

# DIPLOMA

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**Current**

A hydroelectric power station

Fall 2019, The Oslo School for Architecture and Design

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*Photo by H.P. Birkeland*





*Zentrale Bärenburg, from the book  
"Die Kraftwerksbauten im Kanton  
Graubünden."*

*Photo by Christian Kerez*

# PART 01

## Intention

I am going to discuss and explore the coexistence between humans and machines through designing a building in a river, for producing electricity. I will discuss the forces of nature and presence of architecture through designing a dam in a forest in a rural area. I will discuss coexistence between nature and architecture by designing a place for the production of hydroelectricity, in an attempt to shine a light on gap between the production,- and use of power. Through this I wish to discuss the ever stronger relationship between human and machine, and the growing estrangement between the two. I will also discuss the particular relation between an architecture for machines and an architecture for humans through spatial studies of the two programs.

**Coexistence: Nature, Architecture, Machine**

/

**River, Dam, Generator.**



My interest is to investigate states of coexistence between different structures and forces. The unstoppable force and immovable object of a dam in a river - the architecture holding back the water in a dam, the machine-like cyclic aspects of human life, and the production of electricity in a power plant, the scale of machine architecture, and the scale of human architecture, and the coexistence of machines and humans at different scales. This interest stems from previous work focusing on states of visibility, on what is shown and what is hidden, what's accessible to me and what is not, spaces made for other things than for me to enjoy, and how I find my place in it anyway.

*Mascinensaal, Bärenburg, from the book "Die Kraftwerksbauten im Kanton Graubünden".*

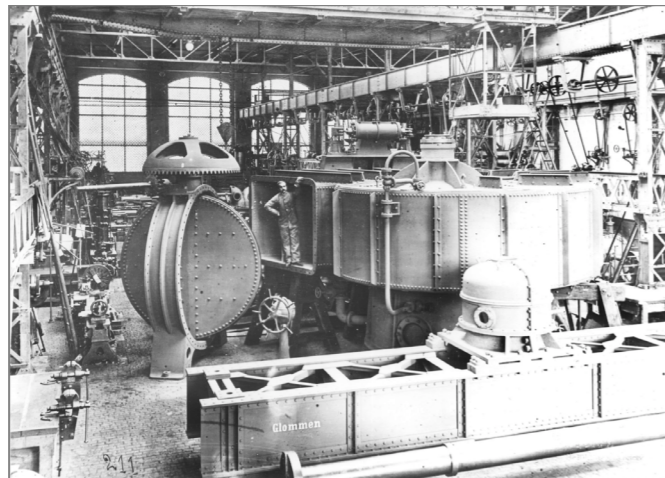
*Photo by Christian Kerez*



# Notes on coexistence

Coexistence is inevitable when the starting point is to stop one of the biggest rivers in Northern Europe. There has to be a symbiosis, where ones tolerates both the seasonal rage and laziness of the current. Sometimes too weak, sometimes too strong, the flow is continuous, and in order to make use of the ceaseless current, there must be a balance.

*Vamma Power Plant  
Wåwe  
Photo: Norges Vassdrag og  
Energidirektorat*



Coexistence with machines is an everyday triviality to me. To be around some of the most powerful, elegant, mind blowing machines in the world has become a necessity, but is all tailored to me, it is all made so clean, so beautiful, so easy to operate, so streamlined that I am distanced from it. I use it everyday, and look more at it than I look at anything else in my life, still it is a stranger, and it holds secrets from me. It harvests information about me and sells it to someone else, who may have insidious intentions, and I will never know it. The machine knows if I am going to have a stroke before I do. I knows whether or not I have manic depression, and sells my information at a higher price in times of hyper mania. It knows if I am going to get Parkinson's disease, and notifies my insurance company, so that I will have to pay more, and it doesn't even have to tell me about it. How do we live such lives, so connected, so naive and blind? We smile and nod while everything is harvested from us, and expect nothing in return. Even as I am writing this I suspect Adobe to scrub my text for any information or meta data that they can sell. No wonder we feel estranged.

