

ABSTRACT

This report is the final delivery of my master thesis called **'Furniture Design for Socialization'**. The report has been written in the Autumn 2019 at the Norwegian University of Science and Technology (NTNU), department of Product Design (IPD). My master thesis presents research, process and final results of my project. The process, applied in my master thesis, is a furniture design process including analysis, conceptualization, prototyping, and production. I have used these phases to shape my own project. The report starts with theoretical facts about socialization and human behaviours in urban environment. The second chapter presents the inspiration source and further into the process and the results in the following chapters.

ACKNOWLEDGMENT

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I would also thank all my friends and classmates who made an unforgeable journey for me in these two and a half years time.

I have saved thanks for my lovely parents and supportive siblings who were always beside me and for all their moral supports.

MOTIVATION

I have always been inspired by traditions and tried to learn from them to bring their solutions in today's life combining with technology. Before moving to Norway I heard a lot that people in Scandinavia are cold and hard to communicate with. When I moved to Norway I lived with 14 other Norwegians. This made me at the beginning to feel a bit lonely and having no company obviously; because I did not know the language and that even made it hard to communicate with my flatmates and to make friends in general. I experienced that people are more sociable and easy to talk to when they are drinking alcohol. But the problem is that they won't be the same person as the last evening that you had a drink with. So I was thinking about in what way I can make friends and socialize with people in Norway. I participated in different activities like Swing dance, volunteering in music festivals and also inviting my friends to dinner from time to time; definitely, I had good times and made many friends, but that I put quite a lot of energy in that to keep those friendships. So I was thinking about how can I make socialization happen in a faster and easier way.

In the meanwhile, one day during the first winter of my stay here in Trondheim, I observed one of my flatmates was feeling cold in her feet and she tried to attach her feet to the oven in the living room trying to make them warm. From there the idea of having 'Korsi', a Persian low table used to warm one's feet, in Norway ignited in my mind. I felt that 'Korsi' is a piece of furniture that probably has been missed in this country because Korsi is related to the cold and winter and also a mean for family and friends to socialize and mingle. It reminded me of my childhood that we used to gather around the 'Korsi' at my grandparent's village house during the cold

long winters. We told stories, jokes and had snacks and tea around it. The warmth of 'Korsi' makes hearts warm and creates a pleasant atmosphere for people to interact.

All these thoughts motivated me to establish my master thesis based on this piece of furniture from my home country Iran. By that, I will follow my passion to learn from tradition and bring its essence in modern life. In my project, I want to learn from the cultural values in the field of furniture, forms, patterns and functions from my country to bring them into Scandinavian culture and Norway. This is the continuation of my work in my specialization project, where I worked with Persian forms and patterns. I strongly care about cultures and I believe we do not need to create another table but we should consider the user's needs and meet them by the means of that table. I am motivated to pick cultural and traditional values and to combine with the technology today to create a product that is modern, obtainable, and sustainable. I want to create a product that entices people to interact with each other in a real face to face phase. I believe social media has just expanded the separation between people more than ever even though they have solved many issues. My idea is to putting aside all those gadgets and thinking about the basic simple solutions that help us to be together to have a good quality time with our family, friends, or colleagues.

TASK DESCRIPTION

The task is to design an outdoor furniture setting that combines bonfire within the furniture to create a meeting space for all. This meeting space brings new activity in the urban texture and gathers people together for a good quality time. The solution is a furniture system more like a parklet including bench, table, and fire pit.

There are many different types of furniture all around the town, all for a reason; but how much do we consider meeting spaces? Are this furniture help to bring people together and improve social interaction. Here Korsí is a mean to meet these challenges. Korsí will make people share an activity together so that the user will be a part of social activity. People can easily get along with each other when they do something together. By sharing an activity people would feel that they are valued and that they are making a contribution to their society.

Masteroppgave for student Pouya Kari Jafar

Møbeldesign for sosialisering (inspirert av persiske møbler KORSI) Furniture Design for Socialization (Inspired by Persian furniture KORSI)

Humans are social beings. We need to interact with our friends, colleagues, and family. However, when it turns cold, life becomes confined to the indoors. Together with the growth in isolation, the winter months are making people increasingly lonely. Therefore, it is important to design solutions that can motivate people to socialize, through the use of both indoor and outdoor spaces. Local cultures have long had a great impact on social interaction. Here we find a solution for how to address the problem of winter isolation. The Korsí is a square wooden table, with an integrated heating unit, that has been used traditionally by Iranians during the cold seasons. In this way a Korsí is not only used to keep one warm but also to facilitate the vital need of humans, to socialize. People can bring all sorts of activities around the table to share their moments with each other. Personal relationships are the basis of everything. Family, society, and company. A person's well-being and confidence depend on being accepted as part of a group, noticed and listened to. The intention of this project is to design a table which highlights the value of socialization. That is a multifunctional table that helps to improve interaction between people, inspired by the Persian Korsí.

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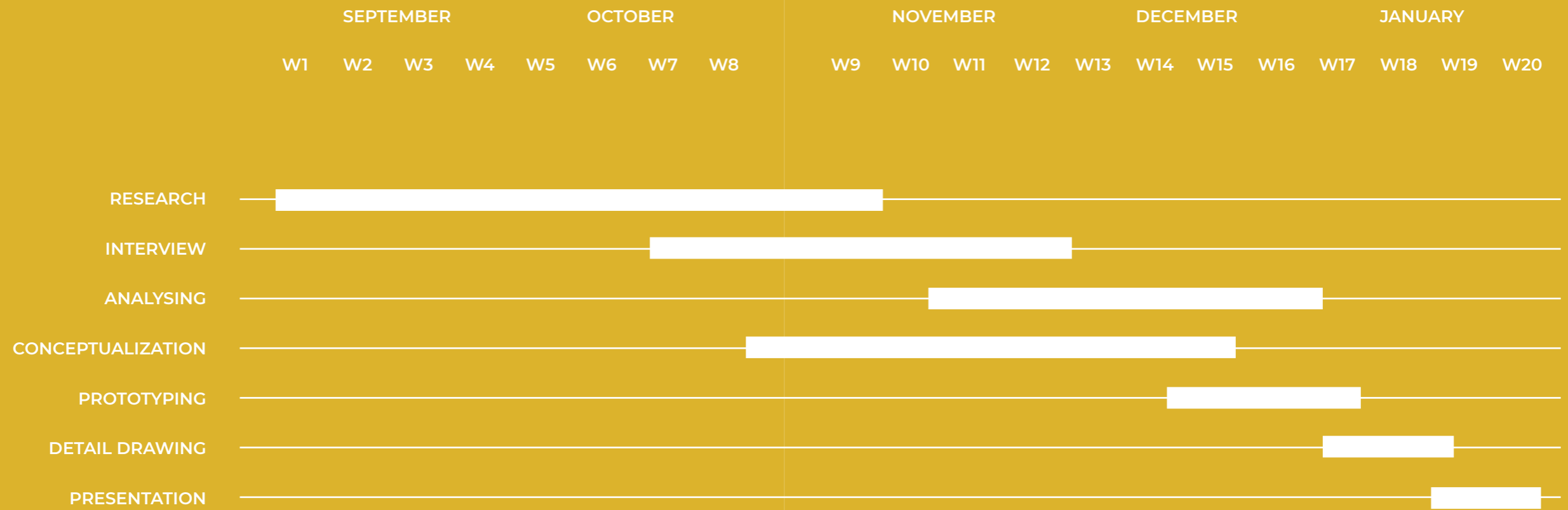
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01

THEORY

BACKGROUND

In 2008 the world has faced the most urbanization for the first time; many people left rural areas to live in towns all around the world. The expectation according to UNCHS is that by 2025, half of the world's population will live in cities (Woolley, 2005). According to FAO, it is also expected that by 2050, more than 70% of the global population will live in urban areas. With this urbanization, a substantial part of the “know-how” and expertise will be lost from the countryside, which will experience a brain drain.

Cities have become more important than villages and rural areas during the last centuries. This dramatic growth of urbanization has been considered as a threat to the future of Earth by some. The civilization phenomenon and the change from rural life to urban not only affects the environment but also social interaction. This urbanization growth and relative industrialization create a range of detrimental and often dehumanizing results (Woolley, 2005).

The urban environment will become significantly important in the everyday lives of the growing population of cities all around the globe. Thus the daily life will be dependent on the quality of that environment. The urban environment will affect the everyday life of both individuals and societies as a whole in different aspects such as housing, education, health, crime, employment and leisure. The quality of life differs from country to country as people's needs, physical and economical situations vary (Woolley, 2005).

Public street furniture is among the elements within the urban environment that impacts the quality of dwellers' lives in that environment. It affects civilization and provides comfort for the citizens. In cold cities,

climate and natural conditions have to be taken into consideration. Cold cities have long winters due to their special geographical locations. Thus the weather and local conditions in cold towns must be considered in the design of the public street furniture to enhance the negative features which improve people's cultural and social life (Shen, Yu, Zhang, 2013).

MASLOW'S HIERARCHY OF NEEDS

Maslow has suggested a hierarchy of human needs (1954). From the bottom of the hierarchy upwards, the needs are physiological, safety, social, esteem, and self-actualization. The needs at the bottom of the pyramid physiological, safety and affiliation are considered as the basic needs and therefore must be satisfied before individuals can attend to needs higher up as they are the weakest needs. How much the needs and to what level are satisfied in different countries of the world is different. For instance, in the developing countries, the strong needs at the bottom of the framework are yet to meet, while in developed countries the weakest needs of the hierarchy are at the focus (Woolley, 2005).

The middle part of Maslow's hierarchy the psychological needs are taken into consideration in my master thesis. Specifically, the social need is the one that is considered to be fulfilled in this project. This level of the hierarchy is yet among the strongest needs of Maslow's theory which is considered as vital human needs that must be satisfied.

Social needs - the third level of Maslow's hierarchy is social and includes such things as love, acceptance, and belonging. The need for interpersonal relationships motivates behaviour. At this level, the need for emotional relationships drives human behaviour. Some of the things that satisfy this need are friendship, intimacy, trust, and acceptance, receiving and giving affection and love. Affiliating, being part of a group (family, friends, work).

In order to avoid problems such as loneliness, depression, and anxiety, it is important for people to feel loved and accepted by other people. Personal relationships with friends, family, and lovers play an important role, as

does involvement in other groups that might include religious groups, sports teams, book clubs, and other group activities (Maslow, 1943).

Esteem needs – this level has been divided into two classifications: first, esteem for oneself such as dignity, achievement, mastery, independence and second the desire for reputation or respect from others for instance status and prestige.

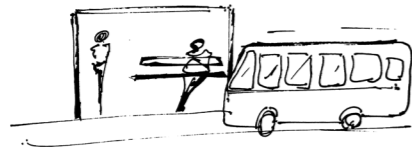
In addition to the need for feelings of accomplishment and prestige, esteem needs include such things as self-esteem and personal worth. People need to sense that they are valued and by others and feel that they are making a contribution to the world. Participation in professional activities, academic accomplishments, athletic or team participation, and personal hobbies can all play a role in fulfilling the esteem needs (Maslow, 1943).

Together, the esteem and social levels make up what is known as the psychological needs of the hierarchy (Maslow, 1987).

OPEN SPACES & URBAN OPEN SPACES

An open space has been defined differently by many authors and thinkers. From a user's perspective, open space is where they can do a range of necessary, optional and social activities (Gehl, 1987).

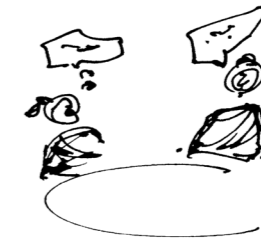
Necessary activities are nearly mandatory in an individual's life such as doing daily shopping, going to school or work, or waiting at a bus stop. These activities happen anyway and they are not mainly affected by our physical surroundings. However, the quality of an individual's everyday life can be improved if the places that these activities happen in are well designed.



Optional activities are the ones that happen if people have enough time or desire for them. Among these activities are going for a hike, spending a weekend in a mountain cabin, standing, sitting or sunbathing. These activities are affected by the weather condition and the place they take place in. They only happen if the weather or the place is suitable and appropriate for that special activity. Thus they are strongly dependent on the physical environment and its quality.



Social activities are considered as a bridge between the two other categories. Being social makes it happen only in the presence of at least one other person. These activities can be children's play, talking to other people or listening to them, greetings, communal activities, and the passive activities of watching and hearing other people. How well our physical environment is arranged has a significant impact on the chances that these social activities may happen.



Our physical surrounding has a great impact on the way we behave in that environment according to many researchers. This relation can be beneficial or detrimental to individuals or society as a whole.

Newman (1972) categorized open spaces as public, semi-public, semi-private, and private which is the most popular definition of open spaces. Walzer (1986) also defines different types of public spaces:

“Public space is space where we share with strangers, people who aren't our relatives, friends or work associates.

It is space for politics, religion, commerce, sport; space for peaceful coexistence and impersonal encounter.

HOW WEATHER AFFECTS THE EXPERIENCE OF THE CITY?

Its character expresses and also conditions our public life, civic culture, everyday discourse.”

The urban areas are counted in the open spaces. There are some questions in this regard asked by Helen Woolley (2005) which are inspiring in my project:

“How can such open spaces affect the quality of life for city dwellers? What are the benefits and opportunities of such open spaces for people? How might such open spaces be used? Are such open spaces important to people’s lives? Surely people who use these spaces do not spend hours discussing definitions of the types of spaces they are using, neither do they debate the benefits provided by urban open spaces, rather they experience the benefits and sometimes take the open spaces for granted. But they do value and ‘own’ such spaces and use them as part of their daily life. Thus these spaces contribute greatly to an individual’s and a community’s quality of life in the urban context.”

I found the answer to this question in an article written by Itai Palti. The following text is excerpted from this article:

“An international study showed that physical activity is highly correlated to weather conditions (Al-Mohannadi, Al-Kuwari). In the field of urban design, the climate is often completely ignored when addressing the walkability of an environment, and whether it supports outdoor activities. It is accepted that public space will just not be used in the rain, and seldom visited in the cold.

Walkability, along with other agents of outdoor mobility and street stickiness (how much we want to dwell in a street) is increasingly being correlated to far-reaching effects on our physical and mental wellbeing.

The mental effects are no less important – modern city life is contributing to the epidemic in depression and social isolation, and once again neighbourhood walkability is linked to mitigating these trends. Confinement to the home – especially for the elderly – lowers rates of social interaction seen as a staple for our physiological well-being.

It seems far-fetched for us to start battling the forces of nature, but there are simple and effective solutions. We don’t need to aim for completely weather-proofing our public spaces, just improving their comfort levels. Methods for creating dry and warm corridors can include blocking wind, cover from the rain, to more complex technological solutions that redistribute heat. We have the means to efficiently gather and store green energy to create more hospitable spots.”

WHAT IS SOCIALIZATION?

Socialization is how we learn the norms and beliefs of our society. From our earliest family and play experiences, we are made aware of social values and expectations. Without socialization, we literally have no 'self'.

Natali Jakarian, a member on Quora¹, the social forum explains about socialization:

“Socializing is something you learn and get used to. It’s not something that everyone’s born with, although, many have the gift of being absolutely amazing at it.

There’s a good reason why it’s called socializing skills; How do people socialize? It’s the same way of how people swim. They learn. It’s already there in our instinct, take the case of moving your hands and feet while in the water, while having no idea how to swim. How did you know that moving your hands and feet will help? It’s in your instinct. But learning how to swim is a skill that requires time and practice.”

The process of socialization makes people be in line with the social norms and society to function better as a whole. Religious leaders, tutors, friends, and family affect the way an individual socialize. Socialization process shapes in two stages of an individual’s life and they are categorized as primary and secondary socialization.

Primary socialization, as the name indicates, happens in the earlier stages of a person’s life through adolescence.

Secondary socialization takes place from when we are an adult and continues throughout our lives. Thus this stage of socialization happens when we found ourselves in new situations; especially we are more eager to interact with people who are coming from different cultural backgrounds. Secondary socialization, therefore, may occur in situations such as college or at work or in travels (Cole, 2019).

Purpose of Socialization

During socialization, a person learns to become a member of a group, community, or society. This process not only accustoms people to social groups but also results in such groups sustaining themselves.

On a macro level, socialization ensures that we have a process through which the norms and customs of society are transmitted. Socialization teaches people what is expected of them in a particular group or situation; it is a form of social control (Cole, 2019).

1. <https://www.quora.com/How-do-people-socialize>

DISCUSSION: ARE SCANDINAVIANS ‘COLD’?

Socialization is not a rule that must be obeyed or it doesn't have any specific instruction that should be done by individuals to be sociable. There are many factors that affect the interaction between people. I did not just limit my knowledge to the theoretical facts about socialization. My method to understand better the socialization principles is by asking individuals about this vital need in everyone's life. The question is what is socialization in an individual's perspective? The focus of my master thesis project is how to improve social interaction in the Nordic countries and in the meantime to keep my design something universal. Therefore, I was wondering if really Scandinavian people are cold in social interactions? I asked people whether Scandinavians are cold or not on social media such as Facebook and Instagram. I have also looked at other social forums regarding socialization. Here are the comments and insights from some of the users of Quora1, a question-and-answer online forum.

The question asked by one of the users is:

Mohammad:

“Why Nordic people are so cold and unwilling in having social relation especially with foreigners or the people they do not know?”

Erik

Historically, Nordic peoples (especially in the north) have lived in small groups and villages and gotten used to dealing with a few people over a long period of time. Meeting strangers would be rare and you could go months or years without seeing unfamiliar faces out in the Nordic wildernesses.

Nordic peoples were used to a rather harsh life in cold conditions with relatively poor soil for agriculture (Denmark might be the exception). They were used to natural predators and cold winters and their behaviour was likely influenced by their living conditions and surroundings.

Culturally, I think the conditions and way of life have created peoples who are shy and cautious with strangers, and who value personal space as well as peace and quiet. We, Nordic peoples, value the serenity and purity of nature and often go hiking in the woods or ski. We feel a connection to nature, and even today there are many small communities living close to nature. These communities aren't used to strangers.

I think that in Nordic cultures friendship is something that takes time. You need to build up trust and understanding.

Nordic peoples aren't as fond of smiles and small talk as, say, people in the USA. A stranger's smile can feel empty and unnatural to us. Do you smile because you're happy, or just to be polite? Nordic peoples prefer to smile because we're happy. Get to know us, and we will gladly share our happy moments with you.

Katja one of the users on Quora explains the difference between cold and warm cultures in different ways of being polite. She goes on:

“It all comes down to different ways of being polite. It’s important to know that the aim is to be respectful, just the ways of showing it are different.”

Katja has divided the politeness into positive and negative:

Katja

In practice, **positive politeness** can in my experience manifest itself in the following ways:

- Not leaving people alone.
- Making sure people feel welcome.
- Offering company without stopping to ask if it’s needed so that other people don’t feel lonely.
- Not paying much attention to personal space
- Not necessarily paying much attention to punctuality (if you have to choose between stopping to talk to someone and being punctual, the former is considered more important).
- Prioritizing connecting and communicating with other people’s privacy or sleep.
- Not necessarily protecting other people from loud sounds (prioritizing sharing a nice moment with your friends).

As a whole, people consider it much more important to

communicate to other people that they are cared for and that they are not alone than respecting their individuality, freedom, and privacy.

Negative politeness—and this is important to understand—is not being impolite, it just manifests itself in different ways. For example:

- Not disturbing other people by interrupting what they were doing, unless necessary.
- Not intruding into someone’s company if not asked.
- Respecting the personal space of other people by not drawing too near them.
- Not taking too much space in the street or in public transportation.
- Appreciating other people’s precious time by being punctual and going straight to the point.
- Appreciating other people’s need for privacy by not asking personal questions, not visiting anyone without invitation, and not making suggestions if rejecting them would be awkward.
- Respecting other people’s need for peace and quiet by not making too much noise.

For someone who comes from a positive politeness culture, negative politeness may seem rude and cold.



Anders

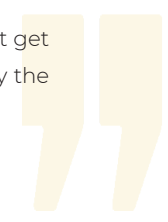
Basically, it boils down to the fact that deep down, we're not used to people. For thousands of years, we used to live in small settlements or on isolated farms, where we relied on a small circle of people who we could trust fully, because if they failed us, our lives were at stake - no fish, crops, food or firewood, and when winter comes, you starve or die.

A tree falls on you while logging, you lose your net, you lose your way while navigating, your neighbour doesn't have you back in a fight - poof, game over.

If somebody comes knocking on your door without scheduling it. It is better to be a life-or-death situation. If it's a stranger, we simply don't know how to relate - or more crucially, why we should.

