

Thinking Transformation

Architectural Design Process of Nest

Diploma work

Author

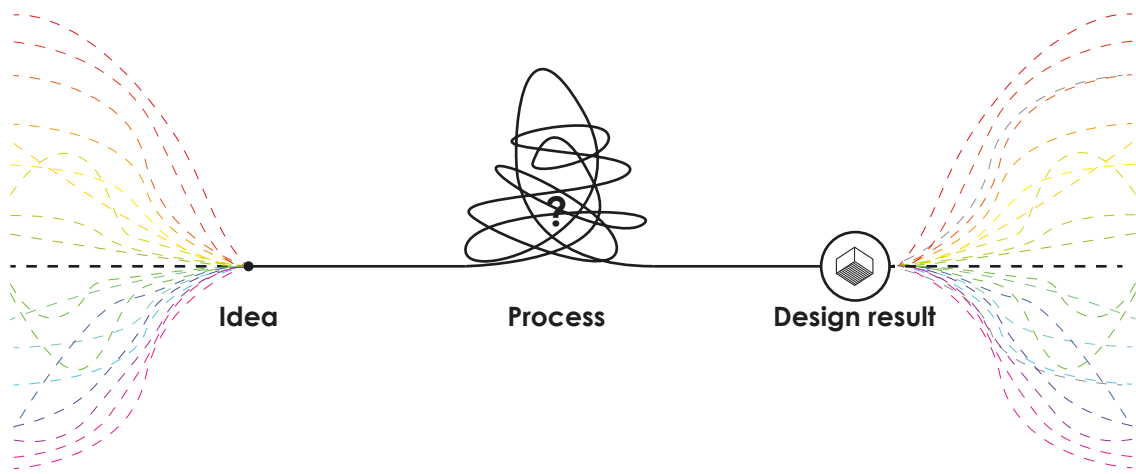
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Often I forget how many ideas are necessary and how brilliant they were at the beginning.
And where they go afterwards.

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Abstract

This diploma thesis *Thinking Transformation - Architectural Design Process of Nest* aims to look at how abstract or immaterial ideas could be developed to concrete architectural results by revealing the whole design process. The analysis of the design process will also disclose one way of designing. My thesis consists of two parts: the actual design work and its process and the visualization and analysis of the design process.

The design goal is to point out important issues of resting through enlightening of the personal experiences and references of the good resting place design for the public. The visualization and analysis part is focusing on revealing the design process and its level of complexity regardless of the fairly small size of the architectural project.

The methodological approach in my diploma thesis has its origin in the idea of reflective practitioner and research-by-design. My thesis also aims to be one of the references of reflective study which makes readers reflect on their design process.

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Introduction

This diploma thesis *Thinking Transformation - Architectural Design Process of Nest* aims to show design process filtering out thoughts as little as possible to get a better understanding of my own way of designing. The content of my diploma thesis is twofold: first, the actual design process of the resting place called Nest and second, the analysis of the design process of the Nest.

Throughout my diploma thesis sketching has an important role of structuring my thinking and developing the design ideas further. To focus on sharing ideas and thoughts, my intention was to write my thesis in a first-person point of view. Therefore, the methodological approach in my diploma thesis has its origin in the idea of reflective practitioner and research-by-design. References were used to better understand the current phenomena and importance of resting.

My diploma thesis consists of four main chapters called Phases. The Phase 1, *Analysis*, consists of visualization of personal experiences leading to the starting

point of the thesis. In this phase, ideas are gathered through analysis of my own experiences and observations.

In the Phase 2, *Developing Idea*, I am forming logics of space and actual design of spaces based on the idea of a good resting place defined in the Phase 1.

The Phase 3, *Results*, I am finalizing the design of Nest and will also apply the idea of Nest to different contexts: Urban area 01, Helsinki; Urban area 02, Seoul and Urban park area, Oulu.

The Phase 4, *Analyzing 'Design Process'* which is the visualization of whole design process through diagrams.

One important idea that I realized during the process was that self-analysis of the design process could be used as a learning method in the architectural field. If my thesis could be a chance to trigger one of the readers' minds contributing to enhance and deepen thoughts, this would be more meaningful than my own achievement.

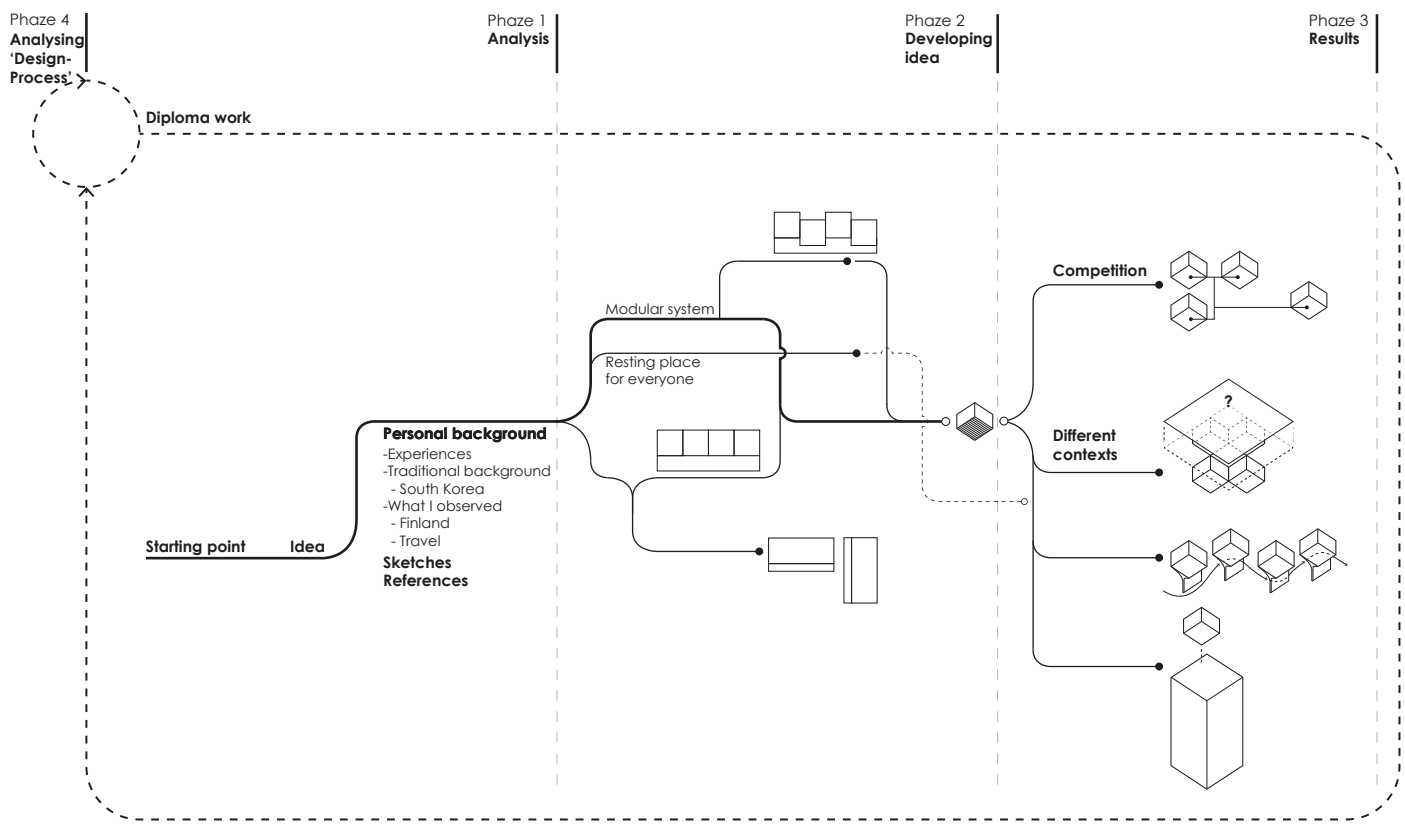


Diagram of Diploma Thesis in General
Reflective Practice
Focusing on concept and project's artifacts

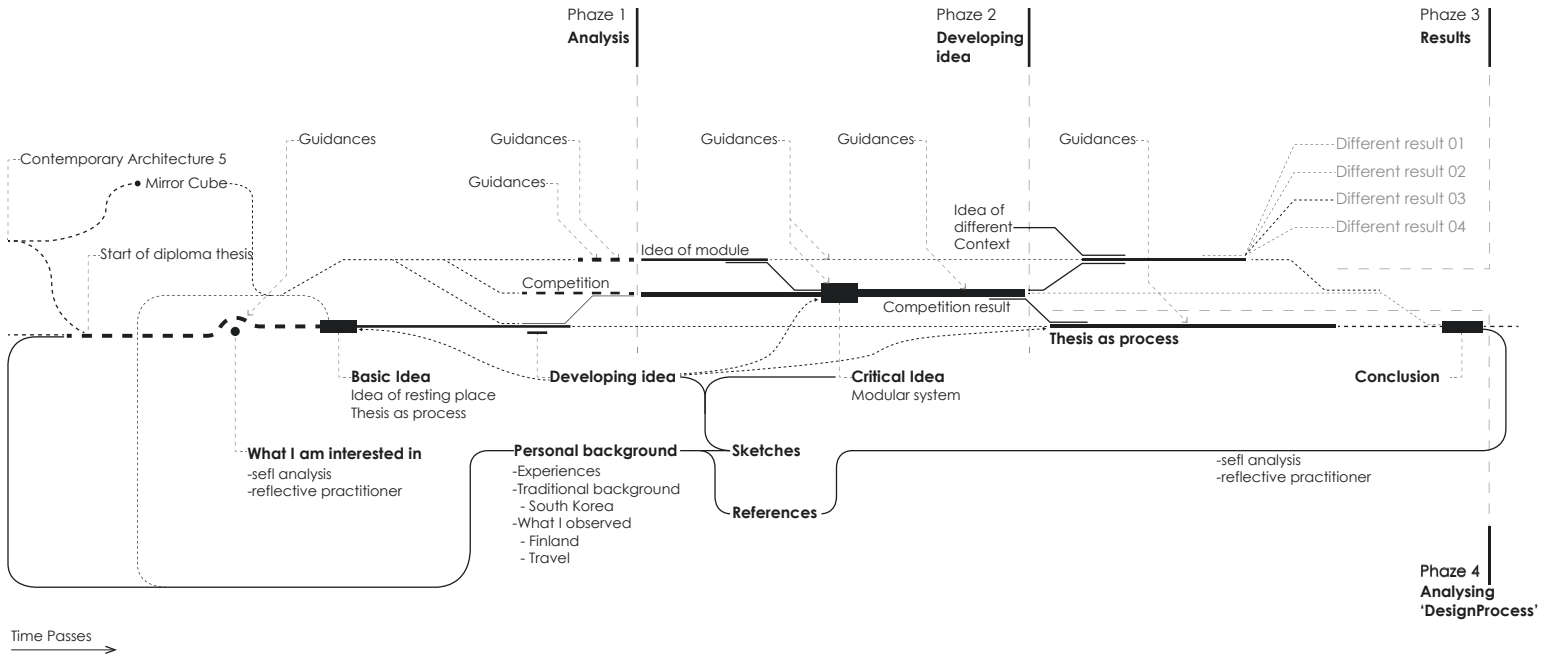
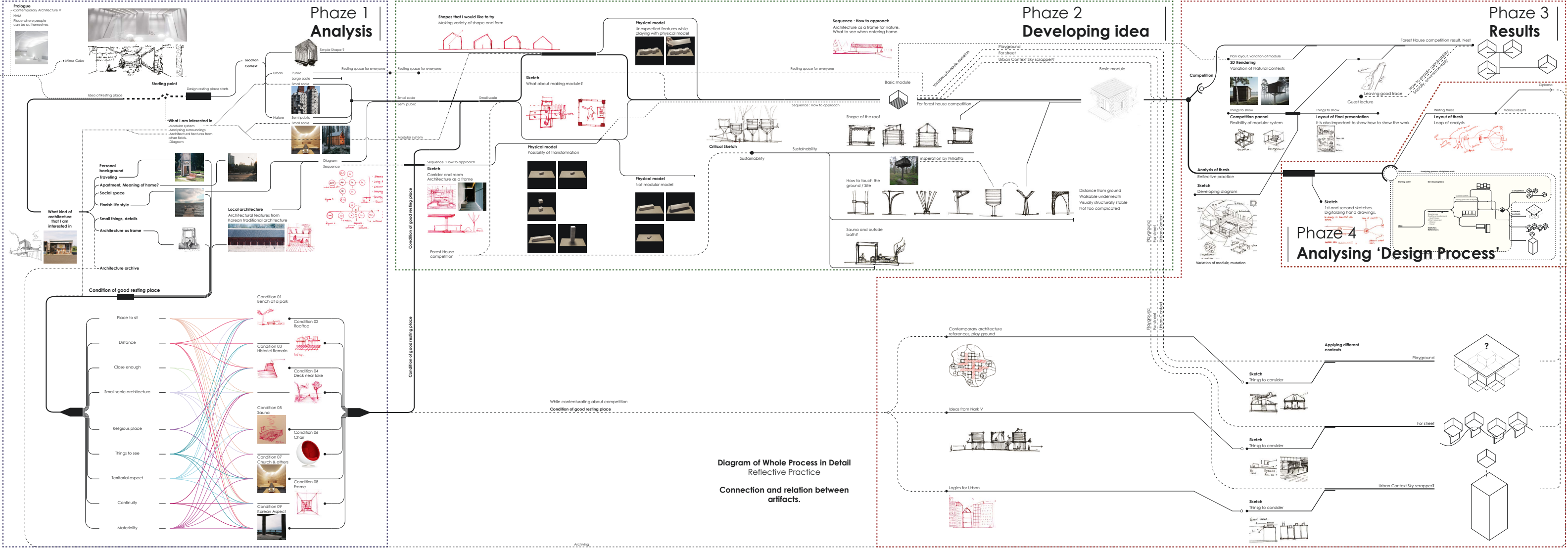
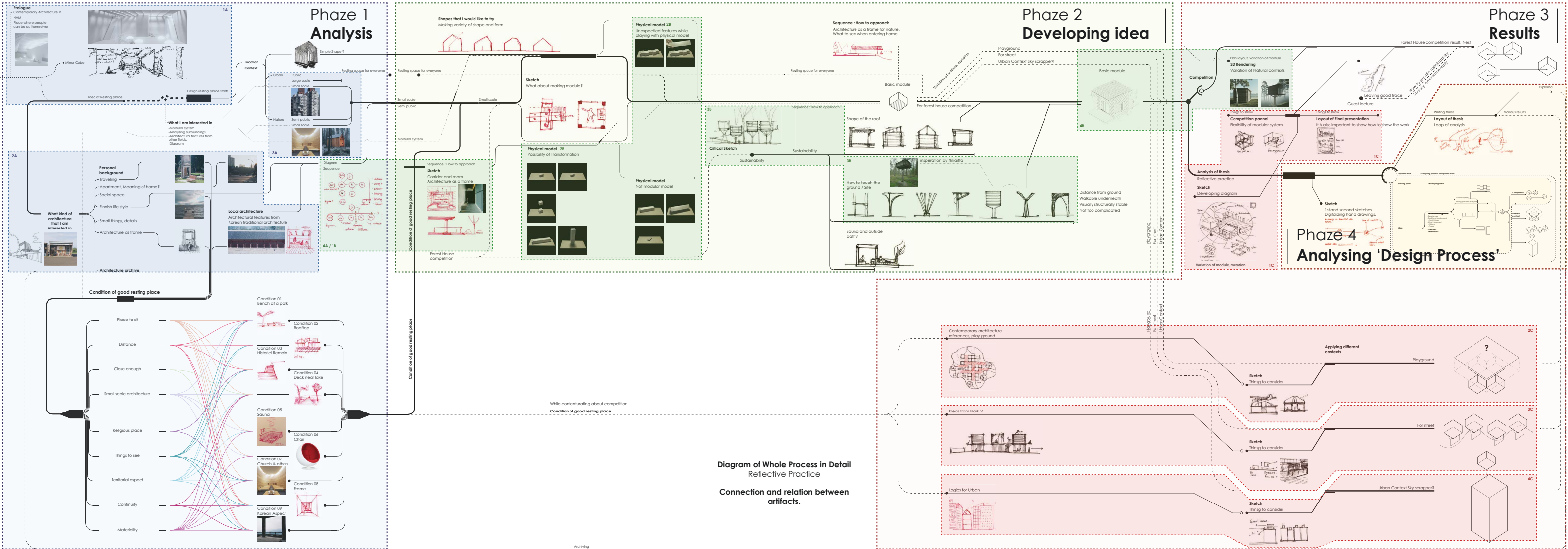


Diagram of Whole Process in General
Reflective Practice

Focusing on chronologic events and stages.





Phase 1

Analysis

Prologue

Ideas from previous project

Prologue

- Contemporary Architecture V

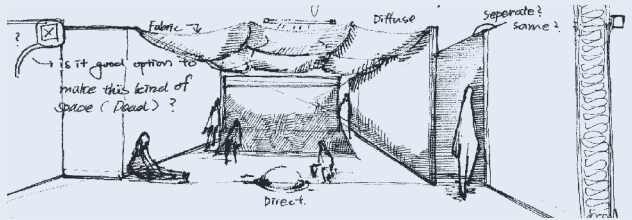
HAM

Place where people can be as themselves

1A



● Mirror Cube



Starting point

Design resting place starts.

Idea of Resting place

What I am interested in

- Modular system
- Analysing surroundings
- Architectural features from other fields.
- Diagram

Personal



Prologue (1A)

In the year 2019 summer, I had my first chance to visit HAM (Helsinki Art Museum). There was one of the exhibitions that I liked the most. It was a large white space. Even people had to wear white overall to enter there. No digital device was allowed. Although I have experienced white space through Finnish winter, I felt somehow different. It was calm, soft, oddly pleasant and silent. People were having their own time. Regardless of the little amount of time I spent there, I felt refreshed afterwards.

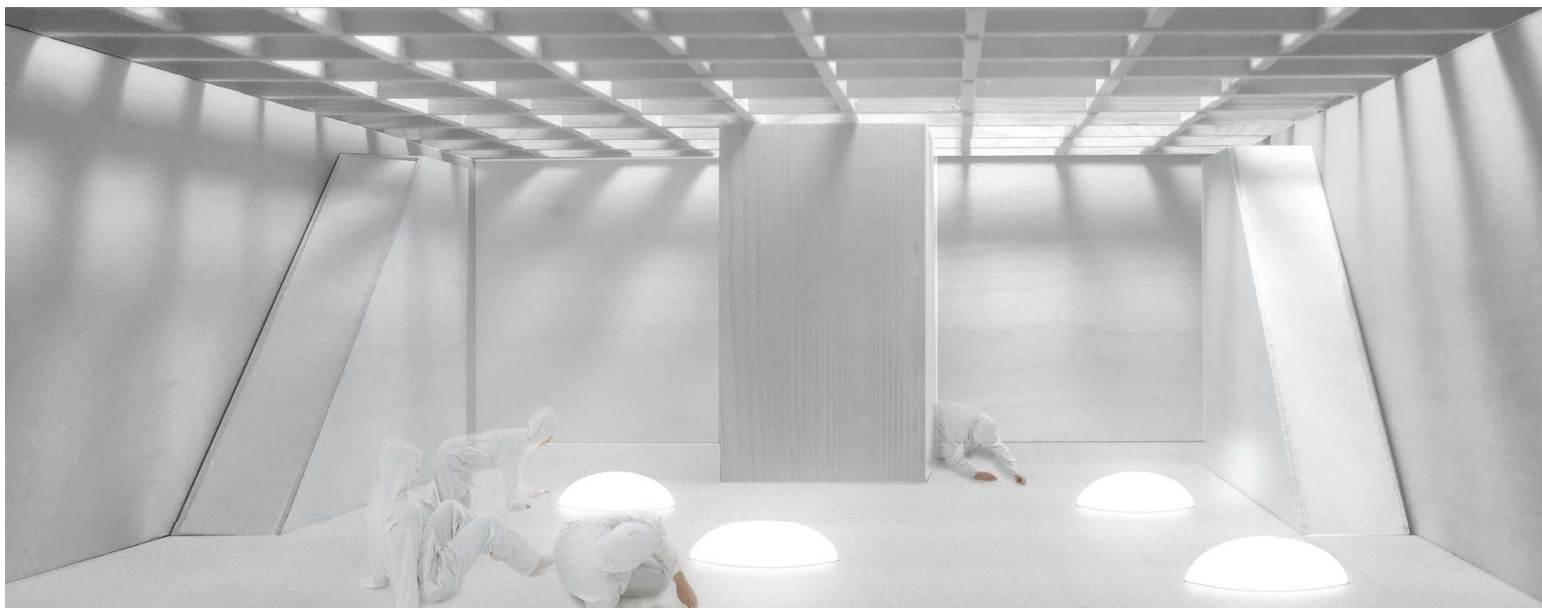
Serendipity of good resting place

When I was working on another school project, a small gallery, I wanted to integrate the idea of HAM's exhibition into my design. At the same time I was starting my diploma work and was looking for things that I am interested in. I didn't know back then, how this exhibition would be the starting point for my analysis. Unconsciously, I analyzed my previous projects and experiences to find out 'why I designed it like this' and 'why I liked it'. For sure, I was interested in space where people could stay for a peaceful moment, a resting place.



Visualization of Mirror cube
(Contemporary architecture V)

2nd Floor
What to see.



Visualization of Mirror cube
(Contemporary architecture V)

3rd Floor
People's behavior in the main gallery space

What I am interested in?

Starting of the thesis.

Thinking about what I am interested in?

What I have observed so far?

What kinds of things are important for life?

Prologue

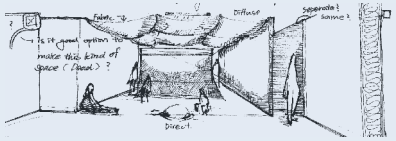
- Contemporary Architecture V
HAM
Place where people
can be as themselves



• Mirror Cube



1A



Starting point

Design resting place starts.

Idea of Resting place

What I am interested in

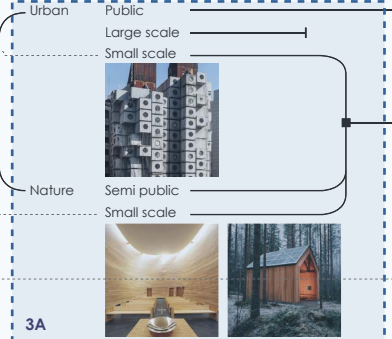
- Modular system
- Analysing surroundings
- Architectural features from other fields.
- Diagram

Location Context



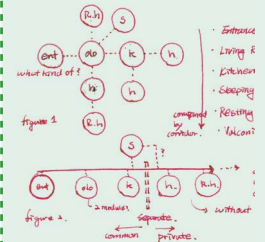
Simple Shape ?

Resting space for everyone



Diagram

Sequence

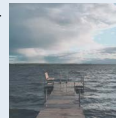


4A / 1B

What kind of architecture that I am interested in

Personal background 2A

- Traveling
- Apartment, Meaning of home?
- Social space
- Finnish life style
- Small things, details
- Architecture as frame



Local architecture
Architectural features from Korean traditional architecture



Architecture archive



Starting point

What I am interested in?

Maybe this will be the starting point of my diploma thesis. Looking for a good topic, struggling the theme. My thesis supervisor encouraged me:

“You need to find out what you are interested in?”

and I began to write and draw something, first without any specific goal. While holding my pen, it helped me to clarify my thoughts. Sometimes I just drew some lines without noticing what I would like to draw.

I tried to recall and focus on the things that I like. I could remember the special atmosphere of the rooftop of the school, a bench at a park, beautiful scenery from a mountain top, a bean bag, a seat near window where I can see the horizontal sea line, colorful lights created by stained glass in the Sagrada Familia, the sunset, Finnish forest, Nallikari Lighthouse, feeling of Juhannus, open sky from the Seven Sister's chalk cliffs, quite calm Barcelona Pavilion, Gyenghuigung(palace) in Seoul, quietness from daybreak when I go back

home from university, the sunrise above Han River through subway's window, smell of fire and wood, small break time between classes, paintings of Renoir, little sofas in art galleries and museums, vibe of film camera, and so on.

After thinking about what I like, I understood that almost everything was part of my travel, especially when I stopped for a moment or an hour to **rest**, draw, enjoy and to see more clearly.

The items nearby road could be forgotten easily. You may see their presence of notice them when you stop for a moment. In everyday life we hardly ever stop. Although people realize the importance of resting and having moments for themselves, people are working as if a single minute is not allowed to rest. Many people around the world are not looking forward to the forthcoming Monday. Instead, they want to pause a little bit. Not thinking about work or school. Yet the home cannot fulfill the feeling of resting either.

Need to know what I am interested in.

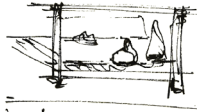
17.10.2017.

Diploma Work.

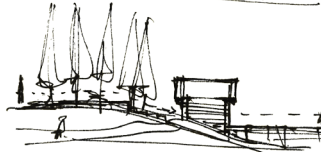
- Traveling ---> see lack of place where people could rest.

- Apartment ---> Home meaning of home is bit different now.

- also somehow working place.



이제야, 정말 space. Social place as to be...
is lacking nowadays home. apartment.



Finnish life style, Mökki.
important thing is

process.

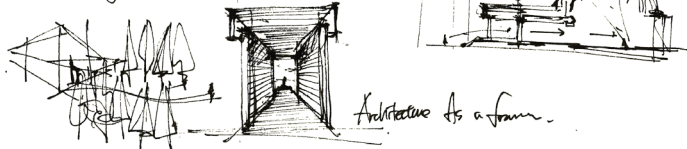
How to approach, what happens inside, connect to the other space

Experience

Architecture

- Moving, small things. Details.. Necessary Objects in spaces Interior way landscape summary

- Inspiring thing / contrast & sequence.



Architecture as a frame.



- BASE literature

Evidence

- what I observed.
- what it is talked about / newspaper, etc.
- theoretical base - why we need?
- or scientific research method

* Society could take care.

- Begin time can't up.

Designing for change.

"we would like to be"

system. scenario.

Science of Resting...

connection between reality. strategy

Idea sketch
What I am interested in
Sketch

Need to know what I am interested in.

17.10.2014

Diploma Work

What I am interested in?

- Traveling ---> see lack of place where people could rest.

Meaning of home

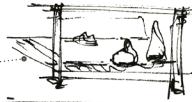
Home

- Apartment -> Home meaning of home is bit different now.

Finnish life style

- also somehow working place.

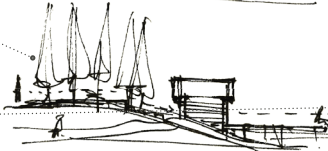
Korean architecture



이제야 알, that 등. Social space as to be... is lacking nowadays home. apartment.

Mökki

Nature



Nature

Experiences in Finland

Finnish life style, Mökki. important thing is

Small things

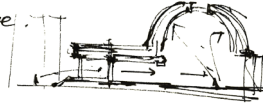
process. How to approach, what happens inside, connect to the other space. Experience Architecture

Inspiring things

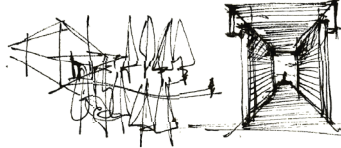
- Moving, small things. Details.. Necessary Objects in spaces. Interior way. Landscape

Landscape

- Inspiring thing / contrast & sequence.



Historical architecture



Architecture as a frame

Form



- BASE literature

Evidence

- what I observed. - what it's talked about (news paper, etc. - theoretical base - why we need? - or scientific n. test and

What I observed

Science of Resting

* Society could take care. Design time can't be cut up. Designing for frame. we would like to be system. scenario.

Science of Resting

connection between. reality. strength

Idea sketch What I am interested in Sketch



Maybe a dog has more freedom even if there is a chain on its neck. It decides its own time to rest and walk. The only work it has to do is protect the house from stranger but since it is having a break it doesn't care about the task that much.

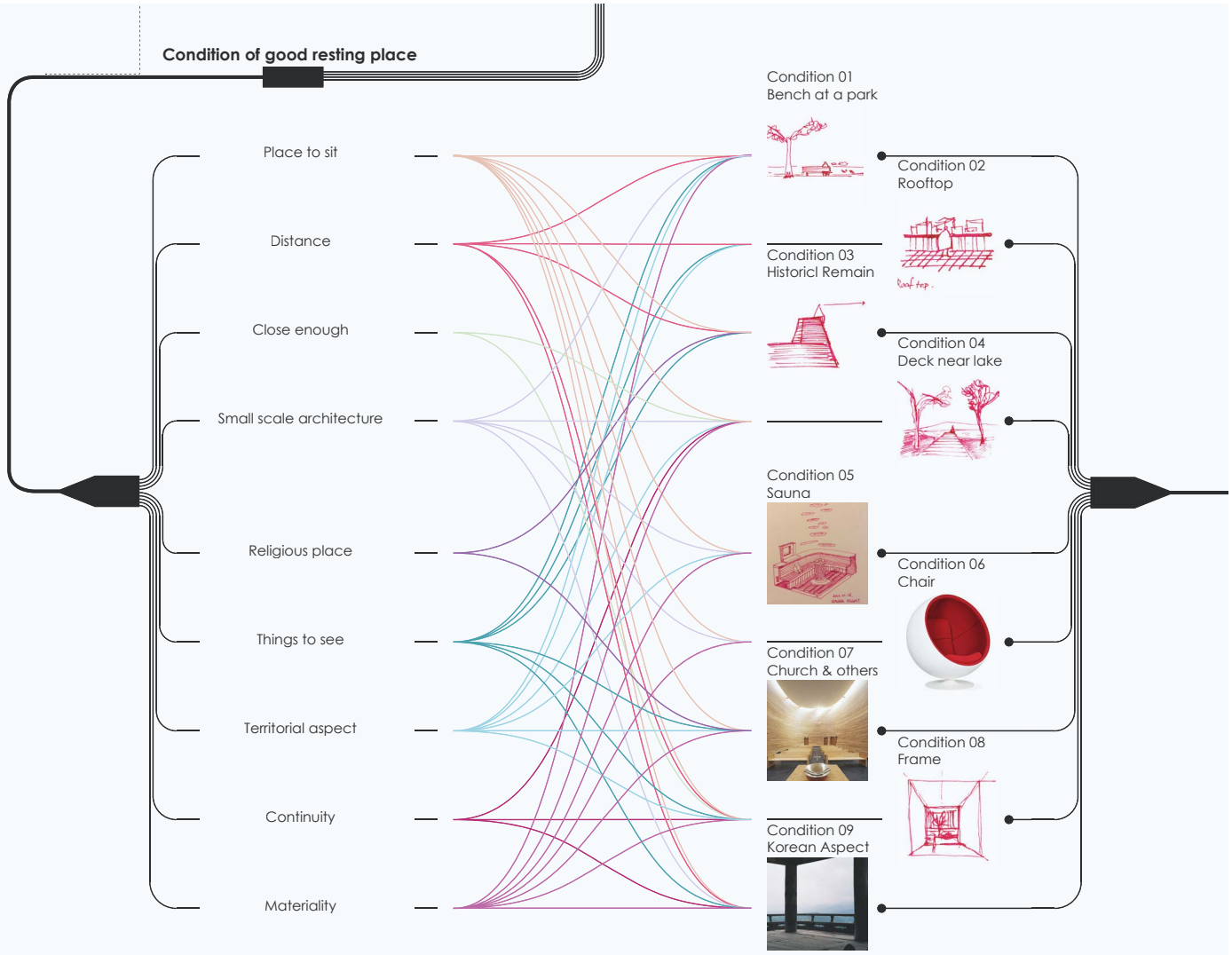
Stair could be a good resting place for humans as well. It is possible to play a game with 'rock scissors, paper'. Whoever wins the game could go up the stairs. While playing, we stop on the stairs. Perhaps games could be good means of resting.

Resting place
A dog resting outside
Tongyoung, South Korea

Conditions of good resting place.

Through my own observations, about the architectural and non-architectural references, I want to share my personal experiences.

Condition of good resting place



Observation: Place where you can rest

Though I said I wanted to design a good resting place, it was quite hard to imagine what is actually a **good resting place**. I can't just say 'I designed a resting place, I named it as such on my drawing so it is a resting place.' but space should support the specific function: resting.

However there are certain conditions that fulfill the qualities of resting place. I would like to address these aspects by sharing my observations and experiences. I hope you also think about your own experiences and compare with mine.

I would like to start with a poster of a movie, '500 days of summer'. In this poster, there are two important features that I found; **Distance and place to sit**. The main characters are sitting on a bench at the top of a hill where one can see all the high rise buildings of the city of Los Angeles. Somehow I could feel the distance from the city while watching the movie and at the same time having a calm feeling. Then I started to analyze the condition why I felt like that.

First thing to notice is obviously the bench. And the orientation of the bench, it is oriented towards cityscape. There is an open sky and tree next to the bench. From the image one may also imagine that there might also be a path behind the bench. By just sitting on that bench, people can capture many feelings. Literally the buildings are a bit far away from the bench yet it is possible to distinguish what is happening in the city. Maybe this might explain why the **distance** is important in this situation.

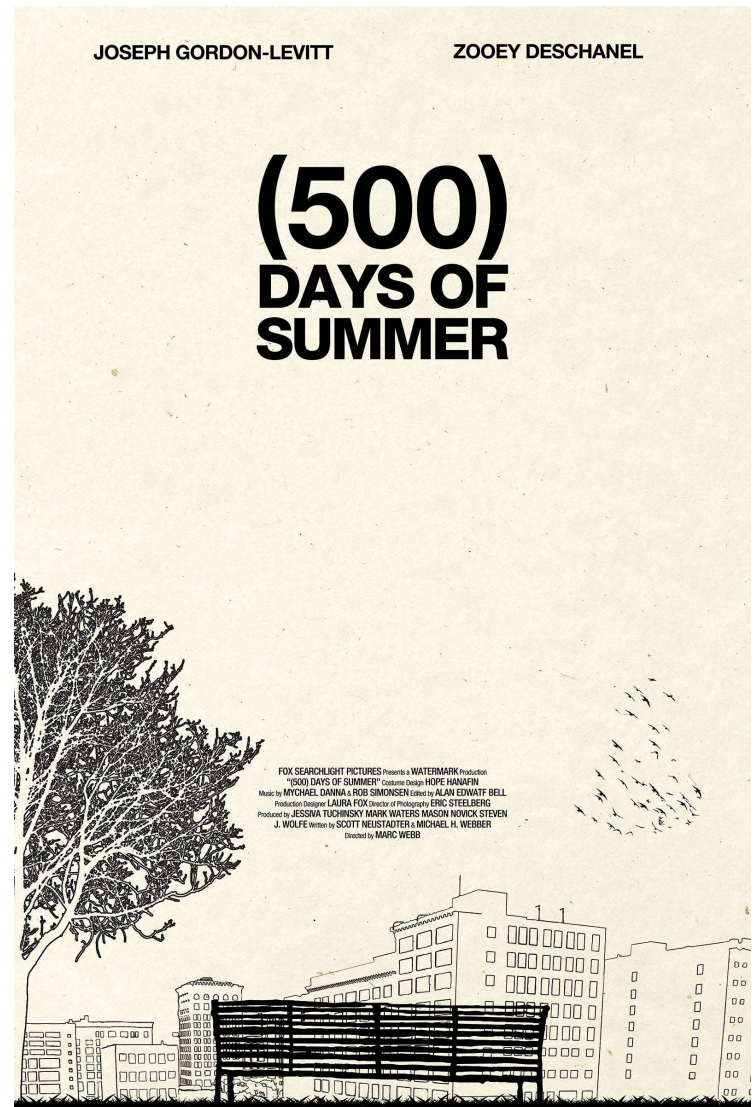
*"Life is a tragedy when seen in close-up
but a comedy in long-shot"*

- Charlie Chaplin -

One example of a resting place in a movie.

Movies have many architectural features. There are scenes which are composed as spaces. This movie, (500) Days of Summer, gave me inspiration of a good place to sit and rest for a moment. Two main characters sitting on the bench and talking about buildings, skyline and so on.

I tried to find out what was an appealing feature in that space. Because, I also felt quite relaxed while watching the couple in the scene. At the same time, I wanted to sit on the bench.



Right, Poster of (500) Days of Summer

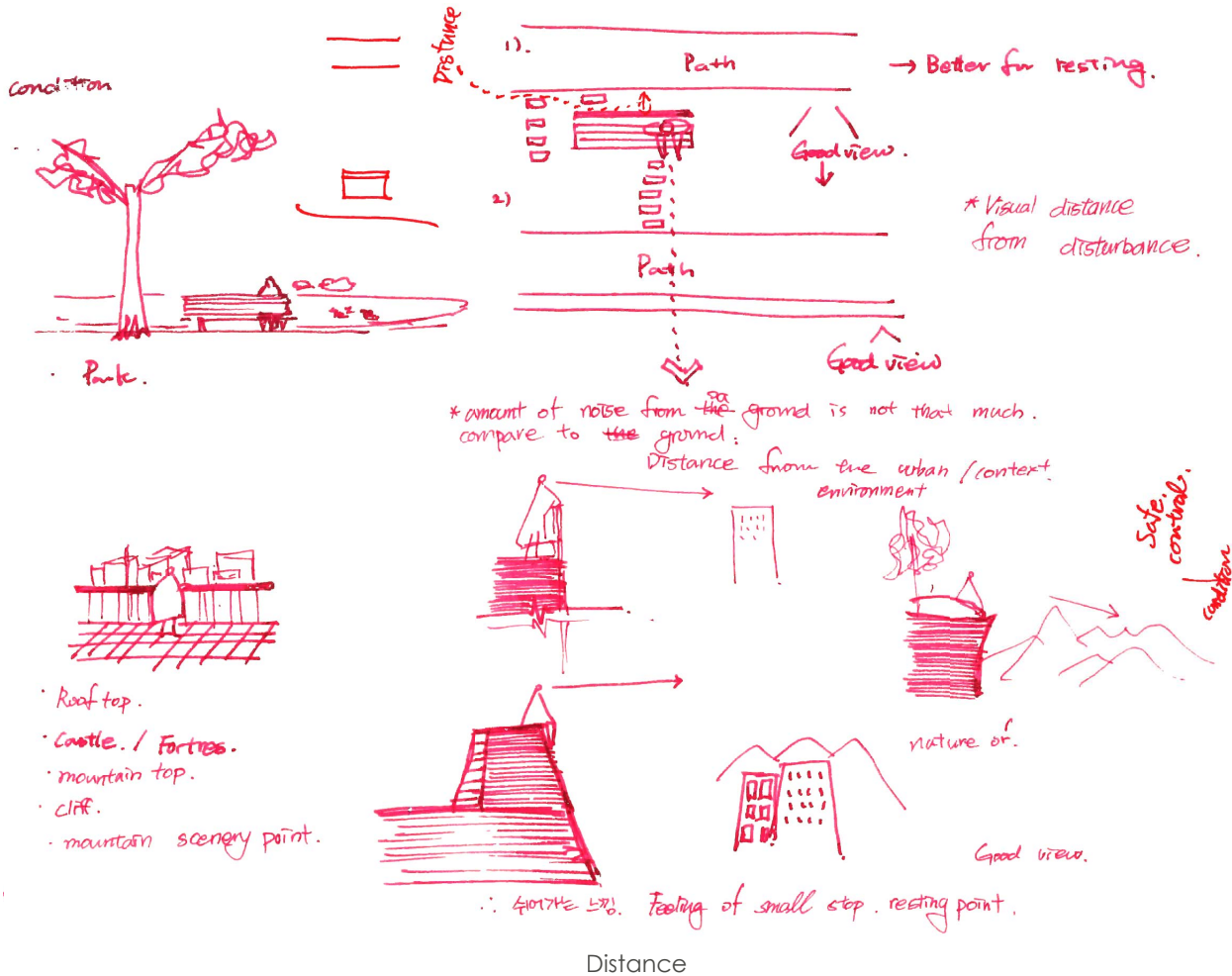


Place to sit

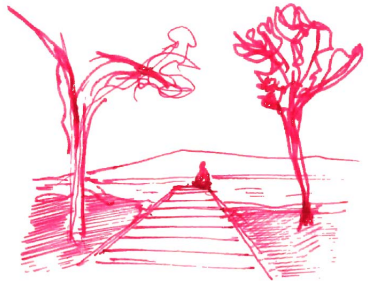
Bench towards scenery, tree, open sky.
Place to sit, things to look at and distance.