*New and old turbine halls in  
Kykkelsrud and Vamma.*

*Photo: Norges Vassdrag og  
Energidirektorat*



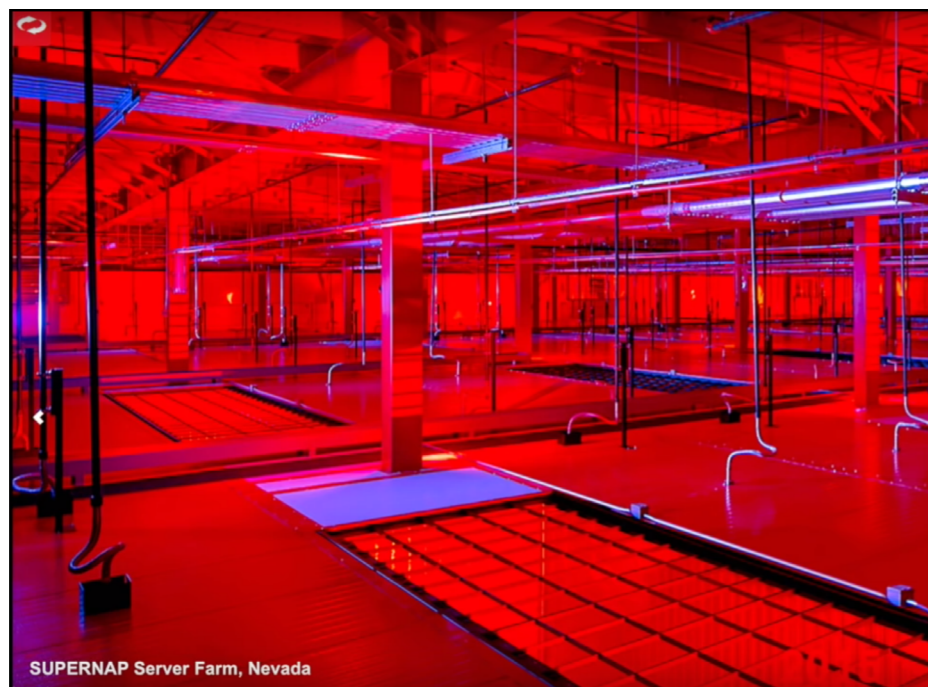


*Top: Hotel Belvédère du Rayon Vert,  
Cerbère, France*

*Bottom: Crowd at Friendship  
Maryland Airport, Baltimore, July 1964.*

The fascination for new and emerging technologies and infrastructure has always influenced the architecture of its time. The hotel next to the railroad serves not only as a viewing platform, but also as a way to get close to this new technological marvel, to not only see it, but be next to it for a while. To spend time adjacent to it, to be a part of the new world.

Likewise, airport viewing platforms many places were an implemented part of the emerging airport architecture. The spectacle of flight was too spectacular not to watch and marvel at. I can only assume they felt as I do now watching Space X launches and landings.



*Supernap Server Farm, Nevada.*

*Rem Koolhaas, lecture on the Countryside, Harvard GSD.*

*Screenshot from YouTube.*

Infrastructure is something which is made for humans to use, but not something which is appreciated to any significant degree. Infrastructure is pure structure, highways, bridges, overpasses, tunnels, ferry docks, bus stops, parking lots. These things are precisely designed to fit its purpose, and nothing more. Concrete is cast in precise, clean lines, flowing from side of the continent to another. What is this if not modernism in its purest form? An architecture free of the formalistic shackles that once held it, void of any other meaning than the one of progress and strength.

Spaces designed for machines, like SuperNap's warehouse in Nevada, US is pure machine spaces, where all light is either deep red or dark blue, because this is what the machines read best. This space is clearly not for the humans, and the space made for the human is a strange, buddhist-like zen space with fake timber panels and a picture of a deity on a wall.

Why are we so afraid to engage with machine spaces? Why are we not implementing them into our lives? They are the things that make our modern life possible. When your local brick and mortar bookshop is torn down in your hometown, and you purchase books online, this does not mean that the architecture for the bookshop is gone, it has just simply moved. The bookshop you once knew is now a giant hall somewhere out in the sticks, or in a hall in a mountain, on servers, stored in stacks in cages in climate controlled spaces. These are the biggest buildings in the world, but still outside the realm of architecture.

When you replace the candle with a light-bulb, or a fire with an electric heater, or you petrol fuelled car with an electric one, all you have done is that you have changed the local combustion to a centralised spot. The energy is generated somewhere else, and you are distanced from it. The infrastructure of all this is all around us, but hidden in plain sight. Most people feel like they don't understand it, and most people think that it should remain something someone else is responsible for. The strokes of our civilisation is hidden, and all we see is the polished results.

Why are we so afraid to engage with the infrastructure which facilitates our lives? I want to create a place where one can experience the forces that holds our world together intimately. A place where one can bodily experience the marvels of architecture, science and construction, and the wildness of our nature at the same time, in the intersection of the strongest forces of nature *and* culture.





### States of the river

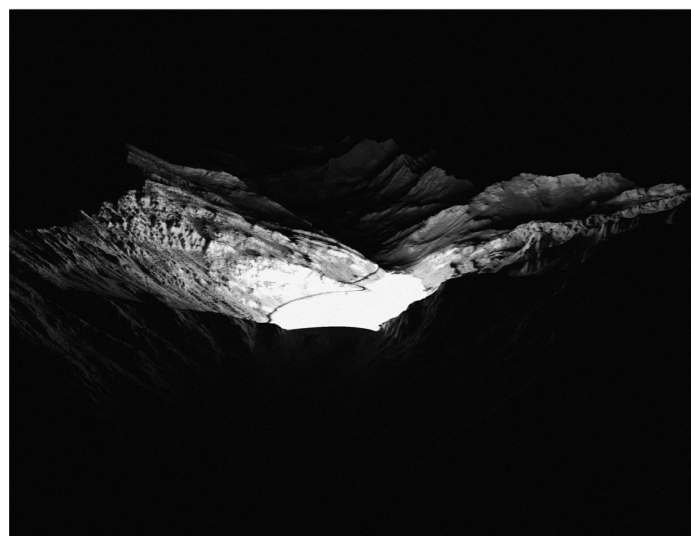
I want to investigate how the different states of the natural force in the river can be understood in architecture. How the fall and flow of the water, its sounds and smells, and the electrical current being translated to electricity and light is the same thing, but in different states. I want to show the river in all its states, and try and discuss how the changes in states changes the architecture as well.

I want to discuss how I can use the architecture and the machines to strengthen the understanding and perception of the river and electricity as the current in different states, and architecture as a mediator and facilitator of these forces.

In doing this I hope to create or enhance the awareness of the natural forces, and how we have tamed and harnessed them in order to create the world we live in. I want to force the coexistence into the realisation that one is not possible without the other, and that electricity, though abundant, comes from gravity making a wheel spin somewhere in the wilderness outside the city.