Mentally, we're still getting used to this newfangled idea of living in cities and relating to new people all the time, and aren't good at it yet. Give us a few thousand years, and we'll be as good at it as people who have been blessed with gentler climates. Until then, we'll just stare at you, say nothing, and go about our business. Nothing against you, we're just thinking of how to get through the winter which can be nine months long.

And if the following summer is cold and rainy so we don't get our brief but crucial fix of happiness and relaxation, apply the above X 2.



Kari

I have learned that the Nordic life, social relations, ways of communication etc. may feel cold to people who come from cultures where people are used to live very close side by side in big cities and maybe big families.

There is a historical background, which I think is quite essential in the northern cultures and it's the very sparse population. In Finland, the average population density is 18 persons per km². In Norway it's about the same and in Sweden little bigger, about 24 people per km². But in Iceland, the population density is 3 persons per km². These are the numbers today. 400 years ago the number of Finns was 10% of the current. In EU the average population density is 117 persons per km². In China, the population density seems to be 140 persons per km².

I find it inevitable, that the sparse population has formed northern ways of interacting, the sense of loneliness, ways to feel connected etc. Just like dense populations have formed other culture's ways to feel about the same things.

Even though we nowadays live mostly in the cities, Finland has really urbanized only during the last 50 years. Our social strategies are rural and it doesn't mean dense villages, it means that your closest neighbour may live kilometres away. When such conditions influence the whole social culture, it must produce habits and social dynamics that don't base on active interacting between people but rather on surviving on your own.

I guess that we just really enjoy peaceful living and our own

space. Most of us can live long times without having people and chatting and lights around. Reading the morning paper in peace, doing things, not in groups, but individually. Of course we are curious of the world and enjoy social interaction - but I think that the intensity and frequency may be quite different in the northern cultures than in some other cultures.

We also may lack strategies in interacting in that social way, some other cultures have adopted. In Finland we have old proverbs like:

“Speaking is silver, silence is gold.”

“A man is to be valued by his work, not his words.”

“Even a snotnose will grow up to be a man; but he who laughs without cause, never.”

Seriousness and trustworthiness have been very valued features and serious, thoughtful way of speaking has been an expression of these features. So, there may be a cultural barrier to the other direction: some Finns may feel it confusing or suspicious, if somebody is very extrovert, comes very close and talks in very friendly way.

I’m not saying that all this is good. We may also suffer from loneliness and isolation because of these features. But they seem to be quite deep in our social culture.

Of course this is a generalisation. It’s not difficult to find extrovert Finns who do easy small talk and make friends quickly. But maybe the bigger part of us have grown to those old strategies in some extent.”

I also asked the same question on FaceBook targeting my Scandinavian friends. Here is the conversion between me and some of the users:

ME

After two years living in Norway and travelling in Scandinavia I am aware that how friendly and helpful Scandinavians are. However, I am pretty sure that you’ve all heard that they say “Scandinavians are cold”, I am not here to say whether this is true or not; but I just want to ask you WHY is this? Is it just a saying or there are some scientific reasons behind it? To what extent do you agree with this saying?

Gerard (Australian)

Norwegians are very reserved and difficult to get to know. They will never be themselves from the first meeting, only showing their true selves after years of knowing you. They are certainly very polite and helpful, but making meaningful connections with a Norwegian takes a very long time.

Faraz (Iranian)

Respecting Privacy!

Jenny (Norwegian)

I'm sure many people have experienced weird looks etc. trying to make a conversation with a random Norwegian on the bus or in the street. If I'm to talk to a stranger, I feel like I need to have a question or a specific reason to make contact. But if you ask for directions etc., most of us will gladly help I lived in Chile for one year, and of course the culture there was more "warm". But I found it more a matter of first impression, how you meet people the first time. Where we don't kiss and hug, but a hello or a handshake has the same meaning. I experienced people kissing my cheeks and giving me hugs, but at the same time being cold and hard to make contact with afterwards. I also met nice people whom I made friends with easily. I think it's the same way here, but that first barrier is probably harder here. I mean, getting to say hello and start a conversation in the first place.

There's also the language barrier, of course. In Chile fewer people spoke English than here, and all of my lectures were in Spanish. I had to learn and therefore the Chileans didn't have to switch to English when talking to me. Here I suppose it's harder learning Norwegian (because we just switch to English if the conversation gets hard, me included..). In Chile I hated when people switched to English. I learned best when talking to people who didn't know English.

ME

Wow such a nice experience! I was also very confused the first month I arrived here. How to greet people has been a problem for a while. Once I saw a Norwegian friend of mine at a bus stop and, as we usually shake hands especially with friends in Iran, unconsciously I wanted to shake his hands but he was looking at me in a way that what the hell was going on with me! So I never shook hands again, only when I meet someone the first time. And it seems hug is more safe.

So talking to an stranger needs a specific reason, I agree to some extent; even I, as an Iranian with a warm culture, don't see any reason to talk to strangers on bus, but if I am on a long train trip I would definitely want to talk to the person next to me; I usually offer them some food to make them talk to me. But then if someone wants to socialize and make friends with Norwegians (or other similar cultures) without getting drunk, and somewhere else than bars, pubs or clubs how can that happen?

Jenny (Norwegian)

Ha-ha, yeah! For me, handshake is used in formal settings or when meeting someone the first time. Hugs are more normal the better you know someone.

You ask good questions though. I honestly don't have an easy answer for you. Of course, parties, clubs etc. are contexts where we lay aside the everyday norm of not talking to random. What might work is attending to events, joining groups, sports, go someplace where more people gather for some reason, go to concerts. I also wouldn't say that you should never talk to strangers here. There's no law saying you can't, and even though it's not normally what we do that doesn't mean it'll never work.

Unni (Norwegian)

I think that if you meet a Scandinavian on their spare time in a leisure activity or time they are full of energy and showing themselves from a angle they most would want to be presented from, then it is more likely to get in touch with them. (Sorry for my bad English). I love every occasion when I see it is okay for the other person on the bus to start a conversation, but many times I also avoid getting into these situations by listening to music or looking at my phone. Just because I am tired before/ after work. But I always look for some kind of icebreaker when I am eager to be social with strangers, maybe a T-shirt print or something.

I agree with the girl writing above in the comment section; handshake can be equivalent to hugs in Norway, if we do a good handshake and a nice opening phrase and eye connection.

Anita (Iranian)

I think this coldness requires a definition. Being warm, to me, doesn't mean that you do a handshake or keeping a conversation for twenty minutes in a bus. I'm assuming (correct me if I am wrong, but this is what I've heard mainly from other foreigners and to my experience as well), that the threshold for making the interaction or friendship to a level that is fruitful for both is SO high. To make someone notice *"oh, this conversation clicked really nicely, this person is inspiring to me, I want to care about this person, etc."* Things that change an interaction (smiling, small talk,...) into a friendship (caring, listening, feeling heard,...). I go around feeling like this about some people and I sometimes end up feeling quite stupid that I even have these feelings/ needs. To my experience, Norwegians are so polite, they don't want to bother you no matter what. But with someone that I like and I want to hang out with, I really want to feel useful for that person. I want to be bothered a bit. I want my friend that I worked with for years in the same office to ask my opinion. Ask my help if they need anything. When I'm never bothered, I feel pushed away. It doesn't grow deeper and as soon as the environment that connects us goes away (stop being colleagues for example), the friendship goes with it. Sometimes (I am deeply sorry if I am wrong, I don't mean to offend anyone, I am just trying to be clear) I feel like

there is this perfect Norwegian human model, that person that lives by himself/herself in the woods. Completely self sufficient, content, without needs. I have heard MANY times people bragging about how much they don't need other people for anything. Or even they feel uncomfortable around other people. Of course it's very difficult to put people in boxes and judge everyone with a term based on their nationality. You as a Norwegian, definitely know better than me about this, I only lived here for three years, you have lived here all your life.

'FIKA' **SWEDISH SOCIALIZATION**

Whether at work, home, or play, Swedes understand the power of shifting gears to cleanse the mind, enjoy conversation, and restore focus. They often do this with family, friends, or co-workers over a cup of coffee. This ritual is called 'Fika', and it is popular with all age groups, including children, who might opt for hot chocolate instead of a cup of joe. 'Fika' is more about connecting with others than it is about getting a caffeine jolt. It is a social phenomenon, a legitimate reason to set aside a moment for quality time (Forslin, 2014).

‘DUGNAD’ NORWEGIAN SOCIALIZATION

‘Dugnad’ is a general term used in Norway for doing or participating in voluntary work such as rehabilitating cabins, or painting the logs of a house or cleaning a place like a kindergarten or a school (Bourrelle, Lund, 2014). Participation in a ‘Dugnad’ is often followed by a common meal, served by the host, or consisting of various dishes brought by the participants, thus the meal is also a ‘Dugnad’ (Sejersted, 2010). This voluntary work has no salary but sharing value with other people (Simon, 2019).

The same thing may happen in other cultures; In Iran, for instance, women in a neighbourhood used to gather together to help one of the neighbours with cleaning the herbs and vegetables that she wants to make food with for blessing. In that way, other women also benefit from this blessing while they have social interaction as well. Another example in the same country is the time of harvesting that men in a village help their fellow villagers to harvest his fruit. However, this task has gotten a name for itself in Norway as ‘Dugnad’ and the general term for it is ‘Communal Work’.

Social behaviour has also been observed among animals; for example, Muskoxen are famous for their defensive behaviour against predators such as wolves. Muskoxen have collective life; in winter they live in herds of 8 to 20 and in winter 12-24 (Tener, 1965). When Muskoxen feel the threat is approaching they run together and the adults form a defensive ring around the calves in the herd (Miller, Gunn, 1980). If there is one predator, they form a line to defend (Lent, 1988). This behaviour shows how social muskoxen are and they interact in their community for their survival.



Photo 1. Iranian women cleaning herbs.



Photo 2. Muskoxen defensive ring.

02

PRECEDENT STUDIES

INSPIRATION: 'KORSI'

What is 'Korsi'?

'Korsi' is an invention to keep feet warm during the cold seasons. When the body is in touch with the extreme coldness of the winter feet are among the first body parts that get cold and freeze immediately. In the past when today's technology didn't exist human invented the technology of the time to keep oneself warm in winter. 'Korsi' is a low four-legged wooden table with an integrated heating system, originally a brazier filled with charcoal or coal, and an overhanging blanket on all sides of the table. People seat on cushions around the 'Korsi' with their legs underneath it and the blanket on top covering up to thighs (Arasteh, 1970).

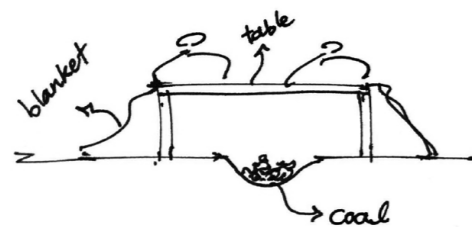
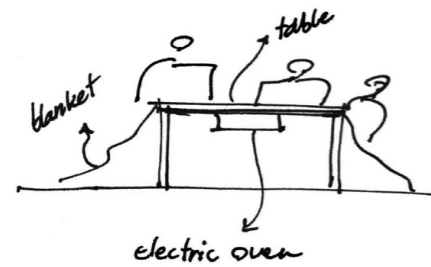
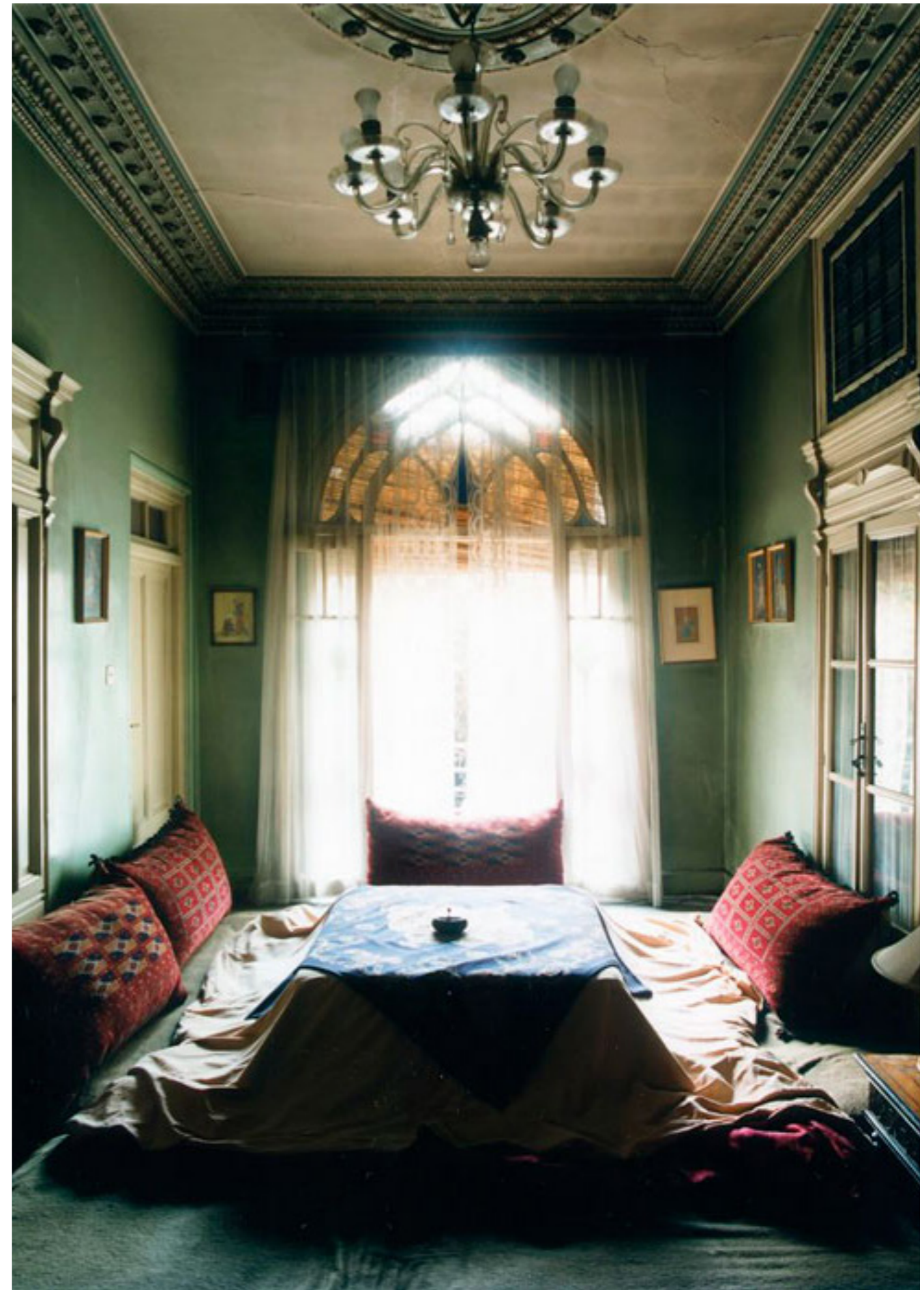


Figure 1. Schematic diagrams of different heating systems used in Korsi. (Left)

Photo 3. Beatrice Minda, 2010-2011. Korsi. (Right)

"Several generations of a large Persian family have left their mark here. How often they sat around the 'Korsi', this low table from the Iranian culture. How many times they lifted the huge blanket and filled the basin under the table with coal. For warm feet on cold winter days, for secret contact." (Minda, 2011).



Korsi's history and cultural values

In the old times, most people in the rural areas of Iran used the 'Korsi' to keep warm in their homes. This was a piece of furniture that brought family members closer and they sat around it and spent time together unlike the scattered modern lifestyle. For the new generation, 'Korsi' is a big reminder of warm cozy homey nights at grandma's house and bring a big smile on faces. Maziar Ghaderi an Iranian artist reminds us that

“A 'Korsi' is meant to bring families together. Without digital devices but with simple presence. It's a rural tradition that was popular when heating wasn't commonplace in homes; only fireplaces, jokes, music, banter, flirting and storytelling.”



Photo 4. Persian Korsi.

'Korsi' is not just a piece of furniture for Iranians. It plays a big role in Iranian culture. It was a big driving force for family gatherings and fun times when there was no TV or social media. Family members spent good quality time together, siblings helped each other with homework, grandparents told the story of themselves to kids and at nights, all family members slept all together around 'Korsi'. For Iranians, 'Korsi' is a birthplace of love and solidarity within the family to overcome the cold long dark nights in winter. 'Korsi' and the pleasant warm time is also intertwined with Iranian national festivals like 'Yalda' night (winter solstice) and Norooz, Iranian's New Year.

Scientific perspective towards 'Korsi'

From the medicine part of the view, 'Korsi' is also beneficial for anemia. Lying the feet beneath 'Korsi' improves the blood circulation and also, by getting the feet warm, the temperature goes to the upper part of the body and makes a man feel warm as well.

In extreme coldness, the blood vessels in feet and other parts of the body such as nose shrunk and as a result blood flow will reduce in this area. This decrease in blood flow results in a decrease in oxygen levels in the outer parts of the body, causing the skin to become bruised, called cyanosis. When the feet get warm by using 'Korsi' the blood vessels will be expanded resulting in high warm blood flow. This flow reaches the upper parts of the body especially the brain which helps the body to operate better. When the body is warm user has a tendency to do activities; while seating around the 'Korsi' this activity would be interaction with other

people around the 'Korsi', this is socialization. However, when the heat exceeds a certain level the brain receives way too much blood and as a result, the person falls asleep.

This is also what exactly happens when people drink alcohol. But what is the difference? Alcohol may at first create a calming feeling from inside the body as blood vessels become wider. The body pumps warm blood into the whole body, but it cools again as quickly. We feel the heat on our cover, but the body itself freezes. The organs do not get enough blood and the body temperature decreases further. Alcohol may help people to socialize, but is this socialization stable? Alcohol has also many other downwards and the risk of death. So when there are other healthier ways of socialization do we really need to drink extensively alcohol to be sociable.

'Korsi' in other cultures

Comparing the 'Korsi', this kind of heating system in Iranian culture, with other cultures reveals to us that similar devices are also utilized in the different corners of the world. Japanese Kotatsu, Spanish Braseró, Dutch foot stove, Portuguese mesa Camilla, Chinese Kang bed-stove and also Korean Ondlos are based on this fact that heating from feet is helpful to not even health, but also the soul.

Among all these means for heating 'Kotatsu' is the most similar one to 'Korsi'.

'Korsi' still can be an item of furniture in modern houses, which creates a cozy place for family gatherings. In Japan, they design new models for 'Kotatsu', a kind

of traditional Japanese table similar to 'Korsi'. Since many buildings in Japan lack insulation and rooms are heated separately, 'Kotatsu' acts as a handy centralized heat source when it's chilly. 'Korsi' and 'Kotatsu' are the means for family gatherings and face to face talks, invaluable connections, which are important regardless of time and place.



Photo 5. Japanese Katatsu



Photo 6. Dutch foot Stove



Photo 7. Chinese Kang bed-stove



Photo 8. Spanish Braseró

OTHER INSPIRATION SOURCES

The Cooking Table

The Cooking Table is part of Moritz Putzier's diploma thesis named *Back to tomorrow, Dining culture through the change of time*. The preparation of food as a creative act and communicative part of the common meal formed the main basis of the design analysis. The act of cooking itself is a creative and communicative act, but also a memento to share, an excuse to meet friends or just to relax. It is an act that brings people together. Moritz Putzier analysed each memento, each detail and each situation. Some of the preliminary questions the German designer asked himself were:

“To what extent can we reduce to basics these days without moving backward? What would a kitchen scenario look like if we take away all fancy cooking tools and electrical equipment? What do we really need to create good food and dine all together with our friends or family?”

My work is focused on the creation of the cooking experience, not on the food itself. Traditional and original values are picked up and transformed into the present time. The project calls the rigid conditions of our daily kitchen live into question and suggests a new way of cooking and dining to keep this creative act as a social ritual alive. I investigated human needs in our modern daily life. The thoughts and solutions I developed build a flexible interaction between cooking, dining and social cohabitation. Always keeping the individual person in the centre of my attention.”

At the heart of the concept is the table, which



Photo 9. The Cooking Table by Moritz Putzier.

historically forms the social centre of the kitchen and general household. It is here where food is served and consumed, and conversation is had. Simultaneously, the surface also has the capacity to act as a cooking zone. The table is composed of two parts which can be separated to accommodate movable gas burners which can be simply inserted along a hidden track on the underside, and where gas canisters can be attached. These modules can be moved easily by hand along the rail, from one side of the table to the other. This possibility offers a stove that turns into flexible cooking tools that can be adapted to individual needs in terms of cooking position, and a number of integrated hobs. The stool bench is specially designed for the table, a combination

of a slightly elevated stool and a slim shaped bench.

