

A Public Toilet

–a Window to Values and Wellbeing of Society

SUVI KAJAMAA

MASTER'S DEGREE PROGRAMME IN CREATIVE SUSTAINABILITY
AALTO UNIVERSITY / SCHOOL OF ART, DESIGN AND ARCHITECTURE
HELSINKI, FINLAND / AUTUMN 2013

This thesis process was an interesting journey that included input from various people. First of all, I would like to express my gratefulness to my supervisor Tuuli Mattelmäki for her valuable support and guidance through out the journey. I would also like to thank the Helsinki City Library of their engagement in being the partner of the process.

I am grateful for all the people who shared their experiences and knowledge, especially the ones interviewed in the *toilet talks* and the ones who gave their input in the workshop. I would like to give special thanks to Glen Forde for reviewing my English writing.

I would also like to thank the "Creative Sustainability family" of all the interesting and memorable moments in the past two years. Finally, I would like to thank my dear friends and family for their honest support through my studies.

ACKNOWLEDGEMENT

ABSTRACT

‘A Public Toilet –a Window to Values and Wellbeing of Society’ is a study of public toilets in the context of an indoor public space. The partner of the process is the Helsinki City Library. The topic is explored from various perspectives to get a holistic understanding of everything that should be considered in public toilet planning and how the created solutions influence the user experience. The study concentrates on the new Central Library, which scheduled to be built in 2017. It describes the often so neglected topic with fresh perspectives and can be used as a planning phase guideline and inspiration to other public buildings as well.

KEYWORDS:

empathic design, user experience, sustainable behaviour, wellbeing, public toilets

1. INTRODUCTION

- Overview of thesis
- Motivations
- Objectives
- Research questions

2. BACKGROUND

- 2.1. The role of Finnish library
- 2.2. Toilets and sustainability
- 2.3. Toilet creativity a part of the toilet culture

3. METHODOLOGY

- 3.1 Process
- 3.2 Observation
- 3.3 Toilet talks
- 3.4 Follow-up probe
- 3.5 Workshop with creative toilet users
- 3.6 Blanco toilet experiment

4. FINDINGS

- 4.1. Rhythm
 - 4.1.1. Layout of the building
 - 4.1.2. Different user needs
 - 4.1.3. Connection to surrounding
 - 4.1.4. Equal effort
 - 4.1.5. Divisions
- 4.2. Service system
 - 4.2.1. Supporting wellbeing
 - 4.2.2. Balance between control, access and privacy
 - 4.2.3. Special features
 - 4.2.4. Maintenance
- 4.3. Experience
 - 4.3.1. First impression
 - 4.3.2. Mental connection
 - 4.3.3. Senses
 - 4.3.4. Refreshing moment
 - 4.3.5. Access issues
 - 4.3.6. Attitude of the provider
 - 4.3.7. Preventing unwanted behavior
- 4.4. Interaction
 - 4.4.1. Real time interaction
 - 4.4.2. Interaction with outside world
 - 4.4.3. Location matters

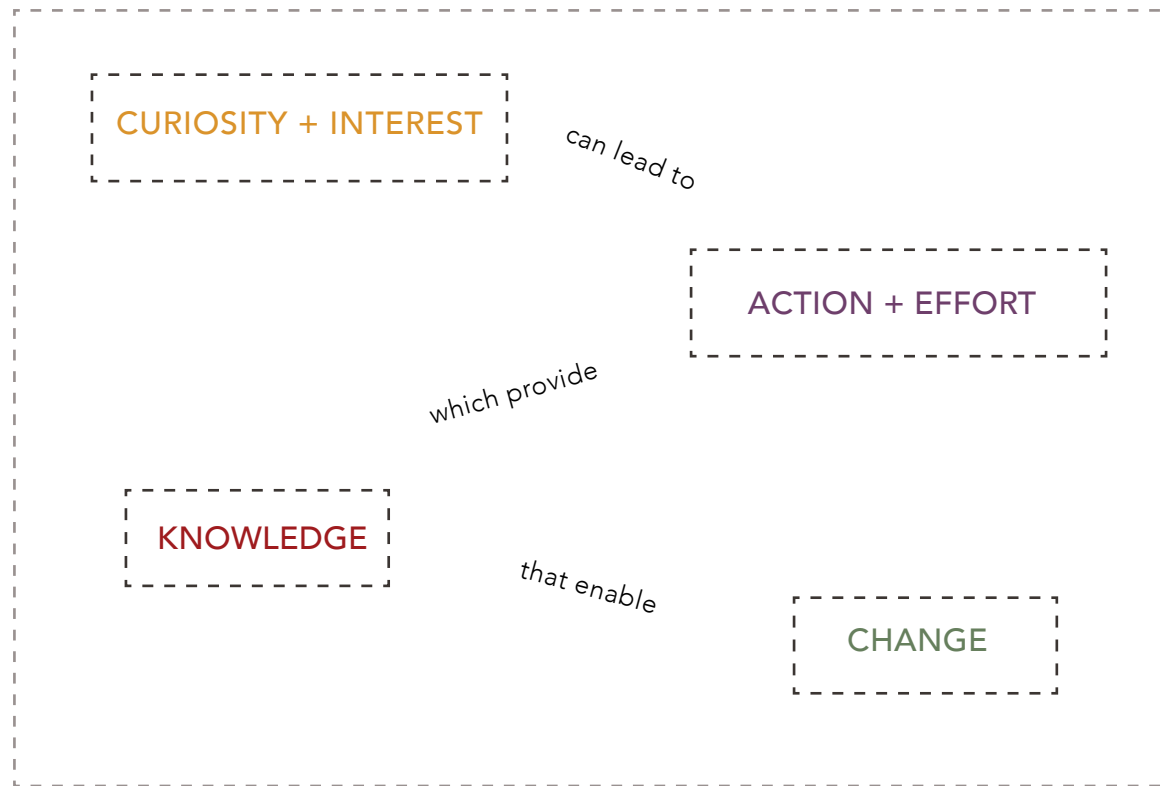
5. CONCEPT

- 5.1. The main characters of the zones
- 5.2. Introducing the concept stories

6. DISCUSSION

- 6.1. Generating interest
- 6.2. Reactions and feedback
 - 6.2.1. Issues raising questions
- 6.3. Future steps

REFERENCES



This thesis focuses on user experiences in public toilets. The Helsinki City Library has been acting as the partner in the thesis work and the focus of the exploration has been mainly on the new Central Library, which is scheduled to be built in 2017. The approach of this study is one of empathic design. Chapter three introduces the different participatory methods that were used to create access to user experiences. The findings of the process are discussed in chapter four. It is hoped that the knowledge gathered will be useful in future planning processes, to create solutions that support the wellbeing of users and increase the appreciation towards the public good. The concept stories introduced in chapter five are the author's interpretation of the knowledge gained during the process. The user experiences, dreams and wishes are at the core, guiding the design process. The aim in the concept stories is not to introduce finished objects and environments but to introduce public toilet planning from a service design perspective, supporting the variety of users and demands. Chapter six is about the results of a participatory exhibition, discussing the reactions of users to the suggested concept ideas.

For some reason ordinary toilets keep on disappointing me. Very rarely do I meet with a positive toilet experience. Most likely, I am amazed by people's bad behaviour and even more I am shocked, by sensing the lack of effort of the toilet providers. Sometimes I see small, positive details, like the hints of toilet creativity e.g. drawings on the toilet walls made by the other toilet users. Those make me truly believe that the toilet environments hide a lot of potential, if only they would be rethought. Public toilets are a necessary part of society. A general impression of the city of Helsinki, details like street urination and lack of an available public toilet when needed, are bigger issues that this study would like to encourage to be solved. Unfortunately, the public toilets are seen as resource-wasting objects, causing problems like vandalism. Instead, they could be the strength of the urban environment. With curiosity and excitement, I am willing to take a journey into the world of toilets. I hope to find knowledge, which will inspire and provide tools for planning better toilet experiences that would be sustainable and be appreciated by both: the users and the providers.

MOTIVATIONS

The aim of this thesis process is to consider public toilets from holistic perspectives to provide suggestions for future planning processes. The aim is to raise discussion towards this neglected topic and highlight the role of public toilets in the service ecosystem of the city. The focus in my master studies is in sustainable development and I have a history in product design and education. From that background, I see human behaviour, interest and attitudes as one of the most important features towards a more sustainable future. Public toilets are important units of the urban environment supporting everyday activities. Still, they are typically considered as neglected spaces, which encounter all sorts of problems.

Toilet planning today mainly focuses on functional issues. I agree that good usability is an important core of a toilet service. Good accessibility, for example, provides equality for all citizens. In this study it is considered as a basic requirement, which all the planning processes should fulfil. This study aims, however, to provide fresh viewpoints that would help planners to consider the design solutions' potential in creating toilet experiences and therefore influence human behaviour towards sustainability. During the process different creative approaches are used to gather understanding: what is the toilet experience about and what is the users' dream toilet like? Toilets host intimate activities and user experiences are really personal. The focus of the study is in the user experience and the approach of empathic design is used to get access to the feelings and meaningful experiences of the users. The aim is in creating input for the planning process of the new Helsinki Central Library, but the outcome is wished to be adjustable, useful knowledge and inspiration to other planning processes as well.

OBJECTIVES

What kind of elements should be considered in the public toilet planning to enable good user experiences in the future Central Library in Helsinki 2017?

How could the design solutions turn the public toilets from neglected spaces to appreciated services that would support user's wellbeing and sustainable behaviour?

In the autumn 2012, a participatory workshop with teenagers raised an interesting viewpoint: toilets being locations for surprising moments of communication with strangers. **The role of a public toilet inside a public building was the starting point, which triggered new thoughts and defined this thesis topic.** When contacting the Helsinki City Library, they shared a great interest towards the idea of developing public toilets and they became a natural partner to this thesis process. According to the conversations considering toilets with the library staff, they have both negative experiences from today's situation, and great expectations and enthusiasm to develop their future facilities.

2. BACKGROUND





Images from Seinäjoki library

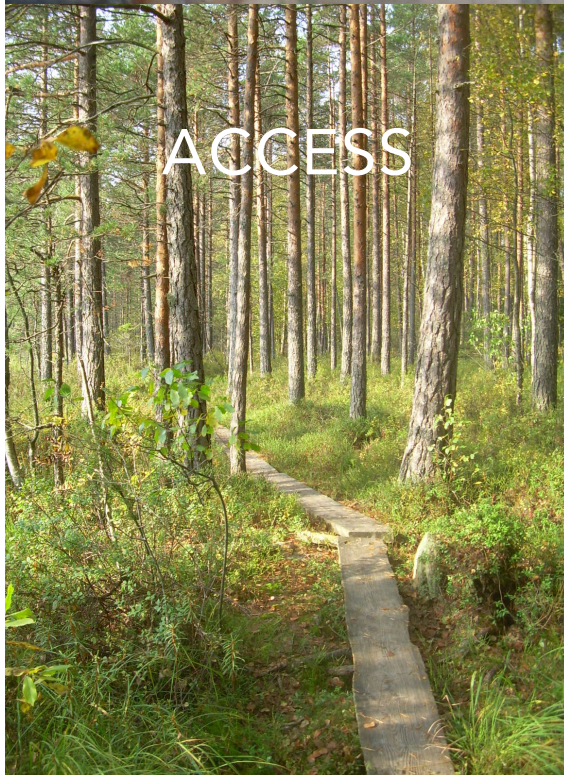
2.1. THE ROLE OF THE FINNISH LIBRARY

The new Central Library, which will be built in the centre of Helsinki to celebrate the hundred-year anniversary of the independence of Finland, will be a remarkable building project, providing a great offer of uncommercial public space for the citizens to enjoy. The process of developing the meaning of the future library is very interesting to follow. The library as an institution is a crucial feature of education and civilization, whose roots are in enabling access to information, culture and knowledge for free, equally to all citizens. The future Central Library is considered as "the Heart of the Metropolis: Heart of Helsinki" (Architectural competition programme). Today the very traditional idea of the library as a storage space for books is history. Various conversations in society, e.g. articles in the media, describe the library with terms like living-lab, meeting space and city's living room.

The Finnish library is a great, reliable example of the sharing economy, which has strong roots and is used by all different social classes. The sharing economy is a commonly known approach in sustainable development, which is growing fast and globally with the help of technology like social media. Its main idea is in developing systems, and even business models, in which citizens have an active role. The core idea is in sharing more and owning less. This has sustainable impacts, e.g. reducing the amount of required material resources, and creating trust and communication between people. (see Economist 2013 and Lahti & Selosmaa 2013). The future library offers spaces and facilities, extensions for city apartments and flexible solutions for the working and studying purposes of citizens in the sharing economy.

Today the Library 10 in the centre of Helsinki functions as the prototype of the new Central Library. Its functions will be removed to the new location. Its atmosphere and activities are relaxed, and even experimental. There, the toilet facilities are an interesting contradiction to the surroundings. A fee to enter the toilets is required because of behaviour problems. In general, the library draws the citizens' appreciation, and the sharing culture is functioning without major problems, toilets being a troublesome exception. Free, high quality facilities are hoped to be the future feature in tomorrow's library. The best toilets in Helsinki are wished to be found in the

new Central Library, as the quotation (from e-mail 16.11.2012) from the former library director Maija Berndtson, describes: "I strongly believe you are working with such an important topic. In the future, the Central Library should host the best toilets in Helsinki, if not in the whole Finland! It is a tough objective when we know what kind of problems e.g. Library 10 and other public toilets in the city centre have."



2.2. TOILETS AND SUSTAINABILITY

Public toilets have maintained a surprisingly similar physical appearance in western countries since the invention of water closets in the late 19th century. Today, the lack of toilets is considered as the biggest global health risk. Approximately 1.3 million children under five years of age die yearly because of diseases caused by lack of access to toilets and clean water. Interestingly, Jack Sim, the founder of the World Toilet Organization, thinks that the best results for improvement are gained by addressing the global situation also locally. He challenges the western countries to be a part of the development and highlights that having fun and doing things, which are provocative to inspire other people to do better, is the approach to solve the challenging topic. He highlights that attracting attention is the strongest tool for improving the taboo topic: **“What we do not discuss we can not improve!”** (IPA Voices 2011)

Access to public toilets is a question of human rights, health and equality. Gro Harlem Brundtland wrote the most common definition of sustainability: **“development that meets the needs of the present without compromising the ability of future generations to meet their own needs”** in 1987 in the report *Our Common Future*. In the background of this thesis study there is a concern that western toilet habits are not sustainable when considered from the global perspective. Water is said to be the future oil. Already today we face a peak, clean water is not equally spread and there is not enough for everybody. In the future, the lack of water will be a reason for more conflicts. The western countries take access to water for granted and are claimed to be **“over-consumers”**, (see e.g. Fuad-Luke 2009) with flushing toilets as a good example. Our **“never-ending”** water resources and the well-designed infrastructure allow our consuming habits and prevent us from rethinking. Unfortunately, the western water footprint is not just locally produced, but much of it is exported to countries suffering from aridity. We indirectly consume the water from the other side of the world, mainly by importing clothes and food (see e.g. Water Footprint Network). The western lifestyle as an ideal to reach globally is utopia. The western investments in technology as the global problem solver are unfortunately not enough. We also need attitude change.

Water use is only one concern. The lack of appreciation and unsustainable behaviour towards public toilets is a common phenomenon in western societies. It touches all the dimensions of sustainability: economical, environmental, social and cultural (see Chich & Micklethwaite). Designing for societal change is considered as a field where a designer with a sustainable worldview can influence society. Sustainability is a social learning process: raising awareness, changing perceptions and behaviour, as Alastair Fuad-Luke (2009) describes. I believe that education through positive experience and personal discovery is the best tool for achieving sustainable behaviour. Raising awareness and interest by lecturing and increasing the feeling of bad conscience of one’s behaviour is not an effective approach to achieve long-term change. The aim in this study, to find solutions to achieve better appreciation and behaviour towards public goods through understanding the user experience, aims to be a starting point for further development towards more sustainable toilet culture.

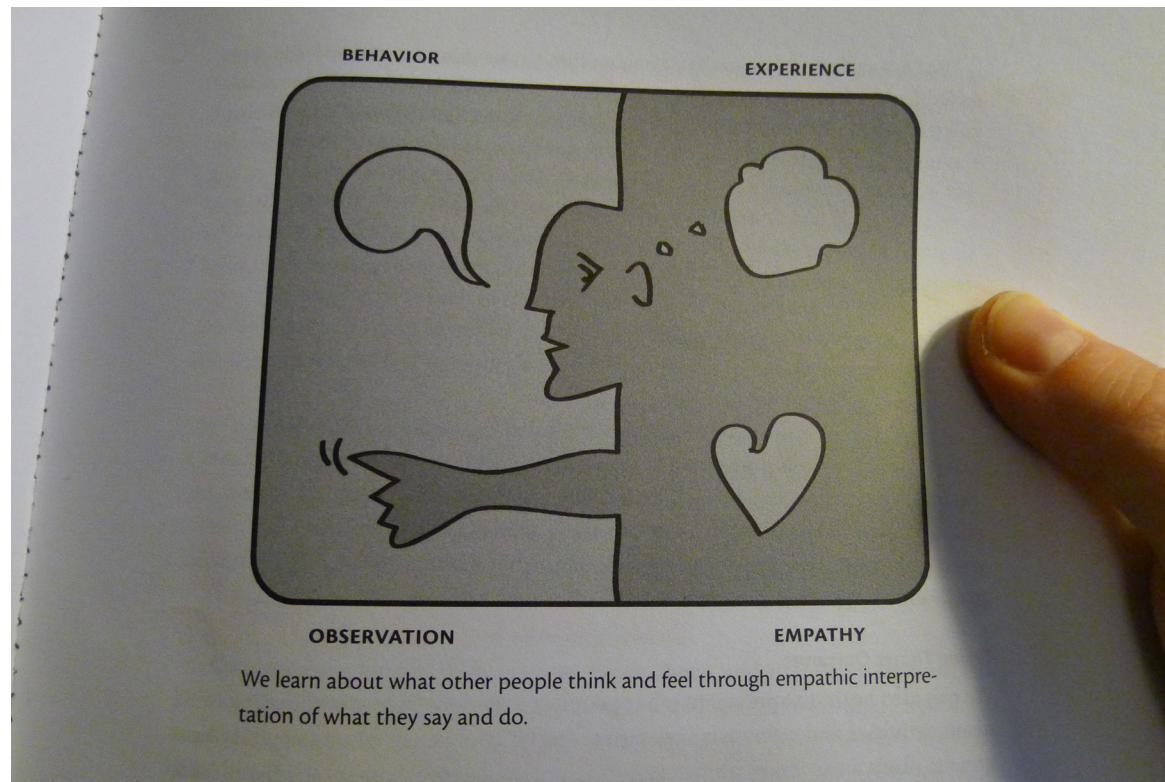
Public toilets witness many interesting phenomena in society. For example, they have a strong history as a gay men's cruising location and they have stimulated the creativity of normal users and artists (see Clara Greed 2003 and Gershenson & Penner 2009). The creativity taking place in toilets is one of the most interesting, dominant features of toilet environments, and it is paid special attention in this thesis work. I introduce the term *toilet creativity* to describe this activity further on. It consists of drawings, writings and stickers filling the toilet walls, created by the toilet users. The content of the creativity varies from political lobbying to declarations of love. A special feature of this action is anonymous interactions with other toilet users, which creates communication chains. Users respond to the messages created by others, and long conversations may occur, where the users might even come back to respond to the comments they have received. Anonymous confessions are an example of typical tone in *toilet creativity*. Very personal issues can be shared with the broad toilet audience. (See McKinley 2009)

When the activity of *toilet creativity* is compared with other urban creativity, like tagging, it is quite obvious that there are differences of many kinds even though some similarities exist. Tagging is all about gaining fame and respect, the amount of tags and the difficulty of their locations define the painter's reputation for those interested in the scene (Macdonald 2001). The visual image of the painter's name is the content of the tags. Participants in *toilet creativity* are often not seeking urban fame and might not even be interested in their actions' visual appearance. Engaging in *toilet creativity* is not considered as a strong part of the person's identity, and most often it is the content that inspires the toilet users to take part. The biggest similarities in tagging and *toilet creativity* are the urban locations and the variety of tolerance and appreciation when it comes to other people who are not part of the actual activity. Both can be considered as money-wasting vandalism or entertaining details of urban culture (Jussila 2013).