Analyzing surroundings

In the following pages there are sketches about where people taking a rest. You can think about resting places with your own experiences and compare yours: **Place to sit, Distance, Close enough, Small Scale architecture, Religious Place** and so on.

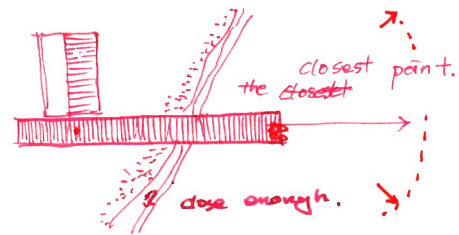


Maybe the first thing that I notice was distance, physical and emotional distance as well. People give meaning to the space.



- Lakeside.
- ~~sea~~ seaside. (beach).

∴ 40% 50%. Feeling of small step, resting point.

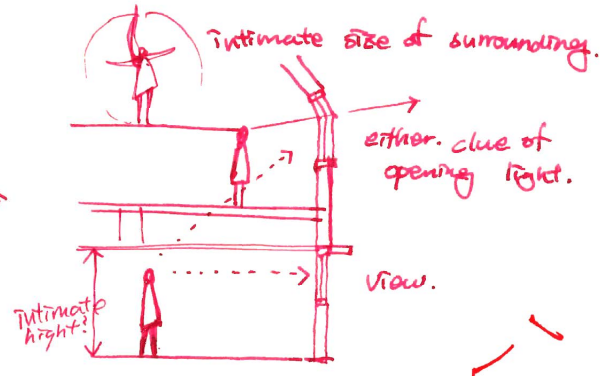
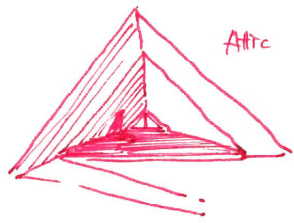


feel
 somehow more
 safe and controll.

protecting

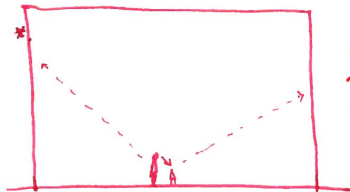


- Small scale of architecture.
- Attic.



Close enough, Small Scale Architecture

Closeness, small scale architecture, furniture, again distance, things to see inside of frame and so on.



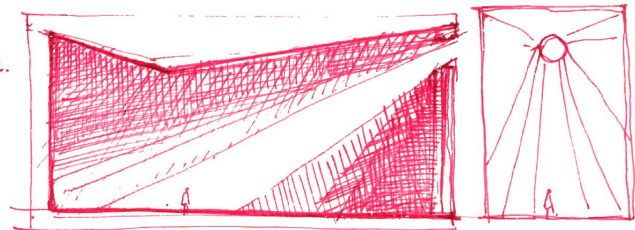
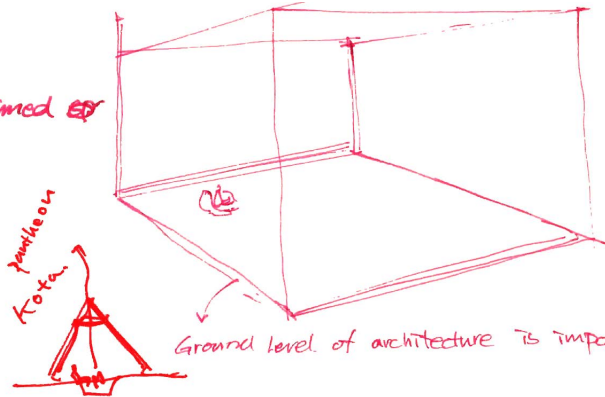
materiality. *

• more like overwhelmed ~~sp~~
kind of feeling.

big scale of architecture.

- * s/he should be able to feel the scale of it.
at the same time it doesn't need opening.
- * Need light source though.
- more like religious spaces
but at the same time could be just
extra ordinary space \therefore non-daily-life space.
- * should not give too much information.

↓
battering
Disturbing.



Religious place, Big scale Architecture

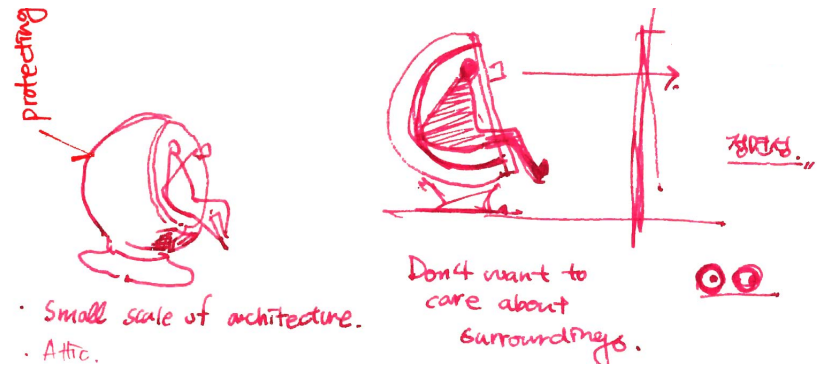
In the big scale of architecture, feeling of being protected, spiritual space, religious space, light, contrast, place to sit or wander around and so on.

Small Scale Architecture

Maybe there could also be a simpler place where people can rest, just like Eero Aarnio's Ball Chair. If you have ever experienced being (sitting) inside of it, you would understand that you don't have to care about anything but things in front of you. Soft inside, hard outside. Even the shape looks like it is protecting the things inside, just like an egg. It creates disconnection from surroundings. Noise is being reduced significantly.



Eero Aarnio's Ball chair
You don't have to care anything else
than yourself



Small Scale Architecture.

Furniture has its own space.
Designing space, that is what we architects do.

Personal background

As a Human being, we are not remote from our own experiences and personal backgrounds.

What I am interested in

- Modular system
- Analysing surroundings
- Architectural features from other fields.
- Diagram

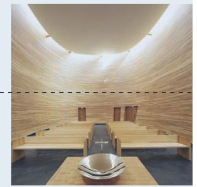
Nature



Semi public

Small scale

3A



Personal background 2A

Traveling

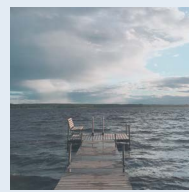
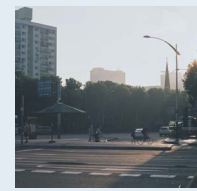
Apartment, Meaning of home?

Social space

Finnish life style

Small things, details

Architecture as frame



Local architecture

Architectural features from Korean traditional architecture



Architecture archive

Personal Background (2A)

Consciously or unconsciously personal background matters in design work. We want to reveal ourselves through our works, in our case it would be Architectural final products or results. Modern famous architects' building design works are recognizable by their forms. Among students, it is also possible to notice the style differences between each of them.

The 'Style' would be made through practice and exercise. Practicing and exercising (or we can also call it studying) become 'Experiences'. Every single moment we gather experiences and they build up our background.

As I mentioned before, even a simple chair could have multiple good features of resting. What happens when furniture meets space? You can imagine that other things from space will make great synergy with each other. In this case, how to arrange (plan layout) will be a critical point that decides quality of space.

Following statements are for pictures on the page 39 and 40. You may read these

texts first and then look at the pictures or read after seeing them.

For the picture on page 39.

Imagine you are sitting on the chair with your friends. Arm chairs are located along side of a big window which beautiful scenery of islands could be seen through. You may enjoy the view while having conversation as well. Softness of the chair and direct warm sunlight might make you more comfortable. Indirect lighting will create comfortable atmosphere when it is darker.

For the picture on page 40.

You may feel more open space. Eaves, columns and handrails frame the scenery to nature. The view will come to you when you sit on the rail. Nothing else is important if you can see an open sky and you feel you are part of nature. Sometimes it feels like it will become shelter for you.



One summer day in Yeosu(South Korea)
Arrangement of furniture and space
in Cafe Yeosu, South Korea



Architecture as a frame to take nature.

Youngju, Busuk-sa(Temple)

Local architecture, observation

Before continuing to design part I would like to mention contents related to cultural aspects. I am concerned, what if my knowledge, perception or feelings are just my own cultural things and do not apply in other countries or cultures? What if my approach is just too local? Of course I see things based on my background and what I have learned. And most of them are my opinion and perspective towards architectural space.

I found an answer from my travel experiences. Traveling allowed me to see and understand not only cultural differences but also common aspects and features shared world wide.

Finally, it was possible to figure out that everyone wants a good resting place. We can see people's common behavior that they like high quality public spaces to rest or to stay for a moment. Some aspects appear with design results.



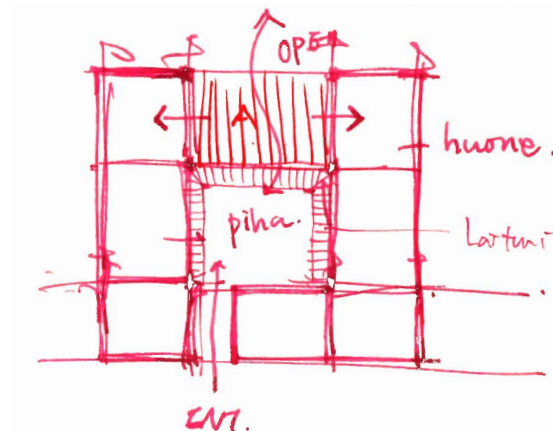
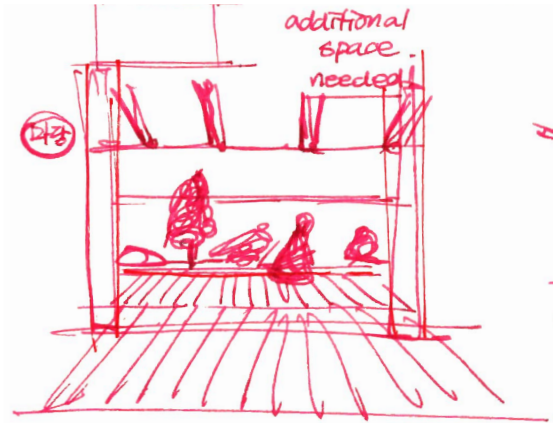
How to spend summer in Korea, back then.
Don't you want to sit on the wooden floor?
Changduk-Palace, Seoul, South Korea

For instance the photograph is taken from Gyeongbokgung(palace) in Seoul, South Korea. As you can simply imagine people can sit for a while on the small terrace (Maru) and enjoy watching other pedestrians and the greenery. Eaves will give a good amount of shadow. Although the terrace has different height levels due to technical reasons as well, it is good to have some kind of level difference to border and indicate the areal separation.

Not only Koreans but also tourists use that space as resting place. Architectural form or details also may give a different feeling of the space. However they still don't limit people's behavior.



Little deck to sit on
People know how to use space.
Seoul, South Korea



Basic perspective view and plan diagram of Korean traditional housing unit (Hanok).
Building makes frame with it's own components.
Courtyard could be designed various way to bring the nature into the building

Similarity of resting and people

People like parks. As a public space it offers an open space, fresh feeling, place to sit. Due to these features, people gather there. Regardless of the size of a park, the behavior of people is quite the same. People tend to enjoy sunlight on the grass in Scandinavian region where the weather is cloudy most of the time. The more you go to the south, people love to take a break under trees in a shadow. Nevertheless the common thing is they would like to stay in the park rather than nearby the road close to the traffic. We can find out many aspects by just comparing the conditions of two spaces. Obviously the comfort of a park is much better than near by the street. In some parks it is prohibited to go to the lawn, but in many cases it is allowed to use the lawn for **sitting** or laying down, if there is a lack of space to sit next to the road. **Materials** are also different. I've never wanted to sit on the roadside without any cover where to sit. The roads are usually covered with hard materials which have colder feeling than benches, grass or even ground. Perhaps psychological things affect more in this situation. However the feelings and impressions giv-

en by space are important.

Feeling of space decides everything. People stay in the space where they feel pleasant and comfortable. The type of atmosphere of a space is depending on architects and how they control the spatial quality. Regardless of cultural difference, people like high quality spaces.

If the quality meets a certain level of pleasantness and if the spatial functions are on the same level, the general atmosphere of the space appears high quality. The details of space would be different in various cultures. However basic principles hardly ever change.



Bench near remains
You may notice why the man in the background of the image chose to sit there.
Venice, Italy

Experiment

Following pages have pictures taken from different countries, but still sharing a similar atmosphere. If the spaces have same or similar function, regardless of where they are located, they have somewhat a same feeling. However they could appear differently by little details.

In all of the pictures, there are things to see and people stay for a moment. First two pictures are about two different market places. People tend to walk through while doing eye shopping. There is usually no space to sit since it may disturb traffic. Definitely, except those who like shopping a lot, these are not places to rest.

Other following two pictures are places where people may have rest. There is nature and place to stay for a moment. However when it comes to '**place to sit**', I rather sit on the wooden deck bench in the third picture than the metal plate deck in the last picture. **Material** matters.



Spain market
Things to see
Where people gather



Korean market
Things to see
Where people gather



Mid summer of Haapavesi
Place to sit, close enough, materiality, continuity
Where I would like to enjoy view



Mid summer of Naosima, Japan
Things to see, close enough, continuity
Where I would like to take a picture

People find their own ways to enjoy .

Unfortunately, in some public spaces such as streets, market places, parks, pedestrian roads and other common areas are easily forgotten to be designed well. In many cases the spatial quality of these spaces is below average. Small adjustments would make a huge difference.

Sometimes, users find their own way to enjoy abandoned or forgotten space.

The usage of these spaces appears the same regardless of cultural difference. It would be hard to guess where the photograph is taken if I don't indicate the location. I am also sure that the moment while you are looking at the image, you can imagine how the people are enjoying the moment on the beach. Of course it could be differ from your personal experiences. But in this case I am not talking about particularity and uniqueness of experience, but common and general experiences. At least a person who has had pleasant time on the beach once would be able to imagine the feeling how the people in the image would feel.



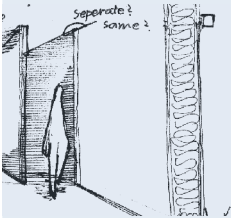
East Bourne, England
The beach isn't abandoned, however it is open for everyone.
And people find their own way to use it and enjoy.

Reference buildings (3A)

There are many buildings I would like to mention as references. They are from various sources such as books, internet sites and my personal archives.

Phase 1
Analysis

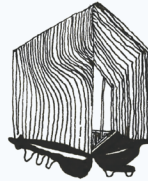
1A



Starting point

Design resting place starts.

Location
Context



Simple Shape ?

Resting space for everyone

Urban

Public

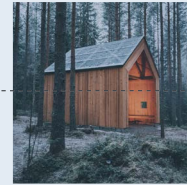
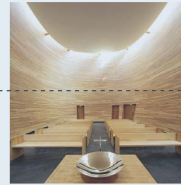
Large scale

Small scale

Nature

Semi public

Small scale



What I am interested in

- Modular system
- Analysing surroundings
- Architectural features from other fields.
- Diagram

3A

Diagram

Sequence



Modular system

One of the iconic buildings built during Japanese Metabolism period was the Nakagin Capsule Tower by Kisho Kurokawa architect & associates.

Modular system is not that new idea. Still it offers a strangely fresh approach and one possibility of a modular system. Simply stacking up, giving some variation or empty space to breathe and it becomes one new different looking building.



Metabolism architecture
Nakagin Capsule Tower
CC by SA 4.0

Design space to perform in a certain way.

Kamppi chapel by Kimmo Lintula, Niko Sirola and Mikko Summanen is one of the good resting places I visited in Helsinki. It has an extraordinary vibe made by its shape and skylights. With or without people, it doesn't matter how quiet this space is. It is almost every time silent. I don't know if the behavior of people is made by its spatial quality, name or other person's behavior, however I am certain that people expect some situations in religious spaces. I assume people who visit chapel most likely want to have a small break or rest.

We can also think architecturally. What if there is no pews at all and there would be one long bench alongside the wall, and a beautiful sculpture or painting would be placed in the middle of the chapel? Some might walk around the artwork, some might take a seat. The space could be designed to function in a specific way. With the resting place is the same. We just need to know the conditions.



Kamppi Kirkko
Photo by Tuomas Uusheimo
Source from arch2o.com

Small scale architecture

I was quite familiar with the idea that one big whole could be composed of several small units. The architectural beauty combined with small houses is one of the important things to consider when it comes to architectural design.

Harmoniously unique. Architectural design shouldn't do any harm to surroundings and context. This idea applies also to the nature.



Tongyeong, South Korea

Collectiveness of buildings

Building in a nature

When I saw this scenery, the harmoniously built temple buildings made me feel relaxed.

Skyline is ascending gradually following the greenery. Just by sitting near the temple and watching the scenery would make me feel refreshed.



Busok-sa(Temple), Youngju, South Korea

Skyline, topography and nature

Place where people stop and stay for a moment.

There must be something to see. Think about a chair placed near a wall where there is no window in a container box. More familiar image of this could be found from crime movies. Buildings which are not for the pleasant moments have exactly opposite features from the building, or place, for pleasant staying.

People are willing to sit on the spaces shown in the image on the right. I also would like to sit on the wooden chair and have a cup of coffee for a moment. I wonder what the person is looking at the curtain wall.



How to make people want to stay
Good framing, things to see through the arches.
Name unknown, Cafe, Taiwan

It is also important to remember to give enough space to stay. Although there is a beautiful scenery beyond the window, if the corridor is too narrow to place single chair, no one could feel free to stay there.



Architecture as a frame
It is important to give things to see and to stay.
SAN museum, South Korea

While walking down the street,
light hits the face and
I had to look back where I was coming from.



Street of Osaka
Urban
Osaka, Japan

No wonder that nature is perfect teacher.
Woods, sunshine and good amount of shadow.



Trees and sunshine
Nature
Nam-ii island, South Korea

Thinking about analysis and design.

By analyzing good resting place, we can think about what kinds of design elements would be needed. Then it is possible to think about prototype of the design as well.

• Soundscape. - Generally good enough to fulfill sound comfort.

statistic. } there is research about thermal, visual, sound, etc... comfort level.

• Good view with protected area. intimate scale of architecture.

depends on more (in) which area architecture could be located.

• Urban - need to keep the distance.

at least (people) surrounding environment need to be considered as object.



example - Kiasma's terrace space.

• music is important as well.

- remembered scene.
- memorized memory. (personal experience).

- classical music (calm, sweet)
- Rock? ... no.

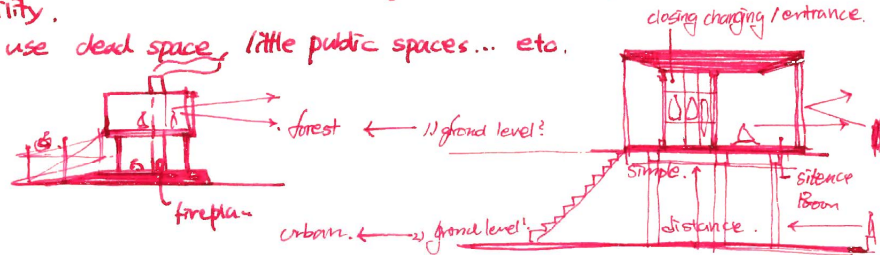
architecture as a filter as a

• Small scale of architecture is important. - in realistic point of view, it is quite impossible to give such a big scale of architecture in Urban spaces.

• Also if it is located in one space as big scale, not everyone could enjoy the facility.

- Important to use dead space, little public spaces... etc.

- Urban context.
- Forest context



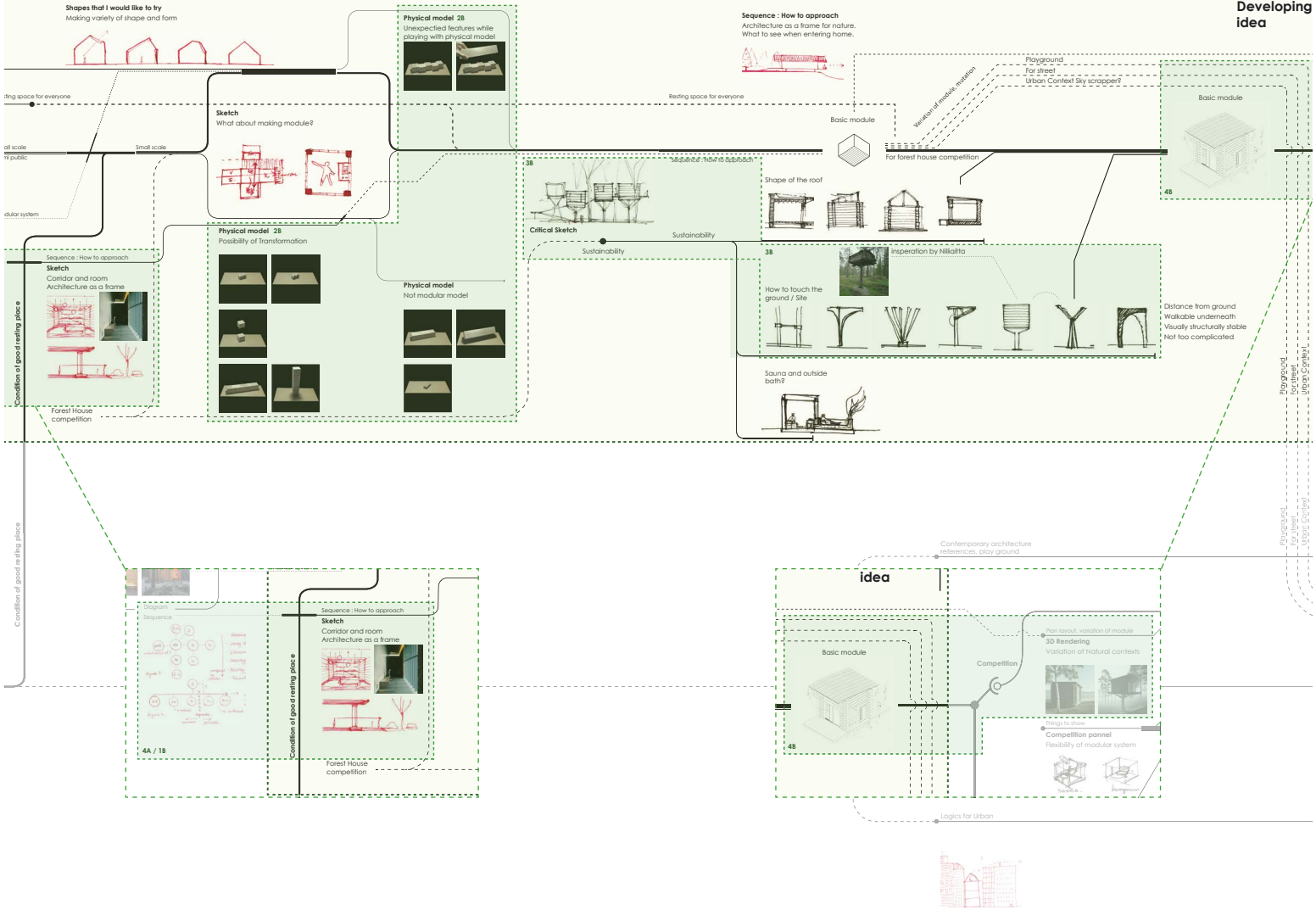
Small practice with analysis

You can see the ideas from here appear and remain until finalization of design.

Sketch

Phase 2

Developing idea



Design Methods

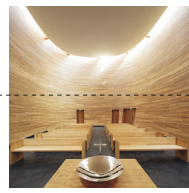
In this phase, I would like to focus on how I developed ideas through various design methods. While developing ideas, I found one competition call, 2020 Forest House, and I participated it since I saw the matching point of idea of designing a good resting place and designing a house in a forest.

When it comes to the design methods, I mainly used sketches. Sketches helped me to clarify the ideas, the relationship between spaces, the basic shape and sequences. I also used other methods such as physical study models to develop ideas and CAD drawings to see more precise results and try out details.

Sequence, relation between rooms (4A / 1B)

How to approach the circulation inside of the house, plan layout, start and end point of movement and the view in inside spaces and from inside out?

Nature
Semi public
Small scale



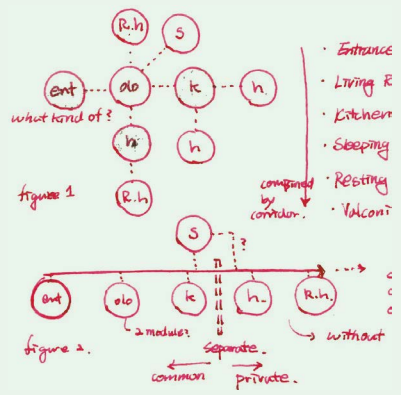
3A

semi public

Modular system

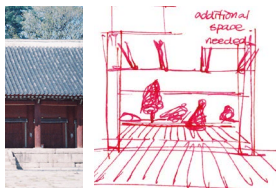
Diagram

Sequence



4A / 1B

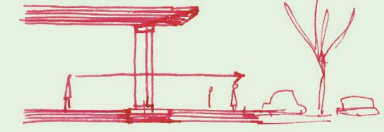
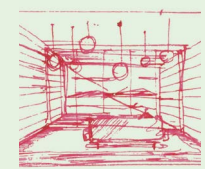
room
architecture



Sequence : How to approach

Sketch

Corridor and room
Architecture as a frame



Condition of good resting place

Forest House
competition

Plan layout sketch

The basic and typical way of developing plan layout is the block diagram. A diagram could be used in many ways. Using a diagram is a convenient and easy way to explain the design process and results. In this case, diagrams are used to figure out the relationship between rooms. I wanted to make basic rules for plan layout based on analysis about good resting places.

Two ideas became options to develop further. One idea was to have a strong axis and it opens towards a good view to emphasize the architectural frame. Rooms will be located along the axis. The other idea was to make the living room and the kitchen as hub spaces of the house. In this case, there is no strong architectural frame however it has more freedom and flexibility of layout from the beginning.

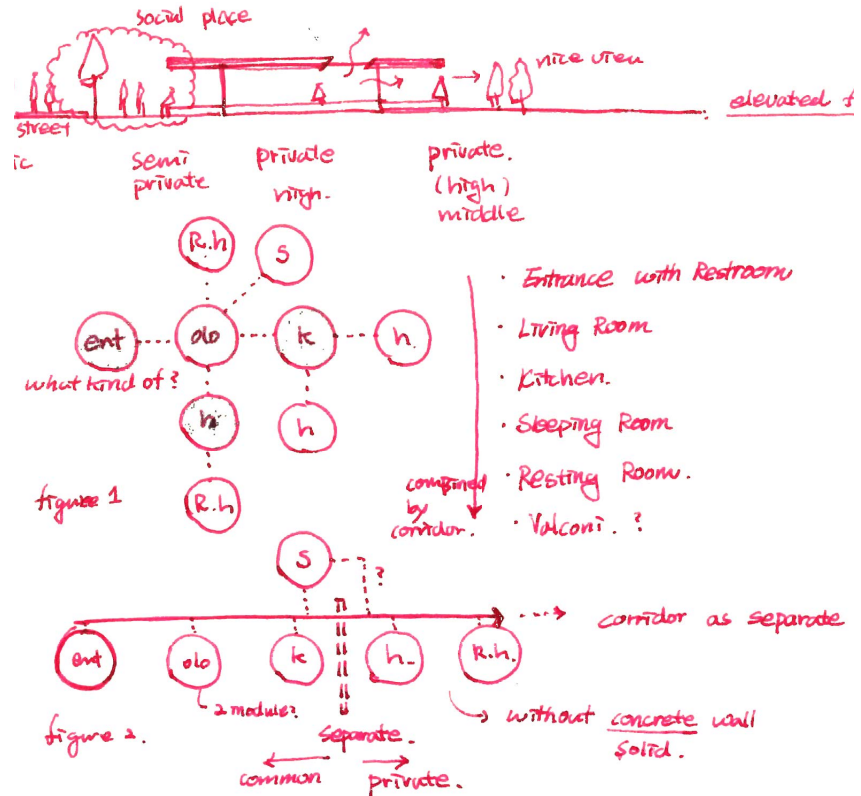
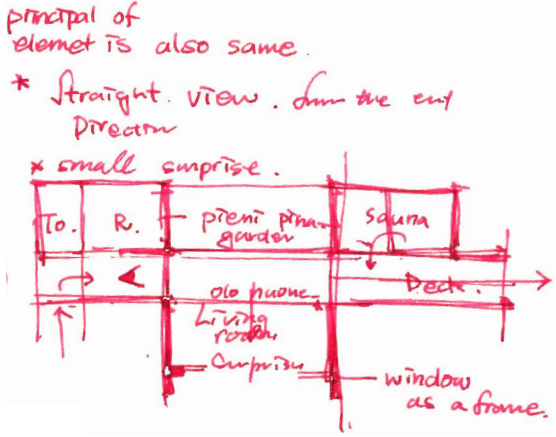
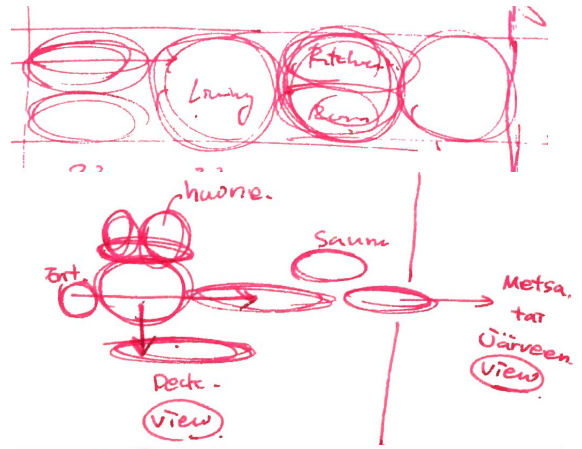
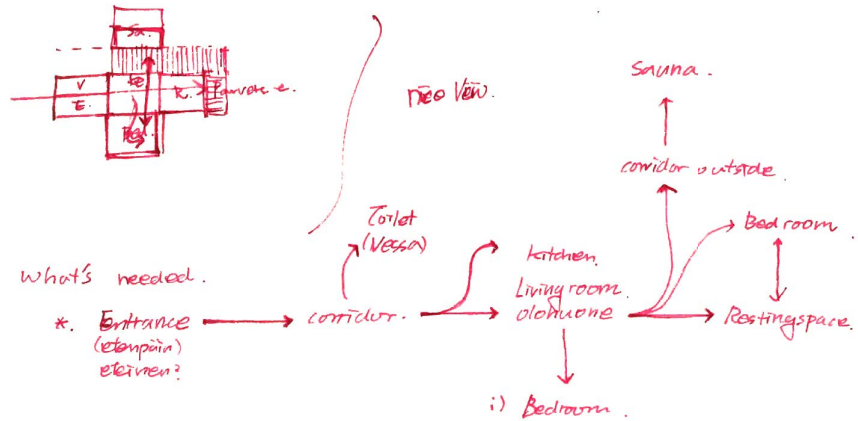


Diagram of relationship between rooms
Through which room to where
Sketch



Morphology diagram
 Direction
 Sketch



2. composition of building.
Morpologia?

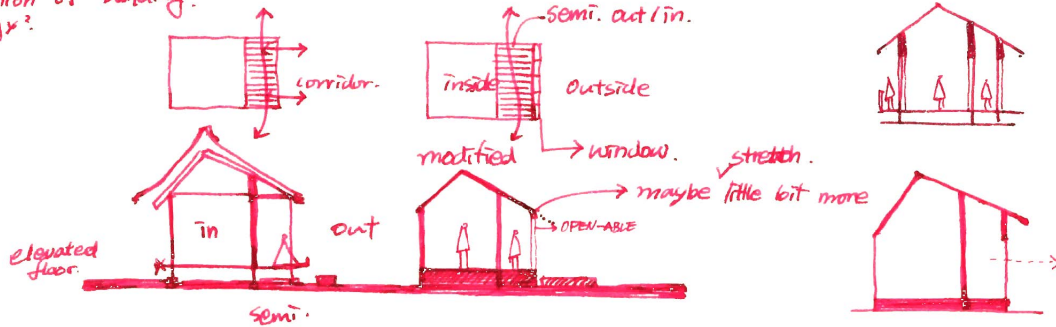


Diagram of relationship between room, corridor and outside
What kinds of corridor should be
Sketch

Using cultural background

I decided to integrate my cultural background with my design work.

At this stage I was more interested in making a modular system. I saw the possibility of various formations of traditional structure. Once there is a modular system, it is possible to link form with the morphological diagram.

What about making module of Functions.

4.5m

4.5m

2.4m

2.4m

10 ~ 12 자. 1자 = 30cm

3.6m

3.6 x 3.6 = 12.96m²

300mm² ~ 400mm²?

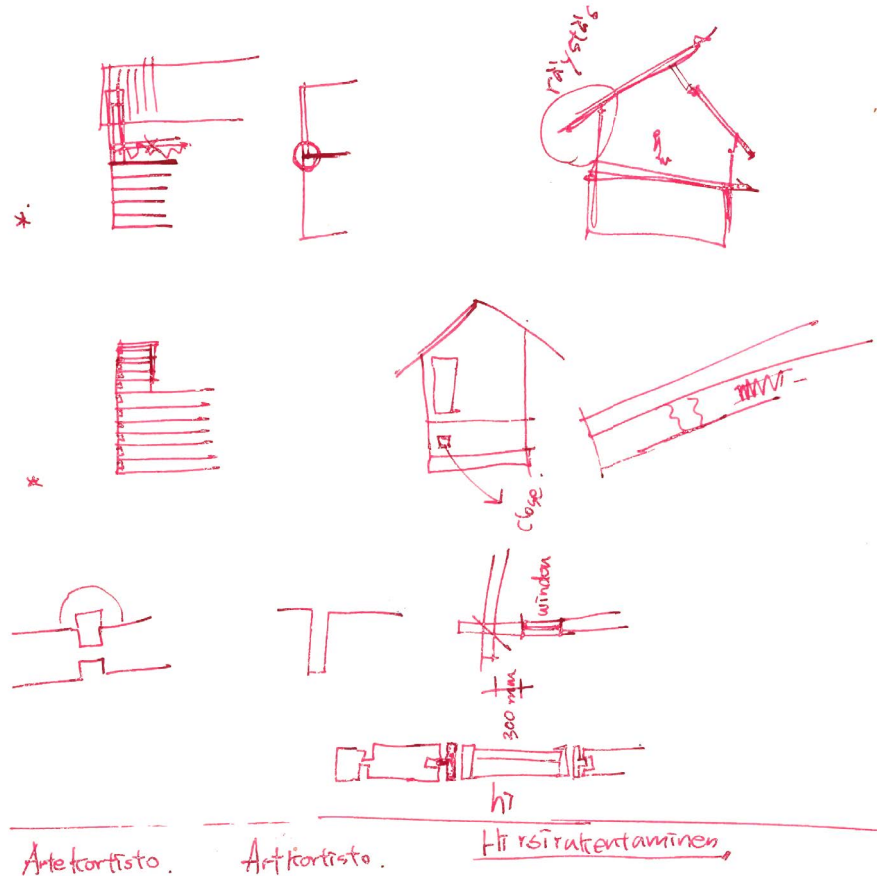
들어올게요

Scale of Korean traditional architecture
Where the idea of module starts.
Sketch

Trial and error

Even in the not so well drawn sketches, there is information to remember. Usually I draw them especially during the guidance sessions as taking notes.

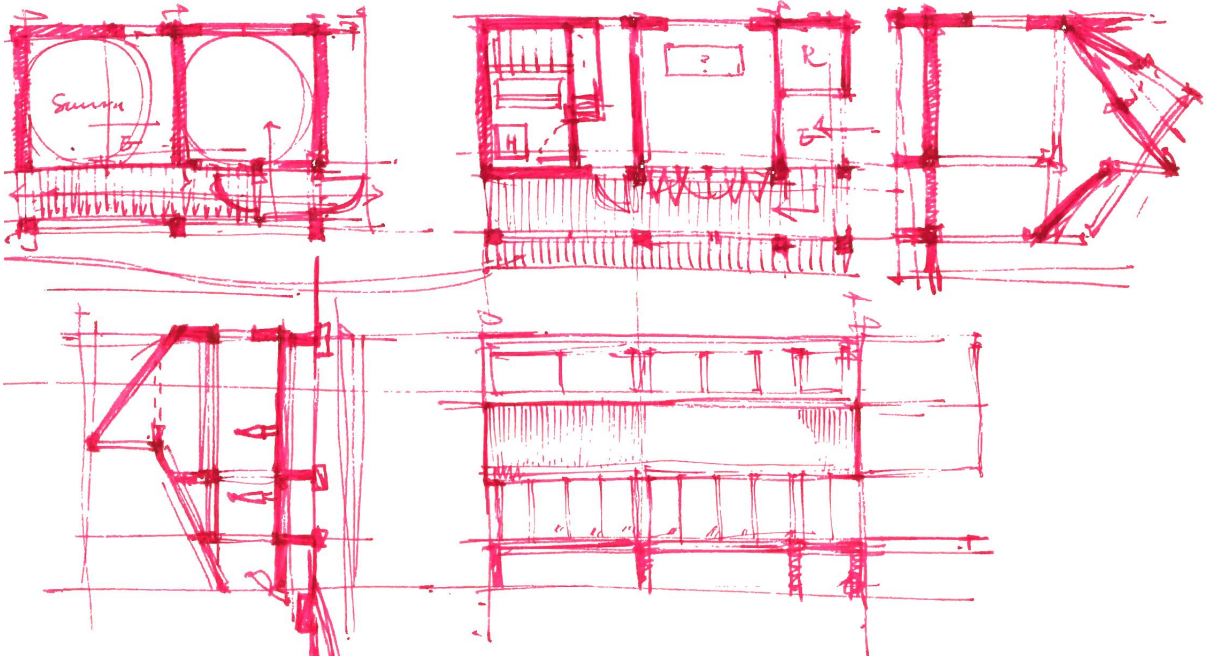
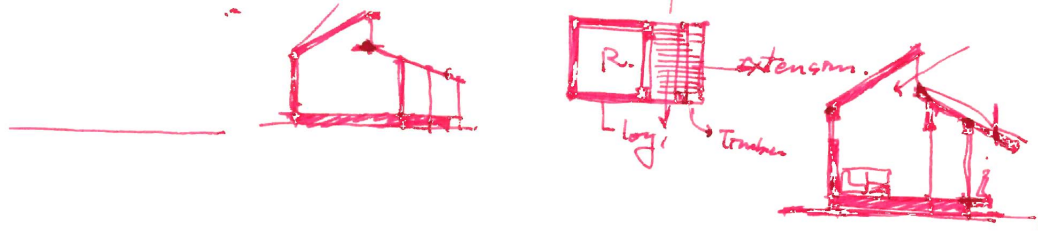
With principal supervisor I had many meetings and each session taking approximately one hour of discussion. The feedback and guidance given by her was critical and very helpful. Drawing sketches and developing ideas through them was highly recommended. Since I knew that I would also like to study my sketches, it became a major method of developing my ideas.



