OSLOMET

Wonderground

An exploration of alternative playgrounds

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1 Introduction

Challenging the conventional idea of a playground

This thesis challenges our collective understanding of what a playground is and can be, in order to find alternative design approaches. As a case study, it focuses on the ongoing development area of *Hovinbyen*, in Oslo, and more concretely on one of its unique attributes, the *Hovin Stream*, and how to activate it as an alternative play space.

The role of playgrounds in our society is ever-important. The current pandemic-situation reminds us of the necessity of social stimuli, and is an opportunity to reimagine the playground as we know it. In a larger perspective, the playground may work as an important counter-force to children's everyday life becoming increasingly centered around the home, organized by adults and oriented around screens, all the while children are less physically active than before (Sanderud & Gurholt, 2014). It's thus crucial to ask critical questions about the design and planning of playgrounds. Looking at playground trends in Norway, there seems to be a one-dimensional way to think about play in public space, with standardized equipment and predetermined opportunities for play. There is a clear lack of experimentation and artistry in the design of playgrounds, and they seem to be more concerned with catering to the everyday life of families than to provoke or challenge established thought

(Periskop, 2019). What if we could discuss different playgrounds as a significant part of children's culture, like we do with theatre, books and movies? This thesis challenges our collective understanding of what a playground is and can be, in order to design alternatives.

What is play? It is not a question with one answer. Most agree, however, it is innate for both animals and humans to play, and that it is important for children's development. Dutch historian, Johan Huizinga, known for his book on the importance of play in culture and society, "Homo Ludens", says play is free, separate from ordinary life and is connected with no material interest, namely, no profit might be gained from it (Huizinga, 1938). French sociologist and philosopher, Roger Caillois, built on this work in 1958, with his "Man, Play and Games", but criticized Huizinga for overlooking the diversified forms of play (Caillois, 1958). He broadened the perspective by dividing play into four categories: competition (agon), chance (alea), simulation (mimicry) and vertigo (ilinx).

Standard playground in Bergen.

Similarly to Caillois' intervention, this thesis questions whether our society's view of what a playground is, represents a one-dimensional view of what play is. Typical play equipment found in public space includes slides, swings, monkey bars and seesaws, forming the archetypal playground; the frame of a playground that most playground designs adhere to. My thesis argues that this standardization facilitates a certain type of play, perhaps most closely linked to the category of ilinx; rollercoaster-y sensations, such as vertigo, dizziness, loss of control. In addition to lack of variation, there is the question of whether fixed play equipment and padded surfaces are substantial tools for children's development, or more critically put; are these places any fun? The opposite of play out of predetermined designs would result in something more of an exploration, a process that requires wondering and questioning. In this sense, finding ways to stimulate and support children's wonder is an alternative starting point for innovative playground design.

Background

My background for starting this project revolves around a deep fascination and respect for play, previous jobs in kindergartens and a toy store, and consistently working with design for children over the course of five years as a design student. Most notable is my bachelor's project; here I created a series of toy figures which by their respective names and suggestive designs meant to

trigger play with "overlooked" elements in a home; Window Scouts, Drawer Animals and Underbeings. The project focused on leaving room for the children to imagine their own stories about these strange creatures and their existence. The project was meant to be a counter-design to popular toys that come with increasingly predetermined opportunities for play, and often fitting in to a ready made, familiar story, such as Lego Star Wars.

This way of utilizing existing elements to design for play was further explored in my first ever self-initiated design project outside of school, The City Toy Car-track. Using 70 metres of track and 100 toy cars I've built pop-up play installations in over ten different locations in Oslo and Molde. The way of integrating a toy product (usually a "boys' toy" confined to the indoors) with existing elements specific to a location was not only creatively rewarding, but also a way of giving ordinary things new meaning through play; an old closed off courtyard became packed with children for a full day, a bush became a jungle for small toy cars, and holes in a wall became tunnels. The project inspires the thought that sustainable thinking (sharing toys, removing gender biased marketing) doesn't have to be just problem solving, but might also generate new ideas. I had the realization that this was a way of designing alternative playgrounds, which led me to pursue this in my masters project.

Underbeings, from my bachelor's project, MEGAsmå, 2017

City Toy Car Tracks, self-initiated design project, 2018

Structure

My research is presented in chapters 3, 4 and 5. In chapter 3, Playgrounds, I will elaborate on what is a collective understanding of playgrounds, discuss why we need a variety of play spaces in public, and present critical voices and alternative thinking regarding planning and design of playgrounds. In chapter 4, Identity, I will present Hovinbyen, Oslo's biggest development project, as an example of a place with unused potential for creating unique play spaces, and how the transformation of overlooked places might strengthen the identity of a new area. In chapter 5, Wonder, I discuss the idea of playgrounds as potential triggers for children's wonder and how to use storytelling to achieve a new type of experience in public space. In chapter 6 presents my design process, and how integrated *The Hovin Stream* into my concept, as an example of activating play with existing natural elements. Continuing, I go through the steps of creating a Wonderground, a self-made name for a playground-concept that is more concerned with triggering a sense of wonder, than a certain type of play. Finally, chapter 7 presents my concept proposal: an example of a Wonderground, with an emphasis a place-specific fictional tale as a tool for triggering wonder and creating mystery .

Being inspired by approaches from the field of speculative design, I decided to create a manifesto, which collects all the main ideas presented at the end of each research chapter, and serves as a framework for the design process. The eight points are not intended to be strict rules, but ideas on how to think differently about the planning and design of public spaces for children; based on research, open to interpretation. The manifesto might be used by anyone within this field, and suggests starting points for discussion, reflection or ideation.

The Hovin Stream, Oslo

Research question:

How to design playgrounds

to stimulate and support

children's wonder, and how

might this broaden our

collective understanding of

what a playground can be?

2 Theory and methods

Speculative Design

Sociomateriality

Play Theory

Childrens Wonder Languages

Transmedia Storytelling

Theory of Loose Parts

Design Probing

Speculative Design

At the core, speculative design is an approach to try and change our values, beliefs, attitude and behavior. This is necessary, as it becomes inherent that many of the world's challenges are too big to be broken down, and simply solved (Dunne & Raby, 2013). Rather, we should ask "how things could be", to collectively redefine our relationship to reality, and create ideals that can inspire and help us imagine alternative futures.

Speculative design inspired this project to expose conventional thought about playgrounds, in order to think beyond solutions to problems, and allow myself to communicate ideas for a better world. Further, a speculative design approach looks to other professions and art forms "to explore, hybridize, borrow and embrace the many tools available for crafting not only things but also ideas - fictional worlds, cautionary tales..." (Dunne & Raby, 2013). In line with this, my design process was inspired by aesthetics from video games and techniques from storytelling.

Sociomateriality

Are spaces facilitated for children and youth, or more facilitated for and defined by adults? How do different values and preferences show in the design and organization of space?

Sociomateriality is a term that studies the interplay between humans and things (Parmiggiani & Mikalsen, 2013). The anthology, *Children and youth: City, space and sociomateriality* gave insight into studying how children identify with and participate in public space.

Another source that seeks to educate on the matter of children's participation in public space, is the *KABOOM Playbook* and its *Play Everywhere*-theory. It's used in this project to inspire ideas for how to use existing public space for play.

The Codex Seraphinianus by Luigi Serafini (1981) is a 350+ pages long, immensely detailed encyclopedia about the animals, plants, technologies and phenomena of a speculative world, written in an imaginary language. Image retrieved from the book Speculative Everything: Design, Fiction, and Social Dreaming, by Anthony Dunne & Fiona Raby.

Street game festival in Oslo, 2017, where I put up my first City Toy Car Track installation: "How can we create non-commercial spaces for kids in the city, and how can we inspire children to make use of public space in alternative ways?" (GrowLab, 2017)

Play Theory

Play Theory, as presented in for instance *Homo Ludens*, by Johan Huizinga, and in *Man, Play & Games*, by Roger Caillois was used to present the many-faceted phenomenon of play.

Games Design Workshop, by Tracy Fullerton, is a comprehensive guide book for game designers. It is relevant here, not only for its systematic approach to how games work, but also contains useful advice on ideation, concept testing, storytelling and prototyping etc.

Childrens Wonder Languages

The book, *Children's Sense of Wonder* by Hilde Merete Amundsen introduced me to the wonder languages of children, and how we, as adults, may encourage and support them. While the book is mainly concerned with how kindergartens can help maintain children's sense of wonder, this project seeks to apply some of these ideas in public space, to discuss how we, as a society may contribute.

Journey: a video game without written or spoken narrative that cleverly uses environmental storytelling to subtly guide the player.

Children articulate their wonder in countless ways, for instance through asking questions, mimicking, dancing, drawing and playing (Amundsen, 2013).

Transmedia Storytelling

"Transmedia storytelling represents a process where integral elements of a fiction get dispersed systematically across multiple delivery channels for the purpose of creating a unified and coordinated entertainment experience. Ideally, each medium makes its own unique contribution to the unfolding of the story." (Jenkins, 2007)

Comprehensive fictional worlds may afford drillability, which means that for someone who is engaged, there is always the opportunity to go deeper into the story, always more perspectives, details and mysteries to uncover. This is linked to the very definition of curiosity: "a strong desire to know or learn something" (Curiosity | Definition of Curiosity by Lexico, n.d.) In my design process, then, I attempt to apply principles from transmedia storytelling as a tool to activate or respond to curiosity.

Theory of Loose Parts

In his critique of modern society published in 1972, Theory of Loose Parts, Simon Nicholson wrote, "In any environment, both the degree of inventiveness and creativity, and the possibility of discovery, are directly proportional to the number and kind of variables in it" (Nicholson, 1973). This is a familiar idea to the critics of fixed playground designs, and is at the core of an ongoing debate about children's safety versus children's ability to play in open-ended, less regulated environments.

The Theory of Loose Parts is also about creating a society that supports citizens in believing that creativity is within all of us. In this thesis, this idea is linked to our sense of wonder, an eagerness to create and learn, that is often lost when reaching adulthood.

Design Probes

Design probes are an approach of user-centred design for understanding human phenomena and exploring design opportunities (Mattelmäki & Others, 2006).

Probing is based on user-documentation, which made it appropriate for first-hand research in the period of pandemic lockdown. It was used in this project as a method to get closer to the thesis site and the families living there, as well as to inspire the creation process.

You can experience the LEGO universe through toys, games, magazines and movies, to name some of the delivery channels used to communicate fictional worlds.

Anji play is a play-based curriculum for kindergartens, developed in China, which is based on similar principles as Nicholson's loose parts; "Without risk, there is no ability to solve problems. Without problem solving, there is no learning. Children select challenges according to their own ability, time, and place" (The Principles of Anji Play — Anji Play, n.d.)

Probe kits made for the neighbors of the Hovin Stream.

3 Playgrounds

Norway, with its kindergartens, maternity benefits and clean air, is well-known for being a child-friendly society. But Norwegian cities are in no way distinguished as good places for children to play

Thea Kvamme Hartmann

Why do we need different

playgrounds?

The frame of playground

A common definition of a playground is "An outdoor area provided for children to play in, especially at a school or public park" (Playground | Definition of Playground by Lexico, n.d.). It is also described in the same dictionary as "A place where a particular group of people choose to enjoy themselves", reminding us that play is a human phenomenon, and not merely concerning children. The latter definition also points to the fact that something that is not planned as a playground can become a playground, nevertheless. In a way, it's how we use a place that defines its meaning. We can for instance look to the skateboarders who use the city as their playground, converting ledges and handrails into complex challenges, creating play out of the ordinary. But the lens through which we look at a place can also define certain limits, for instance in the way that playgrounds tell us that this is a kid's place, and it would perhaps be strange if a grown-up played there by herself. Of course, it's necessary to have designated places for kids, just as we need designated places for playing football, but while adults are given public places for all kinds of activity, the playgrounds we give children offer little variation.
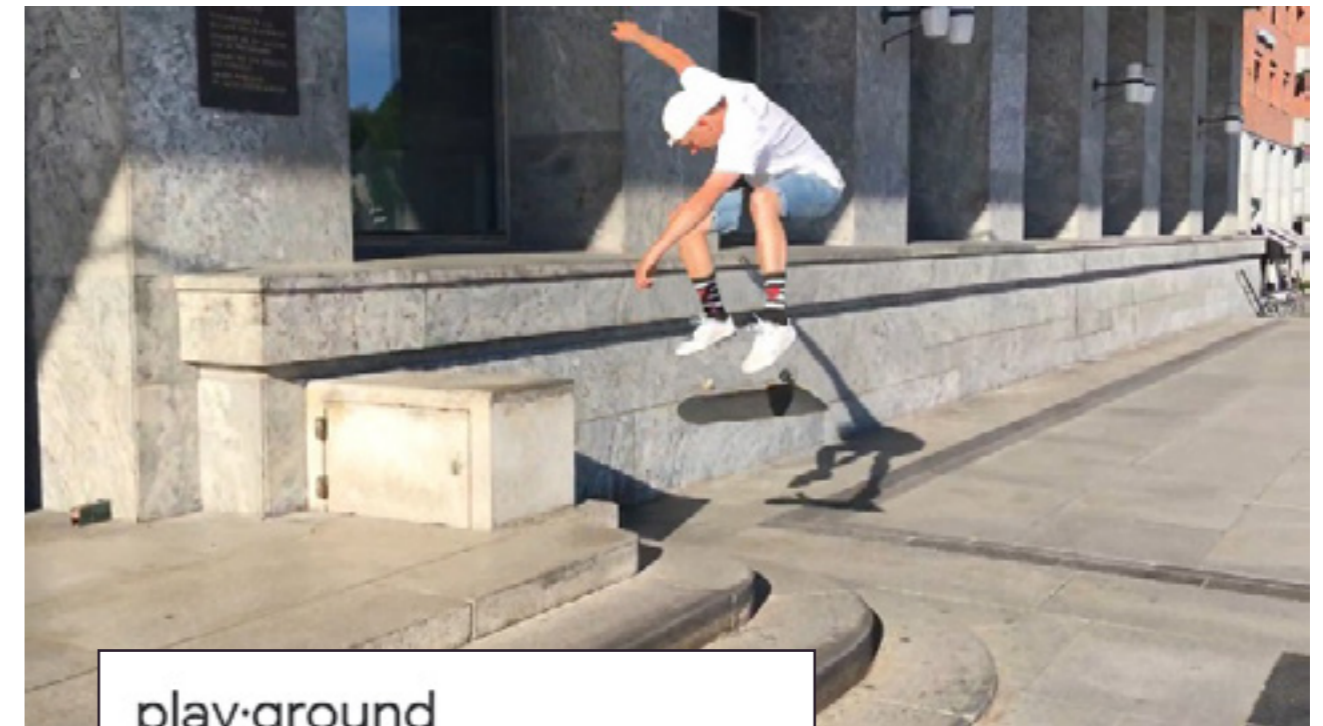
play·ground

/ˈplāˌɡround/

noun
noun: playground plural noun: playgrounds

What do you think of when you hear the word playground? Chances are you think of a place for children to play, with slides, swings, monkey bars and perhaps a sandbox. When you google "playground", the image results give a representation of what is arguably the archetype of a playground. Both these definitions of the word "archetype" are useful here ("Archetype," n.d.):

1. the original pattern or model from which all things of the same kind are copied or on which they are based; a model or first form; prototype.

2. (in Jungian psychology) a collectively inherited unconscious idea, pattern of thought, image, etc., universally present in individual psyches.

Another thing that's true of our common conception of playgrounds is that they're made by adults for children, which means these places, like education, are being subjected to society's wants and needs, politically and socially (Lange, 2018). It's an important dynamic to have in mind when designing for play, after all, it's the children who are the play experts. Are we controlling too much of childhood, too early? By conception and archetypes I refer to the way that society believes it has to be. This chapter highlights some of these "truths" in order to challenge them, and showcase examples where people have thought differently.

Some playgrounds defy our understanding of what a playground is and who might use it. The "Social Benches" by Jeppe Hein aren't labelled as playgrounds by the artist, and probably not by viewers either, as they deviate far from the archetype. However, because they are interactive and bear a clear resemblance to public benches, they are being used in a multitude of ways. Who's to say this isn't a playground, when it's being used as one?

This work was an important inspiration for my project. I'm intrigued by it because it blurs the line between what is interactive art, what is sculpture and what is functional design. Although not primarily functional as a bench for sitting, it evokes playful behavior in public space, even with grown-ups, which is a function I'm very interested in creating with my own work.

"Out of investigating architecture, communication, and social behaviour in the urban space, a series of bench designs was born under the common title Modified Social Benches."

