North Sea: Landscapes of Coexistence Transitional Territories Studio 2018-2019

Danny Arakji

Theatre of Decay. A Nature and Human Coexistence in the Toxic Landscapes in Rotterdam Port.

Abstract

We're living in an era where spaces of logistics are further being detached from cities and urbanization to avoid choke points. But as these spaces migrate they leave traces of spaces permeating the city. What might be the impact of these logistical residual spaces weather large or very small on the expanding urban environment creating a clash, chaos and wastelands. The Port of Rotterdam is going under change concerning the petrochemical part. The reasons of decrease of oil in the las decade for the aim to shift to more sustainable energy production and for the increase of toxic spills on the ground and atmosphere. The Port's strategy is to push automation over these chemical sites that happen to be sites bordering Rotterdam city that is growing and in need of new lands to expand and house citizens.

Key words: Toxicity, Urban Voids, Silo, After Oil, Re Use

The Project

4. The Project

4.1. Proposition

The nature in the Port of Rotterdam is changing. Adjacent to the North Sea it is The Netherlands' highest value of industrial landscape. The place where fossil fuel was once nearly turned into a sacred object, materialized and burned. Many changes have been implemented to ensure its survival and yet decay is still ever present creating permeable places open to the city.

The port activity separating itself from Rotterdam is not a new observation. Once at the heart of the city, its activities and importance grew beyond its spatial capacity. Slowly detaching itself and residing closer and closer to the North Sea. Today, the port exhibits the conditions of a land-locked island. Constructed to be seven meters above sea level, it is considered one of the safest locations in Rotterdam to build on and invest in. Compared to the surrounding landscape which lies meters below sea level and is at high risk of eradication if the dike system fails.

Presently, parts of this new port infrastructure lie abandoned, waiting for the economic demand to once again revive. The landscape activity is very dependent on the economic cycle. But a shrinkage phenomenon should no longer be perceived as a chaotic, conflicting urban wasteland environment. Instead, we should create new possibilities for the potential reuse of logistic spaces. But how would this island react to such an intervention and what would be the final outcome? I do acknowledge many areas are composed of advanced infrastructure which is not adequate for human habitation, due to the toxic ground conditions it resides on. Here, I propose we should enable a future for nature to take over and reclaim this space and restrict man's actions in productive silos operated by machines.

By rethinking the realities, we live in, the space should be in favour of ecological resistance against man's toxic implications. We should move past the Age of the Anthropocene and towards a new era; a new altered healthy nature. Introducing a revolutionary kind of hybrid infrastructure, which will allow for the evolution in the decayed abandoned infrastructure to serve our needs. I propose a project for the coming post-Anthropocene period.

The Port as a Palimpsest', embraces the old fossil fuel burning infrastructure and encourages it to decay. Preparing for a new occupation to allow for the evolution of life from the man-made intoxicated site to the new nature development. The project changes and evolves with time. From a site of industrial ruins to a site of living nature; a site that celebrates the decay of fossil fuel resource burning machines to a Future Land that unlocks a future Common; Autarkic temporary original dwelling in the automated toxic landscapes of the Rotterdam Port that celebrates memories and enriches the constructed site with an altered kind of production. A new living typology which helps us to live with the new nature. Unlocking a new common and create a world perpetually oscillating between the current dystopia and a hopeful future. A Symbiogenesis of machine, toxicity, nature and human beings.

4. The Project

4.2. Objectives

1.

A design that will seek to examine a portion of the Port of Rotterdam (Pernis) as a border future hybrid zone between its city of conception and the North Sea as a space of ecological resistance to human, machine and toxic land articulated by the concept of the Anthropocene as a Post Anthropocene architectural project. Where the infrastructure that was once built on new grounds to mobilize our daily life surrenders to decay for the development of new nature.

2.

A design that uses future abandoned oil silos to act as a temporary catalyst to: rejuvenate toxic landscapes, show a scenario where automation takes over decisions of humans as humans are the ones causing toxicity. An objective to turn the contaminated section of the port into another kind of productive economy that goes in line with nature. A design project that can test out the idea of toxicity as a tool that allows a room for nature to grow whilst restricting human activity to bare minimum.

3.

A project with an objective to develop the chemical part of the port into a biodiverse nature that remediates the contaminated soil but keeps the Port of Rotterdam as an isolated site from neighbouring gentrification influences. To stay the obscure hidden realm of dreams and production.

4.

An action of slicing and cutting and destroying silos with a horizontally and vertically growing memorial wall made with memory boxes from the silo's steel metal which case the ashes of cremated people will give meaning to the architectural experience of the site. A future nature corridor that is meant as a support for life, for new colonizer that will plug on the built wall in the potential urban void.

4.3. Relevance

The Port will be looked through its interaction with its landscape first by looking at its morphological history as a trading port, importing and exporting logistic space as a national identity, although it's detached metaphorically, and its future identity of decay. Structurally it has the highest altitude above water up to 6 meters compared to the city of Rotterdam. Rotterdam port is the island that will stay afloat with high climate change for a country under sea level might be its re birth, toxicity allows evolution for a new nature.

The graduation project looks at the port of Rotterdam as a site in transition taking into consideration the expansion of the city and the new strategy for the port to find a new alternative to the petrochemical oil site on the port close to existing villages. The project looks at a possible coexistence of human, automation and toxicity simultaneously.

The project shows that the port of Rotterdam with its huge economic input not only to the city but the country as whole is voided out of the perception of many citizens of Rotterdam. The Port is like an unexplored island for future potential common. At the moment it's functioning and the public is kept away. When the decommissioning of the refineries starts, the site would be highly toxic to be open to public as well, not until decades pass so the port territory would be accessible. The project illustrates that man is everywhere a disturbing agent. Wherever he plants his foot, the harmonies of nature are turned'. The project shows as well that toxicity preserves a site by not allowing human activity to take place and by that, a new kind of nature takes over and allows evolution and biodiversity and human intervention is done in limited confined spaces.

4. The Project

4.4. Spatial Concept

a. Configuration and Composition

The architectural project is composed of three parts, a silo reception which initiates the cremation procession which is linked to the second part which is the memorial wall which contains the cremation path to the crematorium which is detached from both parts to give the cremation ceremony its privacy and solitude away from other site visitors walking through the memorial wall whose numbers will increase with time as the memorial wall grows.

