

BEYOND BURIAL

Transforming Death: A New Ritual of Farewell and the Ecological Return of the Body to Nature



Thesis Book
Chang Xie
Mdes 2023

Beyond Burial
Transforming Death: A New Ritual of Farewell and
the Ecological Return of the Body to Nature

Chang Xie
Spring 2023

Rhode Island School of Design
Department of Interior Architecture

Beyond Burial

Transforming Death: A New Ritual of Farewell and the Ecological Return of the Body to Nature

A thesis submitted in partial fulfillment of the requirements for the degree Master of Design in Interior Studies [Exhibitions & Narrative Environments] in the Department of Interior Architecture of the Rhode Island School of Design

By Chang Xie
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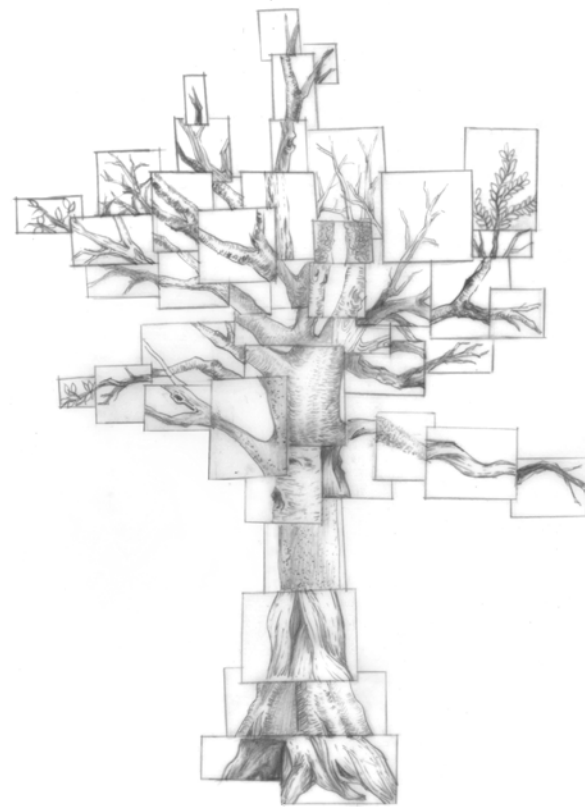
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Abstract



"Death is as natural as life."

- Arthur Schopenhauer, German Philosopher

Burial and funeral culture have been shaped by human self-awareness and reflect an anthropocentric worldview. The modern funeral industry's multi-billion-dollar enterprise is based on the principle of protecting, sanitizing, and beautifying the corpse to promote the idea of human exceptionalism. However, this practice overlooks the natural process of decay and the potential beauty in returning the body to the earth, with which the body shares the same chemical basis as the earth itself. Modern science has provided eco-friendly green burial methods, such as soil modification, ice burial, and water burial, making it suitable to contribute to natural ecology using human bodies.

China's explosive population growth resulting from urbanization has caused a shortage of cemeteries, making it challenging to access earthen burials and cremations. To address this issue, this thesis proposes an Ecological Architecture of Death by renovating Hong Kong's iconic Star Ferry Pier into a new cemetery typology that promotes green burial methods and creates an earth-friendly resting place for the deceased and a space for the living to reflect on our entanglement with the natural world.

The proposal is divided into four parts: Spiritual Space, Facility, Theatre, and Memorial. Spiritual Space provides a ritual to participate in the farewell process and build a relationship with the deceased. Facility offers functional and technical support for burial, while Theatre dramatizes the moment after the farewell to prolong the process of memorialization and incorporates it into architectural spaces and narratives to facilitate the grieving process. Memorial keeps remembrance alive and welcomes members of the surrounding community. By embedding the cemetery within urban life and improving accessibility, mourning behaviors can become a part of daily life.

Ultimately, this thesis proposes a sustainable approach to death that challenges the conventional funeral industry's anthropocentric practices and promotes ecological harmony between humans and nature. Providing safe and open interactions with death and dead bodies, this architecture can help individuals unburden their grief and find a path towards healing.

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| Introduction | |

I

Cultural Context

Knowing Death

**Green Burial
Practices**

Cultural Context

In recent decades, the blistering pace of China's economic development and population growth has transformed **death space** into sites of acute personal, social, political, and economic contestation.

Ancestor Worship

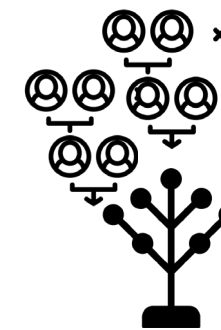
China is a nation without Christian-style monotheism, but our ancestors did not lack belief, and ancestor worship is integral to this belief. It has been described as "the essential religion of China," the keystone to the arch of China's society, and "the most deeply rooted of all forms of religion in the very fiber of the Chinese character."¹ However, rather than describe ancestor worship as a religious belief, it's a daily code of conduct.

Ancestor worship refers to a habit of Confucianism based on the belief that the souls of dead ancestors still exist, will still affect the present

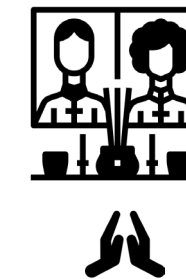
world, and impact the living conditions of descendants. The purpose of general worship is to believe that the dead ancestors will continue to bless themselves with offspring.

Over thousands of years, whether through regime change, sectarian disputes, or the impact of modern Western thoughts, it has not been possible to destroy this spiritual and cultural fortress rooted at the bottom of Chinese society. For this reason, the new burial practices need to respect this distinctive cultural phenomenon.²

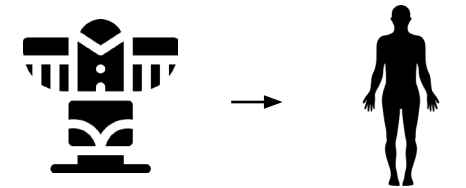
Formation of ancestor worship behavior



"Exalting and worshipping the ancestors of the family, which has the identity of the family and the exclusion of others."



"Believe the gods of their ancestors have extraordinary powers and they will protect and communicate with their descendants."



"Beyond the cognitive limitations of primitive totem worship and reproductive worship, making the subject of worship from originality to humanity."²

1. Addison, "The Modern Chinese Cult of Ancestors," 492-3.
2. Yang, "Lecture: Talking about Chinese Ancestor Worship."

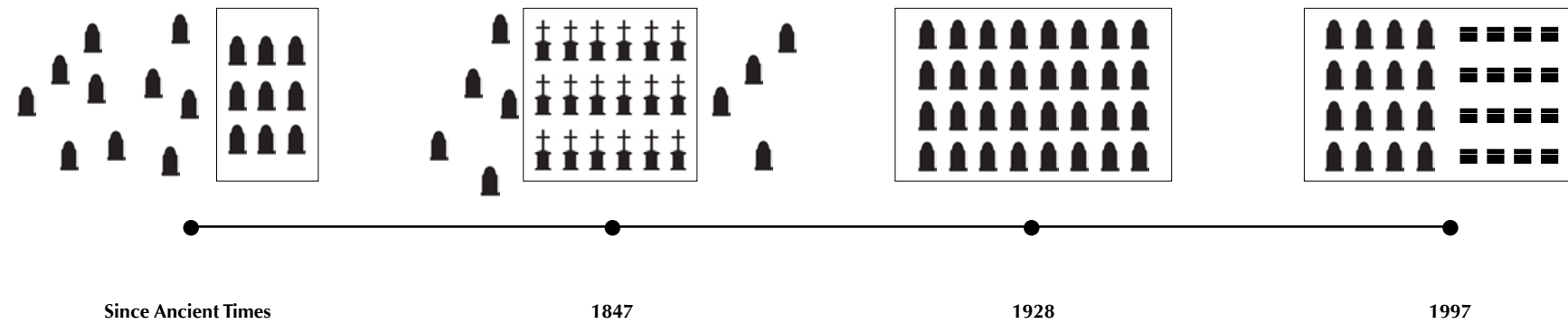
Graves Reform

The Chinese culture has a basis in Feng Shui belief. Feng shui is the practice of spacing physical objects in a particular way to influence the flow of energy or chi. Individuals build graves for their loved ones according to the principles of Feng Shui. It is believed that the grave's location will impact the chi surrounding the deceased person's family. Therefore, the grave distribution in rural areas is basically irregular and random. It means solitary graves can be seen everywhere in the mountains and the rural regions.

With the expansion of urbanization and the lack of management of graves in the last century, the need to manage cemeteries has gradually emerged.

However, the cemetery still does not cover most rural regions in China until now.

These traditional graves have a process and cycle of natural disappearance. The issue is that most of the cemeteries of ordinary people will be forgotten by future generations. Almost no one comes to the cemetery to pay homage after three generations. Therefore, we need to seek a new burial practice to ensure we can find and worship our ancestors.



The grave structure of regular citizens is irregular because the graves are set up based on the principles of Feng Shui. However, the structure of the graves of dignitaries is organized because they can own large spaces of land.

The Shanghai Foreigner Cemetery was only built for the foreigners who died in China at that time.

The Republic of China published the first Cemetery Regulations, advocating the selection of suitable places in major cities to establish cemeteries.

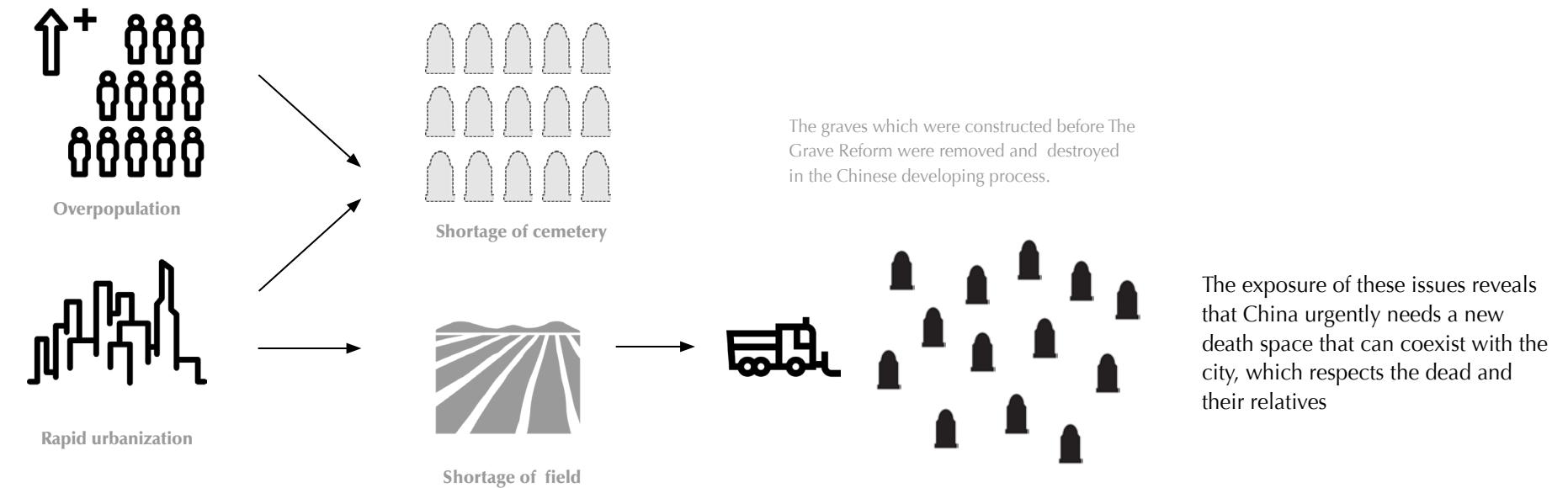
The State Council promulgated the "Funeral Management Regulations" to carry out burial reform from earthen burial to cremation.¹

Overpopulation & Urbanization Issues for Death

"The first wave of "baby boomers" entered the golden era of their lives after the founding of the People's Republic of China. The second wave of baby boomers (born in the 1960s and 1970s) have now begun to enter a concentrated retirement period. The third wave of baby boomers born in the 1980s will exceed 35-40 years old in the coming years."

"When the proportion of the elderly population continues to increase, the number of deaths in China will continue to rise. Since 2006, about 50% of the dead people choose cremation. The demand for cremation mainly comes from urban residents. A highly developed city like Shanghai has already achieved a 100% cremation rate. Only a large number of rural residents are still mainly buried in the ground."¹

The limited land supply and the increasing demand for tombs have exacerbated the rise in tomb prices, which are expected to continue to rise. In highly urbanized areas that are densely populated and economically developed, cemeteries have long been in short supply and unit prices have skyrocketed.



The graves which were constructed before The Grave Reform were removed and destroyed in the Chinese developing process.

The exposure of these issues reveals that China urgently needs a new death space that can coexist with the city, which respects the dead and their relatives

1. Wu, On Funeral Reform.

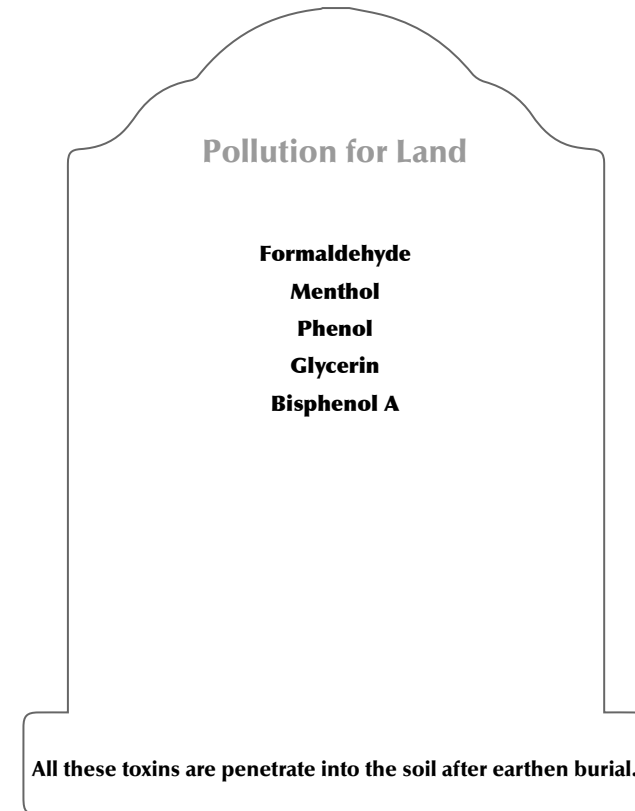
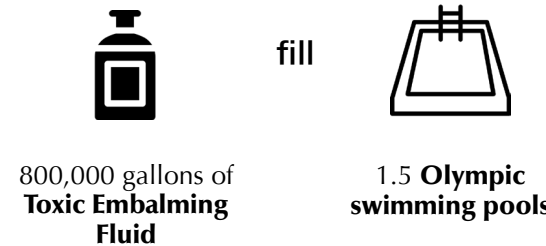
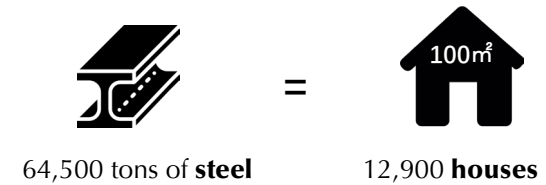
2. Xue, Tian, Yan, Xiong, Pan, Nie, Wu, et al. "Present and Future Emissions of Haps from Crematories in China," 28-9.

Earthen Burial & Cremation Consumption and Pollution

Process of Earthen Burial

- The corpse is disinfected, and its eyes and mouth are set, stitched, or sealed. In addition, 2 to 3 gallons of arterial chemicals are injected, while blood from the corpse is drained into the sewer.
- Remaining bodily gas and fluids are suctioned or desiccated from internal organs, which are then also injected and packed with embalming fluids. These include formaldehyde, phenol, and other hazardous or carcinogenic chemicals, to "disinfect" and delay decomposition.
- Dyes restore "natural" coloration and humectants mimic "living" hydration.¹

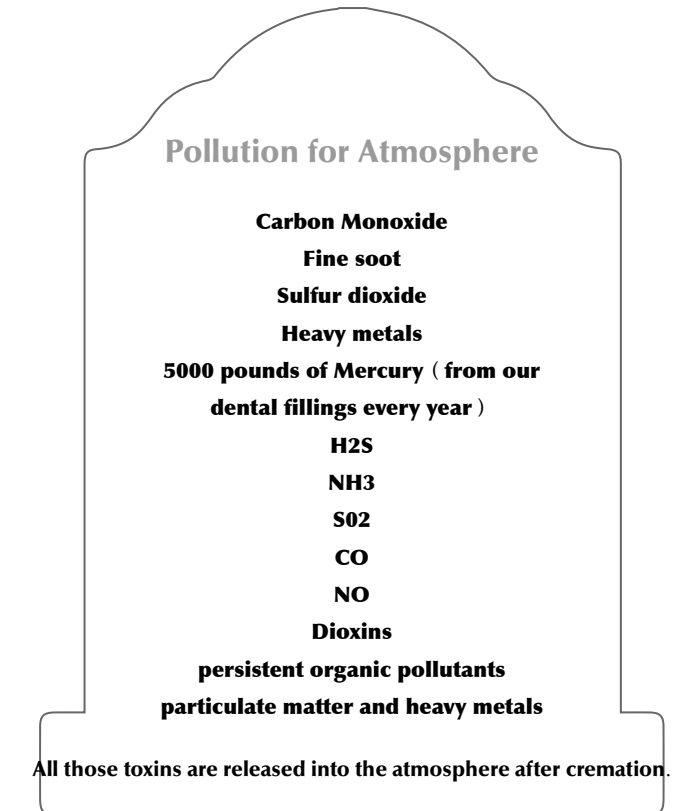
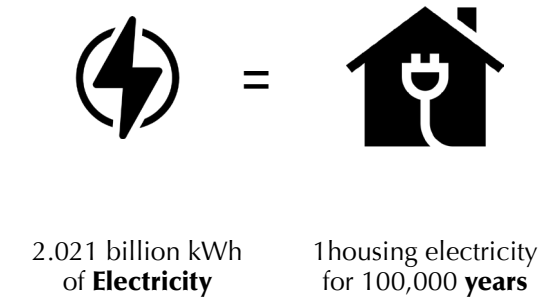
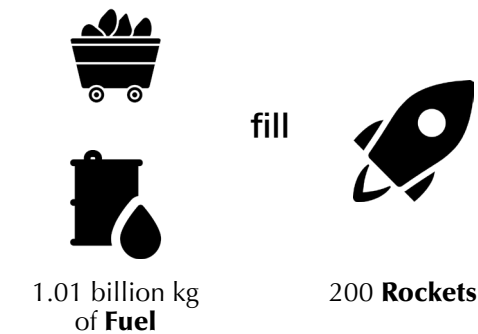
Chinese Annual Energy Consumption



Process of Cremation

- Removing any radioactive isotopes (used for cancer treatment), prostheses, silicone implants, and medical devices that can explode under extreme heat.
- A single body inside a flammable container is then entered into a pre-cremation chamber. Once the incinerator has reached 1500 degrees Fahrenheit, mechanized doors are opened, allowing the wood or cardboard container to enter the main cremation chamber.
- The body will dry, crack, char and vaporize. The bone becomes calcified and crumbles into the white 3 to 9 pounds of "ash".²

Chinese Annual Energy Consumption



Knowing Death

Death is defined as the act of passing away,

the end of life,

or the permanent destruction of something.

Everyone knows that death is the end of life, and human beings cannot escape the fate of death in the end. However, talking about death is always taboo. Or out of fear and fear of death, perhaps for religious and cultural reasons. Because of the mystery, pain, disillusionment and nothingness of death.



Three Status of Death

Physical

First State is when your body function is stopped.

Social

Second State is when your corpse being transported to the grave.

Memory

Third State is, at some point in the future, your name was last mentioned.

PHYSICAL DEATH

Body Research ■ Major Constituent Elements of the Human Body
 ■ Major Constituent Elements of the Earth

| | | | | | | | | | | | | | | | | | |
|--------------------------|-----------------------|------------------------|----------------------------|----------------------|-------------------------|------------------------|-----------------------|-------------------------|---------------------------|--------------------------|--------------------------|-----------------------|------------------------|------------------------|--------------------------|-------------------------|------------------------|
| 1 H Hydrogen | | | | | | | | | | | | | | | | | 2 He Helium |
| 3 Li Lithium | 4 Be Beryllium | | | | | | | | | | | 5 B Boron | 6 C Carbon | 7 N Nitrogen | 8 O Oxygen | 9 F Fluorine | 10 Ne Neon |
| 11 Na Sodium | 12 Mg Magnesium | | | | | | | | | | | 13 Al Aluminium | 14 Si Silicon | 15 P Phosphorus | 16 S Sulfur | 17 Cl Chlorine | 18 Ar Argon |
| 19 K Potassium | 20 Ca Calcium | 21 Sc Scandium | 22 Ti Titanium | 23 V Vanadium | 24 Cr Chromium | 25 Mn Manganese | 26 Fe Iron | 27 Co Cobalt | 28 Ni Nickel | 29 Cu Copper | 30 Zn Zinc | 31 Ga Gallium | 32 Ge Germanium | 33 As Arsenic | 34 Se Selenium | 35 Br Bromine | 36 Kr Krypton |
| 37 Rb Rubidium | 38 Sr Strontium | 39 Y Yttrium | 40 Zr Zirconium | 41 Nb Niobium | 42 Mo Molybdenum | 43 Tc Technetium | 44 Ru Ruthenium | 45 Rh Rhodium | 46 Pd Palladium | 47 Ag Silver | 48 Cd Cadmium | 49 In Indium | 50 Sn Tin | 51 Sb Antimony | 52 Te Tellurium | 53 I Iodine | 54 Xe Xenon |
| 55 Cs Caesium | 56 Ba Barium | 57 La* Lanthanum | 72 Hf Hafnium | 73 Ta Tantalum | 74 W Tungsten | 75 Re Rhenium | 76 Os Osmium | 77 Ir Iridium | 78 Pt Platinum | 79 Au Gold | 80 Hg Mercury | 81 Tl Thallium | 82 Pb Lead | 83 Bi Bismuth | 84 Po Polonium | 85 At Astatine | 86 Rn Radon |
| 87 Fr Francium | 88 Ra Radium | 89 Ac** Actinium | 104 Rf Rutherfordium | 105 Db Dubnium | 106 Sg Seaborgium | 107 Bh Bohrium | 108 Hs Hassium | 109 Mt Meitnerium | 110 Ds Darmstadtium | 111 Rg Roentgenium | 112 Cn Copernicium | 113 Nh Nihonium | 114 Fl Flerovium | 115 Mc Moscovium | 116 Lv Livermorium | 117 Ts Tennessine | 118 Og Oganesson |
| * 58 Ce Cerium | | | | | | | | | | | | | | | | | |
| 59 Pr Praseodymium | | | | | | | | | | | | | | | | | |
| 60 Nd Neodymium | | | | | | | | | | | | | | | | | |
| 61 Pm Promethium | | | | | | | | | | | | | | | | | |
| 62 Sm Samarium | | | | | | | | | | | | | | | | | |
| 63 Eu Europium | | | | | | | | | | | | | | | | | |
| 64 Gd Gadolinium | | | | | | | | | | | | | | | | | |
| 65 Tb Terbium | | | | | | | | | | | | | | | | | |
| 66 Dy Dysprosium | | | | | | | | | | | | | | | | | |
| 67 Ho Holmium | | | | | | | | | | | | | | | | | |
| 68 Er Erbium | | | | | | | | | | | | | | | | | |
| 69 Tm Thulium | | | | | | | | | | | | | | | | | |
| 70 Yb Ytterbium | | | | | | | | | | | | | | | | | |
| 71 Lu Lutetium | | | | | | | | | | | | | | | | | |
| ** 90 Th Thorium | | | | | | | | | | | | | | | | | |
| 91 Pa Protactinium | | | | | | | | | | | | | | | | | |
| 92 U Uranium | | | | | | | | | | | | | | | | | |
| 93 Np Neptunium | | | | | | | | | | | | | | | | | |
| 94 Pu Plutonium | | | | | | | | | | | | | | | | | |
| 95 Am Americium | | | | | | | | | | | | | | | | | |
| 96 Cm Curium | | | | | | | | | | | | | | | | | |
| 97 Bk Berkelium | | | | | | | | | | | | | | | | | |
| 98 Cf Californium | | | | | | | | | | | | | | | | | |
| 99 Es Einsteinium | | | | | | | | | | | | | | | | | |
| 100 Fm Fermium | | | | | | | | | | | | | | | | | |
| 101 Md Mendelevium | | | | | | | | | | | | | | | | | |
| 102 No Nobelium | | | | | | | | | | | | | | | | | |
| 103 Lr Lawrencium | | | | | | | | | | | | | | | | | |

11 Major Constituent Elements of the Human Body

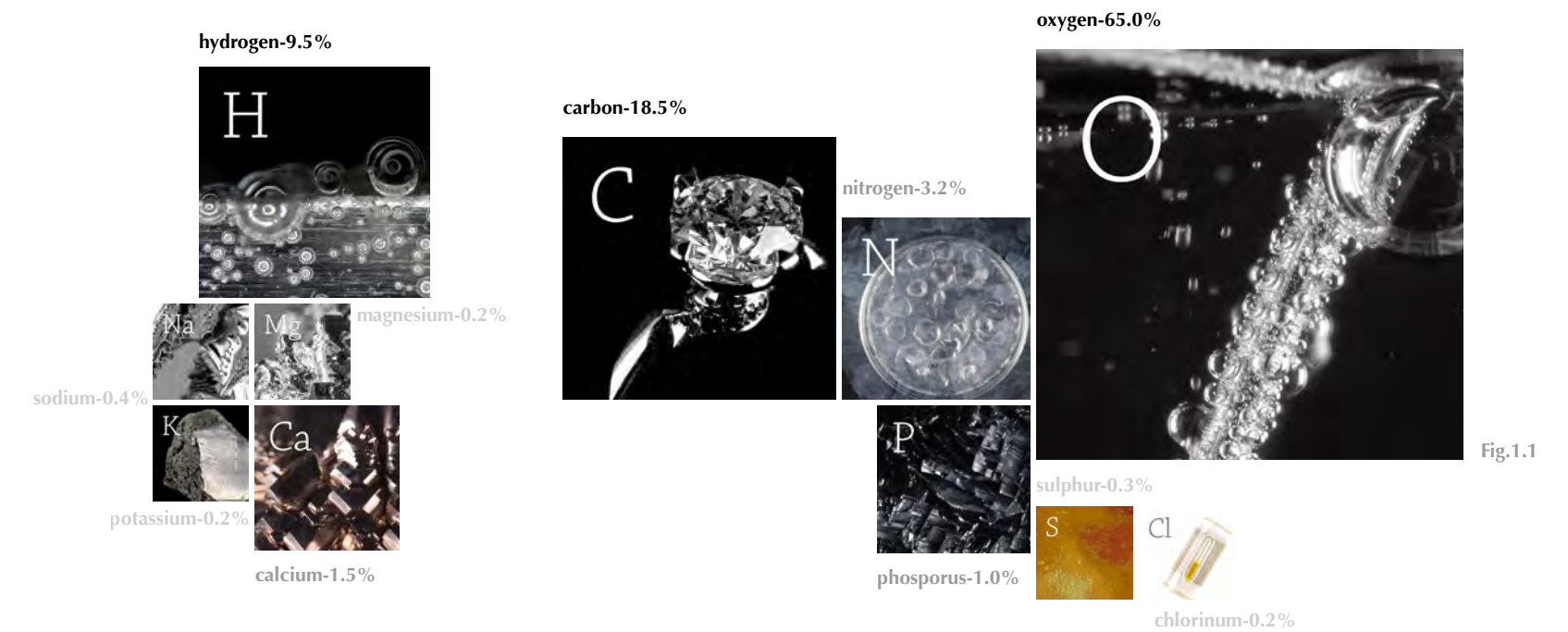


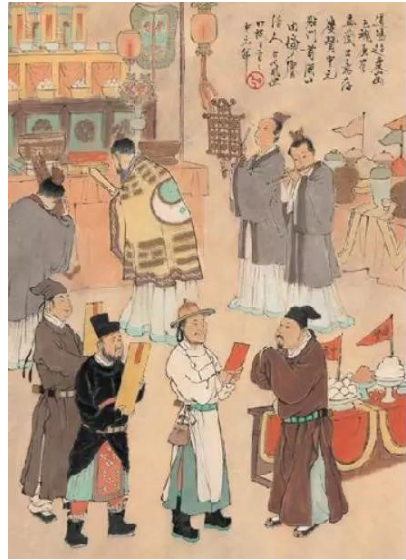
Fig.1.1

The human body has essentially the same chemical basis as the earth itself, making it suitable to contribute to a natural ecology.

