

PORTFOLIO

PATTARAPORN THUMJUNJUA



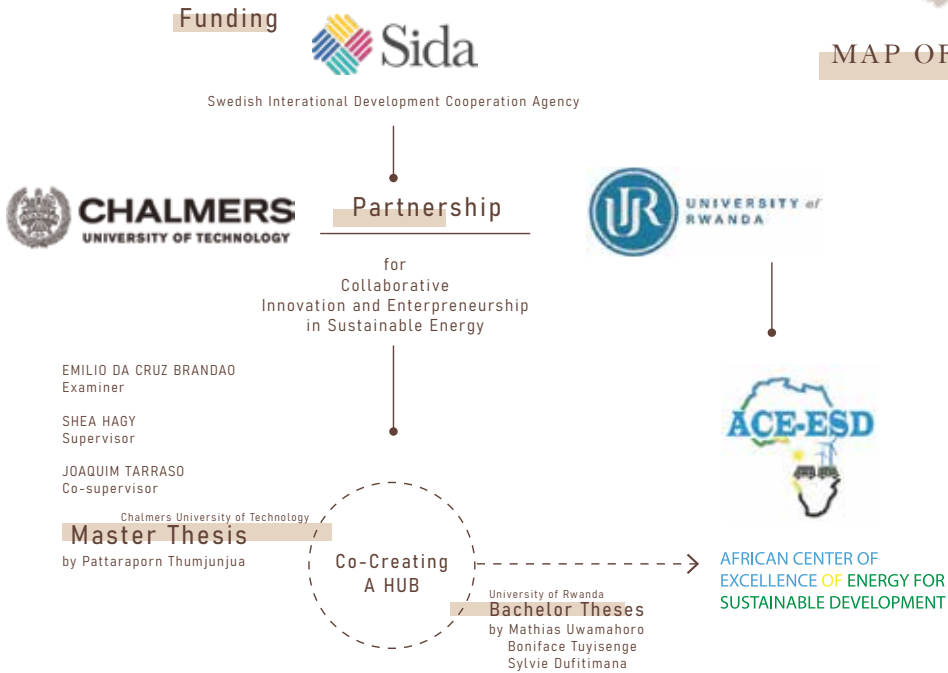
CO-INNOVATION HUB
WITH TRANSDISCIPLINARITY
IN RWANDA

LOCATION:
KIGALI CITY, RWANDA

JANUARY 2019 - PRESENT

CO-INNOVATION HUB WITH TRANSDISCIPLINARITY IN RWANDA

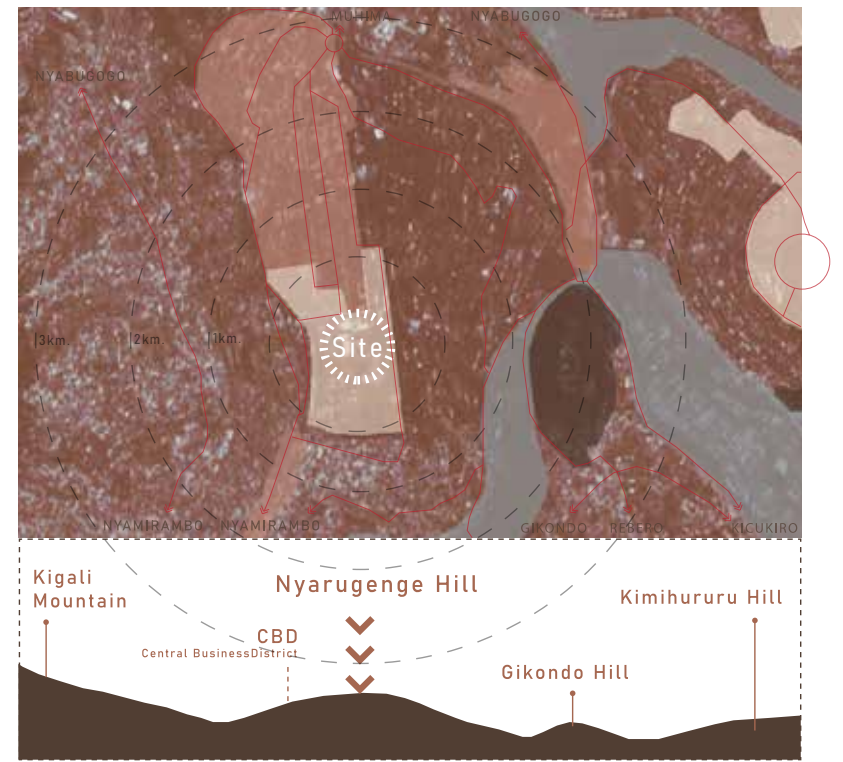
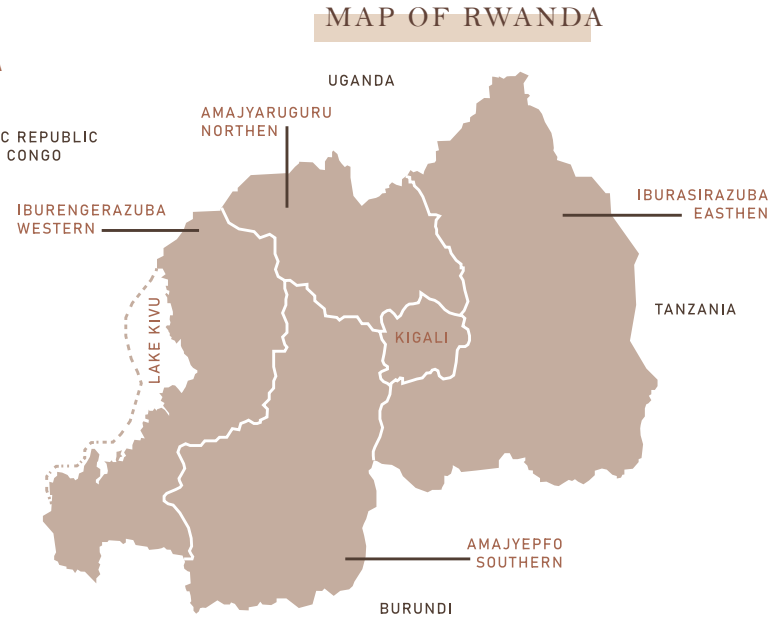
PROJECT STAKEHOLDERS