*All photos taken from Per Berntsen's series on Statkraft.*

*Per Berntsen*



*Lac des Dix, Lac de Mauvoisin,  
Lac de Moiry*

*Atlas of Places*

My approach when thinking about the river, is that is one of many states of electricity. The water in the dam and the light from my iPhone is the same thing, translated from water to electricity in the power plant, and from electricity to light in the screen.

I am doing this in an attempt to communicate the origins of electricity, and how our use of it is dependent on forces of nature, and how our civilisation relies on our knowledge and insight into these things. It all boils down to one simple equation, the first law of thermodynamics,

$$\Delta U = Q - W$$

Energy is never created, it is just transformed from one state to another. If someone turns on a light, then somewhere a wheel is spinning, set in motion by the forces of nature.

It is to rediscover the mystery and spectacle of power production, and reignite the enthusiasm for the corner stone of our modern lives. To create an awareness that has faded from the contemporary, though is ripe for a relaunch in the face of impending doom.

Electricity exists in abundance. This is especially true in Norway, where 98-99% of electricity is produced from hydro, and very cheap. As a consequence, screens, lamps, heaters and machines are often left tuned on to burn electricity unnecessarily. This, in my opinion, is a symptom of a very privileged life, to which of course, I am no opponent, but in this luxury, it is easy to forget that electricity and everything it does for us, is truly magic, and created in a machine somewhere.

As a result, we have become distanced from the premises for the way we live. Ground breaking, revolutionary high tech has become just another commodity in the eyes of the consumers. All the while, the giant electricity machines stays defiantly against the waterfalls.





# The Svælgfos series, Theodor Kittelsen

In 1907, Norwegian painter Theodor Kittelsen was approached by Sam Eyde, a pioneer of hydroelectricity in Norway. Eyde had recently founded Norwegian Hydro with scientist Kristian Birkeland, and together they had revolutionized the production of industrial fertilizer with the Birkeland-Eyde process, in which nitrate is pulled from thin air through an electric arc. Norwegian Hydro went on to revolutionize and develop hydro-power in Norway, and today it is focused on producing aluminium at the feet of great waterfalls around the country.

Eyde wanted Kittelsen to capture the spectacle of the powers of the river. Kittelsen had up until then been famous for his national romantic images, based in Norwegian folklore, so when Eyde, at the very end of what remained of the national romantic era asked Kittelsen to capture the splendour of modern industry, the images naturally became a kind of bridge, connecting the ancient world of myth and wilderness, to the hard reality of the 20th century.

It is this bridge I would like to rediscover in my project. I have mentioned earlier that I think both nature and architecture is enhanced in the meeting of the two in the hydroelectric dam, but there is also an underlying feeling of ancient, eternal forces, and the will and ingenuity of man which is also present. A pride perhaps, in what our civilisation can create, and a feeling of fragility, a fear that in an instant, it can all be reclaimed by the roaring forces of nature. It is a balance of pride and humbleness, of rationality and awe, and it's product is with us in our pockets and on our wrist at every moment of our lives. I want to make that tangible.

*Svælgfos*

*Theodor Kittelsen*

*1907*



*Among the many advances made, none is more astonishing than the progress of light. A few years ago, light was an event only for the eyes. There was either light or no light. It spread through space, encountering matter, which more or less modified it but remained foreign to it. Now it has become the world's prime enigma. Its speed expresses and limits something essential to the universe. It is thought to have weight. The study of its radiation is destroying our previous ideas of empty space and pure time. It resembles and is yet different from matter, in a mysterious mixture of ways. Finally, this same light that once was the common symbol of full, distinct, and perfect knowledge, is now involved in a sort of intellectual scandal. It is compromised, together with its accomplice, matter, in the suit brought by discontinuity against continuity, probability against images, integers against complex numbers, analysis against synthesis, hidden reality against the mind that would track it down and, in a word, by the unintelligible against the intelligible. Science seems to be facing its crucial trial. But the case will be settled out of court.*

Paul Valéry, *Regards sur le monde actuel et autres essais*, 1938

Left page:

*Grunnarbeide*

*Theodor Kittelsen*

1907

Right page:

*Dammen på Kloumannsjoen*

*Theodor Kittelsen*

1907





## PART 02

# Background / Previous studies

In previous studios, I have worked with states of visibility, and states of spatiality or spaciousness in two dimensional formats. By blurring and hiding elements in photographs, I have attempted to create a hidden space, a space that arises as it is left to the imagination, enhanced by hints and traces of something more. This blurring and hiding, and states of shown and hidden, and the states in between, is what I am going to continue studying in my diploma.

*Photos from own studies, "within  
things within" 2019.*



# Visits to hydroelectric power plants

*Touching the hewn granite that make up the walls deep down under the surface of the river, I can feel the vibrations, The humming fills the air. Something giant is hiding somewhere.*

A deep, slow rumble makes everything vibrate. I feel it through the soles of my shoes as I walk towards the long stone staircase leading down to the medieval looking bridge spanning a deep void tot the main entrance to the power plant. The vibrations carry though my arm as I grab the railing and walk down and onto the bridge. I cross it and enter though the massive lacquered oaken doors and into the tower. It leads to a landing in the middle of a giant stair, going three stories up and six stories down. It is like I enter the architecture in medias res, and everything vibrates. Even the air is filled by the stable humming of the machines spinning somewhere in the deep. In the belly of the beast.

I was invited to visit and come inside to see the interiors of Vamma and Kykkelsrud power plants. Hans Harald Løkke, a sixty year old, forty two year employee at the power plants showed me around the gigantic buildings. Hans Harald was upset that there was so little focus on the cultural history of the power plants. Industrial history in the area is neglected, forced out by the heavy focus on the history of agriculture in the area. The massive interventions of the construction of the power plants is disregarded, and now, the men working deep inside feel as if it rests on their individual shoulders to carry the history into the future, as there are no interest from the administration of the plants to spend any resources maintaining it.