99% of human body mass is made up of only six elements: oxygen, carbon, hydrogen, nitrogen, calcium, and phosphorous.¹

DEATH IN SOCIAL STATUS

Fig.1.3



- Preparation of the Body
- Preparation of the Home
- Proper Funeral Etiquette
- The Wake
- A Monk's Vigil
- The Funeral Procession
- The Burial

Chinese Funeral Tradition Ritual

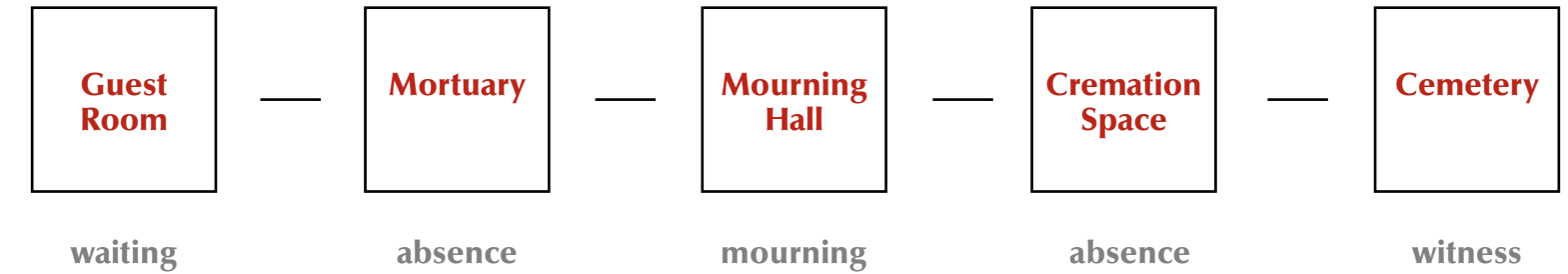
Traditionally, Chinese families are known to host lavish funeral ceremonies with complex processes for their loved ones. Elaborate funerals help determine status in society. **The family plays a key role in organizing the funeral.**

In traditional Chinese society, solemn funerals are an important part of expressing grief and seeking psychological support. The death of a loved one is the highest degree of psychological trauma. Though grief needs to be addressed, we also need to look at the practicality of burial rituals.

The most important thing of the ceremony is serving the dead as if they were living and they were still with us. Even through mourning, we should be aware of sustainable practices to bury our dead. Through mourning, living members process grief and are able to carry on living while accepting loss of loved ones.¹

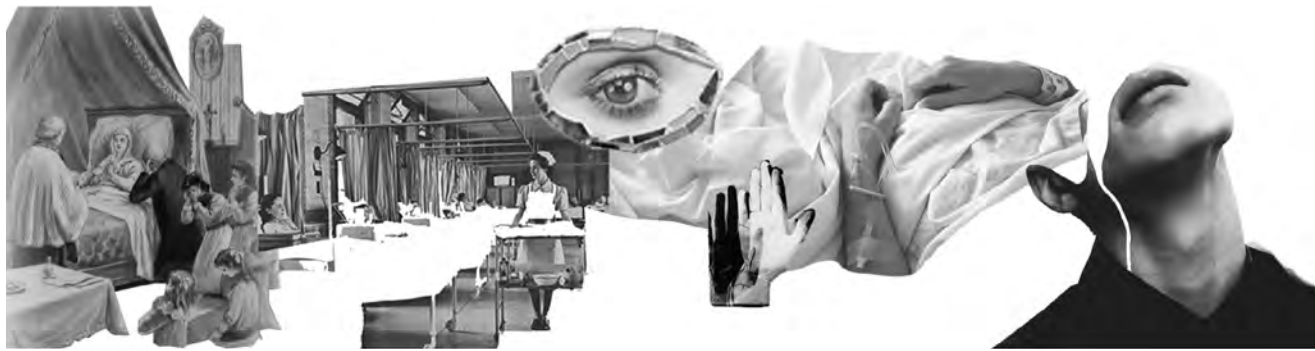
Contemporary Program

The funeral industrial complex leaves little room for direct meaningful involvement and has robbed the family of valuable hands-on engagement and ritual.³ In an attempt to shield the grieving from the realities of death, these methods of procedure have become inhumane, lack ritual and ceremony, and are insensitive to those left behind.⁴



Contemporary Ritual Issue

"Funerals once took place in the family home, facilitated by the surrounding community. The early 20th century saw the rise of the burial industry. Family funerals were replaced with companies and professional technicians. Turning death into a financial transaction leads to 'care' that is profit-centered rather than human-centered, with the corpse itself becoming a commodity."²



1. Wolfelt, "Why Is the Funeral Ritual Important?"
 2. Doughty, "Why You Should Spend Time With A Dead Body."

Family's Behavior



Positive (Participation)



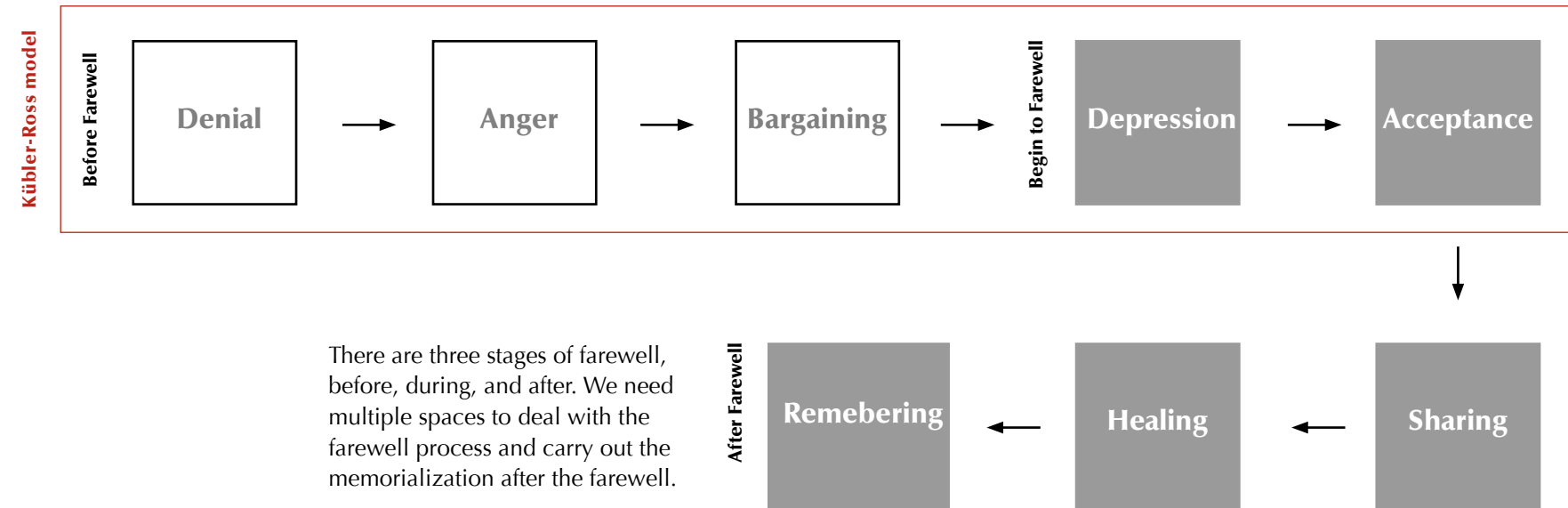
Negative (Absence)

3. The order of the good death, "Everthing you need to get started."
 4. Archer, "Funerals are expensive, broken and exploitative, They have to change."

DEATH OF MEMORY

Stages of The Farewell

Elisabeth Kübler-Ross, a Swiss American psychiatrist, examined the five most common emotional reactions to loss in her 1969 book, "On Death and Dying."



Depression

Three types of grief ritual interventions were categorized:¹



honor the deceased loved one and to keep a symbolic bond



let go of the traumatic experience



self-transform

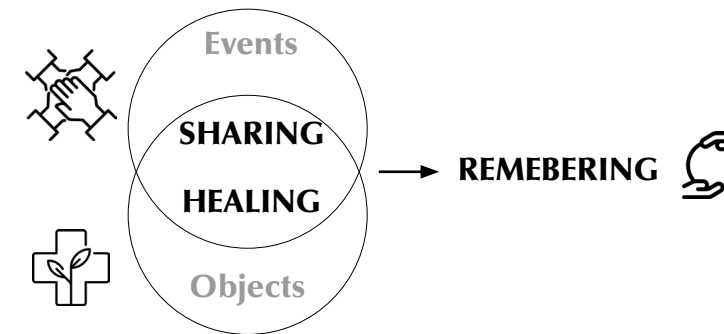
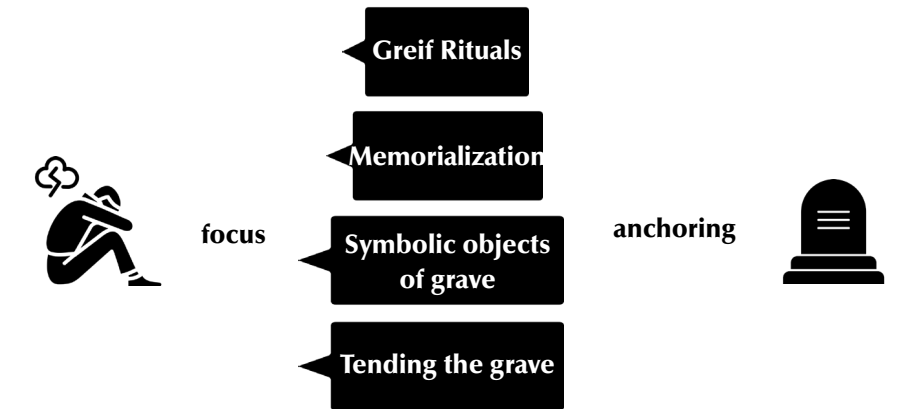
Acceptance

People acknowledge the reality of the loss, which can be enhanced by **participating** in the farewell process and **attending** memorial services and funerals. Psychological studies concluded again and again that the more involved the next of kin are in end-of-life rituals, the better they cope with grief.² This is in strong contrast to the death industry, which is becoming increasingly more privatized.

Dialogue and Relationship

After Farewell

People need to find a way to develop an enduring connection with the deceased even as they embark on a new life.³ The continuing link between the living and the deceased is often manifested and sustained through material objects. These objects provide multi-faceted benefits; they fulfill the need for a "focus," enable the "anchoring" of the deceased and provide a tangible object which the bereaved can visit and interact with. There is a complex dialogue between bereaved people and the deceased that included tending the grave, headstone, and adjacent grounds, and participation in personal rituals that included saying prayers, placing flowers, and depositing grave goods. Tending the grave "appears to serve as a proxy act of physical contact with the deceased" and the choice of the headstone is a fundamental intervention by the living to reconstruct the identity of the deceased.⁴



By using **symbolic objects** and **acts**, people are able to enact their feelings into ritual action. Although the loss cannot be changed, rituals create an opportunity to express and enact painful emotions.⁵

It's time to relink the relationship between the dead and the living. The safe, open interaction with death and dead bodies would provide a sense of purpose for family and friends and would create a space for us to unburden our grief to discover a path toward healing.

1. Wojtkowiak, Lind, Smid, "Ritual in Therapy for Prolonged Grief: A Scoping Review of Ritual Elements in Evidence-Informed Grief Interventions."

2-3. Gire, "How Death Imitates Life: Cultural Influences on Conceptions of Death and Dying,"
4. Clayden and Dixon, "Woodland burial: memorial arboretum versus natural native woodland?"

5. Wojtkowiak, Lind, Smid, "Ritual in Therapy for Prolonged Grief: A Scoping Review of Ritual Elements in Evidence-Informed Grief Interventions."

Green Burial Practices

You become a memory through a tree.

The whole forest could be the **collective memory** of loved ones.

Immortality

Do not stand
By my grave, and weep.

I am not there,
I do not sleep—

I am the thousand winds that blow

I am the diamond glints in snow

I am the sunlight on ripened grain,

I am the gentle, autumn rain.

As you awake with morning's hush,

I am the swift, up-flinging rush

Of quiet birds in circling flight,

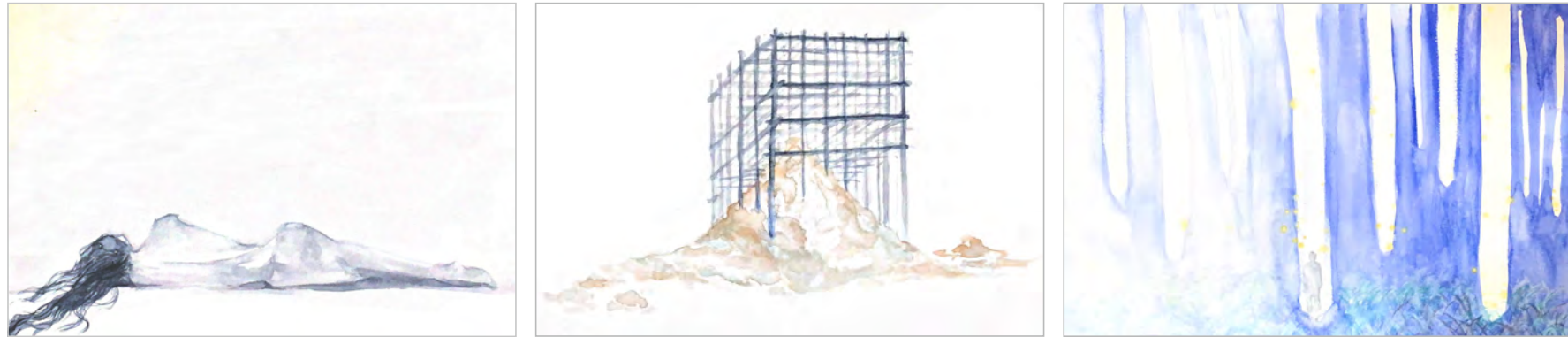
I am the day transcending night.

Do not stand
By my grave, and cry—

I am not there,
I did not die.

— Clare Harner, 1934

Earthen Burial - Cremation- Green AfterLife



I will not be trapped in a coffin or an urn;
I will be grass, I will be trees, I will be wind, I will be rain, I will be part of any living thing and everything you can perceive.

You Will Be The Part of Nature

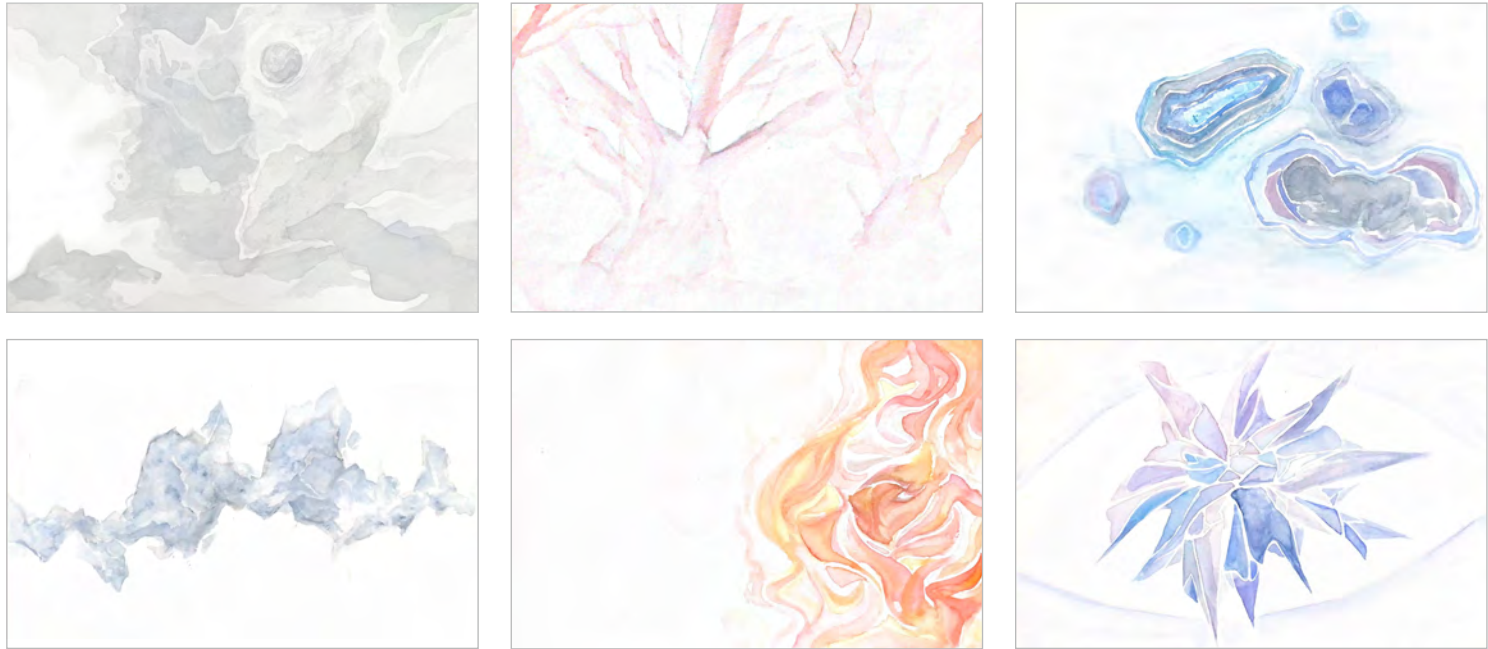




Fig.1.4



Fig.1.5

Biodegradable Vessels

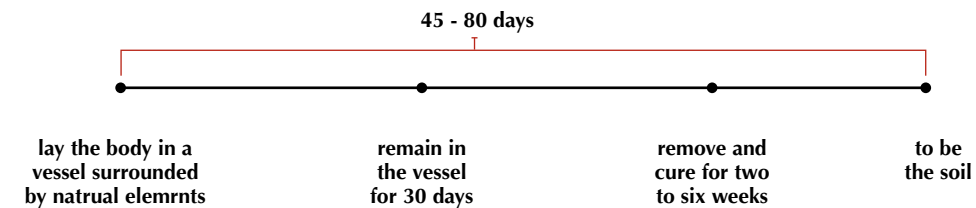
A biodegradable burial container, simply put, is a container you place the body into for burial that will decompose naturally and become part of the earth. In order to qualify as "green" the burial container needs to be made from natural materials, free from toxic chemicals, and capable of being broken down by bacteria and other living organisms.

"The burial places can gain more nutrients, so the government can find more open space and reserve natural habitats. It can also increase the biotic diversity to let animals and plants have better concentration, which can provide wildlife corridors and protect the ecosystems. This is a win-win-win situation for both human, animals and the environment."¹

- Banana Leaf
- Willow
- Wool
- Seagrass
- Bamboo
- Woven Fiber Casket
- Biodegradable Cardboard
- Biodegradable Pod
- Biodegradable Shroud
- Water-soluble Vessels

Remains

- Protein
- Carbon
- Hydrogen
- Oxygen
- Nitrogen



Remains

- A Square Meter of Soil

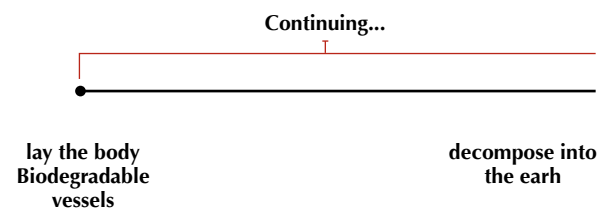
Soil transformation & Human composting

Soil transformation creates a vessel system. The mixture of wood chips, alfalfa, and straw, is a really great mixture that contains a lot of carbon and nitrogen, ready to break down inside the container.

"Then lay the body on top of those materials. Add more of the materials on top of the body. Over a 30-day span, provide oxygen, some moisture and a little sprinkle of water here and there. The microbes and bacteria that are around us all the time, that are on those wood chips and that are in the air, break down the body. The process is more colloquially, human composting. The soil will nurture growth on the same forest floor that inspired its creation, allowing us to give back to the earth that nourishes us all our lives."²



Fig.1.6

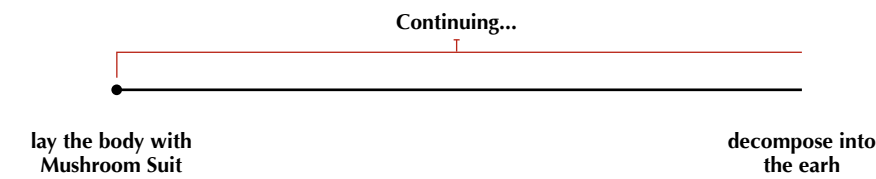


1. Newman, "11 Environmentally Friendly Burial Options."

2. Spade, "When I die, recompose me."

Mushroom Suit

The suit which comes in black or natural has removable hand and head coverings and is made from natural biodegradable material. "The primary fungus used in this suit is Mycelium. The mushrooms and other microorganisms within the suit germinate and begin to grow, which delivers nutrients from the body to surrounding plant roots efficiently. As they grow they gradually decompose the body around them. The process **neutralizes many of the body's toxins** like lead, mercury, pesticides, and BPA. This process creates a nutrient-rich carcass that feeds the earth."¹



Remains

- **Nutrients**

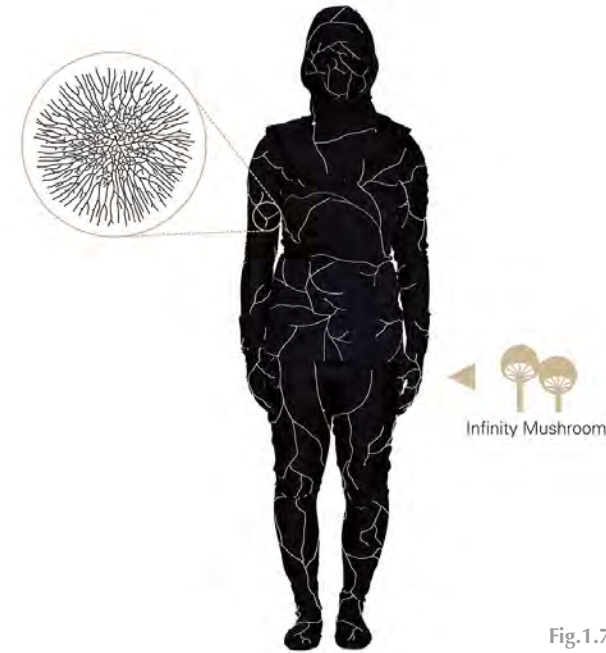


Fig.1.7

Water Cremation

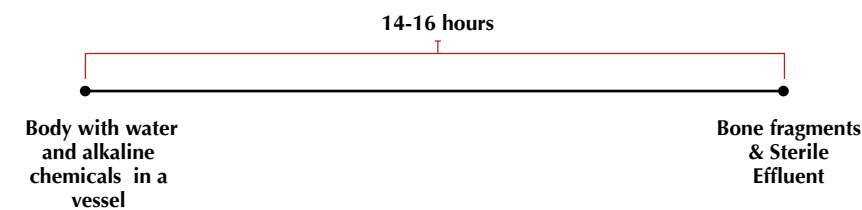


Remains

- **Bone fragments (calcium)**
- **Sterile Effluent (water, salt, sugars, amino acids, peptides)**

Water cremation is the process of alkaline hydrolysis harnessed to break a body down into its chemical components using water, lye, pressure and heat. The body is effectively broken down into its chemical components, which takes approximately four to six hours.

