

sensory bath

thrilling and calm encountering in a vertical bath experience



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thanks

Thanks to my tutor Jonas Carlson for support and valuable comments, to Kengo Skorick for supplementary tutoring and help with the digital tools and finally to my examiner Morten Lund for pushing my project forward.

abstract

This project is about how architecture can be used to achieve a spiritual sensation through thrilling and calm experiences. The combination between these has been investigated and applied in a bath house on the cliffs of Fredhäll at Kungsholmen in Stockholm. The main part of the project is about finding a conceptual idea of how to use light, shape and contact with the water to create spiritual sensations and the resulting building proposal is therefore a conceptual idea rather than a buildable product.

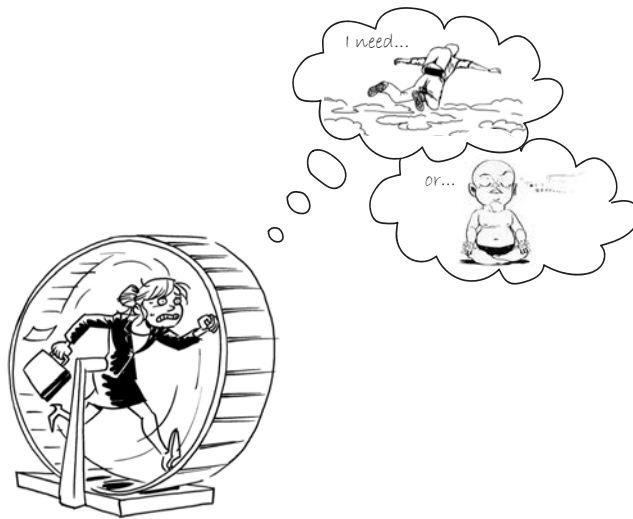
Mainly, three tools has been used in the exploration of thrill and calm; daylight, shape of the room and connection to the water. The thrilling and calm experiences has been categorized into different sub-feelings; captured, falling, fear of the unknown, embraced, sacred and free, among others. This was done to be able to evaluate and describe the experiences.

The project has been designed in an explorative model based way, where each room has been created separately. The rooms have then been combined into clusters, starting with one room adding the next, finally resulting in a maze-like structure with new experiences around every corner.

discourse

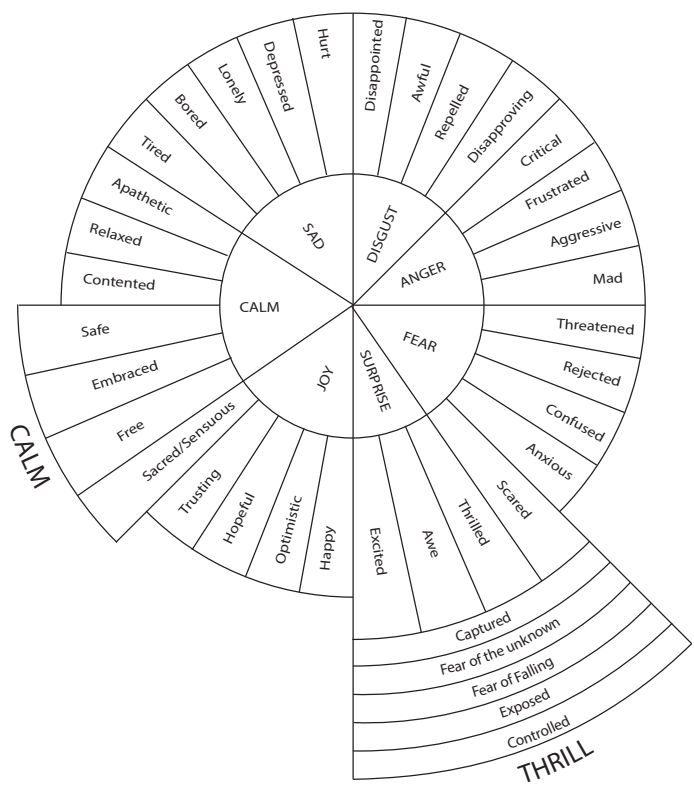
In the stressful life we are living today, we are more stuck in the past and planning for the future than we are embracing the present, and we are often caught up in daily routines that are not stimulating our senses. Not being present creates a feeling of losing control and of not having contact with ourselves. Many of us therefore search for spiritual sensations to get a conscious recognition of being alive. Some people seek the thrill by exposing themselves to fearful or exiting activities, others seek their inner calm.

In this project I have investigated how architecture can contribute to spiritual sensations by focusing on the calm and thrilling experiences and the combination between these.



emotion wheel





















In the emotion wheel below it can be seen which emotions that is included in my definition of calm and thrilling experiences. The calm experience can be achieved by feeling free but also by feeling embraced while the thrilling experience can be achieved by a combination of excitement and fear. There are several different features that can trigger this thrilling sensation, feeling captured, not knowing what is coming ahead, being high above the ground or feeling that you are controlled by something.
















emotion categories

To be able to compare and describe the different spaces and sensations the emotions have been categorized and different tools for achieving the experiences has been created. For example the sense of being captured can be achieved both by being below something or by not having any way back as can be seen in the table on the next page.

thrill

| | | | | | |
|---------------------|---|---|---|---|--|
| CAPTURED |  |  |  |  |  |
| | | Below | No way back | Only one way to go | Squeezed |
| FALLING |  |  |  |  | |
| | | High above | Steep slope | Slippery/ unsafe ground | |
| FEAR OF THE UNKNOWN |  |  |  |  | |
| | | Not seeing ahead | Dark | Lost | |
| EXPOSED WOUNDERABLE |  |  |  | | |
| | | Cold | View | | |
| POWERED |  |  |  |  | |
| | | Not in control over body | No choice | Controlled by the room | |

calm

| | | | | | |
|----------|---|---|---|---|--|
| FREE |  |  |  |  | |
| | | View/ Overview | Power | No boundares | |
| SACRED |  |  |  |  | |
| | | Watched over | Enlightened | Blessed | |
| EMBRACED |  |  |  |  | |
| | | Taken care of | Protected/ Sheltered | Peaceful | |
| SAFE |  | | | | |

existing examples

On the next side some existing examples of how to use architecture to create different emotional experiences can be seen. In these projects the purpose of creating the spiritual sensations is often to emphasise the story that is to be told. In many churches the light and room shape has been used to create a feeling of awe, emphasizing the power of god, and in the Jewish museum the feeling of fear has been used to make you understand the horror of the holocaust. In this project the spiritual sensations have instead been used to create a focus on yourself and to create a feeling of being present.



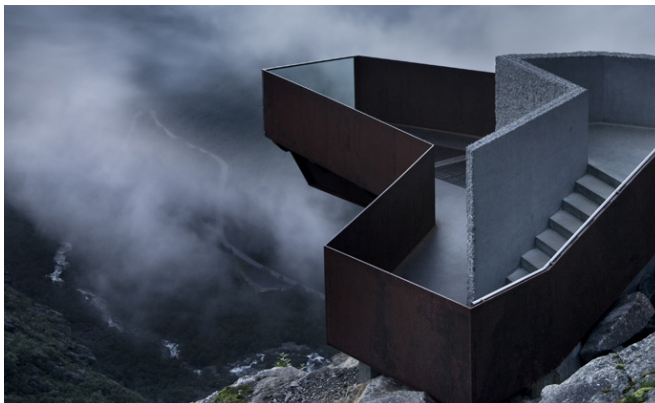
FEAR – Jewish museum, Berlin



CALM – Can Lis, Portopetro



AWE – Pantheon, Rome



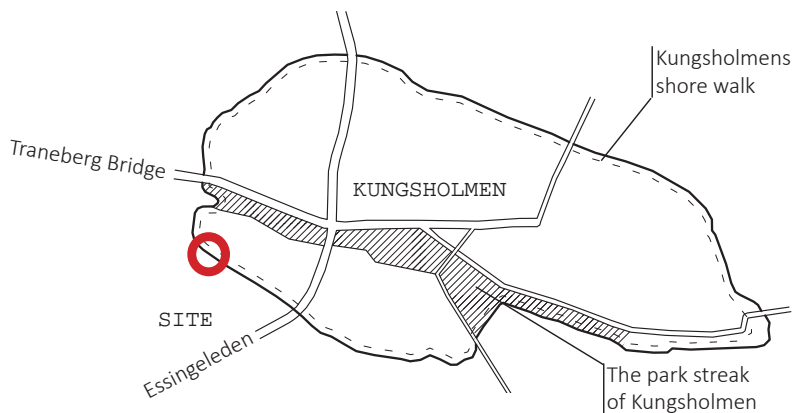
THRILL – National tourist route Norway

site

The site is located at the cliffs of Fredhäll at the western end of Kungsholmen in Stockholm. Stockholm has a unique combination of city vibe and closeness to nature and the site in Fredhäll is a good example of untouched nature in the city center that should be enhanced.

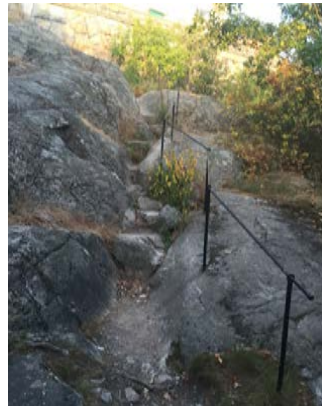


The location in Fredhäll connects to the large park streak going through Kungsholmen and also to the shore walk around the island and is therefore a good location strengthening the existing park areas. There are two large roads surrounding the area; Essingeleden and Drottningholmsvägen which is passing over Traneberg Bridge, these are both affecting the environment on the site.





SITEPLAN
SCALE 1:4000



site investigations

To understand the properties and limitations of the site and to be able to choose the specific location, the surrounding area was investigated carefully. The investigations included the style and buildings in the surrounding area, the properties of the cliffs, the sightlines and views. Also more theoretical information about the site was collected, like wind data over the year and variation in water levels.

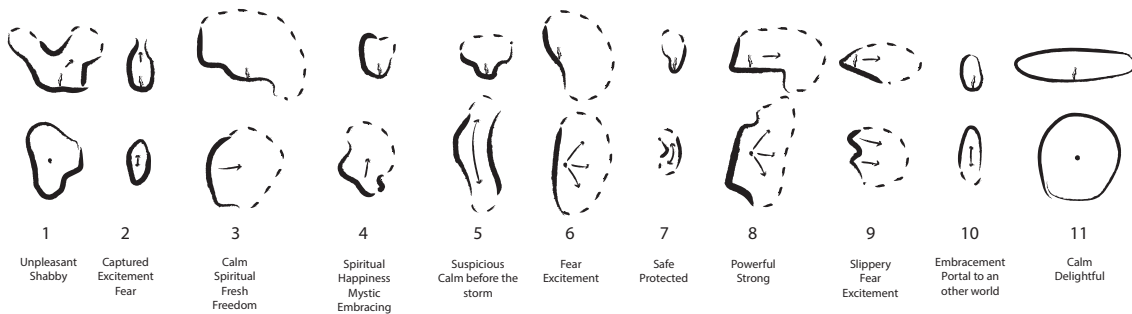
a walk along the cliffs

Along the cliffs you encounter a lot of different spaces. The contrasts between the very closed rooms and the rooms that are free and open towards the sea is thrilling. At one moment you are on steep cliff with a view totally open towards the sea and you feel both fear and excitement, in the next moment you are in a crevice in the rock glimpsing the water far ahead feeling calm and safe.

The walk goes from high above the sea to really close by. On the cliffs high above the sea you feel power, like you own the world, close the water you feel more insecure like the water has the power over you, especially a windy day. The relation to the water has a strong influence on the feelings along the cliffs.

Comparing the map with the topography perception, we can see that parts of the walk seems much shorter than it is, which is caused by the variety of dramatic and exciting rooms.

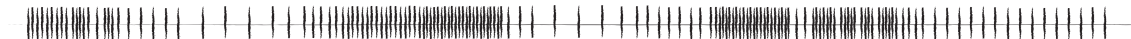
The texture of the ground is varying a lot making you aware of the change of the landscape, it goes from large rocks you have to climb over to smooth soil paths, from rough gravel patches to smooth and flat cliffs. Variation in the texture is maybe not as evident as the topography and the change in space but it gives another dimension to the journey.



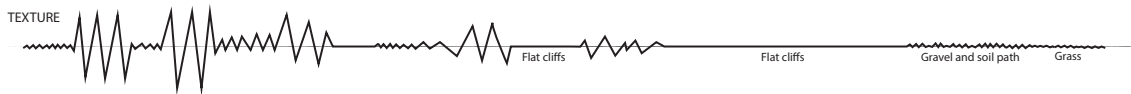
DARK/LIGHT



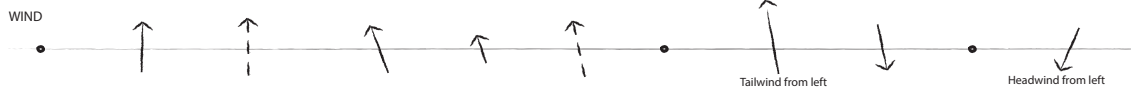
HEAT/COLD



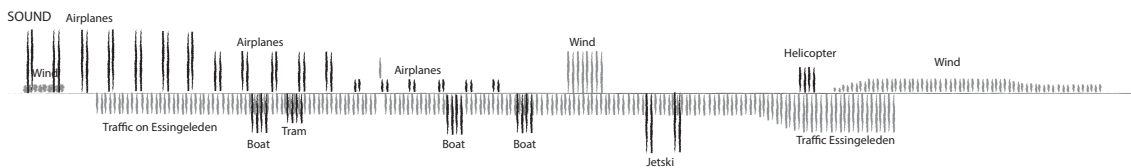
TEXTURE



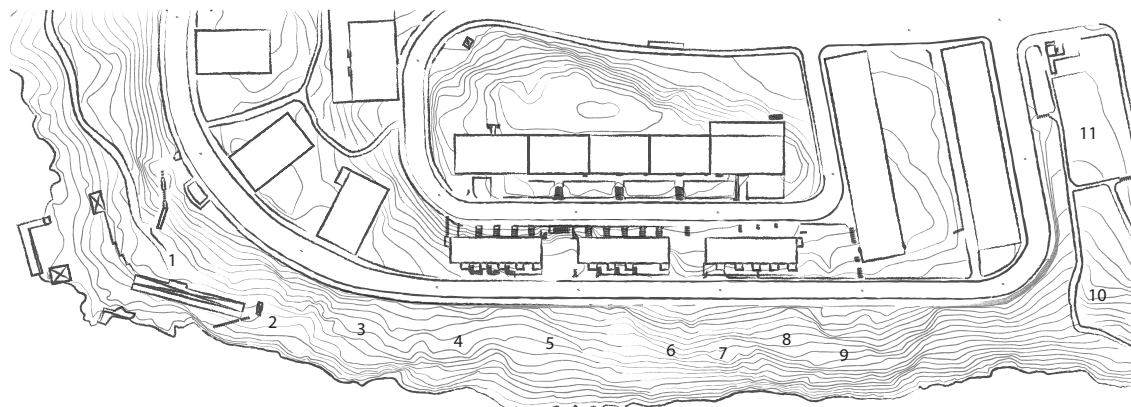
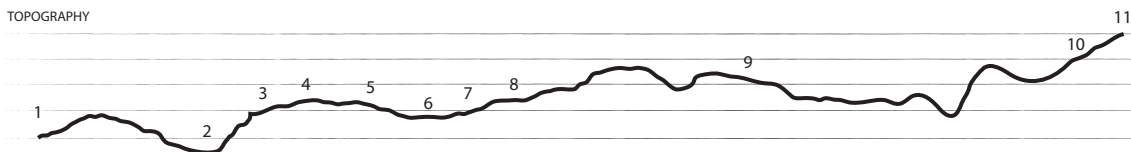
WIND



SOUND



TOPOGRAPHY



choice of site

The most important criteria has been to find a place with difference in contact with the water, a place where the cliffs softly goes into the water and close by are very steep.