What is needed for Log house

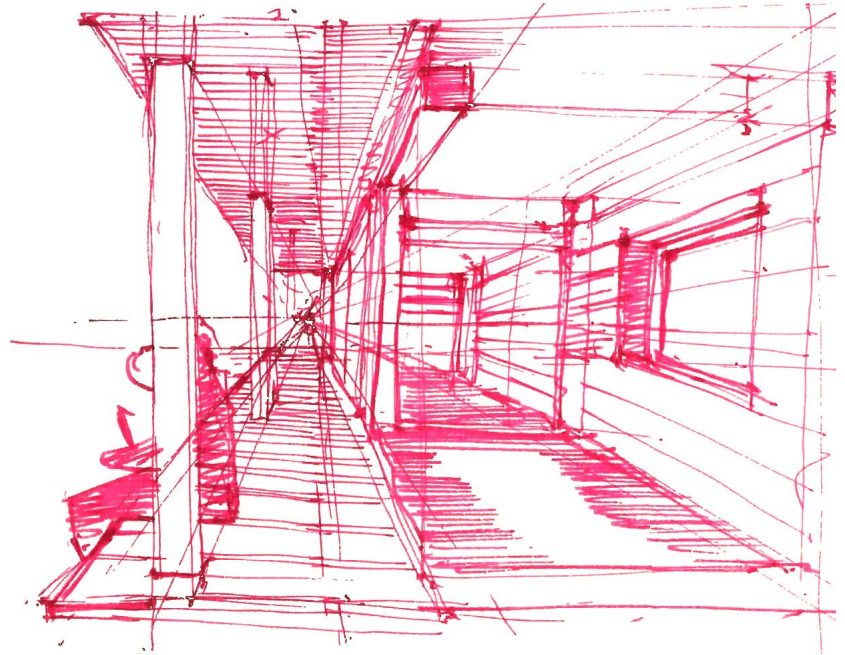
Sketch

things to use. - scale of the room. $3.6(3.3)? \times 3.6(3.3) . m^2$
↑ consider



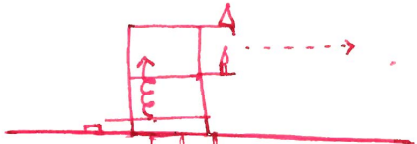
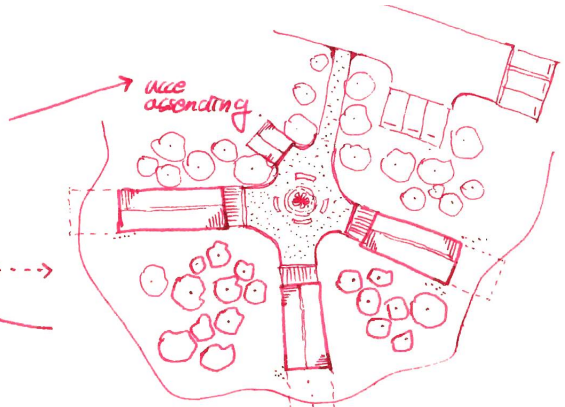
Section sketch of one room
Designing skylight?
Sketch

Even though I had an idea about making a modular system, I first tried to design it as one whole building. Still I wasn't sure about making a module with log structure. As sketches show, I could not get out of the linear form and simple sequence made by corridor.

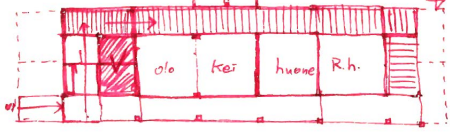


Scene from entrance of the building
Corridor connects view to distance scenery and courtyard.
Sketch

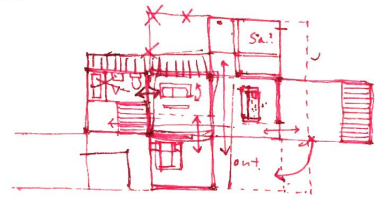
Section figures.



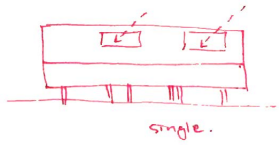
Plan.



View towards.



Roof.



(Possibility is) various?

Interesting shape?.



if there is module... need to go with everything in module?.

* consider as module or not?

~ I think it is more interesting to have as module

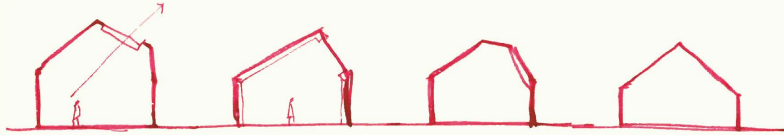
Sketch

Through sketches

Trial and error, finding optimal shapes, shapes that I like, studying through sketch.

Shapes that I would like to try

Making variety of shape and form



Resting space for everyone

Small scale

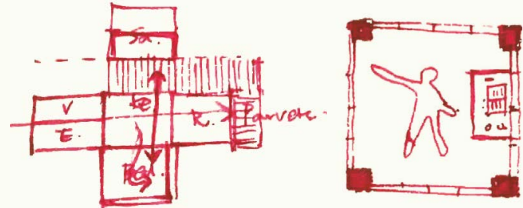
Semi public

Modular system

Small scale

Sketch

What about making module?



Physical model 2B

Possibility of Transformation

Sequence : How to approach

Sketch



Roof style study

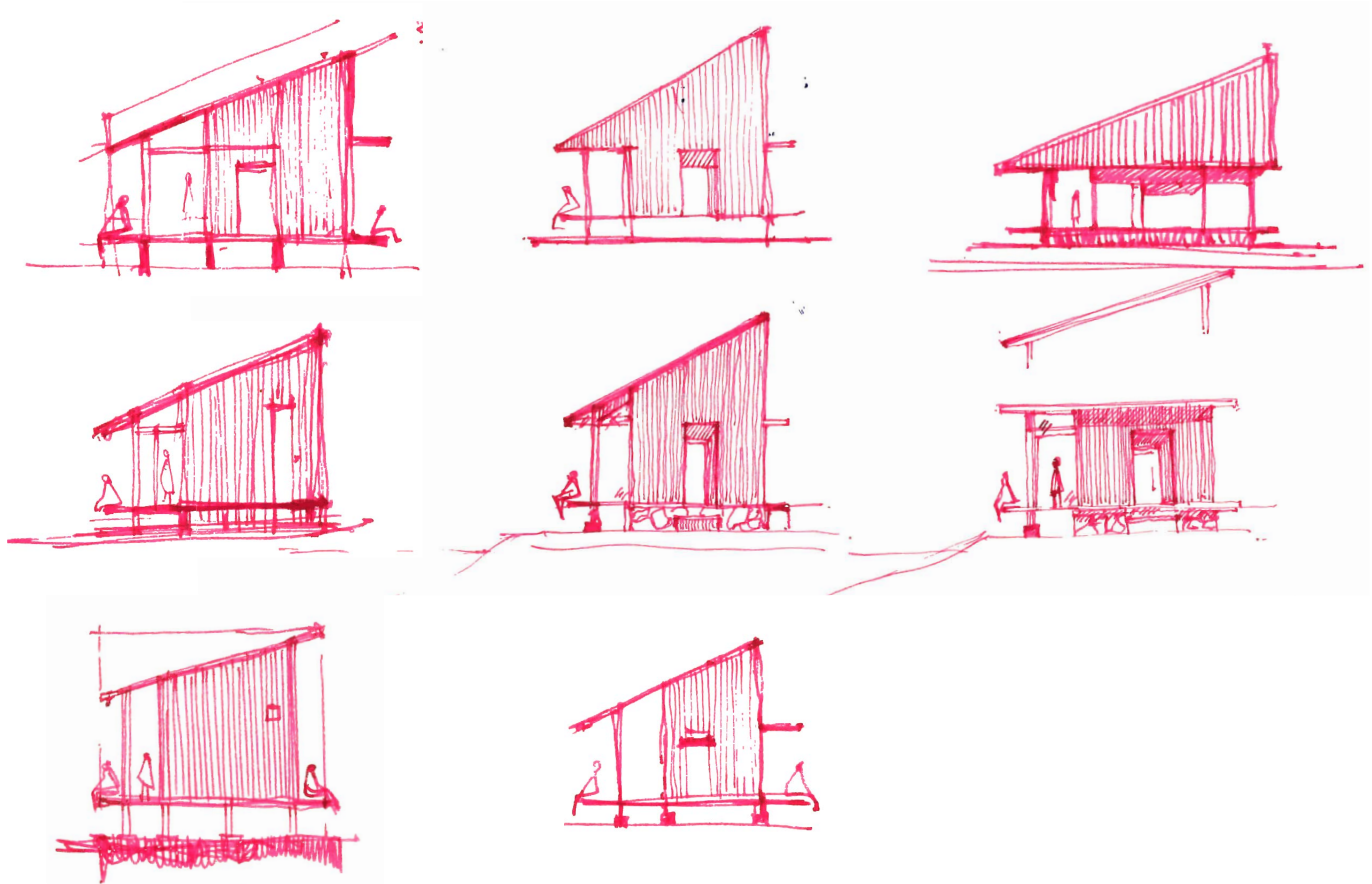
Sometimes it is just about what you would like to achieve from the design process.

I wanted to try out many roof forms at first. Even though they are quite typical roof types and I knew that I would not use them all at the end, I wanted to see the unexpected results or possibilities through sketching. It is critical to see how form works. Drawing rough sketches for several ideas is one of the good ways regardless of quality of drawing.



Roof style study 01

Sketch

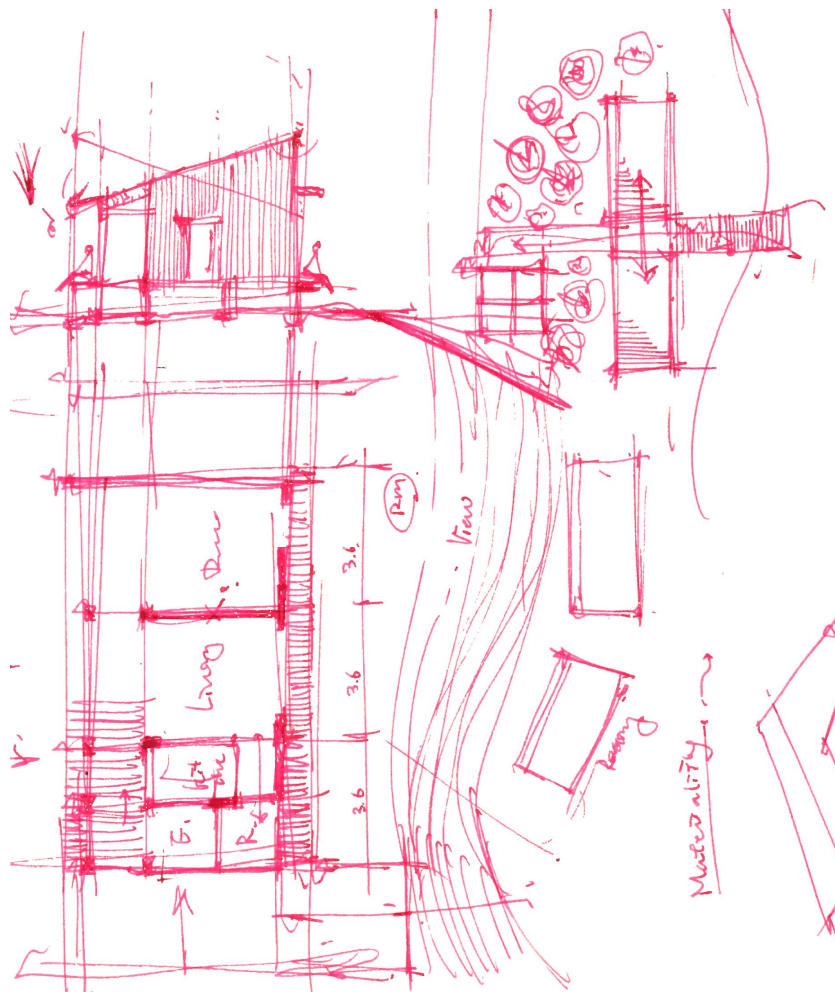


Roof style Study 02-09
They look all different to me.
Sketch



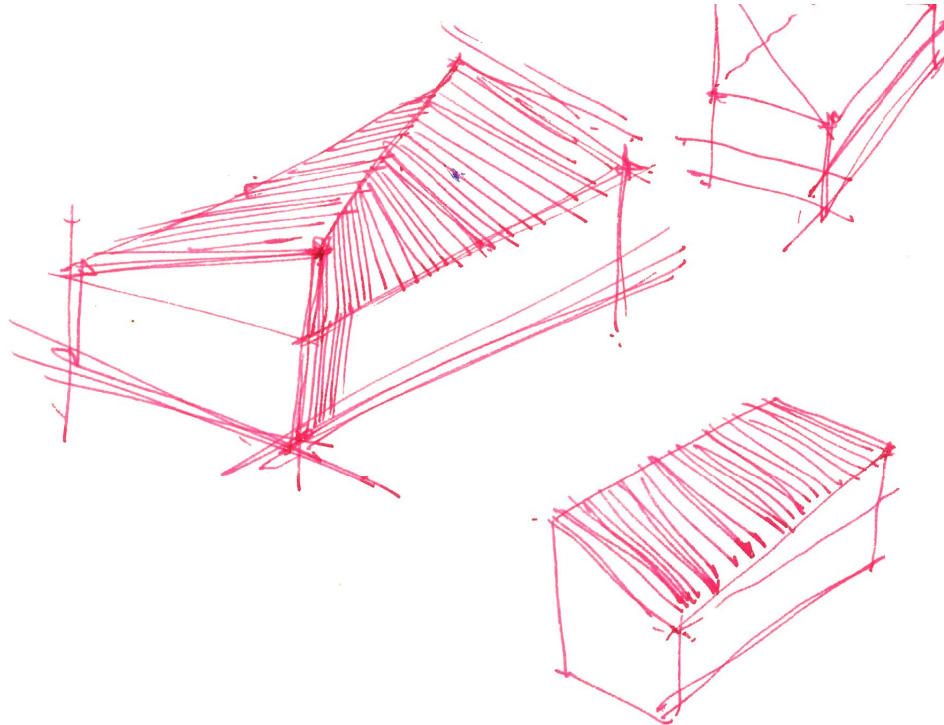
Roof style Study 10

Sketch



Roof style Study 11

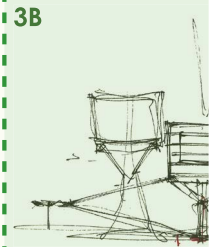
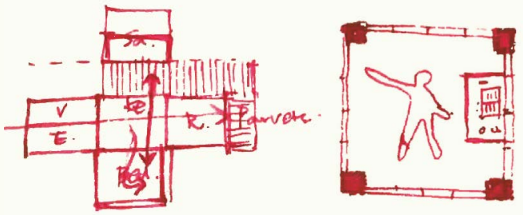
Sketch



Roof style Study 12
CAD modeling is needed when you don't know how to draw the form you want.
Sketch

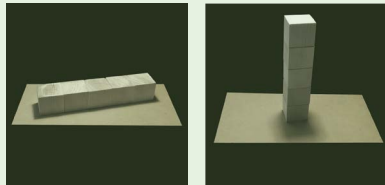
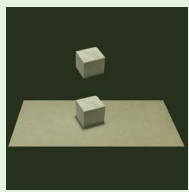
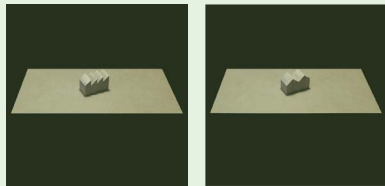
Through physical models (2B)

Studies through physical models, unexpected results, playing with them.

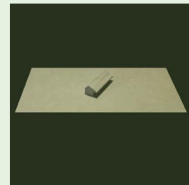
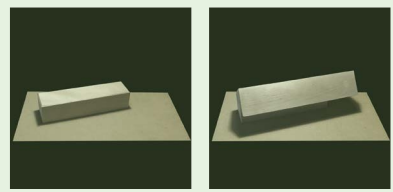


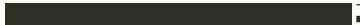
Critical Sketch

Physical model 2B
Possibility of Transformation

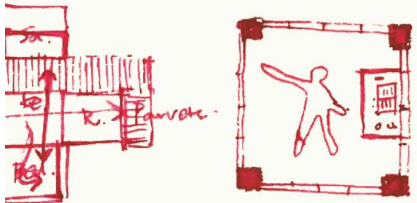


Physical model
Not modular model



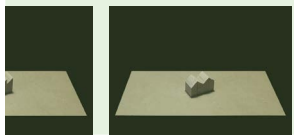


out making module?



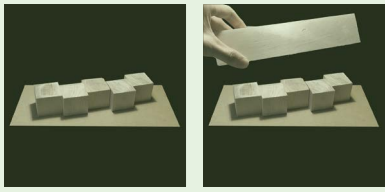
Physical model 2B

ity of Transformation

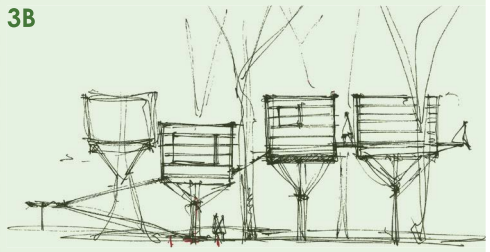


Physical model 2B

Unexpected features while playing with physical model



3B



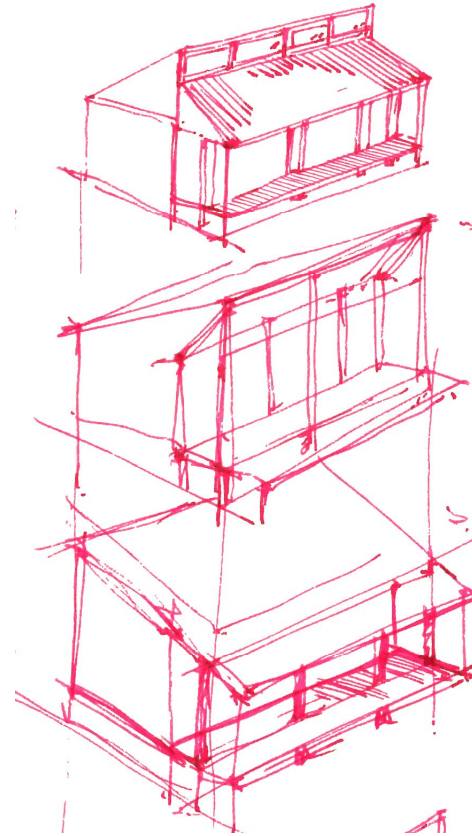
Critical Sketch

Sustainability

Physical model

Physical model study

After developing ideas through drawing sketches, it is important to focus on the functional aspects, such as to contest whether the plan is working or not. Making a physical model is one of the ways to check the idea and develop it further.



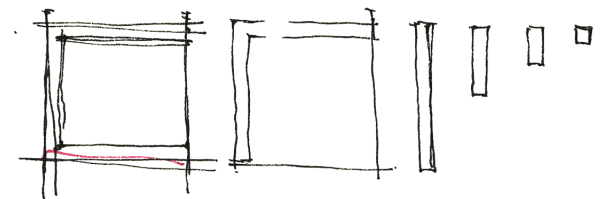
Roof style Study 11-13

Sketch

The interesting thing was also to work with a modular system. While arranging the modules in a straight linear form and playing with them, it turned out that I could use the modules to create various forms. At the same time they didn't need to be connected to each other.

2019. 1. 7.
2020

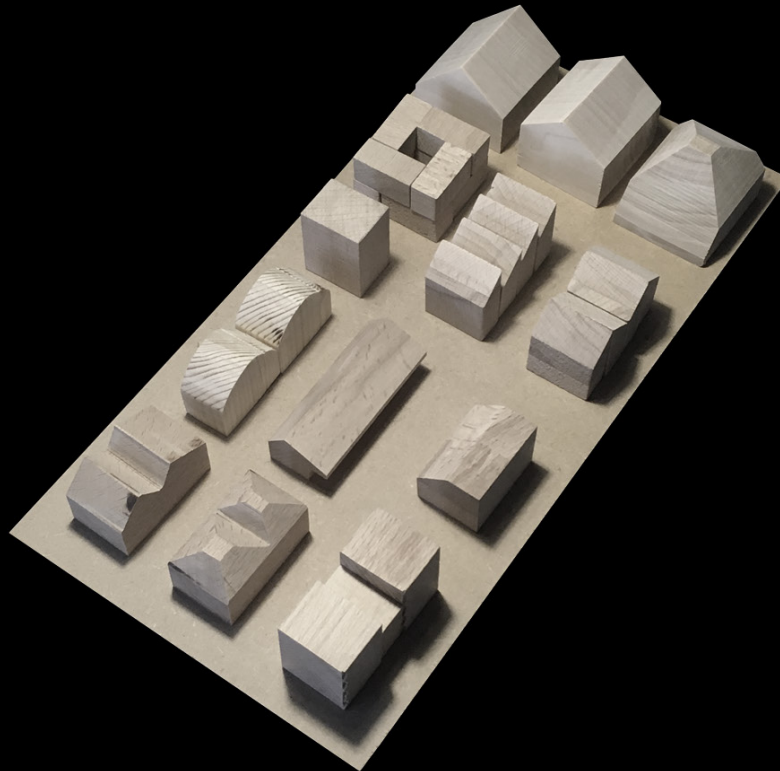
Back to basic.



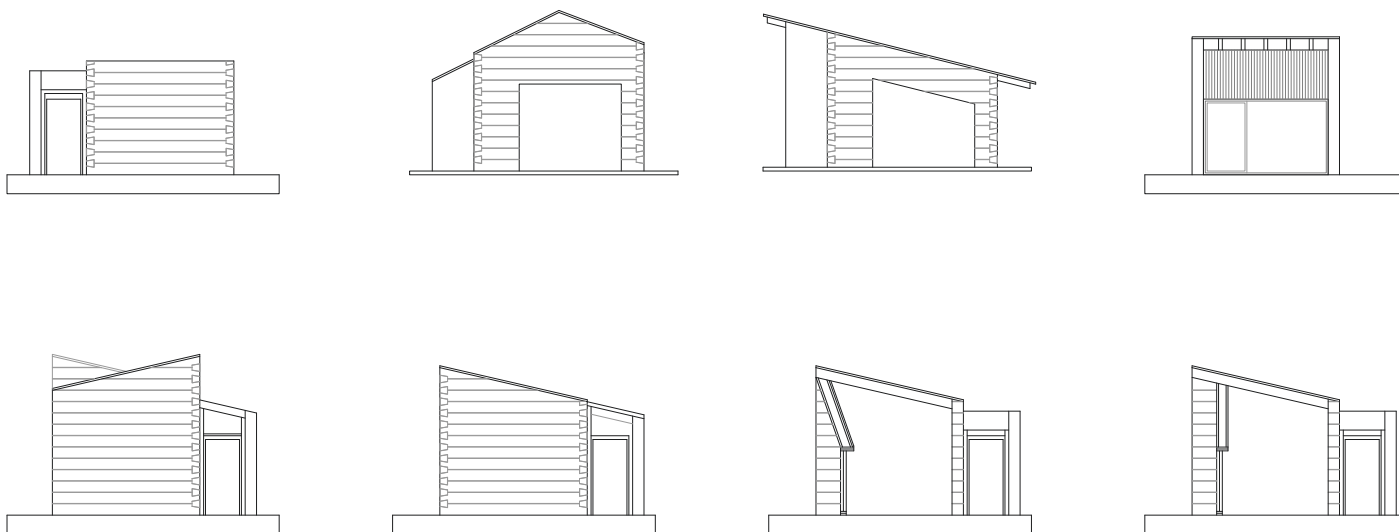
Not Module.

Opening and log components

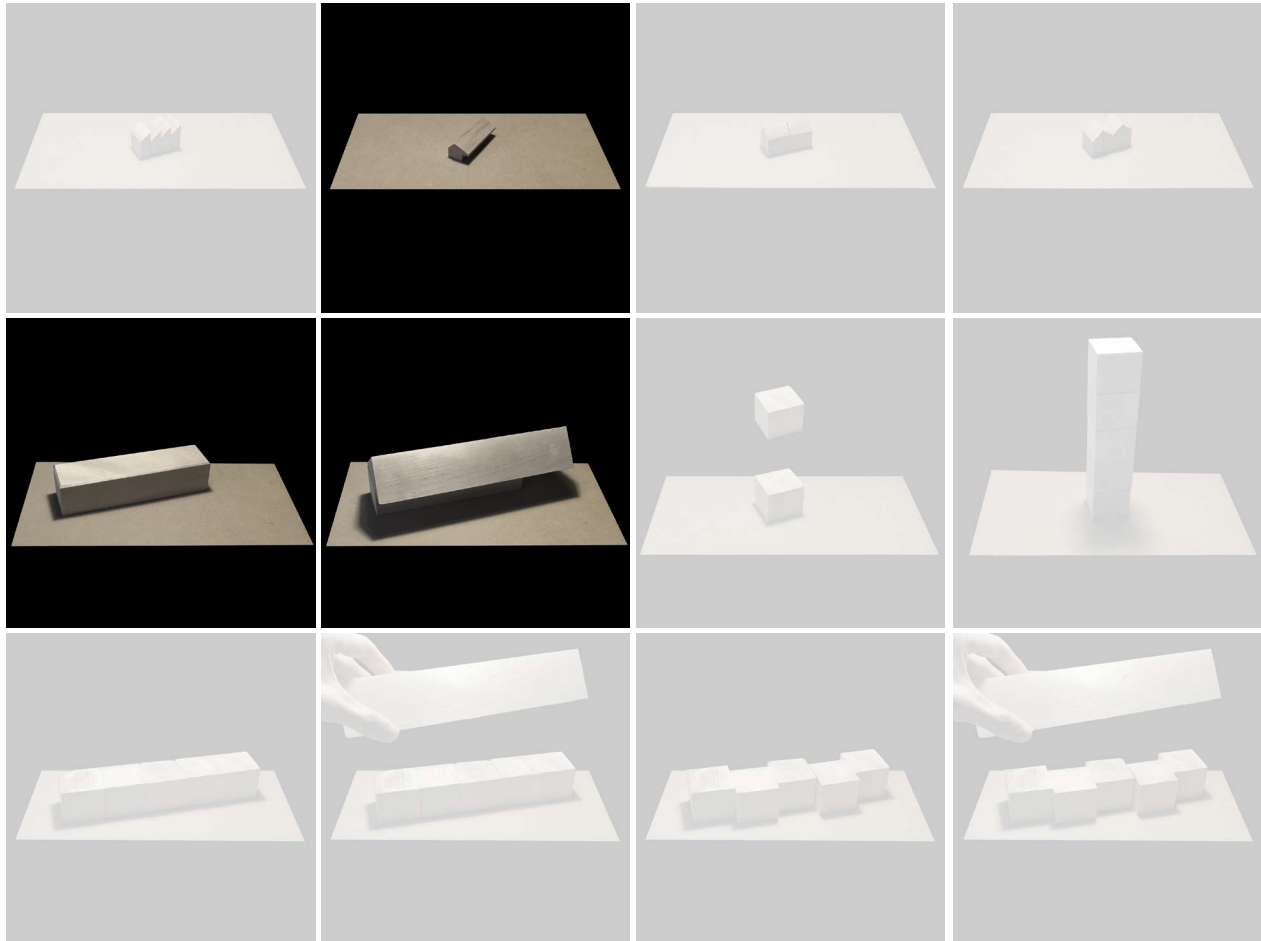
Sketch



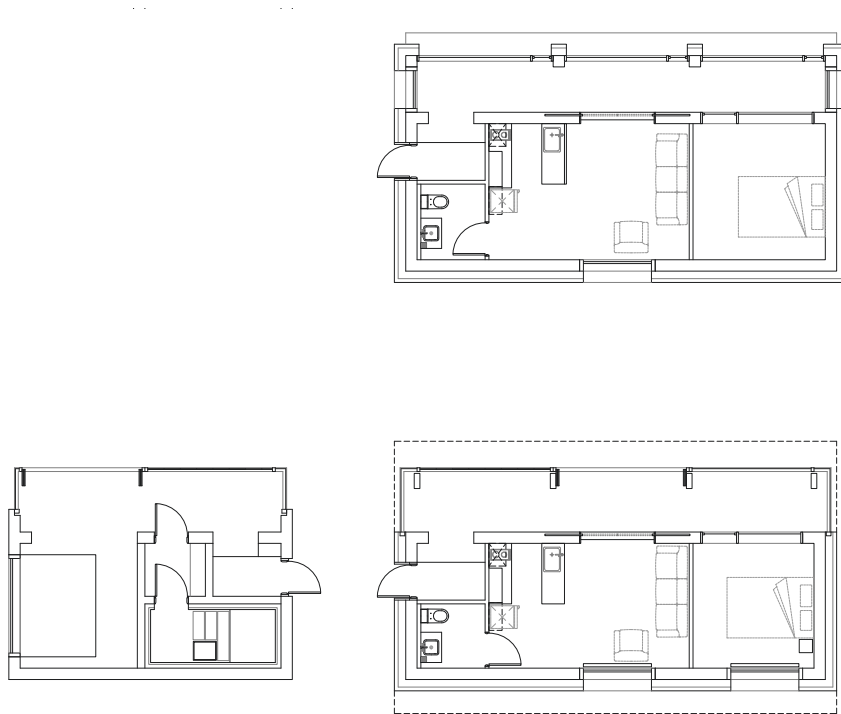
Physical model study
Variation of roof and seeing possibility of modular system
Wooden model



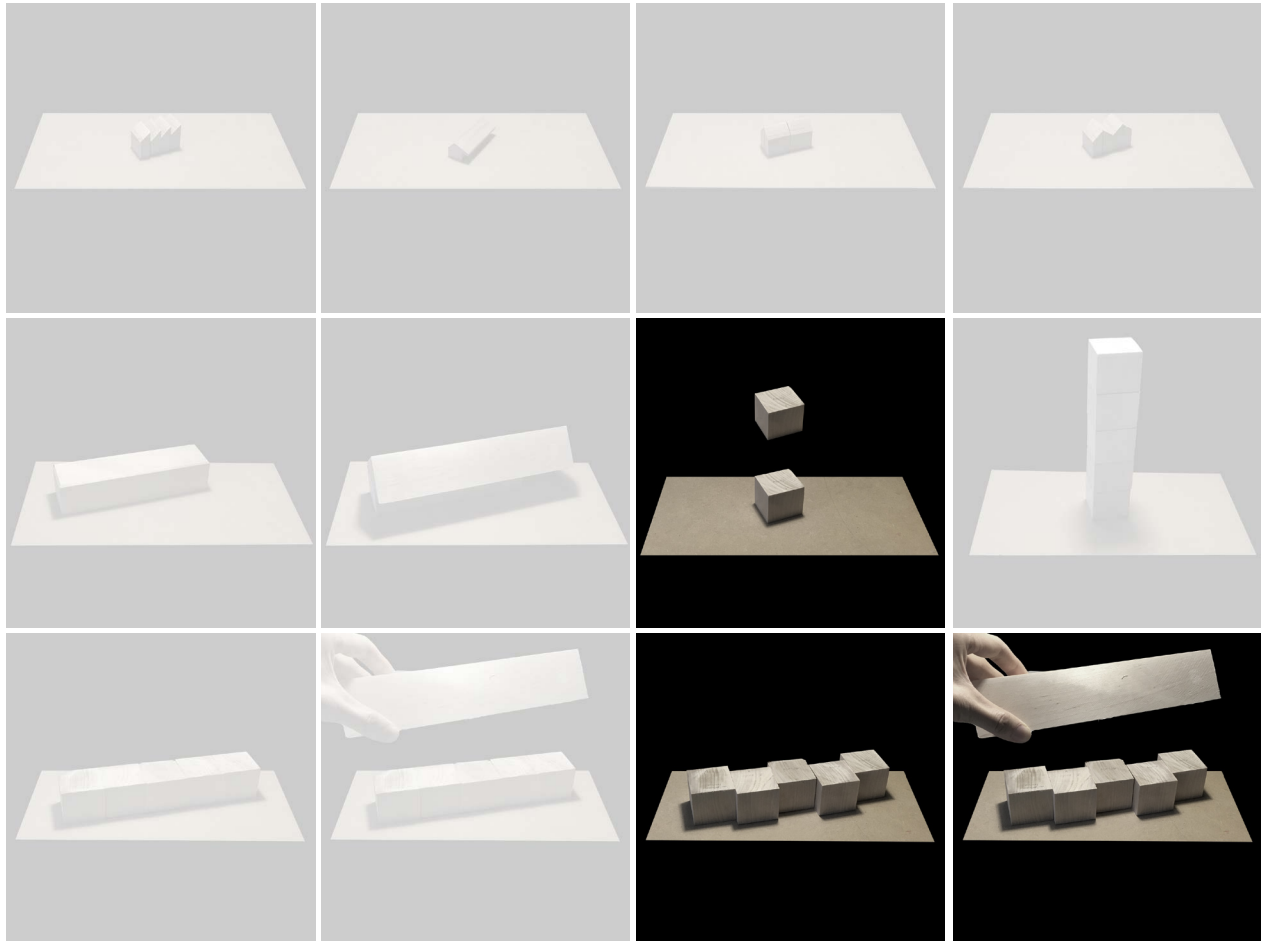
Digital model study
Sometimes I use digital tools to make precise sketches.
AutoCAD Drawing



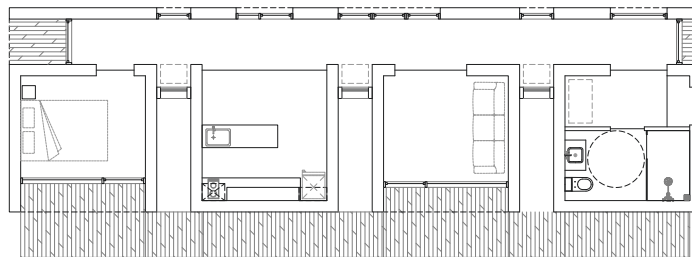
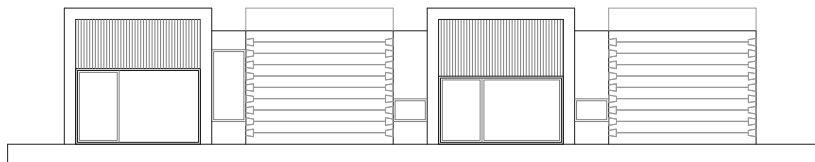
Physical model study
In many cases physical models give ideas to move further.
Wooden model



Digital model study
Based on physical model, I try to make one complete form It is trial, failure and feedback.
AutoCAD Drawing



Physical model study
Physical model study may give you unexpected possibility.
Wooden model



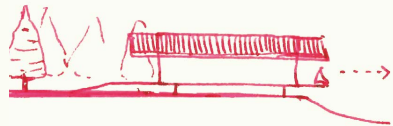
Digital model study
Idea combination with physical model.
AutoCAD Drawing

Critical sketch (3B)

After playing with the physical model, I came up with an interesting idea. This sketch affected the whole design process.

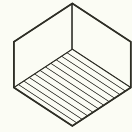
Sequence : How to approach

Architecture as a frame for nature.
What to see when entering home.



Resting space for everyone

Basic module

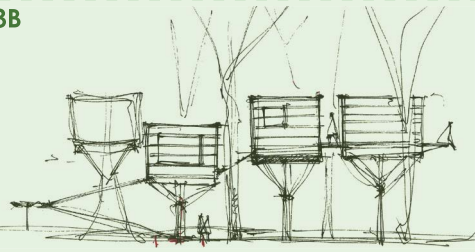


Variation



3B

Sequence : How to approach

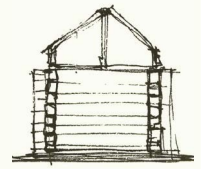
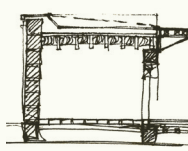


Critical Sketch

Sustainability

Sustainability

Shape of the roof



3B



inspiration

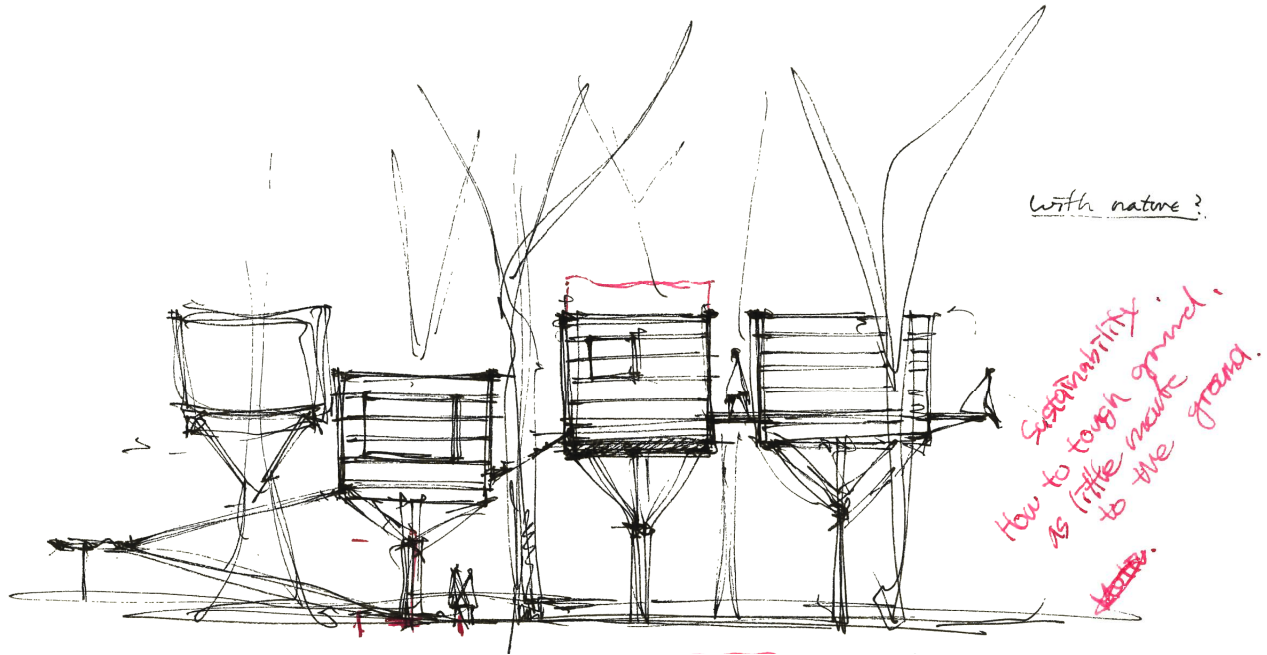
The critical Sketch (3B)

Idea of having an axis was selected. The next step was finding optimal arrangement for the plan layout.

