Do It Yourself or Do It Together?

Emergence of Participatory Culture through Co-creating interactive DIY skateboarding spaces

Oskar Galewicz

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Department of Informatics
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http://www.duo.uio.no/

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Abstract

In this master thesis, I explore how the field of Interaction Design might contribute in creating new platforms for engagement and expression, by involving a participatory culture of skateboarders in a Do It Yourself (DIY) project. The objective of the project was to give skaters an opportunity to experience the maker culture by sketching with technology, sharing their ideas within creative making, and participate in envisioning co-created skating spaces. Thus, the involvement and commitment of the participants were fundamental for this thesis. In total, twenty-eight members of the skateboarding community in Oslo were actively involved in the process of designing and making. The design process resulted in creating a physical prototype – an interactive skateboarding obstacle, using a DIY approach. It was based on the significance of DIY movement in the skateboarding culture uncovered by relevant literature, remarks of the participants and my own experience. My aim was to investigate what motivates and what hinders skateboarders from active engagement in shaping such spaces in Oslo.

The methodology I chose was Research through Design (RtD). I found this methodology highly relevant since my wish was to see how a design process unfolds, and gives the participants a freedom to interpret and express the idea of combining skateboarding and interactivity. The process of designing and constructing the prototype become the sources of new knowledge. Together with the event that followed the making process, they helped me to determine the possibilities for the emergence of DIY culture involved in shaping "activist" spaces in urban environments.

Comments regarding the use of acronyms and abbreviations:

Skateboarders = skaters

HCI = Human Computer Interaction

DIY = Do It Yourself

YPC = Youth Participatory Culture

RtD = Research through Design

Prototype = obstacle, artefact, artifact, element, installation

Master Jam = event

Note to the reader:

Master Jam was the name of the event, during which the prototype was tested.

I write Touch Board with capital letters because it is a commercial name.

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1 Introduction

"We took and old metal roller skate and strapped it to a short piece of 2x4, hopped on top and took off. "

Bob Schmidt

The first days of skateboarding did not indicate how big of a deal it would become - to many, it was just a bunch of kids running up the hill and riding it down again. What started as an innocent act of play in the Californian neighborhoods has evolved into a global phenomenon. Creativity, freedom of expression and lack of formal boundaries are often mentioned as key elements of skateboarding culture. In my thesis, I wish to look at the culture of skateboarders in order to explore how skaters can employ their creative potential in a new, unusual setting. I am interested in investigating different ways of engagement present in skateboarding culture, and in particular, how new technologies might enable new forms of participation. Accessibility and affordability of technological components have come to a point where everyone can try to make things without spending a fortune. Just as a simple DIY project of strapping roller skates to a wooden plank has given birth to a skateboarding phenomenon, the technology development has initiated a range of DIY activities, resulting in a new culture. I believe that new technologies can support and encourage youth in expressing their creativity. Based on that statement, I would like to see how skateboarding communities create new ways of engagement and participation by adopting technologies introduced by the growing field of DIY in a field of HCI. Whether it was being interviewed, participating in a workshop, or spending a long afternoon wiring speakers to a car battery – the people involved in this project proved that doing things together is possible (and fun). It also uncovered opportunities and challenges posed by the emergence of DIY culture, as exemplified by this project. Thus, this project is not really a Do It Yourself project, but rather a Do It Together one.

1.1 Context

My research is a part of the EU project – The People's Smart Sculpture, which fosters participative art and collaborative urban art & culture processes in Europe's cross-cultural city spaces. On a local scale, The Young Expressions subproject aims to explore opportunities for co-creation and collaboration through series of small projects that facilitate increased engagement and participation in civic, leisure and cultural activities among urban youth and children in Oslo, Norway. The project also carefully considers the role of digital and material artifacts in motivating, engaging and mobilizing collaboration with urban youth in participatory culture processes. Over time, the Young Expressions project builds a shared image of the collective city space, highlighting Oslo's diverse multi-cultural present and the potential for a smart-connected city future that includes youth and children as active participants. The small projects implemented (Culén et al., 2015, 2016), mine among them, provide a platform for further discussion around participation in art, culture and civic matters (smartsculpture.eu, 2017).

I chose to start working on my thesis by deepening my understanding of the viewpoints of people that shape the context of my study. I choose to call them a "creative scene of urban activists", and I consider myself to be a member of this group. The word activist points out the active stance towards political or social change, which can be seen in acts undertaken by the people included in my research, in various ways and degrees of implementation.

First and foremost, my study was concerned with the skateboarding scene in Oslo. I decided to focus on how skaters engage and interact with urban spaces through the act of skateboarding, but also through diverse participatory activities. In total twenty-eight, mostly highly-skilled and internationally recognized skaters were directly engaged in fifteen interviews and two workshops conducted throughout my research. I present the number of participants to indicate the highly participatory character and enthusiastic reception of the project among the community members that got involved with it.

Another group of people involved in my research consists of artists, architects and a Co-Founder, President of Urban Sports Square Foundation. Their expertise helped me in various stages of this thesis. It was specifically insightful to hear about their previous and ongoing projects which show the broad range of perspectives of pursuing the engagement with city spaces – from "guerilla" ways of just putting stuff "out there" , to the projects approved by

officials. Becoming familiar with practical advantages and disadvantages of each approach gave me a better impression of "how things work" in reality. When selecting the interview subjects, the DIY approach stood central. I wished to discuss their background and knowledge on DIY phenomena, their working methods and techniques (that I considered relevant for my further work) and the possibility of collaboration. Based on their focus on social interaction and public engagement, I decided to call this group "social activists".

The last group that I would like to present is the professionals that helped me with the purely practical part of the project. Their expertise was essential during the process of constructing the design artefact. Their understanding of the design case, creative discussions, and consultations has contributed in noteworthy guidance towards the final design artefact. Even though some of them (a carpenter, a clerk at the music store) might not be perceived as exceptionally creative occupations, their understanding of this unusual project and their novel thinking was very helpful. I decided to refer to them as "inspired professionals". Some of them are interested in DIY projects, but from the ideological point of view (as DIY is often seen as a way of omitting the professionals) the character of their projects can be discussed, but it has no relevance to my thesis, so I leave it as it is.

In terms of space, I recognize the context of my study as multileveled. First, I look at the City of Oslo as a sphere where skateboarding usually takes place. It is particularly three spots that are directly involved in my study – Politihuset, Gjensidige and Torshovdalen. The first two spots are where the videography was conducted. The last one is the place where the deployment and the test of the prototype took place.

The personal ateliers that I was invited to are another kind of space that was a part of my research. Being able to see places where "the magic happens" was truly inspirational and gave me certain ideas on how space used for creating define artists and their work.

Other types of spaces were the locations where I conducted the workshops that involved multiple participants and required appropriate space. The first workshop was conducted at the Department of Informatics at University of Oslo. The second workshop was conducted in a newly opened Oslo Skatehall.

The last kind of spaces that I would like to mention are all the places that I visited, passed by, or was at, throughout my study. Though it might sound irrational, developing the idea of

interactive skateboarding obstacle affected my way of looking at my surroundings. Considering that basically anything could result in giving me ideas that could lead to shaping my design - even in the most unexpected places and situations.

1.2 Motivation

The Year 2000 was seen by many as a year of change, the new millennium - new opportunities. At that time conspiracy theories around Y2K were blooming one after another, some people had anticipated the end of the world, while others enjoyed the thought of being able to celebrate entering a new chapter in our history - new century, a new millennium. I recall that time as quite essential to me, but I base that on slightly different reasons than those named above. The year 2000 was a year that I was introduced to skateboarding. It all started as a mere serendipity - after playing a football match with my cousin, he allowed me to borrow his skateboard. At that very moment, I had no clue how big part of my life skateboarding would become, and how much of my time I will spend on doing it. Seventeen years later I still find as much joy in skating as that very same day. Somehow I feel that skateboarding has influenced me as a person, and it has followed me throughout important phases of my life. The skateboarding culture and its community have always amazed me regarding its dynamics, social codes, and unwritten rules. Due to my personal curiosity but also due to a research potential, I see skateboarding as a phenomenon that is worth looking at through the lens of science. My educational background has influenced how I view the world in the same way as skateboarding has, and throughout my studies, I often looked for possibilities of merging these two fields. The study of digital media, followed by delving into the Human Computer Interaction field, has brought me to a point where I was given an opportunity to look at the skateboarding culture from a researcher point of view. My idea was to combine these two important elements of my life and explore how these two together can contribute to the field of Interaction Design. My background gave me a unique insight into the skateboarding culture and access to its members. Being an active member of skateboarding community based in Oslo was what made me lean towards exploring that group of people particularly.

Figure 1 Me, skating in the Ekebergpark during Oslo Games Go! Photo: K. Godek

1.3 Research questions

My research questions are generally concerned with the participatory culture of skateboarding. A presentation of various forms of participation, and defining values that motivate these forms are tools that will help me to examine how technologies support the engagement of skateboarders in a social and cultural life. The goal is to see how my design project might result in an active engagement of skateboarders in a design process.

My overarching research interest could be formulated as follows:

What opportunities does Interaction Design and maker culture offer to skateboarding communities?

The three sub-questions that I attempt to answer in order to tackle and narrow down the above research question could be stated as:

- What motivates skateboarders to engage in a participatory process of designing and making for skating purposes?
- What are the opportunities and challenges for engaging members of a skateboarding community in design interventions like the one described in this thesis?
- Does co-creating interactive DIY skate spaces support emergence of a participatory culture, or subculture, within the skateboarding community?

1.4 Chapter guide

Chapter 2 Literature & Background: This chapter has a somewhat challenging structure, as I wanted it to cover several disparate themes, as well as address the existing relevant skateboarding literature and projects. First, Jenkins' concept of Youth Participatory Culture is discussed, including my reflections on how is this relevant for defining the skateboarding culture as a participatory culture. Next, I focus on historical development and types of spaces used by skaters. Finally, I present a concept of Do It Yourself and related literature. I choose to present the DIY movement by describing practices from both Human Computer Interaction and skateboarding communities.

Chapter 3 Theoretical Framework: This chapter introduces "5 Key Principles of Everyday Creativity" by David Gauntlett (2011), which guided my exploration of participation and possible shaping of the DIY participatory culture. Based on my experiences as the member of the community and the initial interviews with community members, I introduce the Sixth Principle related to learning.

Chapter 4 Methods and Methodology: This chapter outlines a methodology used in this research, Research through Design. Next, I introduce the Interaction Design Research Triangle model proposed by Daniel Fallman. It helped me to reflect, recognize and articulate different stages of my research. Subsequently, other methods used in this research are presented, followed by ethical considerations relevant for this work.

Chapter 5 The Making Process: In this chapter I present the design process in a linear and historically accurate narrative. I discuss the making of the prototype, focusing on participation.

Chapter 6 Master Jam: Here, I will first describe the event that took place 8th of April 2017, during which skateboarders had an opportunity to use the co-created prototype. Secondly, I will present the results of the evaluative interviews with the participants. Chapter 6 and Chapter 5 together, create a Design Intervention.

Chapter 7 Recap: Six Principles of Everyday Creativity: In this chapter, I first discuss the principles from Chapter 3, and present findings, uncovered by the interviews. Then, I introduce a new framework - **Eight Pillars of making DIY Skate Spaces.** Lastly, I present the challenges of creating DIY spaces.

Chapter 8 Discussion: In this chapter, the results from the evaluative interviews are discussed. The discussion is divided into four sections, based on the contributions brought by this thesis: Making and participatory nature of it in skateboarding community, the artefact, cooperation and participation supported by artefact and opportunities and barriers to the rise of the DIY skate spaces.

Chapter 9 Conclusion: – In this concluding chapter, I review my findings and discuss the possibilities given by further development of skate-friendly cities.

2 Literature & Background

Reading the existing work is an integral part of any academic project. In order to uncover the potential area of research, one has to become familiar with the previously publicized work.
First of all I have to admit that I found the experience of searching for skateboarding-related literature quite bizarre, since I was "discovering" and "exploring" something that I have done in 17 years. At the same time it was a very interesting experience that opened my eyes on many different topics and issues that didn't quite fit into my utopian vision of skateboarding culture, like its attitude towards women or homosexuality (Borden, 2001, p. 147). However, I discovered some interesting publications, touching upon the skateboarding-related topics that I have never really thought about, which I found very exciting. Individual and collaborative identity building through different modes of participation was something that I wished to examine closer. In the explorative phase of my research I decided to delve into the skateboarding culture by looking at through a lens of participatory culture.

As skateboarding culture is highly concerned with the visual site of it, it felt like a natural choice to look at the preexisting skateboarding photos and videos. In the context of my research, the visual footage served both as an inspiration source but more importantly, it has been one of the key tools in defining the importance of various visual media in the skateboarding culture. Mike Crang and Ian Cook supports that approach by bringing forth its potential in studying cultures and changes the culture have undergone (2007, p.110). As a member of skateboarding community but also as a researcher I was actively browsing the visual contents of various skateboarding magazines - both offline (Thrasher, Playboard, Dank) and online (Jenkemmag.com, Kingpinmag.com, Playboard.no). In addition to that I watched a significant amount of skateboarding videos on YouTube and other social media platforms (Instagram, Facebook and Snapchat).

2.1 Skateboarding Literature

Skateboarding, Space and the City

Ian Borden's book (2001) "Skateboarding, Space and the City" was my first meeting with literature dedicated to skateboarding. It must be said that before I even opened the book, my skepticism towards the academia investigating skateboarding was quite high. My attitude can

be compared with how popular culture pictures research scientists, described by Christopher Frayling in his article "Research in Art and Design" (1993, p.3).

"He takes a problem, makes tentative conjectures regarding the answer to it and keeps revising the answer in the light of neat, well ordered experiments, which must be repeatable or replicable. He is what is known as a critical rationalist." (Frayling, 1993)

As I searched for some YouTube clips showing Borden's skateboarding skills, my enthusiasm was not really increasing. Though, as I proceeded reading the book, I quickly learned, that my attitude was very wrong, although I cannot deny stumbling upon some publications that unlike Borden's book cannot be recommended as a legitimate source of knowledge on skateboarding culture. Getting involved with skateboarding from an academic perspective often pointed towards Ian Borden, making him one of the key researchers involved with skateboarding culture. Scientists with various backgrounds, from sociological studies, through aesthetical studies to architecture, which is Borden's true domain of expertise, repeatedly refer to Borden's' book -"Skateboarding, Space and the City", published in the year 2001. It has willingly or unwillingly become one of the most significant sources of knowledge on skateboarding culture. It is worth mentioning that Borden has gone through a serious amount of relevant literature and, most importantly, including specialist media (Wheaton & Beal, 2003, p.157) which has definitely enhanced legitimacy of his research among the members of skateboarding community. Nevertheless, knowing that the book was released in 2001 has motivated my further exploration of how both culture and practice have changed since, focusing my attention at the topics concerned with participation.

Skateboarding in HCI

Next, I decided to look for examples of connecting the Human Computer Interaction field with skateboarding in particular. I decided to employ the online academic resources like acm.org library, and Google Scholar in order to find relevant research articles and perhaps examples of relevant design projects. One of the first works that I found was the work by Pijnappel and Mueller. The two articles - "4 Design Themes for Skateboarding" and "Copy Paste Skate" (Pijnappel & Mueller, 2013, 2014) were somewhat relevant for my work. The articles approached skateboarding in a creative way, aiming to explore how skateboarding experience might be supported by the use of technology.

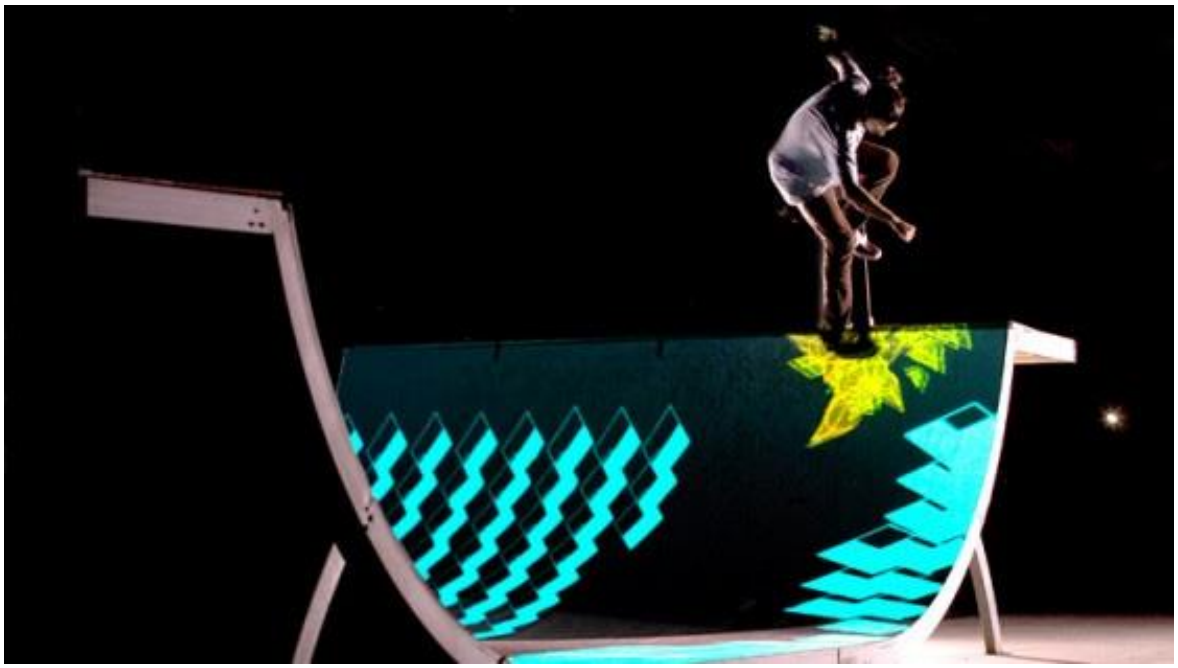

Figure 2 Tron Ramp

Reading these two articles written by Pijnappel & Mueller, left me with mixed feelings. The systems they designed were experimental, and explorative, which I found entertaining, but on the other hand, as a skateboarder, I felt that the experiments could be better linked to the cultural background of skateboarding. Personally, I was missing a contextual depth in terms of a dialogue with skateboarding culture. By that time it seemed to me that the only natural way of designing an interactive system for skaters was to engage them in my project. Another benefit was that these papers led me towards other relevant projects such as Skataviz (Skataviz, n.d) , and Tron Ramp (ENESS, 2010) (Fig. 2) .

Another research paper that investigates how the use of technology can enhance the skateboarding experience was *MusiSkate* (Ghosh, Shah, Navarro, Chen, 2016). In their article, Ghosh et al. attempt to encourage the intrinsic drive to skate through adding a musical feedback to skateboarding experience. In their research, they use user-centered design process, in order to create a solution that would be based on skateboarders' needs and contexts. This paper gave me an idea of how including skateboarders in a design process could possibly create a new way of participation among the members of skateboarding community.

2.2 Participatory Skate Projects

My next goal was to find collaborative projects that would not necessarily be interactive in a technological way, but that would reflect on their participatory character, and potentially uncover some insights about the motivation behind. One of the projects was a project called "Kapow is now – OBJEKT" (Fig.3), which involved number of skaters that would perform their tricks on a skateboarding obstacle, "animated" by the use of projection mapping.

Figure 3 Screenshot taken from a video Kapow is now - OBJEKT

What I found interesting about this project was that the event presented on a video seemed like a well-balanced combination of skateboarding, hanging out and enjoying music. At the same time, the introduction of something novel (the skateable element) seemed attractive for the skaters and the rest of the crowd, leaving them entertained and delighted.

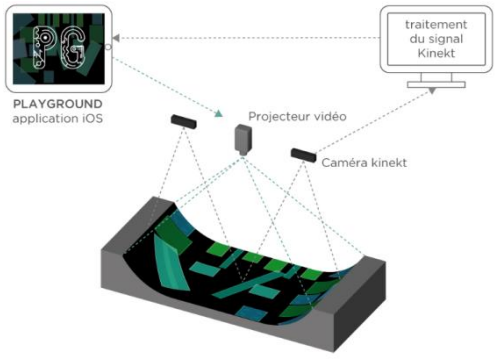

Figure 4 LE U Ramp, Interaction

French designer - Guillaume Batista Pina was another person that influenced my way of understanding the design practice in a skateboarding context. I discovered Batista Pina through his project - LE U (20syl, 2015) -the interactive skateboard ramp, created in collaboration with Nature Graphique and HerrmuttLobby (Fig.4). The video lead me to Batistapina's portfolio (guillaumebatistapina.com), where I found another skateboarding related project - Keyboarding. His previous projects helped me to understand how a designer, through his/her works creates artifacts that combine diverse phenomenon. In case of Keyboarding - producing a sound based artifact and making it interactive through the act of skateboarding, sounded like a fascinating idea. It helped me to understand how creating an artefact may be a manifestation of a range of things – personal taste, cultural background, message to the world and so on.

Figure 5 Screenshot taken from a video "Trocadero Days"

The next and probably the simplest example (in terms of technological sophistication) that I wish to present here is a video called "Trocadero Days" (Converse, n.d). It is a skateboarding clip created by a shoe company – Converse (Fig.5). There are three reasons why I found this video highly relevant for my project. First of all, the skaters present at the video ride for a Swedish skateboard company called Polar. Polar is a highly respected skateboarding company, being known for its genuine and authentic way of expressing the "real skateboarding spirit" in a very appealing and artistic way. The owner of the company – Pontus Alv is a long-time skater and artists, who has gained a legendary status among skateboarders through his skateboarding skills, and through initiating a number of famous Do-It-Yourself projects. Pontus Alv is a huge source of inspiration for skaters around the globe, including myself. The second reason why I found "Trocadero Days" relevant was the

collaborative dimension of it – showing a group of skaters, skating together in the streets of Paris. Some of the tricks would not be even be possible if skating alone. That contrasts a lot with the convention of the regular skate video that usually highlights one performing skater at the time. In the video, they seem to "hype up" each other, and it looks like the skaters featured are having a good time. The last quality that I paid attention to was the way the skateboarders combined different artefacts, with the pre-existing elements of city architecture. Simple pieces of wood were used as an extension or an upgrade to different parts of urban space like walls, railings, window frames and so on.

The last project that I would like to mention here is a project that I found very inspiring in setting a standard for my work. "Paving Space" ("A collaboration between Isle Skateboards, Raphael Zarka and Carhartt WIP, n.d.) was a project supervised by an artist - Raphaël Zarka, in collaboration with two skateboard-targeted companies – Carharrt WIP and ISLE Skateboards (Fig.6). The project was a combination of mathematics, art and skateboarding, which resulted in designing a very neat, multi- dimensional sculpture. The sculpture could be set in a number of different configurations, based on the skaters' creativity. The reconfiguration of the sculpture and the space was done in order to succeed in performing various tricks. These ideas were initiated by the skateboarders that were invited to perform, and the two main factors that shaped that art installation were: their imagination and their skateboarding skills. "Paving Space" was inspirational both in terms of the visual excellence, and collaborative value, but also reflected on how an artist can create a piece of art that is continuously shaped through its use. The aesthetical values of the video and the installation were highly appealing and made my imagination run wild about future of my own project.

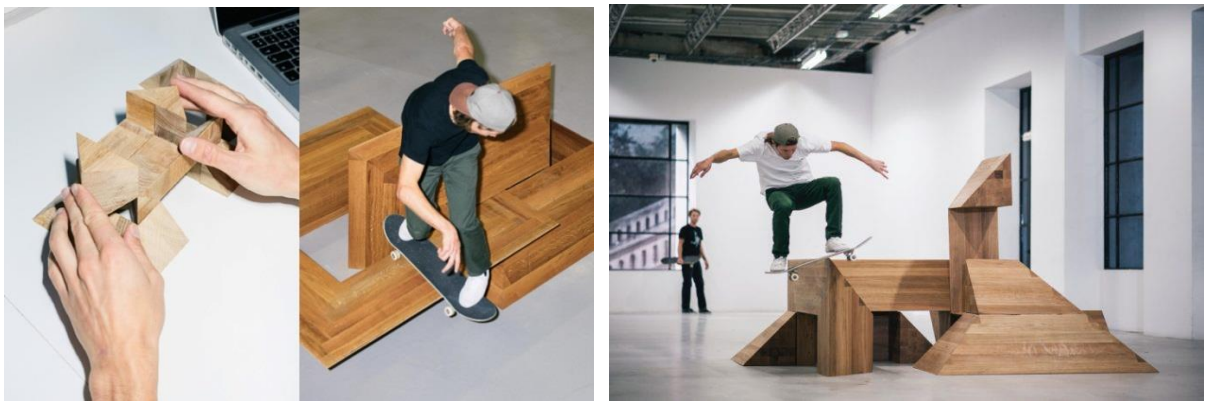

Figure 6 "Paving Spaces" project

After I started contemplating on why these skateboarder-initiated projects inspired me more than the research based ones, I decided to delve into the articles grounded in social sciences, which would help me understand the skateboarding culture. To me it was not enough to know the culture from my own perspective. I needed a certain knowledge and vocabulary in order to be able to combine my role as a skater and a researcher, in a way that would result in a thesis legit and valid in the eyes of both skateboarding and academic community.

2.3 Youth Participatory Culture

"A participatory culture is a culture with relatively low barriers to artistic expression and civic engagement, strong support for creating and sharing creations, and some type of informal mentorship whereby experienced participants pass along knowledge to novices. In a participatory culture, members also believe their contributions matter and feel some degree of social connection with one another (at the least, members care about others' opinions of what they have created). Not every member must contribute, but all must believe they are free to contribute when ready and that what they contribute will be appropriately valued." (Jenkins, 2001, p.xi).

My exploration of the possible themes for my master thesis has started with getting familiar with a phenomenon described by Jenkins (2009) as *Participatory Culture*. Reading about how the educational system has been influenced and in some cases challenged by the development of new media landscape, has given me a better understanding of the "*new media literacies*: a set of cultural competencies and social skills that young people need in the new media landscape" (Jenkins, 2009, xiii). My approach was initially driven by investigating the various groups of interest and looking at their potential value from the participatory point of view. Jenkins' book and his understanding of participatory cultures were directed towards the educators and possibilities of adapting the *new media literacies* in learning practice. My goal was to see if and how this particular understanding could be translated into the community of skateboarders. The competences hidden in each and every skill described by Jenkins (2009) were presented in a way that connects the physical and the virtual world, showing how they can complement each other, resulting in obtaining new knowledge. One example presented in the context of *play* (Jenkins, 2011) is how a hobby such as baseball card collecting result in a number of positive outcomes. It can be directly connected to the positive development of math skills (through working out batting averages), classification skills (through arranging the cards) and communication skills (discussing the cards with others) among others. Just reflecting on that skill alone has given me some ideas of how an academic performance and a personal hobby or passion doesn't necessary have to be two separate parts of one's learning process. Thus, I attempted to apply his work to a new context, presented in Table 1. , and see if skateboarding culture and Jenkins' definition of *Youth Participatory Culture* share some common characteristics.

Skill	Jenkins' description	Jenkins' example	Skateboarding example
Play	The capacity to experiment with the surroundings as a form of a problem solving.	Baseball cards	Skateboarding practice in itself. Learning tricks through trial and error. "Lowering the emotional stakes of failing(…) "(Jenkins, 2009, p.38)
Performance	The ability to adopt alternative identities for the purpose of improvisation and discovery.	Role - play	Interest of skateboarding culture, becoming a member of community, emergence of "new" identity;
Simulation	The ability to interpret and construct dynamic models of real-world processes.	Playing games that simulate f.eks. ancient cultures etc.	playing video games like Tony Hawk's Pro Skater, EA Skate; designing skate obstacles; reimagining architectural objects as skate spots;
Appropriation	The ability to meaningfully sample and remix media content.	Digital remixing of media content.	Making skateboarding videos, montages. Directly connected to the skill of Collective Intelligence.
Multitasking	The ability to scan the environment and shift focus onto salient details.	Multitasking.	Filming while skating; sending live feed while skating; Use of social media;
Distributed cognition	The ability to interact meaningfully with tools that expand mental capacities.	Learning and deploying the knowledge gained in a right moment, and in a right setting.	Learning social codes; Learning tricks and applying them in practice.
Collective intelligence	The ability to pool knowledge and compare notes with others toward a common goal.	Web 2.0	Use of social media; Sharing trick tips; YouTube tutorials; Internet forum; Skate video websites;
Judgment	The ability to evaluate the reliability and credibility of different information sources.	Development of critical thinking towards online knowledge sources.	Recognizing fake pictures, or "not landed tricks"; Posting videos or sequences instead;
Transmedia navigation	The ability to follow the flow of stories and information across multiple modalities.	*Multimodality; Hypersociability;*	Reading skatemagazines, and following same magazines online; Filming with Super8 camera and sharing it online;
Networking	The ability to search for, synthesize, and disseminate information.	Learning how to search for the relevant information; Google.com;	Knowledge of different skateboarding websites, skateboarders profiles on social media platforms etc. ; Searching for trick tips;
Negotiation	The ability to travel across diverse communities, discerning and respecting multiple perspectives, and grasping and following alternative norms.	Cybercommunities	Using social media like Instagram, Snapchat, Facebook; SLAP forum; Skate memes – putting memes in skateboarding setting.

Table 1 Jenkins' taxonomy of New Media Literacy Skills in skateboarding context

Affinity Spaces

The term *affinity spaces* used by Jenkins in the context of participatory cultures describe the environments that support learning, facilitate participation and engage their members. (Jenkins, 2009, p.10) The informal character of the media they promote leaves its users with a freedom to choose when and where they wish to directly or indirectly learn something

through interacting with a selected media. That tendency leaves them with the feeling of empowerment, which might affect their desire of taking an active stance in a positive way. Being able to identify the common values and support them through their own contributions leave the members of the participatory culture with a power of shaping their community.

In a skateboarding context, these affinity spaces go beyond the online community. The core of the skateboarding culture is, obviously skateboarding - an act that takes place in a physical space. This indicates that *affinity spaces* in the participatory culture of skateboarders are to be found both online and offline. At this point, I found out that I had to go beyond the Jenkins' *Youth Participatory Culture* and find concepts and theories that would support my attempt of defining my own framework. The goal was to look into the culture of skateboarders and the existing ways of engagement within the community. In Chapter 5, I explain how the initial interviews uncovered engagement in building as a potential affinity space.

2.4 Skateboarding and space

Surely it is supreme illusion to defer to architects, urbanists or planners as being experts or ultimate authorities in matters relation to space.

(Henri Lefebvre, 1991)

On found space

The phenomenon of searching for spots initiated by 'Z-boys' in the 1970s has eventually become an art, and it was about subsequently shaping skateboarding. First by the growing popularity of a phenomenon called *pool movement* – skating drained pools of California. It was all about searching for the "perfect pool" – "In and around Los Angeles, backyard pools were found and skated, sometimes in the grounds of a burnt-out residence or illegally, without the permission of a temporarily absent owner." (Borden, 2001, p. 40) The hunt for a perfect spot has continued, just that now, the prey were the schoolyard banks, pools, drainage ditches, and other "wave-like" terrain. Borden (2001, p.53) refers to these sort of places as 'found spaces'. However in order to find these spaces, and re-discover them in terms of use, one had to have skill that would uncover their hidden potential. Thus, see how their moves can be emulated in a new context. As Borden stresses, "the tactics of appropriation, colonization and identity formation helped skaters to redefine both the city and themselves" (Borden, 2001,

p.53). The term *participatory creativity* suggested by Borden, refers to role that skateboarding played as an activity and how creativity of its users resulted in repurposing existing architectural spaces and giving them new character through their "colonization". Steady development of skateboarding techniques and tricks has eventually taken its enthusiasts 'out in the streets'. "Skateboard terrain was no longer restricted to pools, ramps or skateparks, but involved anything encountered in the modern city (…)" (Borden, 2001, p.179). This tendency took skateboarding back to its roots, where the interaction with the urban environment is stands central. A skateboarding magazine *Thrasher* defined that movement as "urban guerillas". In one of the issues, they printed a list of skateable elements of urban architecture (e.g. Bench, Car, Parking Lot, Picnic Table etc.). The new ways of utilizing these elements have revolutionized street skateboarding and resulted in it becoming a new distinct form. Street skateboarding has quickly and significantly changed the skateboarding culture, demonstrating that skateboarders do not need professional skateparks to practice their skills.

On constructed space

Throughout the 1970s, the skateboarding population grew from approximately two million skateboarders in southern California in 1975 to twenty to forty million skateboarders by 1978-9 (Borden, 2001, p.57). The national and international media coverage had spread the rumor about skateboarding on a global scale. With a growing number of its enthusiasts, skateboarding significantly increased its business potential and attracted investors and different commercial actors. The commercial skateparks that started to pop up in the mid-1970s was one way of earning money of skateboarders. Although the number of skateparks was growing, their quality left a lot to be desired. "Many early skatepark developers had never even seen skateboards in action, and simply fabricated whatever was in their own minds" (Borden, 2001, p.60). As skateboarding techniques and tricks were developing, the skatepark designers had to keep up in order to attract its users. The *pool movement* had turned the pool into a regular element of a skatepark around the year 1978 (Borden, 2001, p.63-64). A development of building methods and growing understanding of skateboarding techniques practiced in a found space, have given a birth to a skateable architecture – constructed particularly for skaters. The late 1970s was the time when the building of skateparks spread across the globe (e.g. Argentina, Australia, Brazil, Canada, Ecuador, France, South Africa), where the parks built in USA inspired the design. However, objects erected in the 1970s met a number of issues throughout the 1980s. Legislation issues connected to the insurance

coverage, redevelopment based on property value, and last but not least the diminution of skate community were some of the main reasons why skatepark owners struggled with keeping their objects open to the public (Borden, 2001, p. 175 – 177). Lack of visitors meant lack of funds, and lack of funds led to eventual wiping out. Partly because of this tendency, but also because of the growing trend, the majority of skateboarders moved out in the streets.