Regarding the sun, there is good conditions all along the site, but the best condition is achieved at the cape.

It is interesting that you do not hear much of the traffic from the Traneberg Bridge even though it is close by and that the sound of the airplanes is decreasing a lot when you just get around the corner of the cliffs. The traffic from Essingeleden is though present all the time, but the sound is increasing when you come closer. With regard to disturbing noise the best location for the building is as close to Traneberg Bridge as possible but still being around the corner sheltered from the airplane noise.

In the map on the next page it can be seen how the conditions have affected the choice of location on the site.

criteria

for the choice of location on the site



Difference in contact with the water

-flat cliffs

-steep cliffs

Good light conditions and sun during most of the day



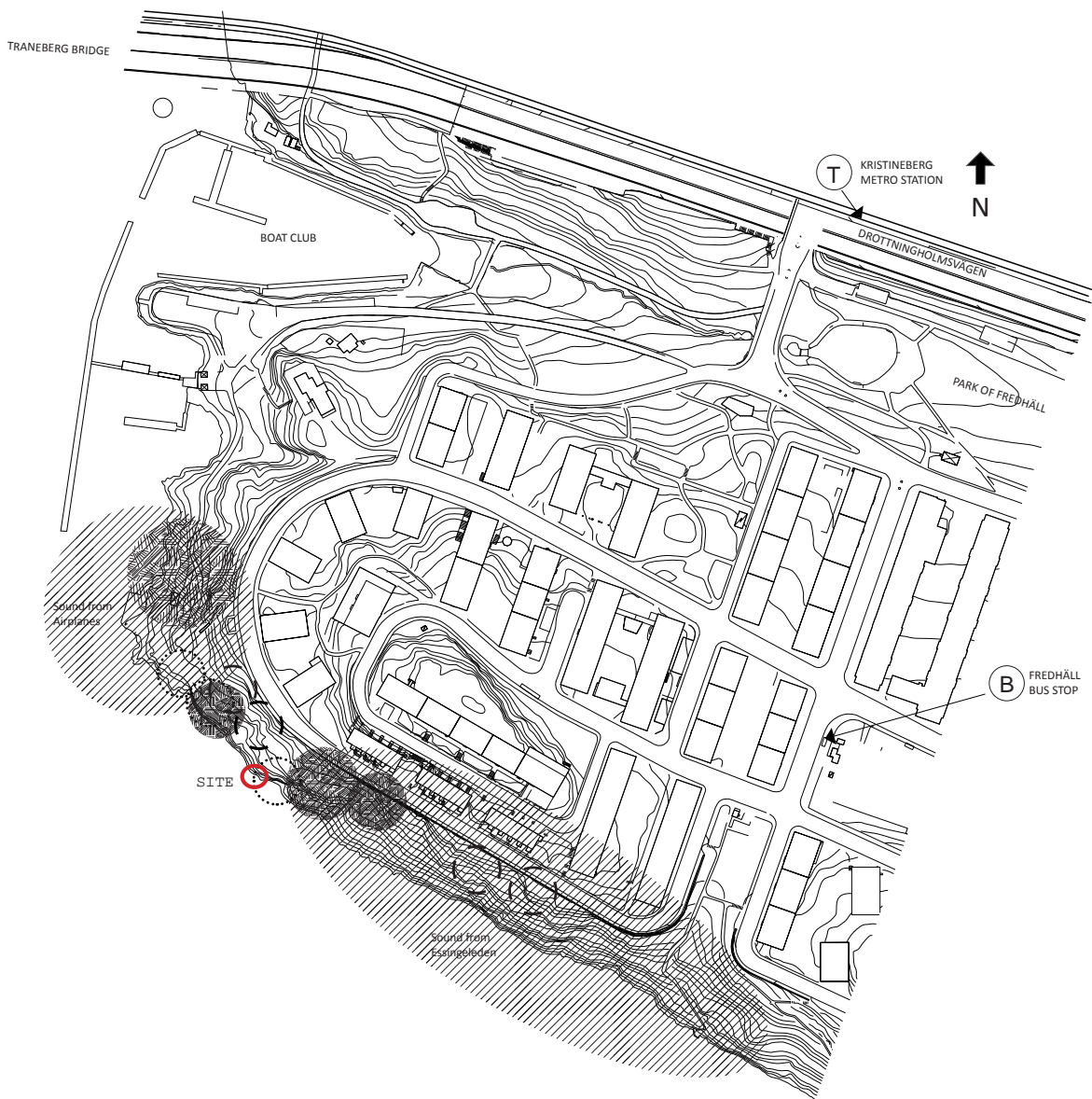
Disturbing noise



Vegetation



Spaces along the cliff, giving different feelings,
calm/protected, fear/excitement



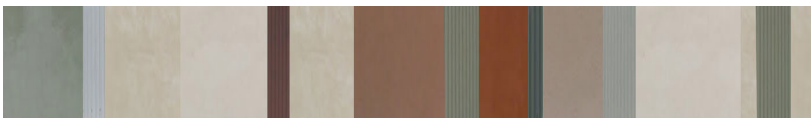
SITEPLAN
SCALE 1:4000

building style

Fredhäll is built in the 1930's and almost all buildings are from that era. Closest to site there are buildings with three to five floors but in the area most buildings are five to seven floors high. The colours and materials on the buildings is mainly light coloured plaster, mostly white but also pale yellow or orange, combined with white, dark pale green or dark red windows. Many buildings has corrugated iron balconies in white, soft pale green or dark pale rust red or steel bar balconies in dark green or black. The roofs are painted in pale green or red.



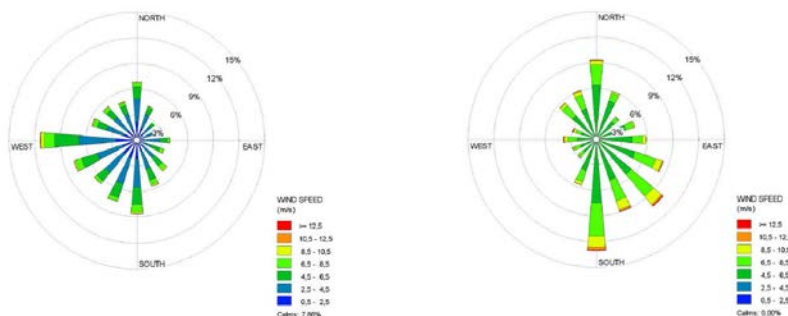
Some buildings close to the site.



Colors on the buildings in the area.

wind

You are quite exposed to the wind at the cliffs which is pleasant when the sun is very hot, but in colder weather the wind makes you shiver. As can be seen below the wind is mostly blowing from west but in bad weather its main direction is from the south.



Wind during the year and wind during the year when there is precipitation, based on data from 1951-2009 at Bromma airport (SMHI, 2013).

waterlevels

Mälaren is regulated by locks at Slussen and the risk of flooding is therefore very small. Today the capacity of letting water pass at the locks are not sufficient, and the water levels of Mälaren is therefore varying between 0.41 m and 1.42 m above sea level with a mean value of 0.86 m. But when Slussen is rebuilt the discharge capacity will be five times larger and therefore flooding will not be taken into consideration in this project.

sightlines / important views

Important sightlines and monuments viewed from the site is among others the new tower in Alvik, the view through the two bridges and a green area on Stora Essingen. The Alvik tower is important since it is a natural eye catcher and it also gives a feeling of being in the city atmosphere.



2. Alvik towers and marina



1. Traneberg bridge / Traneberg strait



3. Alvik bridge / Strait between Stora Essingen and Alvik



4. Essinge church



5. Green area and marina



6. Essinge bridge / Strait between Lilla and Stora Essingen



7. Högalid church

design investigations

To find features that gives a feeling of calm and thrill several investigations and experiments were conducted. To get an good idea of how light and shape could be used it was necessary to build models and check the behavior of the shape with real light. Also in the other investigations physical models were beneficial since I find it the best way to keep the mind free and makes it easy to change and adjust, and to find interesting results from spare pieces laying around.

movement experiments

The movement experiments were conducted to find the relation between the spaces and how the circulation of the building would work. The models were made from Styrofoam, steel wire and wooden beads.

linear



Linear path



Mixed experiences



Horizontal layout



Attached spaces

linear winding

Even if the linear path is winding, you know it when you have walked it once. Not having different paths to choose gets less exciting.

separate paths, not intersecting



Parallel paths



Separated experiences



Vertical layout



Attached spaces

parallel separated

Parallel paths with separated experiences, calm in one path and fear in the other. The different experiences is not emphasizing each other when they are separated



Parallel paths



Mixed experiences



Vertical layout



Attached spaces

parallel intertwined

Parallel paths with mixed experiences. There are different choices of paths but they are not intersecting during the way. Interesting with the vertical movement.

separate paths, emerging in one point



Diverging paths



Mixed experiences



Horizontal layout



Attached spaces

diverging

Paths emerging in the same point but going in different directions not meeting again. You have to go the same way back.



Linear diverging paths



Mixed experiences



Vertical layout



Attached spaces

corridor

Paths separating out from a main path. Easy to orientate but less exciting.



Looping paths



Mixed experiences



Horizontal layout



Attached spaces

loop

Paths separating out from the same point, intersecting later on. There is a possibility to suddenly return to a point where you have been before.

intersecting paths



Intersecting paths



Mixed experiences



Vertical layout



Attached spaces

simple intersection

Paths separating out from the same point and intersecting later on, you can meet along the way even if you take different paths. There is a possibility to suddenly return to a point where you have been before.



Intersecting paths



Mixed experiences



Horizontal layout



Separated spaces

labyrinth

The paths are starting from different points and are intersecting in various places. You can get lost like in a labyrinth and then suddenly be back to a point you have been before.

connection between room experiments

This investigation was made to explore how different entering situations effect the perception of a room. The investigation was made by cardboard models.



glimpsing something
Excitement, want to find the way there.



wide path leaning upwards
Increasing expectation.



small opening
Anticipating small room. Have to bow or crawl to get in, makes you feel vulnerable.



large opening
Anticipating large room. Expecting something exceptional. Making two rooms feel like one. Giving overview of the layout.



deep opening
Sense of massiveness, have time to anticipate what is coming. Do not immediately see what is ahead, can just glimpse it.



going down in a hole
Anticipating dark and cold room below ground.



opening up towards something
Embracing the outside. Anticipating large room.





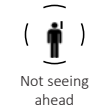
climbing up into

Curiosity, discovering something.



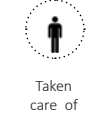
from light to dark

Blinded by light or dark, feeling vulnerable.



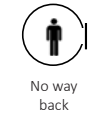
slide down gentle slope

Feeling taken care of.



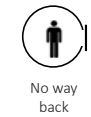
sliding into the unknown

No way back, do not know what comes ahead.



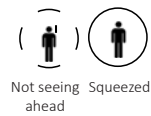
jumping into

Captured can not go back up.