Putzier explains his design as something “with a little twist” that prefers not to push its way into the centre of attention but rather as a hidden aesthetic that defines itself through playful attention to detail. Objects that are driven by the desire to be connected to people.

Mokša

Mokša is a piece of street furniture developed by Finnish designers Simo Lahtinen, Suvi Saastamoinen and Mikko Rikala. Mokša brings light into the dark Nordic winters and encourages them to take a moment to sit down and admire its refined elegance and functional design language. Mokša is a piece of urban furniture that suits not only dark landscapes but also light urban spaces in the summertime.

The design is characterized by adjustable lighting that users can control with a push of a button — offering a brighter atmosphere to the dim city.

“Mokša brings light to the dark Nordic winters and encourages to take a moment to sit down and admire its refined elegance and functional design language” explain the designers.

The wooden and steel unit is conceived as 2.5 meters high and wide structure, with a meter in depth. In addition, the thin illuminated light panels installed onto the roof-like overtop are chosen as transparent features that gently reflect the warmth of the wooden frame. Mokša is a piece of urban furniture that suits not only dark landscapes but also light urban spaces in the summertime. The design is unique, giving the location an individual character.



Photo 10. 'Mokša' designed by Simo Lahtinen, Suvi Saastamoinen, and Mikko Rikala presented during the FIS Nordic world ski championships 2017 in lahti, finland.

Vestre

Vestre founded in 1947 by Johannes Vestre, is a Norwegian manufacturer of urban furniture. Vestre has helped create social spaces for people both in Norway and other countries for more than 70 years. Their focus is to create robust furniture with considerable longevity to be placed around the world as small pops of colour and positivity. Jan Christian Vestre, the CEO of Vestre claims that:

“We are working with both our clients and with landscape architects to create communal areas that promote everyday democracy - spaces where people of ages can come together across social, cultural and economic variations. In partnership with our Scandinavian suppliers, we build products that last, utilizing renewable energy and locally sourced, environmentally-friendly materials. As a team, we at Vestre are looking to the future by building a green industry and implementing ethical and sustainable business operations through strict governance.”(Vestre, 2019)



Photo 11. Author. 'Move' designed by Allan Hagerup for Vestre.

“Our goal is to make Vestre the world’s most sustainable urban outdoor furniture manufacturer” Vestre

VESTRE CREATES SUSTAINABLE AND GREEN URBAN SPACES MADE FOR YOU AND ME. DEMOCRATIC AND INCLUSIVE MEETING PLACES THAT BRIDGE SOCIAL AND CULTURAL DIVIDES. INVITING AND SAFE OUTDOOR SPACE THAT FACILITATES CONVERSATION AND ACTIVITY. INSPIRED BY NORDIC NATURE AND SIMPLICITY, VESTRE HAS BEEN MAKING LASTING QUALITY OUTDOOR FURNITURE FOR GENERATIONS. IT'S ALL ABOUT DOING OUR BIT.

INTERVIEW & OBSERVATION

I discussed my master thesis topic with other designers and users for a better understanding of socialization challenges and trends. I conducted a discussion with a German designer who had worked with the same topic for his diploma to learn from his process and strategies. To get a better understanding of socialization trends in the Norwegian culture and also street furniture regulations in Norway I contacted two architects at the municipality of Trondheim. I have also talked about friends and family gathering with a citizen of Trondheim who made a bench for this purpose in his neighbourhood. I sent email to some psychologist in Sweden who work in the area of socialization and have made some framework and guidelines for users to improve their social skills; Unfortunately, I have not received any reply from them. Semi-structured interview is the method used to conduct these discussions.

Semi-structured interview

Semi-structured interviews are conducted with a fairly open framework that allows for focused, conversational, two-way communication. They can be used both to give and receive information.

Semi-structured interviewing starts with more general questions or topics. A relevant framework or areas of interest such as knowledge, ethics, action, and product relations are initially identified and the possible relationship between these topics becomes the basis for more specific questions that do not need to be prepared in advance.

Semi-structured interviewing is guided only in the sense that a framework for the interview or areas of interest is prepared beforehand.

Video call with Moritz Putzier

Thursday 31st October 2019

In order to develop my own ideas, I established this semi-structured interview to understand what Moritz Putzier, a German designer had done in his diploma thesis which is in the same field as my master thesis's topic. I interviewed him to hear about his Cooking Table in his own word. The focus of our discussion was:

- **Understanding Putzier's cooking table challenges and the solution.**
- **Defining socialization within furniture design.**
- **Indoor private furniture or public street furniture?**

Moritz is a young German designer from Munich. After his graduation Putzier established his own studio in Cologne. Putzier wanted to promote the experience of cooking in his project, here what he says about his idea:

"The idea was how to promote the cooking experience; because people are forgetting about this let's say tradition. I read very old books and looked at different cultures such as in India to see how was the cooking tradition. What I found was that no matter a rich family whose members sits around a table or a poor farm family who sits around a fireplace to eat their meal,

they are all doing this together; even the first humans gathered around a fire to be together. Cooking and food have been always an excuse to bring people together."

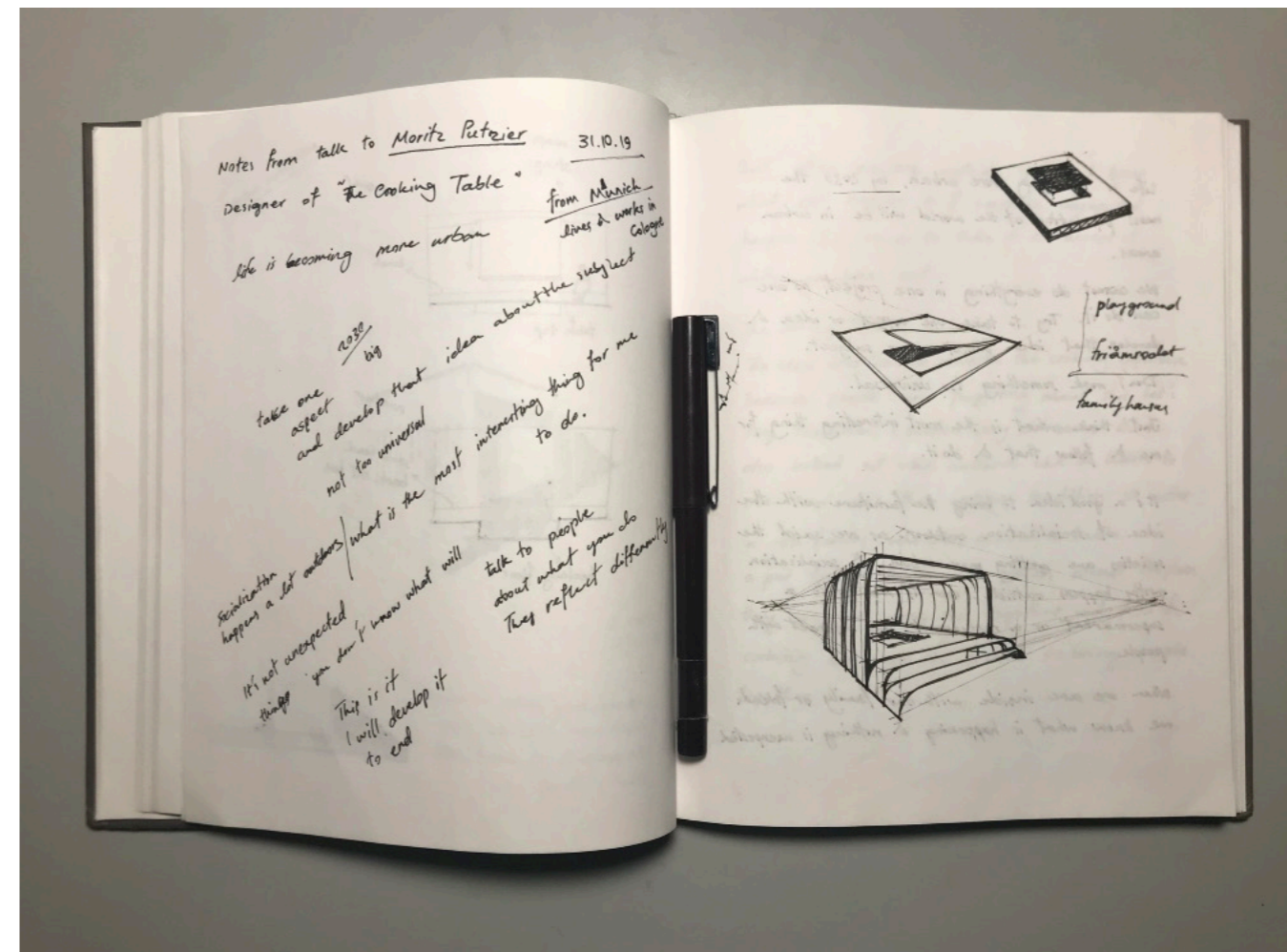
What do you think about keeping the idea outdoor or indoor?

"Urbanism is growing, studies shows that by 2030 the most areas of the world will be urban areas and the rural parts are disappearing, we are not saying that this is good or not but it is a fact. **I believe that it is a good idea to bring furniture with the idea of socialization in the outdoor spaces. In fact, socialization mostly happens outside.** Even if we go to a supermarket or a restaurant we interact with people. When we are inside with our families or friends we know what is happening around us and nothing is unexpected. But when we are outside we don't know what will happen and if something unexpected happens it is easier to accept it.

Obviously we cannot do everything in one project, we cannot consider all aspects of socializing in only one project, no one can do it. Try to take one aspect or idea and develop that idea about your subject. Don't make something too universal. Think simple; just think what is the most interesting thing for you, follow that and do it."

Have you ever experienced to be in a point that you cannot move forward and you think 'that is the dead-end'; and what would you do in such a situation?

"It has been moments that I could not move forward in my projects. In that case it is a good idea to talk to other people about what I am doing, because they reflect differently. When you are deep into your ideas you cannot see the other aspects. Or maybe just say THIS IS IT and I develop it to an end."



Observing Benken with Øystein Aarlott Digre

Friday 16th November 2019

Øystein, born and raised in Trondheim, created Benken. Benken is a bench along with some coffee tables that Øystein made them and put them outside of his house in his neighbourhood, Ila, for everyone to hangout and socialize. Benken brings not only the people who are living at Ila together but also grabs the attention of those who are just passing by to have a short break. Benken has created a meeting space at Ila. Øystein claims that people especially during summer use Benken to chat and eat food together. He has also put a free fridge in front of his house close to the bench that everyone can put food in it or take from.

Øystein argues that the big challenge with the Benken is that it is avoided to be used in the winter time. Because the surfaces are too cold to sit on and also there is no protection from rain or snow. However, I observed that some people had sat on the bench as the spot had been remained on the snow on the bench.

Øystein believes that there is no such thing as cold people or culture, since everyone would react the same way in the coldness of Norway. He goes on *"the same people in that neighbourhood are completely different in the summer time, they are more active, more sociable and more willing to do activities"*.

Øystein regarding the idea of having an outdoor public fireplace says that he would be happy to pay a couple of Kroner to use a public fire place.



Photo 12. Benken, Øystein Aarlott Digre.

Meeting Alzbeta Cepelkova at the municipality

Tuesday 26th November 2019

Alzbeta is an architect at the department of urban space and green structure at the municipality of Trondheim. I showed Alzbeta my inspirations and some of my sketches to ask for her feedback as an architect's point of view. Socialization trends were the focal point of our conversation. I also asked also her about the potential spots in Trondheim where I can locate my design.

Regarding socialization Alzbeta says "this is an ongoing trend and argument here in the municipality. It is always a challenge to make meeting spaces."

The urban area of Trondheim is just the city centre of Trondheim; the other parts are more like outskirts such as family houses with some grocery stores. So urbanization is mostly happening in the city centre of Trondheim.

The idea of creating a shelter is more like 'Gapahuk' in the mountains and forests of Norway. 'Gapahuk' is a wooden structure with one side open and seats all around it. There is usually a bonfire in front of it as well. People who go for skiing they sky between the 'Gapahuks' and have a break there. Schools also take children to these 'Gapahuks' as trips and they have lunch there.

Including a bonfire in your design is something which is accepted in Norwegian cultural context. People will bring their own firewood and they will leave the leftovers for next person who will use the product.

Municipality is struggling with the loneliness of elderly people. Old people are often lonely and have no one to talk to. They feel useless and depressed. **As a scenario if there is a space as your meeting space idea that people especially elderly people who still can do some physical activities like chopping wood, they can bring them to this place just to put there. By this way they would feel they are beneficial and have done something useful.**

Your design should be aesthetically pleasant for the users. Regarding regulations and safety it is important to not be closed so people would feel the safety and that they are secure. Including lighting in your design is also important both aesthetically and in terms of safety; but then there is a lot of responsibility for taking care of it.

In Trondheim there are a lot of playgrounds or areas called 'friområdet' (free area), also called parks (but they are not actually parks) where you can consider to locate your final product. Your design would be good for those areas.

Try to make something that is fixed in the place like 'grill prinsen'.



Photo 13/14. Friluft. grillprinsen (Left). Gapahuk (Right) Trollheimen 2.

Coffee break with Trine Gjessen

Tuesday 3rd December 2019

Trine Gjessen is an architect graduated from NTNU who works in the municipality of Trondheim at the City Planning Office (Byplankontoret). Our conversation started through emails. Trine introduced me some projects in line with my master thesis that are made in Trondheim, a bench at Solsiden connected to the District Heating network (fjernvarmen-net) and Grønn Benk at Tiller.

I met Gjessen for a coffee in the town to get more information about my topic and the relevant fields. In this meeting I explained Trine a brief of my project, research and inspirations through a mood board and showed her my sketches.

Our talk was based on finding some spots in Trondheim to place my design there. The areas that Trine suggested are **Marinen, Saupstadringen, Nyhavna, St. Olavs Pir.**

Regarding socialization culture in Norway Trine goes on that:

“People who live along the coast are more easy to talk and are not afraid of strangers, due to the fact that they have border with sea and obviously they have seen and talked to many people. On the other hand in-land people are always looking at you as strangers no matter you are a Norwegian from another part of the country or a foreigner.”

“As for designing a piece of furniture for socialization, factors like distance and safety are important. Therefore, the design should help the user feel that they are safe

and their privacy has not been violated. For example, instead of having the seats in front of each other they can be organized with a 90 degree angle or another angle. Also one of the benches could be continued to the out of the structure so that users won't feel awkward and they will be comfortable to use it. You can consider a platform that you can put all the elements on top of it and make it more playful.”

“In terms of weather it is a good idea to Have a shelter that protects from rain, snow and wind. If you are considering to set your design by the coast it is important to have a protection from wind. Make some angels, play with different angels considering the location of the bench and the wind direction.”

Trine though a question at me which I did not have a persuading answer to it, she asked: *“why you made one of the prototypes symmetrical and the other with different heights?”*; However, I explained that is because to have more protection from rain.

A scenario for the bench could be:

“Two persons who do not know each other, they sit on each side of the bench in a way that they do not face each other directly. They want to make a fire and they will collaborate in this task.”

Photo 15. 'Grønn Benk' a brick installation with an integrated baking oven. Created by Vigdis Haugtrø the idea of 'Green Sofa' is that user should be able to do new things here, and maybe get to know new people.



03

ANALYSIS

KNOWING

Aims of the project

To promote socialization and ease human interaction.

To create a space for people to share their experiences.

To design an outdoor furniture that can be used in all seasons

To make an intersection between Persian and Nordic cultures by combining cultural values into furniture design

This will be done by designing a furniture system including elements such as benches and tables combined with a heating system such as a bonfire, grill stove or district heating network (Fjernvarmen-net).

Potential Users

The users are not categorized by group ages, meaning that the product aims all walks of life. However, the product will be used in places that people are there for same reasons, for instance in a park or in neighbourhood where the people briefly know each other, or by the fjord that people are there for swim, fishing or enjoying the scenery while they have some snacks. In fact, the product considered to be used for people who are sharing a similar activity or experience.

Target groups should be demographically independent, but will likely have some shared core values, attitude and desire for a lifestyle that is somewhat different than what one sees as more common in rural areas today.

In what context?

Initially when I was studying Korsi I was considering to make a new version of korsi that can be used in the interior spaces. However, designing a new Korsi for Scandinavians may take a long time to be welcomed in their culture. I looked at the challenge through a wider lens and the challenge was not designing a new table but finding a solution to bring people together. the conversations with my supervisors and other designers led me to design a product for outdoor spaces. but then what kind of outdoor, private or public? Rural or Urban? Talking about my idea to many people they were quickly thinking about mountains, hicks and cabins. I understand all of us know when we are going to a cabin or hicks in the mountain we would like to be social and talk to people around us. But my intention was braking this border and bring the socialization pattern into a new platform, and that is Urban areas. Studies show that urbanization is a growing phenomenon and we need to improve these environments for a better life of its dwellers. When I discussed my idea with Moritz Putzier, he claimed the fact that urban areas are becoming more populated. Socialization mostly happens outside, which is a good idea to create a meeting space in the urban areas. He went on: "when we are inside with our family or friends we know what is happening and nothing is unexpected. But when we are outside, we don't know what will happen and if something unexpected happen it is easier to take it and accept it while we are out."

DEFINING

Design considerations

What I learned from investigating cultural and social patterns in Scandinavian countries and previously detected challenges and solutions have been translated into a meeting space in urban environment of Scandinavian cities. Analysing all the information I gathered, the factor that helps individuals to communicate with both their physical surrounding and other people as well is mainly doing an activity. Something that people can do together to share a value which makes them to interact with each other. Cultural and traditional Persian design values have been picked up and translated into a modern street furniture in the same language as Vestre's products. Taking Korsi into consideration and transforming it into an outdoor street furniture the fire element has become the focal point of the design. A bonfire transformed into a furniture setting by means of a fire pit. This is the symbolic inspiration of Korsi in my project which makes it original. The idea is to creating the experience of a bonfire. Then there is a fire pit in the centre of the design and other elements such as seats come along. Central arrangement is an integral part of Iranian architecture and design which is also applied in my design. In Persian traditional architecture rooms usually sit around a central yard. The shape of the walls are inspired by Persian domes and classical Gable roofs.

This is a product for all, without age or gender limitation. People from all walks of life can come here, elderly people who have difficulty to go to the woods or mountain they can still enjoy a bonfire in the city. schools can bring children to this meeting spaces for daily trips. Young people and adults who are busy with everyday life can spend few hours of their days for a

good quality time to socialize with their friends and family. The arrangement of the benches is important, so the furniture should be designed in a way that will avoid hierarchy; to make the user feel safe using it, not only in terms of fire regulation but also safe in a psychological way that the design should avoid making something private so that everyone can use it. It should not be a closed room so that people dare to sit on the benches. Also lighting is important to avoid making a place for drunk and addicted or homeless people at nights. Materiality is important, aesthetically the product must be pleasant for its users. According to the weather conditions in Scandinavian countries the materials and colours that are used in the product must be warm to create a warm atmosphere for the users. Wood is a warm and welcoming material which meets the visual and tactile needs of the user.

HEATING METHODS

District Heating

District heating is an energy system where energy for heating is produced in one place and used in another place. For the transport of heat energy, a district heating network, a closed pipe loop that transports hot water to the consumer and cooled water back for new heating is used. A district heating system can use several different heat sources, such as waste heat, waste, heat pumps and biofuel.

Advantages:

- Safe
- Sustainable and clean energy
- Warm surfaces with no snow

Disadvantage

- Lack of accessibility
- It does not provide the visual and psychological comfort that fire provides.
- Add up the expenses
- Requires regular maintenance
- More responsibility for municipality
- Still wet surfaces
- It makes the product more complex

Fire Pit

A fire pit is the simplest and easiest way to produce heat. Wood or charcoal can be used to make a fire.