LOCATION:
KIGALI CITY, RWANDA

JANUARY 2019 - PRESENT

PROJECT LOCATION

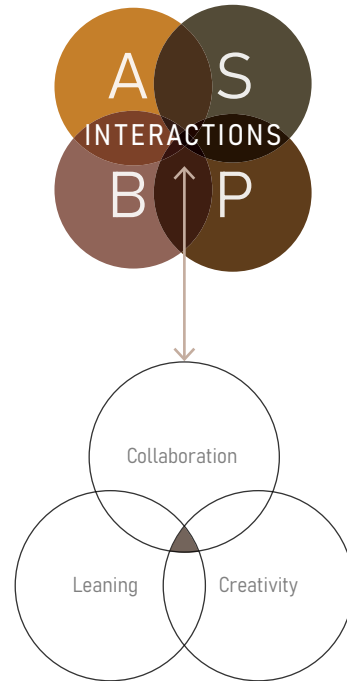


THEORETICAL STUDIES

QUADUPLE HELIX

Bidirectional interactions between four major actors; Governace, Society, Business, and Academic to drive the innovation system

Co-shaping the Future in Quadruple Helix Innovation Systems: Uncovering Public Preferences toward Participatory Research and Innovation (Schütz, F., Lena Heidingsfelder, M., and Schraudner, M., 2019)



INTERACTIONS

Designing context to foster interactions through creativity, collaboration, and learning.

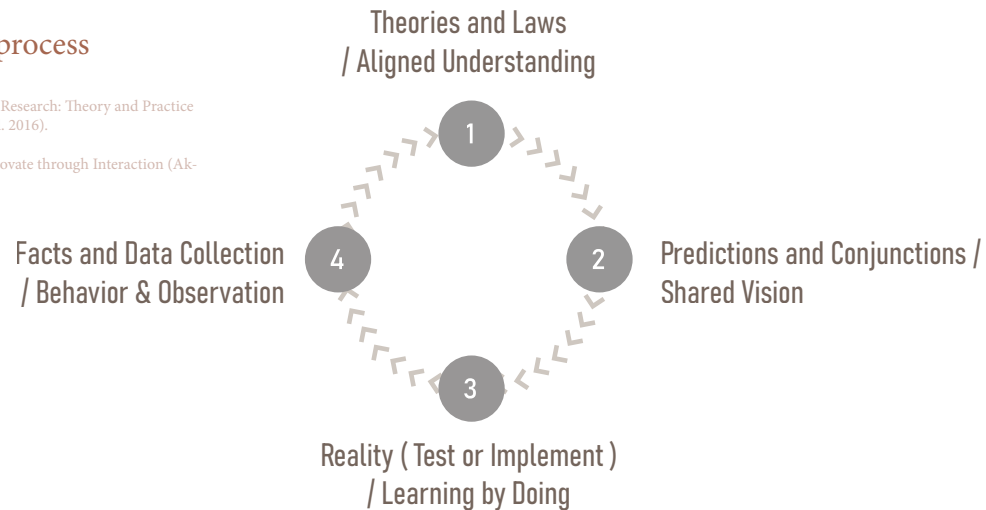
Architecting Interaction: How to Innovate through Interaction (Akkaoui Hughes, Stephanie. 2016).

COLLABORATIVE PROCESS

Cycle and holistic process

An Introduction to Interdisciplinary Research: Theory and Practice (Menken, Steph. and Keesta, Machiel. 2016).

Architecting Interaction: How to Innovate through Interaction (Akkaoui Hughes, Stephanie. 2016).



CHALLENGES

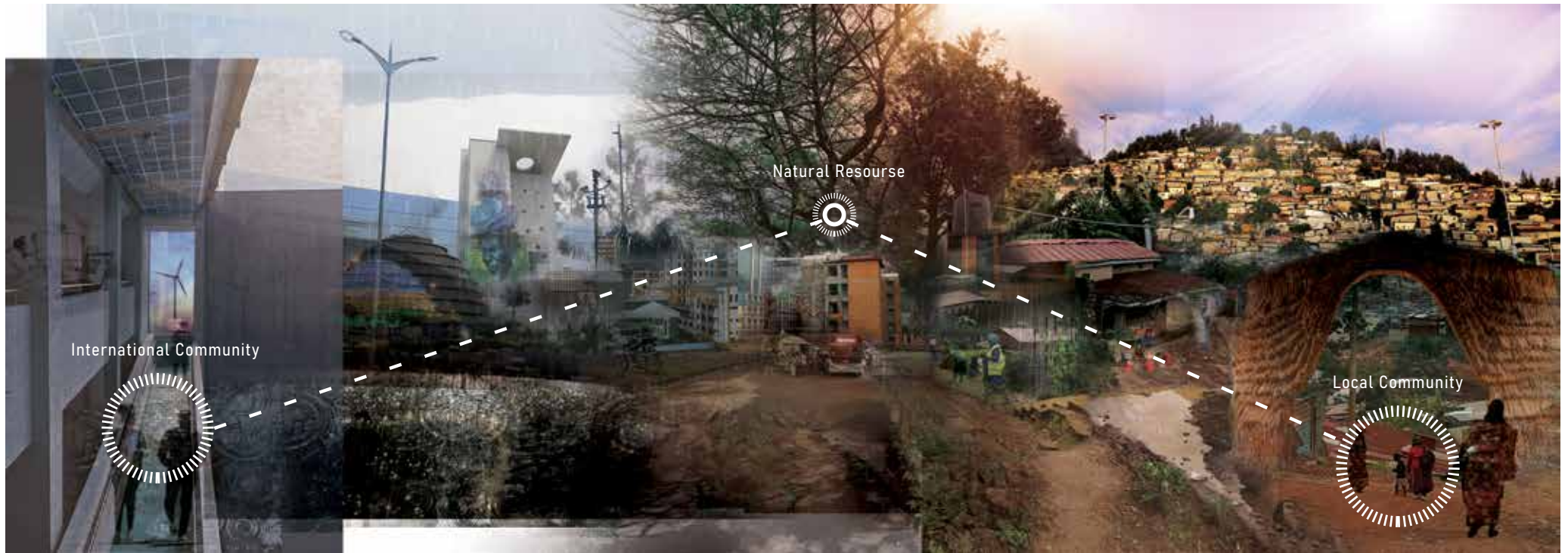
Through 6 and a half weeks local immersion



