

Ventilator

A co-design project in cooperation with volunteers from Ventilen



Written by

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Abstract

This project aims to conduct an explorative qualitative analysis on Ventilen, an NGO run primarily by volunteers. By working with a group of active volunteers, we aim to analyse and co-design a solution that can help and optimize the work and procedures at Ventilen. Through semi-structured interviews, we have acquired knowledge about the field and public opinion on volunteering. We have held two workshops in which different design activities have taken place. Through the workshops we have explored potential design openings and co-designed a concept together with the volunteers of Ventilen. The final concept is the Ventilator board game, that aims to help the volunteers have a more open dialogue with users of Ventilen.

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Introduction

Defining citizenship is not a simple task, as its meaning is dependent on the context of the broader body it inhabits. Accordingly the Cambridge dictionary provides two definitions. The first definition of citizenship is as follows: *“the state of being a member of a particular country and having rights because of it”*. The second definition declares it to be *“the state of living in a particular area or town and behaving in a way that other people who live there expect of you”* (Cambridge Dictionary, 2017).

There is a very important distinction between the two definitions. According to the first definition, citizenship is something that is bestowed upon you simply for living in a certain area. The second definition does start with a geographical premise, but extends it by stating that you need to *“behave in a way that other people who live there expect of you”* (Cambridge Dictionary, 2017). By incorporating a social contract into the definition, it insists that anyone who possess citizenship has to uphold its terms, which varies from country to country.

When discussing citizenship we agreed that the main part of being a citizen is belonging to a community and contributing to it as well. As most members of our group have done volunteer work at some point in their lives, we started by discussing what the relationship between volunteer work and citizenship is. During our discussion, we came to the conclusion that even though volunteer work might not be necessary for citizenship in regard to the law, it is an important part of the Danish social contract. Two group members remarked how they had experienced a decrease in volunteers at a Danish music festival over the past few years. This started a discussion of whether volunteering in Denmark was in decline, and if so why?

As a result our research question is:

“How can we optimize an internal process of an organisation run by volunteers?”.

Through a co-design approach, we have worked with four volunteers from Ventilen, a Danish organisation helping youth between the ages of fifteen to twenty-five combat loneliness. Our initial fieldwork consisted of interviews with members of the general public, as well as people of different ages volunteering in Studenterhuset and a Red Cross shop. These interviews investigated the individual's stance on citizenship, and helped us form a better understanding of the field we were entering. Our first workshop with the volunteers from Ventilen sought to explore and discover potential design openings

through two different design sessions. At the second workshop we suggested potential solutions to the design openings that were discovered at the first workshop whereafter the volunteers, in cooperation with the group, altered and developed the concepts.

This paper will first present the final concept, a board game meant to increase communication between the volunteers and the users of Ventilen. Hereafter it will go into the details of the co-design process; the theory behind, the planning before and execution of the encounters. Later we will discuss the project's findings and reflect on the process. Lastly we will discuss the process of creating our final design, reflect upon the findings from an exhibition at The IT University of Copenhagen and discuss the potential for improvement.

Meet the volunteers

In the following section we will present the case we have worked on, as well as a brief introduction to the volunteers and their roles in, the charity, Ventilen.

We have worked with a national Non Profit Organisation called Ventilen. Their goal is to help youths cope with loneliness. In order to do so, the volunteers arrange different social activities with the youths. Furthermore, Ventilen only use volunteers between eighteen and thirty-five years old. This is so communication is more natural and make it easier for relationships to be built with the youths. Ventilen have locations all over Denmark enabling them to handle many users, we have worked with their branch in Copenhagen. The volunteers we collaborated with were Sebastian, Anya, Anne and Jes.



Picture 1: The participants; Anne, Sebastian, Anya and Jes.

Sebastian is chairman of the Ventilen Branch in Copenhagen. As the chairman of Ventilen, he arranges volunteer meetings, keeps contact with the main office, answers general email enquiries, submit monthly status reports and occasionally participates in a project leader forum. Sebastian is twenty-six, he has recently finished his studies to become a social worker and has volunteered at Ventilen since August, 2016.

Anya is vice-chairman and besides regular volunteer work, her responsibility is to support Sebastian in his work. Anya is twenty-three, studies psychology at Copenhagen University, and has volunteered at Ventilen since April, 2017.

Anne is responsible for recruiting new volunteers and preparing them for their volunteer courses. She is twenty-six, studying to become a nurse, and has volunteered at Ventilen since August, 2016.

Jes has volunteered at Ventilen since July, 2017. Besides being a regular volunteer, he is also a member of the activity group in Ventilen, which coordinates social outings for the youths. Jes is twenty-six and he is studying law at Copenhagen University.

The group of volunteers having different responsibilities within Ventilen gave us the opportunity to gain insights from various perspectives and departments of the organisation. Furthermore, we worked with participants who were active members for a considerable amount of time as well as new members. This helped us to get a more complete understanding of the organisation as a whole.

The Design Concept

In this chapter we will briefly present our final concept, in order to help the reader better understand the report. The concept is developed in cooperation with the volunteers through two workshops.

Ventilen Board Game

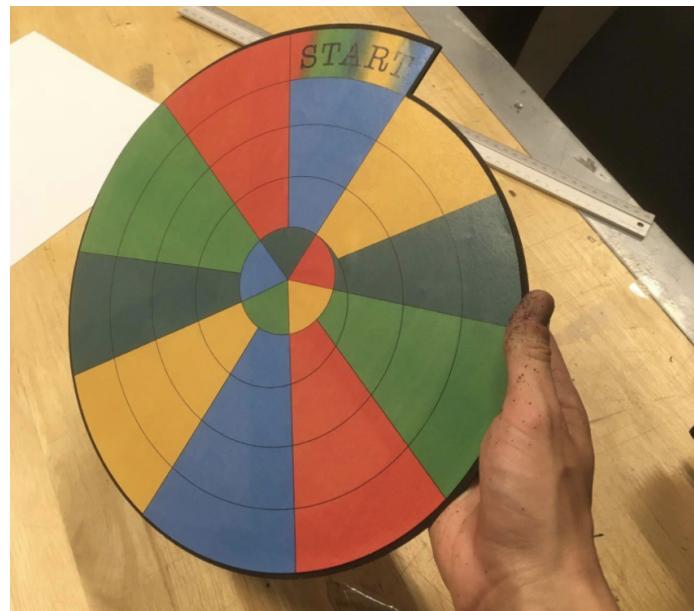
Initially in workshop one, the volunteers had expressed that they lacked ways of sharing experience with others inside the organisation. This was one of the design openings, we discussed at workshop two.