Advantages

- In scandinavian context wood is accessible in almost all places for making fire
- Crackling sound of fire causes a reduction in subjects' blood pressure

- Fire provides relaxation
- It is more accessible compare to district heating

Disadvantages

- Possibility of fire
- The smoke produced by burning reduces user's comfort

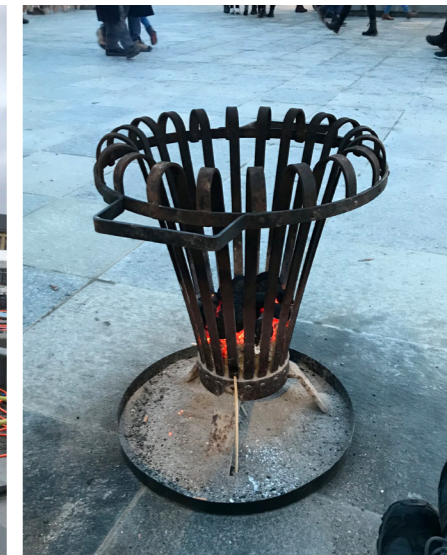


Photo 16/17. Author. Left: District Heating at Market square, Trondheim. Right: Fire pit

WHY NOT FIRE?

Fire is one of the important human invention that has revolutionized human life throughout history. The flickering light, crackling sounds, warmth, and a distinctive smell of fire provide psychological and visual comfort for people. Simply fire helped early humans with cooking, hunting, breaking the darkness of the nights, keeping threats away, and providing heat. Even today fire impacts our modern lifestyle, where we are stressed with everyday hustle and bustle. A fireplace creates warmth, both physical and emotional, and evoke a charm and coziness that can be enjoyed alone or together with our loved ones. The distinctive crackling sound of fire reduces consistent blood pressure and improves the impacts of prosocial behaviours and engagement. Hearth and campfires cause relaxation as part of a multisensory, absorptive, and social experience (Dana Lynn, 2014).

Based on the psychological impacts of fire on human social behaviour and relaxation I chose to have a fire pit in my design. It also avoids complexity due to the fact that in many countries such system does not exist and even it is not accessible in every places in Norway. A fire pit creates the feeling of a bonfire and everyone have access to wood in Scandinavia to make a fire.

“When it’s cold outside, there’s nothing quite like sitting by a cozy fire.”



USER SCENARIOS

People will be educated that the furniture has a fire pit and room to store fire woods, when they visit the product for the first time. Next time that they come to this place they will bring equipments to make a fire. They can leave the leftovers of their fire woods in the places that are considered for storing them. This is a furniture for urban areas, so every one can use it.

After my conversation with Alzbeta Cepelkova from the municipality of Trondheim, I learnt that the municipality has a big challenge with the loneliness of elderly people. A scenario for elderly users (who still can do physical activities to some extent for instance chopping wood) is that they can chop fire woods and bring them to these meeting spaces. In this way users feel that they are contributed in their society and are appreciated.

Another scenario is schools or kindergartens can bring children to daily picnics at these places. By this way children will learn the skills for making fire or grilling. This is a saving of time instead of going to cabins.

Adults also can bring wood fires to sit around a warm fire with their family or friends or just making friends with some random people by helping each other making a fire.



Photo 18. Author. Cabin trip, Kåsen Cabin, Trondheim

04

CONCEPTUALIZATION

SKETCHES 1, TABLE IN A ROOM

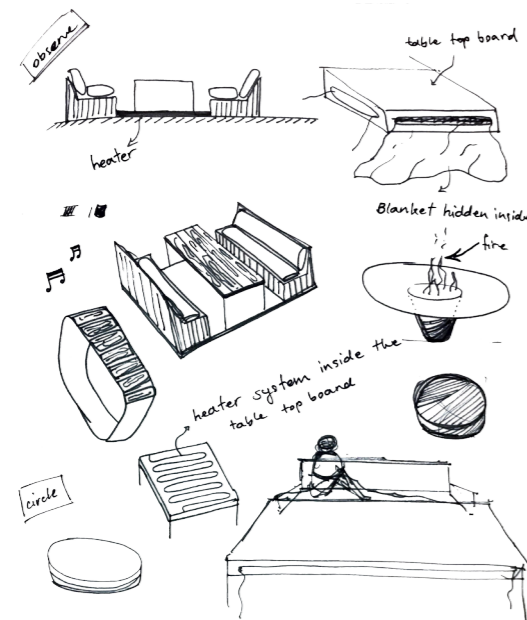
Inspiration sources:

- Persian Korsi
- Japanese Kotatsu
- Norwegian Gappahok
- Norwegian grillhytte

Heating System:

District Heating

I asked myself how can I bring Korsi to the outdoor spaces. In what way a public street furniture can resemble Korsi. The sketches below show my initial thoughts for my design. In all the sketches I tried to keep the heating element in a low level as in korsi to make user's feet warm.



Fireplace

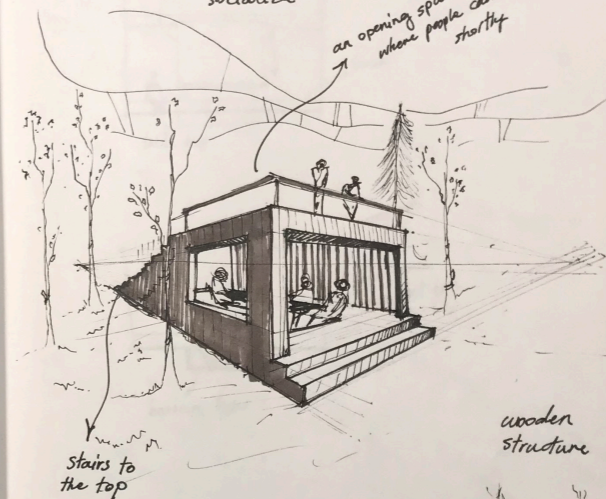
- central to our nostalgic vision of "hearth & home"

They can create warmth, both physical & emotional, & evoke a charm & coziness that can be enjoyed alone or together with our loved ones.

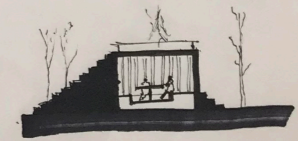
Gappahok
grillhytte

an installation space for people to meet & socialize

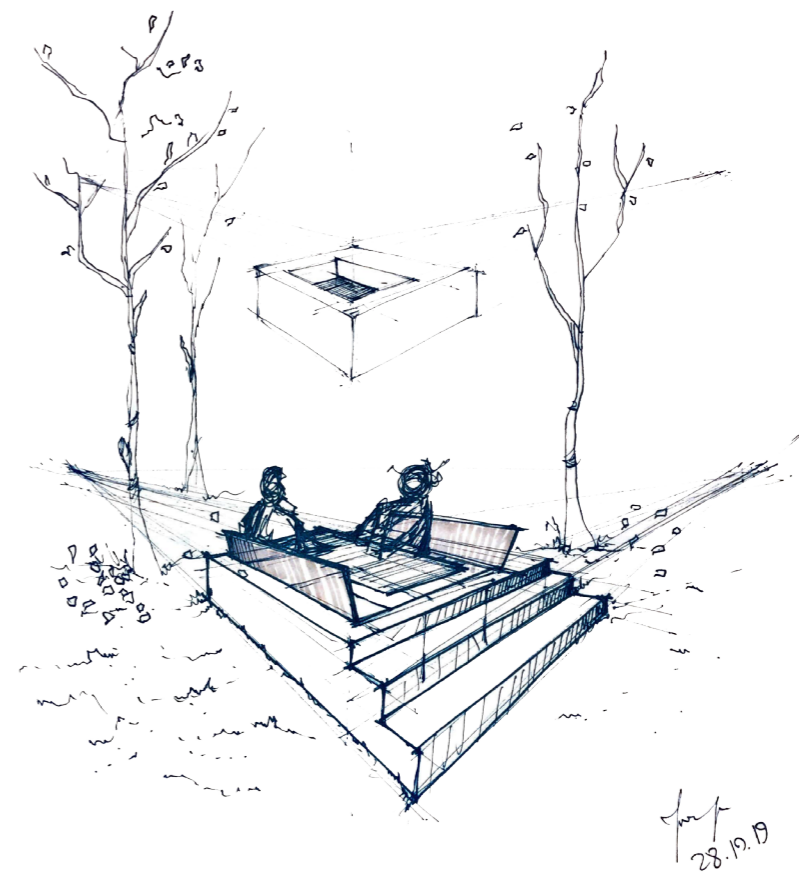
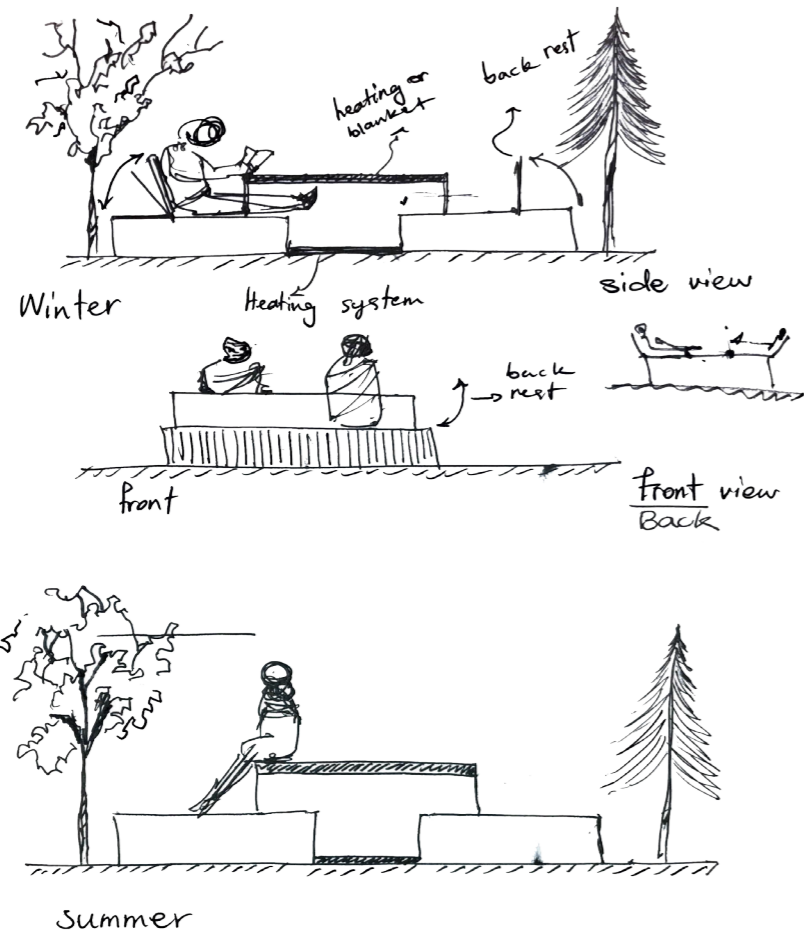
an opening space where people can stay shortly



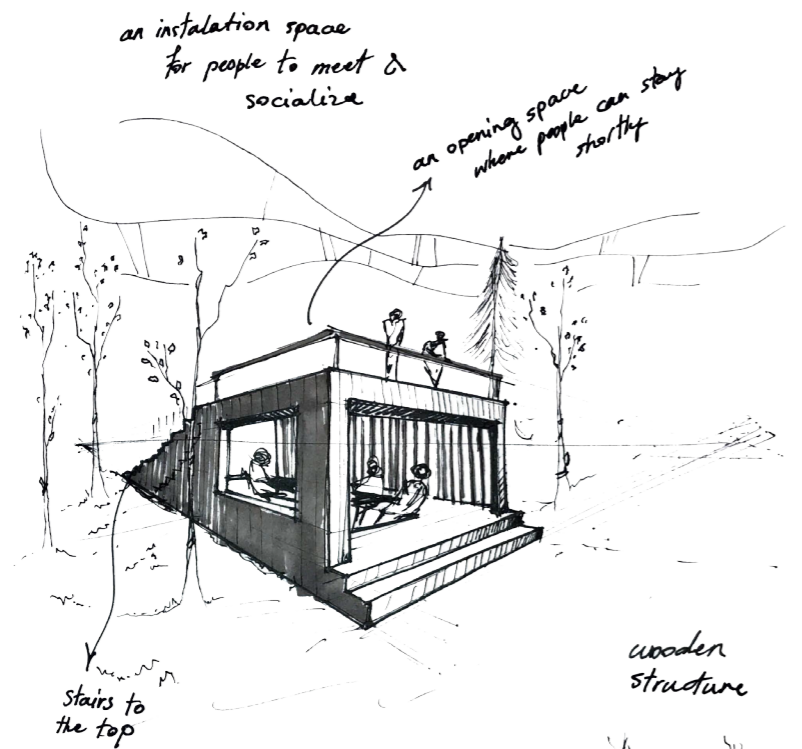
a semi-closed space in which people can stay and enjoy the warmth & chat with their friends or...



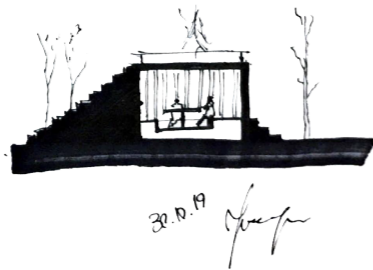
20.10.19



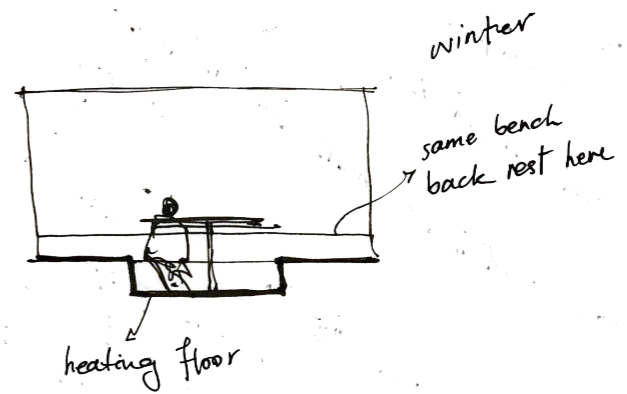
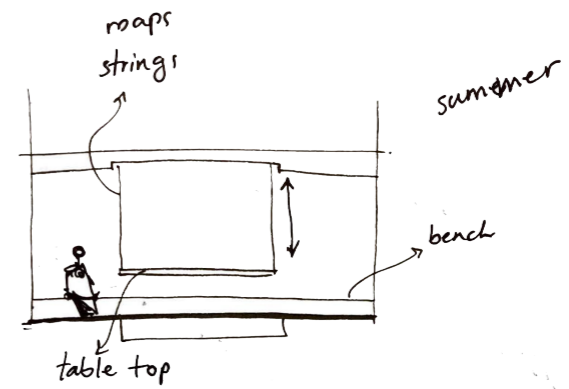
These sketches show the actual korsi as an outdoor piece of furniture. There are two wide benches with a gap in between which is connected to district heating system from the bottom of the platform and generates heat. Another piece of bench sits on the top of the other benches and connects the two. This board can be considered as either a higher bench or a table top. These sketches have also been inspired by Japanese Kotatsu.



a semi-closed space in which people can stay and enjoy the warmth & chat with their friends or...



wooden structure



Norwegian 'Gappahok' or 'Grillhytte' have been the inspiration source of these sketches. I thought to keep my idea as a semi-public space that has only one main opening. A room for all but it seems more like a mountainous social space which is far from the idea of urban public furniture.

SKETCHES 2, TABLE

Inspiration sources:

- Persian 'Korsi'
- 'Buzz' by Vestre
- Grill/wood stove by Barbora Adamonyte-Kei

Heating system:

- Fire wood
- Charcoal

These sketches show the idea of a table that is combined with a grill. In this way people can get around the table. Barbecue some food and enjoy their company. The heat that is generated underneath the table makes the users feet warm. The idea of keeping feet warm comes from 'Korsi'.

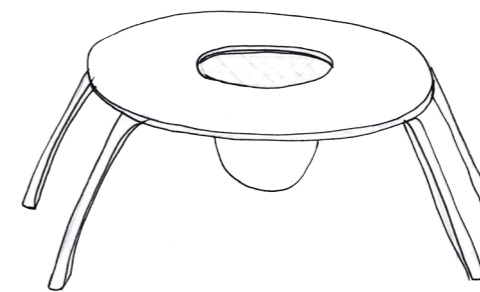


Photo 19. 'Buzz' designed by Espen Voll, Tore Borgersen, Michael Olofsson for Vestre Street Furniture Manufacturer.



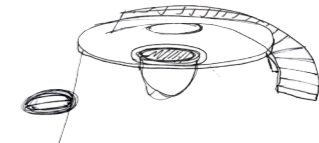
Photo 20. 'Grill/wood stove' designed by Barbora Adamonyte

Inspiration = Korsi
Vestre Buzz
grill by barbora adamonyte
The cooking table Moritz Putzier
12.11.19 *[signature]*

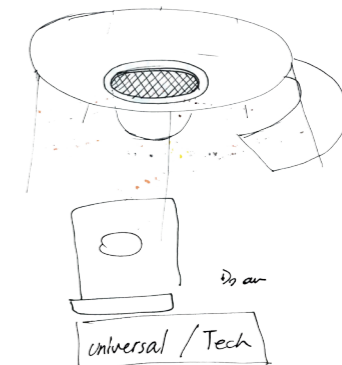


grillprinsen

what would vestre do to make a meeting place



attractive
Elements



SKETCHES 3, SHELTER

Inspiration sources:

- 'Moksa' by Simo Lahtinen
- Gable roof
- Persian domes

Heating system:

- District Heating
- Fire wood

Keeping Moksa in my mind I created some sketches that are sheltered spaces. These sketches show a semi open space that are protected with a roof-like structure. The idea of having roof is to protect the users from rain or snow. This idea has also been inspired by Persian domes and gable roofs.



Photo 21. 'Moksa' by Simo Lahtinen, Suvi Saastamoinen, and Mikko Rikala.