MONODISCIPLINARY
FRAGMENTATION
SINGLE HELIX : ACADEMIA

THE DESIGN CONCEPT BY THE SITE CONTEXT

THE CONTRADICTIONS



The Difference of the Communities



International Community

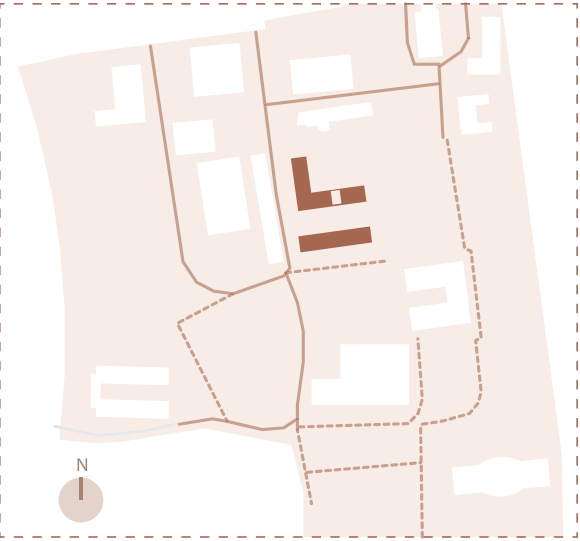


Local Community

The Similarity of Shared Resource



Natural Elements



Building B

Start-Up

Co-Working



Makespace

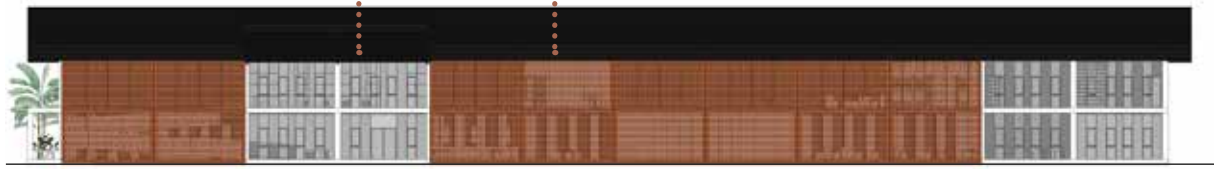
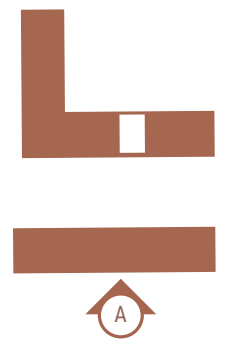
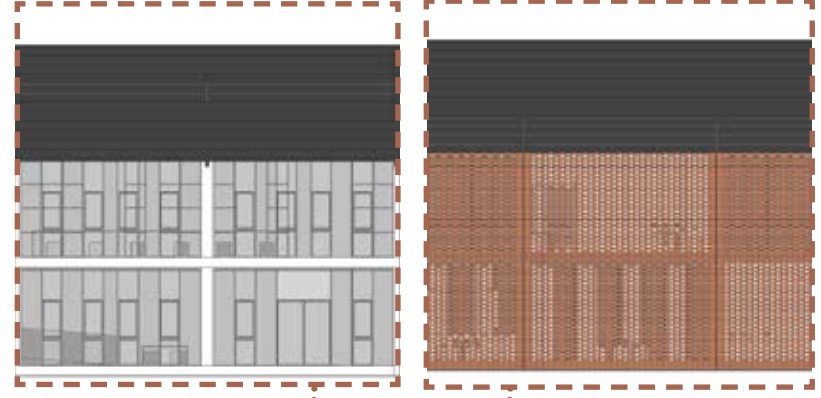
Incubation

Amphitheater



UNITS

UNITS



Textile & Basketry



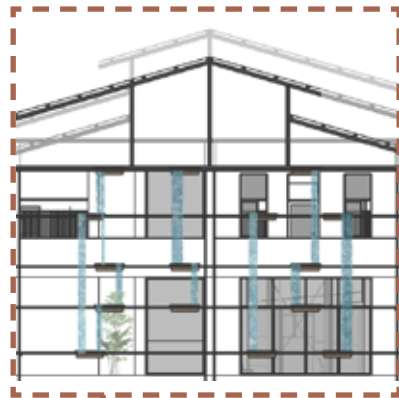
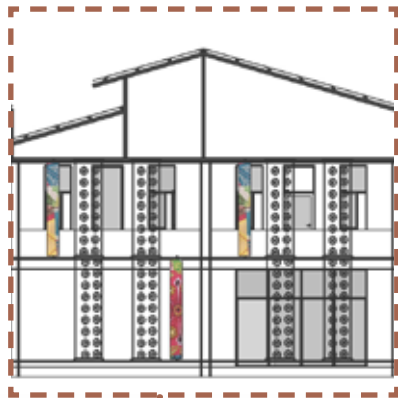
BUILDING S

