

## **A LAMP TO MY FEET, A LIGHT FOR MY PATH**

A development of a method of working in early stages of the design process, applied on an architectural competition for a pilgrim centre in Røldal, Norway.

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## INTRODUCTION

We took the night bus to Røldal in early July. Half past four the bus opened its doors and left us somewhere in Norway's highland. We left Gothenburg in the middle of summer but arrived to something that resembled winter. We were cold and tired. Still, Røldal welcomed us with an extraordinary nature: high mountains still holding snow, melting water purging down the valley and a light mist over the river. We were amazed. We wandered aimlessly for hours, experienced and absorbed Røldal with our bodies and senses.

Since the medieval period there have been pilgrimages to the stave church in Røldal. An architectural competition was announced with the purpose to create a centre for the church and the pilgrims with possibilities for gatherings and exhibitions.

Our master thesis contains of two parts; one being an architectural competition and the other an exploration and development of a method for working in early stages of the design process. The purpose of the development and exploration of the method was to create a tool that we can take with us to future projects and that could help us get a nuanced and complex composition of approaches facing a new project. The goal of the method is to ensure that what is experienced when visiting a project site is developed and refined during the entire process and is essential in the final design.

THE INTUITIVE METHOD

THE COMPETITION PROPOSAL

THE ANALOG BLOG

# THE INTUITIVE METHOD

The intuitive method is a tool that helps you find the qualities that you want your project to hold. It investigates what they are and ensures that they are present in the process and in the final design. It consists of four steps.

Photographs, sketches and texts create a large spectrum of qualities where every interpretation originates from the same experience; in our case, our visit to the site in Røldal. This enables them to be combined in many ways, always appearing as one unit.



# 1. STATEMENT

The first step is about a formulation of statements and a deconstruction of the assignment; an initial interpretation of the site and its surroundings, the task and the programme.

Declare the important points of departure and the intuitive interpretation of the assignment. Most important, *visit the site*; experience the area, buildings, materials, light conditions et cetera, *study the programme*; imagine what is needed. Decide what elements, feelings or phenomena that are important for the site or the task. These statements work as the base and are what to investigate further in the latter phases.

Some statements become *general* and are important as the foundation of the project. Use them in the work with, and in the evaluation of, the other more *specific* statements.

It is important not to make too many or too vague statements, rather you should be able to thoroughly investigate the ones you choose. Do not be afraid to be banal or to choose too simple statements, they can easily be developed in the following steps.

1.

CYCLE

MEMORY

CONTRAST IN  
EQUILIBRIUM





*The cycle of nature* is striking with high mountains holding snow throughout the year, melting water purging down the valley and the mist lifting over the river.



*The memory*, the history and the church are intriguing. As a pilgrim you walk the same path and has the same goal as those who took part of a pilgrimage in the medieval period.



The scenery is amazing. A person becomes very small in the huge landscape. The contrast and how to work with *equilibrium* is important both between the small and the big but also between the old and the new.

## OUR STATEMENTS

The *general* statements of this project are nature, religion and wandering. These three subjects are what we came to think of at the very beginning of the project, before studying the programme or discussing a concept for the building. Already when we arrived in Røldal, when we visited the site and heard the story of the church, the dramatic scenery of the surrounding nature and the tradition of the pilgrim walk became what we found the most important for this assignment. They were then developed to more *specific* statements: CYCLE, CONTRAST IN EQUILIBRIUM and MEMORY.

We use these statements as a base for further investigations and in step four connect them with the experiments and interpretations of step two and three.

2.

## INVESTIGATION WITHOUT PRESUMPTION

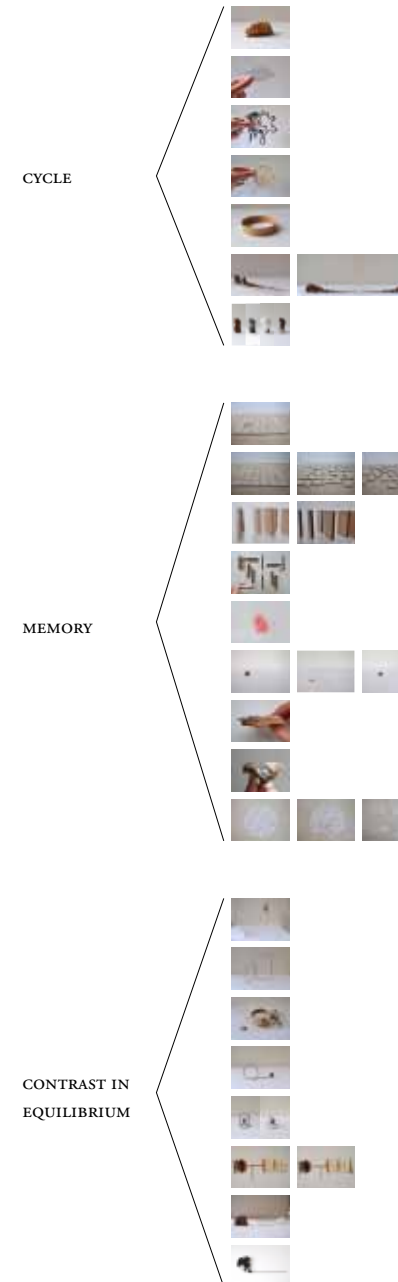
The second step is a phase of investigations based on production without presumptions. It is an initial interpretation of the assignment in a physical form and a way to give a shape to the statements from step one. It is important to produce without much reflection and leave the interpretations to later.

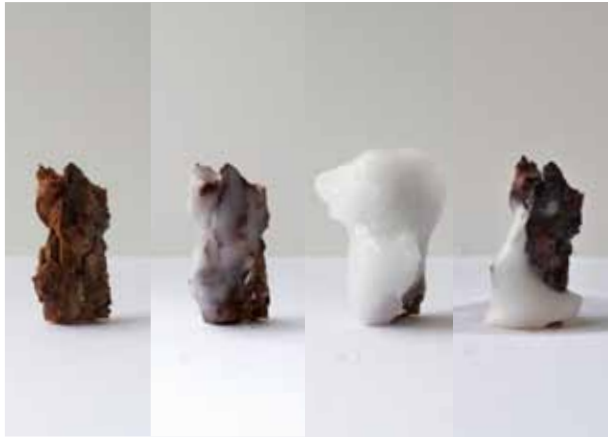
Make quick models or sequences of models to investigate the statements. Most important is to do this without direct a connection to the task. Make abstract forms of what you think the specific statement is or could be. Document your investigations. Do not let the bigger picture restrict you, rather let a material or an amount of time limit you to trick the mind to think freely. This means that you should not let what you imagine the end result to be restrict you but instead let the smaller task of investigating one of the statements be the challenge.

When investigating with your hands the reflections starts unconsciously. Donald Schön writes about *reflection-in-action* in *The Reflective Practitioner*. He means that there is a transformation in the action as it happens. There is an immediate interaction between the action and the result of the action. We believe that the intuitive model as an analysing tool opens up for interpretations, sometimes unexpected. By creating something with our hands, a physical object, we let ourselves observe a thought, interpret it and develop it.

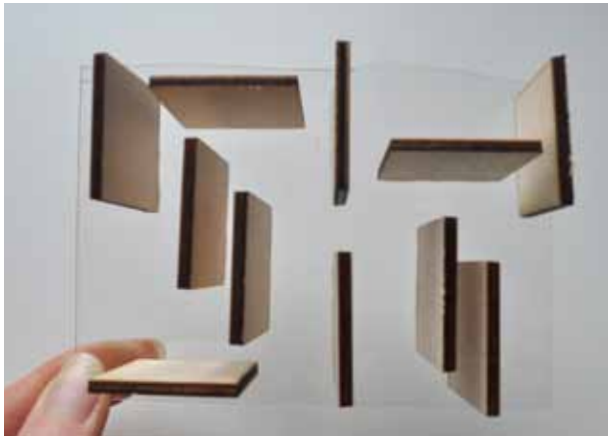
1.

2.

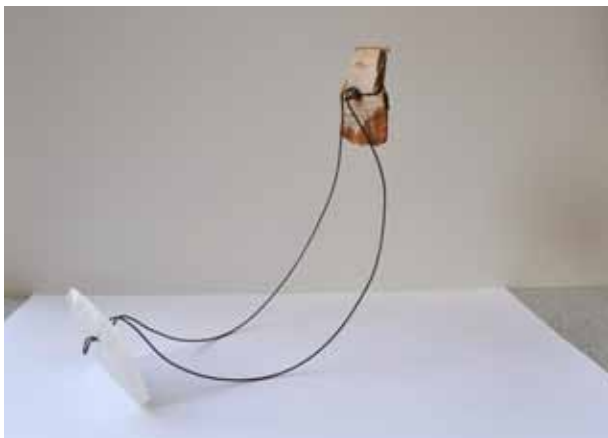




Example of the investigations of CYCLE.



Example of the investigations of MEMORY.



Example of the investigations of CONTRASTS IN EQUILIBRIUM.