"Many have uncomfortably analogized this process to 'pouring bodies down the drain,' a characterization that often overlooks the fact that body fluids and blood are routinely poured down the drain during traditional embalming practices."²



Anaerobic Bio-Conversion

Remains

- **Biogas Covered into Energy/Light**
- **Organic Compounds**
- **Inert Inorganic Content**

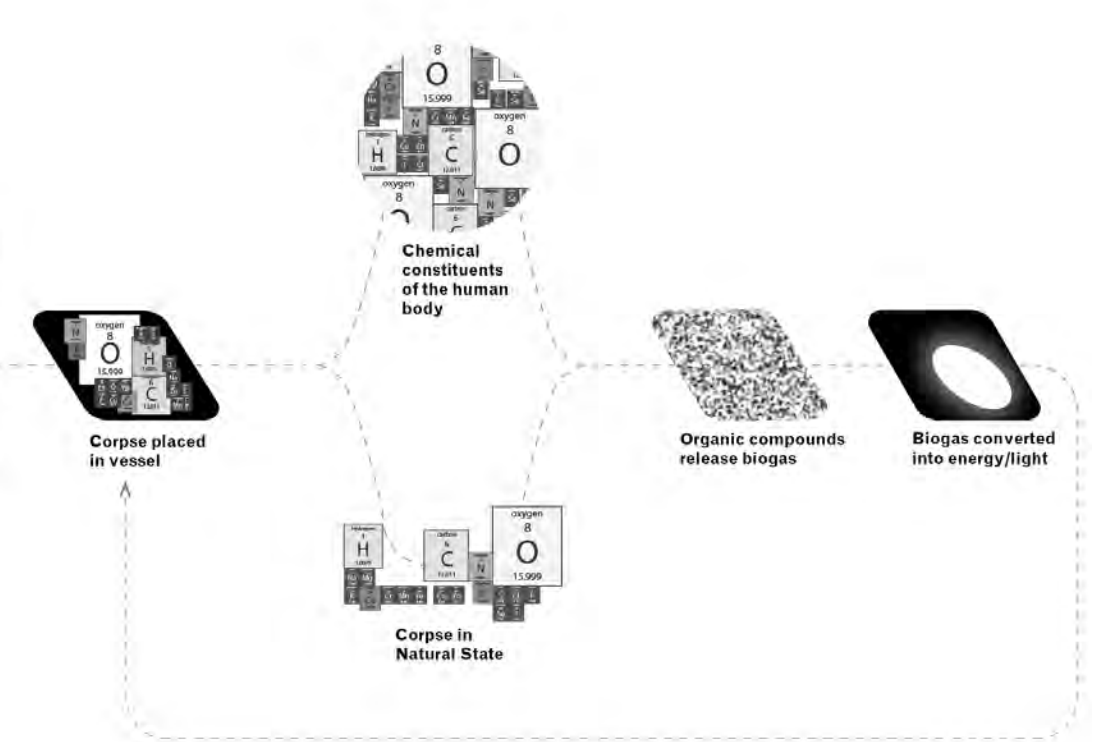
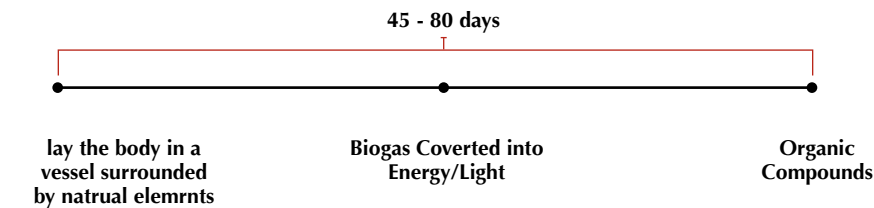
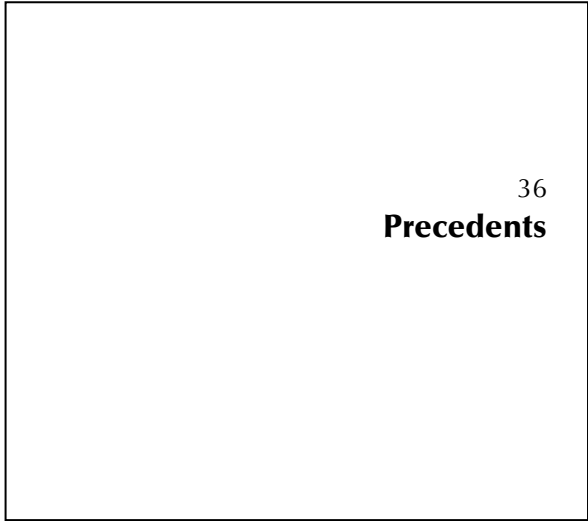


Fig.1.8

"Disposition occurs within discrete Anaerobic Bioconversion Vessels — utilizing microbial methanogenesis to break down organic matter — distilling the corpse to its basic chemical and biological components. Energy, in the form of light, will be produced through the generation of methane via anaerobic carbon cycling. Small amounts of remaining organic compounds provide nutrients for plant growth, while inert inorganic content will be suitable as a memento, equivalent to memorial remains."³



II

Facility

Sacred Space

Theater

Memorial

Farewell Architecture

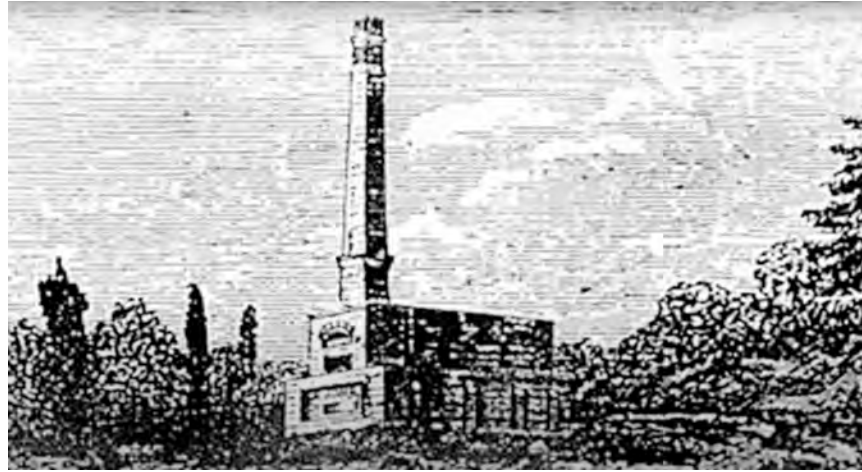


Fig.2.1

The first crematorium in the UK named Woking Crematorium was built in the 1870s. When this was first built, there were protests in the local village. Cremation wasn't socially acceptable, and 99.8 percent of people got buried.¹ However, only a hundred years later, three quarters of citizens get cremated.

The **CHARACTER** of the Farewell Architecture fluctuates between that of a factory, that of a sacred space, that of a theatre and that of a memorial.

Sacred space

Crematoria features all kinds of expressions of the metaphysical. Some are actually ecclesiastical in character, for example by including some sacred space. expressing grandeur as that which is larger than (human) life, often charged with symbolism.²

Facility

This element is part of burial space by definition. It provides the functionality for the burial.

Theater

The farewell spaces also are the theatres of the final farewell, especially when ceremonies are held in them. The building can dramatize this moment, as described earlier but, contrastingly, it can also be a space for a 'performance'.³

Memorial

Memorial is something that keeps remembrance alive. After the whole farewell process, people needs a spaces with symbolic meaning to mourn and capture special memories of your loved one.

Sacred space

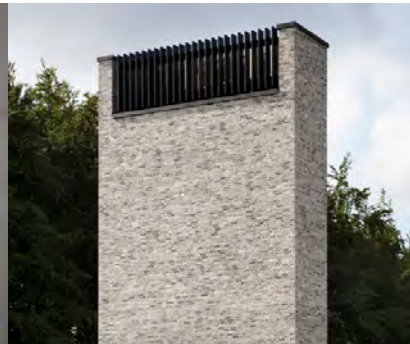


Crematorium Baumschulenweg,
Shultes Frank Architekten, 1998
Fig.2.2

Facility



Woodland Cemetery,
Johan Celsing, 2013
Fig.2.3



Communal Crematorium,
Henning Larsen, 2013
Fig.2.4



Tower of Silence,
5th century BCE
Fig.2.5



Crematory In Parma,
Studio Zermani e Associati, 2009
Fig.2.6



Satori Harbor,
Wutopia Lab, 2016
Fig.2.7



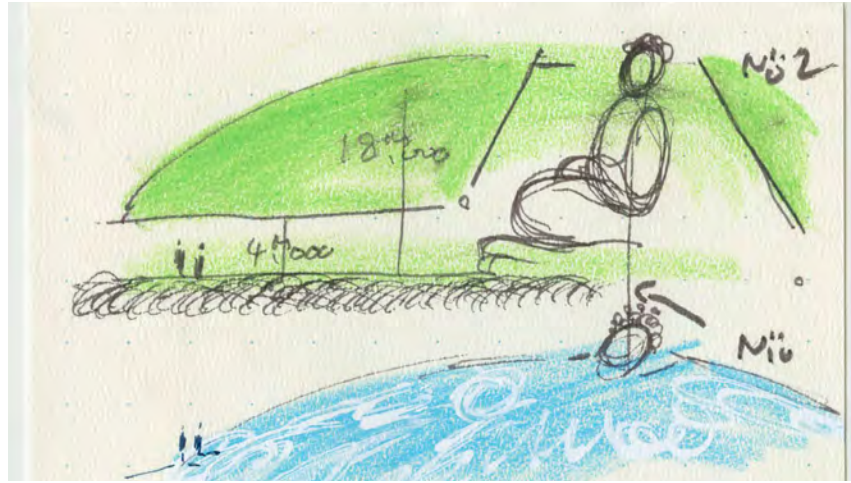
The Memorial to the Murdered Jews of Europe,
Peter Eisenman, 2005
Fig.2.8

Memorial



Fog Assembly,
Olafur Eliasson, 2016
Fig.2.9

1. The Crenation Society, "History of modern cremation in the United Kingdom 1847-1974."
2-3. Visschers, Cramwinkel, and Coenengrachts, *Goodbye Architecture*, 187-8.

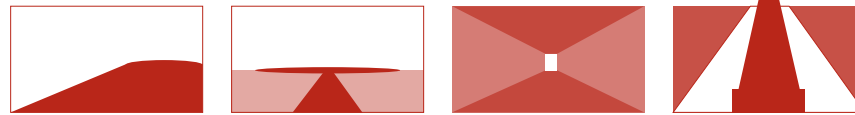


Sketch, Tadao Ando
Fig.2.10

NARRATIVE

The design intention was to create a vivid spatial sequence. Beginning with the long approach through the tunnel in order to heighten anticipation of the statue, which is invisible from the outside. When the hall is reached, visitors look up at the Buddha, whose head is encircled by a halo of sky at the end of the tunnel.

Spatial sequence



landscape

long approach

dark tunnel

main space

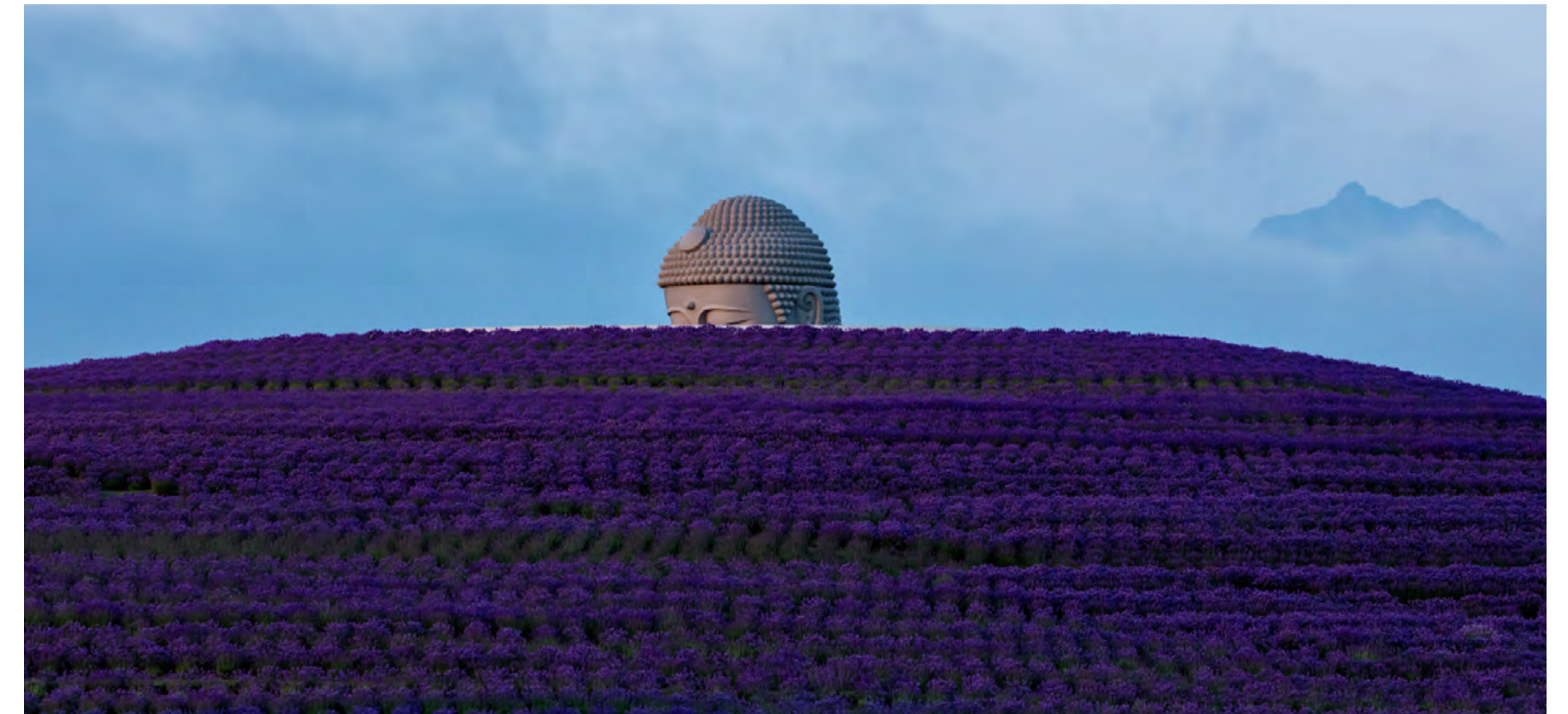
1. Ando, "The Hill of the Buddha."

Makomanai Takino Cemetery - The Hill of the Buddha Tadao Ando, Japan, 2015

REAL ARCHITECTURE

The site is a gently sloping hill on 180 hectares of lush land belonging to a cemetery. The vegetation provides a seasonally appropriate backdrop for the statue to turn fresh green in spring, pale purple in summer and silky white with snow in winter. Creating a more harmonious inclusion within its natural surroundings of a monumental Buddha statue. Embedded under the hill are a 40-meter approach tunnel and a rotunda embracing the statue. Merging construction and landscape to create a spiritual experience through the tools of space and atmosphere.¹

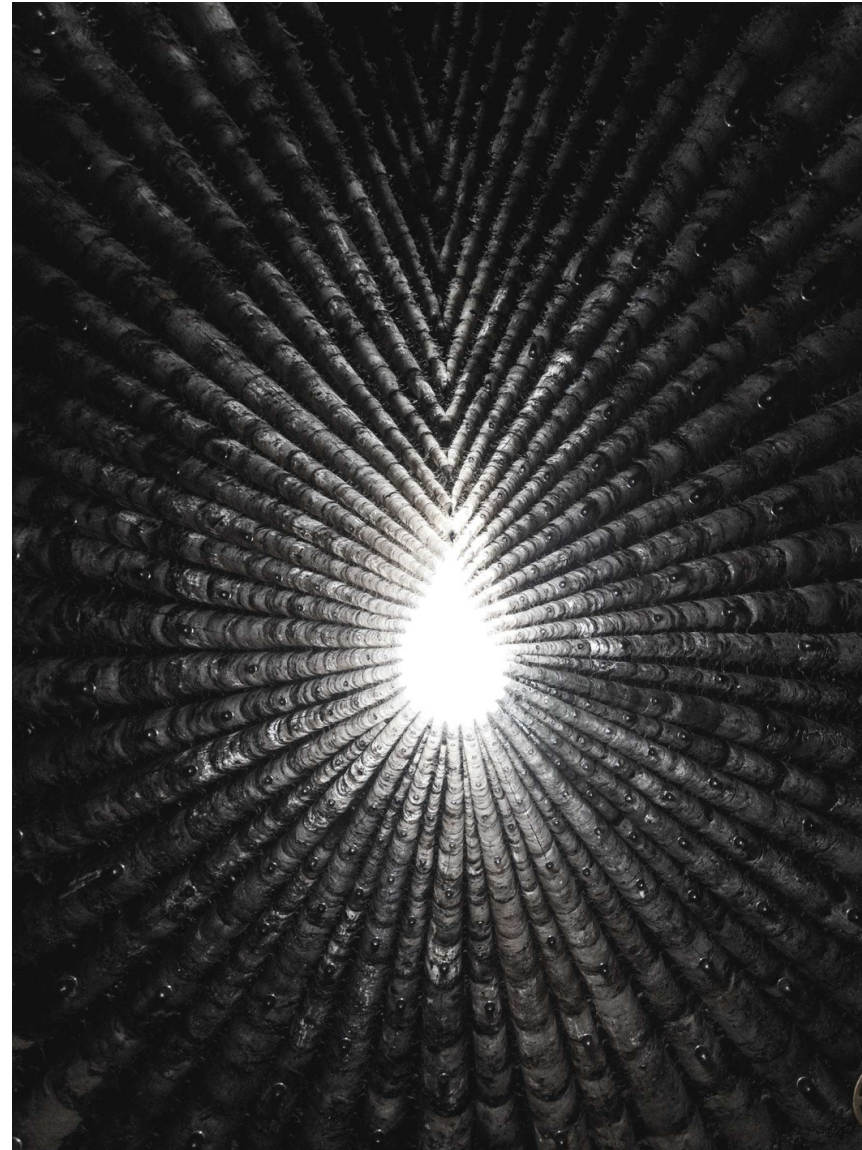
Fig.2.11



Brother Klaus Field Chapel
Peter Zumthor, Wachendorf, Germany, 2007

REAL ARCHITECTURE

ATMOSPHERE

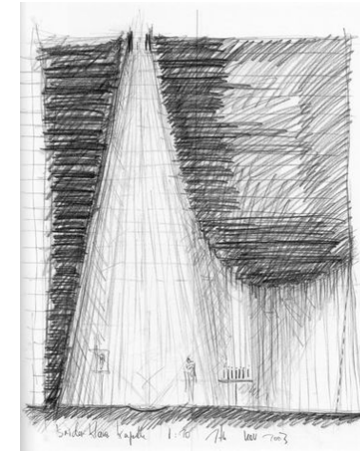


"The chapel is made of 112 tree trunks. After the frame was completed, layers of concrete were poured and rammed over the existing surface, each around 50cm thick. When the 24 layers of concrete had set, the wooden frame was set on fire, leaving behind a hollowed blackened cavity and charred walls. The chapel evokes a somber and reflective character. " Additionally, from the outside, there are 350 small holes on the walls, which are covered with glass - unglazed tear-drop oculus- spheres on the inside. These elements add a special touch to the atmosphere of the place.¹



Fig.2.12-13

Sketch, Peter Zumthor
 Fig.2.14



Lighting  SEE

The central hollow is completely opened to the sky and lets light and rain come into the chapel's dark center. 350 tear-drop oculus embedded in wood frames reflects the light making the space warm during the silence.

Interior Photography, H el ene Binet
 Fig.2.15



Material  SMELL

The pine formwork was burned out, leaving a characteristic vertical texture and pine smell on the concrete walls inside the building.

Sketch of Plan, Peter Zumthor
 Fig.2.16



Form & Memory

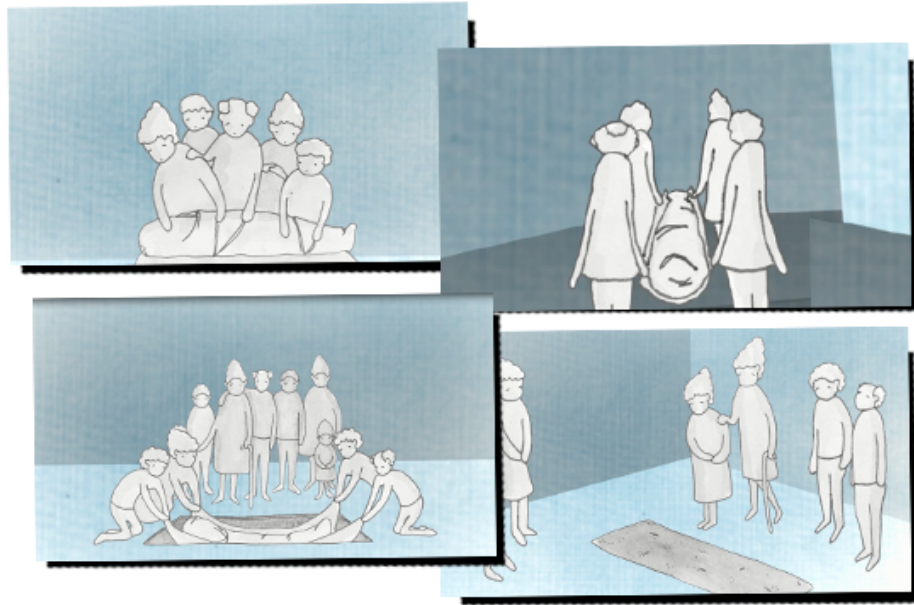
The womb-shaped space has 350 tear-drop oculi embedded in wood frames presenting warmth and sensuality, which is said to reference a vision Brother Klaus - the client for this project- experienced, of floating in his mother's womb and seeing an enormous starburst.²

Detail Photography, H el ene Binet
 Fig.2.17



 THINK

1. Sveiven, "Bruder Klaus Field Chapel / Peter Zumthor."
 2. Phaidon, "Sacred Stories- Bruder Klaus Field Chapel."



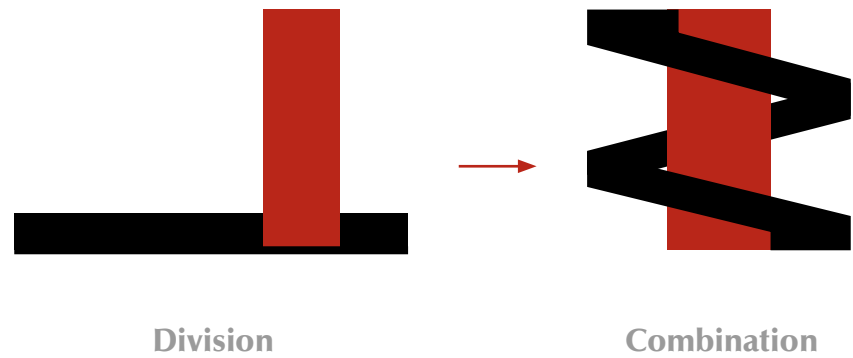
Sketch, Katrina Spade
Fig.2.18

FAMILY PARTICIPATION

The design makes the family intervene in the process of burial to create an intimate ceremony, which decreases the fear of death and the cruelty of factory characteristics.

Bodies are placed into the building core during the laying in ceremony. Friends and family begin their loved one's transformation from human to soil by covering the body with woodchips at the top of the core.

Public Circulation



1. Spade, "Of Dirt and Decomposition: Proposing a Place for the Urban Dead."

Urban Death Project Katrina Spade, Seattle,US, 2016

At the heart of each Urban Death Project facility is a three-story core containing our unique compost-based renewal system. Although this core is being engineered to be replicated entirely, each building that houses a core can and should be unique, designed specifically for the neighborhood in which it resides.
"Bodies of the deceased are placed inside this core by their friends and families during a ceremony. Over the span of a few months, with the help of aerobic decomposition and microbial activity, bodies decompose fully, creating rich soil that can be used to grow new life."¹

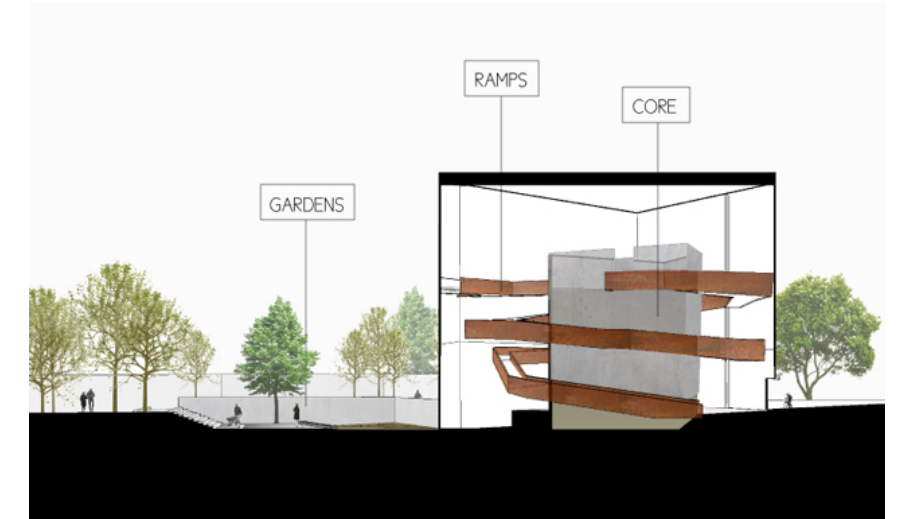


Fig.2.19-21

Fig.2.22



Moksha Tower

Yalin Fu, Ihsuan Lin, Mumbai, India

"Moksha Tower provides burial space for four major religions in Mumbai, which are Hindus, Muslims, Christians and Parsis. As these religions practice different funerals and methods of disposal for dead, the tower is designed to meet the needs of all these religions. For Hindus, facilities for cremation is equipped, and new technologies is adopted to decrease the pollution caused by activities like open burning of bodies. For Muslim and Christian, the tower provides areas for burial and garden burial and funerals; For Parsis, a structure called Tower of Silence is located on the roof of the tower, used for bodies to be exposed to vultures."

Besides the basic facilities for burial process, Moksha Tower also features public green spaces throughout entire building, allowing families of dead to pray, worship and meditate, these green spaces also help reduce pollution of the city, improving the environment of the city.¹

1. Yoneda, "Vertical Cemetery is a Greenery Clad Final Resting Place for Mumbai."



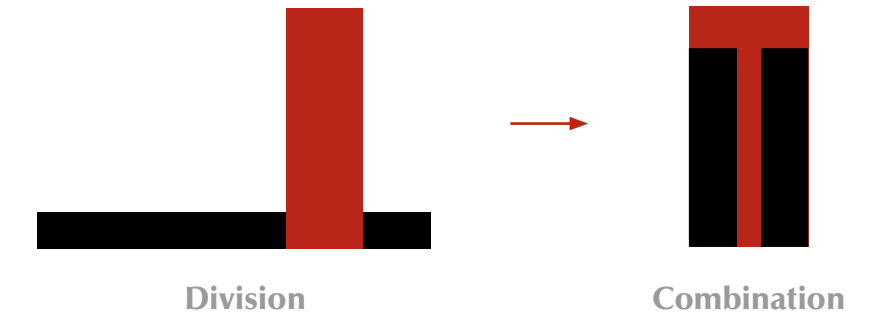
Fig.2.23

The Moshka Tower was designed for Mumbai to free up a significant amount of ground space for the living, accommodating all four of the major cultures and religions found within the city (Hindu, Muslim, Christian and Parsi.)

A tower of silence is located on the roof for Parsis, and additional space is available for worship, prayer and meditation. The multi-layered facade is filled with vegetation to absorb heat and CO2, and new technology enables more sustainable cremation that doesn't fill the air with pollution.

RESPECT DIFFERENT RELIGIONS

Structure

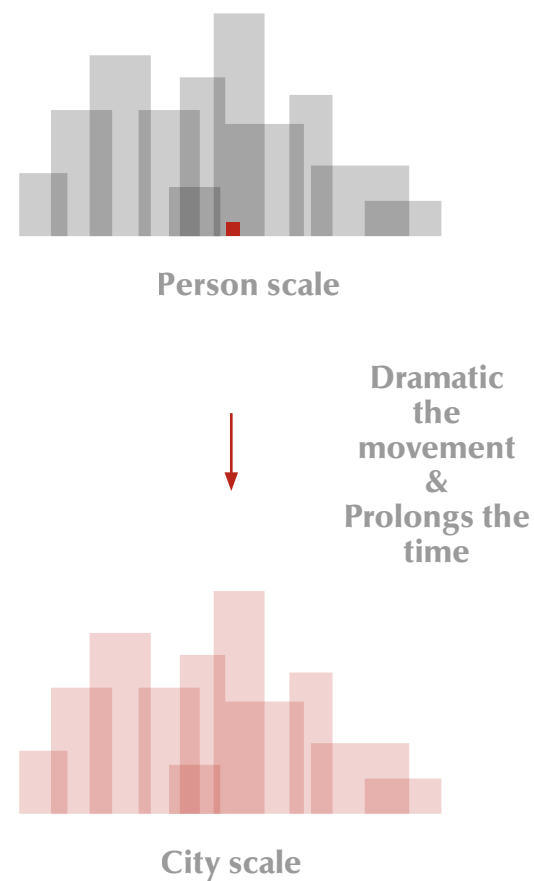


Generally speaking, the function of cemeteries to provide technical facilities is concealed from the public because the funeral industry is based on the principle of protection, sanitation, and beautification of the corpse to avoid people knowing the reality. However, the **structure** and the **circulation** in these two precedents provide the possibility of companying with the dead to help family and friends of the dead to say goodbye closely.

LANDSCAPE SCALE

The project elevates the individualized event of death to the level of the landscape and prolongs the consequentiality of death, treating death as a visible process.