Blue Modified Social Bench. Jeppe Hein. 2015.
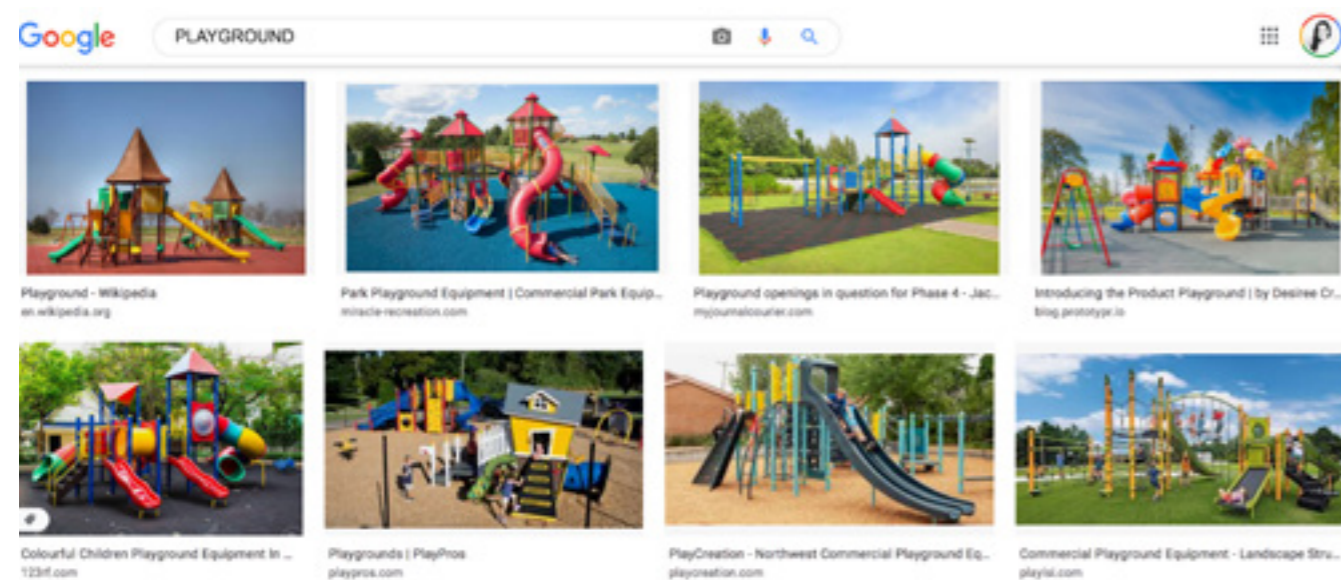
Archetype playgrounds

Modified Social Bench #3. Jeppe Hein. 2005.

The problem with archetypes

There is little doubt public play spaces for children are essential in every community. Play is of course a completely universally and naturally present need in children, and is even a children's right. (International Play Association (IPA World), n.d.). In Norway, playgrounds provide children with the opportunity for free, unorganized play, which is of course paramount in terms of equity. It is also probably an important counter force to what is sometimes referred to as the institutionalized childhood, referring to a change over the course of 50 years in which children's opportunity to freely play without adult control and organization has become smaller and smaller (Polstring Av Barndommen, n.d.).

Given their potential to play a key role in the upbringing and well-being of our children, it is important to ask questions about whether the archetypical playground is living up to that potential. The introductory quote is from an article from 2017 where the author, landscape architect (now with Snøhetta), Thea Kvamme Hartmann, criticizes norwegian playgrounds. She argues that we are dependent on a new and creative generation of playground designers, and highlights different examples to look to for inspiration; from both the past and the present, as well as from artists within the field.

This strong voice caught my attention, as it aligned with the thoughts I was building this design project on. I reached out to Thea, and we had an in-depth conversation about the topic. I had my own preconceived thoughts about why our playgrounds weren't good enough, and the conversation served as a tool for reflection on why that is. The archetypical playground looks boring. It expresses childishness, but in an ignorant way, like there is, or should be, a consistent pattern to what children like. My years of work with kids in kindergartens has taught me that children like a lot of stuff that I like. We are not that different.

'There are lots of people who have opinions on what play should be and how children should organise their everyday life. I believe the playground should do the opposite, which is to facilitate a use that is unknown to us adults. I still dream of a playground that makes me feel powerless. A place where my children may dream, feel and sense in a world no one has ever seen before.'
(Hva vil vi med lekeplassen? - Periskop, 2017)

Thea Kvamme Hartmann, Periskop, 2017

The problem with familiarity

The archetypical playground presents a trustworthy, familiar set of play equipment. These are obviously good tools for providing play, as we can see for ourselves if we walk through a park on a sunny day, but are they becoming a bit too obvious? John Dewey says "recognition is perception arrested before it has a chance to develop freely" (Dewey, 2005). He means that when we recognize something, and fall back on stereotypes and predetermined thoughts, it hinders us from having personalized experiences. A slide affords a very specific behavior, of course by its visual appearance, but also because we know it so well. If we saw a slide for the first time, then we might spend a little time figuring out how to "use" it. In this process we would, to a much larger extent, have that personalized experience that Dewey refers to. In the scenario of walking up to a "different" playground, we would ideally start with a sense of curiosity, a little uncertainty, and use our minds and our bodies to explore that space. Children are robbed of this experience, when we do not introduce

them to new concepts. Further, grown-ups are ultimately the ones to show the young ones how to use a slide, something I've done many times myself, as a kindergarten worker. It is completely natural, because that's just how a slide is used. On the other hand, by introducing ambiguous play elements or surprises to playgrounds, a parent and his child are left to explore together, find their own ways of playing. They are free to personalize the experience.

Playground by Uniqa

"Wonder is, first of all a response to the novelty of experience" (Amundsen, s.31). Novelty is the quality of something being new or unusual. We like being puzzled, surprised, bewildered; to wonder is not only something we value, it is also a vital ability, which I will go more into detail about in chapter 5. But how do we achieve this with playgrounds? Slides and swings can be novel to the smallest children, but to everyone else playgrounds are in general rather unsurprising. And if we, as adults, are to be interested in, rather than distancing ourselves from, what our children are spending their time on, then perhaps we should be bewildered too. There is a need for creative designers who can think deeply about this novelty aspect when it comes to public spaces for children. How can it look different? Can it somehow be dynamic?

How might playgrounds trigger a sense of wonder?

A playground might even operate around entirely different systems, like this car park playground in Berlin, which works as a car park in one part of the day, and a playground in another. The ground is painted to suggest all kinds of games and activities (del Alamo et al., 2004). Or Shiru-ku Road in Tokyo, a playground with the intention of stimulating different senses. Here you'll find small metal chambers that capture and concentrate the scent of the surrounding park's foliage and a system of paths with various textures for barefooted play.

定表移砂石 足の裏と体の関係を示す
Sole-of-the-foot channel-stone; shows the relationship between the sole of the foot and the body

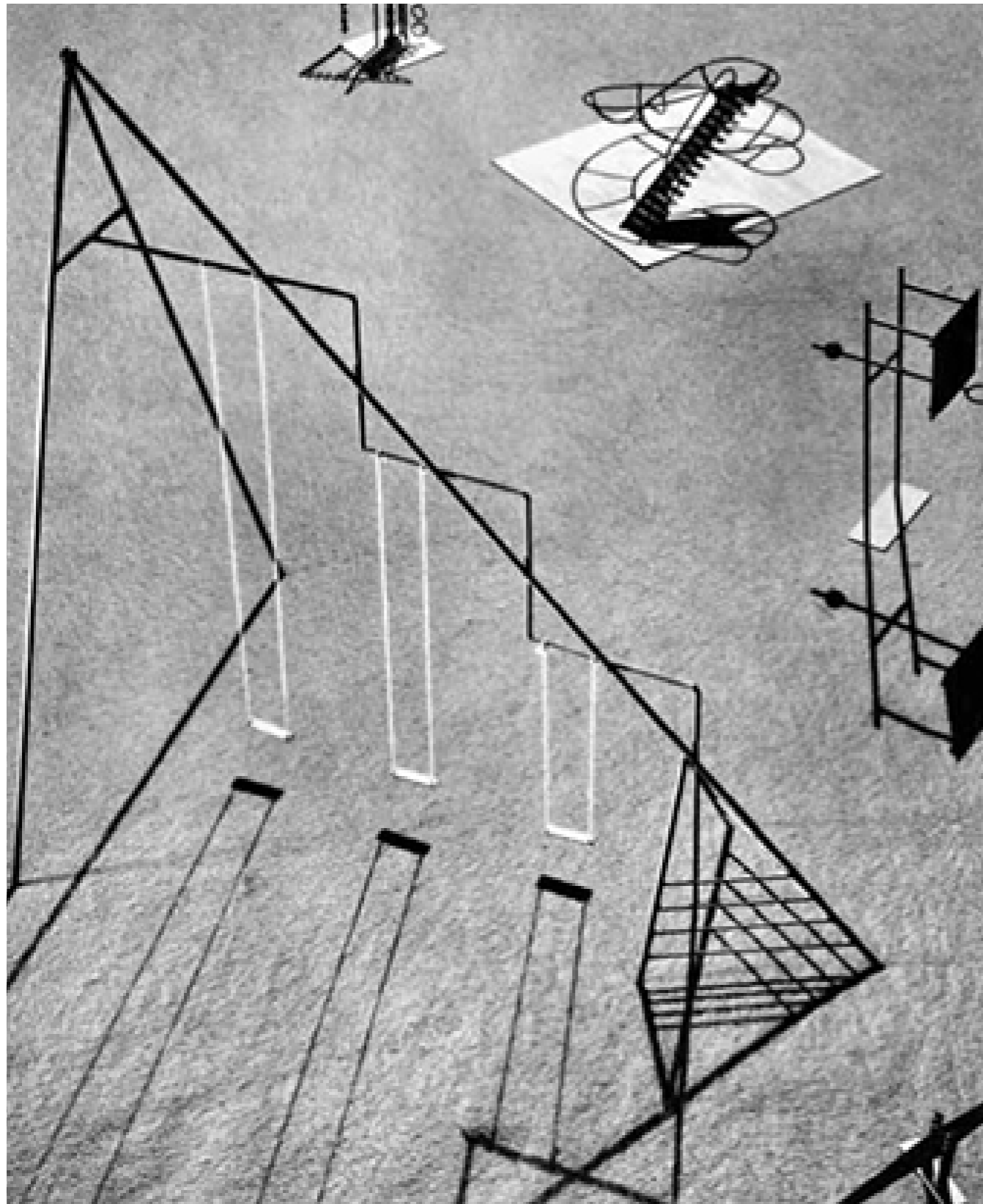みみのオアシス のぼるみみ　The Aural Oasis: "Climbing Ear"

Fig. 23

Visual surprise seems in itself to be a good start. Studying artist's takes on playgrounds, such as the works of Isami Noguchi (fig. 23), makes me bewildered: what am I looking at? With a closer look, the structures are merely new takes on classic ideas of play equipment. Yet, the unexpected shapes and curious arrangements stimulates the imagination in a way you don't get with something you've seen a hundred times before. This perspective doesn't necessarily apply when considering a 2-year old: when everything is new, an archetypical playground can be plenty surprising. However, I think stimulating the adults sense of wonder is important as well. As I touched on earlier in this chapter, parent's might end up having to explore with the child, rather than guiding or being uninterested in the activity. I will look further into why that is, in chapter 5.

Playgrounds in context

If a lack of variety is the problem, if we really are stuck in a one-dimensional view of what a playground is and can be, then who is to blame? I initially looked to the designers of playgrounds: Does it all have to look the same? Is no one thinking about the world of possibilities here, or that children deserve more? Is there perhaps not enough competence and creativity in this field? Turns out, there is lots of it. Uniqa, one of the country's leading suppliers of high quality playground equipment, has a vast catalogue of things to choose from. So vast, that when I spoke to a project manager of theirs, he told me it actually was a little too comprehensive. They do custom-fitted outdoor spaces based on their inventory of classic playgrounds, thematic playgrounds, rubber floorings, skate parks, climbing walls, outdoor lighting, public furniture, barbeques, pergolas etc. Thea had also talked with a playground supplier, possibly Uniqa, and told me she was struck by their engagement and apparent passion for making excellent spaces for kid's play.

While the design of much playground equipment might be in the hands of passionate, skilled people, there is little correspondence between what you find in Uniqa's product page, and what actually exists in public space. This is based on my own observations from areas around in Oslo, and primarily from closely following the development of entirely new city areas, such as Hovinbyen (I go into more detail about this in the following chapter.)

For instance, there is an entire product category dedicated to interactive playgrounds, which include man-powered music boxes and different types of interactive multiplayer games. It made me question how it could be that I'd never seen any playgrounds like that before. According to Uniqa, this is partly due to municipalities requirement for what an area needs to provide in terms of play equipment. The developers then, who are often not prioritizing playgrounds in their budgets, go with the minimum requirements, and we tend to end up with simple, trustworthy playground configurations. The project manager clearly expressed disappointment with the consistent down-prioritizing of children's play spaces.

Uniqa
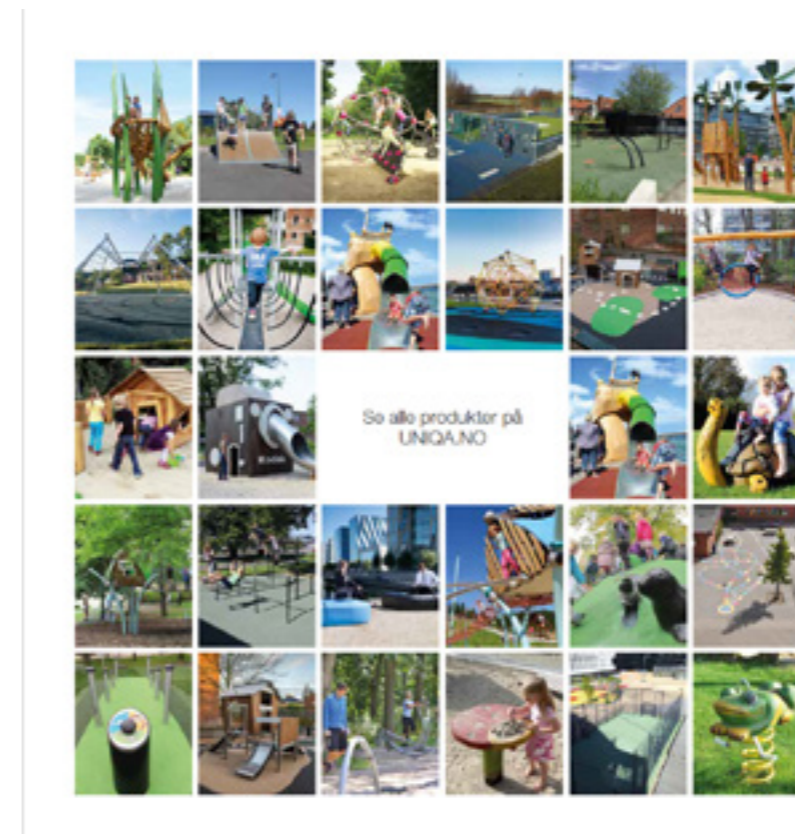
The safety aspect

In Norway, the rapid growth of new neighborhoods is largely in the hands of major housing developers which buy ready made play-equipment and competence from external suppliers, such as Uniqa. Picking from a catalogue of play-equipment from a trusted supplier is of course practical, especially when one considers the many and strict safety requirements that a modern playground needs to meet.

Without knowing too much about these regulations, I was initially under the impression that they were a tedious starting-point for exciting playgrounds. I felt like you, as a designer, had to start with a massive list of things you couldn't do, which felt counterintuitive to the whole creation process. During our chat, Thea opened my eyes to another perspective of this "risk"- issue. Her experience was that kids, including her own, were bad at assessing risk because they don't have to at most playgrounds. This made a lot of sense to me; if children grow up playing solely in entirely padded and fenced off environments, then they won't learn how to deal with the sharp edges, sudden heights and unpredictable movements of the "real" world, namely nature.

*OBOS-lekeplass på Ensjø*

Alternative playgrounds

In her article, Hartmann points at three alternative types of playgrounds that have gained attention: nature-playgrounds, art-playgrounds and construction playgrounds. None of these are very commonly seen in Norway, but especially the latter, also referred to as junk playgrounds, is far away from the trends we're seeing here. The very title of architect Simon Nicholson's acclaimed article, "Theory of Loose Parts", from 1973, points at the core idea of these places: variables. "In any environment, both the degree of inventiveness and creativity, and the possibility of discovery, are directly proportional to the number and kind of variables in it" (Nicholson, 1973). Junk playgrounds are dedicated areas for children to freely roam, and alter. Filled with loose elements such as building materials, hand tools, scrapped household objects and car tires, these places present a crystal clear reaction to the fixed, risk-free playgrounds we generally see. Although supervised by specially trained playworkers, the idea comes with the premise that adults are not to intervene with the activities; the parents are encouraged to simply "let go". The Danish landscape architect Carl Theodor Sorensen developed junk playgrounds during WW2 as a reaction to children's play becoming gradually more structured and organized by adults (Schiffman, 2019). Today, there are about a thousand left around the world, including The Yard on Governors Island, NYC, about which a visitor wrote: "In front of us was an area that looked like—to my eyes, at least—

an Occupy Wall Street campground, with shoddy constructions of plywood, wooden pallets, and blue tarp. I counted 10 children, who were roaming a space about half the size of a soccer field littered with car tires, plastic crates, orange cones, and a sea of unidentifiable debris" (Walker, 2016)

Are these places as dangerous as they look? In the user review section of the aforementioned Yard, amidst a majority of good reviews, a father boldly flags his skepticism after a visit, saying "...this place is just plain dangerous". Nothing serious had happened, but the perceived dangers of kids running with saws was too much for him. In an apologetic answer, the non-profit organization behind the project posted a statistical analysis, "proving" junk playgrounds as not only safe, but safer than most traditional playgrounds. Hartmann told me of similar experiences with her own children, that the padded, controlled environment of most playgrounds offer an unrealistic view of limitations. Not having to have the slightest concern for sharp edges, sudden heights and unpredictable mechanisms of the world, of nature, might render "safe" playgrounds as unsafe. The logic behind this paradox lies in children's ability to assess risk. They seek out thrill and risk at their own pace when playing, a process which is necessary for their development (Ny Veileder for Utforming Av Barnehager, 2020) This shows us that the subject of playgrounds and safety is still, and importantly so, being debated.

