Degree project in Architecture
Second cycle, 30.0 hp

Lysekil Center
Where land meets water

NATALIE BATTAH
LYSEKIL IS A MUNICIPALITY ON THE WEST COAST OF SWEDEN. LYSEKIL IS SURROUNDED BY HARBORS, PIERS AND BOARDWALKS ON ALL SIDES FACING THE SEA. THE PLACE WAS ORIGINALLY A SMALL FISHING VILLAGE AND DURING THE 18TH AND THE 19TH CENTURIES IT DEVELOPED INTO A TOWN FOR FISHING INDUSTRIES, COMMERCIAL SHIPPING AND TRADE.

HALF OF THE PEOPLE IN LYSEKIL LIVE IN THE CENTRAL TOWN OF LYSEKIL, WHICH IS LOCATED AT THE ENTRANCE TO GULLMARSFJORDEN. DURING THE SUMMER MONTHS, LYSEKIL IS A POPULAR DESTINATION FOR DAY VISITORS AND PEOPLE WHO HAVE SUMMER HOUSES IN THE AREA. THIS MEANS THAT THE NUMBER OF PEOPLE STAYING IN LYSEKIL DURING THE SUMMER MONTHS IS UP TO FOUR TIMES THE REGISTERED POPULATION.


LYSEKIL HAS LONG BEEN SPECIALISED IN FISHING. THE SOUTHERN HARBOR IS A FISH HARBOR, IN AN INDUSTRIAL AREA AND. MANY PEOPLE BUY THEIR FRESH FISH AND SEAFOOD IN THE FISH SHOP OR DIRECTLY FROM THE BOAT. THE FISH HARBOR CURRENTLY OFFERS BOTH PARKING FOR BOATS AND PARKING SPACES FOR CARAVANS.

ONE OF THE MAIN REASONS WHY PEOPLE COME TO THE SITE TODAY IS THE FERRY. FROM HERE, VÄSTTRAFIK’S PASSENGER FERRY RUNS SEVERAL TIMES A DAY ALL YEAR ROUND, AND IN JUST 15 MINUTES YOU CAN CROSS THE GULLMARSFJORD AND LAND ON SKAFTÖ, WHICH IS AN ATTRACTIVE PLACE TO VISIT.
PHOTOS

A SMALL FISHING BOAT PARKED ON THE SITE

THE EXISTING TRACKS

VIEW OVER SITE FROM EXISTING GASSTATION

THE EXISTING TRACKS
THE SITE

PROPOSAL

SÖDRA HAMNEN, THE SOUTHERN HARBOR IS IN NEED OF A TRANSFORMATION. THE HARBOR HAS AN EXPANDED SECTION THAT IS BUILT BY MAN. THIS IS OLD AND NEEDS TO BE REPLACED; AT THE SAME TIME, THE SITE IS AT RISK OF FUTURE FLOODING DUE TO CLIMATE CHANGE. HOW CAN WE REBUILD A SITE TO COPE WITH THE UNPREDICTABLE EVENTS OF CLIMATE CHANGE?

A DISADVANTAGE OF THE SITE TODAY ARE THE TRACKS THAT SEPARATE THE HARBOR AREA FROM THE CITY. PEOPLE USED TO BE ABLE TO TAKE THE TRAIN FROM GOTHENBURG TO LYSEKIL IN LESS THAN 1 HOUR, BUT NOW THE TRAINS HAVE STOPPED RUNNING COMPLETELY AND THE TRACKS STILL STAND LIKE A WALL THAT PREVENTS BOTH MOVEMENT AND VIEWS. THE SWEDISH MILITARY DOES NOT ALLOW THE REMOVAL OF THE TRACKS AS THEY MAY BE NEEDED IN CASE OF FUTURE CONFLICTS OR WARS. HOW CAN WE INTEGRATE A RAILWAY INTO AN URBAN ENVIRONMENT WITHOUT REMOVING THEM COMPLETELY?