2.3. TOILET CREATIVITY A PART OF THE TOILET CULTURE



A traditional tag (upper left corner) and examples of toilet creativity

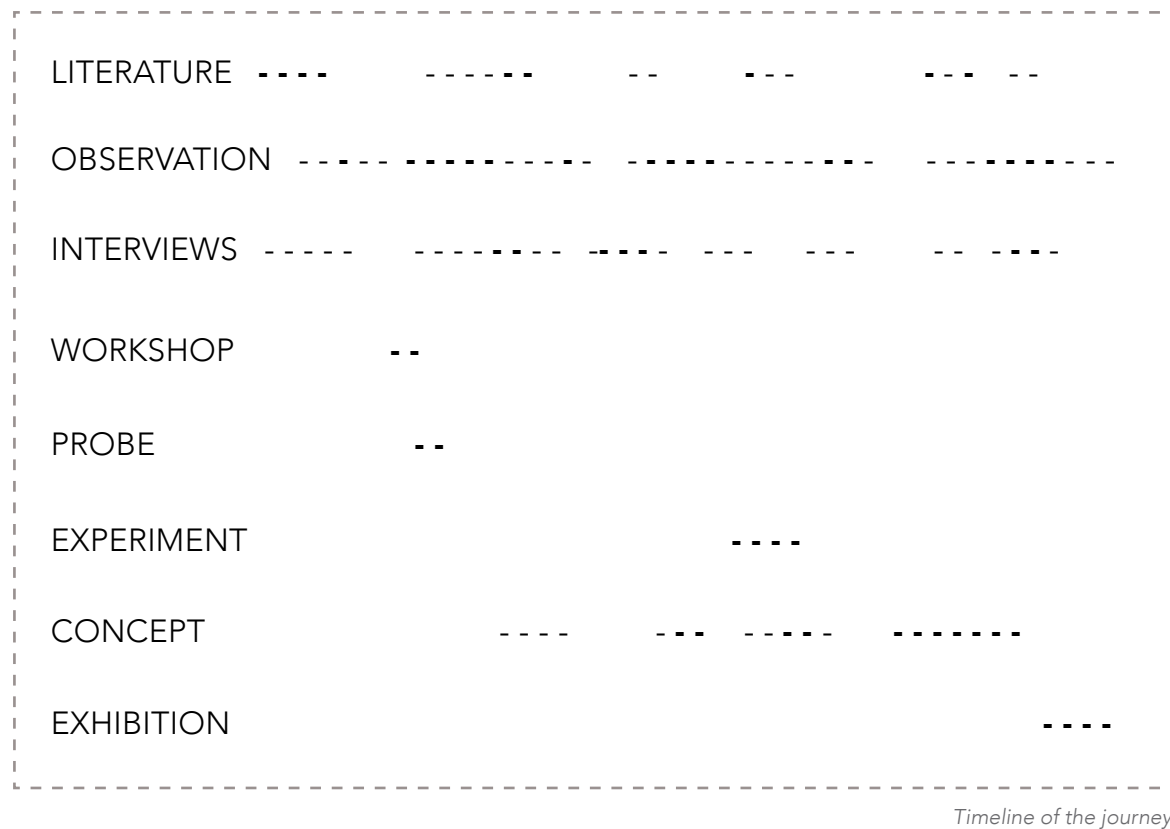


An illustration / Jane Fulton Suri (2003)

This thesis process can be described as a learning process where various methods of empathic design are used to make sense of the phenomena (see Koskinen et al 2003). Its user-centered approach aims to discover the user experiences, including feelings, wishes and concerns towards the research and design topic. The goal is to find understanding to enable the best-fitting design solutions to create successful user experiences and support the appreciation of public toilets. Jane Fulton Suri (2003) brings up the designer's challenge: to design for people who she or he will never meet. She recognizes the problem, that a designer might end up designing for him or herself or can think of the end users as other people — them— with assumed expectations and wishes. She promotes empathic design as the problem solver, and encourages designers to apply a variety of approaches, from experiencing themselves and 'step into the user's shoes', to observing, interviewing, asking experts and doing literature studies. She defines a good design process as a balance between subjective empathy and objective observation. She highlights, as the essence of the empathic design, the curiosity to understand what is it like to be somebody else (Fulton Suri 2003, pp. 51-58. In Koskinen et al 2003 (eds) Empathic design).

Listening, seeing, experiencing and experimenting have been the main methods this process to understand the user experiences and the reasons behind the behaviours in the context of toilet environments. "The real input from the ordinary toilet users is very valuable. Hearing (and seeing) the personal concerns, wishes and experiences creates a strong connection between me and the topic. It is really tangible that I am doing the study and the design for people having real feelings and relations to their environment. I feel responsible and I am not doubting why I am doing this", a reflection from my notebook describes. As typical of a design process of this kind, the concept development is done simultaneously with the research part. The gained understanding brings new insights, and the findings along the process set new requirements for the needed knowledge. This chapter introduces the approaches used. The following chapter four introduces the findings, which are the backbone of the created concept proposal introduced in chapter five.

3. METHODOLOGY



3.1 PROCESS

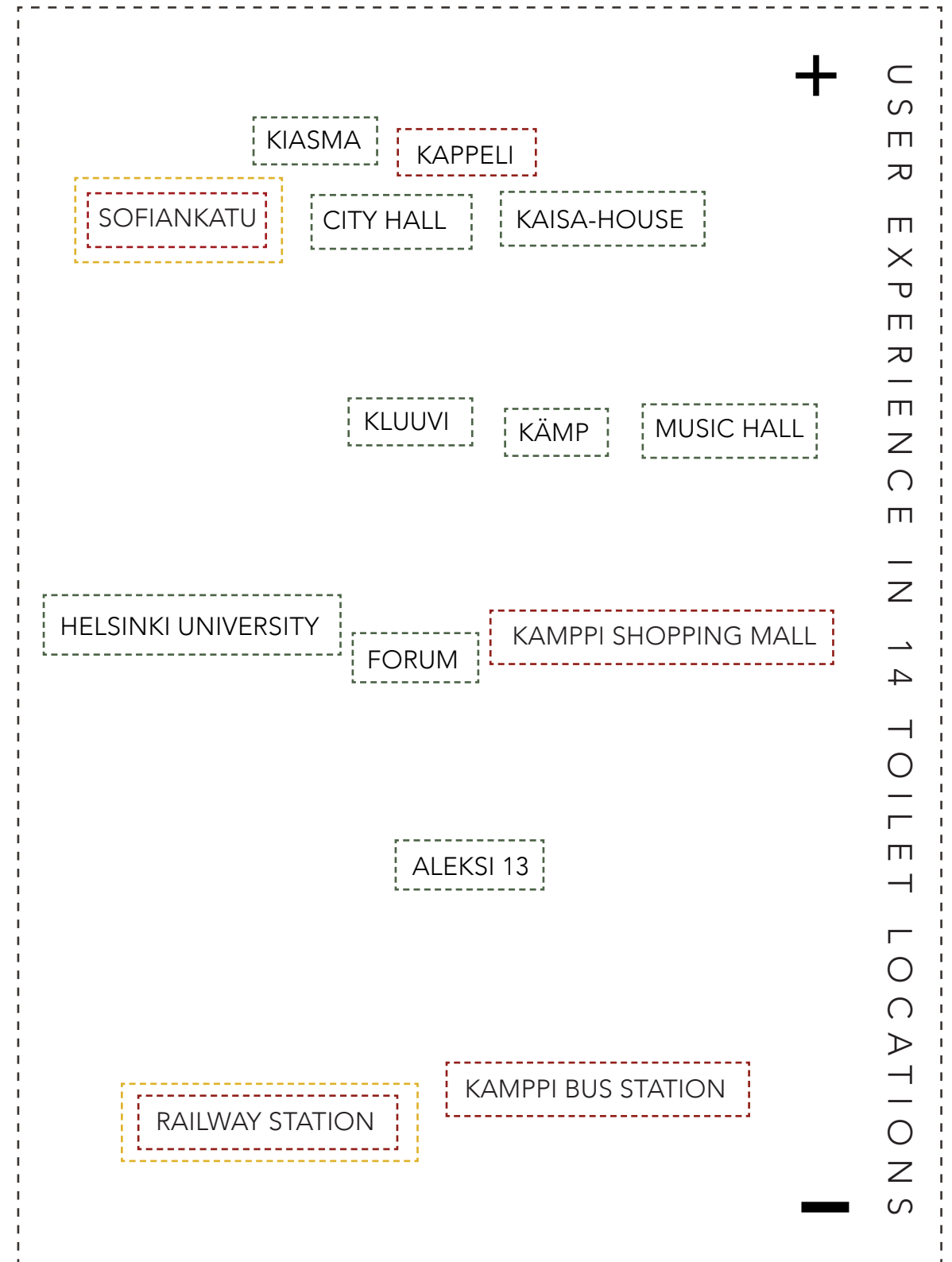
This study aims to explore an ordinary, but often negatively-associated topic, public toilets, from fresh perspectives. The objective is to gather a comprehensive understanding to see how design solutions could improve the user experience and the appreciation of the common good. Participatory and empathic methods and a broad angle of observing existing solutions play a key role in the process. By scaling out from the toilet space itself and observing the issue more holistically, the process is an open-minded journey. The focus is on understanding user experiences: how public toilets are felt and what could be done to improve these experiences.

Today, public toilets are problematic spaces, which encounter issues like vandalism and misbehaviour. The aim is to find solutions that would provide advice and inspiration for future planning processes, how the toilet providers could fulfil user wishes and draw users' appreciation. By doing so, this would potentially positively influence e.g. user behaviour and the maintenance and repair costs. The concept introduced later in chapter five aims to visualize the role of the toilets in the public building from a service perspective focusing on experiences, relations and interactions (see Meroni & Sangiorgi). Ezio Manzini (2011) describes services as action platforms, where the user is valued as a resource and services can be even collaboratively produced (Manzini 2011, pp. 1-6. In Meroni & Sangiorgi 2011 Design for Services). With this in mind, the concept proposals aim to influence user behaviour through experience, leaving space for non-designable action and individuals.

The designer's role in this thesis process is diverse. The empathic design approach and participatory methods allow the designer to jump into the users' world and experience the research topic through his or her own action. Organizing a participatory workshop, for instance, requires the designer to be a facilitator. If the research part involves different professionals than the design phase, there is a risk that all the valuable information is not transformed and delivered to the design team. It is an advantage if the designer is able to be part of the research and develop the concept proposals simultaneously. The experiences gained in the research allow the designer to make interpretations and use the designer's skills towards design solutions. The used approaches are

decided at the beginning of the process. Room for creativity exists, so that the designer can respond to new findings and e.g. explore the reasons behind certain phenomena more specifically (Hyysalo 2009).

For a designer, gathering the background information for a design challenge from many viewpoints and directions is a very natural way of working. This phenomenon is utilized in this thesis process as well. Each approach has its input to the process and the insights are named and organized, setting simultaneously new requirements and highlighting the gaps in the needed knowledge. By organizing the insights and their relations, several interpretation maps are created under different headings. The aim is to cover challenges and opportunities, which could lead to the answers to the earlier defined research questions. The research aims for holistic understanding and for a possibility to consider and see the neglected, even a taboo topic, from a positive angle. The whole process is also a possibility to develop the designer's expertise. One definition of the designer's role is "societal visionary -a broad minded expert" (Pehrson 2013), with the clarifying additional "go producing (open) knowledge together with the community" (Fuad-Luke 2013) function as an inspiration for the participatory action created in the process. In sustainable development, for example, the role of the designer is not only in activities like designing sustainable product lifecycles, but to work in multidisciplinary teams and to influence and inspire the surrounding society towards more sustainable behaviour. Visions like how we would like to see the society in 2050 or 2150 are issues which require commonly created thinking and action today.





Observation is a commonly used research method in design processes. It can be short-term fieldwork, where the designer aims to become a part of the researched environment and e.g. identify with a specific user group. It is an effective method of gaining information and increasing the designer's empathy towards the design target (Hyysalo 2009). The designer can observe the situations from distance or can act as user, really experiencing the researched issue him or herself.

The observation in this study included 14 locations, public toilets provided by different actors in the Helsinki city center. The focus was on capturing the different feelings created by different toilet environments, and understanding the reasons behind the experiences. The relations between the experience and functional details, e.g. toilet guards, entrance fees, differences in visibility and location of the toilets, were compared with each other and with literature about public toilets. Clara Greed (2003), a professor of inclusive urban planning, is very dedicated to toilet issues in her career and is e.g. a founder member of the World Toilet Organization. She describes a toilet fee as a barrier to access, but promotes for toilet guards, seeing a possibility of having them as city guides in the main toilet centers of the city. Ironically, her very extensive book about public toilets mentions Finland once and describes the Finnish railway stations as the locations with the most expensive toilets in the world.

I consider observation as a part of the designer's everyday life. A designer belongs to the group of professionals, which pays extra attention to the surroundings' usability and form: interesting materials are examined by touching, and service flows are analyzed to entertain the existing waiting times. It is a typical phenomenon that a designer records the observations from his or her every daylife. Notebooks are filled with drawings of inspiring details and the camera of the smartphone is in active use. Botherome issues encounter first-aid brainstorming; mind maps and simple sketches are created to envision how things could be more pleasurable. These casual notes function as designer's inspiration and material source for upcoming projects. This everyday phenomenon is utilized in this process as well, and it is a valuable addition to the actual

more structured observation that was conducted during one day. The long-term changes, in issues like cleanliness and feeling the presence of maintenance, were observed mainly in two locations: Kaisa House and Kluuvi shopping mall. They provided a great example of modern public toilets of very different kinds, being comparable: both fairly new and very close to each other.

On the observation day, each toilet visit and the experiences gained were immediately written down very carefully. Afterwards, the notes were transferred to Post-it notes with different kinds of color codes e.g. to keep separate the actual observations, the interpretations of the possible reasons behind them and the first ideas for improving the situations. These Post-its were clustered and titled under different types of headings; different toilet locations were compared with each other, and with existing literature, e.g. what Clara Greed writes about achieving good toilet provisions, and planning guides provided e.g. by ESKE Esteettömyyskeskus (Finnish Association of People with Physical Disabilities) and Rakennustieto Oy (Building Information Ltd).

Generally, the scale of user experience from positive to negative was amazingly broad, and some wild cards, which did not meet the assumed expectations created e.g. by the locations, exist. The approach and attitude to providing the toilets differed much depending on the provider. The tolerance towards toilet creativity and the role of the user fee, for example, affect the user experience in various ways.



In this thesis process the *toilet talks* (main, informal and unofficial) had an important role in getting access to toilet experiences from various perspectives and viewpoints. A *toilet talk* is a term made for this study. It illustrates the approach used: a combination of semi-structured interviews and story-telling. Certain professionals were invited to the main *toilet talks*. These semi-structured interviews provided insights and understanding from a certain professional angle. Jaana Jussila, the CEO of the student restaurant Kipsari (introduced later in the Blanco experiment), opened up the toilet provider's viewpoint, and shared her insights into the meaning of the *toilet creativity* as a feature of the brand and identity. Tero Hirvonen (an interior architect in the planning process of Kaisa House) shared his knowledge from the planner's point of view. He gave great insights e.g. from the user participation and the requirements guiding the focus in the toilet planning process.

Informal *toilet talks* (and short interviews via e-mail) aimed to address specific issues raised during the process. Insights into topics like the toilet culture in the men's room, the maintainer's workload and reasons behind unisex toilets, were in focus in these conversations. The unofficial *toilet talks* were the most casual ones, recording interesting stories from citizens. The amount of these talks was really high. The topic really seems to resonate with the ordinary toilet user and everybody met during the process seemed to have something to share. The *toilet talks* were a great and flexible approach for gathering knowledge. The excitement I faced at every level of the *toilet talks* gave strength to my confidence that considering the ordinary issue from fresh perspectives is needed.

3.3. TOILET TALKS



Details from Kaisa House and Kipsari



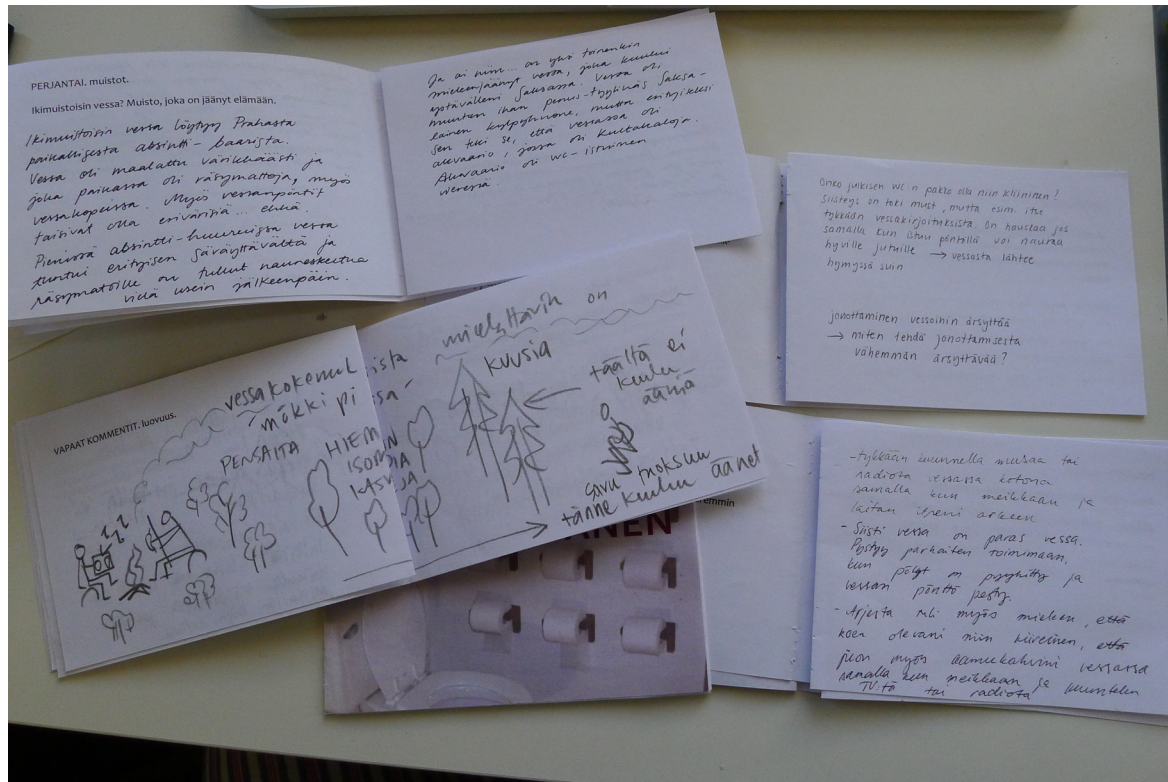
3.4. WORKSHOP WITH CREATIVE TOILET USERS

The toilet experience, including *toilet creativity* and interaction among other people, were the focus point in a workshop where eight creative people were invited to brainstorm, dream and share their user experiences. Different tasks, from individual warm-ups, to break the ice, to various group exercises, were designed for this participatory event to inspire and to make communication easier. By changing the groups in each task the risk of someone dictating the teamwork was avoided.

The participants were invited with a personal message through social media. Both genders were present although women were the majority. The age division was from 24 to 34. Most participants had some sort of creative professional background e.g. graphic, interior or industrial design. Although the future library will host people of all kinds, the selection of this group was a purposeful choice based on the following assumption: these creative people were considered as a group of sensitive people, who are not satisfied if the environment only fulfils the basic needs. They continuously dream and observe and easily see potentiality and faults in their everyday life. Expressing dreams and concerns, questioning and rethinking their surrounding environment from many perspectives, is natural for them through their professions. This is not a self-evident feature. It is easy to get blind by getting used to the surrounding.

"Before it did not matter how the public toilet is like, but now with the baby I really consider carefully where to go", a 37-year-old woman describes how her eyes have opened up after the change in her life. One purpose of the participatory events is to get access to a specific user group, to their needs and wishes. The topic of public toilets is an interesting example of inclusive design, which includes everybody as a potential user with different needs. The workshop participants, being mostly professionals from creative fields, brought insights from two dimensions. Firstly they are ordinary toilet users with personal experiences, concerns, dreams and wishes, but also they are trained to observe their surroundings and understand e.g. reasons behind good usability and function.