Found + Constructed

The last type of spaces that I would like to present here is the combination of the spaces presented above - found and constructed. These types of spaces often referred to as "DIY spots" or "DIY skateparks". These spaces are typically designed, built and used by skateboarders. The process of building these types of spaces is often based on the method of trial and error, where the expertise and skill of the users shape their final form. More detailed description of such spaces follows in a second part of Section 2.5, dedicated to DIY Skate Spaces.

2.5 Do It Yourself

Another field that I decided to delve into was the DIY or "Do-It-Yourself" movement. What I found the most interesting about it was how it played a role of a common denominator for some of the creative practices present in skateboarding, as well as in HCI community.

The term *DIY* in a modern context is dating its roots around early 1950s "(Merriam-Webster.com cites 1952; dictionary.com cites 1950-1955)" (Knobel & Lankshear, 2010, p.5). The early form of DIY is mainly concerned with repairing, fixing, building and so forth, in order to avoid the (possibly high) cost of paying the professional to perform the same activity. Knobel & Lankshear talk about the "*tasks, tools and knowledge*" framework (Knobel & Lankshear, 2010, p.6) that aptly describe the DIY phenomenon from a broader perspective. The higher accessibility of *tools* and *knowledge* resulted in a growing interest of what previously was seen as specialist-demanding *tasks.* DIY have in a way become a social movement, "associated with a range of 1960s – 1970s philosophies and countercultural trends" (ibid.). The idea of self-reliance and being independent from the industry that caused disempowerment have given DIY the strength to attract the people that wished to undermine the existing ways of providing services and producing goods. The growing number of its

enthusiasts included different people, cultures and subcultures, sharing the same idea: being independent from the industries, markets, different laws, and instead, just do it themselves.

DIY in HCI

Early days of DIY practice in technological context reaches as far back as 1920's. The ham radio enthusiast community is seen as one of the earliest examples of creating a community brought together by admiration for the radio communication technology. Another example of customizing technology for the personal use is electronic music production caused by emergence of inexpensive equipment throughout 1980's. Parallel to that, a culture interested in creating, exploring and exploiting software systems, publicly referred to as hackers, begun to rise. (Kuznetsov & Paulos, 2010). Below, I would like to present the two types of "hackers" concerned with DIY activities in a HCI context regarding the character of their artifacts. The first group uses digital platforms in order to create, share and learn their practices. The second group is practicing a more physical approach, combining the digital with a physical, through a process of creating interactive, tangible objects.

New Media - Creators

Knobel & Lankshear (2005) address various DIY activities with a focus on how new technologies encourage in media creating, sharing and learning. The examples they use include are concerned with audio media (e.g. remixing music, podcasting), still media (e.g. photo sharing, photoshopping) and moving media (e.g. machinima, anime music videos). They can be seen as a form of self-expression, formed by digital (or analogue) tools and mediated by a use of various digital channels.

Making - Makers

J.G. Tannenbaum, Williams, Desjardins & K. Tannenbaum (2013) underline the value of DIY as a collaborative and creative way of expression, as a way of creating new design opportunities for HCI. Recently, the expanding scope of DIY projects in HCI community has contributed in developing new tools and literacies that significantly lowered the threshold of becoming a "maker" (Tannenbaum et al. 2013). Accessibility and affordability of technologies like 3D printers, laser cutters, prototyping platforms (Arduino, Raspberry Pi) cause a vast expansion of the "maker movement". The community of "makers" keeps

growing, giving its members an opportunity to learn something new, contribute to their community through creating, and last but not least express themselves through their artifact.

From an ideological point of view, choosing to do things DIY style can be seen as an act of denial and critique directed towards the existing industrial practices and the culture of consumerism. At the same time, it is not always that the projects represent its maker's manifesto against the industry. "Hedonized technology" (Tannenbaum et al., 2013, p.2604) is a good example of tinkering with technology as a form of pleasure, and self-expression – creating for fun and creating for the fun of creating. The uniqueness of the products (some of them do not exist) and being able to control the process in order to "get what one wants", advocates for the use of DIY approach. Self-improvement through acquisition of new knowledge and skills is another important reason why people decide to be personally involved in developing their physical and digital artifacts. The possibility of inventing something new is another reason why people do it themselves.

Figure 7 LED Throwies

Figure 8 Flood Ducks

The innovations created might differ from simple, amusing projects, like LED throwies (Fig.7), giving people opportunity to mount a LED light to a metal surface "for fun", to project like Flood Ducks (Fig.8) – saving lives through detecting voltage in flooded homes. Even though the context of use is very different for these two projects, in terms of simplicity, these projects might be seen as very alike, and both are results of a DIY practice. It proves that tools and technology are out there and it is up to the people to use their creativity to define the purpose of their design. Other, more practical benefits connected to DIY are saving money, convenient completion times. Last but not least a personal satisfaction of being able to go through a creative process, see the result and share it with others, might help in answering a question why people choose to do things on their own.

Kuznetsov & Paulos (2010) have attempted to understand the motivation for contributing to DIY community through conducting an online survey, involving 2608 respondents across 6 different online DIY communities (Fig. 9).

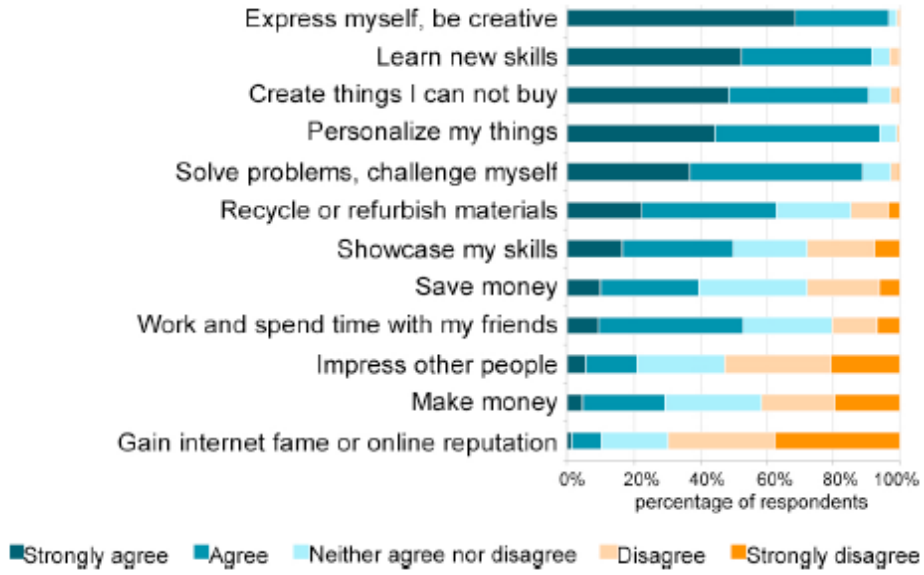

Figure 9 Motivations for contributing to DIY projects (Kuznetsov & Paulos, 2010)

When it comes to the outcomes of DIY activities, empowering the user and moving away from a user-consumer model of consumption is seen as one of the most significant ones, especially in case of "critical making" (Grimme, J.Bardzell & S.Bardzell, 2014). Grimme et al. recognize three different ways of empowerment:

Empowering oneself: artifacts and activities that allow the maker to reject a passive consumerist subject position and assert themselves as agents over their own infrastructural and/or device ecologies"(Grimme et al., 2014, p.434). This empowerment is often a result of creating or customizing artifacts, to meet a practical need. Another reason why makers decide to do things themselves is their criticism towards the preexisting commercial structures.

Empowering others: artifacts and activities that allow makers to teach and inspire others, to raise awareness of or affect changes toward social issues, or to create new choices for artifacts or experiences" (Grimme ibid.). This way of empowerment is motivated by exposing the larger issues and trying to motivate others to search for the solution collectively, either through making, or through teaching others how to make.

Empowering making communities: artifacts and activities that allow makers to contribute to the making community by sharing tools, resources, networking and collaboration" (Grimme ibid.). Here, it is encouraging collaborative projects as means of learning, sharing and

networking the knowledge between the makers that stands centrally. This way of empowerment follows the idea that "sharing is caring", suggesting that - the bigger the community, the broader the knowledge available.

DIY Skate Spaces

I will now present some examples of how skateboarders express themselves through various DIY activities. Skaters are highly involved in creating various forms of media, describable as DIY media, however in context of this thesis I had to focus on the physical, and not online activities. I will start with presenting how skateboarders use digital technology to create, share and learn their practices, compared to the community of Creators, presented above. The second approach that I present is more concrete, where skateboarders create their own spaces, which can be compared to Jenkins' concept of "affinity spaces" in the community of makers.

Skateboarding related DIY Media – Creators

The new technology has seriously changed the present ways of creating and distributing various skateboarding media. One can also observe how the technology development has created new ways of communication among the members of skateboarding community and creative adaptation of the media originally not meant for skaters in a skateboarding context. Different topics connected to skateboarding and media are presented in Appendix A.

DIY Skateparks & DIY Spots building - Makers

There are many examples of various DIY activities that members of skateboarding community are involved with. Designing clothes, producing skateboards and hardware, editing magazines are just examples of how skateboarders involve in shaping their own cultural heritage. However, in my thesis I would like to focus on how skateboarders become designers when it comes to shaping their own experience, through building their own skateboarding dedicated spaces. To describe these spaces I will use terms *DIY skateparks* and *DIY spots*. The difference between these is that DIY skatepark is a space entirely dedicated to skateboarding activity, while spot is a combination of skateboarding elements and free space that can be used for purposes other than skating.

From a spatial perspective, creating DIY spaces might be seen as a combination of found and constructed space described in Section 2.4 on Skateboarding and space. While some of the skaters decided to “move out” to the streets, and some of the skaters remained as regular visitors at the local skatepark, others decided to take things in their own hands and unofficially, initiate DIY projects which Karen Lombard refers to as *indigenous governance* (Lombard, 2015, p.170). Probably the first and the most famous example of a large DIY project is ‘Burnside Project’ in Portland (Fig.10), featured in numerous skateboarding media.

Figure 10 DIY Skatepark Burnside

Here is a citation that draws a perfect picture of what kind of place it was before it became a DIY skatepark:

"in late 1990, the public right-of-way under Burnside Bridge was 'a flea market for junkies, alcoholics, prostitutes and drifters … Homeless men slept in abandoned cars; the pavement was littered with rigs for shooting heroin'. As a proposed skatepark in Gabriel Park had been rejected, on a Halloween night in 1990, 'five skaters – whose identities remain sketchy, even to this day – troweled a cement ramp into place against a disused loading dock and retaining wall'. (Philip Dawdy in Karen Lombard, 2015, p.175)

Today, Burnside still exists and prospers as a public skatepark and makes a perfect example of how collaborative effort can lead to empowerment. In this case, skateboarders had a unique opportunity to turn a useless and dangerous place into their own urban space. However, the *indigenous governance* does not always get the approval of the local authorities, and numbers of different DIY projects has been shut down or destroyed by the officials or by the private owners of the estates they were created at. One of the examples is Steppe Side (Fig.11 & 12), famous DIY spot that existed in city of Malmö in years 2004 – 2007.

"In 2004 an era ended and another was born. In the smoke of the bulldozers that was tearing up the concrete we had mixed with sweat and blood over at Savanna side, we dealt with the loss and put our efforts into creating Steppe side, chapter 2 of the Malmö D.I.Y saga.

For three years we developed this little bowllike creation, making it to a unique place that grew bit by bit every year and was sessioned to pieces most everyday. We were sharing the space with homeless people and rats, junkies and thieves but fitting in nicely nevertheless. After dodging a few bullets over the years we lost the fight in the end to a sledgehammer and chapter 2 was smashed to bits. R.I.P"(Steppe Side, 2016)

Figure 11 DIY Spot Steppe Side

Figure 12 Steppe Side destroyed

Examples of DIY projects in Oslo are Voldsløkka (Gedde-Dahl, 2012, p. 46 – 49) and Cuba. Voldsløkka was first a skatepark and it was built in 1998, by the Municipality of Oslo. The skatepark was demolished (Justme, n.d) in year 2000, but skateboarders continued to use the remaining asphalt to carry out different DIY activities. The latest DIY project at Voldsløkka (Fig.13) was initiated in 2012 by various skateboarders based in Oslo. It was destroyed after

three years of existence, giving a place to Oslo Skatehall - an indoor facility worth 75 milion NOK (Storøy, 2017).

Figure 13 Voldsløkka before (top) and after (bottom)

Cuba park is another example of DIY spot. Located at the Grunerhagen Ballplass, right next to the basketball courts, Cuba was a project initiated by a group of skaters for the first time around year 2008. The placed elements were removed by local authorities several times throughout the years. In March 2014, local skaters decided to cast new elements using concrete (Fig.14). It would make them more robust and more difficult to remove. The elements attracted large number of skateboarders, making Cuba a main DIY spot in Oslo (Fig.15). Only two moths later, the 16th of May 2014 the spot was destroyed (Fig. 16).The last attempt of rising the spot happened shortly after (Fig.17). However, similarly to the previous attempts, the elements were removed and the "battle of Cuba" was lost.

Figure 14 Concrete elements at Cuba park, Photo: Ø. Kvanneid

Figure 15 Cuba park DIY spot, Photo: Ø. Kvanneid

Figure 16 Cuba park destroyed, May 2014 **Figure 17** Cuba park re-building, June 2014

What brings these DIY projects together is that all of them were initially built, and maintained by members of the skateboarding community. Many of DIY spots are often funded by skaters themselves, giving them the freedom to choose the shape and the layout. Some of them get destroyed, some of them get to stay, it is often the laws that regulate whether a project might stay, or has to be destroyed. In some cases, local politics leave those DIY spots untouched, seeing the value and meaning they have for the local communities.

Places like Copenhagen, Barcelona, Gøteborg, Roskilde and Malmø are used as examples of cities that have dedicated some of their areas for multipurposed spaces. Building new skateparks and letting skateboarders to create their own DIY spots are seen as positive means of supporting creative activities among youth. Urban City Laws of Oslo, mention skateboarding as a phenomenon and culture that can contribute to making a creative urban spaces full of life. It is therefore welcome in future city development to think in a way that involves different activities and multiple user groups, considering the groups that are affiliated with the places where these activities take place, choice of materials etc. (Oslo Kommune, Høring Skate og Anlegg , 2014,p. 5).

3 Theoretical Framework

In this chapter, I will introduce the theoretical framework that has guided me in my attempt to define the values brought by DIY activities practiced by skateboarders. The choice of framework was based on the initial interviews with three members of the skateboarding community and my personal experiences as a skateboarder.

My initial interviews were media-focused, which helped me to define the existing patterns of creating and sharing skate-related media. All three interviewees commented on how the internet has influenced the existing ways of creating and sharing skate media content. As the quantity grows, the quality shrinks. The term *skate-inflation* was used to express that tendency by one of the interviewees. Another important theme uncovered by the interviews was how skateboarders appreciate the social aspects of different types of happenings. Skateboarding contests and skateboarding trips seemed to be a good ways of meeting others, giving them possibility to share the experience and enjoy skateboarding together. One of the interviewees has mentioned building things together as an existing way of expression, which I found very interesting.

> O: *"You mentioned something earlier about building something…"*
>
> H: *"Yeah, It is like… for example when we were kids, we had no opportunity to travel around in the city and find the good spots to skate, but we had seen what people skated on. For example a kicker, or a box with iron on. That they slid along and so on. And then we had to find a hammer and a nail and* ***make the elements we could skate on****."*

This statement shows that making is not a new thing for skateboarding community. Also the fact that the elements were designed and built with a specific intent, verify that it was not a random act of bricolage, but a pre-planned action.

> O: *"Where did you find the motivation to do stuff like that?"*
>
> H: *"Cause you want to copy your role models, and if you don't have a skatepark, or a city that is good to skate in, you got to try to recreate the elements they skate on …* ***in your driveway*** *or…"*

The second situation brings back the issue of placement of these designed elements. The interviewee uses a driveway as an example of space where city regulations do not apply to the same degree as in a case of public spaces. However, the size of the driveway limits the possibilities of creating more than just a few elements. In order to continue their building activities, skaters search for spaces that allow them to expand their movement, which eventually become DIY spaces.

When asked about the positive sides of that activity, the interviewee answered:

> H: *"A lot of organized sports, where things are just served to you… not like it is something wrong with kids that play football. It is not like I mean that they should build their own football pitch in a way, but I think that many* ***kids learn*** *a lot from having to* ***build things themselves if they want to have fun****. If they do not do it, they will not learn."*

To have fun skating is one of the primary motivators. In order to have fun, skaters often have to learn how to build their own spaces. They provide themselves with fun experiences through building and using self-made obstacles. This tendency made me reflect on the future character of my work. I had to keep in mind that if I wished to learn skateboarders about topics connected to interaction design and technology, it had to be a pleasant and fun experience.

Another thing that caught my attention was that skateboarders seemed disappointed and frustrated about the fact of being excluded from the projects meant for skateboarders by the officials.

> H: *"Cause the city councils and different… I mean* ***they initiate that kind of projects without talking to skaters****. Both because skaters we are bad to organize, which makes it difficult to contact skaters when they initiate that types of projects. Also because …. Yeah, skaters do not look like they have a lot to do inside the City Hall on the meetings and… or many of them don't."*

The fact that skateboarders are not included in creating their own spaces seemed to be upsetting. Skateboarding, unlike to basketball or football, has no predefined design or shape of the space it is practiced on. Thus, skaters wish to be able to contribute in defining the character and the composition of their own spaces. Their expertise and eagerness is often overlooked by the authorities responsible for developing spaces dedicated to skateboarding.

Another interviewee has also mentioned building spots as a common activity in his local skateboarding community. Both the fun factor and lack of places dedicated to skateboarding were present in his response:

> O: *"Was it build by others for skaters, or was it skaters doing it themselves?"*
>
> P2: *"**It was the skaters that build it themselves. Always."***
>
> O: *"And where did they find the motivation to do it?"*
>
> P2: *"It was probably because t**hey wanted to skate and have something fun to skate on**. And then **they had to build it themselves**."*

These three tendencies: the inflation of skateboarding media, expressing creativity through building (other than media creating and sharing) and the feeling of being excluded from the process of shaping own spaces, seemed interesting at the time. They guided my research approach, making evident to me that unlike to the projects directed by the officials, skaters should be thoroughly involved in shaping my project. I decided to conduct a participatory workshop, which later guided my project towards DIY.

3.1 Five Key Principles of Everyday Creativity

In order to develop an enjoyable and learning DIY project, I had to understand what drives people to get involved in various DIY activities in general. In his book concerned with making, David Gauntlett (2011, p.220-226) have outlined *Five Key Principles of Everyday Creativity*, suggested as tools for thinking about everyday life, creativity and media. These present why people decide to engage in making and uncover the motivations behind their engagement. Thus, I find them highly relevant for my thesis.

I will now describe each of the principles, followed by a short description.

1. **A new understanding of creativity as process, emotion, and presence.**

   This principle is motivated by finding a definition of creativity that embrace the process and the emotions it can create it and not the outcomes exclusively.

"Everyday creativity refers to a process which brings together at least one active human mind, and the material or digital world, in the activity of making something. The activity has not been done in this way by this person (or these people) before. The process may arouse carious emotions, such as excitement and frustration, but most especially a feeling of joy. When witnessing and appreciating the output, people may sense the presence of the maker, and recognize those feelings." (Gauntlett, 2011, p.76)

2. The drive to make and share.

This principle underlines how people decide to get involved in various activities based on their eager to be active and to participate in shaping the world around them. The driving force here is not the money and fame, but meeting others, and possibly gaining some recognition among them, but again, it is rather seen as a positive side-effect than the motivation itself. It is rather their existence, their interests, and their personality that is central - the desire to be noticed. "There is a pleasure in seeing a project from a start to finish, and the process provides space for thought and reflection, and helps to cultivate a sense of the self as an active, creative agent" (Gauntlett, 2011, p.222). Gauntlett also recognizes how people involved with such creative activities share a "desire to connect and communicate with others (…) and to be an active participant in dialogues and communities" (ibid.). He addresses the importance of recognizing these impulses and highlights the importance of developing technology that will support their eager to participate.

3. Happiness through creativity and community

This principle suggests that social engagement is the key to improving the enjoyment of life. Gauntlett discusses that in order to reach the happiness one has to actively work towards it. Communication, exchange, and collaboration are aids that should support the production of everyday life. Novel ideas and common goals establish the values for the community and are the rewards of the active involvement.

4. A middle layer of creativity as social glue

Here, the desire for creating and making things oneself - the productive engagement, serves as a common link, connecting people involved in creative activities "in unexpected, unplanned, and perhaps rather anarchic ways" (Gauntlett, 2011, p.224). The wish to do things instead of supporting the consumerism enforced by the industry is seen as a link

between makers. It cultivates that people should do things DIY style, instead of just blindly following the system.

5. Making your mark, and marking the world your own

Giving people an opportunity to shape their environments and communities is a main concern of Gauntlett's fifth principle. It should happen by giving them right tools and devices. The tools are vital for facilitating "ever-present possibility and potential of unpredictable and unplanned creativity" (Gauntlett, 2011, p.225), thus they should be readily available and easy to use. Further he indicates that people should be offered platforms where they can "truly make their mark, express themselves, and shape the environment" (ibid.), and that emerging technological devices should be "naturally enabling of making and sharing" (ibid.). No gatekeepers and minimum amount of restrictions are seen as two significant factors in fostering everyday creativity, though rather challenging to achieve in a real-life setting.

6. Wish to learn

Among the number of existing ways of participation in the skateboarding community uncovered by initial interviews, I found the activity of building and shaping DIY spaces outstanding. By creating their own spaces, skaters learn how to translate their skills into the physical elements and objects. The process of learning achieved by was seen as enjoyable and fun, and not as a necessary evil. This tendency has led me towards creating an additional **sixth principle** that endorses the everyday creativity, a **wish to learn.** The skateboarding act can be seen as a continuous learning process where improvement of skills is a reward. Learning how to build objects that would support their practice is one of the ways in achieving that goal.

My next step was to figure out how I could share my knowledge of existing technology with the members of the skateboarding community. The goal was to use the knowledge gained by studying the principles described above. I wished to expose skateboarders to the possibilities given by new technologies and see how it would complement their existing DIY skills. It was crucial to me to find a fun, enjoyable way of sharing the knowledge. The goal was to show skaters the potential of creating an interactive DIY space, and give them an opportunity to express their ideas.

4 Methods & Methodology

In my research, I decided to use the interpretive research approach. My goal is to understand the participation in the skateboarding community. Thus, I find it crucial to gain the knowledge about this phenomenon through direct involvement with the members of this community. Choosing the qualitative research methods was based on the fact that my thesis is concerned with the participation, and to me, it seems hardly possible to investigate it without communicating with people that actually participate in activities that form their culture.

4.1 Research through Design

"Looking at how various ways of conducting research approach the process of knowledge creation, science and design seem to be going in opposite directions. "

(Stolterman,2008).

The main goal of Research through Design is to generate new knowledge, through "conducting scholarly research that employs the methods, practices, and processes of design practice" (Zimmerman & Forlizzi, 2014, p.167). The desired outcome of the research is to speculate about the future, by creating prospective artefacts.

Sir Christopher John Frayling first introduced the term *Research through Design* in the Royal College of Art Research Papers from 1993. In his article, he addresses the urgency of finding the right definition of the word research, as the ambiguity around the use of term was causing the confusion. By the critique of how separating the institutions that taught art and design separately ever since 1837, he further highlights the importance of research for "the practice and teaching of art, craft and design" (Frayling, 1993, p.4). He finally defines how research, design and art can be merged in various ways, introducing research *into* art and design, research *for* art and design, and research *through* art and design. He describes the last one – research *through* design as research consisting of three essential elements: *materials research, development work* and *action research* (Frayling, 1993, p.5). The first element is considered with learning various processes connected to the materiality of the projects. The next element - *development work* is about taking the existing tools, using them in a new way and communicating the results. The focus of *action research* is the proper documentation of the

process, resulting in thorough knowledge about the artefact created. These three elements share a common goal – together they create a new knowledge, achieved through a process of creation, and help to create products that "transform the world from the current state to a preferred state" (Zimmerman, Forlizzi & Evenson, 2007, p.497).

William Gaver outlines the major differences between the rigid structure of "scientific method" that "seek to discover, explain and predict things", and the designerly way of approaching the world in order to create things that "have not hitherto existed", "whereas design is fundamentally bent on creating the new" (Gaver, 2014, p.150-151). Design in contrast to science is not about "replicability, objectivity, generality and causal explanations". The bottom line of a design is in its *working* – achieved either "by functioning efficiently and effectively, by solving problems neatly, reconfiguring them insightfully" or by "using materials and production processes in elegant ways" (Gaver, 2014, p.152). The uncertainty of what the artefact might become leaves the designer with what Gaver calls *epistemological ambiguity* (Gaver, 2014, p.153) - where the speculation about the unknown, makes design process comparable with looking for a needle in a haystack. At the same time, the "ability to fit together ideas, materials, technologies, timings, situations, people and cultures" guides the designer, throughout the practice of *productive indiscipline* (Gaver, 2014, p.162). The goal of that journey is to create a novel artefact – a product of the designer's unique synthesis of ideas, thoughts and manifestations. Bringing new knowledge on people, technologies and the world, obtained throughout that journey is the essence of Research through Design approach.

Lab, Field, Showroom

Koskinen, Redstrom, Zimmerman, Wensveen and Binder (2001, p.5) discuss the concept of Research through Design in terms of its theoretical value for its practitioners. They stress that in order to build up a research practice that will result in constructing knowledge; researchers need respective methodology and theory. Koskinen et.al suggest to focus on the "*construction* – be it product, system, space, or media" (Koskinen et al., 2001, p.5) as means of *constructing* knowledge resulting in a "*constructive* design research" practice. The approach they follow is of empirical and pragmatic manner, where the main concern is to find possible ways of putting design and research together. According to Koskinen et al., "a central, or core, idea that shapes and structures the research conducted" (Koskinen et al., 2001, p.7) can be defined as a research program. Research programs guide the activities performed by the researchers

throughout the research process, and the results will then build upon the existing methodology and theory. The dialogue between the research programs and society is crucial for constructive design researchers (Koskinen et al., 2001, p.48) and Koskinen et.al introduces three types of design research defining that relationship: *lab, field,* and *showroom.* I will now briefly present each of the types and discuss which of these perspectives reflect my research case.

Lab

It can be discussed if conducting experiments in a laboratory setting is a right way of researching the design. Koskinen et al. discuss how only some faces of the design research are suitable for the laboratory studies and underlines that the difficult part is to identify these. *Lab* approach is often connected to psychology and natural sciences. Through the examination of (for example) human cognitive skills, certain relations might be uncovered, which "would provide a solid ground for design" (Koskinen et al., 2001, p.51). The laboratory setting gives the researcher an opportunity to test the hypothesis, or to examine different dimensions of the artefact created, using dedicated technology and a controlled environment. However, these advantages can also be seen as the main drawbacks of *lab* approach - removing the studies from the real world setting can bring certain limitations in its future deployment. Thus, it is the focus of the studies that define the appropriateness of the *lab* approach for the research.

In my research, I have not used this approach. The goal of creating the artefact was to initiate participation, and from that perspective, putting it in a laboratory setting would be artificial and unbeneficial, even in the wild. Firstly, the intent was not to experiment with the obstacle that was made, rather it had to do with participation. Secondly, to avoid taking care of the external factors like weather, passersby, random skaters, sounds, light and so forth, which are inseparable part of skateboarding experience. Removing all of these elements would be very challenging and unnatural.

Field

Looking from the contextual perspective, the *field* approach to design can be seen as an opposite of *lab* – "the *lab* decontextualizes; the *field* contextualizes" (Koskinen et al., 2001, p.69). The goal here is to see how people interact with the artefact in a "real world" setting. *Design ethnography* is the term used by Koskinen et al. (2001, p.70) to describe the relation

between the researcher and the population studied. With a *field* approach, the designer builds his understanding of the context through employment of carefully selected research methods "out in the field". The researcher uses his position and experience in conducting the ethnographic-style observations to create data, and more importantly through apt use of methods he creates the understanding of the field and according to Koskinen et al. - "good design research is driven by understanding rather than data" (Koskinen et al., 2001, p.75). Borrowing the research practices from anthropology and sociology and putting it in a design setting, contributes to the field of design research and can eventually result in forming new design methodology (Zimmerman & Forlizzi, 2014, p.173). The main difference between the design ethnography and the ethnography applied in the anthropological setting is "the focus on products and things and the use of mock-ups and prototypes" (Koskinen et al., 2001, p.75). The use of these can stimulate the imagination and help to create the tools used to express the more abstract ideas. The idea is that the design process based on field approach should reflect that "design is supposed to be an exploration people do together" (Koskinen et al., 2001, p.83).

The *field* approach is definitely the approach that has defined many stages of my research. From the beginning my desire was to include the skateboarders in the design process, wishing to hear their opinions and ideas. My goal was to explore their reactions to that empowerment and to see how it could result in sharing their knowledge and skills. The making process was in many ways determined by the skateboarders. The initial interviews and participant observation helped me to find a context of study. The workshops gave me certain ideas of the design I was pursuing. Also the process of building of prototype would not be possible without the help of skateboarders. They shaped the final prototype by helping in the building process and by sharing their opinions about the physicality, interaction and site of deployment. Their expertise was vital for the success of the entire process.

Showroom

Showroom is a design approach that stems from the traditions of art and design. Its goal is "to force people to think, to notice, and to reconsider some aspect of the world" (Zimmerman & Forlizzi, 2014, p.173) through designing and exhibiting provocative artefacts. The work of Anthony Dunne and Fiona Raby, later introduced to the world as *critical design* (Koskinen et al., 2001, p.90) has played a significant role in shaping the *showroom* approach, defining its

critical position towards status quo. Though the highly philosophical nature of *showroom* can be challenging in terms of understanding the message, critical designers describe their work in a way similar to researchers – "from initial ideas to prototypes and how people understand them" (Koskinen et al., 2001, p.94). In *showroom* researchers embed their manifesto into the design artifact that results in initiating the debate and raising questions on the present state of the world. The division between art and design is a problematic one. Koskinen et al. present a set of guidelines that might help designers to preserve their status (Koskinen et al., 2001, p.98). One of them is to engage in the discussions and interpretations of the artefacts. Another tactic is to design in a highly professional way, making it possible for the artefacts to evolve into products. Studying the prototypes in a real life setting is another tactic suggested by Koskinen et al. This type of empirical research is concerned with the form of the research objects, rather than with the issues around their use. In that way they can also gather valuable insights, useful for their future works.

The way I have used the event, the Master Jam, in my work fits well with *showroom*. The goal was to show the prototype to skaters, and let them explore the possibilities, the level of difficulty and test the different interaction modes provided by its shape and function. The prototype was used to create reactions and it was very insightful to hear the speculations and opinions regarding the concept.

Knowledge Typology in RtD

When it comes to design research, there are several standpoints touching upon the subject of knowledge creation. Krogh, Markussen & Bang (2015) outline the broad range of attempts aimed to uncover particular ways of conducting the design research. They address a concept of *drifting* and present two different ways of its perception, based on a character of conducted research. In science literature *drifting* can be seen as random, uncontrolled, illogical and inconsistent way of attenuating the research contribution. On the other hand, appropriate application of *drifting* in the practice of design gives the designer the control over the design process and the flexibility that might guide the design towards unexpected places. In this way, knowledge developed through *drifting* and gained through shaping the design product becomes the outcome of the design process. I will now present the five types of knowledge construction suggested by Krogh et al. (2015) as a possible way of evaluating the results of a design process, preserving the uniqueness and specificity of such.

In their typology, Krogh, Markussen & Bang (2015) classify "five distinct methods of knowledge production through design experimentation: *Accumulative, Comparative, Serial, Expansive* and *Probing."*(Krogh et al., 2015, p.44). I will now present the typology suggested by Krogh et.al, and describe how particular ways of *drifting* have influenced my research.

Accumulative

The iterative process of sketching and creating models, evaluated in terms of their "cognitive qualities, rather than contextual appropriateness". The laboratory setting favors the rigorist character of the study, and brings "depth of knowledge on the particular" (Krogh et al., 2015, p.45). Keywords: "depth", "stacking".

The accumulative method of experimentation requires that the experiments are carried out in laboratory settings. That alone precludes me from defining any of the knowledge production methods applied in my research as accumulative.

Comparative

Krogh et al. identify *drifting* as comparative, when it takes place through exploring one design case in various contexts, or different designs in either particular or various contexts. Keyword: "acknowledging complexity" (Krogh et al., 2015, p.45).

Comparative method is highly relevant for my research. Involving a group of skaters in a design activity might be seen as a shared platform. My design process consisted of three participatory design activities – two workshops and prototype testing/event. The tools and formats varied and both workshops created different outcomes. Thus, I could examine which form was seen as more attractive based on the reactions of participants and level of their engagement in working on assigned tasks.