The Yard
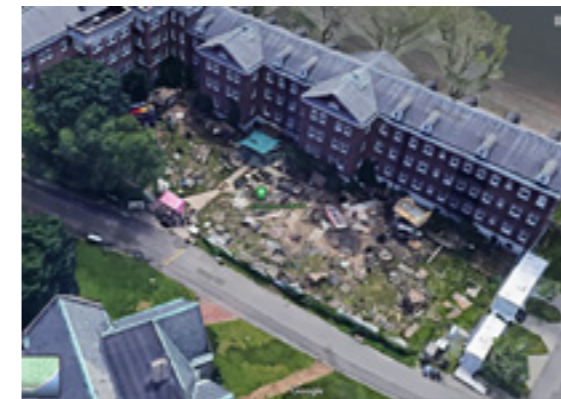
JUNK PLAYGROUNDS

We might not see the rise of junk playgrounds in Norway anytime soon, but we can always trust nature when it comes to providing loose parts and free exploration. We are happy to let our kids explore trees, but only when we have the time. There's widespread concern that children's contact with nature is threatened as a result of their everyday life being more organized by adults and more oriented around screens and the home (Sanderud & Gurholt, 2014). The concern ties to uncertainty for what consequences this development may have for children's health, curiosity and climate engagement. On the other hand, long-term benefits of children being free to challenge themselves in play situations include resilience, self-reliance, adventurousness and entrepreneurialism (Lange, 2018).

"Children in motion meet their places, they are susceptible to them, and they become creative towards their surroundings. Children become more creative in nature than in an outdoor play equipment-filled playground" (Fasting, 2013)

NATURE / PLAYGROUNDS

To sum up:

Expand frame

Create unexpectedness

Trigger interaction with
existing elements

4 Identity

The city has forsaken its identity. It has become an onlooker instead of a participant, an isolated soul amidst millions of isolated souls. But children withdraw from this paradox. They discover its identity against all odds.

Aldo van Eyck, 1957.

How can public spaces for

children create unique

identity for a new place?
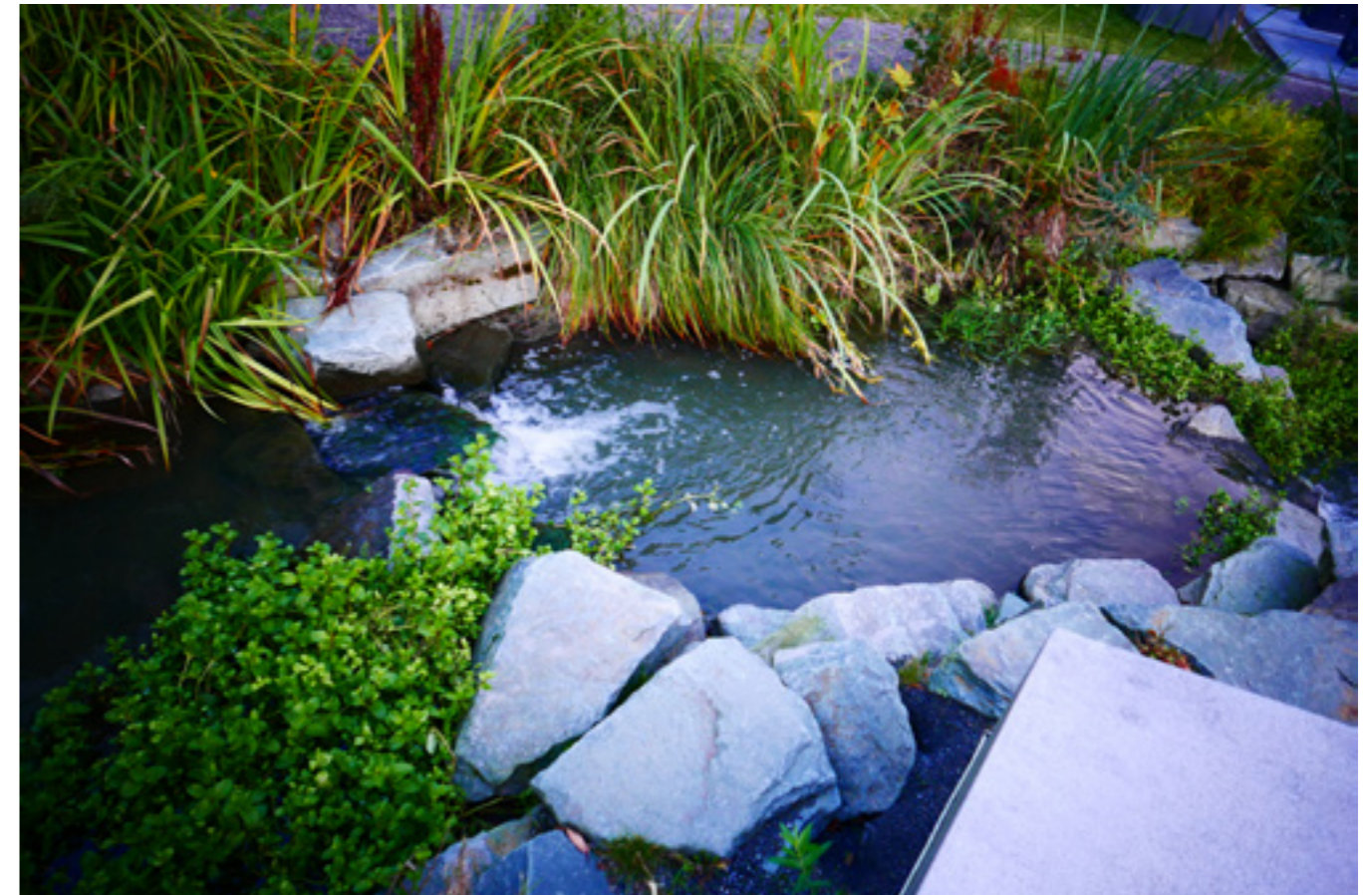
Identity of a place

Aldo van Eyck was a dutch architect who is celebrated for having designed over 700 small playgrounds in Amsterdam between 1947 and 1978. His work was a counter reaction to the movement of functional cities associated with Le Corbusier's high-rise urbanism. Instead of accepting the city as a gear mechanism for efficiency and convenience, he wanted the city to be enjoyed (Torrijos, 2019). His work illustrates in a clear way how these two different visions met, as he built many of his playgrounds in gaps left behind by the infrastructure of the efficient city. These gaps were often spaces between new high-rise buildings; undefined and empty, these non-spaces became alive with children's play through van Eyck's work. When the young architect started his project, Amsterdam was being rebuilt after the war, and so everything was new, from neighborhoods to streets. What does he mean when he says children discover the city's identity against all odds? Without any history, wear and tear, traces of lived life, perhaps we can say that a new place lacks identity.

Identity is more about how people identify with places rather than the looks of buildings and scenery; an important perspective of sociomateriality, as explained in the anthology, Children and youth: City, place and sociomateriality (Seim and Sæter 2018). Seim and Sæter refers to geographer Yi-Fu Tuan's distinction between space and place; "space allows movement, place is pause; each pause in movement makes it possible for location to be transformed into place". Here, we recognize van Eyck's transformative playgrounds; it's hard to feel connection to a place when you're simply passing through it. Facilitating pause in the shape of a playground gave children the opportunity to find identity in a new place.

Like post-war Amsterdam, parts of Oslo are also being rebuilt, forming entirely new parts of the city. Hovinbyen is Oslo's largest city development project, where 30-40.000 new apartment buildings are being planned, providing homes to more than 100.000 people (Økern Sentrum, n.d.). The area starts just east of the city centre, and has historically, and until recently been occupied by industry; factories, car dealerships etc. Parts of this history is protected, and in some cases worn, old structures are 'upcycled' into hip cafés and the like. Mostly, however, everything is being rebuilt from scratch; transforming an area designed for work, into an area designed for living. The living-aspect is emphasized in all information about the Hovinbyen-development, for instance through the municipality's own publicized goals for the project :

- Hovinbyen will be a future oriented and climate-smart city expansion.

- Hovinbyen will have a diversity of attractive urban areas that are tightly interwoven with each other and the rest of the city.

- Walking, bicycle and collective transport will be the easiest and most attractive means of travel.

These goals are, just as the emerging neighborhoods themselves, designed to cater to young families with children. Hovinbyen is an ongoing expansion, expected to be complete in 2030, but finished areas have been inhabited and functioning for several years. I work part-time in a kindergarten in Hasle, one of these places. Regularly walking this 20-minute commute from my neighborhood in Vålerenga, reveals something about why I chose to focus my thesis around Hovinbyen. Vålerenga is packed with these low wooden houses in bright colours, centered around a beautiful park with a church in it. Worn pubs with regulars and decorations that remind you that this is the hometown of the arguably most iconic football-team in Norway (most people think of the team when they hear Vålerenga). Walking into Hovinbyen, then, emphasizes the difference between a place with tradition and charm, and a new place. It feels like a blank sheet of paper, and that feeling was an invitation to make a mark.
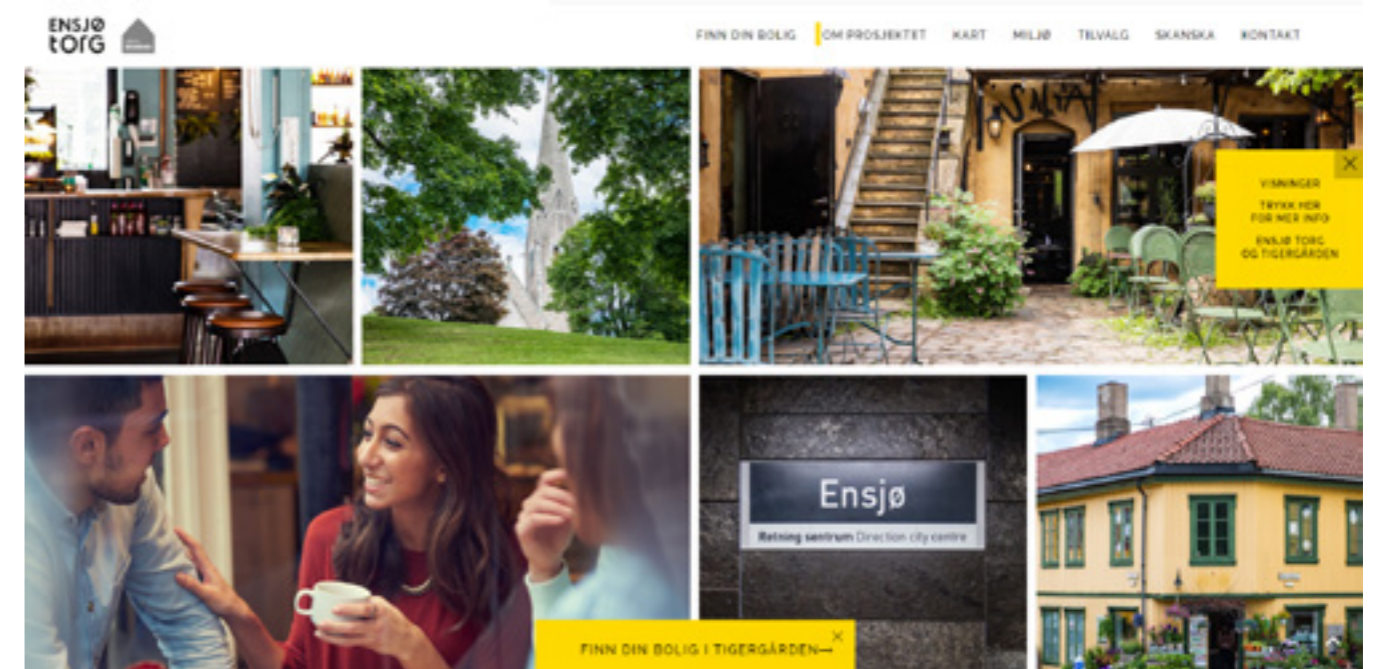
Housing developer, Skanska, uses photos of old houses and establishments in the surrounding areas to advertise their new building projects.

From generic to unique

The quick and ambitious emergence of Hovinbyen has met many critical voices. A recurring topic is the actual design of the architecture; too tall apartment buildings cluttered too densely, in shy tones of grey and brown. A commonly used word by critics is generic, which relates to something being general, common, nonspecific. The housing developers take a big part of the punching, as they have a lot of power when it comes to projects like Hovinbyen, although, as with the playgrounds, they operate within certain limitations and demands from the municipality.

Luckily someone thought of drastically bringing back some of the area's history and integrating it with the future-oriented, family friendly development plans. Roughly since the end of WW2, the Hovin Stream has been running in pipes underground, and in 2006, landscape architects, Bjørbekk & Lindheim proposed a suggestion for directing parts of it to the surface (Brochmann & Lie, 2019). Over ten years later, the Hovin Stream is running through neighborhood after neighborhood, providing a vibrant stretch of nature amidst the asphalt jungle, as someone referred to Hovinbyen in a commentary (Sollien, 2020). The stream is more publically appraised than any other architectural aspect of the area.

Tiny stairs lead down to the moving water, ducks floating by. An array of different plants and flowers decorate the banks. Benches and small bridges suggest pauses to enjoy the tranquility. Like they use photos of charming places surrounding Hovinbyen, the housing developers advertise apartments showing the stream in its glory; a truly unique identity in a neighborhood.

In my research, Hovinbyen presented itself as the home of archetypical playgrounds. Design for children is becoming more adjusted to the everyday life of families, than being experimental, provocative or any sign of novel thinking (Periskop, 2019). The marketing of the Hovinbyen project is clearly concerned with conveying child friendliness as one of their top priorities. This is supposedly a good place to grow up. But are these spaces facilitated for children and youth, or is it really more about convenience in the hectic life of families? These questions went through my mind as I commuted to work, walking along the tranquil Hovin Stream. Is this designed for children, or is it in practice more of a transitional space, like the ones van Eyck transformed?
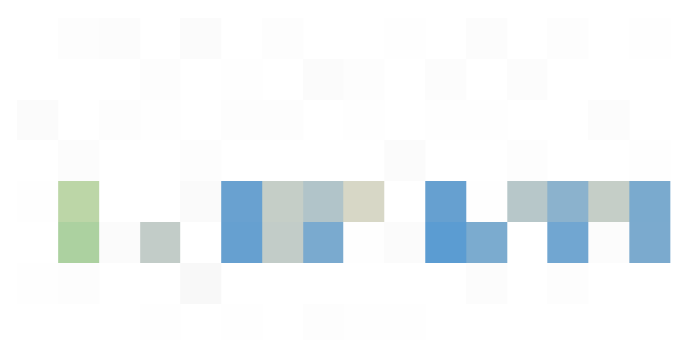
Norway's largest housing developer

OBOS' vision is to build the society of the future and, in doing so, fulfil housing dreams.

To sum up:

A way of exploring your neightbourhood

Communicate childrens culture

5 Wonder

It is an innate ability to wonder about the existence. But it needs to be maintained. To wonder is not something we learn, but something we forget.

Jostein Gaarder, 1993 (translated).

How can we use storytelling

in public space to facilitate

children's sense of wonder?

What is wonder?

My family have a summer place in the southeastern part of Norway; a cabin on a rocky island. A bit away from the house, amidst large, fallen rocks, there is a narrow cave. When I was a kid, I found that there was sometimes candy hidden in this cave. My mom and dad would walk with me to the cave to "have a look", and I would crawl into it, looking for something that stuck out from the crumbly, pointy rocks. That feeling of finding a plastic bag full of sweets under one of the rocks was always fantastic. I was excited, skipping back to the house, chewing bubblegum, but I was also wondering, who might have put something in there? I discussed with mom and dad, and with friends, and everybody found it very curious. I remember the rumour of some troll. We called it the candy-troll.

Today, over 20 years later, we still do this with kids who come over. We start talking about how we sometimes find things in this cave on the other side of the island. And as their eyes grow bigger, you can tell their expectations fly through the roof. Eventually we say the magic sentence, "let's take a look". What must be going through the minds of these children as we climb the rocks toward this mysterious place that we call "the cave"?

A similar situation is described by children's book author Mac Barnett in his TED-talk, "Why a good book is a secret door" (TED, 2014). He's working in a summer camp for children, and notices that one of the youngest girls' tendency to take her melon out from her lunch box and throw it in the ivy, as she didn't like melon. Barnett eventually explains to the little girl that she shouldn't be doing it as it would result in melons growing everywhere. She doesn't believe him, and so he wakes up early the next morning, buys a huge cantaloupe and hides it in the ivy. In his talk, Barnett describes her astonishment as she finds this melon during lunchtime, and how she proudly carried it around the whole day. She was in a place where she knew she didn't grow the melon, but at the same time she was convinced that she did. This place, says Mac, is what we call wonder.

Barnett says this experience is probably why he became a storyteller and not a nutritionist, which is funny, but also touching on the very essence of why this state of wonder is so important. While a pragmatic approach could be to try and explain why eating fruit is healthy, the fiction-approach probably raises even more questions with the child. This is an important aspect of wonder, according to Associate Professor in pedagogy, Hilde Merete Amundsen, who writes that wonder is the prerequisite for knowledge (Amundsen, 2013). In her book, "Children's Sense of Wonder", children are compared to great thinkers and researchers: they have the sensibility to consider the ordinary as something mysterious. At the same time, they have the naivety to ask questions so simple that they problematize the very core of the matter. For instance, why are melons round?


