

**PORTFOILO** Vol.01  
BA Architecture

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C U T L R A N S -  
T U F R R M -  
A N A D I V E  
T E C A R C H I -  
N O T L E C -  
O G T Y R F



# EXPLORING NATURAL WOOD

In this workshop, we used laser scanning, robotic fabrication and digital design tool to explore new possibilities for using natural materials in architectural construction. By tracing crooked woods natural form and importing it into a digital design environment (Rhino). We could use Grasshopper plugins to handle point cloud, define structures and growth patterns. Which made it possible to transform the natural shape of the wood into arbitrary building components and later manufacture these polyamorphic structures by programming a 6-axis ABB robot and a 5-axis CMS router.

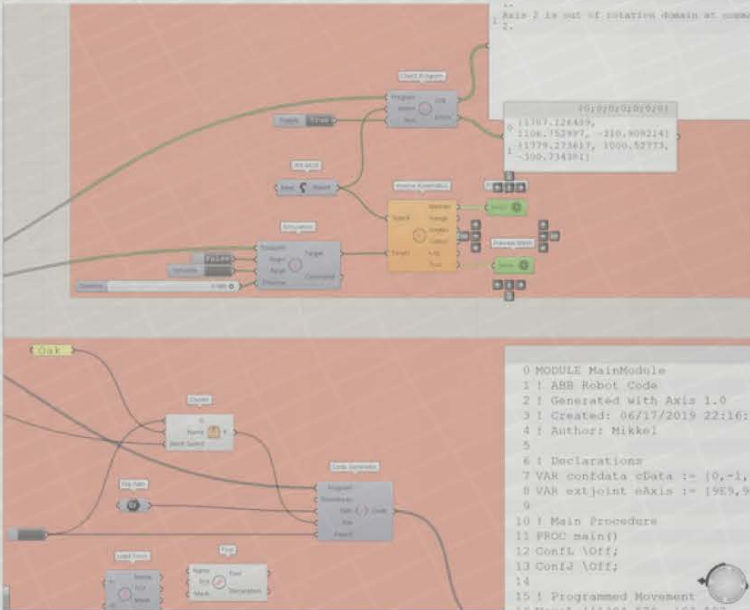
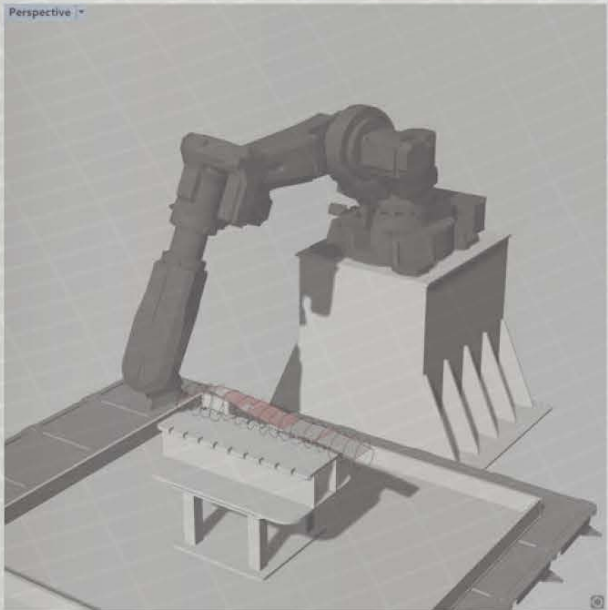
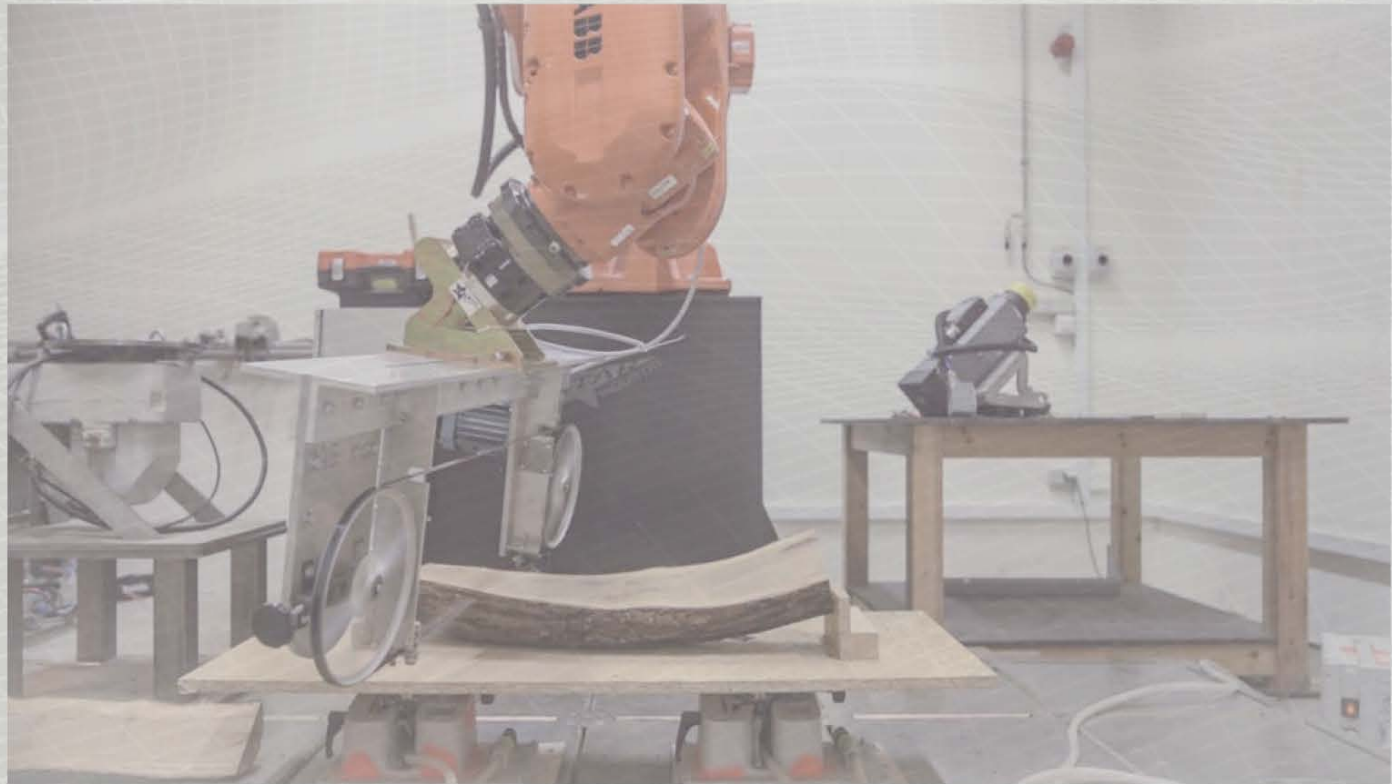
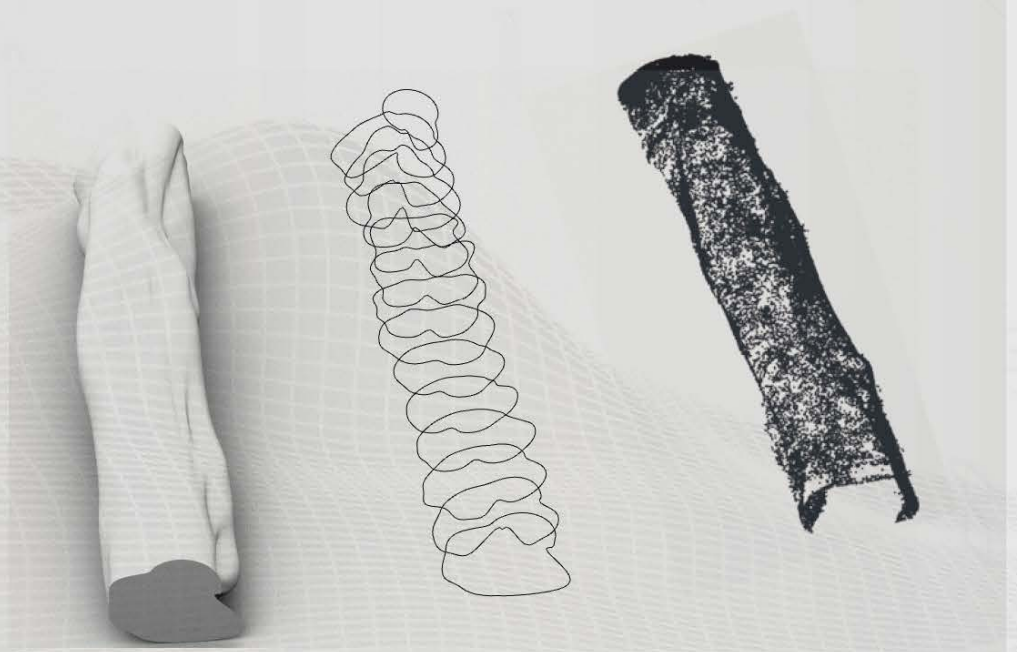
**PROJECT:** The Hard Co[u]r[s]e Digital - Workshop  
**LOCATION:** Aarhus Architecture School  
**DATE:** Jun. 2019