## OUR INVESTIGATIONS WITHOUT PRESUMPTION

The changing of time, but also what a cycle is and how it looks, is what intrigues us when investigating the statement CYCLE. We let objects be affected by a cycle of actions. We try different ways of giving the cycle a shape. How does the cycle look when growing and when disappearing?

Traces, imprints and the remembrance of shape are most important for us when investigating the statement MEMORY.

When working with CONTRASTS IN EQUILIBRIUM we investigate the centre of gravity and the tension between contrasting objects but also how a transformation between two contrasts can take form.

### 3. REFINEMENT, INTERPRETATION

A thought that has become a physical form can by that be looked upon, interpreted and developed. Step three is about refinement and interpretation of the thought expressed in the concept models, a discussion of the early investigations. The material is no longer produced without presumption but with the aim of understanding or expressing something in a more concrete way. Do not respect the original idea of the concept model in too large extent, feel free to make new or several interpretations. Unexpected interpretations of the models can be a pleasant surprise and the models can have different meanings depending on how they are put together in relation to each other or how they are documented; how the photographs are taken or how the film is edited.

Express your definitions and interpretations of the models in a short text. You can allow yourself to attach the interpretation to the specific task but most important is to discuss what the model shows in relation to the statement it investigates. For example: what can the model tell you about how a cycle works? How is the model expressing memory? Also investigate how the concept model can be developed further, in photographs, a film, a sketch or another model?



“A transformation that covers the constant shape of the object. Starting by gradually building a shape, then slowly tearing it down. On its way down the material fills cracks and openings, then gathers on the bottom. The gravity is present, controlling the shape.”

Example of the interpretations of CYCLE.

“To find the way back memory is necessary.”

Example of the interpretations of MEMORY.

“Tension in the relationship between the different materials. The density of the materials is decisive; one is lifting the other, giving stability and power to it.”

Example of the interpretations of CONTRASTS IN EQUILIBRIUM.

## OUR REFINEMENT, INTERPRETATION

Many of the models investigating CYCLE are dealing with questions concerning the passage of time. How is something constant affected by the cycle of nature?

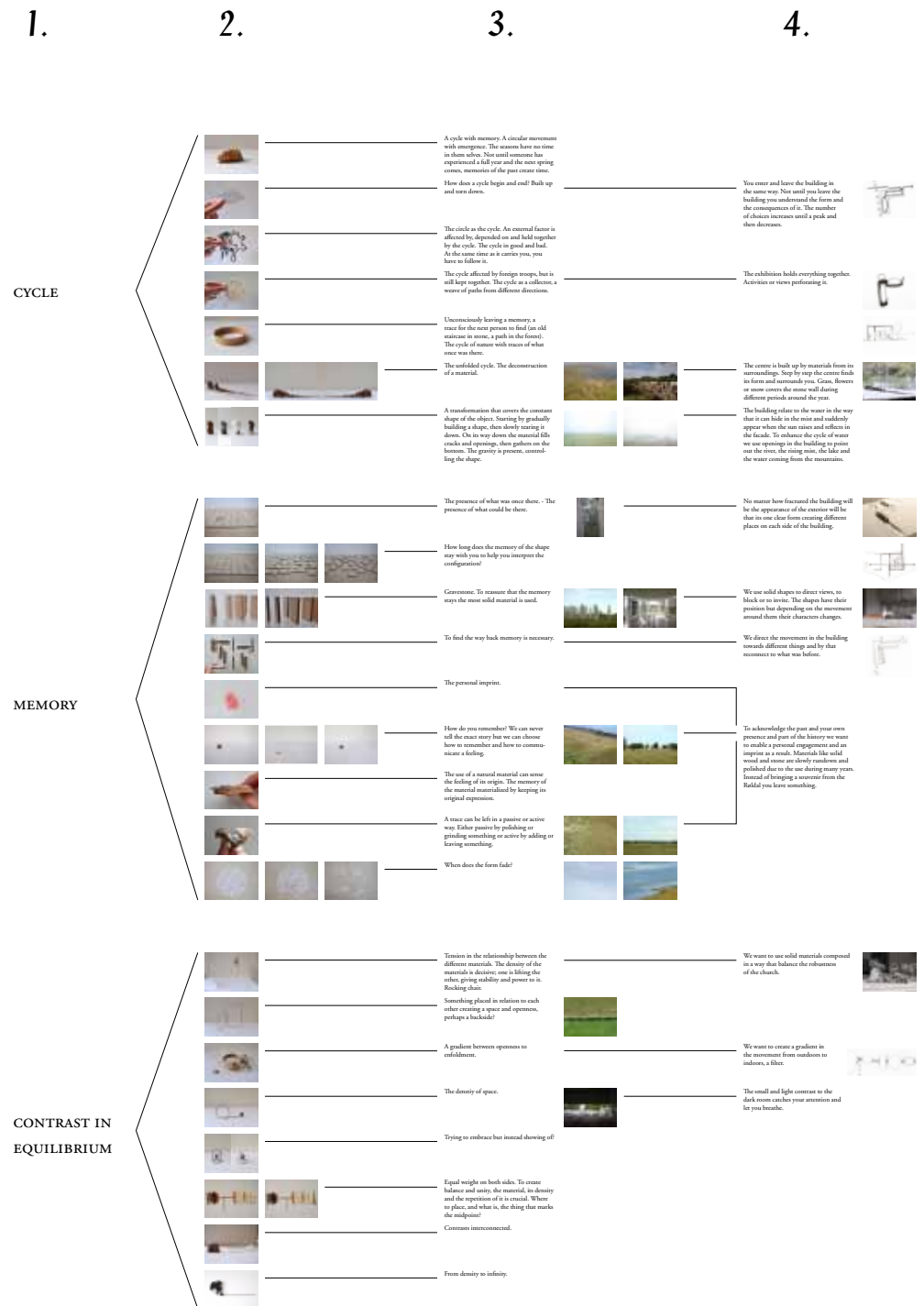
When examining MEMORY the focus lies in how to use the memory of something to find your way but also how to leave traces for the next person to find.

The models concerning CONTRAST IN EQUILIBRIUM are studying the tension in the relationship between different materials; how to create balance with the use of contrast in materials or experiences?

# 4. IMPLEMENTATION

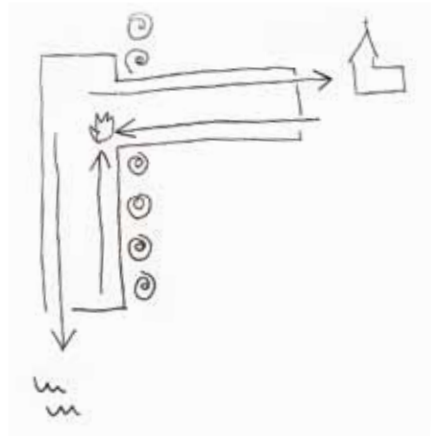
The aim of the last step is to create guidelines for how to implement the results of the earlier investigations in the final design. The connection between the assignment, the statements, the investigations and the interpretations are discussed to create a set of rules.

Ensure that what is important is preserved further on in the process by answering questions such as what has been important during the process and how can that be displayed in the final design? How can the interpretations of the models be explained and connected to the assignment? Describe how the statements and the investigation of them are going to influence the design and the experience of the building. For example, can the design process so far tell you something about the movement, the materials or the volume of the project?



“The building relates to the cycle of nature. It relates to the water in the way that it can hide in the mist and suddenly appear when the sun raises and reflects in the facade. To enhance the cycle of water we use openings in the building to point out the river, the rising mist, the lake, the water coming from the mountains.”

Example of the implementations of CYCLE.



Example of the implementations of MEMORY. We direct the movement in the building towards different elements and by that reconnect to what was before.



Example of the implementations of CONTRASTS IN EQUILIBRIUM. We use solid materials composed in a way that balance the robustness of the church.

## OUR IMPLEMENTATION

The work with investigating the statement **CYCLE** resulted in guidelines for how the building, both material wise and its appearance as a shape in the landscape, is connected with nature. The movement within the building resembles the structure of a cycle in the way that it leads the visitors between functions, held together by the circular movement.

The **MEMORY** is used to orientate the visitors by directing the movement by views of the memory of Røldal. When visiting Røldal you should become a part of the history and leave a personal imprint; you walk the pilgrim path in the building and leave something behind instead of bringing a souvenir.

**CONTRAST IN EQUILIBRIUM** creates guidelines on how to handle light inside the building with different experiences of light during the walk. It also gives us rules for how to compose the volume and the materials so that they interact with the landscape and enhance the dignity of the church.

# FROM INVESTIGATIONS

## CYCLE



A transformation that covers the constant shape of the object. Starting by gradually building a shape, then slowly tearing it down. On its way down the material fills cracks and openings, then gathers on the bottom. The gravity is present, controlling the shape.