Situated in a future decaying industrial landscape the modular memorial wall organically traverses several decommissioned oil silos in Pernis Rotterdam. It is designed to be an infinitely extendible network that grows vertically and horizontally to create a widespread screen on which remaining solos adhere onto in perspective. The Crematorium is in detached silos away from the memorial wall. In this configuration the crematorium itself is underneath the ground leaving the above silo to act like a void sanctuary. The crematorium uses the steel of the silo to place the ashes in steel urns that make up the memorial wall. The port's oil cargo railway system that would no longer in use will change their program to deliver the deconstructed silo steel from the realm of the port to the steel workshop on site to do the urns. The entrance to the site for people coming for the cremonial procession come by boat through the southern entrance of Shell Pernis which has a very calm water velocity to the inside of the silo, they attach the casket to a crane rail system which eases the transfer of the body to reach the crematorium. This passage is on the ports ground floor under the memorial wall. This passage passes through sliced silos which leads to the crematorium which is plugged into the silo.

b. Performance

The performance of the project is looked through time. Its intention is to use the condition of the site's toxicity as a tool to manifest itself to keep humans activity to a minimum restricted path that lets humans visit the site as a collective memory and sensory experience and see nature change and grow through different seasons. The death of the silo to the death of to the rise of protected wild nature. A project that unlocks a future common to the city, but until that time nature grows wild and dictates the rules.

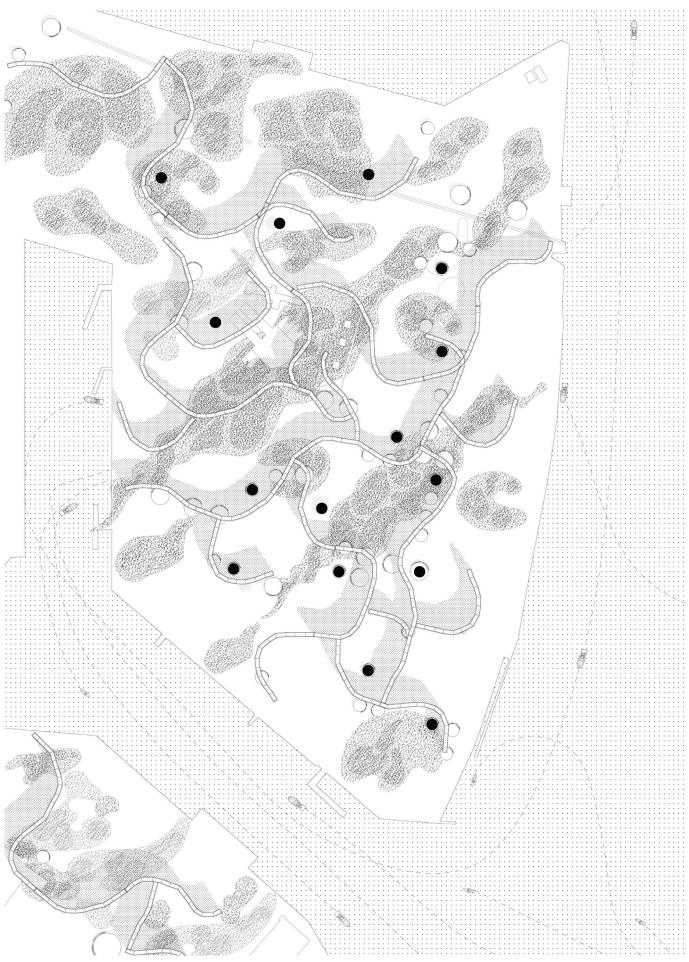
c. Function and Program

The aim of the project is to create a temporal coexistence between man, machine and nature; by use the toxic leftover spaces of oil infrastructure to create a room for wild nature in a future where wilderness will be a necessity. The modular memorial wall slices the silo and opens them this act is the beginning of the altering the site. The wall's structure is made from the memory boxes, urns, from on site metal prepared in steel a workshop that took the place of the decommissioned oil refinery. that is a , that will be plugged on/in/on the edge of the silo. The services facilities in the crematorium uses the existing floor port pumps to transfer water from the river Maas and filter it for watering the crematoriums landscaped roof also the bathrooms' let out in the crematorium are connected to the main sewage system of the port's facilities. The steel workshop's and the crematorium's energy are provided from the existing wind turbines that provide the current electricity to the port buildings, but as the will get decommissioned that energy will be consumed by the project.