Coffee & Milk

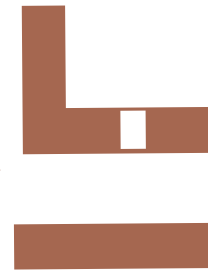
Kitchen

SCAFFOLDING + KINETIC

SCAFFOLDING



B





RUE \D CAFE

LOCATION:
NONTHABURI, THAILAND

SEPTEMBER 2018 - DECEMBER 2019



RUE \D CAFE

LOCATION:
NONTABURI, THAILAND

SEPTEMBER 2018 - DECEMBER 2019



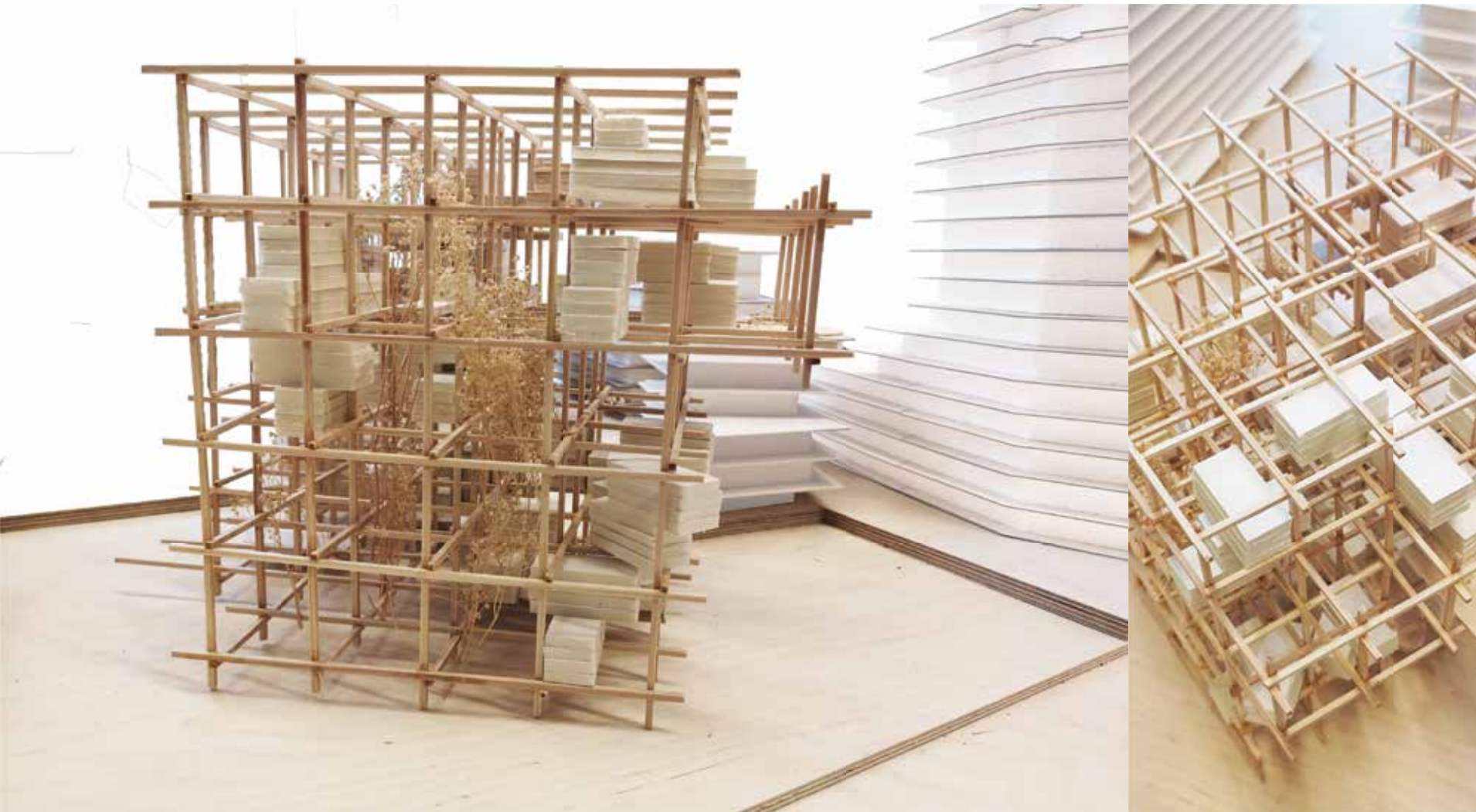


ARCHITECTS : Pattaraporn Thumjunjua &
Chalermchat Kothong
LANDSCAPE : Rattanamon Saenfoo
ENGINEER : Ekkapong Yakan
CONSULTANT : Panupong Wangpayon
OWNER : RUE \D CAFE

ARBOREAL, IN NATURE
SUSTAINABLE BUILDING - COMPETITION

LOCATION:
LILLA BOMMEN, GOTHENBURG
SWEDEN

AUTUMN 2019



DESIGN TEAM :
Pattaraporn Thumjunjua
Salam Abuali
Marie Seidenfus

ADVISOR :
Lasse Lind, GXN

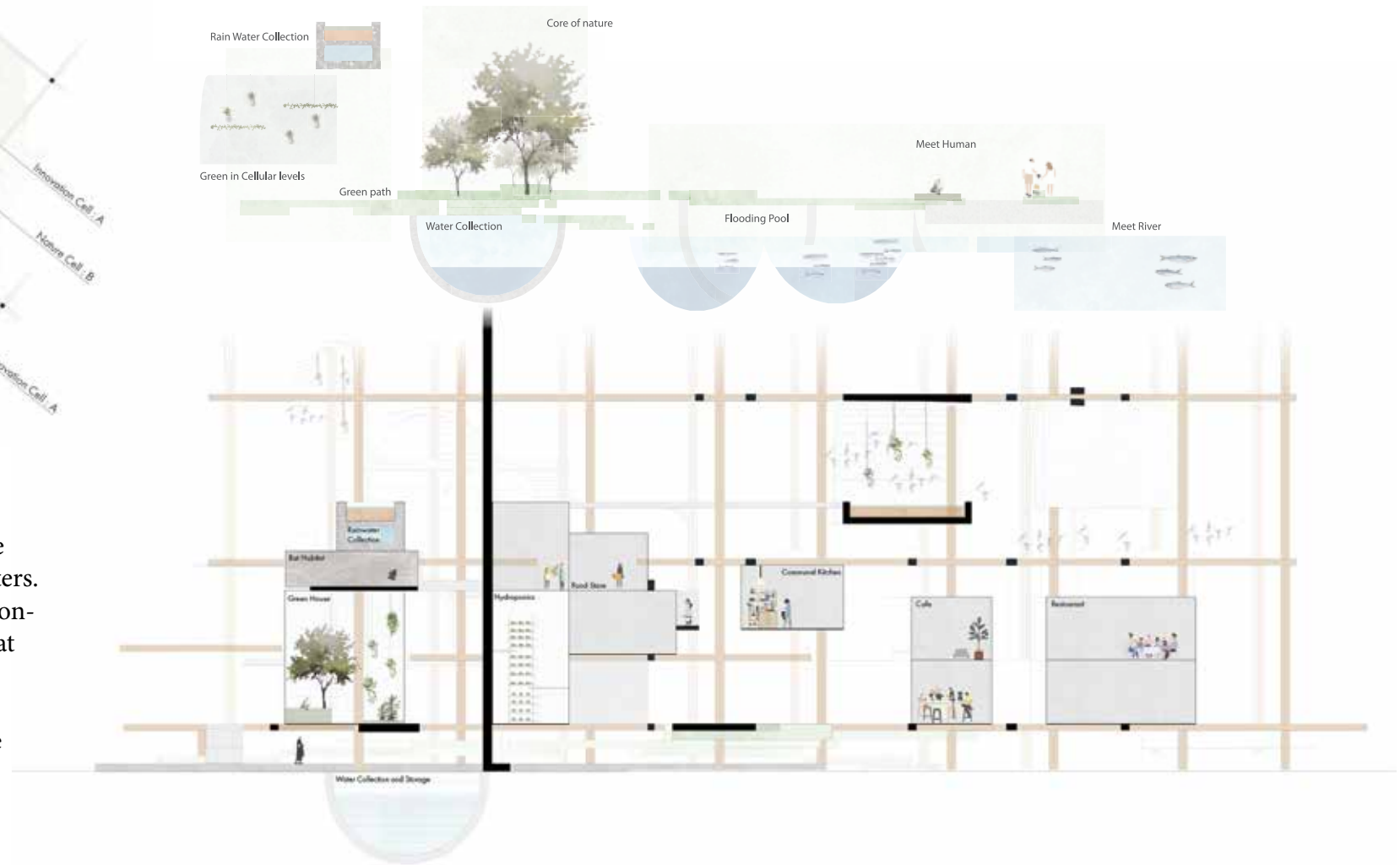
ARBOREAL, IN NATURE SUSTAINABLE BUILDING - COMPETITION

The building is acting like a forest. It treats rainwater in different ways: The roofs collect rainwater, it is slowed down through the building and gathered in ponds. It can then be used for water demand in the building or released to the river.