Serial

In this method, knowledge production is based on the evolution of the design as a result of various experiments, with focus on the chronological order of these experiments, "framed on the basis of its predecessor"(Krogh et al., 2015, p.46). Keywords: "systemizing local knowledge". (ibid.)

The method of serial design experimentation is another method that was present in my research. The prototyping phase is a good example of how I *drifted* from the initial idea, towards the final prototype. Using a camera to thoroughly document every step undertaken in the prototyping phase has given me an opportunity to visually follow how my design evolved and moreover, the dating function on the camera makes it easy to follow these changes in a chronological order.

Expansive

The expansive method focuses on exploration of new perspectives through conducting the experiments in a non-linear manner. The explorative character of these experiments is meant to broaden and extend the area explored, motivated by earnest pursue of new knowledge. Keywords: "broadening", "extending" (Krogh et al., 2015, p.46).

The exploratory character of both my research and my design case quite accurately fits the description of the expansive method. The very limited data on how skateboarders can participate in a design process defines the knowledge gained by the design activities applied in this research as expansive. Also the design process and its results are unique, thus expansive. Exploring how the project was received by the skaters, the spectators present at the event, and the people living in close neighborhood of Torshovdalen – where the final event took place, were not previously measured. Thus, investigating these communities define the method of gaining knowledge as expansive.

Probing

"Personal motivation and engagement in the research pursuit" (Krogh et al., 2015, p.47) is what describes the method of probing. In order to consider probing as a method that bears a methodological value, one has to combine it with one of the methods described above. "Pursuing opportunities in the environment" is what shapes the approach and can be perceived as less traditional from a research point of view. The keywords used to describe probing as a type of obtaining new knowledge give one an idea of their nature. Keywords used by Krogh et al. are: "illogical", "artistic", "impact oriented".

Choosing the shape of the prototype, and its appearance were decisions that I took myself, based on my aesthetical preferences and the personal ideas regarding chosen shape in a skateboarding context.

4.2 The Interaction Design Research Triangle

Daniel Fallman (2008) introduces the triangular model (Fig.18), including three vital, external interfaces of the design: the industry, the academia and the society at large (Fallman, 2008, p.5). Respectively, he labels them in a context of a design research activity as: *design practice*, *design studies*, and *design exploration*. He also claims that the uniqueness of the field of interaction design research is based on a synthesis of these three perspectives (Fallman, 2008, p.5).

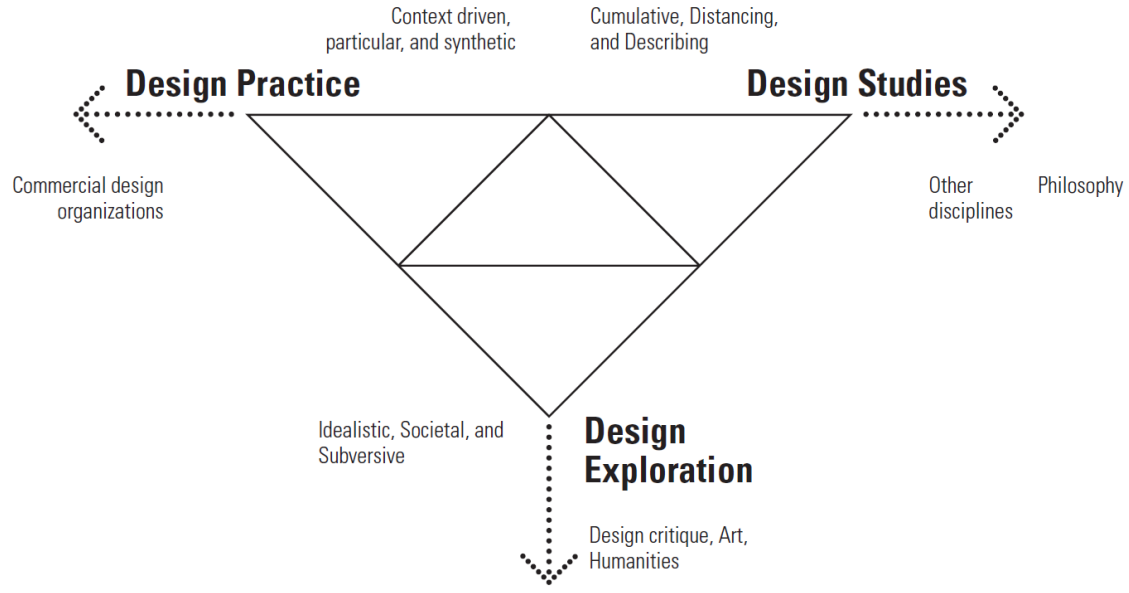

Figure 18 The Interaction Design Research Triangle by Daniel Fallman (2008)

Design Practice

Design Practice are types of activities that Fallman (2008) characterize as comparable to the commercial ways of design implementation. The word practice indicates that the role of the interaction design researcher is active, and Fallman underlines that the engagement in a *Design Practice* is crucial in order to obtain a "tacit knowledge" and "expertise", unobtainable through a passive approach. The empirical, hands-on attitude stands central; however it is very important that the interaction design researcher involved in such practice does not overlook the potential research areas that might be hiding under the surface of the practice he is a part of. Being reflective in the process will contribute to the field of research through writing-up the experience and lessons learned throughout. These might then become a valuable source of knowledge for the future projects. Fallman (2008) sums up by calling the *Design Practice* activity as a primarily *synthetic* one, where "the interaction design researcher becomes involved and engaged in a particular design practice, but does so with an appropriate research question in mind"(Fallman, 2008, p.7).

Design Exploration

According to Fallman (2008), the activities that happen in the *Design Exploration* phase are *synthetic* (similarly to the design practice) and *proactive*, at the same time "the interaction design researcher is involved in bringing forth a product or a service" (Fallman, 2008, p.7). Fallman (2008) addresses the significance of the "What if?" question, which can guide or even define the agenda of the research. He refers to what Schon (1992) characterizes as a "problem-setting" activity, where defining the problem and solving the problem are of equivalent importance, where the former leads the latter. Thus, the projects tend to be self-initiated and considered with exploring the alternative solutions, rather than commercially motivated and utilitarian. "*Design Exploration* is a way to comment on a phenomenon by bringing forth an artifact that often in, itself, without overhead explanations, becomes a statement or a contribution to an ongoing societal discussion" (Fallman, 2008, p.8). The object of the investigation will then become "the aesthetics of the whole interaction including how something works, how elegantly something is done, how interaction flows and how well the content fits in. "(Fallman, 2008, p.8). Finally, the societal and proactive character of the project, driven by the activities involved in a *Design Exploration* is about directing the spotlight at the topics that question the existing ideologies and paradigms in design.

Design Studies

The third activity that Fallman (2008) introduces as a part of interaction design research is the activity of *Design Studies*.

> *"The overall goal is to build an intellectual tradition within the discipline, and to contribute to an accumulated body of knowledge. This typically involves the design researcher in analytical work, and in taking part in and contributing to ongoing discussions about design theory, design methodology, design history, and design philosophy." (Fallman, 2008, p.9)*

Since the approach taken by the interaction design researcher in *Design Studies* is mostly considered with delving into the topics relevant for the project, and exploring these in an academic-like manner. *Design Studies* create the knowledge that is crucial to the interaction design researcher in understanding the cultural and historical context of the design. It serves as scaffolding, using theoretical background to support the otherwise hollow shell of an artefact.

4.3 Design interventions

In their article on experimental design research, Eva Brandt and Thomas Binder (2007) discuss how knowledge produced through designerly experiments in research projects can be shared, despite the differences between the scope and research approaches applied. They introduce the notion of design interventions as "the way the research can be observed to intervene (or interact) with the subject matter." (Brandt & Binder, 2007, p.12) In the context of my thesis, the process of making together with the event, the Master Jam, results in the design intervention.

4.4 Data collection

Since my research was involved with people's participation, I decided to use qualitative research methods. My goal was to understand the community and culture of skateboarders, but also to express their participatory character in a suitable manner.

Participant Observation

The participant observation method "implies an immersion of the researcher's self into the everyday rhythms and routines of the community" (Crang & Cook, 2007, p.37). The goal of the involvement with that community is to see and to understand the situations that occur and what characterizes the community studied. Personal involvement of the researcher supports the data gathering process, provided with the researcher reflections on his role in the studied community. The research process develops as the researcher manages to recognize and contextualize the information that might potentially contribute to his study.

In terms of access, spending a significant part of my life on a skateboard has earned me a certain status among the members of the skateboarding community. Gaining access to a community was straightforward in my case, which left me with a very unique opportunity of studying a skateboarding culture "from a close range". One way of conducting the participant observations was taking a part in ordinary skateboarding activities like skateboarding sessions and hang outs throughout the entire duration of the research. Another exclusive opportunity was receiving an invitation to join a week long skateboarding competition - Oslo Games Go! My ready-made identity allowed skaters to behave naturally and discuss subjects that they would normally discuss using the language they usually do. I also found it insightful to participate in these skateboarding activities as a researcher, reflecting on how technology supports their communication, facilitates their expression and participation.

Interview

An interview is seen as a highly relevant method for research concerned with understanding of the "contexts and contents of different people's everyday social, cultural, political, and economic lives" (Crang & Cook, 2007, p.60,). An interview can be fully structured, semi-structured, and unstructured. A semi-structured interview is framed in terms of general themes and subjects and supported by an interview guide. In an unstructured interview the researcher does not have the predefined themes and it resembles a conversation more than an interview per se. In my project, I used semi-structured interviews in four different settings:

1. The first round of interviews that I conducted, were the initial interviews with the members of skateboarding community. These interviews were rather of exploratory manner, although I decided to prepare some categories beforehand. The questions that we

discussed were concerned with participation and technology in context of skateboarding - the categories that I could potentially delve into.

2. Later in the research I interviewed the President and Co-Founder of Urban Sports Square Foundation – Grzegorz Gądek. The interview was concerned with skateboarding community, participation, urban spaces and attitude of local authorities towards diverse activities that take place in these spaces. The interview was conducted via Skype.

3. Two Oslo based artists were the interview subjects in the third round of interviews. My goal was to investigate their artistic background, along with the projects they were involved with, philosophy of their works and their thoughts on urban space and the role it plays in society.

4. The last round of interviews consisted of the evaluative interviews that I conducted after deployment of my design artefact. These interviews were used to capture the overall impression of the event that took place, the opinions about the design artefact and attitude towards the DIY activities.

There are several reasons why I decided to use semi-structured interviews. One of the reasons was that I wished to leave some "leeway". In case any of the interview subjects would come up with any interesting topics or thoughts that I didn't consider beforehand. Another reason was to keep the natural flow of the conversation, but at the same time following the guide, in order to get the most out of the time I was given to conduct the interview. The interviews lasted for approximately one-hour, as according to Crang & Cook, "this is usually long enough for some rapport to be established and to enable the discussion of a range of issues, and short enough to be 'user friendly' for most interviewees" (Crang & Cook, 2007, p.63). In practice that was a very relevant hint, that kept the interview focused and adequately intensive throughout the entire session. The evaluative interviews were shorter, and took between ten and thirty minutes. The majority of the interviews were conducted in Norwegian. Thus, I translated the quotes used in the thesis from Norwegian to English. One interview was conducted in Polish, but no quotes were used.

Visual Approaches

Film and video

This method uses the camera lens to capture people in a real-life context. The purpose of study define what one would look for while filming, in case of HCI, the human interaction with each other, technology, and the surrounding would stand central. It is seen as especially valuable in gathering contextual insights in the exploratory phase of the design process. Different issues and findings can be revealed through repeated viewing and it can be seen as a convenient source of data in terms of involving other researchers.

During my research I used a DSLR camera to capture two different situations:

1. A "typical" skateboarding session out in the streets, filmed during the exploratory stage of my research. The video was shot at two different locations that were used in a skateboard movie project. The goal of the session was to land a trick, or several tricks after each other "in a line", and capture that with a camera. The approach that I used was a typical "day in the life" (Designing With People, n.d.) approach. I followed a group of skaters for approximately 3 hours, where my focus was to capture how videographer and skaters would interact with technology. I would carefully observe the skateboarding session in order to expose other interesting activities or actions, potentially relevant later in my research.

2. The second situation that I decided to capture with a camera was the Master Jam - the event that took place the 8th of April at Torshovdalen. I wished to capture the prototype deployment and the event. My second goal was to capture different patterns of using the artifact, but also to convey the overall atmosphere of the event. Besides my own engagement in filming, I asked a fellow skateboarder, and professional photographer, to film the event. The material was later used during the data analysis to evaluate of the final design.

Visual diary

Another data collecting method I found useful was taking pictures throughout the design process. In a way it can be compared with a method known as elicitation diary, which encourages to "record only basic information about the important events occurring in their day" (Lazar et al., 2010 p.133). The pictures obtained could later be used in explaining why certain events took place.

I recorded all the data myself. Using a camera to document was helpful in keeping track of different impulses and situations that could later influence my design. The main advantage of taking pictures along the way was being able to rapidly capture a moment and keep those moments in an orderly manner. The camera was also a very useful tool in documenting the different stages of design, and the images taken could later support the presentation of my project.

4.5 Design Methods

The methods described here, are the methods applied in shaping the design process. The result of the process was a physical prototype. Among these methods, I decided to use brainstorming, braindumping, Cultural Probes and mood boards.

Ideation techniques

The ideation methods I chose for the first workshop were braindumping and brainstorming. (Interaction Design Foundation, 2016) The main reason for using these two different approaches was to first give the participants an opportunity to think individually and avoid unwanted distractions and others' critique, keeping in mind that creativity can be both initiated through the individual and the collective ideation.

Braindumping

Braindumping is an ideation technique that gives the participants the opportunity to come up with different ideas on their own. It can be seen as a useful technique for activating the imagination without any external constraints and comments. It can also be seen as a good way of giving a voice to the shyer participants.

For my session, the main advantages were to let the participants "warm up" their brains, but also to have some concrete ideas that they could build on in brainstorming stage of the workshop.

Brainstorming

During the brainstorming session, the key was to follow the four basic rules of brainstorming suggested by Alex F. Osborn (1953). They were used as a guide in order to produce as large outcome (number of ideas) as possible. Its main goal was to build upon the ideas created by the individuals during the braindumping phase.

Cultural Probes

Bill Gaver, Tony Dunne and Elena Pacenti introduce the term *cultural probes* as a collection of diverse materials "designed to provoke inspirational responses" (Gaver et al., 1999, p.22). The focus in their approach was the aesthetic control, the cultural implications of their designs, and ways to open new spaces for design (Gaver et al., 1999, p.24). The exhaustive description of the probes that I used follows in Section 5.1 (Workshop 2).

Mood boards

Oxford dictionary (Oxford living dictionaries, 2017) describes *mood board* as an arrangement of images, materials, pieces of text, etc. intended to evoke or project a particular style or concept. In my case, creating a mood board was based on choosing pictures that I found inspirational and that would guide me towards the final definition of my design.

4.6 Evaluation methods

Content analysis

According to Ole R. Holsti a content analysis is "any technique for making inferences by objectively and systematically identifying specified characteristics of messages" (Holsti, 1969 in Lazar et al., 2010, p.285) In content analysis these messages consist of either textual or visual content, used in searching "for theoretical interpretations that may generate new

knowledge." (Lazar et al., 2010, p.285) These messages are usually divided in two categories: media content and audience content.

Media content that I was looking into was books, scientific articles, online publications, skateboarding magazines and other skateboarding related content.

Audience content in my case was transcribed interviews, notes collected during the interviews, the data collected after the workshops, notes collected during the participant observation (Oslo Games Go!), and video recorded during the Master Jam.

In order to analyze the text content, I was using the coding procedures, common for quantitative research. I used emergent coding in the initial interviews and priori coding in the interviews that were conducted later in the research. In case of the evaluative interviews, I used both approaches, for two different purposes. First, I was using the theoretical framework - in my case Gauntlett's "5 Key Principles of Everyday Creativity", in order to find items relevant for my research project. Then, I analyzed the data, using emergent coding for the same data set, but this time omitting the data previously identified items. I defined the *researcher denoted concepts* that have helped me to identify the relevant items, resulting in discovering new concepts, relevant for the thesis. These were helpful in order to recognize the findings, uncovered by the evaluative interviews.

My approach was similar in the case of multimedia content – I tried to recognize the patterns and the repeating feature of the media reviewed. Though it is seen as labor intensive, I review large amounts of skateboarding-related content on a daily basis. The only difference was that during the research, whenever I found media that was relevant, I bookmarked it, took a print screen or saved the picture on my computer.

Artefact in use

I decided to put my artefact in use by organizing an event as a part of the design intervention. The goal was to investigate the reactions among the participants regarding the artefact. I choose not to call it testing, based on the experimental character of the design. The observations conducted and the video recordings captured throughout the event, helped me to compose an interview guide, which I later used to evaluate the design intervention. I was

interested in hearing about the event and the prototype. Detailed description of the evaluative interviews is presented in Section 6.1 (Evaluative Interviews).

Post-it voting

I used post-it voting during the first workshop. After the presentation of each other's ideas, all of the participants (including myself) were asked to choose three ideas they liked the most and vote by simply drawing a dot on the post-it that contained the idea they favored. That would highlight the ideas liked by the majority of the participants.

4.7 Ethics

The position of a researcher requires a careful preparation and making the participation convenient and enjoyable for the people involved. The researcher has to make sure that the participant's rights, health and safety are protected (Lazar et al., 2010, p.376), and that the risk connected to the research is minimized. When it comes to safety issues, Lazar et al., is mostly concerned with medical research, but this argument was quite significant for my research and I had to take it into consideration. Risk is an inseparable part of skateboarding activity. Thus, designing a safe skateboarding obstacle seems contradictory. One can even argue that there are no such things as safe skate obstacles based on a fact that even standing still on a skateboard can be risky. Thus, the high skill and great bodily control of skaters that tested the prototype during the event was crucial, and none of the skaters were injured during the event. The obstacle can be used in various ways, based on user's abilities. The more advanced users can choose to slide the rail, and the less advanced can just ride up and down, without performing any complicated tricks. From the technical point of view, the obstacle was built in a standard corresponding with the commercially sold objects. The surface was smoothened with sand paper, all the transitions were accurate and no screws were sticking out. No one was forced to perform, and I recommended skaters to skate within their abilities.

When it comes to the research methods, all of the participants were informed about the reason for conducting the study, and that the participation was voluntary and free from any implied or implicit coercion (Lazar et al., 2010, p.381). The written consent was handed to the participants during the initial interviews and the interviews with artists. The oral consent was

given to participants during the evaluative interviews, workshops, observations and while filming and taking pictures.

The public character of the event did not require consent, but I asked the participants for their approval to use the footage later in my thesis anyways. According to the Norwegian Data Protection Authority, pictures that are not by any mean harmful to the person depicted, where the situation or the activity is the main motive, can be used without consent (Datatilsynet, 2017).

My role in the research

I feel obliged to discuss my role as an insider in the context of my study and reflect on its possible implications on my project and on the conclusions that I drew throughout this research. It is worth mentioning that being a member of a group, a community or a culture that one affiliates with, when carefully used, might provide the researcher with a privilege of having certain insights connected to that group, community or culture. Those insights are often collected over a longer period of time, and can be very unique.

The reason why I decided to focus on skateboarding culture was the eagerness to know more about the community that I strongly affiliate with. Perhaps one of the key advantages of the insider status is that it lowers the threshold of getting the access to the potential research participants. One's membership automatically provides a level of trust and openness. It might be easier for the participants to share their experiences because there is an assumption of understanding and of shared distinctiveness. To have a large pool of potential participants was an advantage but in order to be able to get relevant data, I had to define some of the essential qualities of the participants. In the first round of interviews, the initial interviews, I would contact skaters that I found perceptive, reflective and somehow philosophical.

According to Dwyer & Buckle, "there are costs and benefits to be weighed regarding the insider versus outsider status of the researcher. (…) The positive and negative elements of each must therefore be carefully assessed." (Dwyer & Buckle, 2009, p.59). Likewise, I found it very essential to be aware of how to position myself in the research, and tried to avoid the "potential concerns associated with insider membership" (ibid.) through constant reflection on my role in the research process. Marilyn E. Asselin (2003) outlines that one of the biggest

drawbacks of having an insider role is overseeing the potentially important pieces of data caused by "taken for granted" assumptions. In my case, when following the interview guide, I would ask questions that could lead in different directions, but at the same time using my insider knowledge to "attain thick" descriptions of complex phenomena. The next issue addressed by Asselin is objectivity. She stresses that "researcher's expectations, past experiences, beliefs, and emotions can prevent the researcher from achieving a detachment necessary for analyzing data objectively" (Asselin, 2003, p.100). The character of the interviews I conducted in the beginning of my research was rather exploratory, and it was my intention to edit the questions in a way that would hopefully uncover phenomena or problem area that I haven't thought of earlier. Another issue is concerned with that "study participants may have perceptions or expectations of the researcher that may affect how they interact with the researcher, and the quantity and quality of information they share" (Asselin, 2003, p.101). There are certain measures that reduce the beforehand expectations of study participants (ibid.), but in the end, it is limited to what extent we manage to separate our role as a researcher from the insider role. Prioritizing the role of a researcher could possibly feel like a role-play. Thus, it would reduce one of the main advantages of being an insider-researcher – the earned status in the community studied. It was important to behave naturally but maintain the interview format. "Role confusion exists when the researcher perceives or responds to events or analyzes data from a perspective other than researcher" (Asselin, 2003, p.102). As I interpret it, Asselin's main concern is directed towards the case where researcher has multiple roles in the setting where he or she conducts the research. I find this issue rather irrelevant in my case, since there is no hierarchy in skateboarding community per se. The fifth and the last issue described by Asselin (2003) is how presence of the researcher as an observer or interviewer can influence the research participants. My way of avoiding it was to devote enough time to gather the data, make research objects comfortable, and control my mood during the data gathering sessions.

5 The Making Process

In this section, I will first describe how the initial interviews together with the participant observation have made me reflect on how skateboarders generate value through engagement and participation. My next step was to explore the possible ideas for the concept. This process was highly supported by the participatory workshop, which narrowed down my further explorations. As the design process evolved, the number of people involved was growing. Interviews with social activists together with the results of the second workshop have partly defined the future shape of the prototype. The last phase was the building of the final prototype, which again, would not be able without the help of the skateboarders. I will now present the entire process in linear, historically accurate narrative. Below I present how different activities performed throughout the research can be applied to previously presented Interaction Design Research Triangle (Fig.19).

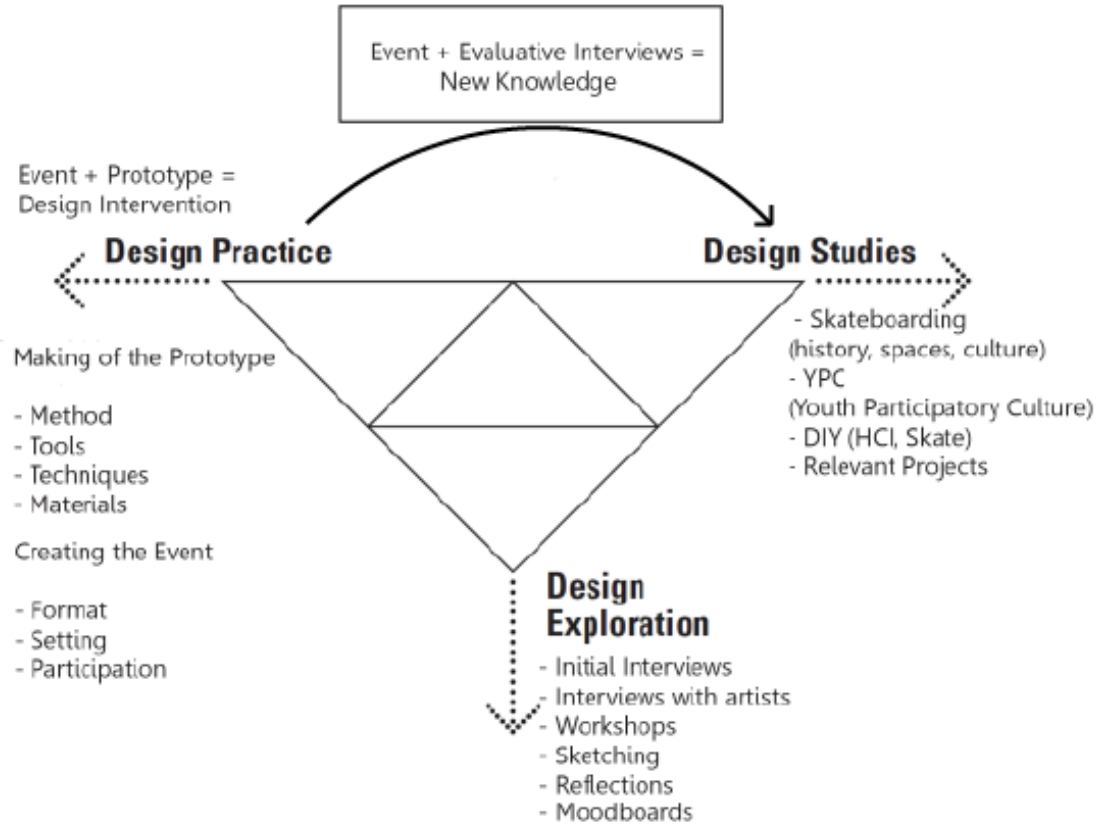

Figure 19 The Interaction Design Research Triangle (Fallman, 2008) in context of my thesis

Initial Interviews

Along with broadening my knowledge on skateboarding, I looked for the potential research area by directly interacting with the members of the skateboarding community. Thus, I decided to conduct a series of exploratory interviews. Being a part of the community made the recruiting process very straightforward. I chose my interview subjects very carefully, keeping in mind that engaging right people early in the exploration phase might result in some interesting insights, which later might turn into research questions. By right people I mean people that I considered as highly reflected and capable of having a fruitful conversation. I designed an interview guide considered with participation, technology and creativity. The interview guide is shared in the Appendix B. The first part on the interview was meant to uncover possible tendencies connected to the participation. The goal was to investigate how the activities that the interview subject was involved with, influenced different spheres of his life, focusing on the social aspects of these activities, and their potential of conveying the creative expression. The second part was mainly concerned with technology development. The questions were interconnected and were regarding the impact of technology on the activities, social life, and self-expression of the interviewees. At the end of the interview I asked each of my interview objects – in total three people, to express their opinion on skateboarding by putting a mark on a specially designed graph (Fig. 20).

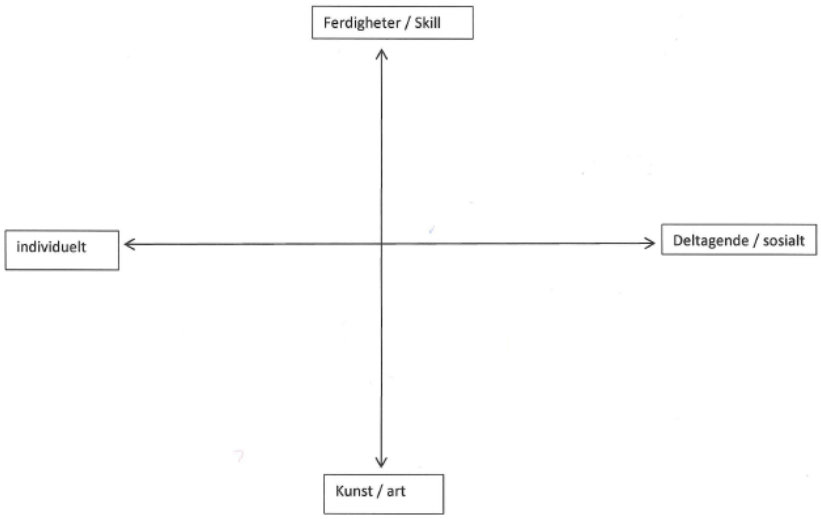

Figure 20 Graph handed to interview objects during the initial interviews

The x axis would differentiate from presenting skateboarding as purely individual vs. purely participatory activity, while y axis would present skateboarding as a purely concerned with skill vs. purely an art. Four out of five participants set their dot in a very similar place, which I show in the Appendix B. It can be read as though they consider skateboarding as a rather participatory activity leaning towards the artistic expression rather than purely pursuing the skill. One of the participants decided to break the limitation of putting only one point at the scale, and instead, drawing a circle that would put skateboarding as each and every combination of skill, participation, art and individuality.

The initial interviews guided me further towards the concepts concerned with media creation and distribution, the DIY movement, and studies on social and cultural aspects of skateboarding. My next step was to search for the probable interconnection between the existing ways of creative expression in the skateboarding community and their participatory values.

Participant Observation

The year 2016 was the year when the novel skateboarding competition called Oslo Games Go! took place. The main idea behind the concept was to choose four talented skate-videographers/photographers that would further choose their own teams. Each team included four skaters and one creative. The event took place between the 30th September and the 8th of October, within borders of the Oslo Council. All four teams were supposed to deliver a video and four photos in order to receive points, and could voluntarily take part in social media challenges that were posted on different social media platforms each day during that period. The winning prize in the contest was 60.000 NOK and the winning team was the team with highest amount of points, collected by completing a variety of challenges. The given challenges demanded both skills and, and they encouraged all teams to do their best and skate as good as possible during that week. To me, the competition was a perfect opportunity to conduct a participant observation. I was taking notes and observing how members of my team, and other teams would use technology in order to complete challenges, contact each other and document the competition. The creativity and knowledge used in completing various challenges shown that skateboarding community is built on the participation and engagement. This observation has given me a confidence to organize participatory activities, knowing that skateboarders will support me as a member of a community and show up.

5.1 Concept development

Workshop 1

The background research on projects combining skateboarding and technology (described in Chapter 2) made me reflect on my own stance towards the future concept but also towards the examples I studied. My attempt to find common ground for these examples left me with the idea of how the act of skateboarding can be perceived as a multisensory experience. As I started to come up with some ideas, my curiosity on what other skaters would think of this topic continued to grow. The insights gained by informal conversations with skateboarders, motivated me to organize a workshop, giving them an opportunity to come up with some ideas and actively participate in my research.

Figure 21 Workshop 1

On the 20th of December 2016, I conducted a workshop (Fig.21) to explore skateboarding as a creative way of expression. My idea was to see how the participants would approach the subject and compare their thoughts and ideas with my own. In my invitation I shortly presented my motivation for the workshop, and explained why it was important to me to have members of the skateboarding community onboard. It felt like contacting the skateboarders to discuss the application of technology into skateboarding experience could create interesting outcomes. Their skill, their background and specific way of thinking was something I preferred for this early stage of the designing process. The main goal for this session was to re-imagine skateboarding as a form of creative expression and explore different dimensions of skating, focusing on the experience itself and its sensory potential. The results of the workshop were seen as the possible sources of inspiration. Thus, another step was to see if any of the created ideas could be taken further in the design process. Another opportunity was

that the workshop could draw upon developing an understanding of what types of ideas are considered interesting. In total, the workshop consisted of 14 participants.

The presentation that I prepared for the workshop was meant to be simple. The reason for that was to keep the participants informed, and not overwhelm them with the theoretical knowledge, but rather keep their minds open for the individual interpretation of the presented content. I briefly introduced the format of the workshop and its focus, in order to prepare them for the practical part of the workshop. I decided to include examples of projects that could give the participants the basic understanding of the field of interest and trigger their imagination. After the two first examples, I asked about their perception of interactivity. It was interesting to hear others insights during the presentation. The participants had some thoughts around the concept of interaction, and their answers indicated that the concept of interactivity was familiar to them, which meant that I was free to proceed. As I anticipated, some of the examples triggered discussions and laughter, since they disclosed that people involved weren't "skilled" skaters, or that some of the pictures were fake - taken while standing still, and not in motion. After presenting all of the examples, the goal of the workshop was repeated, just to give the participants an opportunity to reflect on how the presented examples could inspire them in the ideation process. The next step was to define skateboarding as a sensory experience, where skaters were asked to think of all the senses that are involved in skateboarding activity. Visual, audio and tactile sites of the experience were the key senses that I asked them to focus on, even though the participants argued that skateboarding involves all the five senses (and balance, mentioned by one of the participants as a 6th sense). The last step before proceeding to the practical part of the workshop was to present six sets of pictures to the skateboarders. The pictures were showing different light (day vs. night), different surfaces (wood, asphalt, metal), different skate spots (skateparks, skate plazas), and surroundings (street, park). The main goal was to make the participants hear the sounds, imagine the lights, and feel the surface - stimulate their senses. The theoretical/inspirational part of the presentation was now over; next step was to spill their imagination on the paper.

Figure 22 Workshop 1 Brainstorming

The workshop resulted in a total of fifty-eight ideas (Fig.22). After the presentation of each other's ideas, all of the participants (including myself) were asked to choose three ideas they liked the most and vote by simply drawing a dot on the post-it that contained the idea they favored. In my analysis I decided to focus on the ideas that collected at least two or more votes, however there are ideas that have got less than two votes and still caught my attention, since their characteristics could fit in the same categories as the examples that ended up higher on the list. The ideas produced during the workshop are shared in the Appendix C.

What I found most significant after analyzing the ideas presented above was two major characteristics:

1. The majority of the ideas were considered with the surroundings or the experience, leaving the skateboard as a device untouched.

