

Exploration of intuitive wayfinding



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Abstract

Every day we encounter wayfinding in some way. Either if it is road signage, at your job, in your local shopping mall. If it works, it is easy to take it for granted. While if it is lacking or not intuitive, it could potentially badly affect your entire day.

This project focus on exploring intuitive wayfinding. Theory, methods and ideation has led me into a better understanding on the topic.

Jessheim Storsenter has been a case study. It is a mall that has been expanded multiple times during the years, and mainly consists of three buildings. Looking into their long history has been important for the project. By observing and documenting existing solutions, as well as interviewing people I could analyze and uncover needs.

Ideation led to a proposed concept. It remains to see if it really is intuitive.

Keywords:

Wayfinding, signage, intuitive design, universal design, shopping center

Acknowledgments

First of all I want to thank my partner and family, for providing support and words of encouragement. Who tried to help me any time I asked, even when they did not always understand what I was talking about. Thanks for loving me, even when my stress was badly affecting my mood.

I wish to acknowledge my supervisor, Mikkel Wettre for continuously trying to understand mine somewhat confusing explanations and unfiltered babbling during guidance sessions, and still managed to give helpful advice.

My fellow students who are the only ones currently understanding the pressure we are under, and the constant guilt we feel for everything we should have done. Your advice and openness have helped me feel less alone in the process. A special thanks to Maja W. Soleng, who many times throughout these years have been a solid collaboration partner and my go-to person whenever I'm in doubt or feel overwhelmed.

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“

The best signage is in the right place at the right time, considers the viewer, and is neither overly repetitive nor demanding.

- Ivan Chermayeff
(Calori & Vanden-Eynden, 2015, p.X)

Part 1

Introduction

Introduction

Imagine driving around in a new city without GPS, it's hard isn't it? But not impossible. That is because of the signs that guides you to your destination. Now imagine the chaos and uncertainty that can occur without any of those signs or signifiers. It is easy to take them for granted because our generation are so used to them that they have become a part of our automatic movements.

These signs whom we often take for granted are pieces in a bigger picture, they allow the built world to move more fluently.

Airports are places where it is crucial that signage is universally designed and understood. This is because there are millions of people from all parts of the world traveling through airports every single day. Most of them are in a hurry to get on with their travels. If they can not understand where restrooms, their gate, baggage claim or exits are, every airport might come to a standstill.

Many of the same needs can be found at shopping malls. This is also a place where millions of people pass through or use it as a place to pass the time. Also here people can struggle to find out where restrooms, exits, shops or even people are.

This project focuses on intuitive wayfinding at shopping malls, specifically Jessheim Storsenter. I will look into what makes good or bad wayfinding, map existing solutions and user needs.

Signage and wayfinding are

both words you will encounter often in this thesis. Signs are physical tools to help people navigate, while wayfinding is the holistic system. Wayfinding does not only include signs, but also other markers, such as floor plans, physical and/or digital maps. The aim is to guide you from one point to another. Successful wayfinding solutions take branding and visual identity into consideration when creating a solution, this will help with achieving a common thread throughout a user journey (Abuzz. n.d.).



Digital

- Webpages
- Applications
- Interactive screens
- Warehouses
- Google maps

Physical

- | | |
|------------------|----------------------|
| Shopping malls | Schools/Universities |
| Road signage | Parks |
| Office buildings | Airports |
| Warehouses | Stores |
| Hospitals | Cruise ships |
| Emergency rooms | Gyms |
| Doctors offices | Stadiums etc. |

Ethical considerations

The project is registered at, and approved by Sikt. That among other means that the people included has signed a consent form. Sensitive information is stored on a encrypted memory stick and will then be deleted after the project is finished.

Designer's perspective

I have the opportunity to come from the outside and get another perspective than the people directly involved. I can be curious, observant and critical. Hopefully I will discover pain points or user needs that they are not aware of.

Plan



Who

Pernille Høgevold Midbøe,
master student at OsloMet.



With who

Staff, visitors at Jessheim
Storsenter or other malls and
professionals in the field.



What

Exploring intuitive
wayfinding with Jessheim
Storsenter as a case.



When

During the spring of 2023



Where

At OsloMet and Jessheim



Why

To be able to learn and
prove I can individually carry
out a design project.



How

Through the use of design
methods and research.

Motivation & personal goals

My motivation for choosing to explore wayfinding design is because it involves a lot of the design possibilities that inspired me to become a designer in the first place. It could for instance affect many people's lives every day and you need to work with, and discover real needs to be able to design something meaningful.

- Learn about signage and wayfinding.
- Complete and carry out a larger project individually.
- Include multiple resources and user insight.
- Develop a structured approach.
- Include relevant methods and theory.
- Create a conceptual design suggestion

Research question

“

How can wayfinding be used to achieve an intuitive experience at Jessheim shopping center?

“

In fact, the best signage seems to take an on air of invisibility. It's there, but is taken in and taken for granted.

- Ivan Chermayeff
(Calori & Vanden-Eynden, 2015, p.X)

Part 2 Theory

Methods

The usage of different methods are crucial during projects to gain progression.

I found these methods to be helpful, as they allowed me to gain more insights about wayfinding. I have both explained what the methods are, and how I have used it during my process.

Case study

A case study is an in-depth investigation to gain detailed knowledge using multiple sources. (Martin, B & Hanington, B, 2018, p. 011). In this project Jessheim Storsenter has been used as a target in the case study. While doing so let me explore the chosen subject widely as well as narrowing it down to a specific area.

Desktop research

Starting the project off with conducting desktop research allowed me to gain knowledge and understanding of the topic.

Literature

This thesis includes multiple references to websites. When doing that it is important to be critical. However, I feel that many of these are more updated than books I found. They also come from businesses that daily work with wayfinding and/or signage and whom I feel I can learn from. I have as well used Oria database to search for relevant books and articles.

Interviews

I chose to focus on qualitative interviews, and not quantitative. It means that no surveys were done, and the insight collected is only a representation from a small group of people and cannot by any means represent everybody. The interviews conducted were a combination of semi-structured, structured and group interviews. (Leavy, 2017, p.15).

Observations

During the span of the project I conducted Fly-on-the-wall observation (Martin, B & Hanington, B, 2018, p. 042), which means to observe people and behaviors without interference. Participant observation (Martin, B & Hanington, B, 2018, p. 059), were also a used method as I spent time using the center and trying to find my way around with the tools provided.

Shadowing

Shadowing means to observe someone through their daily routines or a specific occasion. (Martin, B & Hanington, B, 2018, p. 076). This provides key insight, and can discover pain points and possible intervention areas. The observation should be documented with notes, photos, audio or other.

Images

Documenting through images is often an important method during projects. This thesis includes many pictures as they often tell more than words do. Photos have been used to showcase existing solutions, and as tools during ideation.

Photos are taken by me if nothing else is stated.

Design thinking

Design thinking involves five stages through a process. These are **Empathize** which means to research the users' needs, **Define**, where you state the needs and problems. **Ideate** where you create ideas, from there you **Prototype** to create solutions and lastly **Test** the solutions. (Dam, 2022). Throughout the project I have taken these steps into consideration, even if I did not manage to fulfill every stage.

Origin of wayfinding

Humans have marked their surrounding objects long before signage was considered a thing. They did that to communicate information visually and became a shared language between the people who made it, and the ones that understood them. In fact, environmental graphic design can be considered one of the oldest professions. (Calori & Vanden-Eynden, 2015, p.2)

The earliest maps and markings were not so geographically correct (fig. 2), but they were used to visualize knowledge about a space. Since they

contained characteristics such as sea, mountains, landmarks and paths, which made it easier for humans to remember the spaces. Over the years they have gotten more accurate and are a tool for universal communication. (Designworkplan, n.d.-b).

To create environmental graphic design (EGD) the designer needs to take architecture, lighting and landscape into consideration. What we have learned from the old maps and cave carvings is to include landmarks and clear elements that can be universally understood in any language.



Fig 1 "Ancient map of the Mesopotamian world. Babylonian, about 700-500 BC." n.d. Courtesy of The British Museum. (<https://www.designworkplan.com/read/early-wayfinding-maps/>)



Fig 2 "A Roman Empire landmark map, an abstract map of Europe", n.d. (<https://www.designworkplan.com/read/early-wayfinding-maps/>)

Design anthropology

I chose to include anthropology and let Anna Kirah be my source of design anthropology in this project. This because she explains it in an inspirational, and relevant way. In 2021 she held a workshop at OsloMet, and I have since used her advices in projects. She is also one of the reasons I opened my eyes to service design.

During a podcast episode of The Human Show, Anna Kirah said she learned early on that “Anthropology is all about understanding the natives from their point of view, not our own.” (Spain, 2018). This kind of empathy and perspective are important to include in design projects. In public places there are in fact the natives that use the space daily, and the design should reflect on their way of moving and their basic needs.

When talking about her experience as a design anthropologist she explains that “My job has been to bring the voice of the customers into the product development cycle and beyond.” and encourages to “restrain from asking leading questions”

She teaches three techniques to design students.

1. Mirroring, which means to repeat the said statement and then be quiet. I remember she said that we should not be afraid of silence during interviews. By nature people want to fill that silence, and if the interviewer does not, the interviewee might continue talking and possibly provide the most important findings. These findings you might not have gotten if you talked or led the conversation in another direction.

2. Boomerang. Often when talking to others people can state “am I making sense? Do you understand what I mean?” And then your response back is “What do you think? What should I understand?”, this is

called boomeranging, since you are yet again showing you are interested in their answers.

3. Play stupid. By this she means to ask people to “help you understand”. Be curious and get them to explain what things mean to them, or to explain if you are uncertain about a statement they said. “We spend our whole lives assuming we understand the other person. And assuming makes an ass out of you and me, and how do you break the habit of assuming you understood? You question your assumptions.” (Spain, 2018).

All people should bring this set of advice into our relations with other people. Even if designers should “know best”, it is in fact the customer that provides the insights and needs.

“ If you’re thinking of the experience of the employees, ... and understanding it from their perspective, you have an ability to meet real needs, real problems, real challenges that people are facing, not the ones you impose upon them. And when you do that, you create value both for the organization that you work for, but also for the people you serve.

- (Anna Kirah, 2018)

Principles of persuasion

When designing for public spaces these principles can be useful to take into consideration as they reflect upon how people act and why (Cialdini, 2001). They can also be used as a behaviour tool to persuade and influence people to get the result you want.



Reciprocity

People repay in kind.

Application:

If the wayfinding/signs help people find their way, it can have a social effect where people treat it with respect and want to contribute by helping others.

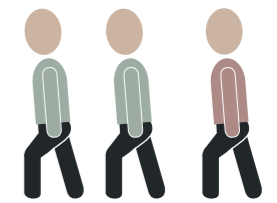


Liking

People like those who like them.

Application:

People tend to have a greater appreciation for something when they feel a personal connection with it.



Social proof

People follow the lead of similar others.

Application:

Wayfinding elements can be used by more if it attracts some, and others follow.



Consistency

People align with their clear commitments.

Application:

Consistency in signage design can help create a streamlined experience for users.

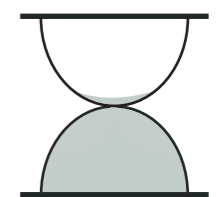


Authority

People defer to experts.

Application:

If signs and elements look official, people will more likely follow and trust them.



Scarcity

People want more of what they can have less of.

Application:

It can be said about signage as well, people want more, until it suddenly is too much.

Universal design

Universal design is an approach to design that seeks to create environments and products that can be used by as many people as possible, regardless of their age, ability, or other characteristics. When applied to shopping centers, universal design can help to ensure that everyone can access and enjoy the shopping experience.

Universal design is a term that designers should encounter through every project. They consist of seven principles that were created by a team of architects, product designers, engineers and environmental design researchers in 1997. The group was led by Ronald Mace.

These principles can be used as a guide and according to the Center for Universal Design in NCSU “may be applied to evaluate existing designs, guide the design process and educate both designers and consumers about the characteristics of more usable products and environments.” (National Disability Authority. N.D.)

Public and office buildings must be universally designed. Requirements for the universal design of buildings are given in § 12-1 of the regulation on technical requirements in construction

works (TEK17). A golden rule in universal design is that buildings and outdoor areas designed for people with disabilities also work well for everyone else, that can not always be said the other way around. (Direktoratet for byggkvalitet, n.d.).

Other guidelines that should be taken into consideration is WCAG. Which stands for Web Content Accessibility Guidelines and is a set of recommendations describing how to make digital content accessible (Digdir, n.d). From February 1st 2023, the WCAG 2.1 standard is part of the Norwegian law (uutilsynet, n.d). It is important for designers to have knowledge about these guidelines as they affect the way we choose colors and contrasts when designing for the public. Even though the rules are made for digital content, the same demands can be applied to physical signs. Higher contrasts

can help the content to be seen from a further distance.

Today we see a lot of visible elements that blind people and those with sight impairments have no or little use for. They might be the most difficult user group to design for. Many places they incorporate tactile guidelines on the floor, which leads to important functions such as toilets and exits. The way shopping centers are layed out it can sadly be difficult to lead the way to every shop or make every shopping experience as enjoyable for them,

Overall, universal design can help to create a shopping center that is welcoming, accessible, and enjoyable for everyone. By considering the needs of all users during the design process, shopping centers can create a space that is truly inclusive and accommodating to all.

“ Universal Design is the design and composition of an environment so that it can be accessed, understood and used to the greatest extent possible by all people, regardless of their age, size or disability.

- (Disability Act, 2005)

7 wayfinding rules

These seven rules are tried-and-tested rules to follow, which are considered 'best practice' for wayfinding according to PAM. (PAM, 2017).

I found them to be easily understandable and informative. That is why these rules worked as guidelines for ideation in my project.



Rule #1
A picture is worth 1000 words

"Symbols and icons are incredibly effective in crossing language barriers. 'Washroom', 'Lavatories' and 'WC' can all be understood with one universally understood icon – just one of countless examples where pictograms communicate more effectively than written words."



Rule #2
Less is more

"Too much information can be overwhelming. Be concise, particularly in vehicular scenarios where drivers and pedestrians need to make decisions quickly. Too many signs in the same location also affect people's ability to absorb information effectively."



Rule #3
Stronger in contrast

"Contrast improves the legibility of signs – it's no accident that so many signs combine dark and light colours. Choosing the right typeface also makes the difference between a good or bad sign. When using overly light-weighted typefaces, the text will disappear into the background, especially when viewed at a distance. Medium or regular weights are best."



Rule #4
Heads up, not North up

"Many of the most effective wayfinding systems incorporate maps as a key element. Bear in mind that people are now more accustomed to the 'heads up' view rather than the conventional 'North up' view of maps due to the recent introduction of vehicular satellite navigation. Highlighting nearby landmarks will also help people better understand their surroundings."



Rule #5
Signs are high-maintenance

"Maintaining signs is very important. Signs can be vandalised, obscured, or degrade over time – you'll need to maintain them to ensure they remain clearly visible and legible."



Rule #6
Context is everything

"Signage should complement and enhance the surrounding environment, so choose colors and shapes that stand out – yet don't clash – with nearby buildings and features. It's also important to reduce visual clutter by ensuring clear sight lines to both the sign and destination."



Rule #7
Be consistent

"Consistency is essential. Make sure you apply the same terms and spellings across the entire signage system to avoid confusion. It's equally important to strike a balance between 'professional' terminology and people's preference for simple, easy to understand language."

Pictogram

The usage of pictograms are highly essential when working with signage and wayfinding.

The main difference between pictograms and it's more known big brother icon are the simplicity and intuitive understanding the pictograms provide. Icons contain more details, and allows a broader artistic freedom. (Designworkplan, n.d.-b)

Picture the old Oslo municipality logo, and then the revised edition (Fig. 3) Even though the logo is not directly an icon or pictogram I felt it represent the contradictions, and serves as a relatable example. The new logo is stripped of all unnecessary details and left with just enough information that you can understand what it is supposed to represent.

When travelling around the world to places that use a different language than you can understand, the usage of pictograms really shines through. If used correctly it will provide an universal language.

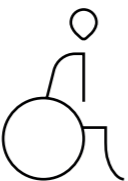
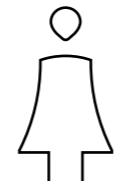
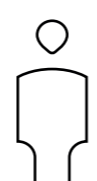
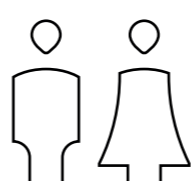

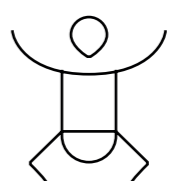
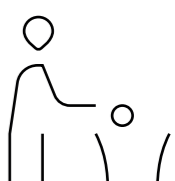
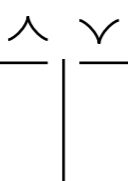
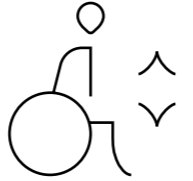
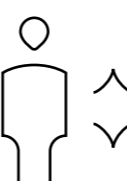



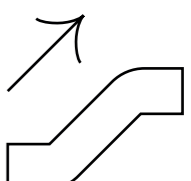


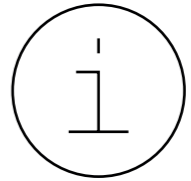
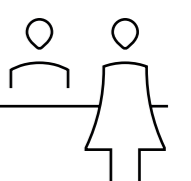


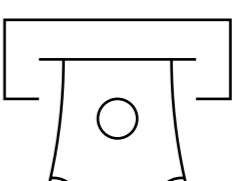
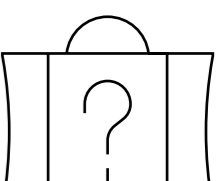

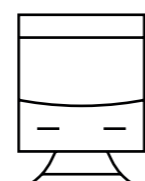
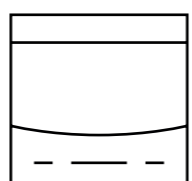
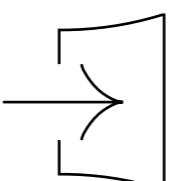
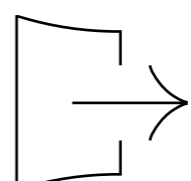
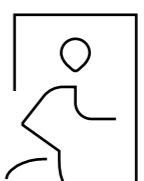
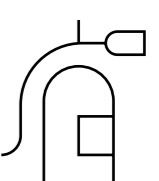
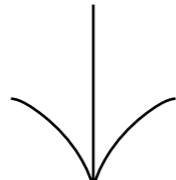
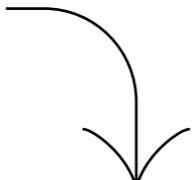




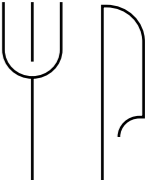
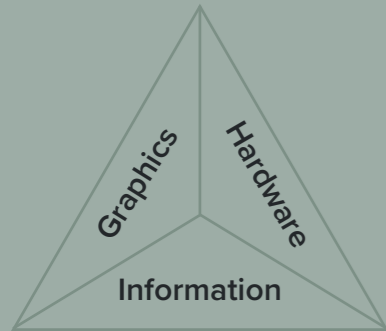
 Accessible restroom Handicap	 Women restroom Woman	 Mens restroom Man	 Unisex restroom Toilet	 WC Toilet	 Nursery Changing room	 Trash can Garbage				
 Elevator Elevator	 Elevator accessible Handicap elevator	 Elevator Elevator	 Escalator Escalator	 Escalator down Escalator down	 Escalator up Escalator up	 Escalator arrow Escalator up				
 Stroller parking Stroller	 No el-scooters No riding scooters	<div style="border: 1px solid black; padding: 10px;"> <h2 style="text-align: center;">Modern pictograms</h2> <p>Figma recently designed a set of 360 wayfinding icons. With that, they wanted to break the 70-year old design tradition.</p> <p>“Inspired by modern brutalist architecture and natural forms, our Guidance Icon Set blends beauty and function.”</p> <p>This set are examples of only showing the bare minimum, which leaves us with a cleaner and more modern look. It seems to be the direction we are heading.</p> <p>The question is - how intuitive are they really?</p> <p>I conducted a small user test to see. Figma’s description is in bold, and below is the participants’ thoughts. Most are the same, but some differ.</p> </div>				 Information desk Information	 Information desk Reception			
 Parking Parking	 No parking No parking					 ATM ATM	 Lost and found Lost and found			
 Taxi Taxi	 Train Train					 Bus Bus	 Entry Entry	 Exit Entrance	 Emergency exit Emergency exit	 Fire extinguisher Fire extinguisher
 Arrow down Down	 Angled arrow Around the corner					 Tilted arrow - left Down left	 Tilted arrow - right Down right	 Shop Shopping	 Coffee shop Café	 Restaurant Eating/restaurant



Fig 3 "Oslo Municipality old, and new logo", 2023. (<https://designmanual.oslo.kommune.no/>)

Materiality

In the signage and EGD-field there are many types of materials and tools that are used.