A door between fiction and reality

A common trait with both the cave- and the melon-story is that they blend what is real and what is fiction by creating an experience in real life. Written stories, games and movies can get us to that place as well, but in the pursuit of designing playgrounds, I am particularly interested in how fiction can be materialized. Mac Barnett is captivated by this idea: "You can't find the seams on the fiction...a little bit of fiction that has colonized the real world". His book, "Billy Twitters and His Blue Whale Problem" demonstrates this idea. It tells a story of a boy who is given a blue whale by his parents for not cleaning his room, and the work and responsibility of taking care of it is overwhelming. When the story is over, the reader will find a pamphlet in the back of the book, which can be filled out with name and address in order to get a 30-day, risk free, trial for a blue whale. After posting the pamphlet, the reader receives a letter from a norwegian law firm saying the whale is held up for the time being, and that the whale can be reached by telephone. Upon calling the number, the reader will hear some whale noises, and is then able to leave a message for their new "pet". Mac plays the audience some of the messages he's gotten from a young boy, who has left over 25 messages over the course of 4 years. This shows the potential of wonder to create engagement. Or perhaps, how wonder is a form of engagement. The boy who left all those messages was clearly

curious; acting or exploring as a result of wonder (Amundsen, 2013).

Intentionally or not, the whale-example corresponds with the principles of transmedia storytelling as a method to disperse a story across various delivery channels (Jenkins, 2007). Here, we have an illustrated story to prime the experience, making the reader consider what it would be like to own a whale. Then, we have a physical pamphlet to be filled out, and the surprising, very real letter in the mailbox. Then, there is picking up the phone and leaving a message. Together, these form a unified experience, and the story moves from existing in the book, to affecting other parts of real life. Layered experiences like this one, inspired an interest in using fiction and principles of transmedia storytelling to design alternative playgrounds.
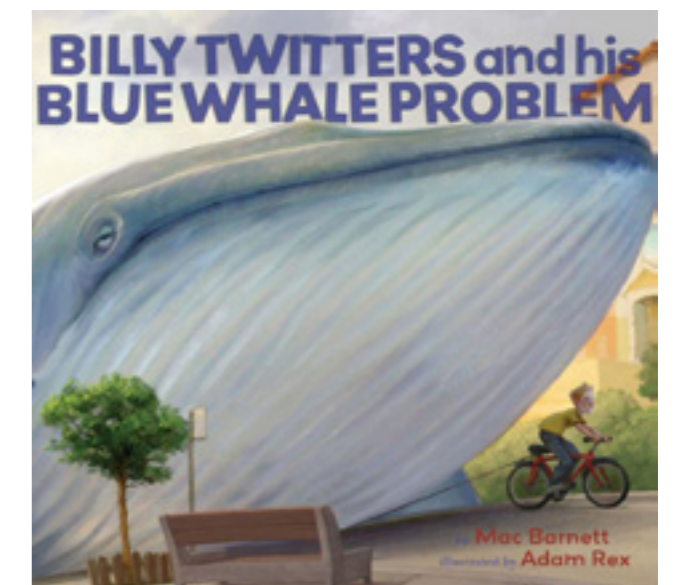
Creating wonder in public space

Can you use fiction in creating public play spaces? Aldo van Eyck once said that imaginary animals had nothing to do in the city, arguing that they shut down imagination rather than stimulating it (Lange, 2018). The example he used was an aluminum elephant; a real elephant walks, and so it is "unnatural as a thing in the street". His playgrounds, in comparison, are minimalist, colorless and nameless; open to interpretation. Indeed, fixed representations of living things tend to feel lifeless. For instance, as a child, I remember plastic animals with fixed legs were infuriatingly inflexible for play. A tiger had to sleep with its eyes and mouth open, legs stretched out, laying stupidly on its side looking like what it actually were; a stiff plastic figure. Of course it is possible to drift away into imagination land without much realism, but like a good book, there's nothing wrong with a little help to get there. The aluminium elephant that van Eyck criticizes sounds, in my opinion, like a faulty design for play.

Perhaps the elephant is too concrete. We immediately know all too much about it. Imagine the sculpture of an elephant in the city centre. It is always there, it always looks the same. The shapes of Eyck's playgrounds are ambiguous, it's likely that different children see different things, and this fosters imaginative play; the abstract shape presents an abundance of understanding, an empty room to fill with your own ideas. But empty rooms can also be created with fairytales. As mentioned earlier, wonder is connected with a lack of knowing. Could this be utilized in public place? An example of a way to do it, is the public installations of swedish art collective, Anonymouse.

Anonymouse, Sverige

Anonymouse, Sverige

Society's role in maintaining wonder

To understand why we should act as co-philosophers to the children, I find it helpful to look at the implications of the opposite. The most common, and most brutal way to not meet children's sense of wonder is inattentiveness or neglect (Amundsen, 2013). When we do not pay attention to the questions or even walk away from them, we show children that other things are more important in life than contemplation. Another way, says Amundsen, is to give ready made answers, however clever and informative they might be. This creates an illusion that there are definite answers to what are actually complex questions, and fosters people who think that these answers can be found elsewhere, instead of learning to think for themselves. I see a clear line to the padded world of a playground; in the same way the world is unpredictable and sometimes dangerous, life is full of things we don't know or have immediate answers to. Not giving children the opportunity to learn this, is to not prepare them for the real world.

How we, as adults, and further, the systems in our society, meet children's sense of wonder is crucial in maintaining it. Children articulate their wonder through different "languages", says Amundsen: verbally, aesthetically, through play and bodily. To "meet" means we must notice, listen to and encourage as many as possible of these languages. As chapter three discussed, the conventional playground affords a certain type of play. Perhaps we can say that these designs only meet one type of wonder language?
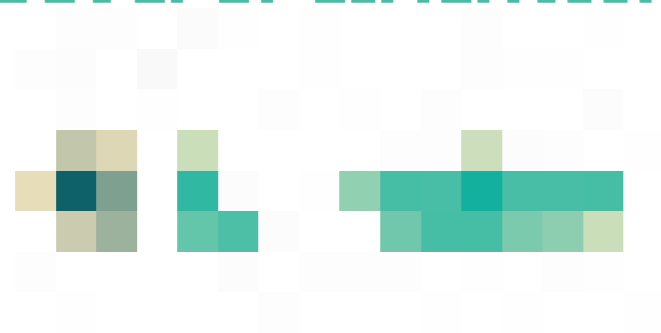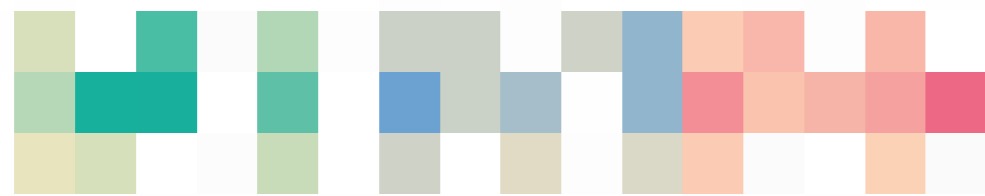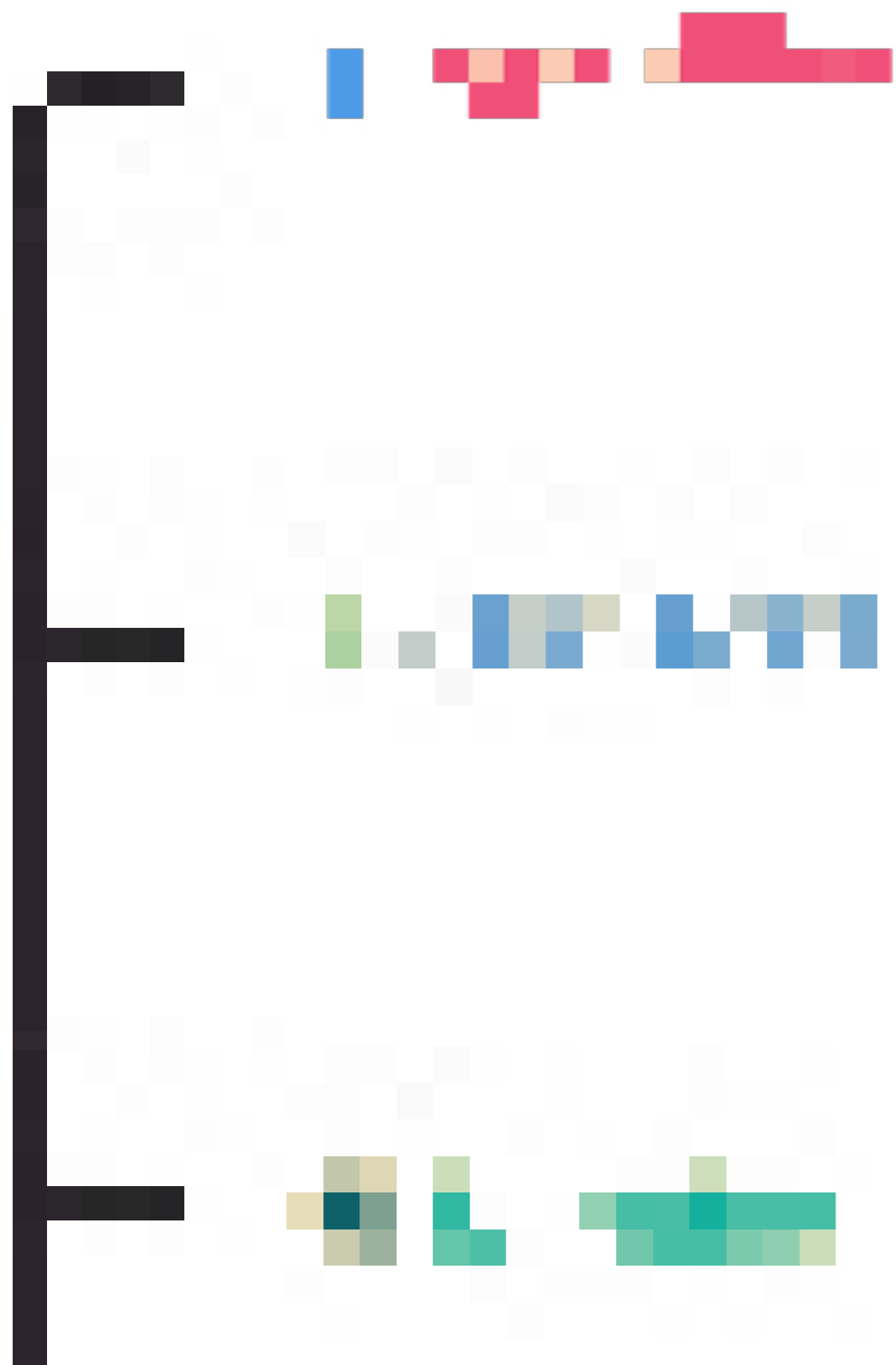
To sum up:

Fiction colonizing the
real world

Design for different
wonder languages

Physical is one of
several dimentions

6 Design
process

Expand frame

Create unexpectedness

Trigger interaction with existing elements

A way of exploring your neighborhood

Communicate children's culture

Fiction colonizing the real world

Design for different wonder languages

Physical is one of several dimensions

Wonderground manifesto

I've collected the main ideas from each research chapter in what I call a manifesto. The ideas are not rules, and are not meant to propose a superior way of designing playgrounds, but rather serve as an alternative approach. As my research question highlights, this project is about broadening our conception of a playground, and the idea is that this manifesto, based on my research, could be used as a tool for discussion, reflection and in this case, ideation.

...
I came up with the name Wonderground to detach myself from the confinement of ideas that comes with the word playground. The following work is an attempt to collect new thoughts into an example of what a Wonderground can be.

A reminder of my

research question:

How to design playgrounds

to stimulate and support

children's wonder, and how

might this broaden our

collective understanding of

what a playground can be?

Exploring the Hovin Stream

I went on multiple field trips along the stream, looking for potential areas and elements to inspire the process of creating a place-specific playground-concept. It runs from the woods in the north, through small neighborhoods, parks and ponds; the surroundings are mostly quiet and pedestrian-friendly. In the identity-chapter, I asked whether the stream is designed to cater to children. The shallow water, with narrow banks on each side, small waterfalls, living things and stepping stones surely makes a good scenery for many types of play. I did, however, come across multiple signs discouraging contact with the water and feeding the ducks. No swimming, and no playing close to the water, because of contamination. It's a waste of potential in terms of opporunity for play to design against interacting with the stream. In an opposite scenario all kinds of public communication would be directing attention towards the possibilities for interaction with the stream; what to look for, what to collect, what's living under the surface (and how to observe it) etc. In my view, these are not directions to activate passive children, they're opportunities for the public space to be a springboard for all children's curious minds.
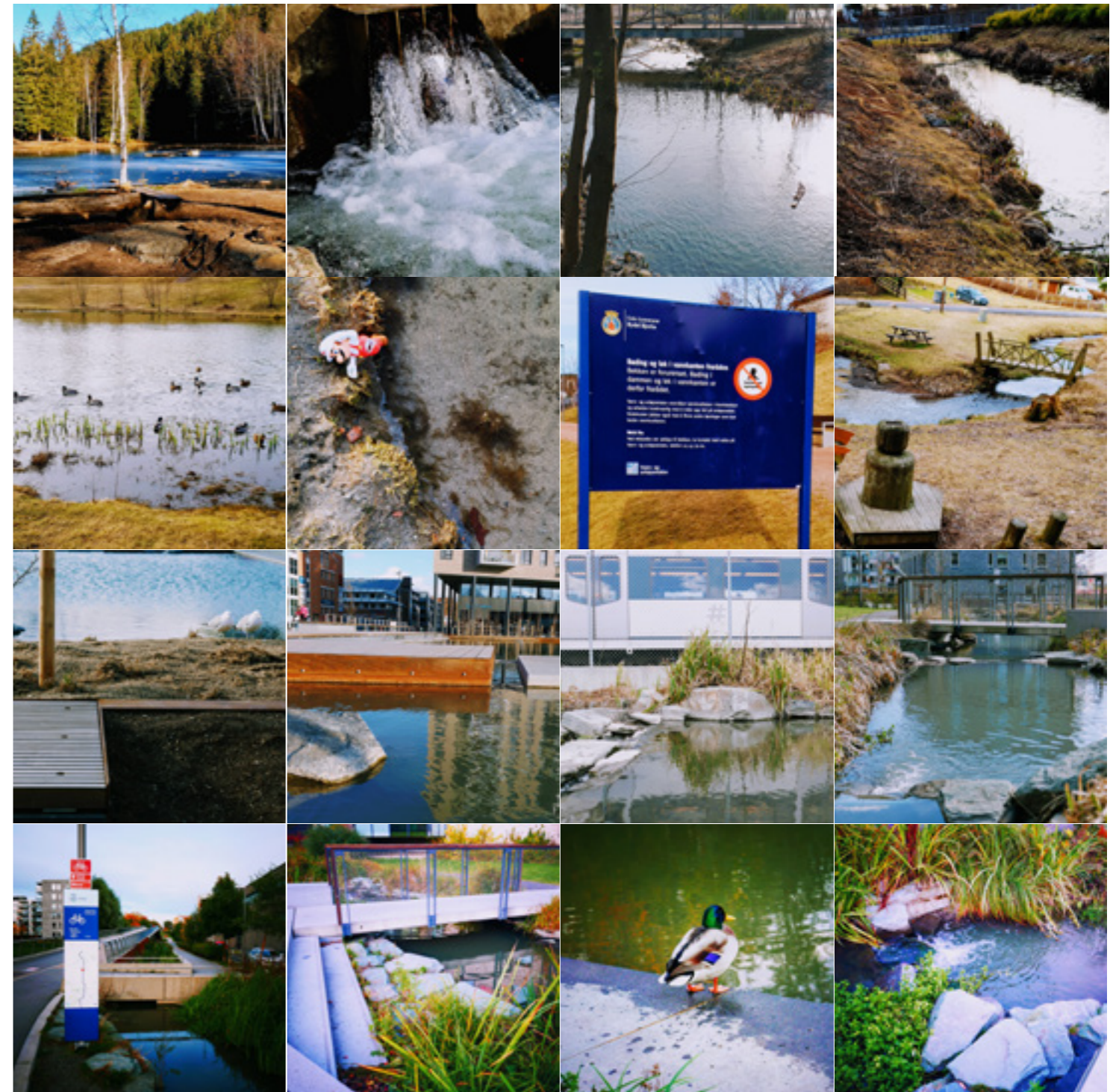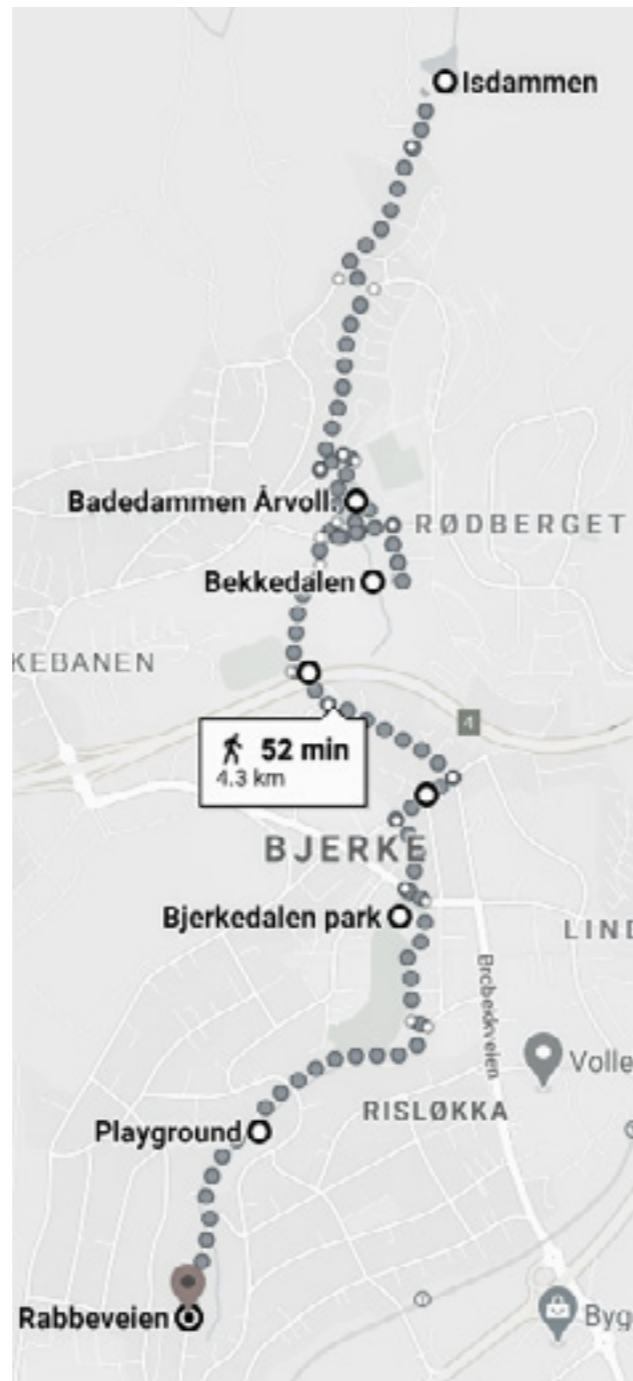
Indirectly activating the Hovin Stream

The wonderground might connect smartly with existing natural elements, aiming to encourage new ways of interacting with the familiar, to discover the unfamiliar.