LYSEKIL THE MUNICIPALITY IS CURRENTLY PLANNING ON HOW TO REBUILD EVERYTHING AND THEY ARE PLANNING ON DEMOLISHING THE EXISTING BUILDINGS ON THE SITE. IN THE MAIN BUILDING THERE IS A SEAFOOD RESTAURANT, A WHOLESALE OF SEAFOOD AND FISH, AND STORAGES FOR FISHERMEN. THE OTHER SMALL BUILDINGS CONTAIN PUBLIC TOILETS AND SERVICES FOR PRIVATE BOATS.

THE LYSEKIL CENTER PROPOSAL IS ABOUT REBUILDING THIS PROGRAMME, BUT ALSO HAVING A NATURAL MEETING POINT FOR FERRIES, BOATS, CARS AND PEDESTRIANS. AT THE SAME TIME, A LANDSCAPE HAS BEEN DESIGNED WITH A FOCUS ON MANAGING A SEA LEVEL RISE OF 1.5 METERS.
FUTURE SEA LEVELS IN LYSEKIL

DIAGRAMS
AXONOMETRIC
THE EXISTING

- A wall that blocks the view of the sea from the city
- Parking spots for caravans
- Sea food restaurant, whole sale and storages for boats
- Public WC
- Gas station for boats
EXISTING TRACKS BECOME A HIGHLINE FOR PEDESTRIANS AND LINK THE CITY TO THE HARBOR

ONE OF THE TRACKS IS BACK IN USE, THE TRAIN IS A SUSTAINABLE WAY TO GET TO LYSEKIL!

A NEW ROAD WHERE PEDESTRIANS, CYCLISTS AND CARS MEET

RESERVOIRS FOR FUTURE FLOODS AND RAINWATER

THE FERRY IS WELCOMED UNDER THE ROOF

THE FERRY TERMINAL IS MOVED HERE FROM ITS ORIGINAL LOCATION ~100 M AWAY.

SMOOTH TRANSITION FROM LAND TO WATER

FISHERMEN AREA

FISHMARKET

KITCHEN AND WC

AREA FOR CARAVANS

CHARGING STATIONS FOR YOUR BOAT!

TAKE A 15 MIN BREAK UNDER THE ROOF, BUY A COFFEE!
The 8 m high steel roof that naturally creates a meeting point with shelter from rain. The roof gives a static and safe feeling. It is being supported by columns that are seemed to be spread out randomly, to strengthen the feeling that it is floating.

The rectangular volumes that are spread out in the site, under the roof, growing out of it and outside. The facade material are slats in thermal wood. Since the buildings do not relate to the roof, it could easily be volumes added or taken away volumes. Let the future decide!

The landscape is a new and important way of seeing the border where land meets water. It consists different surfaces, concrete blocks, and soil with plants, that will manage the future floods because of climate change, but also today’s storm water.
THE TICKET KIOSK  BUY A TICKET FOR YOUR TRAIN, FERRY OR BUS TRIP

THE FISH MARKET  THE CONCRETE LANDSCAPE CONTINUES AS YOU ENTER

STAIRS DOWN TO THE WATER  A PLACE THAT WELCOMES WATER

THE SHORT-TERMED BOAT SPOT  STOP FOR 35 MIN, WC BREAK AND A COFFEE

A PLACE THAT WELCOMES WATER
NOW MORE THAN EVER, WE ARE EXPOSED TO THE CONSEQUENCES OF FLOODS AND THEIR SPATIAL IMPLICATIONS. CLIMATE CHANGE IS ONE OF THE MOST DRAMATIC GLOBAL CHALLENGES OF OUR TIME AND IS PRESENTING A SERIOUS THREAT TO EVEN THE MOST ADVANCED COASTAL CITIES. AS POPULATIONS CONTINUE TO INCREASE ALONG THE COAST, WATER LEVELS COULD WREAK HAVOC ON URBAN INFRASTRUCTURE. EVEN THE MOST CONSERVATIVE PREDICTIONS INDICATE A SEVERE ENVIRONMENTAL IMPACT AS A RESULT OF CHANGING SEA LEVELS.