The signage pyramid was created by Chris Calori and shows the three components that should be included in making signs. First it is the information that should be displayed, then there are the two-dimensional graphic elements such as typography, pictograms and layout. Lastly we have the hardware which means what kind of size, style, finish and material it is made of. The information content system is the foundation, the planning that needs to be substantially in place before design of the graphic and hardware systems commences. (Calori & Vanden-Eynden, 2015, p.80-84).

To the right are a few examples of materials used for signage. Others can be paint, LED-lights or cardboard. Often they are combined as well to create a functioning solution. The choice of material will depend on the intended use, budget, and design considerations.

Screens

Screens and digital solutions are becoming more frequently used materials. This due to their high accessibility and adaptability. As this can be expensive, not everyone can, nor will choose this alternative.

Metal

Metal signs are durable and long-lasting, making them a popular choice for outdoor signage. Common metals used for signage include aluminum, steel, and brass. Metal signs can be made through a variety of processes such as engraving, etching, or printing.

Vinyl

Vinyl is a flexible material that can be used for a range of signage types, such as banners, decals, and vehicle wraps. It is often used for temporary or promotional signage and can be easily removed or replaced. Vinyl foil can as well be used to cover acrylic with color.

Acrylic

Acrylic is a clear plastic material that can be used to create a clean and modern look for signage. It is commonly used for indoor signs, such as directional signs, and can be cut to shape and printed on.

Wood

Wood signs can provide a rustic or natural look and are often used for directional signs in parks or outdoor environments. Wood signs can be carved or engraved, and can be treated to withstand weather conditions.

Glass

Glass signs are often used for high-end or corporate signage, and provide a sleek and elegant look. Glass signs can be etched, sandblasted, or printed on.

Fabric

Fabric signage is a lightweight and portable option that can be used for trade shows, events, or in-store displays. Fabric signs can be printed on and easily transported.

PVC

PVC (polyvinyl chloride) is a lightweight, cost-effective material that is often used for indoor signage. It is easy to print on and can be cut to shape, making it a versatile option for a range of sign types.

“

We adopt a “beginner’s mind,” with the intent to remain open and curious, to assume nothing, and to see ambiguity as an opportunity.

- (ideo.com. n.d.)

Part 3

Case study: Jessheim shopping center

Hypotheses

“A hypothesis is a statement predicting how variables relate to each other and that can be tested through research” (Leavy, 2017, p.69). These hypotheses emerged based on past experience, assumptions and early conversation with the center manager. Some became answered, while others did not.



People want to find their way as fast as possible, especially when in a hurry.



Centers can not have signs leading to every store.



Centers want to provide information, but they also want people to stay as long as possible and spend more money.



People look at signs as a tools/ guidelines, but do not care as much about the aesthetics.



Centers do not want the building filled with signs, that would likely overwhelm the customer as well.



People often find it difficult to locate shops at shopping centers.



Bathrooms are important to locate when entering a new public place.



Stepping out of the elevator or into a building many people experience loss of direction.



History

Jessheim shopping center opened in 1968 and is today the biggest center in upper Romerike. The center is mainly owned by Harald Kværner and partly by Olav Thon.

The center has been combined and expanded over the years and it now consists of three parts. (Jessheimby, n.d.) Since many people still refer to **Fakkelt**/old-part, **HK**/the new-part and **Skovly** when giving directions or talking about the center it is relevant to include the background.

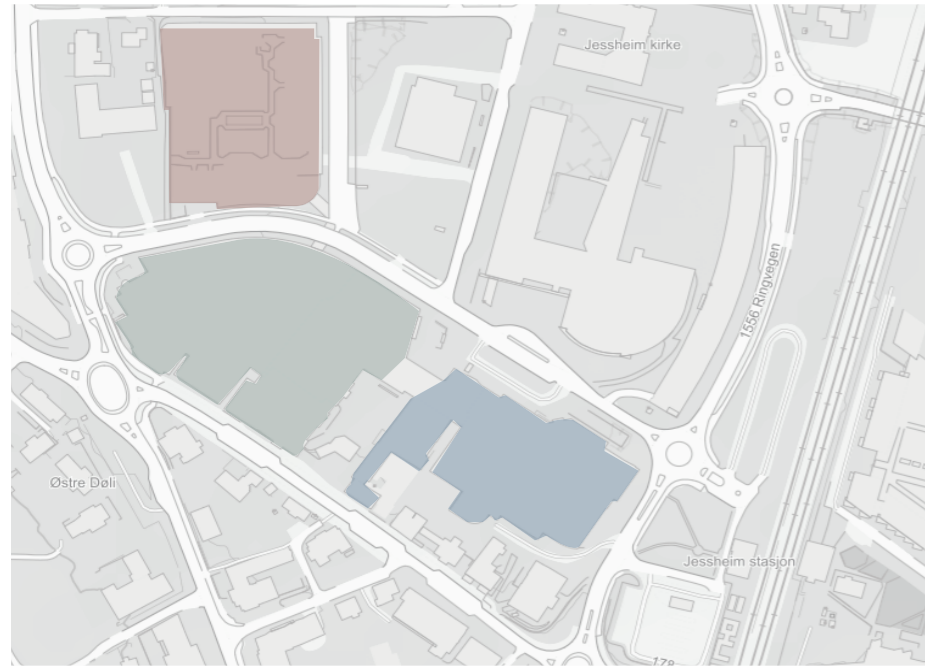
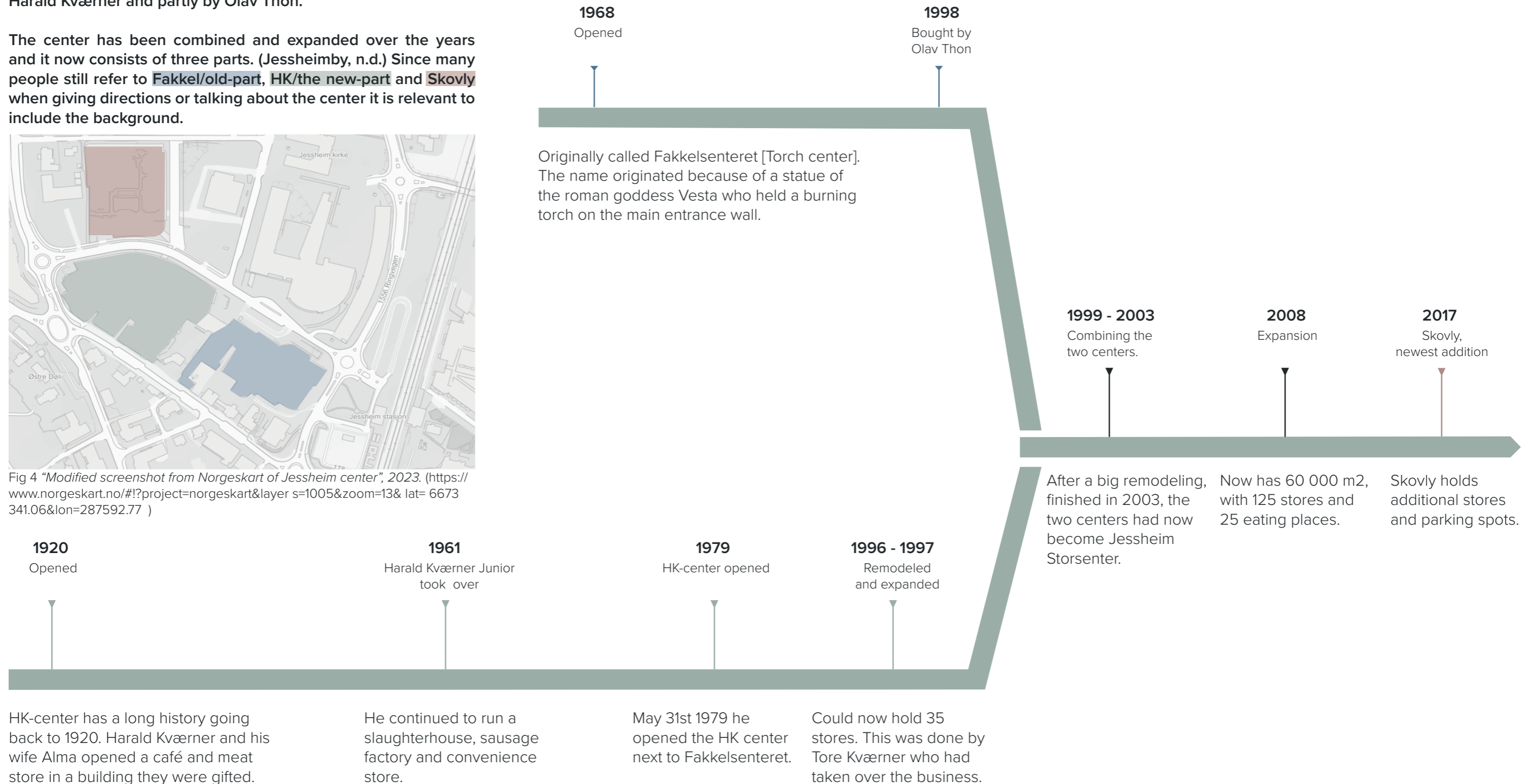


Fig 4 "Modified screenshot from Norgeskart of Jessheim center", 2023. (<https://www.norgeskart.no/#!?project=norgeskart&layer=s=1005&zoom=13&lat=6673341.06&lon=287592.77>)



Stakeholders

Wayfinding design should focus on the visitors, the people working there and other stakeholders.

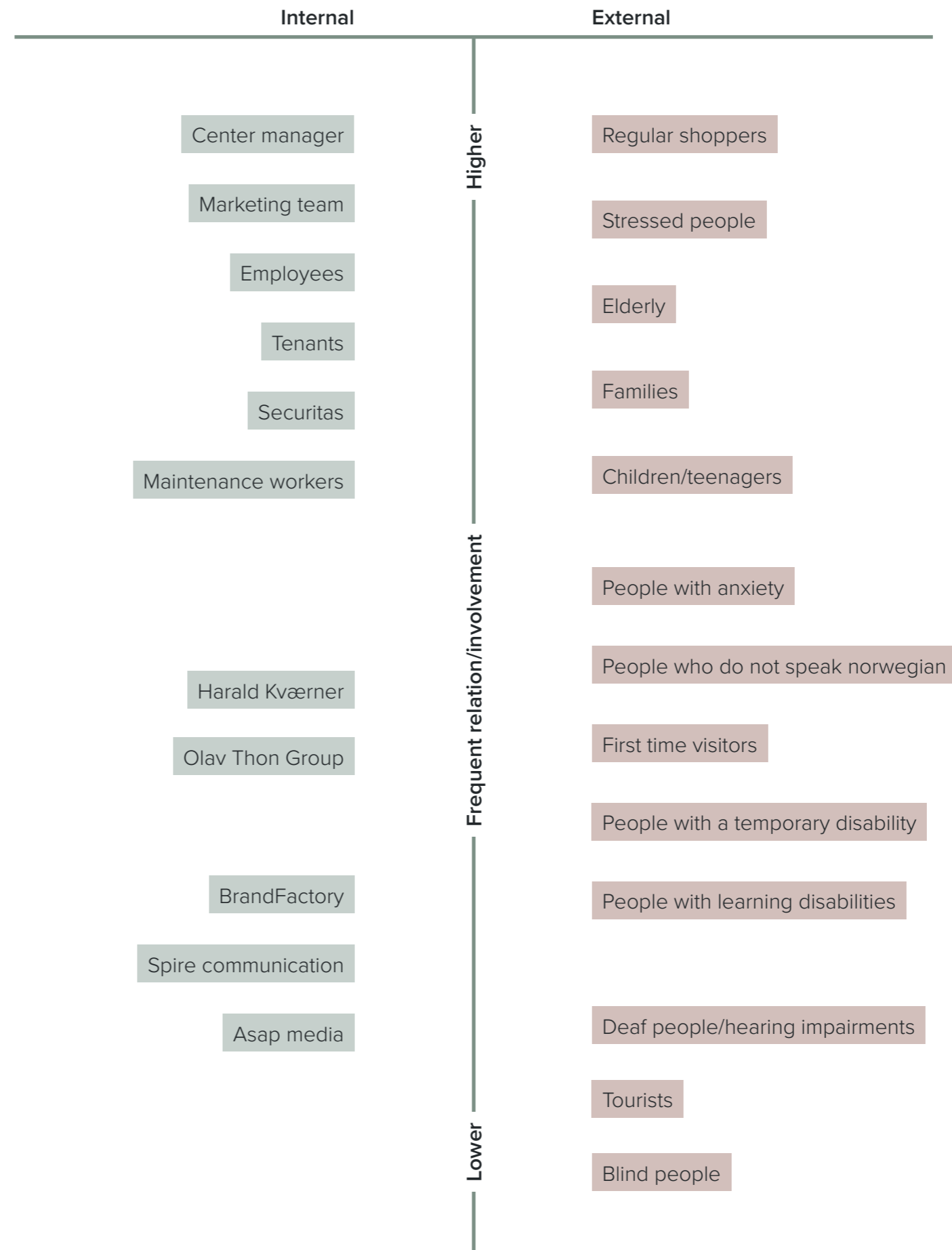
Shopping centers attract people with different disabilities, as well as everyday visitors. Even people who come to the mall often, might only use one floor or go to the same few stores, and are not actually familiar with the rest.

Signs only help a number of the populations, and under stressful situations our cognitive abilities get affected and people cannot take them all in. Our state of mind constantly changes as well.

It is not always possible or realistic that every solution will work for everybody, but it is important to be aware of the different users when designing a holistic solution.

To the right is a matrix of different stakeholders and visitors.

The green represent those who take part in the theatre that is a service. (Miller & Flowers, 2016). That include front stage that the customers meet, back stage which are the support processes. Behind-the-scenes which mean rules and regulations are not included here. The pink represents the audience, meaning the visitors.








Context of Experience

Context of Experience is a psychology-based design tool created in 2011 by Tore Gulden and Cathrine Moestue. (Gulden & Moestue, 2011).

The tool helps viewing journey's from before use, through and after. "One promising strategy to extend the life time of a product is to increase a person's feeling of attachment towards a product throughout the whole period of an ownership." This theory can be put towards materialistic products, including signs, but also services such as shopping centers.

COE can be adapted and used in many different ways. To the right I have chosen to use it for mapping out touchpoints, channels and my statements towards how wayfinding or priming can be used regarding a shopping center. This is based on both hypotheses and what my preliminary research has taught me.

BEFORE	DURING			AFTER
 <p>Pre-pop Priming</p>	 <p>Point of purchase Arrival</p>	 <p>Use Use of service</p>	 <p>Late-use Departure</p>	 <p>Re-use Return</p>
<p>Statements</p> <ul style="list-style-type: none"> • Reputation, location or availability can make new people choose your option. • Choice of transport depend on closeness to public transport and parking - Jessheim have both. <p>Touchpoints</p> <ul style="list-style-type: none"> • Application notification • Website content • Advertisement • Location, people passing <p>Channels</p> <ul style="list-style-type: none"> • Application • Website • Google • GPS 	<p>Statements</p> <ul style="list-style-type: none"> • Floor signs, store overview and wayfinding screens should be available soon after arrival. <p>Touchpoints</p> <ul style="list-style-type: none"> • Staff <p>Channels</p> <ul style="list-style-type: none"> • Signs • Wayfinding screen 	<p>Statements</p> <ul style="list-style-type: none"> • It is important to sign to the places people need, without creating a jungle of signs. <p>Touchpoints</p> <ul style="list-style-type: none"> • Information desk • Store employees • General employees • Security <p>Channels</p> <ul style="list-style-type: none"> • Signs • Webpage • Wayfinding screen • Paper brochure • Wayfinding on private phone • Store overview poster • Speakersystem/message 	<p>Statements</p> <ul style="list-style-type: none"> • It should be easy to find your way back to the correct parking space, and/or entrance. <p>Touchpoints</p> <ul style="list-style-type: none"> • Store employees if lost <p>Channels</p> <ul style="list-style-type: none"> • Signs 	<p>Statements</p> <ul style="list-style-type: none"> • Good experience can bring people back. • People return because of needs. • Closeness to location make people choose you over competition. <p>Touchpoints</p> <ul style="list-style-type: none"> • Application notification • Website content • Advertisement • Location, people passing <p>Channels</p> <ul style="list-style-type: none"> • Application • Website • Google • GPS

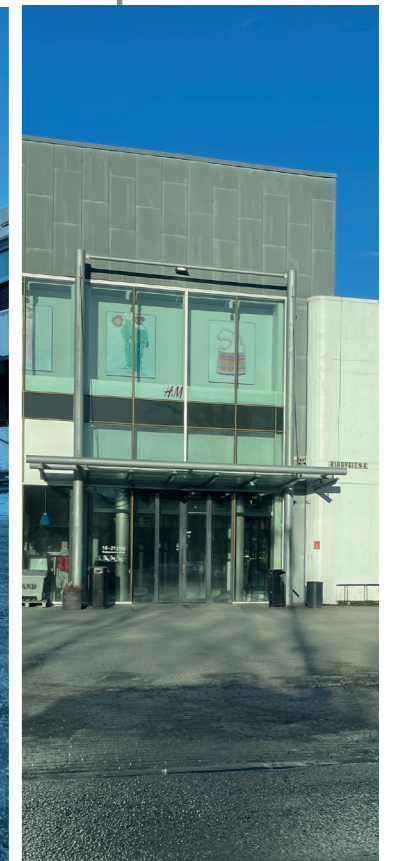
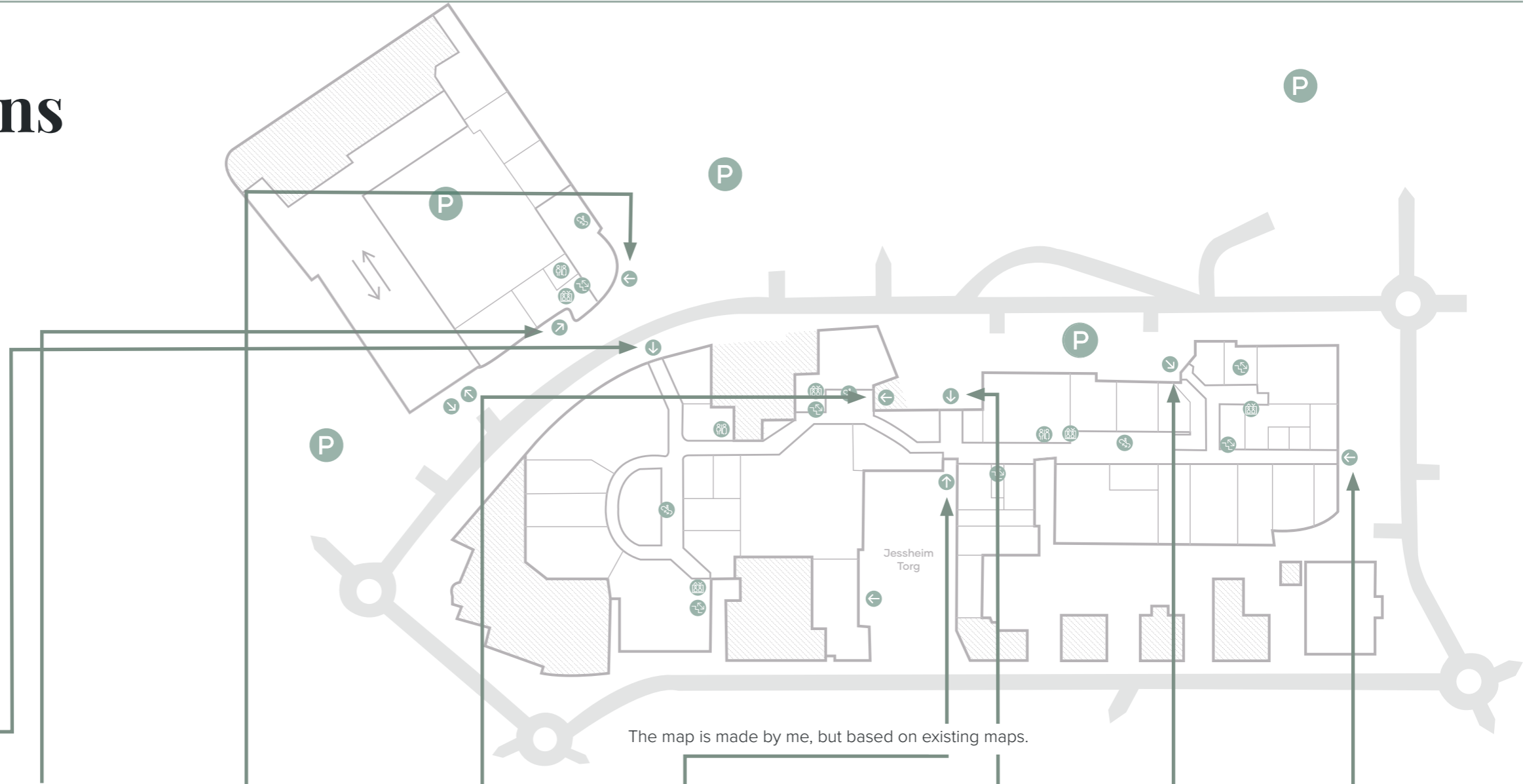
Site observations

Entrances ground floor

To get an overview of the shopping center's layout and attributes, I visually documented all the entrances.

