



YEFEI GUO

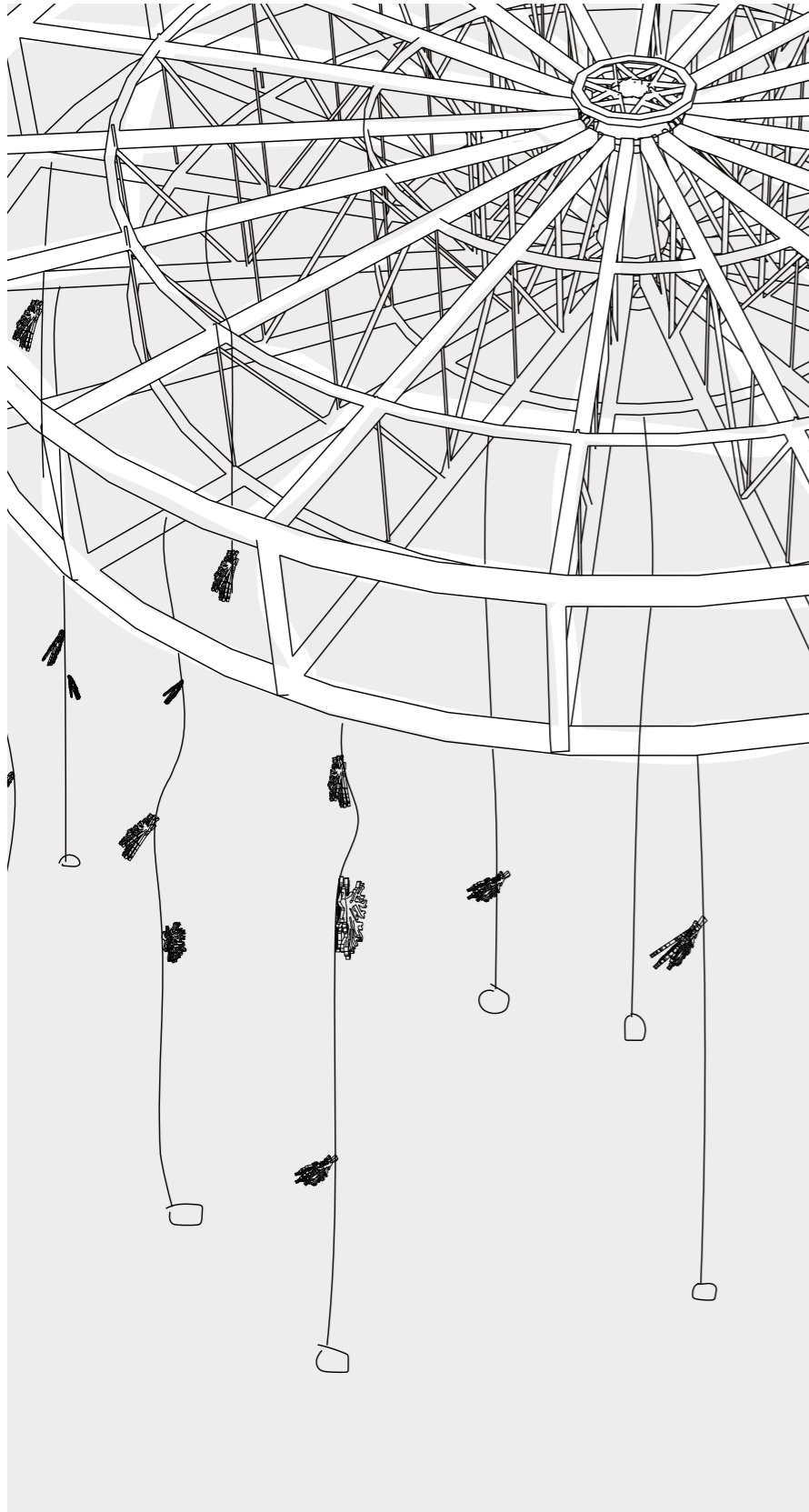
GSAPP 2022
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01