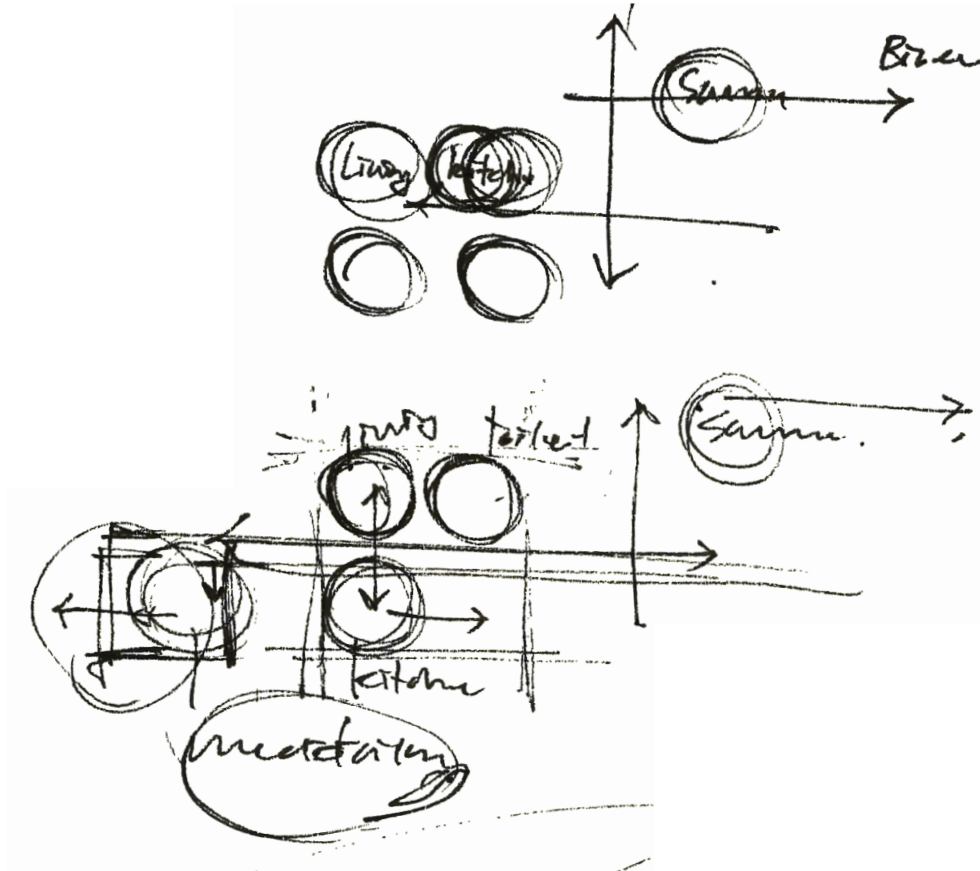
From this sketch the base of the design was created. The idea started with sustainability and its many aspects. Personally, I would like to prefer social and ecological aspects.

Social aspect is to heal and refresh people through good architecture. Even though designing a house for a single person, I think it is important to give space for social events. For example when it comes to a single room apartment, it is quite small to invite many friends. Therefore, in the apartment building, there should be common space such as a club room or small pocket space next to the corridor where some events could be held.

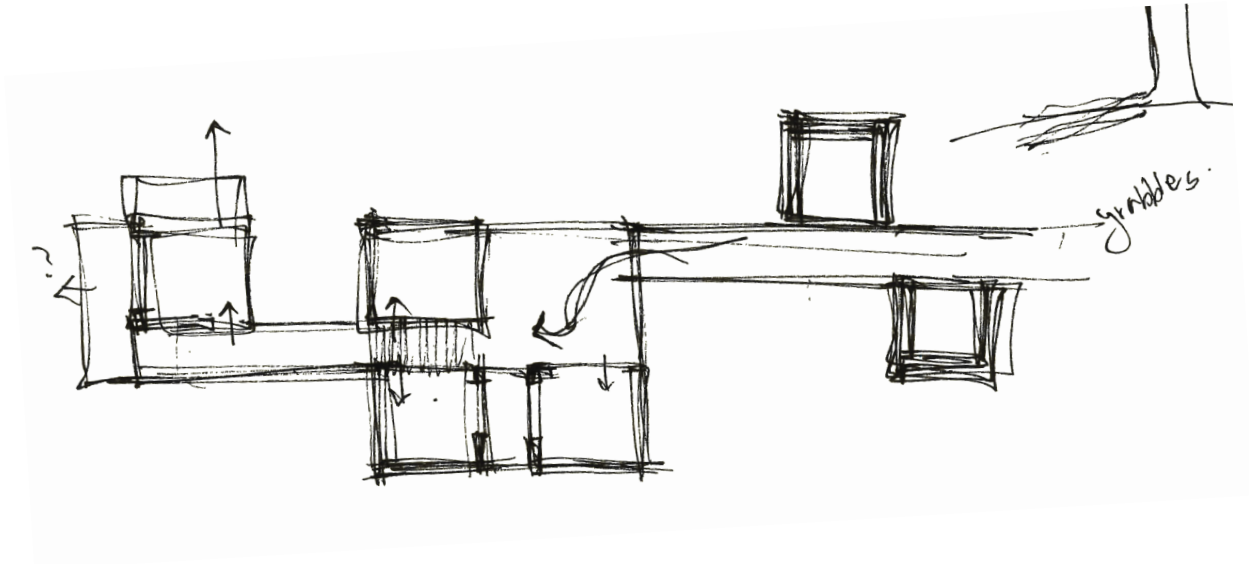
In this competition, while developing the plan layout, I tried to make also small common space outside which could be connected with the living room and kitchen both visually and physically.



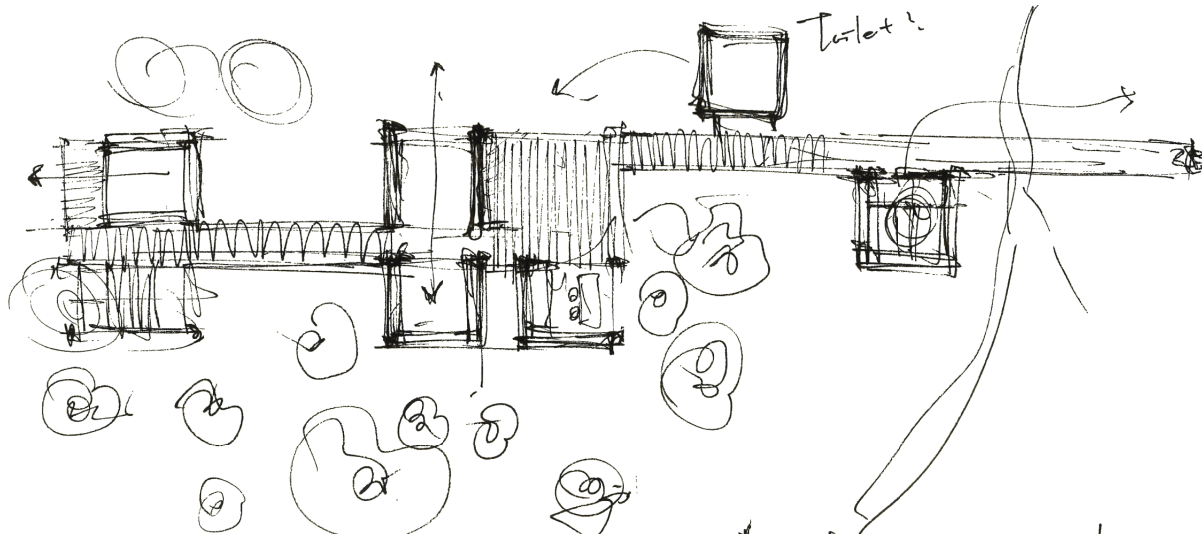
The critical sketch
Sustainability, touching ground as little as possible
Sketch



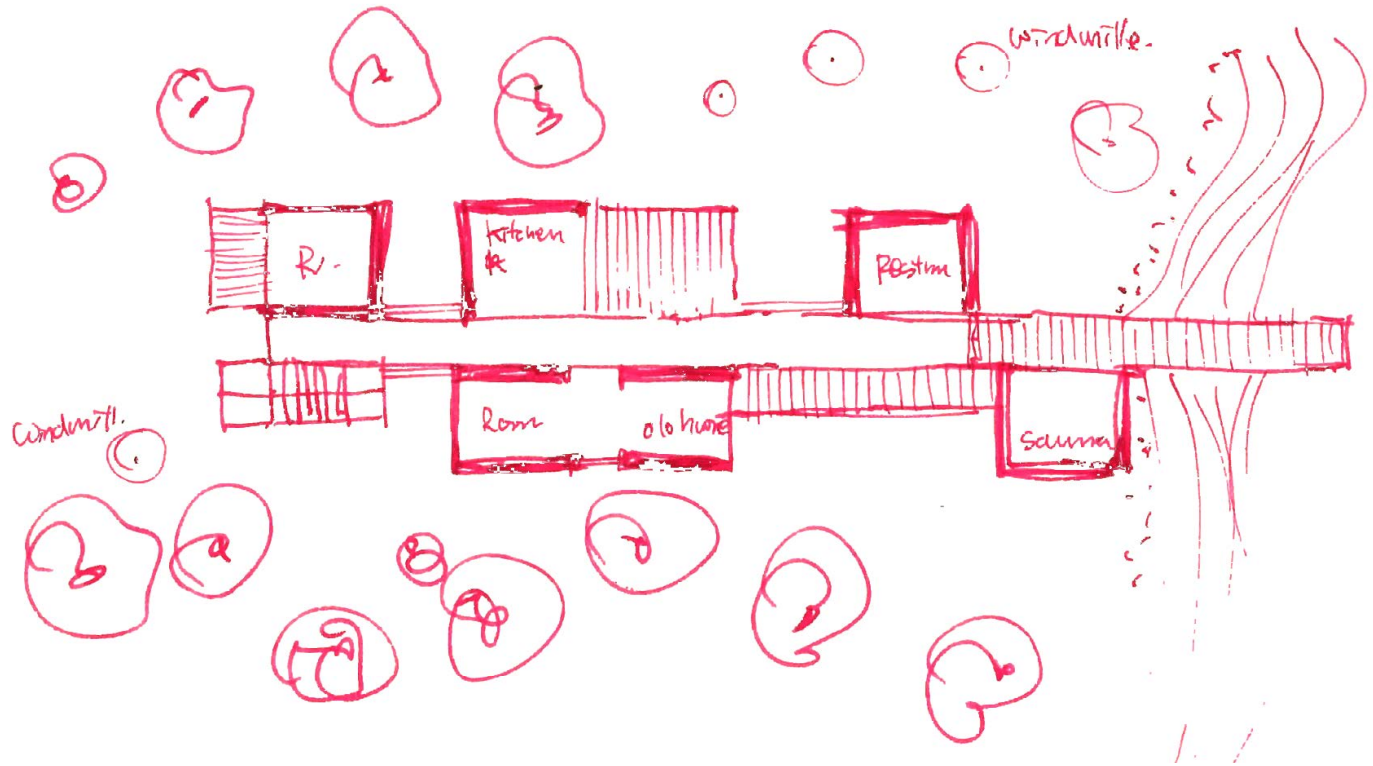
Sequence diagram
Plan layout, connecting common space with other rooms
Sketch



Plan layout sketch 01
Modification, small change, little turn to make privacy
Sketch



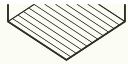
Plan layout sketch 02
Modification, giving distance to bedroom to have more privacy
Sketch



Plan layout sketch 03
Modification, having straight and strong axis
Sketch

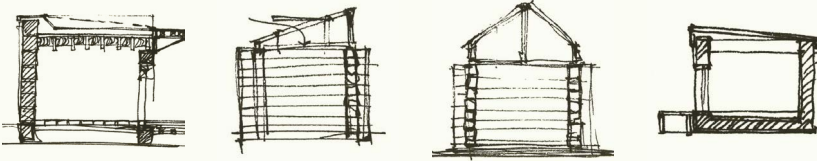
Sustainability, references and style study

Minimum impact on the ground, design through trying out various solutions.



For forest house competition

Shape of the roof



3B

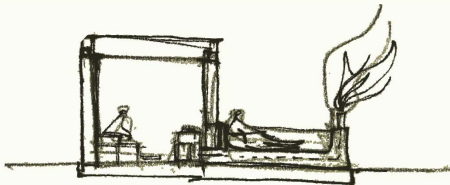


inspiration by Nilliaitta

How to touch the ground / Site



Sauna and outside bath?



Sustainability

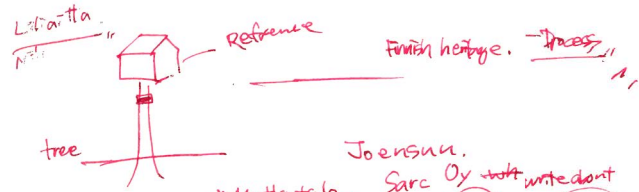
Ecological aspect was another thing that I would like to consider. Perhaps in urban areas where most of the infrastructure already exists, making distance from ground would not affect the underground ecosystem. However, in a forest, it is important to think about the underground ecosystem as well.

Touching as little ground as possible, my strategy was to preserve the underground ecosystem. First approach was not touching the ground at all by using trees as base structure, holding base log beams on top of them. However I wanted to make it more stable and easy to maintain after the building was completed.

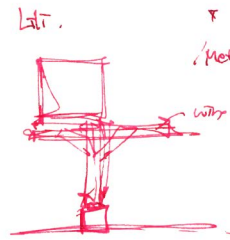
I moved on to the next approach which was to lift the whole building structure and deck above the ground. Later on in a guidance session I found out Finnish traditional solution called 'niliaitta'. Simple structural solution and shape was inspiring and I wanted to integrate the idea to my design. Later the structure developed to a tree shape.



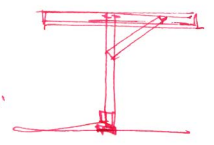
Nilaiitta
Finnish traditional architecture, inspiration
Picture from Wikipedia



Joensuu.
* Metta-talo, Sarc Oy
* Tree hotel: sweden / References
* Sami rrontala: marco casagrande.



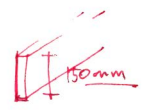
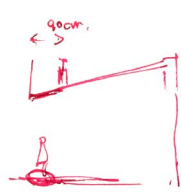
* Osten
* Metsä teta teta kestus.
* communicate with.
* bitumen roof.



* Burning Peltava kuru kelpänsäädä, - Burning toilet.



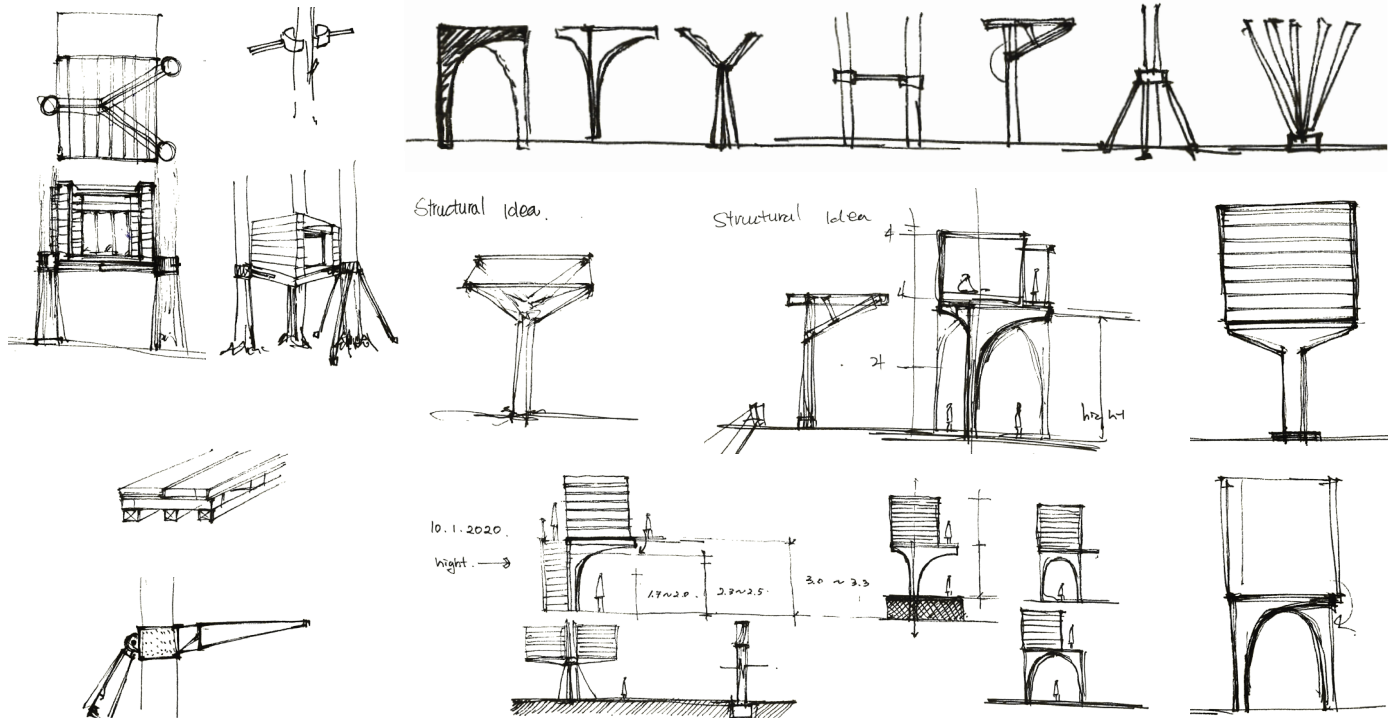
* ilmalämpöpumppu. air source heat pump
ilmalämpöpumppu.



21st JAN 14^h

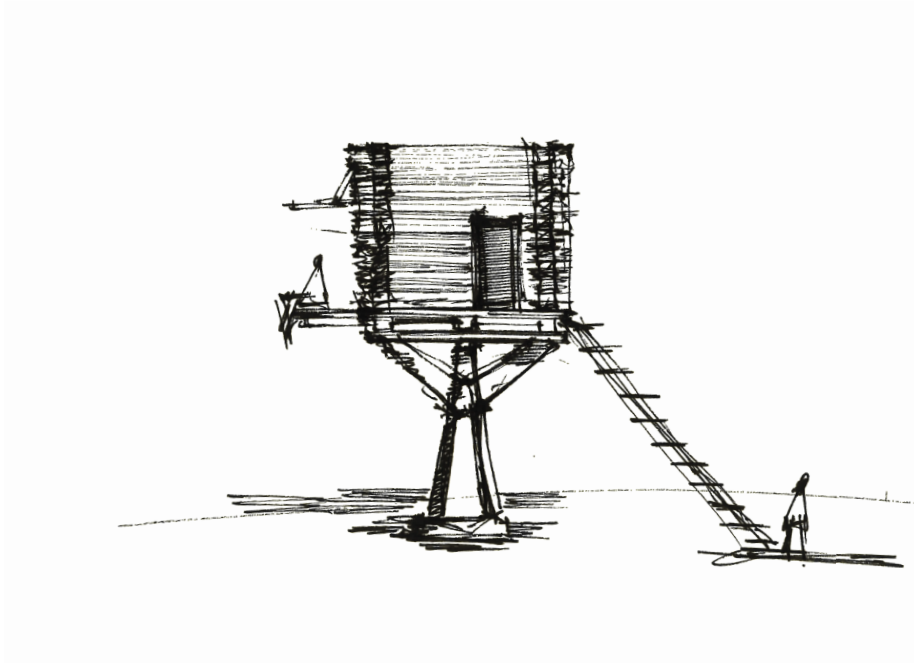
Developing idea of structure

Sketch

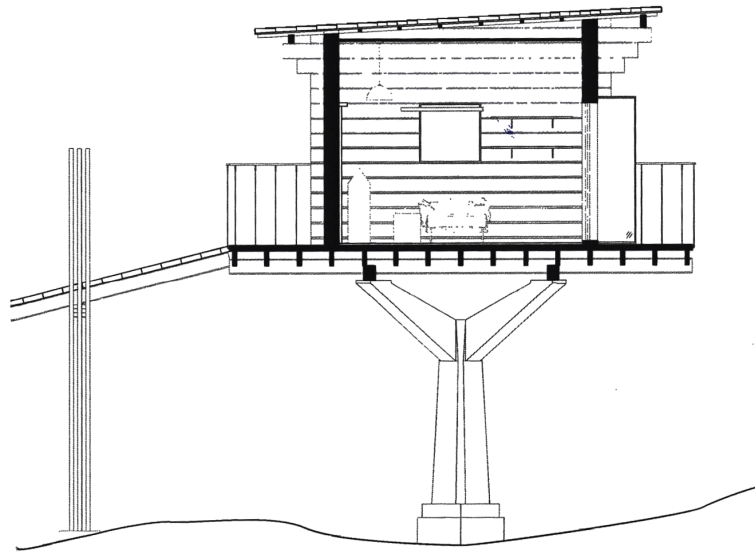


Developing idea of structure

Sketch



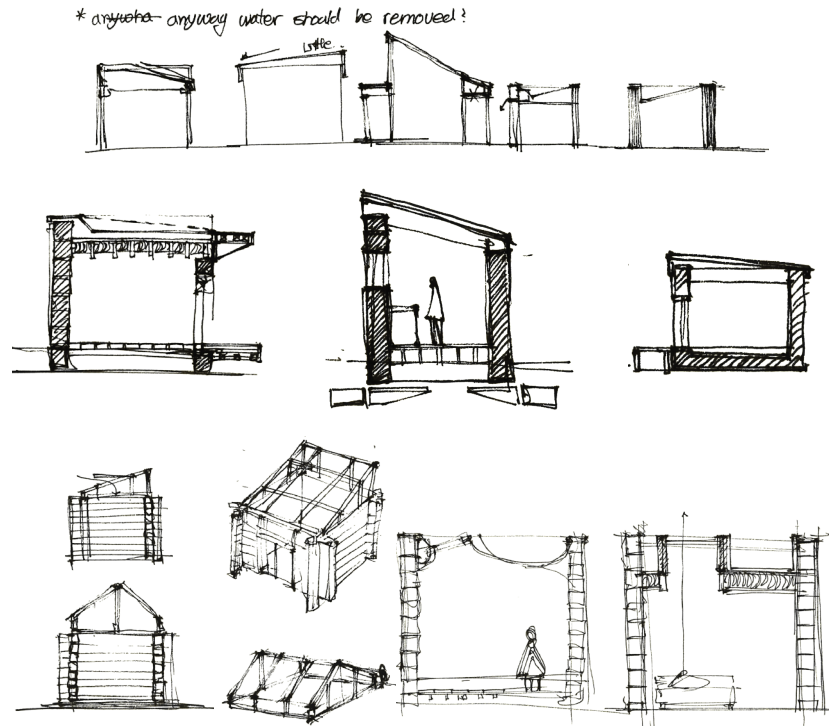
Idea sketch
Having distance from ground, meditation room
Sketch



Idea sketch
Sustainability, touching ground as little as possible
Sketch

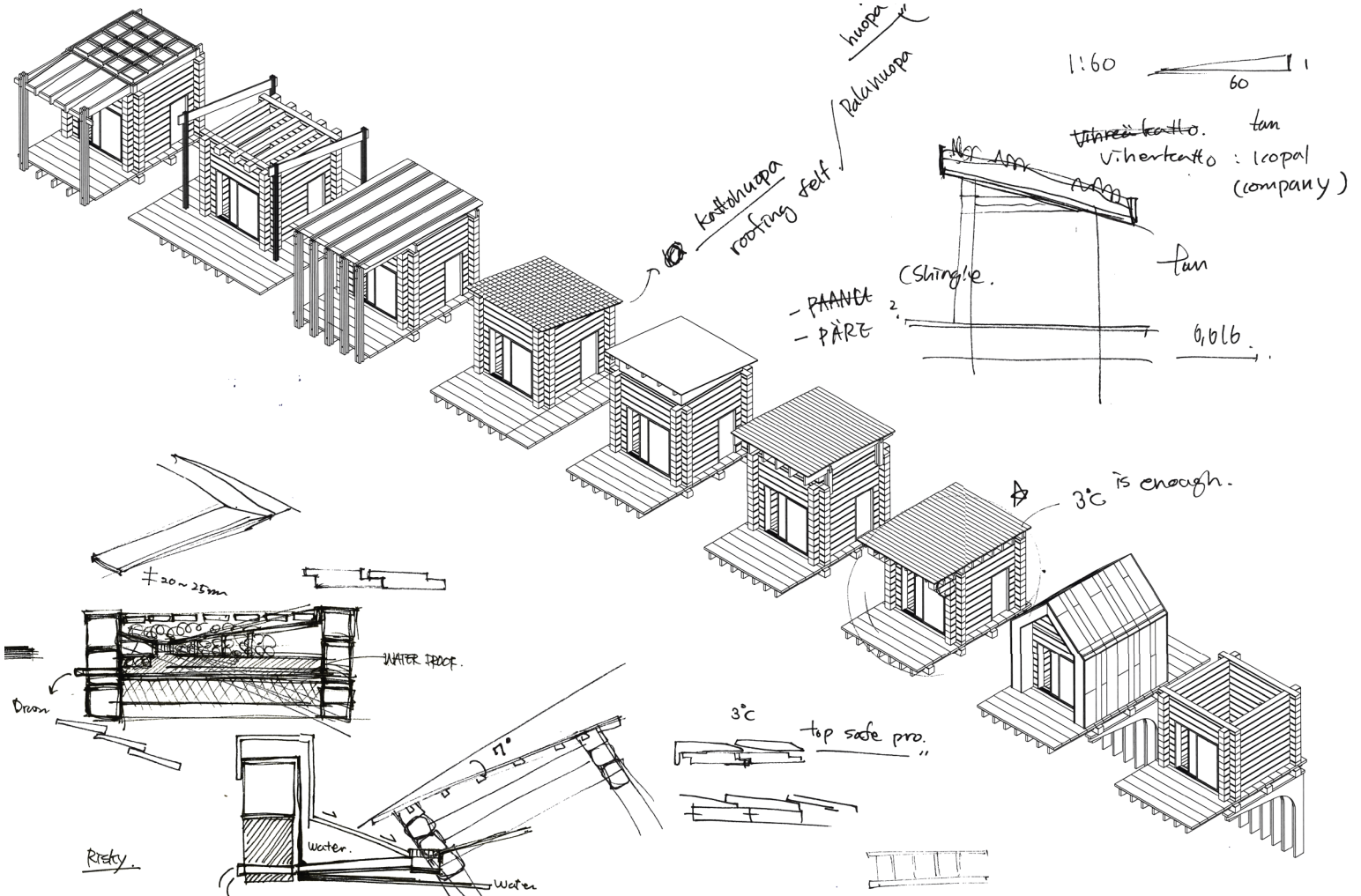
Roof style study

Through the roof style study, it is possible to see whether the sketches actually worked well or not. Through 3D modeling, I also evaluated the details that I drew. In this case, it was also a good exercise to think how the log structure's joints work and how those various types of roof could be attached with the structure.



Roof study with hand drawn sketch

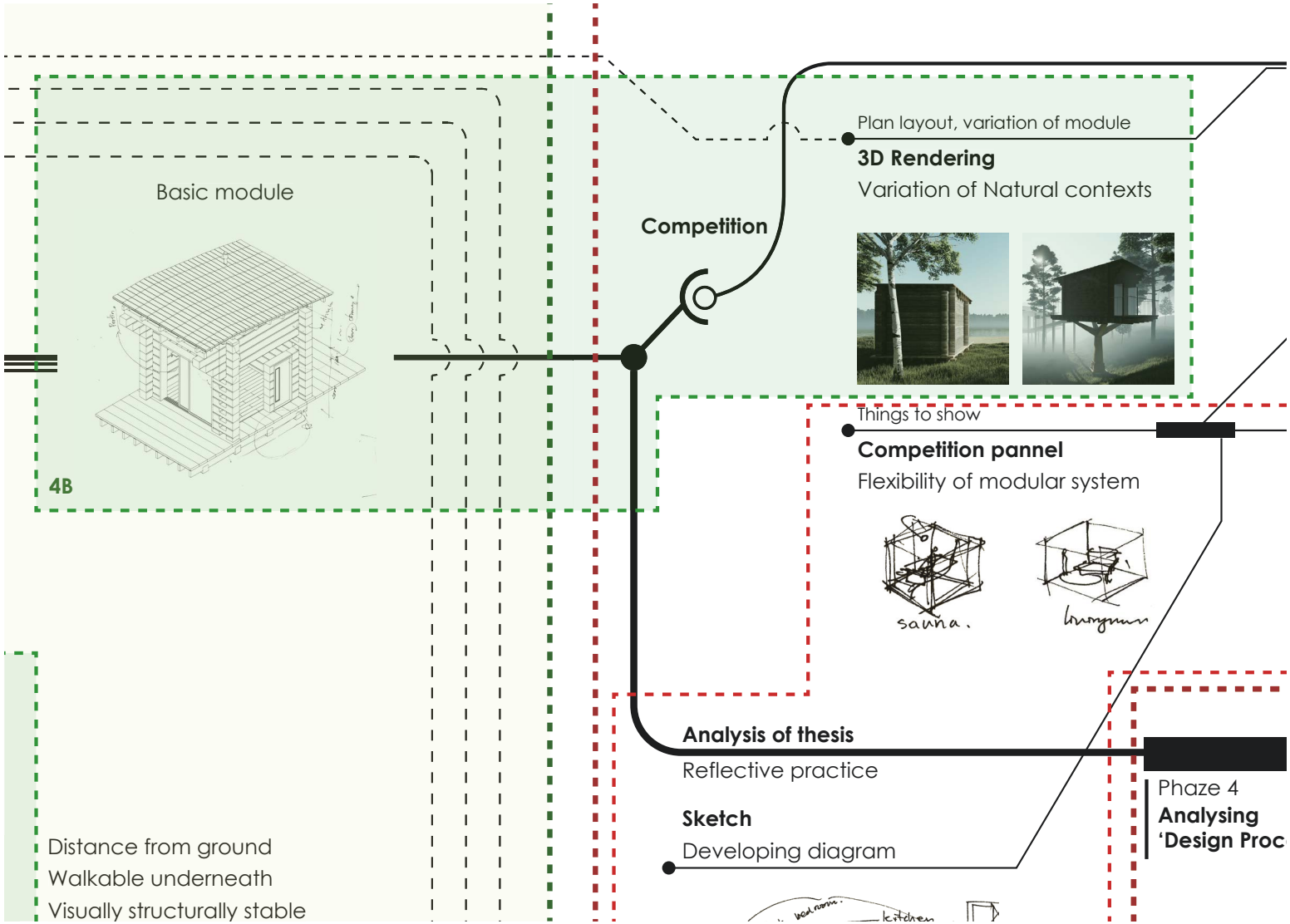
Sketch

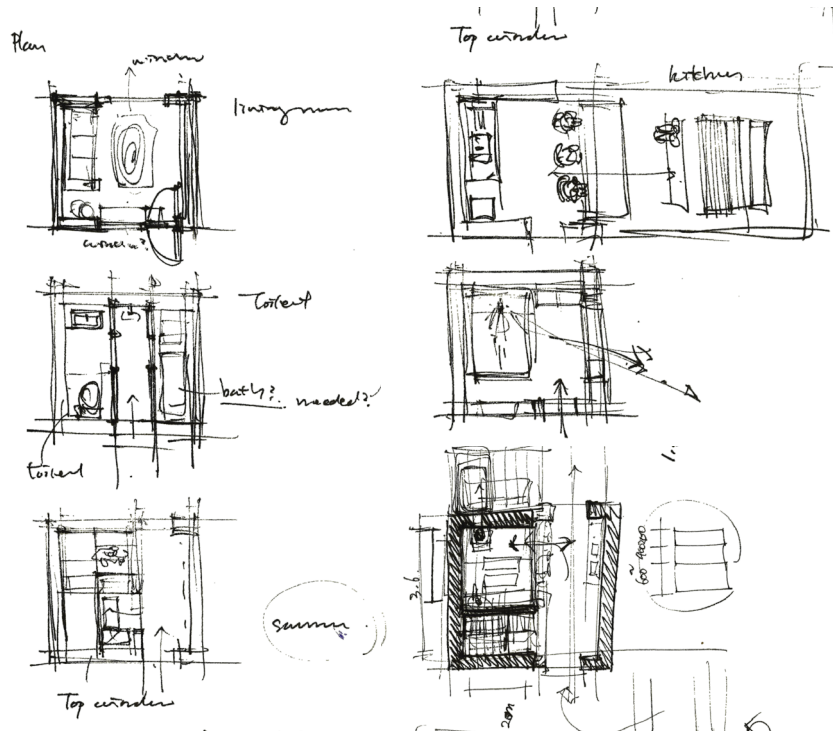


Roof study with 3D modeling
I needed to choose right style of the roof.
Isometric diagram

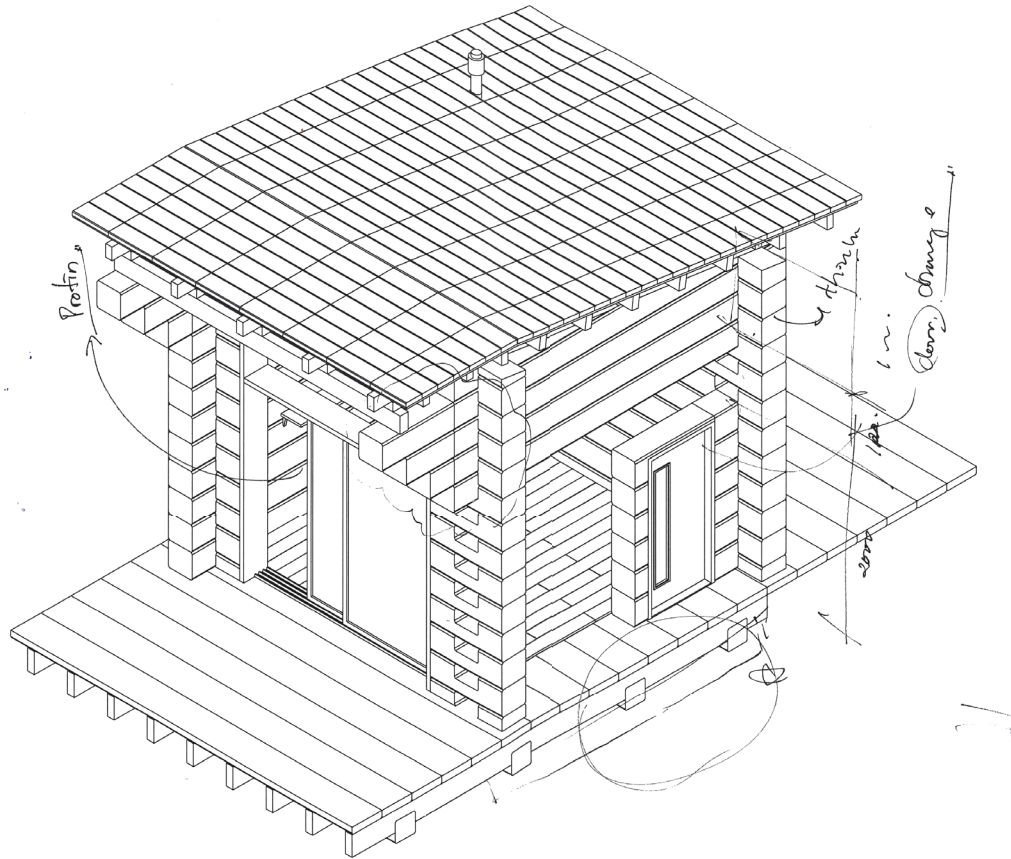
Basic module (4B)

Finishing the basic module and applying it for current condition: forest.





Plan layout of modules
Conceptual, deciding where to open and how to access
Sketch

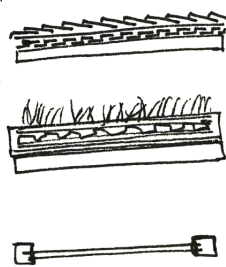


3D model study
Some part of the designs are also inspired by Korean traditional architecture
Isometric diagram

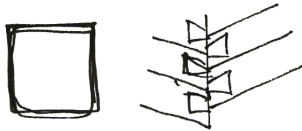
21.1.2020.

After the meeting with Antti. :-

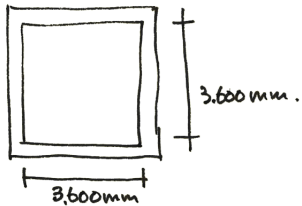
- Roofing
 - ① thin paanu roof 3°
 - ② medium green roof 3°
(Traditional + Modern)
 - ③ Glass roof



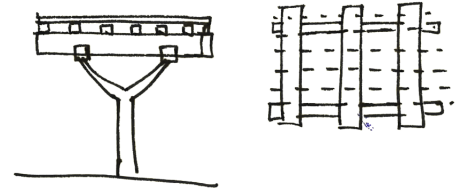
log size 205 ~ 220. / W x D.



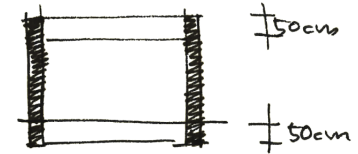
Room size



Base structure



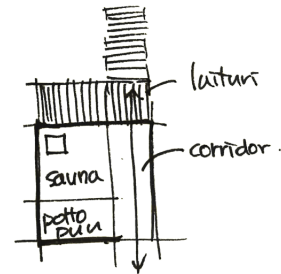
Insulation.