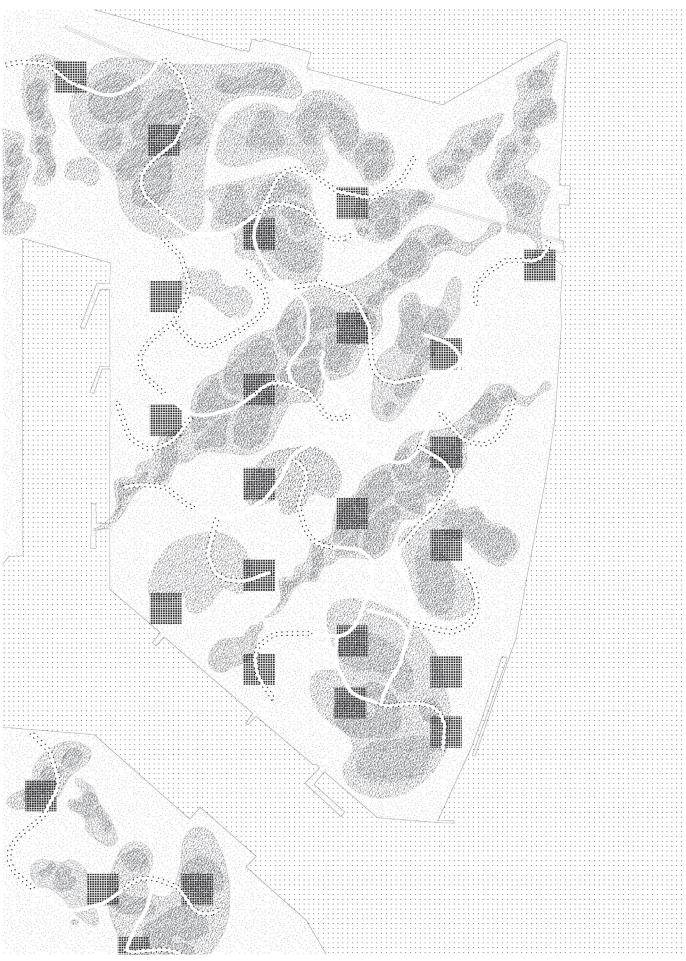




Territorialization Phase One



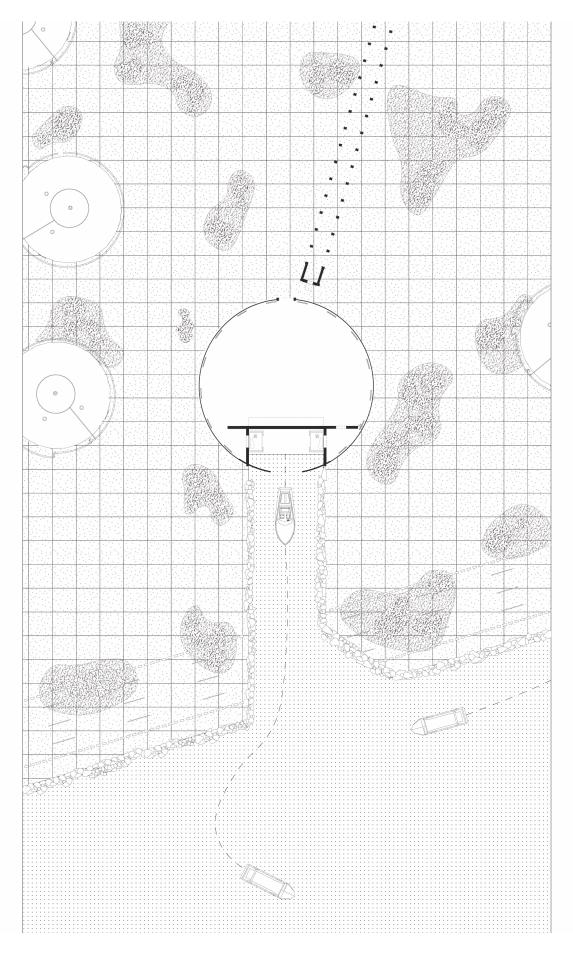
Territorialization Phase Two



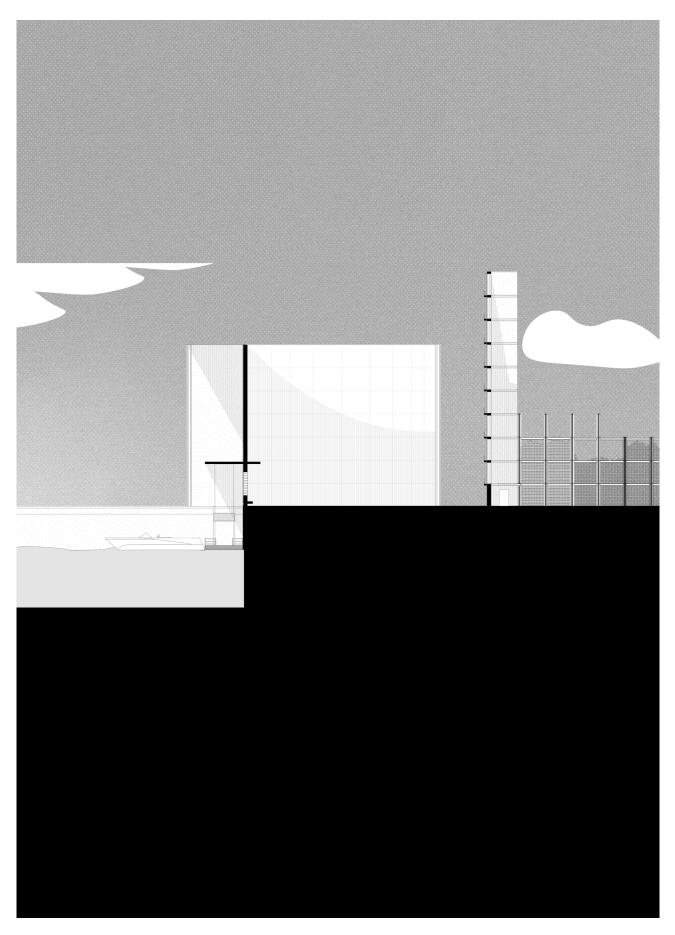
Re- Territorialization New Beginnings

· · · · ·	
	PUD AN ROCK

Memorial Wall Silo Site Intention