When the volunteers started working with this design opening, they quickly came to the conclusion that rather than being a game between volunteers, they wanted to design it for the users too.

Our final concept is a board game designed to improve the dialogue between volunteers and the users of Ventilen, and facilitate a way to open up conversation about sensitive topics. It was specifically designed to be used as an alternative tool to 'Margretheskål' at their monthly 'conversation day'. A conversation day is where the volunteers and users of Ventilen discuss the user's current state of mind, and ensure their well being.

The central idea behind the game is that difficult questions can be addressed more easily by incorporating enjoyable, light hearted questions or activities. The game features categories based on enactment, telling and making theory. The game's categories are based on those of Cranium, a board game consisting of different color spaces where each color is associated with a question card category. Cranium thus contains various activities such as drawing, building with Play-Dough and answering questions.

When deciding the questions for our customized Cranium game, we used the information gathered through our workshops with the volunteers. This information was the basis for questions with varying degrees of reflectiveness, playfulness and seriousness.



Picture 2: The actual board of the game 'Ventilator'.

The Co-design Process

In the following section the theories, methods and processes used throughout this project will be discussed. The process of co-designing can be divided into different stages. Throughout the process, we have followed this timeline (see model 1).



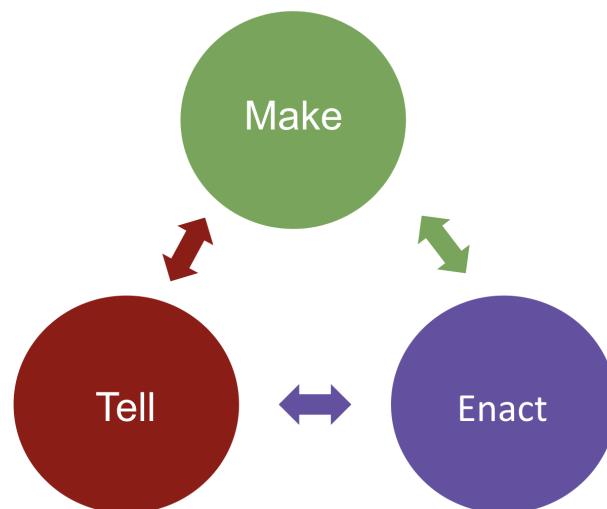
Model 1: Timeline for our process.

Methods & Theories

In the following section, we will go through the main co-design concepts of *telling*, *making* and *enacting*.

Telling, Making & Enacting

An important part of co-design is to design activities which support participants in telling, making and enacting in order to exchange knowledge with the participants. The tell-make-enact model, as seen below (see model 2), is circular with double-headed arrows to illustrate how the actions are connected, and to indicate the design iteration process flows both ways around the circle (Brandt et. al., 2013, p. 150).



Model 2: The Tell-Make-Enact Diagram

This making of things, telling of stories and enactment of possible futures together as designers and participants, provide the basis for forming a temporary community in which the new can be envisioned (Brandt et. al. 2013, p. 145), thus forming the basis of a co-design practice. Unlike many other qualitative methods, co-design emphasises the importance of engaging actively with the participants, and utilizing your own knowledge to complement theirs. This osmosis of competences aims to create a result greater than the sum of its parts. Through tell-make-enact activities, a foundation is formed for both designers and non-designer to start working on the relevant tools for whatever collaborative action they are involved in. Below we will describe how telling, making and enacting is understood in terms of co-designing activities.

Telling is typically facilitated through game-like formats, tangible representations of design artifacts and visual materials (Brandt et. al., 2013, p. 149). These are used to assist the participants in *telling* their experiences and wishes. Problems and opportunities are also discussed, grounded in everyday experiences, in order to better facilitate a narrative. Another tool employed to complement *telling* in a co-design process is 'what if' questions. Their purpose is to make it easier for participants to talk about everyday events from another perspective, making them view their everyday experiences in a new light.

When we are *making* things, we embody thoughts and ideas in the form of physical artefacts, which might help provide views on future ways of living (Brandt et al., 2013 p. 155). In co-design, the idea is that *making* activities help us make sense of the future and thus allow us to collectively explore, express and test hypotheses about future ways of living (ibid.) in the process. When making artefacts, three distinct approaches to making activities exist: participatory prototyping, probes and generative tools (ibid.).

Participatory prototyping uses mock-ups and low fidelity models to create a shared language among participants and designers. This is mostly used in the early stages of a co-design process. This however presupposes that you already know the object of the design, for example one is designing a product, or an environment. (ibid.)

Probes refer to a design-led approach that invites people to reflect on and express their experiences, feelings et cetera in forms and formats that provide inspiration for the designers. Probes are often in the format of postcards, diary books, instant cameras and the like. They are often used for research purposes (Brandt et al., 2013 p. 158).

Generative tools are a form of media used to help non-designers imagine and express their own ideas on how they want to live, work and play in the future (ibid.). Good generative tools help provoke thoughts and feelings the participants does not commonly talk about. Examples of common generative tools are workbooks, day-in-the-life exercises, image collaging and cognitive mapping. These tools and techniques are often used in priming activities to ensure that the participants are prepared creatively for the making process.

With *enacting* activities, we refer to activities where one person or more imagines and acts out possible futures by trying out things in settings that either resemble or happen where future activities are likely to take place (Brandt et. al., 2013 p. 164). This is often inspired by improvisational theatre techniques and is often in the format of scenarios. 'What if' questions can also easily be used to enact and explore future use situations (ibid.). When enacting, staging and tangible prototypes are important, as one can interact with them, place them or hold them. (Brandt et. al., 2013 p.168).