Eight invited people participated in the workshop. Everybody, who promised to come, showed up with positive energy and enthusiasm. In my previous projects, I have noticed that this type of invitation method functions really well. In participatory events, failing in commitment is a common feature to overcome (Hyysalo 2009). The possibility to personally choose whether to participate or not, from my experience keeps the failing rate to a minimum and involves participants with motivation to share their input. The personal invitation and a small recognition of participation afterwards also increase the participants' experience of being a valuable part of the process. In the workshop, the participants were clearly excited, and the feedback afterwards concluded that the participants themselves gained positive energy and inspiration for their own lives. The design process gained a lot of interesting insights from the existing experience of the participants, and even playful visions were shared of how things could be different in future. An idea bank was created, which functioned as an inspiration and information source in the actual concept development.



3.5. FOLLOW-UP PROBE

Probes are a creative research method used in design projects to trigger and engage users in participating in the design exploration process and to get access to users' everyday life. The participants self-document their lives with the help of the probe package, which the design team has designed to ease and inspire the user in his or her observations. A disposable camera and diary, for example, are common objects included in the probe package, which the user is normally engaged to use for one week each day. (e.g. Mattelmäki 2006)

In this thesis process, the timing and order between the probe and the workshop differed from the typical applied rhythm. In context mapping exercises for example, the participants are typically provided with sensitizing packages that are probe-like self-documenting kits prior to the co-design workshop (see Sleeswijk Visser et al 2005). My previous experiences from organizing workshops have pointed out an interesting activity. Some participants have showed strong interest to keep on going in giving their input to the topic after the workshop and details like webpage links, contact information and images, which the participants considered useful in developing the project further. This raised my curiosity to schedule the probe as a *follow-up* for the workshop.

At the end of the workshop, each participant was given an envelope. It included the *toilet book* with an introduction letter, a small recognition of the input given so far and a returning envelope. The aim of the *toilet book* was to enable the participants to capture the positive energy and possible, valuable input emerging after the workshop. During one week, the participants responded to small observation tasks each day. The *toilet book* had extra space to allow participants comment freely on emerging issues. As mentioned earlier, the personal invitation, a possibility to choose to participate and the visual invitation were considered as a strong combination of triggering the engagement. In addition to this, the participants' professional skills for creative thinking were a strong guarantee that they could freely express themselves in the workshop.

In workshops, the presence of other people might influence some participants' willingness to share personal opinions. The designer, as a facilitator, has a responsibility to create an atmosphere of trust, equality and tolerance among participants as not all the participants will be equally talkative (Hyysalo 2009). The *follow-up* probe provided a tool for the participants to clarify and add things that they might feel were not captured well enough in the workshop. The trust created in the workshop, and the participant's experience of the importance of their input, influenced and encouraged the participants to share intimate issues. The experiment of using the probe as a *follow-up* seemed to function well. The workshop engaged the participants in the research topic and functioned as an eye-opener. The *toilet books* enabled the workshop participants to capture memories and observations from their everyday life; it seemed that the workshop event had raised their curiosity towards the topic, and the process of thinking continued afterwards. Based on the results, the participants were able observe their life with new eyes and to remember and share interesting stories from their experiences. Some participants even proposed concrete ideas of how future toilets could be. The return percentage of the *toilet books* was quite high (6/8). Participants were not reminded to return the books, so this most likely was because of the engagement and enthusiasm created in the workshop.

An experiment of toilet creativity named *Blanco* took place in Arabia in the Aalto University's property. In 14 toilet stalls in three different locations inside the campus of art and design, high quality papers and markers were attached, to allow and experience the toilet creativity. Arabia campus, as a location, was chosen on purpose, for people being used to the presence of creativity in their lives. Everyday relation to creativity was considered as a benefit, people being interested and open-minded towards creating visual content. However, it was seen as a challenge. In a location where creativity exists everywhere and in many forms, would the simple canvas in a toilet environment receive enough attention?

Hanington (2003) mentions a student project, where similar kinds of canvases with specific questions have been located in toilets to capture specific user information. He sees these kinds of creative research methods beneficial in getting access to challenging observation locations like toilets, which are considered as the shelters of privacy. In the case of the *Blanco* experiment, the aim was not to get direct answers from users to specific questions, but to observe the toilet users' behaviour towards the experiment and to understand the process of the ongoing activity and its end outcome. The *Blanco* experiment was expected to demonstrate the chaining of communication, which is a typical feature of toilet creativity.

These were the chosen locations:

Kipsari. It is a student association owned restaurant; robust, tolerant and rock bar style. Full of creativity. Highlighted feeling of feminine and masculinity.

Media Factory. A wide mix of users; home feeling, kitchen in the heart. No toilet art. Unisex toilets.

8th floor. Industrial and strategic design department. Some toilet art. Standard gender divisions.



3.6. BLANCO TOILET EXPERIMENT

The Blanco posters were attached with four different themes as a starting point. These themes were similar to features existing in the toilet creativity, and the interest was to see whether they are powerful enough to guide the chaining in a certain direction.

These were the themes:

- a) small illustration
- b) text proposing a question
- c) text expressing a confession
- d) no inspiring detail at all

The hypothesis was that the location, atmosphere of the surrounding and the gender divisions would impact the toilet creativity, its content and level of activity. The influence of the art school was expected to be present in the users' visual input and the quality of the posters and markers were chosen to support this feature. Also it was expected that each of three themes (a, b and c) would have some sort of influence on the content of the user's input.

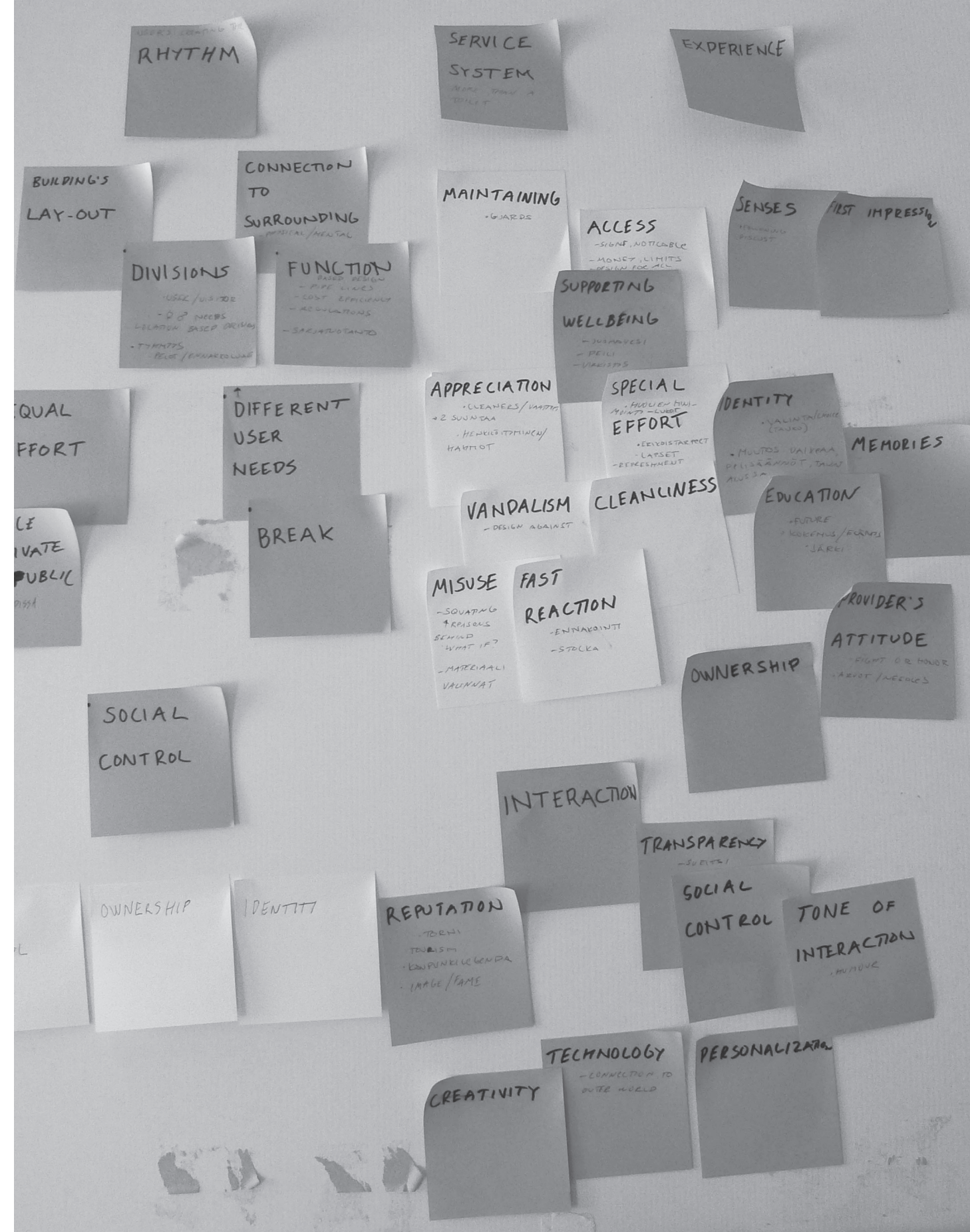
The experiences of the gluing process strengthen the hypothesis that the locations would influence the experiment. The Kipsari toilets are really tolerant towards toilet creativity. The atmosphere is similar to rock bars. Originally, the appearance of the toilets was the result of a student project, but the walls are under constant change and spontaneous personalization. In Kipsari, the Blanco posters were expected to be more restrictive than encouraging objects towards creativity. Even unwanted treatment, tearing down the posters or somehow strongly expressing negative attitudes towards them, was expected. In the other locations, the posters were expected to gain positive interest from the users, by livening the boring toilet atmospheres. No permission for the experiment was asked from the maintainers of the property. A curiosity was to see how the maintainers would treat these additional objects in the toilet environment. An important part of the whole experiment was the gluing process, carried out with a male student. This toilet talk, to share the experiences of the moments of entering the forbidden zones as user from the opposite gender, and comparing the atmospheres of those two worlds, was valuable input for the process.



In this chapter, the findings and insights and the way of processing them are introduced more closely. Different methods have their own role and they support each other by bringing knowledge from specific perspectives and viewpoints. The chapter starts by explaining the interpretation process and then continues by describing the findings in more detail. The aim has been to really understand the gained insights and to make interpretations in order to define the design drivers. By introducing the insights based on different approaches, the learning path is recorded in a form that can be used as a guide. It can also be transformed to other projects considering the planning of public toilets. The following chapter five introduces the concept proposals for the Helsinki City Library. **I wish the following, including examples from the user and expert voices, will inspire and support the future public toilet providers to focus on each planning process as unique opportunity to create solutions that can support the users' wellbeing and the identity of the building in the best possible way.**

The process of making sense of the input from each approach started from transferring the gained information to Post-it notes. These were clustered and organized, creating different themes. The mobility of the Post-its allows reorganization and adding, which enable the configuration of the relations and hierarchy of different issues during the process. All the input from different methods was gathered together and organized on large posters. With color coding, different issues, like input from different methods or pointing out the design opportunities, were kept separate. This kind of process of interpreting the input allows simultaneous ideation of proposals and sketching for the design solutions, which, as mentioned before, is a natural way of working in design projects. For the designer, it also points out the gaps between needed information and the gained knowledge to be able to achieve the best design concepts.

4. FINDINGS



The process of analyzing is flexible and the designer can respond to these arising needs. The *Blanco* experiment is an example of this kind of activity. At the beginning of the process, it was clear that some sort of an experiment, as a creative research method, would be carried out at some point of the process. The curiosity and will, to understand the toilet users' creative behavior better during the process, set the requirements for how the experiment was planned and realized.

Through the process, it became clear that the toilets as a research topic are like a multi-layered net where various topics are strongly connected to each other, and personal viewpoints influence how they are seen. The design solutions are naturally in strong relation with the look and functionality of the toilets. The findings of this study highlight that the design solutions' potential in creating the user experience and influencing the user behaviour could be better utilized in the future toilet planning.

The toilet service is a combination of user experiences, physical objects and supporting activities like maintenance. In a planning process, it is important to pay attention to all of these and create a balance between them. An effort investing in special hardware, for example, loses its power to create nice user experience if e.g. the tone of lightning or the level of maintaining disturbs the user experience.

One of the ways to organize the findings is based on a three-step service process defined by Stickdorn: pre-service period, the actual service and the subsequent post-service period (Stickdorn 2010). **He highlights the importance of the last one, being essential e.g. in building customer loyalty and the reputation of the property by customer recommendation.** These three steps take place also when public toilets are considered. The user expectations, the actual toilet visits and the following feelings can very powerfully influence the user even for a long period of time, and together they create the toilet service experience.

When the Post-it notes were clustered and given definitions and headings, three keywords were highlighted in each cluster: social control, ownership and identity. These three I propose to be the most important topics that should be focused on and considered as guiding terms in the planning process to achieve good toilet facilities, positive user experience and appreciation of public property. The following opens up the insights of the process more closely and describes various perspectives, which are all related to these three keywords from different viewpoints.

I first start with a definition of the three guiding keywords in the context of public toilets.

Social control

- Can be an informal way of controlling user behaviour in public toilets.
- Can be created by the physical (or mental) presence of other toilet users or the staff of the building.
- Aims at creating a user experience where the user is a part of society through his or her own actions.

Ownership

- Defines the experience of how the public toilet user relates him or herself to the surrounding environment.
- Is an essential element of the appreciation of public property and the feeling of belonging to the public environment.

Identity

- Defines the atmosphere of the toilet environment, how it is impacting the user experience and what is its relation to the surrounding building.
- Appears in relation to user's personal preferences, needs and habits
- Creates the reputation and image of the public toilet.

When the inputs from different methods were compared, an interesting phenomenon of the imbalance between the function-based reality and the desired user experience appeared. From the toilet-planning perspective, toilets are seen as functional objects with a lot of regulations, and requirements in accessibility and efficiency. Durable surfaces, efficiency in space usage, the locations of pipe lines are examples of the issues guiding the planning process, which seem to be a puzzle between the aimed function and usability, and the limits of the construction budget and regulations. The users instead dream of something more. **Good design in everyday objects is often something that the user is not necessarily consciously aware of** (Jordan 2000). Most likely, attention is only paid when problems occur in usability and in the product's function. The regulations and guidelines for toilet planning set certain minimum standards for the usability, and therefore meet the user's basic needs.

Despite filling the basic needs, toilet are considered as neglected spaces. The negative, functional problems are often more evident in the women's toilet zone. Functional problems exist, like lack of maintenance and the amount of toilets provided, but those are a part of a bigger picture: user experience. The functional planning approach and failures in maintenance efforts are in great imbalance with the users' dreams and wishes. The public toilets are hoped to be clean, refreshing and unique environments, which would provide safe and pleasurable moments, and support the user's wellbeing in many ways. The standard requirements guiding the toilet planning focuses on issues like regulations in the isolation of water, spatial dimensions and distances between different objects. The public buildings are most often considered as commercial space; the toilets are normally designed to be very efficient in space use to save the space of the building for its profitable activities. However, issues such as what kind of feeling the user is experiencing during and after the toilet visit were pointed out as important details by the workshop participants. **"I enjoy the toilets where some small detail gets my attention and I might even laugh"**, a participant expressed herself.

The findings are introduced under four themes: rhythm, service system, experience and interaction. The aim of this division is to provide clarity and a hierarchy into quite a complex net of issues.



These four themes are the main areas where planning and design solutions can really improve the user experience and guide the toilet users to more sustainable behavior. Through a good user experience, a user creates a personal relationship with a product, service or building. This is essential when considering sustainable behavior. **The personal interest to take care and continue this relationship in the future is a basic requirement for achieving sustainability.** The city bike network in Barcelona is a good example of utilizing personal interest in their service. Borrowing a bike requires a yearly fee and a permanent address in the city. Most importantly, the good coverage of the bike network and the high number of bikes available assure that owning a bike is not necessary and borrowing is considered as a flexible solution. Those using the system become regular customers paying attention to the condition of the bikes. The ones who are not taking part in the sharing at least know people who do. The person-object and person-person relations naturally increase the amount of social control and decrease e.g. vandalism.

All the introduced themes considering public toilet planning are in relation to the earlier mentioned keywords, social control, ownership and identity. In the real-life planning process, these four areas actually overlap. To achieve the best outcome, they should not be considered as separate units, but simultaneously considered components, which aim to reach common goals.

INTRODUCING THE THEMES

Rhythm

This theme encourages zooming out from the toilet environments. Especially in the planning phase it supports understanding the bigger picture for making the decisions. A toilet is understood as a part of the building, which is in relation to the outside world. Analysing the people flows, user needs, habits and activities, the rhythm of the building becomes an important feature guiding the toilet planning.

Service system

From the user point of view, the toilets are wished to be much more than functional locations for toilet seats. Toilets, as part of larger service systems, support the users' wellbeing and mobility in the public environment holistically. Investing in rethinking this theme can shift the public toilets from necessary evil to a valuable component of the provider's brand.

Experience

The providers' lack of effort in investing in this theme is one of the main reasons for the negative associations considering public toilets. The user experience is a combination of various issues, e.g. the issues of maintenance and the visual habitus of the toilets. The experience influences user behaviour and the reputation of the toilet provider.