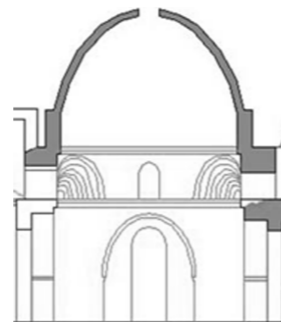
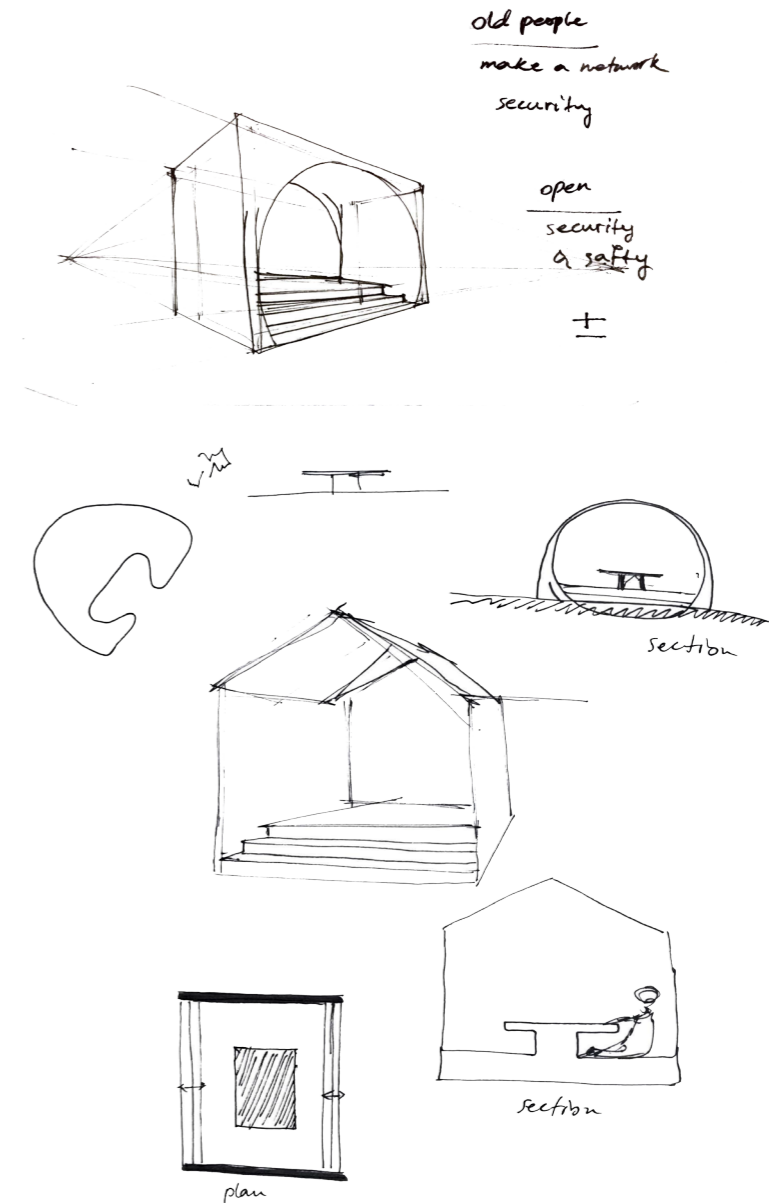
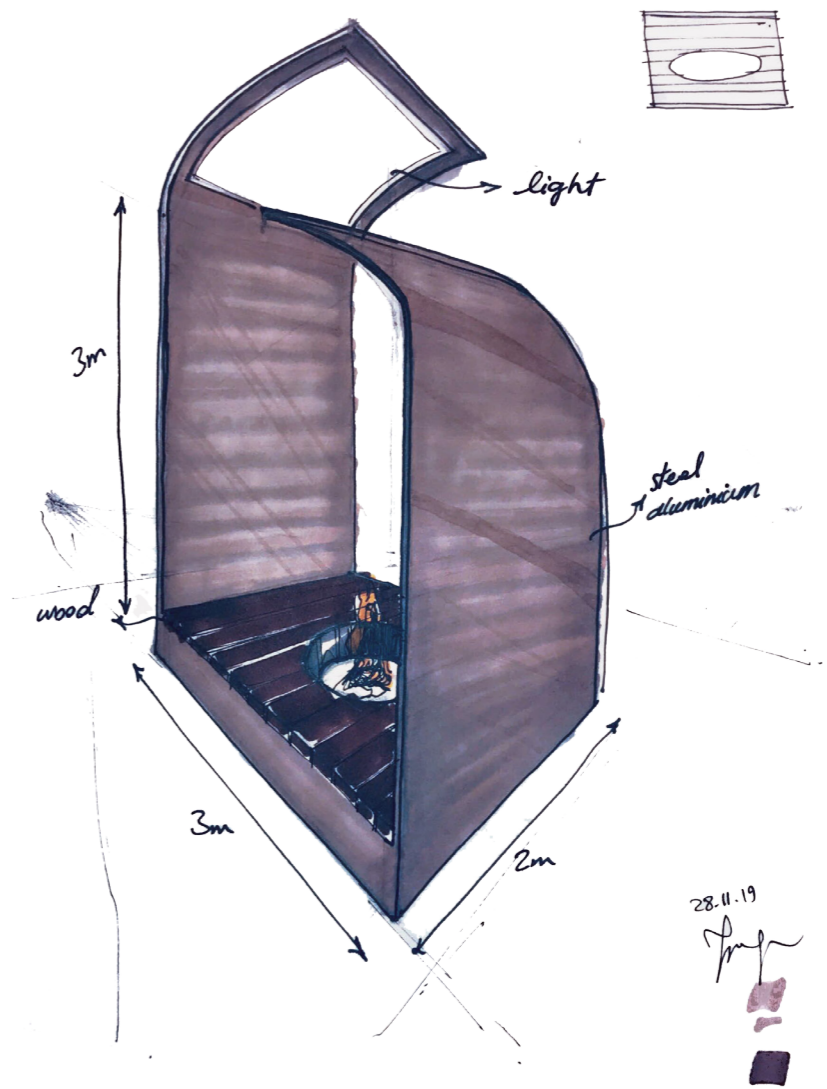
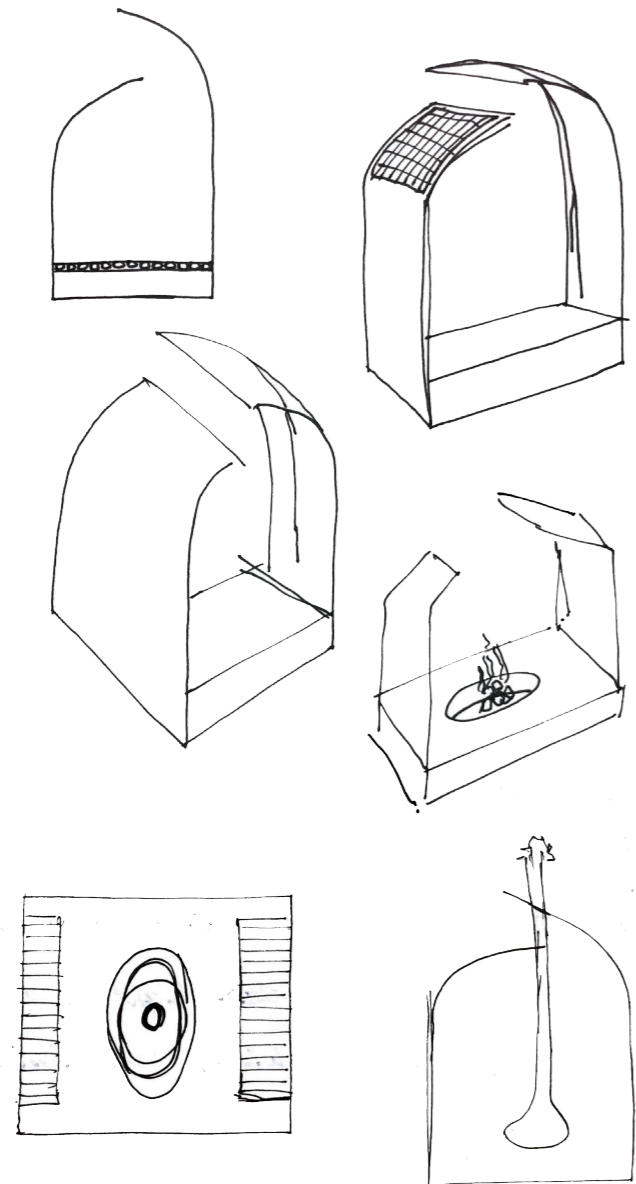
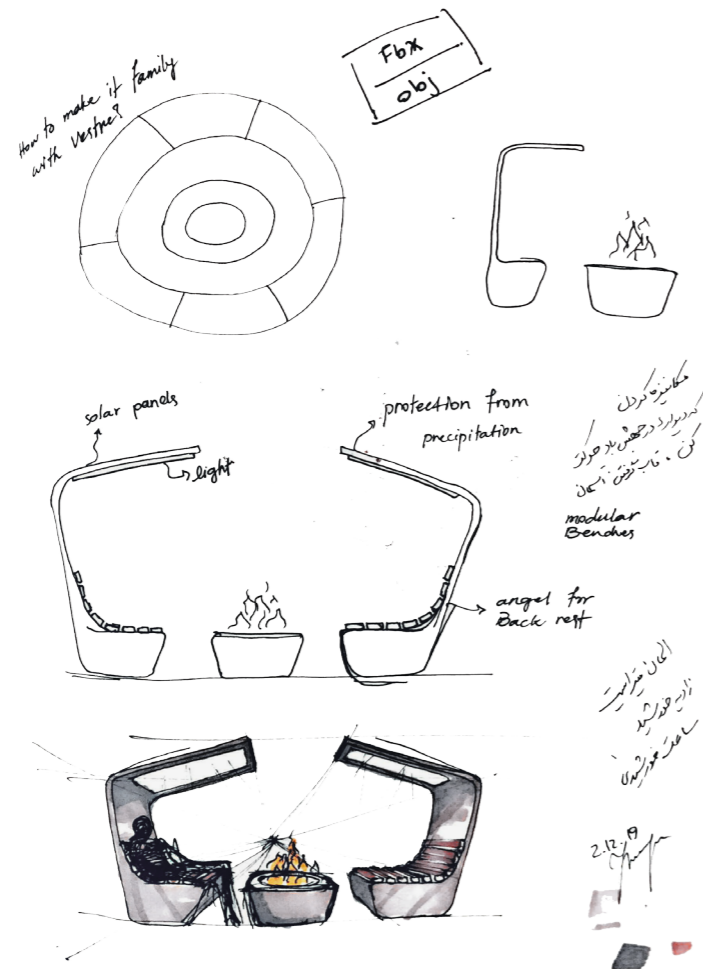


Photo 22. Dome of Sarvestan palace, Iran. Vertical section by Maryam Ashkan and Yahaya Ahmad.

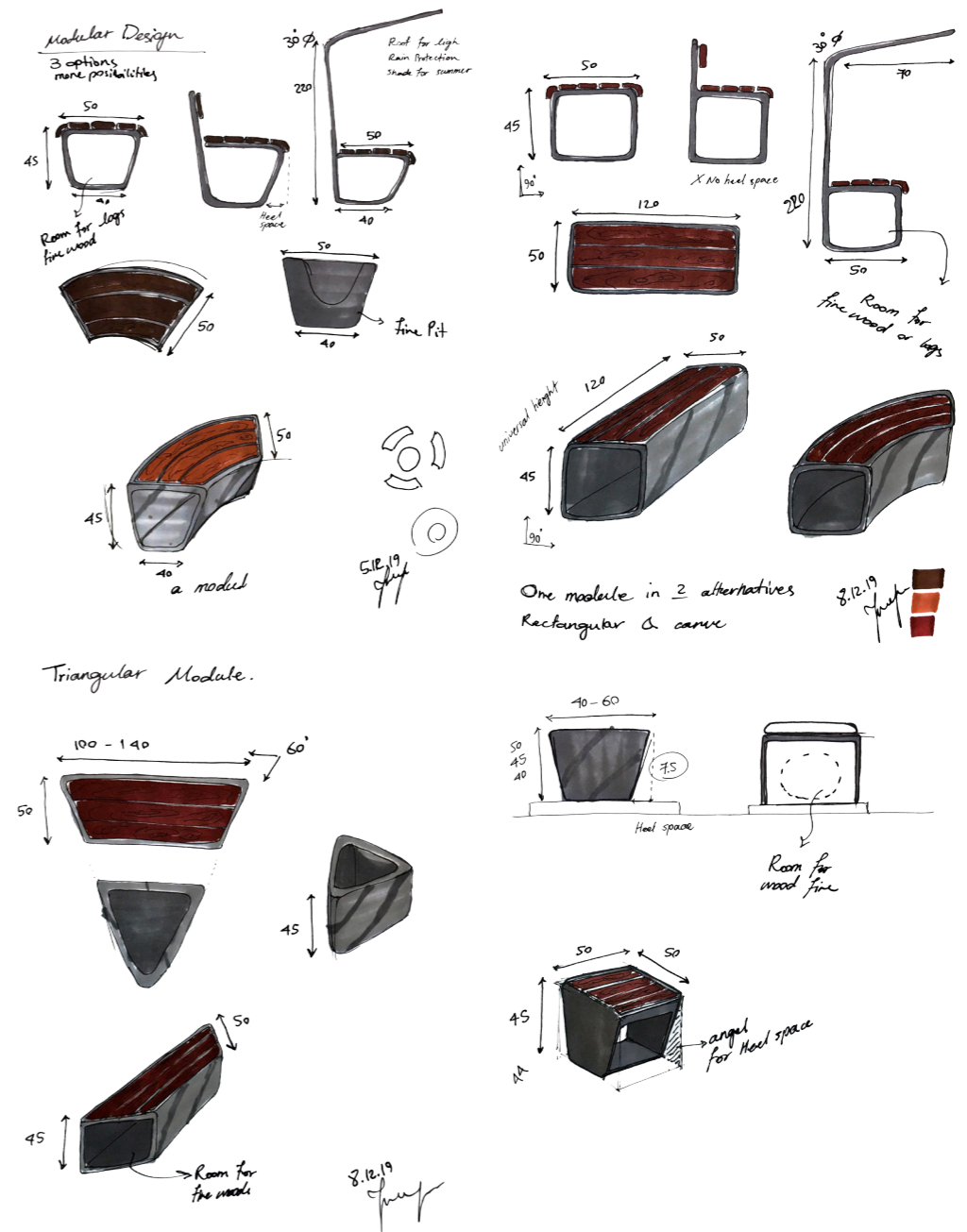




SKETCHES 4, MODULARITY



When it comes to street furniture design, modularity matters a lot. The product must be easy to transport and mount on different sites and situations. Modular furniture also provides the clients usually the municipality with a wide range of options that suits in different places. Conversation with my supervisors led me to a modular design. The sketches here show a cubic network that all the dimensions follow each other.



SCALE MODEL

Based on these ideas I wanted to create a space in the urban areas that everyone can enjoy in all seasons. By analyzing all the sketches I became to choose the concept which provides a shelter, this shelter make a cozy a space that prevents users from rain, snow, and also limits wind. A meeting space that is enticing. These sketches are a symbol of traditional Iranian domes and classical gable roof. The walls also helps to illuminate the space with creating room for lightings. The illumination idea has been inspired by Simo Lahtinen's work, Moksa, a street furniture that made to illuminate the dark towns in Finland.

The whole shape house a modular system. I considered a modul and all the other dimensions are based on that modul. I made two scale models to visualize my ideas. These models are a united structure that houses benches and all the other components.

The first model had a specific and exciting shape. But such structure looks very massive and difficult to produce. The walls are very heigh almost 3 meters which is not logical for a piece of furniture. There is no separate benches in this model and the seat is 40 cm above the ground.

In the second model the height of the walls are resized and are 2 meters. There is a row of benches on each side and in the middle comes fire pit and some other benches or tables. This concept have been chosen for further idea development.



05

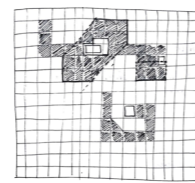
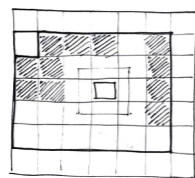
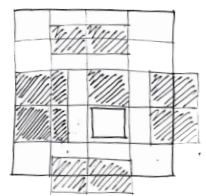
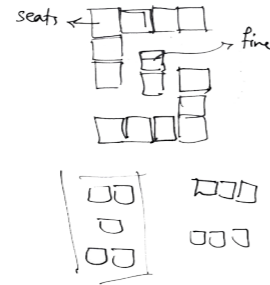
PROTOTYPING

ROOMLAB

Testing the modular system and arrangements of the seats.

RoomLab is a studio at the department of Architecture at NTNU where students are provided with equipment to make and test their designs. In order to get a better perception of the space and modular design I decided to make a real scale prototype in the RoomLab.

I used some boxes and pieces of walls to create my design. My goal was to perceive better the modular system that I considered in my design and dimensions. The boxes that I used were 50x50x25cm. I used two layers of pillows (50x50x5cm) on top of the boxes to get the right height that I was considering (30cm). I set the boxes in two different arrangements to see how it affects the user. The first setting is two L-shapes and the other one is u-shape. The walls are 60cm wide. I did not consider the height of the walls in this experiment. The lamps are spot lights with warm yellow colour. The colour of the light impacts the mood of the space and makes it more cosy and relaxed.





Some of the comments from users:

L-shape arrangement:

I already feel more beautiful.

But the benches are so low it is too hard to sit or get up.

The benches are too close to the fire pit.

How about safety?

U-shape arrangement:

This arrangement is more enticing compare to the first one. I like that one side is open and the other side is closed. It somehow defines an entrance.

The distances seem more safe here.

By doing this exercise in RoomLab I decided to resize the dimensions because of a safe distance from fire and also being spacious make a more welcoming atmosphere. After this exercise I also decided to keep the idea of modular design. Thus I defined a modular system including basic moduls which are benches, a platform that the benches and fire pit will sits on it. And pieces of walls to protect the users from rain or wind. The fire element will be in the centre of the design. At this phase 3d modelling started. Visualizing all my ideas helps to furthure understand the problems and enhance them.

RENDERING, PHASE 1

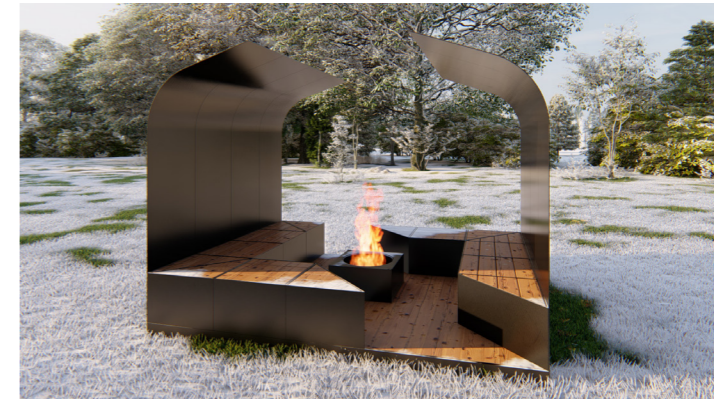
The dimensions that I considered for the benches in these renders are 60x60x40 cm; here I thought that the standard space that is needed for a person is 60 cm, therefore I chose this size to make a comfortable and not intimate space. Also the 60 cm distance between the seats provides the users to easily move around even when one of the seats are occupied. The height of the benches is 40 cm which is quite low; I wanted to keep the user in a low level to induce the feeling of being close to the ground and the idea of sitting around a bonfire.

I visualized these in the 3D renders. In these renders the material of the walls is steel, the benches are steel and wood, the platform is wood with a steel frame. This render visualizes the L-shape arrangement of the seats with 45° chamfered seats which creates a playful shape and absorption to the space.

Comments:

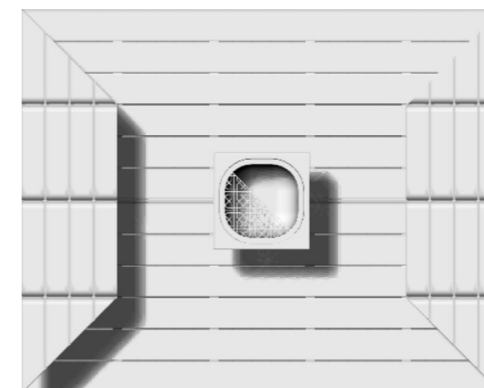
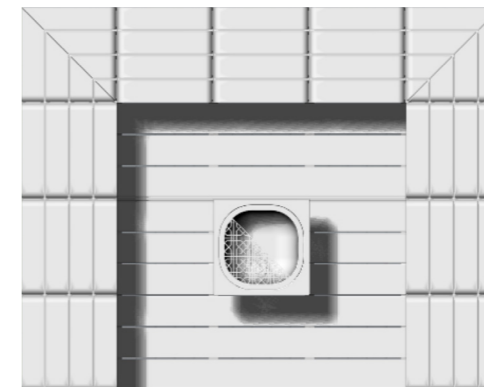
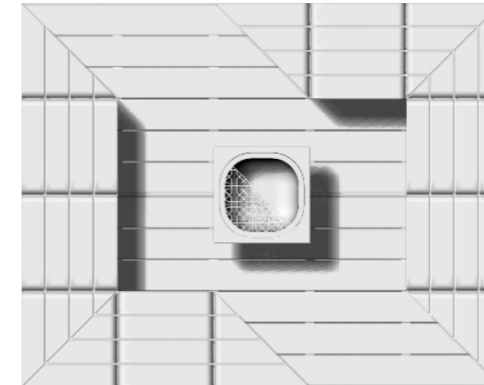
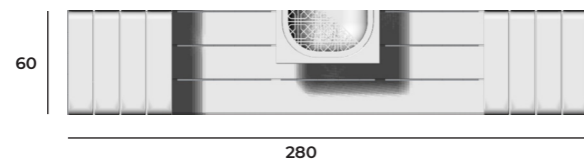
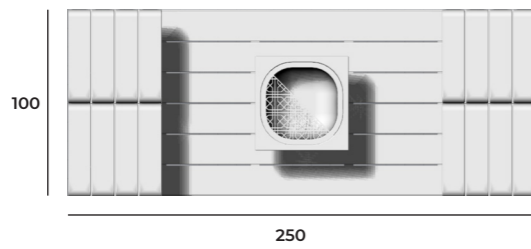
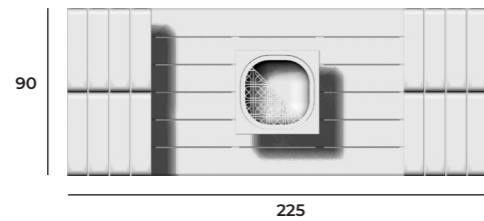
The shape of the seats are interesting and is inviting to enter the space.

The walls look so strange, they seem so cold and frightening.



MODULAR DESIGN

3d rendering helped me to define the modular system better. This system is a square shape network in which all the components occupy one of the boxes. There are 3 main components. Simple boxes (fire pit, bench or table), pieces of walls, and a platform. This system can be expanded to create bigger or more space based on the location or the situation which the furniture is going to be used. The benches can be arranged in different settings.



RENDERING, PHASE 2

Based on the standard dimensions of benches and conversation with my supervisors I changed the dimensions in my second 3d drawings. Here the benches are 45x45x45cm the walls are 90cm wide and the platform is 90x225cm the seats have an open space underneath it which meets the required space for heels and also create room for storing fire woods.