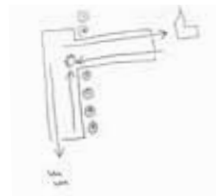
The building relates to the cycle of nature. It relates to the water in the way that it can hide in the mist and suddenly appear when the sun raises and reflects in the facade. To enhance the cycle of water we use openings in the building to point out the river, the rising mist, the lake, the water coming from the mountains.

## MEMORY



To find the way back memory is necessary.

We direct the movement in the building towards different elements and by that reconnect to what was before.



## CONTRAST IN EQUILIBRIUM



Tension in the relationship between the different materials. The density of the materials is decisive; one is lifting the other, giving stability and power to it. Rocking chair.

We use solid materials composed in a way that balance the robustness of the church.



# TO RESULT



The mist in the valley covers the glass house in the early morning, it hides it and makes it a part of the scenery. When the sun rises and shines through the textile the light inside the building still resembles the hollow light in the mist. Like the mist, the glass house is placed just above the ground.



The senses are what lead you forward in the building; the heat from the other side of the stonewall, the voices from the café, the strong light behind the corner and the view towards the nature or the church.



The heavy houses of stone hold the light glass house in its place; something heavy and dense balancing with something light and thick.





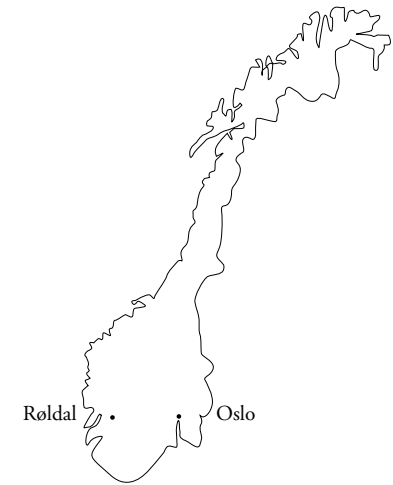
## THE COMPETITION PROPOSAL

Derived from the experience of visiting the site the proposal displays an interaction with the cycle of nature, the memory of the pilgrim walk, and a coexistence with the church.

## RØLDAL

Røldal is a small village with 350 inhabitants. It is situated in a valley between high mountains, 390 m above sea level. The stave church is probably from the 13th century and the goal for the pilgrimages is its crucifix that, according to legend, sweats during midnight mass on “Gammaljonsok” around the 6th of July. The sweat is said to have a healing ability.

The church is the main figure in the scenery of Røldal and the cultural landscape surrounding it is important and must be kept according to the brief. The National Heritage Board must approve the new addition and the centre must be well adjusted to the site and the building materials and techniques shall be locally rooted. The new centre should be humble in its relation to the existing church and be welcoming to the visitors as well as the inhabitants in Røldal. The intention is to convey the history of the church and the crucifix and to be a gathering point, outdoors and indoors, for both visitors and people of Røldal.





## PROGRAM

		m <sup>2</sup>	
Church	Office, priest	20	
	Office, parish council	10	
	Study	10	
	Waiting room	5	
	Storage	20	
	Farewell room	25	
	Mortuary	10	
	Utility room	25	
	Break room, caretakers	9	
	Wardrobe	15	
Administration	Reception	10	
	Office, manager	15	
	Offices, staff	20	
	Conference room	15	
	Storage	30	
	Office supplies	15	
	Wardrobe	10	
	Restrooms	10	
Public	Entrance hall	60	
	Main hall	150	
	Kitchen	25	
	Exhibition	125	
	Video room	25	
	Library	35	
	Storage	15	
	Group study	20	
	Restrooms	26	
		Utility room	15
		Tech room	15
		Outdoor restrooms	10

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## THE PILGRIM CENTRE SPRUNG FROM NATURE

As a pilgrim you walk the same path and has the same goal as those who took part of a pilgrimage in the medieval period. When you take part of the experience you become a part of the history. At the same time as the centre convey the history you create it. In different ways you leave traces for the next person. When the flame from the fire you just sat by goes out the heat is still in the stonewall, when you have walked through the exhibition you abrade the wooden floor just as the wanderer abrades his path.

The cycle of nature is striking in Røldal; snow that is present throughout the year, the sound from the melt water that plunges down the mountains, the mist lifting over the river. To amplify the cycle of water we use openings in the building to direct attention to the mist, lake and melt water.

The nature is what is constant and what belongs to both the past and the future. What the pilgrims before you saw connect to the history and is a part of what was before. The movement is directed by views that remind you of what you saw before. The memory of Røldal is what leads you forward; the sound from the water plunging down the roof, the light from the heights, the view of the rising mist or the church. The pilgrim centre makes visitors and the people of Røldal a part of the nature and the history.



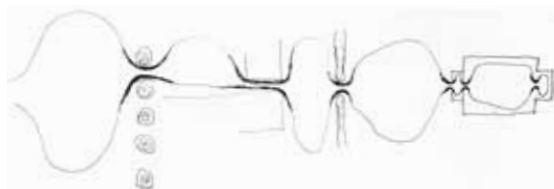
## THE CENTRE EMBRACES THE NATURE

The centre is built of material from its surroundings that has found its form by interacting with the landscape. Together they create directions and spaces. The existing row of birch trees gives, together with the direction of the buildings and the ground paved by natural stone, attention to the beautiful place by the water with the view of the church. A courtyard finds its form between the existing dry stonewall and the new buildings.

The dignity of the walk towards the crucifix is amplified by passing through the spaces that are created between the nature, the landscape and the buildings. This increases the tension and expectation; it frames and gives a direction towards the church.

Divided into three volumes the buildings can have a smaller scale that is subordinate to the church and they can interact with the houses in Røldal.

Over time the feet of the visitors create a path in the meadow between the buildings.



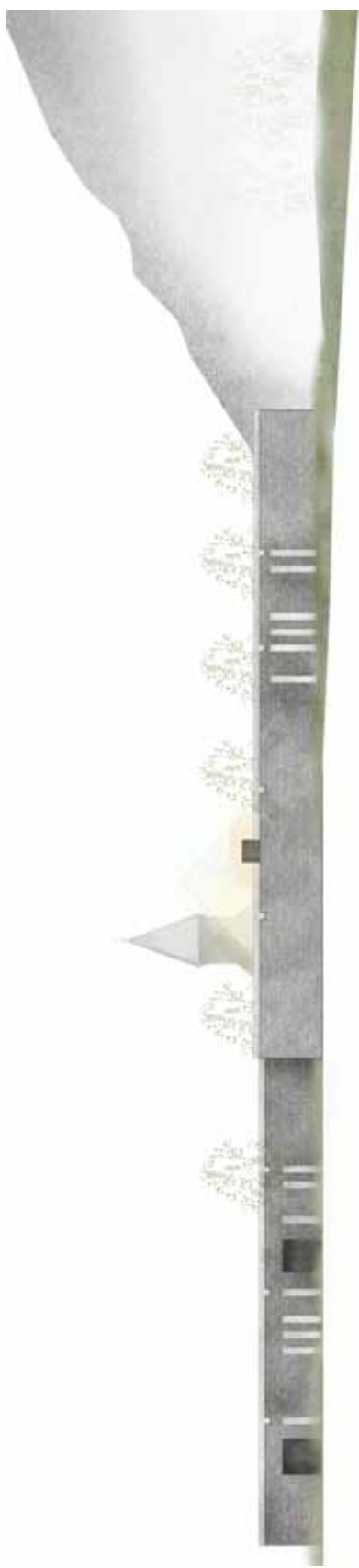
Site plan 1:1000

## APPROACHING

No matter if you come from the mountain, just got off the bus or parked your car you walk the last part towards the church by foot.

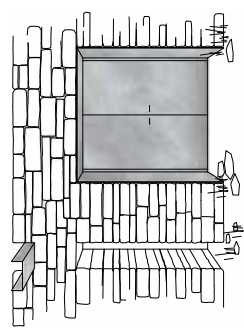
When arriving by car it is extra important to land on site in Røldal. You walk through different spaces before entering. Coming from the church the centre reaches out to embrace you. The courtyard welcomes those who come from the village.





West Facade 1:400

Steel frames in the thick wall of stone frame the door and create a weather-protected entrance. As a part of the cycle of water the rain or melting water is pouring down outside the windows.



East facade 1:400



North Facade 1:400  
The glass house rest lightly over the ground, the heavy stone buildings lies deep down in the meadow.



South facade 1:400  
Glass and textile on a frame of wood give a soft light.