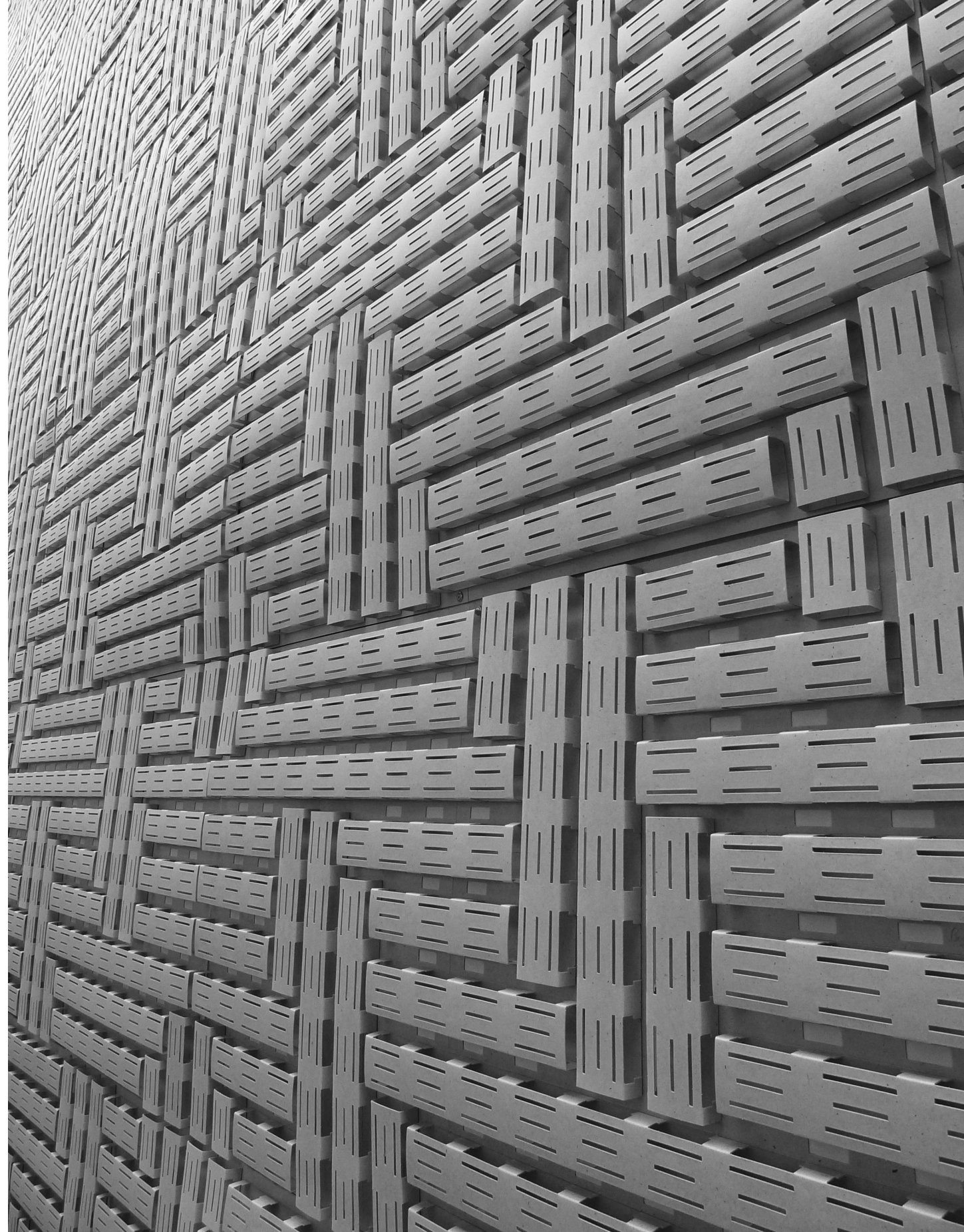
Interaction

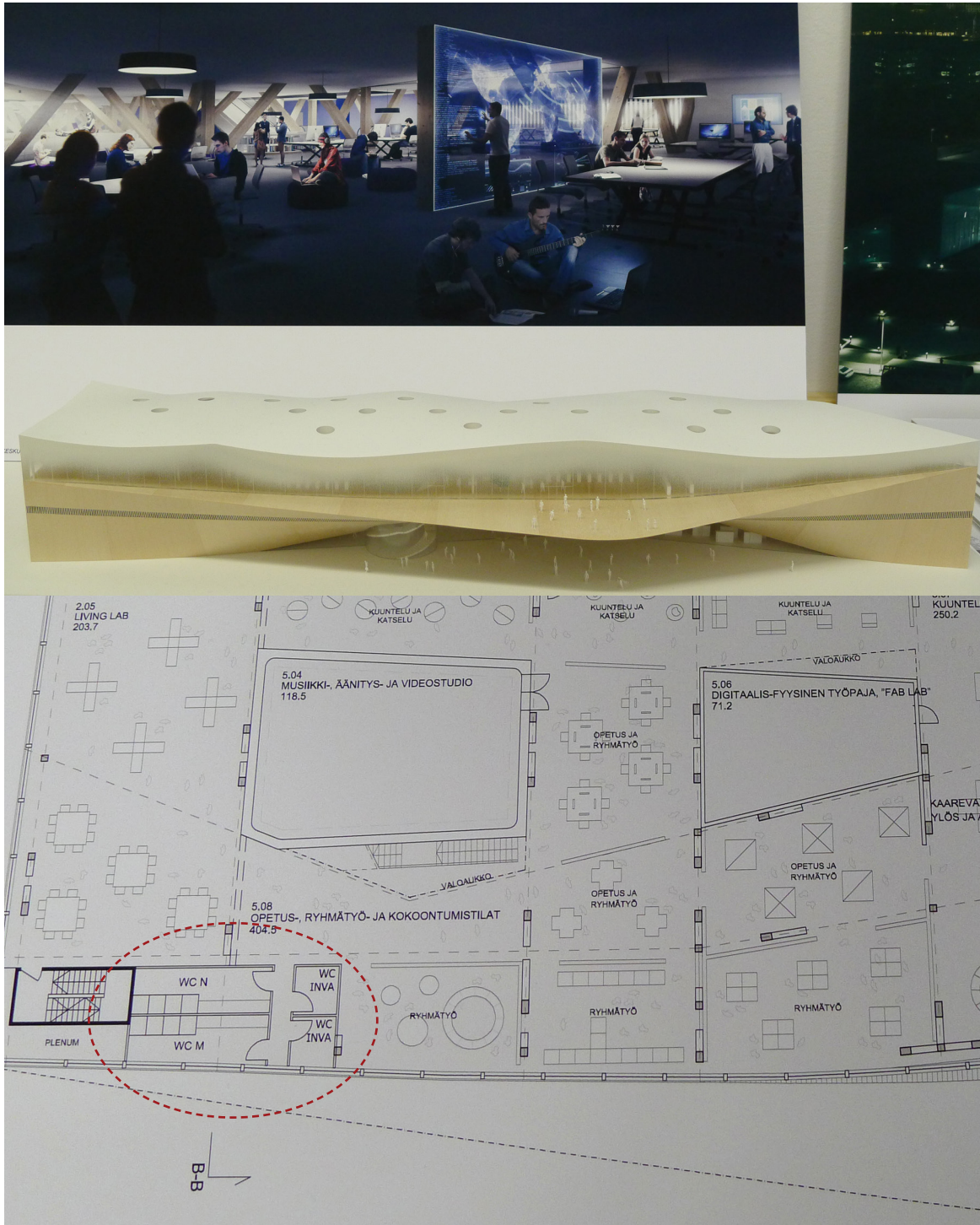
This theme can be a great source of design opportunities not normally exploited in toilet planning. It consists of specific activities naturally existing in the toilet culture, like *toilet creativity* and communication with other toilet users. Typically, the interaction is understood as problematic behaviour that the toilet provider attempts to fight against.

The theme of rhythm is the most permanent theme in toilet provision including decisions made in the early planning phase. **This theme mainly considers architectural details and therefore is difficult and expensive to change later on.** Zooming out is the key element when focusing on the details creating the rhythm of the building, including toilet planning.

Each location would require case-specific analysis and understanding of the activities that create the rhythm of the building. **If the design solutions do not support the rhythm, bottlenecks and other negative issues of usability create e.g. chaos and frustration, which influence the user experience.** The theme rhythm aims to extend the perspective on how public toilets are considered as a part of the building in the planning process today, and point out specific areas, which would warrant attention.

4.1. RHYTHM





Images from the exhibition at Meilahti / proposal by ALA Architects Ltd

4.1.1. LAYOUT OF THE BUILDING

The case-specific decision-making in the planning process of toilets includes understanding the physical layout of the building and the requirements created by the purpose of the building. The activity and the user flow take the main role in creating the rhythm of the building, which well-functioning architecture supports. Normally, in a public building, the main floor is considered as the busiest level, and as the location for the main toilets. It is assumed that the visitors e.g. in the library, mainly use the toilets when entering or exiting the building, and therefore the location of the toilet at the main level is justified. Another kind of approach exists e.g. in the Kluuvi shopping mall, where the toilets are placed at the highest level to require walking through the whole building. This can be seen as an aim to increase impulse purchasing and time spent in the building, which is a commonly known feature from supermarket designs. On the other hand, increasing the distance from the main doors makes the toilets less attractive to access from the street, and thus creates more control and limits unwanted visitors.

A well-designed public building provides a balance between private and social experiences. I introduce terms: an activity zone and an outer zone to highlight these differences later on. The context of the activity taking place and personal preferences influence how the different zones could support the user experience: this could also be noticed in the toilet planning.

A visit to an exhibition at Meilahti in spring 2013, introducing the proposals for the second round of the architectural competition of the new Central Library, was a part of the observing process of this study. Special attention was paid to the layout of the toilets introduced in the floor plans. **In the architectural competition programme, 250m² of toilet facilities was the introduced requirement considering the toilets.** All the proposals considered the toilets as zones divided by genders. Most of the proposals had some clear signs of considering the rhythm of the building, e.g. placing many toilets near the library cinema, but no clear zone thinking considering the toilets was introduced. Surprisingly, one of the proposals had reduced the required amount of square meters to 180. Some proposals differed from the others e.g. one had located the toilets near the outside walls of the building, but it did not become clear if the possibility e.g. to an outside view was taken into consideration. All of the proposals excluded the toilets from the visualizations introducing the atmosphere of the building.

A public building hosts different activities, which each user utilizes differently depending on the person's habits and timeframe. The observation in Kaisa House explains, that in the library, a simplified definition of the users includes two main groups: visitors and regular customers. In Kaisa House, the variety of visitors is very visible and the ones working there daily become familiar e.g. with the tourists taking pictures of the surrounding architecture. The user group of library visitors is broad, and it includes activities like short visits to return a book, or just picking up a cup of coffee from the library cafeteria. The regular users, for instance, use the library as extensions to living and working spaces. The relation between regular users and the building can be very special, as this note from the observations explains: "In the Kaisa house I certainly have my personal spots which I prefer. It is an unpleasant surprise if someone has taken my chair. Interestingly, the other users seem to share a similar habit. The ones sharing the same study area are becoming familiar faces."

These two user groups have different needs for the building and its layout. When the toilets are considered, concrete differences for the requirements of the design solutions show up. Things like noticing the location of the toilets easily, the central position and signage, are meaningful to the visitors that wish for easy access and guidance for the navigation. As mentioned before, the main toilets are normally positioned on the main level, which well supports the needs of the visitors (Tero Hirvonen 2013).

4.1.2. DIFFERENT USER NEEDS



The regulars know the building well, and their timeframe and user needs differ from the visitors. Routines evolve, and the toilets start to facilitate multiple needs, like offering a target for break purposes. "I tend to use the toilet as a destination to create a break. I even use the toilet on the other floor to get some exercise and change for the long sitting hours", 36-year-old woman shared her habits from her working environment. A 23-year-old design student explained his restlessness: "For me the visit in the toilet functions as an accepted escape from my desk. From my experience filling the days with short breaks makes me more efficient, I find it extremely difficult to stay still more than two hours." In the best case, the rhythm of the building and toilet design notices these various needs and pays attention to both user groups, regulars and visitors.

The participation methods, the workshop and the follow-up probe, opened up some interesting routines and experiences connected to toilets and how those vary depending on the person, location and moment. Even the meanings of the activities in toilet were described as changing depending on the moment and time available, as a 29-year-old student described her life: "On weekday mornings I carry the coffee mug with me to the toilet to be faster in my morning routines. I am multi-tasking with a rush while putting the make-up on. On Sundays, the same space is for resting. Again I am accompanied with the coffee cup, this time together with a newspaper. I have no hurry. Even my image in the mirror feels different on those mornings."

Some users seem to be able to bring the relaxed feeling, experienced in the home environments, also to the public toilets experienced daily. My former classmate is a great example of this skill, very openly picking the newest magazines from the classroom to entertain his private moments in the men's room. Using the toilet time creatively for different purposes, seems to be a quite popular phenomenon. A quotation from the restaurant world describes the phenomenon like this: "One of my employees always takes the newspaper with him, but what can I say? I can't really complain." A 30-year-old male shared his strong opinion from the office world like this: "It is obvious that today the moments in toilets are filled with chatting in social media. The tighter the policy

of not using the personal mobiles in the office is, the more common the hidden activity in the toilet is!"

The toilet visits provide certain rhythm for the user's everyday life, and for some the toilets host a special, desired break. Furnishing and tuning the home toilets to meet the user's taste is a common phenomenon. A 24-year-old economy student explains: "For some people the toilet is the most decorated room, the heart of the home." A 60-year-old woman describes: "I have five different sets of toilet textiles. I change them throughout the year, to refresh and to celebrate the seasons." She explains the colors to be really meaningful to her and the toilet decoration an easy and affordable way to vary the atmosphere of the home. The specific space and moment the toilet offers seem to be appreciated for different reasons: "When ever my thoughts got stuck, I visit the toilet" a 31-year-old designer student explains his routines. "Visiting a toilet is an accepted reason to escape, even from meetings at the work place." a 36-year-old employee illustrates the meaning of a toilet at her working place. A 33-year-old student shares her experience: "A toilet is an extension to my 25m2 apartment. It is an atmosphere change, another room. When working from home, I find myself there talking to myself. The mirror in the toilet is a useful tool, looking at my own eyes when setting the deadlines for the day, is a useful method in really achieving them."

Not all toilet users, though, are capable of reaching the relaxed, creative feeling especially in the public toilets. Many people even fear the mandatory visits, for one reason or another. The reasons most often seem to be related to the negatively-experienced toilet atmospheres or the problems occurring in the accessibility and safety issues. It is typical that a person experiences different toilets in various ways. A 34-year-old student from abroad explains his experiences like this: "The toilet in my previous home was the safest place an earth. The protective walls inside of my own home created a very specific spot to me, honestly. In my current student apartment I do miss that place. In Finland, when visiting a bar, I am really avoiding the men's room. I feel myself somehow threatened between the drunken men." When the future visions of unisex toilets were discussed with a 60-year-old woman, she expressed her fears of

violence if the toilet environments would be shared with both genders. "Visiting a toilet means an emergency for me", a 34-year-old woman revealed. She describes the public toilets as places that she only enters if the need is really forcing to. She finds the details of public toilets: feeling of disgust created by different senses, narrowness and the presence of other people, as details that she has difficulties to bear with. She adds that using a disabled toilet eases the situation a bit. Those enable better privacy, wider space and a feeling that the toilet is shared with fewer unknown people.

An interesting part of the toilet design is its connection to the surrounding. The physical connection to surrounding can be understood in different scales. First of all, the toilets are an essential, functional part of the building. Secondly, the toilets belong to the city's toilet network and support the activity happening in the nearby area outside the building. When the relation between toilets and their surroundings was brainstormed with the workshop participants, the atmosphere of the toilets occupied the participants' minds. *Everyone seemed to share a similar experience, entering a toilet in a very nice interior and being amazed how detached the toilet seemed to be.* The workshop participants came up with a word, a *mental connection*, to illustrate this feeling of unbalanced effort used in creating the atmospheres in spaces next to each other. This will be discussed more later on, under the chapter *experience*.

The rhythm of the building and its connection (physical and mental) to its surroundings set requirements and opportunities for toilet design. In the case of the Central Library, the very central location and the image of the library, being an accessible place for the citizens, impact to the amount of toilet visits. The seasonal changes in the climate also influence the citizens' activity and time spent in the public environment. When the central library's location is observed from outside, it is clear that the green areas nearby increase the traffic around the library in the summer season. On the other hand, the library's importance as an accessible indoor space for hang-around purposes increases in the cold wintertime. *These kinds of rhythm changes will impact the library's user flow and the requirements set for the building.* A great example of public planning, where the user flows are not considered carefully enough, takes place in the location next to the central library. A greenery staircase in front of the music hall is a popular place for citizens to hang out. The user needs have been neglected in the planning, and problems in behaviour have occurred as a surprise. The city had to respond when the new bike road Baana started to suffer from the smell problems of urination. A temporary toilet was brought in as a first aid and now a permanent city toilet is in consideration (Helsingin Sanomat 11.6.2013). If the access to toilets does not exist, it is clear that the unwanted toilet culture on the streets tends to increase. This summer, the warmest weeks have showed the hints of problematic spots around Kaisa House as well. The architectural decisions about the main door façade provide an interesting visual detail but unfortunately seem to offer a spot, private enough, for street urination. *Zooming out and considering the connection of the building to the surrounding in the planning process enables understanding about the user activity and can point out requirements that the building should be able to respond to, preferably in advance.*

4.1.3. CONNECTION TO SURROUNDING



A visit to a toilet in Kamppi shopping mall offers an unusual perspective to Narinkkatori.

The first impression of entering a building is not created only by the architectural decisions, but the way how it is communicating with the surrounding. This includes details like how the citizens are behaving and how the location is taken care of. From my experience, a couple of minutes' bike ride from a picnic cover is considered as manageable distance to visit a public toilet. The planning processes of a building should be able to zoom out like this and take into account that the building is a part of its surroundings, providing facilities used even from a small distance.

The user needs, and the rhythm change inside the building, impact not only for the amount of toilets, but also for their layout, function and atmosphere. In Kaisa House and in the new city library of Seinäjoki, signs exist of including the main toilets in other activity around. Lockers, water fountains to provide drinking water and automats for library returns are located in the vicinity of the main toilets. These kinds of combinations increase the natural traffic around the toilets. **Traffic by other people, openness and transparency are considered as strong tools for increasing social control and to decrease unwanted behaviour.** The main toilets of the library, placed in the activity zone, are wished to be easily accessible, noticeable, multi-functional refreshing points.

Unfortunately, the central location and easy access has negative side effects. It is often considered to cause problems like unwanted activity: drug use and vandalism. It would be beneficial if the design solutions increased the amount of social control especially in the easily accessed activity zone. **To achieve this, toilets should be more interactive, not only hidden spaces behind closed doors.** In addition, more open toilet environments would provide opportunities to strengthen the user experience of the mental connection to their surrounding building.

When the different activity zones are compared, I dare to claim that they require different amounts of social control and different tools to achieve it. The outer zone mostly used by the regular customers, benefits of the users' engagement created by the personal relation to the building. Also the social control grows when the building is entered totally and the distance to the main doors increases. The outer zone with trustworthy regular customers is less problematic. The regulars use the toilets for break purposes, and in time create personal relation and appreciation to the building.

The active zone is a more challenging area; toilets are in high use and the variety of users is broad. Interestingly, it is naturally a more social and interactive toilet zone, which is a benefit in implementing methods in order to increase the social control. It is more likely that, in the activity zone, someone is accompanying a person, or small talk takes place because of a traffic peak.



The main toilets in Seinäjoki library

The zone divisions introduced earlier are an important part of the layout and rhythm of the building. The solutions in toilet design can support the activity and requirements set by the different zones. The Central Library will facilitate activities, which include phenomena better known in other public buildings. Peaks in traffic created by events like intervals, has direct influence on the toilet demands. The guidelines for the architectural competition asked for equally spread toilet network throughout the new Central Library. It can be seen as a contradiction of the requirements created by different zones that the process of this study has highlighted as important details of the toilet planning. In fact, the zones and flows should guide the planning decisions and generate even individual outcomes to each part of the building. "A toilet is an interesting place to visit. There you see and sense the level of effort, how much work was invested in the whole planning process. You know, the level of details and quality in realization", an interior designer in her forties explained the equal effort through out the building to be the key element for successful design.

The toilet observation proves that often if some kind of special effort is given to the toilet design, it is located to the main toilets. The toilets in the outer zone very seldom draw special attention. Generally, the toilets today are considered as the objects of mass production. Similar units are placed on each level. The cost efficiency and the pipelines going vertically through the building are the main features to determine the rhythm creating the toilet network of the building.

4.1.4. EQUAL EFFORT



A cafeteria in Stockholm



4.1.5. DIVISIONS

Toilet divisions are cultural and time-related. Today in Finland, the toilets divide citizens into men and women. In addition, toilets for special physical needs are required with legislation, and often those are combined with baby care. Equality and access issues are a part of the decisions-making process in the planning phase. The legislation provides requirements and established practices. Often, these issues do not need to be rethought by an individual planner. The toilet culture is strongly related to the society's current values, and the process of change normally takes time. In the United States, skin color used to be a character of toilet divisions, and in today's Sweden the unisex toilets are becoming a norm. In some locations, like in the Seinäjoki library, special attention is paid to facilitate the users with specific needs. There, the toilet in the children's department is equipped with a specific toilet seat for kids.

The physical appearance of the public toilets and their function has been quite standardized for over a hundred years. In public building projects today, the interest towards urinals is starting to decrease. An attempt to provide more privacy for men as well, seems to be in fashion. Only if the location of the men's room is considered very busy within the amount of visitors, or if it is very limited in space usage are urinals considered a good option. In general the toilet spaces between the two genders do not really differ. The sanitary disposals placed in women's are actually the only functional difference. Toilets with singular units and no common open space are an often-seen solution in locations with standardized traffic flows. In these places, the gender sign on the door becomes the only notable difference and limiting reason to increase the waiting time.

A 33-year old customer in Kaisa House describes the situation as follows: "I feel stupid when I am waiting behind the men's and the women's next to are all free. This stupidity evolves to another level when the one exiting the occupied men's is a member of the other sex, perhaps just being smart and breaking the rules." The waiting time is a good example of an unwanted feature in the rhythm of the building created by the design decisions. In some cases, it becomes a detail that creates frustration or misuse. The problems in user flows and the misuse of the divisions are a great way to gather the feedback of the design's success.

Waiting time is a phenomenon that the toilet users would like to see disappearing. Interestingly, the workshop participants mentioned that spatial details, like the common layout where cubicles are placed symmetrically in a row next to each other, creates a feeling of visiting a toilet factory. "The waiting time and a pressure to be fast as possible increase the amount of stress level I have in public toilets." a 34-year-old student described the experience of the waiting time. It is calculated that women visiting a toilet take almost three times longer than men because of the difference in anatomy and clothing (Greed 2003). The waiting time, normally faced in the women's, is the most common topic to raise the equality issues. Interestingly the professionals focusing on the improvements of toilet provision seem to share opinions of a different kind about how the situation should be developed. Some suggest that a good provision of unisex toilets, and design for all, will be the answer. Some campaign for even stronger differentiation by favoring women by 3:1 ratio (Gershenson & Penner 2009).