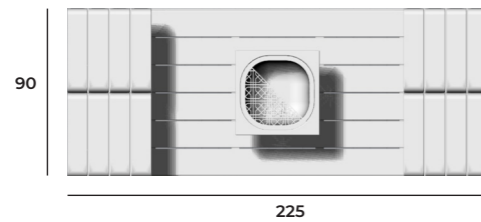
Comments:

Looks very modern.

The woods made a warm space.

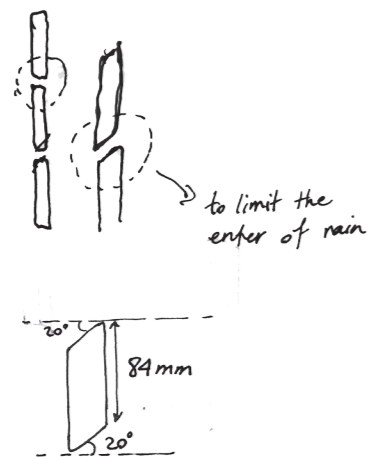
The color of the lights is too white and bright. It is not warm.

The comments from my supervisors at this stage was positive and the renders were showing the initial idea. Yet, there were some critics about the shape of the walls. Nils was arguing that the walls seem falling and they are not stiff. The problem was the angle of the roof part of the wall. I measured this angle in the 3d modelling software (Rhino) which was about 15°.

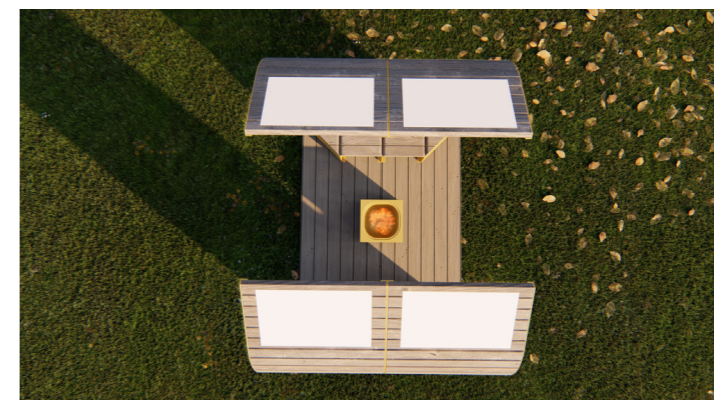


RENDERING, PHASE 3

Critical points in the previous drawings have been improved in the following renders. The angle of the roof here is about 27° . The height of the fire pit is again 30cm as in the first renders. Here I changed the shape of the wood plugs from rectangular with 90 degree corners to 70 degree. This change in the shape of plugs prevent rain to enter from the gape between the plugs. The gap has also been reduced from 6mm to 4mm. Adding solar panels make this furniture energy self-sufficient. The solar panels also block the roof form rain drops.



This shape of the walls still seemed a bit problematic and not suitable to sit outside when it rains; this structure will not prevent precipitation. My supervisor, Nils, also argued that the gap between the walls makes a separation between people which is not supporting the socialization idea. However, the other supervisor of mine was not agree about the separation argument. Martin believes that this shape aesthetically is pleasant for the user.



RENDERING, PHASE 4

The discussion about weather condition drew me a step backwards to my first concept with a closed roof. Having this concept in my mind I made a new model. These renders show the first concept with overlapping roofs. This overlapping roof is a symbolic gable roof or Iranian domes.

One of the roofs is 30cm lower than the others. Height of the taller wall is 220cm and the smaller one is 190cm. The angel of the roofs from the bending point is 35°. There is an opening at the tip of the lower roof for ventilation.

The problem of weather has not solved yet in this model. Also the structure looks massive and impossible to mount. However; the shape itself is an interesting object.



SECTIONAL PROTOTYPE

Testing the shape of the whole volume specifically the walls and dimensions.

After my conversation with my supervisors about weather conditions I decided to create a sectional prototype in real scale to perceive the shape and size of the furniture. This study was mainly a mean to find a solution for the roof. I used some black tapes to draw the shape of my design on a white wall. The first impression of myself was "Oh this is massive!". I drew the roof with different angles on the wall. The angles that I tried were 35 and 30. I also tried to close the roof as a means to prevent rain and snow or to keep a gap on the roof.





RENDERING, PHASE 5

After this experiment I made more 3d alternatives for the roof. The results are shown in the following pictures.

None of these shapes were satisfying and they are not solving all the problems neither. When I put all these renders together I understood that I was too obsessed with the climate issue, which was not the main point in my design. I was almost forgetting about the idea of socialization and that I am creating a meeting space. But still it was hard to make the last decision. So I decided to do a quick workshop and test the furniture.



USER TEST

“Talk to people about what you do, they reflect differently!” Moritz Putzier

All these studying and testing made it hard for me to decide on the shape of the walls. Then I asked other people to give feedback on the alternatives I made. I put all the renders together on the same wall as my sectional prototype to conduct a user testing workshop. In the workshop I tested the proportions and the participants' understanding of the space. There were 3 participants in the workshop. First I introduced my topic generally and then I asked about their feelings and perception of each drawing. All the participants were interested in the concept in which there is a gap in the roof.



Feedback from users

"It makes sense that the lights are located on the last wood slat on the roof, it is the natural ending."

"When I look at this shape I say "what is this? It makes me think about it. But the other concept I know it is a cabin. My eyes are used to it."

"I like the arrangement that defines an entrance with two triangular shape of the benches on each side. It is inviting me."

"The opening roof helps the smoke to go out, but if I consider rain it make sense with a closed roof. But still the direction of rain in Trondheim is side-way which the roof won't be practical."

"It is a green idea to get the energy for illumination from the solar panels."

"Yellow made this furniture warm, cosy and encouraging, the blue colour is cold or at least this colour is not nice."

"The render that has a platform in front of the furniture makes it flexible. Babies can sit there. I would like to lay down on the platform when its a sunny day."

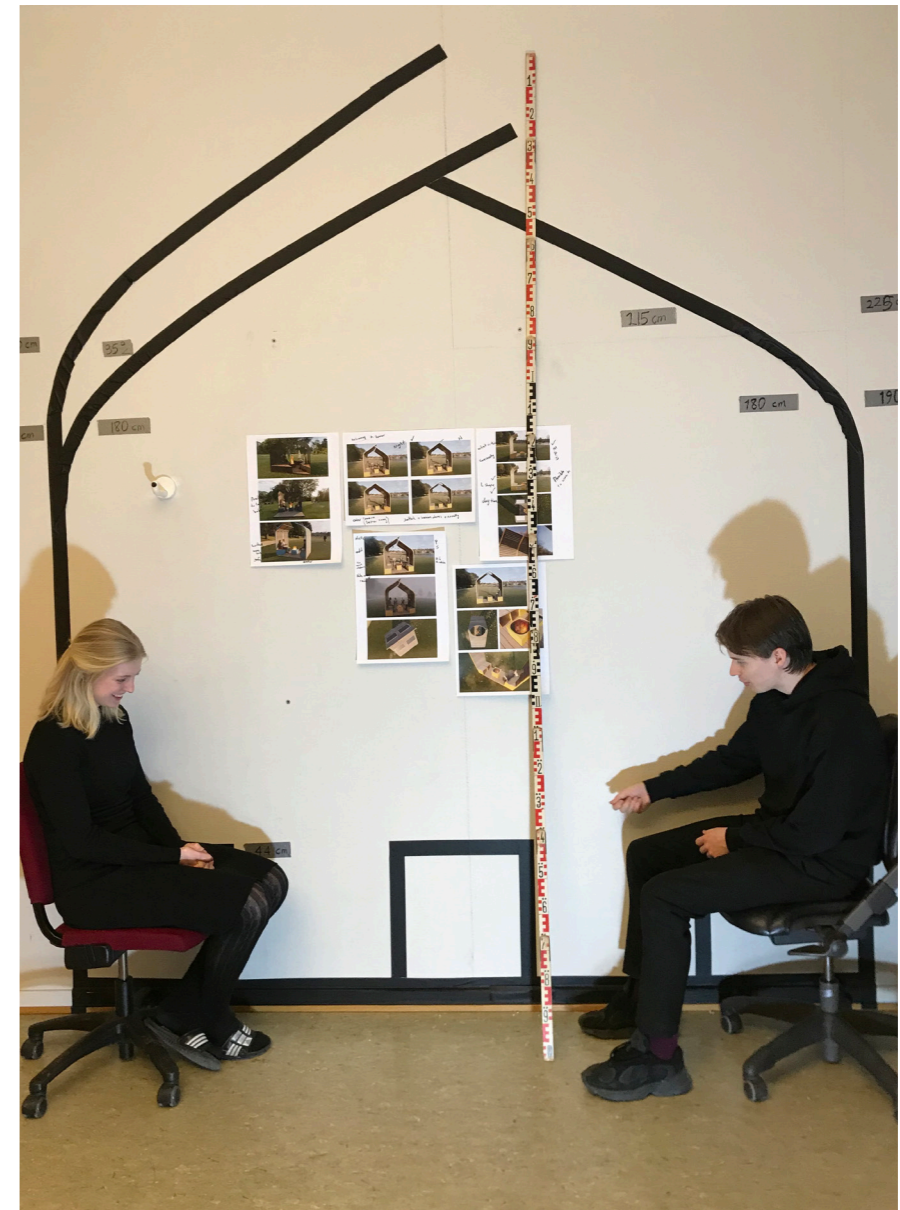
"It seems the location, Marinnen suits for this furniture, close to the river and in the middle of the town. Very accessible."

"The L-shape arrangement is flexible to come in, because it has entrance from both sides."

"What if you add a mechanism with two layers or two parts of the roof, to close it in winter and open it in summer. You could also add glass to keep the view of the sky and protect from rain."

"The distances are too far, It is hard to hear the other person, it should be intimate and also lower roofs help to make an intimate space."

"If I want to choose from the closed roof concepts the one with non-symmetric walls and overlapping roofs looks interesting and it is smart with the opening to help ventilation."



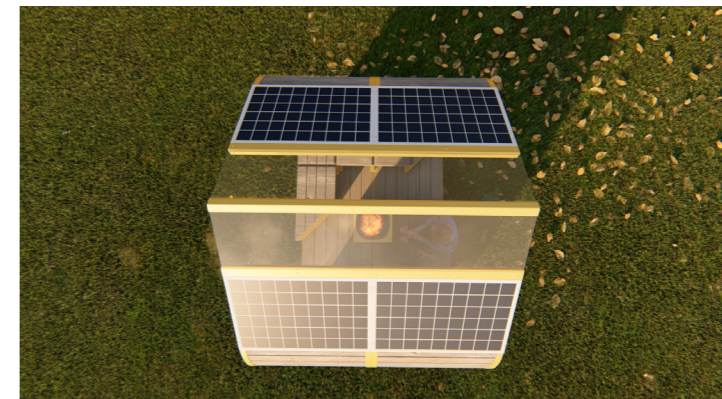
RENDERING, PHASE 6

After prototyping and user testing I made some improvements.

In the following renders the height of the walls are lowered to 200cm, the wood logs are extended on the roof-like part and glasses are added to protect the precipitation.

After this render I decided to choose my second concept with an opening roof. The glass just made the furniture odd, more complicated and vulnerable.

By looking at these renders and considering the comments from the user testing workshop regarding distances and intimacy, the volume of the furniture looked very wide and the seats are too far. Even now that the walls are lowered the shape looks more odd. Therefore, I considered to resize the proportions and lower them to 45cm.



PROPORTIONS

When I discussed the proportions with my supervisor Nils, he was agreed on lowering the distances to 45cm. This is not only the standard size of benches but also it is close to the social distance in Norway (110 cm approximately). According to an international study from 59 universities around the world in 2017, social, personal and intimate distances in Norway are 110, 70, and 35 cm respectively (figure 2).

I also tested the proportions with my sectional prototype. In this prototype I lowered the height of the walls and the proportions. The walls are 200cm, the benches are 45x45x44 cm. Based on these proportions the length of the platform is 225cm. I have also extended the tip of the roofs. Then the gap in the middle (at the opening part of the roof) is 70cm.

In conclusion based on the standard dimensions for benches (45cm) and the social distance in Norway (110cm) I decided to keep the proportions based on 45 cm distance.

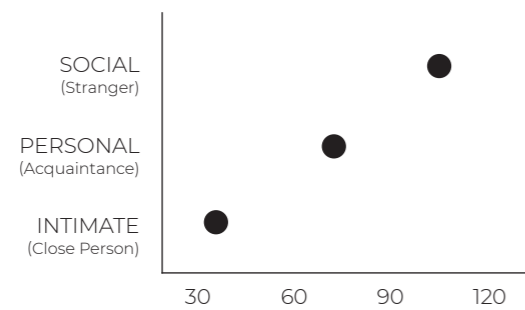


Figure 2. Mean values (cm) of social, personal, and intimate distance in Norway.



CRITICS AND FEEDBACK

In order to improve my design I decided to ask some specialist for feedback, looking through their perspective I got some critics that I enhanced them later in the project. I made a short presentation of the alternatives I have made and sent it to the designers I talked to in the earlier phases of my project. Unfortunately I did not had enough time to receive feedback from all of them. Here are the comments from some of these designers and architects:

Alzbeta Cepelkova

Architect at the municipality of Trondheim

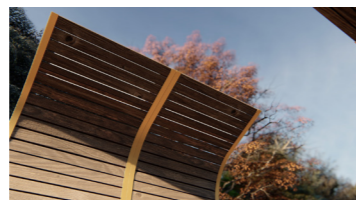
You mentioned those factors as important:

Socialization factor (main goal), weather conditions, aesthetics and technical issues?

If I don't take in account aesthetics (because it is a very subjective element), I don't see any significant difference in the concepts regarding those three left factors.

I see very similar weather protection in both concepts. Of course it is better with more closed roof, but when there are two open sides, it is little difference at the end, I guess.

When I think about technical issues probably Concept 2 (with a gap between in the roof) seems to be easier to produce. You draw metal profiles and wooden planks. It seems to be technically possible.



Concept 2 (with metal walls) seems to be challenging to get the metal walls be enough stable and solid but at the same time keep the light impression. If I also think about winter use, the metal walls can be too cold.

Your main goal - socialization - is to be found in both concepts - at the same level, I would say.

Critics:

a. To make a fire, You have to bring some wood. And it would be useful to have some equipment to be able to manage the fire and clean the fireplace, if needed.

Where can all those elements be stored?

b. Vandalism makes also this type of product really vulnerable because of the presence of fire and ash. Both if I think about damaging the wooden parts of the element and also impurity. People like to draw with the ash and so on.

c. In general, it is very important to think about other public equipment close by to get Your elements serve people good. I think about a place to wash Your hands, waste bins (what will one do with the ash after You are finished with Your fire?), maybe a public toilet... I don't say that You should solve all in Your element,

but just giving You the complete picture of how it works in reality.

d. Such a type of element also needs high level of maintenance.

The client who wants to buy it should be understood with that.

e. If thinking about making food on the fire, some place like table/sidetable/ sidearea could be practical.

Positive comments:

a. I think that concept which allows the client (for ex the municipality which would like to place those elements in the park) to choose the size of the element - how many people it can host - can be a good idea. It is a different type of socialisation to go out only with Your best friend and sit in the element, than a bigger group which is interested in common grilling. And it is the client who knows what they need/what fit.

b. Socialisation is very interesting and important topic and You truly learned a lot about it and about design through the project.

c. I see the idea of "unit with a fireplace" in more urban style than a classical Norwegian dark 'Gapahuk' very interesting. You made big steps towards the development of such an item!



Trine Gjessen

Architect at the municipality of Trondheim

You have taken the project a long way after our talk before Christmas. Good job!! I think you will make good judgements the last week as you've done so far.

My focus is making a meeting space to improve socialization in Scandinavian countries. Therefore socialization is the challenge and the product is a solution to it. Definitely weather conditions affect the design but it is not the main consideration here. If it rains outside it is uncomfortable to sit outside anyway especially in Trondheim that the direction of rain is side-way. But when it is a cold sunny day the fire makes it warm to sit out. The shelters are a means to protect a bit from rain and wind. I am aware that my solution does not meet the weather condition in that case, then it would have been another Gapahuk or Grillhytte. In this project the climate affects mainly the choice of material.

During the user testing of my prototype I figured out the second concept is more attractive for the participants and it is more welcoming specially with the warm colour, yellow. The concept with open roofs brings me more close to my initial idea which is bringing people together around a fire.

About the fire pit I have not considered cleaning equipment, but this problem will be solved by adding some tools. Maybe I should not call it a grill because grilling is just a possibility or a scenario for this product. The idea is mainly to make a bonfire in urban areas. However, I considered to add a sidetable to the fire pit so that users can put their stuff on it. There will also be room to keep the cleaning tools underneath this table.

After all the discussions with my supervisors, user testing and feedback from Alzbeta Cepelkova I became to choose the second concept (open roofs) as my last solution. This solution entice people to use the furniture, and helps smoke ventilation. I also resized the proportion to 45cm which makes it more intimate as in Norway social distance is 100cm.



06

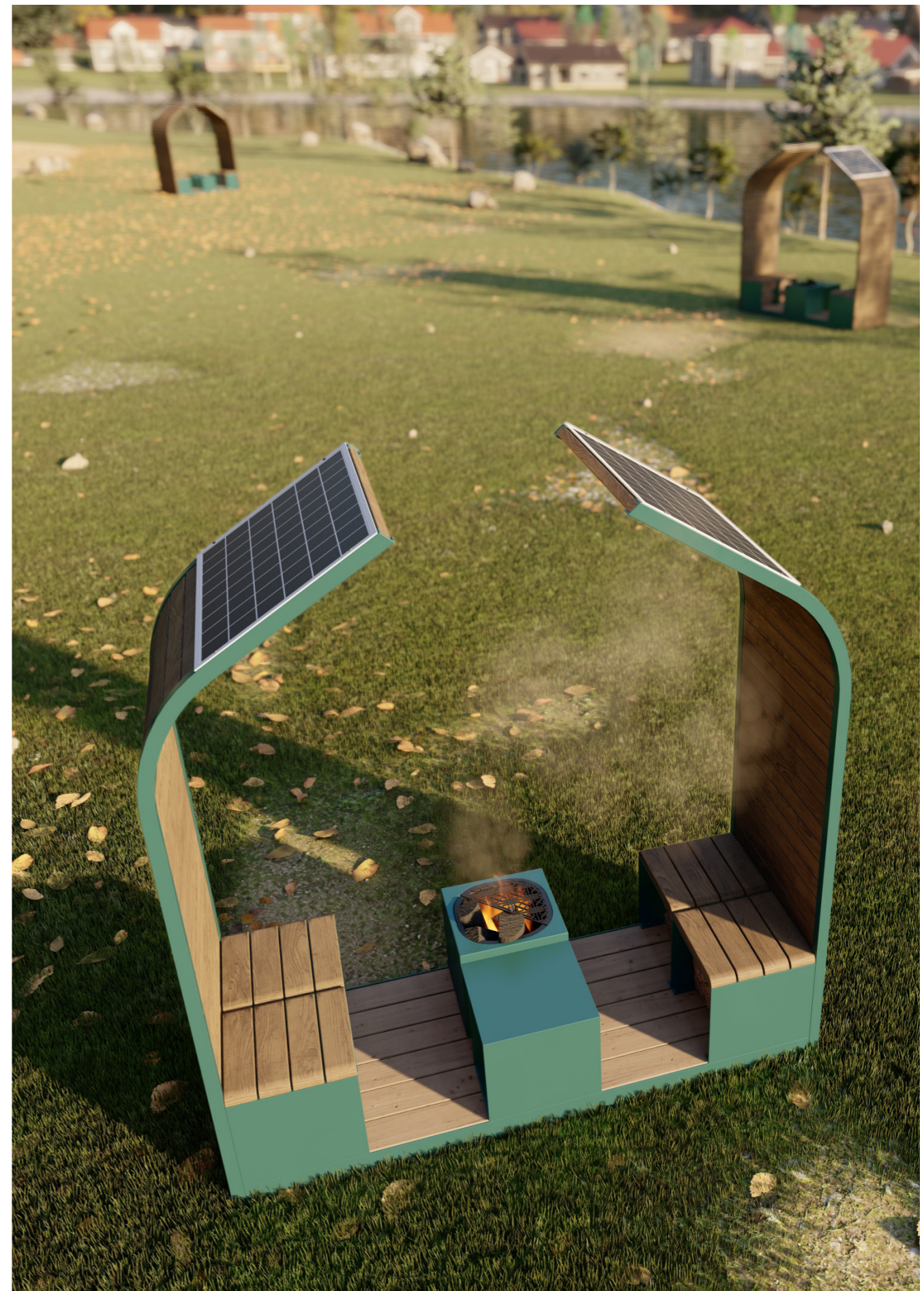
PRESENTATION

'Varmote' is a modular urban furniture serves as a meeting space in the Scandinavian urban areas. The project has been inspired by a Persian piece of furniture called 'Korsi', used by Iranians to make themselves warm in winter time. The elements of Korsi, heating and socialization, have been picked up and translated into an urban public furniture. The key element is socialization. 'Varmote' with its originality has created a warm and welcoming space that entice the dwellers to spend a good quality time around the fire with their loved ones.