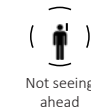
narrow passage

Feeling squeezed, captured, not seeing what is coming ahead.



walking through fog

Not seeing ahead.



light and shape experiments

The focus of the study was on light, including amount and size of openings and on shape of the room including angle of ground surface. Some of the models were deliberately cut into certain shapes, others were put together from spare pieces. The models were made from EPS.

impression of room shape

angled room



Discovered place



Excitement, Curiousness



Thrill

edgy room



Discovered place



Excitement, Curiousness



Thrill

rectangular room



Fixed, manmade, impossible to adapt



Controlled by the space



Thrill

curved room



Unfixed place, possible to adapt



In power of the space



Calm

size of openings

large opening



Focus on outside even if the opening is just translucent



Free



Exposed

medium opening



Focus in the direction of the opening, on the light source

small opening



Focus on the room itself



Embraced



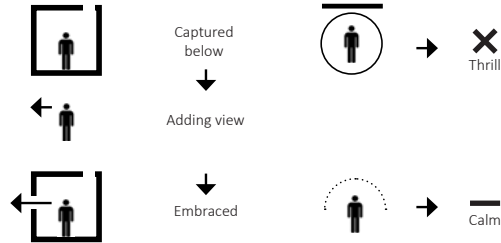
Captured

effect of adding opening in eyelevel

opening above



opening above and in eyelevel



light effect from angled openings



Diverging opening



Diffuse light

Converging opening



Clear light

relation between the opening direction

openings in same direction



Being under something



Thrill

openings in opposite direction



Flow through the room



Movement

openings in multiple direction



Dynamic but room in rest



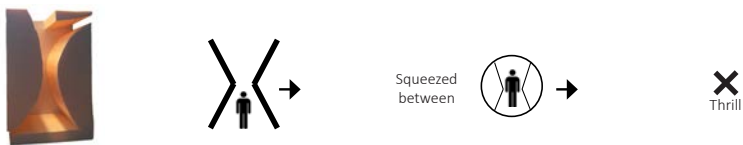
Calm

impression of room shapes

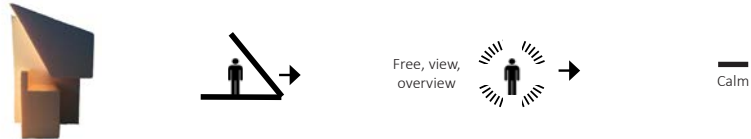
leaning outwards



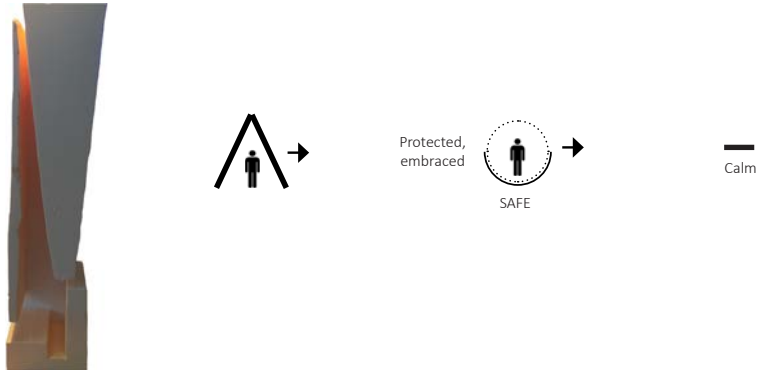
concave room



opening up sideways








leaning inwards









relation to the water experiments

The experiment was made to investigate how the relation to the water affect the experience. The models were made from EPS and plastic sheets.







under the water

| | | | | | |
|---|--|---|---|---|-------------|
|  | Being below the water surface/ Being swimming high above the ground. |  |  | → | ✗ Thrill |
|  | Being below the water surface, have to dive down to find the "diving bell" |  | | → | ✗ Thrill |

captured

| | | | | | |
|---|--|---|---|---|-------------|
|  | The opening out is under water and is not immediately found. |  |  | → | ✗ Thrill |
|  | The whole room is filled with water and you cannot get out of the water. |  |  | → | ✗ Thrill |

ways of entering the water

| | | | | |
|---|--|---|---|-------------|
|  | Have to jump or fall to reach the water. |  | → | ✗ Thrill |
|  | Stroll gently into the water. |  | → | — Calm |
|  | Cannot walk nor jump into the water, have to slide into. |  | → | ✗ Thrill |

feet in water



Strolling in the water along the path.



Calm



Dipping your feet into warm water.



✗
Thrill

ground surface



Path leaning towards the water on both sides.



✗
Thrill



Have to jump on poles to get to the other side.



✗
Thrill



Floating ground, unstable to walk on.



✗
Thrill

fog



Fog makes you insecure, you can not see what is ahead.



Not seeing ahead



Lost



✗
Thrill

from investigations to design

From the investigations I found some features that were extra interesting and I continued to develop these in the project.

movement experiment

I found the labyrinth movement the most interesting since it gives you a lot of different choices and possibilities to move and you can meet along the way even if you take different paths. You can get lost and then suddenly be back to a point you have been before and around every corner you discover something new.

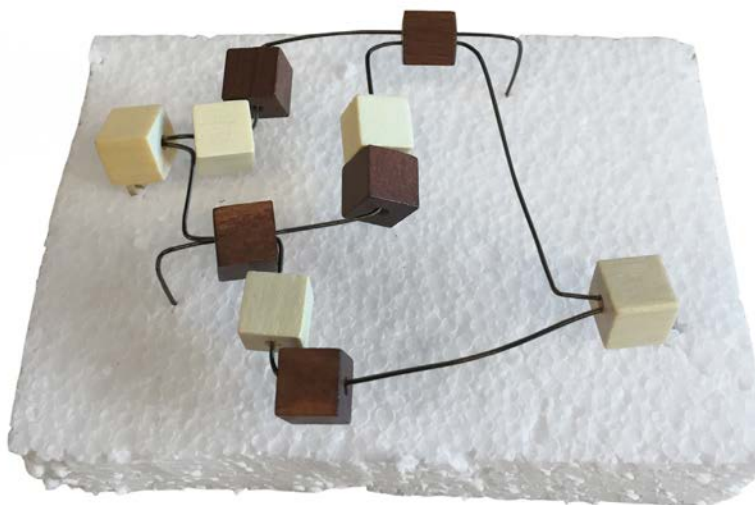
labyrinth



I also found the verticality in the parallel intertwined movement very interesting even if the other properties with the parallel paths is not so attractive.

parallel intertwined

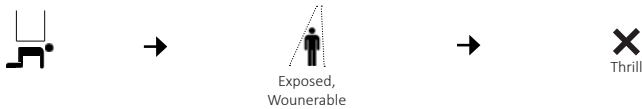




connection between room

Regarding the connection between the different rooms and spaces I found that the way you enter a room affect the feeling you get from the space. A small opening makes you bow to get in, creating a vulnerable feeling, and this could both emphasize the thrilling experiences or contrast to the calm experience making you more aware of the contrast.

small opening



The vertical movement is also something that I found interesting, since it brings out a curiousness and will to discover what is above or below, and this I found both in the climbing up and sliding down.

climbing up into

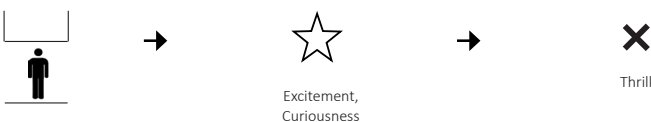


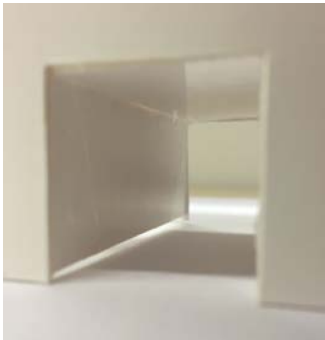
sliding down into
the unknown/steep
slope



Another interesting thing regarding the movement is the thick openings giving a sense of massiveness. It also gives you time to get an expectation of the coming space and you do just glimpse what is coming next and not immediately see.

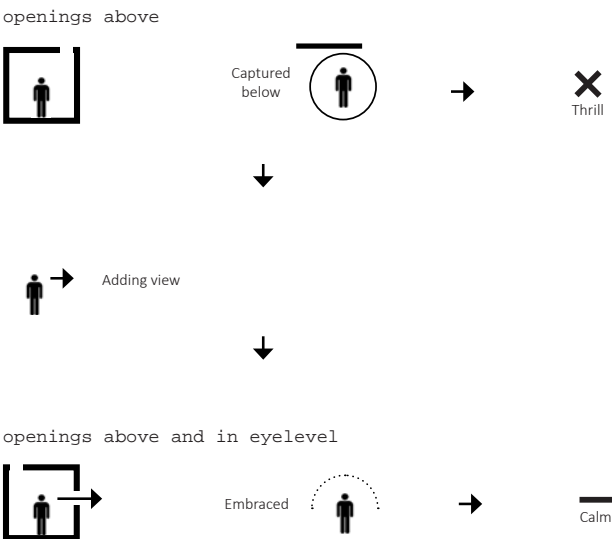
deep opening

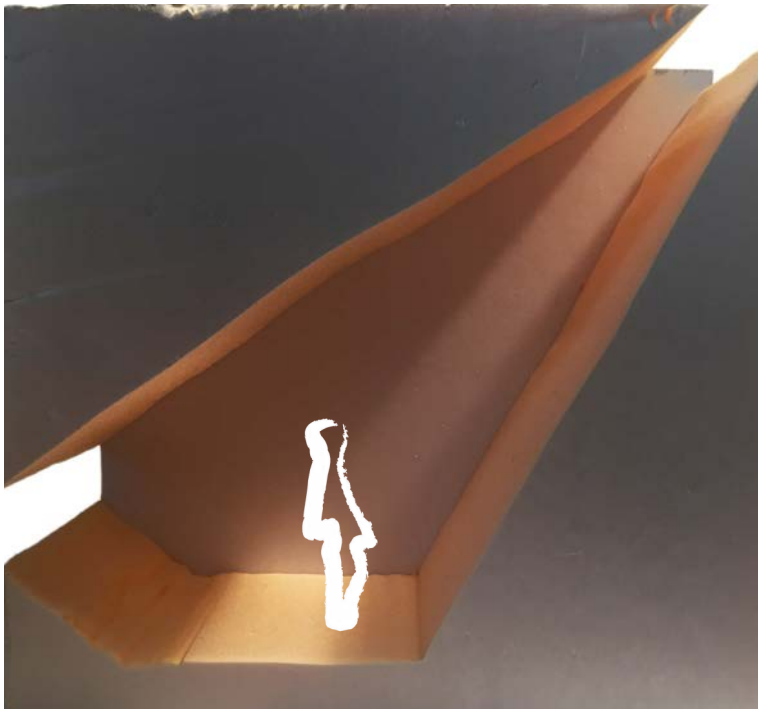
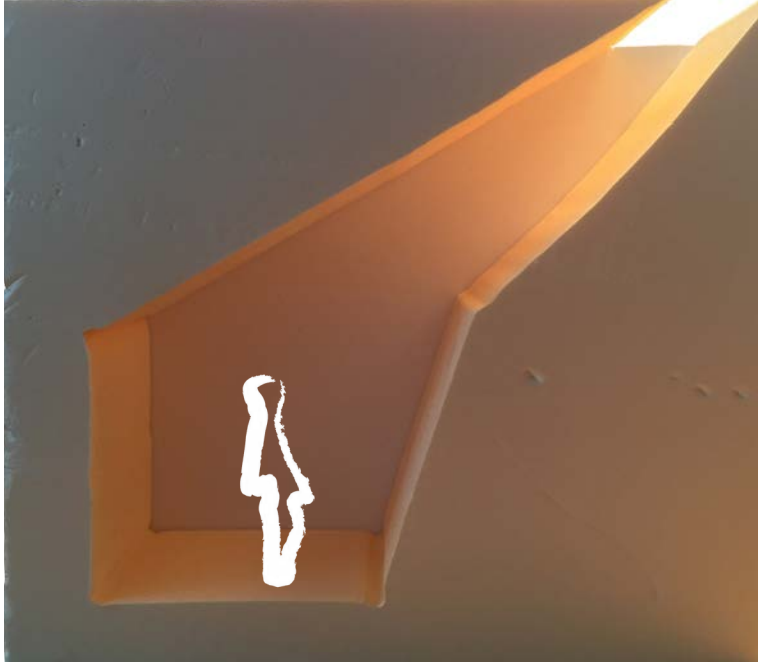




effect of adding opening in eyelevel

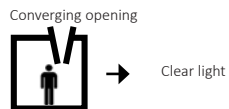
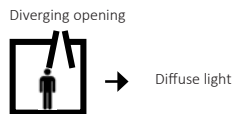
This phenomena was something that i found very interesting and useful in how the view and lighting direction can be used to give completely different impressions. For example with light coming from above, an opening in eye-level immediately changes the impression of being captured below ground to a embracing feeling.

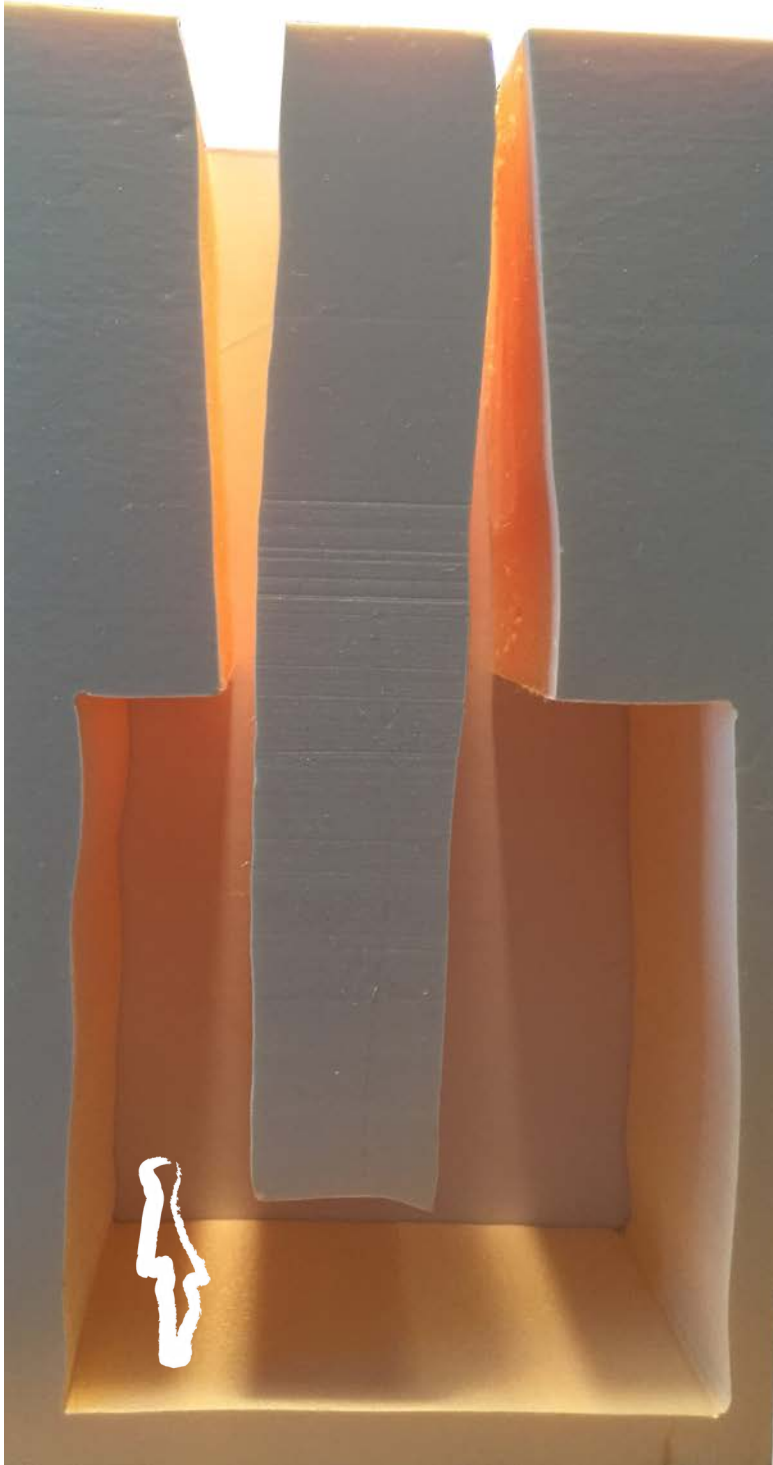




light effect from angled openings

The light effect from the angled openings is also something that I found interesting. Giving a different sense in the room depending on the angle of the opening. A diverging opening gives a diffuse light while a converging opening gives a clear light.