Section B-B 1:400



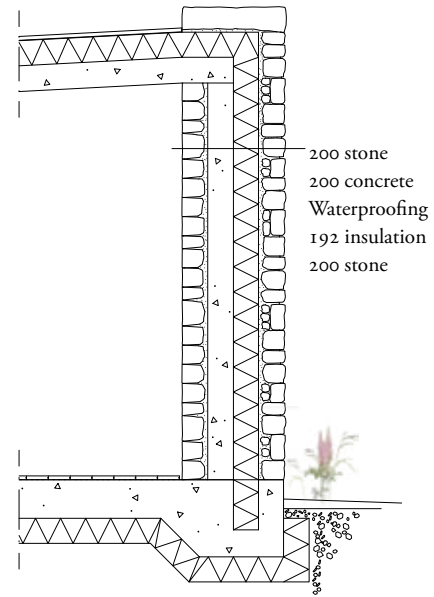
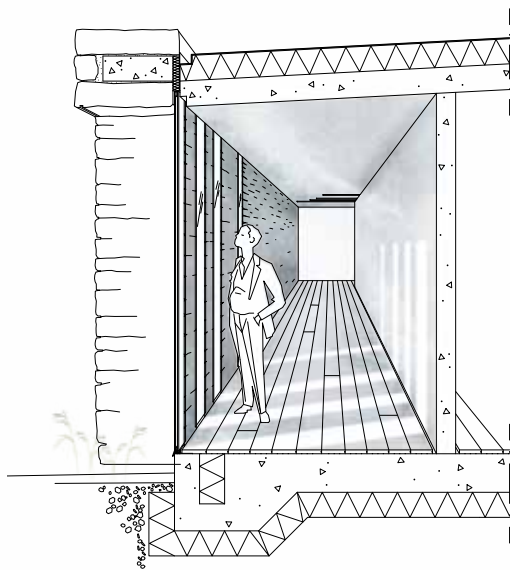
Section D-D 1:400



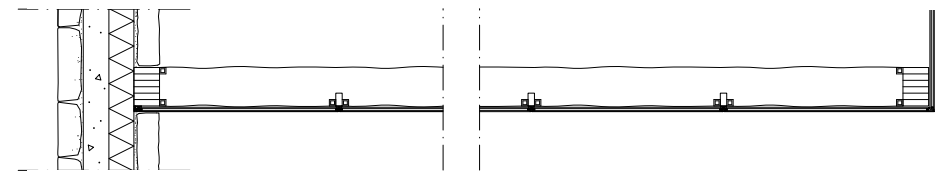
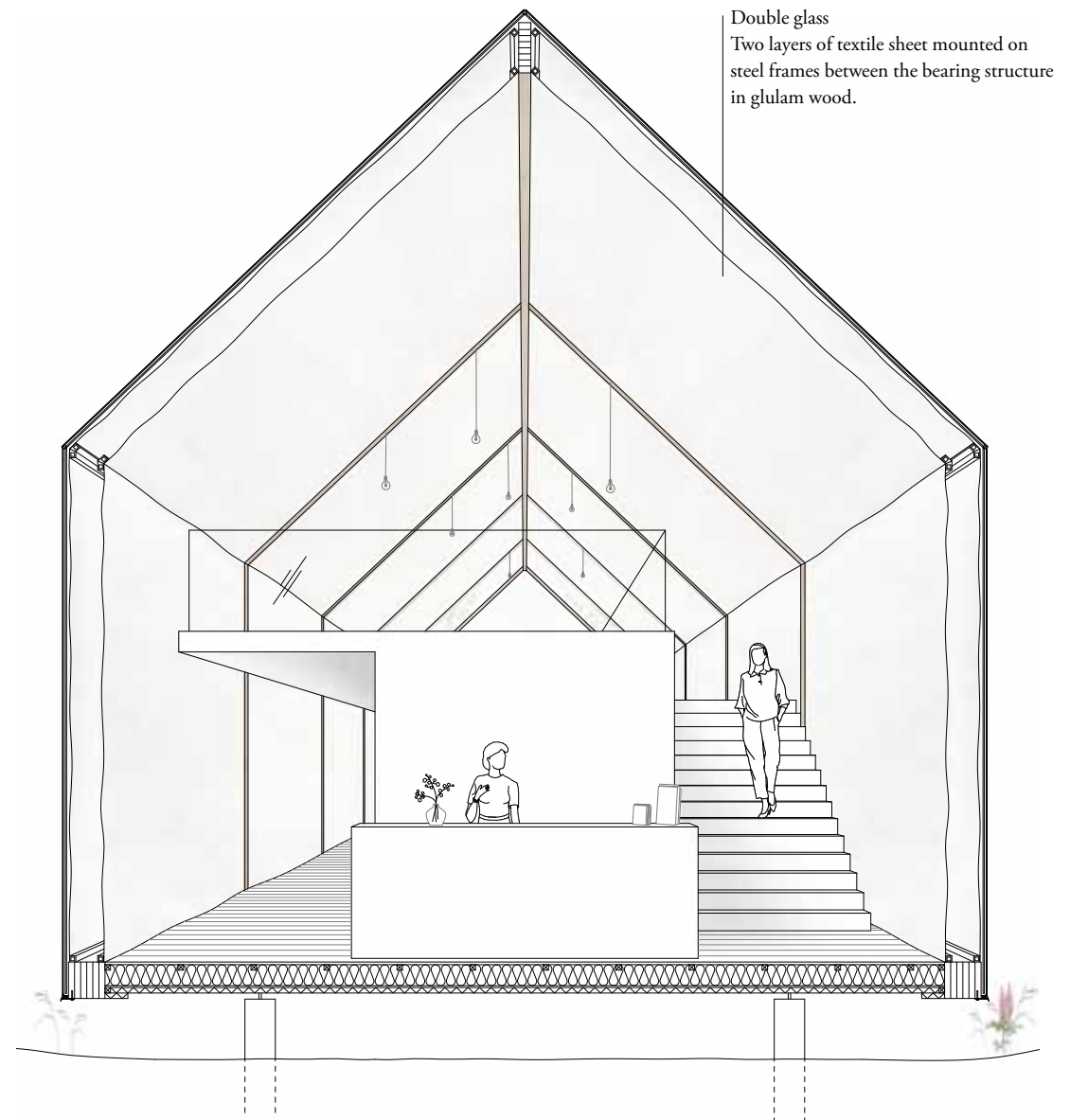
Section C-C 1:400



Section E-E 1:400



The character of the stone buildings is heavy and dark and gives, unlike the soft fabric, a sharp and precise light indoors that creates a rhythm.



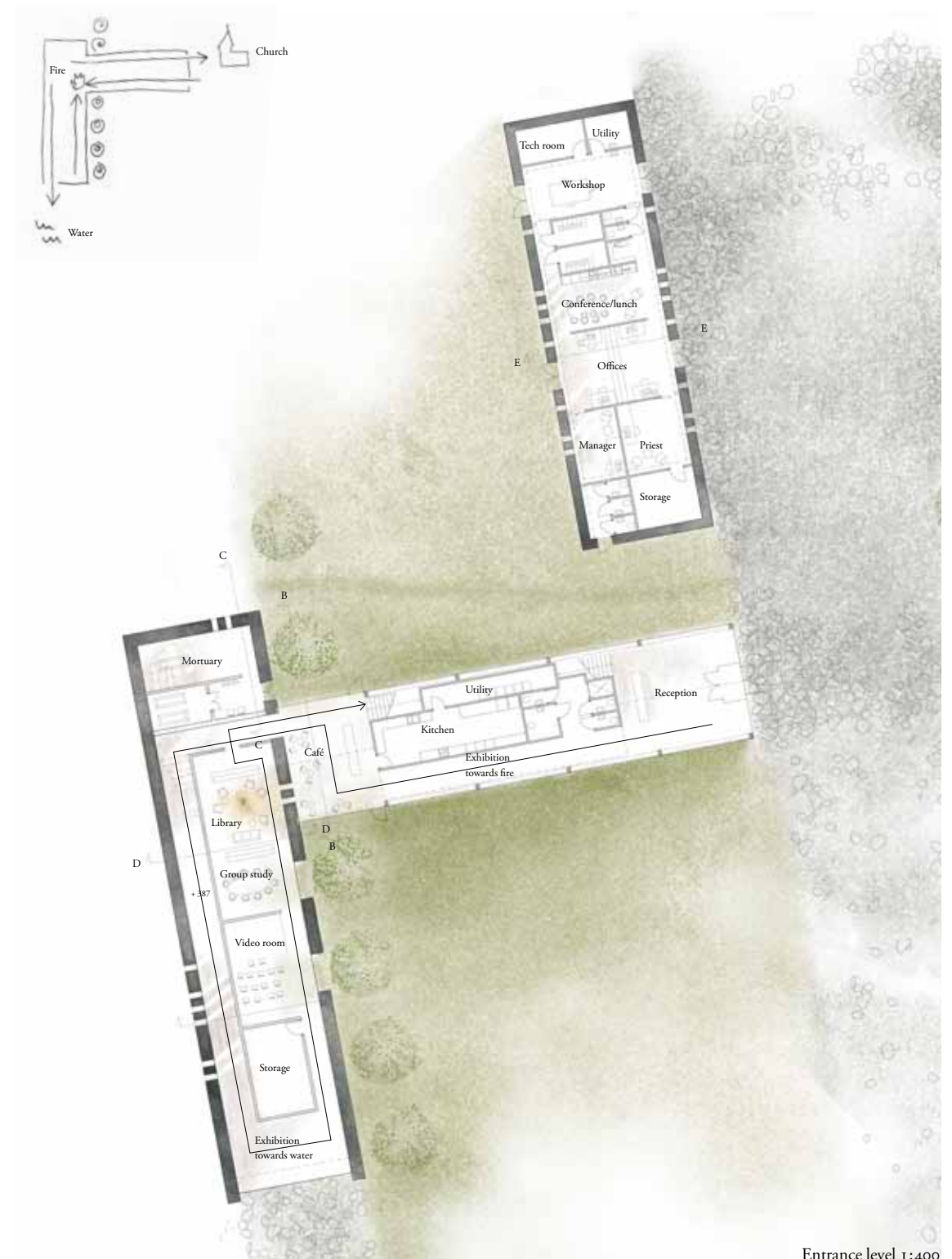
## LET YOURSELF BE LED AROUND THE HOUSE

The rooms are built with different densities that create contrasts in light and spatial formations. The same room alternately gets smaller and bigger, which creates a pulse and a movement forward. The movement passes through all the public functions and makes them a part of the exhibition, the walk through the house and the history.