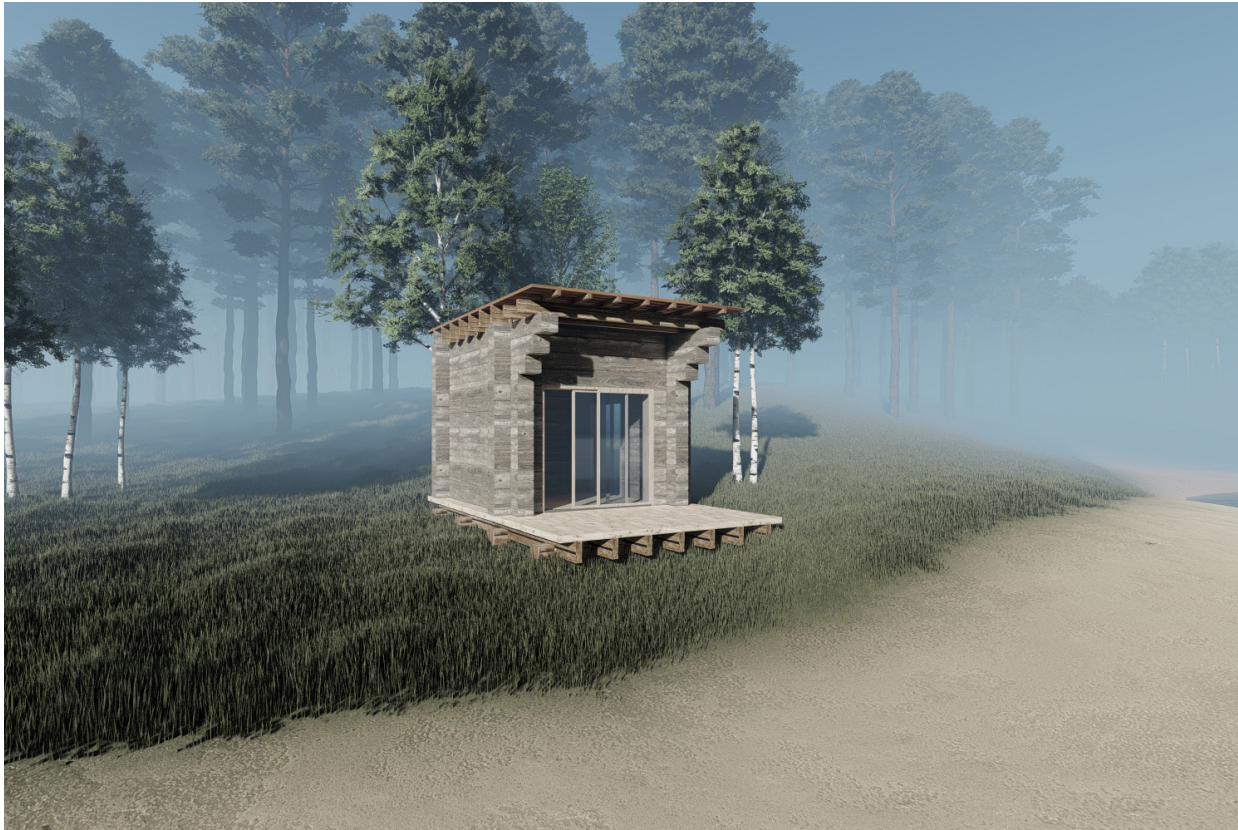
Section drawing first

Plan drawing under.

Sauna



Things to decide or to show
 In this stage, I still didn't decide how to cover the roof.
 Sketch



3D rendering study 01
Materiality and atmosphere
3D render



3D rendering study 02
Materiality and atmosphere
3D render

Phase 3

Results

Things to show (1C)

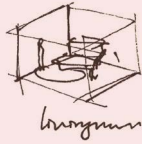
Making diagram, deciding what to show, how to explain design work, board layout.



Things to show

Competition panel

Flexibility of modular system



Things to show

Layout of Final presentation

It is also important to show how to show the work.



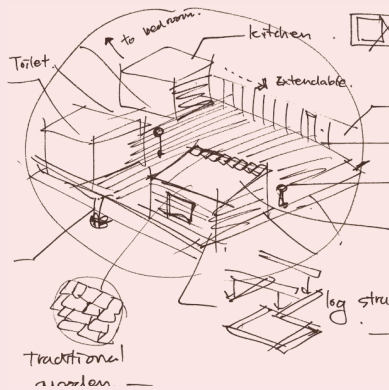
1C

Analysis of thesis

Reflective practice

Sketch

Developing diagram



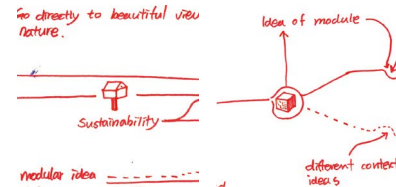
Variation of module, mutation

1C

Phase 4 Analysing 'Design Process'

Sketch

1st and second sketches.
Digitalizing hand drawings.



Diploma work

Starting point

Idea

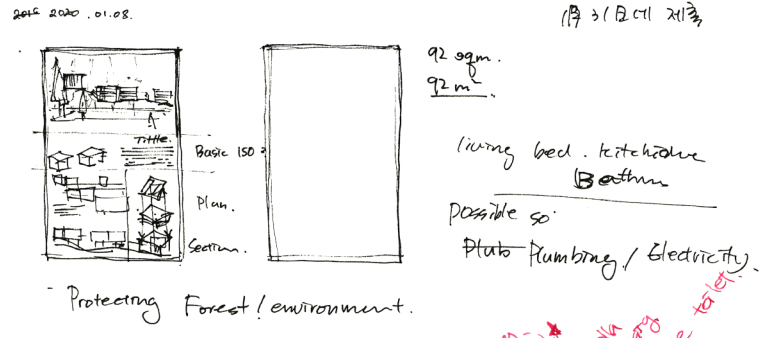
Things to show (1C)

In this Phase 3, the procedure of making results of competition is presented first. The materials were made to explain the important features and aspects related with the competition requirements. The perspective view images are focused on delivering the general atmosphere of the house. The sustainability and functionality aspects are featured in the images with isometric diagrams. After the materials had made, the final board was completed. All the materials and the layout of the final board had developed through sketches.

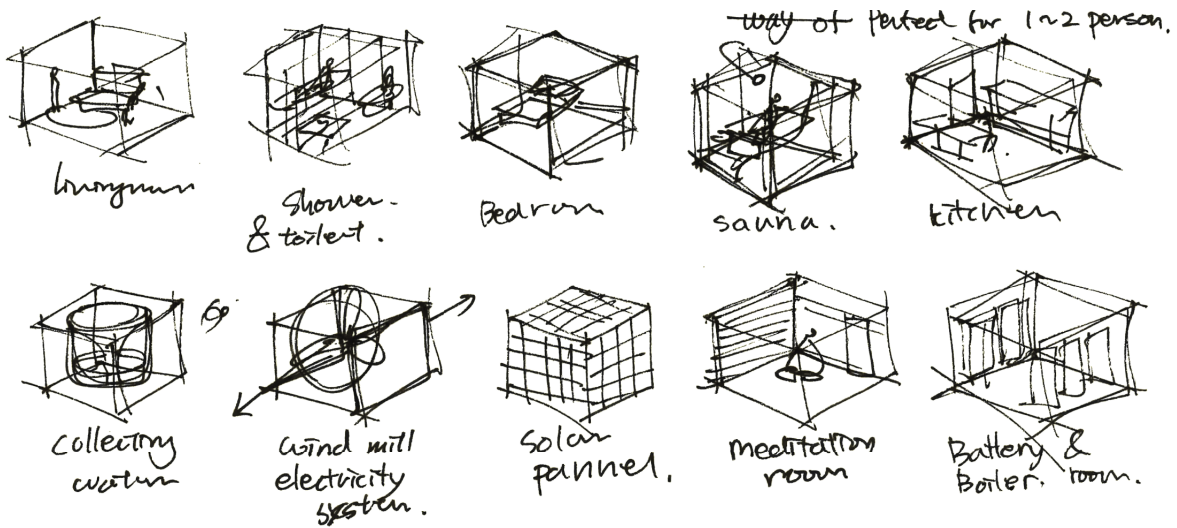
Competition call

Briefly, I would like to mention the forest house competition. It was about to design a small scale wooden house in maximum 100sq.ft floor plan, no more than 3 floors. There was freedom of choosing site location and construction method. It was also possible to suggest a new lifestyle. However the solution should be practical and sustainable.

"...This year's competition focuses on wooden houses, an extraordinary architectural style with traditional methods of building with heavy timbers, prefabricated wooden structures or creative light-wood frame with other components. Entrants are challenged to conceive a new and original concept for wooden house, however not strictly limited to the style of 'full-timbered structure'. A degree of flexibility and alternative choices are allowed, for example 'half-timbered' or 'partially wooden', provided it is backed up with adequate justification. The project area is defined in a forest environment..."



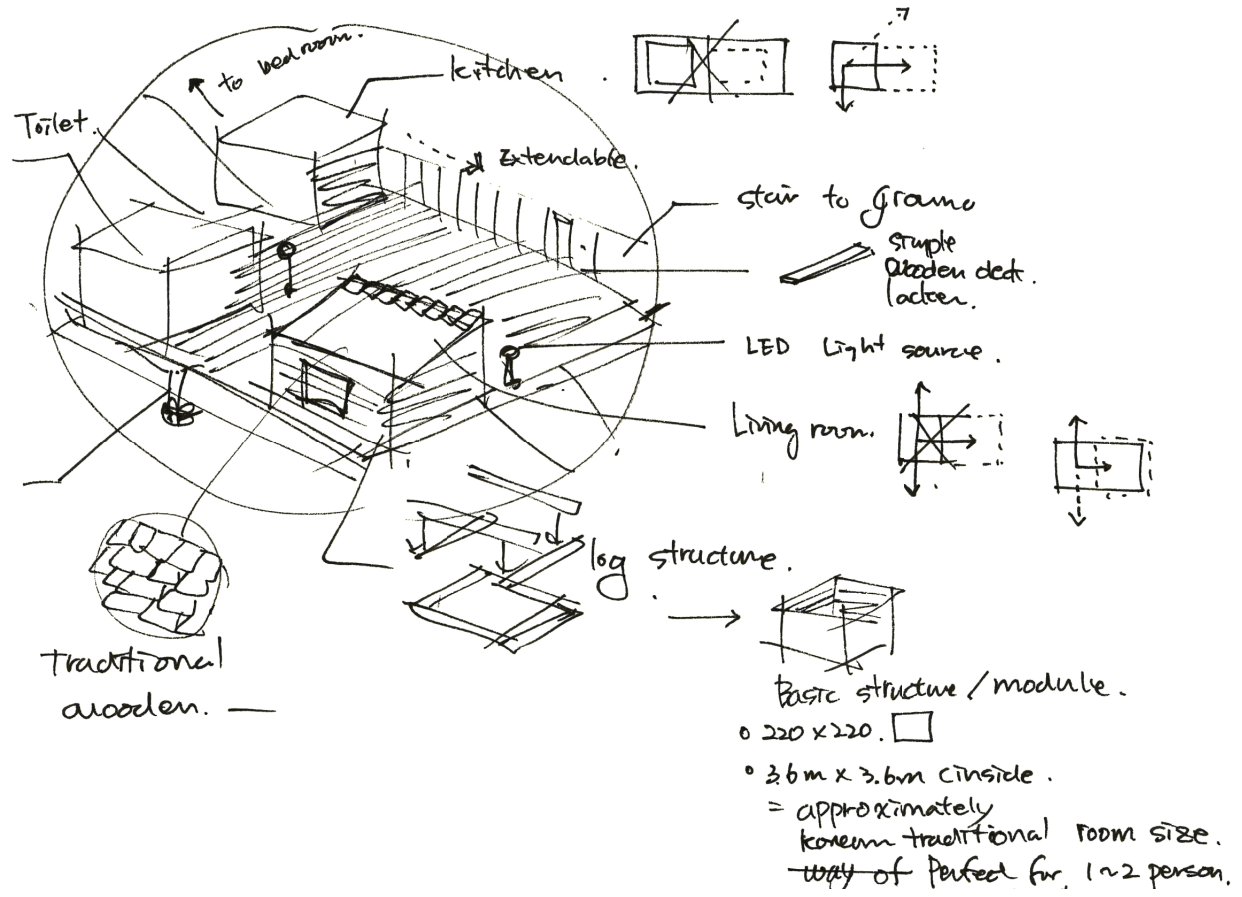
Things to show - Board layout
Deciding layout of the board is always fun to do.
Sketch



Things to show - Explanation with diagram

This is one of the ways that I like the most to explain concept or functionality of the spaces.

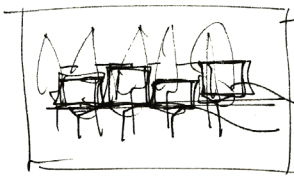
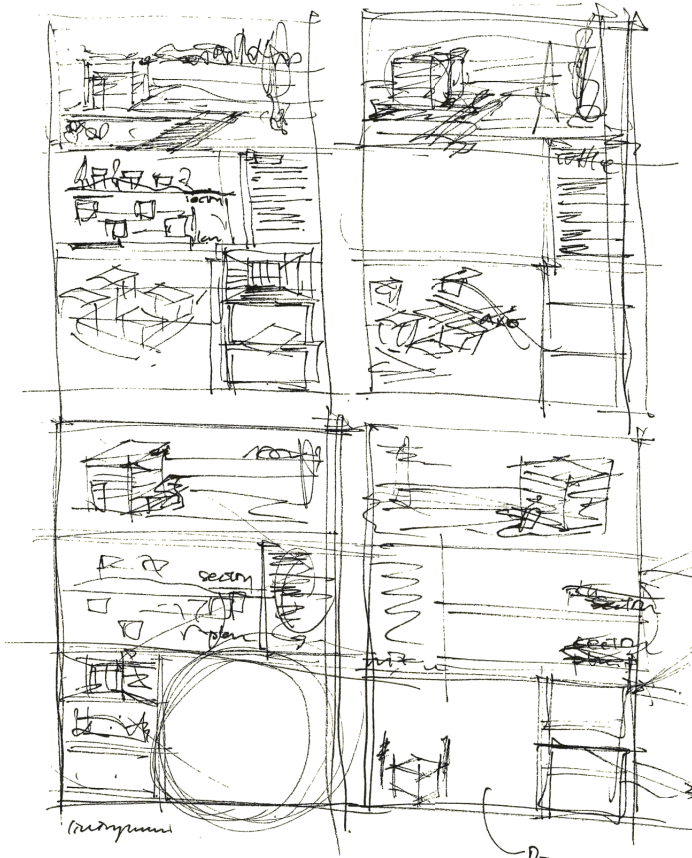
Sketch



Things to show - Functionality

With isometric diagram there are much more things could be described than I usually expect.
Sketch

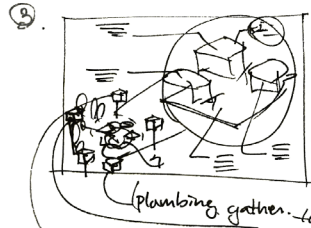
annel



Background Forest Pic

Hand drawing

- ② TEXT (All text) — introduction (A4 450)
 - A4 Board intro
 - Photo descriptions
 - Diagram descriptions



- ① tree illustrator
- ② Description
- ③ make it bigger
make it smaller whole
- ④ A4 x
- ⑤ Toilet / shower description - Hand diagram

④ → water tank. → electricity → Diagram (Hand draw).

④ plan
section

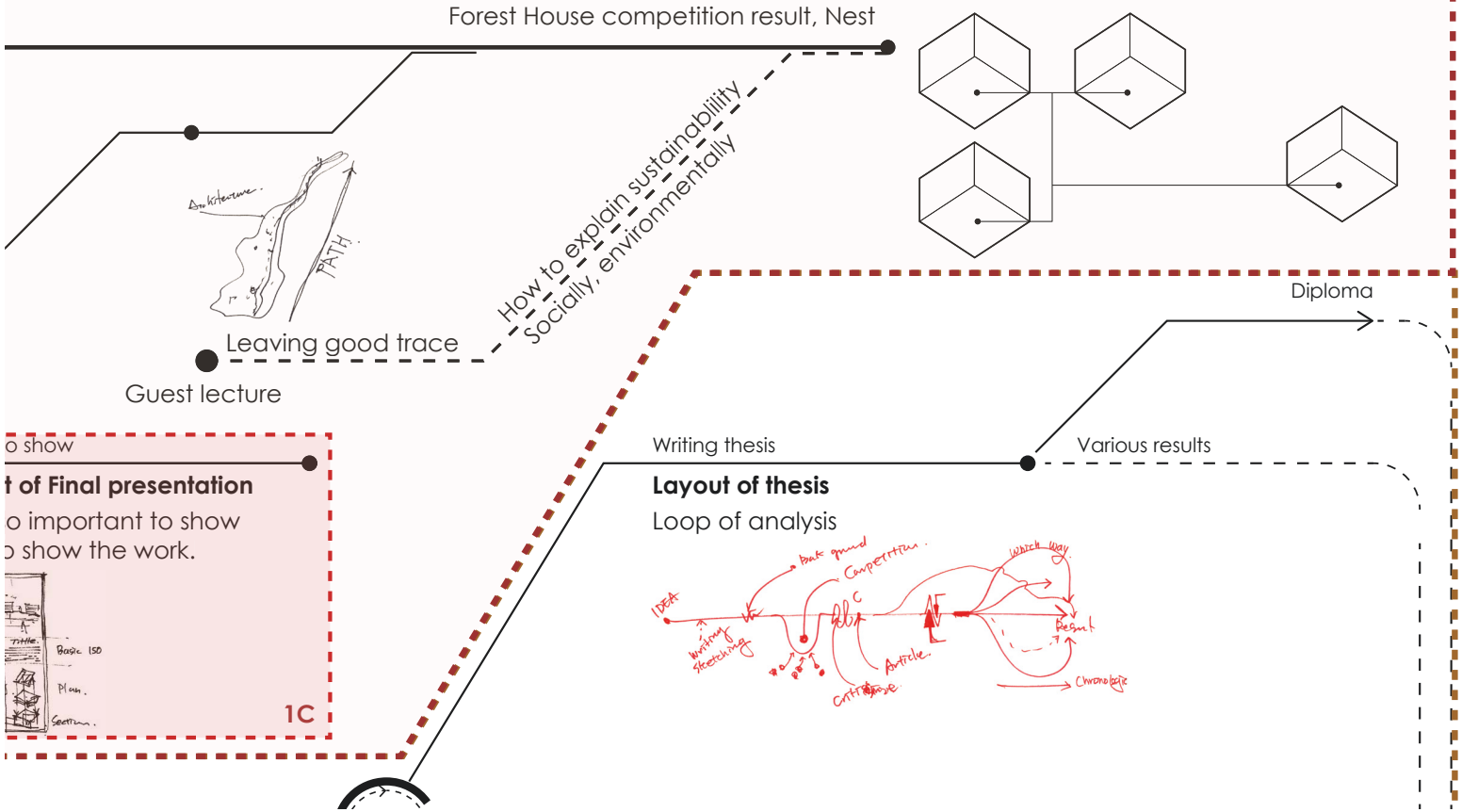
- ① Tree place (s) - Background
- ② Topography
- ★ ③ Door & window
- ④ people - hand draw
- ⑤ some texture

⑤ Main image → People - hand draw.
→ Rough: - less saturated.

⑥ Sub image

Things to show - Board layout and things to be done
Making final material to make the board look nicer
Sketch

Phase 3 Results



to show

Content of Final presentation

is so important to show
to show the work.

Basic ISO

Plan

Section

1C

Lecture Diary

There are always things to learn from others. If you want to develop through listening to others, it is important to filter the thoughts through your own thinking. My strategy is drawing sketches about the lectures or the guidances and reviews them afterwards. Time is needed to digest the thoughts and the material is needed to review. Nobody knows beforehand what kind of good idea could appear while having conversation or listening to a lecture.

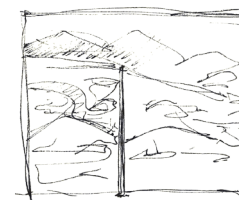
The image on the right is full of sketches from a lecture¹. The lecturer presented the idea of leaving good trace on the environment and of the social sustainability.

12.02. Jörden. Johan. Tandberg. / Lecture.

IN THE GARDEN. MNL.

a way of approaching sustainability.

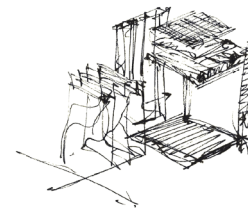
Leaving Trace.



what kind of trace.

abstract nature...

Artificial landscape → Something beautiful.
 • Industrial field.
 Or. & where you put it.!



will be be
 what to make permanent.
 what to make decade.

sustainability
 changeable, where to change, replace.

VIEW point Sonja.

Architecture.



Pre-abstracted

Abstract full Karl Andersson (1977).

Prime Landscape.

Rest Raught

walk

Bus Path

when they turn go, they will see something different

Vector

A page from a lecture diary
 It is important to think in your way.
 Sketch

¹ Jörgen Johan Tandberg, 27 January 2020, Monday Matinée Guest lecture, Oulu School of Architecture, University of Oulu.

NEST

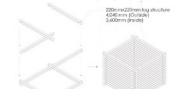
The result of forest house competition.



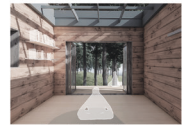
FOREST NEST

Finnish Traditional log structure + Korean space formular + Nature

The design start with the inspiration of Finnish vernacular architecture and modular system of Korean traditional architecture. To reach sustainability, Living in the forest might require more energy source and sustainable system. In understanding that not to rely on the nature could solve everything. To make sustainable forest house, not only through local materials in the design, first having a base as minimum is possible of the same level as a good base. Second, using local energy as possible. Both of these could be solved by formulating the materials. Other things to think is to reduce construction. To reach the goal, the building material and method of construction is based on Finnish vernacular architecture which is log structure. As the materials in the forest structure will be made out of wood which come from local forestland. The space inside each ground should be as little as possible. The solution of this has been inspired by traditional Finnish forest storage design called 'hirsirunko' which is underground log building with the floor of ground level. The main reason is to make people live with other life system on the ground. Modular system is not only saving construction way but also help giving solution to reduce use of energy. If the house is formed as a new house, it is quite expensive to heat up only one space. Energy will be wasted to warm up unnecessary space as well. However in modular system, it is possible to control the space when needed by controlling area and effect of the heat transfer. It helps to reduce the volume of space which should be heated and be smaller than each house. Size of the space should be large enough to contain the basic functions. Size has been decided according to Korean traditional architecture system.



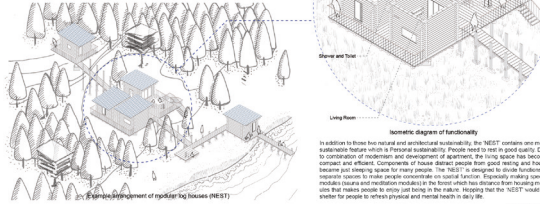
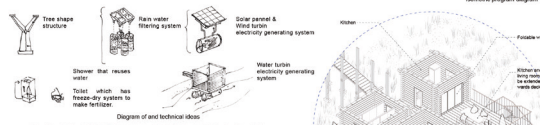
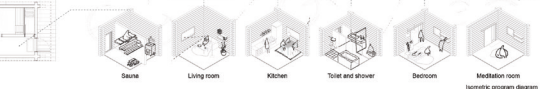
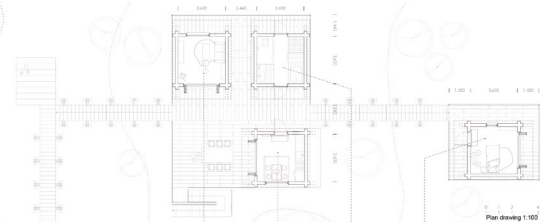
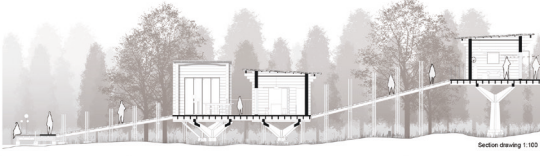
Isometric diagram of log structures and module
By making module system within 4m, it is easy to transport by any kind of transportation system.



Perspective view from meditation room
It is important to have high quality of light. The room could be constructed on various way due to modular system. For example, the roof could be designed with angled with log frame that people could feel the nature through ceiling as well. Imagine the light sky to the forest.



Perspective view from outside
When locating architecture in the forest, it is important to have a little break as possible. In this design, log structure will be placed above the tree. The biggest advantage is that the air will amount of ground will be touched. Sometimes, distance needs enjoy the scenery.







One summer day in kesämökki
I would like to have this summer house.
3D rendering

Finnish Traditional log structure + Korean space formular + Nature

The design started with the inspiration of Finnish vernacular architecture and the modular system of Korean traditional architecture in addition to pursuing sustainability. Living in the forest might require more energy and sometimes leads to misunderstanding that just by living in the nature could solve everything and be sustainable. To design sustainable forest house, two major things have been considered. First, leaving a trace as minimum as possible at the same time a positive one. Second, using as little energy as possible. Both of them could be solved by form shaping and materiality. The modern technologies such as the 'incineration & freezer toilets', water recycling shower system, rain water collecting system, river turbine generating systems could be adapted in the one of the modules.

To reach the first goal, the building material and method of construction is based on Finnish vernacular architecture which is the log structure. All the materials to form the basic structure will be made out of wood which comes from local Finnish forest. The spaces touching the ground

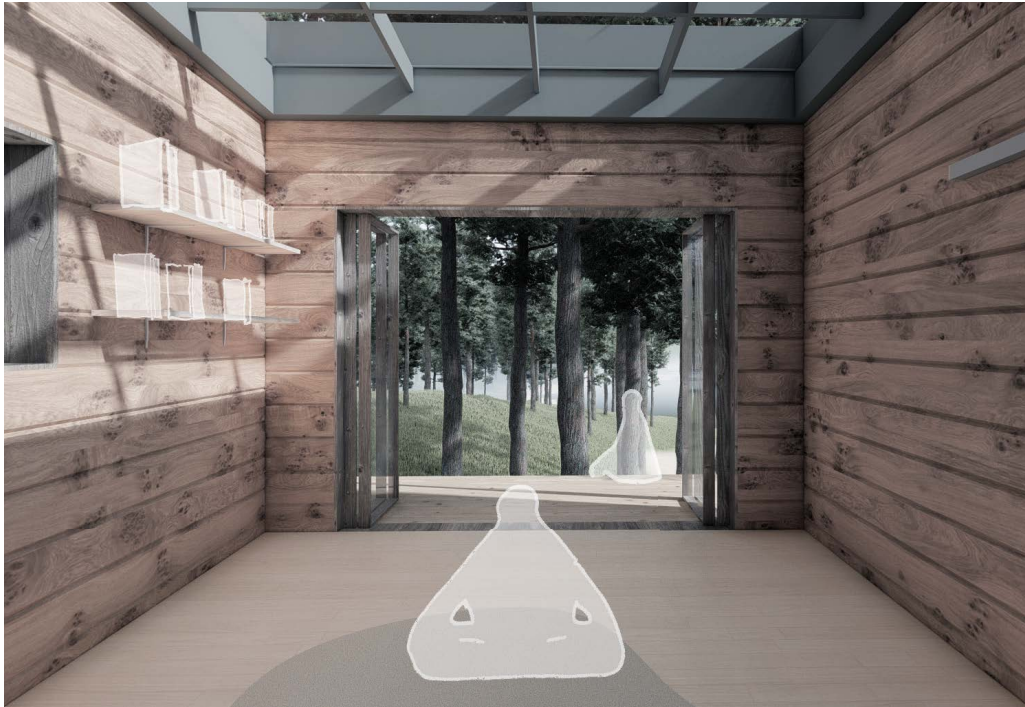
should be as little as possible. The solution was inspired by traditional Finnish food storage design called 'niliaitta' which withstanding log building with tree-shape or single pile structure. This will enable people to live with other ecosystems on the ground.

Modular system is not only making construction easy but also enabling solutions to reduce use of energy. If the house is formed as one mass, it is quite impossible to heat up only one space. Energy will be wasted to warm up unnecessary or unused space as well. However in a modular system, it is possible to control the space which could be currently used and setting up the temperature in an efficient way since the volume to be heated would be smaller. Size of each module should be large enough to contain the basic functions. Size has been decided according to Korean traditional architectural system.



Perspective view from outside

3D Rendering

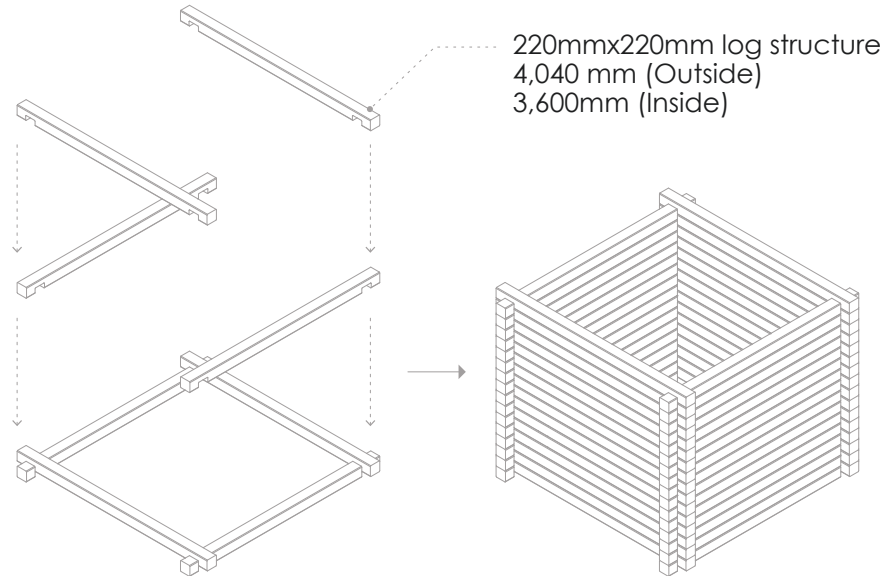


Perspective view from meditation room

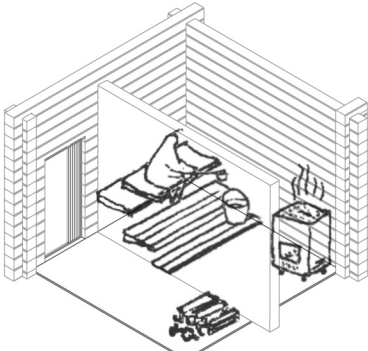
3D rendering

It is important to have high quality rest. The room could be customized in various ways due to the modular system. For example, the roof could be designed with skylight with full glass so that people could feel the nature through the ceiling as well. Imagine the night sky in the forest.

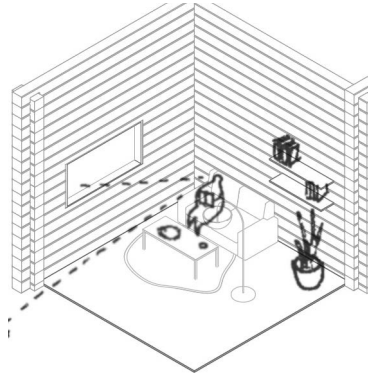
When locating architecture in the forest, it is important to leave as little trace to nature as possible. In this design, log structure will be placed above the tree shaped structure so that only little amount of ground will be touched. Importance of distance applies in a different way.



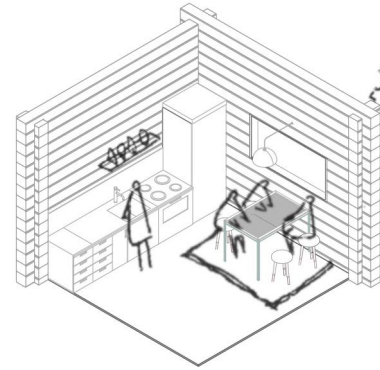
Log structure and modular system
Basic size of the module is from Korean traditional architecture.
Isometric diagram



Sauna



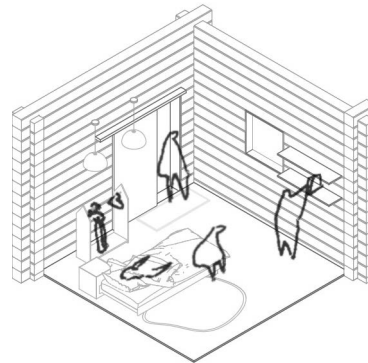
Living room



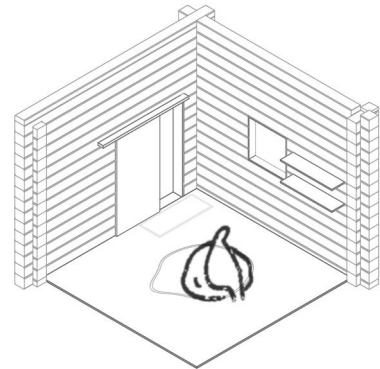
Kitchen



Toilet and shower



Bedroom

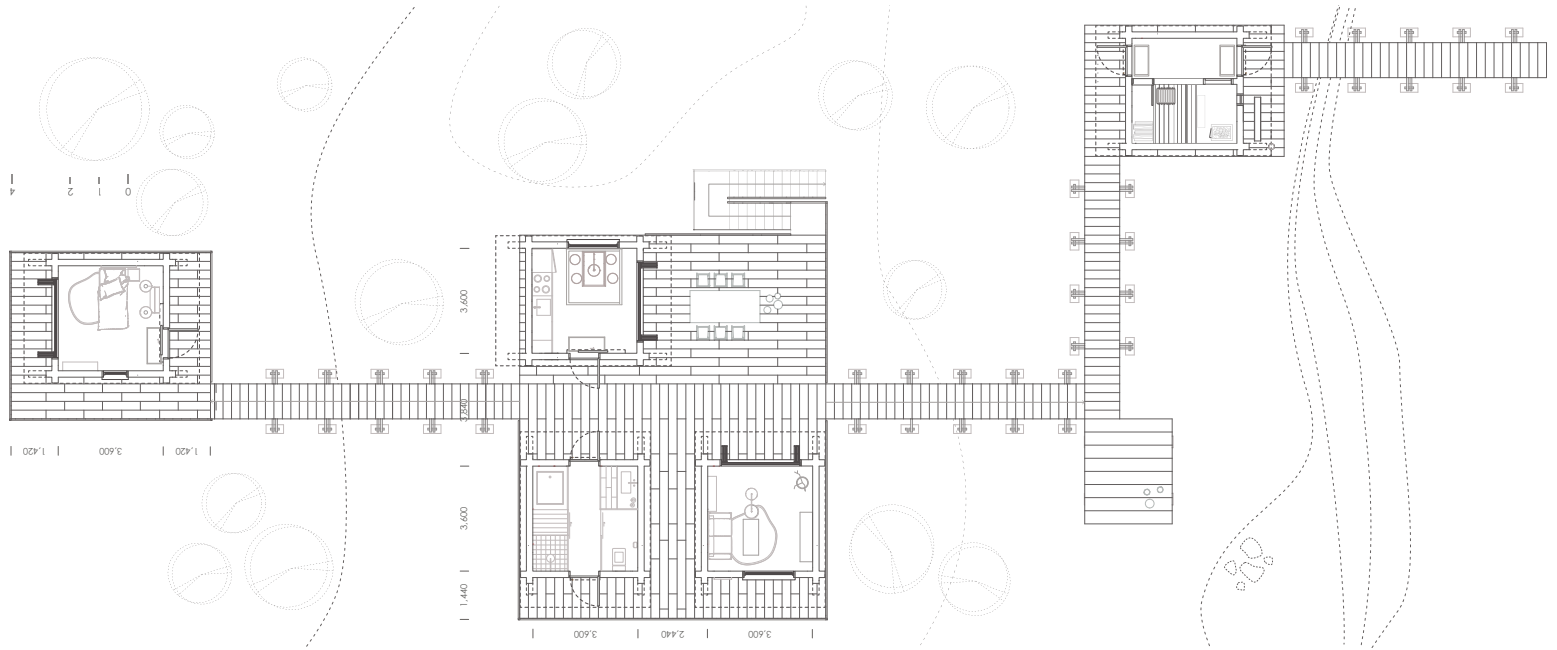


Meditation room

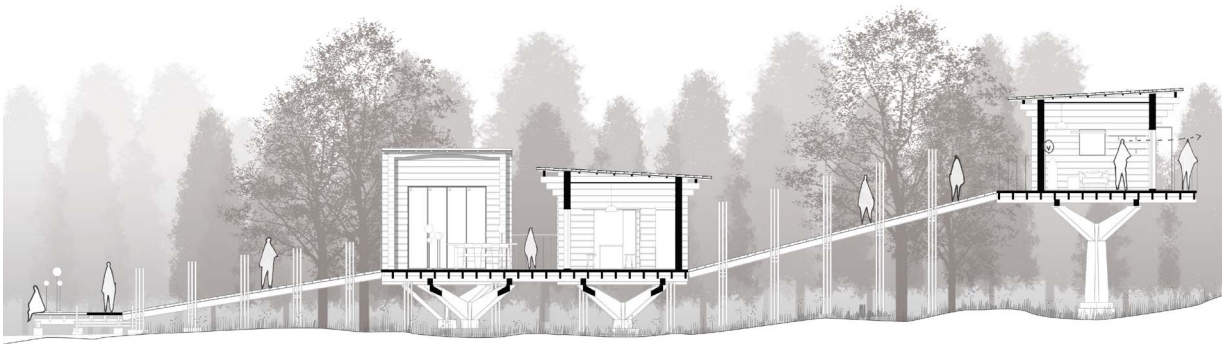
Functionality diagram

By making module system within 4m, it is easier to transport by any kind of transportation system.