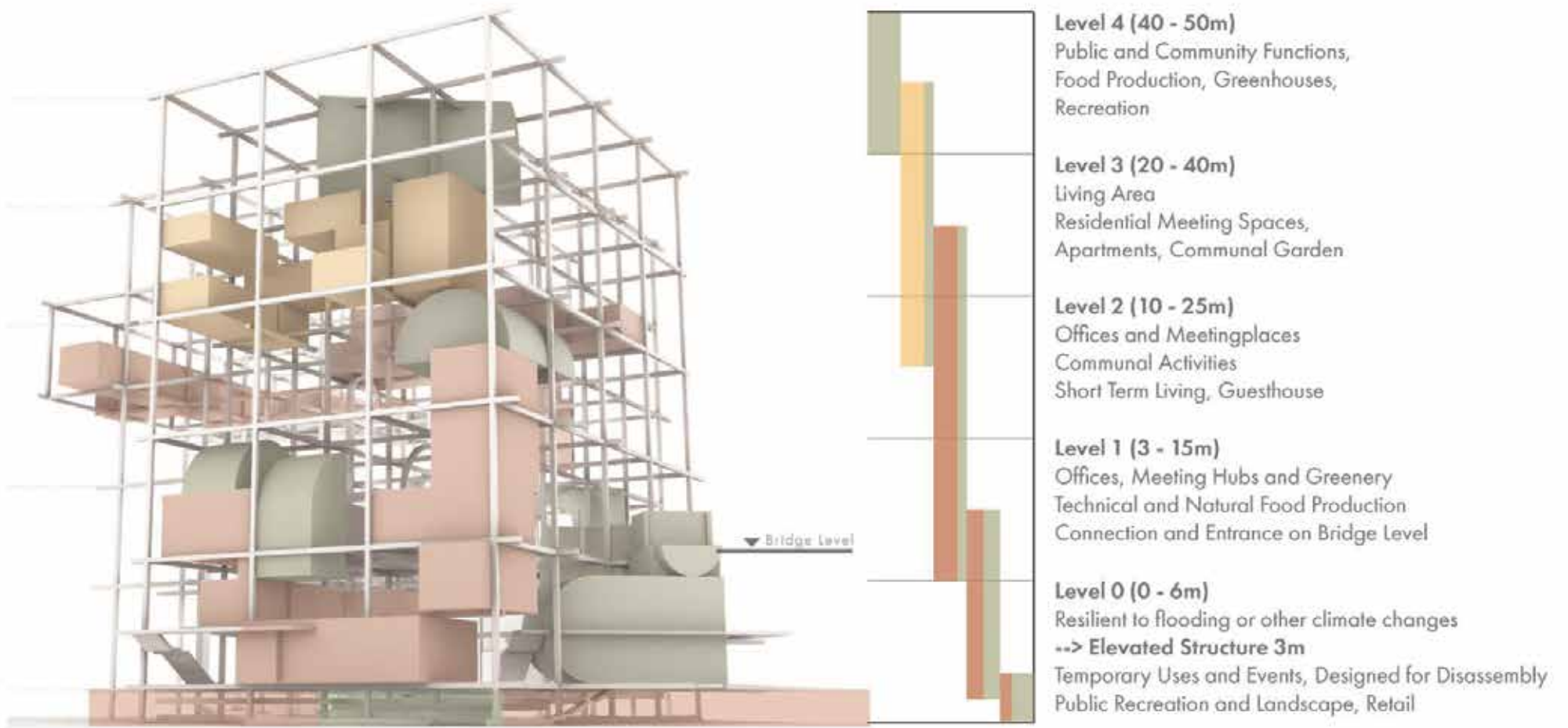
FROM CELLS TO A CLUSTER

Following a natural organisation, we combined the cells and formed clusters. Each cluster has a main theme and contains of cells of different qualities that work together in symbiosis. The circulation around the clusters is open structure and hold up by the scaffolding.



The concept allows nature to come into the building mass as a natural area, open the public or used and enjoyed by the occupants of the clusters. By doing this we hope it will have an influence on social inclusion and support biodiversity in the city. The building behaves as a natural being, of many part working as one

DISTRIBUTION OF FUNCTIONS



GUARDIANS OF THE OCEAN
BIOMIMICRY GLOBAL DESIGN CHALLENGE 2019

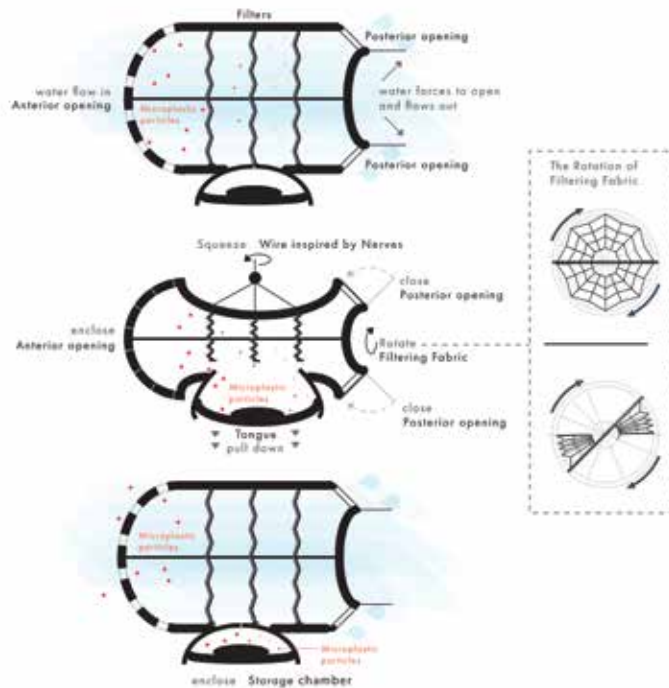
BIOMIMICRY GLOBAL DESIGN CHALLENGE
BIOMIMICRY INSTITUTE, USA

SPRING 2019

GUARDIANS OF THE OCEAN

BIOMIMICRY GLOBAL DESIGN CHALLENGE 2019

We are a group of three architectural students interested in environmental issues such as plastic pollution in the oceans, and study in the urban sustainable development programme at Chalmers university. By studying life threatening developments such as ocean plastic pollution, we learned a lot about the micro and macro challenges associated with plastic's life cycle. While our focus became the Baleen whale for the final inspiration, initially we also studied a variety of other organisms, including; the Lotus's seed pod, the oyster pearl, the larvacean.