As you can see on these pictures, there are no "entrance" signs. The interesting part about humans is our skill of using our past experiences and intuition. These entrances all include a glass door/glass sliding door which allow people to look inside and see. They have either a clear path without obstructions or stairs guiding the eyes towards the doors. Since this is common, people can usually know that these are entrances.

(Overview of entrances on the first floor are in the appendix.)



Site observations

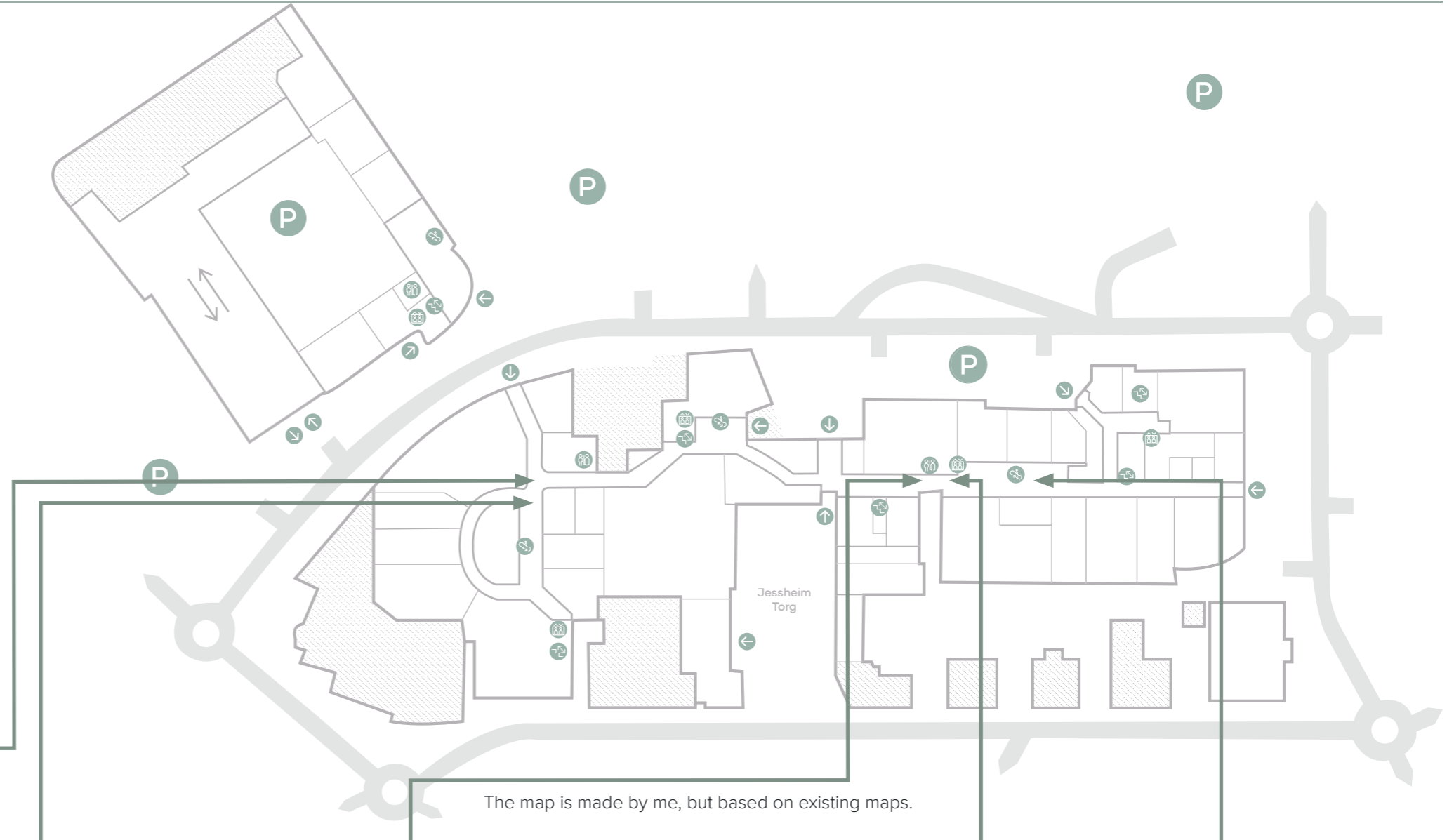
Signage ground floor

Spending time at the center during the span of the project I documented what kind of wayfinding elements they have incorporated, in addition to the entrances. These are the majority of signs at the center. I have however not documented every repeating signs or emergency exit signs.

Some floors have many, others few. The pictures shows the type, and the map points to their placement. Instead of including overview of all the floors I have picked out the ground and first floor.

Two of three wayfinding stations are located on the ground floor, while the last is on the first floor.

Center manager Jon Bakke said regarding signage "The property owner is ultimately responsible for the procurement of signage. In many cases, it is ordered in collaboration with the architect during the building process. In other cases, we see that additional signage is needed, and then we often order from local suppliers. In many cases, from "asap-media." (Personal communication).

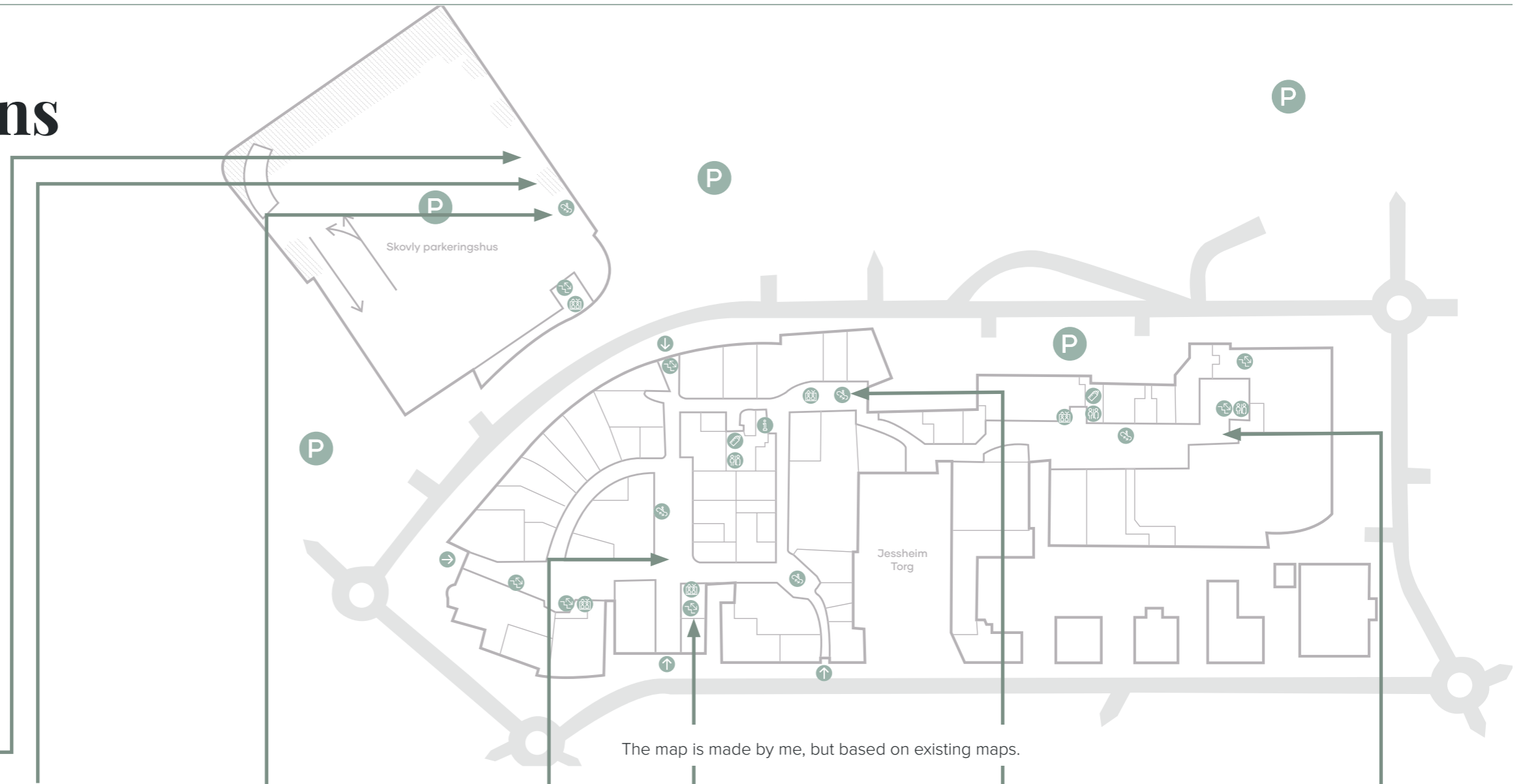


Site observations

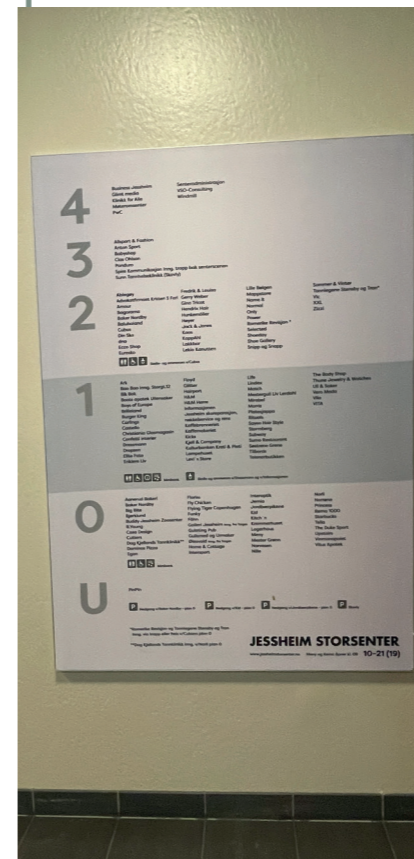
Signage first floor

Jessheim has many good solutions, although seen on the pictures - there is not one cohesive style on all the signs. It however differs in style, material and colors.

Going from left to right they have elements made of paint/foil, metal, foil, digital screen, textile, cardboard and printed paper in an aluminum and glass display case.



The map is made by me, but based on existing maps.



Site observations

Findings

During this project I have spent a lot of time observing the building and peoples movements in it. Below I have gathered a few key findings that consist of both facts and assumptions.

Stigma using screens?

Watching people approaching and using the wayfinding-screens something stood out.

Many people approached the screen, looked around and did not use the screen after all. They could have spotted the store they were looking for or decided they wanted to find it themselves, but I could not help to wonder - is there some stigma connected to using the screens?

Direction on conveyor belt

Looking at people approaching the conveyor belt I noticed that many of them walked purposefully close to it before they realized it went the wrong direction. Then they had to go around.

That reminded me that I do the same, and it takes a long time for me to remember which direction is the right.

Non-cohesive signage

Observations show different types of signs all around the center.

Some follow a black and white theme, others are in gray metal, textile, glass, paper or paint/foil all with individual expression.

It seems like the result of covering needs at different times and from different manufacturers, but not looking at, or following a holistic identity.



Fig 5 "Wayfinder", 2021, by BrandFactory. (<https://www.facebook.com/brandfactorynorge>)

Digital channels

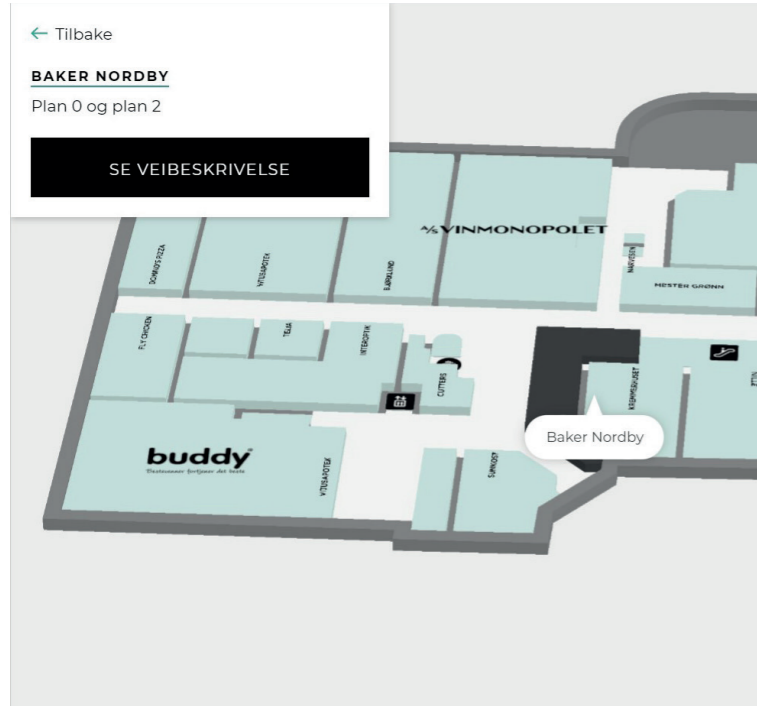


Fig 6 (2023). "Wayfinding map", 2023. (Jessheimstorsenter.no)

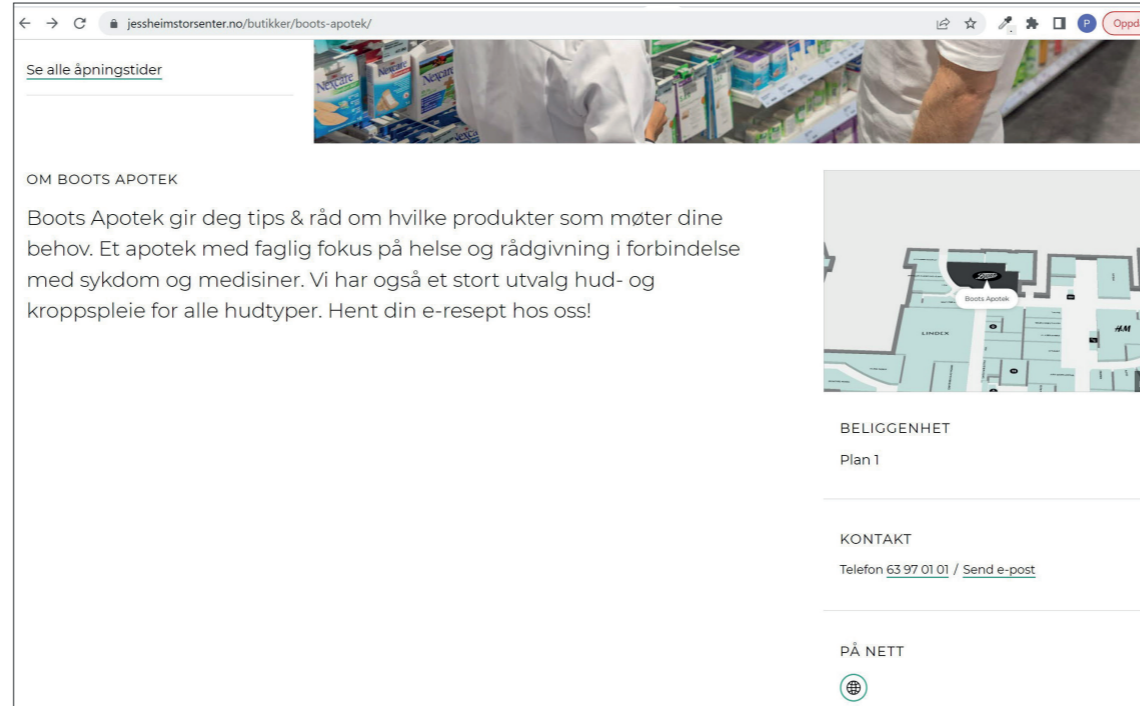


Fig 7 (2023). "Homepage when chosen store", 2023. (Jessheimstorsenter.no)

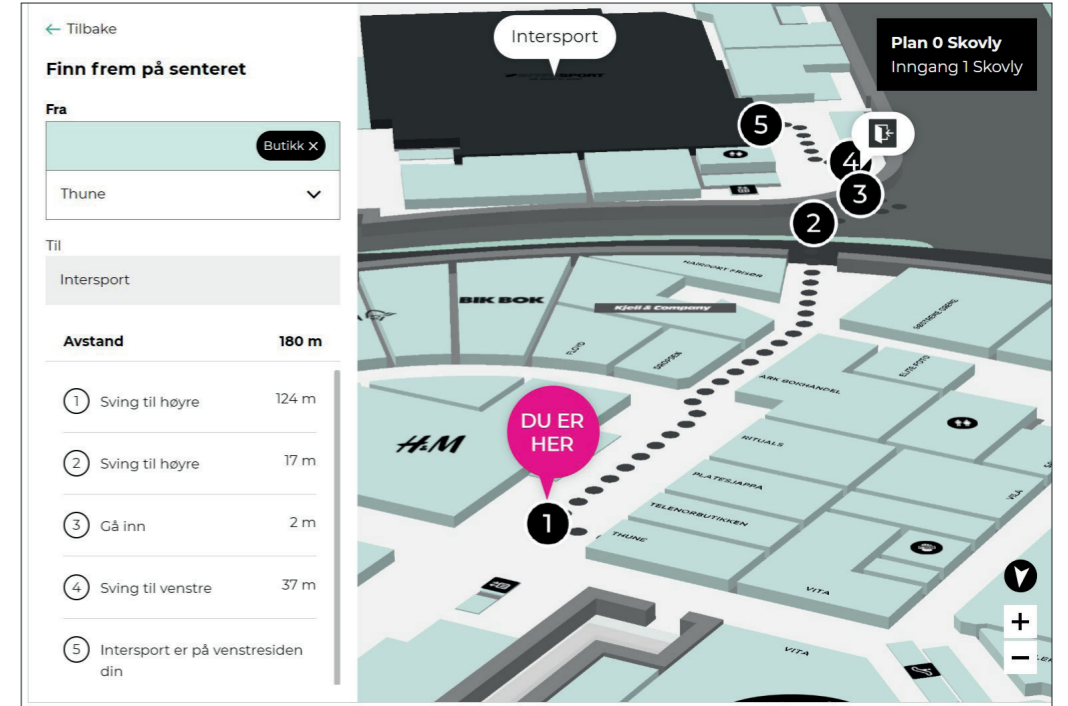


Fig 8 "Wayfinding map, with directions", 2023. (Jessheimstorsenter.no)

Webpage and screens

Wayfinding map designed by BrandFactory

This map can be found on the wayfinding-screens at the center and on their homepage

Webpage design is the same as other Thon-centers.

Pros

- Option to choose fastest route.
- Option to choose a wheelchair and stroller accessible route.
- Same design as other Thon centers, familiarity for experienced costumers.
- QR-code for bringing directions with you.
- Momentarily updated when changes occurs.
- Marketing team can change and/or remove store names.

Cons

- Only in norwegian.
- Have discovered unmarked stairs on recommended accessible route. See fig 7, stairs located at 2
- Could the technology/system be confusing for some people?
- "Finn fram" [find you way] where the map is, are located at the bottom of the page.
- Expensive solution.
- Only BrandFactory can make bigger changes like moving walls etc.