First we went to Kykkelsrud, where the hall containing the nine turbines and generators have been silent for twelve years, after the new building opened next door. The sound filling the room, with a six seconds reverberation time now is the occasional tourist like me, the occasional concert and the steady swirl of the river.

Vamma has always been the largest hydro electric power plant in Northern Europe. It is massive. Unfathomable. Bigger than anything else in the area, and so alien, so strange, so out of this world, so silent and hidden in the middle of a river, that I have always regarded it just like an odd part of the landscape.

**Now, I realise that one of the reasons I am drawn to it, is because in this rural landscape, it is so large it is almost urban in itself.**

# A machine made of concrete

*Never before had so much energy been generated in such a small place. It is like the force of a nuclear blast, but continuous, burning ever outwards.*

## The ghost in the shell

(transcribed)

I don't mean the title of this text in its metaphorical sense. Try to think of it as washed clean of all its connotations. I am thinking about it and using it because it very precisely fits being the title of what I want to discuss over the following pages.

The world as it presents itself to us is a thin veneer. Everything extends itself to us, and reaches out to us as the final fraction of micro meter that is the surface of everything, both to our touch and or vision. It is the surface of which sounds bounce off, and where smell is contained. Regardless, the phenomena of a solid, a mass, tells us that there is something more beyond the surface we see, (and of course this is the case, everyone knows this is the case, but this is a phenomenological argument, abstracted one level up.) This «something more» behind the screen, or veneer we perceive the world as, is starting to touch upon what I mean when I write the ghost in the shell. The shell is the world as it presents itself to us, it is the final coat of paint, the layer of dust, the next stroke of the sand paper, never made. Inside this shell hides something else, something more, something hidden and forever unseen.

If you pick up a piece of wood, it holds this secret inside. The shell is the brownness of the wood, the grain, the feeling of it under your fingers, the smell of it, its presence. The ghost is the darkness inside, where the light doesn't reach beyond the horizon of the matter that makes up the shell. Everything that is not transparent has darkness inside. The light fades into the darkness of the object, and creates the horizon of the world inside the shell.

So you hold this piece of wood in your hands, and you would like to have a look at the secret world of the ghosts, so you decide to cut it open. You bring it to the saw, and place it on the table, the entire world held in the thing inside the boundaries of the thing in itself, and then you cut it in half. You can now pick up the two pieces and look at the cut sides of them. Of course what you will see is the two cut sides. The world inside doesn't reveal itself that easily. What you have done is that you have taken a piece of wood containing one tension, or an energy of the secret world, distinct in itself, but of the same stuff as everything else, and made it into two. Now, this is no trivial act. These two pieces of wood are now radically different from what they were a second ago, when it had its own presence, its own tension. Now, by halving it, you have created two new objects, new things made from a first. A simulacrum, an AVART of the former, with two new tensions. Spirits. Like two new cultures in two new nations created from an old one. I think this is something like LOGOS, like to speak something into being. The act itself generates new while destroying, but not fully removing the old, but changing it, or putting it back, like a salmon caught and released in the same river.

Now, if you put the two pieces back together, you make something new again. If you glue it, it is different. If you use nails, it is different. If you make a joint it is different, and some of these solutions are more true than others, though I don't know what, how or why that is.



# Hell

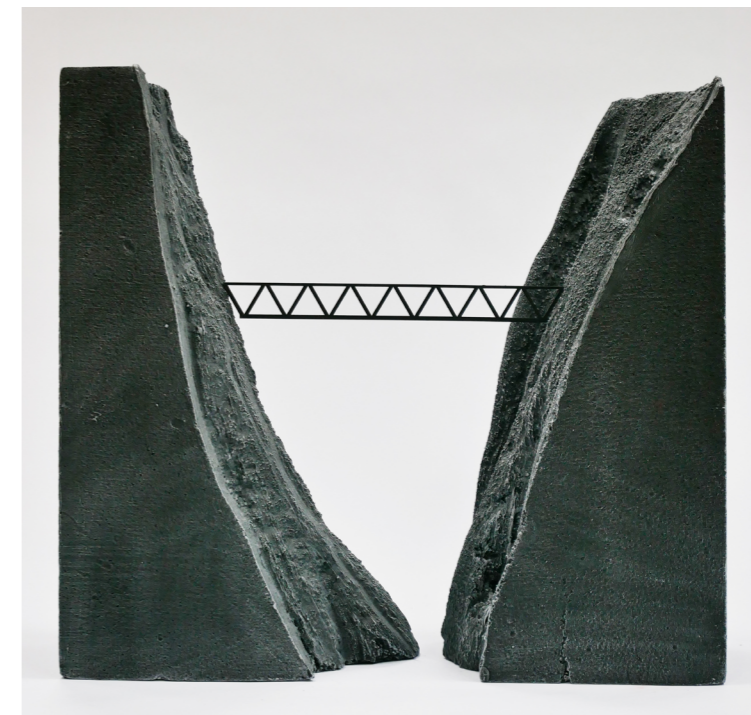
I was invited to climb down through the manhole and into the deep darkness within the turbine at generator II. This new world, deep inside the machine within the machine was steaming, hot, slippery, dangerous, and completely hostile. The noise from the river tore at my ears, every surface was a thick, black slime, except from the metal parts which were a slippery oiled balancing act. The heat, the smell, the noise, the void extending in all directions out of reach of our flash lights. It was like Lars von Trier's rendition of Dante's Hell. I had reached the end of architecture for humans, and arrived at the border to the architecture for machines. In a world for machines. I felt as unimportant down there as a used battery is up here. I was to be crushed at any moment, and the machine would pay my mutilated corpse no mind as it churned forever on.