Recruiting

In order to work in a co-design process, we needed a group of participants to collaborate with. We wanted to work with volunteers in nonprofit organisations. However, we had difficulties regarding recruitment, which will be elaborated on in the following section.

Refused Proposals

In the beginning of our recruitment process, we started by contacting various volunteer organisations, asking if they had any interest in cooperating and helping us recruit volunteers. Most organisations initially showed great interest in our project, but all declined eventually declined to participate for a multitude reasons.

One of the first organisations, we contacted, Sind Ungdom, were for instance very interested. We sent them a recruitment video (Appendix 1.), which they forwarded and emailed to their volunteers. Unfortunately none of their volunteers expressed an interested in participating, as they were too busy. Another organisation, Headspace, also showed interest, and we set up a phone meeting with their communications manager. A week later, he reported that they had just conducted a similar study with a consultancy firm, and therefore could not find the time to do another similar study. We contacted a lot

of organisations in this way and got similar responses from all of them; they all lacked the time or resources to be a part of our study. Even though the refusals were problematic, they also supported our initial thesis, regarding the organisation's' lack of resources.

After our proposal had been refused by various organisations, we decided that we needed another recruitment strategy. We therefore decided to contact the volunteers directly. To further our recruitment process, we employed snowball sampling (Metodeguiden.au.dk, 2017). In snowball sampling you contact a person who then contacts and recruits relevant people from his/her network. In our case, Anton reached out to Sebastian, the chairman of Ventilen. Sebastian thought the project sounded interesting, and he helped us recruit three other volunteers. However, this did not happen until after the fieldwork had been completed, which is why the fieldwork took the shape it did. We will briefly go through the fieldwork in the following section.

Fieldwork: The Public's Thoughts

Because of our problems with recruitment, we had not found Ventilen at the time of our fieldwork. We therefore decided to use the fieldwork to familiarise ourselves with some of the public's thoughts and opinions about volunteering. We planned to interview both active volunteers at Studenterhuset and Red Cross shops as well as pedestrians in the city centre, in order to acquire more insight on volunteering. In the following we will describe the process and findings of our fieldwork.

Process: Interviews

We had prepared two semi-structured interview guides. One was directed at pedestrians, to ask them, who they thought did volunteer work, their general view of volunteering and if they would do it themselves. The other interview guide was directed at volunteers in order to get an understanding of why they chose to be a part of their chosen volunteer community and also how they broadly viewed volunteering. Both were done in an effort to get a more representative view of the public's thoughts on the state of volunteering and its role in the Danish society.

We choose to do the fieldwork by semi-structured interviews as we were in the early stages of our process and therefore did not want to constrain the range of possible answers. Using semi-structured interviews gave us the opportunity to modify and add questions as the interviews unfolded and thereby

decreasing the chance of missing important information (Blomberg et. al., 2003). Initially we discussed using a vox-pop format for the interviews as we wanted the general public opinion (Hårbøl, et. al., 1999). However after some consideration we realised that the format of vox-pop interviews do not allow for in-depth explanations of a particular topic. In our case, the semi-structured interviews provided the interviewer the freedom to discuss interesting points in-depth, which was the main purpose of the fieldwork. The interviews also provided us with the means to reflect upon the reasons of doing or not doing volunteer work.

Findings: Benefits of Volunteering

What we found interesting, was that almost all of the recipients were doing volunteer work as much for themselves as for others. Not only did volunteering serve as an intrinsically meaningful activity, but almost all the recipients had thoughts on how the volunteer work would benefit them both personally and professionally. Some young girls wanted to be volunteers based on altruism, and helping others in need. A teenage girl did it for the adventure and for the experience alone. A third example was a middle-aged man with kids, who wanted to volunteer because he wanted to be a role model for his kids and teach them to help others.

Another interesting stance on volunteering surfaced when interviewing some elderly ladies who volunteered at a Red Cross recycling shop. They felt that volunteering was only for those who had retired, as

“...dem der er på arbejdsmarkedet har jo ikke tid til at være her.” (Translation: those who are employed, do not have the time to be here as a volunteer)

However, as this was an opinion only stated by elderly people, we do not have enough empirical basis to determine if this is a general opinion within the volunteering community. It is however an interesting notion.

The questions and answers served as a blueprint and inspiration when we designed the first workshop with our volunteers. We used this to inform which themes to investigate and which areas we thought we should focus on in our final project. Specifically we incorporated interesting or thought-provoking quotes from our fieldwork as part of the questions in the Cranium game, we designed for workshop one.

We kept an open mind as we had yet to meet our participants, so even though we had an assumption, we incorporated various interesting points and quotes from the fieldwork into the Cranium exercise.

Workshop one: Meeting the Participants

In the following section we will describe workshop one, which had the purpose of getting to know our participants and their everyday life at Ventilen in order to explore design openings. We planned the first encounter using various co- and participatory design tools. These tools are used as talking points and visualisations of possible problems and solutions.

Process: Cranium & Future lab

When planning the workshop, we decided to split it into two different sessions; design session one and design session two, where each session consisted of one design activity. The first activity was a customized game of Cranium, while the second was our own interpretation of the design game 'Future Lab'. The workshop was held at one of the group members' apartment, to assure a relaxed and informal atmosphere for the volunteers. The duration of the workshop was about two hours.

After a formal introduction of ourselves and the project, we began the first activity. The customized Cranium game. We aimed to get an insight into the volunteers' everyday life at Ventilen as well as a tool for exchanging knowledge between us and the volunteers; we therefore participated with them. Play began by having the participants pick cards from the categories; telling, making, or enacting. These overall thematized activities were inspired by the co-design model (model 2). Most of the overall themes had subcategories, making it similar to the original Cranium game. However, unlike the original game, our Cranium was focused on volunteer work in order to better fit our project. Below in model 3 we show examples of questions and activities for each category.



Picture 3 & 4: Playing Cranium with the volunteers.