The dramatic blue, dyes the river, smog and rain of our city as it slowly colors the entirety of London. This forced the city of the living to engage with the city of the dead, in the present, for the benefit of the future, and of the past.



This blue dye is drawn out of the shroud during resomation, coloring the effluent water, garden, building and river Thames blue.

Fig.2.24

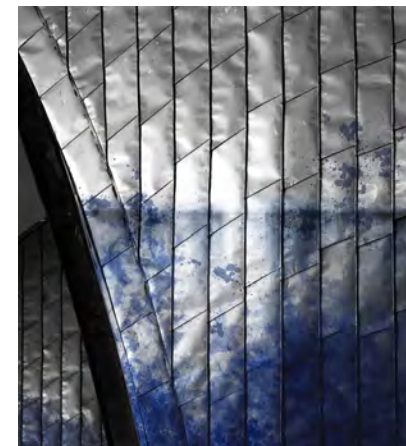


Fig.2.25

This project build a new city of the dead where Chelsea's pleasure gardens once stood. "Bodies arriving at the London Physic Gardens would be wrapped in a blue shroud printed using the cyanotype process with patterns of the necropolis structures, rendered obliquely. Inside the resomation chamber, the Prussian blue pigment would leach into the water, which is then used to water the gardens. This blue water would also leach from the soil into the Thames, dying the river blue. It would also enter the water cycle, raining down on the city and eventually staining its buildings blue, too. The gradual colouring would serve as a constant reminder of death and the impact of climate on the city."¹

London Physic Gardens
Sam Coulton, London, UK, 2018

CONCEPTUAL ARCHITECTURE

1. Coulton, "London Physic Gardens: A New Necropolis."



Touching My Father

Song Dong, 1977-2011, Performance by Video

In China, the elders and younger generations will not hug, shake hands and initiate other intimate physical contact. The relationship of the father to the son is like that of the king to his people.

"Touching My Father 1997. Song Dong quotes about his experience "While I was touching him with my video projected hand, he was smoking. Unexpectedly, with his eyes on my 'hand' ,he started to take off his jacket, the shirt and the vest until he was half naked, feeling my hand with his bare back..."¹



Fig.2.26

1. Dong, "Song Dong: Art as My Life."

The Eternity of Farewell and Sharing

The artist cast the last image of his father on the water. The thought of his father drove him to reach out and touch the invisible and intangible father reflected on the water with warm hands. Watching his father's image disappear and reappear he could recreate the sensation of touching his father. This led him to say a final goodbye to his father.

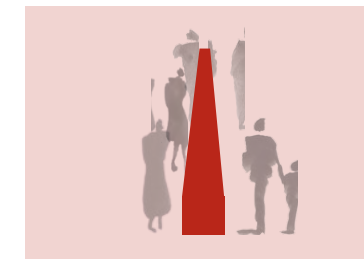


individual

Interactive intervention



Enlarge the Emotion
&
Strengthen the Moment



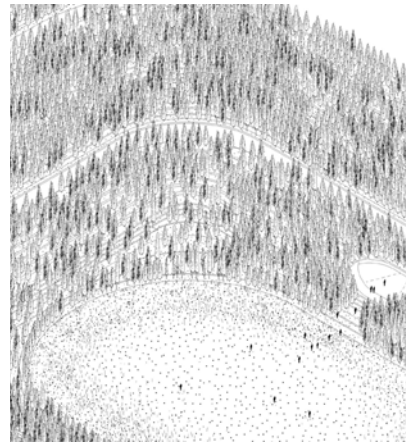
Collective

If eternity really exists, then farewell is an eternal ritual. Happening or loss is a momentary thing, what exists is memory and nostalgia. At a certain moment, people suddenly remembered the picture in memory. The memory of the final goodbye is a moment that can be remembered for eternity.

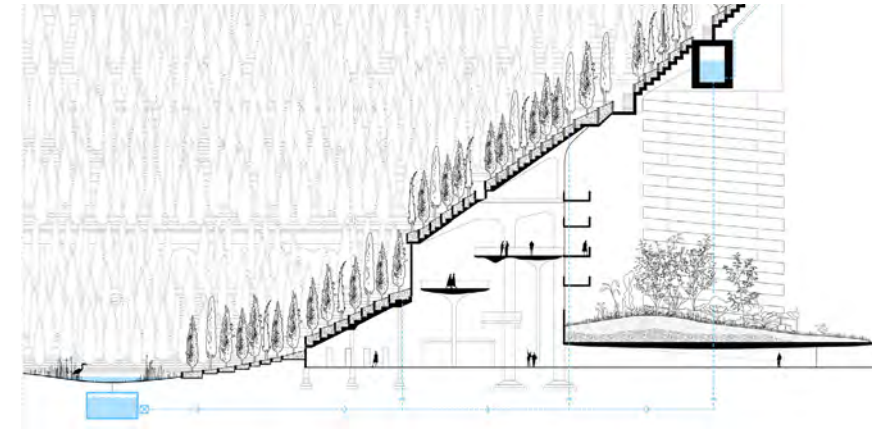
Fig.2.27



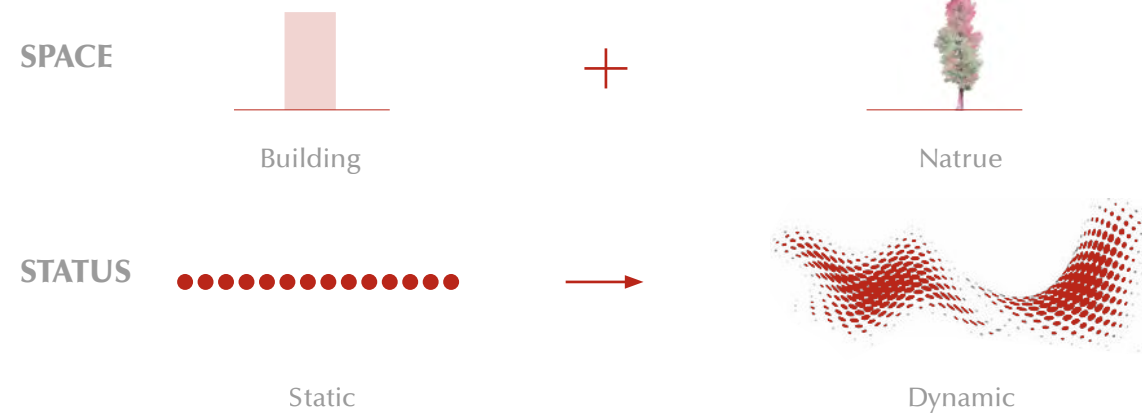
COEXIST WITH NATURE



Rather than create a monument with a fixed identity—such as a statue—he is proposing one that will exist in a state of flux and change. The concept of a memorial that is a living, changing entity. The cypress is a common ornamental tree cultivated for millennia throughout the whole Mediterranean region. The dark green vertical shape of these trees is a highly characteristic signature of cemeteries and sacred spaces, like a symbol of immortality, emblem of life after death.



Section Drawing, Angelo Renna Fig.2.28



San Siro as Coronavirus Memorial
Angelo Renna, Milan, Italy. 2020

Italian architect Angelo Renna has suggested planting 35,000 cypress trees in Milan's San Siro stadium to turn it into a public memorial for those that lost their lives during the coronavirus pandemic. To create the memorial Renna proposed removing the stadium's roof and taking out the seating, before covering the stands with the earth into which 35,000 cypress trees would be planted – around one for each death in Italy.

Large holes would be cut through the stadium's stands to create new public routes to a central grassed area.¹ The memorials still in the planning stages are massive in size; probably to demonstrate the enormous influence the pandemic continues to have over our lives and deaths.

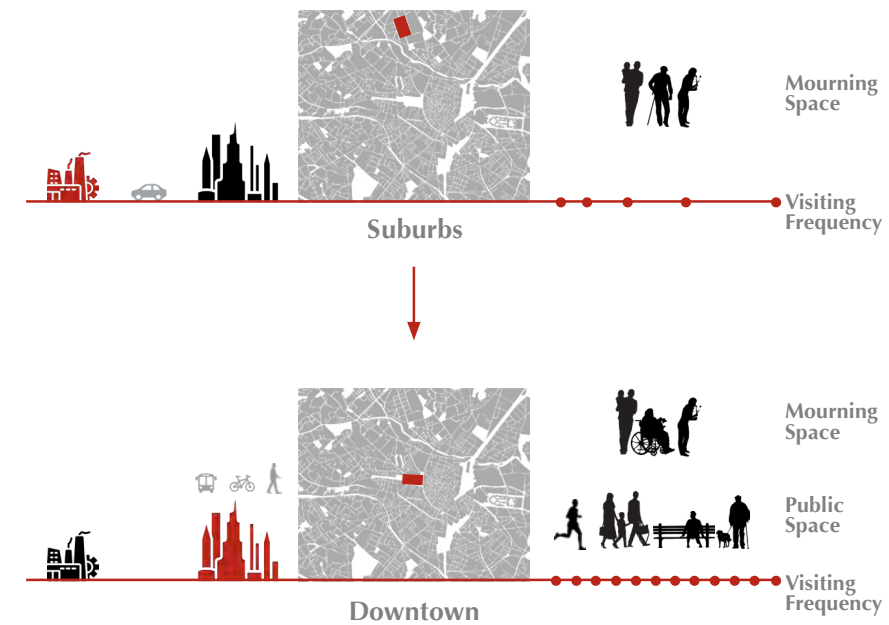
Fig.2.29



1. Ravenscroft, "Angelo Renna proposes turning San Siro into tree-covered coronavirus memorial."

COMBINE WITH CITY

This project takes the cemetery as a public memorial, embedded within the urban life of the metropolis. Through improving the accessibility of cemetery, the mourning behaviors become the part of our daily life.



Therefore, the final resting place for the dead will be a beautiful sea of lights in the modern city. It conveys acceptance of the physical finality of death, while recognizing both the endurance and transience of remembrance, and the cyclical nature of organic life.



Fig.2.30-31



Fig.2.32

A unique new proposal introduced by Columbia University's DeathLab offers up an alternative way to honor the deceased by transforming the undercarriage of the Manhattan Bridge into a twinkling graveyard, where human remains decompose in biomass pods and emit lights that mimic the stars above.

"Individual 'mourning lights', powered by the bio-energy latent within the corpse, materialize the ephemerality of remembrance. The aggregate glow of individual vessels generates a perpetual landscape honoring the deceased.

Semi-private, sheltered spaces are nested amidst communal processions and large ceremonial areas for diverse public functions. Here, the intimate and communal stages of grief are respected, but not cloistered. These spaces of death and remembrance are defined by and continually fortified within the cycles and energies of urban life."¹

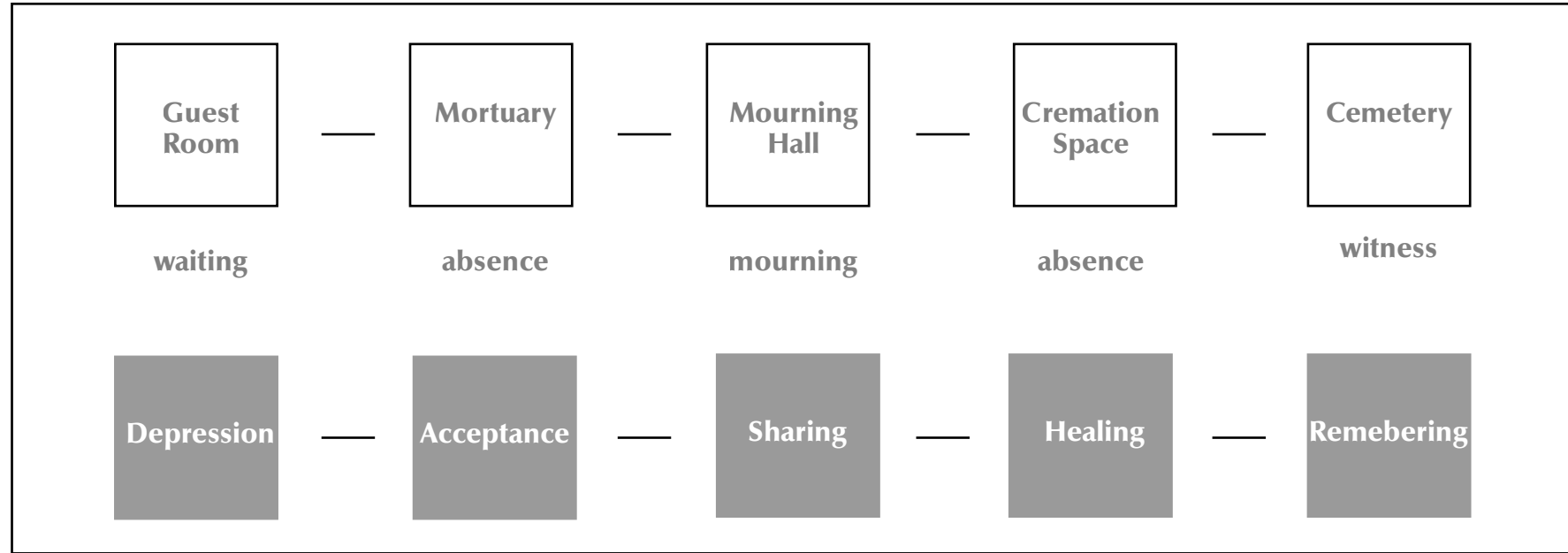
1. DeathLAB, "Constellation Park."

Constellation Park

GSAPP - DeathLab,
New York, US, 2016

CONCEPTUAL ARCHITECTURE

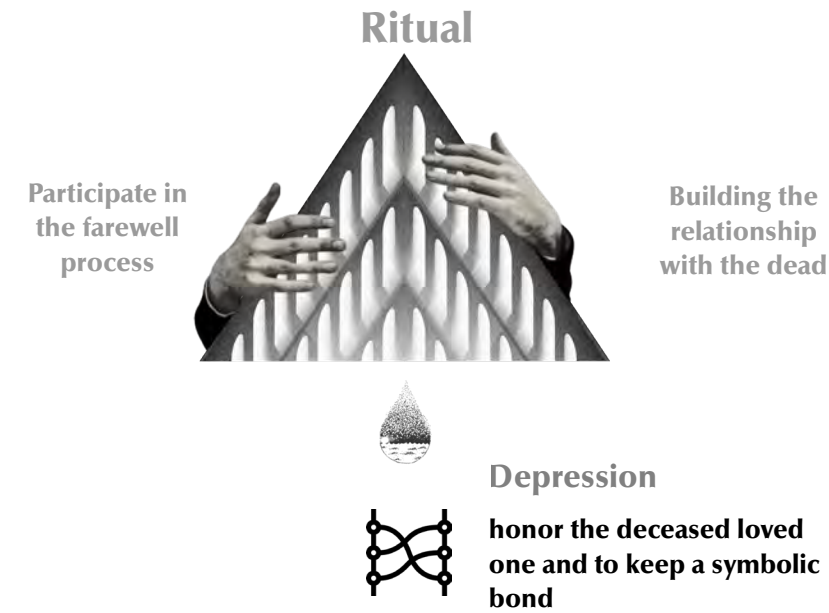
SPATIAL NARRTIVES



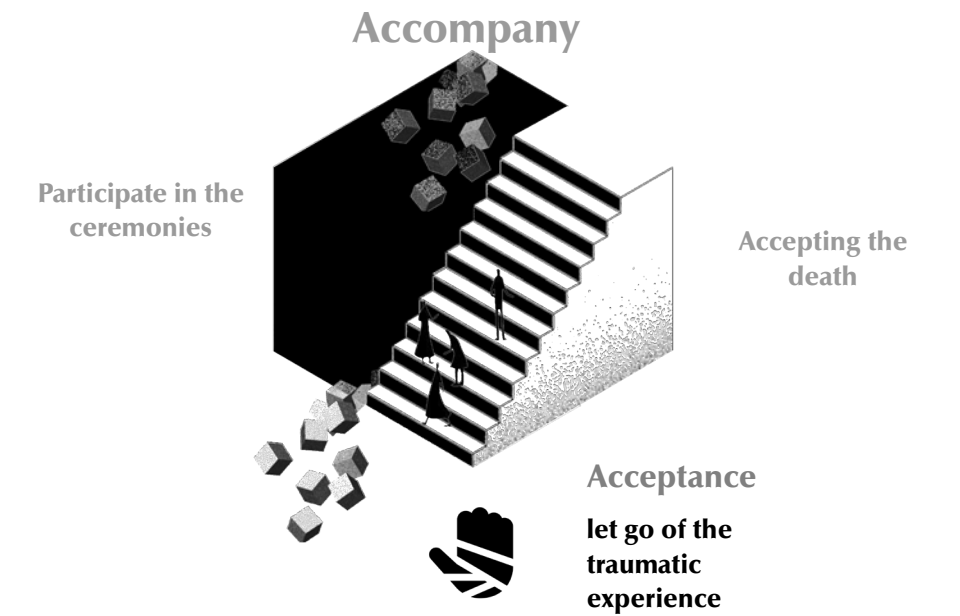
Combination



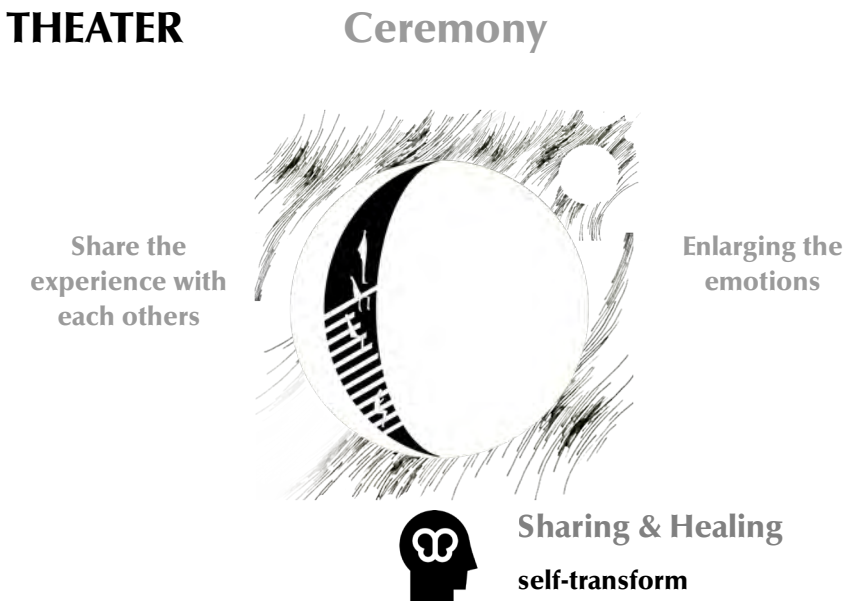
SPIRITUAL SPACE



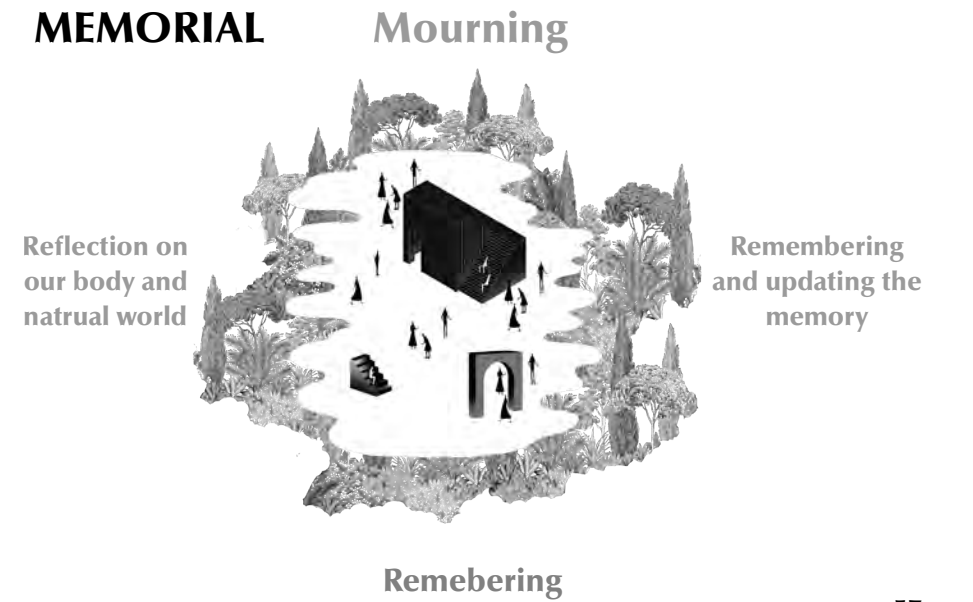
FACILITY



THEATER



MEMORIAL



PROPOSED PROCESS

Spiritual Space



Meditation



Holding ceremonies



Carry the body

Facility



Farewell ritual

Theater



Choose seed



Pick up the ashes

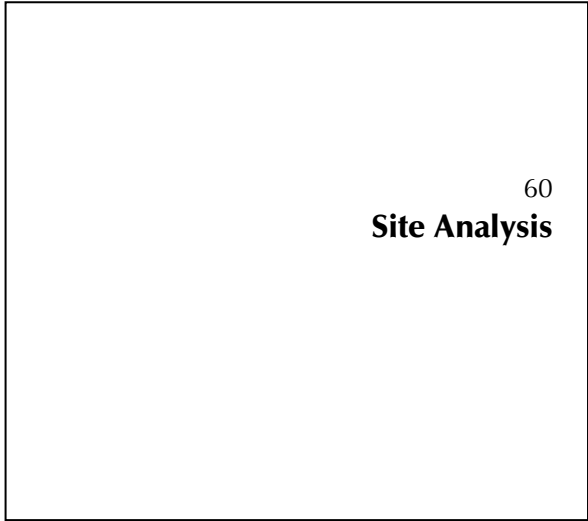


Take a boat

Memorial



Plant the seeds / Mourning



III

Hong Kong

Star Ferry Pier

User Group

HONG KONG

Hong Kong is an almost 100% urbanized city with high density and a rapidly aging population. This resulted in a **serious shortage** of cemeteries and space.

Based on official 2019 census data, with a total population of about 7.5 million and with a density of 6,781 people per square kilometer, Hong Kong ranks third in terms of population density among cities in the world. For this reason, Hong Kong is almost a 100% urbanized city. Living costs are high, places are crowded, and housing is in short supply. Moreover, the city lacks greenery due to the high costs of land.



Urban Problems

Aging Population



Projections have estimated that the number of elderly people in Hong Kong will rise from 15% in 2014 to 25% in 2024, and similarly, the annual death population will also rise from 42,700 in 2010 to 50,300 in 2021.¹

Land Shortage



The per capita living area in Hong Kong is less than 14 square meters. Moreover, Hong Kong's urban public space is only 2.7 square meters per capita, only slightly larger than a coffin or toilet cubicle.²

Less Access to Green Space



In Hong Kong, public green space actually accounts for 40% of the total land area, a large percentage when compared to London and New York. However, most residents live on only a quarter of the city's land, and it takes residents an hour on average to reach the large country park.

1. Hong Kong Census and Statistics Department, "Table 1A : Population by Sex and Age Group."

2. Lee, "Hong Kong's public space problem."



Fig.3.1-2



Shortage of Cemetery

Due to the serious aging of Hong Kong and other problems, Hong Kong has not been approved for new cemetery land for a long time. The number of deaths in Hong Kong increases gradually each year, with the number of registered deaths increasing from 33,305 in 2001 to 51,536 in 2021, with the number of deaths in the older age group of 65 and above reaching as high as 42,406 in 2021, accounting for 82% of the total deaths in 2021.¹ The shortage will only increase and become more and more serious.

Fig.3.3



Fig.3.4

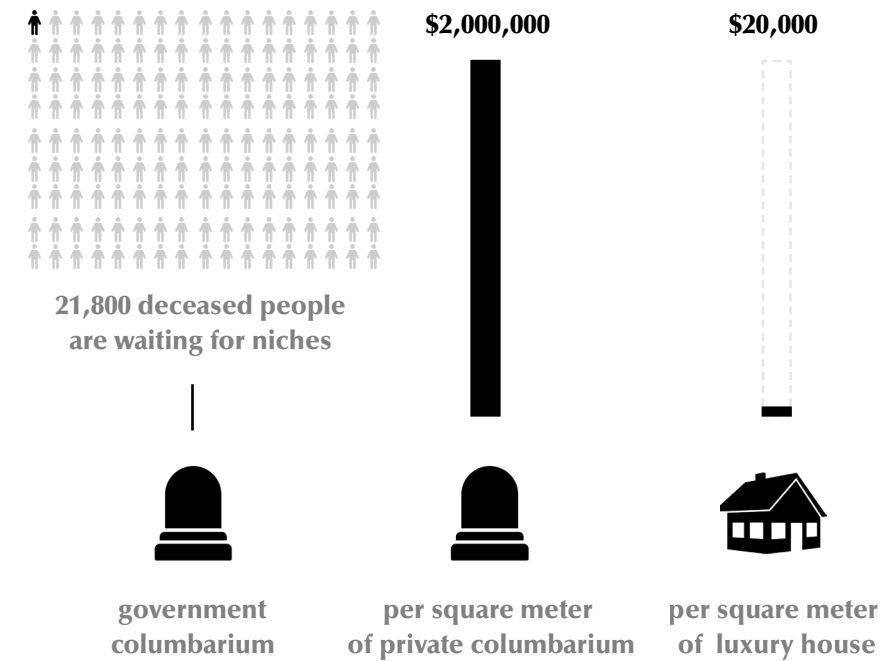


1. Hong Kong Census and Statistics Department, "Table 1A : Population by Sex and Age Group."

Abnormal Phenomena

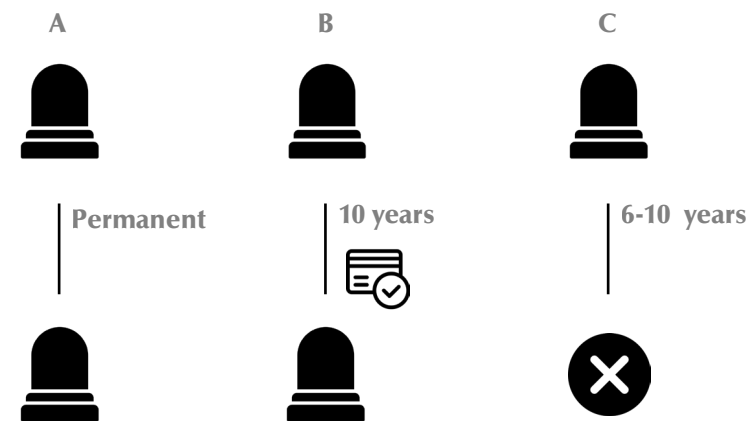
High Cost and Short Term

It can take up to five years to obtain a government columbarium niche at more than HK\$3,000 per niche. According to official figures, there are more than 21,800 deceased people waiting in line for a government columbarium niche. Those who can't wait will have to pay up to \$129,000 for a niche the size of an A4 sheet of paper at a private columbarium. Luxury homes in Hong Kong cost about HK\$151,389 per square meter, which means cemeteries are more expensive than houses.¹



TOUGH AND CONSUMING AFTER-LIFE

The cemetery in Hong Kong is divided into three categories according to the price. The first-class cemetery can get a permanent cemetery by paying the full amount in full, and the second-class must renew the fee every ten years. The C-grade cemetery only has land property rights for 6-10 years, and the ancestors must be moved out of the cemetery after more than ten years.²



1. Lee, "Focus: Land shortage prompts sky-high priced cemeteries in Hong Kong."
2. Xu, "Cemetery estate World."

The 'Dead' Snap Up Property With The Living

The plight of most people has become an opportunity for some businesses. The Chinese media has exposed that some foreigners have been found to be buying homes in the community under the guise of "buying a house and placing the account", but actually placing the ashes in the community. However, it is worth pondering that the "columbarium community" has "filled up" the shortage of public funeral resources in some places in an illegal way.³



UNFAIR DISTRIBUTION OF RESOURCES

HARD TO ACCESS TIGHT TIME



High-speed Rail Line Cemetery

The supply of cemeteries in Hong Kong is seriously insufficient, and more and more Hong Kong people are going north to buy cemeteries in recent years. Unable to afford the high price of cemeteries, Hong Kong people have turned to Shantou, Huidong and other overseas Chinese areas along the Xiamen-Shenzhen Railway and Guangzhou-Shenzhen High-Speed Rail to buy cemeteries. At present, nearly 1,000 new remains of Hong Kong people are buried in Guangdong every year, and it is believed that the annual increase will be at least 10% in the future.⁵



AWAY FROM HOMETOWN

Annual Grave Sweeping Traffic Jam

Regular traffic is disrupted every year during the tomb-sweeping period of the Qingming Festival and Chung Yeung Festival. So people had to avoid the festival day and go to worship a week earlier or later. But things haven't gotten much better. Every year during the festival, hundreds of people wait in line for the bus, and some people wait for 3 hours to get on the bus, making the original 10-minute drive take 10 times longer to arrive.⁴

Hong Kong Fung Shui Woods

The symbolic importance of plants and specific trees can be traced across a wide range of different cultures, and the traditions associated with them may have endured for hundreds, and in some cases thousands, of years.