## Within things within

A series of architectural models based on a series of photos investigating the relationship between what is shown and what is hidden. These layers are represented as what one can observe at a distance as the more or less recognisable shapes of buildings, then what one can imagine from the exterior of a building, its scales and sizes, and how that sparks the imagination. The final works are what happens inside the buildings, and how the machines creates a mysterious world of something hidden in themselves, both in their inaccessible physical presence, and in the results they produce, which often become visible somewhere far away from the machine itself.











# Solbergfoss 1:25

In preparation for the Solbergfoss dam and power plant, one of the three power plants close to the site chosen for my project, the engineers built a scale model of the project in Nordmarka in Oslo. The scale model was built in concrete in 1919, and is still there, hidden in the undergrowth.

The model is close to Hammern power plant, built in 1900, it provided electricity to the capital before the three larger were built in Glomma. The photo below is from one of the support buildings for the power plant.

The decorations on the doors embodies much of my fascination with the time's fascination with this new technology, and it's attempts to find a language within it's own architectural reality.





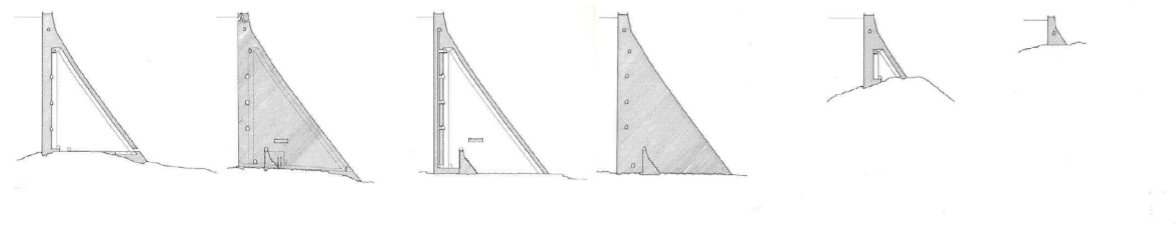
# PART 03

## Method

By investigating infrastructural architecture and spaces made for machines in a hydroelectric power plant, I will study states of coexistence through degrees of visibility and accessibility in the intersection between nature/architecture, and human/machine.

I will investigate what makes both architecture and nature become enhanced in the meeting between the two. Likewise, I am going to study how human and machine are enhanced in the meeting between them.

I will start by using the surveyed hydroelectric power plant photos, and choose certain moments in the photos which communicates certain spatial qualities I would like to work with, and recreate them in models. Then, I will use those spatial models and place them on the site to discuss how they scale to the site, and how they can be understood in relation to the river and the site surrounding it. Then I will explore how they can become accessible, how big and tall the dam needs to be, what materials, communication, infrastructure etc. is needed. Then I will develop the first exercises into an architecture, as mentioned above.



*Staumauer, Albigna, from the book  
"Die Kraftwerkbauten im Kanton  
Graubünden"*



*The inside of the old dam is nothing but a giant void, walled by rock and concrete overgrown by lichen.*



*1 and 2 was startet in 1964, and at the time, together, they produced more than the ten older ones combined.*





*Top: Centre Pompidou, Paris. architects:  
Renzo Piano, Richard Rogers,  
Gianfranco Franchin,  
unknown photographer*

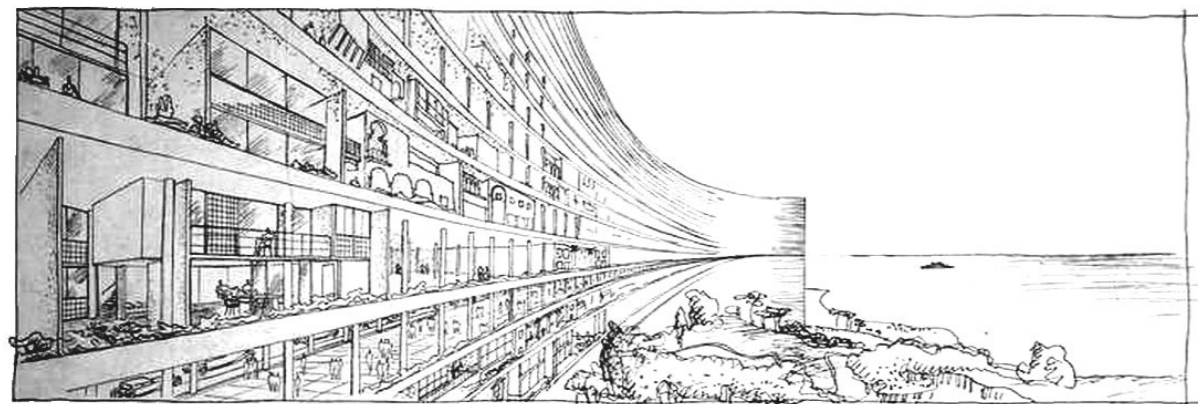
*Bottom: Leca Pools, Portugal, architect:  
Alvaro Siza  
Photo by: Melissa Liebling Goldberg*

# The power plant

Among the reasons I have chosen a hydroelectric power plant for my project, is that I think of these buildings as giant machines. Every part of them is created to work as cogs in a machine, making spaces for turbines and generators to do their jobs. Like human scaled spaces inside magnified combustion engines. I want to discuss the ways spaces are designed for both machines and humans, and how humans and machines are treated in relation to each other. Like the escalator at Centre Pompidou, in taking people up and down, is articulated the same way as the rest of the infrastructure that makes the building work. The human is another cog in the machine. Another premise for the building to operate optimally.