Word play

The player who drew the card reads it out loud, and then everyone has 1,5 minute to write the first 3 words they associate with the word read. When the time is up, everyone explain their choice of words. The player who drew the word starts.

Word: Help

Creative corner: Draw

Draw and explain

The player who drew the card reads the assignment. Then the player has 1 minute to think. Then he/she has 1 minute to draw. When the time is up, he/she has 1 minute to explain the drawing. When the time is up, everyone can give their opinion or ask questions.

Assignment: Draw your association with volunteering.

Enacting

The player who drew the card reads the situation. Then the player, and the player at the right, 1 minute to prepare. Then they shall enact the situation as they would act in reality.

Situation: Enact what you would do, if a user of Ventilen called you when you were volunteering.

Creative corner: Build

Build and explain

The player who drew the card reads it out loud. Then he/she has 1 minute to think followed by 1,5 minute to build. When the time is up the player has 1 minute to explain the drawing. When the time is up everyone can give their opinion and ask questions.

Assignment: Build a positive volunteer situation.

Quotes

The player who drew the card reads it out loud. Then he/she has 1 minute to think followed by 1 minute of explaining his or hers opinion of the quote. When the time is up, everyone can give their opinion or ask questions.

Quote: "I wish i could say that i would do it, but i just don't feel like i have the time."

- Girl when we ask about volunteering.

Model 3: The question categories explaining their meaning. Red: Telling, Green: Making, Purple: Enacting.

When a card was drawn from the categories 'making' or 'enacting', the player only had limited time to complete the activity. When the time was up, the rest of the players tried to guess what had been drawn/made/enacted. If a player guessed correctly, both players moved one step forward on the game board. As it turned out, the volunteers enjoyed the game so much that when the time was up, they wanted to play an additional round.



Picture 4 & 5: The atmosphere when playing Cranium.

After playing the last round, we had a short break, which allowed us to use findings from design session one actively in design session two and without the participants' interfering. Furthermore, the break between the two sessions made the transition between them smoother and more natural.

Next, we introduced the volunteers to our interpretation of 'Future Lab' (Brandt et. al., 2013 p. 152). The essence of this design game is to get the participants to reflect on their dream scenario of problem-solving. This happens in three phases. First, they reflect on all sorts of problems and make a priority list of these problems. Then the participants are asked to come up with solution-scenarios that may or may not be in accordance with the laws of the ordinary world. Lastly, the participants are encouraged to try and incorporate these utopian solutions into real life technical solutions. The idea with the exercise is to challenge the participants mindset in order to bring new solutions for problem solving.

We used the format of 'Future Lab' as inspiration but changed the main focus. Instead of focusing on problems, we wanted the volunteers to reflect on what already worked well at Ventilen and how we, in cooperation with the volunteers, could improve this. Thus the exercise was still designed to make the participants more open minded when proposing ideas but, in our case, to focus on improvement. We chose this focus as all of our participants were active volunteers, thus we expected that they enjoyed such work and therefore had more suggestions in regard to room for improvements instead of problems they needed solved. This design activity was based on findings from the Cranium game and was planned as a co-design between us and the participants.

As our design session two was inspired by 'Future Lab', it was divided into three stages: Thematizing (15-20 minutes), prioritizing (5-10 minutes) and improvements (15-20 minutes). When thematizing the

volunteers made A4 posters with different headings on what they found interesting, important or liked the most about their work at Ventilen. To create the posters they could use different cut-outs we had prepared beforehand, Play-Dough, Post-Its notes in a multitude of colors, pencils, markers as well as the words and drawings from design session one. They were also encouraged to write, draw or add anything else not available to them. We took part in this process of creation by mentioning our own volunteering experiences, questioning the visual illustrations they added as well as asking them 'what if' questions. Those questions were used to facilitate the telling, as they challenged the volunteers to shed a new light on their everyday work at Ventilen.



Picture 5, 6, 7 & 8: Creating posters with the volunteers.

The second stage was prioritizing. In this stage the participants, along with us, decided which A4 sized posters were most meaningful in regards to their volunteer work. We decided on 'Teamwork' and 'The Role of The Volunteers'. The two posters would then be used to make a bigger poster and function as a starting point for discussing suggestions on how to improve certain aspects of their work. The posters' purpose was both to provide ideas for different design openings, as well as something tangible for us to take home and work on when preparing the next workshop. However in the workshop, we actually just

discussing suggestions for improvements as making a bigger poster did not seem to resonate with the participants.

Our interpretation of 'Future Lab' therefore worked as intended, as it functioned as a tool for conversation and future design openings, but it was not executed as initially planned.

Findings

After the first workshop we narrowed down our findings, and this section will summarize those four findings we extracted from the workshops design sessions.

Assumptions vs. Reality

Our original idea, based on our fieldwork and personal experiences when volunteering, was that Ventilen would have issues with recruiting volunteers. However the opposite proved to be the case. They have an excess of applications, and have to turn some away. Keeping an age limit for the volunteers does not seem to be a problem in Ventilen. What can be deduced from our case is, contrary to our fieldwork, that this specific age group is quite actively engaged in volunteer work, at least in regards to Ventilen. The participant though expressed other difficulties when volunteering. They find it challenging to maintain static boundaries between personal life and their volunteer work. They expressed that it could be hard to tell personal stories when interacting with the users, but on the other hand they had to relate and gain the youths' trust. So for the volunteers, whilst they assume a role of authority, their work often requires a personal approach to establish trust.

Recruiting Through Network

The volunteers reflected upon the influence of networking in volunteer organisations. They all agreed that knowing somebody in Ventilen was the easiest way to join the organisation. This helped the organisation to recruit within their own network. This however was also perceived as a double-edged sword; both as a "stamp of approval" of the new volunteers, but also as potentially limiting the influx of other abilities, skills and ways of thinking. They all acknowledge that this was a potential problem within the organisation; however they also felt that Ventilen handled it well.