Significant memories of play from my childhood often revolve around me bringing toys outside. The roughness of natural elements brought the toys to life in a way that wasn't possible inside. Gravel became an offroad circuit for my cars, providing actual clouds of dust, real dirt and scratches.

Rocks formed vast landscapes where distances became realistically long compared to the small size of an action figure. In a time where children spend more time indoors, there's reason to believe experiences like these are more rare than before. Toys might have unutilized potential for bringing children closer to nature; what if public spaces inspired children to bring their favorite toy outside? In this case, the effort required, such as planning what toy to bring, could be a way of creating more meaningful experiences for children in public, through personalization (Gulden, 2013).

Trigger
interaction
with existing
elements

The idea of encouraging children to bring their own toys was tested in the public toy car track-project .
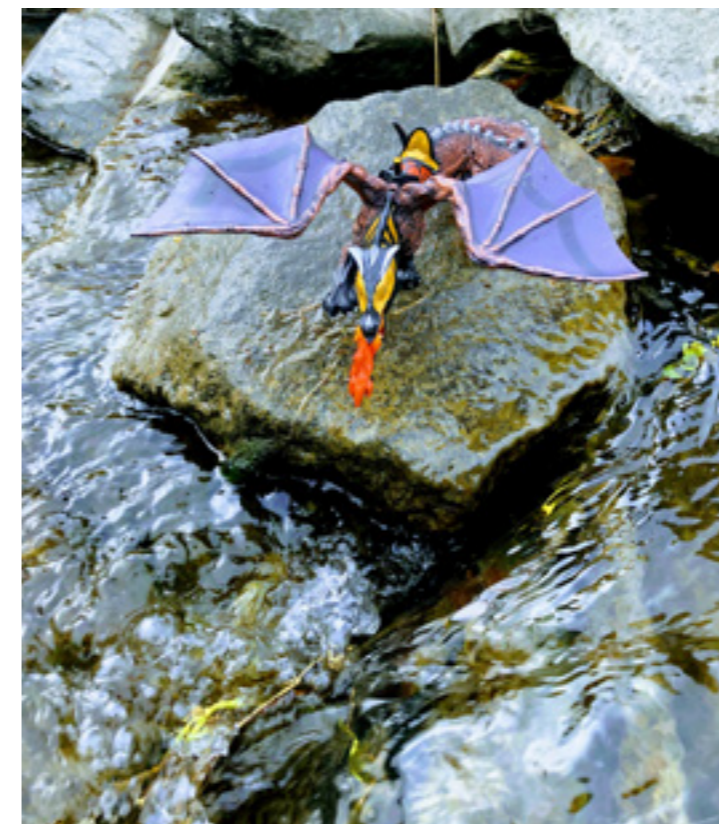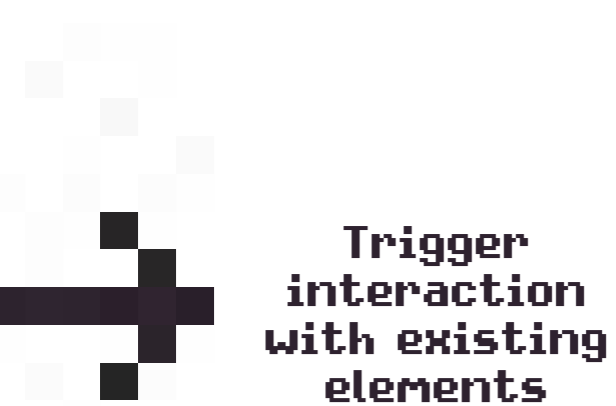
A dangerous place.

In my user-oriented research with design probes I asked the children involved to document a toy of choice in different

Imagining a playground-route

The stream is long and waiting to be explored. Can this format be utilized to break one of the most limiting conventions of the playground, which is that it exists in one place. When you go to a playground, it's the same place every time. If you went to a play route, you might discover new places with each visit, depending on how far you choose to go, and what you find. Interestingly, I found that there are already route systems that include the Hovin Stream; different maps and connections of checkpoints constitute experiences that give the stream and its surroundings a sense of place, rather than just something nice on your way to work. It's encouraging hikers to visit new places. However, these experiences are clearly aimed at adults. Couldn't this type of challenge might as well be a way to give children opportunity to connect with the stream?
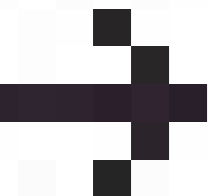
On the other hand, a *playground-label* excludes parents, and creates expectations of certain functions. A public space for play can also be a less clear defined space, both in terms of boundaries and components.

Expand frame

The Pole Hunt facilitates exploration with a free, orienteering-like game. It aims to increase physical activity in the whole country. (Wikipedia contributors, n.d.)


In testing out concepts I had local children explore the stream in a treasure-map-like challenge.

Exploring children's relation to the stream

I used design probes as a method to involve local children in the project. Although not determined to find answers to specific questions, I was curious to see what relation might exist or occur between the kids and the stream. A note of reflection from early march reveals some of the thought process that went into the planning of the experiment. Here, you can also notice how the process of designing probes can in itself be an important step of a design process, and in a way, this work could be considered a prototype of an alternative play experience for children. The singled out words in the note hint towards a mood or a certain type of experience, perhaps something in the lines of a treasure hunt, or an archeological excavation. This is clearly inspired by the idea of a stream being something to explore and study closely, but it is also about catering to different wonder languages than the fast paced, physical and bodily play that conventional playground equipment usually affords.
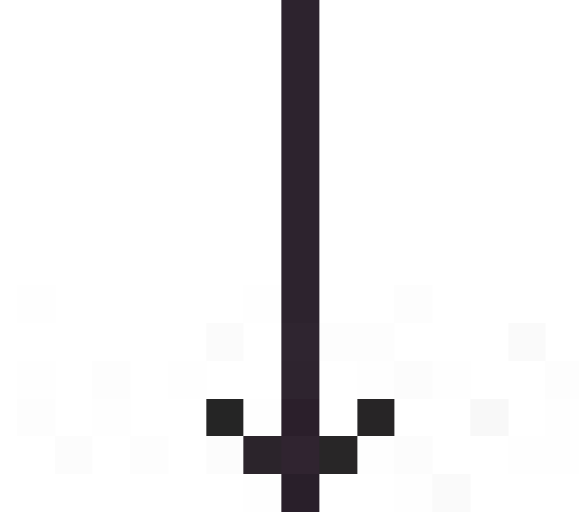
The playground
as a way of
exploring your
neighborhood

I've been working on the probes, they're taking shape. Found some old archive folders to use, as well as some colourful plastic translucent ones. I'm gonna pack them in the travel bags from Clas, and yeah, name them and stuff. And put the magnifying glass in there as well.
Some keywords:
Treasures
*Opals*
Hidden
Under
Find
Look for
Seek
Small characters - Oh, these strange characters are coming back. Not Underbeings this time, but something similar, in the sense that their apperance mimic that of cave workers. They have a furry coat though, which is new. Maybe for keeping warm down there. Maybe they have pockets for collecting opals or other valuable minerals.

A note of reflection from early march.

Through my connection to the kindergarten, I got four small participant groups to join the experiment. Among these neighbors of the stream were two girls, the age of five/six, and one boy, the age of seven, all of them with a little help from a parent. The last participant group consisted of four or five kids from the kindergarten assisted by one of the workers. I asked for documentation to be returned within two weeks. Due to the Corona-lockdown in this period, the activities were received enthusiastically. Here you can see the contents of the probe kits.
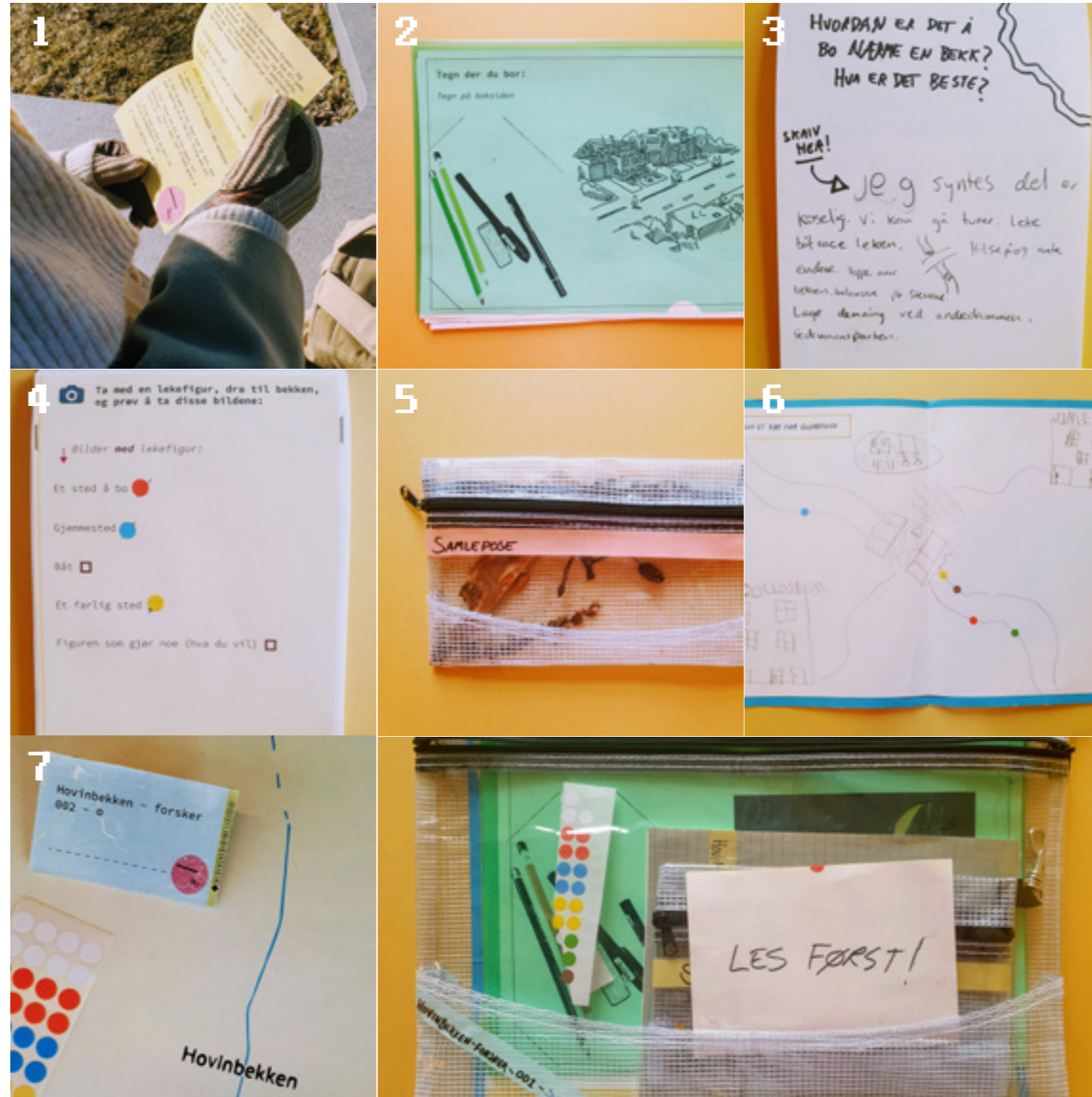
1. Introductory letter, with necessary information and asking the "Hovin Stream - researchers" to create a secret name.
2. Folder of drawing-tasks with various degrees of ambiguity, for instance: "Draw where you live", and "What if the stream was lava?"
3. Notebook with questions and blank pages for the researchers to articulate their relation to the stream, through writing.
4. Photo tasks instructing the participants to bring a toy of choice to the stream, for some of the photos. Some tasks were: "A place to live", "A hiding place" and, "Something you want to show".
5. Small collecting-pouch to gather things from the stream.
6. Archive folder with a sheet of a3-paper on the inside, asking the researchers to draw a map of Hovinbekken.
7. Badge for the researchers to write their secret names on and Sticky dots.

The documentation collected by the test-group was not used explicidly in the design process, but the experience worked as inspiration to pursue the thought of the local kids being researchers of the stream. Further, the established contact led to the user test presented later in this chapter.

The underground stream - a place-specific tale

I had the idea that storytellers, in this case, authors of children's books, were like designers for wonder. This is how fictional writing became an important design tool in this project. I decided to go through the process of writing a fiction, and then materialize it in different ways.

The story I came to work on was inspired by many of the aforementioned processes, including the field trips along the stream. Looking for mystery, I found myself sort of chasing after the stream as it disappeared underground now and then, before coming back up again, for instance on the other side of a small neighborhood. I thought the element of mystery with the underground stream might be utilized and exaggerated; it might go in pipes for functional reasons, but it also might also drop into a deep waterfall suddenly after disappearing from the surface, and travel for long detours, through secret underground cities. I figured what allowed these kinds of exciting thoughts was a lack of knowing, and this made me think of the children living next to the stream and their relationship to it as something ordinary and familiar. Could I somehow create wonder from this contrast?

Fiction colonizing the real world
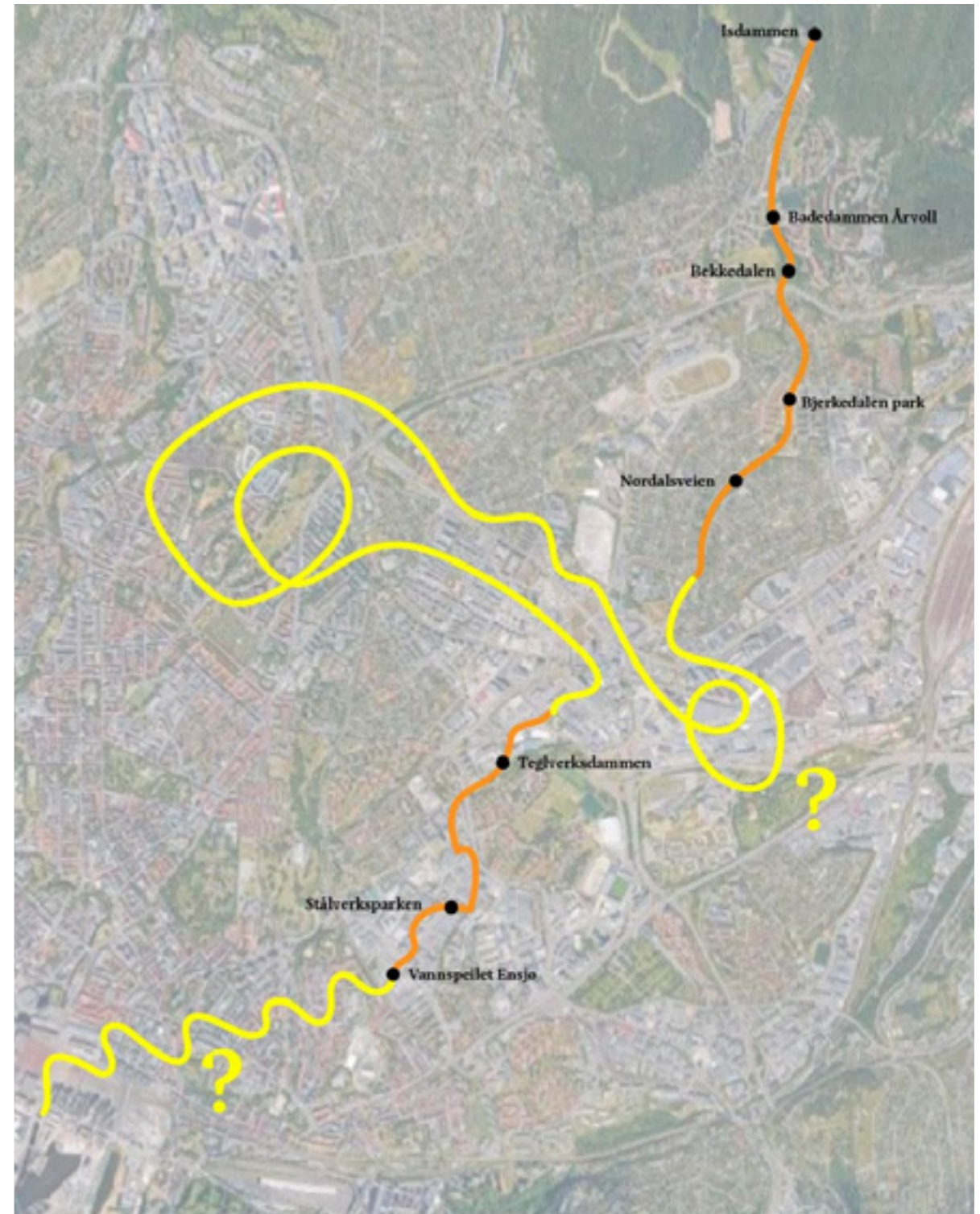
I drew this map to visualize an imagined path (yellow) for the stretches of water that run underground.

pauddo was written as a unique story to this place, and became an expandable universe in which to hang all other ideas on, which is why, at this point, it needs introduction.