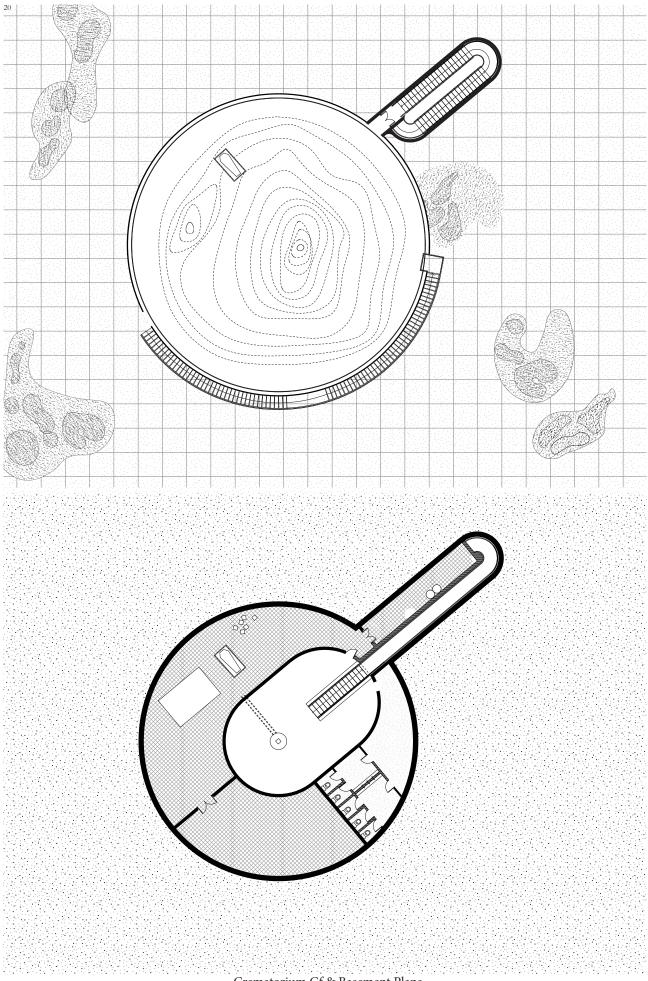
Entrance First Silo Plan



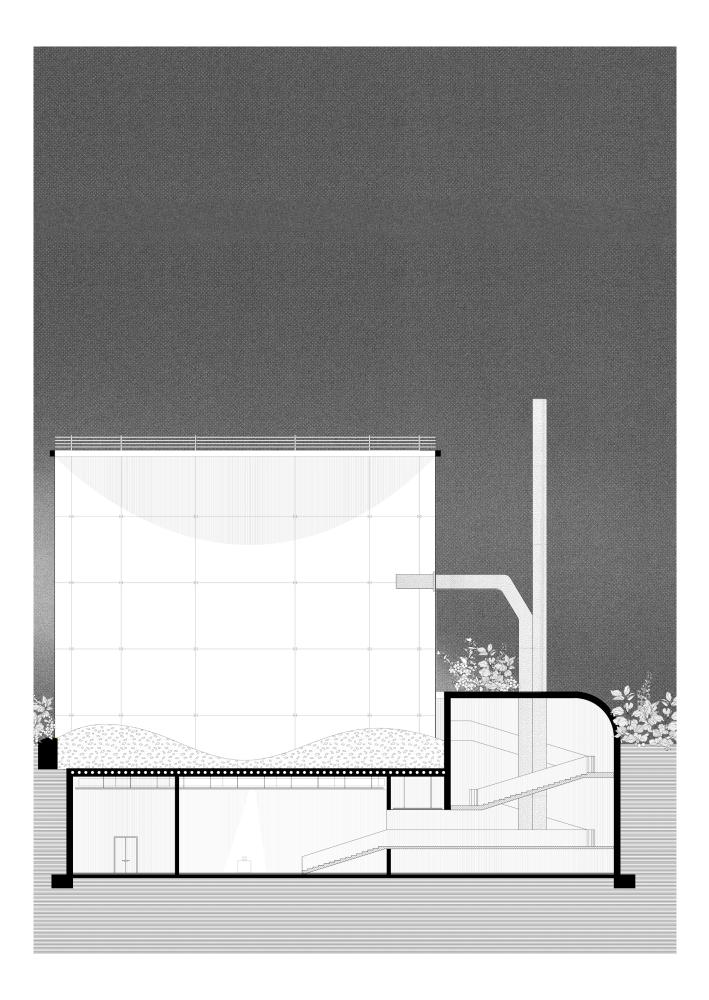
Section Through Entrance Silo



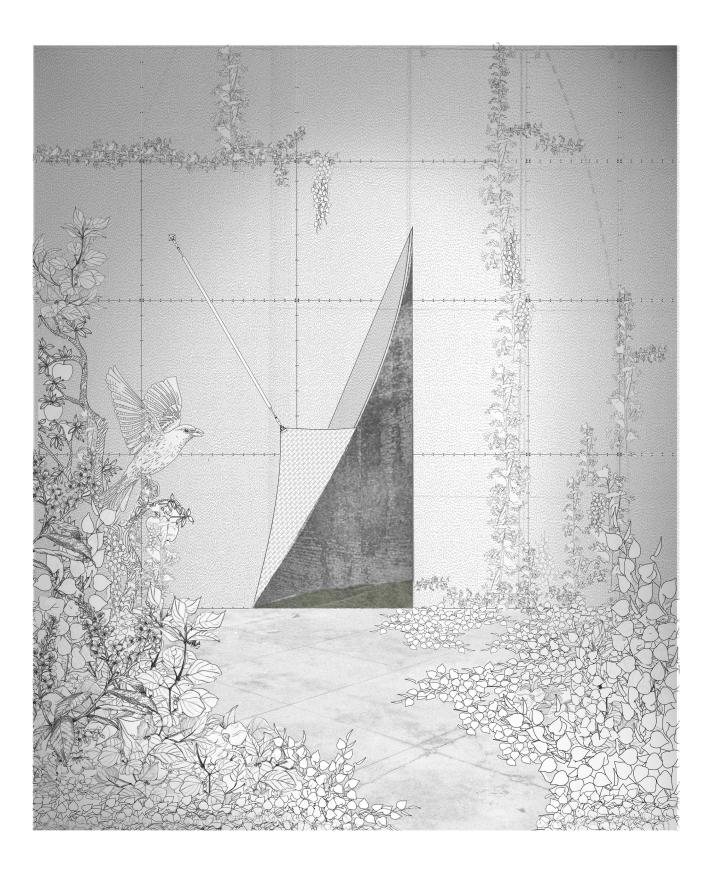
Cremation Gf Level\ Memorial Wall Above



Crematorium Gf & Basement Plans