Fung Shui Wood originated from the Chinese traditional value of harmony between man and nature. Likewise, proximity to the woodlands would be

of primary preference in choosing village-building sites—not only in the belief that the woods can block the evil spirit—but also in the aim to provide an array of benefits, such as hillsides consolidation, wind blockage, micro-climate regulation and source of fruits.

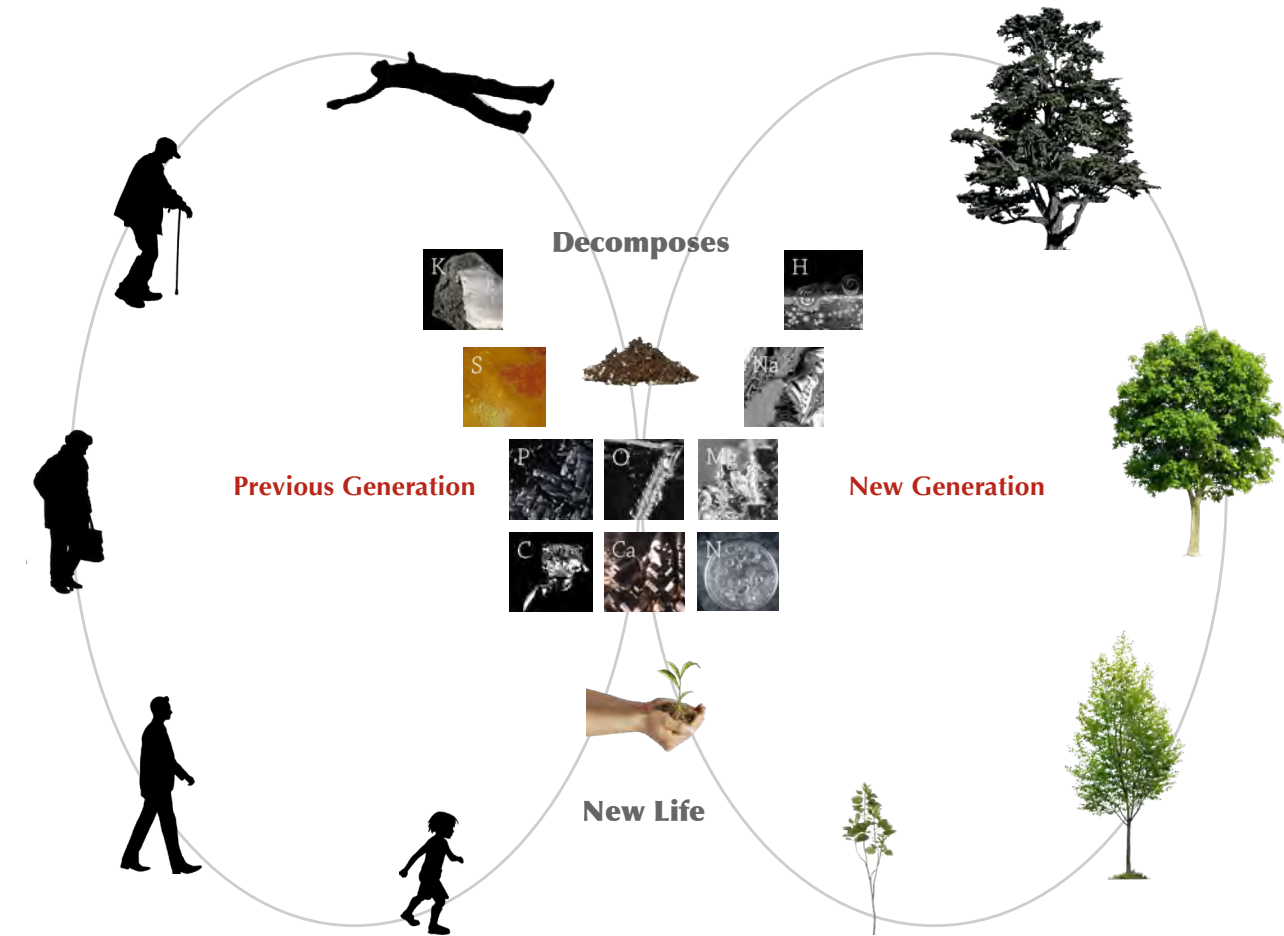


The Symbolic Plants in Hongkong

The trees are seen as individual memorialization. They represent life as opposed to death, permanency as opposed to transience, and provide a vehicle for continuing family relationships following a loss.

Planting Tree When a Child is Born

Chinese folks have a tradition of planting trees when a child is born. In the past, people had the custom of planting commemorative trees in front of their homes or on mountains after giving birth. This is due to the commonly held belief that their children will thrive just like the tree.



The predecessors turned into soil and nutrients can nourish the new generation. It echos the essential of Chinese Ancestor Worship.

Star Ferry Pier



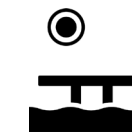
The elderly of this generation are generally people who grew up in pier culture. For them, the Star Ferry Pier holds **solid communal memories**.

Pier Culture in Hong Kong

The rise of Hong Kong is inseparable from the wharf, inseparable from a boat of immigrants landing from the wharf, and inseparable from the boxes of goods that stay and travel far away. In other words, the story of Hong Kong is almost equivalent to the vicissitudes of the Hong Kong wharf.



Renovation Purposes



Reactivate the pier culture

In the last century, Hong Kong arose because of the wharf. But in this century the wharf has gradually declined, so the wharf has also witnessed the rise and fall of Hong Kong. Moreover, the marina culture was neglected during the economic transformation of Hong Kong.



Combine with more burial methods

Using the pier as a reuse site, this method would also take advantage of its seaside possibilities and combine additional funeral methods related to water and the ocean, like ocean burial and resomation.



Nostalgic narrative

The elderly of this generation are generally people who grew up in dock culture. Crucially, I think the nostalgic story can inform the narrative. The dock is a place of memory for the community.

Hong Kong's iconic Star Pier

Star Ferry Pier in 1920



Fig.3.5

Star Ferry Pier or Tsim Sha Tsui Ferry Pier, is a pier located on reclaimed land at the southernmost tip of Tsim Sha Tsui on Kowloon Peninsula in Hong Kong. It is commonly known as Star Ferry Pier in Tsim Sha Tsui. Star Ferry operates the pedestrian ferry service across Victoria Harbour to Wan Chai and to Central on Hong Kong Island.¹



Fig.3.6

The old Hong Kong-side Star Ferry Pier, facing the elegant Edwardian buildings that then lined Victoria Harbour. A pre-war Star Ferry is berthing or departing, its engines belching diesel smoke. In the middle distance the General Post Office offers – CABLES. To the right a new-fangled neon light announces – COCA COLA.²

1. Wikipedia, "Star Ferry Pier, Tsim Sha Tsui."
2. Chee, "Love Then Abandoned."

Protect Star Pier Event

In 2006, a government decision to demolish the pier in Central, close to the city's main financial buildings, triggered sit-ins and hunger strikes. The movement is widely credited with sparking renewed interest in local identity and a new generation of protesters. Many continue to bemoan the site of the new pier in Central as being inconvenient for pedestrians and gaudy in its aesthetics.³

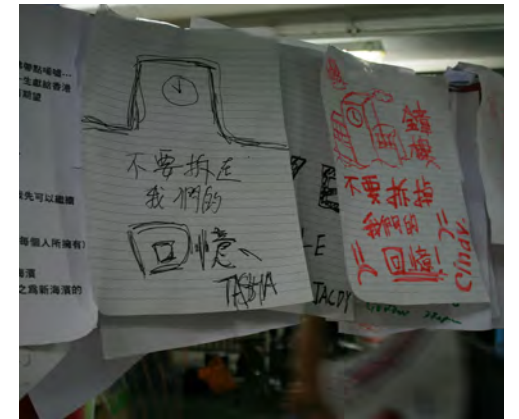


Fig.3.7-8



Fig.3.9

Falling into Difficulties

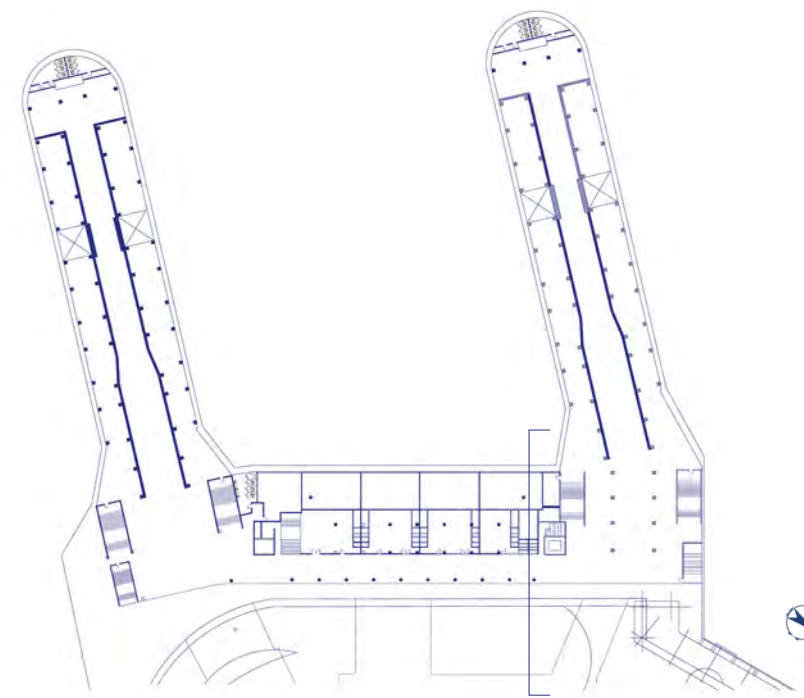
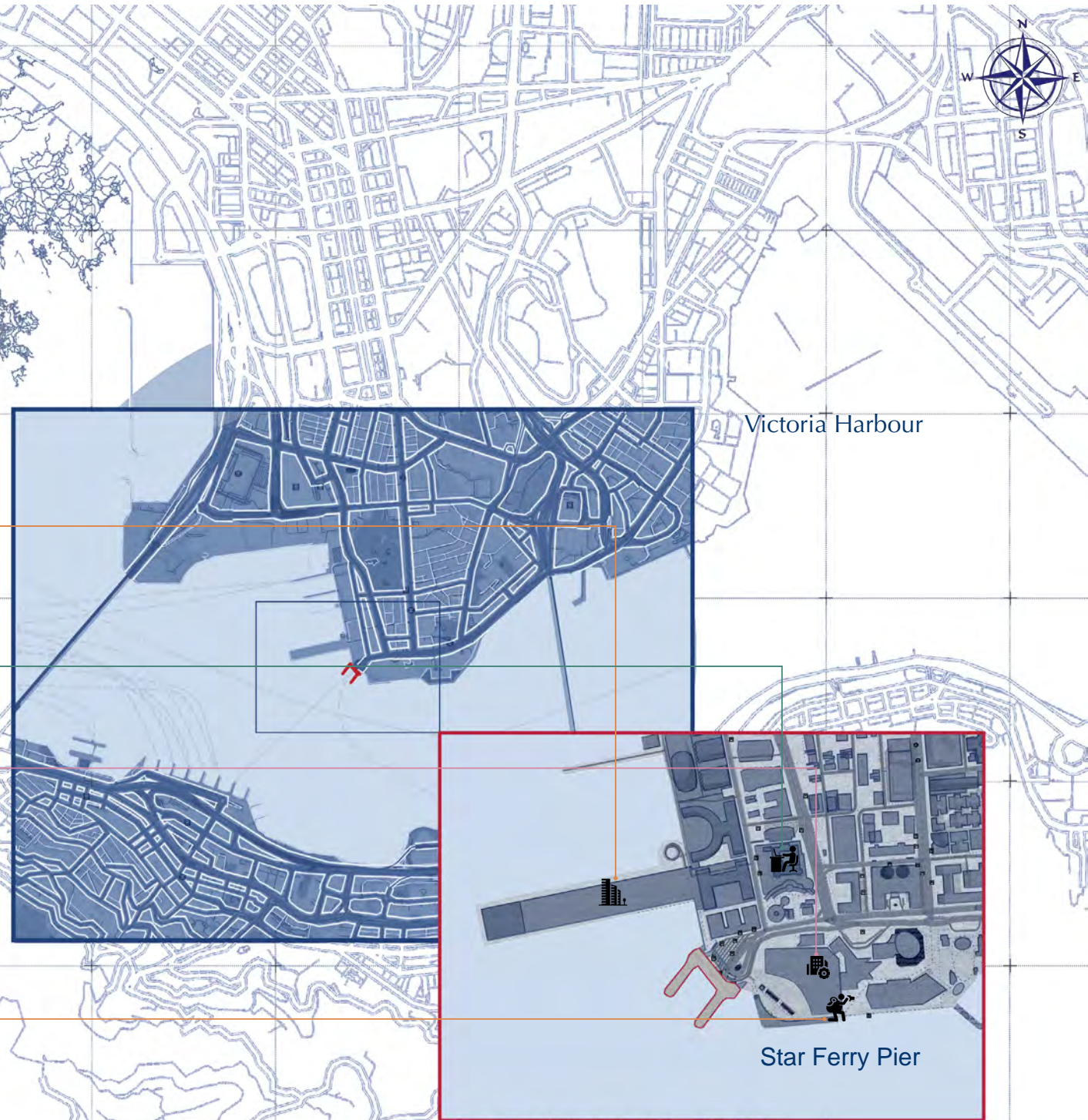
The 142-year-old ferry, which transports passengers across Victoria Harbour from Hong Kong island to the Kowloon mainland, is seriously indebted. The Star Ferry Company saw a loss of more than HK\$70 million (\$8.9 million) since mid-2019 when mass protests erupted in the city, according to a company statement in March. Its two ferry routes recorded 1 million passengers in the first two months of the year — which was 27% of what was accomplished in 2019.

Covid restrictions caused tourism to remain at a standstill — and looks like it will stay that way for some time. Before the pandemic, almost half of its passengers were tourists.⁴

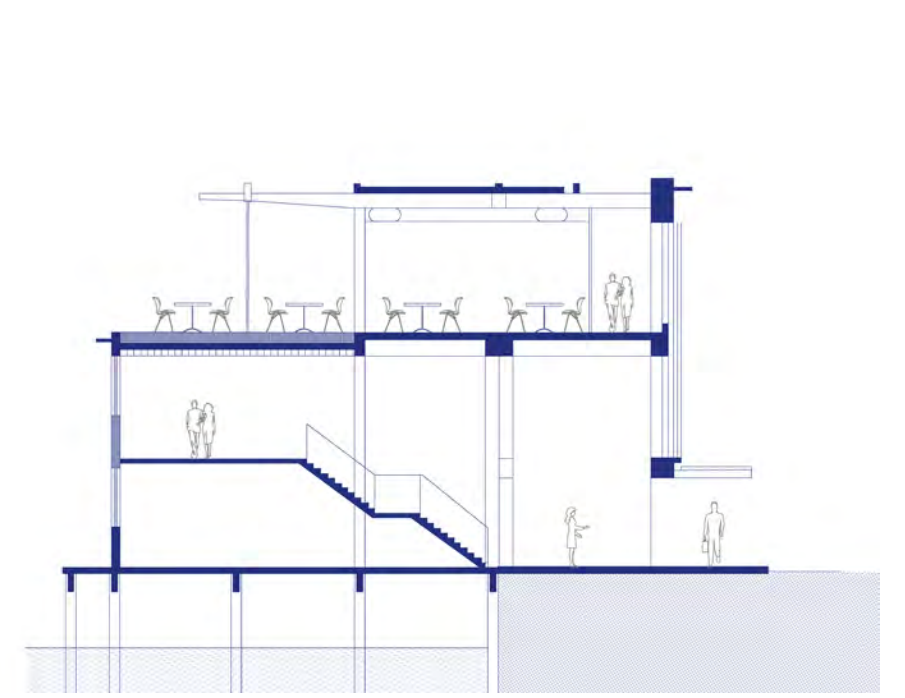
3. VOC, "Demolition of Hong Kong's Star Ferry Pier sparks cultural heritage controversy."
4. Stevenson, "Star Ferry, 'Emblem of Hong Kong,' May Sail Into History After 142 Years."

Documentation of Star Pier

HongKong



Original Plan



Original Section

The pier is close to Star House, Ocean Terminal, Hong Kong Cultural Centre, and the Clock Tower of former KCR Kowloon Station. The Five Flag Poles between the pier and Star House are a popular meeting place. The Kowloon Public Pier is located south-east.

There are a few retail shops at the Pier, including newsstands, a shop selling Star Ferry merchandise (models of ferries), an HSBC branch, and a Hong Kong Tourism Board information center.¹



View From Harbour City
Fig.3.10

User Group

Throughout history, specific cultural contexts have always played a crucial role in how people perceived death. Different societies have held widely diverging views on the “breath of life” and on “how the soul left the body” at the time of death.

Diversity in Hong Kong

Religion

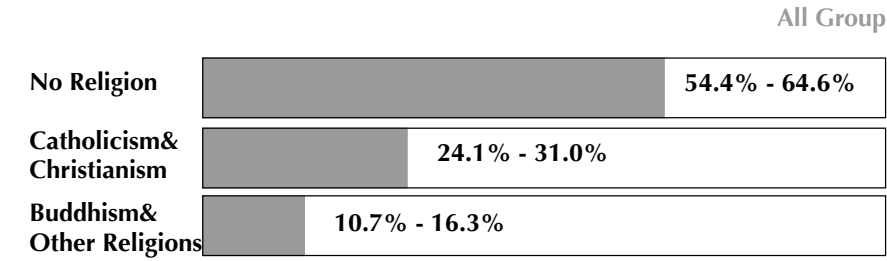
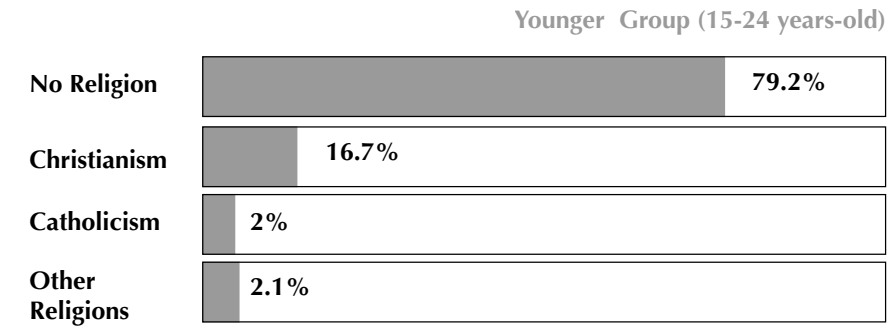


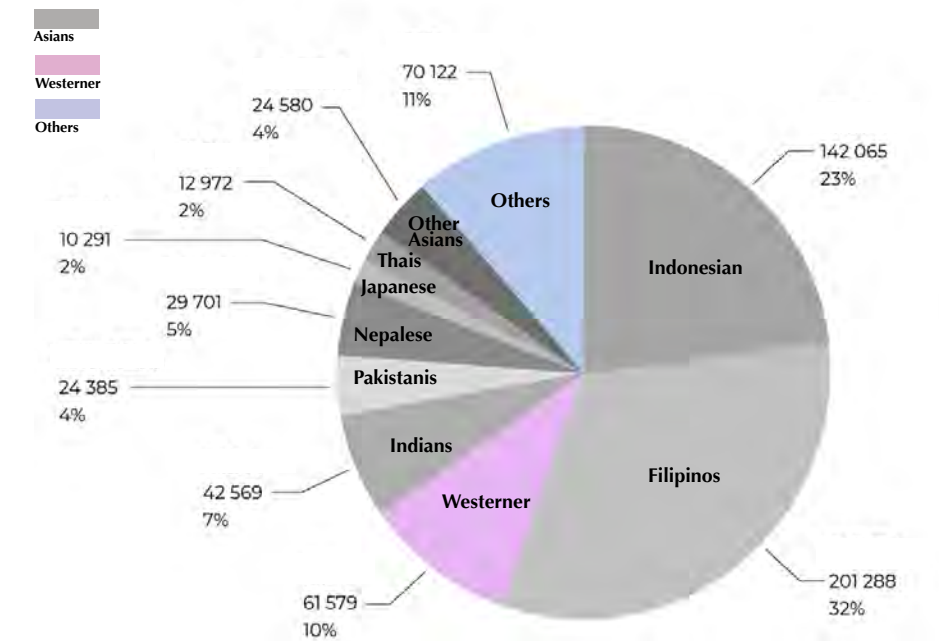
Figure #: Information sourced from: Data on academic research articles published in Hong Kong from 2006 to 2018.



Information sourced from: Hong Kong Annual Report 2016 and the fact sheet "Religious Facilities in Hong Kong" of the Legislative Council Secretariat Information Research Group

Based on the data, Hong Kong seems to be a culturally diverse society. Regarding itself as a cultural diversity and not regard any one culture as the dominant culture. There are also some social developments in Hong Kong, like the proportion of no religion in the new generation increased.

Ethnic group



According to the results of the 2021 Population Census, about 619,552 people in Hong Kong reported as non-Chinese, accounting for about 8.4% of the population.

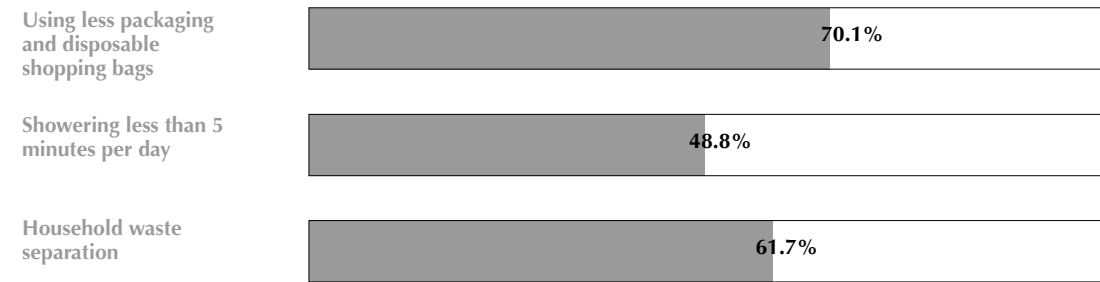
To create an equal afterlife and respect for all citizens of Hong Kong one will have to address multiculturalism and current social developments. This kind of cemetery has to be **secular** and **sacred** for **all religious** and **non-religious** individuals from all nationalities and ethnicities.

For The Deceased

• Nature Lovers

A representative sample of 1,017 Cantonese-speaking local residents of 15 years or older was selected based on the distribution of Hong Kong population in terms of age, gender, and district.

CARBON-REDUCING BEHAVIOURS



• Traditional Chinese

Green burial not only seeks to ensure a balance between humanity and nature but also reflects another sentiment deeply rooted in Chinese tradition - what we might call today our footprint.' As the early twentieth-century poet Xu Zhimo (1897-1931) wrote, "Very quietly I take my leave, as quietly I came here; Quietly I wave good-bye, to the rosy clouds in the western sky".

The resource-saving and environmentally-friendly funeral activities and practices of green burial allow people to return to nature unobtrusively.

The Chinese saying "Tian Ren He Yi" – "天人合一" – Nature and human beings combine into an integral whole."Ecological funerals and interments reflect this "Combining Into An Integral Whole."¹

Embrace An Earth-Friendly Afterlife

A territory-wide large scale study by the Collaborating Centre for Oxford University and CUHK for Disaster and Medical Humanitarian Response (CCOUC) in 2016 found that **Higher proportion of people of older age groups frequently practise carbon-reduction behaviours, in contrast to the general impression that younger generations adopt environmental-friendly behaviours more readily.**



"天人合一"

1. Zeng, Sweet, and Cheng. "Ecological Citizenship and Green Burial in China."

Return Back To The Memories

• Nostalgic Elderly Group

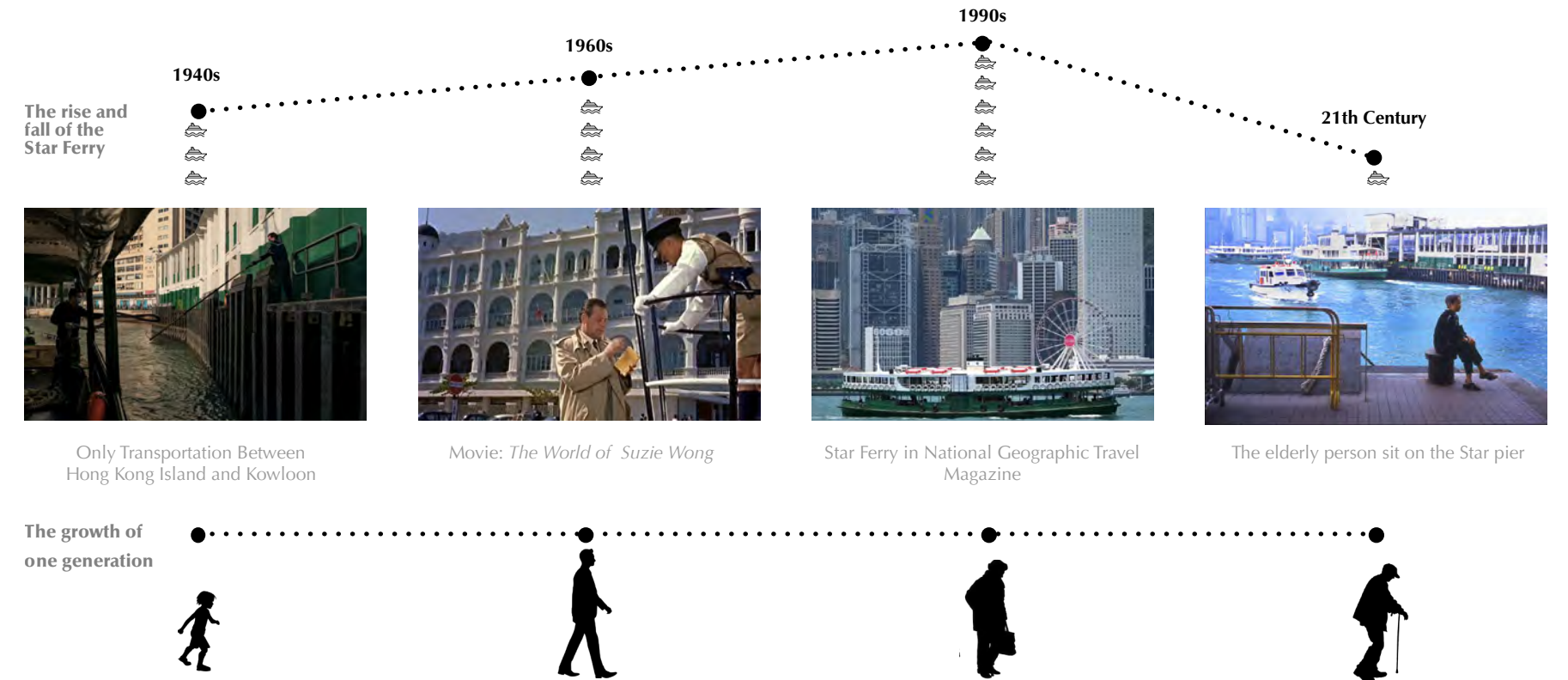
The elderly between the ages of 70 to 80 were generally people who grew up in the ferry culture. Star Pier has the emotional value and memorial value for this generation. The collective memory can be the intention for returning to this place.