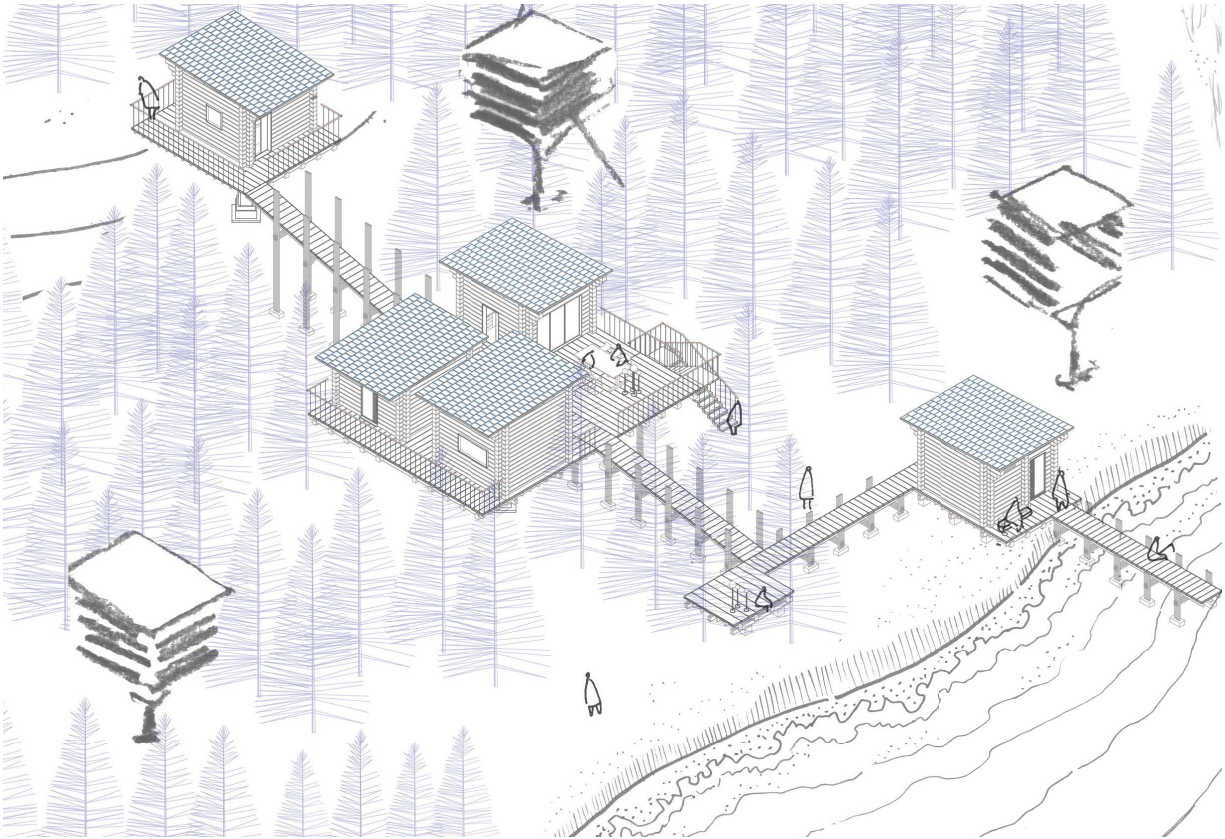
Isometric diagram



Plan drawing
Original scale, 1:50 in A2



Section drawing
Original scale 1:50 in A2



Example arrangement of modular log houses (NEST)
Some modules will have technical features.
Isometric diagram with sketches

Isometric diagram of functionality and modern technology

In addition to natural and architectural sustainability, the 'NEST' contains one more sustainable feature which is personal sustainability. People need to rest in good quality. Due to the combination of modernism idealism and development of apartments, especially in big cities, the living space has become compact and efficient. Components of the house distract people from good resting and it became just a sleeping space for many people.

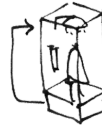
The 'NEST' is designed to divide functions in separate spaces to make people concentrate on separate functions. Especially placing the special modules, (sauna and meditation modules) in the forest apart from housing modules to make people enjoy just being in nature, hoping that the 'NEST' would be a shelter for people who need to refresh physical and mental health in daily life.



Tree shape structure



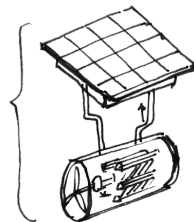
Rain water filtering system



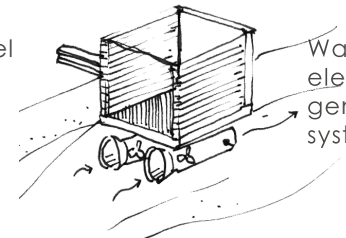
Water recycling shower system.



Toilet which has freeze-dry system to make fertilizer.

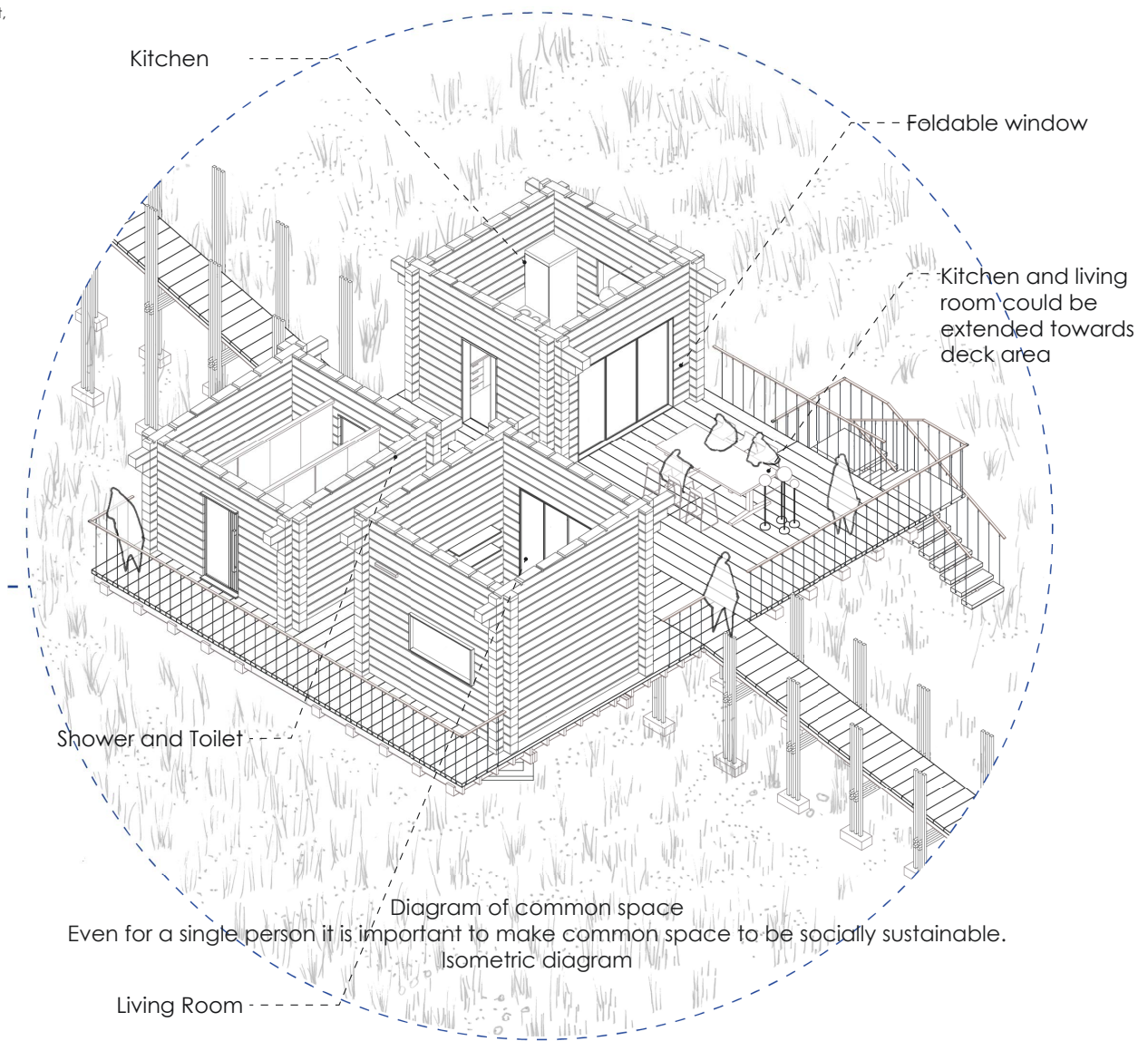


Solar pannel & Wind turbin electricity generating system



Water turbin electricity generating system

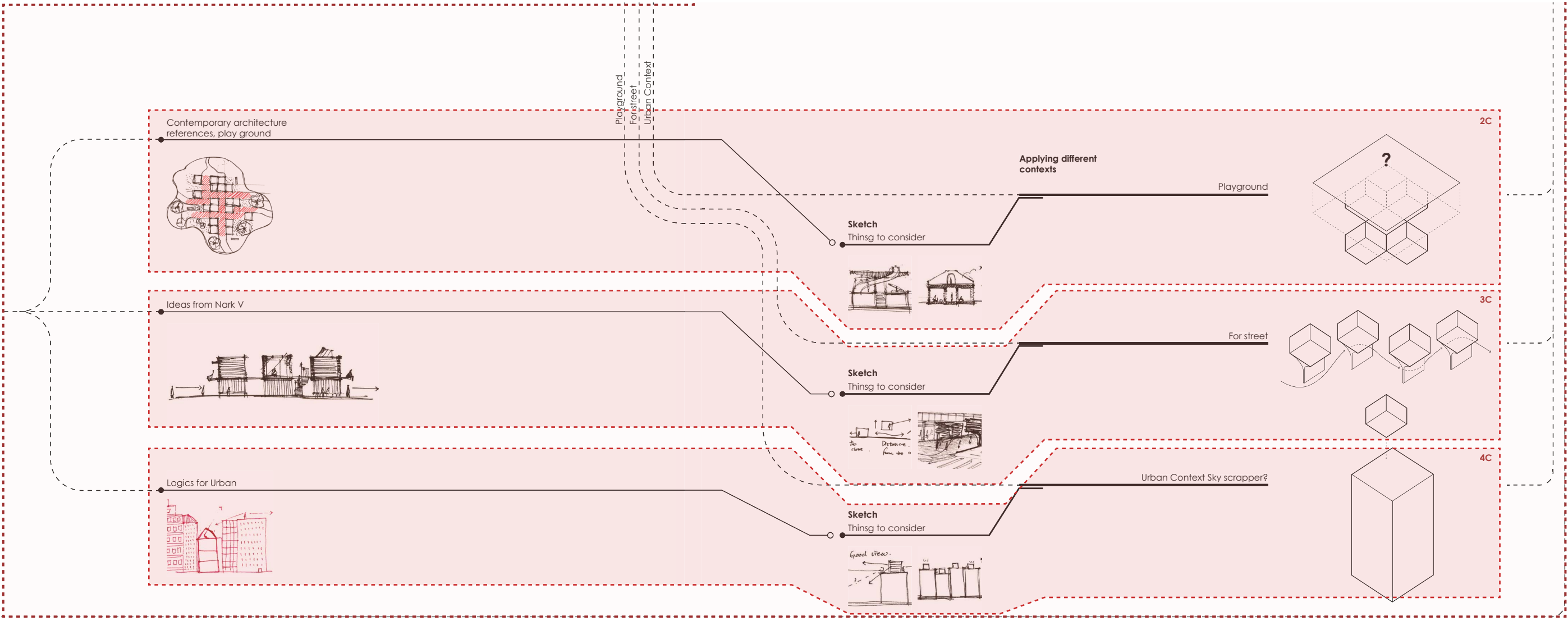
Diagram of sustainability and technical ideas
Modern technology will be used to enhance sustainability.
Sketch



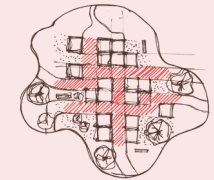
Even for a single person it is important to make common space to be socially sustainable.

Applying to other contexts

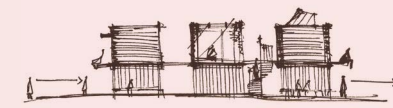
Playground, Urban area 01, Urban area 02



Contemporary architecture references, play ground



Ideas from Nark V



Logics for Urban

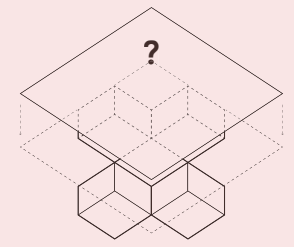
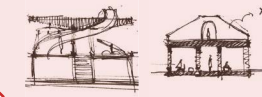


Playground
For street
Urban Context

Applying different contexts

Playground

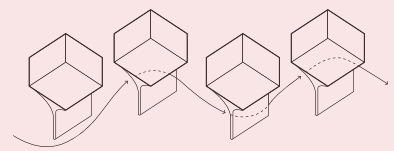
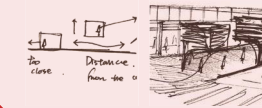
Sketch
Things to consider



2C

For street

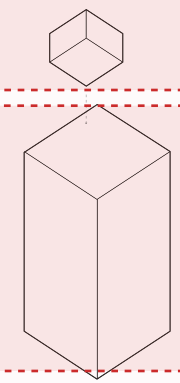
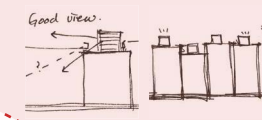
Sketch
Things to consider



3C

Urban Context Sky scrapper?

Sketch
Things to consider



4C

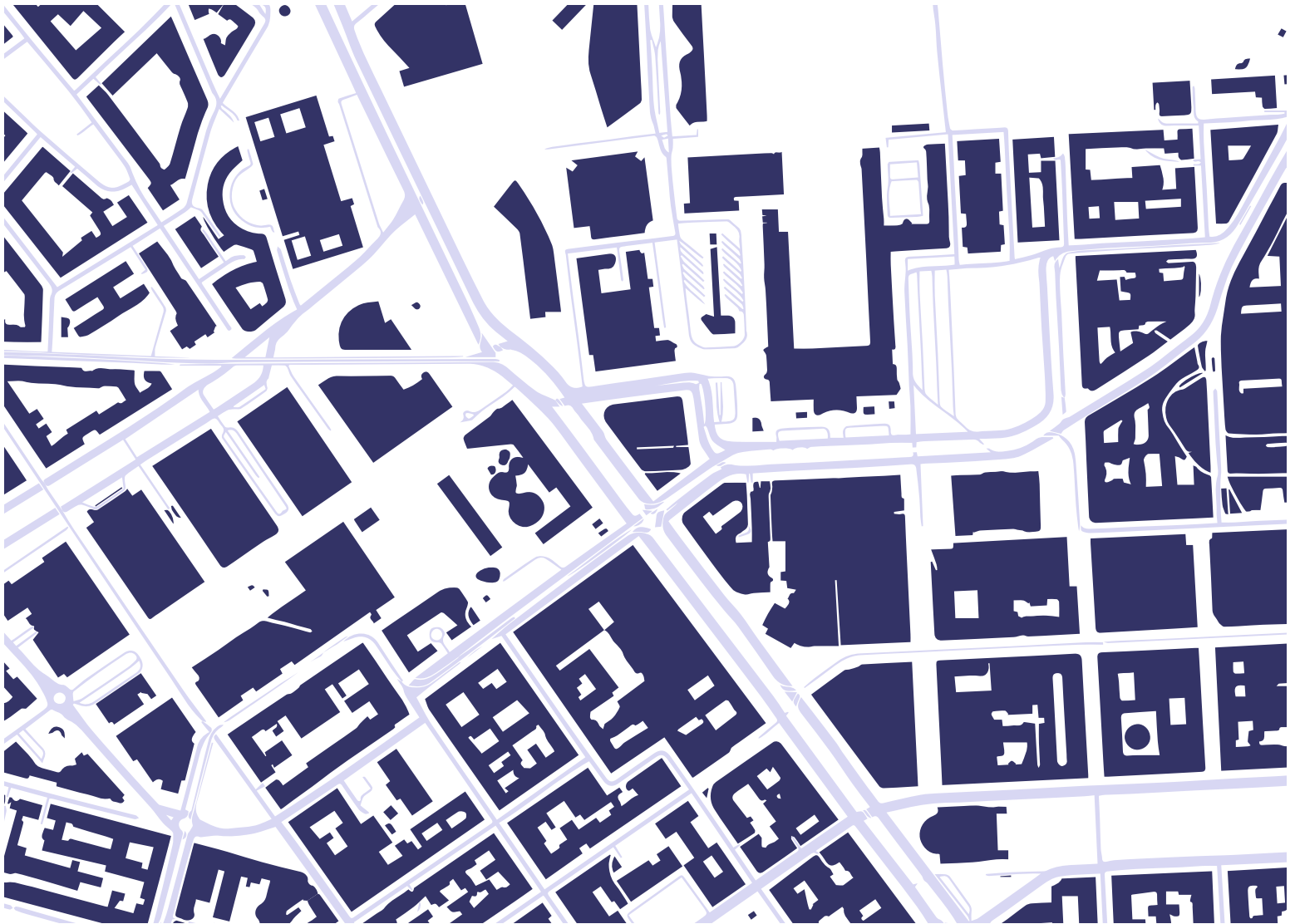
Applying to other contexts

After finishing competition, I went back to the basic module to apply in different contexts. This time since I wanted to focus on how the basic idea will develop further in various way, I designed in a conceptual approach.

I chose three urban spaces which all have different features. It was interesting to see how idea transforms differently according to contexts.

Urban area 01
Helsinki (2C)

Resting place near Amos Rex,
Helsinki city center.



Things to consider in different context, Urban area 01 - Helsinki.

As the diagram shows on the right, in urban space it is important to think about how not to distract the pedestrians. However, we have given up most of the common public space to vehicles.

It is also good to make distance between hectic ground and space to rest. I chose to lift the resting modules (nest) up making possible the pedestrians to pass by the structures without blocking the way. Same structural result making distance from ground made with different reasons. In addition to that I wanted to design the structure so that pedestrians could enjoy structural beauty while walking by.

At first, I thought the design could be located in front of the Amos Rex, however after trying with 3D modeling and visiting the actual site, it turned out it was not a good idea to hide the well-designed facade. Instead, I also tried to locate the 'Nest' on the roof of the building, but again it would make other problems not matching with the surrounding context.

- .logics for Urban.

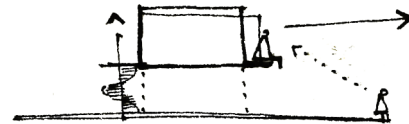
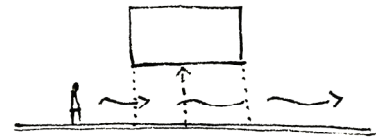
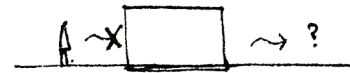
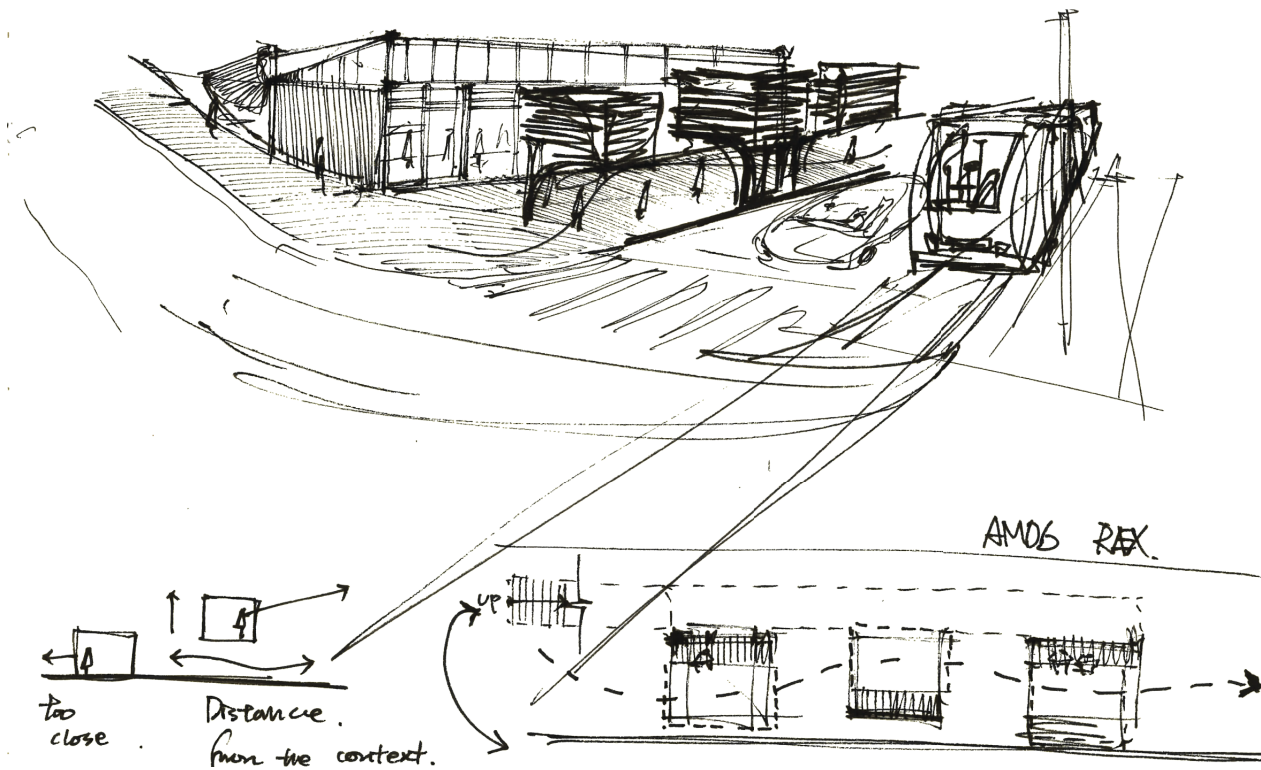
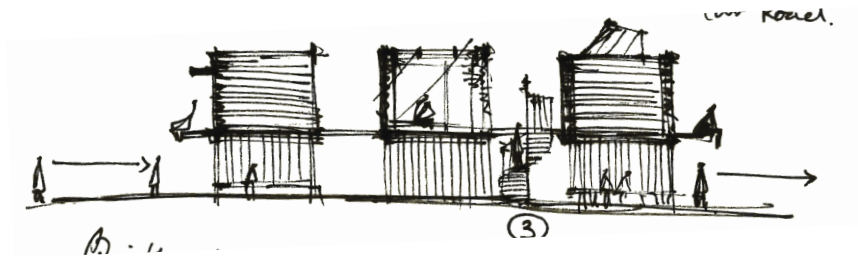


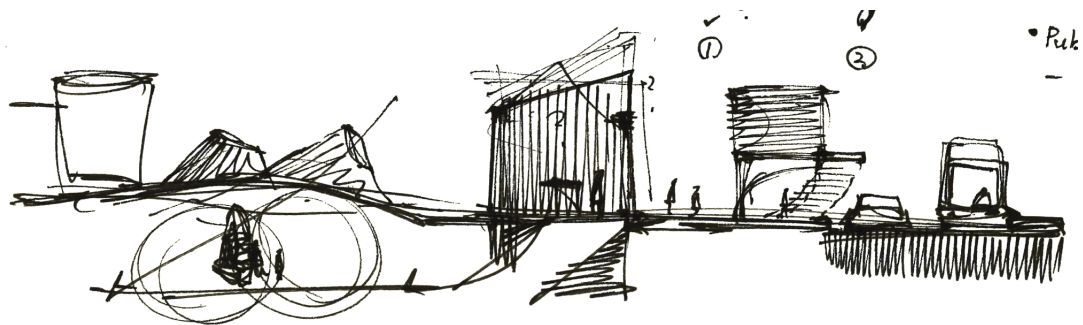
Diagram
Distance.
Sketch



Idea sketch for Urban space, Helsinki 01
Placing in front of the Amos Rex
Sketch



Idea sketch for Urban space, Helsinki 02
Pedestrian, traffic, how to get there
Sketch

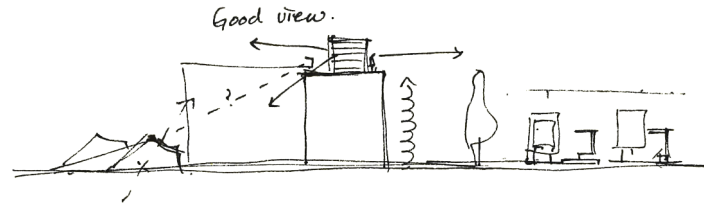


Idea sketch for Urban space, Helsinki 03
Section diagram
Sketch

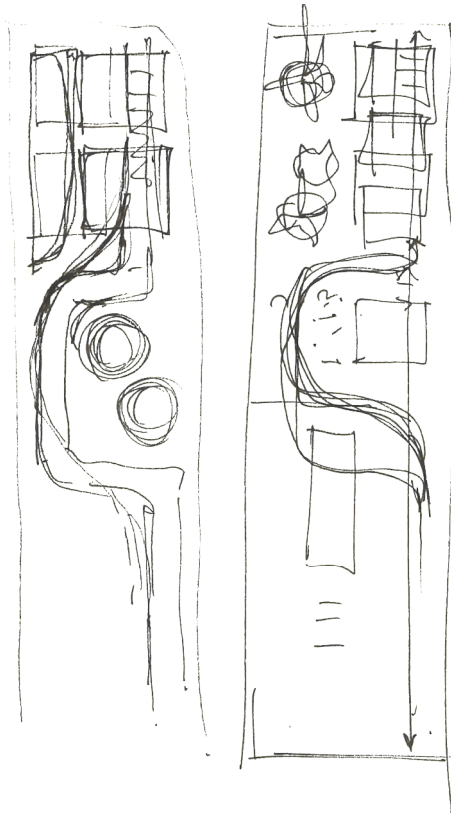
3.3.2020.

* horrible putting infront of AMOS REX. → too big.
↳ found out by 3D modeling.

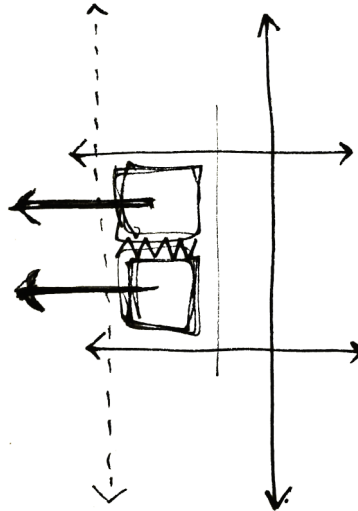
What about putting on Amos Rex?



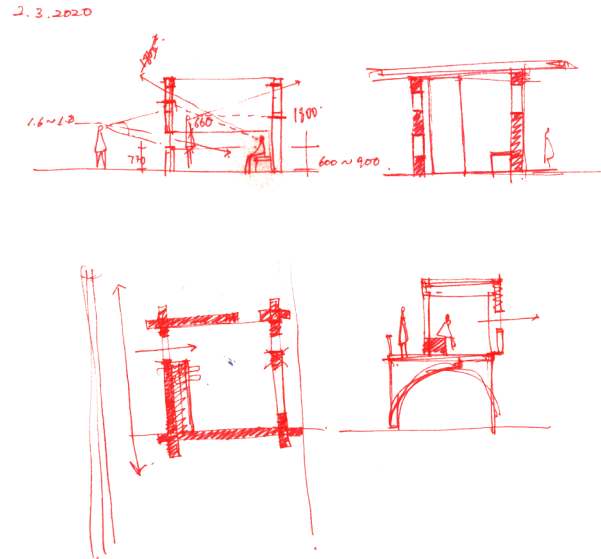
Idea sketch for Urban space, Helsinki 04
What about placing on the roof?
Sketch



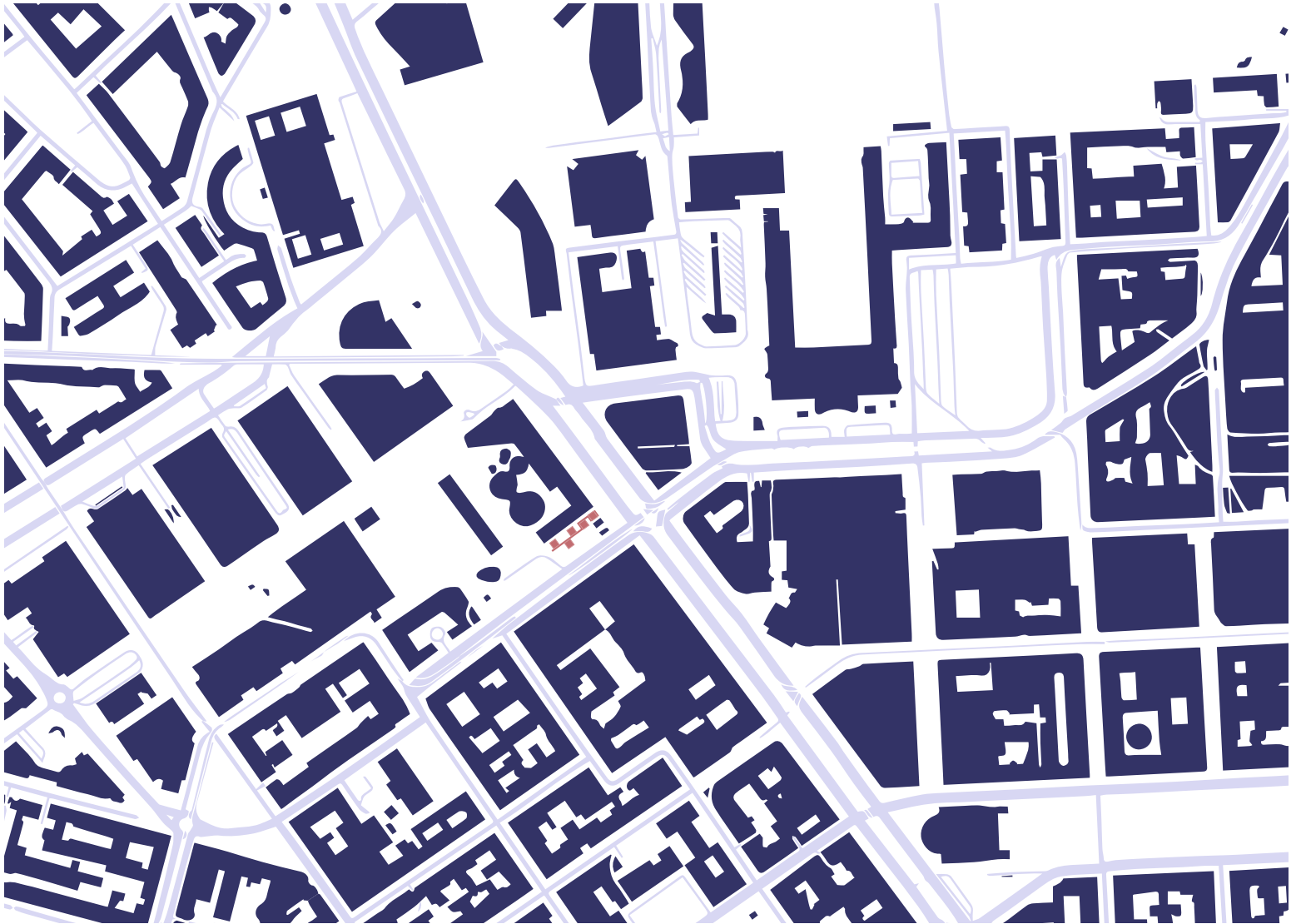
Idea sketch for Urban space, Helsinki 05
Roof garden layout
Sketch

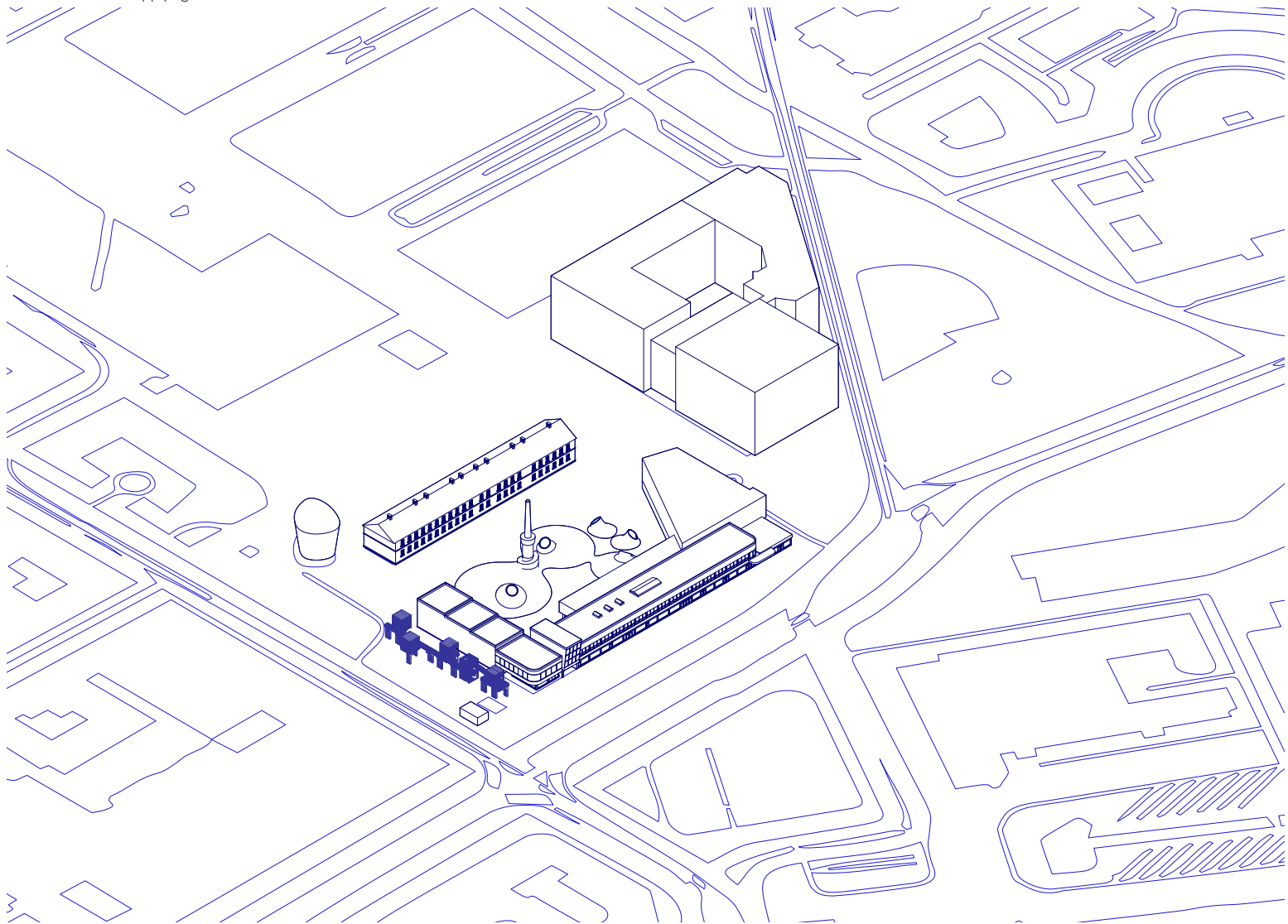


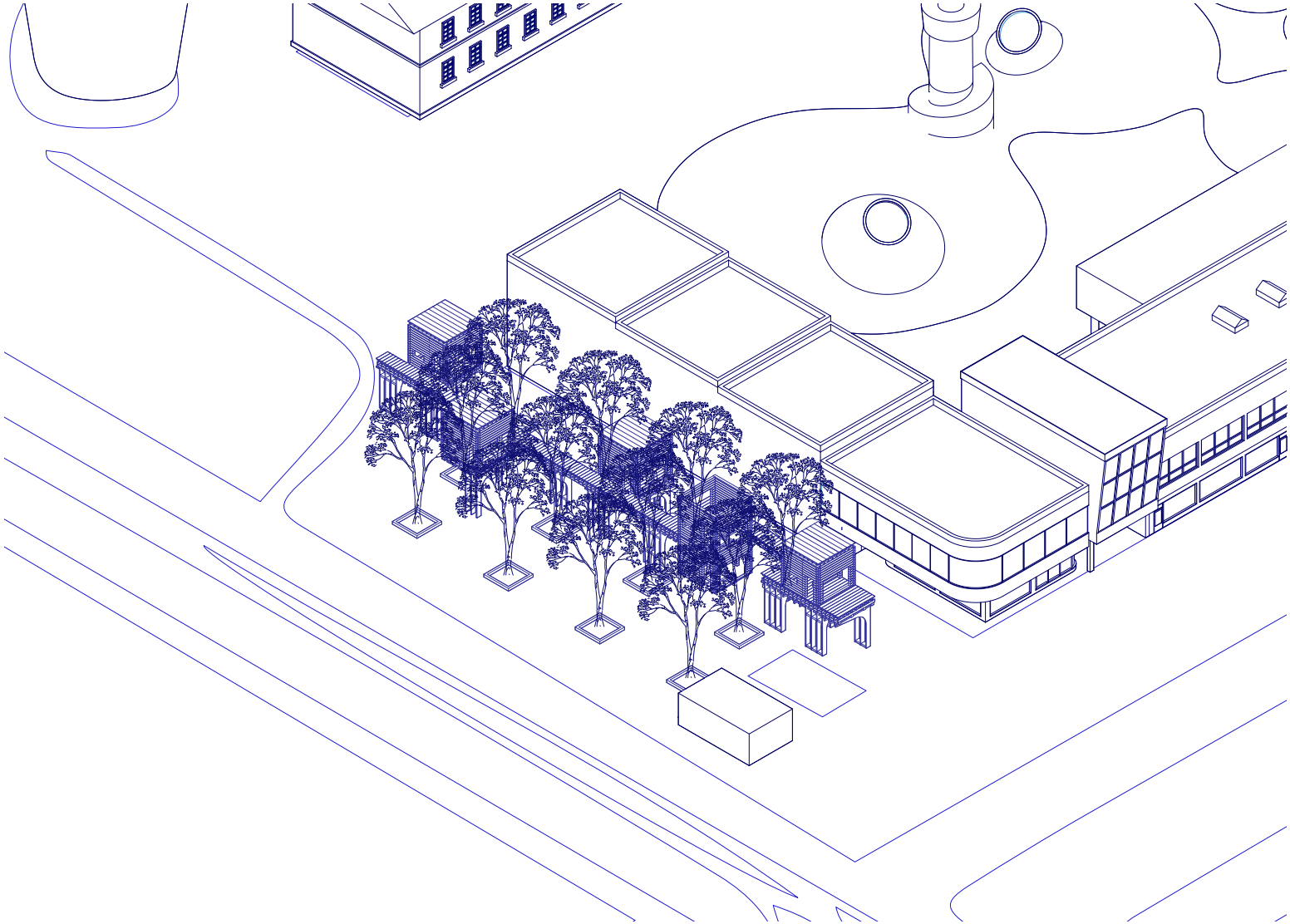
Idea sketch for Urban space, Helsinki 06
Placing on the strong axis is dangerous.
Sketch

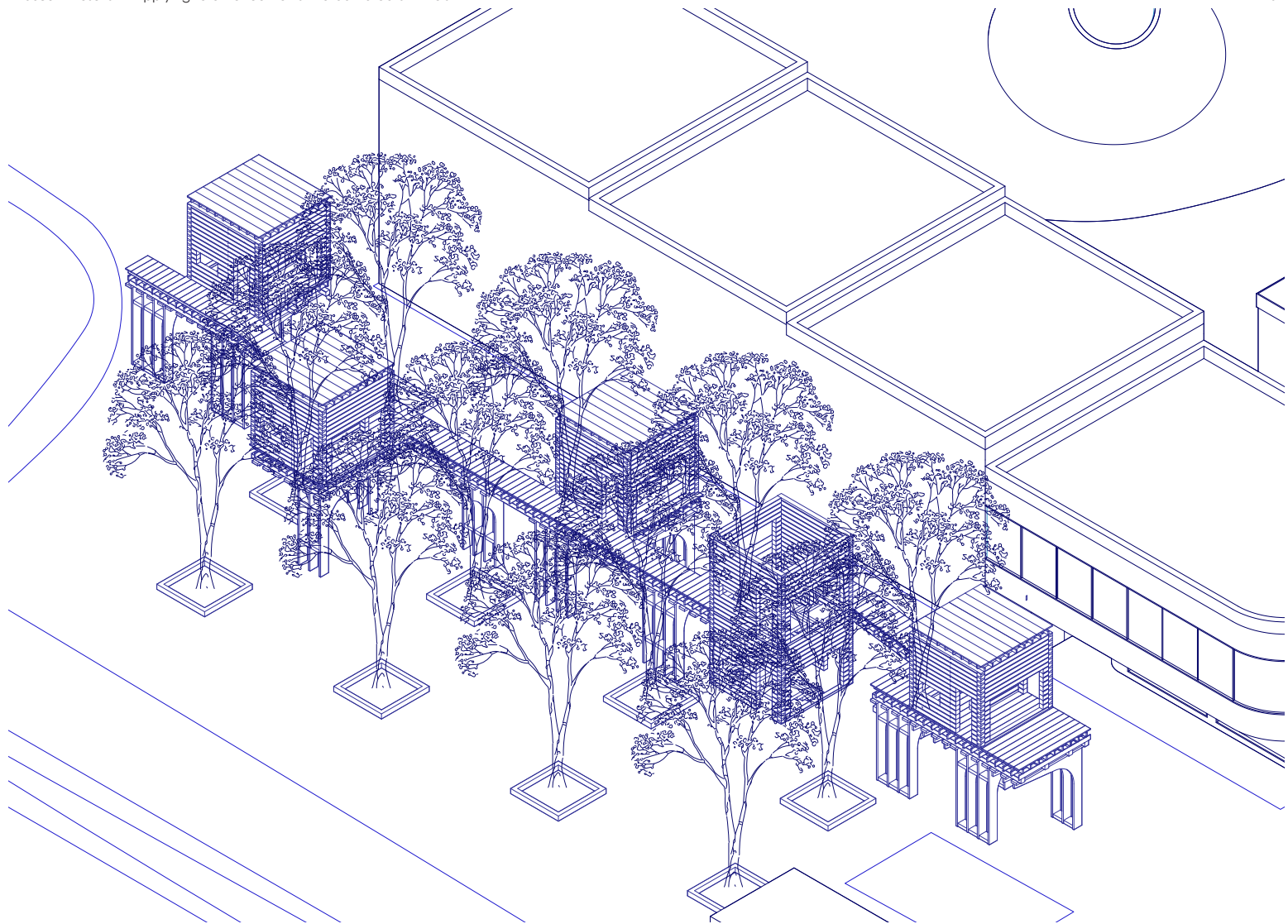


Idea sketch for Urban space, Helsinki 07
Where to open, how to hide
Sketch









Urban area 02
Seoul (3C)

Resting place on the top of the buildings,
Nest on the top.