Digital channels

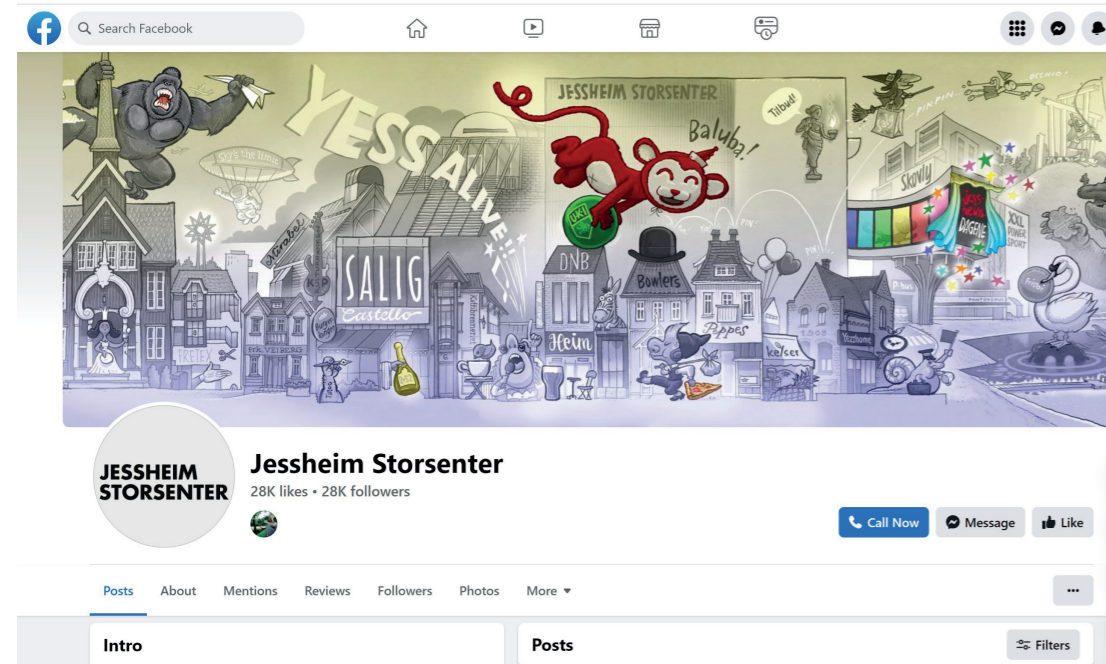


Fig 9 “Jessheim storsenter page”, 2023. (<https://www.facebook.com/jessheimstorsenter>)

Facebook page

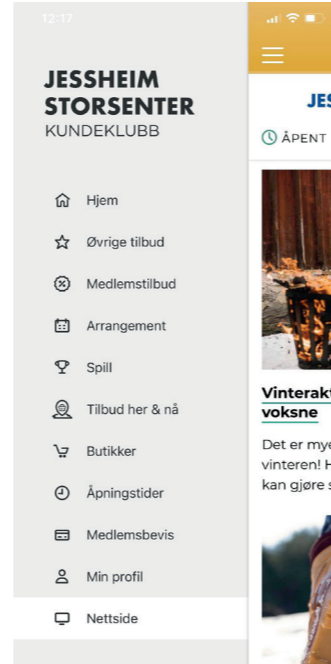


Fig 10 “Customer rewards club application”, 2023.

Application

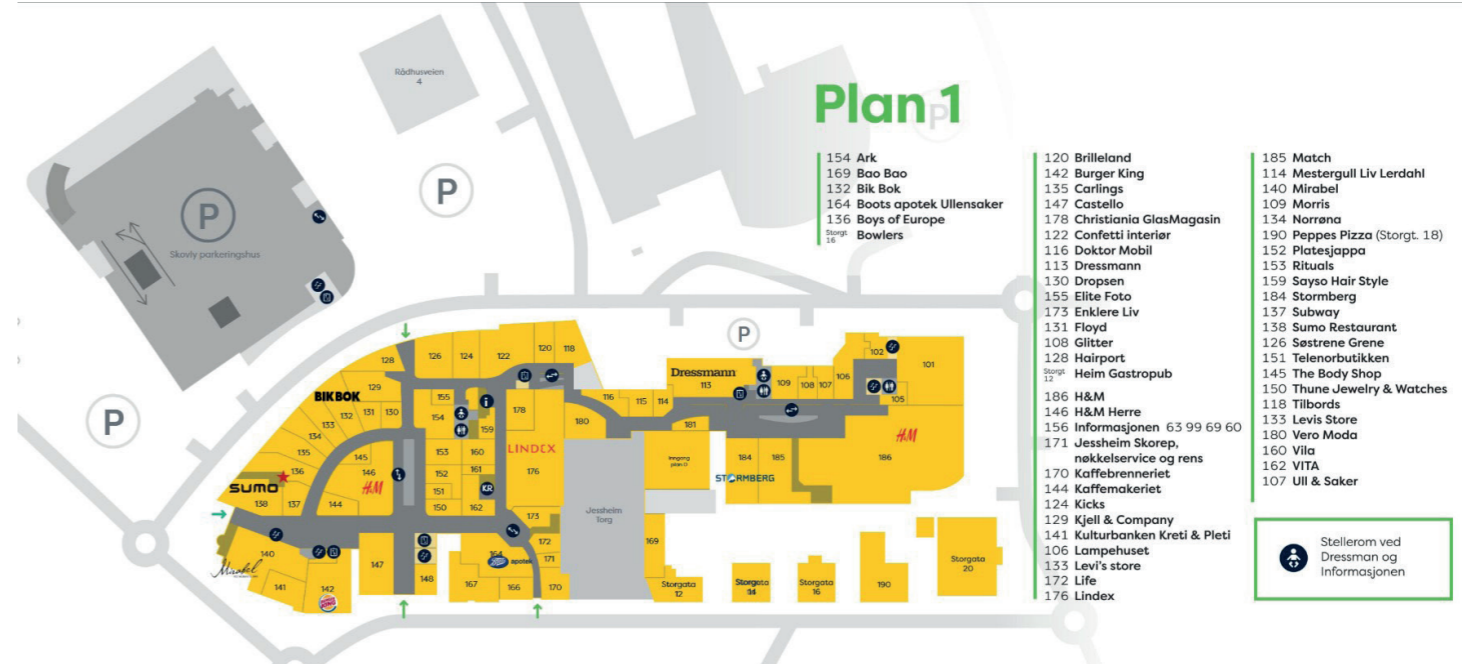


Fig 11 “Jessheim center Infoguide”, 2023, by Issuu. (https://issuu.com/jessheimstorsenter/docs/infoguide_april_2023)

Infoguide - brochure

Official facebook page for Jessheim Storsenter.
Updated and maintained by marketing coordinator.

Official application which Include costumer reward club,
Shows sales, promotional offers, contact information for stores.
Jessheim have their own application with personal style, while the rest of Thon-centers have the same application.

Designed by Spire Communication.
Prints 3000 copies every time, and simple changes are made by the centers marketing coordinator.

Pros	Cons
<ul style="list-style-type: none"> • Easy way to reach people. • People of most ages are familiar with Facebook. 	<ul style="list-style-type: none"> • Posts only in norwegian. • No internal map or directions, except names of places and shops.

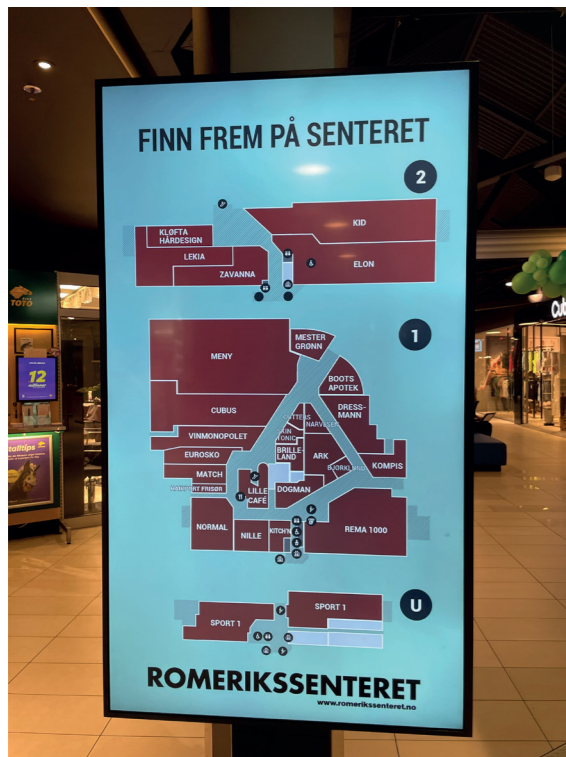
Pros	Cons
<ul style="list-style-type: none"> • High availability. • Include link to the digital floorplan (see fig. 10). • Available for both Apple App-store and Google Play. 	<ul style="list-style-type: none"> • Only in norwegian. • No integrated map. • Does not visually match other wayfinding elements from Olav Thon Group.

Pros	Cons
<ul style="list-style-type: none"> • Physical map with holistic overview of every floor that can be brought with you. • Can be found both online and at the center. • Most people are familiar with these types of maps. 	<ul style="list-style-type: none"> • Only in norwegian. • Outdated and does not visually match other solutions. • Not sustainable material • Changes can happen a while before the map is updated.

Comparison

Strømmen and Romerikssenteret are examples of centers owned solely by Olav Thon Group. They most likely have guidelines and regulations they need to oblige which Jessheim does not. Here are a few representations of their solutions.

Romerikssenteret

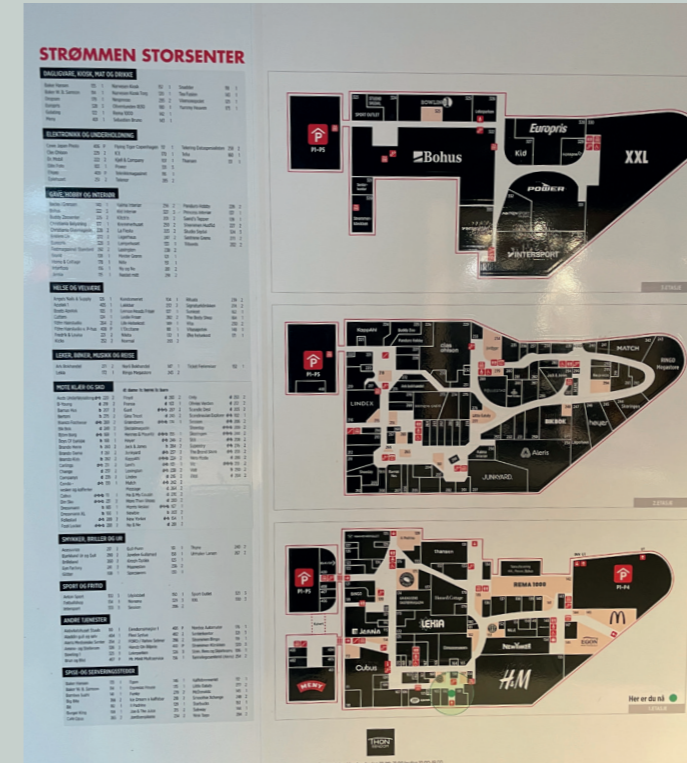


The digital map is displayed on a screen, which makes changing easier. It is in a loop amongst different commercial posters. The screen provokes attention since the screen continuously changes, but it is a challenge to read the map before it changes. Will people then wait for it to return, or walk away?



The signs have a cohesive style and will be repeated with different icons throughout. The arrow is however in a different stroke weight than the rest of the pictograms, as well as the arrows at Strømmen. Unsure of the reason.

Strømmen



Physical store overview and map of every floor. Matches the overall color and style of other Olav Thon Group centers, as well as the signs provided by BrandFactory.



Visible and lit up sign indicating the entrance. By keeping the same appearance for the signs, it can help the customer's awareness of the rest of the signs found at the center.



This sign consists of a combination of intuitive pictograms and a word. Customer service is not up an escalator, but it can seem that way here, and therefore I think it is misguided.



Placed next to the wayfinding screen, and effectively provides fast knowledge (Kahneman, 2012), for passing visitors.

Existing projects

Here is a selection of three existing projects which I find both inspiring and important. Two are places which have to accommodate and guide many new people daily, and while Plus factory has visitors, it is mainly repeating users.



Oslo Lufthavn

Airports are dependent on having good wayfinding to be able to guide travelers from home, through the experience and until they leave. Often people are stressed and in a hurry, so signage needs to be visible and intuitive. While some places want their signage to only be noticed if the need arises, airports are seemingly thinking “rather one too many, than on to few.” I once flew from Oslo to Sola and back during this project and observed that they use the same signs in both places, which strengthens the feeling of one holistic experience.



Fig 12 “Plus factory”, n.d. (<https://www.fokusraad.no/prosjekter/vestre-pluss>)

Plus factory

I was introduced to wayfinding when I, in 2021, attended a presentation held by Jan Christian Vestre, the previous director of Vestre. He showed their plans for the new PLUS factory which opened in 2022. Even though their well-executed solution with colored zones most likely will be too much anywhere else, it works for that space.

They have assigned different colors to each part of the production. Lines on the floor guide people to the area they are looking for, and it is as well easy to see it when approaching since most of the details are in that specific color. This can highly be addressed as intuitive wayfinding.



Fig 13 “Wayfinding at hospital”, n.d. (<http://studio-sc.com/seattle-childrens-hospital.php>)

Seattle Children’s Hospital

The Seattle Children’s Hospitals wayfinding and graphics program show how zones can be inspired by local elements and result in original and positive surroundings. They have used the ocean, mountains, rivers and forest as inspiration sources which all can be found surrounding Seattle.

It was designed by Studio-SC who said “Our challenge was to balance signage clarity and brand warmth within a complex system that unified old and new parts of the hospital experience.”

“

Everybody can make a sign, but it is crucial to understand why it is there, and where it should be placed to have most impact.

- Kristin Eide

Part 4

Research and insights

Interview Marketing coordinator

Who

Trine Hagelia

Position

Marketing coordinator at Jessheim center

Duration

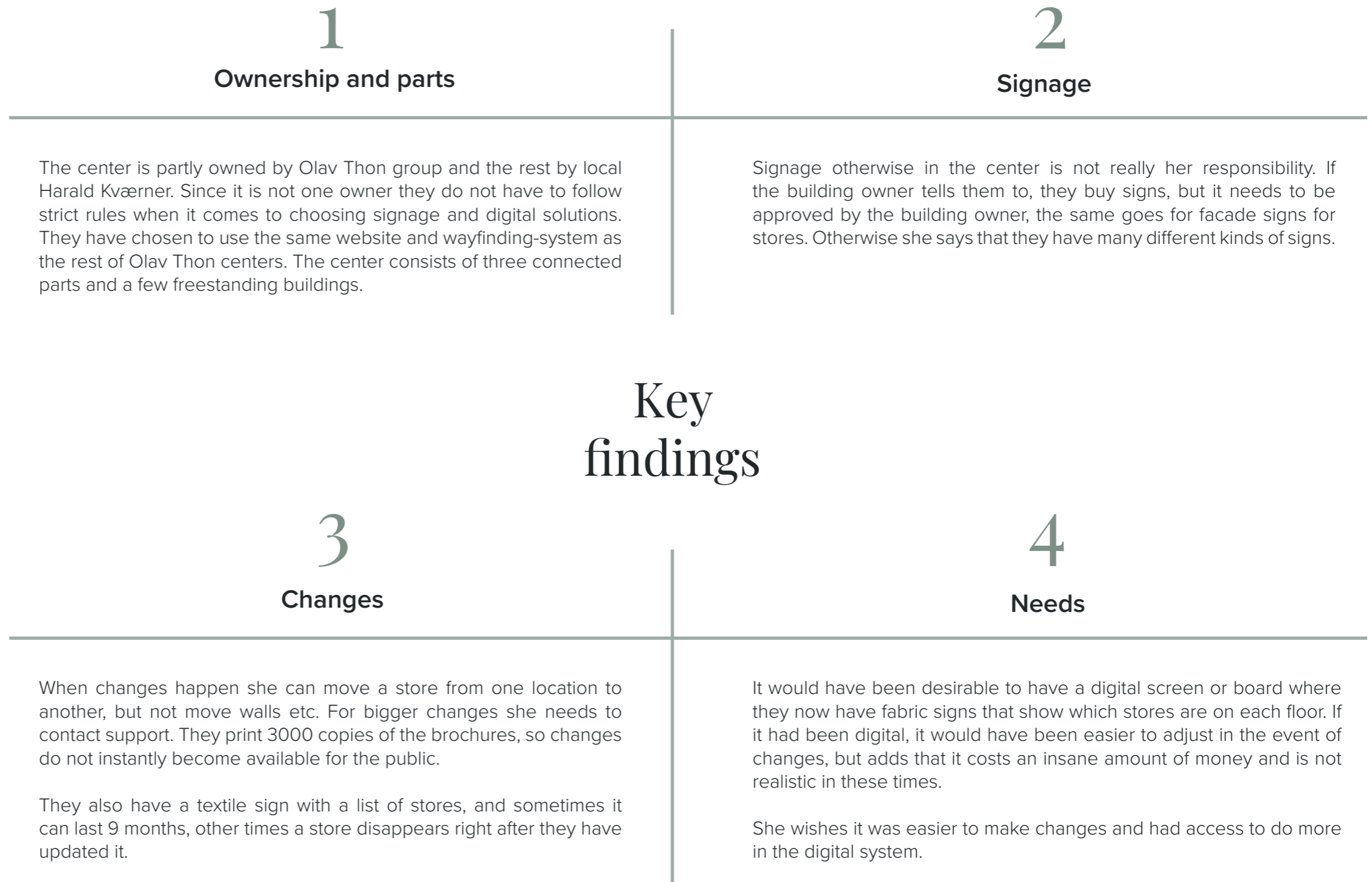
Since 2003

Main tasks:

Web page and Facebook page. The digital wayfinding from BrandFactory goes under this. The marketing team consists of three employees and the center manager. Even though they have separate focus areas they help each other out if necessary.

“ Many people think it is difficult to find their way around here.

Sadly there is not much we can do about it.. It is not like we can rebuild the center to make it better.



Walkthrough at Brand Factory

With who
Kristin Eide

Position
Head of Digital Signage/
Project management at
BrandFactory

Duration
Worked with wayfinding
for 30 years.

BrandFactory
Is a swedish owned
company, and
BrandFactory have
many big clients in both
countries. They have
provided solutions for
Olav Thon group centers.

“Wayfinding is about providing security and information in the right place at the right time.”

1

Universal design

There are rules and regulations they need to consider. Equality of opportunity and discrimination law, universal design and TEK10 are important factors. At both shopping centers and office buildings there are many glass surfaces, and for people not to crash into the glass they need to be marked. As a minimum it should be markings at 90 cm and 150 cm.

Contrasts are important, if someone cannot read something from 20 cm away or more, something should be changed. The wayfinding station is built so that it is wheelchair accessible and that people with vision impairments can see. No sound, but centers are not obliged to have sound.

2

Digital and analog

She talked about how the customer journey often starts from home. If someone is going to a center for a specific store, they often search online before. They look for location and determine parking and entrance from that. This allows them to come and leave fast.

“When they arrive at the entrance, you must reinforce and confirm where they are going and the way to confirm is to have either analog or digital information. Today, it is natural to have digital information because things change so quickly.”

Branding is fast wayfinding, recognizing different shops' logos and names will help people find their way.

3

Safety

“It's about security, the feeling of being informed and being safe and looked after. And then you spend money. We humans are quite simple, and that is the common thread. We provide this information continuously along the way. I keep people safe, informed and looked after and give good information and at the same time help them to take them further in the experience.

And after many hours they go home after having done a lot of shopping. And then we will be left with a feeling that “I was well taken care of. Yes, I will come back.” And then you start your journey all over again. Now you may know where to go next time, but know that you can use the wayfinding system in case you don't.”

4

Materials

Their signs are mainly made of a combination of materials. Some with lights, others not. The most used are aluminum, with acrylic, either colored or with foil.

The style depends on if the client wants everything to light up, or only the front, back or sides. Including perforated foil means that it can look black when the lights are off, but white when lit. The foil is either translucent or opaque.

People want the sign to last as long as possible and cost as little as possible. They are made in an environmentally friendly way which can last up to 10 years, and with LED light which has a long lifespan. The outdoor signs run on photocell sensors and the indoor ones have timers.

5

Tips

In new projects she spent days walking around in the center, observing and looking after places where people stopped and looked confused.

Almost everybody understands pictograms, and using that you do not have to think about language.

They try to have a maximum of three clicks on the map.


It is rare that an entire center gets updated at the same time, and if not one firm or person owns the wayfinding, then it is difficult to obtain the holistic visual identity throughout the service.

Everybody can make a sign, but it is crucial to understand why it is there, and where it should be placed to have the most impact.





Question round with staff

Are people asking you for directions?


 Not daily, but a few each week


 Yes, often


 Yes, this shop is located in a place where many people ask. A kind of crossroad at the center.


 Those who are not familiar always ask. It is difficult to find out where everything is.

Do most of them come in purposefully, or ask during the shopping experience?


 Both can occur


 Many people purposefully come in to ask for directions. Many people are confused that floor 0 is floor 0 and not first floor.


 Often people passing by that enter and ask.

 Many come in just to ask, or stand uncertainly on the outside for a while before calling into the shop asking.


What do most people ask about?


 Vinmonopolet [liquor store] - the closer to the weekend the more they ask about that. Many questions about pharmacies as well.


 Very varied, in the period after a shop has moved, many people ask, but otherwise no one stands out.

 Hennes & Mauritz's womans department, wondering if they are going in the right direction.


 Restaurants and cafes mostly.


 Many don't remember where they parked.


 Many ask after similar stores as ours.


 Many do not realize that Body Shop next door has closed, so they ask where it has moved.


Can you tell about your first impression of the center, if you remember?


 From Jessheim, so has grown with the center and its expansions - no problem finding their way around.

 Large and difficult to find. Lots of hallways here. Have worked at the center for 9 years, more difficult after Skovly was added.

 But my God, how many parts are there?

 I got lost, have the direction sense of a goldfish. Feels very large, which surprised me. I think it is relatively clear how the center works now.

 A long time ago, I don't quite remember, perhaps a large and organized centre.

 I personally find it to be a difficult center, I usually use the store directory.

Information desk

What are the most frequently asked questions you get?

Generally where different stores are. Often those who have recently moved. Many people ask where XXL and other stores which are located in the Skovly part.