Back then, the Star Ferry shuttled individuals across the waters of Victoria Harbour, was the only means of transport for residents of Hong Kong Island and Kowloon to travel between the two places.

The Star Ferry has been featured in many movies during the 19th century. The ferry itself is a symbol of Hong Kong. In 1999, National Geographic

Travel Magazine listed the Star Ferry as one of the "50 Must-Visit Attractions in Life", and the Society of American Travel Writers selected it as one of the "Top 10 Places in the World". Best Ferry".

However, According to the Hong Kong Maritime Port Authority, the number of ships arriving in Hong Kong has sharply declined since 2020 citing arriving cargo ships fell by 9.2% year-on-year and the number of passenger ships fell by 90.4% year-on-year. In 2021, the data continued to show a downward trend.

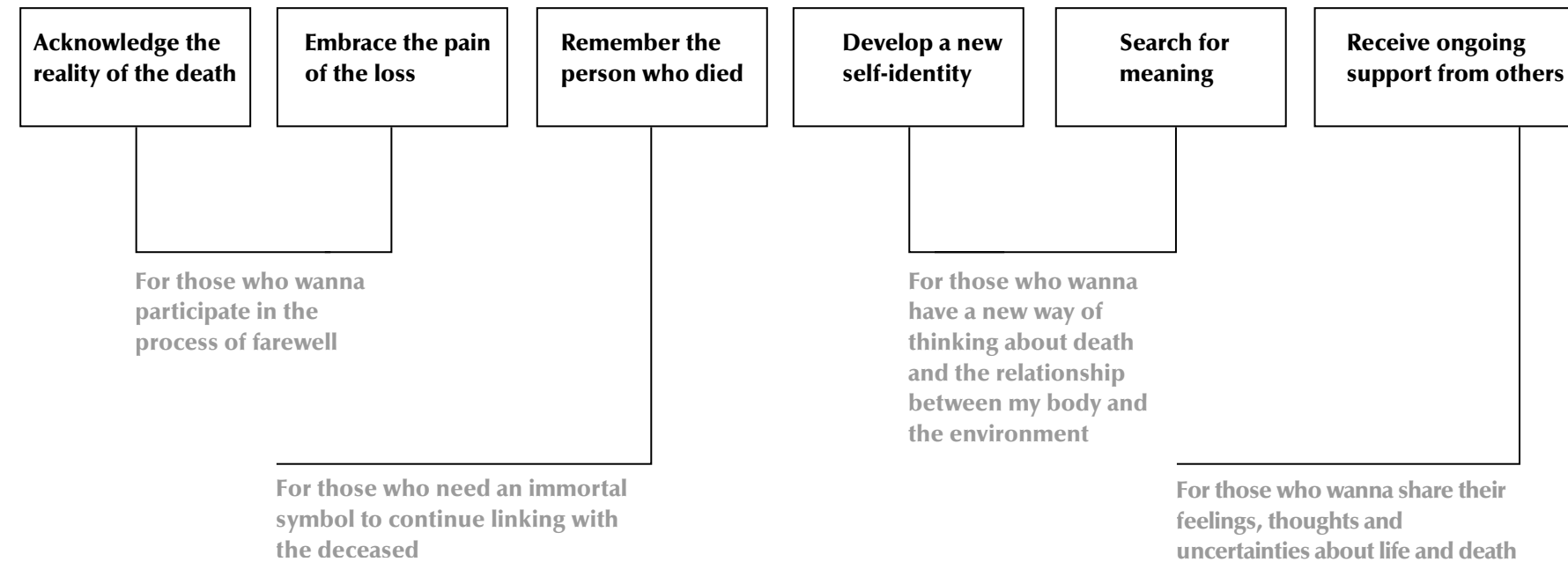


For The Living

• Family and Friends of the Dead

Dr. Alan D. Wolfelt, PhD, has defined the Six Needs of Mourning. His research shows that all griever's need to do these six things at some point along their grief journey if they are to heal.¹ Green burial offers a chance for symbolic immortality by re-entering nature via a process of decomposition while also offering shared activism with family or friends. People are engaged in every step, which helps meet the six reconciliation needs of mourning.

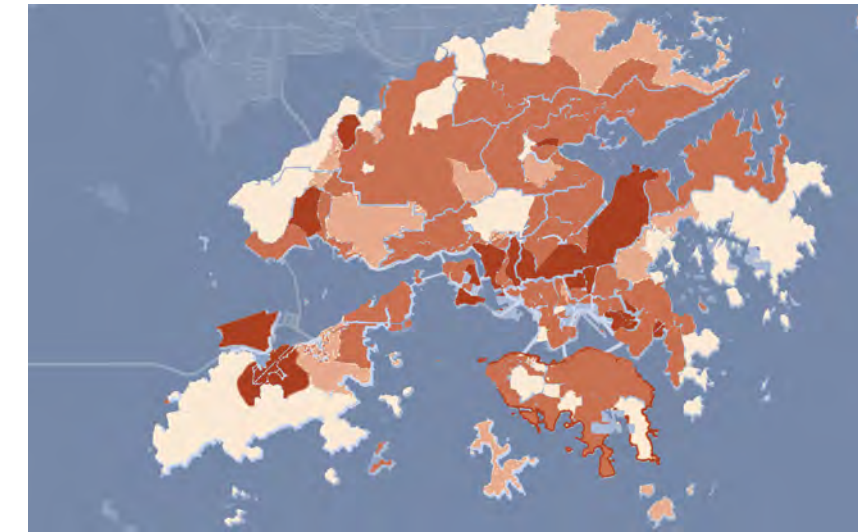
SIX RECONCILIATION NEEDS OF MOURNING



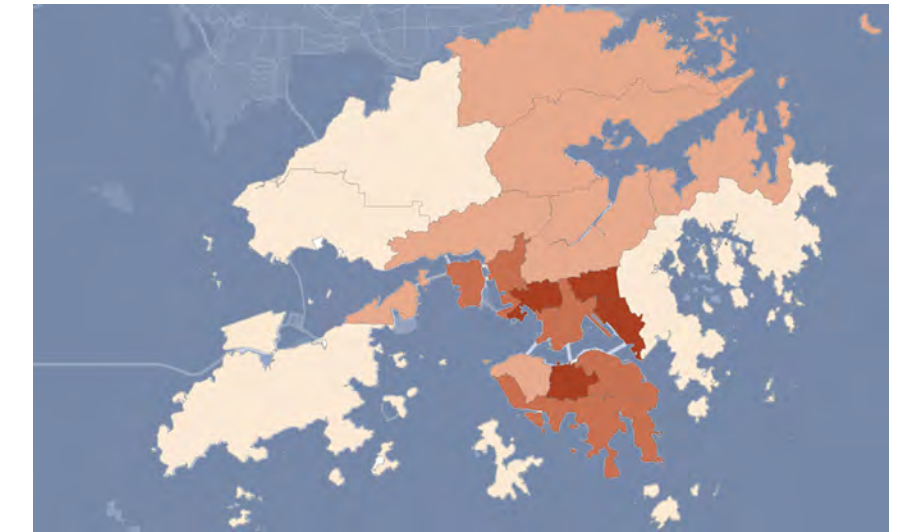
Build A Memorial To Mourn And Reflect

• The Public

Hong Kong's green space coverage rate is 70%, and residents only have access to 35%. The two greenery in this area needs to support a population density of 44,458 per square kilometer.



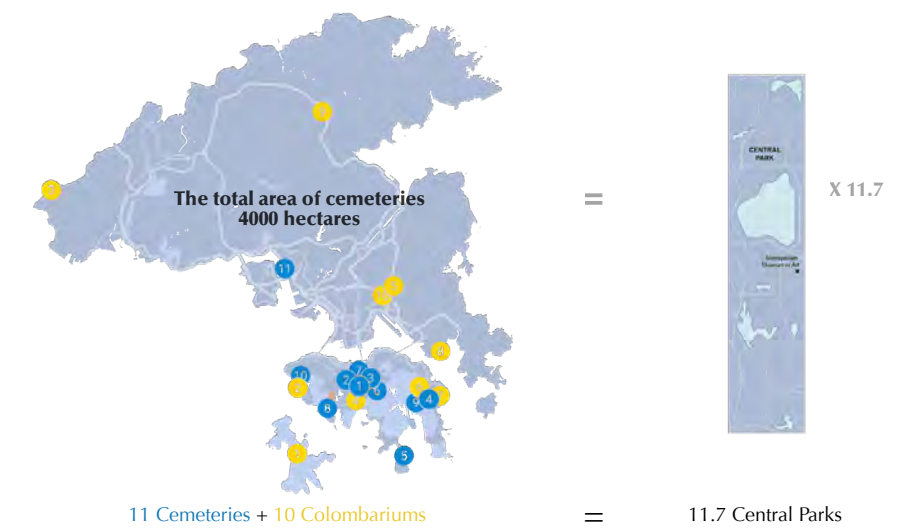
Population Densities



Senior Population



Open Green Space



Cemetery Area

1. Alan. "Why Is the Funeral Ritual Important?"

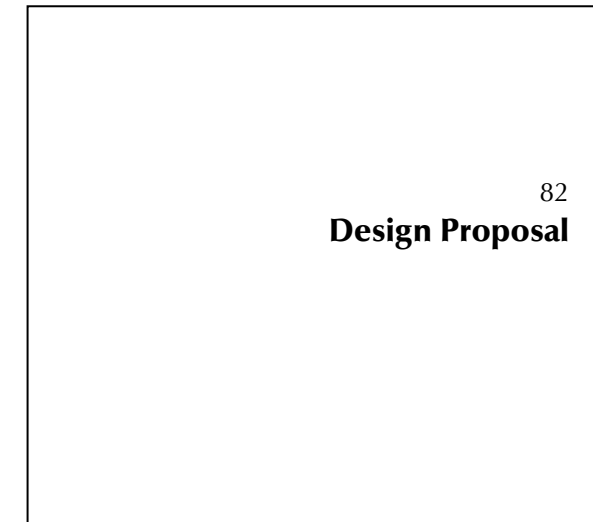
Context Conclusion

Spatial Arrangements

IV

Narratives

Epilogue



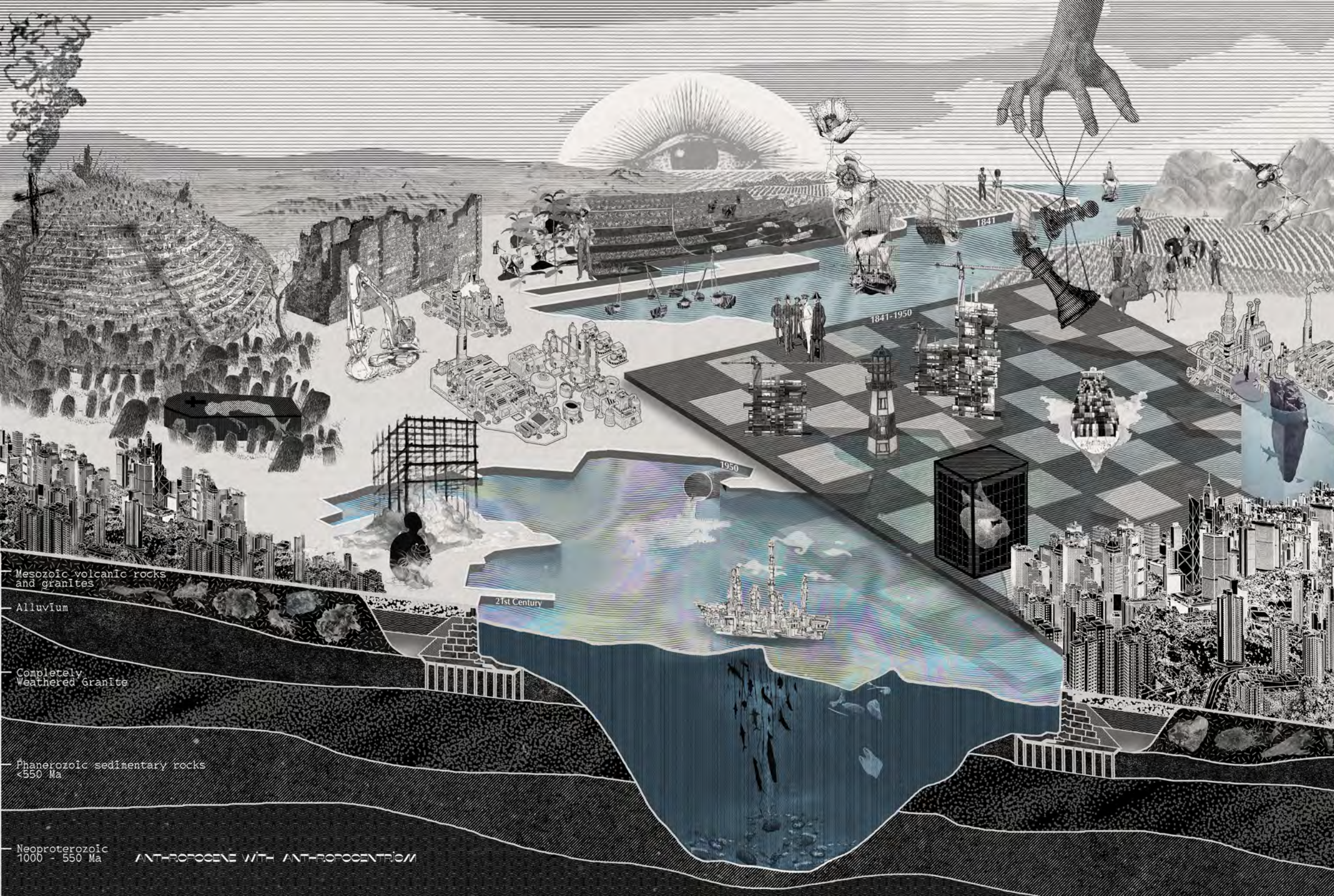
82
Design Proposal



With-Nature

Burial and Funeral culture are the product of human self-awareness reaching a high degree. This collage shows before civilization's emergence, the original burial methods from nature. From ancient times to the present, the earth has hosted about 107 billion human beings. As scary as it may sound, the truth is that the earth has reabsorbed the dead into its elements for so many millions upon millions of years. The book named *The Dominion of the Dead* said: "Through the action of fire, the corpse gives itself up to air; through inhumation or simple putrefaction it returns its composite substance to the earth; through the force of gravity, it sinks into the sea's underworlds. Whatever biomass it receives after the extinction of life becomes part of the planet's receiving matter—matter from which life, its imponderable origins, in turn, emerges."

If we are in the background of de-anthropocentrism, people are just the same as other species rather than higher than other species. The human body has essentially the same chemical basis as the earth itself, making it suitable to contribute to natural ecology. Human bodies, when they perish, share in this organic afterlife of the dead. They are rolled round in the earth from day to night, with rocks, stones, and trees.

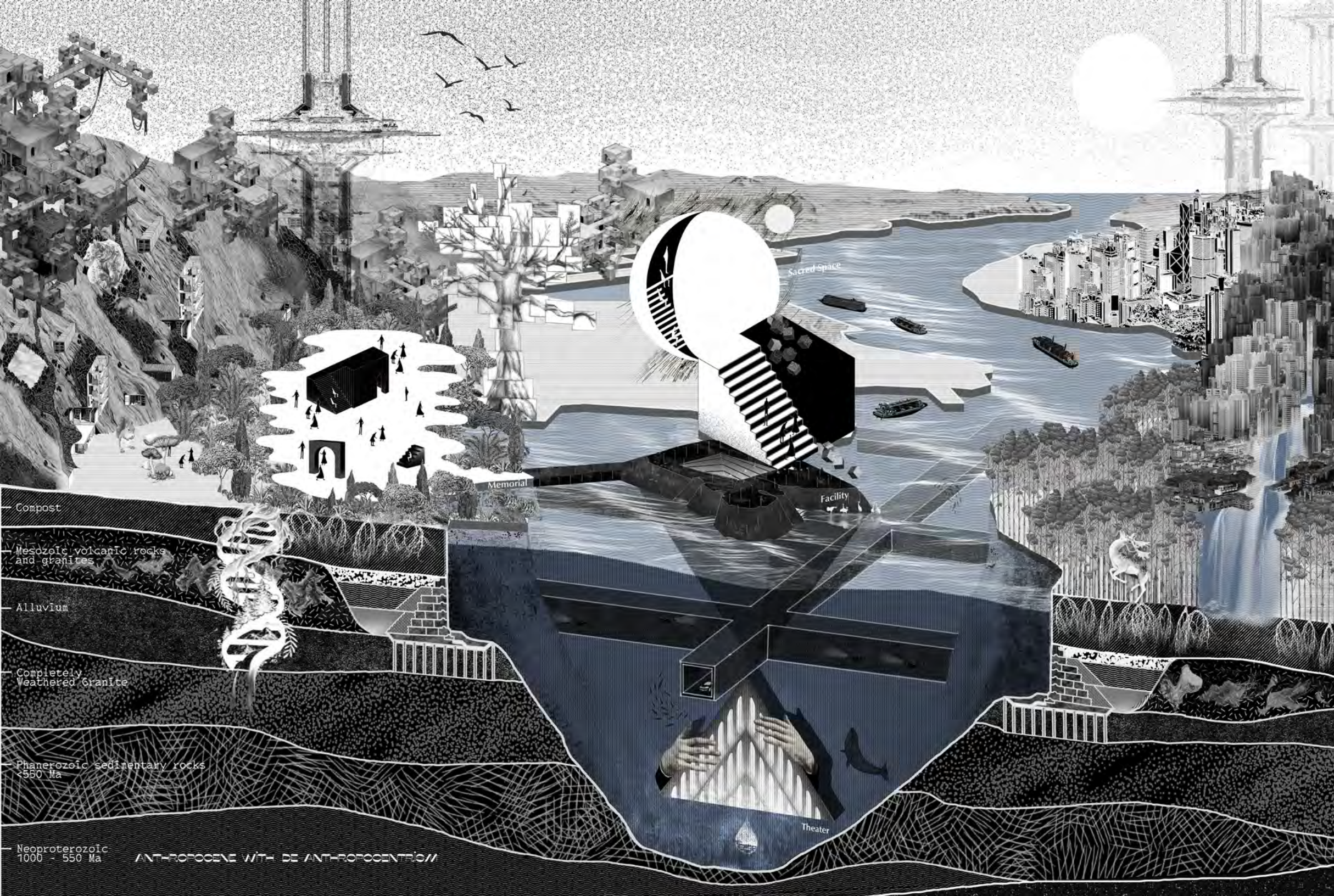


Against-Nature

The drawing takes Hong Kong's urbanization as a clue and the river as the timeline because the rise and fall of the pier echo the history of Hong Kong's development. Hong Kong is a city that relied on the piers to rise, it is the hub for connecting the west and east in the war period, so it also echoes the history of being invaded and colonized. So I have divided its development into four stages - invasion - colonization - capital intervention and saturation.

In 1841, Hong Kong was ceded to Britain. And became the military outpost. The British bring the opium to the land and then make money. Then in colonization history, Hong Kong's harbor was an important trading port to output and input resources from East to West. Hong Kong's harbor is like a chessboard controlled by different powers in modern history. The human connection and entanglement with nature gradually weakened during urbanization and the pollution still increased leading to the urban texture continuously changing. Hong Kong's urbanization has led to a series of problems: overpopulation, plastic pollution, air pollution, and ocean pollution.

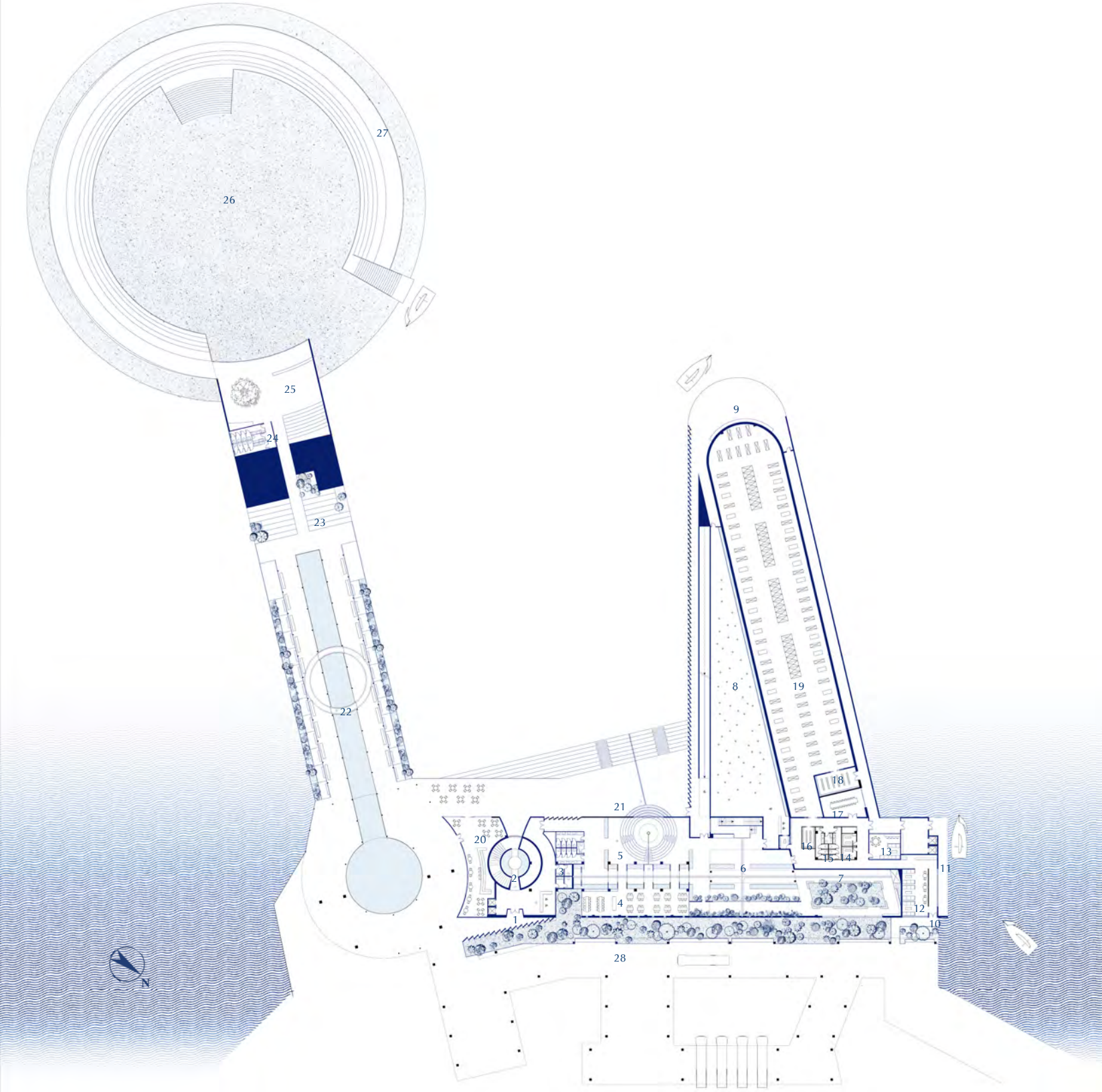
We are in the background of anthropocentrism, the funeral industry is multi-billion-dollar, and its economic model is based on the principle of protection, sanitation, and beautification of the corpse. cremation and earthen burial, there is a lot of pollution in the land and air. We are trapped in the building when we are alive. After we die, we will still be trapped in the nondegradable coffin or the urn, so we cannot return to nature.