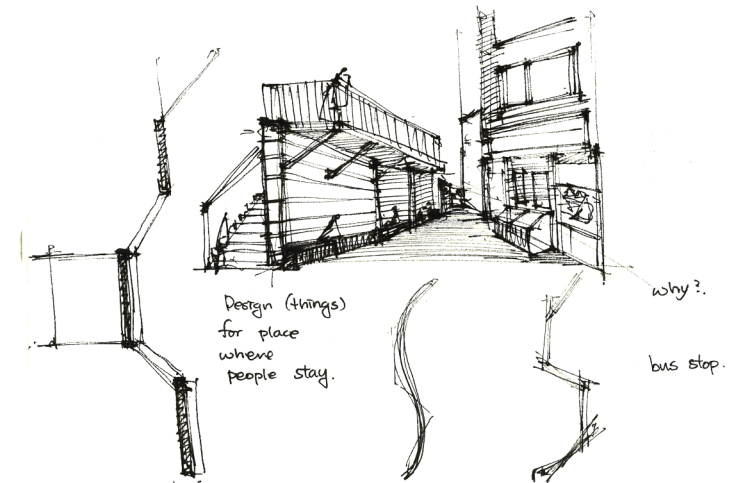


Things to consider in different context Urban area 02 - Seoul.

Each city has its own characteristics. The other urban space that I chose is located in Seoul, South Korea. The place is well known for its high density and traffic. Although there are many possibilities to think about such as using the rooftop of the high rise buildings, making extra space above the subway station or using dead spaces.

First I tried to think of a more extraordinary way which was to use the building's facade. It was fun to think about how it may be a better solution than just making good resting place inside of a high rise office building. However, I wasn't sure if the material of the module would match with the building materials in Seoul.

I went back to the other results of the design process and decided to use the idea of using rooftop of the building as well as making a roof garden. I imagined what if all the high rise buildings in Seoul could have roof gardens with resting places. It would definitely create different and better atmosphere for the city.



need reason to design always.
.. already know the conditions.

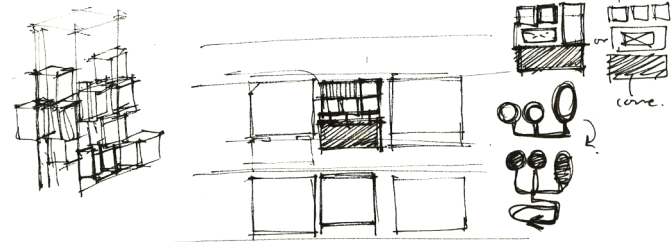
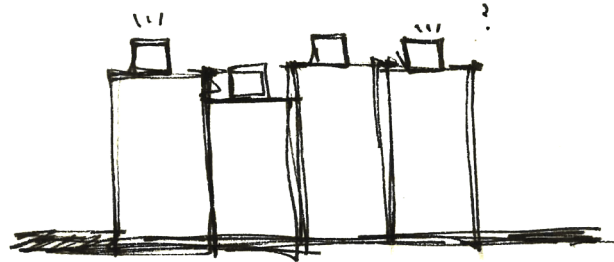


Diagram
Imagination
Sketch



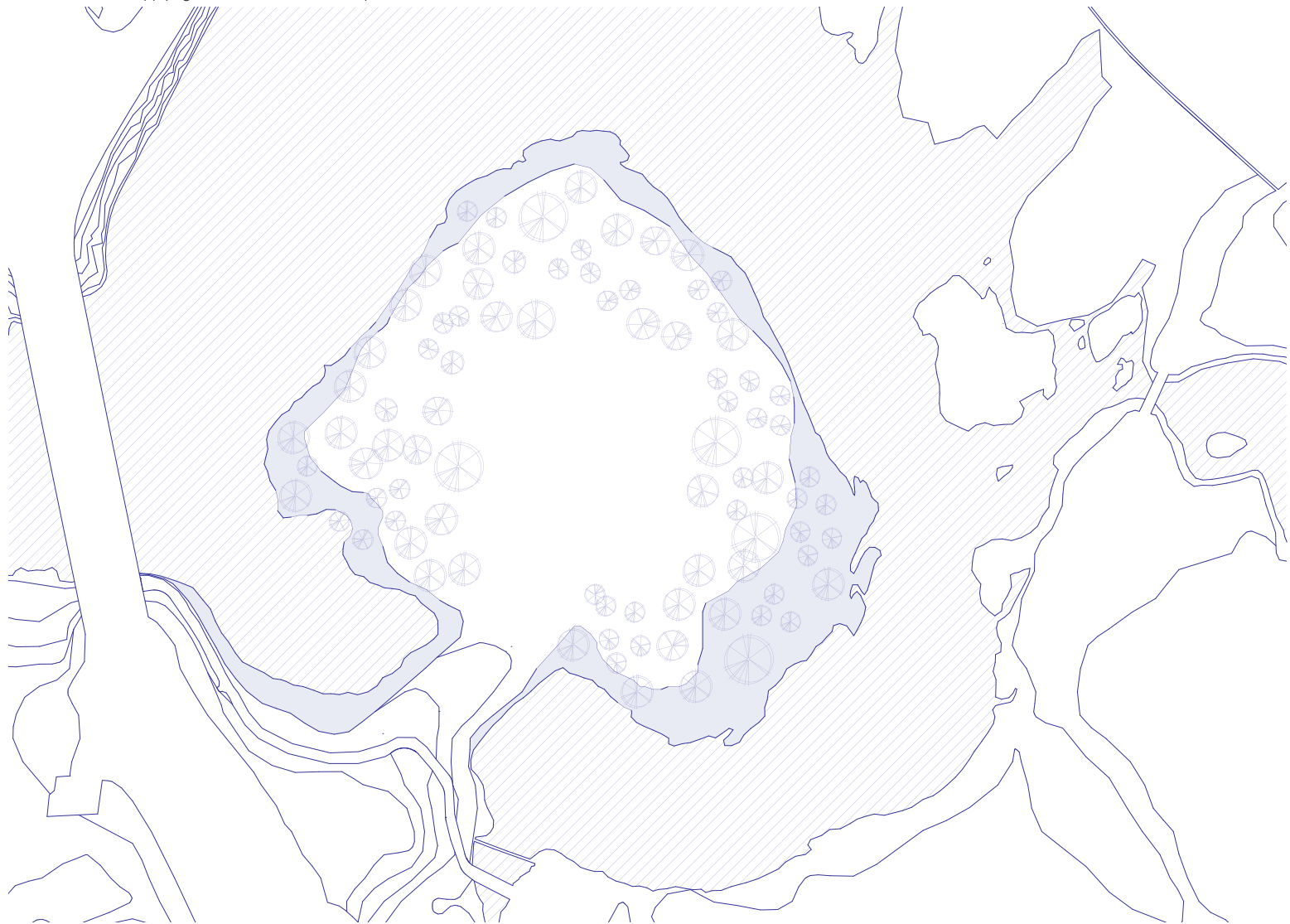
Idea sketch for Urban space, Seoul
Section diagram
Sketch

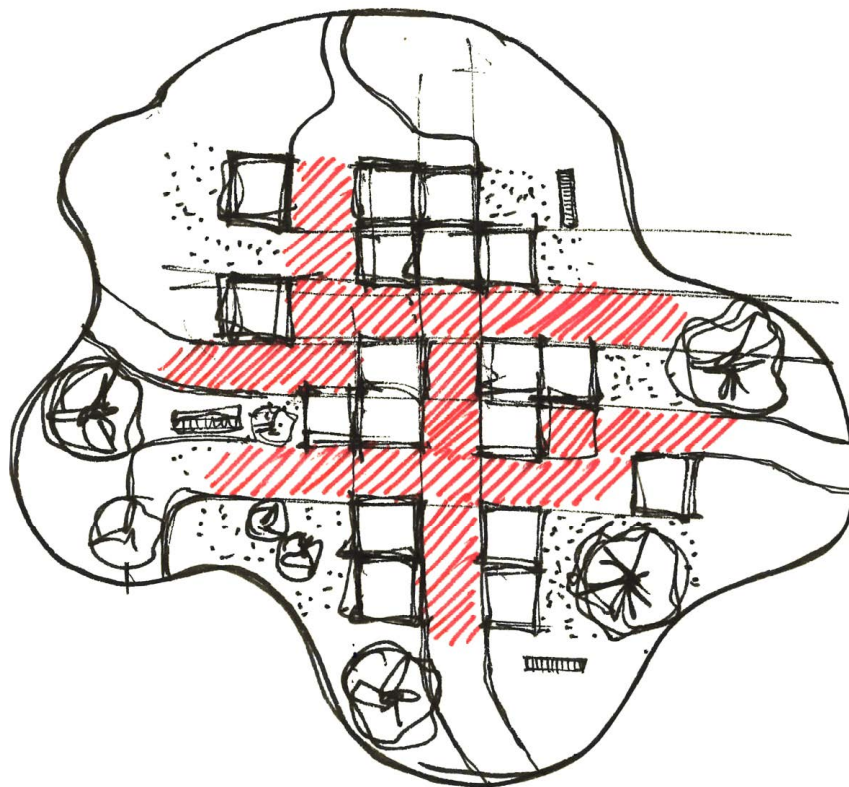




**Urban park area
Oulu (4C)**

Making playground on the Lammassaari Island





Concept sketch of Playground

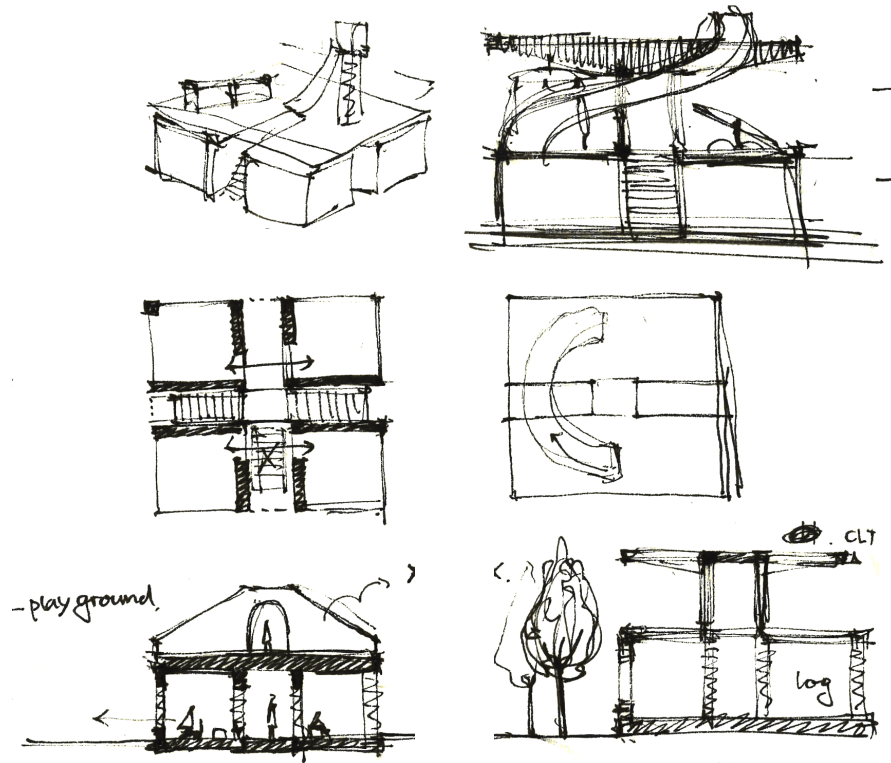
Sketch

Things to consider in different context, Urban park.

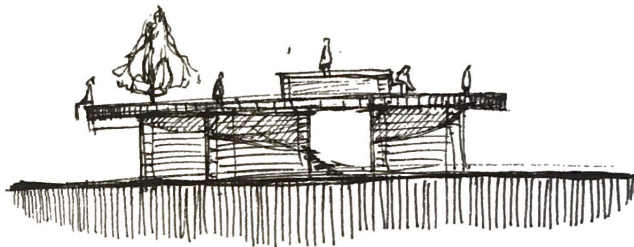
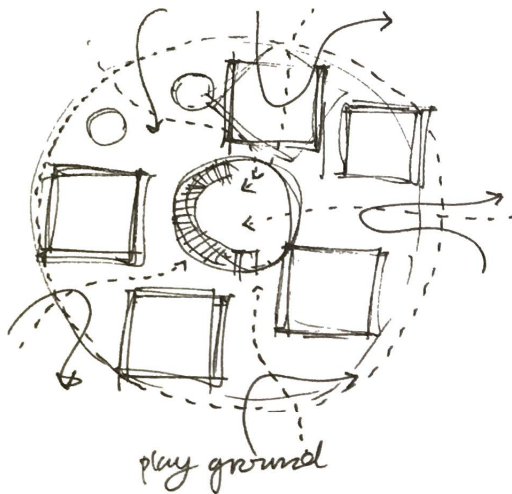
First I set the principal ideas, creating sense of security with visual connection between outside and inside of a module and a different structural usage.

Instead using traditional log structure, I made a variation inspired by the pile of criss-cross stacked woods next to a sauna mökki. Visual connection to inside could be simply made by taking out woods from middle part. To make structurally stable, the edge points of logs will have joints. A roof-playground will be situated above the structure. Playground could be designed in various ways.

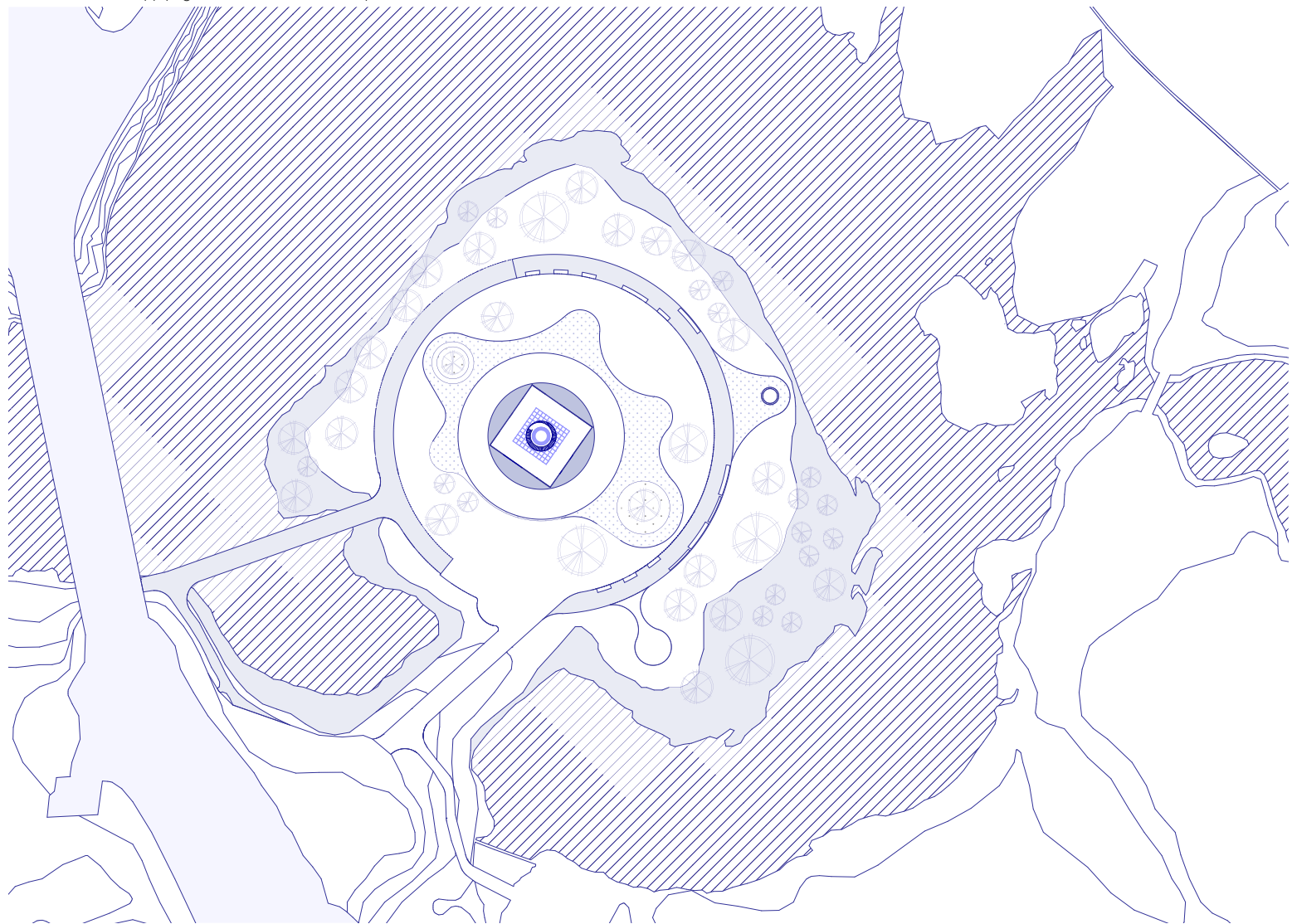
Making differentiation of log structure from outside creates a sense of security, but still visual connection to the playground remains.

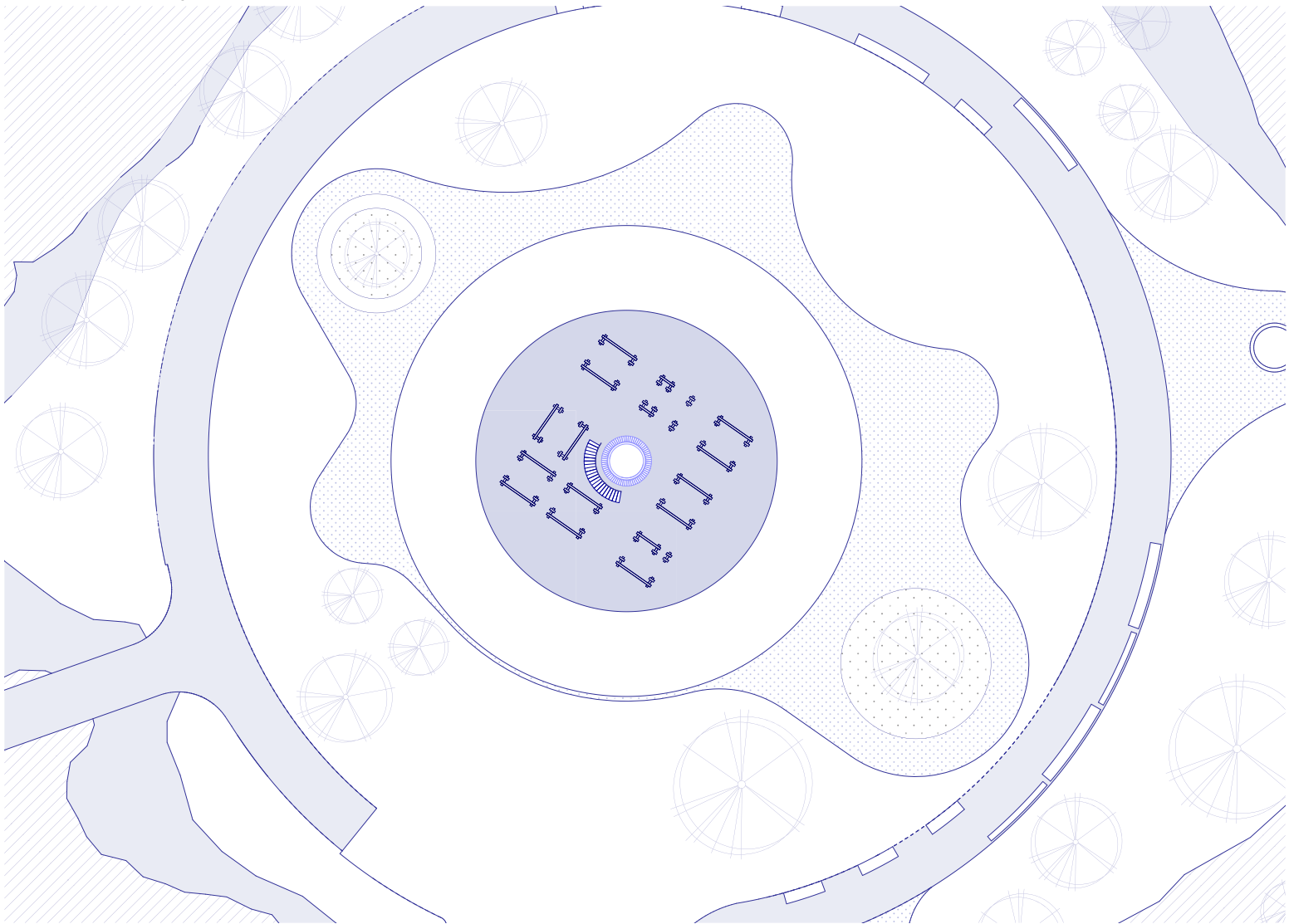


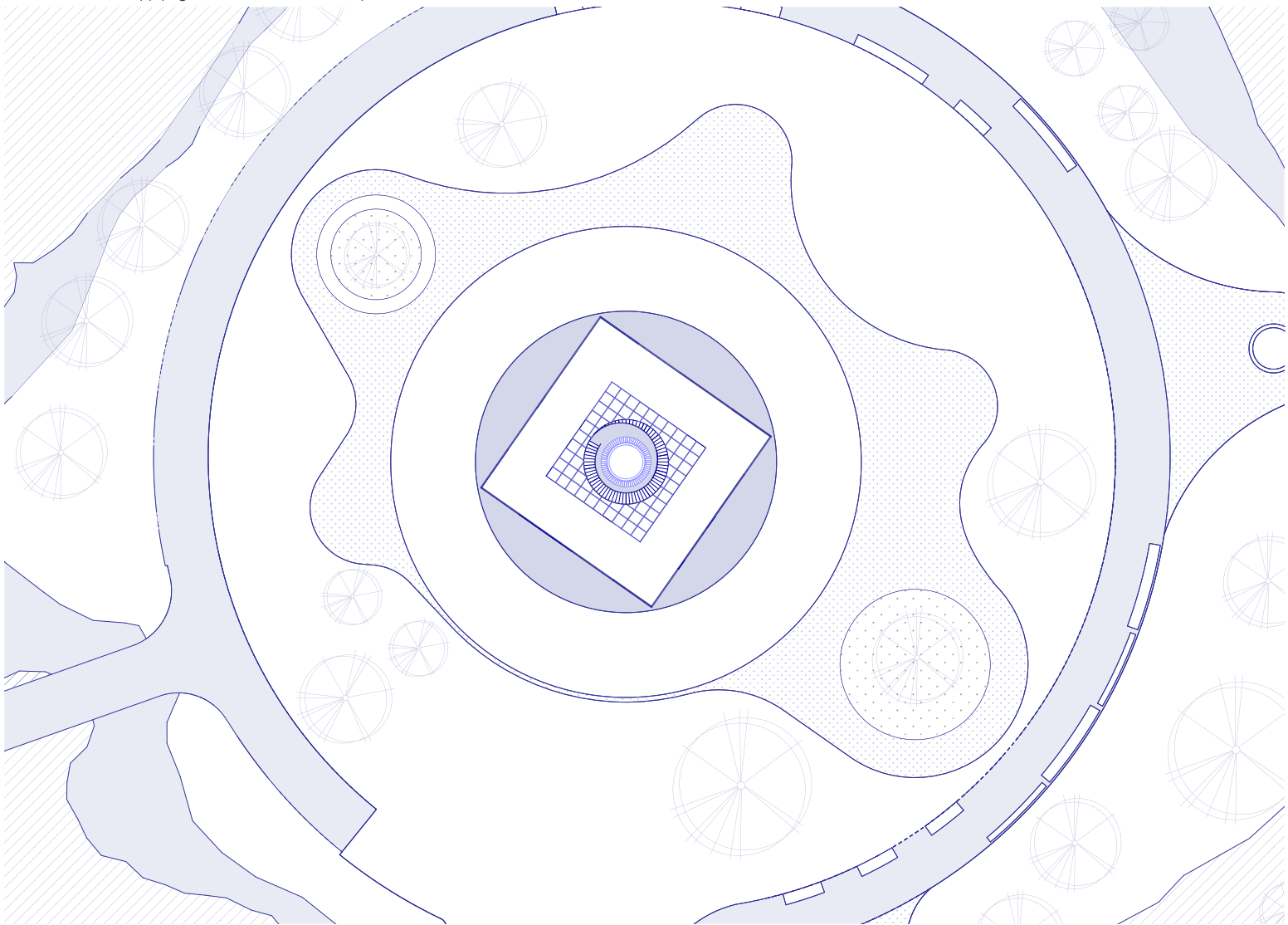
Idea sketch for playground
What if we can use the roofs as playground?
Sketch

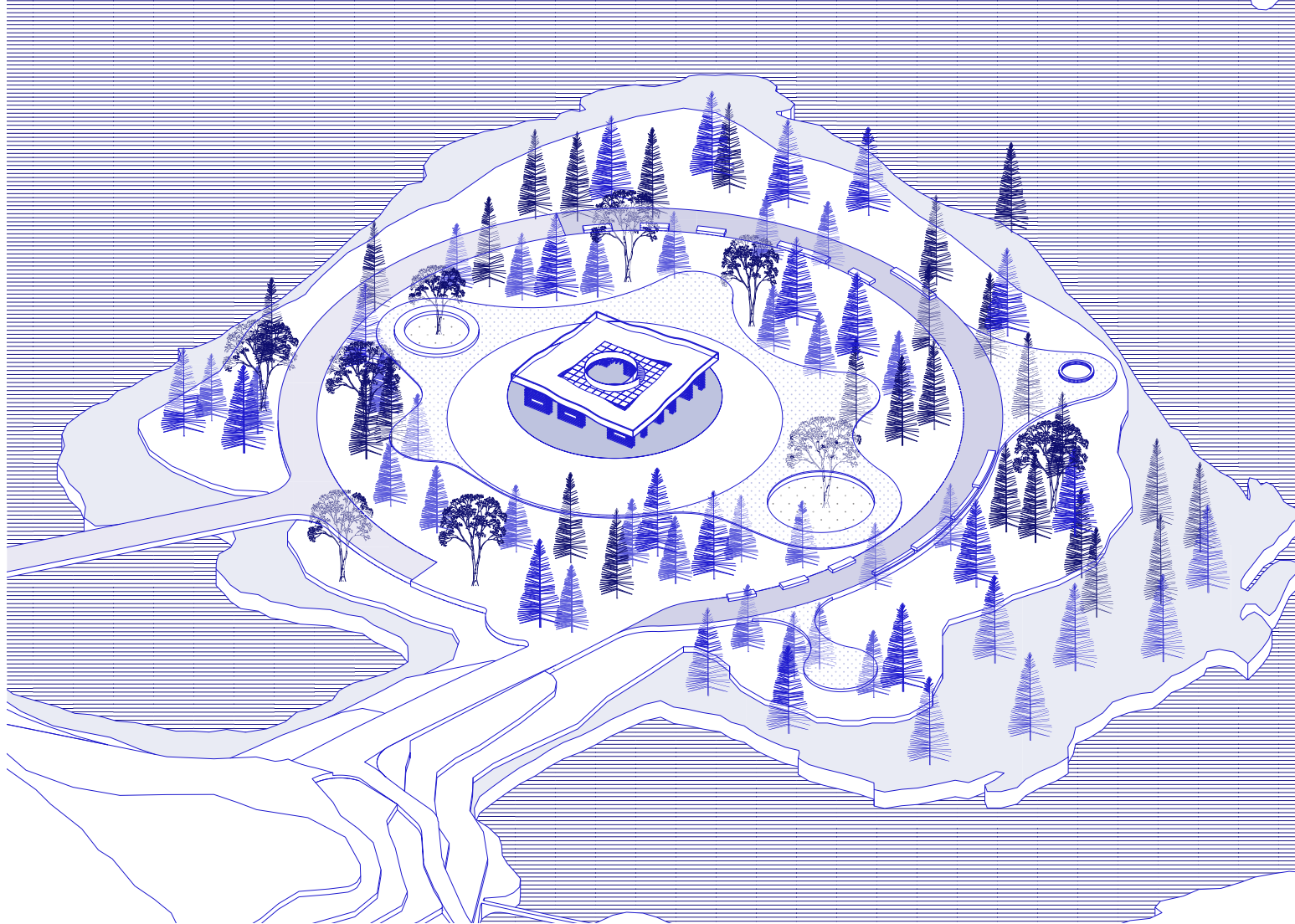


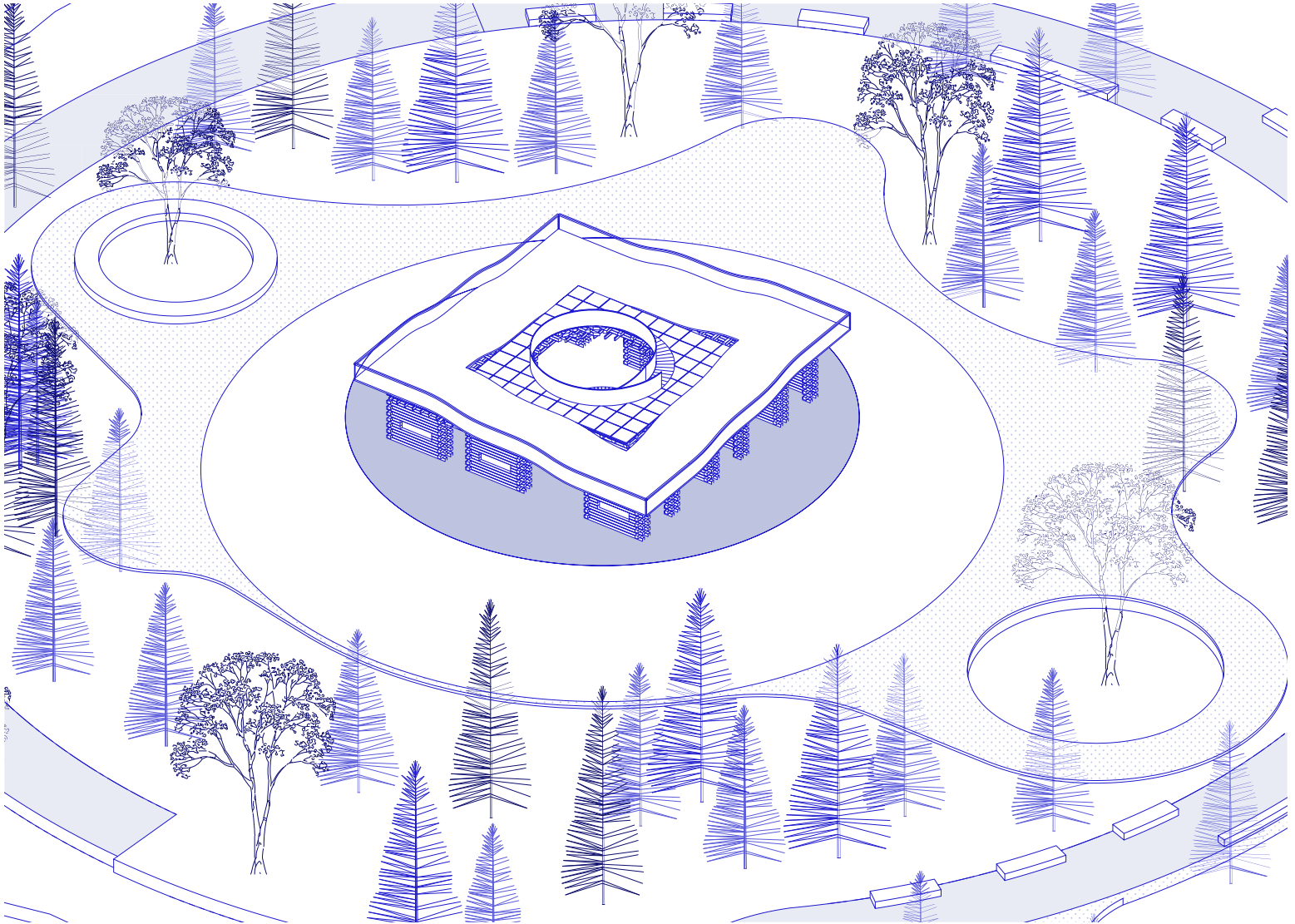
Idea sketch for playground 02
How to approach, scale, using rooftop
Sketch

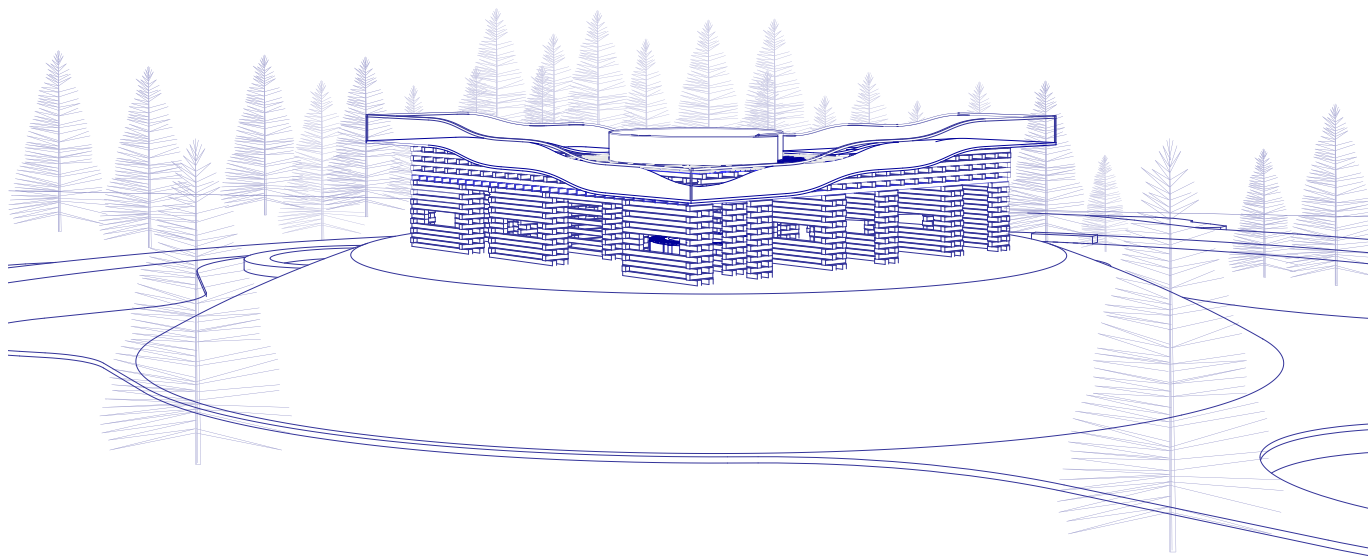




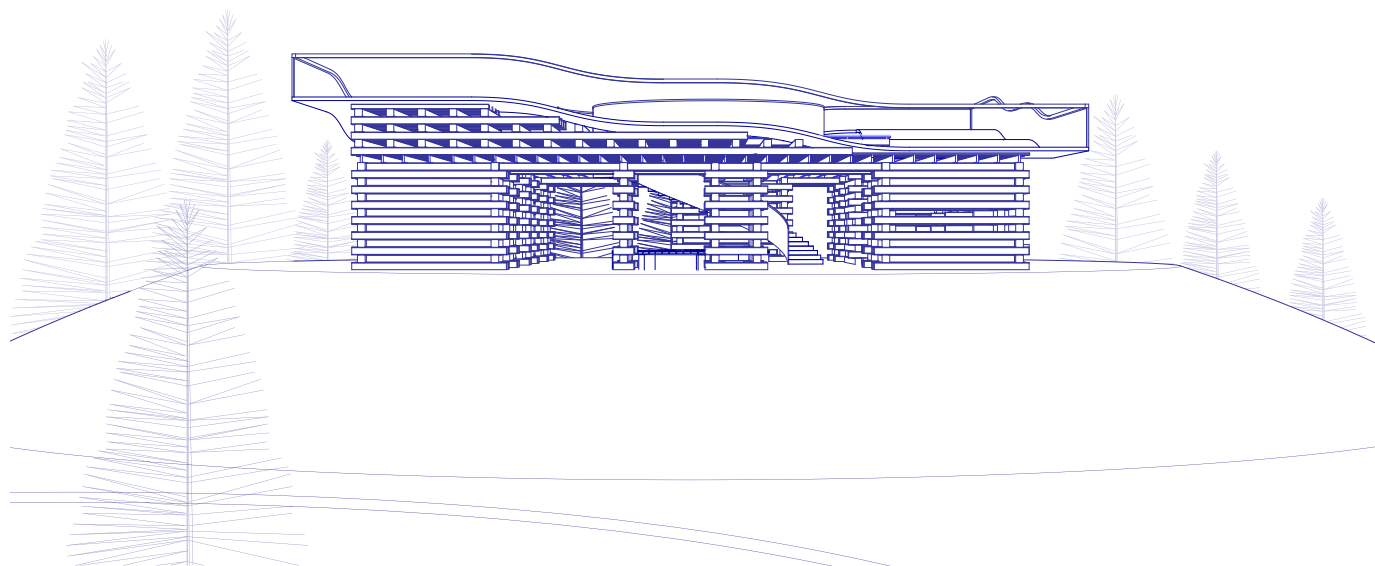




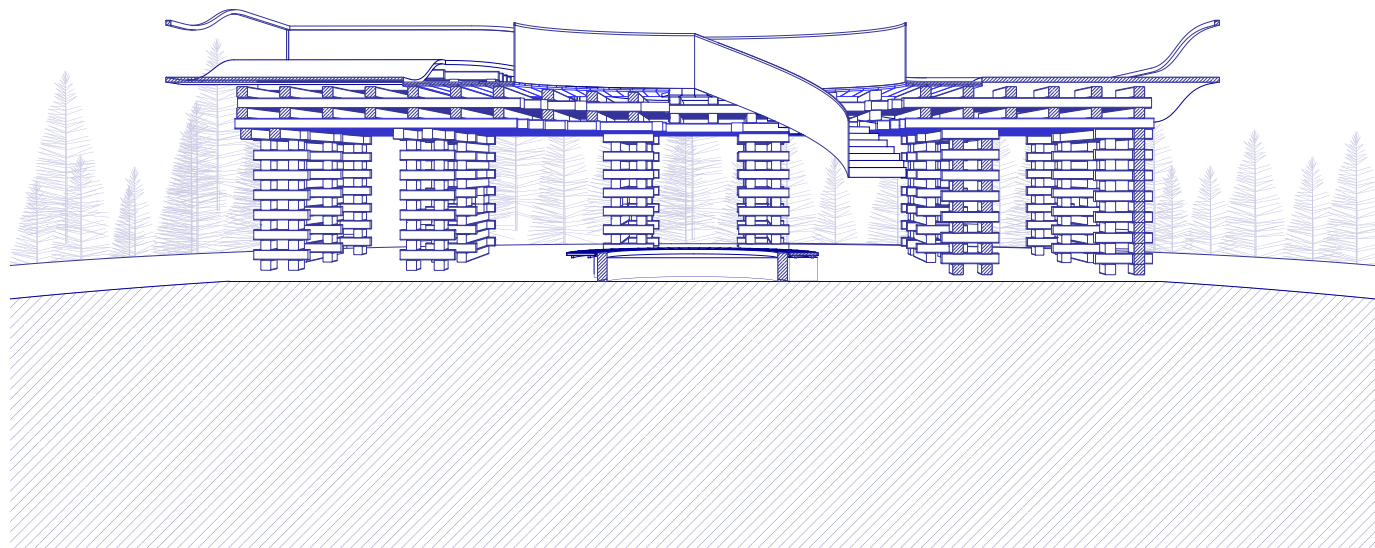




Perspective view 01



Perspective view 02



Section 01

Phase 4

Analyzing 'Design Process'

Diagram

Whole process of my diploma thesis would be explained by diagrams.