Is there any negative feedback you hear?

We hear a lot of positive and negative things, but nothing special.

Which stores/exits/etc. are most often asked about?

There are many different ones, but mostly those that are most commonly used such as pharmacies and grocery stores.

We also have these info brochures that are often used. We do not have an overview of whether they or the screens are used most often.

Debrief

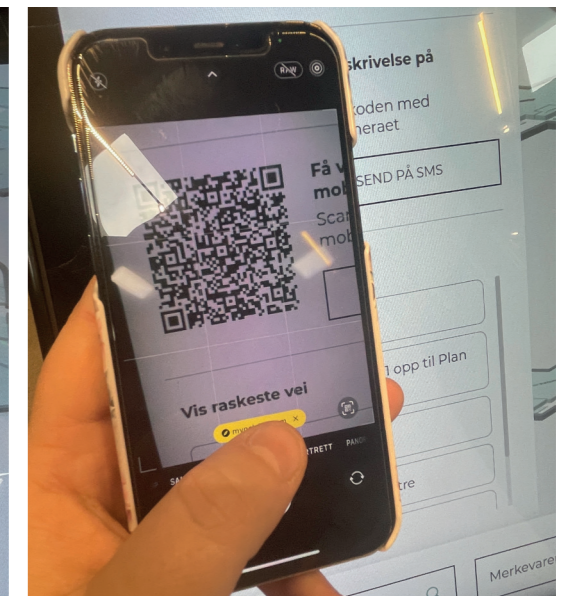
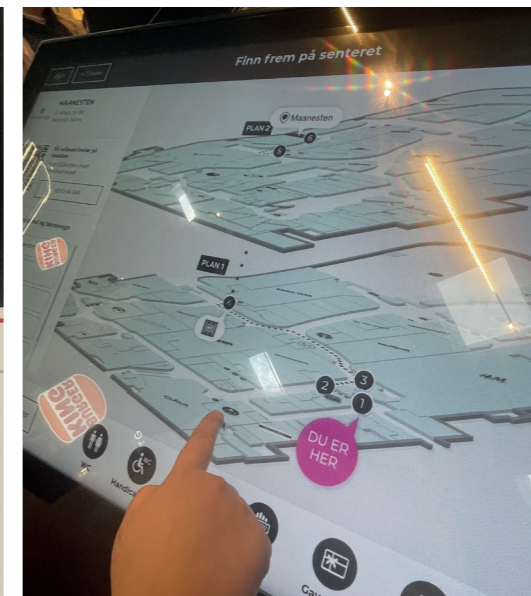
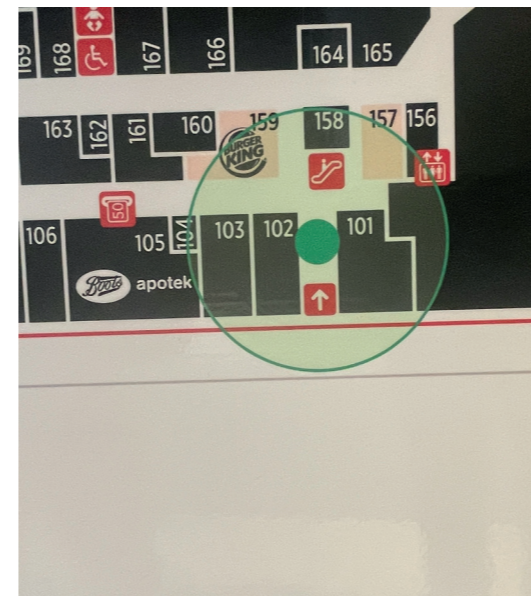
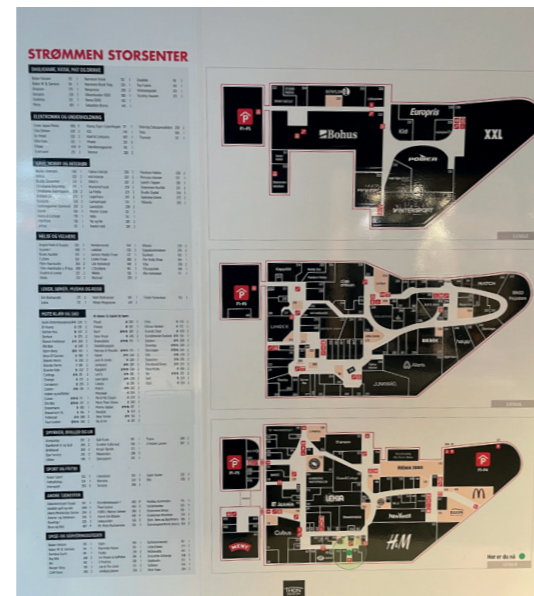
People who have grown up here are familiar with the layout and expansions of the center. Many people use the staff for directions. The liquor store and pharmacies are stores frequently asked about.

“Totally hopeless to know where things are, I ask people to go to the information desk since I often do not know myself.”

Shadowing

Shadowing is to follow someone's actions while documenting it. Strømmen shopping center is similar to Jessheim, a big, and to many confusing center. Below is the experience of one who has been to Strømmen multiple times as she located a new store while thinking out loud.

(Due to many visitors and their privacy, no pictures were taken of the way to the store.)



Statements	<p>“ I will try to find “this” store. I also find it confusing with the stores it says P on. Where are those?</p>	<p>“ It is difficult to quickly see which floor/entrance I am at on this map.</p>	<p>“ Oh, there it is. The dot is all the way at the bottom of the map.</p>	<p>“ How are you supposed to understand this map? It is also strange how different it is from the other map.</p>	<p>“ Who actually scans the QR-code? I can't picture my mom coming here and using that.</p>
Actions	<p>Walk in an entrance and locate the map right inside. Looking for a specific store.</p>	<p>Scans the map for a while trying to get an overview.</p>	<p>After locating her position she walks further and stops again when she sees the digital wayfinder.</p>	<p>When it's her time she searches for the store, and looks at the visual directions.</p>	<p>She questions the function, but uses it anyway. From there she finds the store quite quickly.</p>
Touchpoints	<p>Physical map</p>	<p>Physical map</p>	<p>Physical map</p>	<p>Digital map Signs</p>	<p>Signs Digital map through private phone</p>

Post interview

After the walkthrough at Strømmen center we had a debrief and then asked a few questions.

What is the first thing you do when you arrive at an unfamiliar center and need to find a shop?

“The first thing I do is I try to find a brochure”

Why not a physical map or screen?

“Because I can take brochures with me”

What are your preferences after your experience with the qr-code where you could bring the map with you digitally?

I would still prefer the brochure, it takes less time than searching the system and scanning the qr-code.

Most important sign?

“Toilet, then exit, then parking garage”

Do you prefer signs with words or icons?

“Would rather have icons than words/text on signs. Not if it had been for a store, icons would not work for H&M for example, but I prefer a man and a woman to indicate toilets.”

Do you like to take your time when at centers?

“I like to get in and out as quickly as possible”

How is your sense of direction?

“Bad”

Do you pay much attention to signs when you go to shopping centers?

“No actually. I wouldn't have noticed/thought about the signs at Strømmen if I didn't go with you. Struggling with anxiety, I am rarely able to think clearly when I go to the center”

What are your thoughts about aesthetics?

I care a lot about aesthetics when it comes to my surroundings.

Function over aesthetics?

Absolutely. There is no point in having a sign if it has no function

Is there a wayfinding system that you feel works particularly well?

Colors on the ground. An example was at Aleris. Received

a message saying “reply to this message when you are here.”

Did that and got a new message with instructions to “follow the yellow line”, so I did it and it was so easy to find. Several different colors were available.

Miscellaneous statements:

I think Jessheim is the worst center I've been to. I will go to Sandvika any day over Jessheim. There are so many weird directions and confusing layouts. I can't visualize where things are, but maybe I haven't been there enough...

The old part (the torch part) I am comfortable enough with, but I don't understand anything about the new part. I don't know how to get back to the old part either. Then you also have the part over the bridge. If you had transported me to a place at the center, I probably wouldn't have guessed where I was, so I would likely just walk around blindly and hope for the best.

“ If you had transported me to a place at Jessheim center, I probably wouldn't have guessed where I was, so I would likely just walk around blindly and hope for the best.

Group interview

Group interview consisting of six participants between 13 and 68 years of age.

The group interview proved itself to be a good method for people to answer questions in a more comfortable setting. Since several participants can come up with answers it can be easier to agree or remember from others.

The questions were asked in general, and not directed solely towards Jessheim Storsenter. Since many of them have never been there, their answers could provide insights about other shopping centers and universal needs.

Here are the main statements and findings from this interview. Interview notes are in appendix.

1

Usage

They use wayfinding screens, directories and employees when trying to find a store. Some mentioned that they like to look up the store online before coming but that often only reveals the floor.

Most said they like to have a look around when they are at centers for errands, but one said they "Don't like going to centers, and have often planned what I should do before I get there. Then I often want to be efficient and not enjoy myself. Would rather walk in small streets for that."

2

Signage

When asked what the most important sign is, the most frequent answers were toilet, exit and floor signs.

They all said they use signs as a main source for orientation, especially when going to a new place. When they are familiar they use their cognitive map to find their way.

When talking about successful wayfinding solutions they brought up the wayfinding screens, where they are shown where to go. One mentioned that they prefer separate entrances and exits so they do not crash into anybody.

3

Icons

Most prefer icons over text, a few both. When one expressed that they felt "that sometimes there may be slightly unclear pictograms on what is women's clothing and men's clothing and would not know if they have entered the right toilet until they are inside", multiple agreed.

They all care about aesthetics, but think the function is more or equally important.

4

Direction

When asked about visibility of the direction regarding conveyor belts/escalators these were the main replies; "It annoys me to no end that I can't see the direction of the escalator/belt from a distance.", "Very annoying that it's a long way around to the next one" and "Have often gone close and realized it is the wrong direction."

5

Miscellaneous

One suggested that frames around the store signs could have a color if it is in a colored zone.

They also talked about the need for a meeting point at centers, in case people lose each other. While some then suggested it to include the opportunity to buy something to drink, another thought that could attract many people and it could be difficult to see the person you are looking for.

“ Was at Ski center, there were mezzanine floors and even though I have a good sense of direction, I completely lost track of where I was. There they had a transition to another part and became very confused about what was where. [A bit like Jessheim].

“

Design has the power to enrich our lives by engaging our emotions through image, form, texture, color, sound, and smell.

- Tim Brown (2019)

Part 5 Ideation

Findings

Observations, insights and needs have led me towards exploring these 5 subjects.

The “findings” section states what led me to the subject, while “possible intervention” tells my initial thoughts of solutions. Lastly, “further work” tells if I am moving forward, or not with a subject as well as which considerations I should take.



Cohesive visuals

Findings

The data shows that the center consists of many graphic elements which differ in style. It will look more cohesive with a set visual profile.

Possible intervention

There is room for intervening and creating a solution for this topic. This could mean creating a visual identity to make it easier to follow guidelines when adding new elements.

Further work

I did however choose not to go further with this as they would have the opportunity to have a complete solution if they follow the rest of Olav Thon Group centers.

Cost and sustainability is also something to take into consideration since the center administration have stated that they have opted against solutions because of cost. It is nor sustainable to change all the existing solutions without a plan for them.

A solution for that could then have been to create a service that collects and resells used signs, including the necessary restorations.



Meeting place

Findings

Participants in the group interview expressed their needs for a designated meeting place at shopping centers. One suggested it should be a place where people could sit down like a cafe, while another said it could be confusing if everybody stayed at the place.

Possible intervention

A solution could be to create an easily recognizable logo/icon that would represent said meeting place. It could then be placed on the floor or wall along with arrows indicating the location.

Further work

In a time where people in most ages carry a phone, the need might not be as big. I also suspect that people will find the information desk and ask them to make an announcement over the speaker system. For those reasons I decided not to move forward with this subject.



Zones

Findings

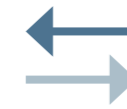
The center has as earlier stated been put together by three different buildings over the years. People from the area are used to the layout and different parts, but new people often find it confusing.

Possible intervention

The different parts could each have a color or icon representing it, this could simplify the act of giving direction and might help people remember. Instead of trying to erase the transitions, maybe they can be embraced.

Further work

Creating zones has proved to be efficient in wayfinding, and has the opportunity to work at Jessheim as well. Therefore I have chosen to move forward with ideation regarding this subject.



Direction indicator

Findings

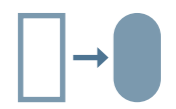
Observing people’s movement at the center and interviews shows that the direction on conveyor belts/escalators can be confusing. This is not an inconvenience that hurts people or makes them lose a lot of time, but I still feel it could be a more streamlined movement if people could see the direction from a distance or even just more momentarily.

Possible intervention

Placing a sign before it which shows the direction, or design elements on the conveyor belt itself can help indicate which direction it is going.

Further work

Since this is a situation that can be encountered in many places, and a solution could most likely be implemented elsewhere I found the room for possibility intriguing and will continue exploring solutions.



Make changes easier

Findings

Dialog with the center manager and interviews revealed that when changes happen, it is not always possible to update the store directories and infoguides before time has passed.

Possible intervention

Ideas that came to mind were a modular directory which allows them to move store names in case of changes. The other is a projected sign that can project either the store directory and/or floorplans. Combining a digital image which can easily be changed, without dealing with complicated software, and a surface to show it on might keep costs low and be a sustainable option.

Further work

Modular systems and projected images are nothing new, but I find both preliminary concepts to be possible solutions for the needs they currently have. Therefore I wish to continue with exploration.

Design criteria

MoSCoW method is a technique which help managing requirements and criterias. (Productplan, n.d.). Setting criterias can help with developing concepts since it creates a framework and possible boundaries.

1

Must

- Must answer some needs.
- Must not be an inconvenience to the people using the space.
- Must be one element.

2

Should

- Should be intuitive.
- Should work especially for Jessheim.
- Should be inclusive.
- Should be non-verbal.
- Should consider most people.
- Could be more elements.
- Should be possible for the staff to make changes.
- Should be removable/reversible if needed, without much damage.

3

Could

- Could follow the existing visual style.
- Could work for more places than Jessheim.
- Could be a digital solution.
- Could be an analog solution.
- Could be a combination.
- Could be low-maintenance.
- Could be interior focused.
- Could change existing solutions to improve the experience.
- Could be fun and colorful.
- Could be permanent.



Concept inspiration



Fig 14 "Wayfinding", n.d. (<https://fuzeinteriors.co.nz/10-best-wayfinding-systems/>)



Fig 15 "Wayfinding", n.d. (<https://fuzeinteriors.co.nz/10-best-wayfinding-systems/>)



Fig 17 "Wayfinding at hospital", n.d. (<http://studio-sc.com/seattle-childrens-hospital.php>)

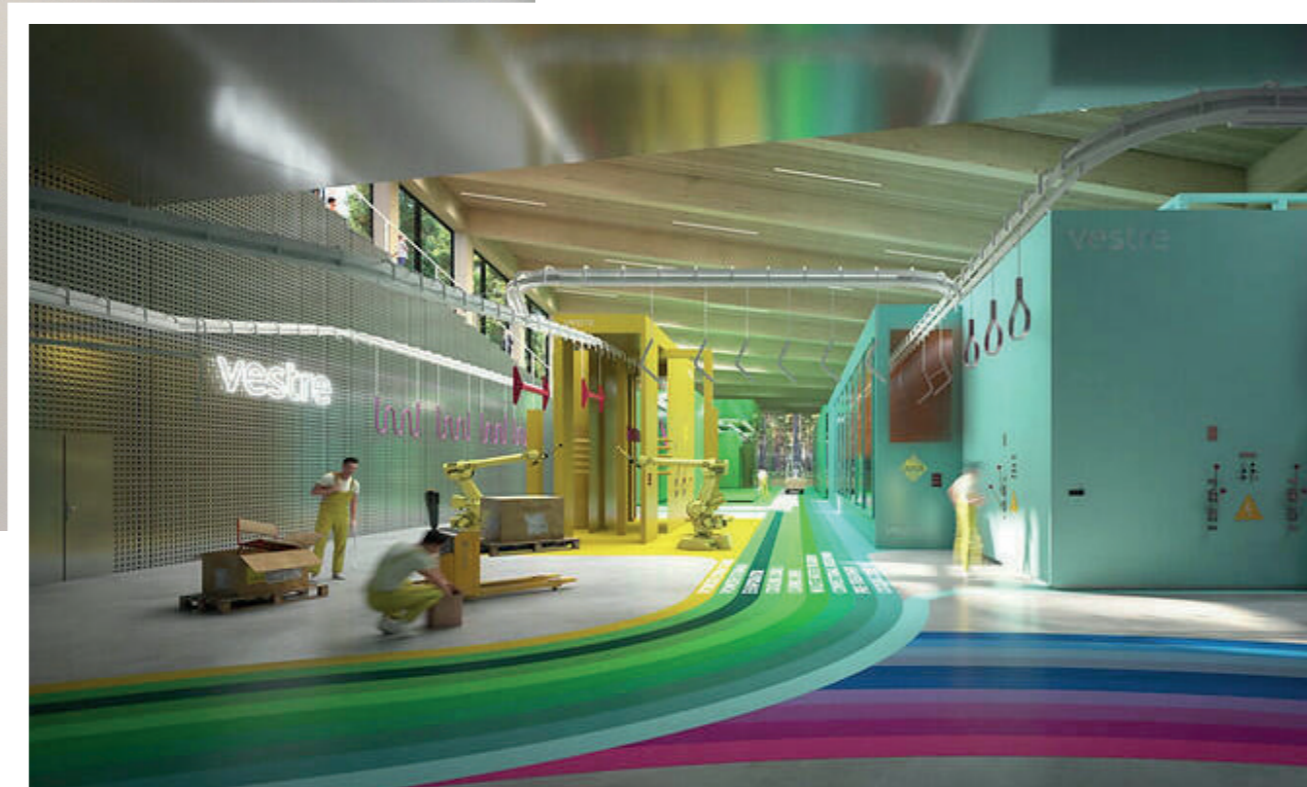


Fig 16 "Plus factory", n.d. (<https://www.fokusraad.no/prosjekter/vestre-plus>)

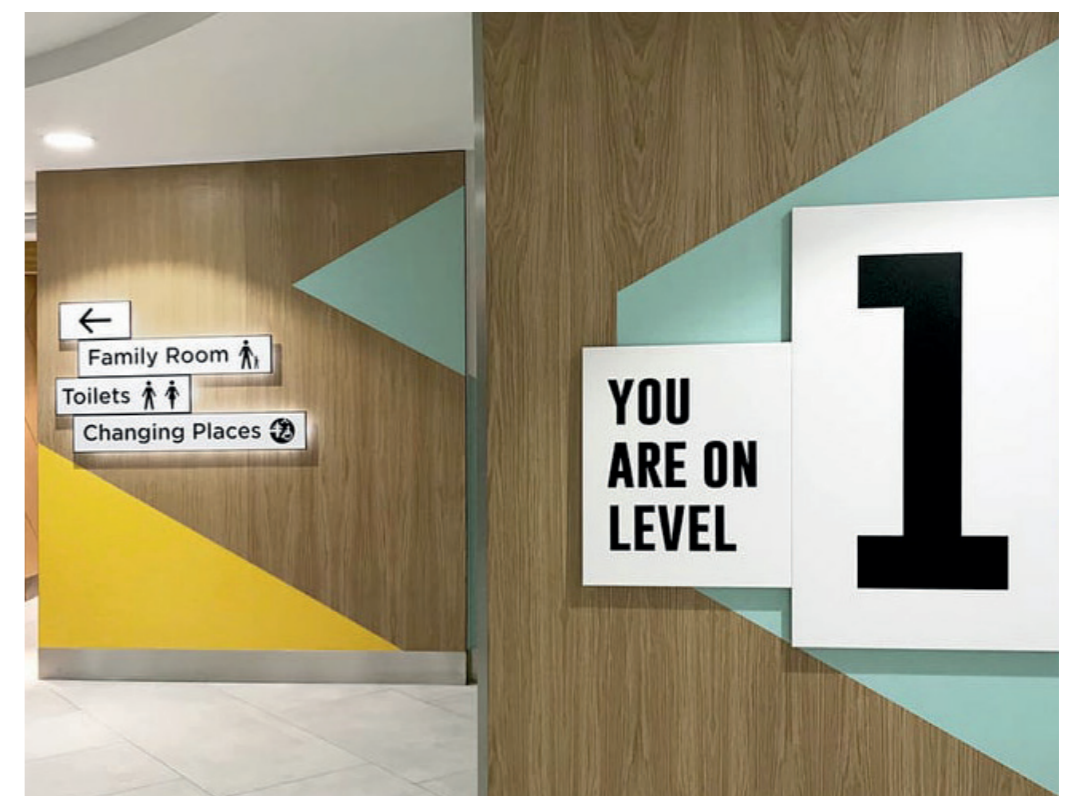


Fig 18 "Wayfinding", 2019, by Parker, A. (<https://www.g2.com/articles/environmental-graphic-design>)

Ideation

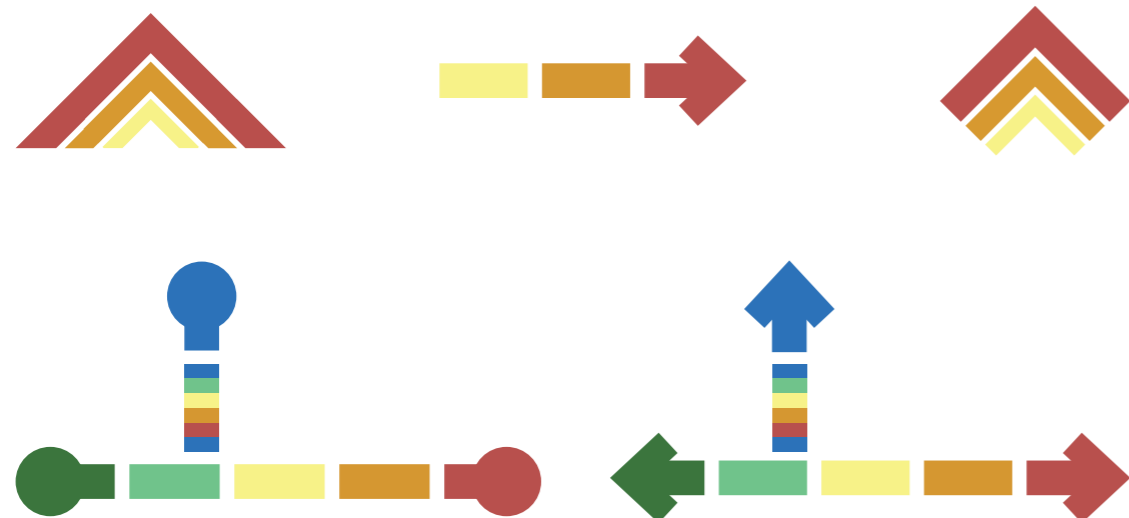
A concept based on the inspiration pictures, and a well-used method in the environmental graphic design world is the use of colors.