Sharing is Key

As part of their job at Ventilen, the volunteers have access to supervision with a trained psychologist. This is perceived as an important and valuable part in their work. The supervision is individual, which

allows them to talk to someone about their communication with the youths. Because of their duty of confidentiality, it is an advantage that they have someone to talk to who understands and can support them in their situation. Though the volunteers emphasized the need to share knowledge with their co-workers. They all have different skills and experiences they would like to share, as the youth of Ventilen have different issues that the volunteers need to handle in different ways. Therefore it would be ideal to have an opportunity for sharing experiences and procedures among the volunteers. This aspect was a great design opening, one we wanted to include in our next workshop. They all agreed that it is important that they also share their experiences with new volunteers.

The Lonely Youth

Advancement youths situation is very important to the volunteers. This makes their job worthwhile and they want to help as much as they can. However, the volunteers also experienced some issues regarding the transition of some youths from inside to outside of the organisation. Some are declared “healthy”, but as soon as they stop attending Ventilen anymore, they relapse, and their daily life falls apart. The participants ascribe this to the fact that some of the youth use Ventilen as a clubhouse, where they meet all their friends. This is another design opening that we decided to use in workshop two. It is an interesting design opening, as we might be able to help the volunteers help the youths.

Method reflections

Reflecting on the workshop, we made some improvised alterations on the day. Some of the design activities turned out differently than what we initially had planned, which resulted in new and unexpected insights, such as how important the competition part of the game was for the level of engagement for the participants.

We were afraid that being more designers than participants might bias our data. However, this turned out not to be a problem. Our volunteers were already friends and a group of very talkative people, thus they were capable of having lengthy conversations and discussions about the topics without us interfering. The fact that they were friends also influenced how our first design activity went. For instance, the competitive aspect of the game worked really well; they were teasing each other, and were comfortable being silly. By asking the participants questions and giving them an opportunity to discuss their work at Ventilen in the setting of a game proved helpful. They were really engaged with the activity and did freely express their opinions. Furthermore, this setting gave us insights into the thoughts

of each volunteer and not only the one who talked the most. The game might have been even more beneficial if we had facilitated the thematized activity ‘enactment’ better. Whenever they drew that category, they became a bit nervous, though they still did the enactment. Reflecting on the game, we realised that there is a difference between two participants’ enacting themselves in the game and everyone enacting at the same time. Enacting only two people can be quite intimidating. Furthermore, we as designers were not able to take the initiative each time as it depended on the cards. If we have had the opportunity to take an initiative and be a part of the enactment every time, it might have helped the participants to feel more comfortable when enacting.

The second design activity we did was our own interpretation of ‘Future Lab’. This provided us with an opportunity to focus our attention on issues within Ventilen, and begin to suggest possible design openings for solutions. Our goal was to concretise the knowledge we gained from the Cranium game, by adding headings and pictures, quotes, and drawings to the opinions, they had voiced in the first session of the workshop. However this activity was not as engaging as the game, which could be because the participants had to create something. Being creative on command is difficult for most people, which became evident throughout the activity. They would much rather talk and discuss, but together we managed to create some posters. The activity thus served its purpose and provided us with some potential design openings. It also worked well as a dialogue about possible improvements and not just what already worked well in the participants’ work at Ventilen. However, we did not get any specific design ideas nor possible design solutions, which would have been useful as preparation for the second workshop. This could be a consequence of the time constraints and/or the fact that we did not prepare clear and concise guidelines for how to engage in the activity. Instead of ending up having possible design solutions, we only had possible design openings; of those we selected two to work on in our second workshop. The two openings were the participants’ wish to be able to share their experiences and the difficulties the youth had with relapsing when they stopped in Ventilen.

Design Openings: Apps vs. Analogue

After workshop one, we looked at the collected materials and discovered potential design openings. Based on the findings from the Cranium game, the posters, as well as the overall dialogue, we decided to design possible solutions for two different design openings. We chose to design some solutions, not to limit the input of the volunteers, but to have something to provide as suggestions and inspiration for the volunteers. At the workshop we stressed several times that we wanted the volunteers to be

completely honest, to iterate and change the solutions as much as they wanted, even redefine the concepts completely if they wanted to. Furthermore we made sure to criticise and propose edits to our suggested design solutions, encouraging the volunteers to do the same. In the following section, we will describe the design openings and present the suggested ideas for design solutions.

Design Opening 1: Sharing of Experiences

In the first workshop, the volunteers expressed that while they did get to discuss their work and experiences in their supervisions, they did not have a specific way of sharing their experience with other volunteers. This made us to think of tools that could help the volunteers share their experiences with one another. In the following we will elaborate the ideas for design solutions.

Design solution idea 1.1: "There's an app for that":

We created brainstorms on different possibilities for an app. This could be a logbook, as well as a shared forum where the volunteers could vent when they became frustrated, or celebrate when they were successful. Furthermore relevant entries could be anonymised and work as a database where future volunteers could seek help; after all, even though the users of Ventilen are individuals, some problems may be similar across different cases.

Potential features:

- Logbook/diary: Could be either auditory (maybe transcribed) or simply written. It could incorporate a Onenote/Evernote style design, so that it could be a mix of recordings, writing and even photos.
- Database: The entries can be scanned for relevant keywords and content, be made anonymous and available for other volunteers.
- Social aspect (forum): There is probably a Facebook group for social events, but maybe there are confidentiality issues that would make some cases inappropriate for social media? So where do the volunteers go when they are frustrated or really happy after a shift? Maybe they need a place to share, seek advice or simply vent their feelings. Even though forums in many ways are a thing of the past, it might be a useful tool in this case?

As we wanted to get their feedback and discuss with them on how our suggestions could be changed, improved or rejected, we had prepared some questions to ask them in order to get them thinking. These are below regarding the app:

1. What could be the purpose of the app?
2. Who is the target group?
3. What could an app like this contain?
4. What kind of functions?
5. How to navigate?

Design solution idea 1.2: A Board Game

Because of the volunteers' engagement and excitement towards our customized Cranium game in workshop one, we brainstormed about a board game specifically designed for sharing experiences. Most people have fun playing games, and a board game designed specifically for the volunteers might also have an effect on their internal relations and ability to share experiences.