impression of room shapes

Regarding the shape of the room I found the angled and edgy rooms most interesting since these gives a feeling of the space being created by nature and discovered by the visitor rather than man-made as the rectangular rooms.

angled room



Discovered
place



Excitement,
Curiousness



✕
Thrill

edgy room



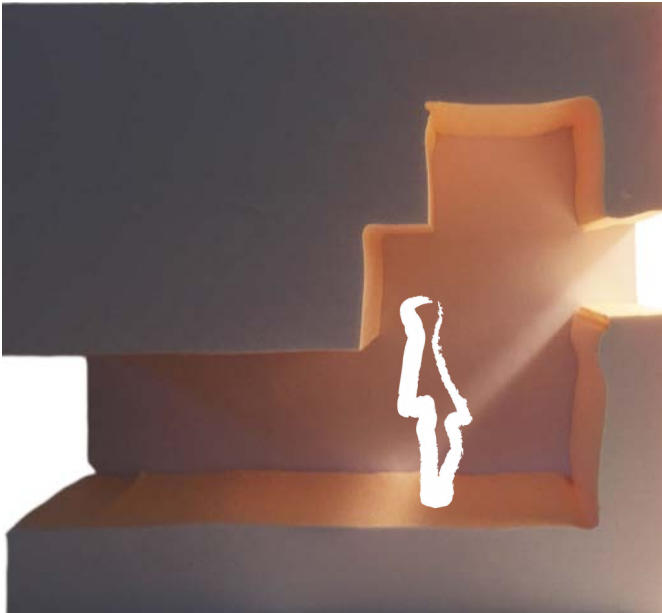
Discovered
place



Excitement,
Curiousness



✕
Thrill



relation to the water experiments

In the investigation of the relation to the water I found some usable features, below I present some of them creating thrilling experiences. For example a diving bell under the water gives a feeling of being captured, a floor surface that is slippery and leaning creates fear of falling and a room where you do not find a way out creates a captured feeling.

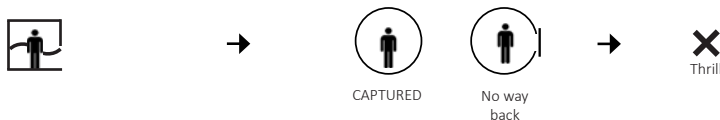
under the water / diving bell

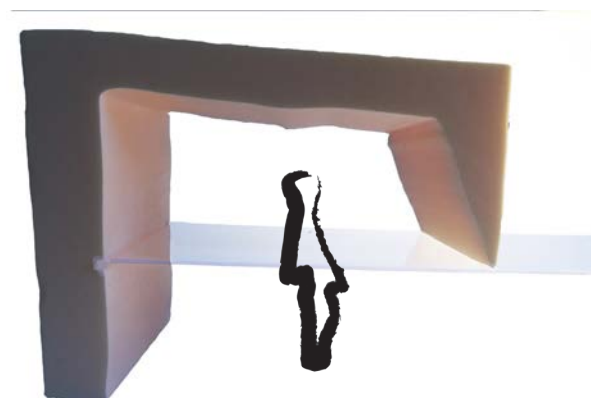
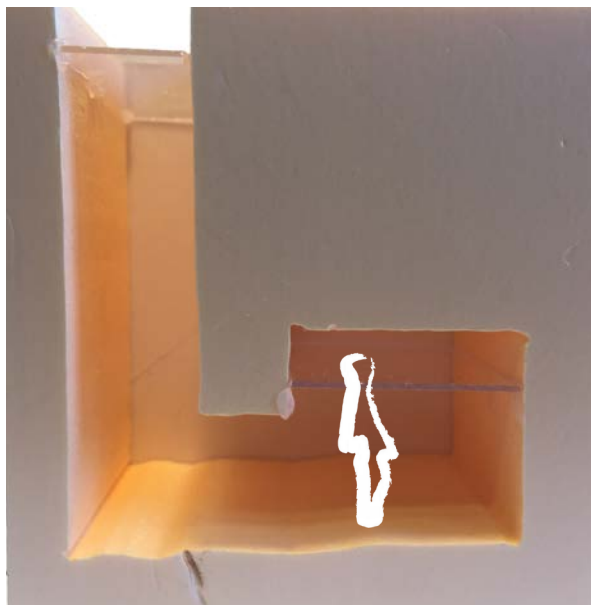


ground surface



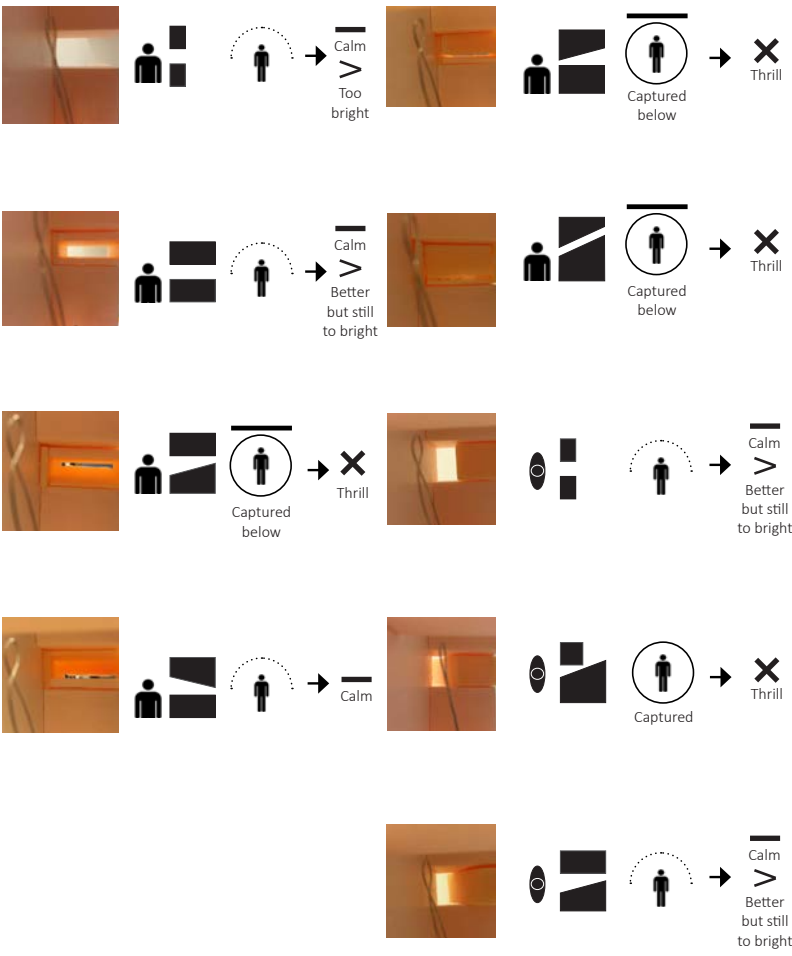
captured





sub-investigation: opening in eyelevel

This investigation was a continuation of what I discovered regarding the opening in eyelevel and the angled openings. The purpose was to find a way to make an opening in eyelevel large enough to not feel captured but small enough to not destroy the light effect from above in rooms with opening in the roof.



process

The process has been model based and the sketching has been done only in physical models. The advantage with sketching in models instead of sketching on paper is that it is so much easier to understand how the spaces relate to each other. To actually have to construct a model of the building while designing it make you aware of things that you would not have realized otherwise and this results in new solutions. The process can be divided into four steps.

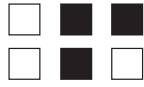
In the first step separate room sketches were made to come up with the design of the experiences. The tools used in creating the separate rooms was light, shape and the connection to the water.

The second step was about finding the relation between the rooms and the experiences. This was done both by conceptual movement sketch models but also by attaching the separate room models to each other. Several clusters were then created based on the models of the attached rooms. The rooms were clustered together on the basis that they should give each other something interesting or relate to each other in a good way. For example rooms with focus on temperature or underwater experiences. When doing this the interest for the vertical layout emerged as a cause of the interest in vertical movement.

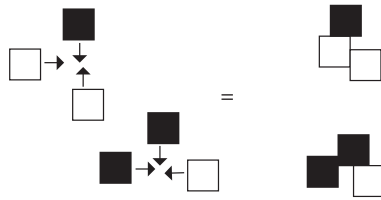
In the third step the relation between the clusters was found and a core model was made based on the clusters. This was done by forming the mid of the building first and then adding experiences above and below until a tower was shaped.

In the fourth step additional experiences were added to the structure to fill up between the clusters. One room was added at a time, starting with the existing room figuring what experience should come next. Rooms and experiences were added, removed, changed and put back until the experiences, connection between the rooms and the order felt complete.

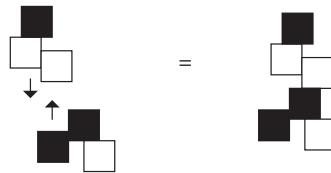
SEPARATE EXPERIENCES



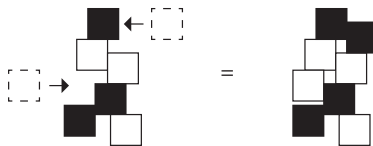
CLUSTERS

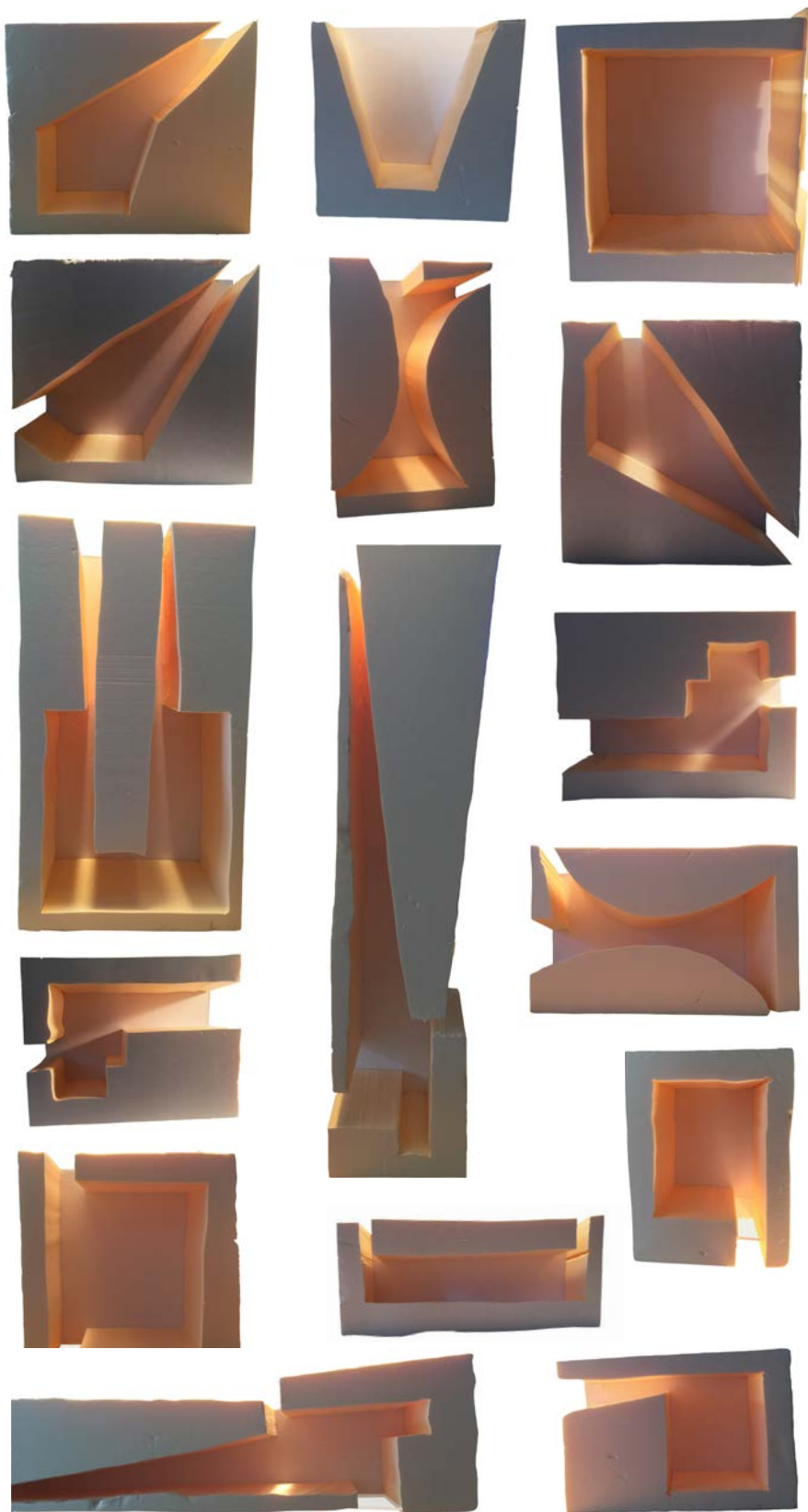


COMBINING CLUSTERS



ADDING EXPERIENCES











the bath

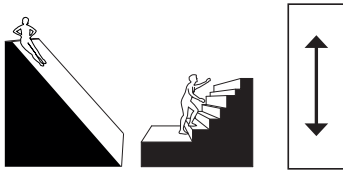
The results from the investigations were applied on a bath house at the cliffs of Fredhäll. The purpose with the bath house was to give the space, light and water experiences a relation and a function, to investigate how their relation to each other could strengthen the experience and create a story when moving through the structure. The purpose has not been to create a proper building proposal but rather to display a concept for how light, shape and connection to the water can be used in architecture to create sensory experiences and a sense of presence.