Literally translated from Norwegian 'Varmote' means 'warm meeting'. The term is a combination of two words, 'varm' means warm and 'mote' means meeting. 'Varmote' is a meeting space that entice people to share a task, making a fire, having some barbeque or a warm drink for a social pastime in the urban environment.



The furniture contains 3 main components, basic cubs, pieces of walls and platforms. Therefore, a basic setting of this furniture includes 4 benches (45x45x44cm), a fire pit (45x45x44cm) along with a side table (45x45x40cm), 2 walls (90cm width and 250cm height) and a platform (90x225cm). modularity makes 'Varmøte' flexible to be used in different places. Based on the needs of those environments the number of the components or the arrangement of the seats can be adapted to the situation.

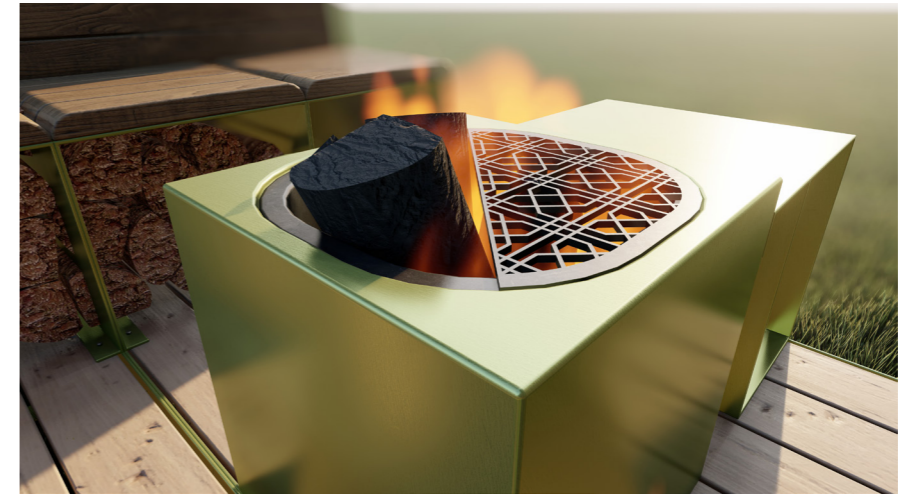




Practical yet elegant, 'Varmøte' creates an enticing feature that lasts a lifetime. The compact design with the warm materials and colours brings an intimate and cosy meeting space into urban environment. The fire pit in the heart of 'Varmøte' generates and sustains high levels of heat making it perfect for outdoor gatherings. It creates a wonderful ambiance with a natural glow that sets the right mood. 'Varmøte' lets you gather your friends around a late-night glow of a warming fire to enjoy each other's company. you can chat and laugh away until the early hours, enjoying the natural light and warmth. In addition, the thin illuminated light panels installed onto the last wood slat on the roof-like part of the wall with its warm yellow colour adds up to the warmth and cosiness of the furniture in the long dark nights.

Serving as a meeting point and urban landmark, the wooden and steel unit is conceived as a 250 cm high and 225 cm wide structure with 90 cm in depth. Even though the furniture has been conceived for dim urban settings, 'Varmøte' can also be enjoyed during summer days and nights thanks to its enriching social and public values.



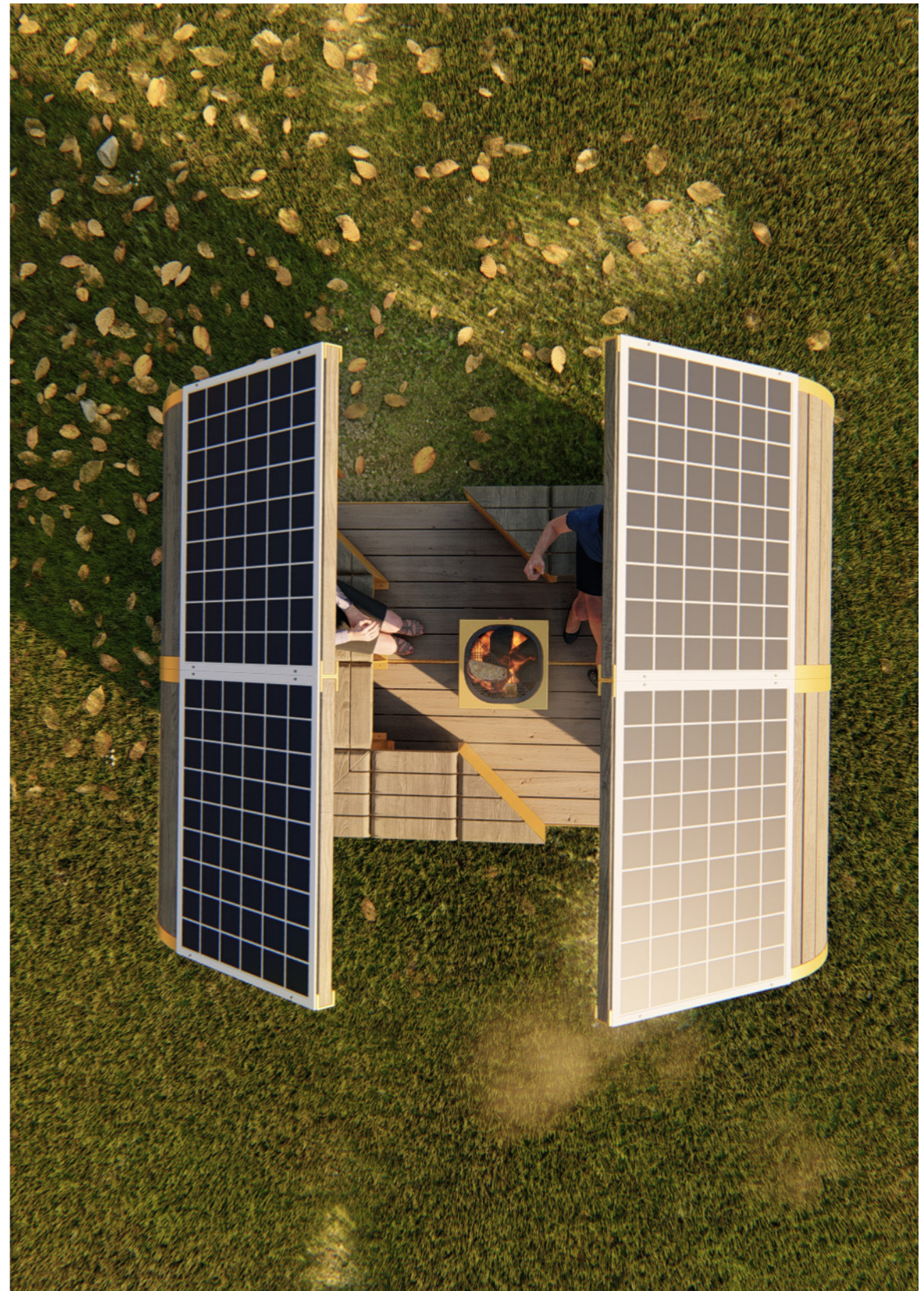


Made from black coated steel the internal fire bowl is able to deal with extremely high temperatures. The unit itself is made from hot-dip galvanized steel, which comes in a sleek cubic design. The fire pit is built so that firewood sits inside a bowl suspended inside the pit. Users can burn the firewood that are stored underneath the benches to keep the fire alive in the bowl. The fire pit also has a matching cooking grate, allowing the user to grill or barbecue. The Persian essence has also been brought in the design of the grate using the motifs of Iranian tiles. When it is not in use, the fire pit can be maintained and cleaned using the tools that are hidden in the side table.

'Varmøte' is designed to encourage interactions between people and their environment, increase biodiversity and make the street greener for residents, shoppers and businesses.



'Varmote' is a 100% energy-sufficient product. The solar panels used on top of the walls generates enough energy for the lights. Thus the product can be used in many places that are not even provided with electricity. Also by applying solar panels the product makes a contribution to increasing the global output of renewable energy.



MATERIAL

Metal

Hot-dip galvanized steel is the metal part used in the product which does not rust.

Wood

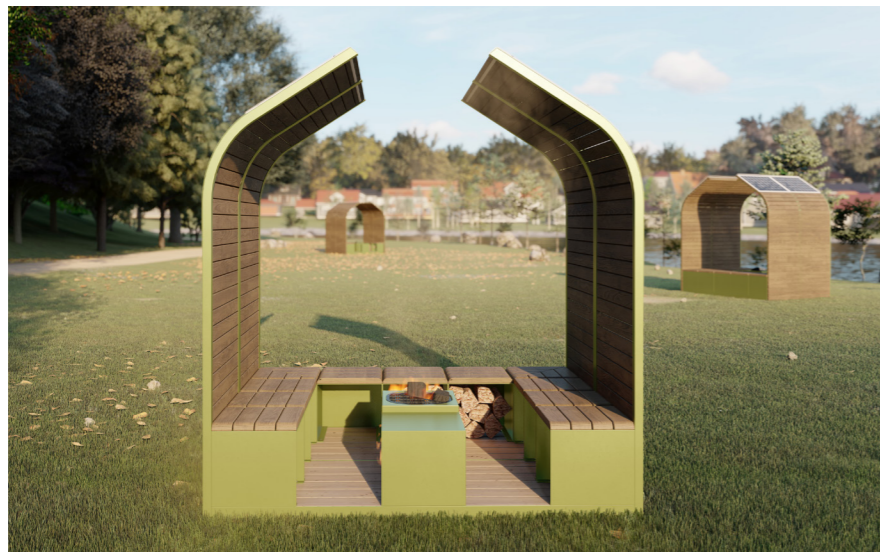
The wood applied in 'Varmøte' is linseed oil-impregnated Nordic pine from Scandinavian forests that have the most sustainable forests of the world. Natural linseed oil offers protection against rot, however the surface will age and take on a natural grey colour over time. Due to the cold climate trees grow slowly and are felled after 80-120 years. As a result, Scandinavian pine is harder and more suitable for urban furniture than pine from tropical areas. However, wood is a living material, and small cracks will naturally appear over time.



COLOUR

In cold, Scandinavian cities there is a lack of plants during long winters in urban environments. Therefore, the colour of the buildings and the street furniture are very important in the perception of the urban space and its psychological impact on the dwellers. Thus the colours must be light and warm to create a 'warm space' for people in winter to give them a good psychological feeling.

'Varmote' has presented in warm colours yellow, orange, green.



SUSTAINABILITY

Sustainable cities and communities

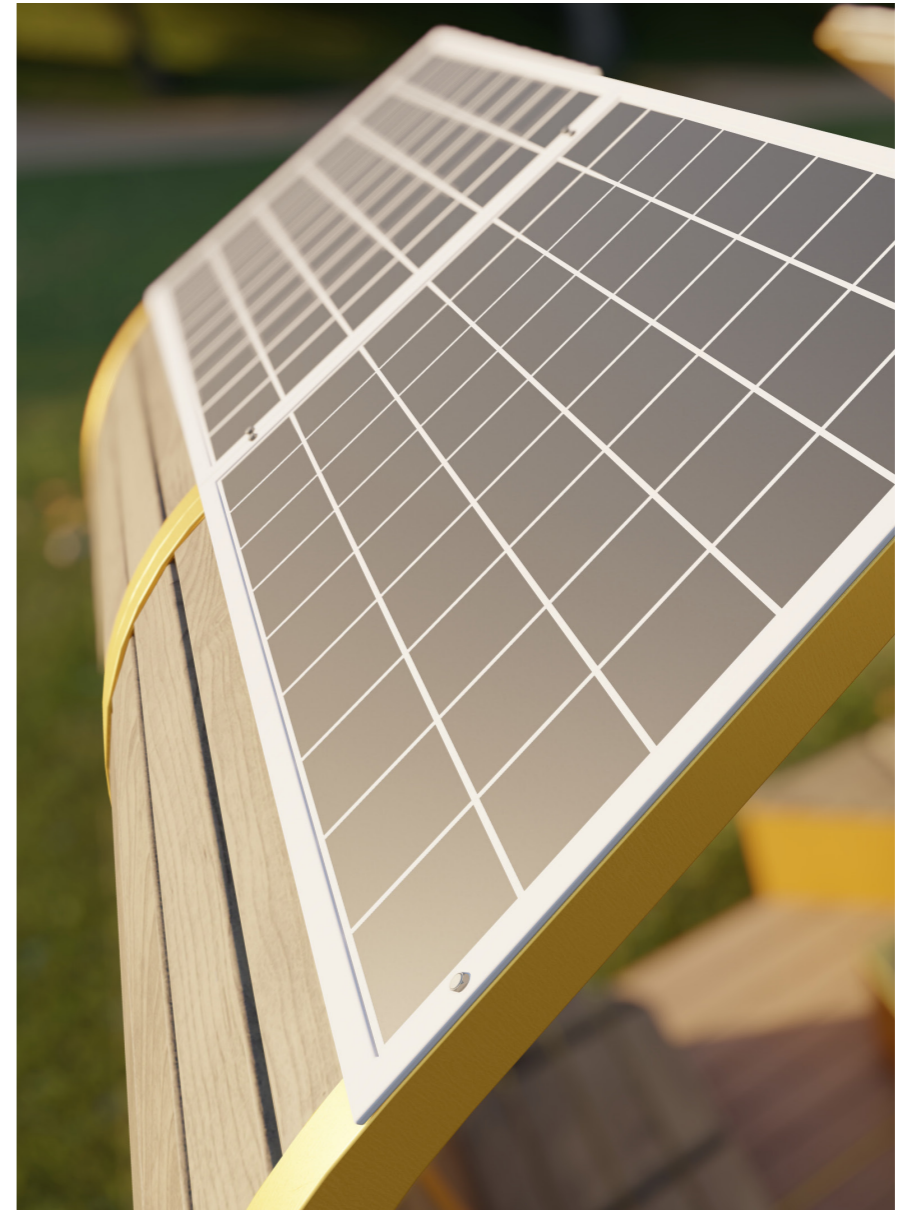
As the population of the urban areas are growing, smart cities are emerging. It is hard to envision smart cities with technology-free areas. However, Varmøte creates a technology-free meeting space, where the users are away from phones and other smart devices, a space where we can just be human.

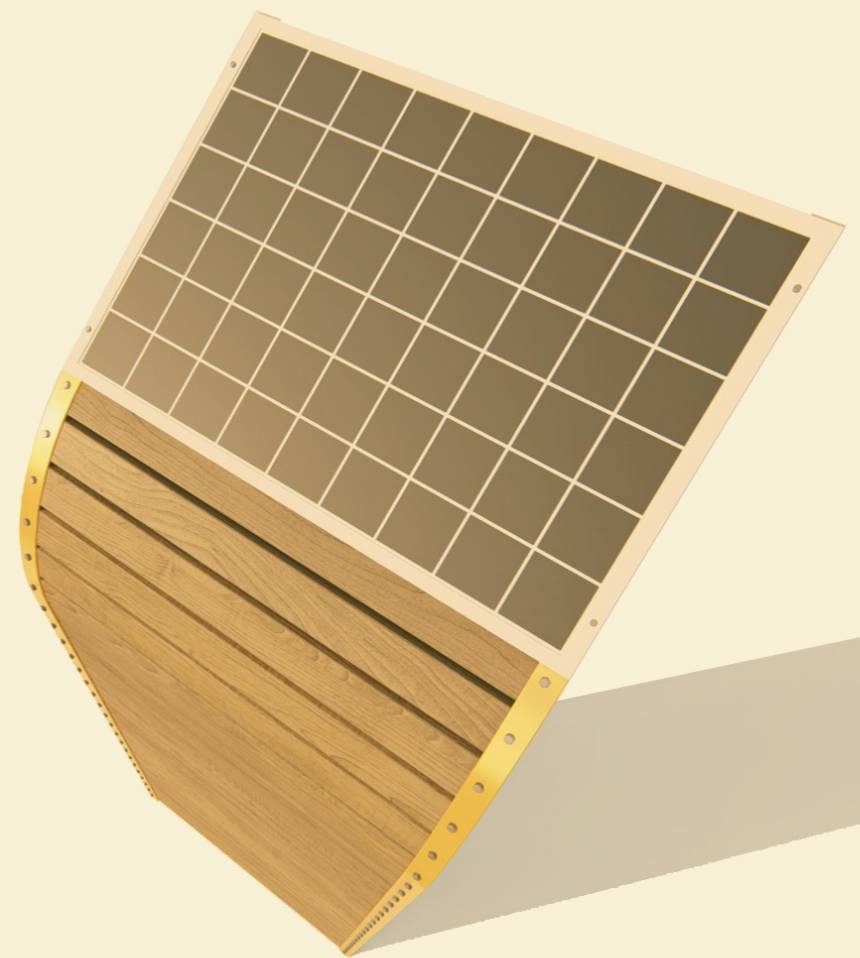
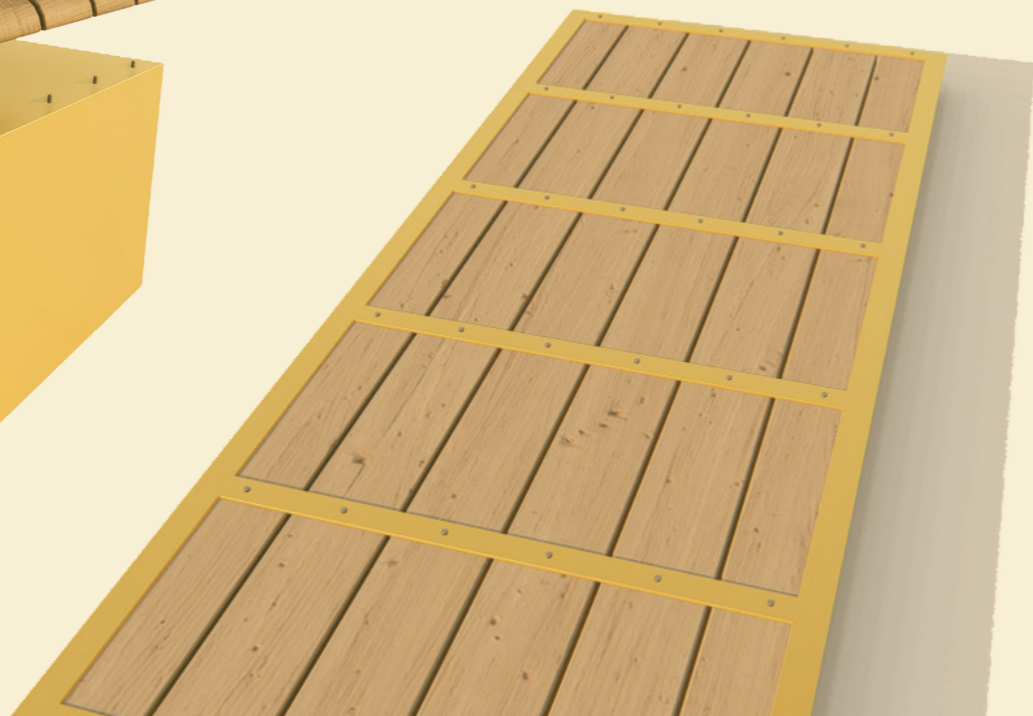
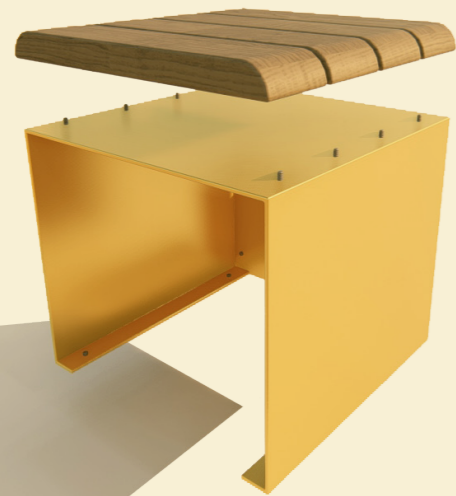
Life on land

The wood used in the product is Scandinavian pine which comes from Scandinavian forests that are considered among the world's sustainable forests.