Potential features:

- Sharing is caring: share your experiences and thoughts with other volunteers through verbal communication; creating a context where you can share with each other, instead of individually at the supervision.
- Fun: Sharing your experiences in a safe, relaxed environment. In this game, it is up to the individual how much they will share, and it can be as deep and difficult, or as light and easy as they want.

As with the first design solution idea, we had also prepared different questions to get the dialogue started:

1. Have you considered different categories?
2. How would you win and/or cheat?
3. Dialogue or one way communication?
4. Is it points or a dice that decide your moves on the board?
5. Maximum and minimum of players?

Design Opening 2: Rehabilitation

In workshop one, the volunteers had expressed that they experienced the users of Ventilen having a hard time exiting the organisation when they were well enough. The users became dependent on the services and safe space Ventilen provided, and risked relapsing into loneliness when they stopped using Ventilen. At the same time though, it was also emphasized that Ventilen does not have the capacity to act as a clubhouse for users that are actually well enough to exit the organisation.

Design solution 2.1: "How are you feeling today?":

The app could work as a personal logbook for the users of Ventilen. The user could create a profile when starting at Ventilen, and the primary volunteer could be connected. The user would then be able to share his/her mood for the day. There are many possible solutions for measuring the mood. It could be auditory, written, scale-based, smiley-based or even tailor-made questions that changed every day based on the user. Over time the volunteer(s) could get a sense of the user's mood over time. This could help both the volunteers work when the user is still active in the organisation, and help the user when he/she is "rehabilitating" and exiting Ventilen. By following the user's mood even after the user stops using Ventilen regularly, the volunteer(s) could intervene if they saw signs of a relapse or decrease in happiness.

Potential features:

- Logbook/diary: Mood-diary, as described above.
- Two-way/communication: Chat communication between user and volunteer.
- Team up with earlier user: A person who came to ventilen as a user, could be teamed up with another previous user of ventilen, and through the app they could help each other overcome different difficulties.

Prepared questions to get them thinking:

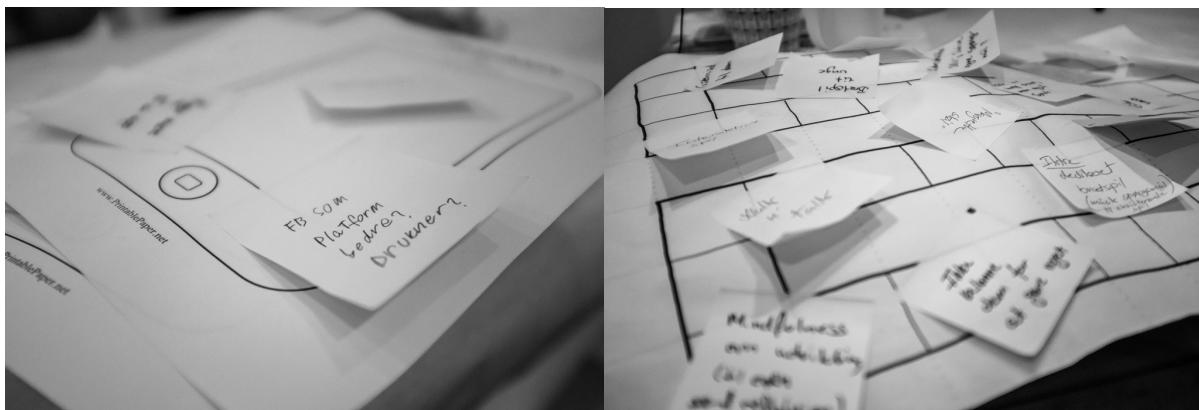
1. What could be the purpose of the app?
2. Who is the target group?
3. What could an app like this contain?
4. What kind of functions?
5. How to navigate?

Workshop 2: Exploring Design Concepts

The aim with the second workshop was to use our proposals for design solutions as inspiration and starting point for developing specific design solutions in cooperation with the volunteers. At the end of the workshop, we wanted to have an idea of a solution we could then use when developing the final design.

Process: Design Sessions

We split the workshop into two sessions as it had worked very well in the first workshop. In design session one, we started out by presenting the chosen design openings and encouraging the volunteers to comment on those. Hereafter the ideas for design solution were briefly presented, only by mentioning the possible aim of the design and a few possible features. Because the volunteers did not partake in the choosing of the design openings and possible solutions, it was important that they felt comfortable giving their honest opinion on the ideas for design solutions. The participants were positive, and could recognize the issues from their everyday life as volunteers. When both their and our ideas for possible design solutions were discussed, we brainstormed on critique, approvals and ideas for them and their features, one design opening at a time. We facilitated this by brainstorming along with them, showing our own critique towards the designs and the various opinions within our group.



Picture 9 & 10: Brainstorming on our and their ideas for possible design solutions.

One of the volunteers thought that the rehabilitation app were interesting. But while discussing this, different ethical considerations surfaced. As the volunteers have been charged with protecting the personal data and safety of the users, the volunteers are not allowed to contact the users of Ventilen, unless the users contact them first. This could prove difficult in an app like that were the volunteers

could track the mood of the users, as they were not allowed to interfere without having been reached out to. One of the users suggested an alternative. She suggested a “mindfulness” app, where the users would set goals for themselves and be able to do different tasks each day in order to reach that goal.

When we suggested the board game design solution, the volunteers expressed their enthusiasm for the idea. A volunteer mentioned that it might be a good tool to use with the youth, to help them open more up and talk about different issues or thoughts. In the process of designing ideas for solutions, where the volunteers did not participate, we had actually envisioned the board game as a tool for exchanging experiences between the volunteers. The volunteers, however, liked the idea of having it as a tool to make the young people talk about vulnerable topics instead, which we decided to work with instead. However, a volunteer remarked that he was afraid the users might find the too personal and emotional, thus not being enjoyable as a game in its own right. Therefore it was important to him that the game would be about different things as well, like enacting, having fun, being silly and getting to know each other on a more general level. The game was further iterated in order to make it a game in which the volunteers and users could anonymously develop the questions together from time to time. In that way, the players of the game would not have to worry about getting the same questions all the time, and the users and volunteers would all get a part in making the questions. Surprisingly to us, the volunteers themselves also wanted to participate in this game, as this would help them walk the line between professionalism and personalism better, by sharing pieces of themselves with the volunteers in a more natural way. Both because of their wish to participate, as well as protecting the youth, it was therefore also important that the game had a way of being allowed to say no to answering a question if one felt it was too personal.