The heat from the other side of the stonewall lures you there. As do the voices from the café, the strong light behind the corner and the views towards nature. With help from inside and outside you are lead around the building.

The hall and the café are divided into two rooms, which enables a flexible use. The hall can be used either for temporary exhibitions or for activities for visitors or people in Røldal like weddings, christenings or other gatherings.

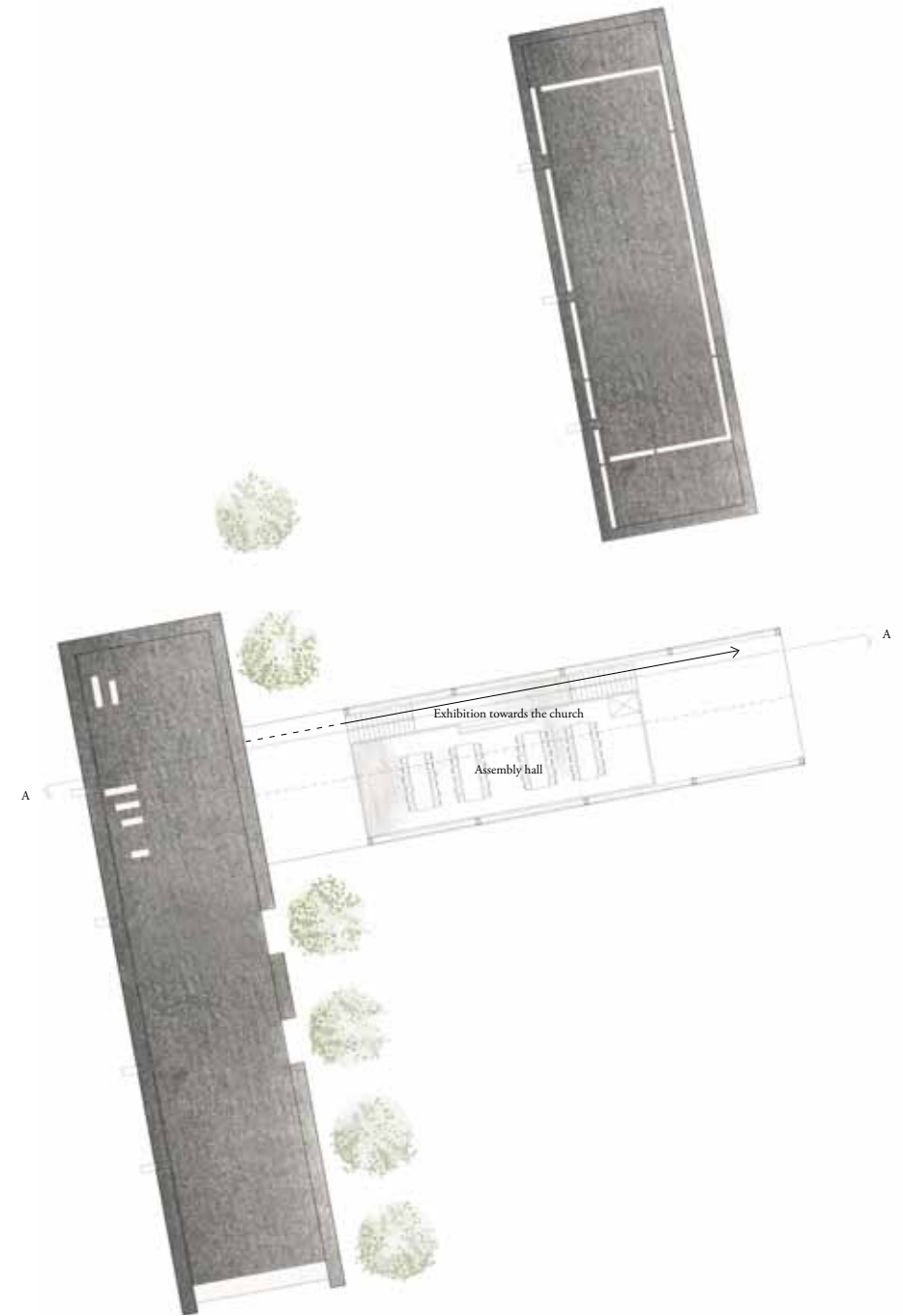
The employees of the centre and the church have their offices in a common building where they can meet and work closely together throughout the day. The offices are accessed directly from the courtyard.



Entrance level 1:400



Section A-A 1:400  
The assembly hall in the second floor with a view towards the church and the lake.



First floor 1:400



On the way to the centre the church is what leads you forward and by passing the different rooms the dignity towards it increases.



The churchyard, in front of the entrance.



The walk towards the church.



The walk towards the entrance.



The fabric inside the glass creates a warm and light entrance. The tactile materials are important, you can feel the fabric on the wall, lay your hand on the rough stone and feel the warmth from the fire. The material age beautifully with the presence and use of people.



The walk towards fire.



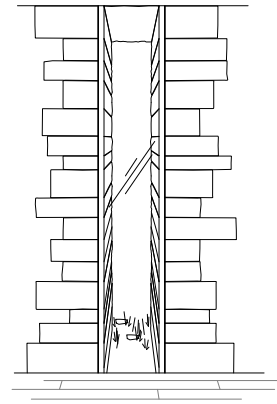
A strong light in the dark leads you forward into the stone building.



The walk towards the strong light.



A rhythm is created by gates of light from narrow openings in the facade and roof.



When reaching the viewpoint over the river the glass continues over your head and you get the feeling of standing in nature with only the sky above you.



The walk through light.



The walk towards nature.



The birch trees extend the room and you see the light from the fireplace. The light in the stonewall and the voices on the other side of it lead you back to the café.



The walk around the house is soon complete. The senses were what led you forward. You have helped to erode the floor, the path on the meadow is deeper and the heat from your fire is still in the walls. You have created a small part of the history in Røldal.



The walk towards fire.



The walk towards the church.





# THE ANALOG BLOG

As a visual documentation of your process the analog blog is a tool that provides an overview of your progress and decisions; the development of ideas from statements and thoughts to models, buildings and illustrations. State the most important decision or idea in the end of every day and document it.



## Brödtext

Jag skall leda de blinda på vägen,  
föra dem längs okända stigar.  
Mörkret framför dem gör jag till ljus,  
oländig mark blir jämnt.  
Det jag nu har sagt skall jag göra,  
jag viker inte från det.

Jes 42:16

Dragens val:

Adobe Garamond Pro

20110905

"En modell är ett abstrakt  
tänkanke, ett språk."

L. Hopsch

"En konstnär tänker när  
hon målar."

Eminence / Evidence

"Situationen tar tillbaka."

D. Schön

20110906



172 sidor senare.  
Rapporten har fått en  
layout.

2011 09 07



Interesse i modellfoto.

MAPE arkitekti

2011 09 08

## STEG 1

- ställnings tagande

KRETSLOPP, KONTRAST, JÄMKVT,  
KÄNSLOR

Uträndernas genom treenigheten i  
Røldal: NATUREN, KYRKAN,  
VANDRINGEN.

"Kontrasterna blir gärna  
jämliska" Sofie C.