I claim that each planning process should be considered individually. Suggested solutions, that would facilitate the customers' need the best, might not be the ones the customer is asking for. **The ones creating the toilet plans should really pay attention to the location, be broadminded and brave enough to rethink.** The Japanese architect Junko Kobayashi is a great example of this attitude, being a forerunner in the field of toilet design. In her opinion, "a society that gives toilets their due is a society that values life". She and her customers have understood that toilets are assets of the surrounding building. The toilet experiences are something that the users highly value. In Japan, 80% of her business is toilet design. She really takes each location seriously and has the skills to push the good ideas to the budget so that everything will be realized. Her toilets are highly valued from all dimensions: users, providers and maintainers. (Ono 2013 and Watts 2012)

Public toilets are not only functional combinations of certain objects, but systems, which can be designed to support the citizens' wellbeing more comprehensively. When considering the toilets as service systems, the gap between the wished user experience and function-based reality, introduced earlier, can be seen as a service opportunity. Service systems include various elements. Not all are concrete, visual touchpoints to the user. Details, like how the maintaining is organized and how the vandalism is taken care of, are part of the whole. Perhaps they are not always visual to the user but they influence the user experience and customer behaviour.



4.2. SERVICE SYSTEM



Details from Kaisa House

One workshop participant nicely concluded the reason for public toilets: **"They are there to minimize the users' worries."** This citation is in quite a big contradiction of the negative association often attached to public toilets that some users really avoid. Many of us share the habit of using the toilet, especially when leaving home. We use the toilet in preparation. We minimize the need to be forced to use the public toilets and we prepare to cope with the uncertainty of the next available one.

According to the *toilet talk* with Tero Hirvonen, in the planning process of the Kaisa House the user participation has had an important role. The real user wishes have been considered as one key element of success in designing a well-functioning, appreciated environment. Hirvonen explains that e.g. co-design session with Kynnys r.y was organized to increase the planners' understanding about the specific wishes in details of accessibility and usability issues in the toilet environment. He mentions that small details, like the design of the door handles to support the users with problems in motor functions, and racks for walking sticks, are the outcome of this process.

In participation, a risk exists, that the participation might remain artificial. The user input does not always really influence the design outcome. In Kaisa House there are many great examples of realized user wishes. Hirvonen tells that the well-designed water fountains are especially made for the Kaisa House and are an outcome from the user participation and real-life wishes. Easy access to free drinking water supports the function of the building and its target group. Often an opposite approach is taken and drinking water is seen as part of the profitable business. The Helsinki-Vantaa airport is an excellent example, no water fountains exist and the toilets are equipped with non-adjustable taps, offering water too hot for drinking. This, combined with the strict security control, forces the customers into unsustainable water consumption.

In the future, I hope to see projects in the field of urban planning that would continue user participation as a follow-up process after the realization of the project. **This kind of communication would give valuable user feedback to the planners, would increase their knowledge and enable even better decisions in future planning.** Also, it is a chance to make corrections if dissatisfaction occurs. The architect Kobayashi takes care of the lifecycle of her realized projects. In some locations, she even holds meetings every three months with maintainers and female employees to keep the communication ongoing. Sometimes the follow-up communication would bring valuable, large-scale advice considering the success of the architecture and its aimed function. "Our school, where I work, is a great piece of modern architecture. The heart of the building is a multifunctional space. It is the location for the school restaurant and the school's stage. Also it is the main hallway with all the traffic inside. Big windows provide natural light. The problem is that in a big school the restaurant is always in use and that prevents the use of the stage. The high-tech technique at the stage is anyhow useless at daytime. No solution to darken the big windows exists" a teacher illustrates the lack of communication between the planners and users.

Unfortunately, all the visions imagined by the planners do not always meet the real life. The reasons why the user feedback might not reach the planners vary. The customer of the building process might not be familiar with the real users' experiences or e.g. the gratefulness and pride towards the new architecture might prevent the honest communication and feedback to planners. The *toilet talk* with Tero Hirvonen and the observation of the Kaisa House shows small hints of the already existing knowledge fading in the process. The disabled toilets, for example, should have dark floor and back wall, to provide contrast for vision-impaired users. In Kaisa House only some of the realized toilets' fill this guideline. **I claim that two main reasons for this fading process are the economic compromises made in the construction phase and the fact that the main architect is no longer the one supervising the construction site and the process as a whole.**

4.2.1. SUPPORTING WELLBEING



Tools to access a toilet

As introduced before, toilets exist in relation to their surroundings. Increasing the transparency and traffic could be one way of raising the amount of social control. The rhythm of the building and the activity zones could partly define how the toilets as service systems could be planned. The main toilets in the library's activity zone, being more social, would benefit from a lounge-type waiting area. The toilets on the outer zone could e.g. provide possibilities for the regular users to choose what kind of environment they want to visit during their refreshment break. The physical design of the toilets is a part of the whole service and supports the aimed experience.

"A lock of the door is the main element to create the feeling of privacy. Very often they are too weak and another hand is occupied to control the unwanted enters. A person trying out the door, to find out that is occupied, is annoying", a 34-year-old woman describes. A similar situation can be experienced in the clothing stores, like a note in my sketchbook explains: "For some reason, most of the changing rooms are left without a lock on purpose. On the other side, people are peeping under the doors to observe whether it is in use. On the other side, half naked people are trying to make some purchase decisions in peace. The situation keeps amusing me." The changing rooms and public toilets share an interesting similarity, nakedness inside a public space. Even though the experience of social control would be high, the design solutions should guarantee that the user could experience comfort and privacy. Being afraid of surprising distraction is one of the main features to ruin the toilet visit.

Different kinds of design solutions have been implemented to limit the access to the toilet services. An entrance fee to a public toilet is seen as one of the tools decreasing the number of unwanted visits and to improve the cleanliness of the toilet facilities. Fees are not there to cover the maintenance costs and neither are they a guarantee of a well functioning, good toilet experience. *"If the toilet fee would be a promise of a good toilet experience, they would be accepted"* a male in his forties concludes. A toilet fee is a questionable solution, which increases the inequality among citizens and limits the access to public property. *The access to public toilets is a part of the bigger question, for whom is the urban space actually designed?* The money needed creates practical access boundaries; in our card-payment culture, requiring a coin is not the most functional solution. Other solutions to limit access exist: the Sokos department store in Helsinki requires a card given to the regular customers and the Turku library limits the toilet visits with a library card.

In general, in the Finnish culture the word "paying customer" is a password to toilet facilities. Most likely the semi-public spaces like cafeterias and restaurants are not willing to serve the passers-by for free. In many other countries the mindset is different and the non-customers are welcomed for free. "The toilet problems should not be solved by punishing the normal user," this comment from a 24-year-old student, quite well clarifies how the toilets are perceived. The providers considering the toilets with pride, as an important part of the whole service, would positively stand out from the network of toilets. Considering the toilet facilities as service, giving strength to the brand, instead of fighting against this necessary evil, requires a provider's attitude change.

"The toilet problems should not be solved by punishing the normal user!"

Citizens tend to create an imaginary toilet service map of their urban environment. These maps are used when a need for a toilet occurs. They guide the persons' routes and create habits, which spontaneously guide the citizen. In situations like visiting an unfamiliar city, the deficiency of the toilet map creates an uncomfortable feeling when a toilet is needed. "My favorite toilets at the center are in Kiasma. Every time I go there, I need to visit the Kiasma store, I just cannot force myself to pass by", a 34-year-old woman illustrates the phenomenon. The toilet providers could better utilize it. Instead causing problems and negative experiences to the toilet users, serving great toilet facilities would create a positive reputation and perhaps engage new regulars in the other activities of the building.

In some cases the limits in access become a positive experience. A public toilet in a very famous park in Cologne is an interesting example. There the limiting features create the toilet experience. When the toilet is open, a toilet guard is providing the service. She actually guides the visitor to the next available stall and she checks the condition of the toilet after each use. For the user, the combination of clean toilets and the safe atmosphere on the side of the park is an enjoyable experience. A small plate for tipping is placed at the entrance and the customers use it without objection. The tipping is recognition of the good service, given directly to the toilet guard. A few things definitely determine the amount of given tip:

-after a few visits, the lady becomes a familiar face

-the moment of tipping takes place when exiting the toilet building

-the amount of money tipped at once is visible to the guard and the other people in the queue

In this combination, both the toilet guard and the toilet user are a respected part of the whole. The level of cleanliness is guaranteed and no space for misbehaviour exists.



The city of Malmö is well-equipped with public toilets with free entrance

The access to public toilets is a part of the bigger question, for whom is the urban space actually designed?



4.2.3. SPECIAL FEATURES

Toilet practices are culture-related, and nations have different development approaches. In Japan, the toilet manufacturers have managed to flood the markets with their multifunctional washlet machines, and the toilet culture has rapidly changed in 15 years. Technology is serving the Japanese: washing, drying and lifting up from the toilet seat. Sweden for instance, is developing dry toilet technologies, targeting a sustainable future. Certain areas exist, where no new water closets are accepted. Some directions of development remain local and allow the toilet cultures to develop differently. These cultural differences create surprising behaviour, misuse of the toilet service for example. The misuse differs from vandalism and can be either purposeful or accidental.

Today the Japanese washlets require weight on the toilet seat to operate the washing function. This detail was added to avoid accidents created by tourists not able to understand the instructions in the control panel, provided only in Japanese. In Finland, especially near the eastern border, squatting is causing the misuse of the toilet seats. Two different approaches can be seen to prevent the problem: an attempt with signs to forbid the squatting, or investment by the provider in durable steel seats.

Special features in the toilet service can make the toilet provider stand out. Even small details can improve the toilet experience and usability. Those with special needs particularly benefit from the functional efforts. The observation day proves that a lot of improvement could be made in both: experience and usability. Most of the toilet visits are so horrifying, that even the great level of cleanliness is experienced as a rare, special effort. **The most thought-provoking detail is the toilet paper holder in the disabled toilets.** In most of the locations, it seems to be the missing object from the planners' checklist. Only one location has toilet seats with an appropriate paper holder providing an ergonomic distance for its users. Spatial issues seem to be a common issue. Even in recently built buildings some toilets are so narrow that the toilet visit is almost impossible.

Mothers and caretakers represent another user group with special needs. Clara Greed (2003) argues that the access to toilets limits especially the mobility of those with special needs. She even draws connections

between issues like the availability of public toilets and the attractiveness of public transportation. Interestingly, her views on better toilet provision consider mainly issues like strengthening the policies and regulation. The user experience, and its possible positive power as a driving force towards attitude changes, seems to be something that she is not really taking into account. I believe public toilet experiences can have a strong educational approach, especially when it comes to the young citizens. I claim that a good design has the power to open up the users' eyes and, through experience, guide and question the existing behaviour.

The kids are a special user group when it comes to learning and developing the attitudes towards public property. It is delightful to see that places like the Seinäjoki library, that has paid a special attention to the small visitors, also does it in the toilet zone. The children's area in total has gained a lot of attention in the planning process and is highly appreciated by its users. **The toilet furniture, especially designed for kids, greatly supports the process of learning the toilet behaviour.** Unfortunately, the atmosphere of the toilets relies on the functional details, and the mental connection to the surrounding is missing. In such a creative interior, the gap between those two spaces unfortunately feels very radical.

The special features support the users' everyday life, but also cause misuse and culture shocks. As discussed before, toilet culture is culture-related and slow to adapt. It is interesting to see how issues like internationalization influence the local toilet culture in the long term. Global hot spots, like airports, are already mixtures of different toilet cultures. **"When visiting the toilets in the Asian countries, it is good to know that the last stalls in a row are always the western style. For me, the combination of wearing trousers and squatting cleanly is pretty challenging"**, a 60-year-old woman shares her knowledge. No squat toilets exist in the Finnish toilet hardware catalogue today, but it can be hypothesized that the future might look different. For the ones preferring squats, the provider would stand out because of a good service. For the rest, especially for families, the squats would facilitate a possibility for a learning process and prepare for visits in the other cultures.

“A good toilet needs to be clean”, this simple, even self-evident thought is the key element for a positive user experience, and unfortunately seems to be difficult to reach. The lack of maintenance is the most common and visual character in public toilets. Through different senses, the toilet experience is valued. Mainly what we see and smell matters. Actually, we have been educated to feel disgust and avoid contact with unhygienic things (Lagerspetz 2008). **The design solutions can decrease the physical contact with dirt and influence the user’s mental experience.** The same amount of dirt is experienced differently depending on the moment. Things like material choices, light and colors matter. If dirt is noticeable to the toilet user, the meaningfulness of action (e.g. washing hands) increases. Some toilets provide an interesting contradiction between the different senses. The appearance of Kipsari’s toilets (the student restaurant introduced in the Blanco experiment) is similar to some bars. In general, the nightlife has a bad, unclean toilet reputation and the toilet behavior seems to vary depending on the time of the day. In Kipsari, the bar association is very strong but the level of maintenance creates a great contradiction.

The maintaining is not just about cleaning. Repairing and fixing things, is an essential part of running the toilet service. The marks of vandalism are normally easy to notice and they require fast reaction to be prevented from spreading. **The problems created by normal use, blocked drains, broken lights and locks are often invisible to the maintainers but harmful for the users.** “In a shopping mall, the 3rd toilet was good enough to enter. The first one had a broken lock, next one was too disgusting,” this kind of user description is a very typical situation. The level of cleanliness can be increased with the frequency of maintaining. The repairing of invisible things requires different tools. **Depending on the purpose of the building, I recommend that either the communication between the customers and maintainers or the presence of employees among ordinary toilet visitors should be increased.**

4.2.4. MAINTENANCE

A design against crime is an interesting field of design to improve the feeling of security and to reduce the amount of vandalism. This field of design is especially evolving in Great Britain and shows interesting examples of how design can prevent unwanted action on the society. The Arts and Humanities Research Council is funding projects e.g. to develop objects to decrease theft and to increase security in the urban environment. Their work is based on user- and abuser-centered testing. Interesting solutions have been created: an M-shaped bike rack was developed to increase the attractiveness of cycling in cities suffering from bike theft, and a specific hook was designed to increase the person’s experience of feeling relaxed when not being afraid of a bag thief in a cafeteria. (see AHRC 2012 & 2013 and Design Against Crime Research Centre) No innovation yet seems to have been found to fix the vandalism encountered in toilets. In Great Britain, public toilets, even in very busy transportation hotspots, with real public toilet needs, have been shut down because of vandalism. Toilet guards are suggested to be one solution to create control and reduce misbehavior (Greed 2003). I argue that a guard can turn out to be really an inefficient method. When the misbehavior was brainstormed in the workshop, a guard was seen as a passive person and even the meaningfulness of his or her work was questioned, being a job wasting the person’s capability.



Maintainers, their visual appearance and their relation to the users, were highlighted as the main features influencing the user behaviour. This is in line with the other observations. The example from Cologne, introduced earlier, highlights the interaction with the guardian/maintainer as a method of creating user appreciation and relation to the space. The Helsinki railway station has a toilet guard, who remains passive and faceless behind her counter. These toilets are some of the most disgusting ones in the city. "The toilet gate looks fancy, it creates a feeling of being connected with the history of Helsinki. That is where the good feeling disappears. The smell of puke welcomes at the toilet door and it really prevents breathing. Everything is a bit broken and the blue light against drug use creates very unpleasant lightning. I hear the other people's presence, especially from the cubicle where I can see the wheels of a shopping bag. I feel like escaping before I bump into someone", the notes from the observation day describe.

Highlighting the maintainers' presence in the toilet environment, like using the checklist of the frequency of the maintainers' visits, is one tool for communicating the provider's effort and care towards the toilet users. In the observation tour Stockmann was the only toilet provider really utilizing it. There the toilets are very clean considering the amount of traffic and central location. **The frequency of the maintainers' visits is pretty impressive and varies approximately from 40 minutes to one hour.** For a toilet user, the checklist seems quite old-fashioned method, perhaps new solutions to communicate the provider's interest to toilet services could be implemented.

Unfortunately, the cleaners are often outsourced and do not belong to the permanent staff of the building. The maintainers belong to a group of professions that tend to remain quite invisible if problems do not occur. I personally consider this as an educational mistake. **It is not unusual that the cleaning is accomplished outside the opening hours of the public building and the maintainer remains as unknown and invisible person.** My personal experiences from cleaning office spaces, when I was younger, showed me interesting attitudes from the office employees. Their inconsideration of their actions, especially before the summer holidays, were

enormous. Huge piles of paper waste at each desk were placed next to the small garbage bins, attached with a note "Waste!". Either the cleaner was seen as a person with super powers capable of anything, or no one actually considered the role of the cleaner in their working environment. Being a cleaner is not appreciated very highly as a profession, even though their existence is essential to each citizen.

An interesting exhibition at Virka Galleria, "Cleaner's Voice" by Martta Tuomaala, represented the attitudes cleaners encounter in the Finnish society. Around the same time, a documentary from the Finnish cleaning companies was shown on national TV. Those both greatly opened up the field and the way how some of the cleaning companies act. A large number of the Finnish cleaners belong to different ethnic groups. Short contracts are deliberately made which complicate the immigration processes and the integration of the work force. No high education is needed and the employees remain easily replaceable. The salary costs are kept minimum and the employees in a difficult situation cannot complain. "I wish some of the people at the office would once in their lifetime clean up after themselves. Sometimes I wish I could just rinse the whole toilet area with a powerful fire hose. Recently, I have met a person who has never washed windows herself. Where do these people come from? Now when working on a different field, I can earn the amount of my previous monthly salary, from a project lasting two days", a conversation with a Finnish woman with ten years history from the field of cleaning expressed.

The maintainers' presence and the personal relation to user could be utilized when creating better toilet services. When a cleaner is familiar to the ones using the space, a different kind of relation and communal care can be built. A school and studying environment is a good example, where the maintainer's personality has brought new means for the ordinary issues. In the upper comprehensive school of Kruununhaka in Helsinki, the cook of the school kitchen, Yang Wang, has created a special, respected relation to the children, because of his special character and enthusiasm for rock music (Helsingin Sanomat, 8.5.2013). In the Institute of Design in Lahti, the cleaners set boundaries in the students' behaviour. The tone of the communication of the cleaners

varied, but the message was the same. Some nicely suggested that we should help out to carry the extra heavy garbage, and some left quite strict orders on the blackboard, to take care of our own mess. It is possible to reach the expectation to look after public property when the users feel ownership of the space.

Toilets are spaces that are expected to be maintained by cleaners. A toilet brush located in a stall, instead of the cleaner's trolley, is a contradictory object. It is accessible to everybody and it allows users to participate in maintaining, but they very seldom do. On the other hand, the design of the toilet brush holder and its location in the stalls has turned out to be a behaviour problem. Tero Hirvonen described that very open holders are favored in school building projects today, because the traditional ones have invited boys to pee in them. An elementary school, where I used to work, is located in a district in Espoo where issues like apartment buildings or immigrants do not exist. The cleaner of the school was one

of the exceptions bringing cultural diversity to children's everyday life. He, as a very talkative guy, had a personal relation to the pupils. Children for example played a game where he had to remember everyone's names. If problems occurred in children's behaviour or attitudes towards the common good, he had a good grip on how to handle the communication with the children. His presence and personality definitely influenced the children's behaviour and most likely had a positive influence on their attitudes towards diversity. These examples show that the way of communication between the maintainers and users varies. **The interaction face to face increases the humanity of the maintainers and influences the behaviour of the users by increasing the responsibility of each person's actions.**



An image from the exhibition at Virka Galleria

From a user point of view, the good function and the accessibility issues are concerned as toilet standards, which should be fulfilled in any case. The user wishes and dreams are linked to the user experience: **how the toilet visit feels and what kind of atmosphere is provides.**



4.3. EXPERIENCE

A toilet is commonly known as a place that gives the first impression of its provider or owner. When visiting an airport, restaurant or a person's home, the toilet visit always describes something more. The toilet observation day gave a surprisingly wide picture of Helsinki. Unfortunately, the negative experiences are often so strong and holistic, that they tend to create the most memorable first impressions. "The observation day included some toilet environments, which can be considered good. The feeling of disgust attached to me was amazingly strong. When returning home, washing my hands was not enough. I actually had to take a long shower and put all my clothes in the washing machine to refresh myself again", a note from the observation day describes.

The Kamppi area is a very interesting location, where the first impression changes radically in a very small area. The Kamppi Center provides toilets for the shopping mall and for the bus terminal. The latter, together with the railway station, are definitely the worst toilet experiences one can face in Helsinki. The toilets of the shopping mall couple of levels higher differ a lot from the ones near the bus terminal, even though the location is almost the same. Only 100 metres from the Kamppi Center the new Kamppi Chapel also offers toilet services and the difference from the bus terminal is incredible. All those toilets require 1 euro entrance fee.