Team Tutor

A Anna Maria Orru
Guest lecturer, Chalmers
PhD, Architect, University Lecturer

Consultants

O Otilia Thoreson
Marine Biologist advisor WWF

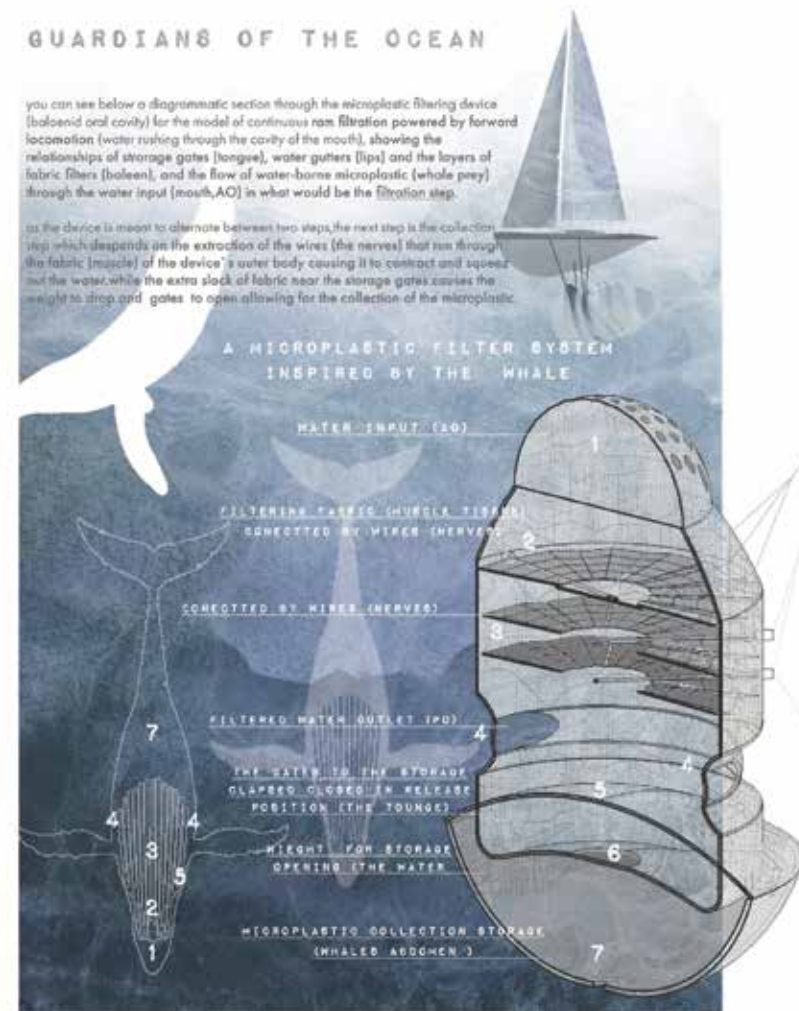
M Mutaz Khattab
Architect

Team Members

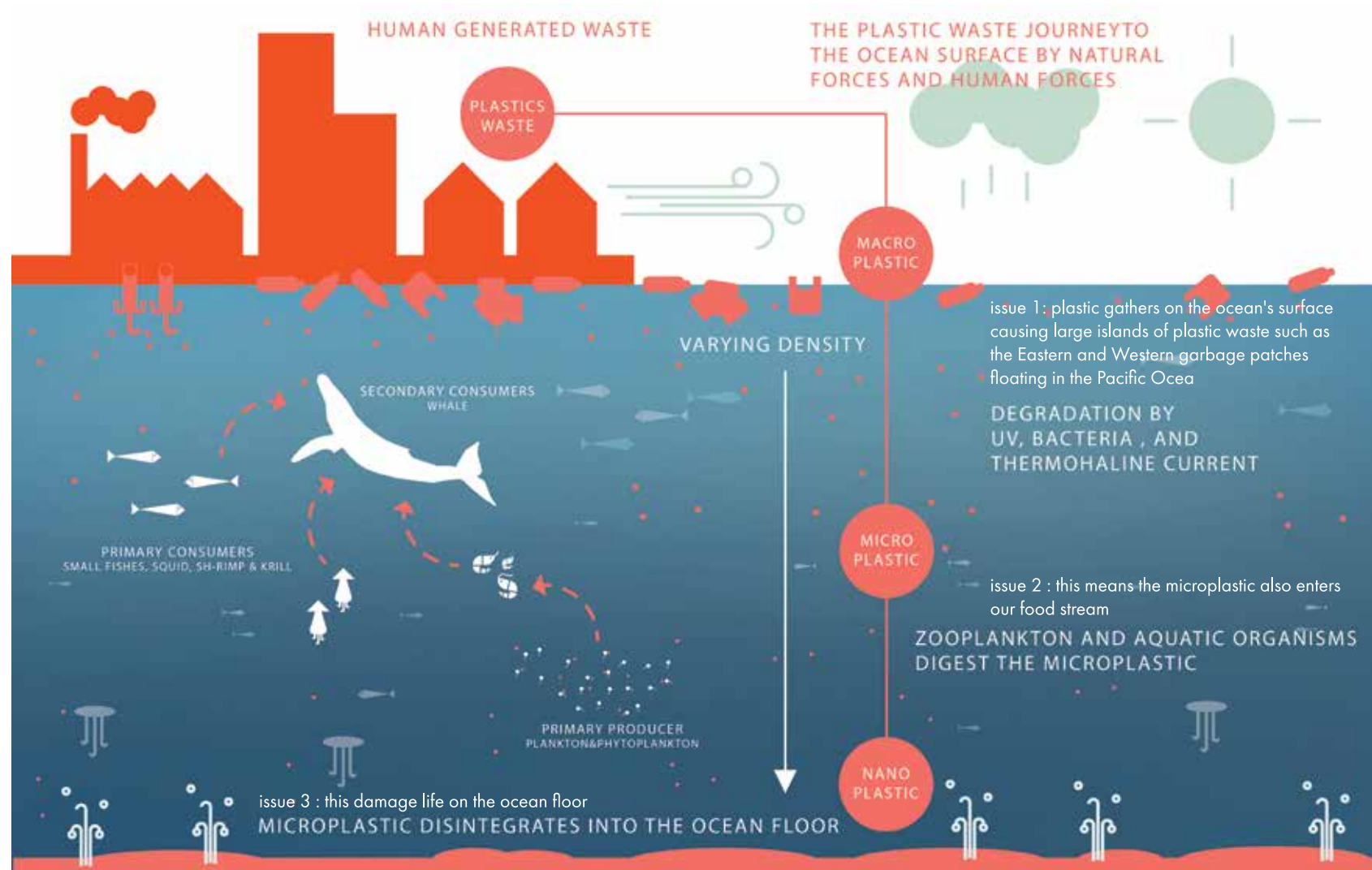
S Salam Abuali
Master student, Chalmers University