Guest lecture

Things to show

Layout of Final presentation

It is also important to show how to show the work.



Basic ISO
Plan
Section

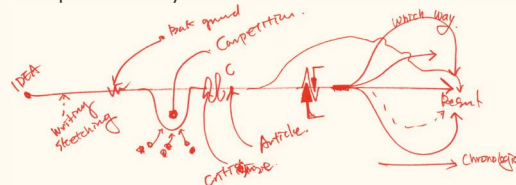
1C

Writing thesis

Variou

Layout of thesis

Loop of analysis



tem

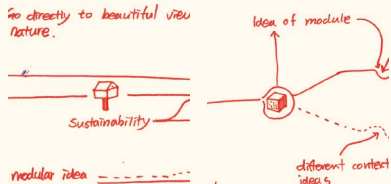


Diploma work : Analysing process of diploma work

Phase 4 Analysing 'Design Process'

Sketch

1st and second sketches.
Digitalizing hand drawings.



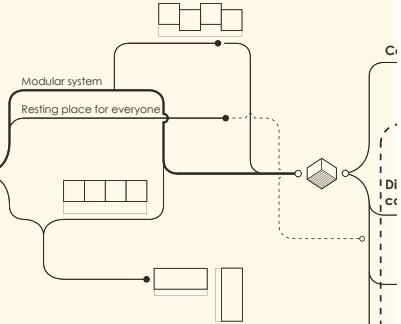
Starting point

Developing idea

Idea

Personal background
-Experiences
-Traditional background
- South Korea
-What I observed
- Finland
- Travel

Sketches
References

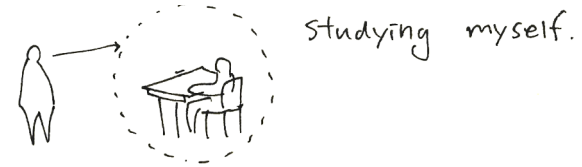


First analysis

The idea of the transformations, the process of this diploma thesis was open ended. Perhaps, if it would have been an ordinary school project, I would have finished work by showing only the Phase 3, by showing the results. However, through the guidance and design process, I kept saying 'I would like to show my design work as a process' which meant I wanted to show all the details of the designing and thinking process.

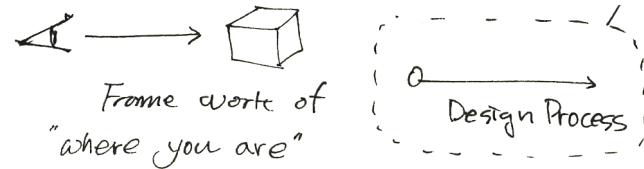
Then the questions occurred. With what method design process would be shown? The design process is combination of tangible materials and invisible thinking. I had tangible materials, which were drawings and writings from my sketchbook. However, without explanation, it isn't easy to understand one's thoughts. To clarify the connection between ideas and sketches, I decided to analyze my own design process by using the diagrams.

In this phase 4, there are sketches and thoughts about how to visualize the process through analyzing my own process.

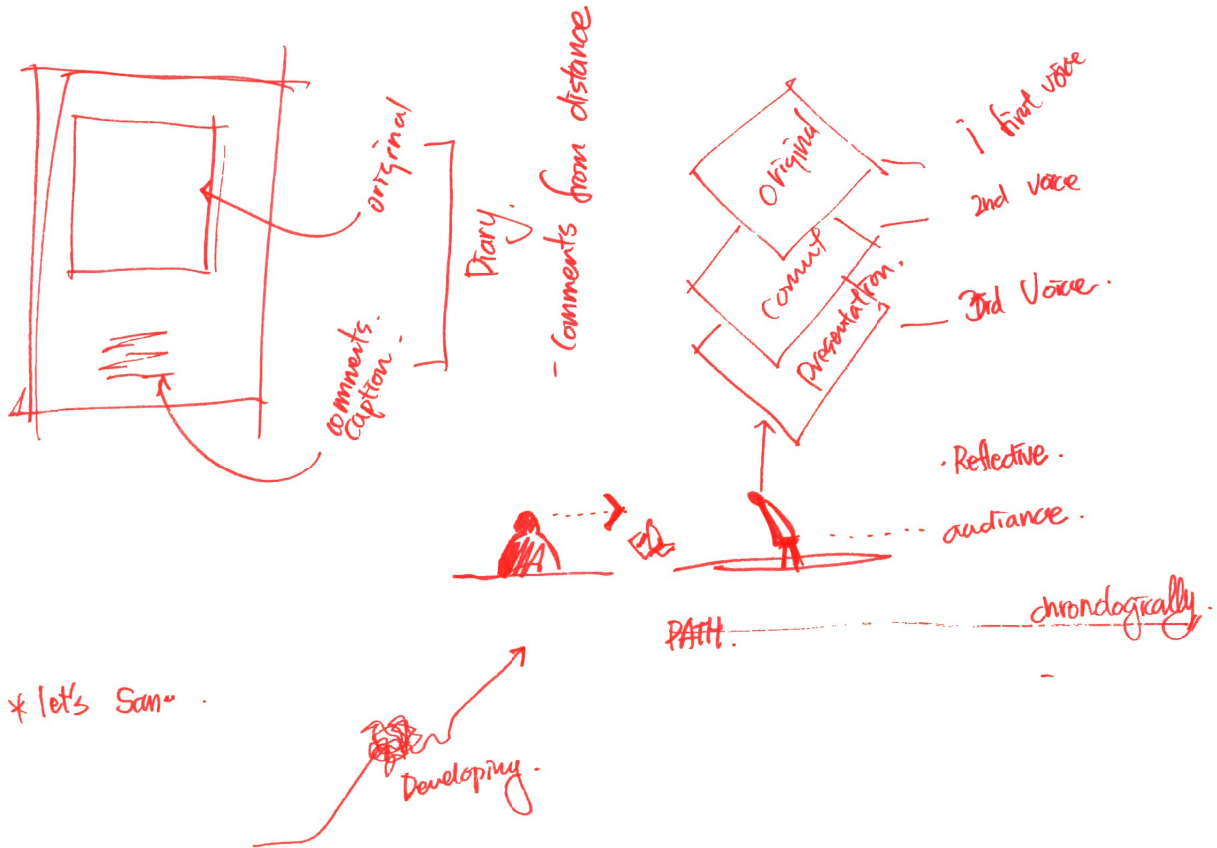


° Approach

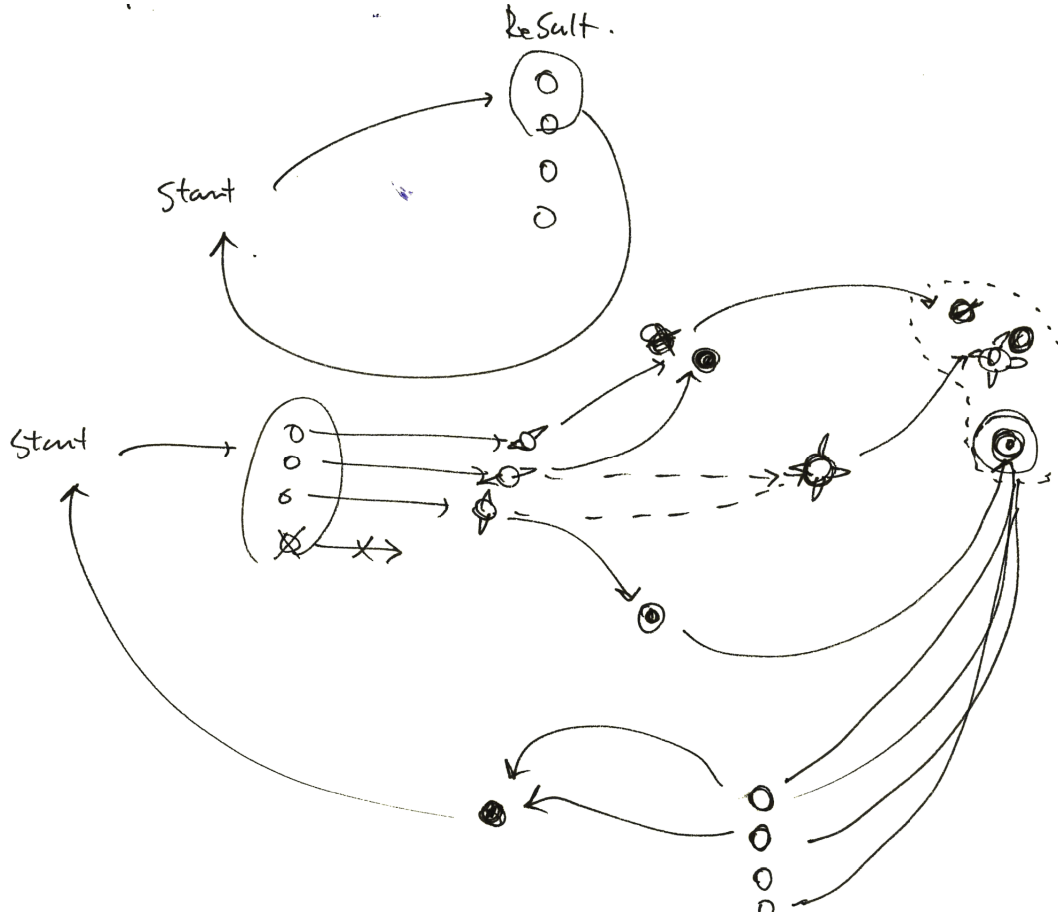
intension of looking at
"How we are producing
Design knowledge."



Reflective practitioner diagram
Learning by studying myself
Sketch



Different stages, voices
As process goes on, the layers of voice overlapped.
Sketch

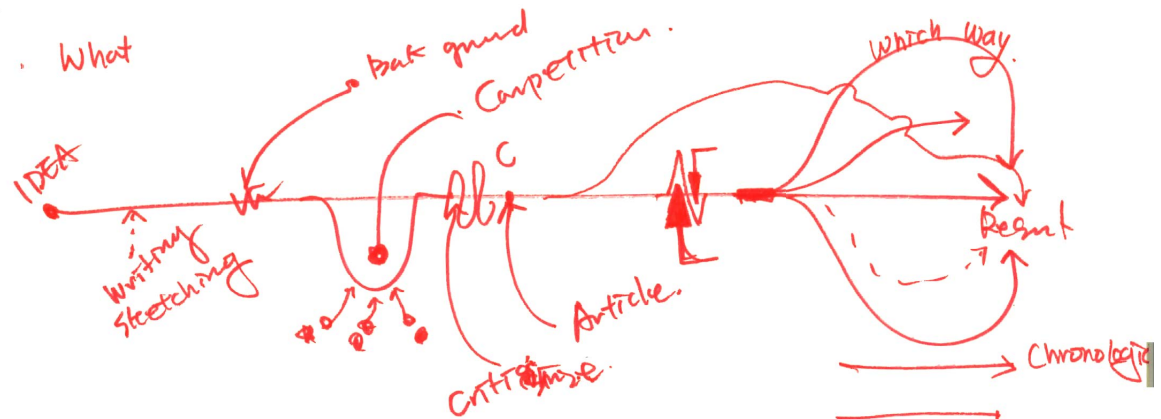


Initial sketch
Idea develops and process has loop
Sketch

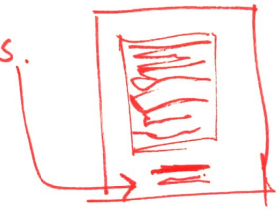
How competition affected / effected.



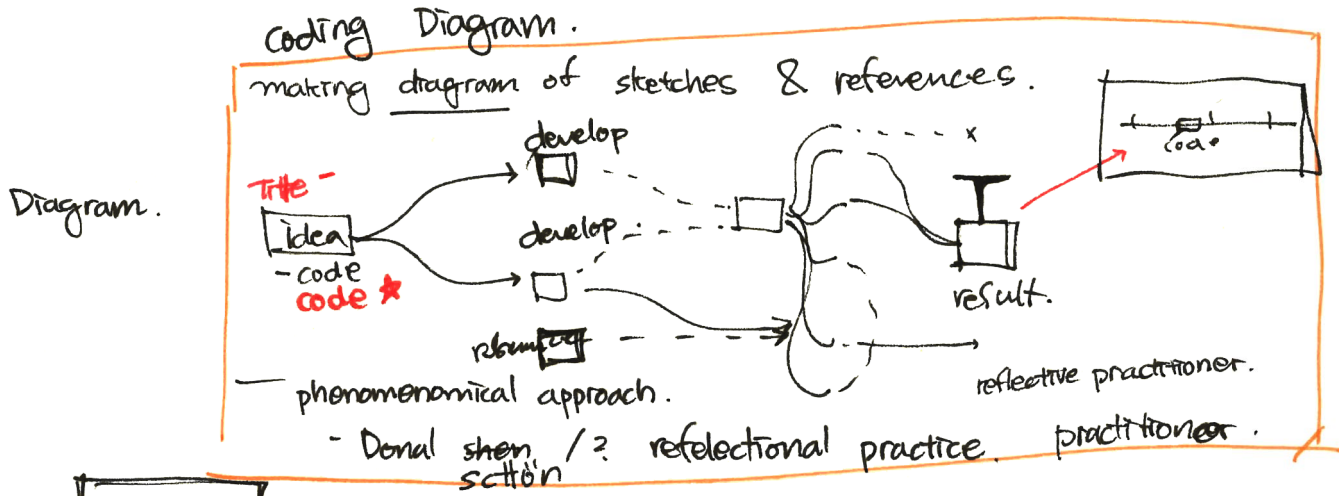
What



Captions. explanation / Revealing of thoughts.



Draft of Visualization
Things affect design process
Sketch



Sketch of general diagram
Try to find what materials link with what.
Sketch

Finalysing Diagram

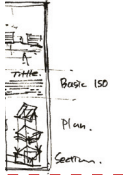
Diagram to explain architectural project

Guest lecture

to show

Importance of Final presentation

to important to show
to show the work.

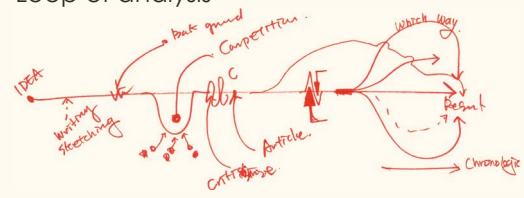


1C

Writing thesis

Various results

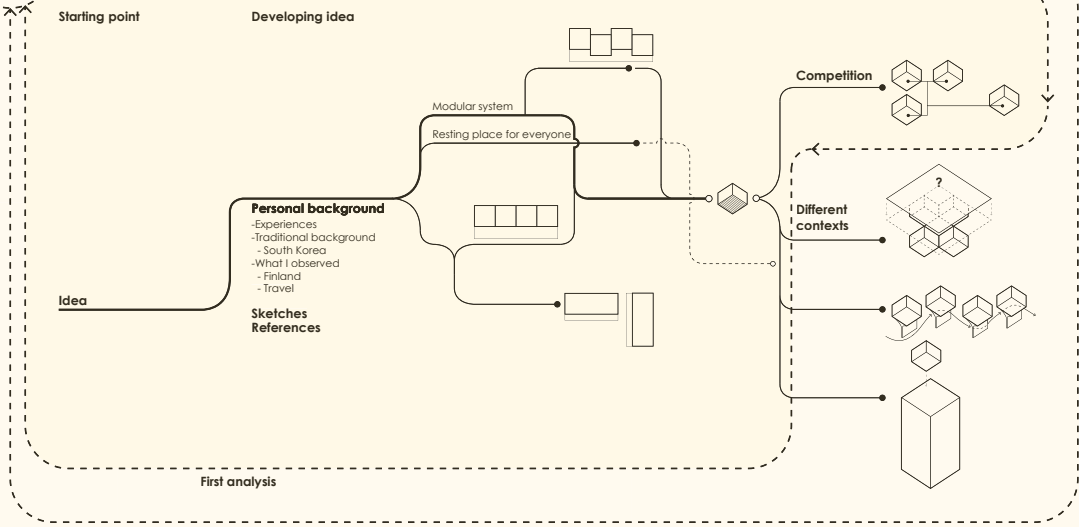
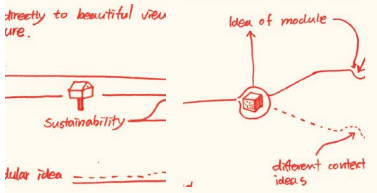
Layout of thesis Loop of analysis



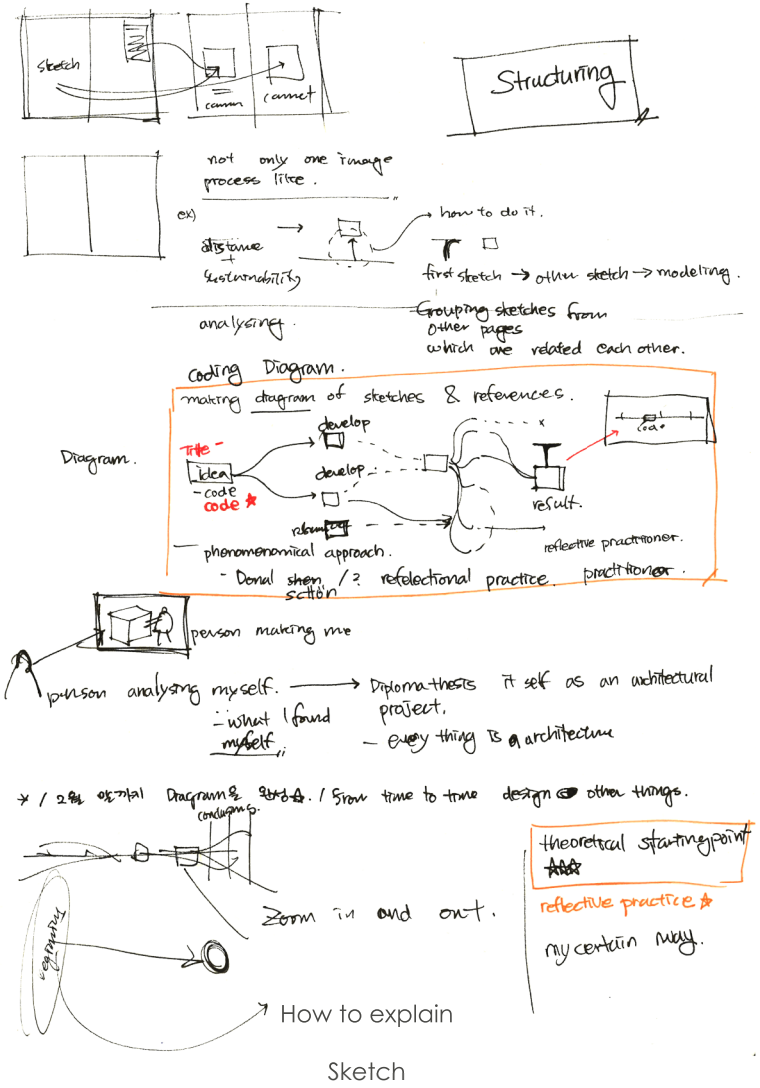
Diploma work : Analysing process of diploma work

Sketch

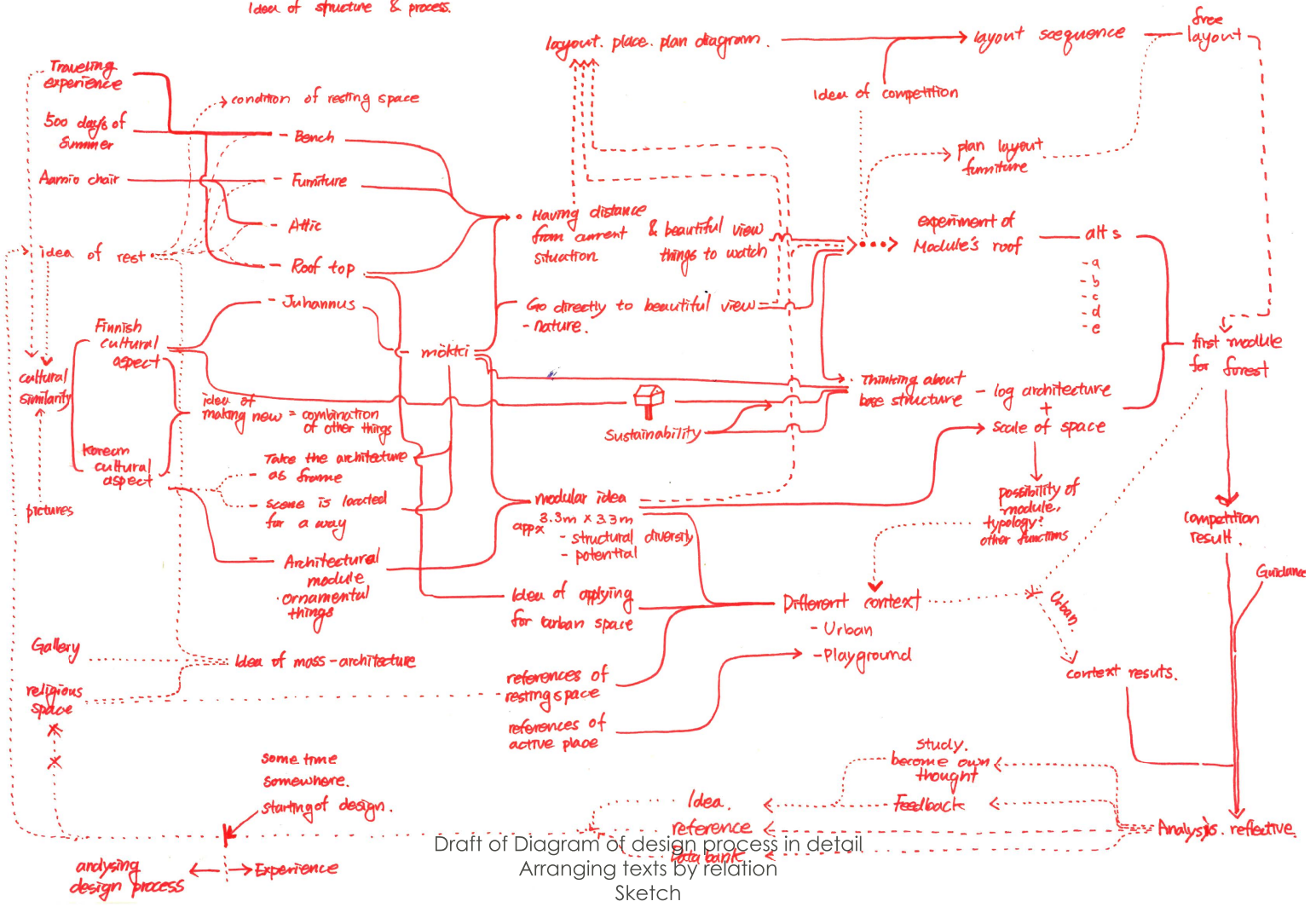
first and second sketches.
digitalizing hand drawings.



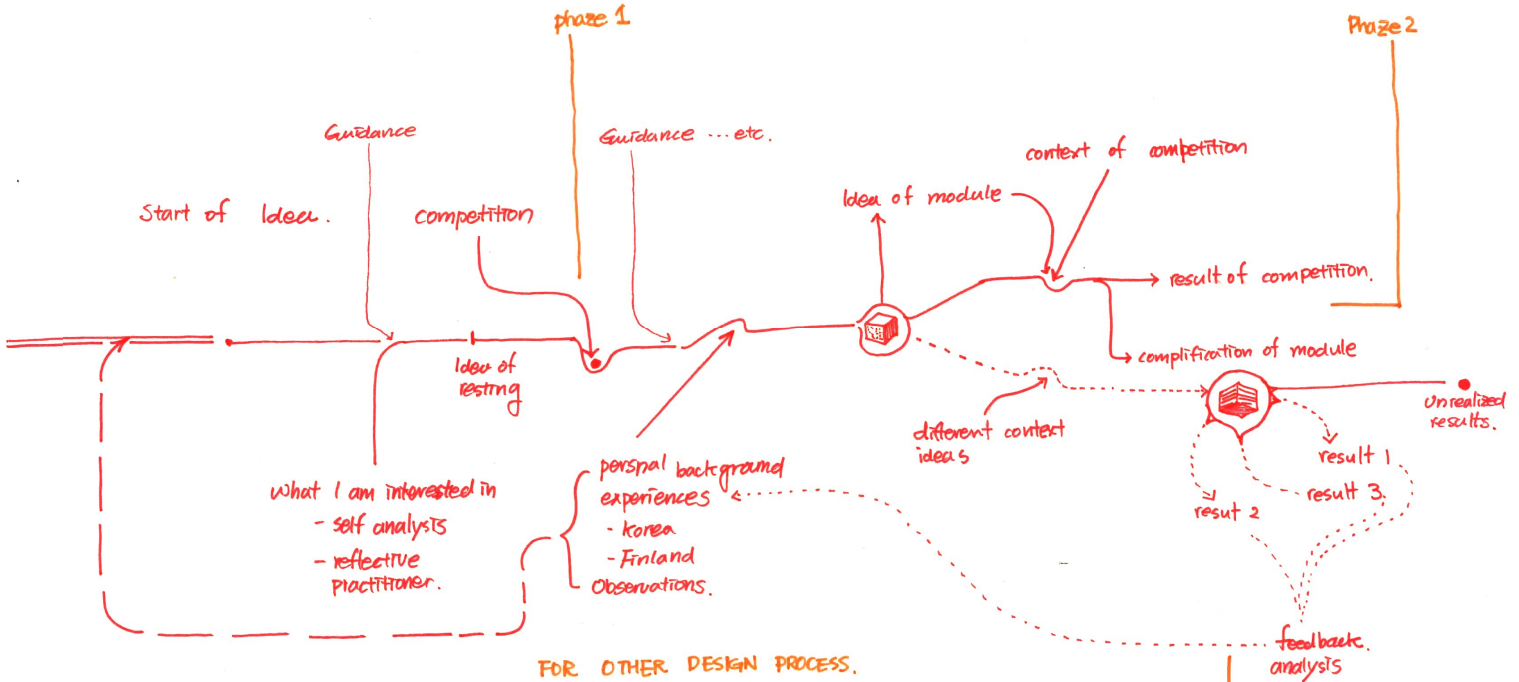
While I was analyzing my design processes, I was able to group and link together different parts of the process and divide them into separate stages. As the schematic diagram shows, through the design process could be explained as phases the idea developing and reaching the design results. However it is more important to think 'How' it develops. First, when starting the process I gathered all the material and made rough grouping to sort out everything. Then, it was easier to see how the idea developed and find out the internal processes and how things affected each other. Also there are important milestone type of contents, as big nodes, that lead to critical ideas and developments.



Idea of structure & process.



Draft of Diagram of design process in detail
Arranging texts by relation
Sketch



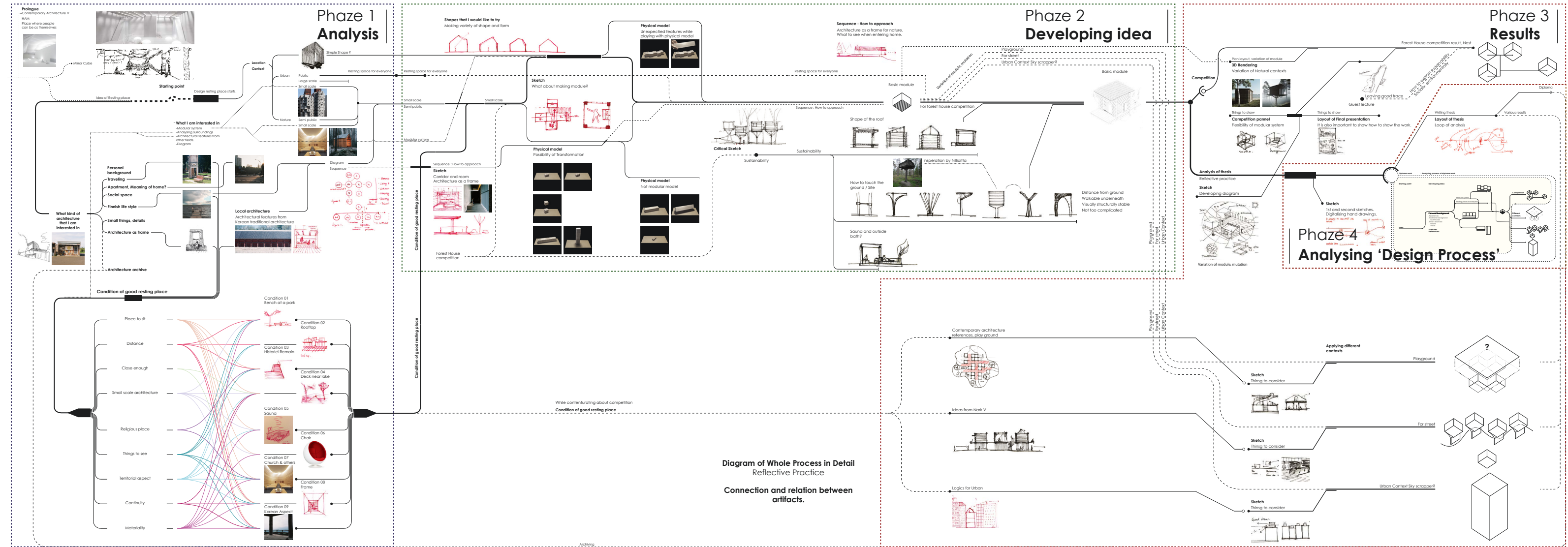
FOR OTHER DESIGN PROCESS.

• Design process analysis diagram.

Think about important phases.

- First idea. →
- competition.
- Design of competition
- analysis phase.
- results
- feedback?

Draft of Diagram of design process
Grouping by bigger thoughts
Sketch



Conclusion

The general aim of my diploma thesis was to better understand my own way of designing. The content of my diploma thesis was twofold: first, the actual design process of the resting place called Nest and second, the analysis of the actual design process of the Nest. Through analyzing my design process, I realized how important role sketching was when structuring my thinking. In addition to the sketches in the different phases of my design work, I was also willing to share my experiences and ideas influencing my way of designing. By visualizing the analysis of the design process and breaking it into three phases Analysis, Developing Idea, Results and the fourth phase Analyzing the Design Process itself, it was easier to study each of the phases separately. While focusing on each of the three phases I realized that the design process was not always going only forward, but also steps backwards and iterative loops where needed too.

Each phase has focus points to address. In the Phase 1, the main idea was to explain how the thoughts gather and develop as the ideas which could trigger

the design process. Phase 2 was focused on showing the design process without filtering out too much of original materials so that readers will have clearer understanding about the relationship between the initial ideas and the design results in Phase 3. Furthermore, with various results, I would like to address that even with the same ideas, the results of design could be different due to many other aspects, especially the contexts. Finally by visualizing the whole design process by the diagrams in Phase 4, the design process will be shown and explained clearly.

My diploma thesis didn't aim for a big and critical solution for current phenomena in society through architecture. The thesis was more about my personal development and sharing my ideas by showing the design process. This was also the reason why I wanted to use first person narrative form. Therefore, I hope my thesis would be treated as one of the reflections that raise discussion and thoughts contributing to develop one's own thoughts about designing and creating design knowledge.

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Literature & References

Bachelard, G., 1994. *The Poetics of Space*. 1994 Edition. Beacon Press.

Gehl, J., 2010. *Cities for People*. First Edition edition. USA: Island Press, 288 p, ISBN10: 159726573X

Gehl, J. & Svarre, B., 2013. *How to Study Public Life*. First Edition edition. USA: Island Press, 200 p, ISBN10: 1610914236

Heikkilä, J. & Suikkari, R., 2000. *Log Structures in Finnish Architecture - Continuing the Tradition* [online document]. Finland: University of Oulu. Available from: http://www.itam.cas.cz/miranda2/export/sitesavcr/utam/ARCCHIP/w11/w11_heikkila.pdf [Accessed 28 December 2019]. 14 p.

Heinrich, B., 2016. *Redefining Rest - Slowing Down to Speed Up!* [online document]. USA: TedxFargo. Available from: <https://www.youtube.com/watch?v=hypNfi10JZo> [Accessed 18 October 2019]. 16:31 mins.

KAIRAMO, M., 1978. *Features of Vernacular Architecture In Finland*. M.E.T.U. Journal of the Faculty of Architecture, 4 (2), p. 179-194.

Kossila, E., 2019. *PTT: Pienet asunnot pienentyneet Turussa läpi 2010-luvun-kaksiot pienenevät lähes viisi neliötä* [online document]. Turku: Yle Uutiset. Available from: <https://yle.fi/uutiset/3-11029570> [Accessed 21 October 2019].

Pallasmaa, J., 2012. *The Eyes of the Skin - Architecture and the Senses*. 3rd edition. USA: John Wiley & Sons, Inc, 130 p, ISBN: 9781119941286.

Pencavel, J., 2014. *The Productivity of Working Hours*, Germany: The institute for the Study of Labor (IZA), Discussion Paper No. 8129. Available from: <http://ftp.iza.org/dp8129.pdf> [Accessed 18 October 2019]. 57 p.

Rubin, D., 2013. *The power of rest and reflection* [online document]. Israel: TedxDC. Available from: <https://www.youtube.com/watch?v=L2G-jmmbvfYY> [Accessed 18 October 2019]. 8:00 mins.

Verbeke, J., 2013. *This is Reserch by Design* [online document]. In M. Fraser (Ed.), *Design Research in Architecture: An overview* (pp. 137-159). Ashgate. Design Research in Architecture. Available from: <https://www.google.com/search?q=johan+verbeke+this+is+research+by+design&oq=johan+verbeke+this+is+research+by+design&aqs=chrome..69i57j69i60.9118j0j4&sourceid=chrome&ie=UTF-8> [Accessed 9 March 2020].

Walker, M., Sleep is your superpower, Ted Talk, https://www.ted.com/talks/matt_walker_sleep_is_your_superpower/up-next?language=en, 2019

Wikipedia, 2017. *Freezing Toilet* [online document]. w:Wikipedia:Freezing Toilet. Available from: https://en.wikipedia.org/wiki/Freezing_toilet [Accessed 23 January 2020].

Wikipedia, 2019. *Water Recycling Shower* [online document]. w:Wikipedia:Water Recycling Shower. Available from: https://en.wikipedia.org/wiki/Water_recycling_shower [Accessed 23 January 2020].

Wikipedia, 2020. *Incinerating Toilet* [online document]. w:Wikipedia:Incinerating Toilet. Available from: https://en.wikipedia.org/wiki/Incinerating_toilet [Accessed 23 January 2020].

Wikiquote, 1977, Charlie Chaplin, Quotes [online document], "Life is a tragedy when seen in close-up, but a comedy in long-shot." Quotation, w:Wikiquote:Charlie Chaplin. Available from: https://en.wikiquote.org/wiki/Charlie_Chaplin [Accessed 29 Feb 2020]

Yun, J. S., 2008. *History of Korean Architecture*. Republic of Korea: Dong Myeong Publishers, 541 p, ISBN10: 8941121264

Picture references



Exhibition at HAM : I (Am)
Paweł Althamer
Photo by Maija Toivanen

<https://www.hs.fi/kulttuuri/art-2000006060111.html>

Pages used: 9, 11, 14, 16, 20, 54, 198



Niihaitta Helsingin Seurasaarella
(Open air museum)
Vernacular architecture
Photo by Argus fin

fi.wikipedia.org search
Niihaitta

Pages used: 10, 12, 66, 97, 105, 107,
199



Church Stone Shelter
Arkkitehtitoimisto TILASTO
Photo by Julia Kivelä

Archdaily.com search Church stone
shelter

Pages used: 9, 11, 14, 20, 54, 69, 198



Eero Aarnio's Ball Chair
Photo by

Pages used: 9, 11, 14, 26, 34, 198



Nakagin Capsule Tower
Kisho Kurokawa
Kisho Kurokawa architect & associates
Photo by Kakidai

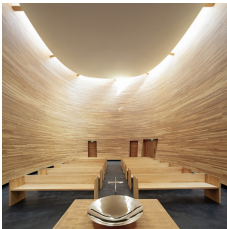
en.wikipedia.org search
Metabolism (architecture)

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198



(500)Days of Summer Poster
Designed by Martin Lucas

Pages used: 28



Kamppi Chapel
K2S Architects
Photo by Tuomas Uusheimo

arch2o.com search
Kamppi chapel

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56, 69, 198

Appendix

Final boards