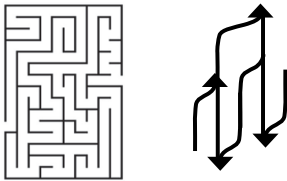
main concepts

In the project some main concepts has been important apart from the main topic of the spiritual sensations.



vertical movement and layout

The first main concept is the vertical movement and layout. From the movement experiments and connection experiments I discovered that there is something interesting in climbing into a room or sliding down into something instead of moving on the same level. The different levels brings out a playfulness and urge to discover what is above and below you.



maze / winding path

The second main concept also emerged from the movement studies and is about the maze-like building layout. Several paths meets in different places creating different possibilities of how to move, you begin to feel lost and then suddenly you are back where you have been before. There are new experiences around every corner and you feel like being on an adventure, discovering new spaces. You do not immediately see where you are going, glimpsing something, without knowing exactly how to get there.



massiveness

The third concept is about the massiveness. There is something exciting with the feeling that a place is cut out, instead of built up. Like a cave. That mass is subtracted to create a space and that the room is so important that the surrounding spaces have to adapt to it.



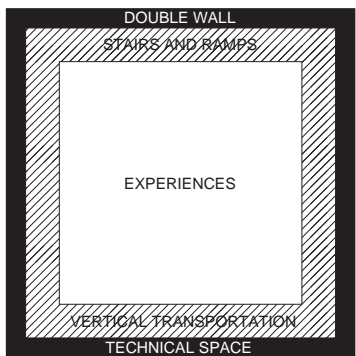
contrast between narrow and open spaces

The final main concept is about the contrast between closed and open spaces. This has emerged from the walk along the cliffs, where you find this contrast between a very narrow crevice in the rock and the openness towards the sea at a ledge on the steep cliffs. The contrasting spaces and the unexpected shapes creates a feeling of being in nature.



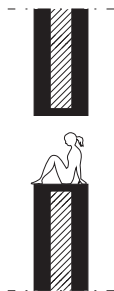
design concepts

Below some design concepts that has been important in the creation of the building are shown.

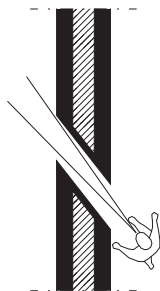


layering of the building

To get free space for the bath experiences the vertical transportation like stairs and ramps and the technical spaces for ventilation and rainwater runoff are placed as layers on the outside enhancing the double wall concept.



Express massiveness



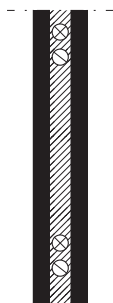
Direct the view

double wall concept

As a way to achieve a feeling of massiveness the outer wall is built as a double wall, also making it possible to direct the view and hide installations.



Incorporate gutters

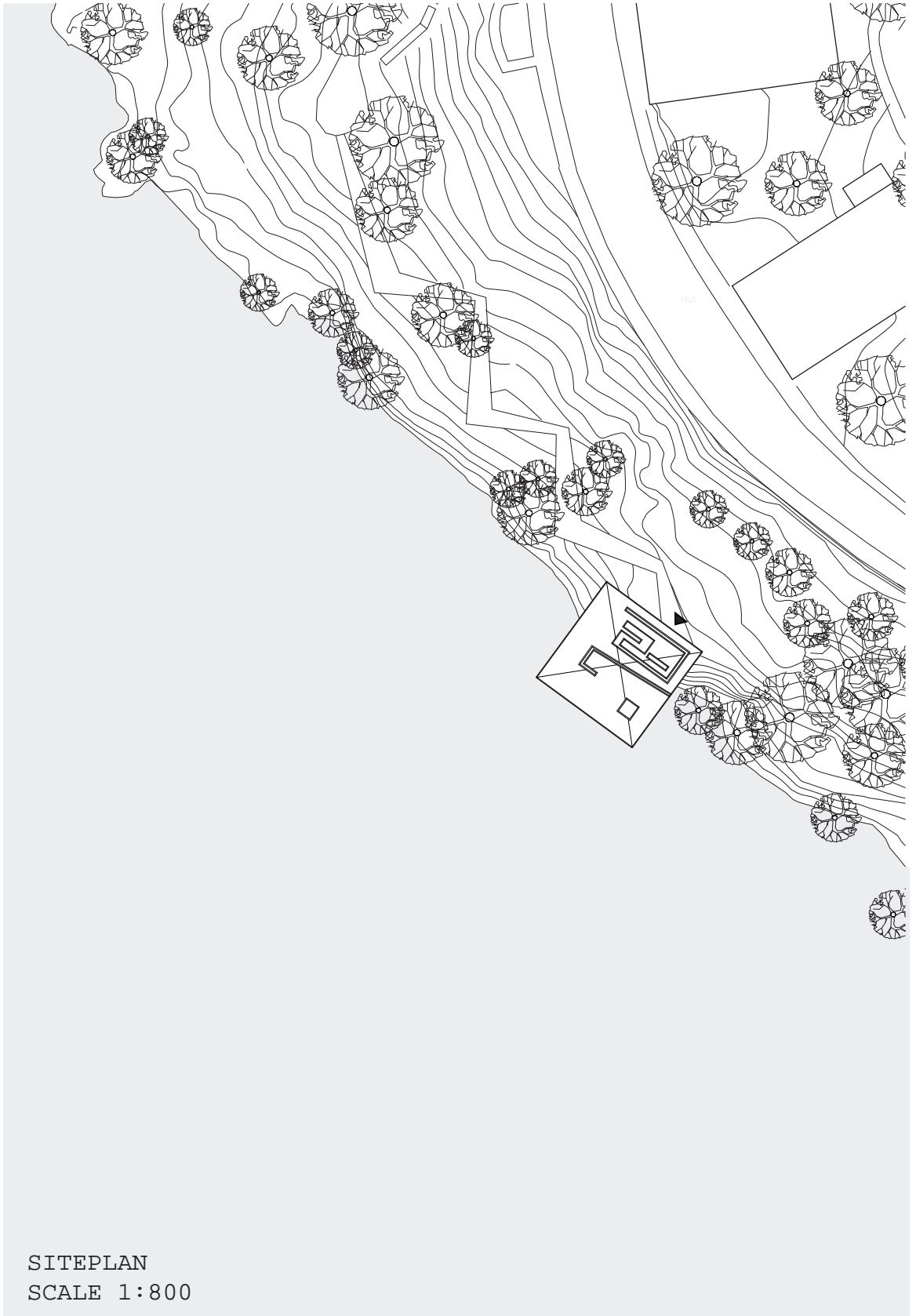


Incorporate ventilation ducts

coloration concept

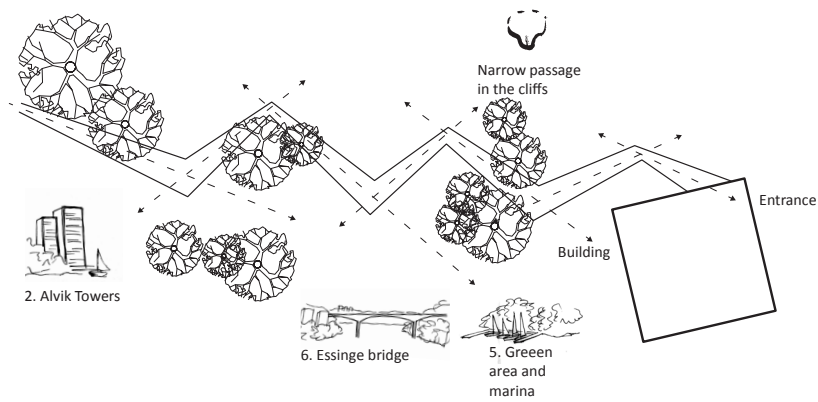
The colours of the concrete inside the building consists of earthy nuances of dusky blue, grey brown and orange ochra.





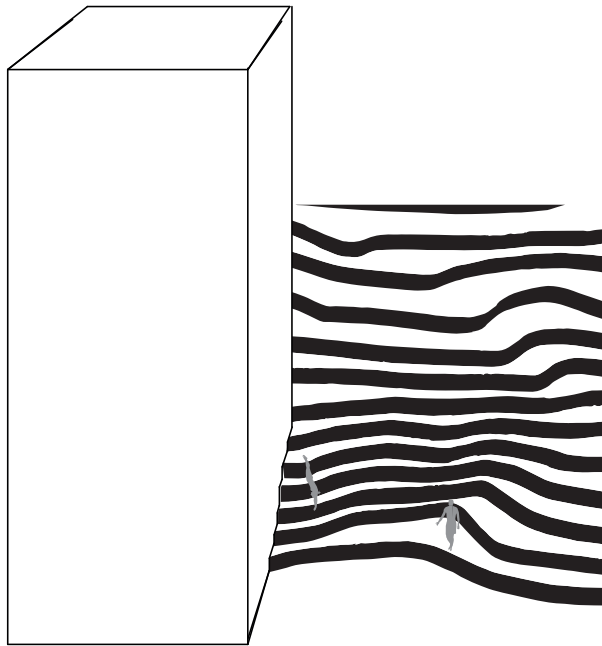
the way to the building

You get to the building by the road passing Kristineberg Boat Club, at the end of the road you meet a bridge. The bridge is zig-zagging along the cliffs directing the view towards important features and view lines along the way. The sight towards the building is blocked by vegetation and you can only glimpse the structure until you are close by.



meeting the water

The building is located where the cliffs are varying between very steep and flat towards the water. This gives the opportunity to meet the water in different ways also outside the building.



movement

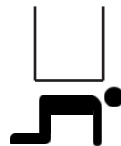
To get the most out of the different sensations the experiences should emphasize each other. This is done by mixing calm and thrilling experiences and by using the entering situations into the rooms in a way to accentuate the feeling of the space.

There are two different routes to choose between through the building, the light experience and the advanced experience. The light experience apply for people with movement disabilities, kids, people that are not skilled swimmers or just people that do not want the most extreme sensations. The advanced experience fit people that want to challenge themselves, people that are used to water and have good physics.

The building consist of eight floors, you enter two floors above water level and there is a possibility to go to the bottom floor to swim in the lake water or to go upwards in the building for indoor experiences.



Mixed
experiences

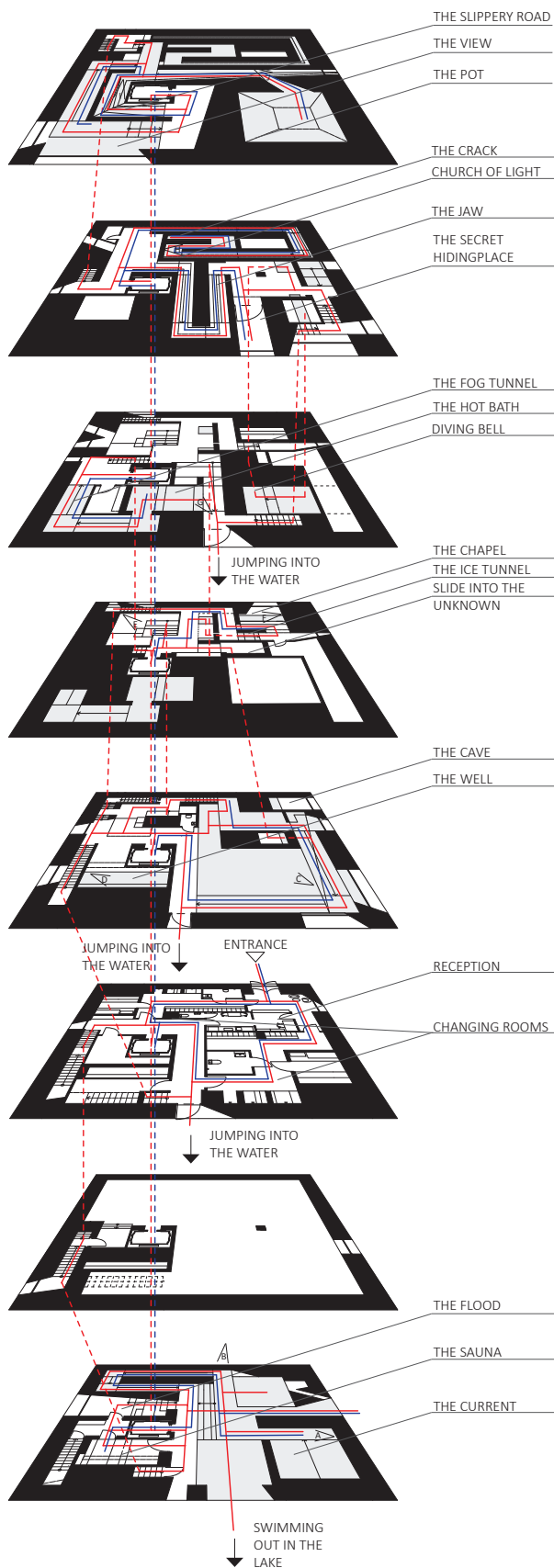


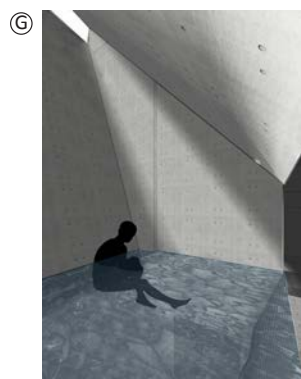
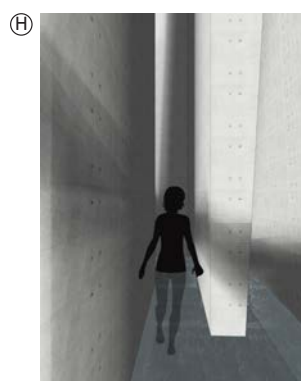
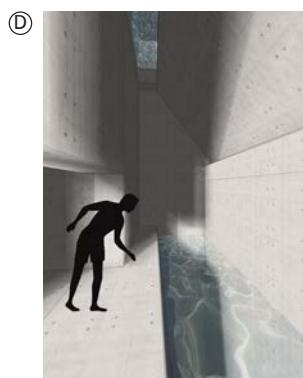
Entering
situation
enhancing the
experience

LIGHT EXPERIENCE



ADVANCED EXPERIENCE







THE CHURCH OF LIGHT

Here you can stroll around in the warm water feeling the difference in light coming from above, the diffuse light that has been bouncing on the out leaning walls or the direct light from the opening between the walls leaning inwards.