P Pattaraporn Thumunja
Master student, Chalmers University

J Jakob Jona Klein
Exchange student, Chalmers University



SPRING 2019



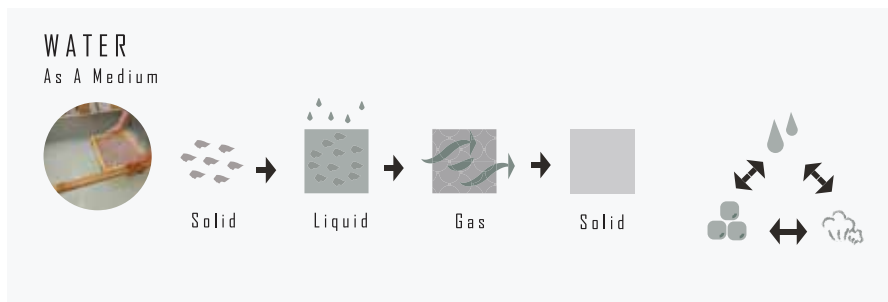
Journey of plastic and our challenges

LIVE - BRARY

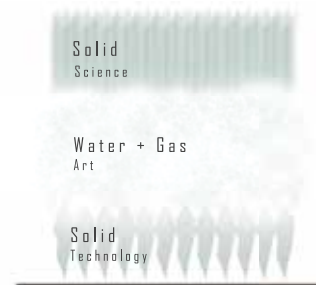
HERITAGE AND TRANSFORMATION



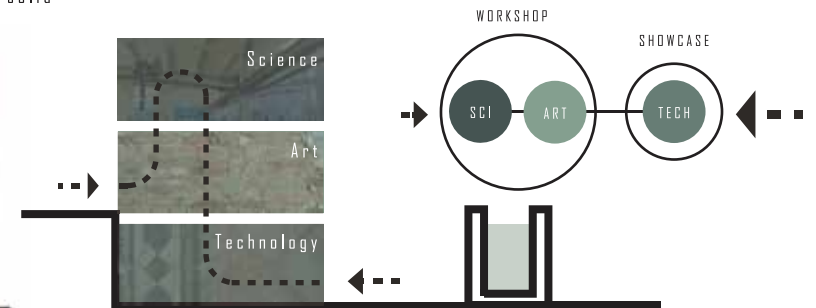
CONCEPT



The concept of water as a medium transforms one solid to be another form of solid

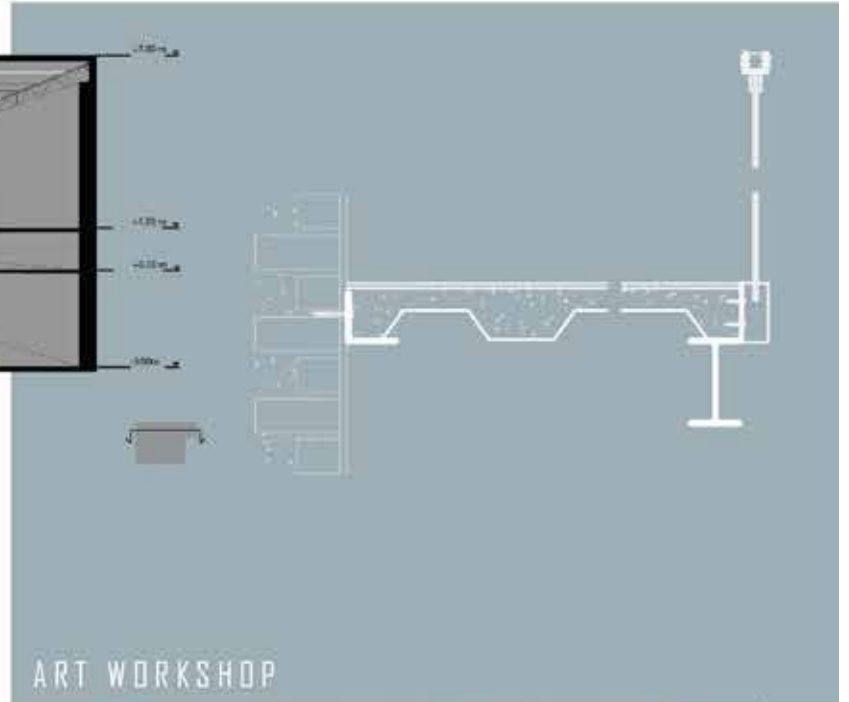


FUNCTIONAL DIAGRAM



LOCATION:
FORSÅKER, MÖLNDAL,
SWEDEN

SPRING 2019



SCIENCE WORKSHOP



ART WORKSHOP



GALLERY



DIGITAL EXHIBITION

SAGAN OM GÄRDSÅS MOSSE
SOCIAL INCUSION & PARTICIPATORY

LOCATION:
BERGJÖN, GOTHENBURG,
SWEDEN

AUTUMN 2019

SAGAN OM GÄRDSÅS MOSSE

SOCIAL INCUSION & PARTICIPATORY



PARTCPATORY WORKSHOP 1

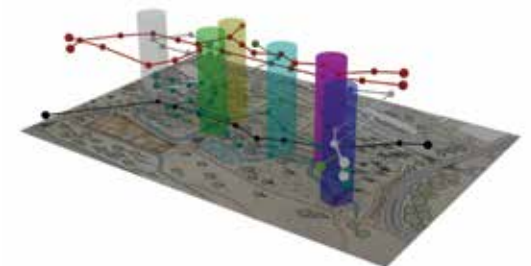
The traced maps stacked on top of each other made it easy to find where the paths meet. In these spaces we decided to have a second workshop where the children could design rooms for the charaters.