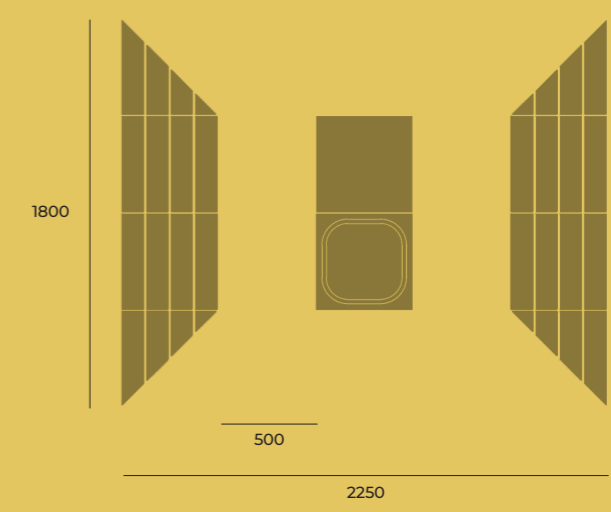
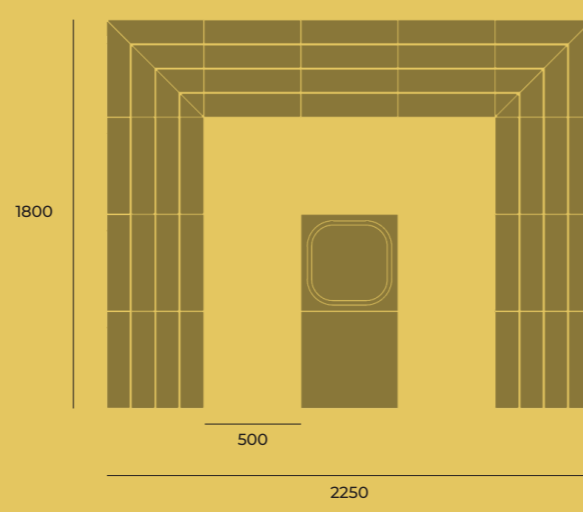
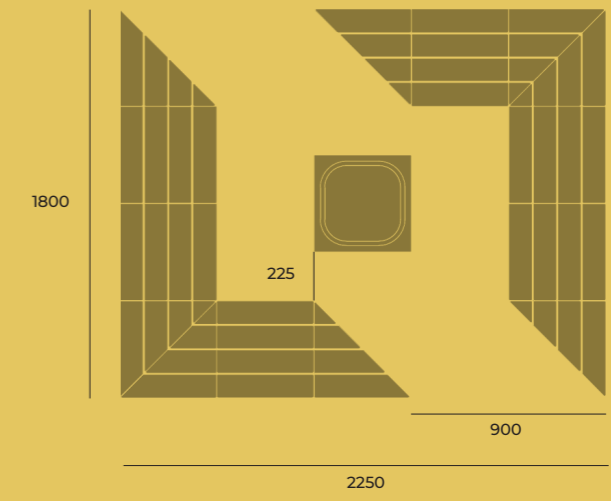
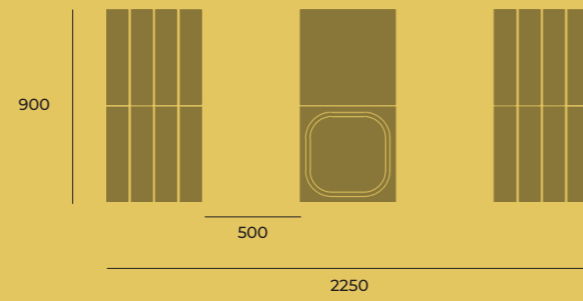
Affordable and clean energy

Using solar panels as the energy source for lighting makes the product energy self-sufficient.

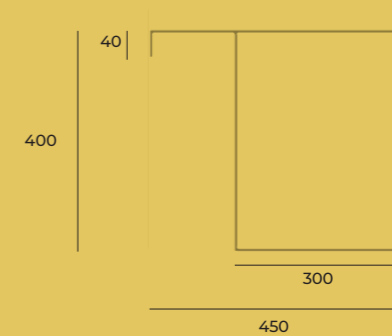
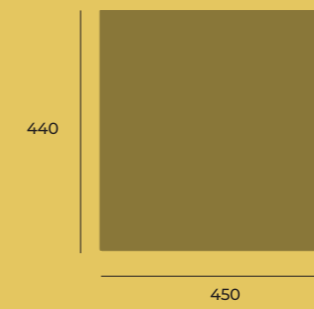
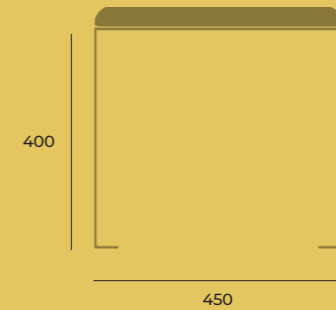
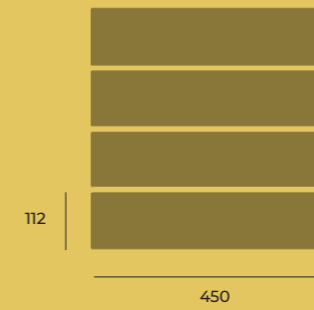




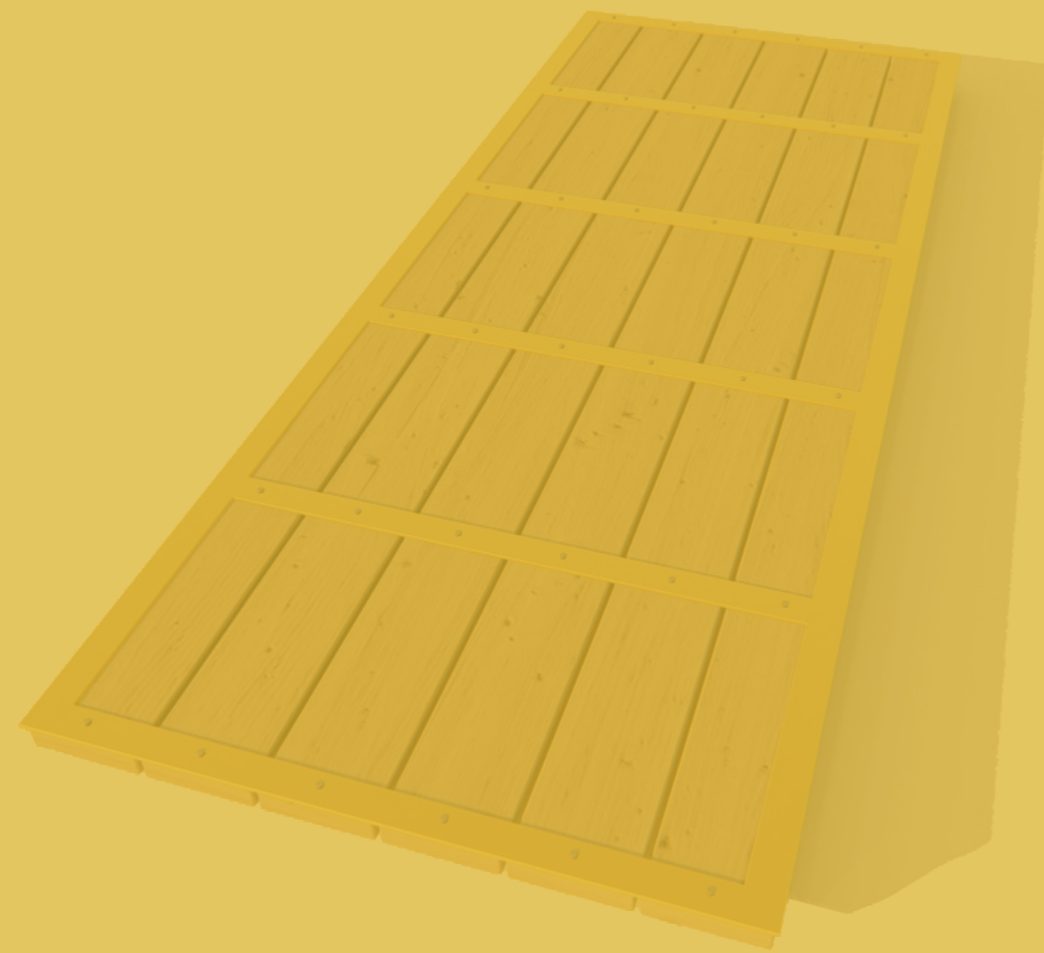
PLANS



BENCHES & FIRE PIT



PLATFORM



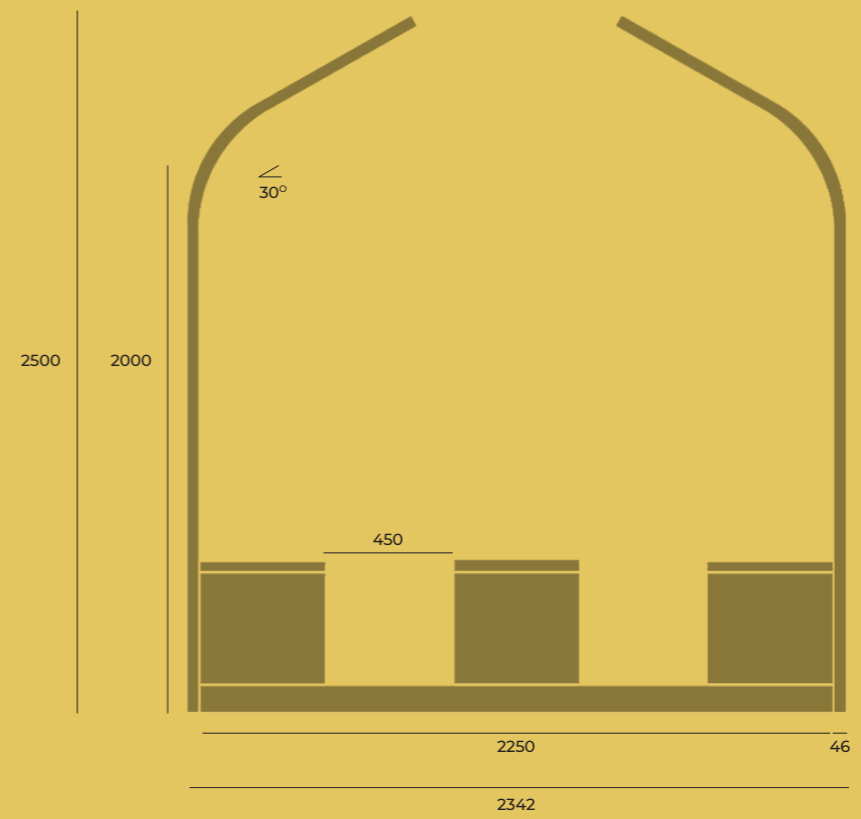
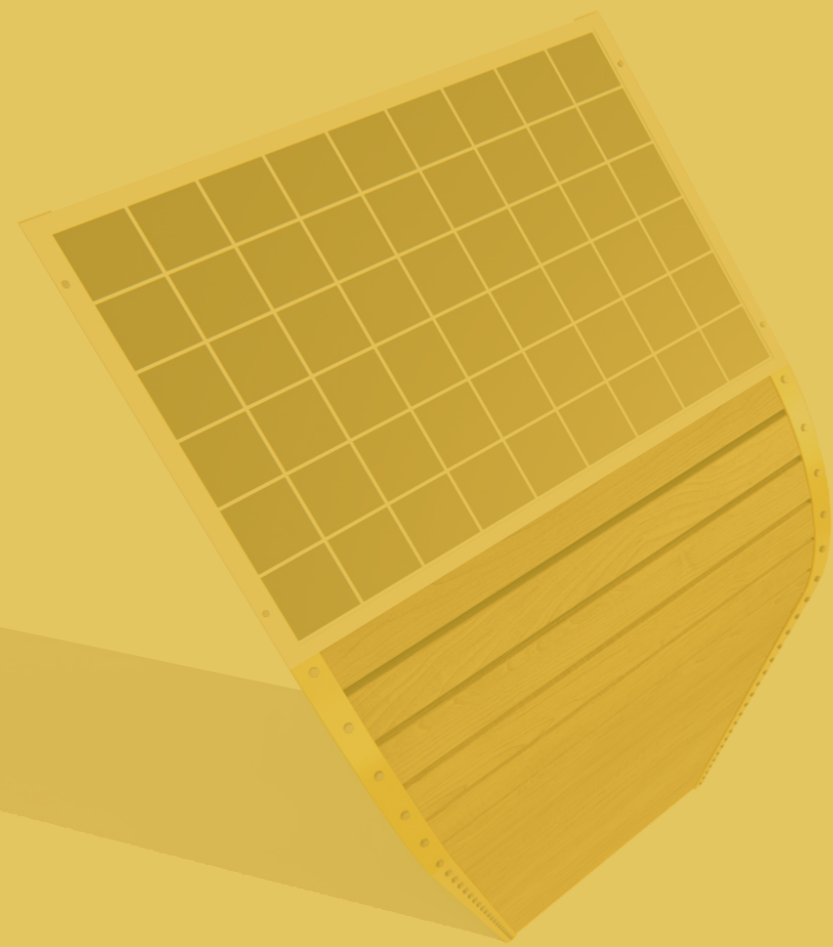
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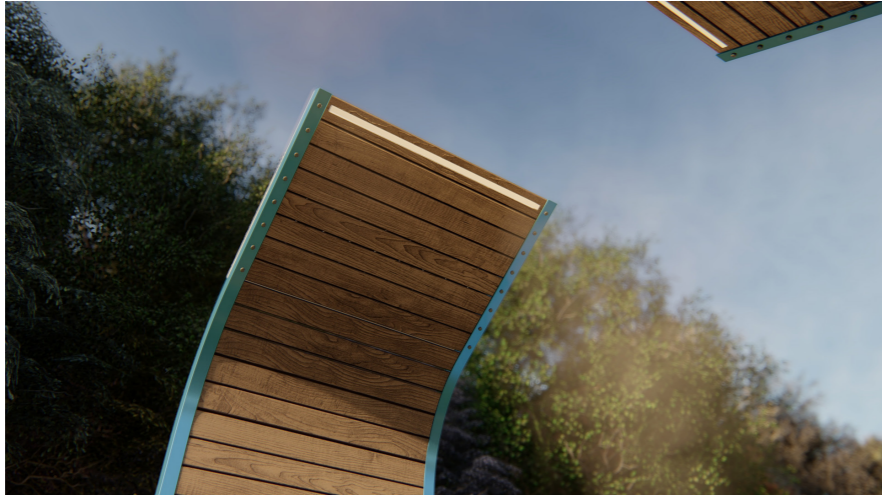


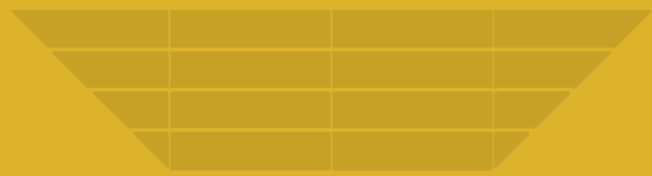
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2250

ELEVATION









CONCLUSION

My master thesis started with the idea of improving human interactions by understanding their needs in their physical surroundings. The project has been a continuation of my specialization project in which I investigated the impact of the physical environment on human interaction. As I mentioned earlier in my thesis I have a tendency to bring Persian traditions into my design to create something with an original essence. That is what I sought to achieve in this project. by bringing the idea of Korsi socialization into my work.

At the beginning of my project, I was not sure if I could bring the essence of Korsi into the Scandinavian culture. Before starting my thesis, I reached out to people randomly and talked to them about my topic; I was so delighted that my idea was appreciated by almost all of them. I was thinking to design a table with the function of Korsi for the interior spaces, but it was a big challenge for me to teach people about cultural values behind Korsi, for instance, sitting on the ground around a table is not common in western, in particular, Scandinavian cultures. After some study and research, based on the fact that urbanization is growing dramatically I decided to design outdoor street furniture. The solution is a public modular unit with the spirit of Persian design.

I learned that in Norway and in Scandinavia as whole socialization to a large extent happens through organized activities such as Dugnad, Fika, sports clubs, cabin trips or parties. This is why I defined the task as making a fire in the town around which to spend the long dark Nordic nights. Through this, I want to make people come together and spend quality time in urban areas and possibly make new acquaintances.

Modularity makes this furniture flexible both for

production and the clients' choice of arrangements based on the places for which the product is considered. Sustainability is another appreciated factor in this project. Inspired by Vestre I have used cost efficient materials and sustainable energy sources (solar panels) in my project.

My solution not meet all the challenges regarding socialization; however, based on the facts that I learned in the process of this project I created something that entices people to spend some time at this meeting space to explore it. That's how people will communicate with their surroundings. My solution is not only a product; this is a service that adds more value to the cities and its dwellers.

“I like when the user can discover an object which doesn't reveal every detail at first sight, when he needs to interact to find out how the product works. It is like getting to know someone.” Moritz Putzier

REFLECTION

This is the final project of my entire student life. It has made an immense contribution to the way that I look at world around me. I am a shy person by nature but sociable. This project somehow also symbolised a personal dilemma for me. I have always thought that I have communication problems but I discovered that really I was not comfortable in my environment.

During my master thesis I have talked to many people both professional designers and individuals. I understood how much potential I have. I am so thankful that I got the opportunity to talk to Moritz Putzier, the German designer, whose diploma was under the same topic as mine. I learned a lot from his process and the feedback from Azbeta Cepelkova and Trine Gjessen allowed me to believe in my talents. They were so delighted by the process that I gone through and results. They also gave constructive feedback that I hope to use to bring the project forward in the future.

I must also mention the efforts of my supervisors, Nils Henrik Stensrud and Martin Høgh Olsen who have continuously helped me to improve my work with their feedback.

REFERENCES

Al-Mohannadi A., Al-Kuwari, M. The effect of weather conditions on the seasonal variation of physical activity. <https://www.aspetar.com/journal/viewarticle.aspx?id=234#.XihErmhKiMo>

Arasteh, R., Arasteh, J., 1970. Man and society in Iran

Cole, N., 2019. Understanding Socialization in Sociology. Retrieved from <https://www.thoughtco.com/socialization-in-sociology-4104466>

Dana Lynn, C., 2014. Hearth and Campfire Influences on Arterial Blood Pressure: Defraying the Costs of the Social Brain through Fireside Relaxation

Gehl, J. (1987) *Life Between Buildings: Using public spaces*, New York: Van Nostrand Reinhold.

Forslin, L., 2014. The Swedish kitchen – from fika to cosy Friday. the Swedish Institute publication.

Lent, P. C., 1988. “Ovibos moschatus”. *Mammalian Species*. 302 (1–9): 1.

Maslow, A. H. (1954). *Motivation and personality*. New York: Harper and Row.

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-96.

Maslow, A. H. (1987). *Motivation and personality* (3rd ed.). Delhi, India: Pearson Education.

Miller, F. L.; Gunn, A., 1980. “Behavioral Responses of Musk Ox to Simulation of Cargo Slings by Helicopter, Northwest Territories”. *Canadian Field-Naturalist*. 94 (1): 52–60.

Newman, O. (1972) *Defensible Space: People and Design in the Violent City*, London: Architectural Press.

Norges vassdrags- og energidirektorat (NVE), 2007. Generelt om fjernvarme. Retrieved from <https://web.archive.org/web/20140329033755/http://www.nve.no/no/Konsesjoner/Fjernvarme/Generelt-om-fjernvarme/>

Palti, I. How weather affects the experience of city? retrieved from <https://www.theccd.org/blog/how-weather-affects-experience-city>

Sejersted, F., 2010. Nasjonal dugnad.

Shen, T., Yu, W., Zhang, L. (2013). Analysis on the Public Street Furniture Design in Cold Cities.

Simon, C., Mobekk, H., 2019. Dugnad: A Fact and a Narrative of Norwegian Prosocial Behavior. *Perspectives on Behavior Science*. 4. 42: 815–834.

Tener, J. S., 1965. *Muskoxen in Canada a biological and taxonomic review*. Ottawa: Queen’s Printer.

Vestre Product Catalogue. 2019. <https://vestre.com/about-vestre>

Walzer, M. (1986) ‘Public Space: Pleasures and Costs of Urbanity’, *Dissent* 33, 4:470–475.

Woolley, H. (2003). *Urban Open Spaces*: Taylor and Francis.

<https://www.quora.com/Why-are-Nordic-people-so-cold-and-unwilling-to-have-social-relations-especially-with-foreigners-or-with-people-they-do-not-know>

<https://www.quora.com/How-do-people-socialize>