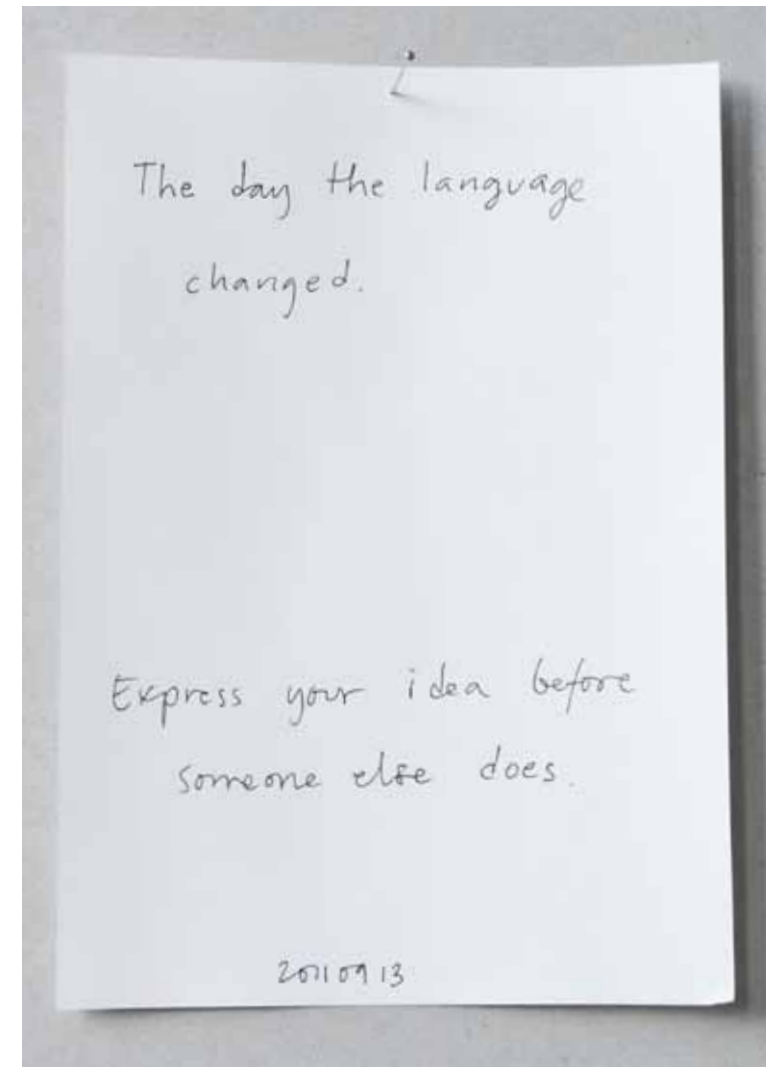
2011 09 09

## STEG 2



En uttre faktor verkas av  
kretsloppet.

2011 09 12





Do you remember December?

2011.09.14



Weather and light conditions are reflected in the building.

2011.09.16



Sequences of openings makes  
the surroundings present.

20110917



Breathing space

20110918

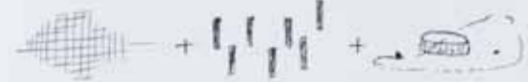


The functions fall into places.



The exhibition as a dividing part, always present in the building.

20110920



How does the cycle end and begin?

open up vs closing

A gradient from openness to enclosure

20110921





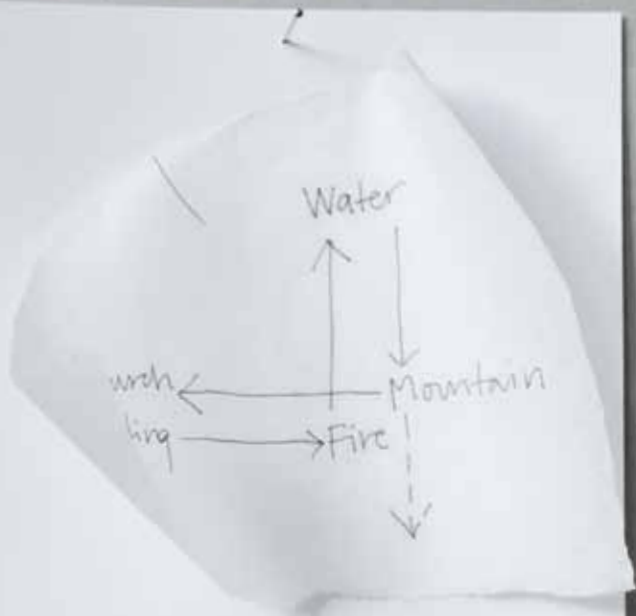
The nature embraces and  
creates.

20110926



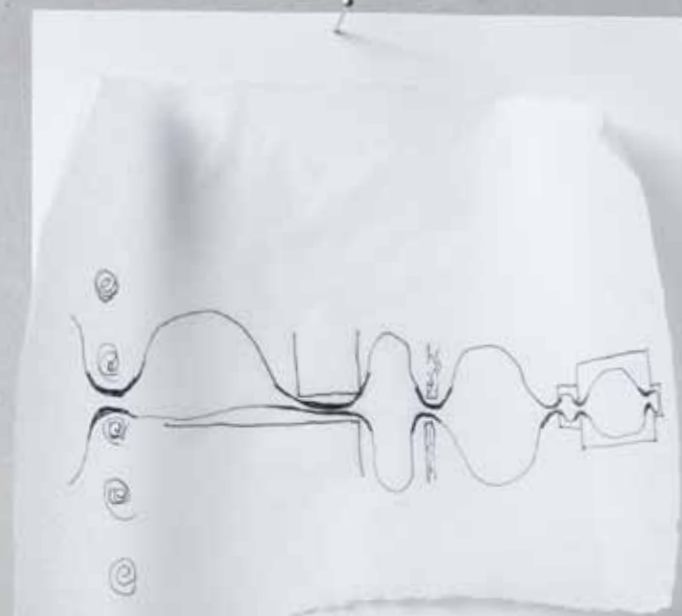
The buildings embraces  
and creates.

20110927



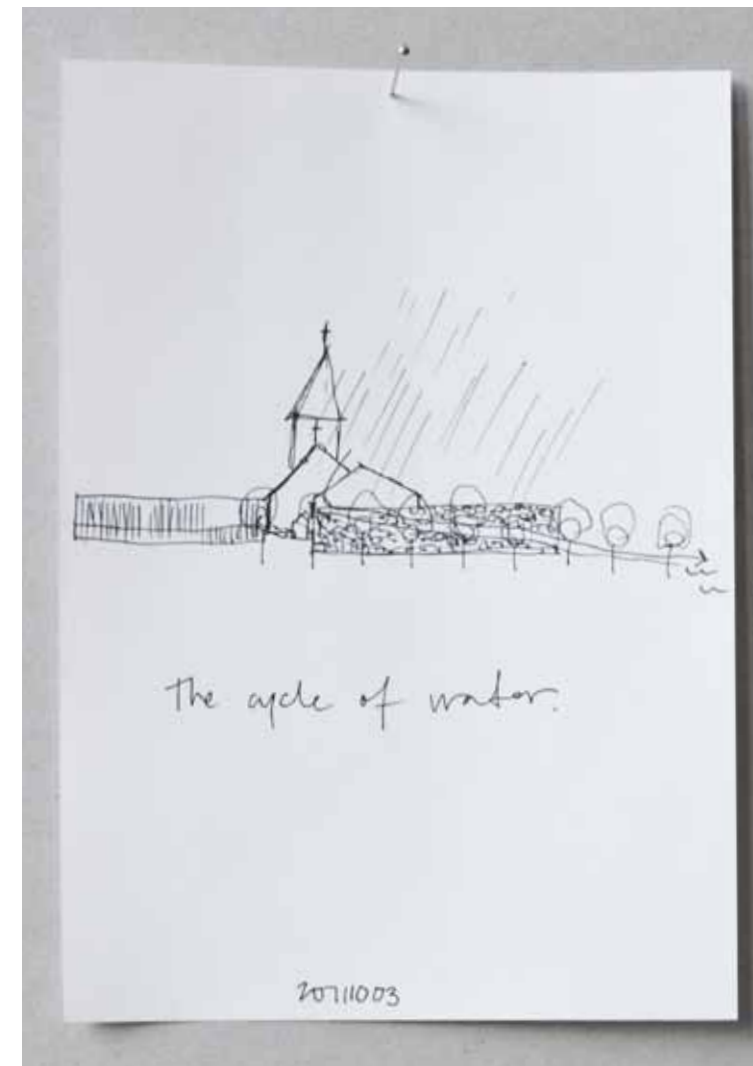
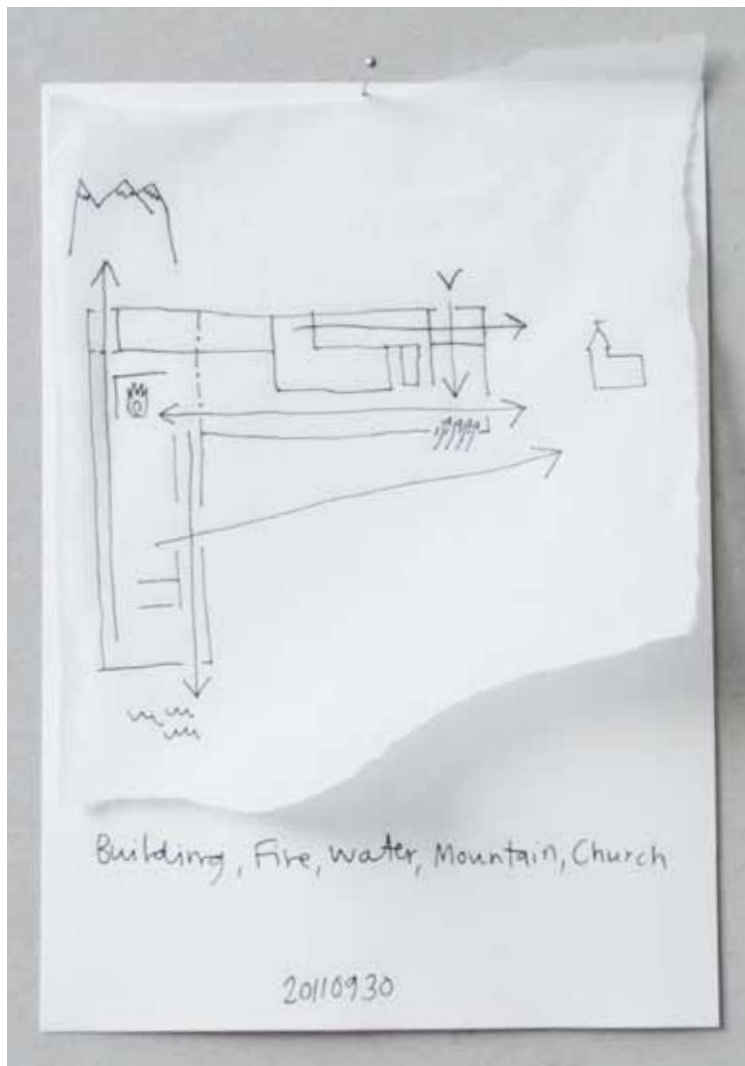
let the movement remind  
you of the surroundings.