PLACE FOR CONTEMPLATION

Here you can sit in peace and watch the view through the window or look at the people swimming through The Ice Tunnel.

CHANGING ROOM

THE VIEW

A top floor pool with a view over Mälaren. Here you can feel calm while watching the scenery.

THE SLIPPERY ROAD

To get through this passage you have to walk on wet leaning ground. It is a thrilling experience, you are scared of slipping and you feel very insecure of the ground conditions.

THE HOT BATH

THE FOG TUNNEL

THE WELL

The well is a deep and narrow pool where you can see the depth by the light coming from The Sauna below. You cannot see outside but light is indirectly reflected in, lighting up the leaning roof.

DIVING TOWER

Behind the well there is a diving spot from which you can jump out in the water.

THE FLOOD

In this room you are under the water level and you feel the power of the nature when waves hit the window.

THE SAUNA

BASEMENT FOR TECHNICAL INSTALLATIONS

THE POT

You reach The Pot by The Slippery Road. In the pot water is pouring down like rain and the only opening is found in the roof. Here you can sit and watch the sky through the rain.

THE SECRET HIDING PLACE

You reach The Secret Hiding Place from The Diving Bell, here you can be calm and sit with your feet in the water and the only light comes from below.

THE DIVING BELL

You have to dive down under the water through a small passage to find The Diving Bell, the light from the windows below guides you forward.

THE MAIN POOL

Here you can swim while watching the view outside.

THE RAIN SHOWER

The water falls evenly like a soft summer rain.

THE CHANGING ROOM SAUNA

In the sauna you can sit or lie in a warm space watching the light coming in from above.

TECHNICAL SPACE

THE CURRENT

When the waves hit the facade the water comes into The Current and swirls around your feet, making you feel like you do not have control over your body.

THE SLIPPERY ROAD

THE HOT BATH

The water is hot and steam is rising from the bath, the only light comes from above and there is a dark and cozy atmosphere.

THE FOG TUNNEL

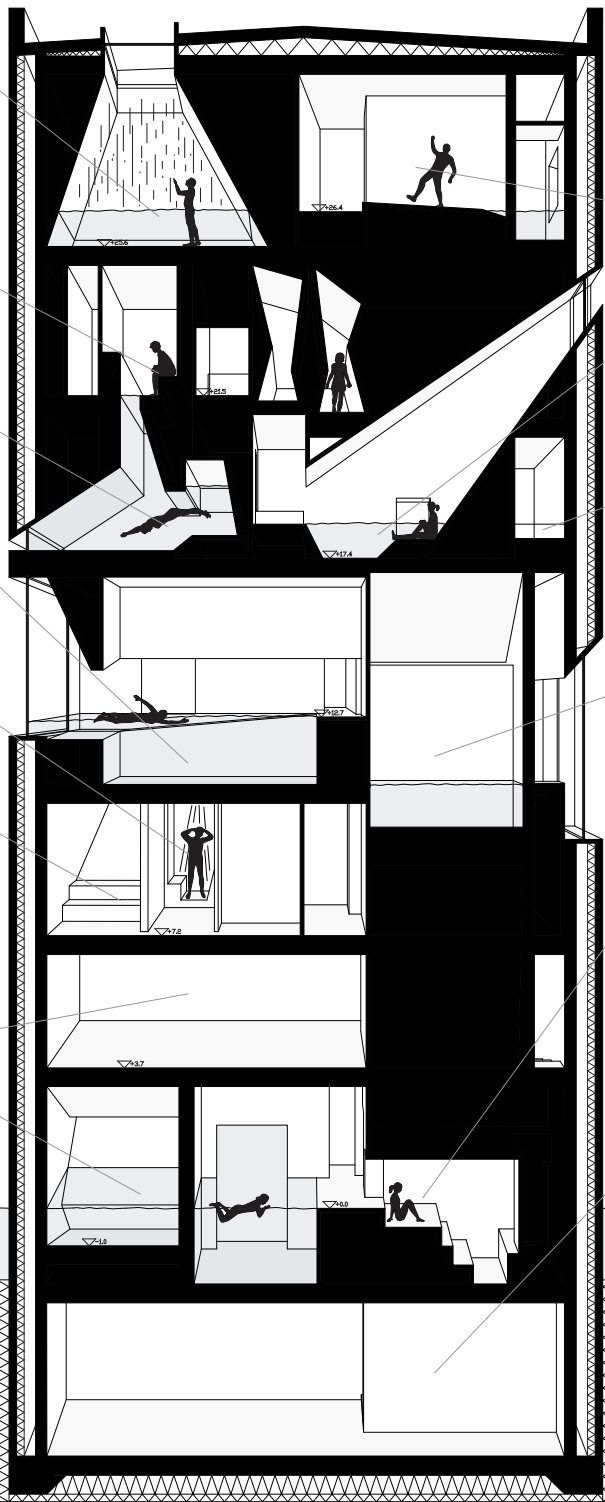
The Fog Tunnel is leading to The Hot Bath. It is filled with fog and you feel thrilled not seeing what is coming ahead.

THE WELL

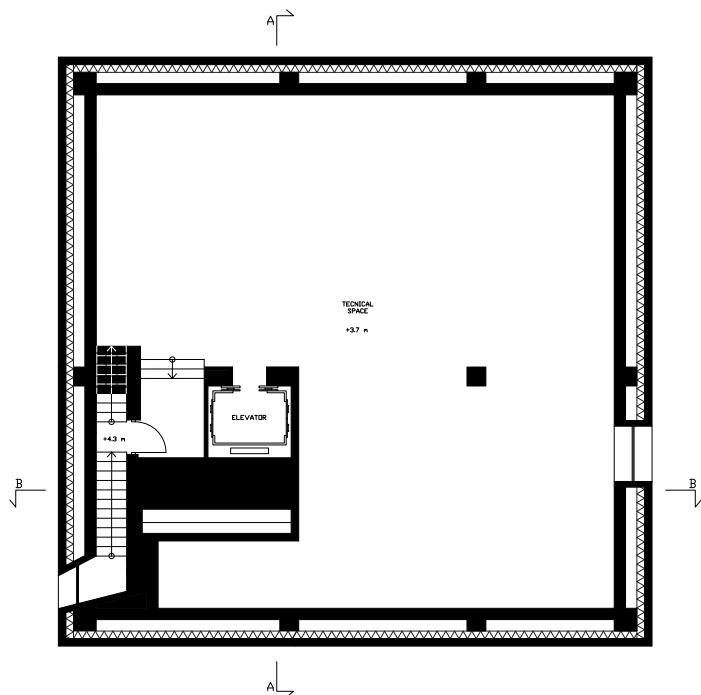
THE SAUNA

On the bottom floor there is a Sauna which can be used both in summer and winter time. During the winter you can go ice skating and then heat up in The Sauna. You have to crawl in to this dark and cozy room through a small opening.

BASEMENT FOR TECHNICAL INSTALLATIONS



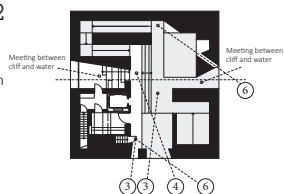




FLOOR PLAN -1
SCALE 1:200

FLOOR PLAN -2

This is the lowest level of the building, and it is open to the outdoors. Water from Mälaren flows directly into the building and through the openings you can swim straight out in the lake.

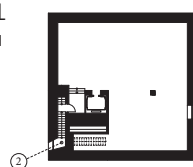


SIGHTLINES

On this floor you are mainly in water level and can look out over the lake through the large openings directing the view towards the straits between the islands.

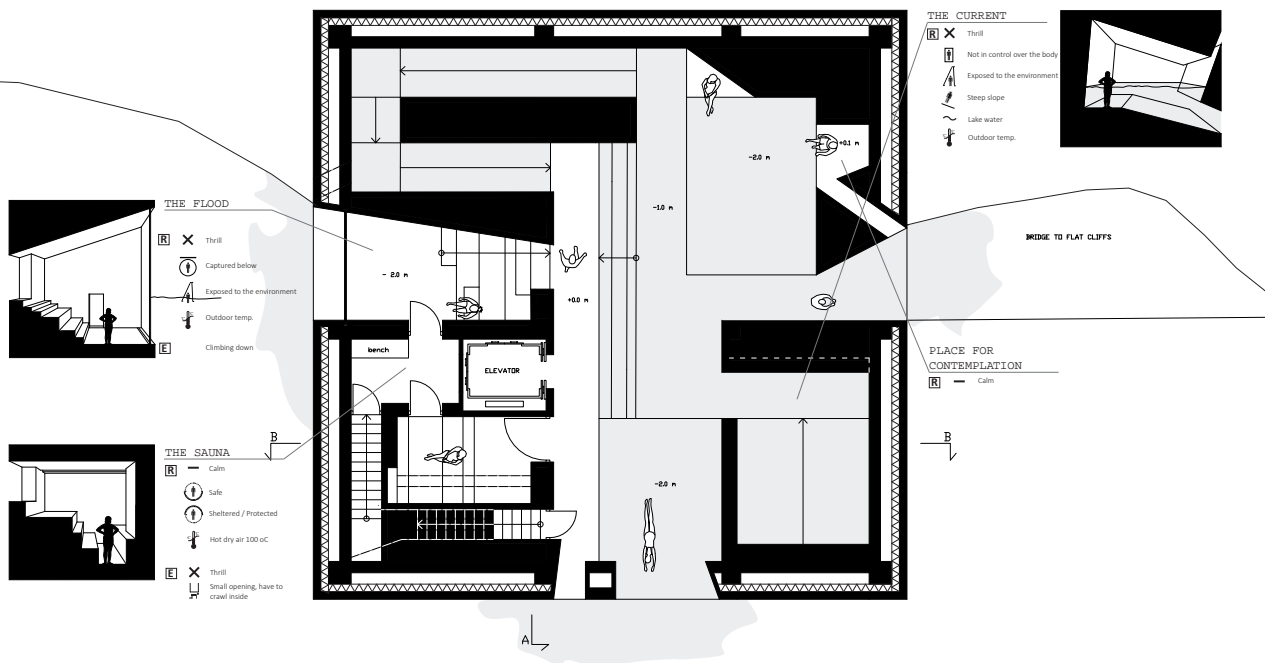
FLOOR PLAN -1

This floor contains technical space for water purification systems, ventilation system and other technical equipment.

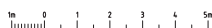


SIGHTLINES

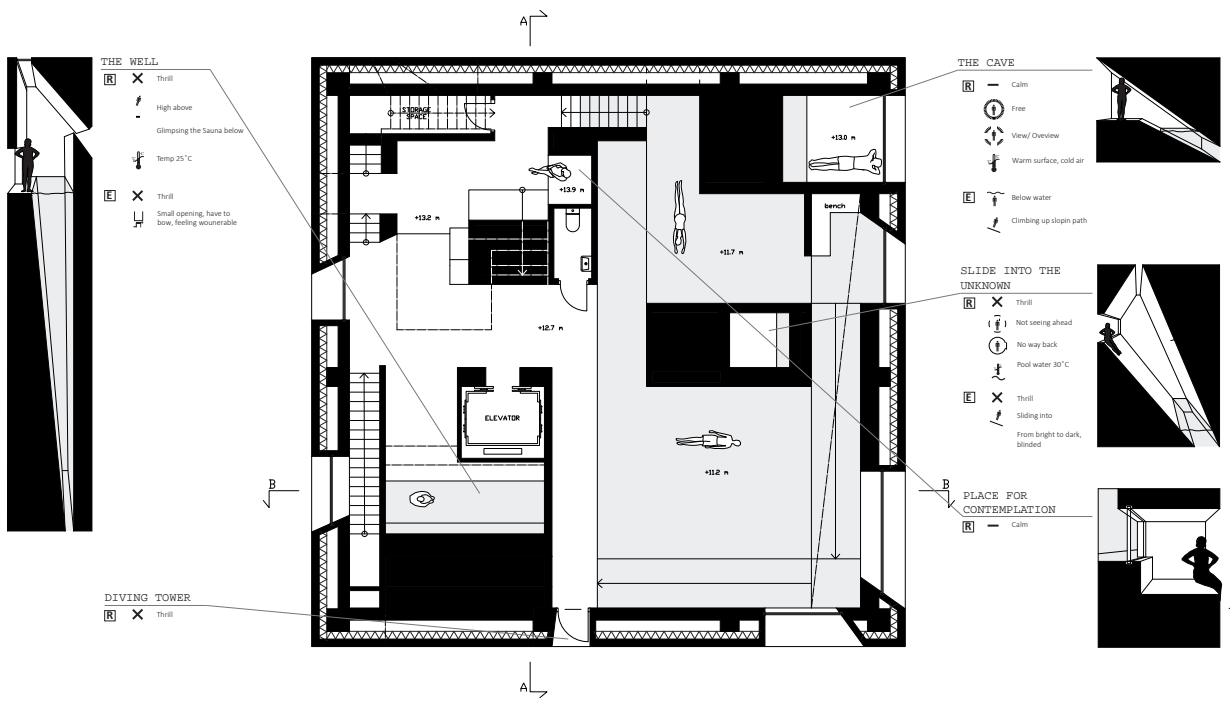
From the stair passing this floor you can see out over Alvik with focus on the city atmosphere created by the new Towers of Alvik shining in the night.



FLOOR PLAN -2
SCALE 1:200

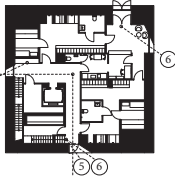


- [R] Properties of the room
- [E] Entrance situation



FLOOR PLAN 0

You enter the building on the ground floor. On this floor you have reception and changing rooms. From this level you can go down to the outdoor swimming area or up to the pools. There is also a possibility to dive straight out into the water.