Relink to Nature

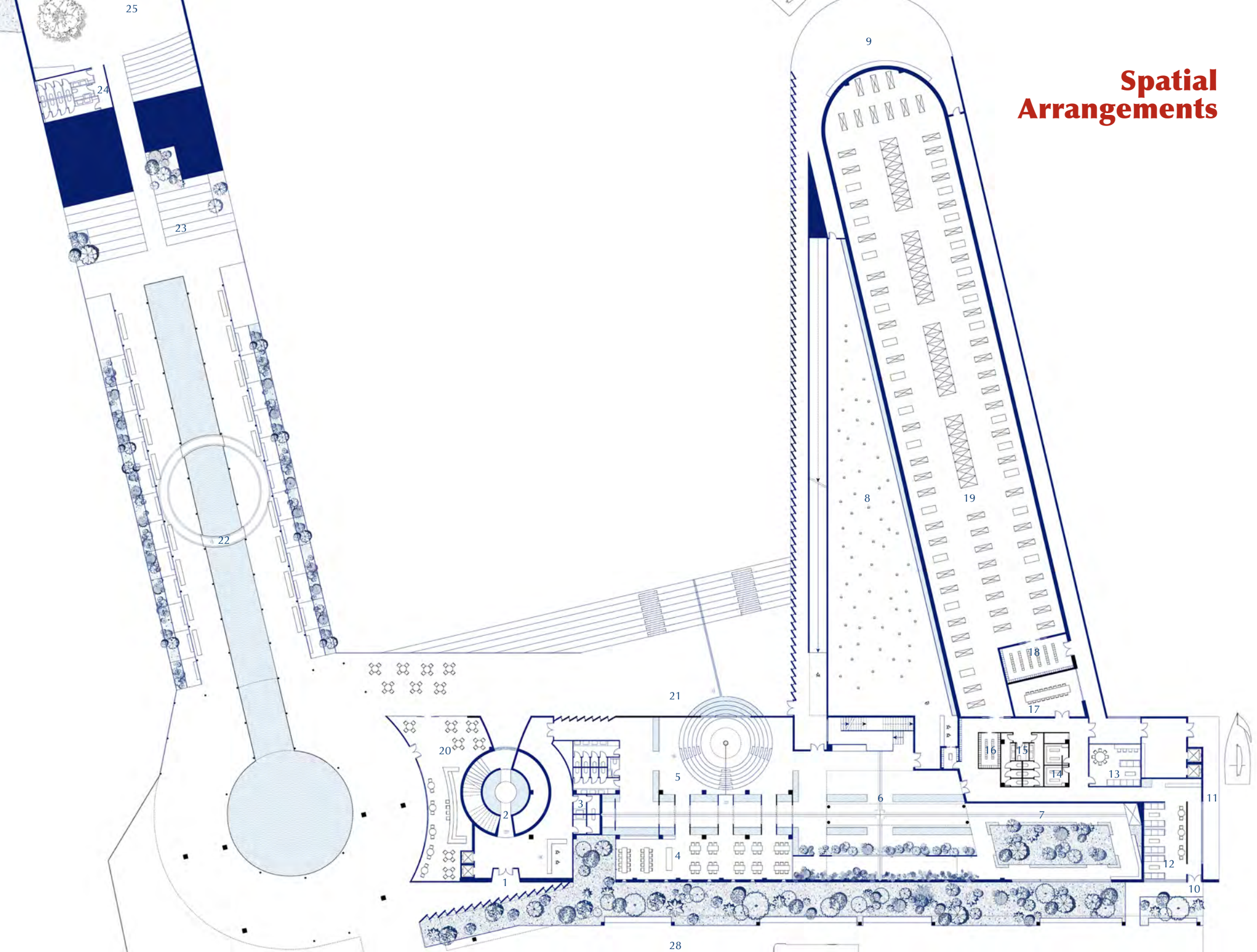
The CHARACTER of the Farewell Architecture fluctuates between that of a factory, that of a sacred space, that of a theatre, and that of a memorial. In the drawing, I have symbolized these four characteristic spaces and combined them as conceptual architecture.

The farewell architecture features all kinds of expressions of the metaphysical. Some are ecclesiastical in character, for example by including some spiritual space. Expressing grandeur as that which is larger than (human) life, is often charged with symbolism. It provides a ritual to let people participate in the farewell process to build a relationship with the dead. Facility is part of the burial space. It provides the functionality and technic for the burial. The farewell spaces are also the theatres of the final farewell, especially when ceremonies are held there. The building can dramatize this moment, it can also be a space for a 'performance'. The memorial is something that keeps remembrance alive. After the whole farewell process, people need spaces with symbolic meaning to mourn and capture special memories of their loved ones. After the green burial, You become a tree, as the growing memory. The whole forest could be the collective memory of loved ones.



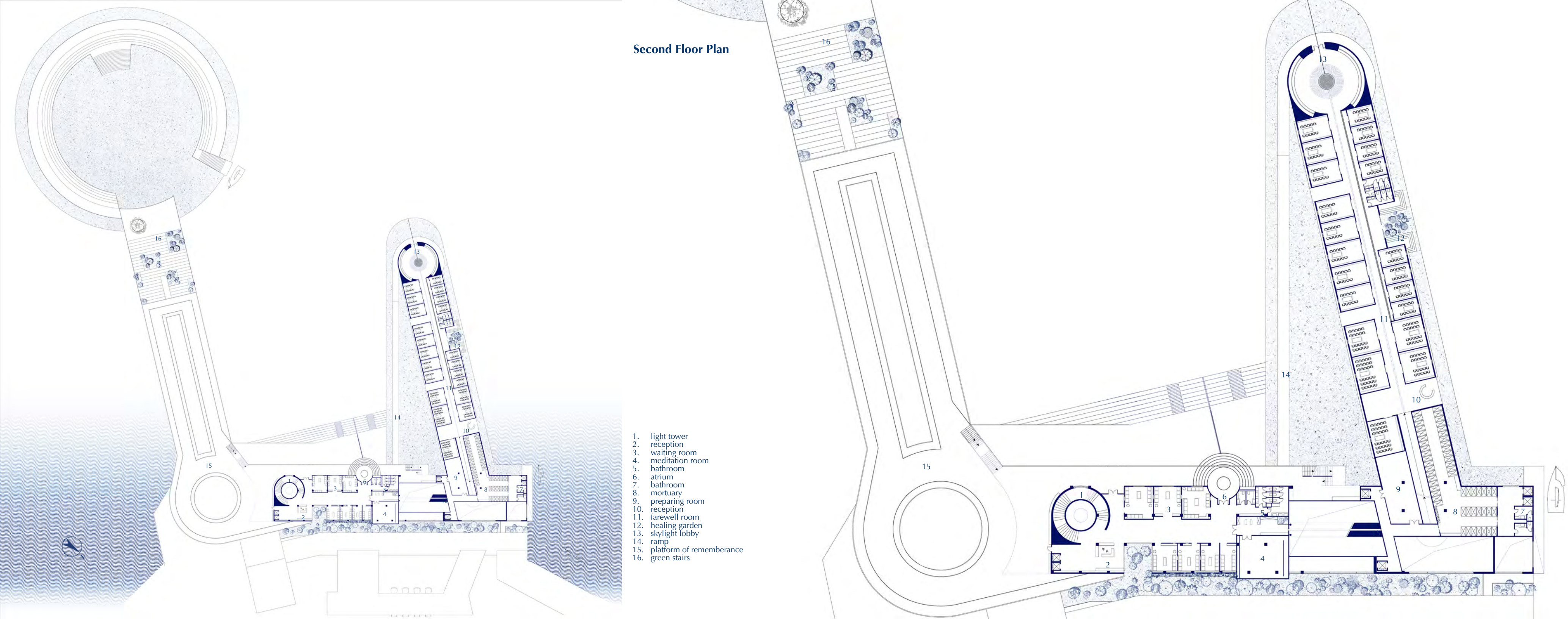
Ground Floor Plan

1. funerary entrance
2. light tower
3. bathroom
4. cafeteria
5. stairs of sharing and healing
6. atrium
7. seed garden
8. soil urn forest
9. ferry pier
10. staff's entrance
11. corpses delivery landing
12. meeting room
13. staff quarters
14. locker room
15. bathroom
16. soil and seeds storage
17. conference room
18. technical room
19. burial facility
20. cafe
21. pond
22. bridge
23. green stairs
24. bathroom
25. viewing platform
26. hill of the remembrance
27. condolence ring
28. bus station

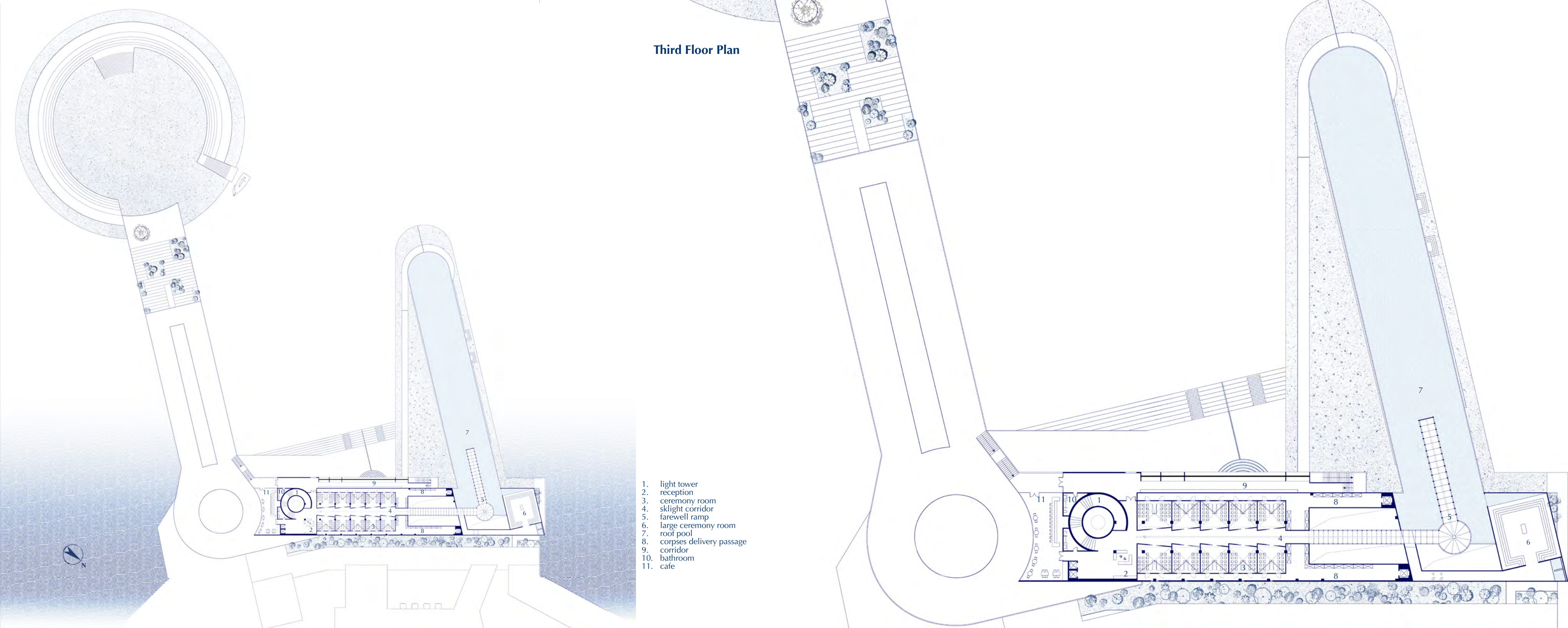


Spatial Arrangements

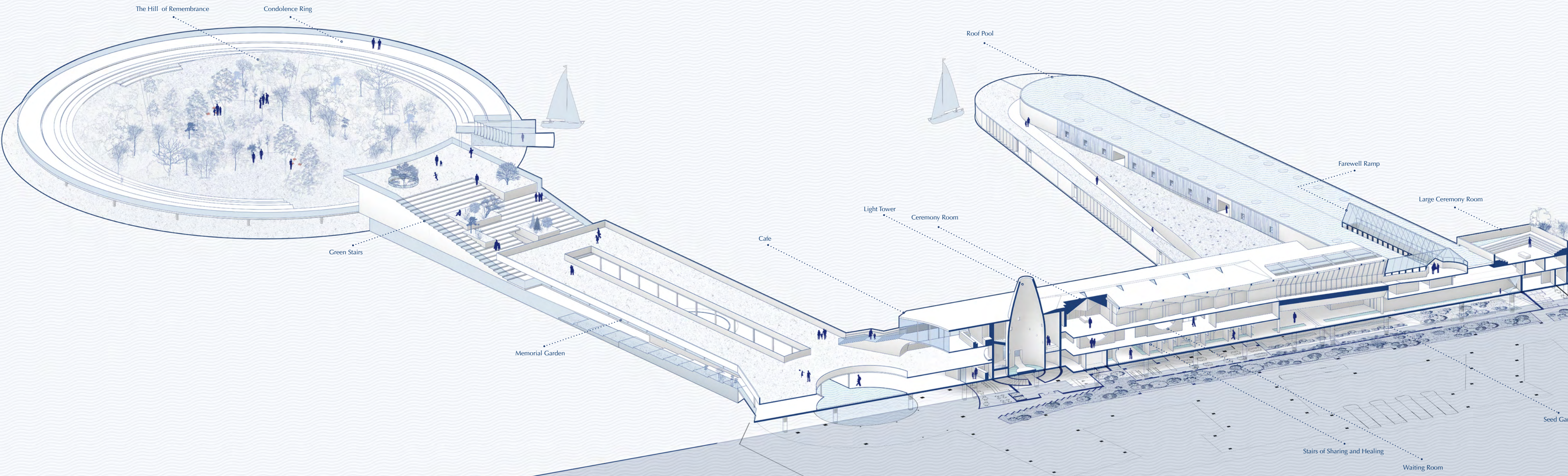
Second Floor Plan



Third Floor Plan



1. light tower
2. reception
3. ceremony room
4. sklight corridor
5. farewell ramp
6. large ceremony room
7. roof pool
8. corpses delivery passage
9. corridor
10. bathroom
11. cafe



The Hill of Remembrance

Condolence Ring

Roof Pool

Green Stairs

Light Tower

Ceremony Room

Cafe

Farewell Ramp

Large Ceremony Room

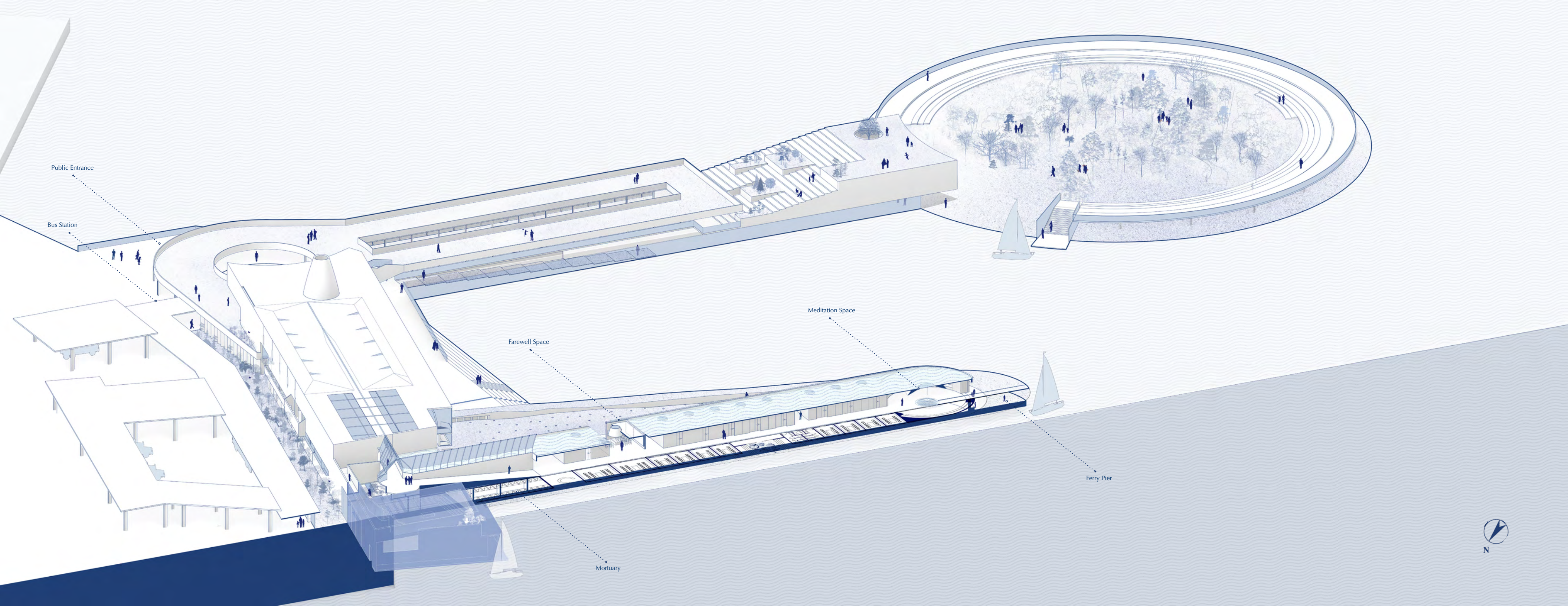
Memorial Garden

Stairs of Sharing and Healing

Waiting Room

Seed Garden





Public Entrance

Bus Station

Farewell Space

Meditation Space

Ferry Pier

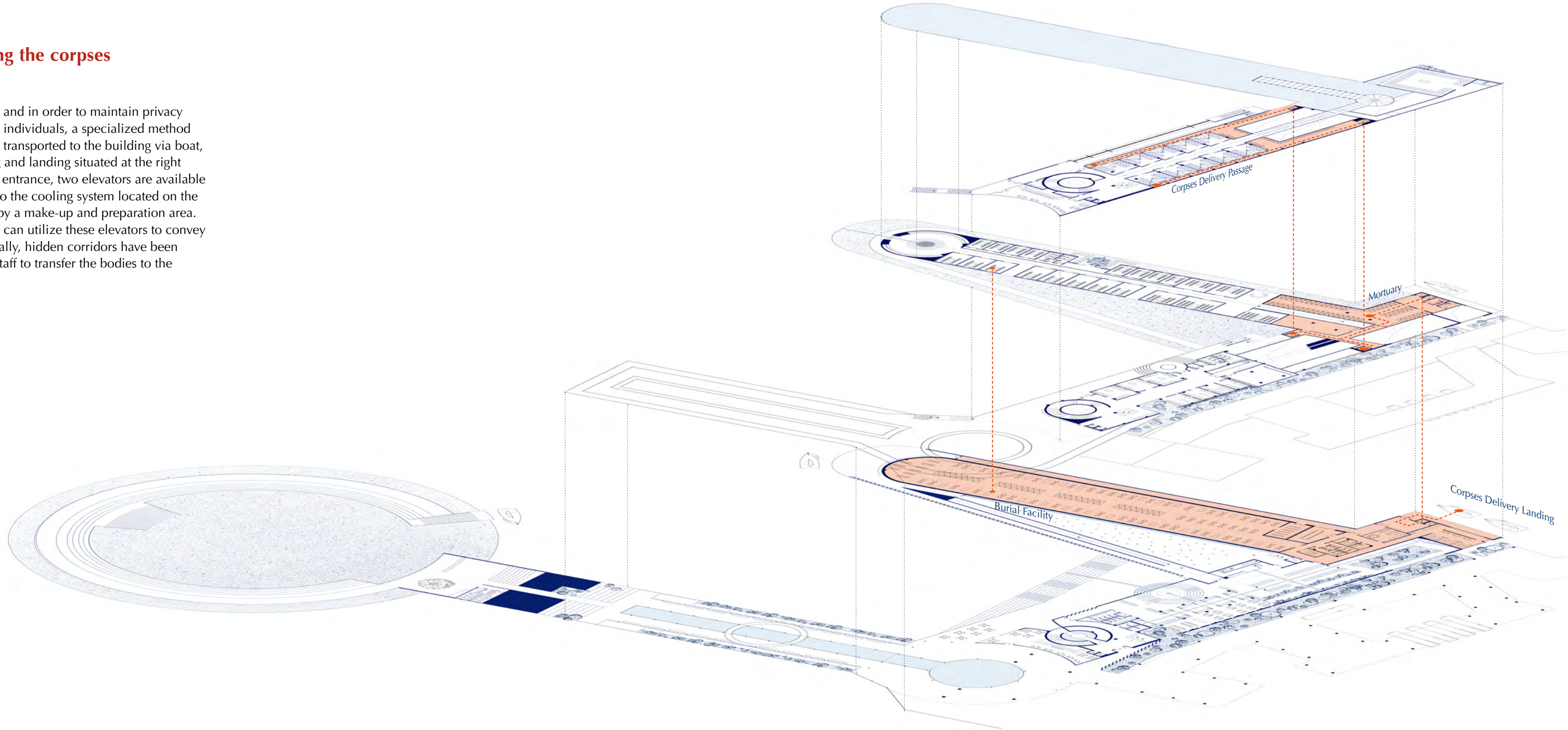
Mortuary



1. FACILITY

for storing and decompsing the corpses

Due to the central location of the site and in order to maintain privacy during the transportation of deceased individuals, a specialized method has been adopted. The bodies will be transported to the building via boat, with the designated point of handling and landing situated at the right edge of the first floor. Adjacent to the entrance, two elevators are available to facilitate the movement of bodies to the cooling system located on the second floor, which is accompanied by a make-up and preparation area. For further procedures, staff members can utilize these elevators to convey the bodies to the third floor. Additionally, hidden corridors have been constructed on both sides to enable staff to transfer the bodies to the respective ceremony rooms.



Narratives

2. SPIRITUAL SPACE for new ritual of farewell



Meditation



Holding ceremonies

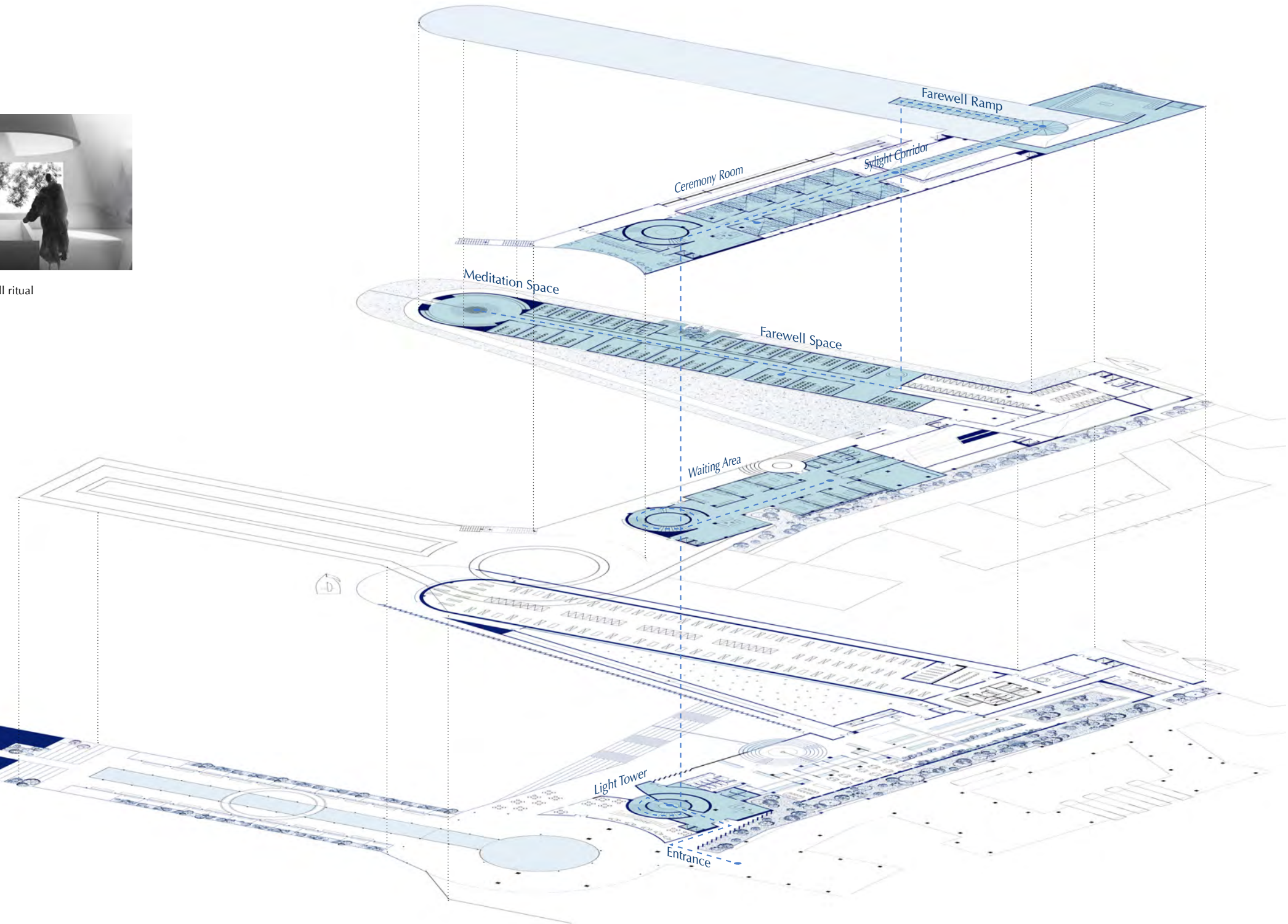


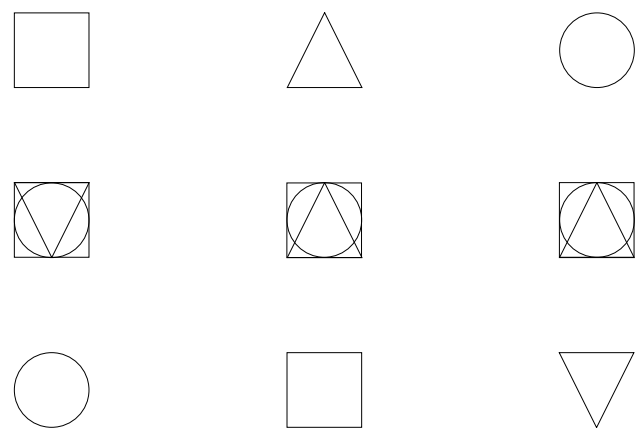
Carry the body



Farewell ritual

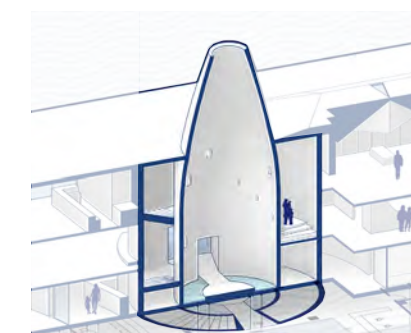
The central building holds significance within the premises. To establish a seamless circulation, the incorporated ramps connecting the central and right buildings, forming a triangular loop encompassing the Facility, Spiritual Space and Theater. Considering the proximity to a crucial bus hub, the funerary entrance has been situated on the left side. The roof, previously linking the pier and bus station, has been transformed into a half-covered, half-garden structure, shielding citizens from view and creating a serene and uninterrupted entrance.





Light Tower

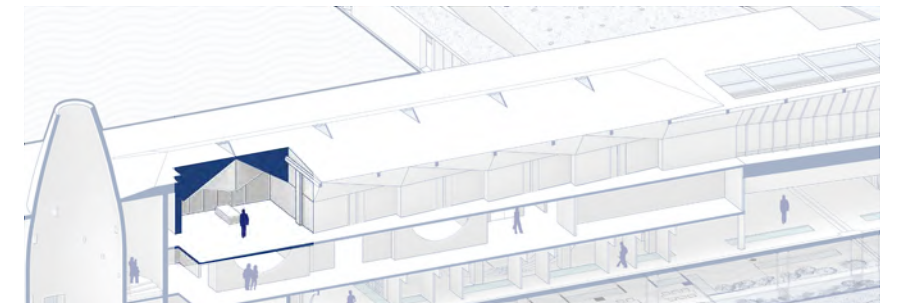
Upon entering the main entrance, mourners proceed along a corridor that leads them to a dimly lit space, except for the radiant "light tower," serving as a central hub connecting the three stories. Upon reaching the light tower, a breathtaking panorama of the open ocean unfolds before their eyes. Ascending the spiral staircase discreetly located behind a wall to the second floor. This experience allows people to quickly isolate themselves from the hustle and bustle to better recall back memories.



Ceremony Space

In the ceremony room, mourners encounter the departed, with the body being discreetly transported by staff via the hidden corridors previously mentioned. The structure connects the roof opening allows the skylight to be concentrated at the forefront of the platform, ensuring the focus remains on the face of the deceased.