In design session two we laid out papers, drawing tools, pencils and wireframes for apps on the table. The purpose was to get a creative design process together utilizing our different skills. We therefore divided the participants and us into two groups, consisting of two volunteers and two designers, which would then work on the preferred design solution ideas generated in design session one. When getting the different ideas for design solutions down on paper, the different solutions become more conceivable. When sketching the board game for instance, we had our first opportunity to talk about the shape, colours, different questions et cetera. In one group, for example one volunteer made a mindfulness app that would help the young users of Ventilen cope better with stress, while the other

made an app as a library for activities. The other group continued together with the idea of a board game.



Picture 11 & 12: Sketching and brainstorming on the idea of a board game as the design solution.

When the groups had sketched and discussed the purpose and possible functions of their designs, they presented their ideas and gave feedback, allowing for yet another small design iteration process.

Findings

Secrecy & Privacy

An important finding in this workshop was that the volunteers have constraints in regard to contacting the youth outside of Ventilen. These constraints are in place to protect the youth, both because of their vulnerability, but also due to privacy issues. Therefore there are some problems regarding creating an app with the purpose of being a communications tool between the volunteers and the youths. This can be especially crucial in relation to the use of notifications. One could argue that it is not a direct communication, but on the other hand it is still an inquiry from the organisation Ventilen, thus potentially violating the privacy clause.

Furthermore, we also discussed with the volunteers if an app could be a problem regarding whether or not the volunteers should act on the information they got. If it was an app where the users could rate their day or mental state, how are the volunteers supposed to react if they discover they youth have had bad days for a whole week? Would it make them feel guilty or obliged to contact the youth in order to make sure they got the help they needed, thus potentially also violating their rule of privacy, but

fulfilling their job as volunteers? As this workshop showed, there were many ethical considerations that made most apps difficult to take further than the idea generating process.

Analogue or Digital?

When we started this process, we expected the volunteers to want an app to support their work, but it turned out they preferred an analogue solution; both due to the above-stated reason, but also because they felt they personally had too many apps already. We had suggested a board game as they seemed to enjoy the Cranium game we played with them, and that turned out to be the optimal solution. It spoke to the current trend of board games being trendy again, and the volunteers assured us that the youth enjoyed playing board games and that it would be a good medium for sharing thoughts and insecurities among the volunteers and the youth. They also wanted a solution that could be applied in a specific situation. The board game served well for their monthly “conversation day” where they talk to the youth about how they have been, difficulties and progress.



Picture 13 & 14: The volunteers ideas for design solutions; wireframes for the app and an outline for a board game.

Fun & Meaningful

Another discussion throughout this workshop was the balance between having fun while also creating something meaningful. It seemed very important to the volunteers that the final product was both fun and useful. The board game fulfilled both wishes. However, when designing the board game, we needed to design it in a certain way to facilitate both purposes. During the brainstorm session, the volunteers therefore emphasized that they would like to have a “enact” or “play” category, as well as a way to say no to answering a question. Making a tool that was both fun and practical to talk about the relevant topics was thus the main focus of workshop two.

Reflections

In this workshop, the volunteers embraced play and were more comfortable being creative with us. They appeared satisfied with the co-designed design solution, and they were looking forward to receiving the final product. As a group of digital designers, it was interesting and unexpected to end up designing something analogue, but ultimately the number one priority when doing co-design is to design something together with the volunteers that they would appreciate and use in their work as volunteers at Ventilen.

We ended up with the board game, not because it was analogue, but because it enabled communication in a fun and innovative way. We could also have explored the same opportunities in the form of an app, but the volunteers and the team were afraid that it would be “just another app” on the market for stress management. As the volunteers meet with the users of Ventilen several times a week, sometimes the best solutions are to give people the possibility to give and get some physical presence from others and their friends, even though we live in a digitally marked world.

Developing our final design

After finishing the actual co-design process, we sat down to evaluate and reflect upon the concepts we had developed with the volunteers in workshop two. This chapter will describe the process of how we went from an idea for a design solution to a co-designed concept, and how we developed the final concept.

In the second workshop we designed three different design concepts, two solutions for apps and one analogue board game. Our original intention was to co-design only one to two concepts with the volunteers. This plan however changed when the group working with app design disagreed on which concept to pursue, and chose to split into two groups and work on one concept each. This split in the app group resulted in two ideas that were not as final or well developed, as the board game that had been designed by all the members of one group. Besides being the most well-rounded concept, the board game was also the idea for a design solution that initially excited the volunteers the most.

From Design to Co-design

When we discussed the idea for a design solution, the board game was meant to facilitate experience sharing among the volunteers. The volunteers got excited about this idea, because they had experienced the effect of such a game first-hand in our first workshop, the Cranium game. The nature of the design idea however changed, when one volunteer noted that the users of Ventilen love boardgames. This comment immediately changed the intent of the board game, and made it into a game that were to be primarily designed for the users of Ventilen. In design session two, one group then started working on the board game based on this new purpose. They made a sketch for a potential board, a spinner and a variety of possible categories with appertaining descriptions of possible questions. The board was shaped as a V, making it a true Ventilen board game. The spinner was supposed to substitute a colored dice, making it a more fun interaction.

The four categories were as follows:

- Non-demanding questions: Easy and fun topic.
- Demanding questions: More personal topics, might be difficult to talk about.
- New rule: A rule from the card must be implemented in the game.
- Interactive: Enact the situation on the card.

The categories were built on the discussion with the participants, where they among other things said that it was important that it was both a fun, but also a useful tool for talking about more personal and vulnerable topics.