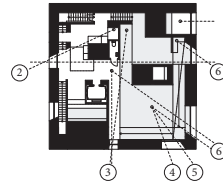


SIGHTLINES

On this floor there are not so many openings in the facade. From the lobby you see the strait between Lilla Essingen and Stora Essingen and from the bench outside the changing rooms you can look out over Alvik.

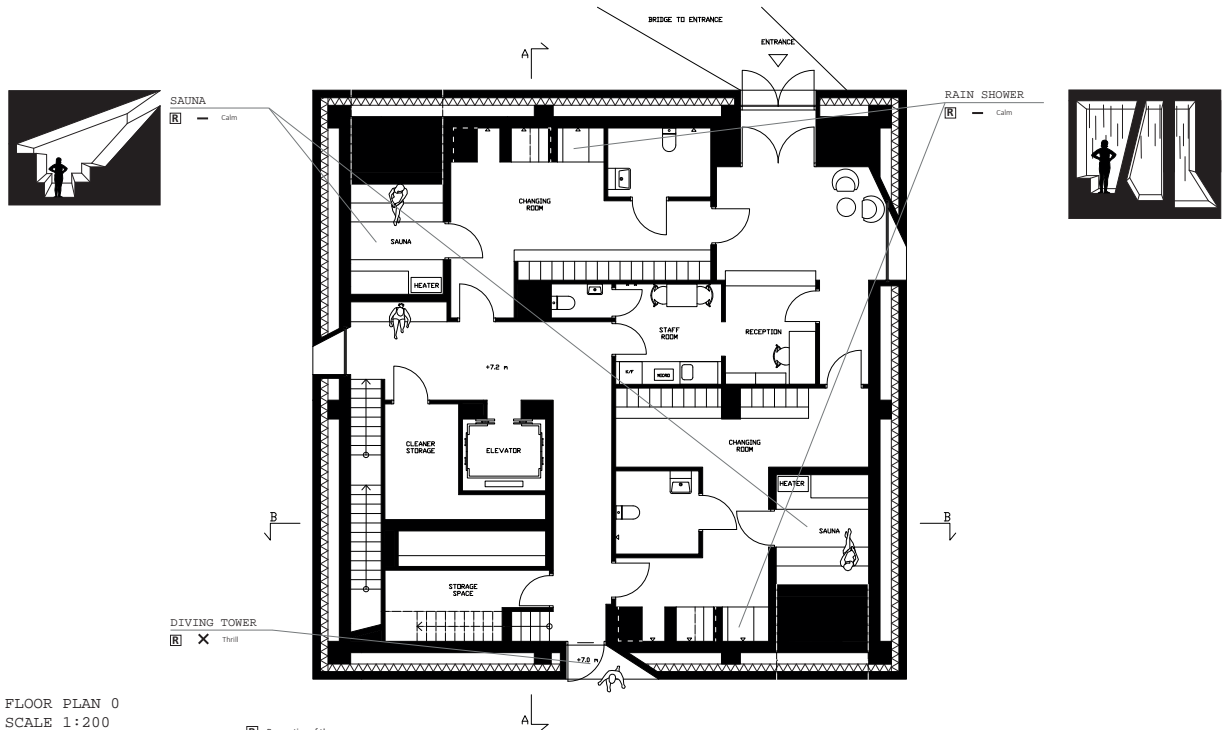
FLOOR PLAN 1

This floor contains the main pool and The Well where you can swim in very deep water glimpsing a light from far below.

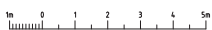


SIGHTLINES

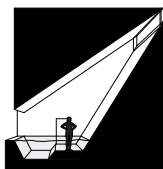
From the main pool you can watch out over the Essinge islands and the straight between. From the place for contemplation you can see the city lights of Alvik Strand.



FLOOR PLAN 0
SCALE 1:200

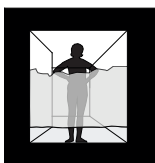


R Properties of the room
E Entrance situation



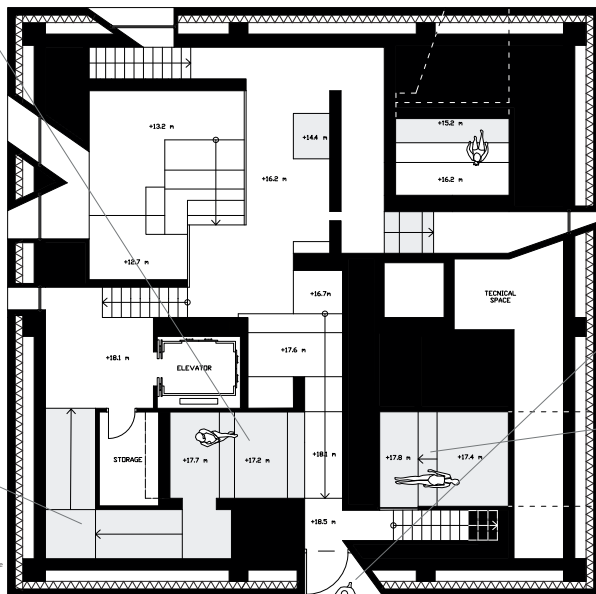
THE HOT BATH

- [R] — Calm
- [P] Peaceful
- [E] Embraced
- [H] Hot water 40°C
- [X] Thrill
- [I] Fog, not seeing ahead



FOG TUNNEL

- [R] X Thrill
- [I] Not seeing ahead
- [E] X Thrill
- [H] Small opening, have to bow, feeling vulnerable



DIVING TOWER

- [R] X Thrill
- [H] High above

THE DIVING BELL

- [R] X Thrill
- [P] Captured below
- [I] Dark
- [H] Cool water 15°C
- [E] X Thrill
- [H] Below water



FLOOR PLAN 3
SCALE 1:200

FLOOR PLAN 2

On this floor hot meets cold. By The Ice Tunnel where you need to swim through cold water you reach The Chapel Sauna.

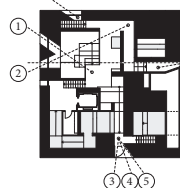


SIGHTLINES

In The Chapel Sauna you have light coming in from above, you can also glimpse the cliffs outside. Through the small opening next to The Chapel Sauna you can glimpse the towers of the Church of Högalid.

FLOOR PLAN 3

On this floor there is a focus on fog and steam. The Hot Bath is reached through The Fog Tunnel where you feel insecure not seeing what is coming next. On this floor is also The Diving Bell which is reached from the fourth floor.



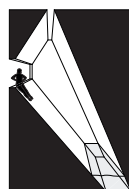
SIGHTLINES

On this floor hot meets cold. By The Ice Tunnel where you need to swim through cold water you reach The Chapel Sauna.



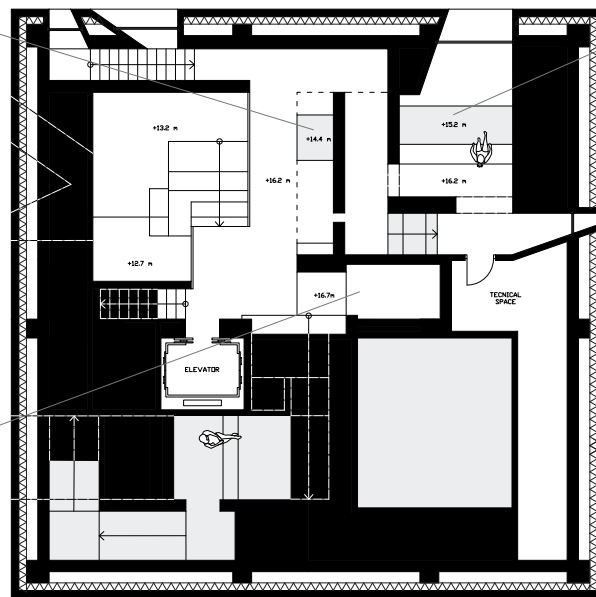
THE ICE TUNNEL

- [R] X Thrill
- [H] Exposed to cold
- [P] Captured below
- [H] Cool water 10°C
- [E] X Thrill
- [H] Jump into a hole, expecting dark and cold



SLIDE INTO THE UNKNOWN

- [R] X Thrill
- [I] Not seeing ahead
- [H] No way back
- [H] Pool water 30°C
- [E] X Thrill
- [H] Sliding into

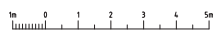


THE CHAPEL SAUNA

- [R] — Calm
- [P] Peaceful
- [H] Scared
- [E] Embraced
- [H] Hot dry air 100°C
- [H] Feet in cold water 10°C
- [E] X Thrill
- [H] Small opening, have to bow, feeling vulnerable



FLOOR PLAN 2
SCALE 1:200

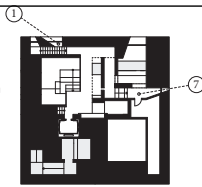


- [R] Properties of the room
- [E] Entrance situation

FLOOR PLAN 1
SCALE 1:200

FLOOR PLAN 4

On this floor there is the underwater experience from where you reach The Secret Hiding Place. On this floor you also find The Church of Light where you can stroll in the water with direct and diffuse light coming from above.

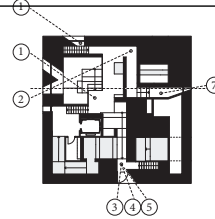


SIGHTLINES

In the deep windows you can sit and relax watching the Traneberg Bridge and Alvik on one side and the strait between Stora Essingen and Alvik, and the Church of Högalid on the other side of the building.

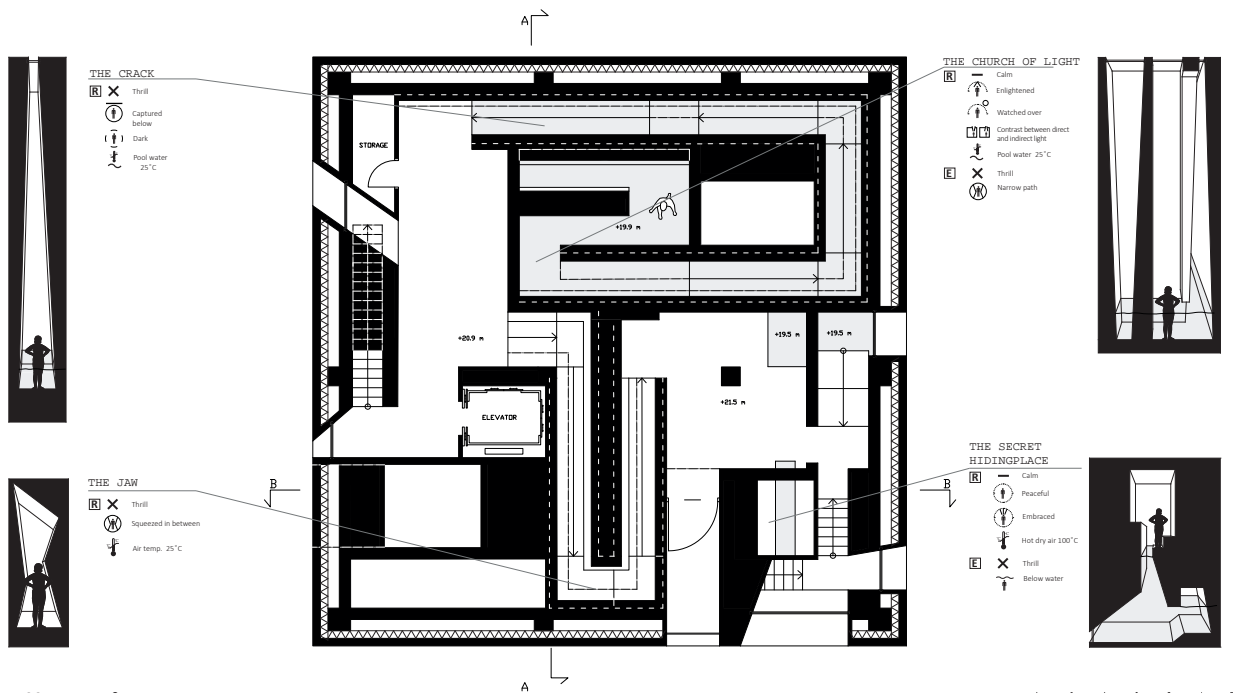
FLOOR PLAN 5

On the top floor you can either watch the view over Mälaren or take The Slippery Road where you will challenge your balance. You can then end up in The Pot where water are falling like rain and the only outlook is the sky.



SIGHTLINES

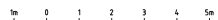
On the fifth floor you are high above the ground, and in the top pool you have outstanding outlook over Mälaren.