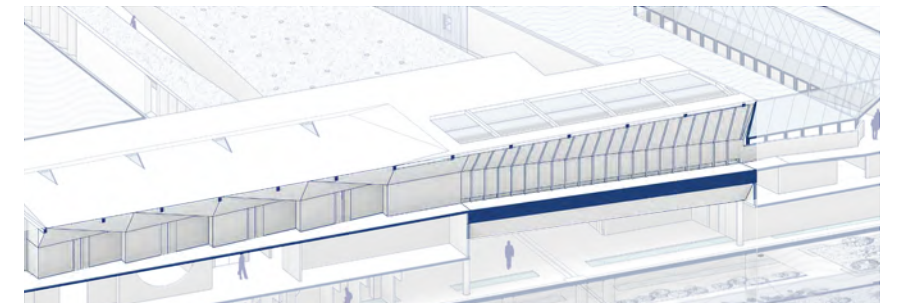
Furthermore, this architectural design embraces and respects all religions, creating an inclusive environment for diverse spiritual beliefs. The "Spiritual Space" embodies an absence of explicit or emblematic religious elements, instead emphasizing the utilization of natural elements such as water, sky, and light. Within the ceremony room and meditation area on the second floor, adherents of various religious traditions are free to engage in their unique rituals, as no restrictions or prohibitions are imposed. The space exists to accommodate their religious practices, serving as a support rather than a constraint.

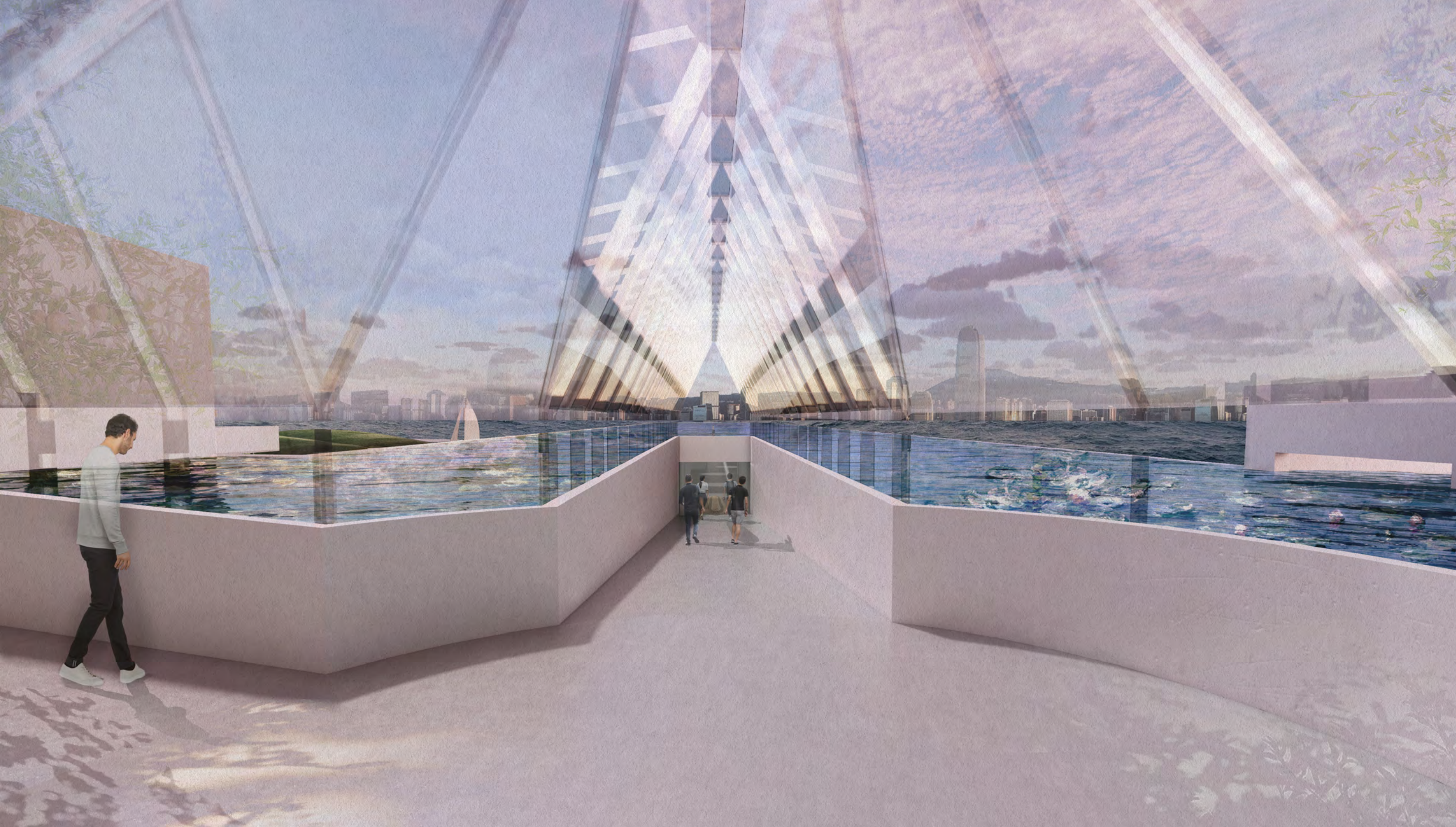




Skylight Corridor

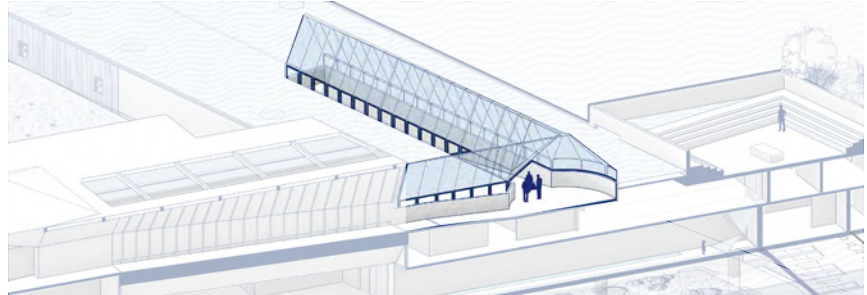
Following a brief ceremony, relatives accompany the body to the farewell space through an overhead ramp leading to the roof ramp. This symbolic journey mirrors the companionship experienced during life's final journey. By fostering a secure and open interaction with death and the deceased, individuals find solace and purpose, unburdening their grief and embarking on a path of healing.





Farewell Ramp

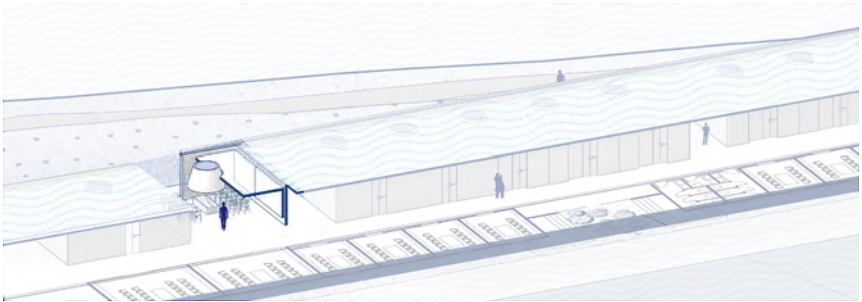
During this process, individuals transition from the interior to the exterior. The journey leads to the bottom of the lotus pond, where an intriguing play of water reflections mirrors the sky with gentle waves. The rectangular entrance slit guides the eye downwards to darkness. People carry the body and pass through this expanse of water into the space beneath the water's surface.

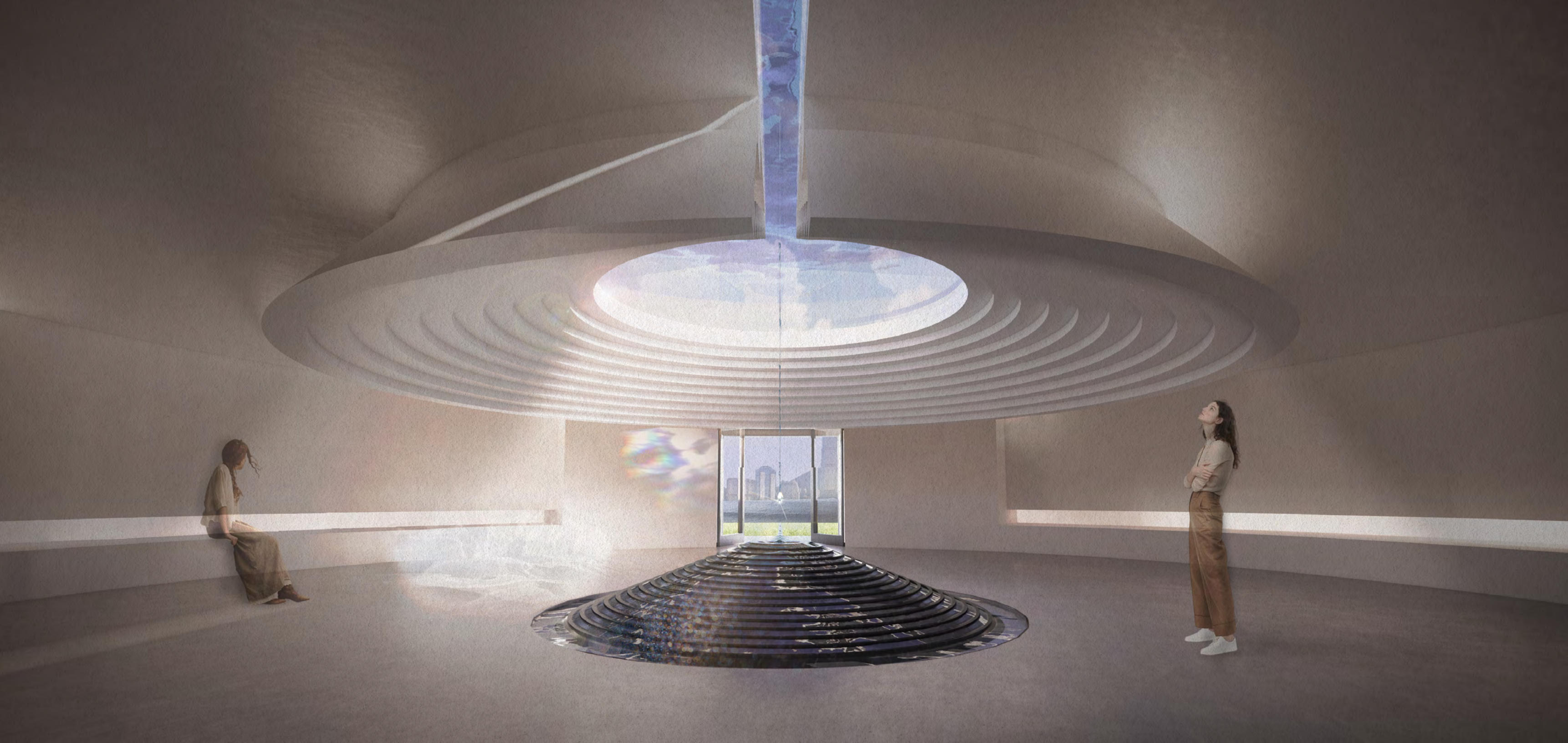




Farewell Space

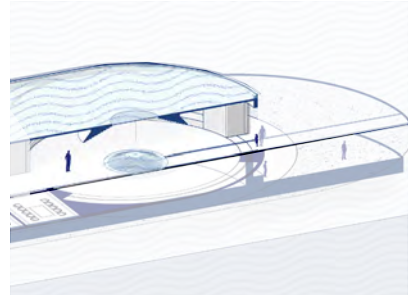
In the farewell space, relatives sprinkle a mixture of sawdust, purple clover, and straw onto the body, aiding in the natural decomposition into soil. By pressing a button, the body gently descends to the first floor via an elevator. Bamboo plantings shield the view from the bustling city while cascading water from the roof flows down to create a curtain outside the window. The skylight above allows light to filter in, casting shimmering water reflections on the deceased.





Meditation Space

The meditation area features a tiny opening on the ceiling, with a crystal pendant reflecting rainbow shadows and guiding water drops from the roof pool into a pond.



3. THEATER for gathering and healing



Choose seed

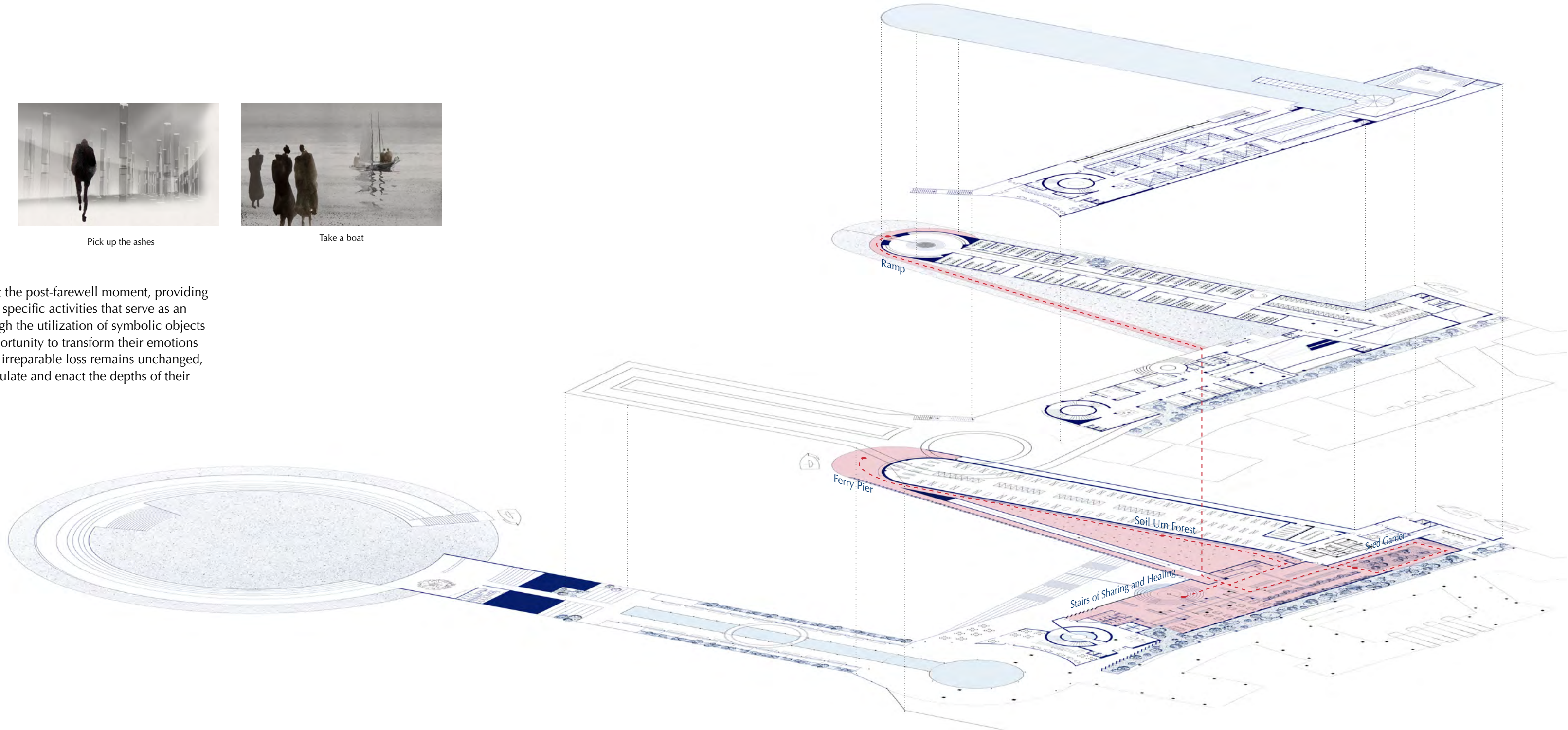


Pick up the ashes



Take a boat

The theater serves as a stage to depict the post-farewell moment, providing individuals with a space to engage in specific activities that serve as an anchor for releasing their grief. Through the utilization of symbolic objects and actions, individuals have the opportunity to transform their emotions into ritualistic expressions. While the irreparable loss remains unchanged, these behaviors offer a means to articulate and enact the depths of their painful emotions.





Stairs of Sharing and Healing

Descending from the grassy slope, individuals return to the first floor of the main building, entering the theater section. A staircase space facilitates communication among different families, allowing for the sharing of emotions and stories, providing solace and mutual healing.



Seed Garden Entrance

Additionally, while waiting, families can select seeds for their loved ones, symbolizing the potential to become any chosen plant after death.

Each plant species is assigned a unique number, and the render depicts the entrance to the interior seed garden. Behind the entrance lies a skylight atrium, bathing the garden in sunlight, with its three-story height creating a vibrant and flourishing space.



Soil Urn Forest

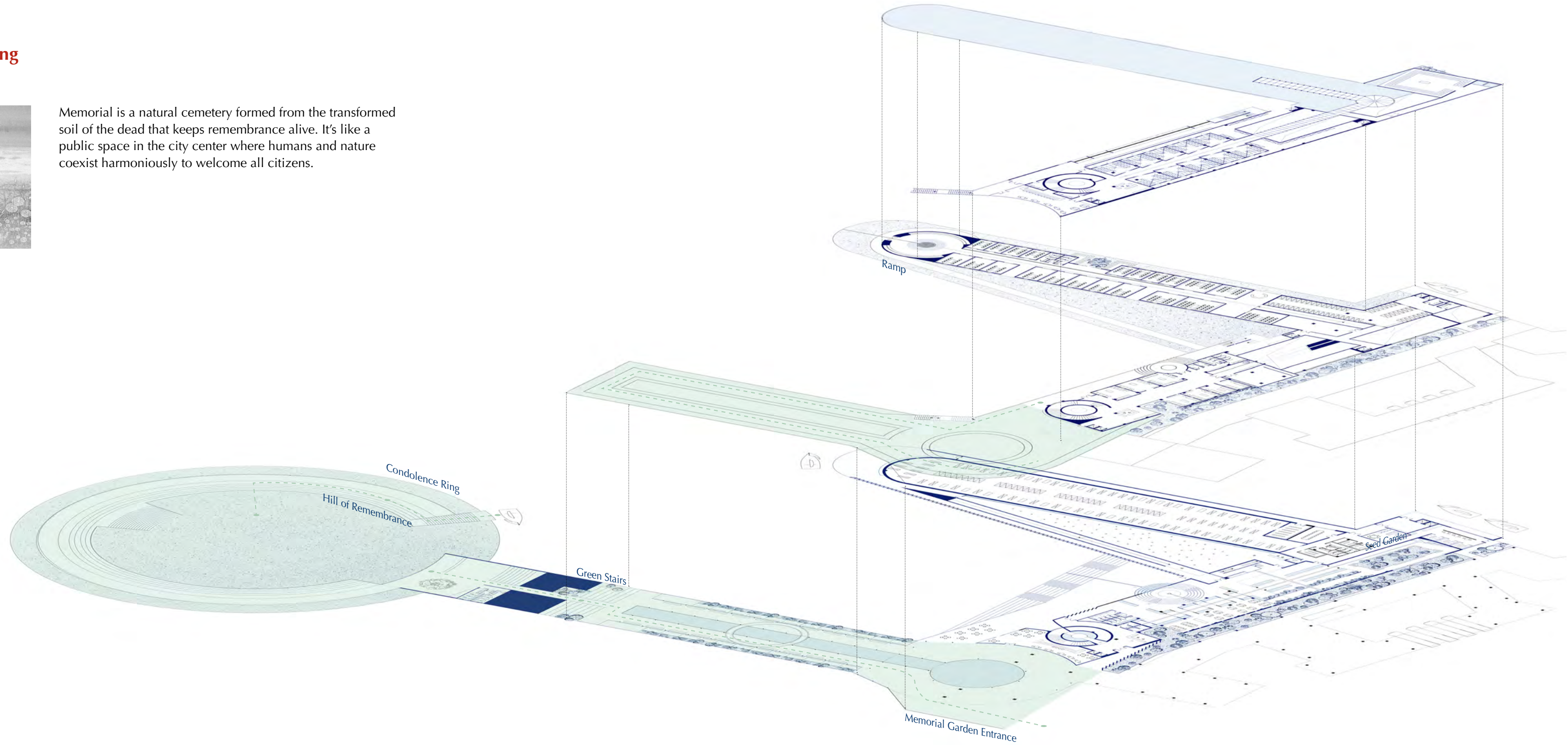
Subsequently, upon choosing the seeds, family proceed to an area concealed beneath the grassland, where numerous openings are created. These apertures, positioned contribute to the formation of a luminous forest through the implementation of light-guiding materials within the columns. Within this ethereal space, urns are elegantly showcased, symbolizing a profound reconnection with nature and the prospect of rebirth. Towards the right side, a gap allows the water curtain from the farewell space to cascade into this realm, forging a fluid link between the farewell space and the domain of soil urns. Progressing through these columns akin to light-filled trees, individuals traverse towards the conclusion of this space to arrive at a pier, where a boat awaits to transport them to a small hill floating upon the ocean's surface.

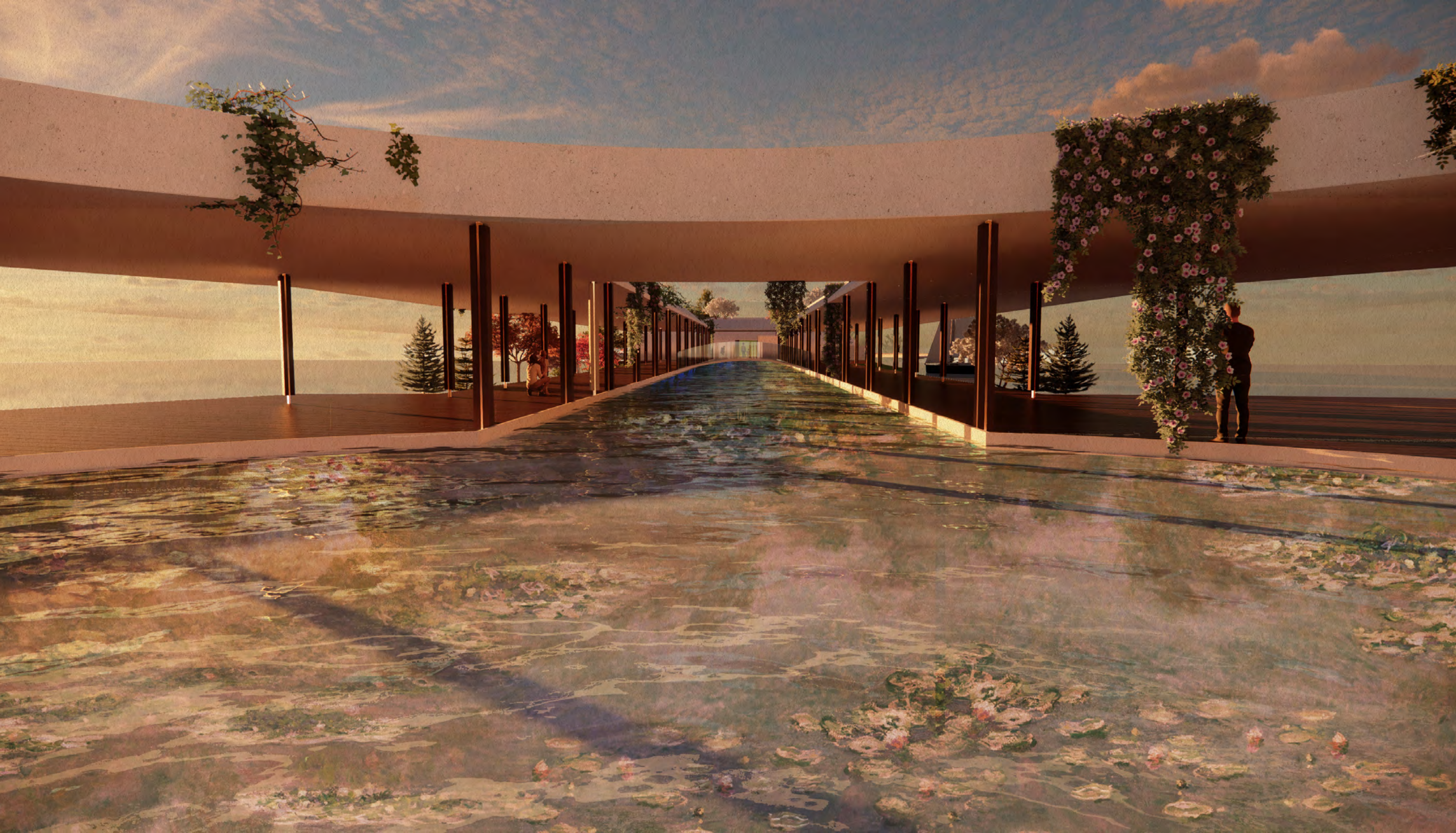
4. MEMORIAL for mourning and reflecting



Plant the seeds / Mourning

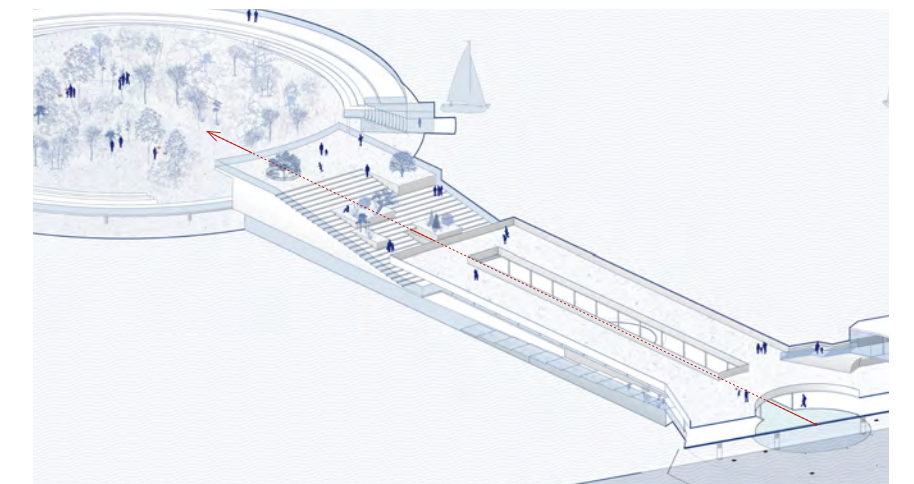
Memorial is a natural cemetery formed from the transformed soil of the dead that keeps remembrance alive. It's like a public space in the city center where humans and nature coexist harmoniously to welcome all citizens.





Memorial Garden Entrance

The entrance to the memorial is accessible to all citizens, featuring a central elongated pond that guides a direct line of sight. Upon entering, individuals can immediately behold the distant hill at the end of the space. An arch bridge connects the flow of people on both sides of the slender central pond.





Hill of Remembrance

Positioned beneath the green stairs, a viewing platform allows citizens to witness people planting soil and seeds upon the hill of remembrance. This space fosters an expansive horizontal view, facilitating introspection and an escape from the urban milieu, offering a panorama of serene forests rather than a skyline crowded with towering skyscrapers.

With the passage of time, as countless souls intertwine with the fertile soil and embrace the earth's embrace, a symphony of memorial islands emerges upon this vast ocean. These islands, born from the convergence of planned circles, evolve organically, reaching towards a more harmonious and natural shape, forever connected in their ethereal growth.

Epilogue





This proposal stands as an exemplary showcase, illustrating one of the potential approaches for this novel cemetery typology. The four constituent elements, along with their accompanying ritual processes, are adaptable and transferrable to diverse architectural settings and renovation projects.

I

1.01: “The Elements of Life.” Envisioning Chemistry. <https://www.envisioningchemistry.com/the-elements-of-life>.

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