At Kamppi Center, cameras are installed to provide control and security. In the Chapel, the presence of staff is strong and the "religious" environment sets some behaviour rules. The bus terminal seems to have lost fight against behaviour problems. Ironically, its location is the most central; it serves thousands of citizens who pass through daily.

The first impression is a combination of many details. It is meaningful in communicating the behavior rules to the toilet user. Also it reflects the provider's attitudes to its toilet facilities.

4.3.1. FIRST IMPRESSION

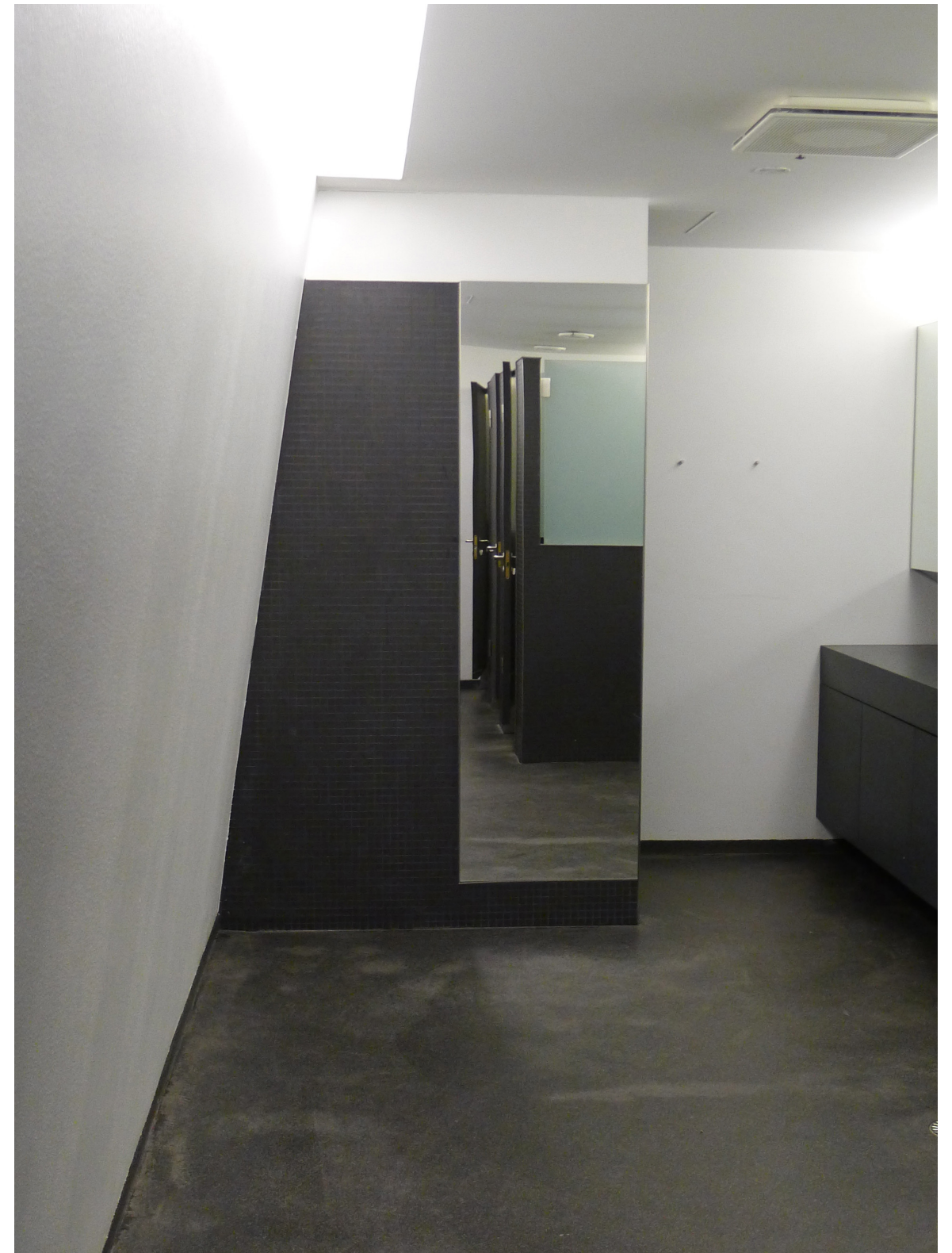


The term, mental connection, introduced earlier, is the person's experience of spatial and mental continuation between adjacent spaces next to each other. When it comes to toilets, such a mental connection is rarely encountered. Kiasma, the contemporary museum in Helsinki, is a nice exception.

There the toilets are understood as a part of their surrounding, and interesting architectural details create the experience of continuation. The special appearance of the building is present behind the closed doors of the toilets: "Material choices like the opaline used in the walls between the stalls create a semi-transparent, light feeling and the geometrical shapes in the roof create a feeling of natural light", a note from the observation tour describes.

Where public toilets are concerned, bars and cafeterias are the most likely fresh exceptions, where the atmospheres of the toilets are given attention, and the mental connection can even strengthen the main interior's identity, and the user experience. "Once I visited an absinth bar in Prague, the toilets were really colorful and had rag rugs on the floor, even in the stalls. The combination of the absinth tipsiness and the unusual toilet world is a memory, which we have been laughing at later on", one workshop participant described her unusual, memorable experiences in the toilet book. The positive toilet visits, which stay in the memory often include something unexpected or unusual. These details can be culturally-related, like my own example describes: "I still remember the dinner, in the Pakistani restaurant in Berlin, over ten years ago. The dining room was really beautiful. Chopper trays were used as small tables while we sat on silk pillows. Shoes were taken off and left on the shelf near the entrance. Also the payment was taken care of in that separate room after eating. When visiting a toilet, a pair of slippers with spiral tips, were placed at the toilet door to protect the user's feet. For me, these habits were new and created a special memory trace of that restaurant, being a very ordinary place for someone else."

4.3.2. MENTAL CONNECTION



Kiasma



Honey or aloe vera? Alternatives in Cafe Mascot in Helsinki

4.3.3. SENSES

A high level of cleanliness is the key element of a good toilet experience. The sense of smell has an important role in creating the toilet experience: positive or negative. One thing the workshop participants clearly shared was the disgust for the combination of bad smell covered with some strong chemicals, being a familiar combination e.g. in temporary festival toilets. On the observation tour, two toilets positively stood out: the Kamppi Chapel and the Helsinki City Hall both smelled like a pleasantly perfumed soap. The rest of the toilets, which could have been considered clean, had a stinging smell of disinfection or did not stimulate the sense of smell at all. For some users, the sense of smell is a very powerful feature of the toilet experience "It is not just the moment of visiting a disgusting toilet, but it is the feeling afterwards. The bad smell somehow follows and it is hard to get rid of". The smell experience can be so strong that it mentally controls the user for some time, even after visiting the toilet.

Hand soap is a concrete, physical example of the following-smell experience: "The soap at our school building smells really odd. After a toilet visit, my own hands start to disturb my concentration." Some workshop participants suggested that toilets should offer a possibility to choose between two hand soaps. They considered this as a nice effort from the toilet provider to please the customer. "We tend to get immune to the aroma of our own products but the nose is amazingly sensitive to products used occasionally", a 34-year-old woman described and continued: "When I am shopping e.g. detergents, I feel a bit of a freak. I need to go through the whole shelf and smell which one I like the best before making the decision." The smell of the soap and detergents used are small details in the toilet, but they are amazingly strong features of the user experience. They are not often conscious choices from the provider, but results of the prize competition between different suppliers.

Ambient design is a field of design where all senses can be used to improve the user experience. This can be used consciously in challenging design targets e.g. increasing the feeling of security in elevator design. The toilet design at Helsinki-Vantaa Airport is an example where the sense of hearing is used to create the identity of the toilet. Birdsong, together

with images of a birch forest, creates a nice first impression for the ones visiting Helsinki. In Japan, the washlet systems are a great example of sound design in toilets, where the user experience influences the user behaviour. The Japanese are known as an extremely reserved nation when it comes to other people's presence in public toilets. Before the era of washlets, running water was used to cover the human-made toilet sounds. Today the sound system attached to the washlet provides the feeling of privacy and has an enormous impact on the water footprint of the toilet, saving 20 liters of water in each toilet visit (Watts 2012).

The case of Japan might be extraordinary, but a phenomenon called shy pee is commonly known in Finland as well. The example of washlets clearly proves that sound design can increase the feeling of privacy and improve the user experience. Not just the other people, but the purpose of the building, sets requirements for the toilet sounds and acoustics. Normally, the silence around can create challenges in toilet design but exceptions exist. "It is a pretty nice, well-designed place. The toilets though were quite ordinary and boring. The loudspeakers are somehow connected to the toilets' back wall. I have never experienced as strong and painful resonation", a 34-year-old woman shared her experience of holding her ears in the toilet of Kaiku club in Helsinki.

The toilet atmosphere could provide user experiences which support the surrounding activity. As introduced before, e.g. the toilets in studying or working environment facilitate a moment for a break. In a library, especially the outer zone of the building could offer toilets with different atmospheres, which the regular user could choose from according to his/her mood. The workshop participants really let their imaginations fly, when the possibilities of the refreshing or calming features of the toilets were brainstormed. "A cooler temperature and the sound of flowing water", were described as the features of refreshing toilet environments.

Interestingly, the participants connected the meaning of a toilet used for break purposes to a Finnish term "happihypely". This commonly-known habit basically means a short visit outside to get fresh air, new thoughts and energy. They considered the toilet walls as objects which could encourage the imagination to fly. The possibility to choose or adjust the environment was seen as a welcome feature, which would support the desired user experience. Surprisingly often, the ideas were somehow connected to nature. When positive toilet memories were explored, very often a summer cottage or a grandmother's house were described as places with a pleasant and relaxing toilet atmosphere. "A winter trip to Lapland and a visit to a local toilet made me understand that a public toilet can be a pleasant experience. Watching the view from the toilet window, being surrounded by the white nature and silence, was a stunning experience. Next to me, a poster of different species of butterflies reminded me of the past summer", a 28-year-old male shared his understanding about toilets.

An interesting conversation popped out in the workshop when the participants started to dream of a toilet where the toilet entrance and exit would be located differently. This, they named "a refreshment path", where a person with a serious need would enter the toilet, and exit feeling like a refreshed, new person. The idea behind the path was to break the rhythm of the ordinary toilet complex, with symmetrical, "factory like" cubicle rows, and to provide different stages to e.g. "fix the outlook in peace". This dream is an interesting alternative to the existing design traditions, where the moment of entering the toilet space is considered as a private activity. The toilets are often hidden around a corner, to provide privacy for the one entering, and ironically, at the same time they are supposed to be easily noticeable, guiding the unfamiliar user to enter. The refreshment path and its anonymous visiting time might be in contradiction to the tools of increasing the social control to improve the toilet behaviour, but it nicely questions how the entrance/exit could look.



4.3.4. REFRESHING MOMENT



4.3.5. ACCESS ISSUES

In public spaces like libraries where the user can spend long hours, toilet visits create a rhythm for the user's day. As discussed earlier, toilets offer an opportunity for a break, but they have some limiting features as well. In a public working space, the issue of security arises when visiting a toilet. Someone leaving the working desk behind needs to somehow control their valuables, like laptop, while entering a toilet. **The person's level of laziness and feeling of trust defines three solutions so far.**

1. The rhythm of toilet visits is included in other breaks like lunch and coffee, and therefore the hassle of carrying personal items is minimized.
2. Those visiting the toilet whenever they want to, either bring all their valuables with them, or they simply trust the other people. Quite commonly, the person next to them is asked to keep watch during the toilet visit.
3. Some people avoid social contact or are just trustful enough to leave the desk unguarded.

In Kaisa House, for example, there are new signs, which recommend that users should look after their belongings. This seems to be an increasing habit in the center of Helsinki, but does not necessarily mean that crime has become an increasing real problem in places like the student libraries. "Especially in the winter time, the amount of stuff one needs to carry is problematic. Also the stalls are often too narrow to really fit the jacket in the hook", a business student described. In the observation day, the lack of functional objects to ease the toilet visit was very common. **"If a hook exists, it is most likely too little and a bag carried with has to be anyway placed on the toilet floor"**, a note from observation day described the uselessness of poor product choices. A good urban design encourages citizens towards activity. The design solutions should support the user's mobility especially in locations where long days are spent passively sitting. As the examples above show, the user experience of good accessibility is more complex than having a decent number of easily noticeable toilets.

The toilet divisions are not only functional access issues, but they relate to the user experience in many ways. The unbalance in waiting time creating inequality between the two genders is the most common topic under the toilet divisions, as introduced earlier. Another issue experienced very differently is

the labeling created by the signs on toilet doors. Some toilet users are more ideological and e.g. fight against the stereotypes that the caretakers are only women or protest against the narrow gender roles. Some users are afraid of the practical issues, like the sufficiency of disabled toilets when the number of elderly people increases. For some toilet users, the labeling complicates everyday life and can create e.g. the fear of homophobia. A 34-year-old youth worker described: "I know a guy who would really welcome unisex toilets in his life. Wearing make-up is not really suitable behaviour in the men's room." An interesting detail of the divisions is the different attitude towards the need for privacy between two genders. "Visiting the new Abba museum was an interesting experience, suddenly fixing the make-up felt like a more intimate action than before. There I realized, the unisex toilets are something that we do not yet really see in Finland. On the same trip, the angst against traditional toilet provisions was a very active topic on the toilet walls of the Moderna Museet", a 37-year-old female shared her experience.

In Sweden and Denmark, unisex toilets seem to be quite common in modern buildings, and the demands for equal provisions between genders gain interest. My excursion into Malmö and Copenhagen showed that, especially in study environments like schools and universities, unisex toilets are often offered. Architect Sven Etzler shared his opinion of Swedish architecture today via e-mail. He pointed out that e.g. in the case of Abba Museum efficiency in space usage is the reason behind the unisex toilets, and he thinks that unisex toilets are not becoming a trend. The users' misbehaviour towards toilet divisions creates interesting user experiences. "I think, the tolerance to women's misuse of the gender division is much higher, especially in the bar environment. Once I entered the women's because for some reason there was no queue. It did not take too long and I was ejected by a bouncer. Quite often though, I have had to use the urinals, basically in front of the women. In bars, women often occupy the men's cubicles. As a man, I am not allowed to complain", a 34-year-old male shared his experience in the toilet talk. **The open urinals at outdoor events are a great example of the attitude that the men taking a pee are considered to require less privacy than the women correcting their make-up.**



Detail from Seinäjoki library: "Push the button to a bottom!"

4.3.6. ATTITUDE OF THE PROVIDER

The toilet user can sense and experience in various ways the provider's interest and values in toilet provision. In many cases it is very tangible to the user how different phenomena are tackled and taken care of. I suggest that toilet providers would spend a moment to create a plan, "attitude strategy", towards issues like behaviour problems, in advance, in the planning phase of a building. *As discussed earlier, existing behaviour habits are really difficult to change, and the user experiences of the toilet environments influence the user behaviour and set behaviour rules.* Issues like how vandalism is tackled, what kind of hidden messages the hardware design communicates and how the users are instructed should be given attention in the planning phase. Often these seem to be issues to which the provider only attempts to respond and react.

In the Seinäjoki library for example, additional signs, not in line with the graphical identity of the building, are placed to instruct the user in correct behaviour. The signs positively inform: in which part of the building eating snacks is allowed and how to flush the toilet seat. Also they forbid. Wearing shoes inside of the spaces made out of a textile is not allowed, for example. The Kluuvi shopping mall, for instance, is constantly changing their acceptance towards youth, and forbidding them access to the unique, uncommercial top floor, because of behaviour problems.

As discussed earlier, design against crime is an interesting field of design, improving the negative symptoms of the society. In the toilets it is mainly considered as material choices, which can lead to particular user experiences. *"Sometimes the toilets look like they are designed for vandalism. The materials chosen look like they are strong enough to face an atom bomb or they simply are the cheapest to be easily repairable,"* a note from the observations illustrates the limits in the construction budget of a building are one issue, but often the lack of trust towards toilet users eliminates many delightful details in toilet design.

Most citizens would like to enjoy a well-designed public environment. Unfortunately, the expectation of unwanted behaviour prevents special efforts and investments in troublesome locations like public toilets. Ironically, the negative toilet experience can become a norm that a toilet user gets used to. "Is it really an issue, a public toilet? I am used to doing my business where ever, no matter what the toilet is like", a 67-year-old male described his low demands towards public toilets.



4.3.7. PREVENTING UNWANTED BEHAVIOUR

Drug use is a good example of specific unwanted behaviour taking place in public toilets. Two different design solutions aim to tackle the issue, and they express the provider's attitudes towards the problem very differently. Blue light is a weak attempt to prevent drug use from happening. It mainly creates an unpleasant atmosphere, which over time the ordinary user gets used to. Another design solution is safety disposals installed in the cubicle wall. The disposals aim is not to prohibit but to increase the level of safety among toilet users and maintainers. The safety disposals are still quite rare in Finland. The district of Kallio in Helsinki is trying out this solution. Around 15 disposals have been installed to provide safety for places like playgrounds. The tone of communication is very different in those two solutions, both still considering drug use as not accepted behaviour. To an ordinary person, both solutions strongly visualize the taboo; the problem of drug use exists. **Both of the solutions have an educational impact, how drug use and the addicts are seen as a part of the society and public space.**

In most toilet locations, *toilet creativity* is considered as a form of vandalism. "The fight against toilet graffiti is almost impressive. The toilet doors are thick of paint and the runs are really visible. Only one toilet has some graffiti, I wonder how often these are repainted. Perhaps every week", a note from the Forum shopping mall during the observation day describes the provider's reaction-based actions towards vandalism. The fast reaction time is considered a tool for preventing *toilet creativity* and other vandalism towards toilet space and hardware. Nevertheless, as the quotation above shows, it might also lead to a cat-and-mouse chase, between vandals and maintainers. When the tools of preventing unwanted behaviour were brainstormed in the workshop, humor was highlighted as the most effective way to guide toilet behaviour.

"The toilets were like an art installation. In the cubicles there were a sign that camera surveillance takes place. Small cameras made out of matchboxes were attached to the cubicle wall to control the visitors", a 25-year-old female shared her experience. "Have you heard about the fly trick? A fake fly attached inside the toilet seat or urinal increases the men's capability to aim their pee, a small soccer goal works

fine as well", a 34-year-old male told. This is actually an old method, already the first urinals at the end of the 19th century had different sorts of targets to ease the aiming. Images of women making eye contact by the urinals are used to create an imagined presence of other people with a humorous tone. This kind of experiential education is an effective approach to guide user behaviour and to create personal identity to entertain the toilet user. The imaginary characters and their possibilities in influencing the human behaviour in toilet design will be opened up more in the following chapter *interaction*.

From four themes, (rhythm, service system, experience and interaction) interaction is the one that most often is not utilized in toilet design, and not understood as a positive feature and possibility. It is perhaps the most difficult theme to take account of in the process of toilet planning and it does not exist without the presence of the other themes. Those three themes either prevent or allow toilet interaction. They all are in two-way relation and the other three could really benefit from utilizing interaction.

Today, if considered, interaction is most likely seen as traditional *toilet creativity*. Depending on the chosen perspective, it is either a feature of vandalism or urban art. By getting to know what the interaction in toilets means, it becomes clear that it includes much more than illustrations on the toilet walls. **It is user experience of communication, including humans, their actions and the surrounding elements.** Toilet interaction can e.g. create content and inspiration for the toilet breaks, ease the uncomfortable moments and strengthen the toilet providers' identity. The *toilet creativity* can vary from permanent solutions to solutions with transforming appearance. Its appearance includes user action and coincidence, and therefore cannot be fully predicted.