The center has an iconic rainbow bridge between the main building and Skovly. Bringing the colors into the rest of the center could help bring unity to the design. By having a neutral color like yellow in the middle, and red and green at each end, it could perhaps be easier for people to understand “it is in the orange section” when giving or receiving directions.

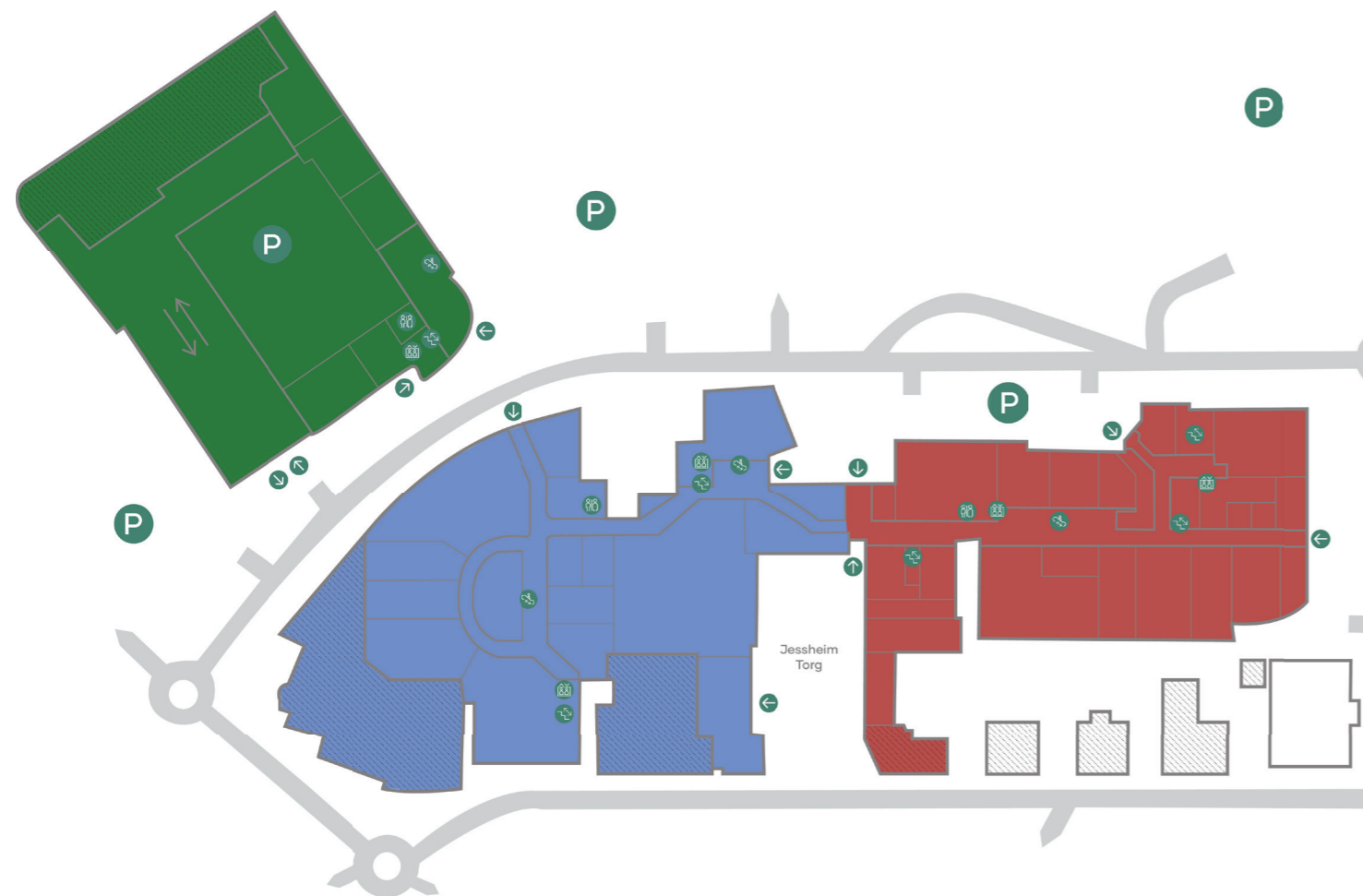
A solution could also have been to have the floors become a darker color the higher up you get, but that would not solve the issue that the center is long, divided into those sections which many struggle with understanding.

The center leader has said they want to keep a clean look without signs everywhere (personal communication), but they have already incorporated different colors into the interior, and these could be structured into following the assigned colors, as well as adding some elements.

Below are some ideas of signifying elements that could be places on the ground or walls in foil.



Ideation



Assigning a color to each of the buildings could make people more easily create a cognitive map of the mall. This would embrace the different sections instead of trying to blend them together. To achieve a more inclusive design, the use of icons to represent each part as well as the colors, could be a solution.



The colors could be incorporated into architectural elements like poles/support beams, furniture, tiles on the floor, illustrations on walls.

← Concept inspiration →



Fig 19 .



Fig 20 .



Fig 21 .



Fig 22 "Direction Indicator of Automatic Operation System", n.d., by Superhelindo (<https://superhelindo.co.id/products/escalator-travellator/>)

In the parking building/Skovly they have a symbol (fig. 19) to reveal the direction of the escalator since they are located through separate doors. The escalators even have lights showing it. (fig. 20 & 21). Why aren't solutions like this a standard? The flaw is however that the direction cannot be seen from the side on the retail floor.

Ideation

There is not always a need to bring completely new design to the table. Often changing, expanding or evolving an existing solution can be the best option.

The conveyor belts at Jessheim shopping center already have colored lights incorporated into them. The lights change colors such as green, blue, pink, purple and red which strengthen its visibility.

People associate green with clear/go ahead and has a calming effect while red is often associated with love, it attracts more attention and could as well mean danger/stop. (Colorpsychology, n.d.). What makes it confusing in this exact setting is that the belt direction that you can use is pink, while the wrong direction lights up in a welcoming green. The belt is however colored correctly for the people going down from the upper level. This option will not be effective for those with color-blindness, so colors should be paired with an additional intuitive element.

Possible solutions to this could be to restrain from using green and red light since they could send the wrong message. If possible the lights could be monotone and split in the middle. Red on top half of the conveyor belt, and green at the bottom and opposite.

Another element when considering people's associations and psychology is our placement related to direction. We keep to the right when walking on the sidewalks as well as we are driving on the right side on roads. I asked a couple of people what they thought when they saw this picture and both expressed that they would assume the green/right is the belt they should use, also because that it is placed to the right and not the pink on the left. When told that the lights changed, one said that it might feel different in person.

Today the conveyor belts are set up so that you can continue all the way up or down, without having to go around. That means that on every other floor is the opposite to this picture and it might not be solved in a better way when it comes to direction alone.

Skovly building has solutions for this challenge, both a symbol on the wall (Fig. 19) and the newer escalators there have green and red lightstrip indicating the direction (Fig.21).



Ideation



An idea is to suggest that BrandFactory add a sign in their catalog that shows which direction the conveyor belt/escalator goes and possibly where the other direction is found. By using the same design as the existing “information” sign, it will contribute to preserving the intuitive understanding that those are signs to help people find their way. By placing a sign before the belts people could get the chance to see the direction from multiple angles and distances.



The center have already inserted a few red tiles in the area in front of the conveyor belt ramp, if you look at the picture to the left. It does not seem to have a set function as they overlap both directions. A possible way to indicate the two different directions could be to keep the red tiles on the right side, and add green ones on the left.

Ideation

Moving arrows

Painting or foil on the belt could be a cost-effective way to show which direction the conveyor belt is going. The green arrows will draw the eyes to see which direction it is going. It is prone to wear and tear, and that can be a flaw.

The common denominator with the sketches on this page is that the additions can help people see it without people on it, but the conveyor belt needs to be in sight line.

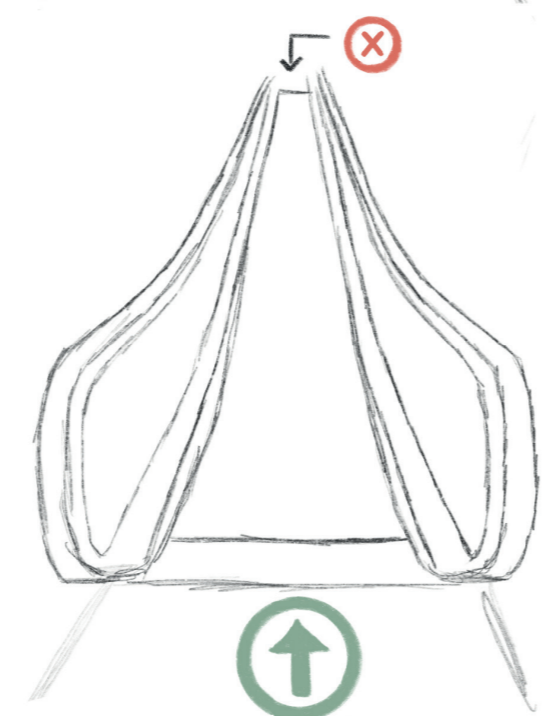
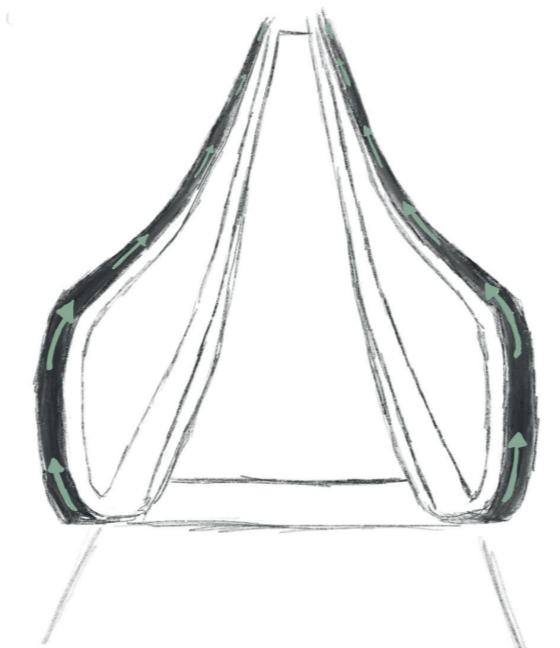
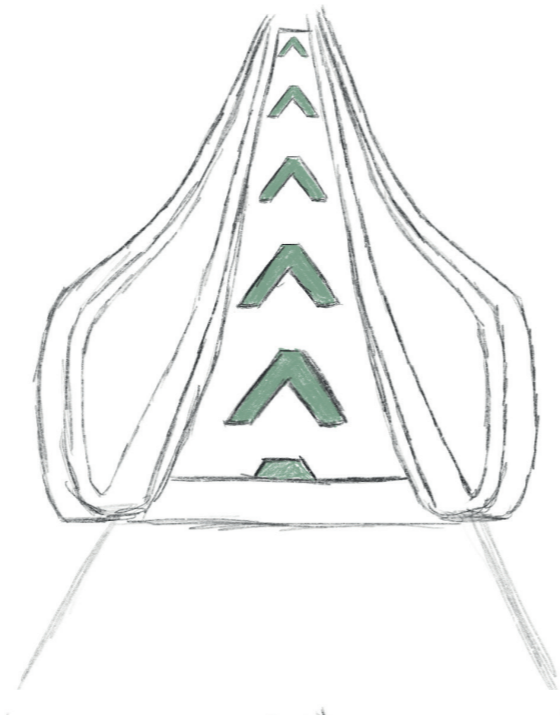
Green/red handrails

Attaching elements on the black handrail such as arrows or other shapes could increase visibility of the direction.

The elements would however be highly exposed to wear and tear both from people and the handrail going around.

Go - stop icons

This solution depends on people looking at the ground. It takes universally known icons into use, for example these, to make it more intuitive.



Moving footprints

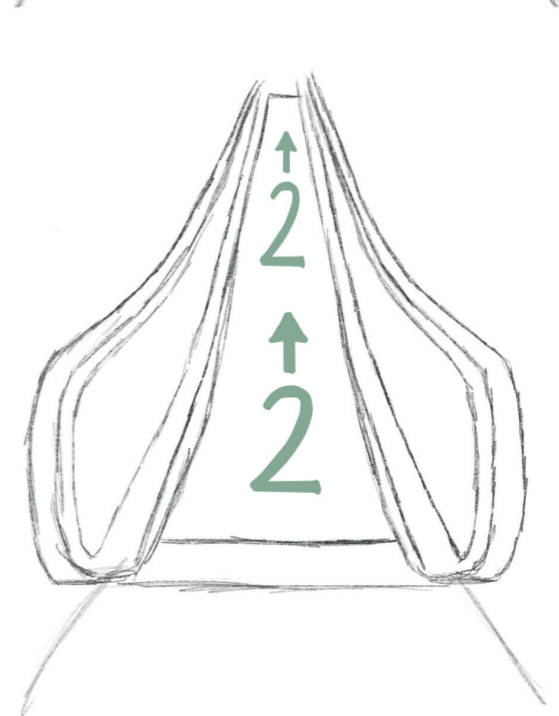
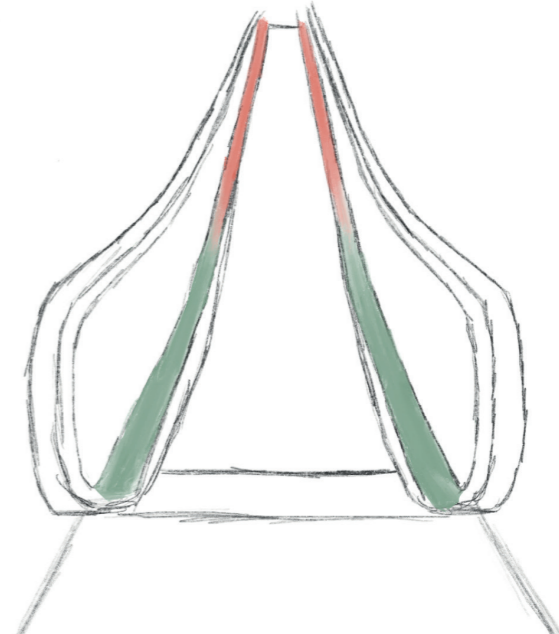
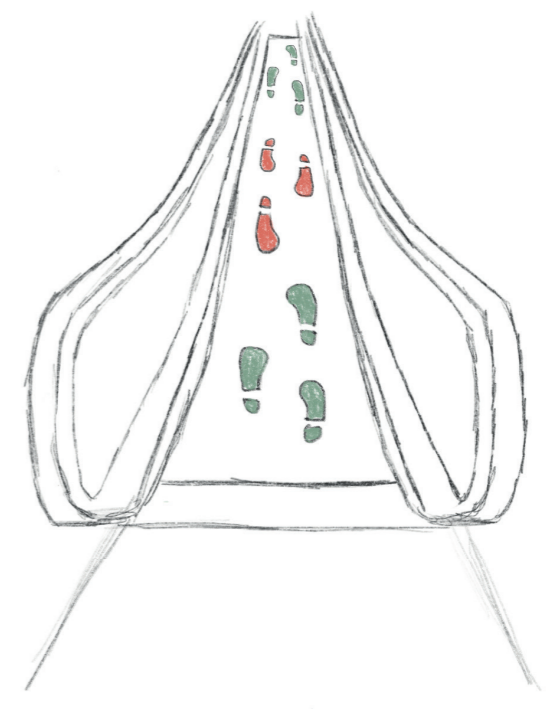
Footprints are associated with direction and showing the way from one point to another. This sketch shows green prints representing the correct way, and red the wrong way. While sketching I initially thought it needed the red ones to show the direction from the top, but since the moving elements could quickly show the direction the red ones might be excessive.

Green - red

Painting or covering the metal sides of the conveyor belt with foil could indicate both the right and wrong way to enter. With the existing lights it would most likely compete for the attention and confuse the users, but if the colored lights did not change and could be different on two ends this could potentially help with the wayfinding.

Numbers and arrows

Placing numbers and arrows on the conveyor belt, as well as indicating the direction, point out which floor they can get to by using it. It could however have a short lifespan, or potentially need updating/maintenance often.