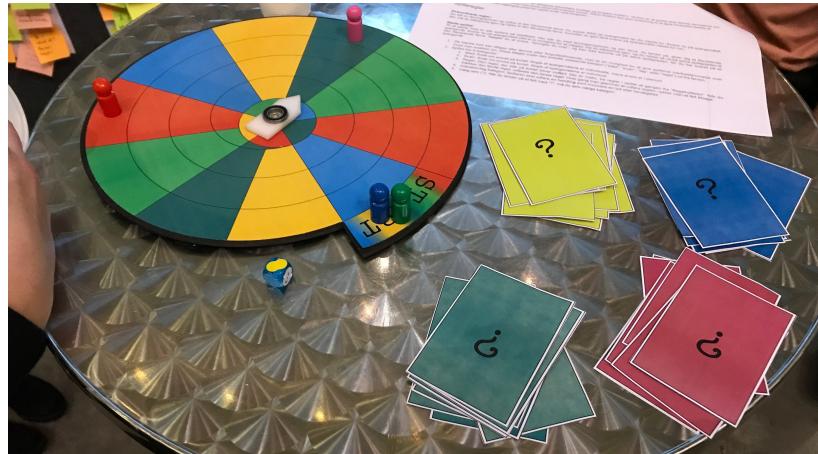
From Co-design to Final Concept

After the second workshop we analyzed the co-designed concept of the board game, and discussed how to develop it into a final concept whilst keeping the volunteers input as intact as possible.

We decided to name the final game the “Ventilator”, making a wordplay by both using the name of Ventilen, as well as playing on the meaning of the word itself; an appliance for ventilating a room. Ventilator facilitates conversation with other users of Ventilen as well as the volunteers participating. In contrast to the co-designed board depicting a V-Shape, we designed the boardgame in the shape of a spiral. We did this both to make the visual aesthetics of the game more interesting, but also to better utilize the area of the board by not having a lot of negative space. Furthermore, the spiraling design allowed us to incorporate the spinner into the game board in a seamless way. We designed the board so

that each playing field has one of five colors matching the questions of each category: red signifies *demanding questions*, green signifies *non-demanding questions*, yellow signifies *playful or the interactive category*, and the blue field is chosen as the *new rule category*. Finally there is the dark-green playing field which let the player chose one of the above mentioned categories for themselves.

The original co-designed concept lacked the competitive aspect, but like many other board games, there is a start and a finish line. The goal is therefore to be the first player to cross the finish line. As it is impossible to give right or wrong answers when the questions involve personal experience, we designed the game mechanics to be slightly different. We made the evaluation of the answers binary, so that the only wrong answer is no answer at all. A player that gets a question and answers it, gets to spin and move his game piece, while the player that passes on answering the question loses his spin. This game mechanic is meant to incentivize players to answer even tough and emotional questions.



Picture 15: The final prototype of the design exhibited at The IT University of Copenhagen.

A Fourth Encounter?

As we did not have time to go over the final design solution with our volunteers, we naturally do not know if this would work for them. Ideally, a fourth encounter would have allowed us to test the questions and the game mechanics of the board game with our end users, which could have led to further iterations and streamlining of the final concept. We did however play the game with our fellow students at an exhibition held at the IT University of Copenhagen. Obviously, the game is not made for them, so sometimes they found the questions difficult or weird to answer. However, as we did play ourselves, sometimes we were also faced with a question, we as players and the designers of our game thought was too difficult or uncomfortable to answer. Had we been able to play with our users, or just

get some feedback from our volunteers, we may have gotten a relevant input on how we should formulate the questions. This would also help us explore whether or not this game would actually make the volunteers and users of Ventilen communicate better. Even though the volunteers have to balance between being professional and personal, there could have been too many questions that the volunteers - or the users - felt was too personal, or something they could not share in the given forum. This could potentially result in the opposite effect and make the volunteers appear more distant in the eyes of the youth.

The fact that we ended with a board game was based on the input of our volunteers and the exercises we did with them. The final design could however have taken many different shapes. In hindsight, a fourth encounter could have helped us perfect the game, but due to time constraints we did not manage to host one.

Conclusion

Our co-design project was completed in corporation with a group of volunteer from the NGO Ventilen. Over the course of eight weeks, we planned and conducted three different encounters.

In the beginning of our process, we discussed whether or not volunteering in Denmark was in decline and came to believe that organisations had a hard time recruiting new volunteers. Therefore our initial belief was that we should help a volunteer organisation find a way to recruit young people more effectively. Thus we designed our field work as well as the first workshop, based on the question: *'How can we help Ventilen get more volunteers?'*. However it became clear throughout our co-design process that it is problematic to base an exploratory co-design process on assumptions.

Due to our difficulties with recruiting participants, we took our first encounter to the general public, exploring the field in an alternative way. This approach had both positive effects and negative consequences. On one hand it gave us an insight into the public's view on volunteering, but on the other hand it did not help us understand our specific user group. Instead, we utilized our fieldwork as a platform to form relevant questions for our first workshop, which helped us gain deeper insight later in the process. As we progressed with our project, we altered our research question and as already stated, the final one was, *'How can we optimize an internal process of an organisation run by volunteers?'*.

Through the two workshops, we realised the best way to optimize an internal process at Ventilen would be designing a board game for the purpose of better communication between the volunteers and the users.

Reflecting on the process, a more fruitful recruitment phase could have allowed us incorporate our user group more into the design of our final concept. Ideally, a fourth encounter would have allowed us to test the questions and the game mechanics of the board game on our end users, which could have led to further iterations and streamlining of the final concept. Lastly, it is also relevant to note that a co-design process cannot be duplicated, not even in the same industry, as the process depends on so many different factors. Not only the individuals participating, but also their internal dynamics of the group, agendas of those involved and their backgrounds. The final board game could potentially be used by other branches of Ventilen, but it would have to be changed to be applied to any other NGO. The most important part however, is that the final result was developed in cooperation with the volunteers, thus everyone involved have some relation to the project, and our participants feel they have gotten something that could potentially be extremely valuable for the end users as well as aid them in their jobs at Ventilen.

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Appendix

Appendix 1. (recruitment video)

<http://bit.ly/2zX5WVg>