Another reason for choosing a hydroelectric power plant is that I find it to be a crazy, exhilarating show of force, both natural and structural. When the river rushes through the concrete floodgates, everything, both nature and structure is vibrating with the wrath of the current. I feel like I am closer to nature than in any other situation. I am so close to the waterfall, I can almost reach out and touch it. It appears wilder than if it had been running free outside the station. At that moment when current meets concrete, when nature meets architecture, both are exaggerated, enhanced, making me feel like I am closer to both, like both are stronger in that meeting than in any other case. I feel like I am standing on the border between them, at a point of *almost* singularity where nature and structure collide.

Siza's pool shows something of the same. It is the same water as in the ocean, affected by the same currents and forces, but one is safer there than out in the open sea. It is like a sample of the Atlantic ocean, with all its wrath, but tamed. We experience the same powers, but scaled down to a representational variant. If we had been exposed to the forces in all its might, we would have been crushed.



*Plan Obus, Algiers*

*Le Corbusier, 1933*

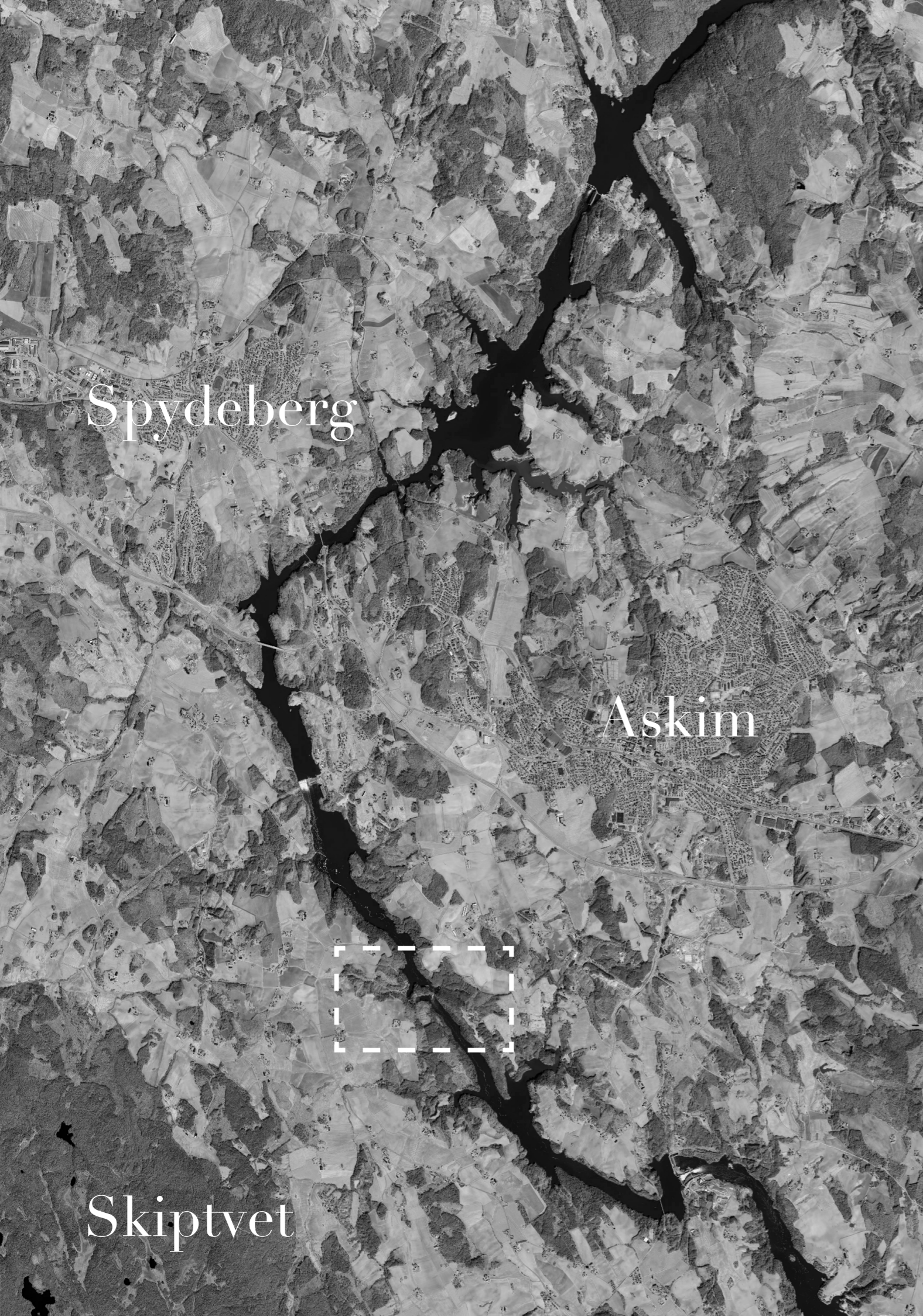
## Infrastructure and humans

*"...the ultimate expression of his "roadtown," an elevated highway arcing between suburban cities and containing fourteen residential levels beneath it. These levels were raw space that Le Corbusier believed would fill in "little by little" with homes for the working class that would accommodate as many as 180,000 people. His vision of this new Casbah took the layered domestic spaces of the medina and stacked them as if sweeping up a scattered deck of cards."*

*- Le Corbusier's Algerian fantasy; Brian Ackley, 2006.*

I am in no way in favour of Le Corbusier's vision for the Casbah in Algiers, but this idealistic spark of merging infrastructure and a place for humans is something I find relatable. I am fascinated by gas stations, subway kiosks, fire lookout towers, airport terminals and so on. I find the same fascination with bus stop sheds way out in the sticks, power lines and log flumes. It all appears to be places for very specific and temporal habitation, but in their specificity is a certain novelty, a strangeness that awakens my curiosity. It is created to fit within something which is not made for humans, but we squeeze ourselves in regardless, to do the task we are there to do and then leave. Personally, I find them more desirable than the most luxurious apartment.