01





Wood is normally used as a standardised construction material that have been transformed from a natural tree log into box-shaped timber. This workshop was about rethinking the way materials are use and how we can limit the resource waste. By Collecting, scanning, analysing we where able to cut complex geometries into the natural wood





# THE AMPHIBIOUS CITY

**PROJECT:** Industrial harbour transformation  
**LOCATION:** Randers, Denmark  
**DATE:** Feb. 1 2019

02

As a 4. semester project i did a simulated contest with assistance from the danish architecture company: Møller & Grønborg.

The project took place in Randers, where the municipality has issued a competition on how to transform the current industrial harbour, solve the city traffic problem and making a proactive response to the local climate changes.

Rising tides is causing annual floodings in the area and it is therefor nessesary to either barricade towards the waterfront or try and embrace the changing waterlevels and see it as a dynamic aspect of the new city - i chose the latter..





BY  
FORSTAD

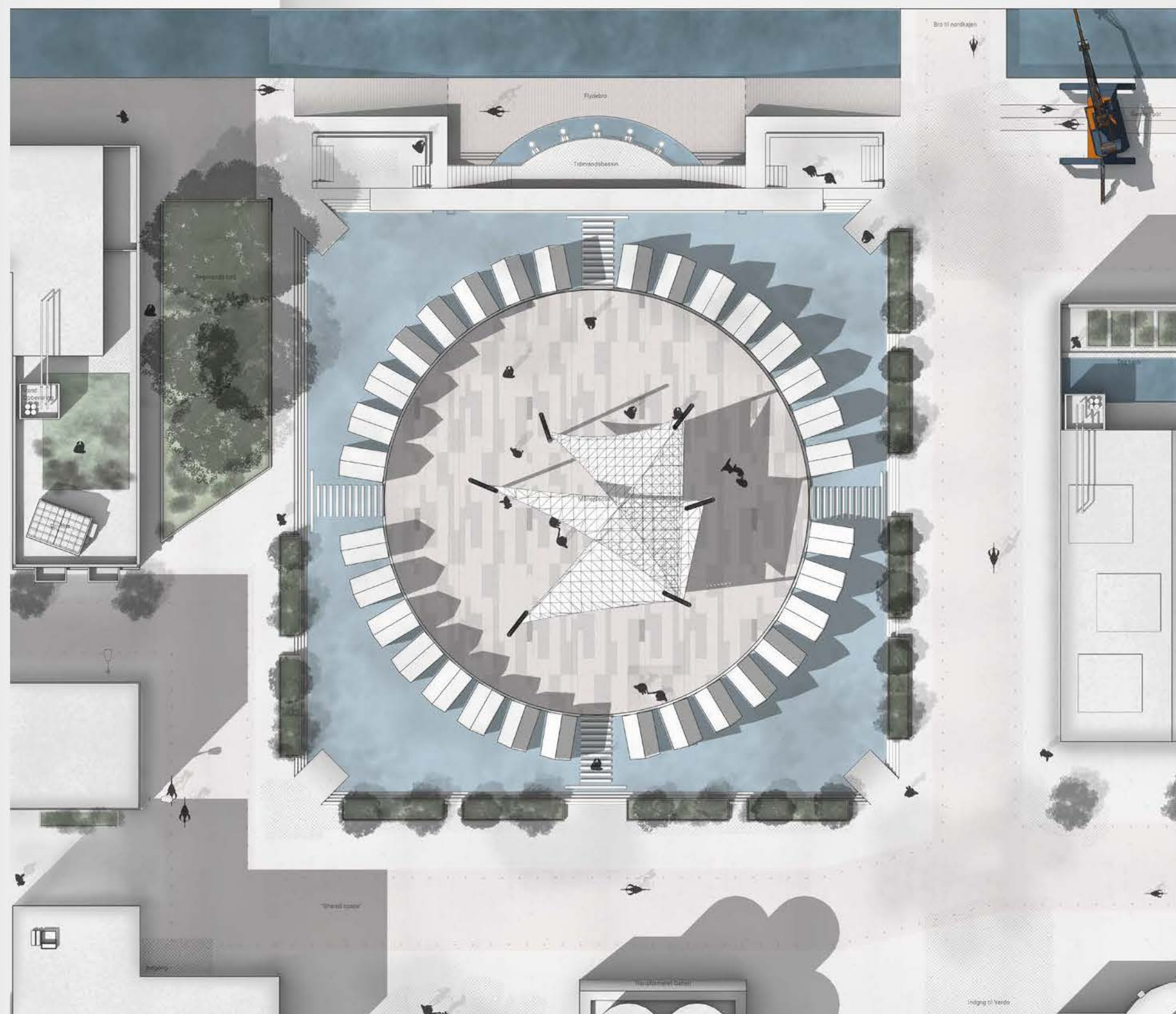
Vandet opdeler byen på langs

Tung trafik opdeler byen på tværs

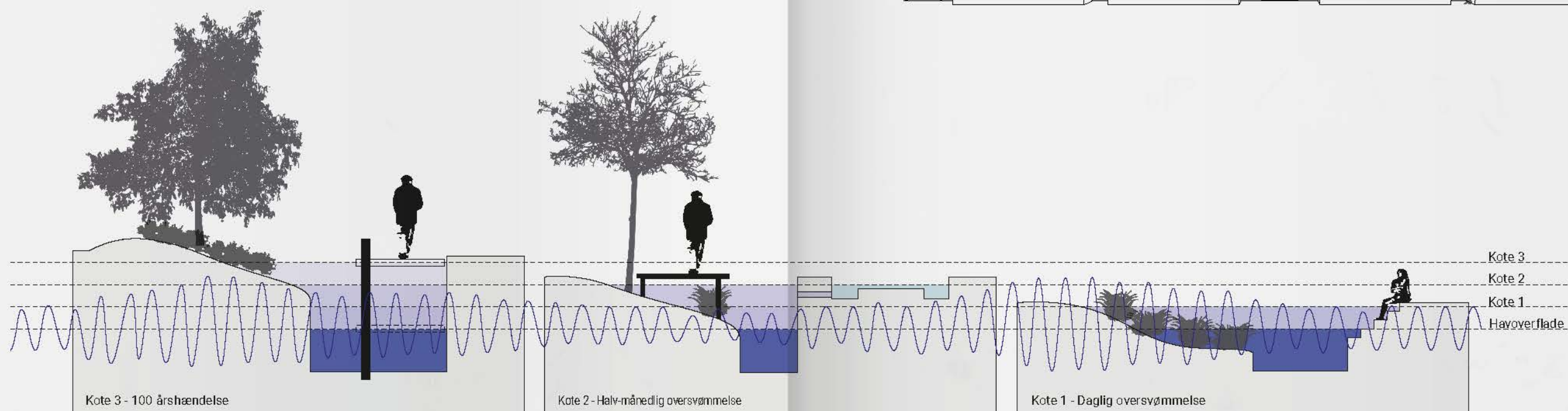
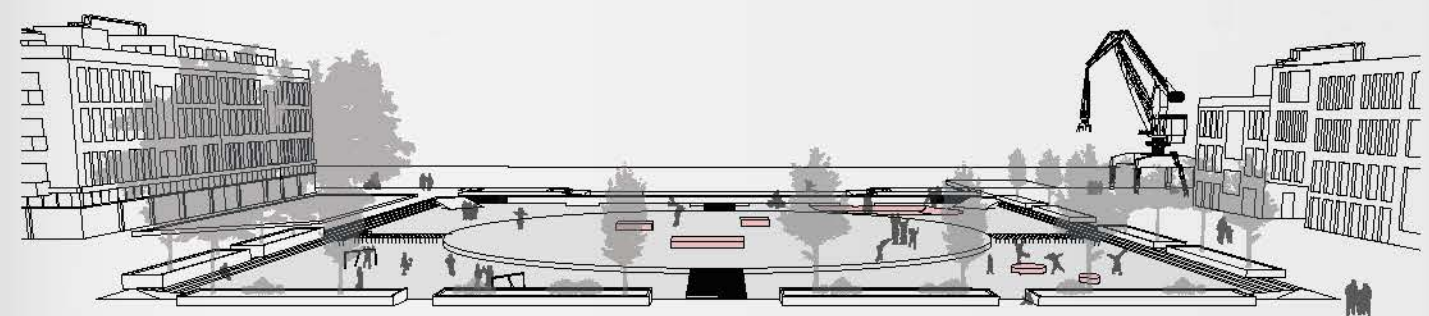
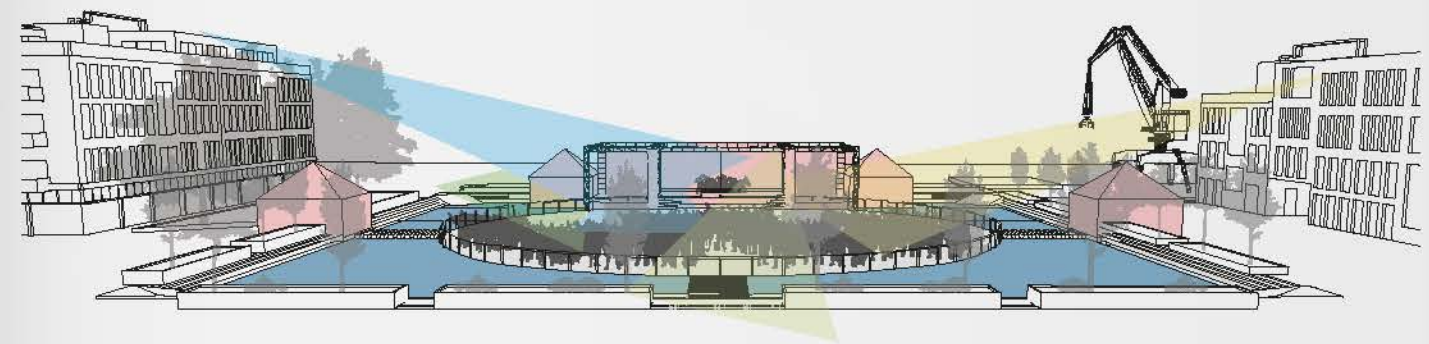
Rekreativ natursti "klippes" over

Industri på pieren fortrænger byliv











# CONTEMPLATING MATERIALITY

Parallel to my studies at the Aarhus school of architecture i have been designing and producing differentiated design products and furniture. It all started in the summer of 2017 before my enrollment at AARCH, where I founded an entrepreneurial company together with my partner Alexander Hammergart from Copenhagen, Denmark. "Taktile IVS" was a design brand based upon a simple geometrical profile and its way of communicating the inherited material qualities of wood. The design was constantly revolving around the growth patterns of wood, trying to resolve its heterogenous materiality. Meanwhile the design possesses both haptic-, acoustic-, esthetical- and air improving qualities (through diffusion.)