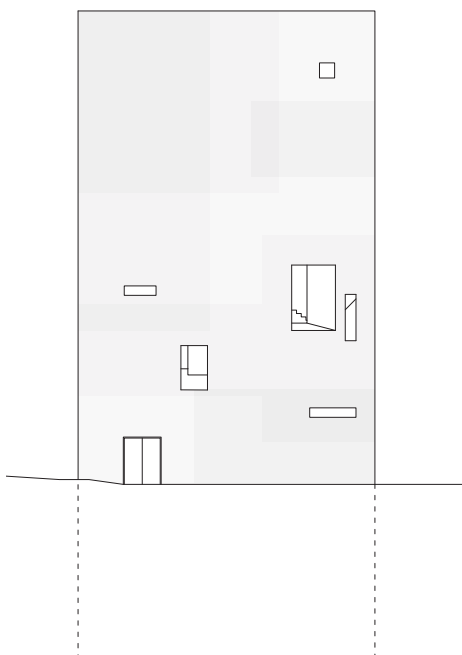
FLOOR PLAN 0
SCALE 1:200



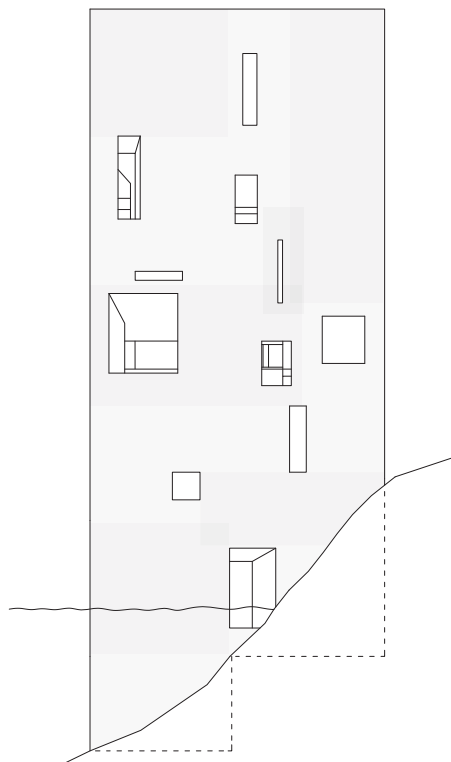
- R** Properties of the room
- E** Entrance situation



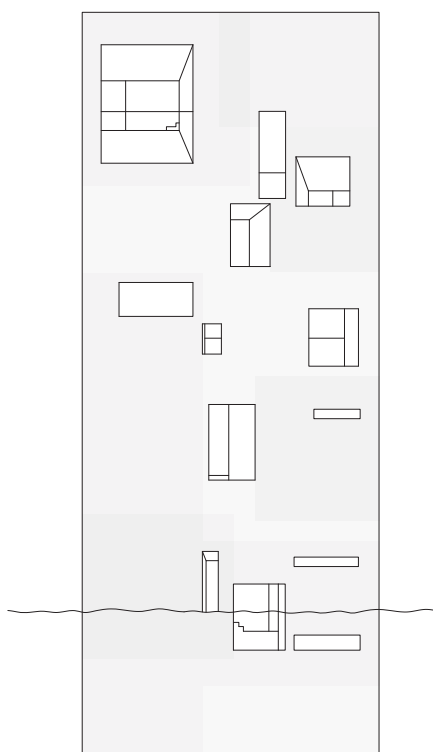




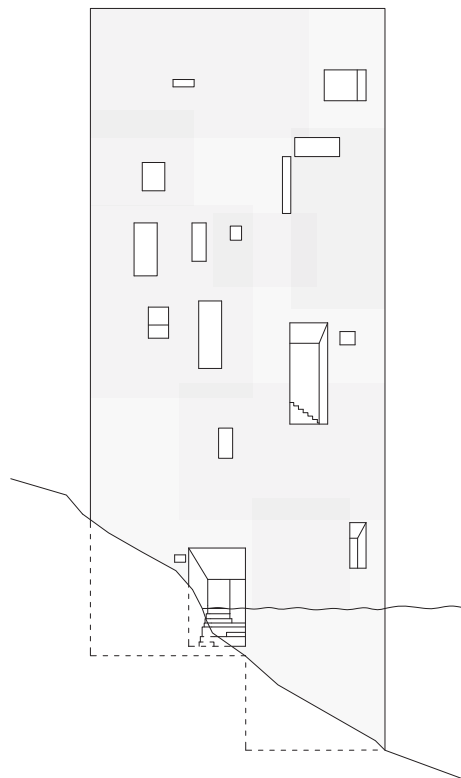
NORTH FACADE
SCALE 1:400



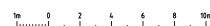
EAST FACADE
SCALE 1:400

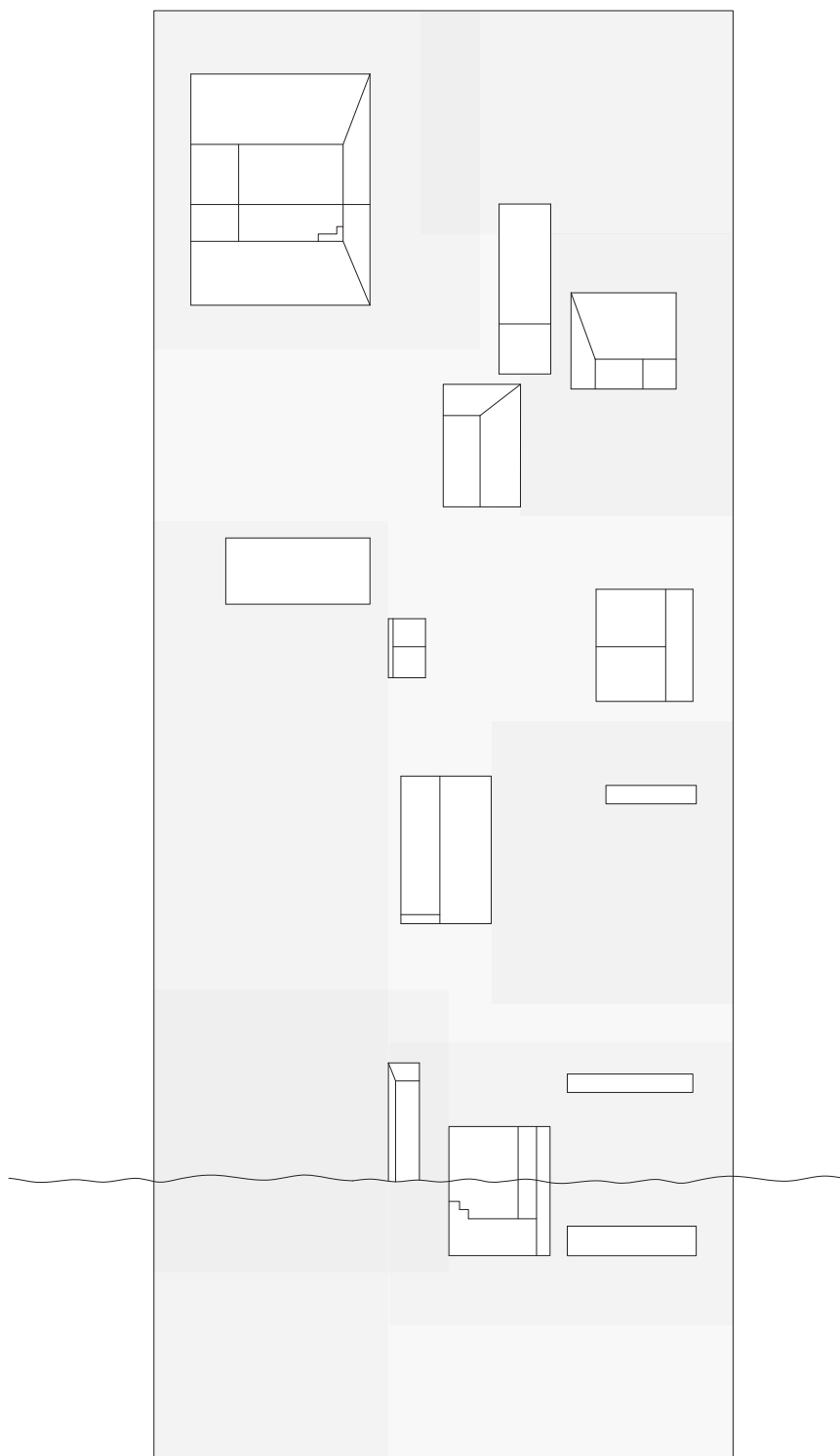


SOUTH FACADE
SCALE 1:400



WEST FACADE
SCALE 1:400





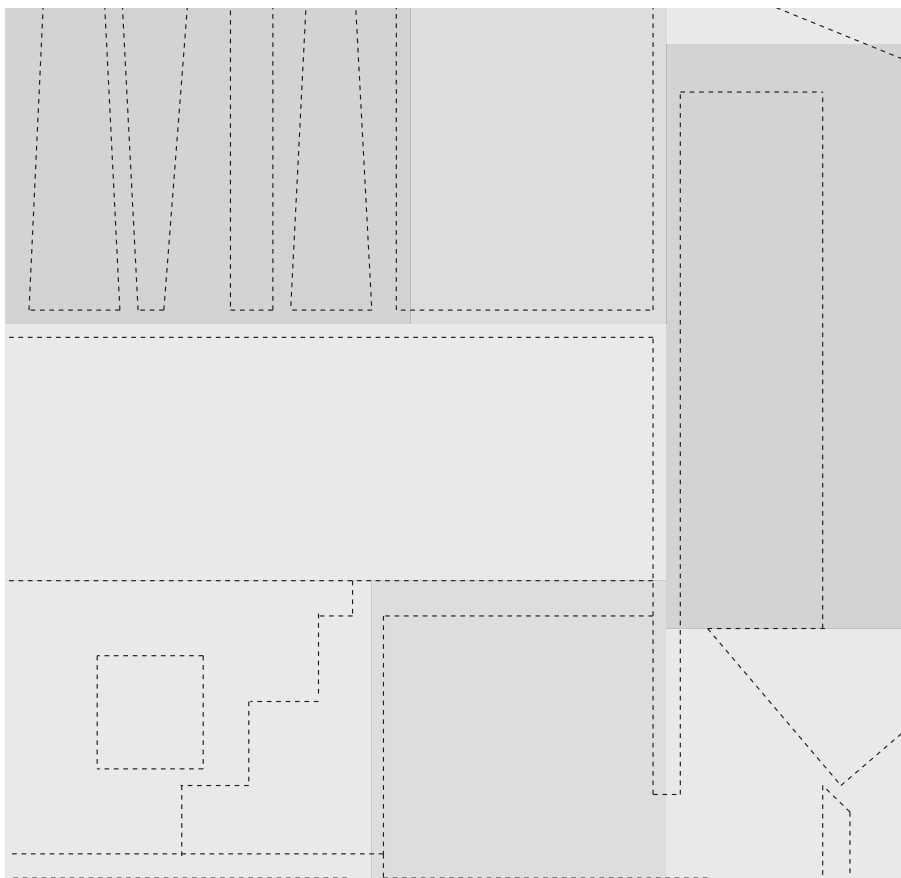
SOUTH FACADE
SCALE 1:200



facade color concept

The coloration of the facade is based on the rooms behind which makes a subtle hint of what is going on inside.

The concrete facade is precasted with plywood boards of different colours as framework. The plywood formwork creates different nuances in the facade since the concrete absorbs some pigment from the different coloured plywood boards. This can be seen in the pictures of the reference project NDA Planter on the next page.



Left: Reference project NDA Planter by no.555 Architects

Below: Different nuances of plywood used during construction



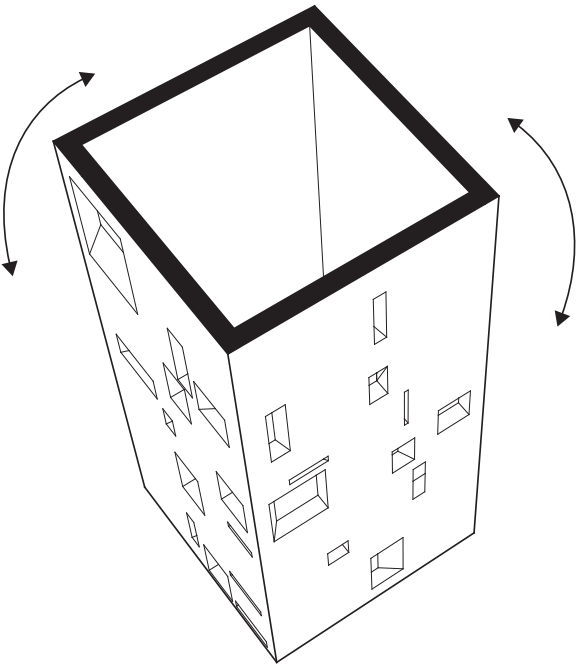
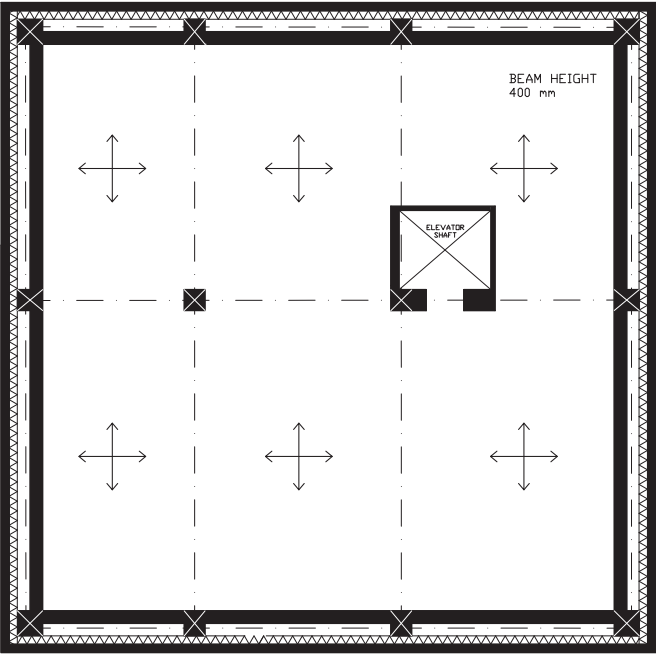
Pictures from <http://www.dezeen.com/2012/11/06/concrete-house-by-no-555/>

structural system concept

The exterior wall and the elevator shaft is load bearing. The exterior concrete wall is reinforced in some points where the main beams are attaching. In these positions the system lines are going straight down to the foundation without any disruptions from windows. The main beam height is 400 mm.

stabilization

The exterior walls are acting as plates and stabilises the building against rotation and horizontal forces.





conclusion

In this project I have investigated how light, shape and the relation to the water can be used to create a spiritual sensation. It has been very interesting and it has increased my understanding of how light and shape affect the space.

I have been using a very model based process, which I found essential for this project, both because that the ambience created by light really cannot be simulated in computers or understood by drawing sketches. But also because the intricate movement and layout could not possibly have been created or understood without building it by hand in 3D.

I would have liked to continue to develop the final layout further by making a final sketch model iteration of the whole structure. I also would have liked to work more on how the final project is presented both in drawings and illustrations and to continue develop the concept regarding water to make it more present in the project.

The fact that the focus of this project has been the light and space rather than a finished building proposal means that there are issues that would have to be solved if the building would be constructed. I think that it is not so much about applying to the building regulations as to solve the issues behind the rules. For example, putting up railings would not be an option in this project but instead the “quay principle” could be used making the edges so visible that no one will accidentally step over it. The water is also a way to make the building safe, there is no danger of tripping if the water catches you, for example if the slippery road is made below water, the water will save you from hitting the concrete when falling.