I wanted the stream-story to inhabit some mysterious beings. From sketching and writing emerged some strange characters with coal miner helmet-looking heads, and they soon took over the whole design process. As a civilization living beneath the ground, I wanted them to be the *guardians of the stream*, conveying their collective admiration and respect for the natural elements. Further, since the underground stream could become anything, I decided their world would be upside-down; opposite, while parallell, to our own. I thought the upside-down-idea had great potential for creating wonder, and causing strange, humorous ideas in contact with our ordinary world. The name of this imagined place, pauddo, reads upside-down (in norwegian) when read upside down.
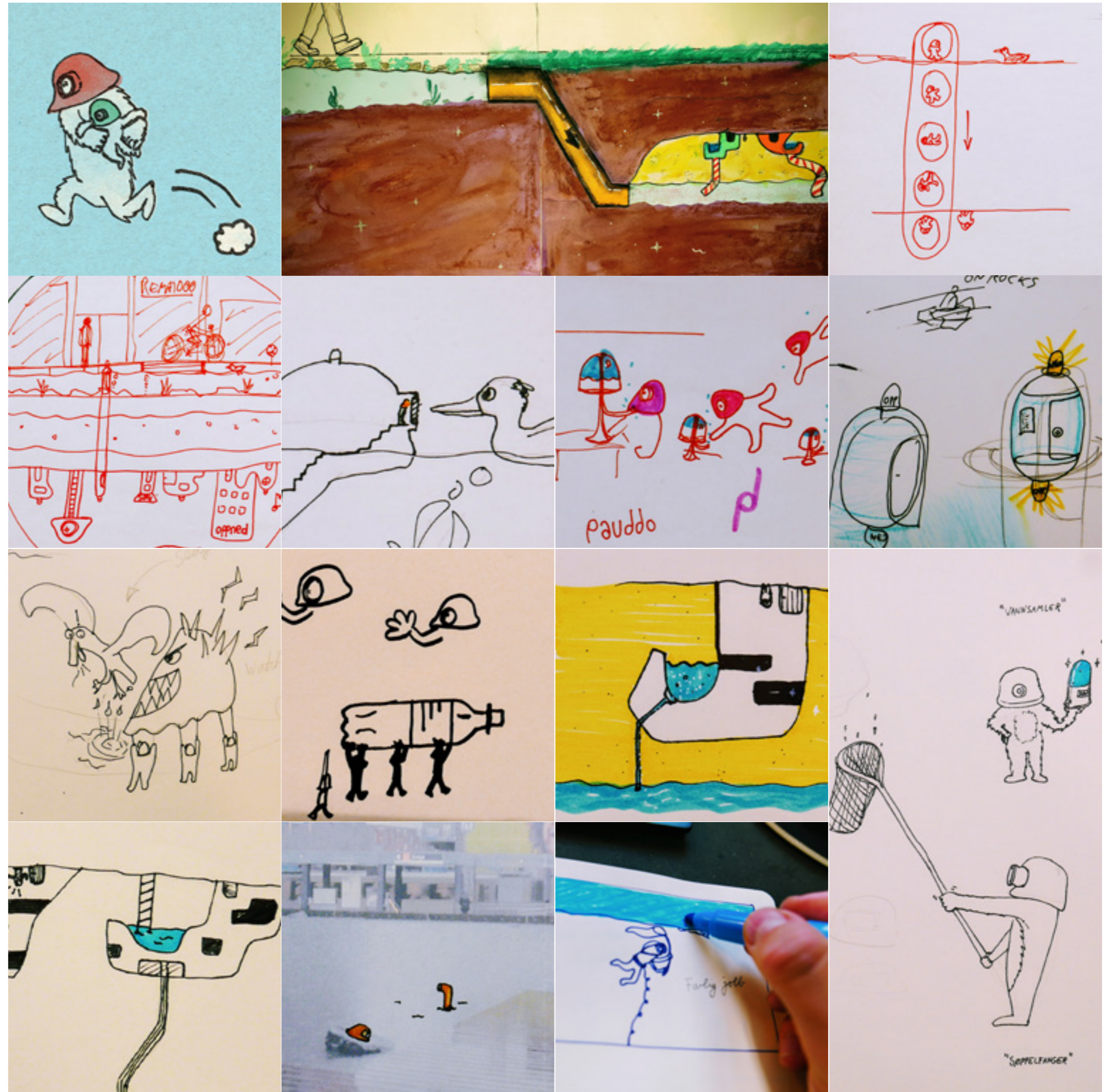
pauddo — the expedition

The pods are watching over the stream. They are studying it, monitoring, listening, smelling, taking samples. Learning. They are truly curious about the stream and everything in it. It's a new world for them to discover, because until recently, they were at all unaware of the existence of the surface, or japun, as they refer to it. The discovery was made by pod, one of the brightest researchers in all of pauddo. She studied the sacred regions of Watersky, the place in pauddo where a stream of glittering water runs in the ceiling. It's a marvellous place to be, and it's always been the most beautiful mystery to wonder why the water falls upward. And what's even more marvellous is how they start to float when they drink water. For most pods, to be able to fly around like this whenever they want, is so much fun they forget all about the mystery of it. But for pod, the curiosity was too strong. She worked years and

years, wondering about where that holy water was coming from, and one day, pod and her team realized that the only way to find the source was to travel there. Many warned them against it, saying it was too dangerous, even old pod. There were many strange myths about where and what the stream might lead to. However, their curiosity had become unstoppable, and eventually they embarked on an expedition that would change pauddo forever.

In their pautech-built propeller vessel, the team, consisting of pod, pod, pod, pod and of course, pod, started their journey against the stream. This challenge was impossible right from the start. The propellers weren't by far strong enough, and so the whole vessel was taken by the stream and led out through the pipes. Their uncontrolled journey through the darkness is too extensive to tell here, but the team was eventually struck

by an infinitely strong, warming light they'd never felt before. When they came to their senses, they were floating in water, the propeller vessel nowhere to be seen, and as they looked about, they couldn't believe their own lenses. They had discovered japun. The upside-down world. The source.
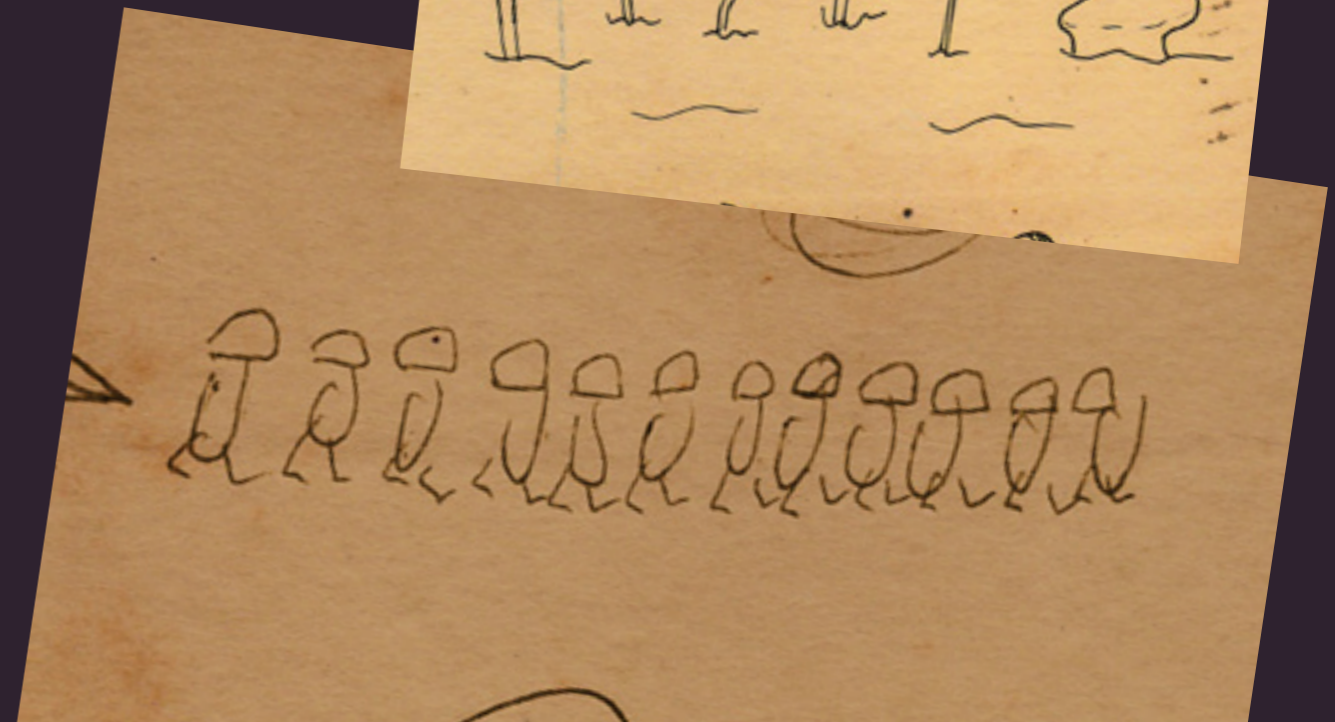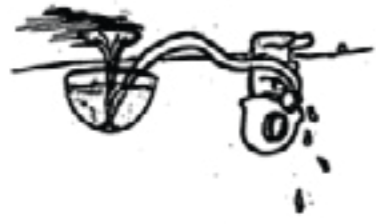
Transmedia storytelling
(doors to a fictional world)

The Wonderground suggests a type of
storytelling experience for children in
which the playground works together
with other delivery platforms to form a
whole. This segment suggests some
platforms to utilize, and explores how to
disperse a fictional world in accordance
with transmedia storytelling. The following
pages present my thoughts behind this
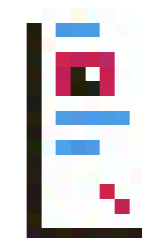dispersion; my ideas for different doors to a
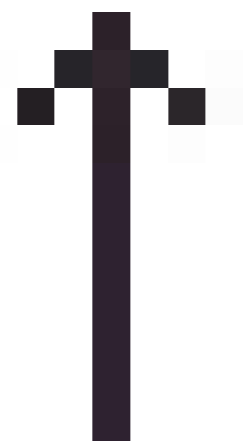fictional world.

Physical signs

Traces

Digital platform

Physical is
one of several
dimensions

Letter / magazine

Public signage for experiential purposes

A common sight along the stream and walking paths in general, are signs. Primarily for functional reasons, we are accustomed to read signs in public. To use public signage to engage in a storytelling experience would be an interesting contrast.

Further, the word sign is linked to wonder in the way that it communicates without explaining. Consequently, the use of symbols and signs in this project was an aesthetic decision in order to fit into the mysterious narrative. In addition, signs and symbols can be interpreted by the four year olds who ask the most questions, but can't read yet. In that sense, signs could be a way for the public to support children's sense of wonder.
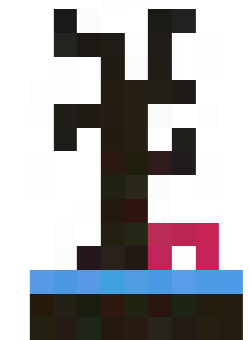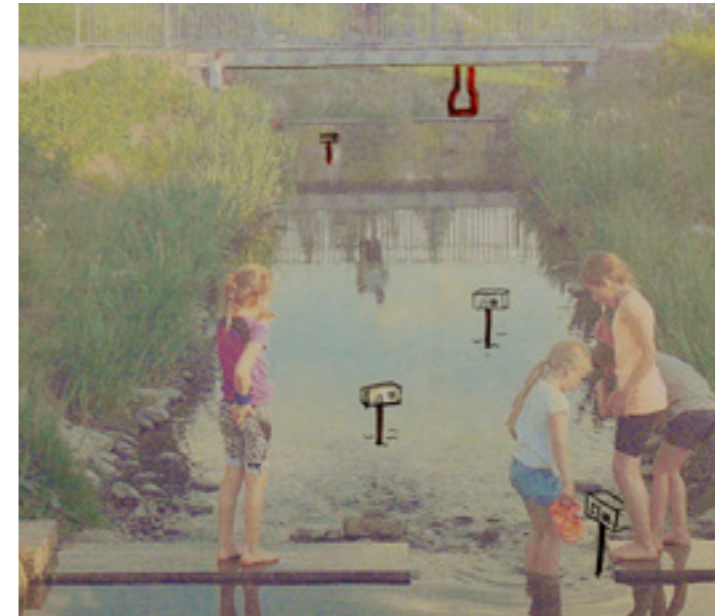

Traces of a hidden world

The traces are the physical manifestation of the story. During christmas, the stocking hanging by the fireplace in the morning, or the porridge that disappeared over night, or Santa coming into the living room on christmas eve, are all situations that work to remove the seams between real life and fiction.

In my case, the traces are the physical props of the Wonderground, hinting towards some mysterious existence, but never conveying definite answers. The point is to make room for theories and questions, and feed this sense of wonder with each discovery of a new trace. From afar, they could resemble elements from a conventional playground, in the sense that they invite interaction and playful behaviour, but when studied, they reveal, perhaps only in conjunction with the other platforms, that their form and function are in fact linked to a fictional world.

Phone-access to magical perspectives

87 % of all 9-11 year olds in Norway have their own smartphone (Medietilsynet, 2018). With access to technology that digitally literate groups of people use every day, some possibility opens up for the communication of a place-specific story. For instance, it enables you to bring the amusement of a playground experience to another place, such as home. What if the playground didn't only exist in one place, but co-existed and evolved with children's engagement over time?
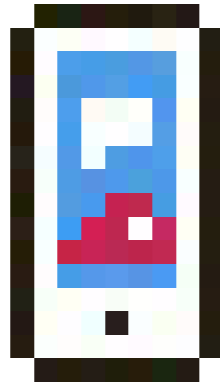
Further, the smart phone allows for the addition of (im)possible perspectives. Expanding on the world of pauddo, I became interested in cross-section views and its occasional role in children's books and pop culture. As we are oblivious about all that's going on underground, and most of it is very dark, dense and dirty anyway, we can make stories. In almost every civilization we find some concept of an underworld; it's perhaps as old as humanity itself ("Underworld", n.d.). In 2020, the smartphone could be a channel for young generations to interact with old myths, as well as new tales.

Lastly, by adding digital communication, there's always the opportunity to improve the experience and create dynamic in real-time through updates; new characters to explore, new mysteries to unravel.

In the book, Sam & Dave Dig a Hole, the two main characters are oblivious to the treasures hidden around them, while the reader can see it all with the help of a cross-section perspective. This storytelling-trick creates friction between the reader and the narrative; or engagement.
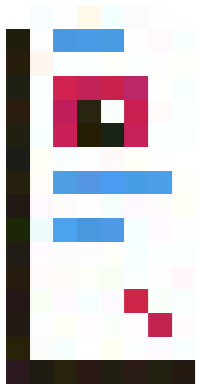
Wonder in the mailbox

What if children received an invitation to
this fictional world in their mailbox?
The place-specifiness of the wonderground
makes reaching local communities a design
challenge (or opportunity) on its own.
The mailbox is a thing sort of exclusive to
adult-life, with all its very serious letters
and newspapers. It's all very rooted in real
life, which is why, as a way of delivering a
mysterious story, post can be an effective
way of blending fiction and reality.

There might be opportunity for
municipalities, housing developers,
and other influential actors who are
responsible for the experience of public
space, to engage children through their
established communication systems.
For instance, residents with an OBOS-
membership, receive a magazine nine
times a year. In addition to informing
about new development projects and
providing inspiration for interior etc., the
magazine is used as a way of including
the voices and opinions of the residents,
conveying the idea of a people-friendly and
humble organization. This platform could
be used to bring children closer to their
neighborhood, by communicating to them.

The inspiration for using post as a delivery platform came from reading about these mysterious structures found in the forest of Rollag municipality. The news was communicated through their local newspaper (as a real mystery).