20110928



Enter the church with dignity.

20110929





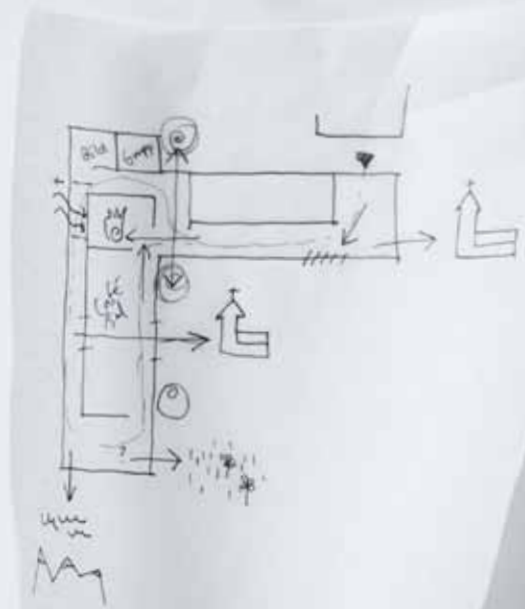
Dynamic input.

2011004



Relation - Proportion

2011005



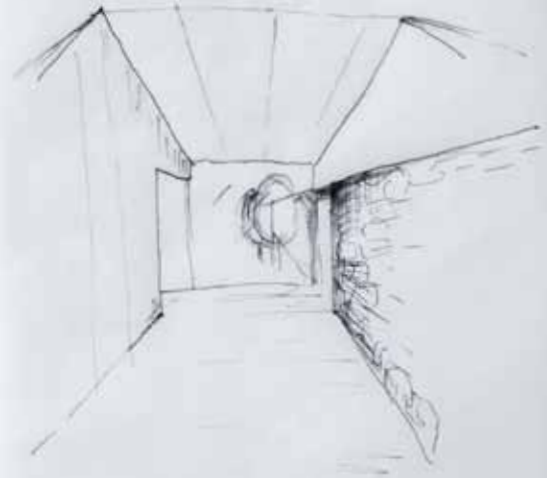
To direct is to exhibit.

20111006



The vertical light in the horizontal building.

20111007



Redirecting views.