THE CORAL ARK

GSAPP
SUMMER 2021

Professor: Yussef Agbo-Ola
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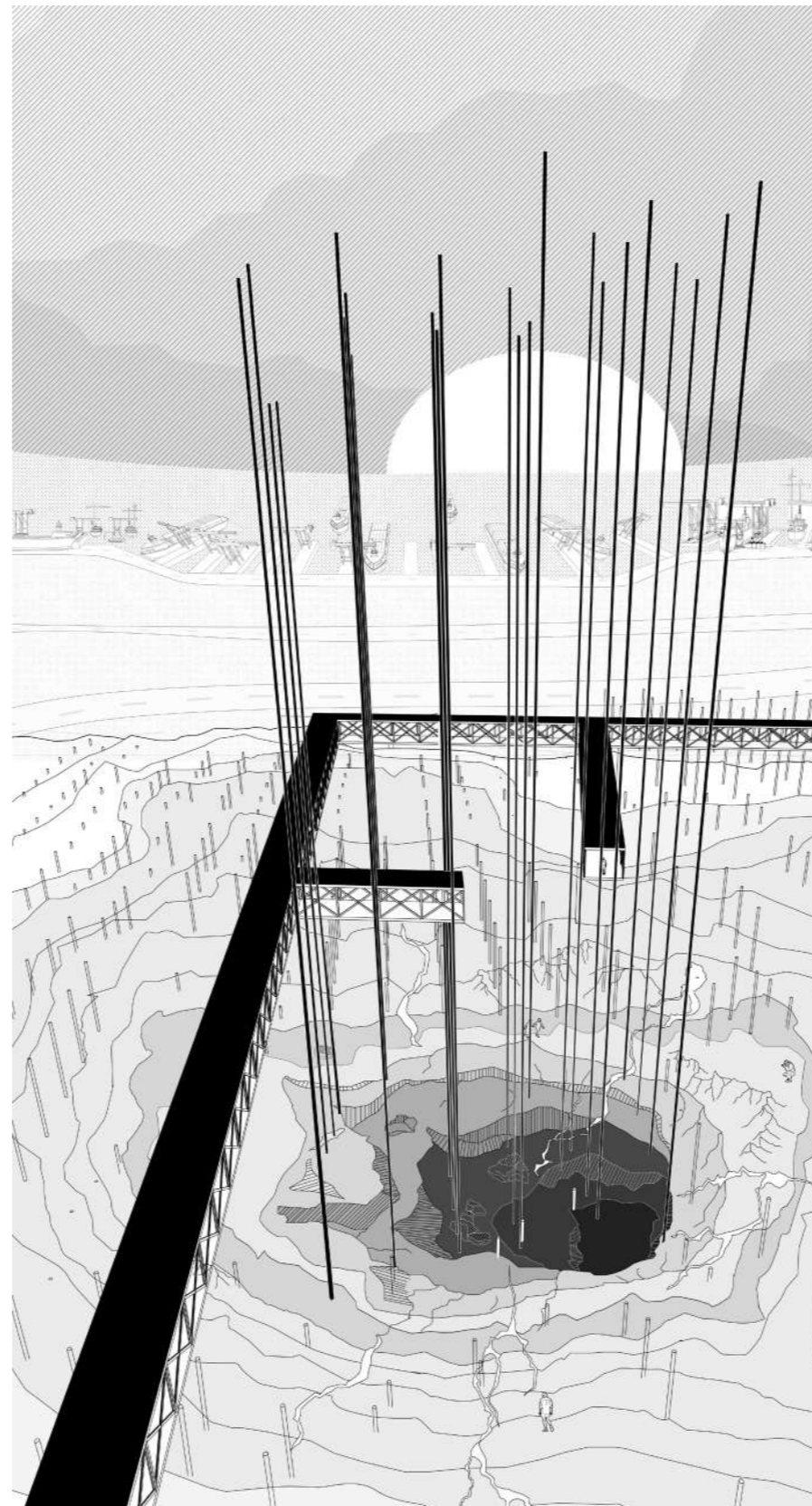