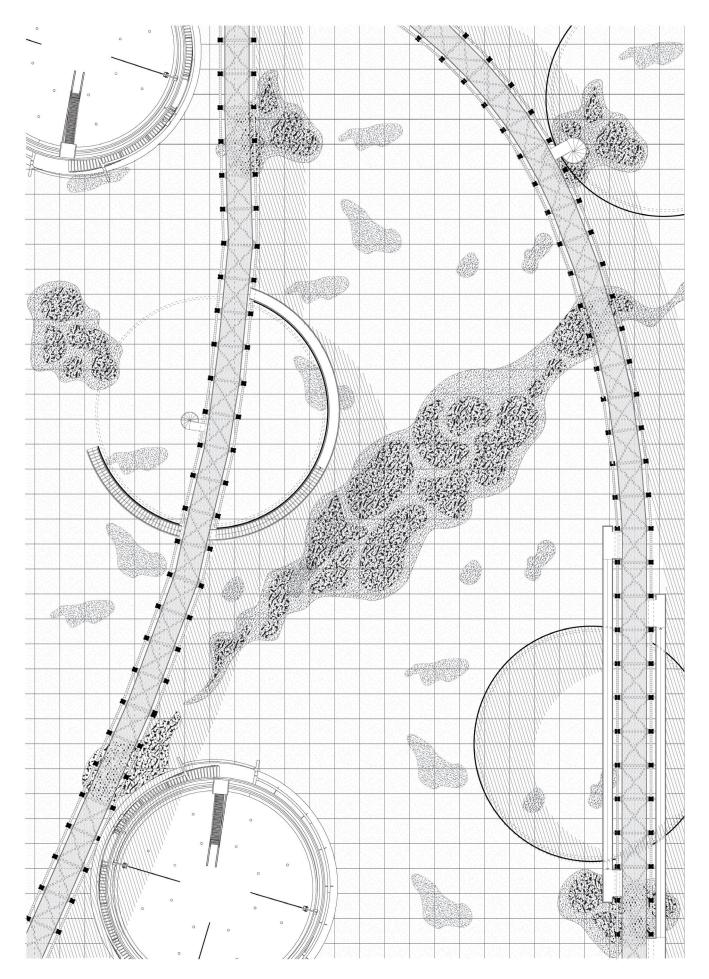
Crematorium Section



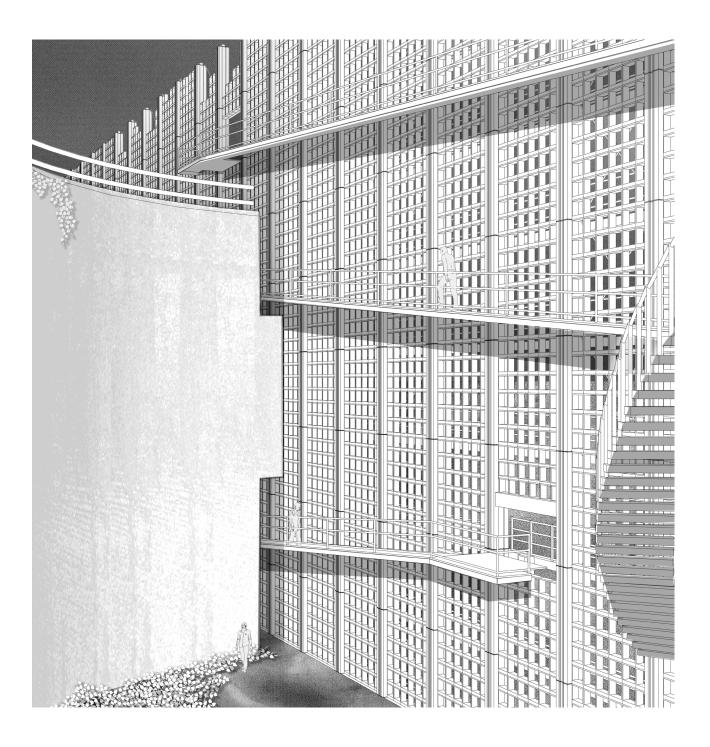
Crematorium Silo Entrance

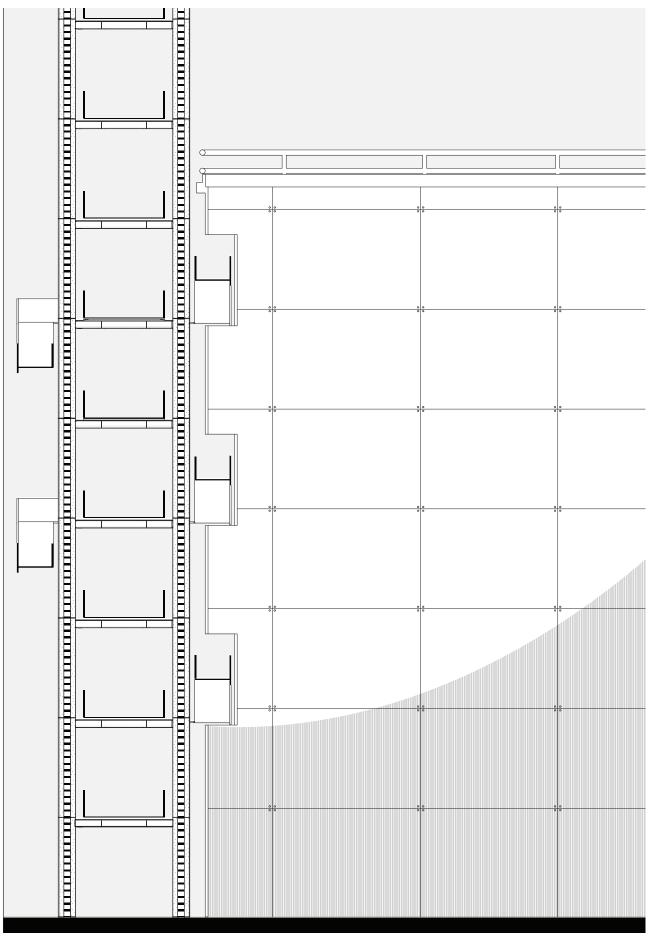


Wall Elevation

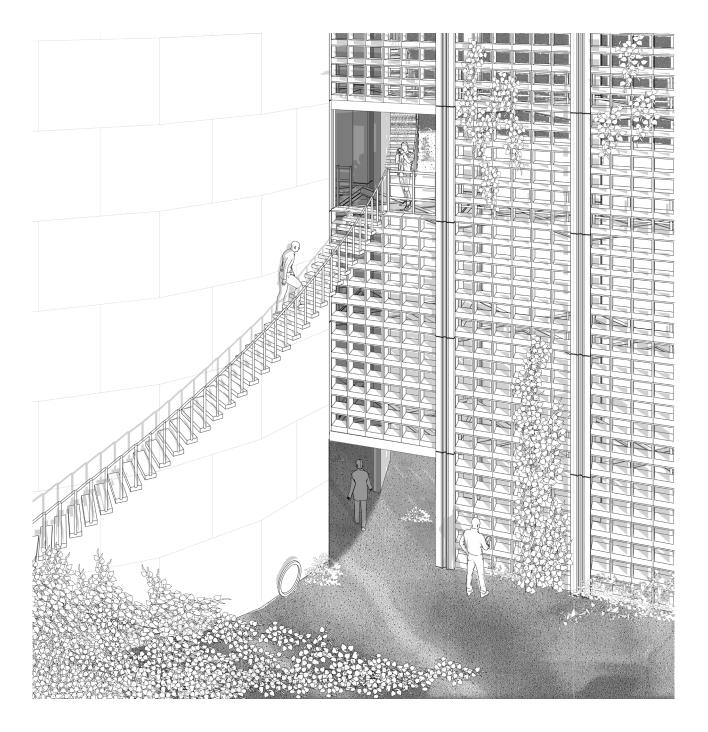


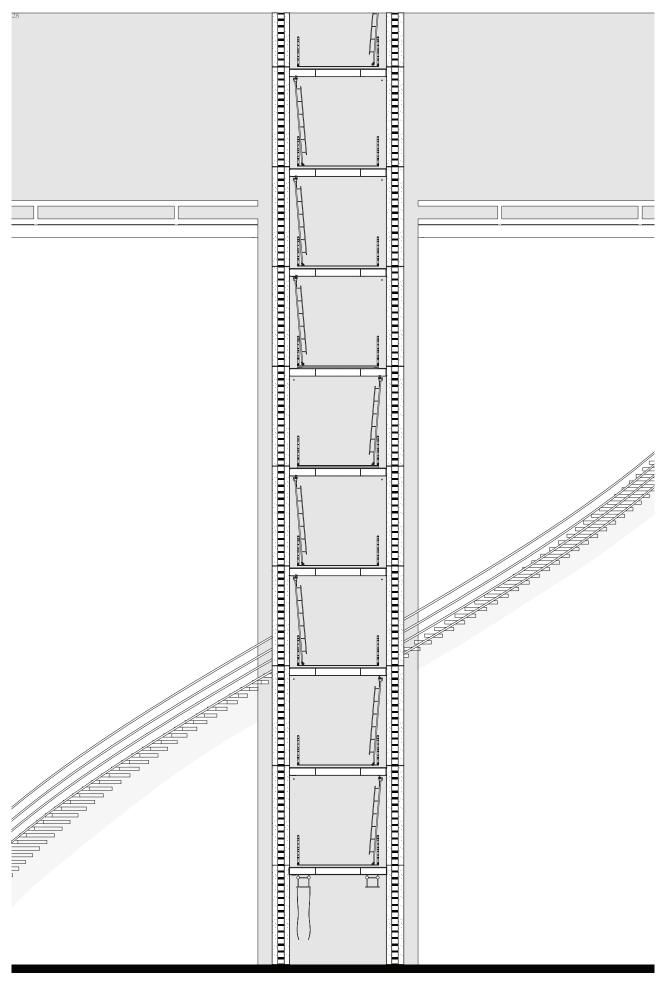