2. Throughout the workshop the participants were underlining that they rather focus on how including technology into a skateboarding setting can influence the experience in a novel way. Designing for fun, not for the skill. One post-it directly addressed that wish. (Fig.23)

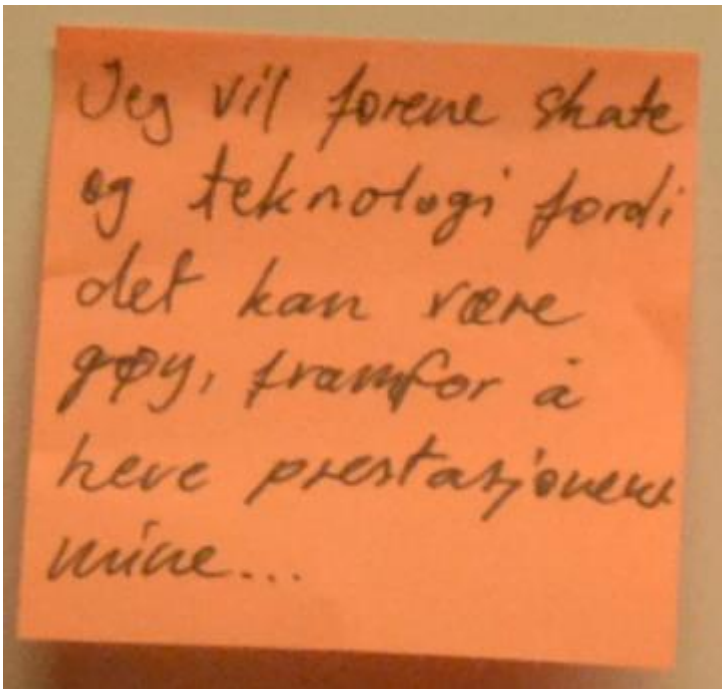

Figure 23 Post-it

"I wish to unite skateboarding and technology because it can be fun, rather than to lift my skills"

It is worth mentioning that the skateboarders that took a part in the workshop are highly skilled, which could have influenced their view on how technology could enhance their performance. Taking that into consideration, the workshop left me with valuable insights and ideas, which lead me further into the next phase of concept development.

Further explorations and reflection on the concept of unpleasant design

The example that caught the most attention during the workshop was the “Paving Space” project (described in Section 2.1.1). I decided to look closer at other projects created by Raphäel Zarka. “Free Ride” was the first collaborative project between Carhartt and Zarka, which was executed in the year 2014 – two years before “Paving Spaces”. It consisted of displaying a skateable piece of minimal art outside of the National Museum of the 21st Century Arts, in order to repurpose the entrance area of the museum into a public space (Exercises in Revolution_Free Ride, 2014). The idea of turning a sculpture into a skate obstacle and turning a prohibited space into a skate spot was fascinating. It led me towards the further exploration of the concept of public space and architecture. I was amazed by an idea of redefining objects and spaces through its use - similar to Zarka’s in “Free Ride”. Revisiting chapters dedicated to architecture in Borden’s book, and internet research, made me stumble upon the concept of Unpleasant Design (Fig.24) -benches that make it impossible to lay down, stones under the bridges, preventing homeless people from sleeping there, or - in skateboarding context - “skatestoppers” in form of metal spikes, rough ground etc. preventing skateboarding.

Figure 24 Examples of Unpleasant Design - spikes, skate stoppers (top) & Camden Bench (bottom)

A concrete example of Unpleasant Design is the Camden Bench. It is a bench that deters sleeping, drug dealing, theft, littering and other criminal and anti-social behavior – including skateboarding. Ironically enough, Camden Bench made me reflect on tangible objects placed in various urban spaces as a link between the people that both create and use these spaces. As I read about Camden Bench, I stumbled upon an article about creating an open-source game called Bounce, which invites to play table tennis on the Camden Bench "to subvert the piece of angular street furniture" (Chris Alton, 2016). I started to develop the idea of creating something opposite to the Camden Bench – designing an element of urban architecture that would invite people to use it, explore it and have fun with it. Creating a space that would engage people in social and cultural urban life became a main feature and goal of my future design.

Moodboard 1

My next step was to create a mood board where the goal was to merge the ideas of bench, urban spaces, participation and skateboarding-friendly architecture into a design potential concept (Fig. 25).

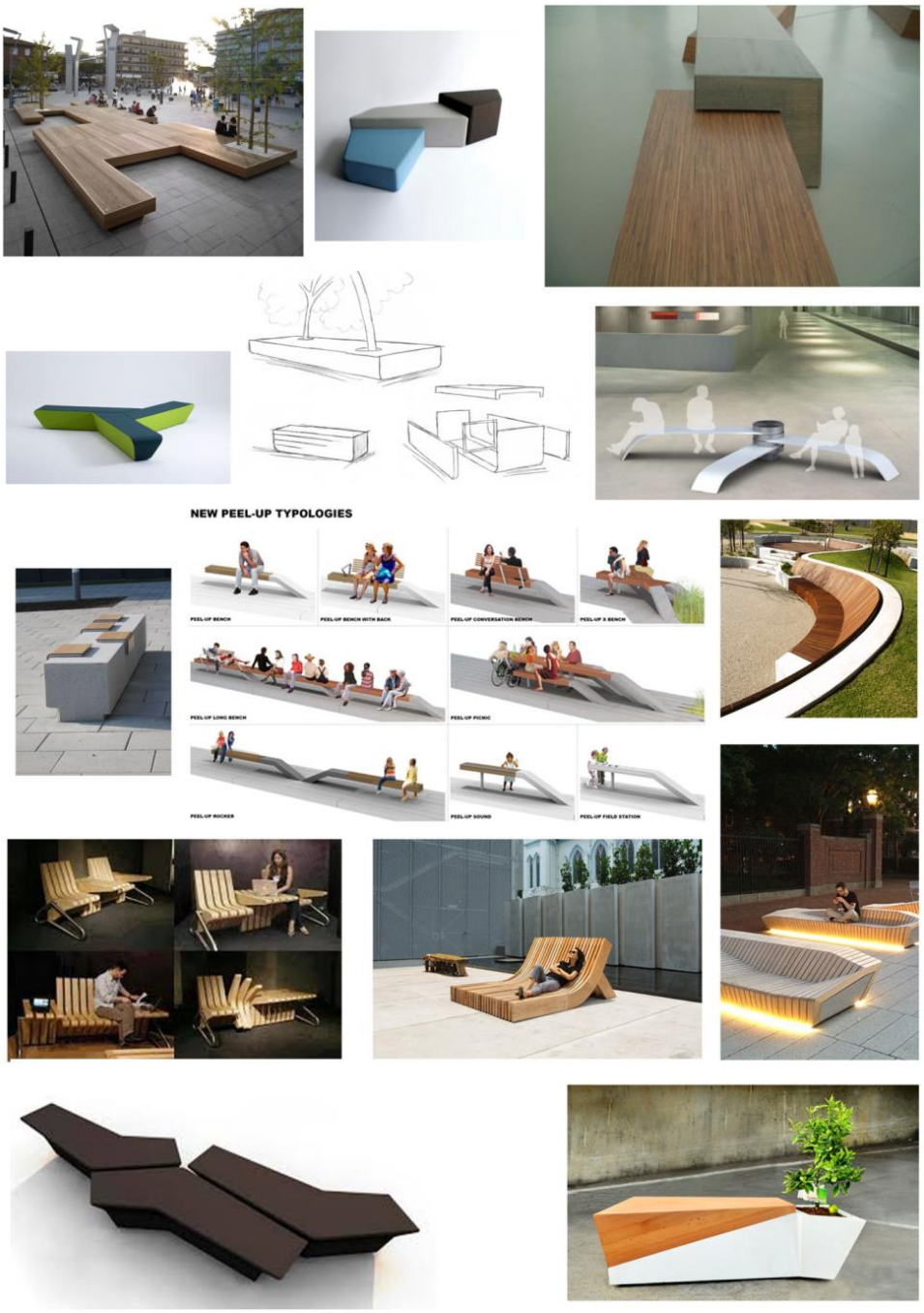

Figure 25 Moodboard 1

Local authorities and skateboarding

In January, I conducted an informal interview with a fellow student, writing a master thesis considered with how Norwegian sport politics approach self-organized sport (which skateboarding was until November 2016) from a scientific and technological perspective. The reason why I decided to contact him in the first place was to identify the attitude of the Norwegian officials towards skateboarding and to ask for the literature that touches upon that subject. He provided me with the documents published by the Municipality of Oslo related to the future development of skateboarding facilities.

Interviews with Social Activists 1

In January 2016 I contacted an architect studio – Kollaboratoriet in order to make an appointment. I knew that they were previously involved in various projects concerned with engaging citizens with their urban environment (kollaboratoriet.com), so I found it highly relevant to discuss with them the idea of creating a multifunctional urban space. During the meeting I explained the concept of Unpleasant Design and expressed my eager of creating something opposite to it. I presented my ideas, and sketches, and we continued by discussing different geometrical forms and possible functions both in a skateboarding and non-skateboarding context. The meeting resulted in the idea of a multi-modular skate spot. The idea was based on placing multiple interactive elements at the dedicated space. The simple interaction (light, sound, heat) could be controlled by the users, who could move the elements, connect them and explore various configurations. That was the concept that I chose to go further with.

Another person that I decided to interview was Grzegorz Gądek - the Co-Founder, President of City Sports Square Foundation based in Warsaw, Poland. City Sports Square Foundation is highly involved in creating multi-functional public spaces allowing physical activity. They encourage the citizens of Warsaw to engage and participate in forming these spaces together with the professionals (architects, sports enthusiasts, designers). The goal is to create spaces supporting urban wellness and social cohesion. During the interview I was introduced to the existing work, and discussed the opportunities and challenges around co-creation of urban spaces. The main outtakes of the interview were: defining the challenges connected to skateboarding activity in an urban setting (e.g. sound, size of space required) and discussing features that are seen as beneficial when creating an urban space (e.g. water tap, green areas).

5.2 Prototyping

After the meeting with Kollaboratoriet, I was struck by how the concept of multimodular skate spot resembled the concept of littleBits – "simple, intuitive, space-sensitive blocks that make prototyping with sophisticated electronics a matter of snapping small magnets together" (Bdeir, 2009, p.298). In my case, the scale or the functions of the objects would vary from the littleBits, but in principle, the modular, intuitive and spatial character of the elements would be very alike. I immediately recognized the potential of further exploration of the interactivity with members of skateboarding community. However, this time I decided to use various artefacts, inspired by the concept of *cultural probes* introduced by Gaver, Dunne and Pacenti (1999). My goal was to support the creativity among the participants during the Workshop 2.

Low Fidelity Prototypes

Following the idea of thinking through making, I decided to create tangible representations of various skateboarding obstacles. I used bricolage (French for DIY) to construct four different objects of a polymorph plastic (Fig.26).

Figure 26 Lo-Fi Prototypes

The three main reasons for choosing that material were: short time of stiffening, its hardness and its translucency. The last feature inspired me to create a simple interactive prototype, using the Arduino, photo resistors and a LED light (Fig.27).

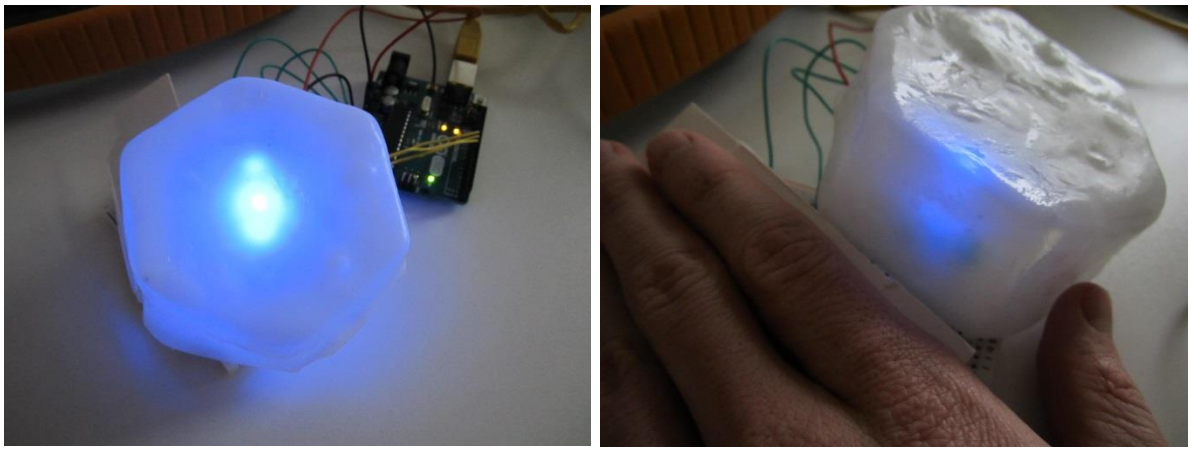

Figure 27 Lo-Fi Prototypes

Approaching the prototype would simulate skater approaching the obstacle, and based on a distance from the prototype, LED lights would change the light density. I found the concept of a skate obstacle becoming brighter as a skater approaches it as an interesting one, and decided to explore it further as one of the possible dimensions of my design artefact.

Workshop 2

Figure 28 Workshop 2

My second workshop took place 15th of February 2017. The goal of the workshop was to design a skateable element, and identify places that would be suitable for creating a DIY spot in Oslo. In total, sixteen skateboarders attended the workshop. After a presentation of three different sections (Fig. 28) and tools they consisted of, I introduced LED Throwies and littleBits, explaining their potential as interactive prototyping tools. I wished to include simple technologies to facilitate rapid prototyping for non-HCI participants. Explaining the form of the workshop was the next step. The presentation was kept very simple and consisted of written instructions. It is shared in Appendix D. In total, sixteen skateboarders decided to join the workshop.

This time, the idea was to make the participants express their thoughts and stimulate their ways of expression through tangible artefacts. Instead of using post-it cards that allow the imagination to run free, the current phase of concept development made me want to investigate an approach that would materialize skaters' ideas, through use of various physical

tools. The artefacts that I brought to the workshop were: clay, straws, wooden blocks, previously developed low-fi prototypes described in the previous section (their physical dimension), LEDs, littleBits and several exemplars of map of Oslo.

It is important to underline that the participants were free to develop any idea, and try to materialize it (Fig.29) in order to provoke a reflection-in-action (Schon, 1983 p.49 - 69). I decided to introduce physical tools, or probes, as a way of externalizing skaters' ideas and to see if they "can [users] think and talk with or through objects, using them as props to act with? Do they give discussions a focus and provide a record of decisions?" (Hornecker & Buur, 2006, p.442). By making them think of potential inhabited space of deployment of their artefact, I wished to define its character as an inhabited space, through understanding the meaning, atmosphere and history of the space and state significant questions, like "Do people and object meet? Is it a meaningful space? (Hornecker & Buur, ibid.).

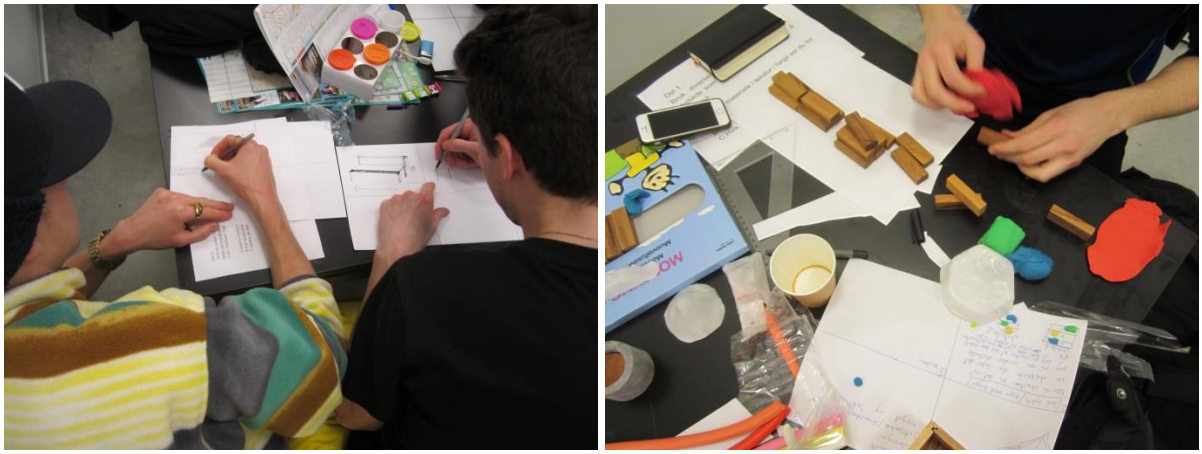

Figure 29 Workshop 2 in action

Finally, the participants developed thirteen ideas - nine physical prototypes and four written concepts. They are all presented in Appendix D. The last three participants did not manage to come up with any ideas, which explain why the number of ideas and the number of participants does not match. The reasons why four participants chose not to create a physical prototype varied. One of them found it physically difficult to materialize his concept in a way that shows its main principle (a flippable edge). Another participant chose to draw and explain his idea instead of forming it, questioning his forming skills. The last two participants chose not to form their obstacle for the same reason – it was rather the function, not the shape of the obstacle that was in focus. They were convinced that it was easier to explain it to me verbally. When it comes to maps, ten maps in total were returned, two other participants

wrote the chosen location on the paper they delivered, and one participant had not defined the location at all. One participant decided to use littleBits, and one participant used LED Throwies, the rest decided to explain the interactivity using words. The ideas that involved the use of heating elements, cooling elements, projector etc. were impossible to externalize due to a lack of appropriate tools. The size and form of the littleBits speakers were the reasons why participants with ideas that included speakers preferred to not use them.

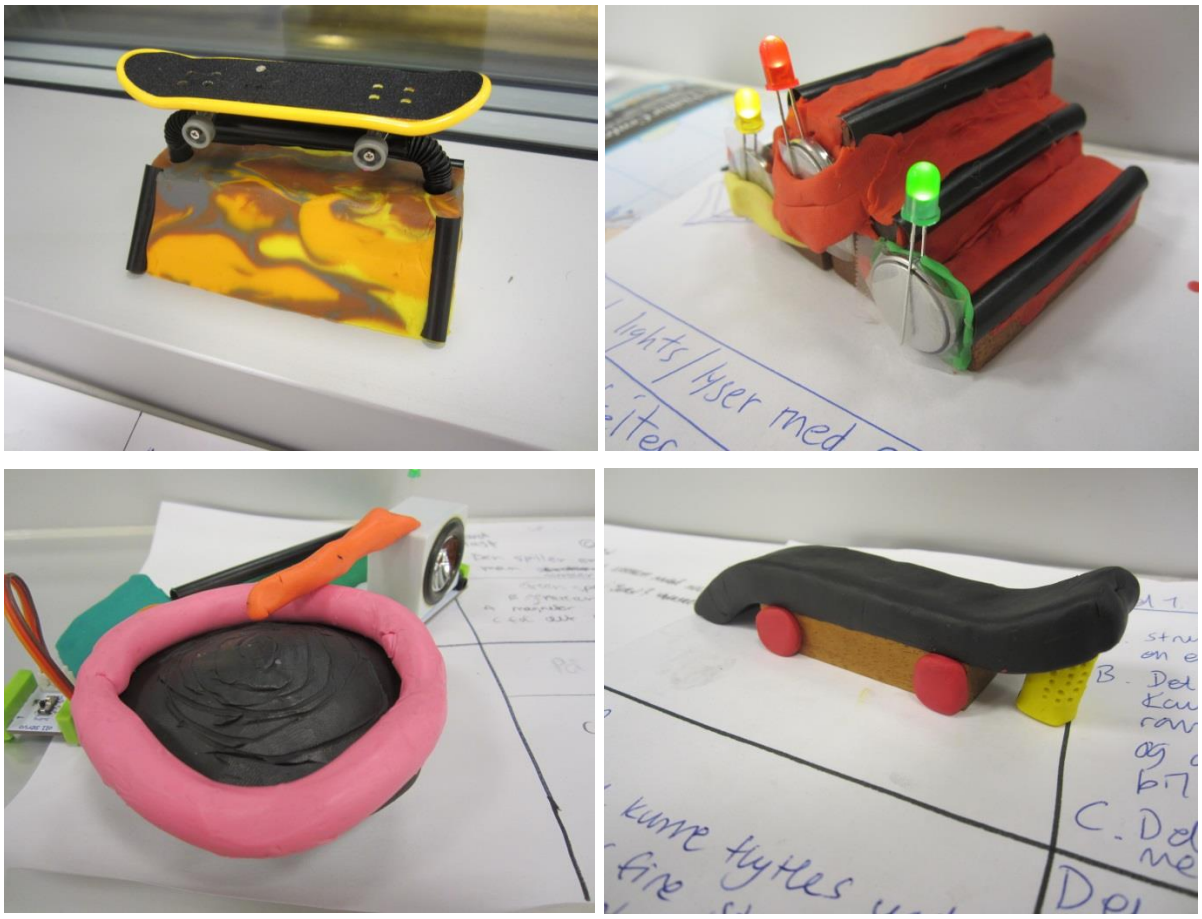

Figure 30 Workshop 2 results (from the left top corner) IBO, LED lines, LP Player & 4 Wheel Drive

My data analysis was divided into two categories: the obstacle and the spot. The subcategories concerned with the obstacle were materials, features and challenges. The subcategories concerned with the spot were the location and its key features.

Since the choice of the material was concerned with the particular obstacle that they designed, I decided to focus on the desired interactivity and other features instead. The use of a speaker, LED light, multi-functionality, heating elements, adjustability, portability and charging station were the features mentioned by the participants. The technology was seen as the biggest challenge, followed by the durability, the shape and the use of proper materials.

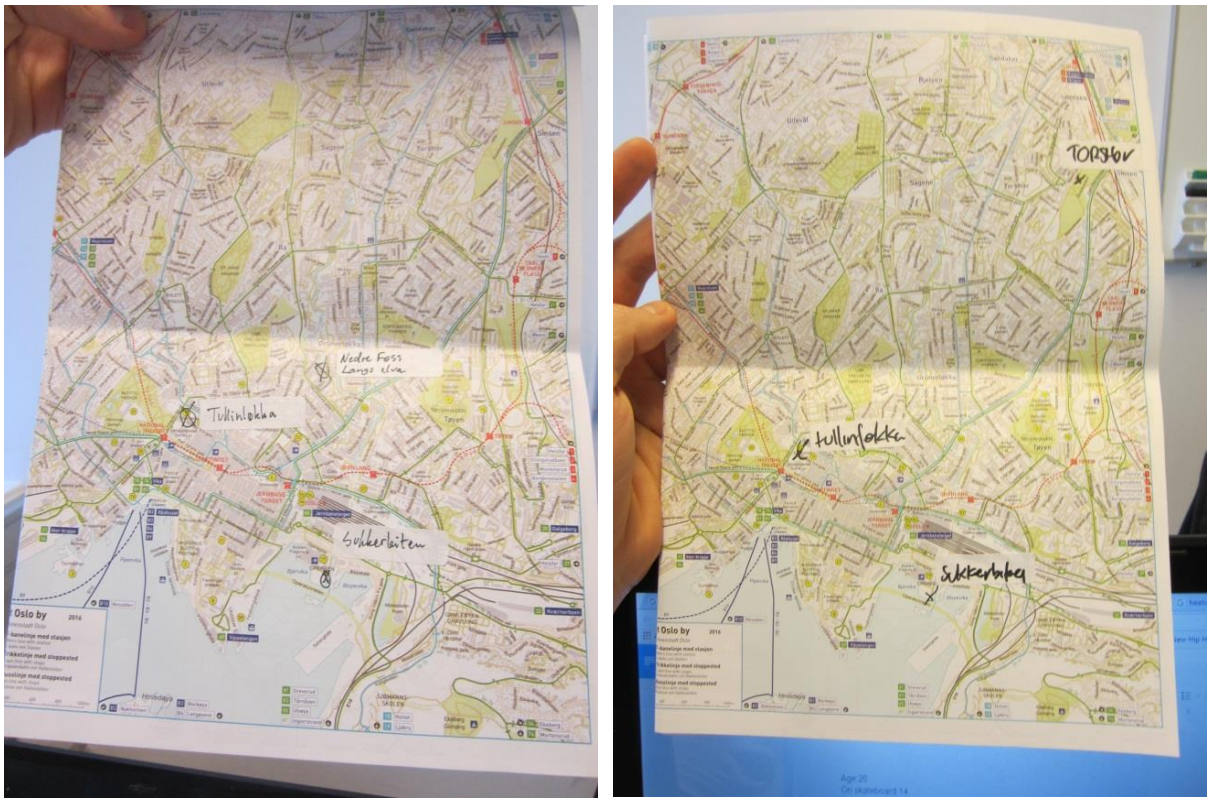

Figure 31 Workshop 2 – maps

When it came to choosing a spot, the participants listed: Cuba Park, Torshovdalen, City Hall, Mølla, Sørenga, Sukkerbiten, Tulinløkka, anywhere and Tøyen Metro Station as spaces suitable for a DIY spot (Fig. 31). The features that they defined as essential were green areas, good quality and a large size of the flat ground. In addition they wished that the place was peaceful and fun for non-skaters.

In search of the physicality

While trying to define the shape of my future artefact, I looked at every bench that I walked past and saw every object as a possible source of inspiration - anything could suddenly catch my attention and give me new ideas (Fig. 32). In order to document these objects, I purchased a small digital camera which I would have with me at any time and capture anything that I found interesting. This way, I could look at pictures I took and dwell on their potential for my project. In order to understand the character of the object desired by skaters, which was obviously what I was looking for, I chose to go back to the results of Workshop 1. I found it useful to look at the ideas created by the participants and categorize them according to the experience each of them could potentially create. Becoming familiar with a *pleasure*

framework, developed by Costello & Edmonds (2007), gave me an idea of how I could reflect on the outcomes of the Workshop 1. Knowing that I was in search of something novel, experimental, unorthodox and at the same time aesthetically attractive and suitable for skating, I decided to define the pursued design as avant-garde.

Figure 32 Potential shapes (L shape, road block, bench)

One of the objects that I considered using was a road block. I felt like applying a light based interaction to what can be recognized as a "boring object" in terms of appearance and function in an ordinary setting, would drastically change its character. I also developed a new Arduino prototype which was built on a previous concept of light getting brighter as the artefact was approached. This time, I decided to use ultrasonic sensor and multiple LED lights.

At that time one of the most crucial decisions had to be made – I decided to focus on developing only one module, instead of creating a multimodular spot. The reason why I decided to look away from this concept was that I felt that the time I was given to complete the project would not be sufficient in order to create high quality artefacts. It also made me reconsider the use of a road block, based on my expertise. I saw a range of tricks and maneuvers it would support as limited and less attractive as an alone standing obstacle than in combination with other obstacles. That is why I decided to leave the concept of a road block behind. I continued exploring the concept of a skateboarding obstacle that could work both as a sculpture, and as a part of a city scape.

Moodboard 2

I developed another mood board that would reflect on the things that formed my ideas at that time, strongly inspired by art of Tony Smith and Sol Lewitt, “Free Ride” and “Paving Space” projects, minimalistic geometrical shapes and black and white aesthetics (Fig.33).

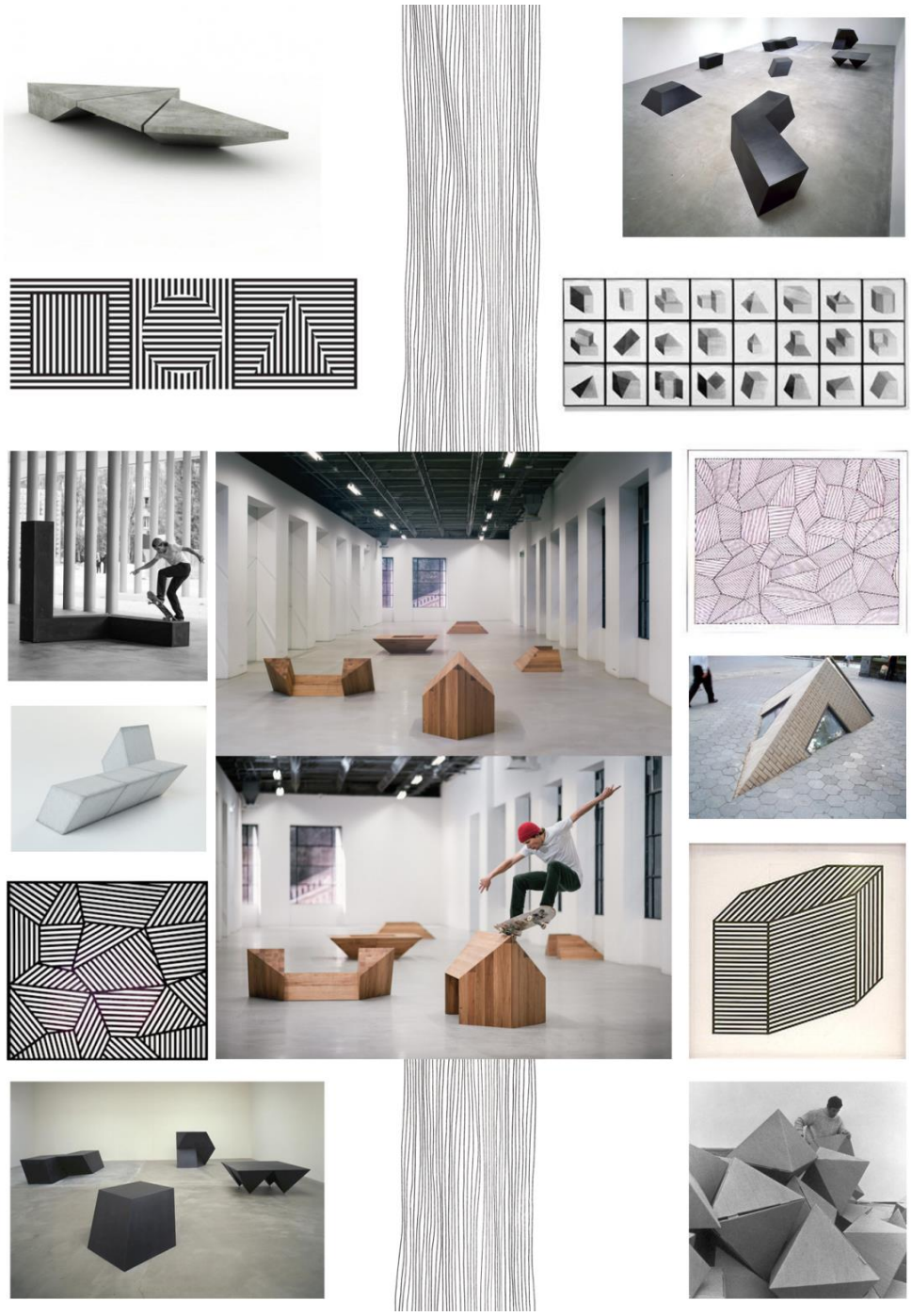

Figure 33 Moodboard 2

Low Fidelity Prototypes 2

At that stage of the design process I found a website providing hundreds of easy foldable models of different geometrical shapes (korthalsartes.com), which allowed me to experiment with different forms, and their qualities. I decided to take two of these forms further (Fig.34), believing that one of them might potentially become the shape I would choose for the final design.

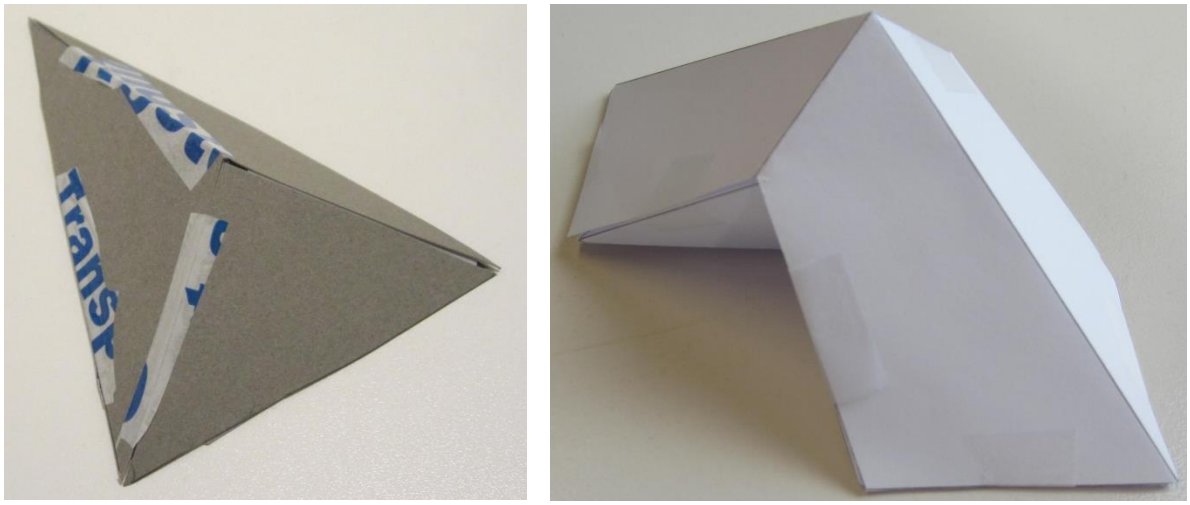

Figure 34 Paper Prototypes

From the interactive point of view, I found reading an article on "Designing Playful Interactive Installations for Urban Environments" by Grønbæk, Kortbek, Møller, Nielsen and Stenfeldt (2012) highly inspirational, and educational. They shed a light on the challenges that should be considered when designing Interactive Urban Installations, which I found relevant for my concept. The challenges describe by Grønbæk et al. gave me a more practical understanding of what I should keep in mind, while designing my artefact.