User tests

A user test was conducted with some of the participants who had joined the probe experiment earlier. This was mainly to test the different dispersion platforms in order to find out if I could communicate bits of a fictional world along the stream, and whether it managed to create a sense of wonder. The first of two groups consisted of two boys, age 7-8, accompanied by sister, age 3, a father, and me. In the other group, two girls, age 5-6, were accompanied by only a mother, who documented the test, and sent me the material digitally.
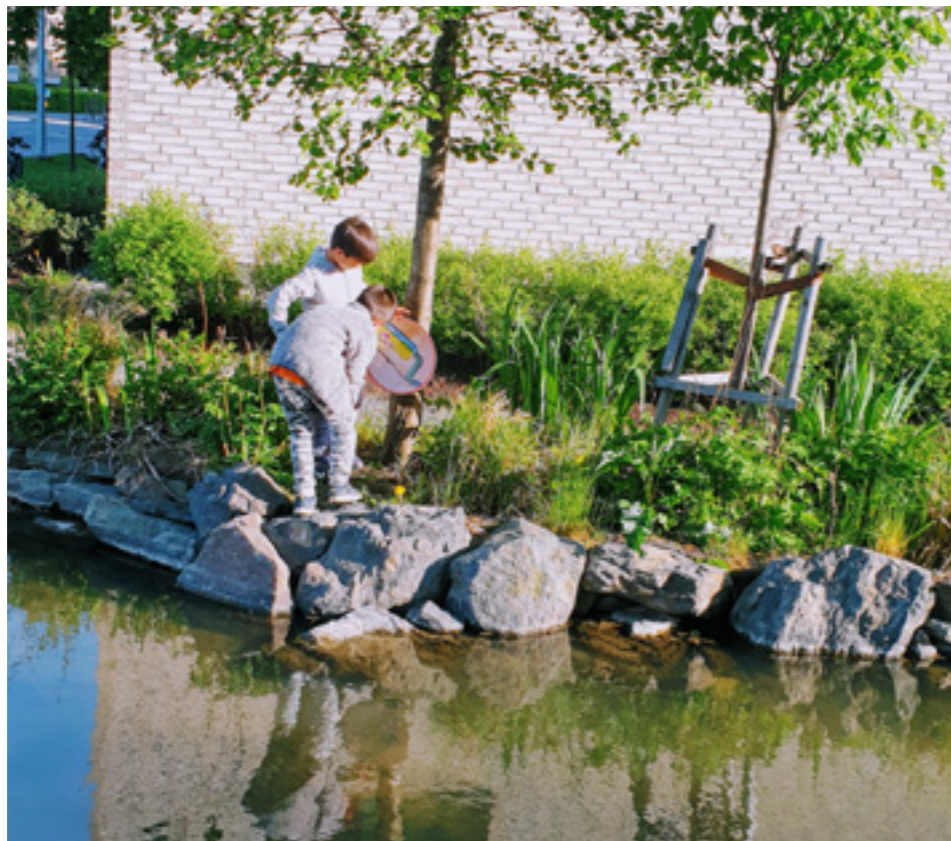
The test consisted of posts I had put out on four different locations, forming a route of approximately 1 km. It was introduced for the participants in an envelope with a letter, an illustration and a map. The letter gave a brief look into pauddo, and challenged the reader to find four hidden messages along the stream, in order to reveal a secret website. The map showed X-es and some reference points for navigation, similar to a treasure hunt.

What happened?

"That's the sushi-place! I used to live right next to it. And there's the Kiwi-store." As lifetime residents of this area, the boys mastered the challenge of finding their way to the posts. At each of the four locations were signs with illustrated cross-section views of pauddo, each revealing a different scenario or phenomenon of the story, and each being rotatable to encourage interaction. The idea was for the imagery and interaction to communicate an imagined connection between each location and the story. Next to each sign was an orange arrow with a word spelled on it. Collecting all the words and putting them in together would lead to a website, where the participants could finally write a message to pauddo. As for traces, I made a small door and placed it at the first location to serve as a physical manifestation of the story.

The storytelling idea behind the signs, however, were more or less overlooked. The signs may not have communicated well due their materiality (information seems smaller seen in contrast to the outdoors), or perhaps the fact that children are not accustomed to reading a lot of signage in public space. More importantly, though, was the challenge's ability to create a game-like engagement. To find the next place, and collect the arrows clearly became the main motivation for following the route, more so than the curiosity of finding out more about the story. In other words, this challenge could be completed without any form of storyline.

One of the arrows pointed inside a hole in the structure of a metal bridge, and at one point in the footage from the non-participatory test, the girls peek through it. This interaction was not planned, but it made the girls exclaim excitedly that they could see a door inside. I had not been inside the bridge, and it was pitch black in there; of course, this was an explicit observation of children's imagination filling out gaps, probably primed by the experience of seeing a tiny door in the wall in the first location.

"There's a door in there!"

Pixel art and the future of playgrounds

I started learning pixel art, and it became an important aesthetic decision in developing my concept. When you draw in low resolutions, the smallest changes in color or the placement of a single pixel can change the feel of the whole artwork. This posed an interesting design challenge in terms of communication.

Pixel art is a digital drawing technique that emerged from the design processes of early video games where the processing power of the available technology limited graphics to visible pixels and a handfull of colors. Today this art style is not only a phenomenon of my generation's nostalgia with games like Pokémon, but also seen in popular modern games, like Minecraft and Terraria. As of may 2020 Minecraft is played by 126 million people worldwide and is by far the world's best selling computer game ever made. The game is widely popular with children in all ages, a lot due to its sandbox format which let's you create whatever you like with blocks; again, a high amount of variables seem to engage kids (Nicholson).

Although a 3D-game, the pixel aesthetics in Minecraft is its trademark. Considering that 86 % of 9-18 year olds in Norway play computer games, we can safely say this is part of today's children's culture. While many adults have opinions of gaming as unproductive use of spare time, there are also those who say we must accept and be curious about what is undoubtedly a

generational phenomenon. I'm with the latter group; instead of distancing ourselves from children's culture, we should try to understand it, in order to be well-informed guides for the young in a society that's growingly dependant on technology. There is no reason that public spaces for children shouldn't evolve with current trends in society; not to say that playgrounds should become places where children go to look at their phones, but that designers and planners work creatively to embrace this change, even to make sure that playgrounds stay (or become) relevant as respectable additions to children's culture.
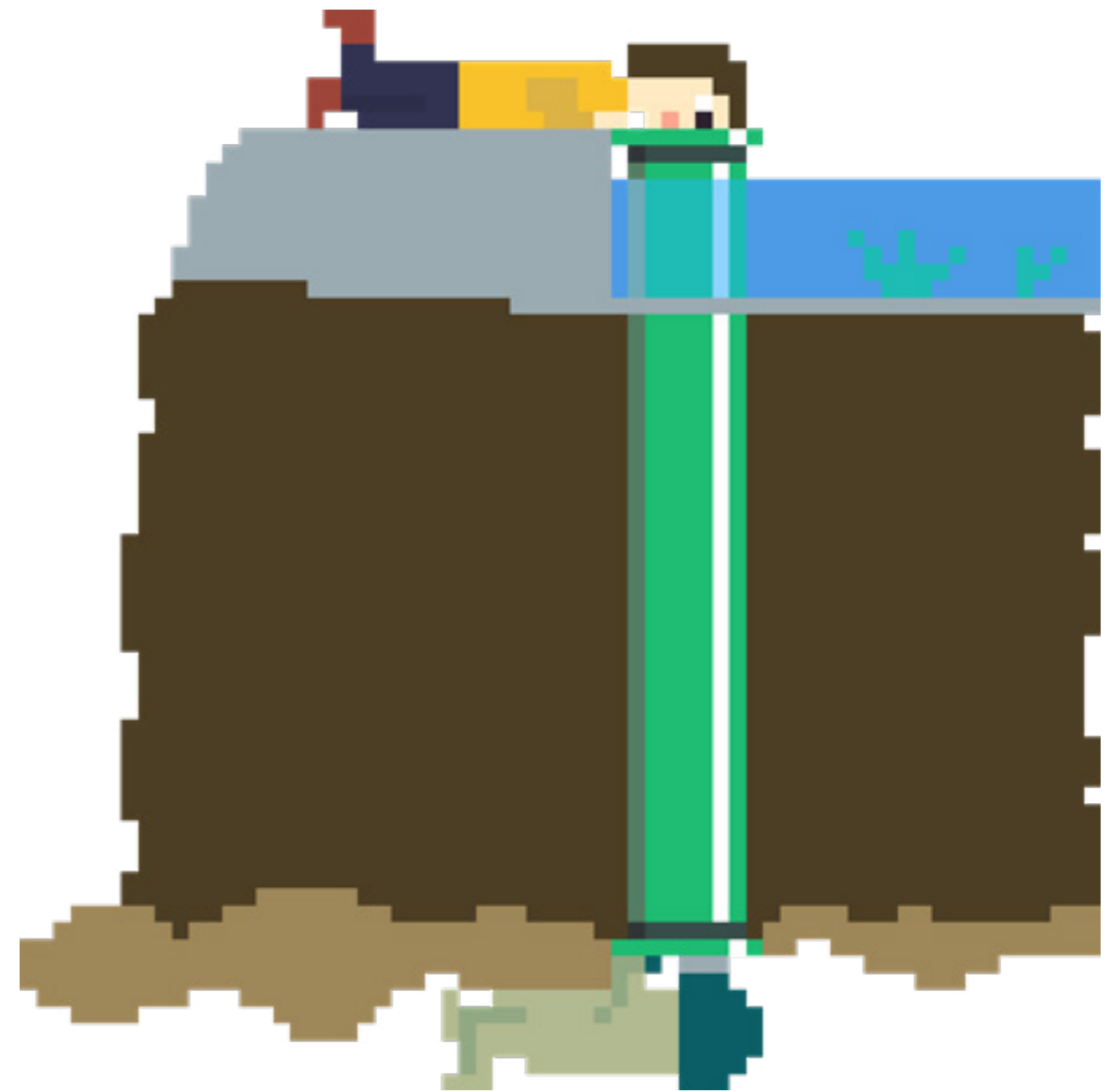
Communicating
children's
culture

A variety of choice for a variety of personalities

"Kids find magic in ordinary places, and they're eager to unravel life's mysteries. When a place encourages exploration, discovery and imagination, it taps into kids' innate sense of wonder." (KABOOM Playbook, n.d.)

This is the first of seven key principles to create good play spaces according to the KABOOM Playbook. I wanted the physical installations I worked on *(traces)* to be mysterious, ambigious.

To design for different wonder languages is to design for the different ways children articulate their sense of wonder. The keyword of exploration was ever present in my work with this project, which led me to imagine the children's roles as researchers of the stream.

Design for
different wonder
languages
+
Create
unexpectedness

115
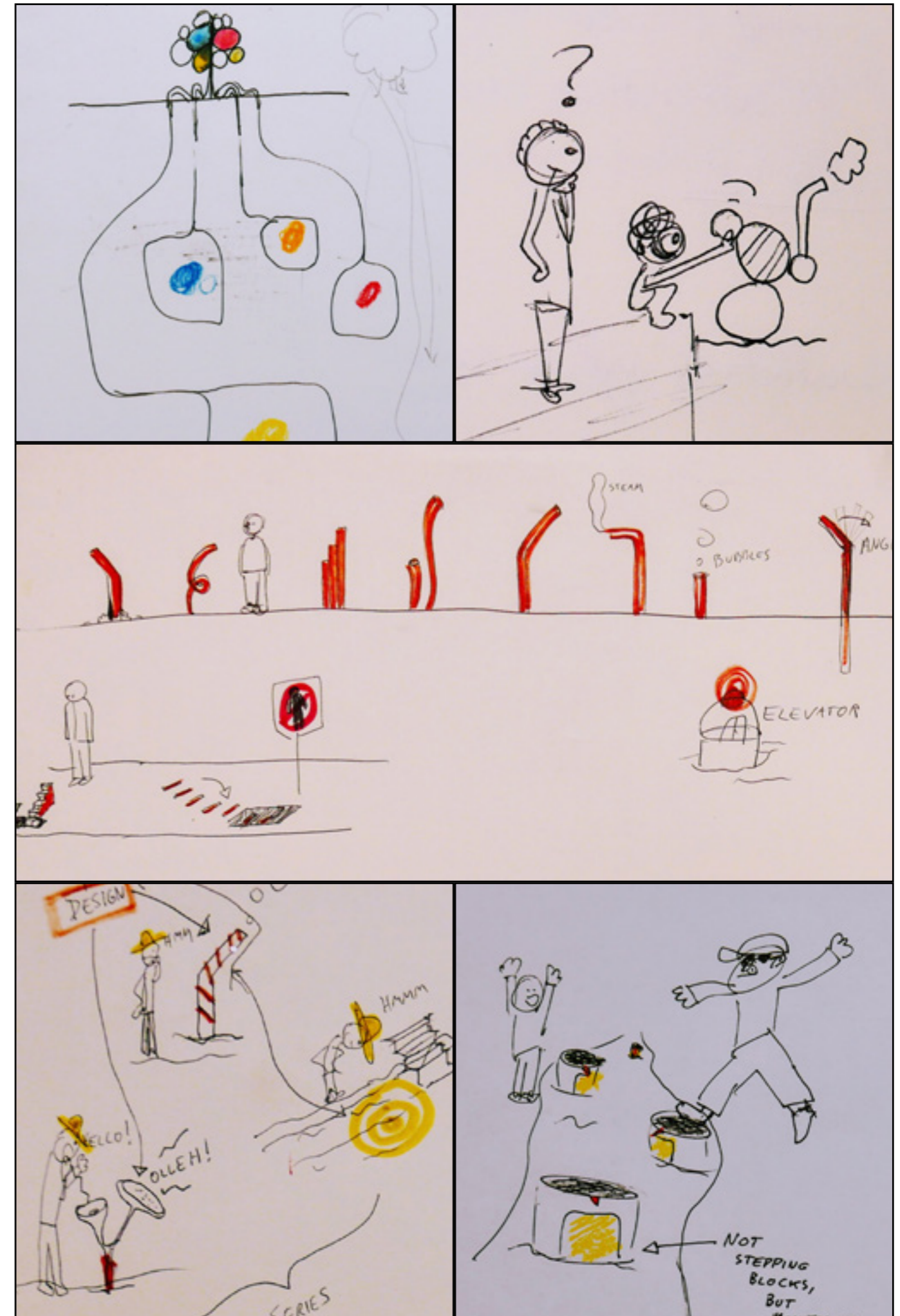
7 Wonderground
Design proposal

pauddo

A Wonderground in Hovinbyen.

Intergrated with the Hovin Stream, the Wonderground forms a route to explore. pauddo has colonized the stream with their instruments; tools for the pods to study our world, interactive installations for children to explore their world. While the functions of the stepping stones, the light grids and the sound pipes can be explored, their purpose is unknown, and it is up to the experiencer to interpret this newly established communication with the visitors from below.

As an extension of the interaction with the instruments, scanning them with a smart phone reveal new perspectives and possibiltity for interaction.

As an introduction to this adventure, neighbors of the stream receive a cryptic but vividly colorful magazine with details and imagery from pauddo.

The Light Trees.