Memorial Wall Silo Intercept Situation



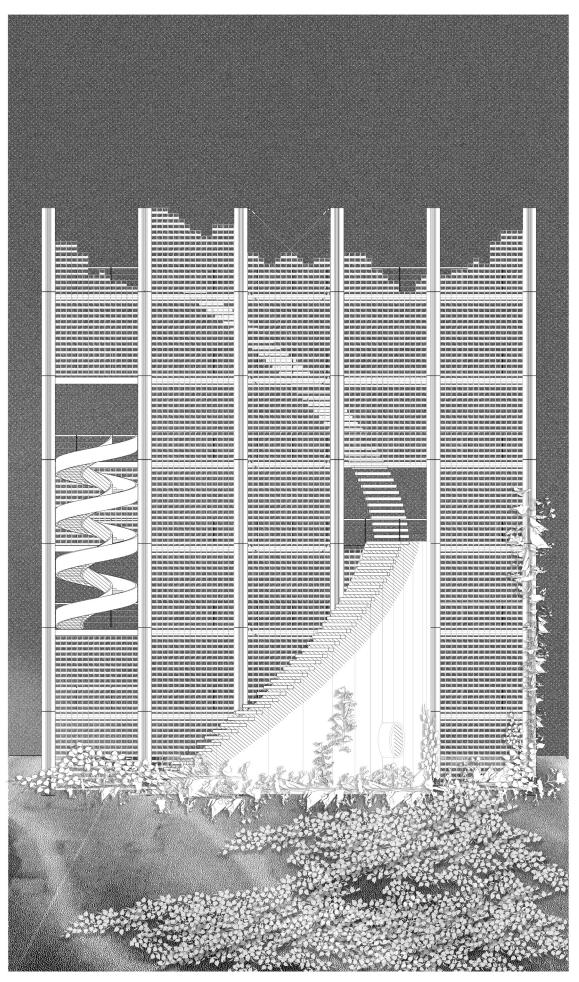


Section of Wall Breaking Up Silo With Ramps

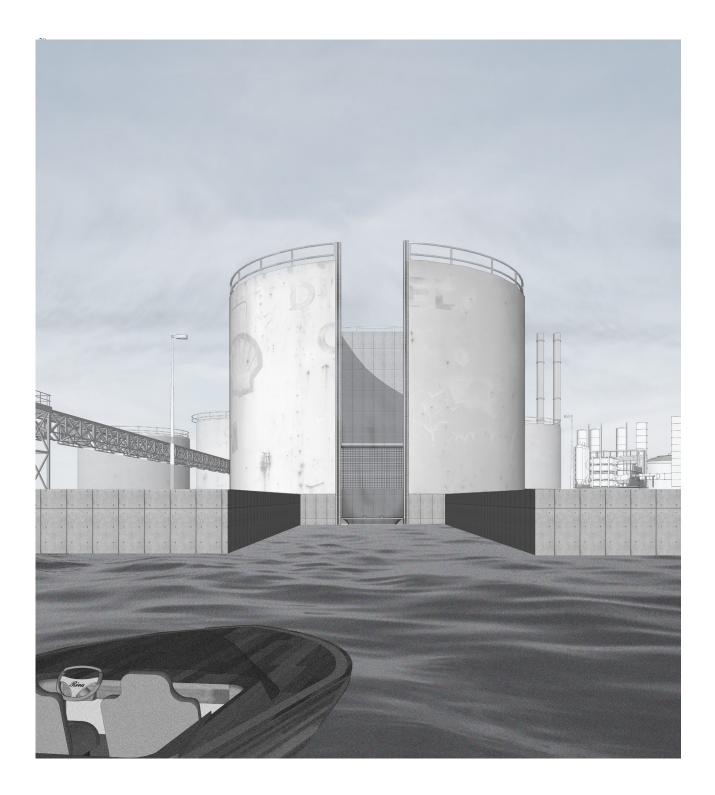




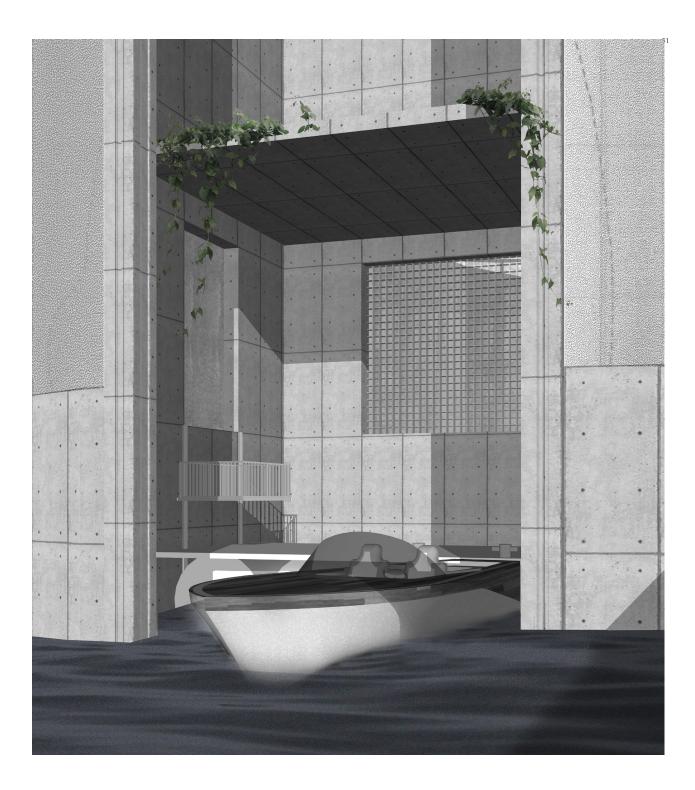
Section of Wall Slicing Through Middle Silo Stairs