Another important step was to explore the sound-based interaction, where I came up with an idea of using a BareConductive Touch Board and a conductive paint as a trigger. The plug-and-play character of the composites made it possible to test potential prototypes rapidly (Fig.35).The idea of performing skateboarding tricks in a certain way, in order to create different sounds seemed very interesting. Thus, I decided to stick around to this concept based on its originality, and the novel idea of using skateboard maneuvers to interact with a system.

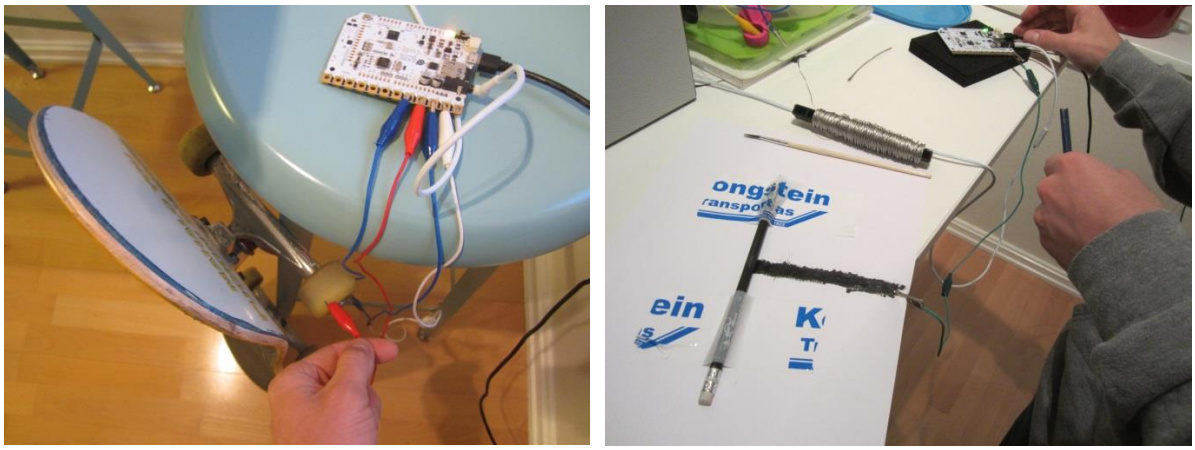

Figure 35 Testing Touch Board and conductive paint with skateboard

Interviews with social activists 2

Parallel to prototyping, I wished to talk to various artists that tend to use urban landscape as a gallery. The goal of talking to the artists was to hear their thoughts about using their art to initiate the interaction between the city and its citizens. One of the artists – Øyvind Mellbye (www.yvind.net) is an Oslo based artist that uses diverse technology and electronics in his works. During the interview he explained and described different projects he was involved with. He told me how his projects, are strongly influenced by the concept of DIY, pointing out the benefits of a "hands on" approach. He used casting concrete as an example to explain how he explores new territories, in search of the knowledge that is necessary for executing his projects. He also explained how people contribute in shaping his installations, focusing on one of his works -"Slepebrøleren". "Slepebrøleren" is a concrete sculpture with a built-in speaker system, connectable via Bluetooth. The sculpture looks like a "ghetto blaster" – an iconic, portable radio popular among youth in 1980s and 1990s. It is located at Grunerhagen Ballplass and anyone can connect to it and use it to play music, or for other purposes. His goal was with "Slepebrøleren" was to make people curious, and interact with it. The highly participatory character of this installation gives people freedom to use it in order to create content, making it more as a platform than a defined work.

Ø: *"It is in a way a piece that has no content in itself. Sound and what happens to it is something added by the audience themselves. And they can choose to play music, or use Darth Vader Voice app and shout to kindergarten kids using a mobile phone… that kind of things. So it is almost more like a platform."*

Another artist that I interviewed was Lars Kjemphol (www.larskjemphol.com). Lars defines his works as "social sculptures". During the interview he presented several projects that he was involved with throughout the years and explained the philosophy that he follows in creating his works. One of the projects he presented to me was "If You Build It They Will Come"

L: *"I found this old abandoned basketball court. I scraped off the old painting, weeded, and fixed to become like that (showing the picture). And then I somehow started to work with people, or as I say It – I work with a social sculpture. I try to create entities out there that can influence people. Showing them that this is real. That people that don't care about art, notice its presence."*

His works are often built from recycled materials and he is a strong supporter of DIY movement. One of his projects – Woodland Skateboards was even partly initiated through DIY philosophy.

L: *"I started WDLND just to see if I am able to produce a skateboard myself."*

The philosophy that shaped his works was based on thought that people shape the world through their actions, which results in defining our culture. He recognized that way of looking at our surroundings as more participatory and empowering.

L: *"All human beings are involved in shaping the huge sculpture, which is the world. Through all actions you perform, you are forming in a larger or smaller grade the enormous piece of art, which is our culture. And if you look at the world that way, it is much more participatory way of living."*

The outcomes of these meetings was my understanding of how DIY approach used in their works gave them an understanding of different techniques and materials, but also how it shaped their art and defined their position and role as urban artists.

5.3 Design taking shape

Determined to start the actual building of the prototype, I decided to visit Oslo Skatehall to look for the sizes and angles that I could apply to the prototype. I chose to measure one particular element, based on its proportions (Fig.36). The 30 degrees angle and approximately 240 cm width was the dimensions that I applied in my future sketches (Fig.37).

Figure 36 Bank to curb

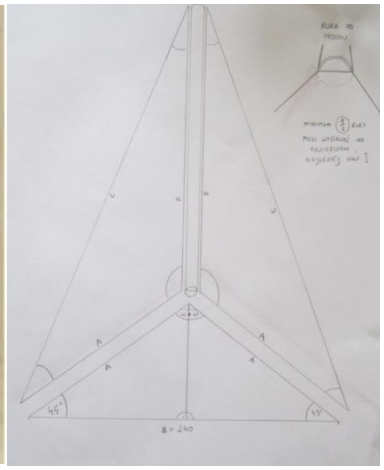

Figure 37 Sketch

Physicality

After I made the decision on the physical shape of the prototype, the process of creating the full-scale version started on 21st of March. My first step was to consult a professional carpenter. I explained the project to him, the desired shape and the purpose of the artefact using a sketch (Fig.38). He helped me estimate the amount of materials I would need to create the structure. The features that I presented to him were:

- The possible directions of skateboarding (the drawing with the arrows), and the qualities of the surface, since any ruggedness might negatively affect the experience (sketch to the left)

- Another important fact was to explain the areas that are particularly exposed to damage (sketch in the middle, marked with the dots)

- The mounting of the rail – the key feature of the obstacle, was explained very thoroughly (it had to be very steady and ruggedness had to be eliminated)

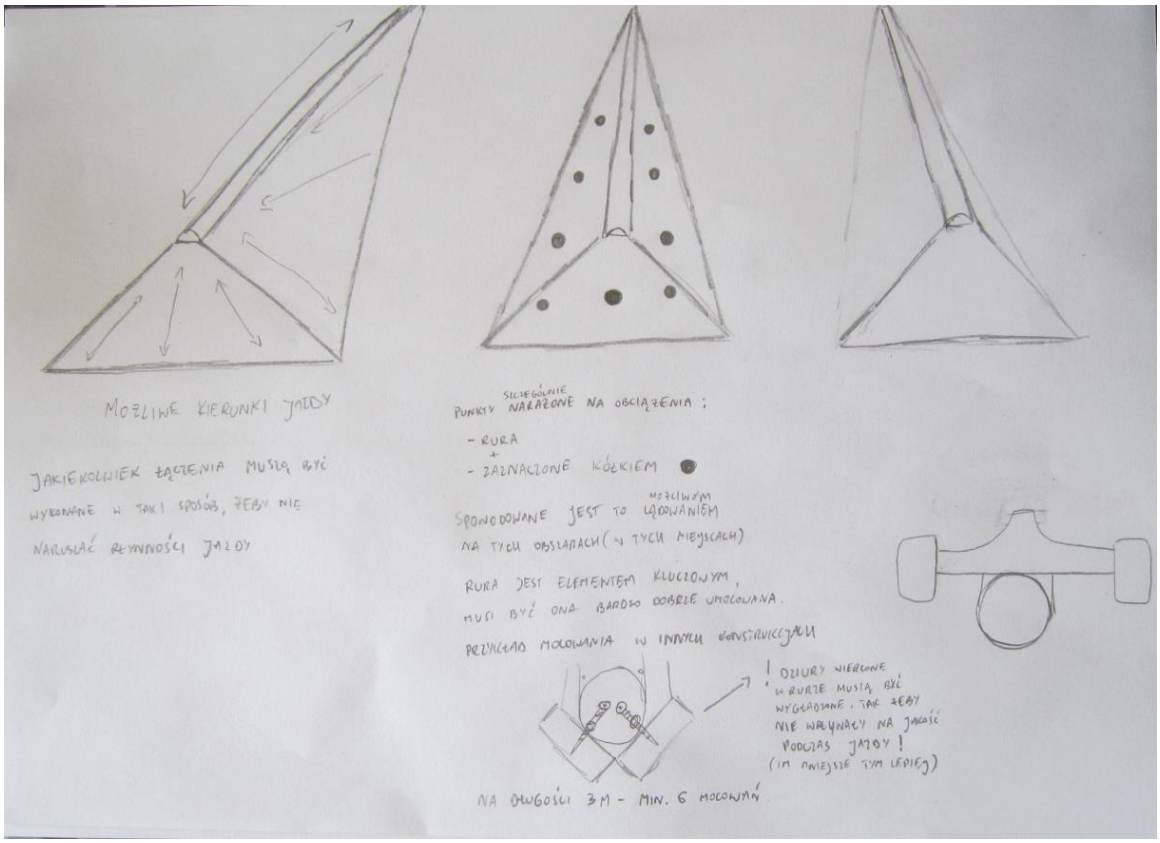

Figure 38 Sketch with instructions

That picture helped us create what Schon refers to as “reflective conversation” (Schon, 1983). Having a common understanding of the design artefact, helped us to create a common language, and was used in future discussions. It was also useful in case of the practical challenges, and it supported us in finding solutions together.

His expertise gave me a thorough impression of how I should approach the building process and helped me to create a list of necessary tools. Knowing that the prototype would be a subject to multiple hits and smashes, the robustness was very important. I was advised to purchase a 48x98 mm borders and 15 mm thick wooden plywood, hoping that it would be strong enough to handle the extreme usage (Fig.39).

Figure 39 Buying the materials together

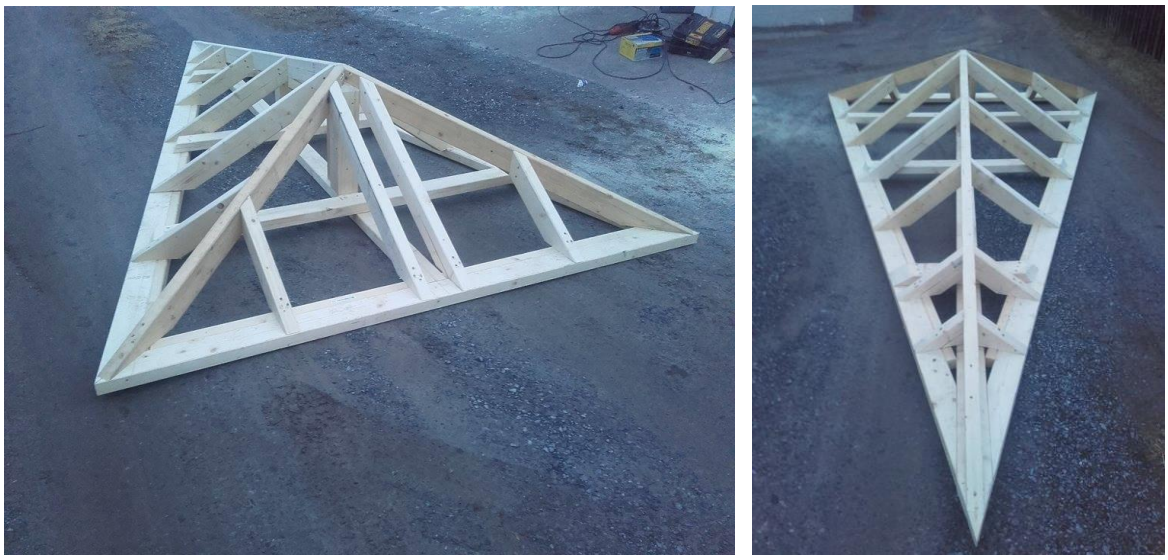

Figure 40 Scaffolding

The first step was to build the scaffolding (Fig.40), which would support the plywood. Based on the size of construction (240 cm x 420 cm x 420 cm), it was more convenient to execute the building process outside. The solidness of the construction and the materials used have significantly affected the weight of the prototype, making it impossible to transport, move or lift withouth a help of another person. The building process took approximately 10 days and I received a lot of help throughout (Fig.41). In case of any uncertainity I was contacting the specialist that was involved in the project from the beginning. After the scaffolding was done, another step was to mount the rail. I adjusted the technique found online to my own use, using screws on each side of the rail, instead of just one (a red arrow on Fig.41). Also the rail was glued to the scaffolding, in order to make it more stable.

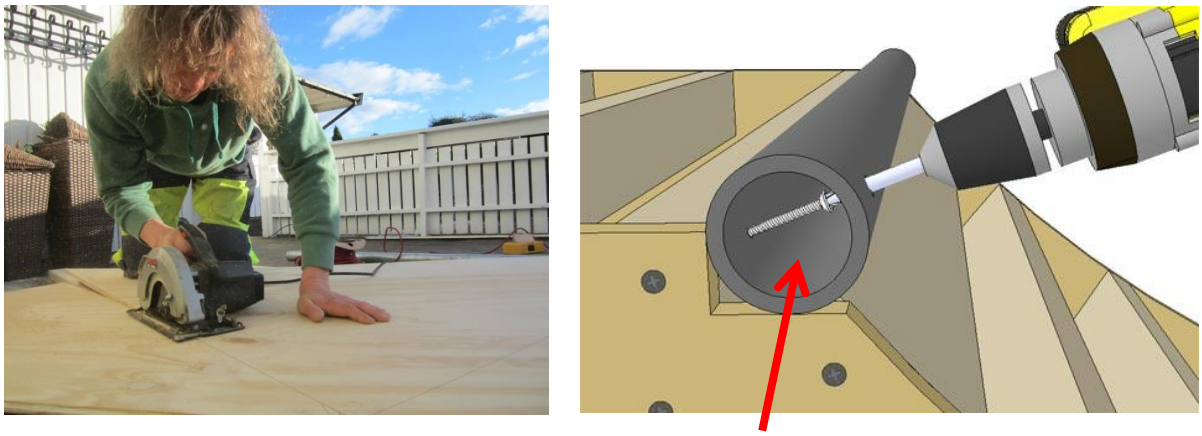

Figure 41 Cutting plywood (left); The mounting technique (right)

After mounting the rail, last part of the process was to mount the plywood. The plywood was neatly mounted with galvanized, weatherproof screws. The quality of the plywood was quite high, but limited resources made me choose the robust, but not weather proof variant. At the same time, the weatherproof plywood recommended by the personell at the construction store was (in my opinion) too slippery for skateboarding purposes, making my choice easier. After mounting the plywood, we smoothened the edges. That was the last part of the constructing process (Fig.42).

Figure 42 Finished physical form

Figure 43 Me, transporting the prototype

The obstacle was now ready for phase two of prototyping - employing the interactive components. As I mentioned above, the size of the prototype was significant and to find a car that would fit its specifications was quite challenging. Luckily, one of the skateboarders that took a part in the previous stages of my study offered his help and lent me his car (Fig.43).

Interaction

Figure 44 Wiring the prototype

After transporting the obstacle to a place where I could continue my work, the first step was to secure the prototype in a way that would prevent it from falling, and that would make it possible to work underneath. I then continued my work by using a stapler and a steel wire,

and wiring the prototype from the inside (Fig.44). It would later connect the conductive paint with the Touch Board. The reason why I chose to use a steel wire was to avoid using paint for the entire system. I tested it previously as a trigger for the interaction and it worked very well. The next step was to use the conductive paint to paint certain areas of the obstacle. They would work as triggers if approached by a skateboard. I tested different parts of a skateboard to find the ones that lead electricity. The steel trucks were working really well, and were the parts that were closest to the skateable surface. I had to adjust the sensitivity of each trigger, turning all the painted fields into proximity sensors. This way, one would not have to touch the prototype directly. It could be done by being close enough to the painted field (approximately 5 cm) in order to trigger the sound. The fields were connected to the Touch Board, using steel wire, and each of the fields would have a sound connected to it. As the character of the prototype was purely exploratory, I chose the sounds based on my preferences and ideas about how it could influence the skateboarding experience. I decided to upload 6 different sets of sounds – each consisted of 9 sounds, based on the number of triggers placed on a prototype. I called them: drama, horn, robin, rap, random SCI FI, xylophone, trommeset. Some of these were melodic, and some rhythmic.

Since the triggers were supposed to be painted onto the prototype, I decided to explore different looks, and appearances. The shape of the prototype and its character reminded me of an iceberg; one sees only the tip of it, but the rest (the interaction) hides underneath. Guided by this idea led I designed mountain-like shapes, where the black fields would be the triggers, connected to the Touch Board. My decision turned out to be quite practical too. Since the Conductive Paint was sold only in small quantities and was quite pricy, painting the lines instead of fully covered fields was very convenient (Fig.45). I also purchased an ordinary outdoor paint to cover the larger fields and paint the thicker lines, making it up to skateboarders to discover which fields were interactive and which were not.

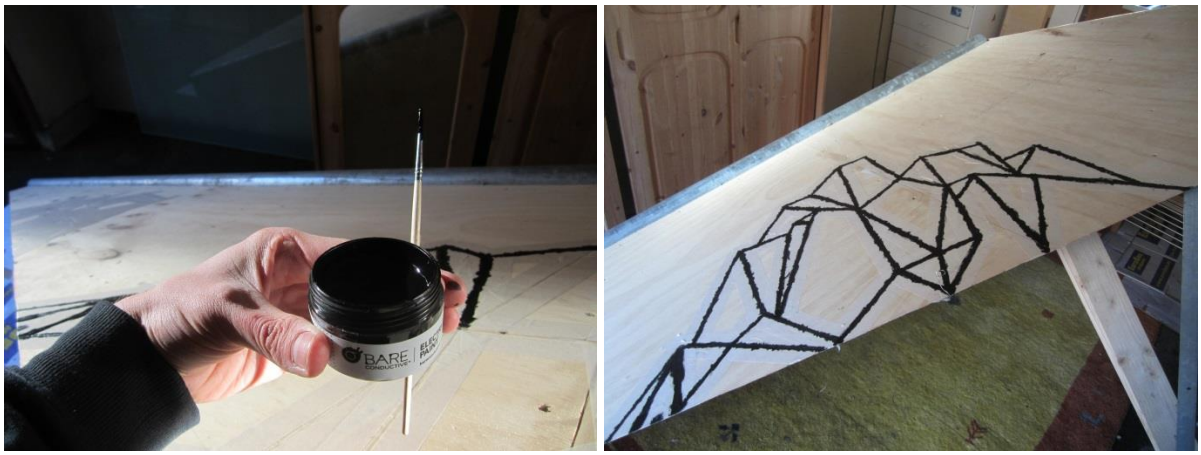

Figure 45 Painting the prototype with conductive paint

Figure 46 Connecting the speakers to the car battery

After finishing the paint job, I tested the prototype by simply connecting the Touch Board to a portable speaker. It functioned as expected, however, I immediately discovered that the volume delivered by the speaker was quite low. Since the sound was the main feature of the prototype, I did not want to take any chances, and I decided to invest in a speaker system. I purchased two 6,5 " In-Wall Speakers - 110 W each, an amplifier, a car battery and a set of necessary wires. Considering myself a novice in this field, I decided to contact a skateboarder with a relevant background. He was very enthusiastic and offered his help and expertise right away. We started by drilling holes in the plywood, in order to make the sounds louder. We continued by mounting both speakers underneath, connecting them to the amplifier and then to the car battery (Fig.46) – the entire process took just one day. Putting all the elements together was the last part of the prototyping.

Final Setup

Eight painted triggers and the rail on the top were working as proximity sensors. A steel wire was stapled to the painted sensors inside, and underneath the prototype. The steel wire was connected to the rail by conductive paint, painted on the inside of the rail. All of the steel wires were then connected to the Touch Board, using the alligator clip wires. In order to prevent the wires touching, I decided to make the extensions, using the ordinary, isolated wire. The Touch Board was then connected to a source of power, a power bank, using a USB wire. The AUX/RCA cable was connected to the amplifier, and then connected to the speakers. The last connection was between the amplifier and the car battery. The electrical circuit was now complete, making it possible to trigger the sounds by approaching chosen fields.

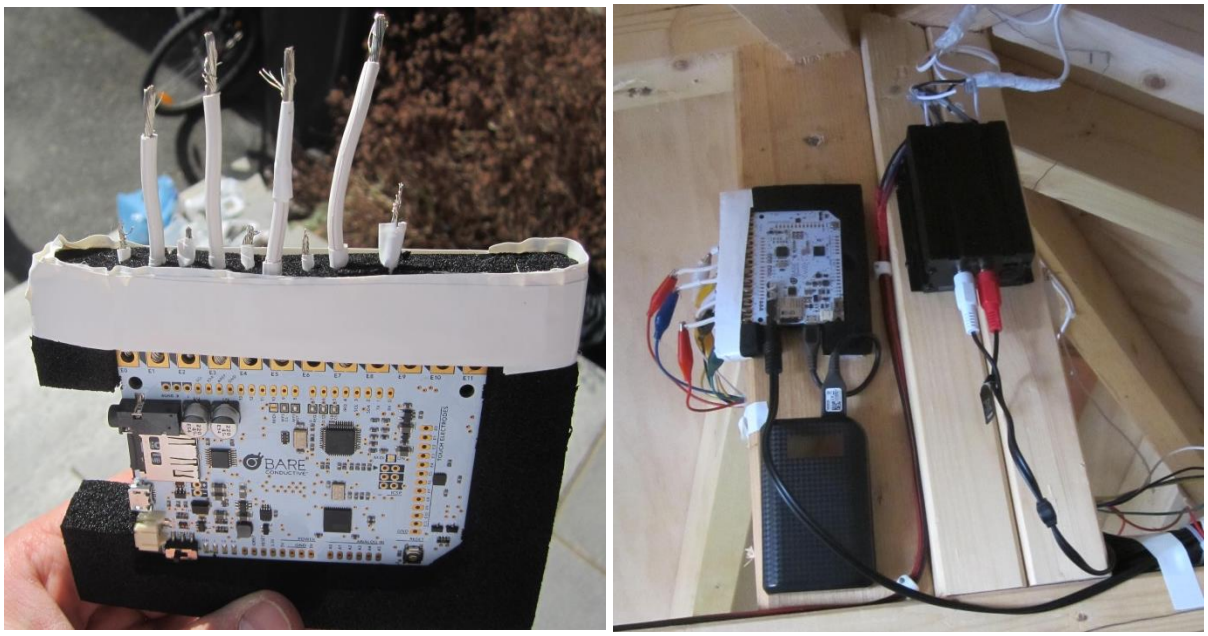

Figure 47 Touch Board (left) & Final Setup (right)

Site

Choosing the site for prototype deployment was the last stage of prototyping. Skateboarding is highly dependent on the weather conditions, and is most of the time not performed while raining, snowing et cetera. The ground has to be dry. That alone became quite a challenge early in April. In the beginning, I decided to ask my friends (personally and using Facebook) if any of them knew about a 200 square meters large, skate friendly venue in Oslo. Some of my friends shared my request with their friends, while other suggested places like

Kanonhallen, Ingensteds and White Room. The prices for renting an entire place for a day varied between 6000 NOK and 47 000 NOK. Parallel to that, I received the permission to place the obstacle in an indoor skatepark Skur13. However, thinking about the other DIY projects and how putting it in a skatepark limits the possibility of showing it to everyone, not just people invited to the event, I finally decided to deploy the prototype outdoors.

Figure 48 Sweeping the gravel at Torshovdalen

The main criteria for the site were inspired by the outcomes of Workshop 2. During the workshop, the participants expressed how green areas with a lot space and peaceful atmosphere were appreciated. Some of the participants have mentioned how it would be nice to do something new at the already existing DIY spot at Torshovdalen. The idea of improving the spot through filling the available space with new obstacles was a tempting one. I decided to investigate if Torshovdalen was suitable for conducting the final part of my design: its evaluation by users. I visited the spot myself in order to see (Fig.48). At the site I discovered that there was a lot of gravel lying around. Gravel makes skateboarding hardly possible, so I decided to pick up the broom and sweep the site, making it more skate-friendly. The grand finale of the prototyping phase was soon about to take place.

6 The Master Jam

Figure 49 Master Jam

The *Showroom* part of my thesis was an event which I decided to call "Master Jam" (Fig.49). The event took place the 8th of April 2017. The invitation was sent using Facebook, where I described the event in a few words. I decided to not share a lot of details, to make it more exciting. I described the form of the event as "futuristic skate jam". Besides that, I explained that the installation was a result of a design process as a part of my master thesis. Other means of persuasion were promising a lot of friendly people, coffee, cake and nice weather.

Despite the quite unstable atmospheric conditions at that time of the year, the weather was good that day. As the obstacle arrived around 14:30, there were already some people waiting. After carrying it out and placing it on the desired spot, my task was to set up the interaction. As I connected the car battery to the system, the triggered sounds were clear and loud, but as soon as I lowered it down to the ground, the sensors immediately stopped responding. Since the number of skaters arriving at the spot was growing, I decided to let them skate for a half an hour, and try to think of the solution that would solve the issue. I decided to adjust the threshold of the Touch Board, making it more sensible, but it did not work as expected. The last adjustment was to tape the steel wire that touched the ground, but that also ended up in a fiasco. I decided to plug a mobile phone to the sound system and play music using the

obstacle. The official opening took place at 15:30, and initiated a one-hour jam competition. The prize was a bottle of champagne, and the winner was going to be judged by the audience. After an intensive skateboarding session, the performance of two skateboarders stood out, resulting in a shared first place. Everyone seemed to be pleased with that verdict, and people continued skateboarding after the prize handing ceremony. The event lasted for around five hours, until 19:30. The last part of the event was cleaning the trash and removing the loose components like the car battery and the Touch Board out of the prototype. I decided to bring them along, both because of the earlier mentioned unstable weather conditions, but also to prevent theft.

The event was a fantastic way of testing the prototype and at the same time, I saw that people enjoyed themselves. It was without a doubt a highly inclusive and social event. At most, the number of participants was around sixty people, turning the usually empty piece of asphalt into a large happening. It attracted people from neighboring houses, and many passersby stopped to watch and see what was going on.

6.1 Evaluative Interviews

The goal of the evaluative interviews was to hear the opinions about the event, the prototype and general attitudes towards DIY projects. I used open coding in order to denote the concepts that would expose valuable data. The nomenclature that I identified was partly based on the interview guide and partly through a process of organizing the statements, left me with the following list of categories (Fig.50).

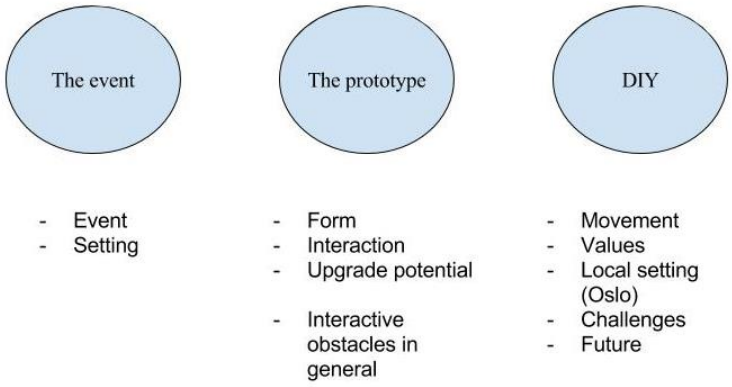

Figure 50 Categories

The two first categories were seen as an evaluation of the format of the exhibition, the setting where the prototype was deployed at, and finally the prototype itself. The last category, DIY, will be analyzed in Chapter 7. In total, I conducted twelve interviews. Though I tried to use approximately fifteen minutes per interviewee, the duration of the interviews varied with the shortest lasting for 10 minutes and the longest for 35 minutes. I will use a letter for each interviewee in order to keep them anonymous, but make it possible to distinguish them from one another. I decided to use following letters: F, F2, G, H, K, L, M, M2, P, P2, S, V, O (the letter O is used as a reference to myself).

The event

At the very beginning, I asked the interview subjects to express their opinion about the event, and the answers were unanimous. All twelve interviewees expressed that they enjoyed themselves and commented on the large number of people that showed up. Their reasons for participating in the event were various. Some people were a part of the previous stages of the design process and were interested in seeing how the prototype turned out, but many of the attendees liked the fact that something new and exciting was happening. The event was not strictly meant for skateboarders and everyone was welcome. Some of the interviewees mentioned that it was exciting for the skaters, as well as for the spectators.

> H: *"The milieu that showed up around this project – a lot of skaters, skaters' friends, girls, boys, children that played around. It is very… like if you live in this area and you see that there is a lot of activity going on at that place – you go out. There was a couple, three people from the apartments around that joined."*

When asked why they chose to show up, they named various reasons. The majority was there to become familiar with and support my project. They also named that they were there to skate, meet others and have fun. Some of the participants that I knew from before showed up without knowing about the event. They told me that it was fun to skate along with many others at an otherwise empty spot. The overall impression expressed in the responses was that the participants enjoyed themselves.

The setting

The setting is defined as the place itself (Torshovdalen, Oslo), the character of the place (relatively empty space with preexisting DIY obstacles) and the format of the event, a skate jam. Again, the interviewees were very positive about the setting of the event and seemed very excited about the new obstacle. The prototype was continuously skated by at least one person throughout the entire event, a period of approximately five hours. As new skaters arrived, they joined the skateboarding session trying out the obstacle and learning how to skate it. Some respondents described the event in a following way:

> M: *"It was lovely. People that didn't skate just sat there and drank some beers and listened to the music. Football on the side… It was just a hangout – good vibes. It was plenty of others that hung out there."*

> H: *"Even though we haven't had presentations of master projects before, it was all packed in a setting that made people enjoy themselves."*

They defined the character of the event as informal and open for everyone. Another thing that was mentioned by multiple interviewees was the fact that the place where the event took place is usually rather empty and that it was a positive thing to activate it by organizing the event.

> K: *"I noticed based on the atmosphere that everyone enjoyed themselves and it was very smart place to arrange it, cause there are some possibilities of making some DIY elements, and it is a piece of asphalt that stands there quite empty. So in that case I feel like it can be a little spark to it."*

The respondents had some comments regarding the physical characteristics of the place. One of the participants mentioned that it was a bit far away from the city center. Also the remaining gravel was seen as a minor disadvantage. One interviewee also commented on the quality of the asphalt at the spot.

> H: *"It could've been a good idea to place it on a nicer flat, just so that there would be less noise when you approach it. Cause if it would be a concrete surface, the sound would be way more hearable when you hit the sensors."*

According to some of the interviewees, the event was situated too close to the neighboring houses. The sound of skating and people gathered might have upset the local residents.

P: *"It might have been that the neighbors were not prepared and they thought that it was some sort of a party."*

K: *"It is quite far… or… nah it is quite close, so people most likely heard it, since skating makes a lot of noise, it is a part of it."*

The respondents were concerned with the fact that the prototype could become a subject to vandalism or that the technological parts could get stolen. Some of the interview subjects suggested alternative places and spaces that could house the prototype. Based on the aesthetics and the look of the prototype, they commented how the shabby look of the pre-existing obstacles was not adequate to the neat look of the prototype.

H: *"But it could stand in a nicer surroundings. The elements that are there are quite shabby, so if it would stand, like, at Vulkan Mathallen, in the middle of the concrete there, it could also be like a sculpture out in the cityscape."*

P: *"And I am thinking like. It is going to stand there… it is a nice obstacle and it stands there with these trashy, soggy, rotten curbs."*

Interview subjects mentioned putting the obstacle in a skatepark, though the opinions about that were rather split.

P: *"I think like in the Oslo Skatehall for example. It would be very fun to have something like that."*

K: *"You put something like that in a skatepark and you lose the entire concept (DIY obstacle). The whole thing just disappears."*

Interviewees explained that the prototype could be exhibited as an art installation in a gallery setting.

F: *"I think that if you would make it work 100% with this sound thingy like you wanted, and you would make right sounds… I think it could almost be an art installation. It would have been freaking awesome to present it that way. You know like a "White Cube" gallery."*

Some of the skaters also mentioned that it could be fun to place the prototype in a random public space in the city to see if it would attract people that do not skate.

> L: "*If you would have an obstacle like that some random place in the city, it could not only be a skater that would approach it. Ordinary people would have approached it, touched the thingies that make sounds, you can combine it."*
>
> M: *"If it would be out in public, with completely ordinary people that have no clue about it, they would be fascinated. Just as you know… like piano at the shopping mall type of thing. They could possibly use it completely different."*

The format of the event was commented in the following way:

> M2: *"It has to be like that with this type of obstacles anyways… that people explore. People always skate gnarlier (more risky) on similar types of jam-settings though."*
>
> H: *"I feel like it fits the best in a setting like it was at the event. Cause it then becomes a very show-like element."*

The obstacle

I will now present the evaluation of the prototype in a similar manner. During the interviews I asked my interview subjects to comment on the physicality and the interaction of the prototype. I asked them to evaluate it from a skateboarding perspective. It is important to underline that skateboarding is a highly individual activity in terms of skills and preferences, and it is agreeably impossible to create an obstacle that will satisfy everyone. Comments presented below, support that statement.