## PART 04

### Site

The site is Vrangfoss in Glomma, on the border between Askim, Spydeberg and Skiptvet municipalities in Østfold, Norway, between Vamma and Kykkelsrud power plants.

The three municipalities will merge January 1st, 2020.



# Solbergfoss

20 m water fall  
13 Francis turbines, and one Kaplan turbine  
950 GWh pr. year median  
1150 cubic meter pr. second

## Power plants

The first hydroelectric power plants in Norway were commissioned in the late 1800's, by private and municipal contractors, in cities from Hammerfest in the north to Kristiansand in the south. Everyone wanted a piece of the electric pie that lay untapped in rivers and creeks across the country.

The first use of the power in Glomma river was by Borregaard in Sarpefossen, in Sarpsborg close to the mouth of the river. This was built in 1899. Solbergfoss, Kykkelsrud and Vamma came in quick succession. Kykkelsrud was finished in 1900, Vamma was finished in 1907, and Solbergfoss was finished in 1924. Together they produce over 3500 GWh pr year.

# Kykkelsrud

26,5 m fall  
1265 GWh pr. year median  
4 Kaplan Turbines in use today.  
1025 cubic meter pr. second

# Vamma

28,5 meter water fall  
1350 GWh pr. year  
10 Francis and 1 Kaplan turbine.  
950 cubic meter pr. second.





# Askim

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Askim (15 000 inhabitants) has a long and proud industrial history. It was the location for Viking rubber factory for 70 years, and Glava insulation from 1935, still operative today. The three hydroelectric power plants in the municipality has been played a big role in the creation the industrial infrastructure in the city. During construction of all three power plants, railroads were built from the city centre to the sites, and small communities popped up around it, based on the builders who worked there during construction. These small communities had post offices, shops, sports teams etc. The railroads are now torn down, the communities decimated and many of the houses are gone, but memory remains.