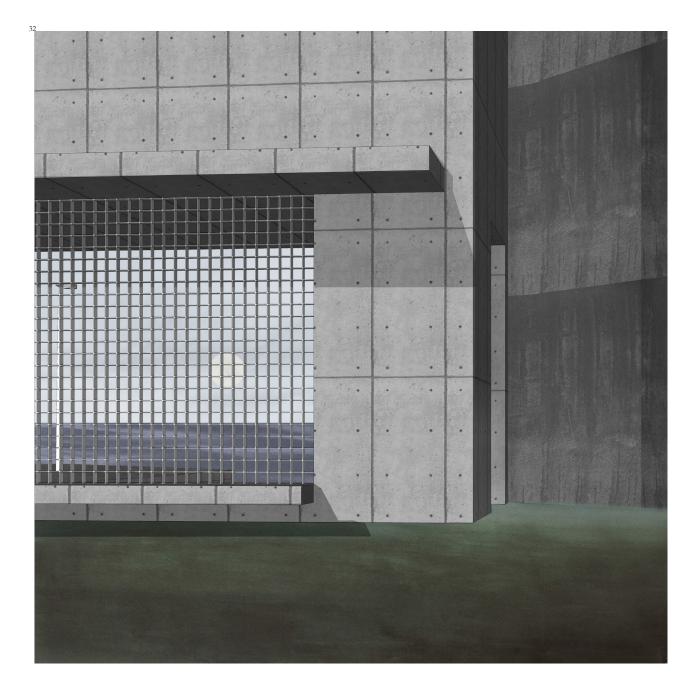


Schematic Elevation



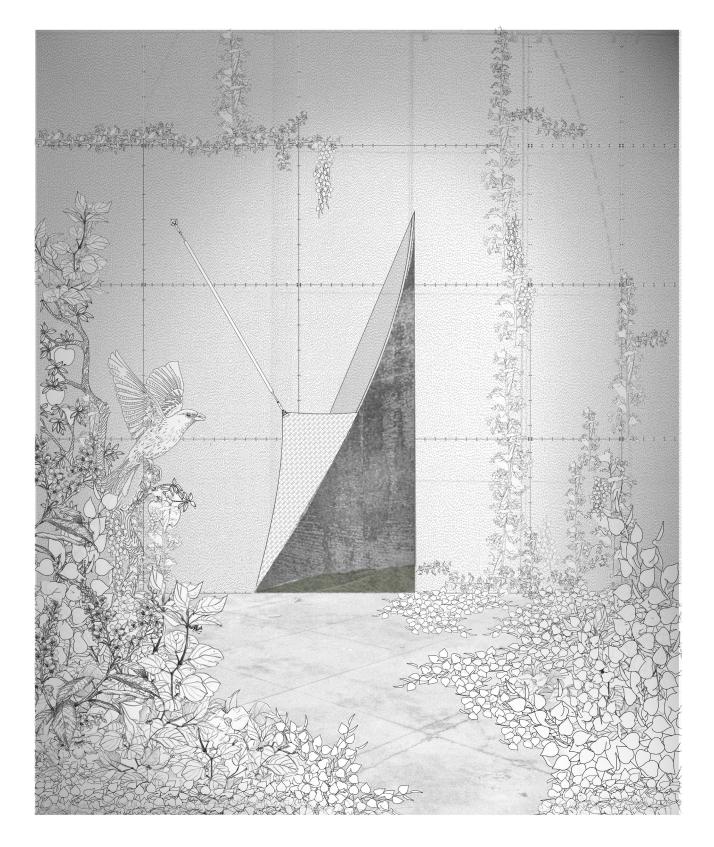
Arrival to First Silo







Entrance Exit to Memorial Wall

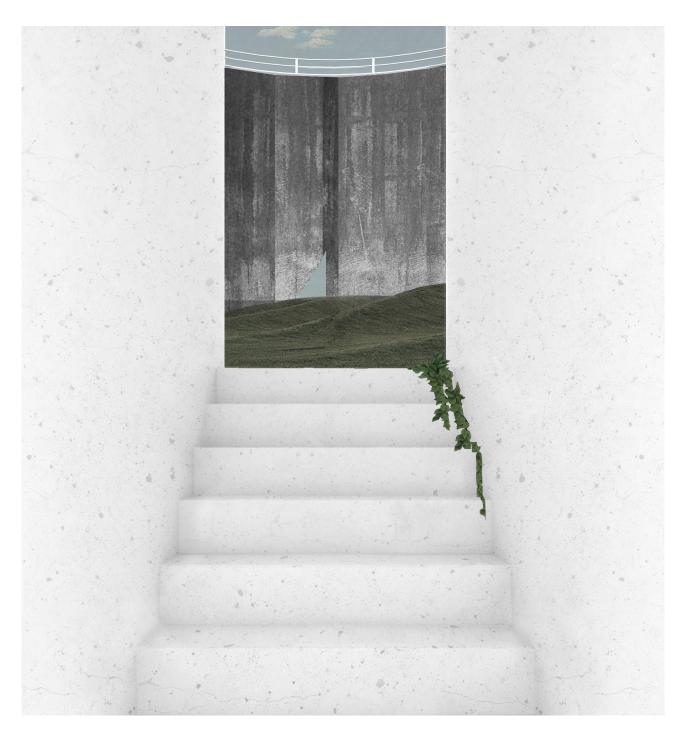


Crematorium Silo Entrance

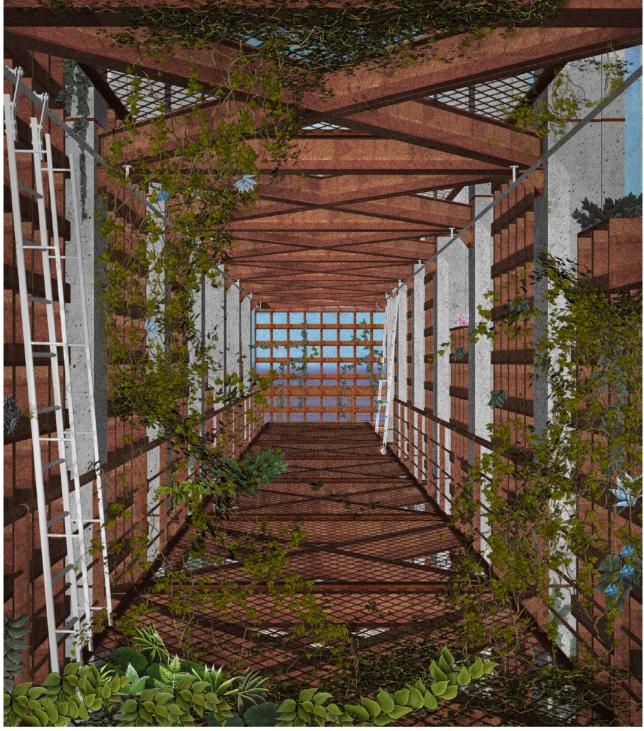