> V: *"Personally I like banks a lot, so to me it was awesome. I like pyramids, just that this one was a bit steeper on one side, everything worked awesome. Good transitions, completely perfect."*
>
> P2: *"I think that it was very cool, I think that the proportions were very good. I think that it was perfect."*
>
> F: *"I mean, the shape was nice, but to me personally it could be a bit bigger. So that you could have more space and time."*

The multifunctional character of the prototype was expressed by one of the interviewees in a following way:

> M: "*It was like hip to wallie to rail, so you could do basically almost anything you wanted. I feel like there was nothing that was not included really. I mean, it was not a ramp, but you could skate it in very many ways. There were many opportunities."*

A majority of interviewees have commented the difficulty of the obstacle. Many have described it as very challenging. However the challenging character of the prototype based on its proportions was seen as an advantage.

> S: *"It is very uninteresting to make something that everyone can skate at once. There will be no learning then."*

> G: *"I think that it was a unique and cool obstacle. I never skated anything alike before. It was in a way difficult to pop on it from the shortest side, but it was also in a way very fun… that it is difficult."*

According to the comments, the obstacle was not perceived as an easy one, and in order to perform, one had to learn it and get used to its proportions. One of the respondents has expressed his concern, regarding users with a different level of skill than the participants.

> G: *"For us, the advanced it is quite cool to have such a challenge, but if you would have for example a kid that would skate it… it would be difficult."*

However, when asked if the proportions should be different, or if the obstacle should be easier to skate, all twelve interviewees objected. Asked why, they said that it would become a different experience.

> P2: *"It was a bit challenging, but if it would be slacker, it would become a bit more boring, since it would then become an ordinary corner. And if it would be steeper it would be too difficult. So, it was actually a golden middle way, since it was a difficult corner and just steep enough to grind and all that. So that was a very good job."*

The interactive dimension of the prototype did not work as well as expected. When held up, the obstacle was working perfectly, but as soon as it was put on the ground, the sensors would refuse to work. After three attempts of setting up the Touch Board, I had to give up the sound

making function, and use the built-in speakers to play music instead. However, skateboarders remained positive, ensuring me that playing music was seen as a novel and fun experience.

> V: *"I heard it when you tried it out and it worked, so I wasn't really sure why it didn't work afterwards, when you started to skate. The Interaction would have been awesome, but we had music coming from the pyramid and to me it was an interaction in itself. At least something new. To me it was cool."*

Although the interaction was faulty during the event, I decided to explain how it was supposed to work, in order to hear the opinions on the general idea of adding an interactive element to skateboarding obstacles.

> G: *"If it is like that one stripe of paint is a beat or a sound or something like that… people could skate after each other and make some kind of choreography or something music-like."*

> F: *"I think it would be so awesome! It would be something that has never been done before. That there is a lot of sound coming out of the obstacle…"*

Some of the interviewees seemed disappointed due to fact that the interaction was not working as they anticipated.

> S: *"It was a bummer… it would be way cooler if it would work. It would be more exciting to skate if it would have had sound."*

> H: *"Yeah, without a doubt. So it was a bit bummer that there was no sound when we skated and that the sensors did not work. But it played a sound like a speaker and that was pretty cool as well. It would definitely be very fun to try it again some time."*

Overall it seemed like everyone was very amazed by the idea of creating sounds while skating. It was compared to adding a new dimension, or a new sense to it.

> S: *"Yeah it would be fun to explore and try it out. Just the fact that you add a new element to the obstacle. Not just in terms of the appearance or geometry, but also a bit like… like you add another sense to it."*

7 Recap: Six Principles of Everyday Creativity

Another part of the interview was concerned with the topics connected to the DIY movement. The goal was to uncover the attitude of the skateboarders towards various DIY activities in Oslo, the value it brings to the community, the challenges and the opportunities for future development of the movement. In my analysis I set the data collected during the interviews against the theoretical framework described in Chapter 3.

1. **A new understanding of creativity as process, emotion, and presence.**

This principle accurately describes the character of the entire project, both the development process and its result. The reactions and emotions among the participants during the event, and just the fact that they showed up, proves how this project was a success.

> V: *"It was awesome! Good that there is **something new to skate** at Torshovdalen and that you had music under the obstacle. That you gathered everyone and that **everyone had a good time**. And that it was a nice weather and **pure joy**."*

Some of the skaters attending were also involved in earlier stages of the project.

> G: *"I came because I think that the **project seemed very cool. I attended two previous parts** too, so **I felt that I have to be there for the big deal.**"*

Despite the technical issues, it seemed like people enjoyed themselves.

> F2: *"To me it was very **fun**. Cool that so many people showed up. Many people think that it is **fun to watch, many people think that it is fun to skate**, so my impression was that it was very successful. Even though there was some technical issues, **it didn't affect the experience."***

The fact of creating something novel was commented by one of the participants:

> F2: *"It is fun to **turn an idea into reality**, skate it afterwards, try it out. **You can try stuff that you wouldn't be able to without creating that obstacle.** So it was very fun."*

Others saw a value in working together and seeing the project from a start to an end:

P2: *"To **explore possibilities** and **come up with ideas**, basically to have a project like that and use it both to **come up with something and implement it."***

2. **The drive to make and share.**

The eager to be active and participate in shaping the world was another criterion that I used in analyzing the data collected during the interviews. I was interested in uncovering the reasons for active participation in my project, specifically concerning the members of the skateboarding community.

P2: *"Just the **joy of creating something**, but also to get something new to skate on, some **creative expression. Take an initiative**."*

P: *"You **try to do something good for the skateboarding community and the local community at Torshov**, instead of bunch of junkies that sit in the park there on a Saturday and drink. **It was like a happening there.**"*

It even seemed like the design intervention inspired some of the skateboarders:

P: *"There are many people that built more stuff than me. I was never really interested in that kind of stuff. **But I could gladly try together with others. I don't think that I would do it completely on my own, but if it would be a crew, it could be exciting**."*

Others decided show up in order to see the prototype, but also to meet others:

M: *"I went there to **check out what you have made**, but also because **everyone else was going there.**"*

M: *"**It is fun.** It becomes more like a **social thing.** Just **hang out with friends**, and you **build and you look forward to skate it**."*

M2: *"I came to **help out and to hang out with all the boys**. So it was a good mix of **happening that was also productive.** "*

3. **Happiness through creativity and community.**

This principle was concerned with how being active and creative might improve life quality. However, one cannot stay passive, but work actively (especially with others) towards the better life. One of the participants, asked about the value of DIY activities, stated:

> L: *"It **makes people more creative**. You have to **put all the possible ideas together** and it is a very cool thing. **You create a lot of weird ideas**."*

According to some, the event reflected the engagement among the members of the skateboarding community and their wish to support other skaters, in this case - me:

> M2: *"It was packed! A lot of skaters. **It shows how good the solidarity is and how easy it is to gather and do stuff."***
>
> L: *"That it was **something cool going on, something new, something that seemed exciting.** Plus that others that I knew were going there. And that I wanted to **support you."***
>
> K: *"**It influences the skateboarding community a lot. If someone makes a spot like that, suddenly everyone is there for a while."***
>
> G: *"I would assume that **skaters become more united**. Like, if they are **standing together about one thing… it unites the community.**"*

The last quote describes very well how social engagement is the key when it comes to shaping the values of the community:

> H: ***"It is a very strong feeling of fellowship, the feeling of mastering something. I think that it inspires a lot and that it is very important that you feel that one develops the culture that one is a part of in a right direction."***
>
> L: *"It is always **fun to make creative things** and to do it **with friends**. It is fun to build something. **Community… bunch of buddies**."*

4. A middle layer of creativity as social glue

The opposition to the existing ways in the context of this design intervention is not the consumerism lifestyle, but rather the existing laws and the hostile attitude of local authorities.

Instead of passively waiting for things to happen, skaters decide to take things in their own hands.

> F: *"It definitely **creates a value**, and often takes place at **spaces that are not used to nothing.**"*

The limited dialogue between skateboarders and the officials often result in creating spaces without any involvement of actual users. The overall impression was that they wish to contribute more, but also build stuff themselves.

> L: *"It is always attractive to involve skaters. **To make people choose themselves is better then give them finished design.** But of course it is **less and less DIY in the new public (skate) parks**… in my opinion."*

> L: *"You could have some **spaces where one could possibly put something own… not just make a (skate)park complete**. Have some stuff that is nicely done and some good stuff, but also **leave some space for people to express themselves**. It is a cool thought."*

> S: *"DIY can contribute so that (skaters) they try to build things themselves. Because it is often, not always, but **often, that there are a lot of mistakes when the officials step in and implement something on the skateboarding front.** It is often **a lot of complaining when officials or local authorities are building something for skating**."*

Another thing is that if local authorities decide to involve skaters, they should listen to their opinions, not just include them for the sake of it:

> V: *"I mean look at the Skatehall, which is not DIY. There was a lot of people that didn't have that much to do with skating, and **even though they got some guidance from people we know, famous skaters, they still f****d up some stuff.**"*

According to some, giving skaters the opportunity to define and build their own elements should be considered as one of the solutions:

> V: *"DIY is awesome cause **skaters themselves do what they want and try and see**. And make a lot of mistakes, but in the end **I feel like skaters are best to build stuff for skating."***

5. **Making your mark, and marking the world your own.**

It seemed like the fifth principle was very important to many of the interviewees. The culture of skating has built its cultural heritage over many years, and its members are proud of being a part of it. Being able to continue the traditions and to do things their way is a significant part of the culture. Enabling them to express themselves by giving them dedicated spaces, or letting them build at the certain areas could foster their creativity.

> V: *"Fix spots, fix stuff that already exists,* ***use the city more that skaters already do****, using what we get. In addition to that* ***we could have the opportunity to tweak it a little and get even more out of the city.****"*

> F2: *"I think that it would be very cool if there would be a* ***bit more focus on skating in urban planning.*** *And it is often not a lot that takes to make such spaces into a skatespot.* ***You just need proper tools.****"*

When it comes to shaping spaces dedicated to skating, a genuine understanding of skateboarding techniques makes skaters irreplaceable experts in their field.

> F2: *"It is really cool that* ***things are made by users themselves.*** *It makes it a bit more… it gives them more* ***space to be a bit more original.*** *We have so much* ***expertise*** *in that kind of stuff."*

An opportunity of turning "dead spaces" into a skatespot was seen as creating something out of nothing. Seeing the potential value in objects and spaces that no one cares about and turning them into skateable spaces was a good example of productivity among skaters.

> M: *"It is very positive. It becomes like… that the* ***place where nothing is going on otherwise****… but it is like that with skating everywhere though. But* ***it is cool to build something for skating and at spots where there is not that many people hanging out,*** *just make some kind of park, or something like that. Obstacles like that."*

> M2: *"There are not that many sports, if you can call it like that. Yeah, no one goes and… or at least not in Norway… that goes and build a football pitch…* ***So it is a very cool thing that we are so engaged in what we are doing, that we choose to go and create a space for it.****"*

K: *"It is f*****g awesome though. It is like* ***the funniest thing about skateboarding. Just to see an opportunity.*** *Look here…* ***there is nothing going on, and then you just do it yourself.*** *A little bit of cement, you don't need that much really. A good stone, a little bit of cement and some Leca blocks and you suddenly have a spot…or* ***you just suddenly have f*****g lots of movement at the spot that was completely dead before. There should obviously be a more opportunities to do that.****"*

A value brought by designing, shaping and skating own spaces was seen as something unique and was accurately described by one of the respondents:

G: ***"When one was involved in making something, it has a special place in one's heart."***

6. Wish to learn

The wish to learn was the principle exposed during the analysis of the initial interviews. It was brought up again by the respondents participating in the last round of interviews. The statements presented here are expressed by the skaters that were not involved in the initial interview round. However, these confirm that the wish to learn can be seen as one of the reasons why skaters involve in creating DIY spaces. Learning about materials and boosting building skills was seen as one of the advantages:

F: *"I think that it would be* ***exciting to learn how to use different materials*** *and to use them to* ***build and stuff****, even though I am not natural talent."*

Creating spaces that are challenging and require certain skateboarding skills was also mentioned as a positive thing:

M: *"S**t… that is cool, a* ***difficult spot****. "*

The reason why building DIY seemed to make more sense was explained by another respondent:

V: "***Skaters themselves do a lot better job**, because **they have a genuine understanding** of what is cool. What is cool…**what is new and cool**. And where you can **cross the line a bit**, cause when you skate on a quite **high level**, you know how much should the coping stick out, or how high the curb should be. **What makes a spot a good one.**"*

7.2 Findings

After analyzing the data multiple times, I came up with two additional points that according to my results should be a part of the framework for doing similar research.

Inspiration to others

This motivation is directly connected to one of the challenges posed by creating DIY spaces – passivity. Projects like this one were seen as inspirational and shown that one idea can initiate a series of participatory activities.

K: *"It is always how it begins. **You just see someone do something**, and you think… damn, that was f*****g **cool, next time we do this**… and then we do that. It is actually not more than that. **It is just that one person has to work, like you did**, and … "f**k that was so awesome, next time we do it like this and like that …"*

As some of the respondents commented, there is no need of expensive equipment and that it is hard will, motivation and cooperation rather than fancy tools and machines that are the key in creating such spaces.

P2: *"You proved that **you don't need that much** and that **it is something one can do by themselves. So I actually hope that it can be a nice inspiration to other people.**"*

K: *"The joy of creating something and using it afterwards. Making something cool. It is fun. To find a stone some place. What can you do without a car? You just put it on your skateboard. It is just as good. The work you put into it. You stash it at home for a while. **It is f*****g hard work that no one is getting paid for, but everyone is f*****g stoked to participate in stuff like that.** That is what is cool about that. It is actually **not more than that**. Just **one person that has an idea, and the ball begin to roll.** Suddenly everyone join to get the stuff that is needed and make it."*

To see an opportunity and to transform it into a physical thing seemed fascinating. Showing others that things are not as hard as they expect, supports enthusiasm among the rest of the community and results in doing things together.

Changing the stereotypes

Another tendency that was uncovered in the interviews was a wish to change the existing stereotypes about skaters. The interviewees expressed their frustration around the negative attitude towards their activities. One of the respondents suggested that in order to show the positive aspects of DIY spaces, one should document the transformation of an empty space turning into a hang out, as an effect of adding a skate element.

> K: *"It would be cool to take one area, or square and* ***document it before****, when you see that it is* ***completely dead*** *and nothing happens there.* ***Then you make a little obstacle****, you take it there and* ***suddenly twenty people skate it, barbecue****…"*

Master Jam was an attempt to activate Torshovdalen and organize a positive happening for the skateboarders as well as the local community. Showing people that skaters gather their resources to turn nothing into something was seen as a positive way of representing the community.

> H: *"Projects like that have a huge value.* ***Because it tells a lot about the productivity in the community."***

> H: *"I think that Municipality is actually really fascinated with this kind of cultures. You see, for example in Copenhagen and in Malmo and other Scandinavian cities where they have a strong DIY community.* ***Municipality suddenly notice the community*** *and think like… wow, they are* ***very active people****, we have to help them and* ***support*** *that, and then the* ***creativity starts to bloom*** *and new skateparks are being built and the* ***city adjusts****."*

Also when it comes to the stereotypes, skaters are often seen as a group of people that make noise, drink beer and pollute. People are skeptical of letting skaters dwell in their neighborhood, which often result in arguments and cause a negative atmosphere. Also the fact that skateboarding is thought of as destructive and harmful seems like one of the reasons why

people choose to repel skateboarders. But as one of the interviewees pointed out it is rather creating than destroying that seems to be a goal of their actions.

> V: *"It has to be* ***built wisely****,* ***without destroying anything****, but* ***using the pre-existing elements.****"*

As hanging out is an inseparable element of skateboarding, it attracts many people that spend their time on skating, watching others skate and basically hanging out. It seemed like skateboarders understand that this has to be done respectfully and with caution, to not upset the neighbors.

> V: *"If we want DIY to exist,* ***skaters have to learn respect****. The locations can be anywhere, but only if skaters would* ***learn to consider others and not pollute****… throw cigarette butts. We are actually adults, at least most of us.* ***We should care more****.* ***If we want others to reach out, we have to be grown enough to receive their hand****."*

It seems like many years of "battles" for DIY spots between skateboarders and the Municipality of Oslo has come to a point where a new solution has to be found. Skateboarders are willing to adjust their behavior and show their activeness in order to change the negative attitude towards their community. They wish to show that they can create, not only destroy, and that skateboarding culture is more than drinking beer and pointless hang outs.

The additional two motives of creating DIY skate spaces have made me finally define what drives skateboarders to create such spaces. Thus, I wish to introduce the new set of values, based on all eight principles described above which I decided to call ***Eight Pillars of making DIY Skate Spaces***.

7.3 Challenges

During the interviews I asked the respondents about the challenges that might hinder skateboarders from creating DIY spaces in more "activist" manner. I will now present these, supported by the quotes from the interviews.

Practical issues

The majority of the interviewees seemed to not worry about the practical things like tools, transport and such. It was rather the ability to set some time out to build and do stuff that was seen as the issue by some. Some of the respondents mentioned that having a large network makes things easier and that if someone would initiate a project, probably everyone will be willing to help. The prototype developed as a part of this thesis is a perfect example that these challenges are manageable.

Local Authorities (the Municipality of Oslo)

When asked about the challenges around building things DIY style, all of the interviewees pointed at the Municipality of Oslo and local authorities as major adversaries. The lack of dialogue between the city and skateboarders has previously resulted in destroying elements built by skaters, which have negatively influenced their attitude towards the local authorities. Also the existing laws and regulations consider building without permission as intrusive and potentially hazardous. Raising DIY spaces requires certain resources. People use their spare time, money and sweat in order to build the desired spot. The feeling of uncertainty about the future of their work hinders them from taking any actions.

> S: *"That it will **remain standing** is the biggest challenge. Things are taken apart, because it is not allowed to build there."*
>
> S: *"It is often caused by different laws, that **things are being removed**. It is **not allowed to build** here and there, this and that, because he or she owns the land here, or it might belong to the city too as far as I am concerned."*
>
> V: *"Of course it is **local authorities**… if we start to build some asphalt on a grass it will be probably a bit problematic when it comes to city council. Of course you are **not allowed to do things without having permission**, without being sure that everything*

will be safe and no one hurts themselves. There are some ***rules that limit our possibilities*** *in making whatever we like."*

M: *"It is* ***easy to make****, but to make it* ***remain standing is another thing****. "*

M2: *"It is mostly because* ***things are torn apart*** *one day. And it can be a* ***lot of money thrown out*** *if it doesn't last that long."*

O: *"So, what makes the threshold to build things so high?"*

P:*"Maybe the fact that* ***there are no places to do it? Everything is always destroyed****."*

G: *"You use money and stuff, and it sucks that it is just* ***torn apart****."*

F: *"Norway is very good in regulating stuff, and* ***if something is not regulated****, it is just* ***removed****. And it happens that the initiators in a DIY community are not necessarily very good in sending the right applications and are toady with the right people. That is probably a challenge in a city we live in."*

Every single one of them mentioned the Cuba park, (described in a Section 2.5 on DIY Skate Spaces) as the example of the Municipality working against the skateboarding community. The Cuba park was a name that frequently popped up throughout the entire project. Here are two quotes that selected to express the disappointment caused by the events that took place in Cuba:

H: *"We have actually built quite a few DIY elements in Cuba park, but they were just* ***razed to the ground*** *before seventeenth of May (Norwegian Constitution Day).* ***And we put a lot of work to it. And they were very nice.****"*

K: *"The Municipality* ***contradicts itself****. For too many years. People were joining meetings in Grunerløkka District about building concrete elements in the Cuba park. And then* ***we did it, and then they destroyed it.*** ****** was on three meeting in a two year period or something, but nothing ever happened. He even made a lot of sketches, talked to the people and did a lot of work to make it easier for them,* ***but nothing ever happened****.* ***And then people came and did it themselves, and it got destroyed.*** *They did them a favor, but no…"*

One can probably recognize a link between these drastic actions taken by the Municipality of Oslo and the skateboarders' wish to create a dialogue. That could prevent the skateboarding community from being stigmatized as a troublesome element of the city, and reverse their bad reputation.

The opponents (neighbors)

Another challenge that was repeatedly mentioned during the interviews, was the people upset by skateboarding, or by skateboarders, often referred to as neighbors. When asked what annoys so-called neighbors, respondents answered:

> K: "***The sound****. The fact that* ***skating is noisy, progressive, aggressive, and punk in a way.*** *You are out there, use a lot of energy, you make noise, maybe bleed a bit, spit a bit, drink a beer or two… I just think that the* ***majority don't really appreciate it****. Or you know after skating so many years. People don't look so f*****g positive on such easy positive things. They don't see things in a same way, they just want peace and green grass.* ***They often would like it to be clean and tidy around them. I think the sound annoys them.****"*

> F2: *"There are many that consider s****kateboarding an act of vandalism and nothing else than noise.****"*

Another respondent was actually participating in a project that was shut down by the frustrated neighbors:

> S: *"I tried to participate in some projects. We bought some concrete and made this wooden concave which we were supposed to use on this one wall. The plan was to cast it to the wall.* ***But it never happened because of the dull neighbors. The police showed up, and stuff like that.****"*

According to K, the radical character of skateboarding and the atmosphere created by the skaters distorts the order and peace of non-skaters. It is important to underline that this attitude does not apply to everyone – some people admire skateboarders and their ways of expression, though often they appreciate it more if it takes place far away from where they reside.

Passivity

As the challenges above might be seen as mostly caused by the external factors, the next challenge is about the internal obstacle – the passiveness of Oslo based skaters.

> P2: *"**People do not take the initiative**."*

It seems like a large number of excellent skate spots, and growing number of skateparks make Oslo skaters lazy. They like to discuss the possibilities and talk about new projects, but it is often that it stops there. Why bother building if they can just skate the existing spaces?

> M: *"Every city has a potential, but it is all about **that there has to be a group of people that actually instead of talking, does it.** "*

> L: *"To organize something in **this gang is often the problem**."*

> H: *"We are not good in setting our time to actually carry out things. **We talk a lot about stuff like that, but our capacity to implement things is not so strong**."*

Though the eagerness is there, many of the respondents have mentioned the lack of a leader or initiator as a main obstacle in context of creating DIY spots. They also named that person like that could involve in a dialogue with the officials. Some have referred to how other cities cope with that:

> H: *"Like in Copenhagen and in Malmo, there are l**ocal politicians that came out of skateboarding community, and that work actively to negotiate and improve skaters' position.** And it will probably come to Norway in some years too..."*

Other ones were even more honest about taking the passive stance:

> P: *" In a way, I was never that interested in building stuff like that, but I think that it is very nice that people want to do stuff like that, so that I can come there and skate it. "*

As one of the participants pointed out, skateboarding is still quite young in Norway, which can be one of the reasons why the DIY culture has not developed yet.

H: *"I feel that in Oslo, we don't have that strong DIY culture among skaters. It has probably to do with the prohibition and that s**kating is way younger in Norway, than it is in other countries.**"*

Skateboarding was a prohibited activity in Norway between 1978 and 1989, making it the only country in the world where any activity connected to a skateboard (including the possession) was prohibited by law (Trier, 2006). The façade of the newly built indoor skatepark Oslo Skatehall is covered by the old prohibition law (Fig.51). It can be seen as a symbol of growing recognition of skateboarding culture in Oslo, and in Norway.

Figure 51 Oslo Skatehall façade

8 Discussion

This research exposes the significance of participation in a skateboarding community. Starting with the interviews and ending on the evaluation of the prototype, the skateboarders were highly engaged throughout the entire project. As it progressed, the number of people involved and offering any form for help grew. When it comes to sharing a passion, the skateboarding community can be seen as quite homogeneous, but when it comes to their backgrounds, occupations, or creative and practical skills of its members - it is highly heterogeneous. In the context of my study, the diversity was reflected through different ways of participation and roles that skateboarders played in the distinct stages of my project. Their presence has definitely made a mark on the design intervention, but also proved that an involvement in a design process can be seen as a highly appealing form of participation, appreciated by the members of the skateboarding community.

Making and the participatory nature of it in skating community

There are various ways of interpreting the driving forces of cultures involved in making. Some people make because they are bored, some because things they desire do not exist and some choose to make things as a personal manifesto against the existing status quo. In my thesis, I was interested in identifying what motivates skateboarders to participate in DIY making projects. In order to investigate that, I used Gauntlett's *Five Key Principles of Everyday Creativity*, which generally describes what motivate people to make things themselves, engage, and participate. However, what motivates skaters in particular was something that I wished to examine. The analysis of the data I collected, left me with interesting findings that resulted in defining *Eight Pillars of making DIY Skate Spaces*.

The First discovery that was not covered by the Gauntlett's principles was that skaters wish to make in order to learn. The process of learning in itself was seen as a fun way of obtaining new knowledge. In the last round of interviews this statement was supported by several skaters, confirming that learning by doing is a desired outcome of making. Skaters wish to learn how to use different materials, tools et cetera, but they also wish to learn, through building new, challenging spaces. Usually, skateparks built by local authorities are intended to be "for everyone", regardless of skills. Even though ordinary skateboarding is not seen as a

competitive activity, a wish to improve undoubtedly exists. Building spaces of appropriate difficulty might support the skaters in pursuing higher level of skateboarding skills.

Inspiring others was another motivation uncovered by the interviews. The entire project can be seen as a mean of empowerment and inspiration to others. It is in a way a counteraction to the passivity, labeled by the interview subjects as a hinder in creating DIY spaces. Finding new impulses and initiating various projects might ignite a spark among the skateboarders. A growing popularity of skateboarding as a leisure activity has significantly accelerated the process of creating new venues and skateparks in a local and global context. It is undoubtedly a positive change when it comes to recruitment of new members to the community and practicing the skateboarding skills. However, the possible consequences of this development might result in lowering the engagement in DIY activities among skaters. Thus, the engaged members that will keep these traditions alive is more important than ever.

The third motivation brought to light by the interviewees is somehow connected to the former two. It is a wish to change the existing stereotypes. During the interviews, skaters expressed the disappointment and frustration around the existing ways of tackling the emergence of DIY spaces employed by local authorities as they were razing it to the ground. Using the Cuba park project as an example, they explained how the hours of effort and labor were destroyed by Municipality of Oslo without a single word. Previous attempts of creating a dialogue between skaters and local authorities were characterized as a one way. In the end, the spot was destroyed. The engagement and the activeness expressed by building DIY spots should be appreciated, not neglected and condemned. However, seeing things from a "neighbor" perspective, labels skating as intrusive, noisy, and dangerous. It is understandable that authorities and neighbors are not thrilled about bringing these elements into the city scape. At the same time, destroying things, and kicking people out, seems like drastic and unnecessary ways of handling things. As one of the interviewees pointed out:

> P: *"It is so reactionary to think that skateboarding doesn't exist."*

My overall impression is that skateboarders seek peace, and that they are willing to reach out and do things differently. It is a matter of finding a compromise – skateboarders have to take into account that their presence and behavior cannot be associated with chaos, beer and noise. It is up to them to take certain actions and prove that they are actually willing to cooperate. But it is a bilateral process. The Municipality of Oslo and people responsible for city

development have to be willing to hear what skaters have to say and not judge them by their appearance. In the end they both want to find a solution that suits both sides.

The artefact

The process of making the artefact, an interactive obstacle for skateboarding, was a large part of the design intervention described in this thesis. I conceptualized the making as a symbol of the participation and co-operation. These elements were present throughout the process of learning about interactive DIY technologies and were followed by the process of making. I was also given the opportunity to see how design 'activism' could engage the skateboarding community in the final stage, deployment and use of the obstacle. All this was very new to me, both as an interaction designer and as a skater. Here I wish to discuss the artefact itself. Its participatory aspects are discussed in the next part of the discussion.

The objective, as mentioned above, was to create an interactive skateboarding obstacle. The obstacle would allow for experimentation around possible ways of embedding the technology in a skateable element, in order to enable various forms of interaction. Its use would then define if the prototype had the power to influence the usual behavioral patterns of skaters. By usual behavior I mean performing the previously mastered tricks in a new setting and finding out how to use the obstacle in novel ways. Another objective was to improve the existing landscape of DIY spot at Torshovdalen, in order to make it more attractive for skateboarders, but also for everyone else, by introducing an interactive sculpture in the urban city landscape.

The design process was influenced by the results of two workshops, where the exploration of embedding technology in a skateboarding setting was central. I describe this in Section 5.1 – Workshop 1 and Section 5.2 – Workshop 2. The next thing I did was to reflect on the ideas and the outcomes of rapid prototyping, which resulted in building an interactive obstacle, described in Section 5.3. The interaction was sound-based and it coupled sounds with the particular areas of the obstacle. The areas covered by the conductive paint, and the rail on the top of the obstacle, triggered the interaction. These couplings functioned as proximity sensors, and the interaction was achieved by skating on the top of the rail or on any of the painted fields. The skater would trigger diverse sounds, depending on which areas of the obstacle he would choose to skate on. The sound-based interaction in itself was not novel. There are plenty of examples using the sound interaction to achieve goals similar to mine. At the same time, to activate a skateboarding obstacle by adding a sound dimension was a novel approach.

The placement of the fields that I covered with the conductive paint was thought through. I wished to examine how experienced skaters would use their extreme bodily control to produce different sounds. This focus on 'sound print' was adding a new dimension to the usual behavior patterns described above. The visual dimension of the tricks was now complemented by the sound.

As one of the participants pointed out:

> M: *"I never thought about it, but it would be f*****g awesome if one would do tricks in a different way just because one want to make a sound come out of the coping. Or that if you knew that if you hit it with the wheel there, or with a truck there, you would hear the sound."*

The prototype functioned well throughout the making and it was tested and discussed prior to the deployment in the park. Unfortunately technology is not always cooperative, in particular when very novel. Thus, during the event, the prototype worked only sporadically. Multiple times I tried to lift the obstacle, look for disconnected wires and other problems, to no avail. The interaction, the quite central aspect of the event, had to be replaced with a much less satisfying solution, in the *Wizard of Oz* style. It was reduced to playing music from a mobile phone, using the inbuilt sound system. However, based on the continuous use of the prototype during the event, it seemed like the physicality of the obstacle compensated for the technical issues. The skateboarders interviewed after the Master Jam described the obstacle as challenging and difficult to skate, though to them this was a positive feature. The shape of the element was supporting the imaginative use of the obstacle, giving skaters freedom to find their preferences and enjoy it their own way. The skateboarders liked the fact that the obstacle was equipped with two speakers. They saw a potential in playing their own music using the obstacle, as the volume was higher than the ordinary portable speakers.

Creating the prototype opened my eyes to new opportunities and confirmed that skateboarders wish to try new things and expand their skate-horizon by finding new ways to use their skateboard. To me, this prototype was an attempt to add a new sense to the skateboarding experience, and I am willing to pursue this concept further.

How an artefact supports cooperation and participation

Another dimension of the interactive artefact created as a part of this thesis was involving skateboarders in the design process. The objective was to inspire and encourage local skaters to materialize their ideas. The interviews, workshops, and the Master Jam reflect a highly participatory character of the culture and a new attitude towards DIY activities among the skateboarders involved. Skaters want to support each other and they want to take part in extraordinary projects, and it seems like they enjoy it. Participation is a key word for this thesis and there are at least three levels of participation that ought to be clear. First of all, the overall objective of this project was to understand the participatory culture of skateboarding. The second level of participation was the presence and active involvement of skateboarders in the design process. The third level was how skateboarders directly helped me with the practical issues. Whenever I felt like I needed some help, or thought that I would not manage to do something, there was always someone that was willing to assist me, or knew someone else that could help. Throughout the project I was reminded multiple times that the network of skateboarders is a broad one, and a generous one.

Another important outcome of the design process was the interest in the concept of interactivity expressed by the skaters. Showing different prototype platforms like Arduino, LittleBits or Bare Conductive Touch Board and explaining how they work was met with excitement and enthusiasm. New ideas were popping up immediately after understanding how things work. I believe that I managed to make modern technology more available and more accessible to many of the participants involved with my research. Their attitude towards the technological components went from seeing it as costly and difficult to implement, to ideas that would include projector, sound system and electric wheels – "because it is possible right?" I noticed that as the process evolved, the enthusiasm was growing, hand in hand with the participation. The final event left me with a feeling that we achieved something together. As one of the interviewees described:

> H: *"When things stand there all finished, and when you are done with this kind of DIY project, you often have some kind of grand opening, or an event, as a celebration that you accomplished something. And all the communities and culture, when they finish a building, the entire community stands there and thinks… Yee! We made it!"*

Opportunities and challenges to the rise of DIY spaces

Creating DIY spaces in urban settings is a phenomenon that has a long tradition in a skateboarding culture. This transgressive act of adopting urban spaces to skating purposes creates strong reactions among the local communities. What appears to be important to one culture is an apparent bother to others. Some projects survive, while others are being razed to the ground. However, it seems like the hostile attitude towards skateboarding is slowly starting to shift. European cities like Copenhagen, Malmö, and recently Hull, are cities that chose to focus on the positive sites of skateboarding and decided to integrate skateboarding in their infrastructure in order to create an active, "multifunctional urban environment" (Kingpin, 2017). It seems like the artistic, cultural and educational values that skateboarding brings to public spaces are getting more and more attention. Larger acceptance among officials result in building new venues, which give skateboarders an opportunity to enjoy their passion without fear of being chased or getting a fine. Although it sounds like the future of skateboarding as a sport is becoming brighter, the repercussions of this development might influence the culture. Building new objects and dedicating new spaces for skateboarding purposes are purely positive initiatives. However, the bureaucracy and existing designing practices do not allow skateboarders to contribute with their expertise, leaving their creativity and their potential unused. Assigning unused and "dead" spaces in the city to DIY purposes could be seen as a compromise between skateboarding community and the officials. As new skateparks emerge and strengthens the community by recruiting new members, the experienced and highly-skilled skaters should have an opportunity to express their creativity and knowledge in certain ways. As the popularity of skateboarding grows, it is important to create spaces that foster and support this activity. Why not give skaters a chance to show that they got what it takes to design these spaces themselves? The first step, however, is to create a dialogue between the skateboarding community and the officials.