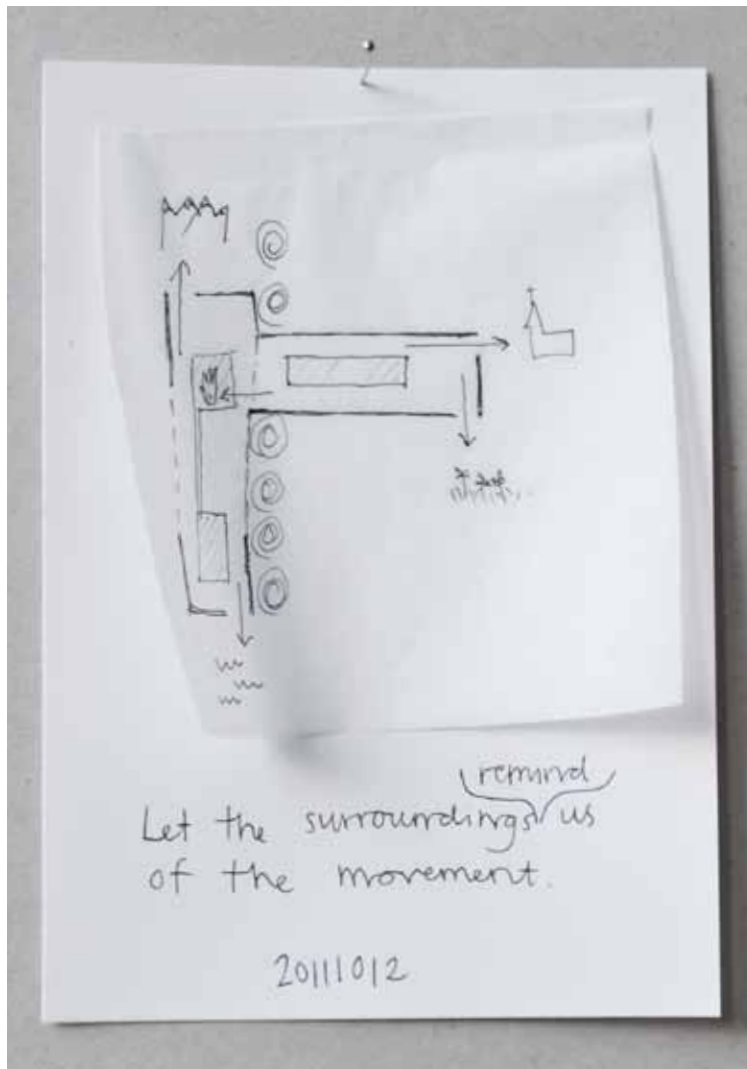
20111010

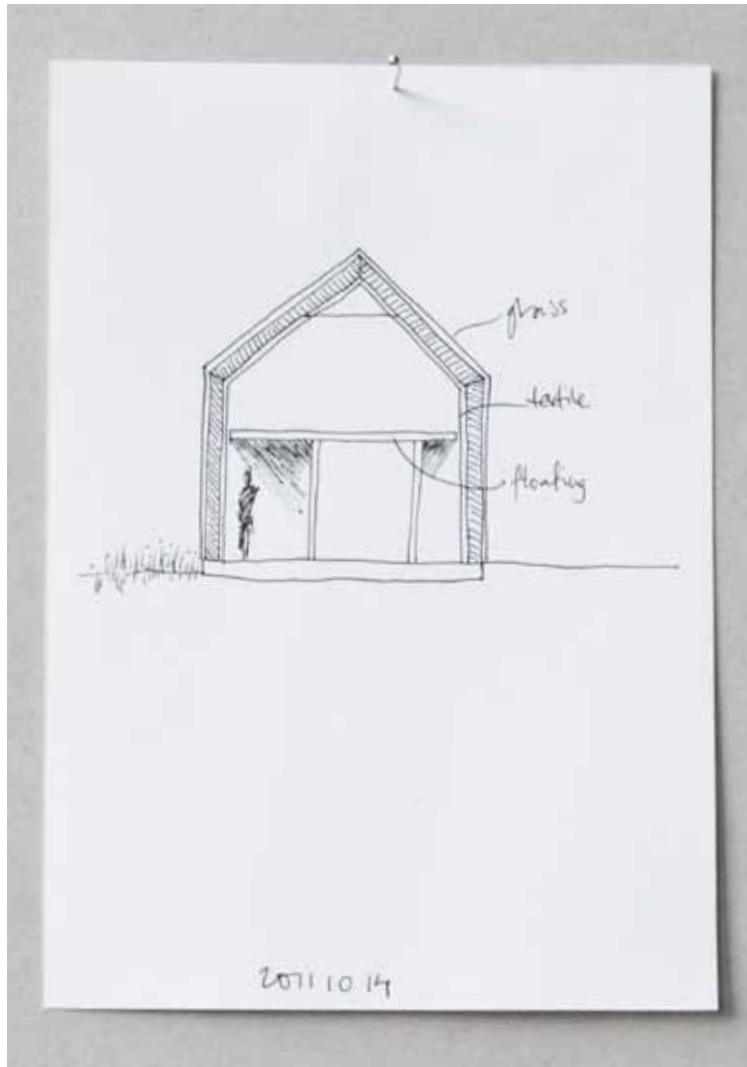


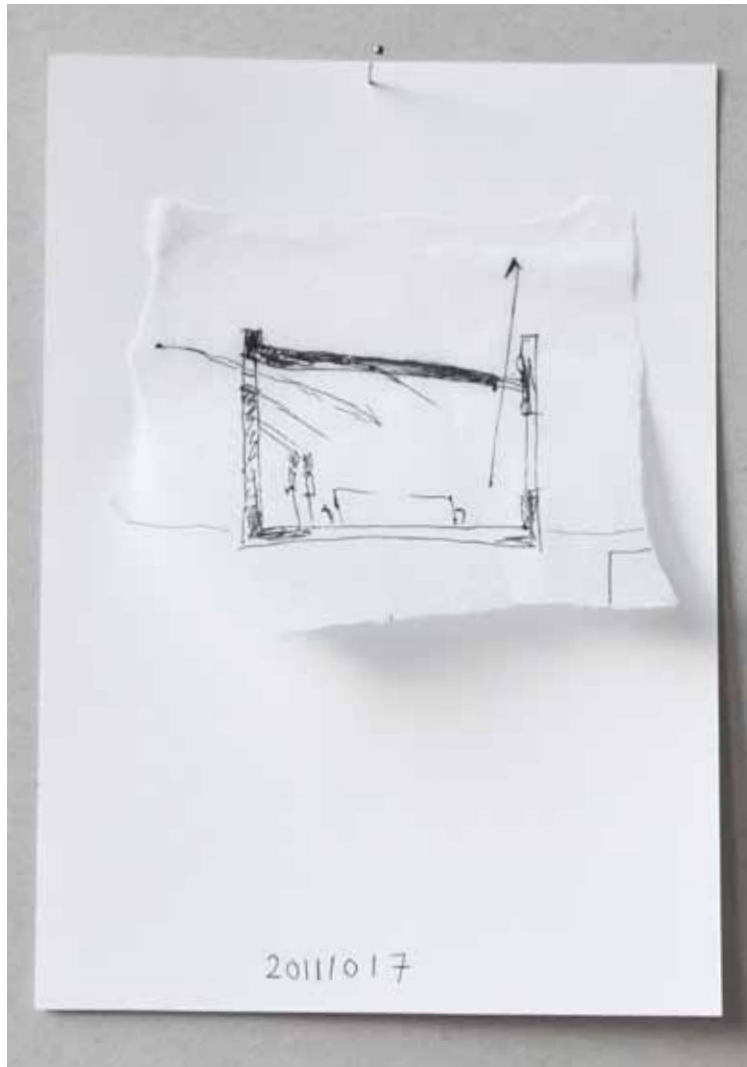
Walk through the light.

20111011











Walk through the light  
to reach the mountain.

2011/019



2011020



20111021

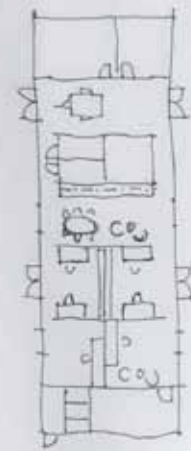
LYCKA TILL MEA EXAMENS-  
ARBETET, DET SKA  
BLI SPÄNNANDE ATT  
LÄSA!  
Ulrich Strauss Film

20111024



Let the light continue  
over the corner, not the  
window.

2011/10/25



2011/10/26



Enter.

2011.10.27



Welcome.

2011.10.28



Towards the fire.

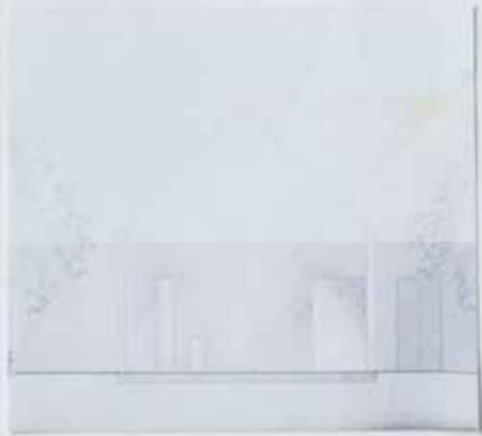
20111029



In the row of birch trees.

20111030





Follow the light.

2011031



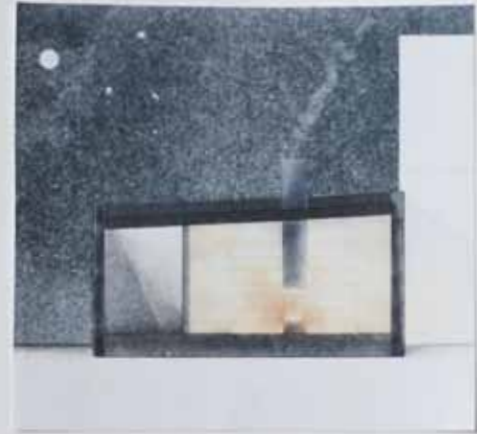
Exhibit

2011101



Towards the water.

20111102



Reaching the fire.

20111103



Over the last mountain...

20111104



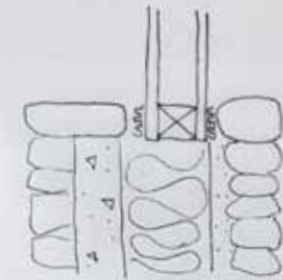
... towards the church.

20111107



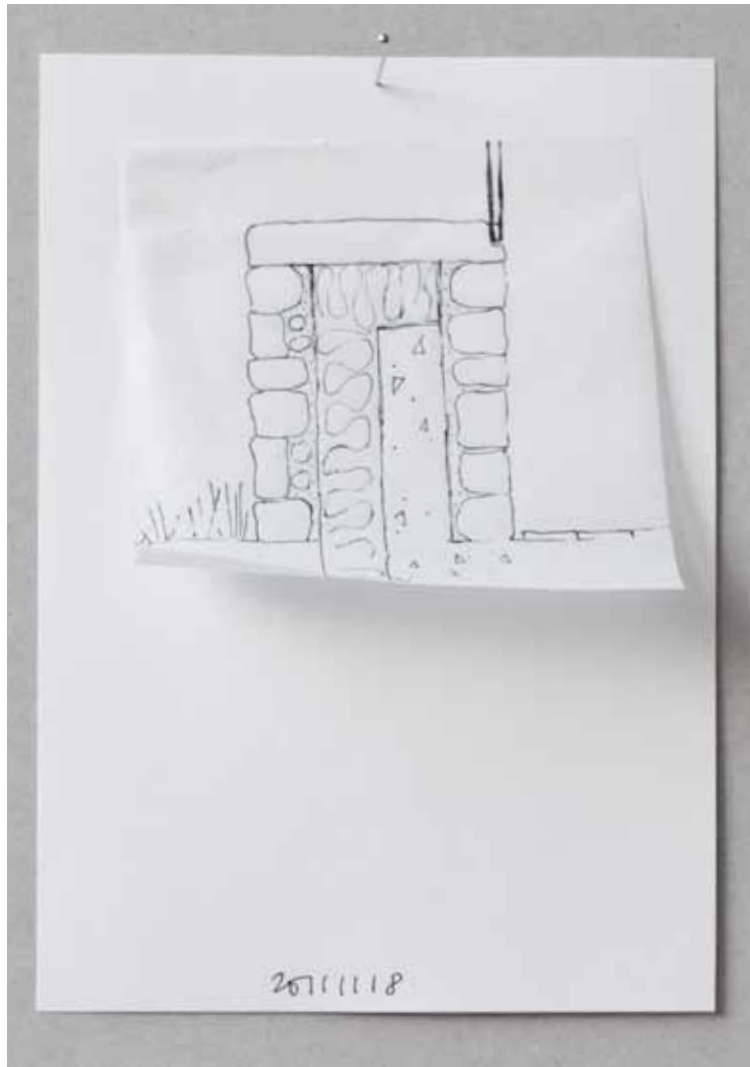
Reaching the Church.

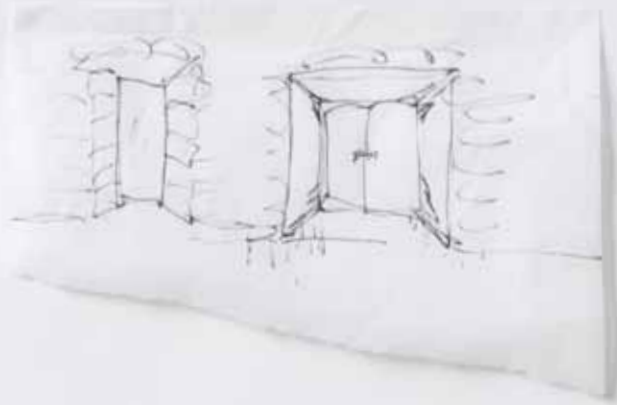
20111108



How to build the stone wall?

20111117





Adding doors.

2011/1/22



The water pouring down  
in front of the window

2011/1/28

# COLOPHON

A Master Thesis at Chalmers Architecture

Master's programme  
Architecture and Urban Design

Design studio  
Matter, Space, Structure

Examiner  
Morten Lund

Supervisor  
Daniel Norell

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