In 2018 I created a series of oak furniture in collaboration with Asbjørn Bratsbjerg from AARCH. They were all made from old tabletops, that we gathered from local homes – some even dating back to 1921!

Similarly for all the designs, merging computational and analogue fabrication methods were in focus. This meant introducing numerically controlled machines (CNC) and exploiting it´s potentials in rapid prototyping and manufacturing.

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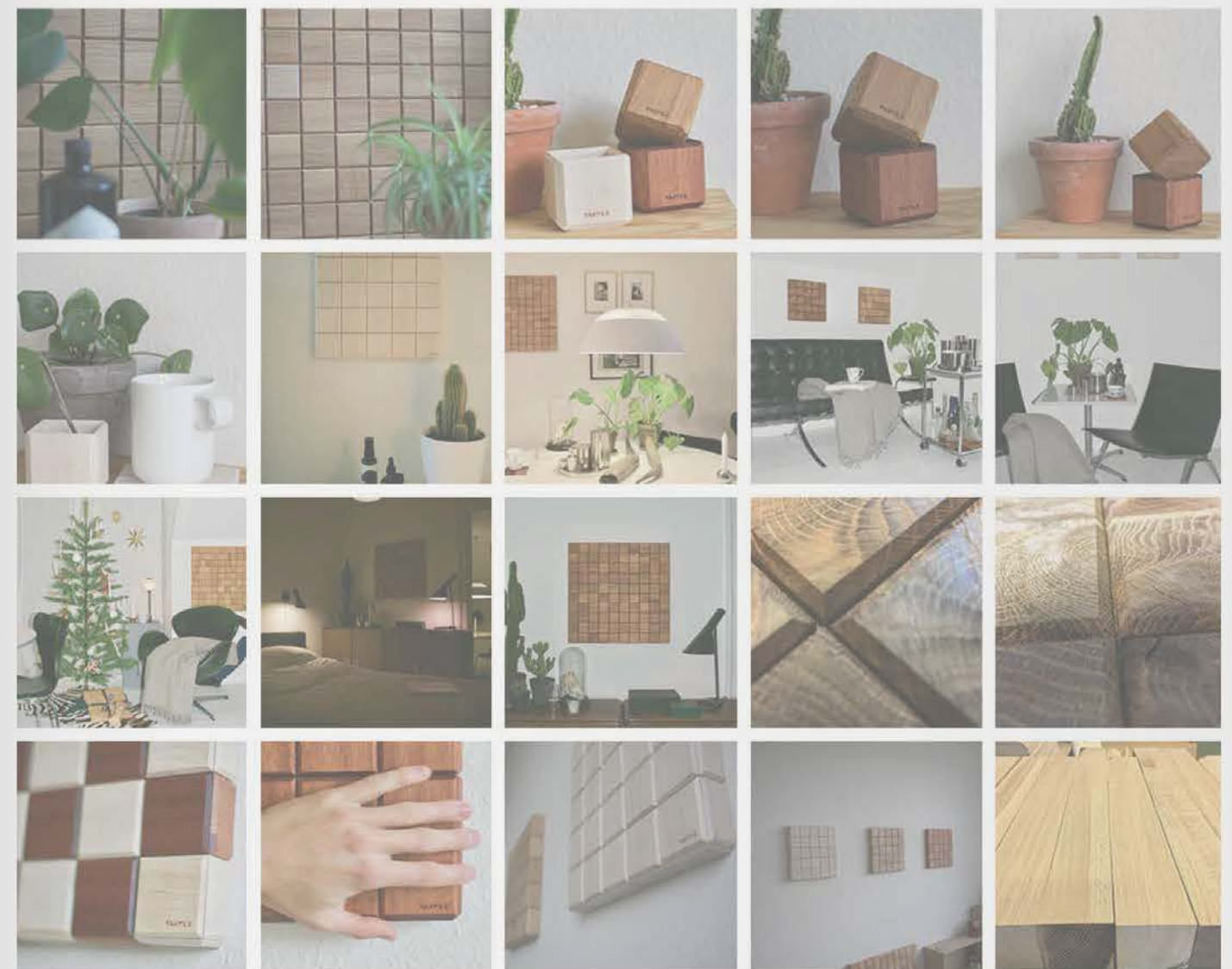
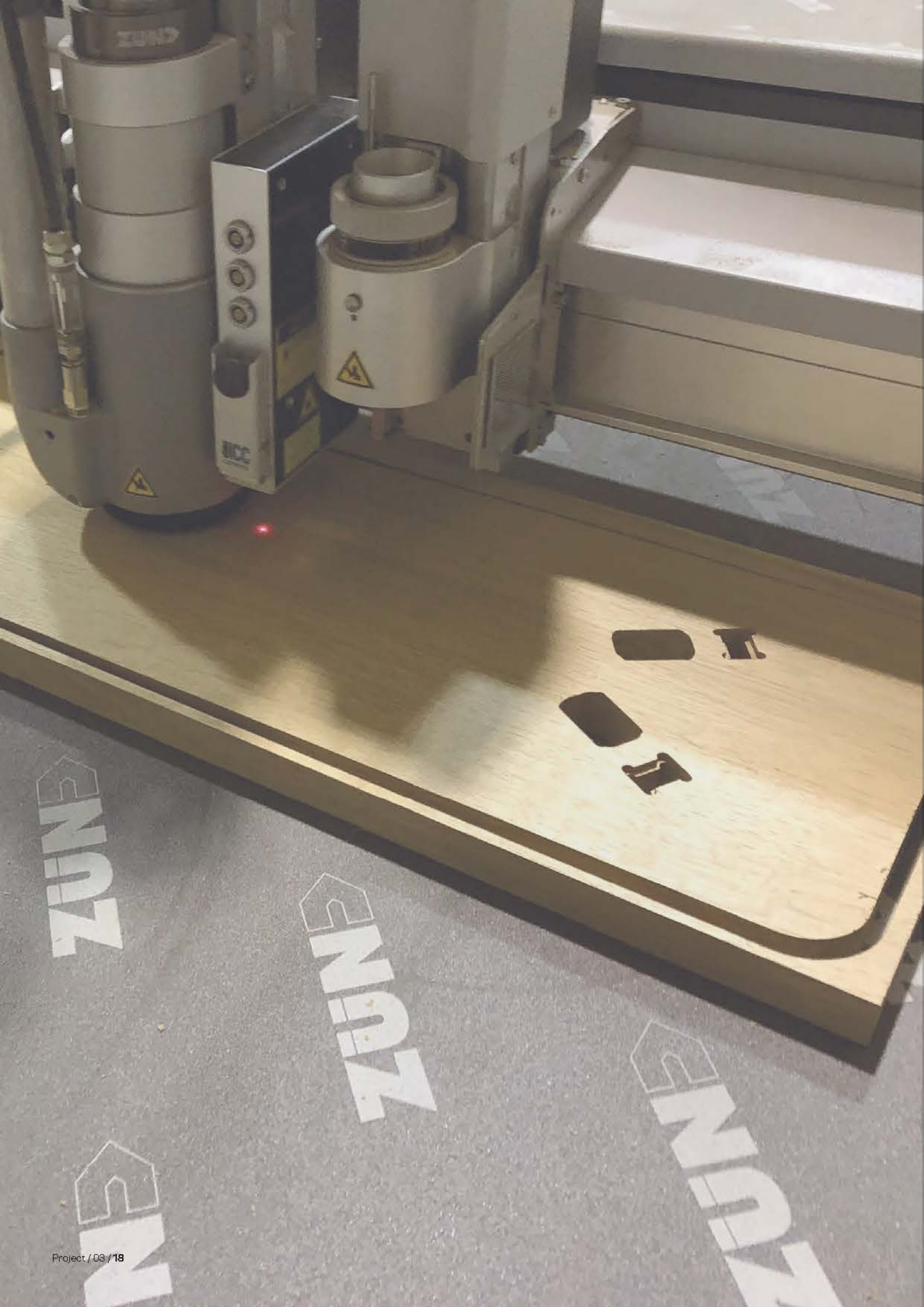
**PROJECT:** Phytoremediation,  
**LOCATION:** Randers, Denmark  
**DATE:** Feb. 1 2019