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# Vrangfoss



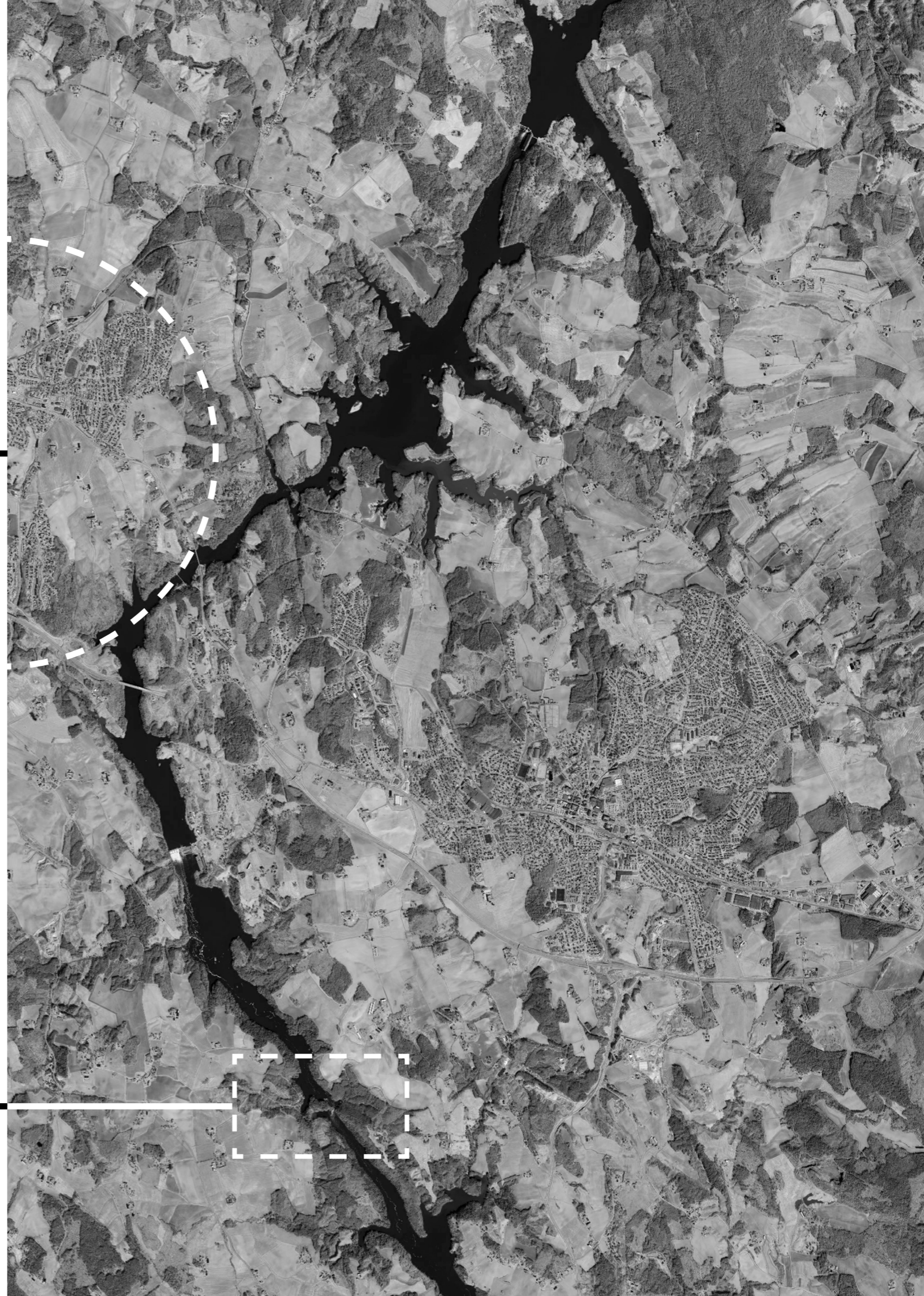
# Spydeberg

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Spydeberg (5000 inhabitants) also has a history of industry with over a thousand years of using the rivers in the municipality for machines. The first hydro electric power plant in Spydeberg was built in 1912, in Smalelva, the Narrow river, but it was closed in 1968. Ever since this, Spydeberg has been an agricultural community with a majority of the inhabitants commuting to Askim, Ski or Oslo.

# Vrangfoss

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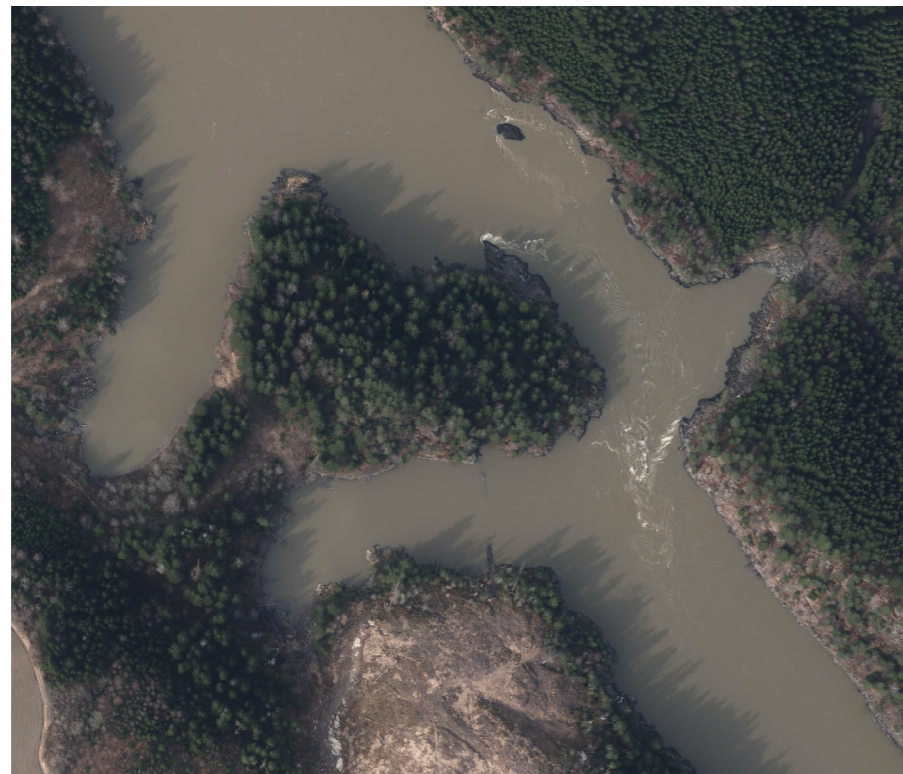






The river in the spring and the river in the fall. The same site, same river, but in different states of current, with different force and temperament.





These cycles are what the dam and station is mediating. When the river grows in the spring, the dams open, slightly first, and then wider and wider to let the river pass without tapping into the current.

## PART 05

# Deliverables

Study models, investigations in scale, coexistence, material, site, space, exercises. Spacial studies, models and drawings. A book containing the project's background, process and output, plans in 1:200, sections in 1:200, situation plan and sections 1:1000, five visualisations of the finished building, model or models. Study models, model photos, other images and documentation.

## PART 06

# Timetable

### Timetable:

**August:** Model studies of surveyed photos of power plants, spacial, material, coexistence-investigation study models.

**September:** Placing of study models on site, working with scale and the surrounding area, site model. Exploring spacial studies, discussing coexistence.

**October:** Designing the building or buildings and site, based on model and scale studies on existing site.

**November:** Drawing the final building or buildings in plans and sections, building model or models.

**December:** Illustrations, presentation, sensor's booklet.



# Vamma 12

## What not to do

Many people believe that words like beautiful and ugly have no place in contemporary architecture discourse. They are right, of course, but missing the point. It is the cultural blind spots created by this dogma that has allowed architecture to become separated from the human experience in the first place.

Vamma 12 is the twelfth turbine to be installed at Vamma. It will produce more than the other eleven turbines combined. It is indeed a marvel of hydroelectric production.

Regardless, its building is a dark grey steel shed in a barren gravel wasteland, with no thought for its surroundings or how it is perceived. It is an ultimate machine architecture, and it is scrubbed clean of any human experience at all.

*Vamma 12 in construction.*

*E-CO Energy*





# Røldal-Suldal hydroelectric power plant

Geir Grung

Reference project

The power plant, hotel and houses were built in the 1960's as a part of Norsk Hydro's facilities in Røldal-Suldal. The hotel was originally a hotel for the employees, but is now a hotel for tourists who would like to stay close to the wild nature surrounding the power plant.