PARTCPATORY WORKSHOP 2

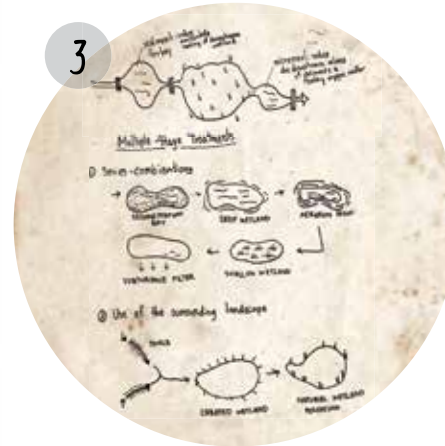
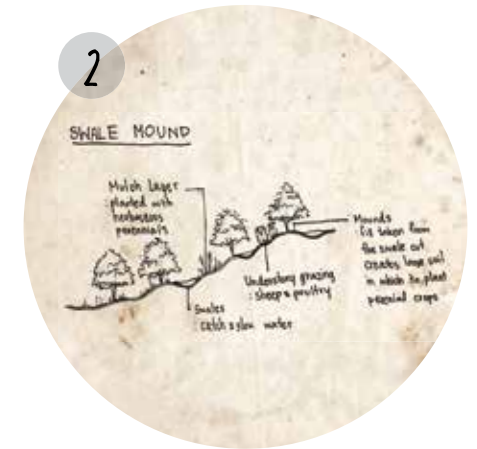
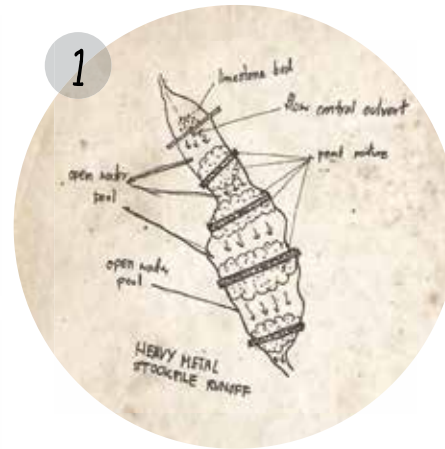
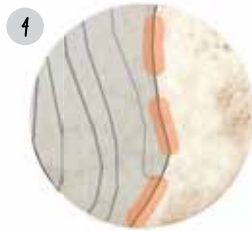
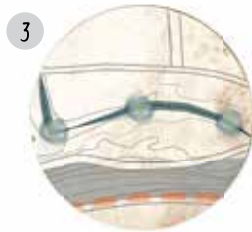
Letting the kids design, 6 big boards in cardboard with zoom-ins of parts of the map of Gärdås mosse were made. On each of the boards we placed information about the different characters whose paths crossed, to be used as inspiration during the workshop.



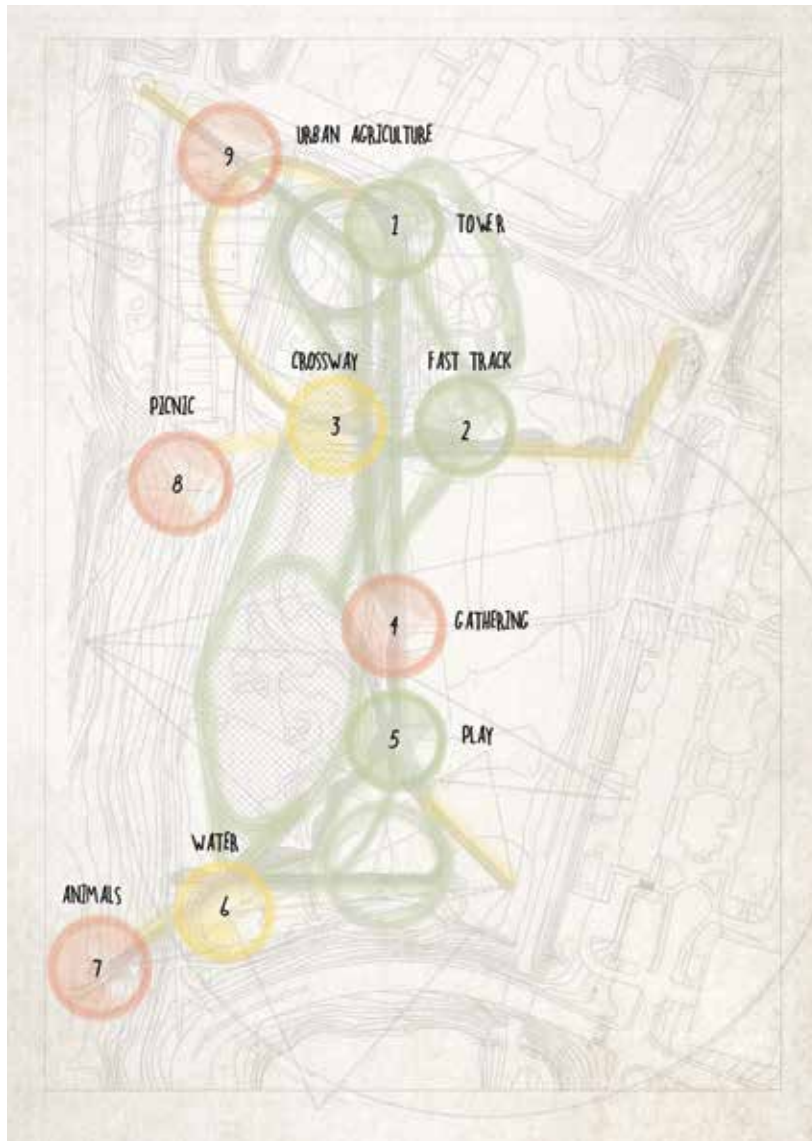
TEAM :
Pattaraporn Thumjunjua
Salam Abuali
Jonas Carlsson
Victoria Mccrea



PERMACULTURE
For developing water quality



The site is as a basin, surrounding higher street with steep slopes. the water at the site has been polluted and stagnant. These are a proposal plan to solve the problems in the long term.



LOCATION:
BERGJÖN, GOT HENBURG,
SWEDEN

AUTUMN 2019

Vision of The Project : The site with all its elements and all the biodiversity is the classroom. Finding paths that teach us different things, they can be adapted to school curriculums and different seasons. Finding places on the paths where they intersect and house different activities

SAGAN OM GÄRDSÅS MOSSE DARE TO BUILD



CHALMERS



RICE

COWI

LOCATION:
BERGJÖN, GOT HENBURG,
SWEDEN
SUMMER 2019

ASIA PASIFIC YOUTH EX-
CHANGE

SDG_s WORKSHOP

LOCATION:
THAILAND

JULY 2018

LEADERSHIP DEVELOPMENT
TRAINING



LOCAL IMMERSION PROGRAM



SYMPOSIUM



RSC - KMUTT

RESEARCH
ASSISTANT

LOCATION:
OMKOI, CHIANGMAI, THAILAND

DECEMBER 2016

HILL TRIBE HOUSING COLLECTING DATA
SUPERVISOR: Dr. Chanen Munkong, KMUTT