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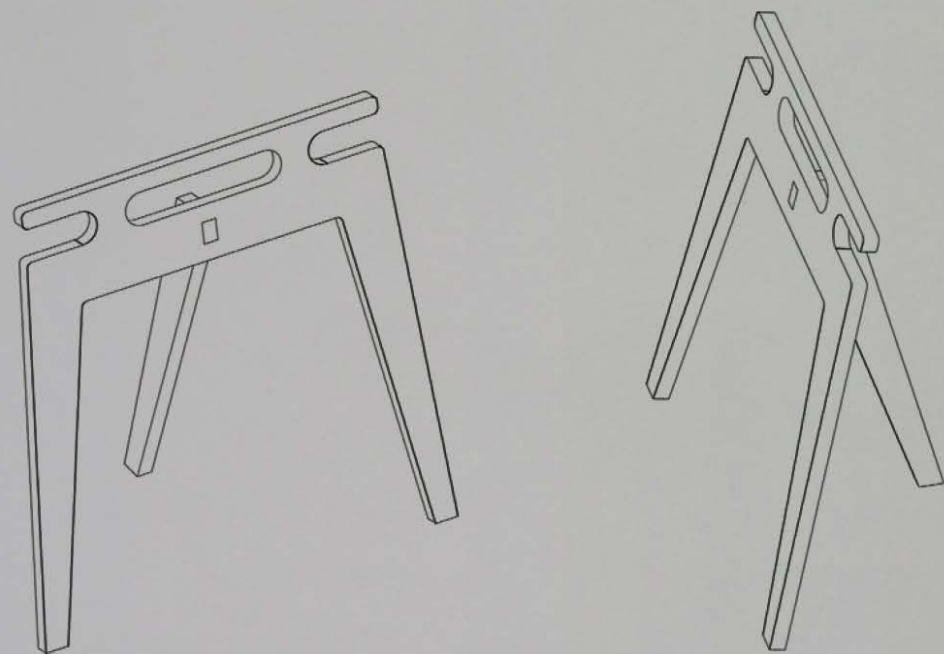
03

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# A HOUSE FOR DWELLING

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**PROJECT:** Vacation home by the water  
**LOCATION:** Pedersøndergaardsvej 10, Ebeltoft, Denmark  
**DATE:** Jun. 15 2016

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## 04

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In my sabbatical year I worked full time as a carpenter assistant, constructing and renovating houses and gaining empiric knowledge. I was hired to design and partake in the construction of a vacation home in Ebeltoft, Denmark. I was through the entire process from sketch to final building. I was also corresponding with the regional office, submitting technical drawings and acquiring the building approvals.

The main Idea was to create a 100 m<sup>2</sup> building which had a 200 m<sup>2</sup> suspended timber terrace around it - allowing the inhabitants to move barefoot around the house. The entire floor structure rests upon walls of concrete and consists of long beams of timber. This made for an easy and affordable construction which allows the surrounding nature to rapidly regrow and merge with the terrace. The slanted roof creates a hybrid interior space, where the central living area can be directly connected to the alcoves on the loft.







# CLASSICISM

## REHEARSED

## REVISED

## RENEWED

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**PROJECT:** 2nd Temple of Hera, model and drawings  
**LOCATION:** Aarhus architecture school, Denmark  
**DATE:** Jan. 5 2019

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### 05

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Concluding the third semester I did a workshop together with Therese Kamp, where we analysed and build a 1:20 model of the 2nd temple of Hera. This Doric temple is a "peripteral temple" meaning that it is 6 by 11 columns. It has a "systyle intercolumniation" which correlates to the spacing between the column, relative to the width (1:2).