Crematorium Ceremonial Morphed Ground



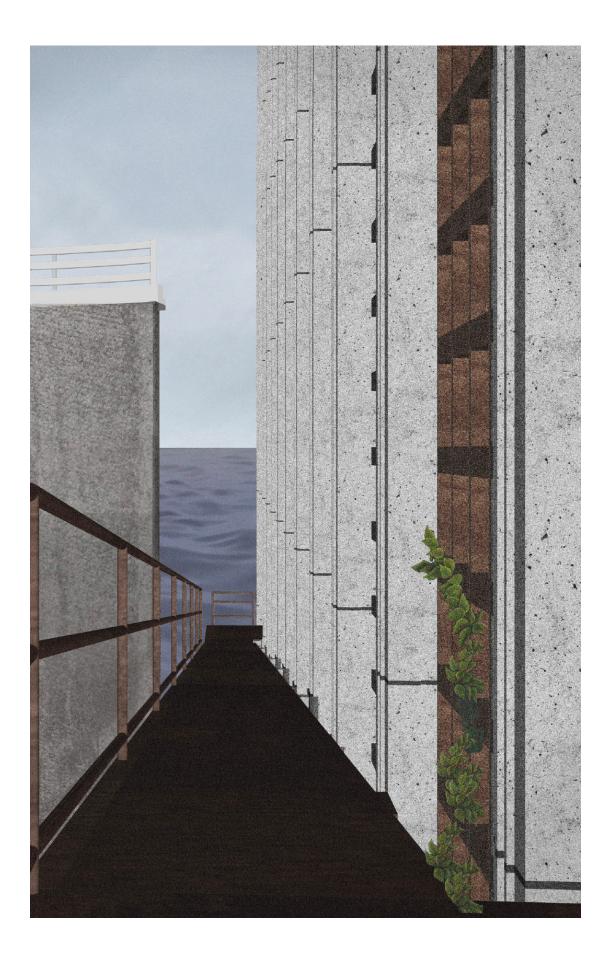


Urn Space Exit\ Entrance



38

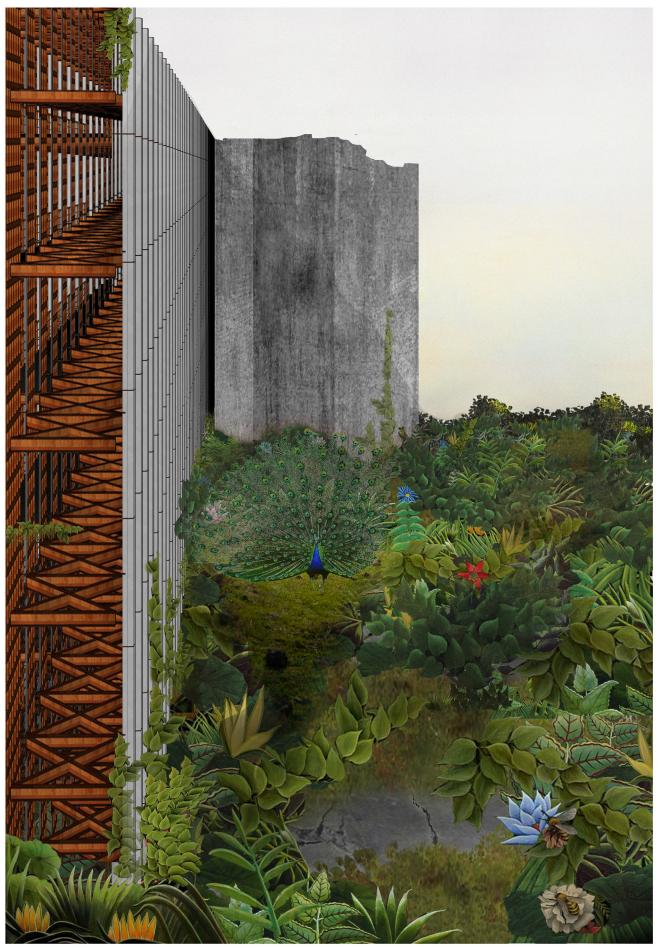
Prison Like Memorial Wall



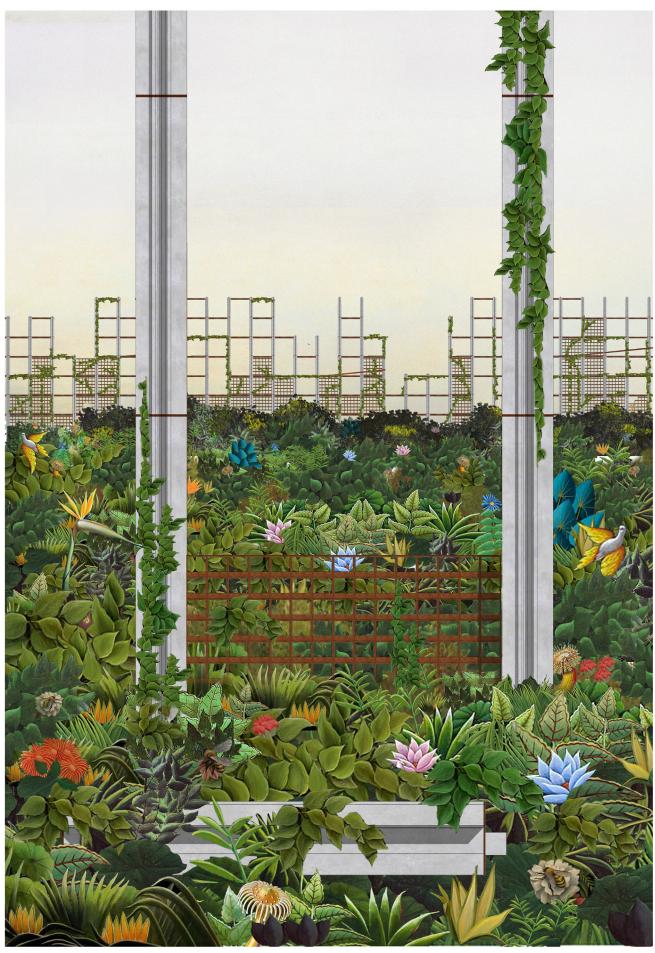




Phase 2



Phase 3



Thank You