These instruments illuminate the stream
with an array of cylindrical bulbs fastened
to a grid of magenta hued pipes. Some of
the bulbs glow warmly, while others are
switched off. A closer look reveals small
symbols which indicate turning the bulbs
to switch the light on or off. Scanning
these QR-symbols with a phone reveals a
cross-section view illustrating some of the
functionality of the instrument; the light grid
and a neighborhood in pauddo share light
source. When a bulb is activated on the
light grid, a corresponding house in pauddo
loses its light. It might be switched off when
you walk away. Are you able to share?
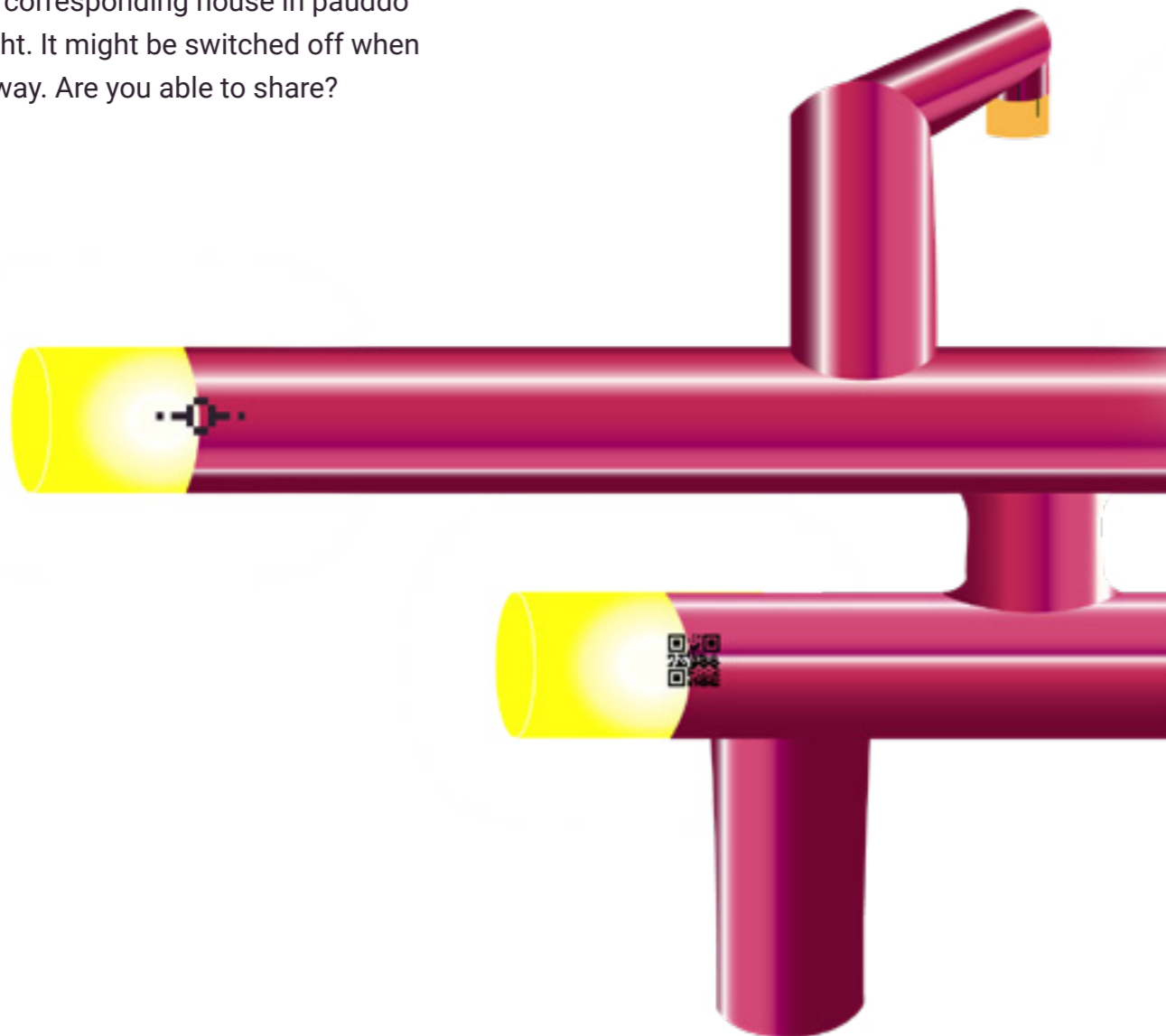
SCAN
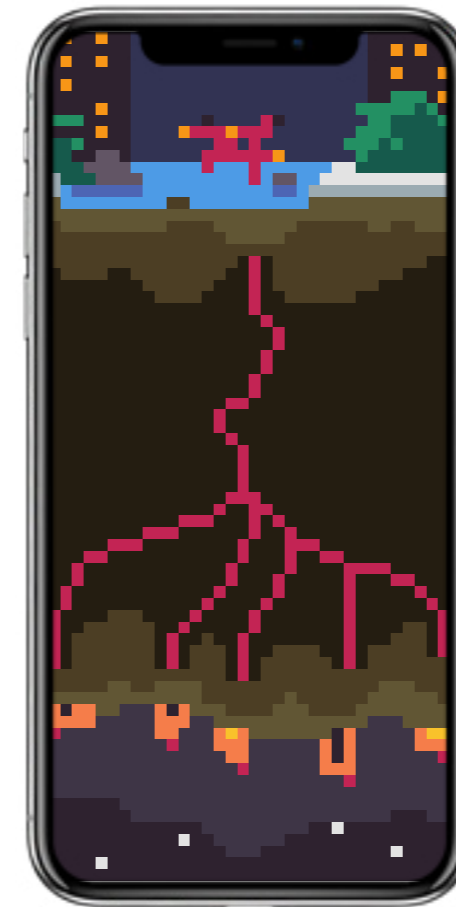
ZOOM
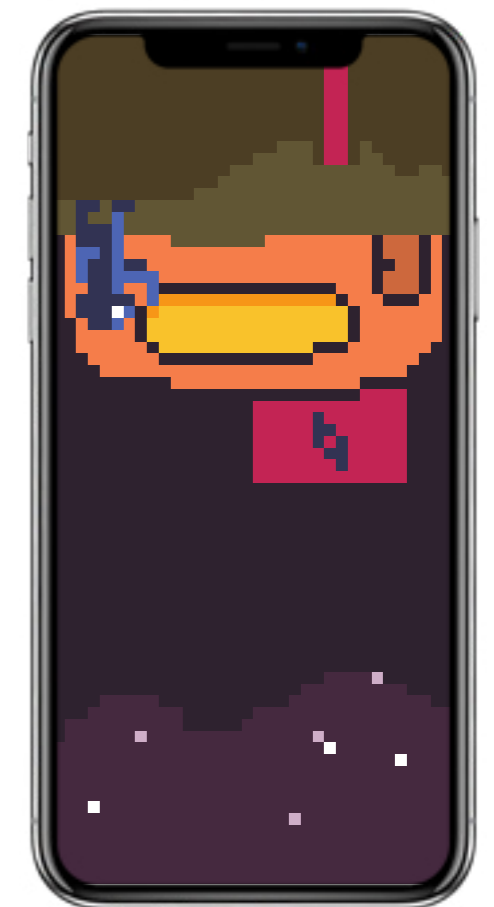
The Sound Flowers

From the banks of the stream grow trumpet-looking objects in bright orange and blue. When getting close, they start to emmit sound; strange noises coming from below, like bird songs from another world. Upon scanning, the perspective reveals a pod in the other end of the line, standing in a booth with another trumpet in the centre. Shouting down creates a marvellous eccho. Can they hear you?
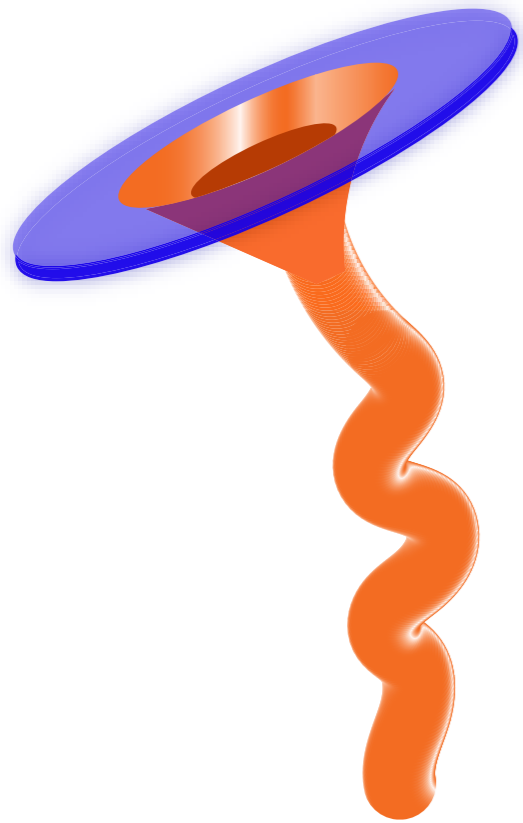
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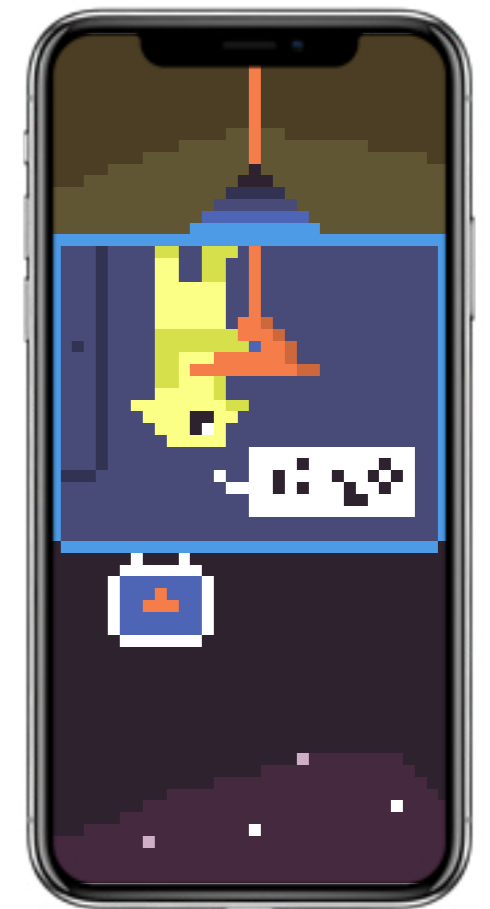
Stepping Stones

In the middle of the shallow stream are scattered a bunch of teal, round objects. They stand sturdy, sticking up from the water, and have rubberized tops, perfect for jumping on. Occasionally they make a noise when stepped on. The QR-code reveals that these installations are in fact observation huts for the pods, connected to pauddo with long staircases. If you can balance, or wade, you can peek through their observation window. What do you see?
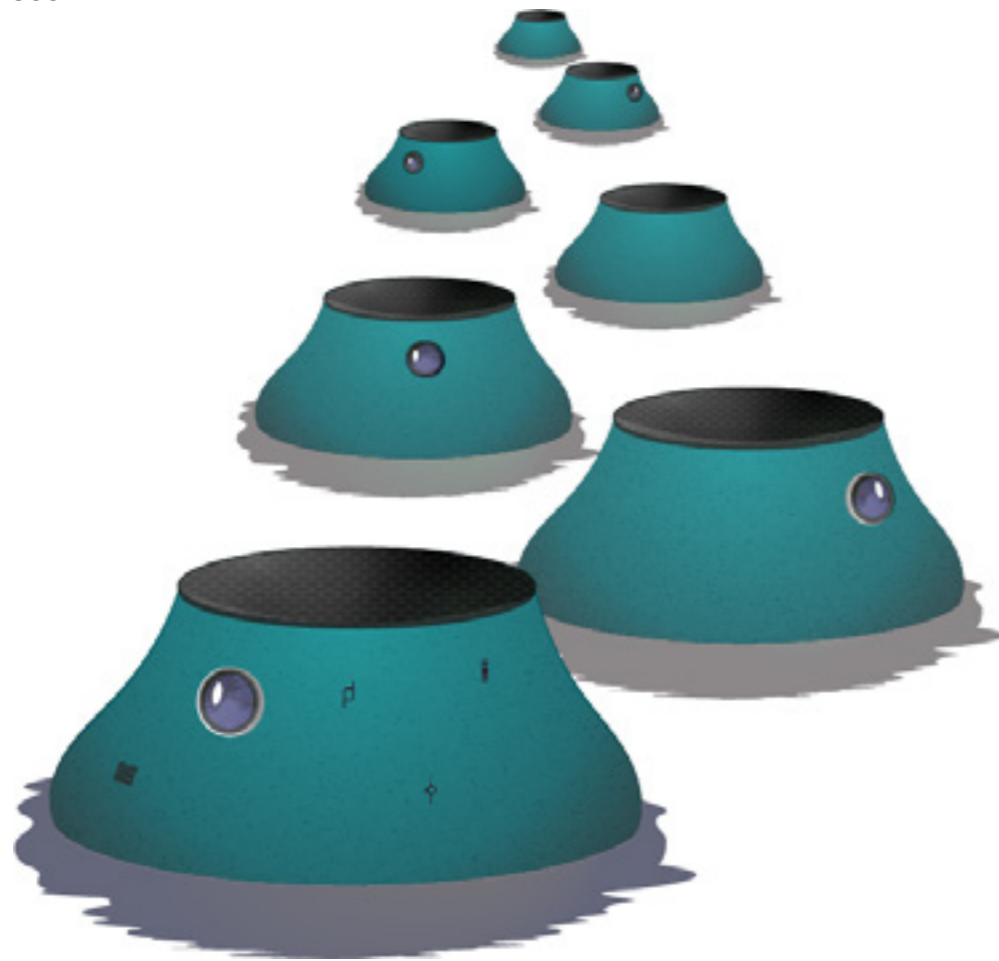
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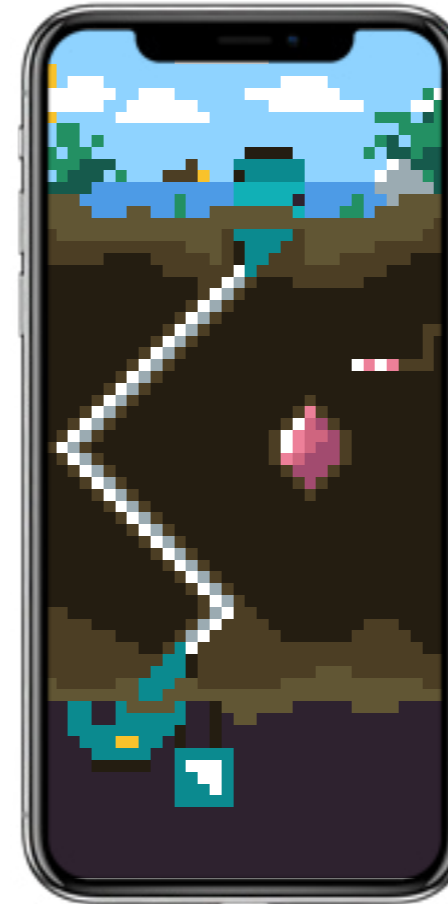
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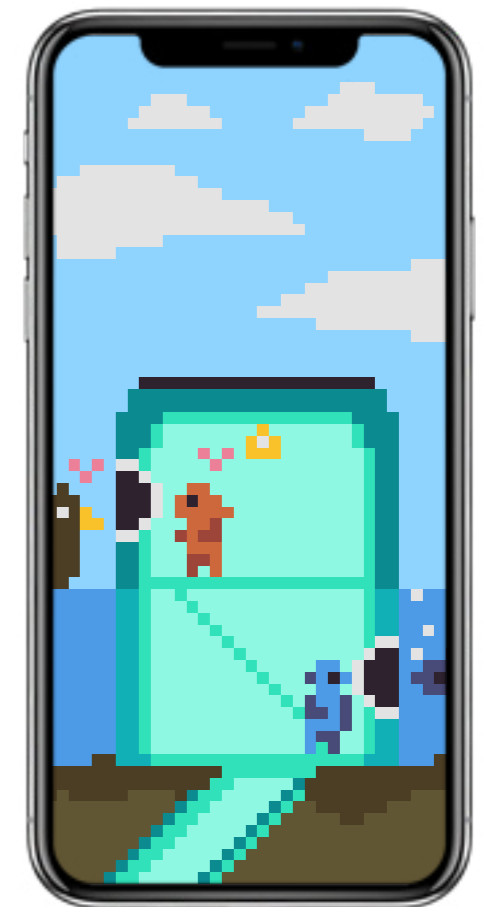
The magazine

The pauddo - magazine is imagined as an add-on to the OBOS-magazine that every OBOS-member recieve nine times a year. Utilizing such a communication platform can be a way of altering the Wonderground-experience over time. In addition to details, puzzles and mysteries from the world of pauddo, an important addition to the experience are DIY-challenges to encourage interaction with the stream. For instance, by giving instructions for how to construct a simple aquascope, the child can personalize the experience and engage with the "loose parts" of nature.

This Wonderground is imagined to intergrate with the Hovin Stream. A visit will not be the same every time, as it depends on where you choose to go, and what you find. This map illustrates a vision where a large number of installations are spread out along the route.

A neighbourhood story

Thomas (8) receives a mysterious magazine in the mail. The magazine contains a cryptic letter from someone who calls herself pod, a map of the neighbourhood and some weird tasks. He follows the map outside to figure out what's going on.

As the map suggested, Thomas finds some curious things in the nearby stream. He notices some small signs. Maybe pod left them there to tell him Something? He sees a QR-code and tries to scan it with his phone.
It sends him to a site that lets him see what exists underground - an upside-down world? He realizes that when he twists the lights on and off, he controls the lights in small houses underground. He explores some more and runs back home to tell his parents about his discoveries.

After school the next day, Thomas brings his friend, Alex, along to see what he found. They have both received the magazine in the mail and have been discussing the mystery all day. At school they made water binoculars as instructed in the magazine - an important mission from pod to the stream explorers. Maybe there's more to see underwater? They stumble across some sound emitting objects.

The whole neighborhood have been exploring and playing in the stream for the last three weeks. Kids are trying to convince each other who has seen pods the most times and who knows more about pauddo.They challenge eachother to jump long jumps across the stepping stones and some are eager to turn off the lights on the light trees to share light with pauddo. One day Thomas's mother yells from the kitchen that a new pauddo-magazine has arrived in the mail. Thomas jumps to the roof with exitement. Have the pods heard their messages through the pipes? And what will be their next mission?

Point of discovery

Triggering a sense of wonder

Entering the door of fiction

The desire to dig deeper

8 The end of an adventure

Reflections and conclusion

The Wonderground experience is an
imagined one, in this thesis. Rather than
a definite solution to the lack of variation
and experimentation in playground design,
it is a commentary, a critique of a tendency
in society. One of the most clear findings
of this project is the revelation that we all
think about playgrounds a certain way. Our
collective conceptions of important issues,
such as creating good spaces for play, is
clearly preventing us from going forward.
Daring to dream, experimenting with totally
new constellations of art forms might get
us out of the box, more concretely, I believe
speculative design is an approach worthy of
more attention in design education.

pauddo is proposed as an example of
a Wonderground. If this project were
to inspire other designers, artists,
planners or authors to develop their own
Wonderground, that would be the ultimate
result of this work. I imagine authors
who are looking to reinvent themselves
to stay relevant as artists, and using the
Wonderground manifesto and the ideas
explored here, to activate a place that they
care about, perhaps done in collaboration
with sculpture artists, musicians, housing
developers, and neighborhoods. With this
project, I wish for society to dream big, and
be really ambitious about children's play
spaces in public.

Thank you

Ingvild, my dear partner and best friend in the world, who has looked after me, and assisted greatly in the final days of this project.

My supervisor, who rooted for a dreamy project.

Mom and dad, and Ingvild's mom and dad, for their support.

My two family dogs, Josefin, who passed away during this project who was my best friend, and Lily, who is always happy.

Good friends as safety nets during this pandemic.

Pixel artists.

The YouTube comment section for unexpected wisdom.

Ambient music that followed me through long working sessions.

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2. Speculative Everything
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46. Rollag
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