The motivation of this thesis was to give skaters an opportunity to partake in a process of creating an interactive DIY spot. One of the goals was to examine how skateboarders perceive the future potential of the movement. The interviews uncovered the potential values for the community, as well as the challenges that had to be considered. The values are covered by the *Eight Pillars of DIY Skate Spaces,* described in detail in Section 7.2. When it comes to the challenges, skaters describe local authorities, neighbors and passivity as main hinders for DIY activities. The event described in Chapter 6, was initially meant to show the importance of

similar events for the community. A large number of participants and positive attitude towards the happening proved that skateboarders wish to participate in similar projects. However, as I revisited Torshovdalen a day after the event, I was met by following sight:

Figure 52 The prototype day after the event

Figure 53 The act of vandalism

As the photos reveal, not everyone was as thrilled about the Master Jam as the participants. The prototype as well as the rest of the obstacles placed at Torshovdalen was subject to vandalism (Fig.52 & 53). The effort it took to spread the jam all over the obstacles and to sweep the gravel and cigarette butts near the prototype shows that this act was not just a

random act of vandalism, but a planned one. To me, it was a manifestation of two completely opposite views on skateboarding, at one place, in one day. One can only guess the motivation behind this act. However, it seemed like bringing life and joy to this relatively empty space was not welcome by everyone.

Future work

My first priority in terms of future work is to make the prototype function as it was planned. People that attended the event still ask me if I managed to eliminate the technical issue, my goal is to finish the prototype, so that I can give them a positive answer the next time they ask.

The entire process of writing this thesis has uncovered the enormous potential of further work that could be done with members of the skateboarding culture. As I enjoyed the project very much, I decided to invest in buying additional components, and I plan to create several interactive prototypes. The goal is to experiment, and have fun while building it together.

The challenges met by skaters in creating DIY spaces might be used in future attempts of creating a dialogue between skateboarders and local authorities. Assigning a space that could be freely used and shaped by skateboarders in order to perform their activity would be a dream come true.

Also the ideas that were brought up by people that participated in this project would be very interesting to explore. Here I present some of the examples: making a series of obstacles and presenting them at different art galleries; use produced knowledge to create new generation of skateparks; looking at how one can improve skills through skateboarding.; exploring how people could support participation, through technology;

9 Conclusion

The story of skateboarding in Norway shows that anything is possible. Skateboarding went from being a prohibited activity to receive dedicated venues worth millions. In 2014, the Municipality of Oslo estimated that there were 10 000 people actively skating in Oslo. As new skateparks are being built, it is a paradox that the passivity among skateboarders seems to be growing.

The joy of learning, building and contributing to the community are three important values of being actively involved with creating DIY spaces. However, instead of fostering these values by letting skaters shape their city, officials choose to deliver rigid, pre-built facilities. As history shows, skateboarders tend to enjoy bringing value to places that ordinary people consider useless. The interviews reveal that it is not the building the skaters consider problematic, but the continuous uncertainty, around their DIY activities. The reception of DIY projects is never certain, which lowers the engagement. Designating certain areas of the city in order to support skateboarders' desire to shape their own spaces could be seen as a highly desirable act. It would prove that the City of Oslo wish to let skaters partake in co-creating its urban landscape. But it takes two to tango. Skaters have to take initiative and show that they deserve a new start. To start thinking long-term and try to initiate a dialogue between the local authorities and the members of the community seems like the way to go. It is often a matter of attitude towards particular groups and communities that have to be worked on. Thus, it is important that the authorities see the potential, enthusiasm and creativity, not only the noise, trash and injuries. It is a matter of changing the attitude. The wish is to change the stereotypes, and allow skateboarders to keep their cultural heritage, gained by many years of skating streets and creating their own spaces in the urban landscape.

As this thesis shows, the eagerness and motivation is out there. My DIY project has gathered a large number of people. It seemed like the skaters enjoyed learning new things and used their minds and hands to introduce a new element to the city landscape. An invitation to join the design process was seen as a fun and enjoyable way of trying something new. Through engaging with technologies and showing the convenience of activating objects, skaters have explored how well-known obstacles can be turned into something novel. The potential is there, it just has to be recognized. Hopefully, projects like this one can show that skaters are capable of doing valuable things by **Doing It Together**.

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Appendix A

Here I would like to present how skateboarders use media to express themselves. Based on the main focus of thesis I had to leave out some parts of the research, here is one of them, considered with creating and sharing skateboarding related media. I present the importance of visual content (photo, video), and different ways of its distribution.

Skateboarding and media

> "All these kinds of imagery are central to skateboarding's development. The video has this been seen as 'a good recording and learning tool', while photographs have been particularly influential"
>
> (Borden, 2001, p.119)

Appendix A will focus on the very essential part of skateboarding culture, namely skateboarding media. Here, I will present different types of content created, but also at the technical aspects of the visual media production and distribution. The common term I would like to apply for all types of visual and verbal media concerned with skateboarding is subcultural media. However, I would like to start by explaining what types of media has accompanied and subsidized skateboarding culture since its early days, underlining its role in individual and collaborative identity building. I feel that in order to understand the role of the media in the culture properly, one also has to be introduced to its aesthetical, historical and contextual properties. Thus, this paragraph will present each of these perspectives, supported by relevant literature.

Visual Content

"Moving images were first captured on film, then video, and most recently digital cameras. Post-production techniques have also advanced, making it easier to edit still and moving images. The advent of digital technology has been significant, enabling more photographs to be taken and in some ways democratizing skate photography as digital cameras become cheaper. Indeed, it was difficult for most skateboarders to afford the kind of equipment available to professional photographers, but over time, the technology has become

cheaper, allowing the subculture of creative skaters we're examining to use photography as part of their skateboarding."

(Jeffreys, Messer, Swords, 2015)

Photo

Since the very beginning of skateboarding, numbers of photographers have been capturing still shots of skaters, which eventually resulted in emergence of first skateboarding magazines in the middle of 1960s. Those pictures played significant roles in throughout the skateboarding history. Very accurate description of these functions is executed by Jeffries, Messer and Swords (2015) in their analysis of Bordens' (2001) words connected to the image-related representations.

"Borden (2001) examines the reasons photography, both still and moving images, is so important in skateboarding. First, skate photography has an instructional and archival function – recording and preserving places, people, and tricks (p. 6); tracking an individual's progress; enabling the image's user to analyse and correct their performances; capturing and disseminating new, innovative tricks; and enabling other people to learn these from having seen them performed (pp. 114–119). Second, photography has a social function. It is a medium of exchange, providing evidence of tricks performed with kudos for 'firsts'. New tricks are rapidly disseminated, initially through friends but today via the Web, and bragging rights are contested for the novelty of being the first to recreate the move in a particular locale (pp. 119–135), each repetition seen as a new creation (p. 262). Finally, Borden suggests photography can have a spatial function, identifying a particular space and, implicitly or explicitly, an emotional connection to place (p. 123–125). Skate photography can be both documentary and also an aesthetic object." (Lombard, 2015)

Another dimension of skateboarding photography is related to the purely technical site of it – the equipment. As Jeffreys (2015) points out:

"Borden (2001, pp. 114–119, 127) also discusses the impact of equipment such as motor drives, flashes, wide angles, and stroboscopes on the ways in which skateboarding has been captured at different points in time. With each advance in technology, new possibilities were opened to photographers to capture tricks in new and interesting ways. "

Photographers used and still use different cameras, lenses and techniques in order to immortalize the moves performed by the skaters. In the early days (1960s – mid 1980s), pictures were mostly taken at different skateparks, pools, pipes and ditches. Even though the locations were different, the character of the places pictured was rather homogeneous and "surfer like". Elements like concrete walls, banks, or even a flat ground were highly

dominating the pages of skateboarding magazines. The aesthetical value connected to the trick performed, the style and the skill of performer was often what defined a good picture.

In his article on Aesthetic Implicitness in Sport and the Role of Aesthetic Concepts, Lesley Wright accentuates that "we do not experience the aesthetic in sport in isolation; the experience is unified, and it may be difficult to separate the aesthetic from other aspects of the whole "(Wright, 2003, p.89). There are many factors that make a skate shot a good one. Wright further discusses that for the pictures where a skill of an athlete stands in focus, "the technical excellence is supreme, but it is not enough" (2003, p.87). Expansion of the horizons (literally) through the adaptation of the new spaces by skateboarders, the importance of the spot that picture have been taken at has undoubtedly grown. Variety of locations has become enormous, since pictures could be now taken practically anywhere.

Video

Borden (2001, p.116) assumes that still picture "although readily available in the specialist magazines, [such images] are thus restricted by the limitations of the medium". Emerging of camcorders and new video technologies throughout 1980s has resulted in numerous skate productions. The late 80s and early 90s have started a new trend of letting skaters film themselves. "H- Street company with Mike Ternasky pioneered the exploitation of low-cost camcorders (…) by giving camcorders to team riders to shoot their best tricks, then hacking together a quick rough-edit for release" (Borden, 2001, p.117). Using home equipment and exploring different tools and techniques that would spare skaters from blowing their budget, gave skate productions specific style and aesthetics. A quite extreme example is using a peep hole as a substitute to the expensive fish eye lenses used by professionals. The quality of such homemade video couldn't be compared to the bigger skateboard productions executed by the companies to promote themselves. At the same time, the promotion of skill, style, and local environment was now available to larger extent through relatively low-cost videos. David Buckingham (2009) discusses that "videos can be used as a source for learning new moves and tricks, (…) skaters may also watch their own performance, (…)video 'is the main media that shows how people are progressing', help to inform viewers about the architecture of the spots themselves – cityscapes, squares, industrial parks, corporate malls as well as the configuration of the space". (Buckingham, 2009) The movement of skaters filming their own tricks has emerged and quickly evolved into the main way of expression among the skaters

worldwide. “These are essentially local and informal communications, giving a sense of a particular place. (…) Other production are more artistic in nature (…) exploring the poetic and urban content of skateboarding with equal degrees of emphasis” (Borden, 2001, p.118). that Integrating music, mixing skate footage with non-skate footage, experimenting with different angles, various filming techniques, and all that executed by a videographer possessing good filming skills – these are just some of the elements that could make a skate video outstanding and exceptional. “Skateboard filming requires a very special combination of artistic and athletic skills. The videographer must be able to compose shots while riding a skateboard next to a performing skater.”(Snyder, 2012, p.323) By putting it all together with good skating, the personal expression of the skaters included, urban environment and last but not least the filmmaker’s vision – all these pieces could result in a contribution to the skate scene. Sharing a video with others by using resources available at the time was also an important part of the process. “The overall effect is to make it easier for skaters to disseminate material globally, certainly compared to their access to commercial magazines or videos” (Borden 2001, p.118). The videos would then result in reviews, they could inspire other skaters, or even encourage some to start skating. The threshold of sharing the media with masses could now be overcome (at least to some extent), and reaching broad(er) and remote audience has become reality.

Distribution of skateboarding related content

“Skateboarding subculture is – with some distinct regional variations – a global practice. Besides the numerous titles of the USA and UK, skateboard-related magazines have been produced in countries all over the world. These magazines, together with the burgeoning use of the internet, ensure that skateboard subculture is a global as well as local activity, with skateboarders being found today in just about every city around the world. This is a spatial dispersion which transcends geographic, national and, often, racial barriers.” (Borden, 2001, p.142)

First magazine devoted to skateboarding – *quarterly SKATEBOARDER*, later known as *SkateBoarder* emerges in winter 1964. *quarterly SKATEBOARDER* is presumed to be the first magazine entirely dedicated to skateboarding, started by Surfer publications in 1964 - Editor John Severson (VintageSkateboardMagazines, 2017). Its content is relatively inspired by surfing magazines – action pictures, accompanied by short stories, reportages, and

commercials. Naturally, all these were concerned with skateboarding phenomenon. Relatively new and growing sport was presented as a parallel to skiing and surfing, and the focus was directed towards how "thousands of young people who live in areas where there is no surfing or skiing can now enjoy *sidewalk surfing*."(*quarterly SKATEBOARDER, vol1)*. That enthusiastic approach was not shared by, among others, California Medical Association which through protests in the 1960s classified skateboarding as hazardous, which later resulted in making skateboard highly risky, and some places in USA banned activity (Borden, 2001, p.248). Re-emergence of *SkateBoarder* takes place in the summer of 1975 (Borden, 2001, p.19) and caused a snowball effect. New magazines like *Skateboard World, Streetsurfing* started popping up in USA, but also a number of countries all around the world have now gotten their own skateboarding press. As Borden suggests, representation of a skateboarder can be considered as cut across technical image and the "lived component of skateboarding" (2001, p.114), recognized later by Wheaton & Beal as "important part of the identity creation" (2003, p.160). As different styles of skateboarding have developed through 1970's and 1980's, they influenced the specialist media, shaping the character and the message they sent to their readers. *Thrasher* became the first street-dedicated magazine, presenting the progressive expansion of the skateboarding horizons. They promoted landing new tricks in new environments, using various elements of urban architecture. *Thrasher* quickly evolved into the "complete guide to skateboard subculture" (Borden, 2001, p.163), adopting and promoting a rebellious character of skateboarding "as a form of vengeance and subversion" against "those in power" (Borden, 2001, p.163).

Indisputable technology development that kept on progressing since the 1980s and just kept on accelerating ever since, created novel ways of creating and distributing a skateboarding content. Very expensive equipment that only a few could afford back in the 1960s, 1970s and early 1980s was often a work tool for the professional photographers or privileged skaters. The quality of media produced was relatively high, since it often required technical skill and many years of experience. Decreasing prices of photo and video gear encouraged amateurs to try out their artistic visions, but what is even more important - the constant presence of the camera/camcorder at the spot or out in the streets have brought the unpredictability, spontaneity and dynamics to skate footage. These elements have arguably pointed the direction that creative site of skating have followed ever since. Another game changer was the expansion of the internet as a new channel of distributing a skateboarding-related content. Its

use has escalated very quickly and first websites dedicated to skaters and their community, have seen the light of a day. Some of the examples are:

> "(…)Thrasher's bulletin board and R.A.D.'s e-mail address in the mid-1980s, (…)to professional 'digital magazines' such as Influx, Heckler and the UK-focused 'digital skate resource' Project (begun 1996), (…)to Usenet alt.skateboard site." (Borden 2001, p.118)

It was now possible to not only see what skaters around the globe are up to, but ask them questions and discuss different topics (from trick tips to shoe design) omitting the geographic barrier. New forms of digital media like 'digital magazines', 'online fora', and 'message boards' have emerged, giving skateboarders an opportunity of active participation in creating their culture. Creating websites of informal and formal character can be seen as a contribution to the community both through distribution of existing knowledge but also as a mean of further knowledge development. "From these sites skaters represent skate moves through textual descriptions, choreographic codes using the ASCII character set, still photographs and movie clips – all viewable on the screen or down-loaded. " (Borden 2001, p.119) The internet and its impact on media picture have definitely revolutionized the way skaters now access the desired information, how they spread their creations, and generally keep themselves updated. Number of skateboarding dedicated websites and on-line versions of the existing magazines have definitely become a new media, used to "spread the word", but emergence of video-sharing websites like YouTube or Vimeo, and social media platforms like Facebook, Instagram and Snapchat, have completely transformed the existing ways of sharing the content and reaching the audience. Today, a vast majority of skaters own a mobile phone that unites all of the traditional media photography, filming, magazines, message boards etc. and makes it pocket friendly. An average is skateboarder is now able to watch a skate movie, read an interview, film some tricks and share it with the rest of the world in no-time. All these functions have been composed altogether in one device. The impact it had on the skate community is enormous. Emergence of new online platforms generated new patterns of use, but some of the 'old skills' could now be applied to the new context. Being online as we know it today has given us numbers of new opportunities. World where the old skills gained throughout the years of experience could be applied to a new context and therefore effect in creating new skills.

Appendix B

Initial Interviews

Interview guide

Del 1. Deltagelse (Participation)

Denne delen handler om hvordan det du driver med påvirker deg mht. ditt sosiale liv, men også hvordan det skaper muligheter for å uttrykke deg og dine ferdigheter på en kreativ måte.

Innledning

1. Hvilken form for aktivitet bruker du for å uttrykke deg selv?
2. Hvor lenge har du holdt på med dette?

Hoveddelen

3. Hvordan startet det hele? Hvordan kom du på at det er det du vil drive med?
4. Kjente du noen andre som bodde nær deg som drevet med det samme?
5. Hvis ja, hvordan så ut en vanlig dag for deg mht. dyrking av det du holdte på med?
6. Var det noen andre involverte?

JA	NEI
6 a. Var det viktig for deg at det fantes andre som holdte på med det samme? 6 b. Har det bidratt på noen vis at du følte en slags tilhørighet med disse? - Var det noe som skilte deg/dere fra «resten»? Kan du gi eksempel på dette? (Klær, språk, måten å være på etc.) - Kan du tenke deg hvorfor dere gjorde det? Var det bevisst? - Følte dere et slags behov for å være annerledes? 6 c. Følte du deg annerledes enn «de andre» jevnaldrende pga. det du drev med? - Om ja, hva var det som bidro til at du følte at du var annerledes? - Var det noe positivt eller negativt?	7. Betyr det at du fortsatt med dette, selv om det ikke fantes noen andre i nærheten som gjorde det samme? 7.a Hvor fant du motivasjonen din i å stå på? - Var det f.eks. noen folk som bodde i andre byer som du hadde kontakt med? 7.b Hvordan holdte dere kontakt med hverandre?

8. Er skatere ganske like? Uansett hvor de bor i verden? OM JA/ NEI: Hvorfor tror du det?

9. Ser du på det du driver med som en deltagende aktivitet som inviterer andre og øker verdien dersom flere er involverte?
10. HVIS JA: Hvordan påvirker dette nytteverdien? Betyr flere folk tilstedet, mer gøy? Eller er det noen andre faktorer som bidrar til dette? I så fall, kan du utdype?
11. HVIS NEI: Ser du på det helst som en form for egen uttrykk og du vil helst være alene for å nyte det mest mulig?
12. Finnes det konkurranser i det du driver med? Hva synes du om at ferdighetene måles på den måten?
13. Er det noe du synes er spesielt bra med konkurranser? (Ikke bare skating, men det som skjer rundt, møte andre, flere parker, omtale i media etc.)
14. Finnes det andre måter å konkurrere på, som ikke nødvendigvis er typiske konkuranser? Eventuelt andre måter å vise frem sine ferdigheter?
15. Når det er snakk om filmprosjekter, hvor tror du de som bestemmer seg for å være en del av et slikt prosjekt henter inspirasjonen sin fra?
16. Hva tror du er grunnen til at de står på, selv om de ikke nødvendigvis får penger for det?
17. Kan du sammenligne det du driver med kunst? Eller handler det bare om ferdigheter?
18. Hvorfor?
19. Kan du gi noen eksempler på dette?
20. Føler du at folk som driver med skating er overgjennomsnitlig kreative?
21. Tror du at skating bidrar til økt kreativitet? Om ja, hva tror du kan være grunnen? Kunne du finne noen eksempler på dette?

Del 2. Teknologiparten

Det er ganske åpenbart at siden du begynte å skate har teknologiverden gått gjennom kraftig utvikling. Det har påvirket hverdagen vår veldig, og derfor neste delen av intervjuet handler om akkurat dette, mht. skating/det du driver med.

MEDIER:

1. Har du brukt noen form for media i sammenheng med skating før utbredelsen av internett? Om ja, kan du si litt mer om dette? Kan du gi noen eksempler?
2. Hvordan fungerte den sosiale delen av skating?
3. Har du/dere brukt noen form for daværende teknologi for å avtale møter, holde kontakt, etc.?
4. Hvordan ser situasjonen i dag? Kan du starte med å fortelle litt om hvordan din bruk av medier har blitt påvirket av teknologiutvikling?
5. Kan du si at vanene dine har forandret seg? Synes du at det er positiv eller negativ forandring?
6. Er det en av sosiale mediene som skiller seg ut når det kommer til tilgang til relevant skateinnhold?
7. Hvordan har instagram påvirket markedsføringen? Merker vs. Individer?
8. Er det noen av de «gamle» form for teknologi som du fortsatt bruker i dag (i skatesammeheng) ?
9. Hvorfor det? Har du noen tanker rundt dette?
10. HVIS JA: Har måten du bruker det på forandret seg? Eller er det helt likt som før?

SOSIALT:

11. Når det gjelder den sosiale delen, hvordan har dette forandret seg de siste årene?
12. Har det blitt lettere å bli en del av skatemiljøet?
13. Tidligere har jeg spurt om skatere er like uansett hvor de bor i verden? Har teknologiutvikling påvirket dette på noen som helst måte?
14. Er det noe du synes er spesielt positiv med hvordan ting fungerer nå?
15. Har ting som ikke var mulig før blitt plutselig mulig, eller ting som var vanskelig før lettere?
16. Er det noe som var lettere før og blitt vanskeligere? Eller ting som var mulige før blitt plutselig umulige?
17. Har du noen tanker rundt dette?

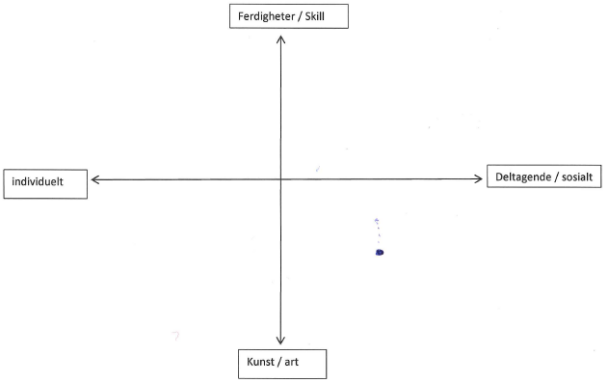
KREATIVT:

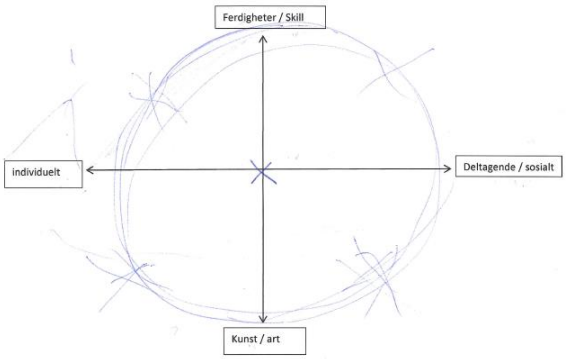
18. Med tanke på den kreative delen av skating, har dagens teknologi og måten den brukes på påvirket hvordan ting vises, hvordan trender skapes, hvordan ting generelt fungerer? Med andre ord: hvordan har alt dette påvirket skatemiljøet ditt?
19. Hvordan har det påvirket skatemiljøet rundt i verden generelt?
20. Er det noen mønster eller fellestrekk som er spesielt synlige?
21. HVIS han sier om at folk lengter etter det gamle: Føler du at det kan være en form for kunstnerisk uttrykk?
22. Har kreativitet blitt større, lik, eller mindre etter at teknologien har blitt billigere og mer tilgjengelig?
23. Har det på noen måte påvirket synet ditt på skating? Før internett vs. etter internett?
24. Hva med industrien?
25. Synes du ting går i en positiv eller en negativ retning?
26. En siste ting er DIY bevegelsen, kunne du si litt mer om dette?
27. Hvor får skatere motivasjonen sin til å holde på med dette?
28. Hva med skateparker? Hvorfor velger de å skate street og bygge sine ting istedenfor å bruke skateparkene som blir bygd for de?
29. Føler du at skating mister litt pga. at den er såpass lite organisert? I motsetning til andre idretter som fotball, basketball etc.
30. Har du noen tanker rundt hvorfor den er så lite organisert?

Avrundning

31. Om det er noe, hva savner du med denne tida?
32. Hva er det du ikke savner?

Responds


Ferdigheter / Skill
individuelt
Deltagende / sosialt
Kunst / art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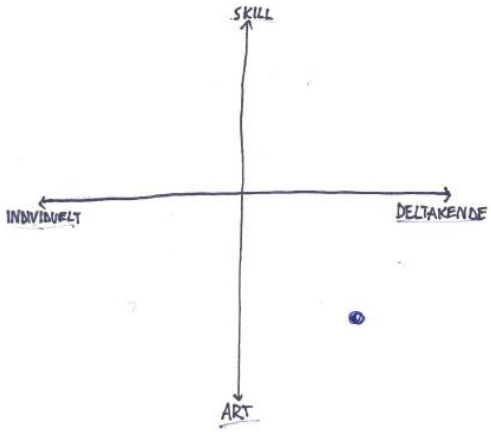
individuelt
Deltagende / sosialt
Kunst / art


SKILL
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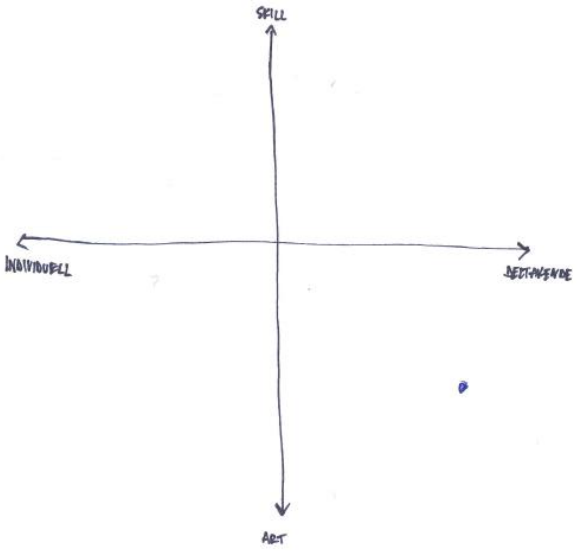
DELTAKENDE
ART


SKILL
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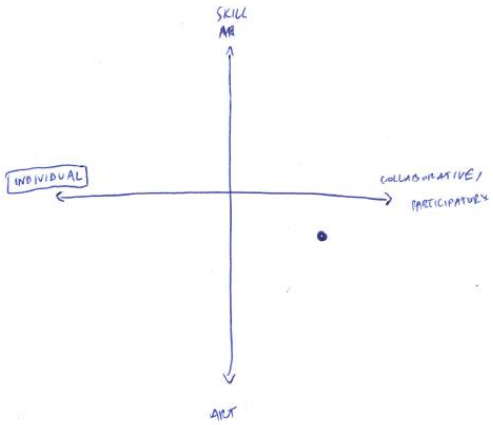
ART


SKILL
AR
INDIVIDUAL
COLLABORATIVE /
PARTICIPATIVE
ART

Informed Consent

Forespørsel om deltakelse i forskningsprosjektet

"Youth Participatory Culture"

Bakgrunn og formål

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Har du spørsmål om prosjektet kan du ta kontakt med meg på telefonnummer: 46245704 eller sende meg en e-post til oskargalewicz@gmail.com . Du kan også snakke med min veileder, Alma Culén, som har telefonnummer: 22852494 og e-postadresse almira@ifi.uio.no

Oskar Galewicz

Samtykke til deltakelse i studien

Jeg har mottatt informasjon om studien, og er villig til å delta i intervju

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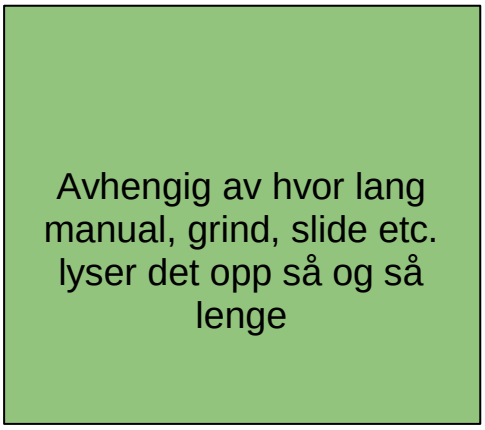
(Signert av prosjektdeltaker, dato)

Appendix C

Workshop 1

Here are the ideas that gathered at least one vote. The colors used symbolize different groups.



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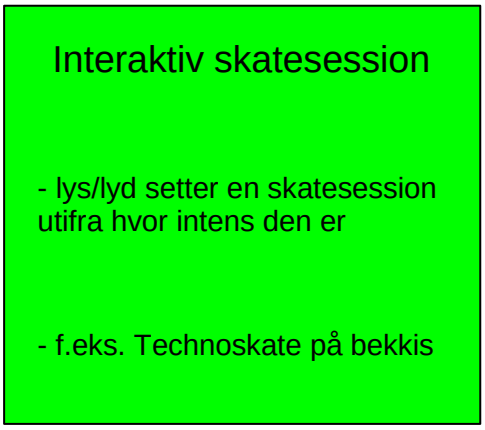

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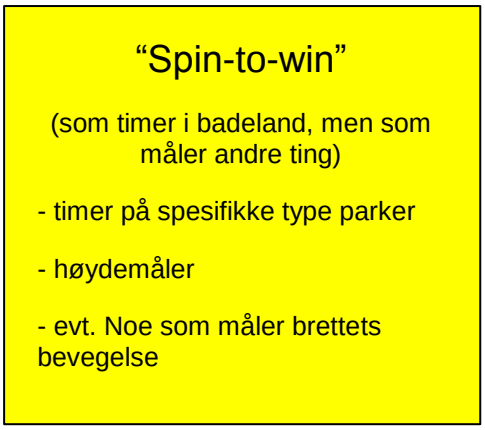

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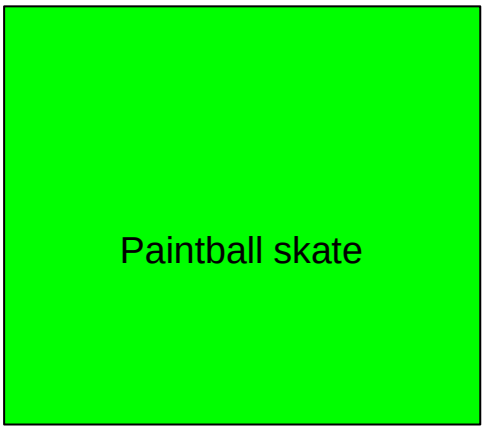


4

3

Kombinasjon av Isle og Polar

- portable geometriske objekter

- bruke forskjellig materiale og forskjellig lys/farge f.eks. Life Paint brukt i forskjellige miljøer

- Janoski AD (hvor man kan endre på miljøet)

-modulære LCD - skjerm

3

En stor boligblokk med mange etasjer som du tar heisen opp og skater forskjellige universer ned igjen.

2

Pop-up Obstacles

- Foldable osv.

2

Sensor i coping

(kan bytte samples etter ønske)

1

“Omslag” du flipper opp fra undersiden på benker.

1

Geo - Catch /

Skatemon - Go

- premier fra butikker/brands

- points

1

App som viser hvor det er session.