Concept inspiration



Fig 23 "Projected rug at IKEA", 2018, by Campos, G. (<https://www.avinteractive.com/news/projection/ikea-employs-laser-projection-visualise-rug-sizes-08-05-2018/>)



Fig 24 "The Freestyle Projector", n.d., by Samsung. (<https://www.amazon.com/Freestyle-Projector-SP-LSP3BLAXZA-Carrying-Protection/dp/B09SKDRLVB>)



Fig 26 "Building Modular Directory Signage", n.d., by Green Flags Enterprises. (<https://www.gfesignage.com/modular-signage.html>)



Unsplash.com



Fig 25 "Projected safety signage", n.d., by ProjectedImage. (<https://www.projectedimage.com/news/the-benefits-of-projected-safety-signage>)



Fig 27 "Modular sign system", n.d., by Snøhetta. (<https://doga.no/aktiviteter/dogas-priser/doga-merket-design-arkitektur/vinnere-av-doga-merket/historiske-typer-for-fremtidens-medier/>)

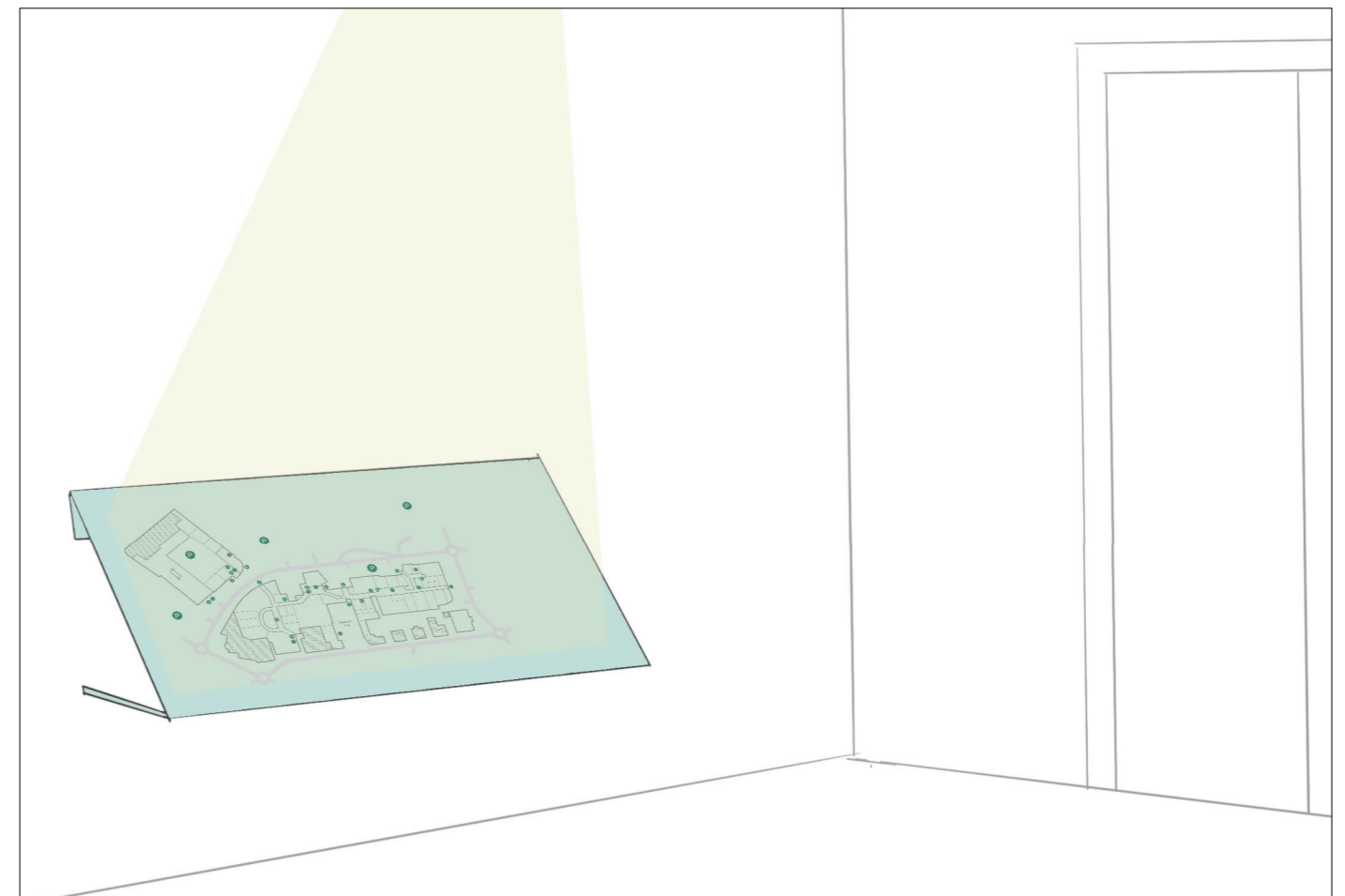
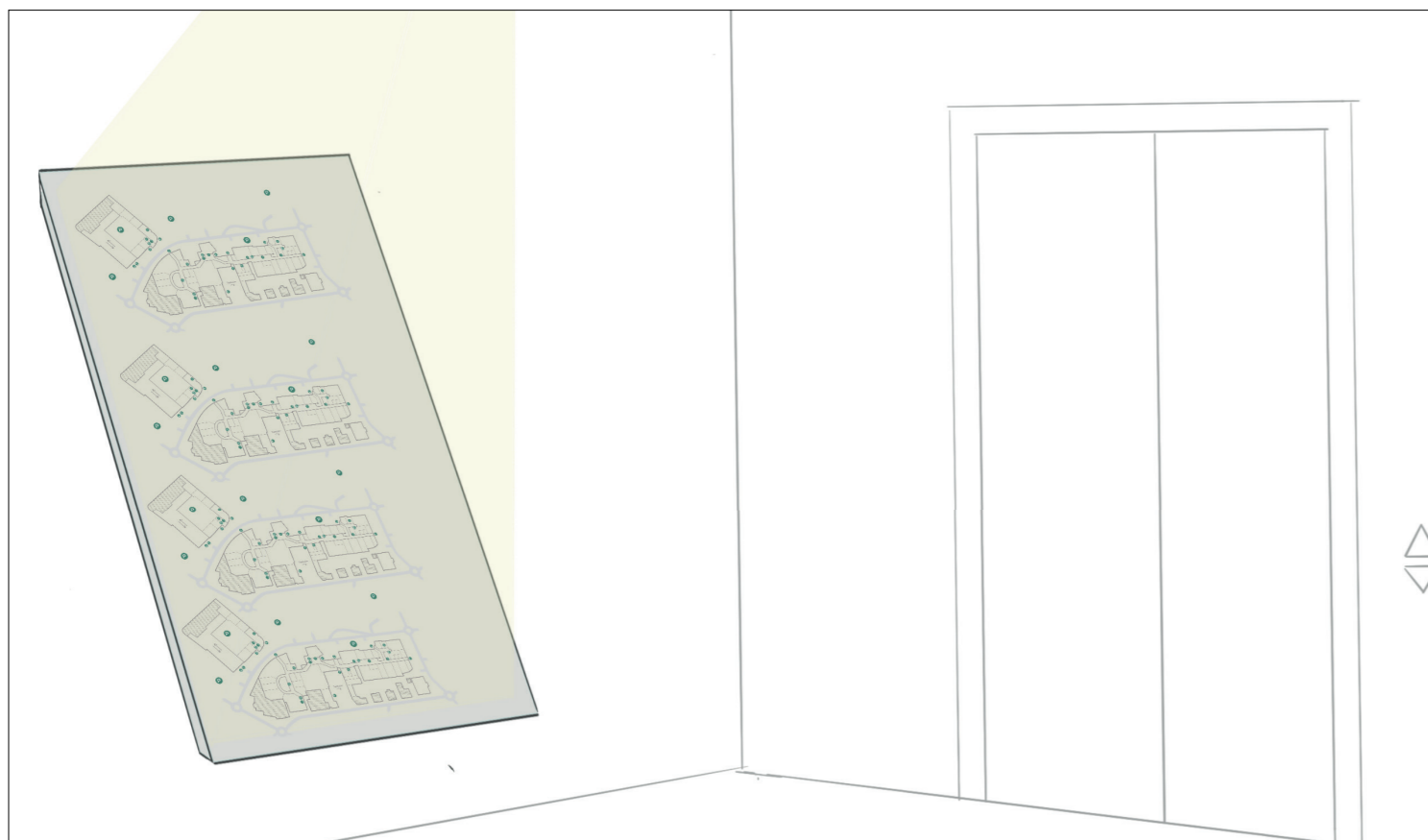
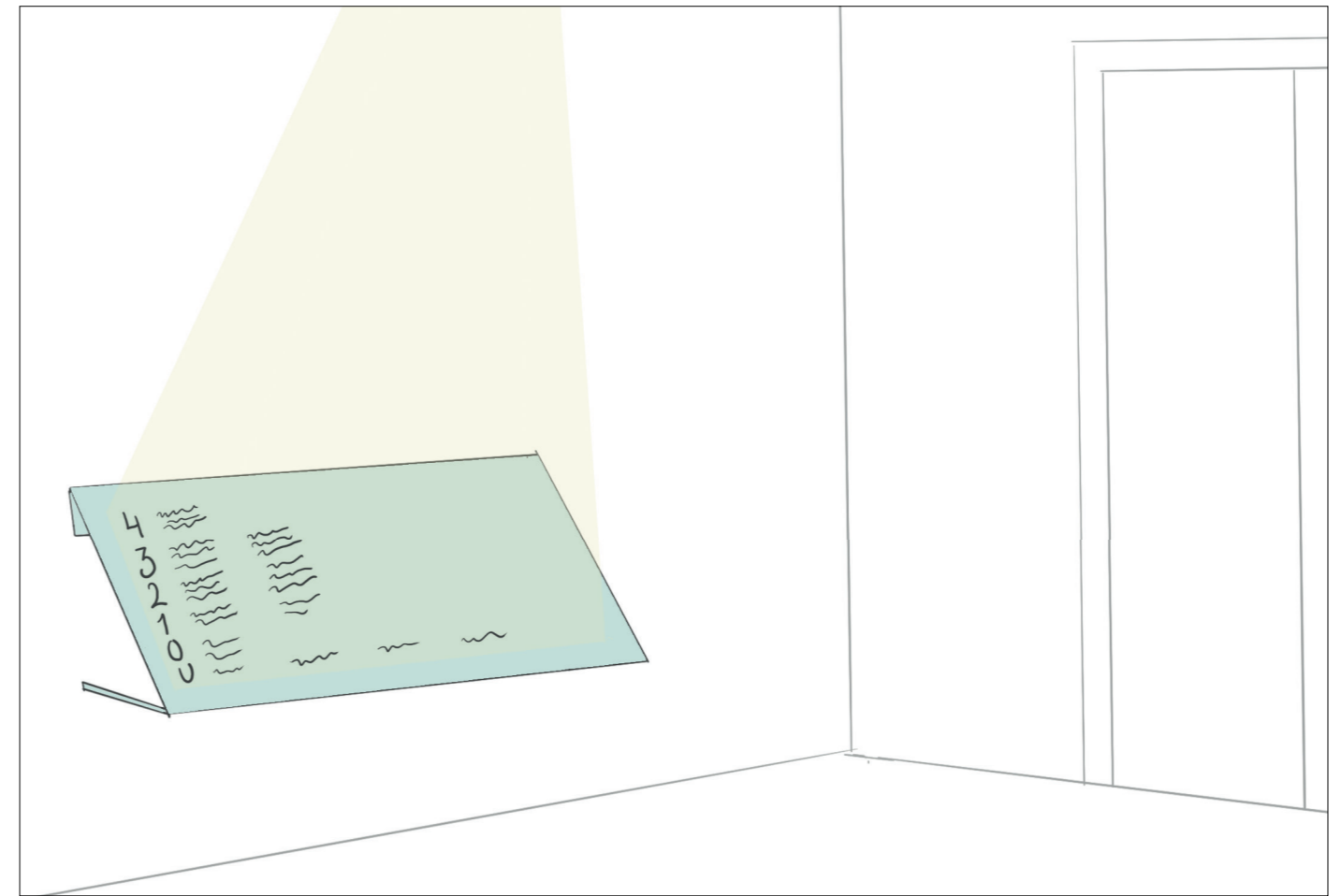
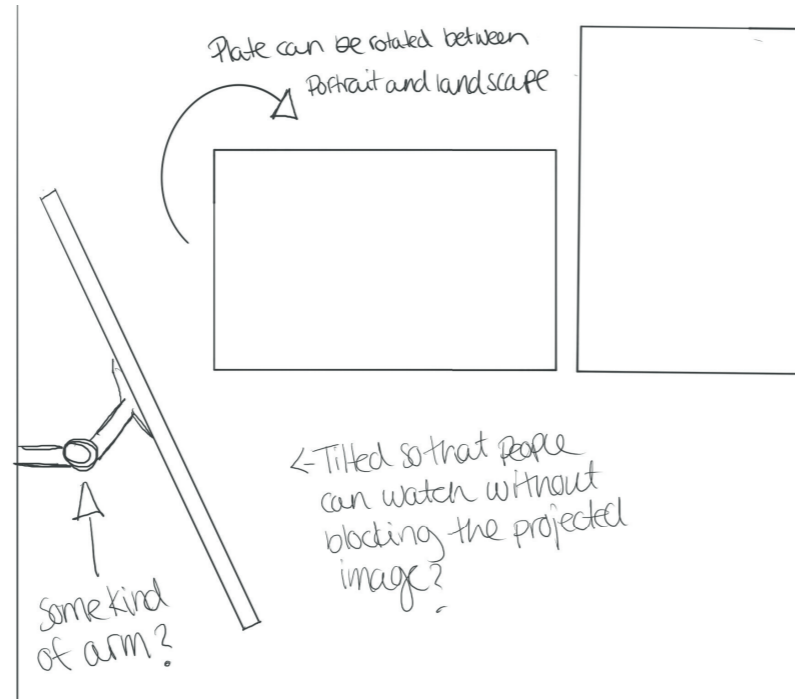
Ideation

Projected sign

Information could be projected at a receiving surface. To prevent people blocking the image it could be paired with a tilted surface, then have the projector attached to the ceiling and projected below at a steeper angle. Enough visibility and contrasts could be a challenge to achieve with this concept.

Since the surface is clean, it is only the digital image that needs to change which can be done fast and changes would be shown momentarily.

Depending on the attributes the sign could show only the store directory, one floor or all the floors. If it had buttons, the user could choose what they wanted to see. This is not meant to replace the wayfinding screens which provide more information, but the analog directories.



Ideation

Modular store directory

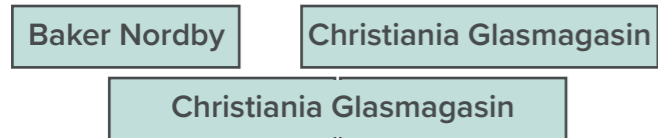
In the elevator lobby on each floor they currently have these store directories made of printed textile. This concept explores the opportunity to create a modular sign instead. The idea is for plates (the light green on fig 25) to be slid into a slot or on depending on the design. The plates would each hold a store name and can be moved to another floor in case the store moves. If foil is used to write the names, then the plates can be reused if the foil is replaced with a new store name.

Materials used would likely be a combination of acrylic, aluminum and foil.

Baker Nordby Sticker with cut-out letters

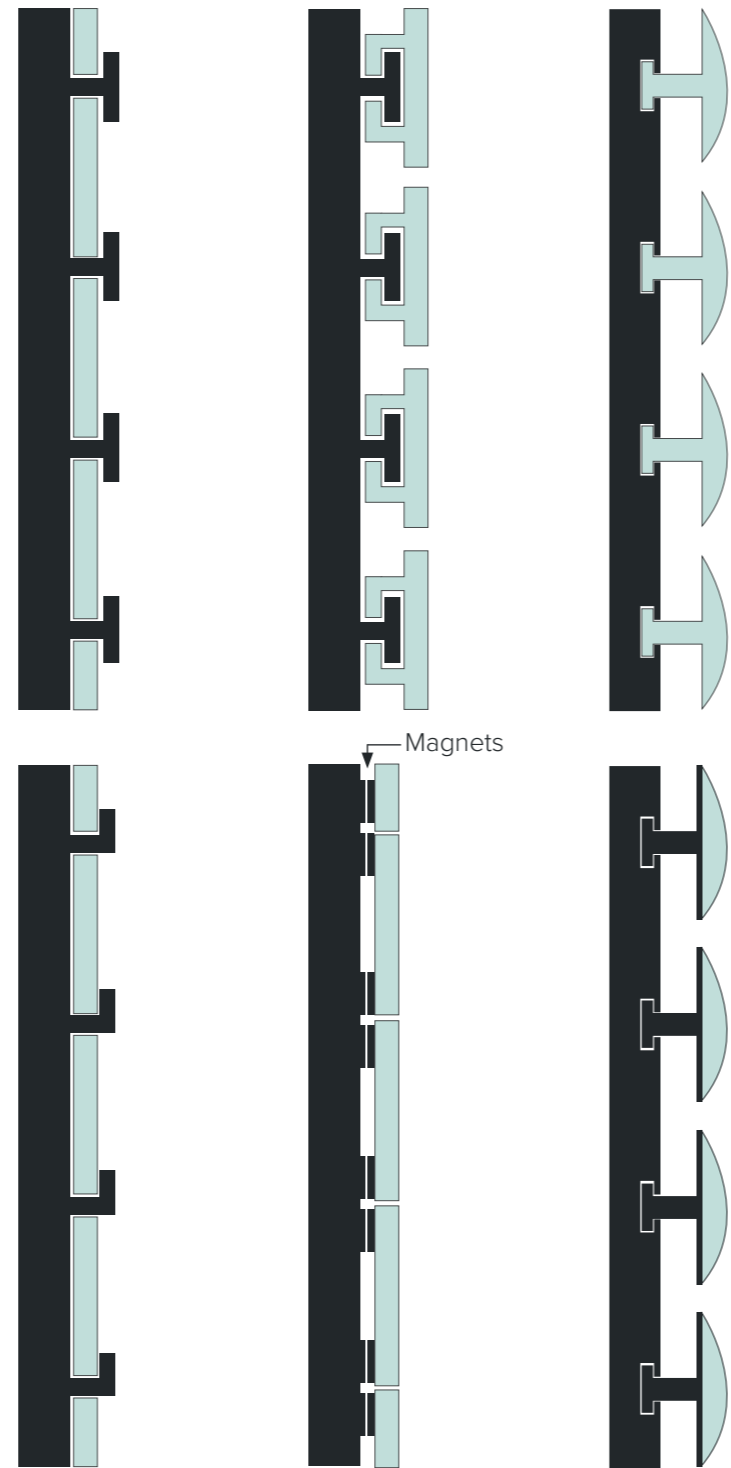
Baker Nordby Sticker with print

Baker Nordby Only letters



Should the plates be in different lengths to fit a variation of words, or should it be a set size which can be put together? If a foil/sticker with the name is placed on top, then the latter has a high probability of working.

Should the names be stickers, engraved, printed paper or with another method?

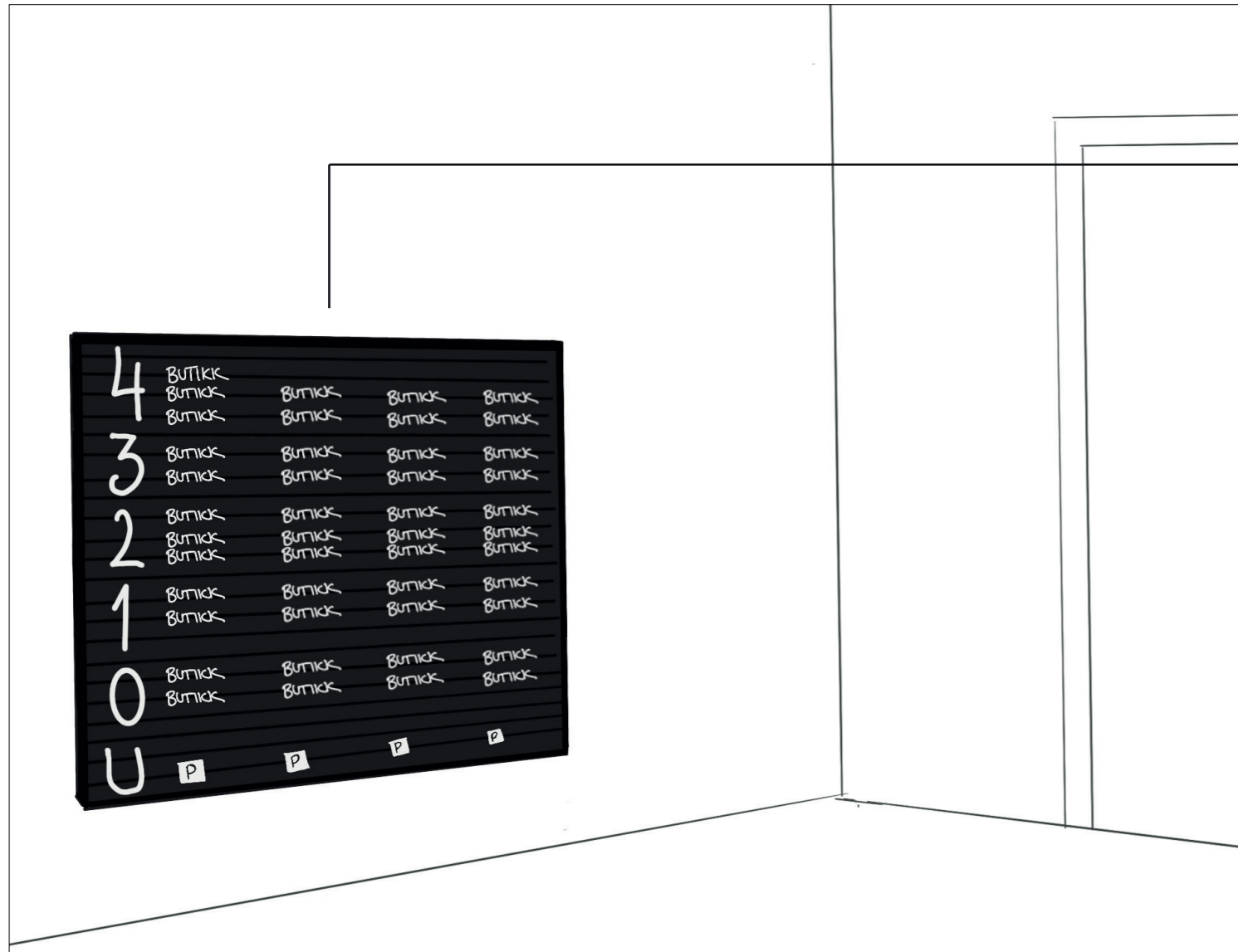


Exploration of ways the modules could be connected and variation of shapes.



Fig 28 .

This design is only to represent the concept. The colors are collected from the existing maps color scheme on the wayfinding stations.



This concept is an enlarged version of the classic letterboard. Utilized in this setting would facilitate for easily changing elements when needed. Some might even find it enjoyable to make the changes. Since it would consist of small loose parts it should be behind glass/acrylic to prevent vandalism or pieces go missing.



Fig 29 .

Fig 30 .

How it works is with a set of plastic letters with a piece sticking out at the back. The receiving part are many cushioned half-circles or squares where the back of the letters can be pushed into (fig 26). A board with many small holes can as well be a solution (fig 27).

“

Signage should complement and enhance the surrounding environment. so choose colours and shapes that stand out – yet don't clash – with nearby buildings and features.