4.4. INTERACTION





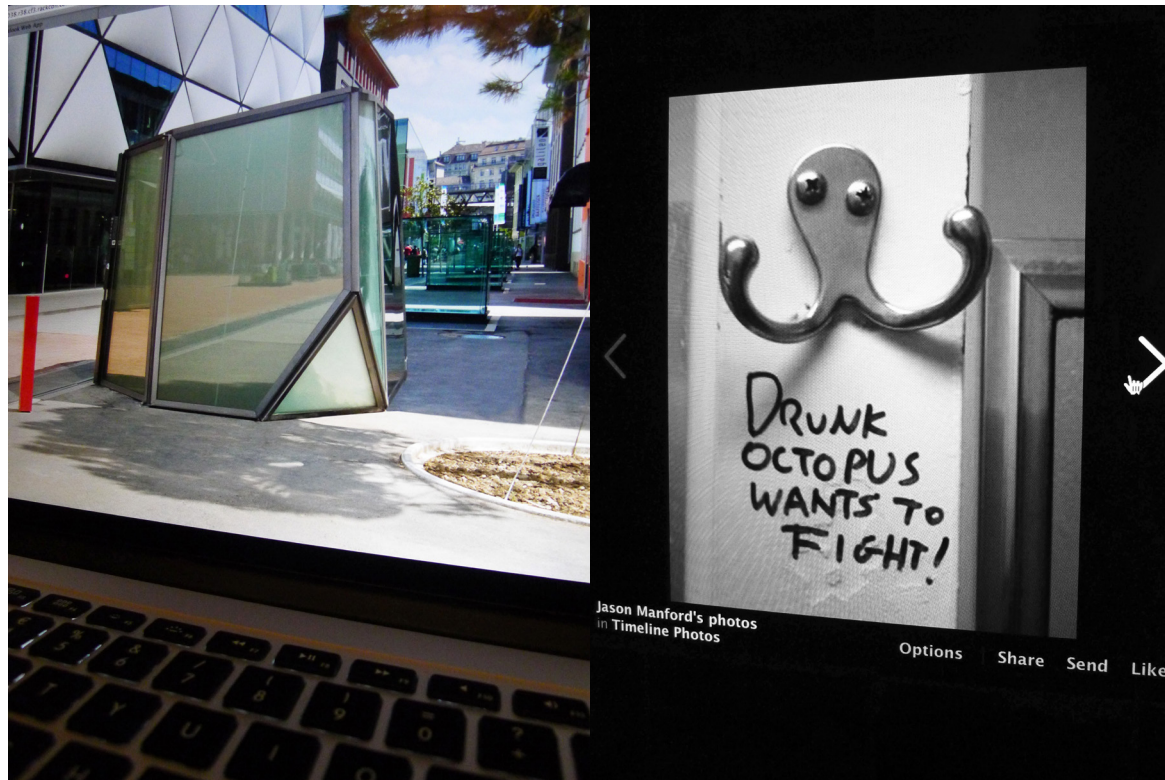
A unisex area to wash hands at Kluuvi shopping mall

4.4.1. REAL TIME INTERACTION

The toilet interaction is not only anonymous communication, but it includes real-time human contacts. This happens partly because of the decisions about the spatial layout. For some people the waiting time in a narrow space with strangers is uncomfortable: "It is like being in an elevator, if you say something it feels stupid and if not it increases the uneasiness", a 24-year-old female expressed. Often the moment when a stranger starts to talk in the public toilets is surprising and has some sort of reason: the person exiting might inform the following user that the toilet paper is finished or the seat is not flushing. Also the contents of the building can encourage the users for real-time interaction. **At the theatre, a boring waiting time in a queue can turn out to be the place for sharing the first-half experiences.** In the observation day, I was approached once: "At Kamppi a mother with a trolley asked me to hold the door to her to enter the women's for free. She was trying to enter the baby care, but did not have a proper coin for it. She seemed to be happy to encounter me in the right moment." As mentioned before, knowledge of problems in the toilets' condition often does not reach the maintainers. **The design solutions could support the user's natural habit of paying attention to the level of the condition, and the willingness to pass the message further on.**

The toilet environment is a special combination of private and public. The feeling of privacy is an appreciated feature and sometimes the presence of others can be disturbing. "I realized that the eye contact between people exists in the toilet space, but it is only a very short glance. Like we notice the other person, but we would still like to prefer the privacy", a female student shared her observations in the *toilet book*. The interaction among friends breaks the rules of toilet privacy and it increases in locations like bar environments. Typically the women's zone is considered more social, even though men have their own things, like a soccer game played with a cigarette butt. Women more often accompany each other and conversations through cubicle walls and even visiting the same toilet together takes place. The cubicles with open walls are normally considered unpleasant, but they have their positive side allowing interaction. **When a toilet paper suddenly finishes, a helping hand easily transports the paper under the cubicle walls.**

"I am not a fan of the gender separation or the long queues in the women's, but I wonder what we would lose, if mixing the people in unisex toilets", 28-year-old female shared her comments considering the toilet cultures.



Toilets interact with the outside world. **The reputation of the toilet can be seen as a feature of interaction, of how people share and express their experiences from a certain toilet facility with other people.** The Torni bar in Helsinki is an excellent example of a toilet, where the reputation of the toilet is so strong that it can be considered a tourist attraction.

One particular contemporary toilet in Lausanne, Switzerland has become a landmark. It changes its appearance from transparent glass to opaque and the consequences are very multidimensional (Newlaunches, 2013). The change in transparency gives the toilet an identity and it increases the positive reputation. Also the aim of the transparency is to increase interaction with surrounding to create social control and to provide more pleasant user experience. The mirror effect provides the needed privacy when the toilet is occupied. The fear of encountering unwanted things when entering a toilet is lowered. The transparency enables the user to see into the toilet space already from outside. The one exiting the toilet is under the pressure of social control. **Lowering the anonymity of the toilet visit aims to reduce vandalism and other unwanted behaviour.**

The *toilet creativity*, which resonates with the toilet user, also interacts with the outside world e.g. through social media. The speed of spreading can be enormous and the *toilet creativity* can reach global audience. An image of a simple coat hook attached with writing "DRUNK OCTOPUS WANTS TO FIGHT!" is a brilliant example of this phenomenon. When a comedian Jason Manford published an image of the octopus in his Facebook page it got 75 000 likes and was shared 60 000 times just in one day. (Facebook, the 4th of April 2013) The interaction from toilets with the help of technology took place also in the Blanco experiment. An image from the toilet of the Kipsari restaurant was posted to Facebook. A postdoc student was curious to know, what is going on in the toilets and who is behind the Blanco posters.

In the Blanco experiment, the *toilet creativity* turned out to have some features of a competition and it raised interaction between the cubicles. At Media Factory, a conversation chain debated, which cubicle has the best illustrations. Some toilet user established

a term "a board of toilet creativity" and played with the idea that it could be officially reviewed and appreciated. A common feature of *toilet creativity*, chaining, was highly present in the Blanco experiment. It greatly emphasizes the co-creation and interaction between toilet users. The users added to the illustrations created by someone else, the content and meaning of the drawings developed, changed and even created stories. Also, the writings chained and spread in many directions. It was not always possible to see where the conversations started from and how many people are actually interacting. In Blanco experiment the process of chaining entertained the toilet users: "Now the moment of entering the toilet is filled with excitement, I am anxious to see how the drawings have changed", a 24-year-old male expressed his feelings.

4.4.2. INTERACTION WITH OUTSIDE WORLD



Details from a restaurant in Estonia

A hypothesis before the *Blanco* experiment brought up that the identity of the chosen location would influence how posters are experienced and responded to. The experience of the gluing process of the posters gave strength to the hypothesis. "We are trying to encourage people to toilet creativity but this feels like we are limiting it. The white posters in an extremely tolerant toilet environment feel a really strange combination. I wonder how the posters will be treated," a note from the gluing in the men's room in Kipsari describes. In *Blanco* experiment, the content of the creativity and the level of activity varied depending on the location of the poster. The most interesting differences were linked to the divisions and into the original atmospheres of the toilet locations. Against the hypothesis, even the posters at Kipsari drew positive attention and were taken care of. **The only sign of vandalism was a stolen marker, which somebody had replaced with a ballpoint to keep the activity going.** Correcting the spelling mistakes made by others was an interesting phenomenon, especially in the art school environment. The comparison to the toilets of the Helsinki University, located near the main student restaurants, shows that location really impacts the toilet creativity. There, no hints of visual artistic skills exist. The toilet walls are filled with writings, an ordinary ballpoint pen is the most used tool.

The unisex toilets at Media Factory gained the biggest interest from the toilet users. Interestingly, there the content of the toilet creativity was gender free, kind and humorous which the casual surrounding definitely had an impact on. In Kipsari, the content of the creativity was typical to bar atmospheres. Topics like love related confessions were popular and the tone of the language was rough. Interestingly, the women's at Kipsari gained more attention than the men's. The appearance of the toilets is the result of a participation project, the students took care of the last renovation. The men's room was paid more attention and enthusiasm, and the women's zone suffered from lack of time and the outcome remained quite lame. Also, the way the *Blanco* posters were located favored the sitting position, and this perhaps influenced the amount of activity. The *Blanco* experiment in the women's zone seemed to encourage the passive observers into action, like one toilet writing personally expressed: "I have always wanted to draw on the walls of the toilet but now I started to feel shy."

In some locations, creativity and interaction is a strong part of the provider's identity. In Kipsari, the reputation of the toilets is high. They are an essential part of the atmosphere of the restaurant. Kipsari is a great example of transforming toilet creativity. The original design is the backbone and the users interact and add their layers on the top, to create even stronger identity. Certain features of urban art define the toilet creativity. It is never permanent. The entertaining pieces enjoy respect and will remain longer. A person's imagined relation to others, mentioned earlier, is an interesting feature of interaction. It is not yet utilized in toilet design, even though it is a well-known phenomenon in another everyday interior. A great example of this relation to an imagined person is the Finnish character Saunatonnttu (elf living in the sauna). Saunatonnttu interacts with the sauna visitors. He is an essential part of the sauna experience. He gets the acknowledgements of the good sauna heat and the users want to keep him content. **This imagined relation influences the user behaviour and even sets behaviour rules not to disturb the imagined friend.**

The concept that is introduced in the following aims to visualize the understanding gained through the process. The suggested solutions aim to illustrate the role of the public toilet as a service system. Its relation to users, their experiences, action and behaviour are the essence of the concept stories. The aim is not to introduce finalized object or interior design. The zone thinking is at the core of the concept proposal created from the perspective of the Central Library. Earlier introduced zones: the activity zone, the outer zone and the outside zone, host different activities and serve users with different needs, timeframes and habits. The zones set different requirements for toilet planning, the introduced concept aims to communicate these differences. The real user voices: wishes, concerns and dreams, are interpreted to toilet environments and stories, expressing the possibilities in future toilet design.

5. CONCEPT

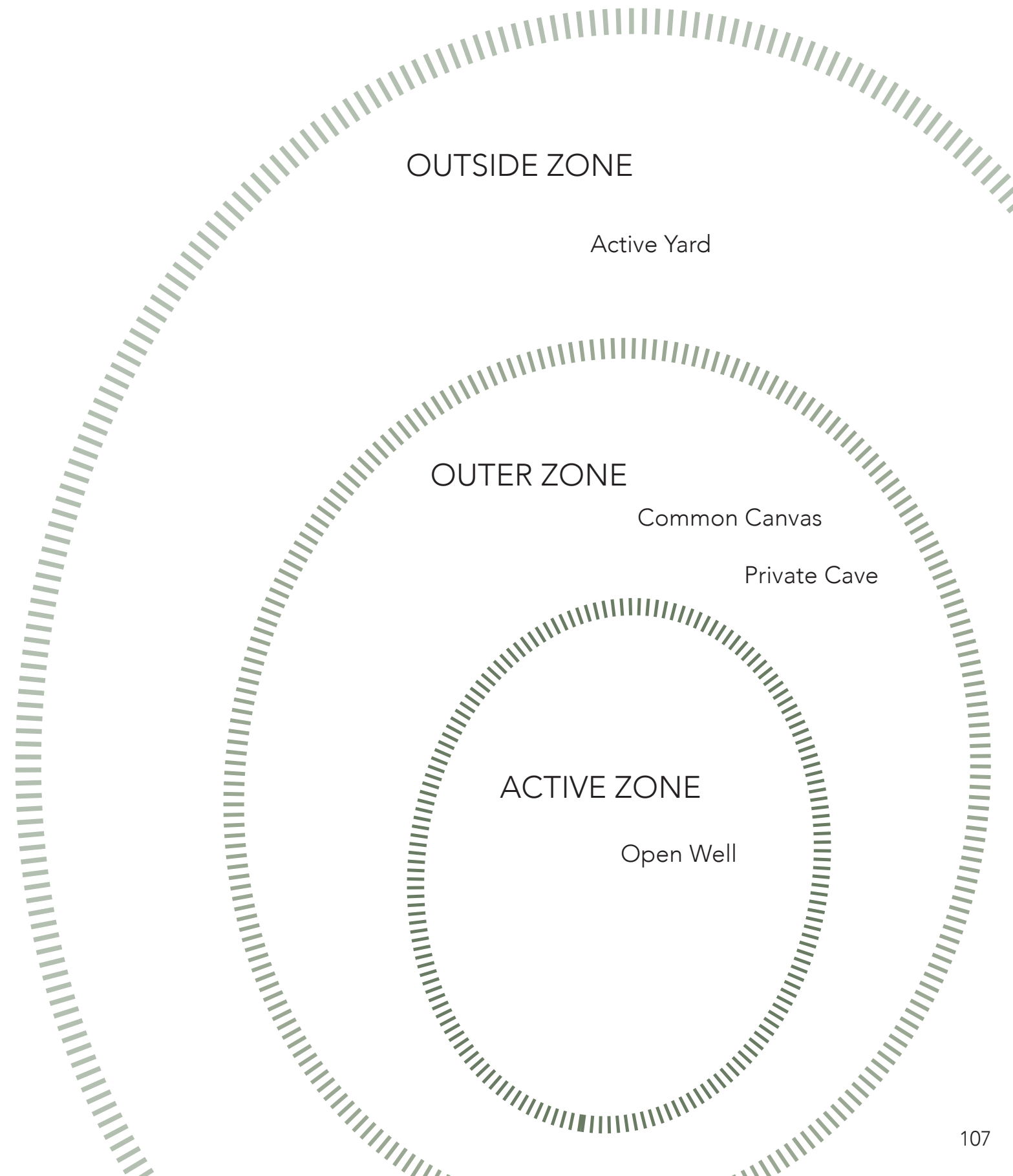


CONTRAST PAIRS / CONSIDER / IN TOILET PLANNING

The active zone is the lively heart of the building, which most often is located on the ground floor. Because of its central locations and easy access it is also the most troublesome part of the building. The increased transparency and openness create communal feeling and increase the feature of social control. Toilets in this zone are easy to notice and they strongly belong to the surrounding architecture. They have a big capacity: they bear traffic peaks. Mainly, they serve those visiting the building briefly.

The outer zone surrounds the active zone and is mainly used by the regular customers who are very familiar with the building. In this zone, the user typically spends long hours. The zone hosts different activities and the users' requirements for the building vary a lot. The outer zone toilets emphasize the user's personal preferences. They aim to support the user's everyday life and offer possibilities and refreshment. They function e.g. as a destination for a break.

The outside zone consists of the outdoor space near the building. Its role is strongly connected with creating the first impressions and the reputation of the building. The outside zone partly defines how the building and its role and identity in the society are considered from outside the building. Its toilets serve the library users and they offer easy access for those just passing by.





Common Canvas



Active Yard



Private Cave



Open Well

Keywords:

interaction, co-creation, urban art,
culture

Common Canvas is a communal, lively and multidimensional tool of communication. Once a month, a chosen urban artist creates a spatial work of art, using the outdoor and indoor surfaces of the toilet. This is the base for the following, ongoing activity. The Common Canvas invites users for creativity, to add their own layer. The outcome is photographed monthly to record the process of co-creation and the societal phenomena which the urban art naturally expresses.

COMMON CANVAS



It is time for change!



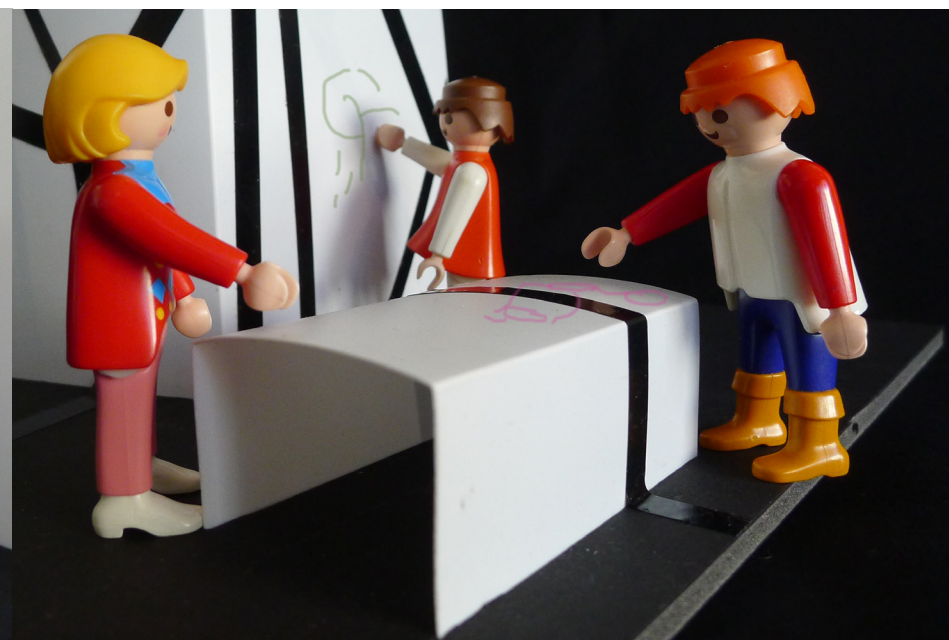
The artist of the month gets help from the customers.



Rasmus enjoys the content added by the other people.



Librarian writes a message.



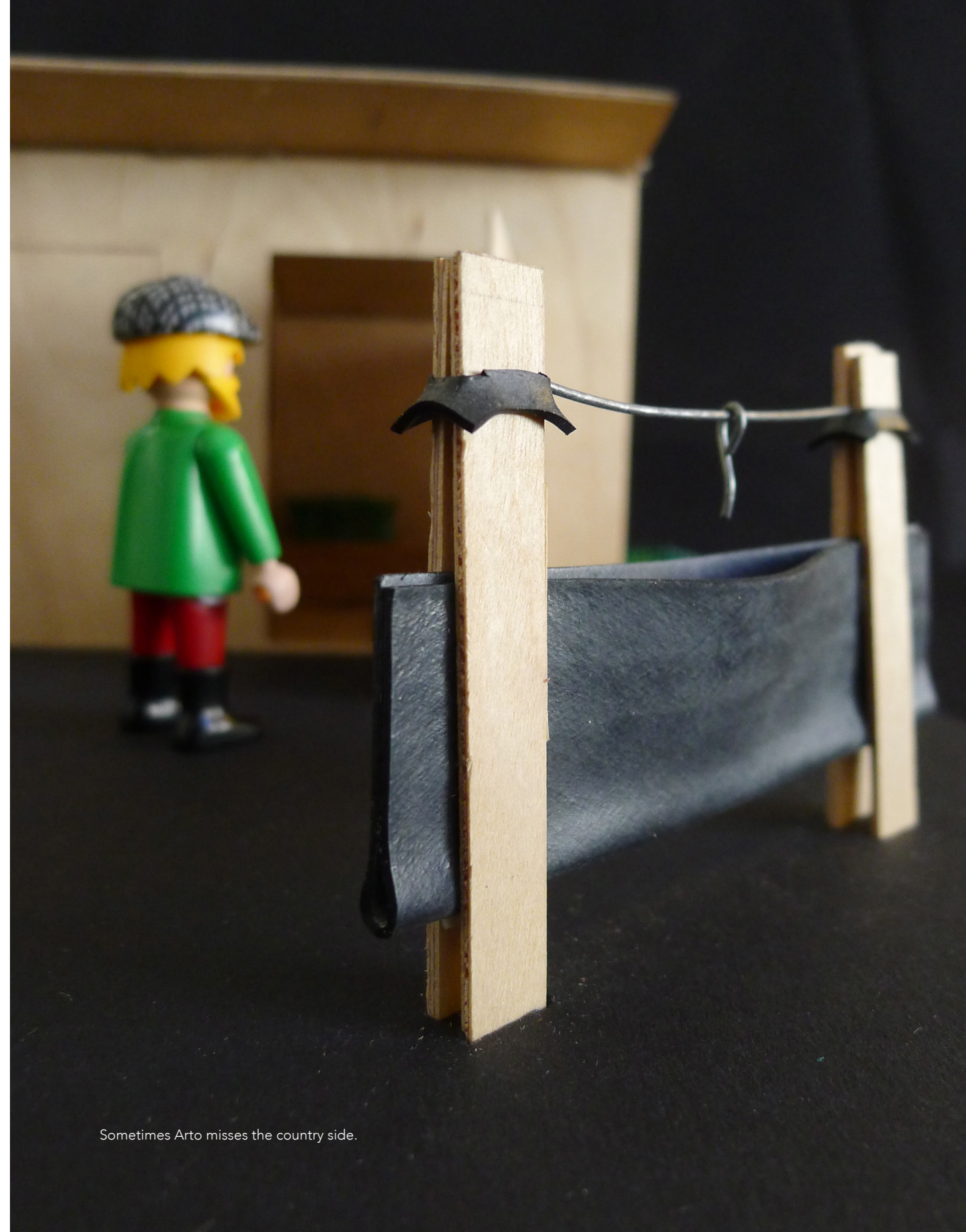
Patrik, Hannes and Elina use the Common Canvas as a working space.