THERE IS THIS MISGUIDED IMPRESSION THAT SOLID AND FLAT GROUND IS THE DESIRABLE AIM. DEMANDING THAT A BUILDING MUST STAND ON THE GROUND: ITS TERRITORY CLAIMED AND POSSESSED. DIVIDING WATER AND LAND. WHY NOT ENJOY THE FLOOD? WHY NOT TAKE THE WATER AS A DYNAMIC TERRITORY THAT CAN BE USED AND AESTHETICALLY ENJOYED. MAINSTREAM THINKERS AND DESIGNERS FEEL THREATENED BY HYBRIDS, THEY PREFER ESTABLISHED TYPOLOGIES. A BOAT IS A BOAT. A HOUSE IS A HOUSE. A TOWN IS A TOWN.

LYSEKIL CENTER HAS A LANDSCAPE THAT INVITES THE WATER. AS WATER LEVELS RISE, RESERVOIRS ARE FILLED IN SOME PLACES AND ABSORBED BY PLANTS IN OTHERS. IT IS A MIX OF WAYS THAT WATER AND LAND MEET TO CREATE A DIVERSITY OF ACTIVITIES; A DYNAMIC PLACE HAS BEEN CREATED.
Today

Sea level rises 1.5 m

Soil and plants absorb the water

Today

Sea level rises 1.5 m

The reservoirs gather the water and creates a new and dynamic environment
AXONOMETRIC

THE FUTURE BORDER BETWEEN LAND AND WATER
THE PROGRAMME


THE ADJACENT BUILDING CONTAINS ALL THE IMPORTANT FUNCTIONS FOR THE OPERATION OF THE BUSINESS, INCLUDING COLD ROOMS, A KITCHEN AND STAFF ROOM. THE ROOM FACING THE WATER IS A KIOSK AND OFFERS SERVICES FOR SMALL BOATS. YOU CAN EASILY PARK YOUR BOAT UNDER THE ROOF TO TAKE A BREAK OR BUY SOMETHING IN THE KIOSK.

THE SMALLEST BUILDING IS MAINLY FOR THE FISHERMEN AND CONTAINS STORAGE FOR THEIR NETS AND TOOLS. A LITTLE FURTHER AWAY, THERE IS ALSO A BUILDING TO COMPLEMENT PEOPLE STAYING OVER IN THEIR CAMPER VANS. IT HAS A SHOWER AND A KITCHEN.

THE OUTDOOR ENVIRONMENT PROVIDES WITH RECREATIONAL SPACES AND IS A PLAYFUL PLACE TO BUY YOUR TICKET AND WAIT FOR YOUR TRAIN OR FERRY.
STEEL TOP PLATE WELDED
JOIST GIRDERS TO COLUMN
STABILIZER PLATE
TUBE STEEL COLUMN 300X300
DIAGONAL TRUSS
POLY-CARBONATED ROOF
ALLUMINUM
ANCHOR ROD
SHEAR LUG
BASE PLATE
CONCRETE FOOTING
CONCRETE FOOTING
ANCHOR ROD
SHEAR LUG
BASE PLATE
WASHER AND THREAD
DETAIL SECTION 1:20 (A0)
DIAGRAM OPENING IN ROOF TO LET IN PRECIPITATION
GO FOR A PLAYFUL WALK ON THE ONCE CLOSED OFF TRACKS
FISH MARKET! BUY THE BEST SEAFOOD IN SWEDEN
EAT FRESH SEAFOOD WITH A SEA VIEW IN THE RESTAURANT!
A PLAZA FOR THE PEOPLE! (AND THE FERRY...)

EXTERIOR VIEW
A FLEXIBLE WORKING AREA FOR FISHERMEN
ENJOY THE VIEW WHILE DIPPING YOUR FEET IN THE WATER