- (PAM, 2017)

Part 6

Proposed concept

Proposed concept

I chose to move forward with the concept involving colored zones. Although by also including icons which can represent each part.

As earlier stated, insights showed that even though the buildings are connected, many people still refer to the different buildings by their original names. For those who are from around here, finding their way is quite easy, but for most others it is a confusing center. Why, can be blamed on bad direction sense or the building itself.

Finding icons that can represent the parts, we have to go back to the beginning. The original center was called Fakkelsenteret [The torch center], so I only find it fitting for that section to be represented by a torch (fig 28).

Skovly, which is the newest building, has perforated trees on the exterior wall and a tree in their logo (fig 32), so that part can be represented by a tree. The most difficult part to assign an icon to, is the main building. Originally it was a café and then a slaughterhouse, but a café or a sausage icon could both be too confusing, and would most likely not make sense for the people not knowing the history. The old logo for HK-center was however a pig in a suit, so to restrain from choosing an irrelevant icon I will use that (fig 33) as my inspiration.

Since having a torch, tree and pig would probably not make sense by itself anyways, I would suggest having a plaque/sign with each icon, in each part which contains a small summary of its history.

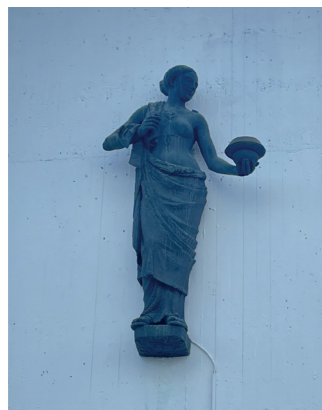


Fig 31 Vesta statue on the wall of Jessheim Center.



Fig 32 The exterior wall of Skovly building. Including their logo at the top.

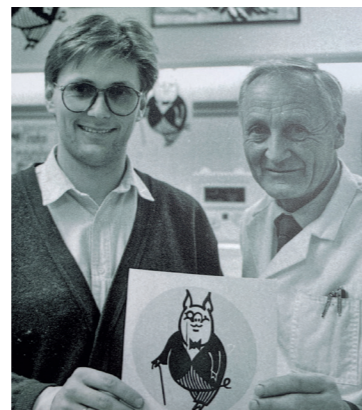


Fig 33 Picture taken of a poster at an exhibition at the center in May 2023. Showing Kvaerner and logo.

Strengths

- Can make navigating the center easier.
- Is visible for those with or without color-blindness.
- Acknowledges the center's history.

Weaknesses

- Is not the clean look.
- Can interfere with existing colored details.
- The colors alone can be confusing because of existing colors in Skovly parking house.

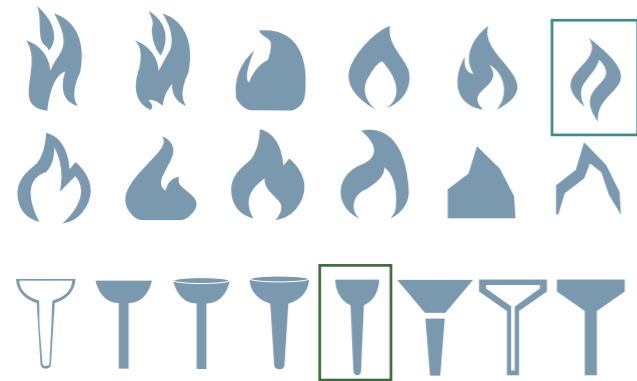
Opportunities

- Could make it easier to chose/order colored items when needed.
- Can be implemented other places.

Threats

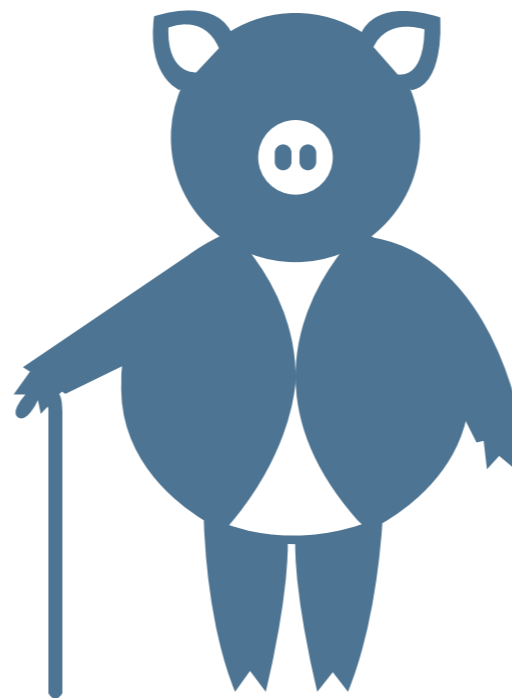
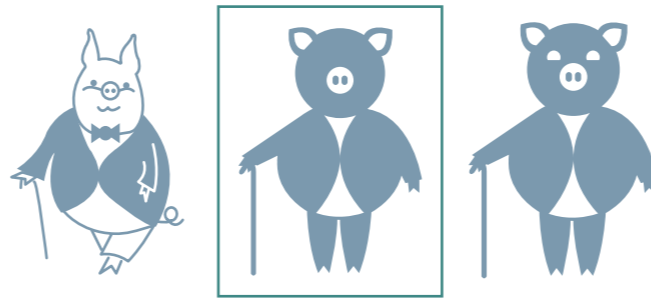
- The building owner and the administration might not want this solution.

Icons



3 people were asked which combination they preferred, and this combination was best liked by 2 out of 3.

“I like that it looks like a modern torch”.

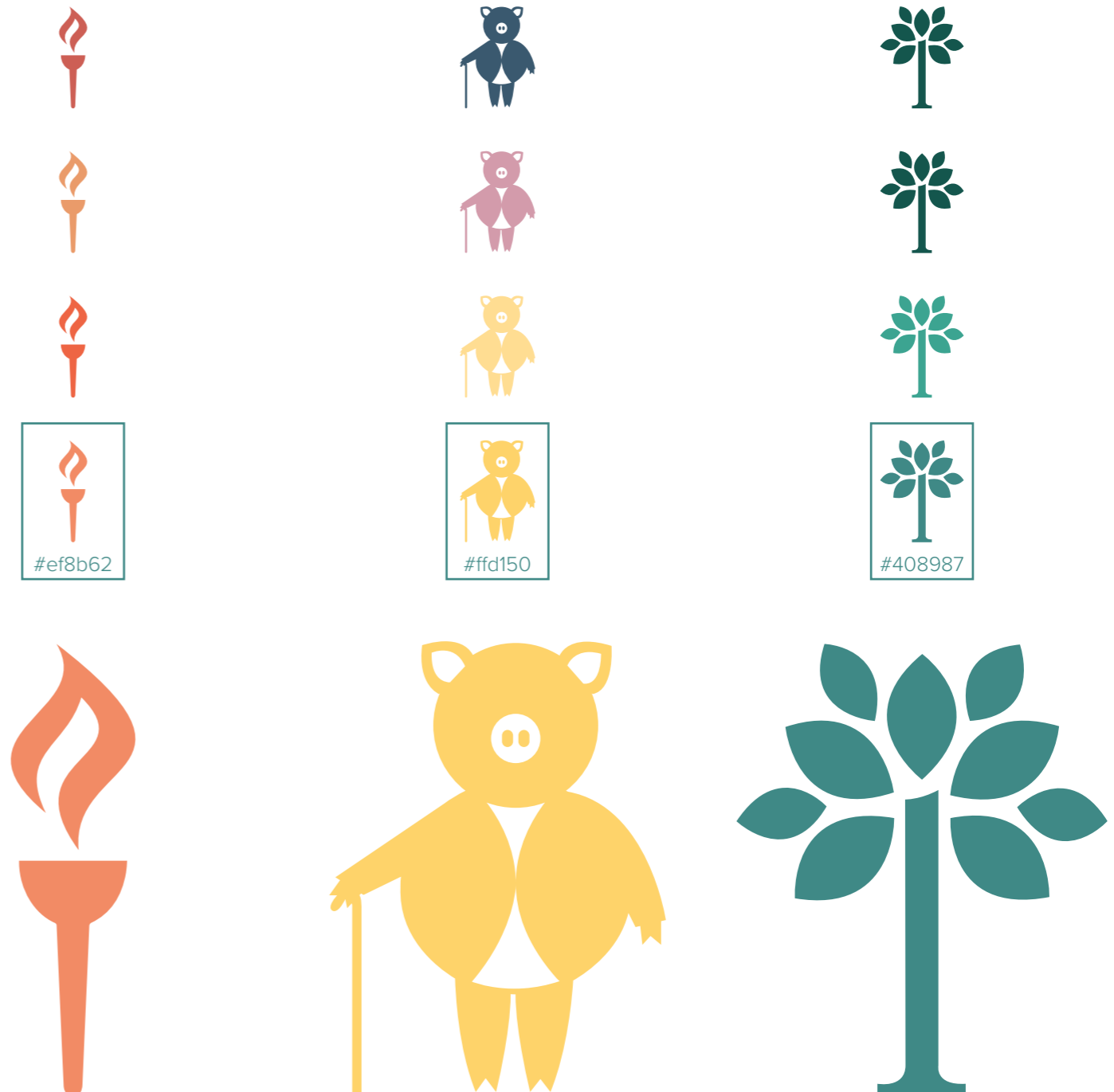


This pig is a simplified version of the old Harald Kværner logo (Fig.23). Since the other icons have few details, this needed to be stripped down drastically for it to feel like a set.



I thought about creating many different iterations of trees, but quickly landed with that no tree would represent Skovly building better than the tree in their own logo. (Fig. 22)

Colors



When choosing colors I initially felt the color red would fit the torch part because of its association with fire. Green would be natural for Skovly because of the tree icon. The main part with the pig can be pink, but that might be too bold.

When looking at their existing solution, they have assigned different colors to each floor in the parking section of Skovly building. Even though the colors are not connected to the shopping area, it would be safest to stay away from those tones to avoid causing confusion towards the customers.

Looking at the remaining colors from the rainbow bridge or other details found in relation with the mall, I ended up with these three suggesting colors. A deep orange, which can also be associated with fire. Darker green, similar to their exterior logo, would still distinguish itself from the lighter green. The pig is represented in yellow. This because both orange and green come from yellow, which is a primary color, and the yellow section is also in the middle. Even though U1 parking is marked in yellow, it is only a half level with a couple of signs. Contrasts and readability in environment are especially important to test later on.

Placement



Fig 34 Colored icon and transparent floor number, same on all four sides. Use of positive and negative space. Paint or foil on support beam.

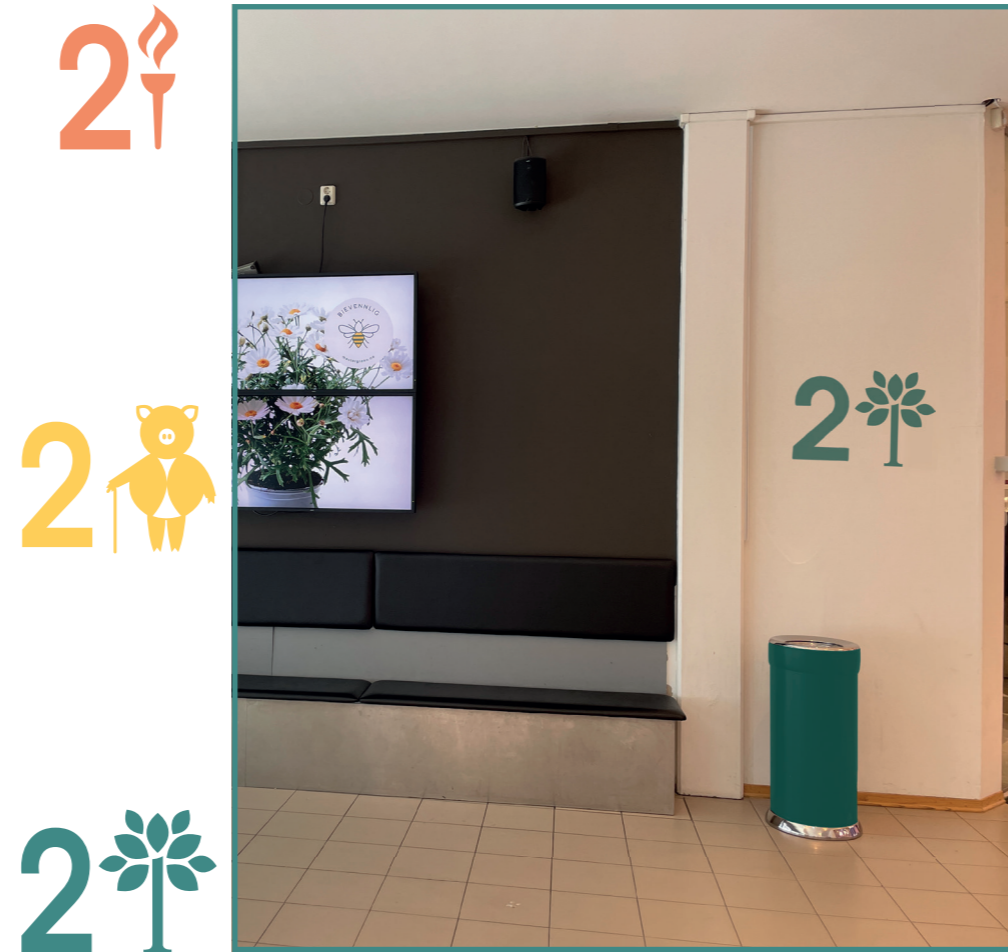


Fig 35 Icon and floor number on wall. Here the trash can is colored as well, to show example of colored details in the zone.

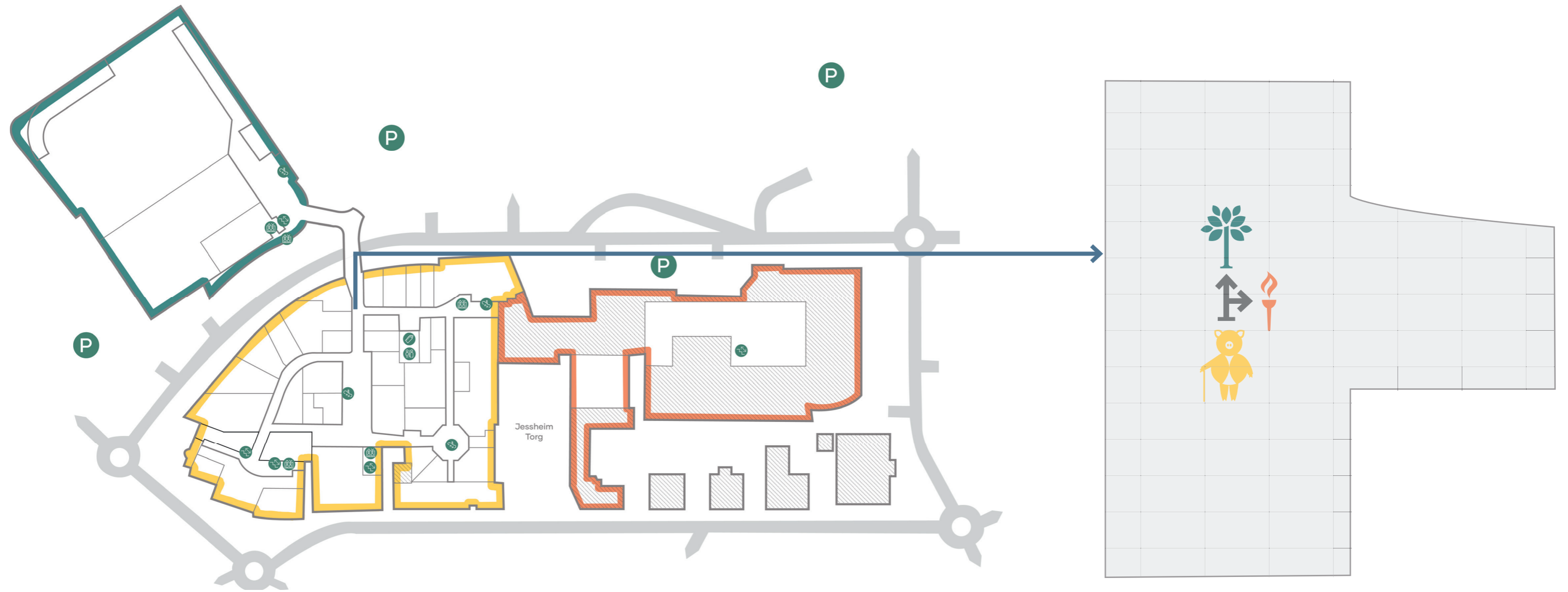


Fig 36 Transparent icon and floor number on painted support beam. Trash can and floor number in the background is colored to show example of possible details.

Here are three examples of how the elements could be displayed in its right environment, so I asked 13 people at the mall which of these they preferred. The majority said the left and middle version (fig. 34 and fig. 35), so I decided to move forward with these two.

Figure 34 would work well in high traffic places where people are depended on knowing which floor they are on quickly since it is more visible, while figure 35 could be used in places to remind people.

Divisions



Each part is outlined to show where it is divided.

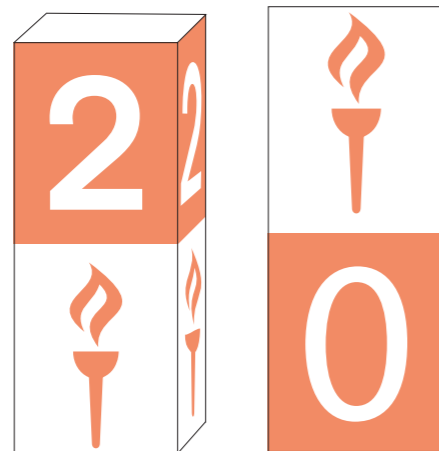
Outlining could be done to physical and digital maps as well. In the store directories, the names should either be sorted by parts, or have a small colored dot or line next to the name. This would allow for people to quickly locate which store is in which part.

The icons and indicators could be placed on the ground (foil), in intersections where people might need further information on their position. The arrow points to where the

Elements

Towards achieving a more complete solution, additional elements are suggested such as conveyor belt sign and visual context. Directories, maps and existing signs should ideally be color coordinated to better fit the zones. Interior elements such as trash cans and benches could as well. Here are ideation of the first two, which I propose should be tested in a pilot project.

Conveyor belt sign


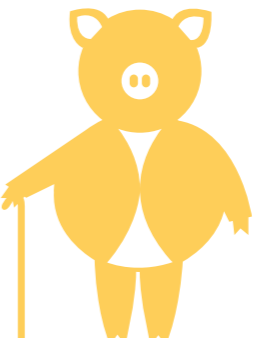



Sign hanging in front of the conveyor belts/escalators. Number on top or below indicates if it takes you to an upper or lower level.

Visual context



Mockups of different layouts for the history sign. In the end I felt the chosen one looked most clean and structured.

 THE TORCH PART Est. 1968	 HK/NEW PART Est. 1979	 SKOVLY Est. 2017
<p>The name originated because of a statue of the roman goddess Vesta who held a burning torch on the main entrance wall.</p>	<p>The history started in 1920 when the Kvaerner family opened a café and meat store. Over the years it has been a slaughterhouse, sausage factory and convenience store before it became a center.</p>	<p>Skovly is the newest addition and can offer multiple stores, parking spots, office spaces and even apartments on the roof.</p>

Since the icons are based off of historic background, I felt that they could need context. This would be located one or more places in each section, providing a small piece of Jessheim storsenter's history.

Depending on which zone it is located at, that part of the illustration would be enlarged. If it is placed on a light colored surface it would look like this, but on a darker background the black text should be in the three colors.

In environment



Part 7

Conclusion

Further development

Jessheim shopping center has a relatively new children's section called Balubaland with its own mascot. Multiple children's stores are gathered there, as well as an indoor playground. This area is located on the second floor, and the interior design is really well executed. What needs to be taken into consideration is if this should be separated visually from the others and be its own part, or stay under one of the suggested zones.

Since the mall is older and well established, that means that they have many wayfinding elements. Since, to my knowledge, they are not planning on renovating, in the near future. If this solution were to be realized and for the center to become more uniform visually, it would mean that many existing solutions had to be changed out. This is not necessarily sustainable unless they can be reused. What needs to be taken into further consideration is which signs that should be replaced, if any. Some of them can possibly be modified to fit other elements.

I believe my proposed concept has the potential to be a successful solution towards navigating in their current, and confusing buildings. For the concept to go from being a fictional solution to reality, it would need more user testing, iterations and development. Since it is a public place with a lot of foot traffic and different visitors daily, I would propose to first run it as a pilot project. That means to conduct a preliminary test of the solution, although on a smaller scale. This would allow us to test the concept, collect feedback and make the necessary adjustments.

Depending on the building owner, both paint or foil could be used to implement the solution. Paint will result in a more permanent and durable result, while foil can easily be removed. Foil can for that reason be a great material for a potential trail run. By conducting the pilot test would as well help uncover cost, contrasts and if it actually is intuitive wayfinding or not.

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