- for brands/teams
- promo/markedsføring

1

Pokemon GO - Skate Obstacles

- Få skatere til å dra på nye spots
- videobevis på best trick
- AR for å finne spots

1

AR Skate

1

Skate-rute

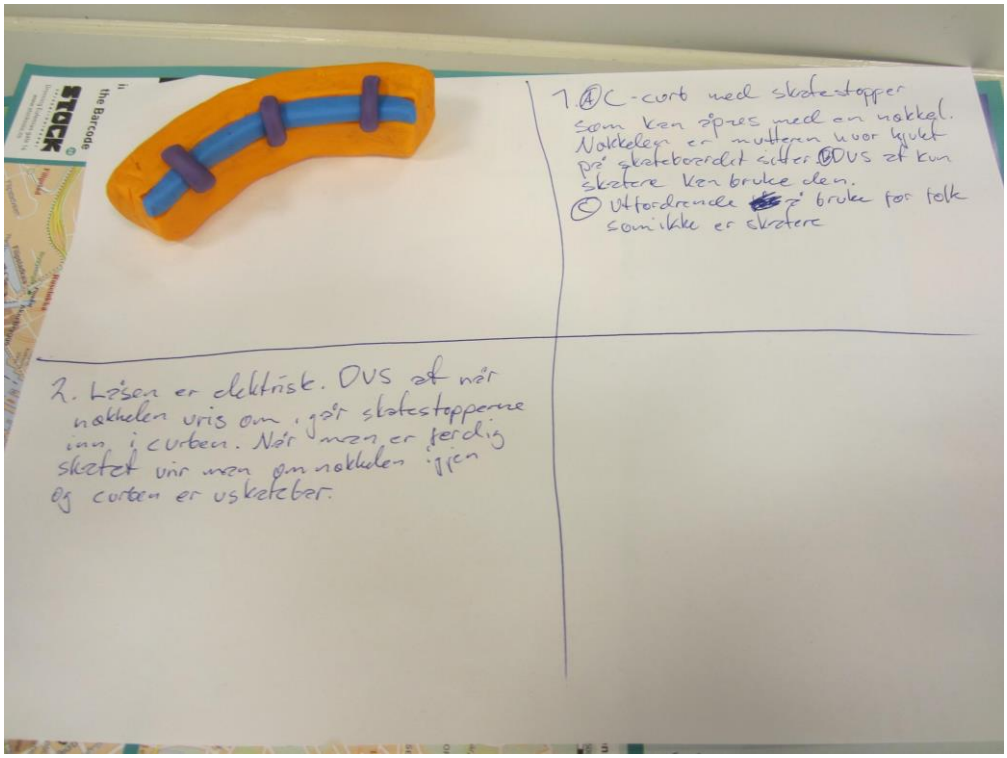
- Mapping til kart
- For by forståelse/planlegging

1

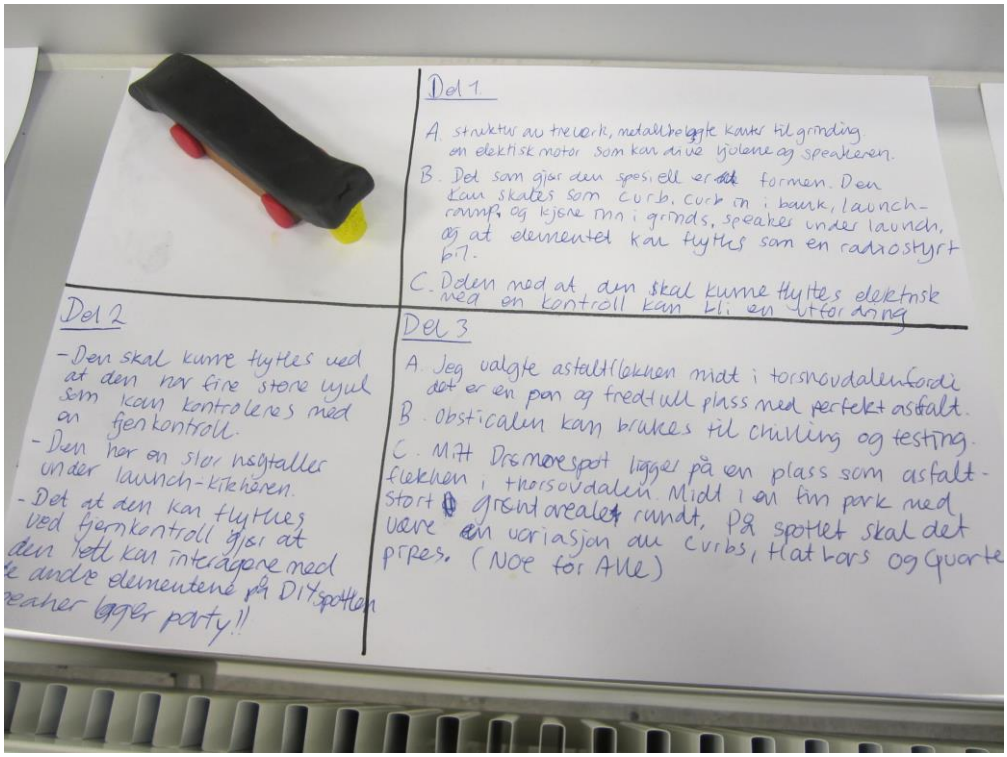
Appendix D

A slide used in a presentation shown during Workshop 2

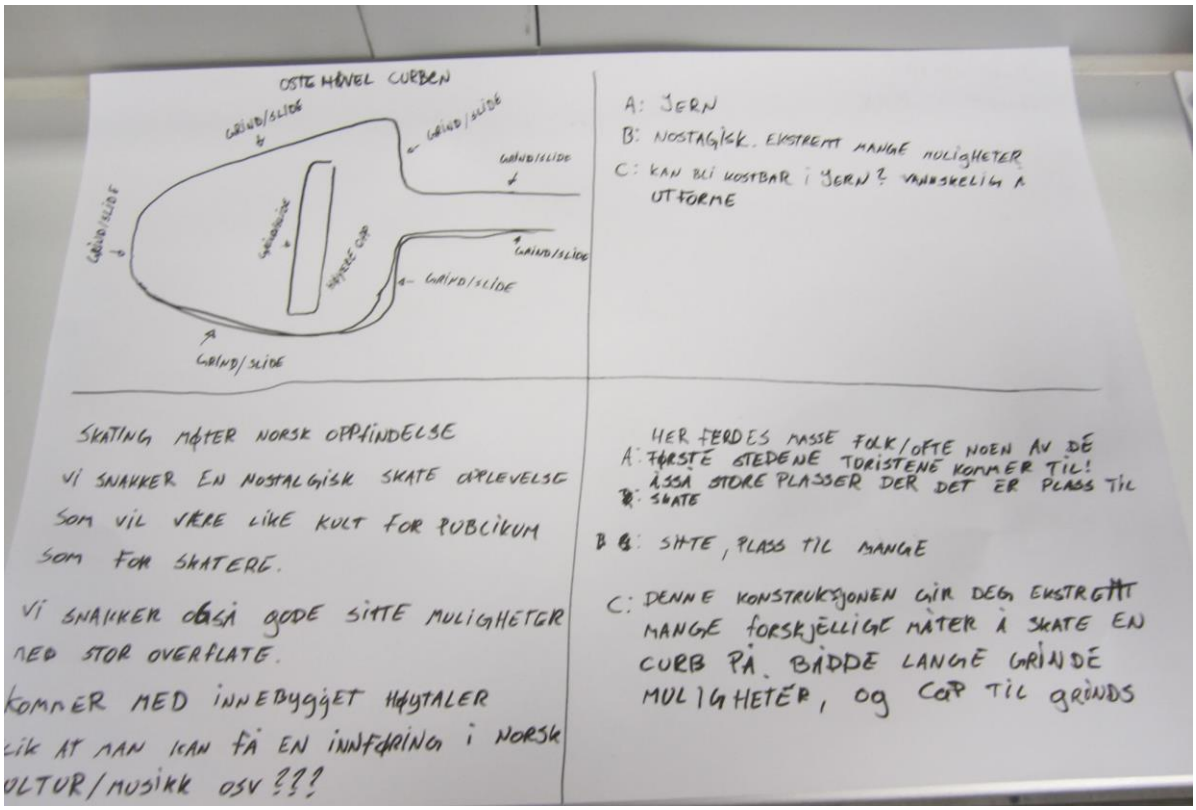
The obstacles created:



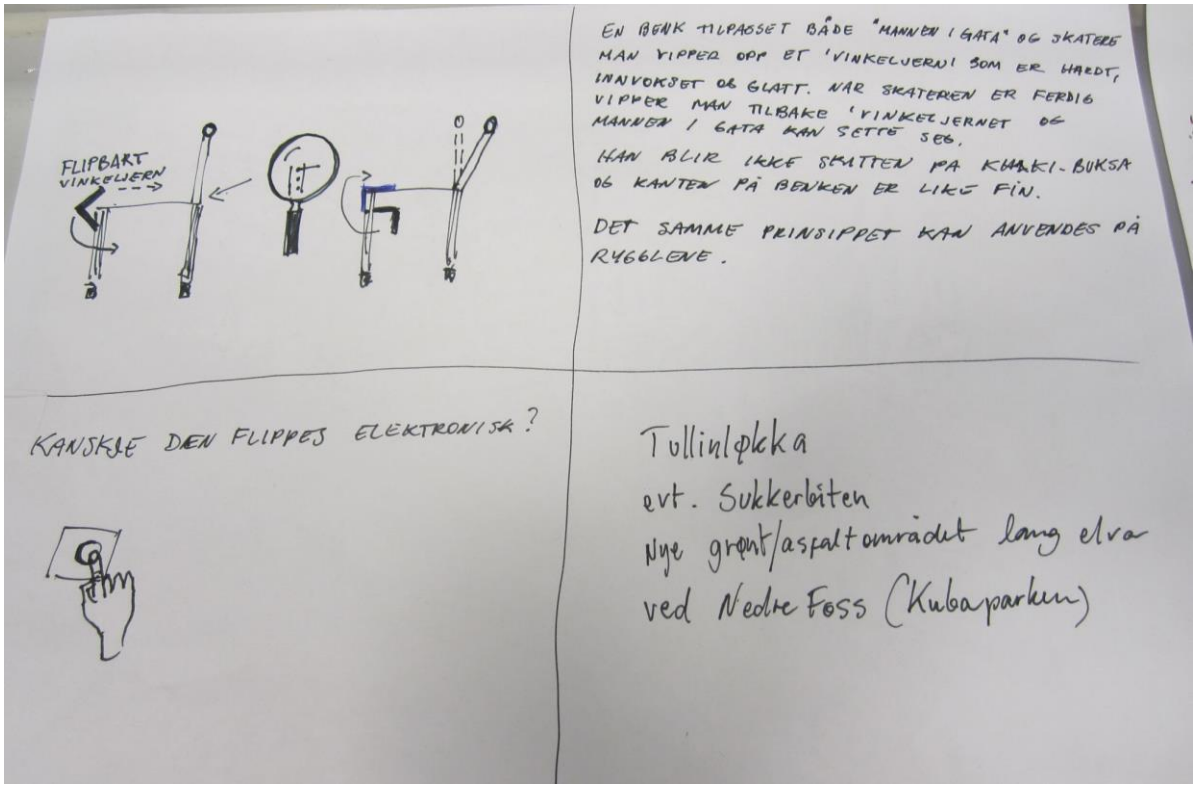
C- Curb



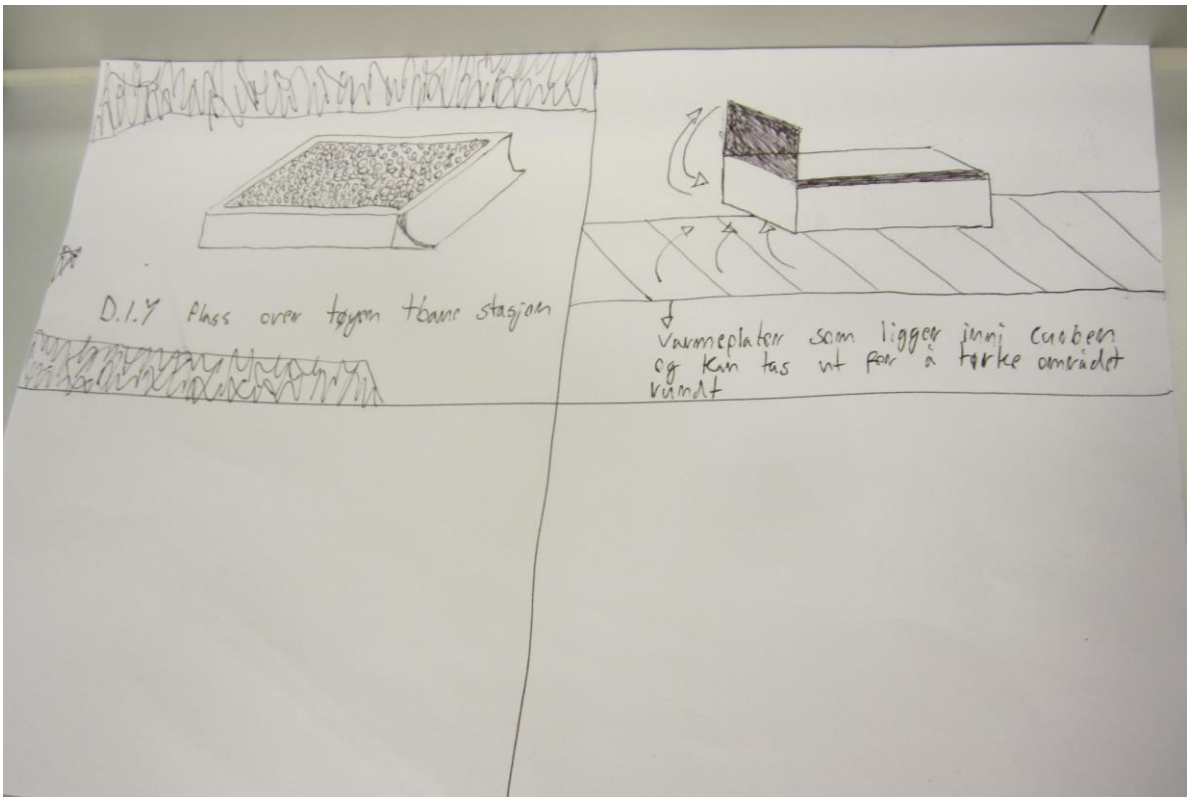
4 Wheel Drive



Cheese Slicer

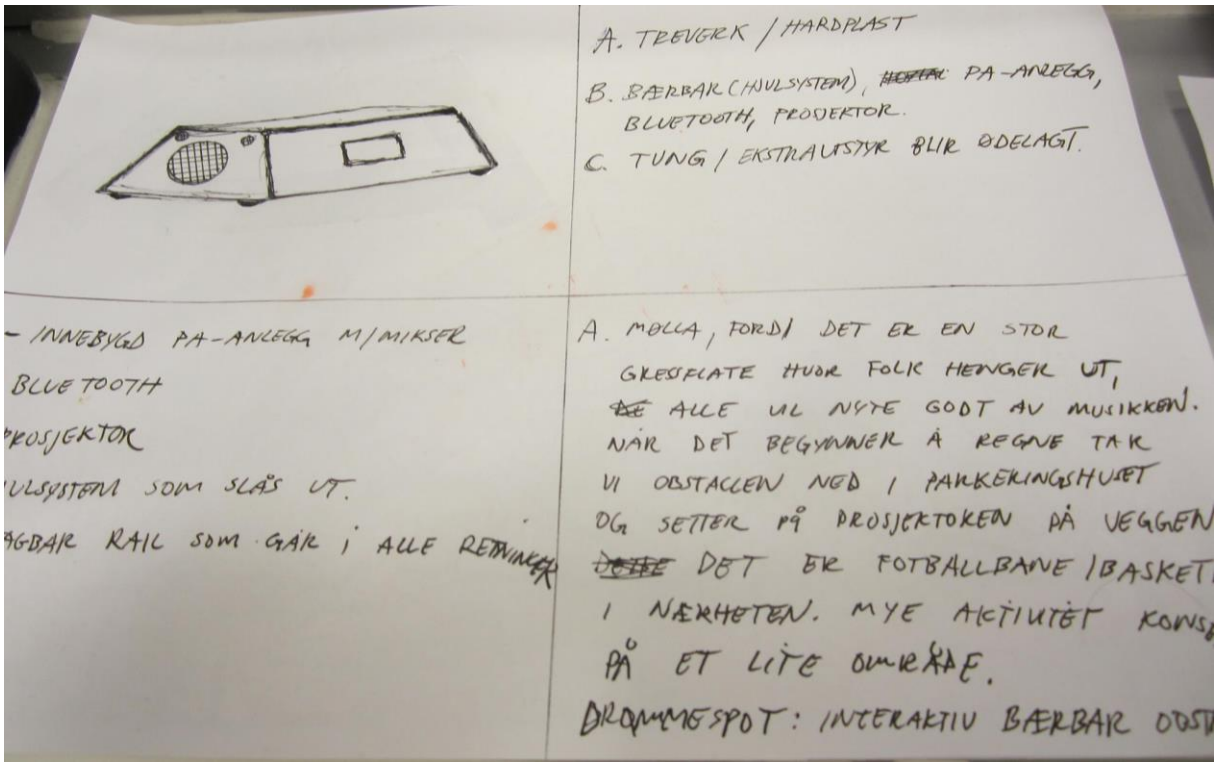


Flippable Edge

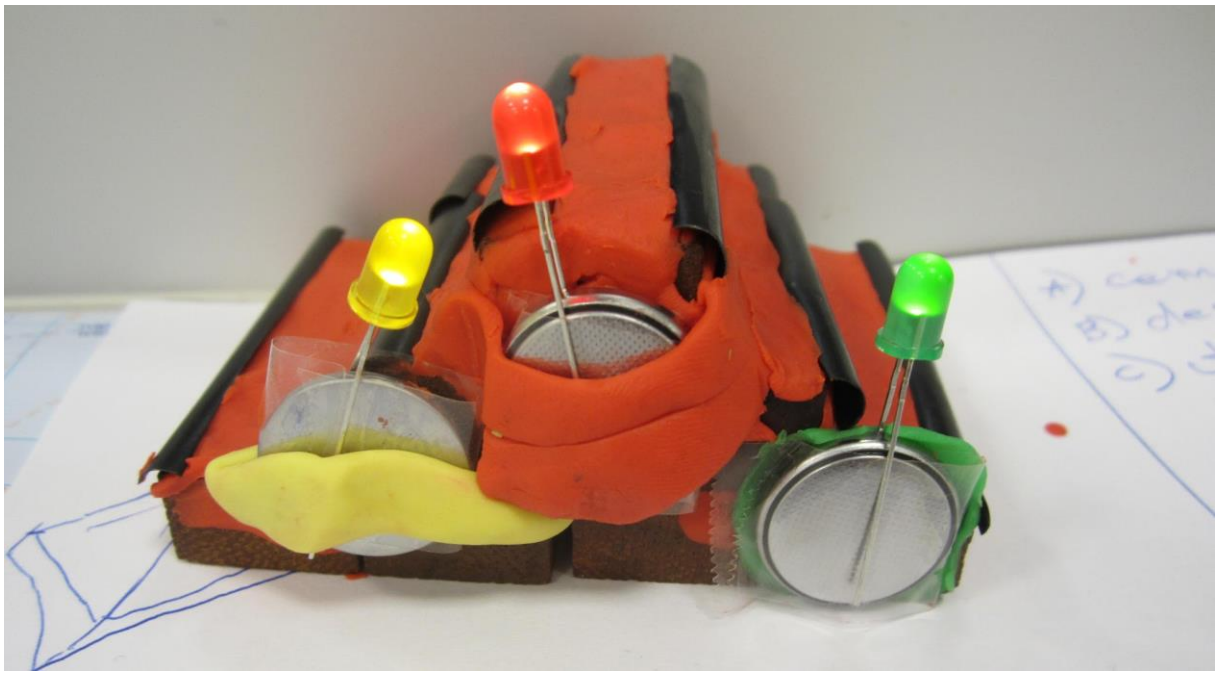


Heating Plates

IBO (Interaktiv Bærbar Obstacle)

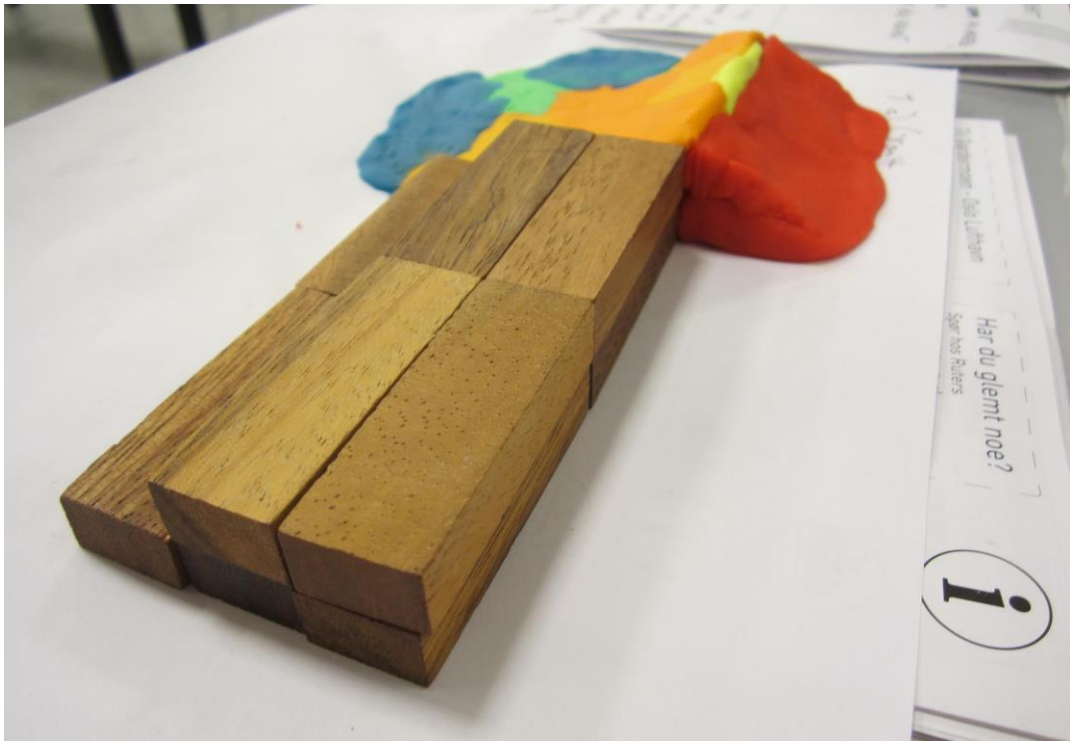


IBO (Description)

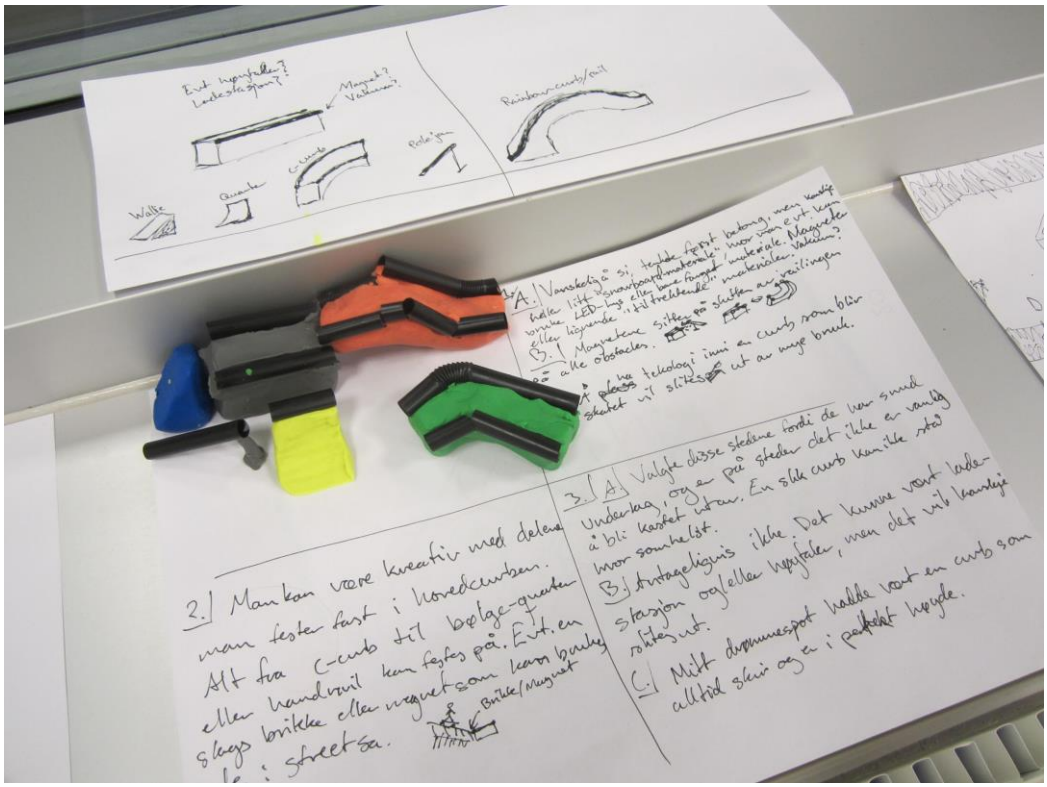


LED Lines

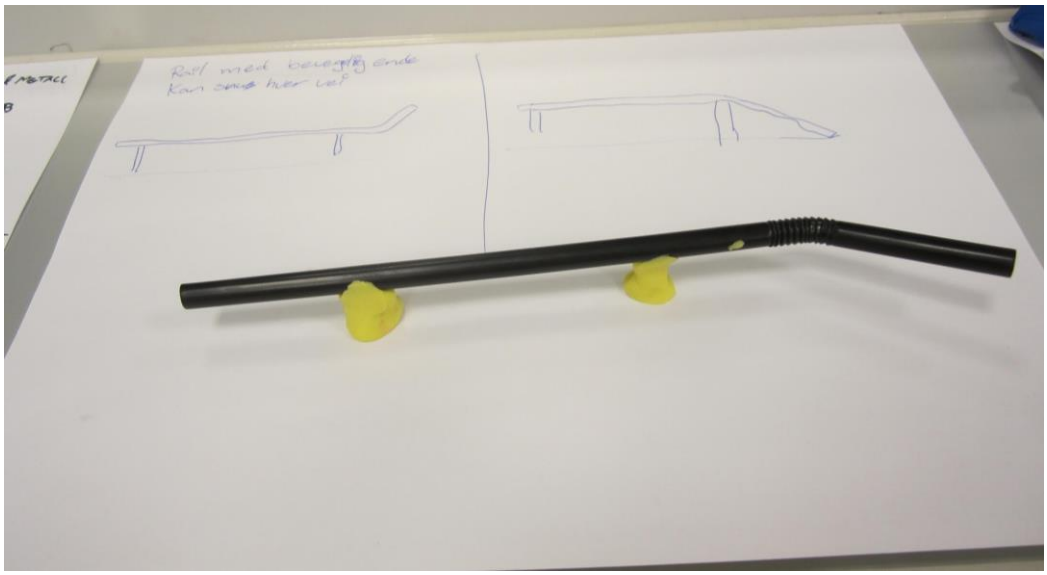
LP Player



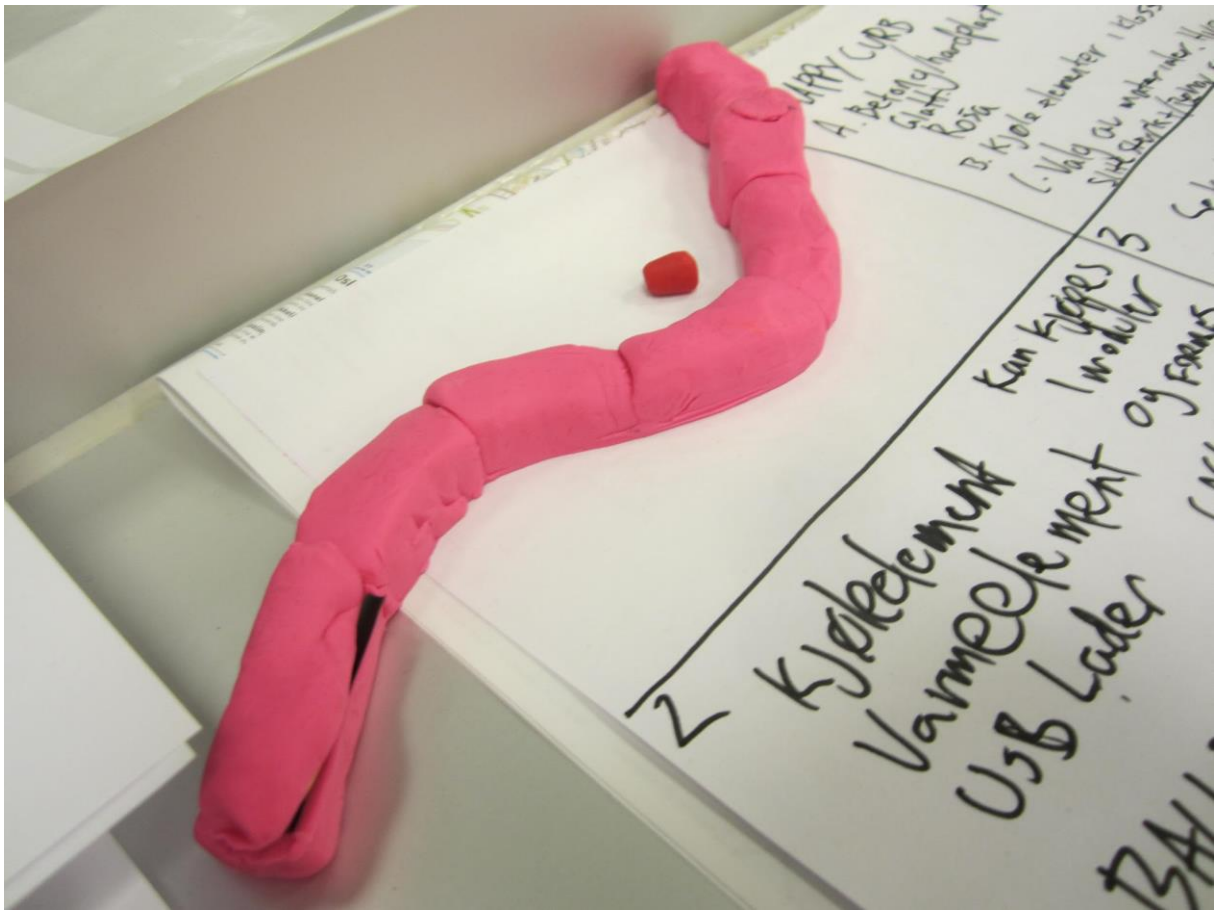
Ledge Manny Bank Tranny



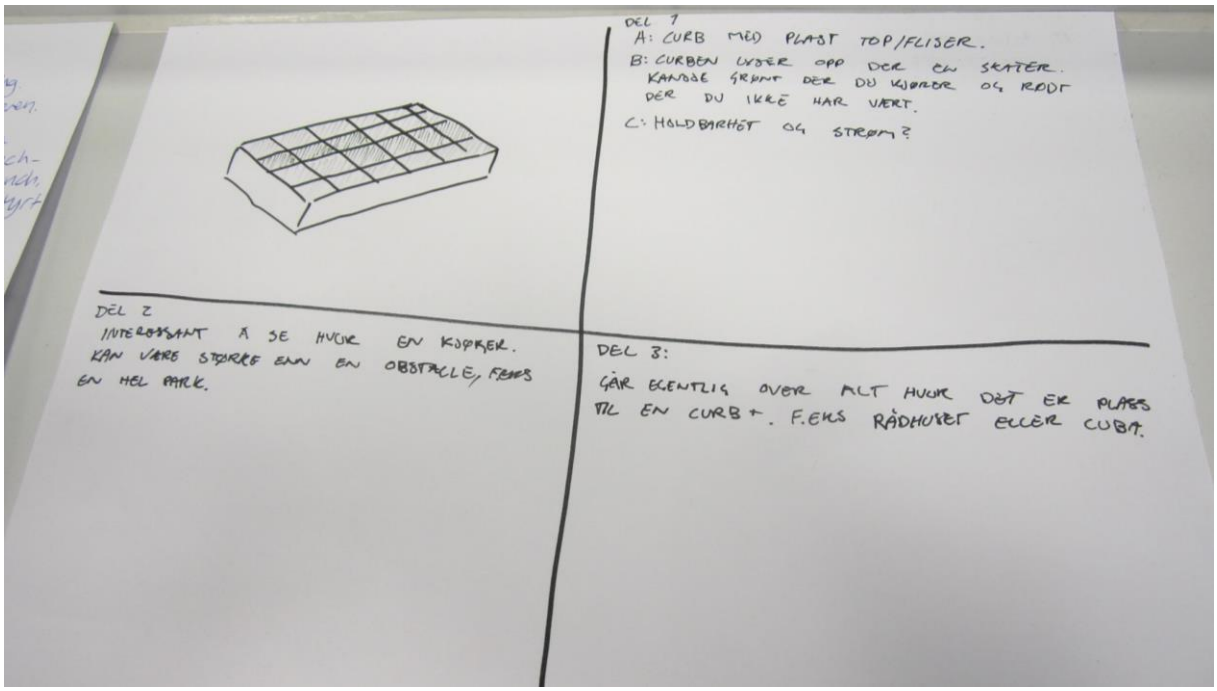
Modules with magnets



Rail



Slappy Curb



Tiles Curb

Appendix E

The Interview guide I used for evaluative interviews.

Event:

- Hva synes du om eventet?
- Hvorfor dro du dit?

Obstacle:

- Hva synes du om obstaclen?
- Formen?
- Interaksjonen?
- Hva liker du best med den? Om det er noe du liker…
- Hva kunne vært bedre?
- Hvordan kunne man gjøre opplevelsen morsommere? (Upgrade, Forandre…)
- Har interaksjonen påvirket hvordan du brukte den? Prøvd å treffe ulike lyder etc.
- Hva slags setting kunne den passet best i?
- Er interaktive obstacles noe du synes kunne vært spennende å utforske videre og evt. være med på å utvikle?

DIY:

- Er du kjent med liknende prosjekter? Hvor skatere har laget noe, organisert noe på egenhånd?
- Hva synes du om slike prosjekter?
- Hvordan påvirker det miljøet?
- Hva synes du om DIY i Oslo? Ser du potensialet?
- Hvis man hadde tatt initiativ og startet ulike DIY prosjekter i Oslo, hadde du vært interessert i å delta?
- Hvorfor det?
- Tror du at dette eventet kan bidra til at sånne ting skjer oftere?

Appendix F

Informed consent handed to the artists.

Informed Consent

Forespørsel om deltakelse i forskningsprosjektet

"Youth Participatory Culture"

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Navnet mitt / aliaset mitt kan brukes i masteroppgaven