Keywords:

physical action, refreshment, connection
to nature, reputation

Active Yard is located outside the library. Its main themes are a connection to nature and active action. The garden is taken care of by the library users and the firewood for the library sauna is chopped as a break activity. The modern dry toilet reminds the user of the calming atmosphere familiar in the summer cottage environments. It is an excellent example of development towards more sustainable toilet culture and it draws a lot of positive attention. The yard responds to the seasons. The dry toilets are open from spring to autumn and they serve both the library users and the people passing by.

ACTIVE YARD



Sometimes Arto misses the country side.



The dry toilet is calming experience.



Arto is fascinated of the power of the toilet to transform his mind to the summer cottage.



The yard is full of play and action.



Heidi practises a useful skill as a break for static sitting while studying.

Keywords:

trust, ownership, senses, refreshment

Private Cave is the regular user's favourite toilet located in the outer zone. Its character aims to create a feeling of a soft hiding place, which communicates with the surrounding hang-around spaces. Inside the toilet, the user may adjust the world of senses: lightning and sounds, to support the moment of charging his or her batteries.

PRIVATE CAVE



Sami adjusts the atmosphere to fit his mood.



Sami's thought got stuck.



He knows where to go when a need for break emerges.



This is his favorite toilet.



A small break gave new energy to Sami.

Keywords:

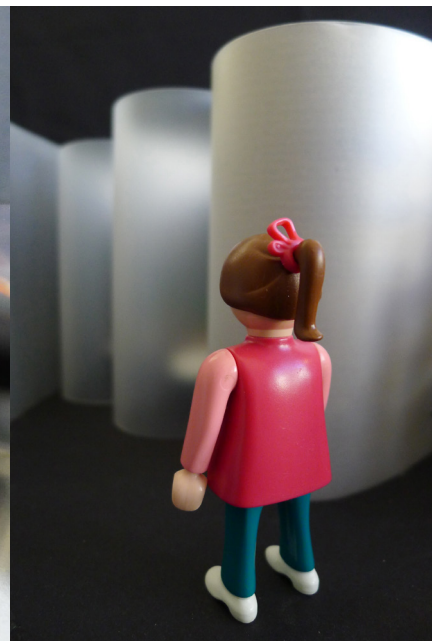
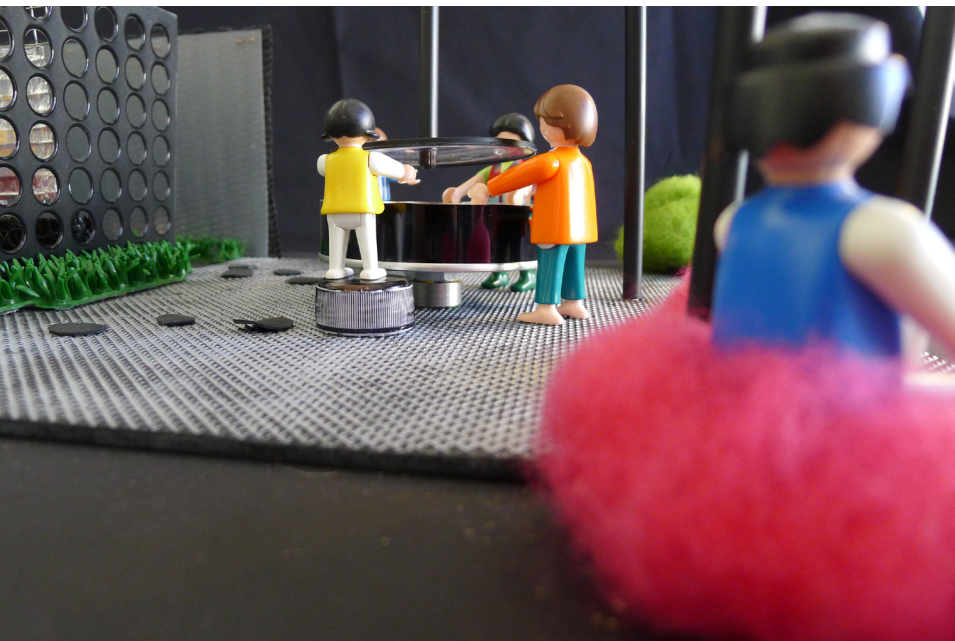
transparency, social control, communal atmosphere, the presence of water

Open Well is the heart of the active zone. Its core, the well for washing hands, invites users for a communal moment. The sound of water is strongly present as a part of the architecture. The toilet walls are capable of transforming their appearance. Available toilets are transparent, making the moment of entering more pleasant. The occupied toilet transforms into an intimate space, providing peace and a feeling of security.

OPEN WELL



Heikki mentioned to the librarian that the toilet paper is about to finish.



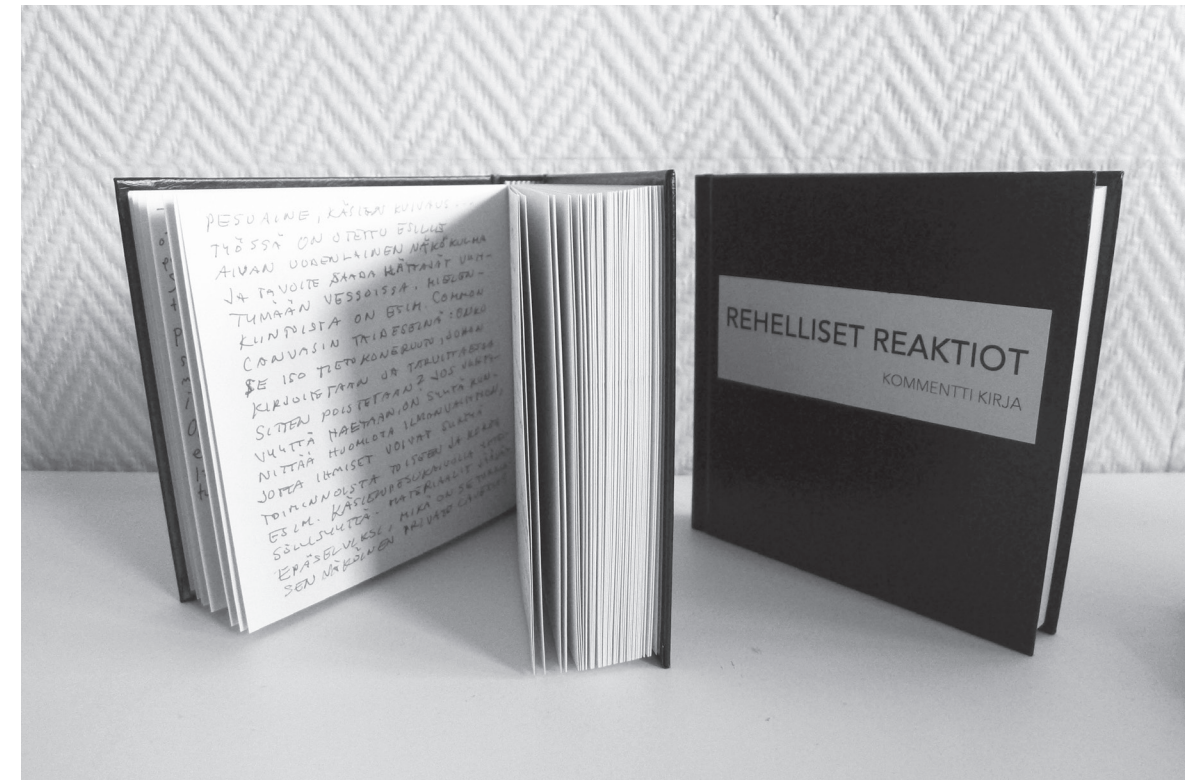
Heikki visited the toilet to refresh himself.

The well is surrounded with the sound and movement of water.

"Here washing hands is fun!", Linda got excited.

Anna notices a free toilet easily.

This chapter introduces some reflections to the process and to the introduced concept. An exhibition "Rehelliset reaktiot" (honest reactions) took place in Library 10 to get feedback how users respond to the proposed concept ideas. The posters introducing the concept stories, and the comment books collecting the users reactions achieved some attention. The ones leaving feedback seemed to pay careful attention and really shared their first expressions and reactions to the introduced stories.



6. DISCUSSION

A first sign of greater interest of starting a discussion about the role of public toilets in society took place when a journalist from Radio Nostalgia made a phone call (11.9.2013) to get an interview to hear more about the reasons behind the project and the exhibition. The importance of raising interest in the topic was also highlighted in the user feedback; some users were really grateful that someone is actually considering and paying attention to the whole issue of public toilets. "Already the created vocabulary highlighting the issues in toilet planning seems useful. Toilets really are an issue even preventing people of realizing their dreams i.e. travelling. Developing the toilet culture definitely is a wise thing to do", a comment from the exhibition describes.

6.1. GENERATING INTEREST

All the stories achieved some positive mentions. The effort of varying the toilet atmosphere in different zones of the building seemed to be a pleasing detail. Each user giving comments highlighted some of the concept stories as his or her favorite. The Open Well, and its communal moment of washing hands, was definitely the idea collecting most excitement and approval. It also seemed to be strong and simple enough to imagine how it would feel in real life. Increasing the experience of glamour is a feature which has not been mentioned much throughout the process, but now for some reason was brought up by a couple of users. Especially the Open Well encouraged the users to dream about extra luxury in everyday activity, which would be connected to the old times. Objects like a machine for shoe polishing, or steam brush for correcting the clothes, were mentioned as details being welcomed to the Open Well to support the needs of the users and to create the atmosphere of glamour.

The presence of art in the Common Canvas, and the possibility to be part of the creation process, were mentioned as successful ideas, being very well related to the tradition of toilet creativity. Someone was interested in what kind of technological solutions there would be to facilitate visual interaction, but most comments voted for traditional tools. Some seemed to have detailed visions of how they would like to take part: "It would be nice, if there were different kinds of materials available that the user could use to add his or her layer. Not just the ordinary tools of drawing!"

Especially the Private Cave, and its aim to facilitate a refreshing moment, caught some emotional responses. One person had an interesting comparison: Visiting a toilet and driving a car, they are the places for a moment for yourself. Anything that increases the strength of this moment is definitely most welcome." Another person got quite excited about the Private Cave and ironically started to worry: "If ones favorite toilet would be occupied when needed the disappointment faced would be quite big. Especially in the Private Cave everything should be done to minimize the presence of others. The ventilation for example should be really good."

6.2. REACTIONS AND FEEDBACK

Another person also highlighted the need for escaping from others. "The door of Private Cave should be so heavy that one concretely feels shutting the door behind. When stepping back to "the reality" the atmosphere surrounding the toilet should be really pleasant and full of energy to really welcome you to join again", he described his visions.

As discussed before, the user needs are personal, and they vary. From the stories introduced in the exhibition, the Active Yard was the one dividing the users' feelings the most. "I am the one avoiding the dry toilets" one person expressed his prejudice towards the idea. "This seems like a right kind of modern direction with a really good vibe. Solutions like this should be invested more and companies having the knowledge should have an active role in the development process", another person shared his excitement and perspective towards the future development. Also the transparency, especially at the Open Well, gained positive feedback. The very easy signal of an available toilet provided by the transparency was highlighted as a pleasurable detail. At the same time some visitors to the exhibition had doubts about trusting the protectiveness of the doors.

The value of increasing the respect and appreciation of the ordinary everyday activity gained very positive feedback from many users. "It is really easy to imagine the environments introduced with the stories. Unfortunately too often a visit to a toilet reminds me of a sterile hospital. Sometimes an exception occurs and that is the moment when you come back to your friends with excitement, sharing what you just saw. A visit to a toilet is not just an ordinary stinky experience, which you try to forget as soon as possible, but something more", one user concluded her viewpoints in the comment book.

Interestingly, nobody questioned the idea of having a wood-heated sauna in the library environment, but the presence of an axe raised some doubts. "An axe available in the city center - wouldn't that lead to murders?", someone shared his or her worries. I personally consider the skills of using the axe strongly related to Finnish traditions. After working a couple of years as a woodwork teacher in an elementary school, I truly believe in learning responsibility in a safe environment. In the library there are already signs of increasing object-sharing e.g. snowshoes and percussion drills are available in some locations. Also, the signs exist of increasing communal learning. Elderly people are helping each other with computers, and workshops to knit together, for example, have taken place in the library environments. An axe borrowed with a library card and used at the library yard in the center of Helsinki: would it fit the picture of the future?

Quite many visitors of the exhibition shared the questions of the toilet divisions even though they were not really discussed in the posters. Some users understood the toilets of the Open Well as unisex, even though its idea is to have separated toilet areas surrounded by the communal unisex well for washing hands. "Perhaps the toilets in different zones have different divisions, unisex in some zone and traditional divisions in some, one user shared her wish. "Even for men it is important to have a private space where the outlook can be taken care of in peace", one man expressed his reaction to openness and his assumption of a unisex world. The considerations and wishes of the users towards the balance between private and public, and the variation inside the building, is in line with my recommendation based on the understanding gained through the process. I suggest that areas like the Open Well would have the traditional toilet division, which can be favorable for supporting some design solutions considering e.g. traffic peaks. In the outer zone, where the toilets could be more like singular units, I see no necessary reason for a gender sign on the door. The identity of the location and the aimed atmosphere should be the guiding features of the decision-making in the planning process.

6.2.1. ISSUES RAISING QUESTIONS

The positive reactions to the communal feeling in Open Well, and the privacy provided by Private Cave, for example, nicely strengthen the previous findings that the different zones of the building should facilitate different user needs. The aim to raise the importance of the user experience into a more central role in the planning can be considered as an addition, a tool for achieving pleasurable and appreciated toilet services. Usability and good function also retain their importance in creating these services in the future. Zone thinking as a part of toilet planning will, I hope, be a feature which will be considered as an important issue in each public building planning process in the future.

The regulations in toilet design seem a restrictive, uninspiring, obligatory part of the planning process. Some optional, creative tools could be created to share the additional knowledge and insights different professionals and stakeholders already have. Easily accessible open knowledge, and inspiring examples, would relieve the planners from doing overlapping work on the ordinary issues e.g. in the field of accessibility. The functional features of toilet design are very adaptable to different toilet locations. Providing the inspiring tools for achieving the best toilet design would enable planners to spend their time in location-based, unique challenges. This would encourage the planners to consider toilets more creatively, and to design solutions which would aim to support the users' wellbeing more holistically.

After the process, it is sad to admit that public toilets belong to an area which easily remains a necessary evil of future development. The change in toilet culture requires effort and interest. With the economy as a driving force, an attempt to cut down on construction and planning costs can force public toilets to remain spaces fulfilling only the basic needs. If people with greater interest towards the topic are not involved in the urban planning, perhaps better toilet experiences will not be achieved. I believe this can be the biggest obstacle in changing attitudes and achieving sustainable behavior in the context of public toilets.

6.3. FUTURE STEPS

It seems clear that inspiring, realized examples have the greatest power to encourage the actors of society to think, dream and act towards better environments and services. In the case of toilets, an attitude change from the toilet providers, to think about toilets as facilities increasing the value and identity of their brand, seems necessary to overcome the lack of effort and investment. There is also a risk that realized solutions to facilitate more pleasurable toilet experiences will not meet everybody's personal taste, and the outcome will remain controversial. Society needs toilet providers who are willing to take this risk and to be identified with the development of toilet services.

- Architectural competition programme (2012-2013) Helsinki Central Library, the Heart of the Metropolis. City of Helsinki.
- AHRC, Arts & Humanities Research Council (2013). <http://www.ahrc.ac.uk>.
- AHRC (2012) Design Against Crime. Short documentary film retrieved 23.4.2013 from http://www.youtube.com/watch?v=rFTze_oDFWI.
- Chick, A. & Micklethwaite, P. (2011) Design for Sustainable Change. AVA Publishing SA. Lausanne.
- Design Against Crime Research Centre (2013). <http://www.designagainstcrime.com>.
- Economist (2013) All eyes on the sharing economy. Retrieved 9.6.2013 from <http://www.economist.com/news/technology-quarterly/21572914-collaborative-consumption-technology-makes-it-easier-people-rent-items>.
- Fuad-Luke, A. (2013) Building Competencies for Societal Visionaries, a panel discussion in Seminar on sustainable opportunities on global scale at Masters of Aalto. 14.5.2013.
- Fuad-Luke, A. (2009) Design Activism. Earthscan. London.
- Gershenson, O. & Penner, B. (2009) (eds.) Ladies and Gents. Temple University Press, Philadelphia.
- Greed, C. (2003) Inclusive Urban Design. Public Toilets. Architectural Press, Oxford.
- Hanington, B. (2003) Methods in the Making: A Perspective on the State of Human Research in Design. Design Issues. Vol19 No4.
- Hirvonen, T. (2013) Toilet talk: toilet planning, Kaisa House as an example case.
- Hyysalo, S. (2009) Käyttäjä tuotekehityksessä. Tieto, tutkimus, menetelmät. Otavan kirjapaino, Keuruu.
- IPA Voices (2011) An interview of Jack Sim during launching the IPA Solve Awards 2011. Retrieved 14.4.2013 from <http://www.youtube.com/watch?v=j6nisHPg7kU>.
- Jordan, P.W. (2000) Designing Pleasurable Products: An Introduction to the New Human Factors. Taylor & Francis. London.
- Jussila, J. (2003) Toilet talk: toilet creativity and the role of the toilet in the brand identity.
- Jompero & Murto, Baanasta tuli pissatunneli, Helsingin Sanomat, 11.6.2013.
- Koskinen, I. (2003) Preface. Koskinen, I., Battarbee, K. & Mattelmäki, T. (eds) Empathic Design. IT press. Finland.
- Lagerspetz, O. (2008) Lika. Translated into Finnish: Lång, M. Multikustannus Oy. Vaajakoski.

Lahti, V-M. & Selosmaa, J. (2013) Kaikki jakoon! Kohti uutta yhteisöllistä taloutta. Atena kustannus Oy. Jyväskylä.

Macdonald, N. (2001) The Graffiti Subculture: Youth, Masculinity and Identity in London and New York. Palgrave. New York.

Mattelmäki, T. (2006) Design probes. Doctor of Arts thesis, University of Art and Design. Helsinki publishing Gummerus Printing, Vaajakoski.

McKinley, B. (2009) Writing on the Stalls. Short documentary film retrieved 16.4.2013 from <http://vimeo.com/4280971>.

Meroni, A. & Sangiorgi, D. (2011) Design for Services. Gower Publishing Limited. Surrey.

Newlaunches (2013) Public toilet with transparent walls to avoid damage. Retrieved 13.3.2013 from http://newlaunches.com/archives/public_toilet_with_transparent_walls_to_avoid_damage.php.

Ono, S. (2013) Flushed with success: When nature calls, designer has the stylish answer. Retrieved 20.5.2013 from <http://www.asahi.com/english/lifestyle/TKY200410300133.html>.

Pehrson, B. (2013) Building Competencies for Societal Visionaries, a panel discussion in Seminar on sustainable opportunities on global scale at Masters of Aalto. 14.5.2013.

Sleeswijk Visser, F., Stappers, P.J., Van Der Lugt, R. & Sanders, E.B.N. (2005) Contextmapping: Experiences from practise. CoDesign Journal. Vol1 No2. Taylor & Francis, London, 119-149.

Stickdorn, M. and Schneider, J. (2010) This is service design thinking. Basics-Tools-Cases. BIS Publishers, Amsterdam.

Water Footprint Network (2013) www.waterfootprint.org.

Watts, N. (2012) The Toilet: an Unspoken History. BBC. Broadcasted in Yle Teema 6.7.2013.

World Commission on Environment and Development (1987) Our Common Future, Oxford University Press, Oxford.