02

THE VIOLENCE IN THE AIR

GSAPP
FALL 2021

Professor: Nahyun Hwang
n@nhdm.org

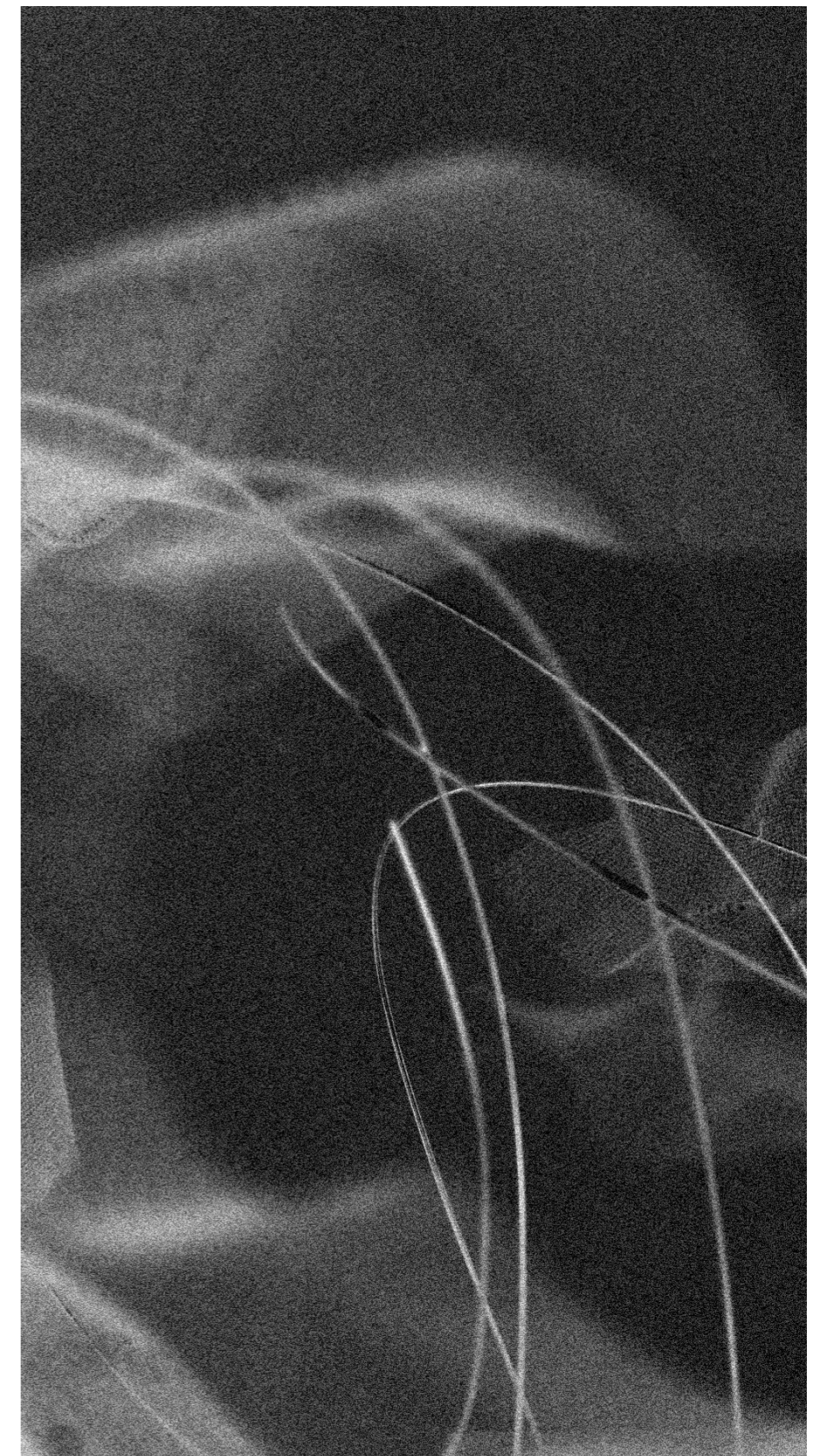


03

TWINNING
双

GSAPP
SPRING 2022

Professor: Ada Tolla & Giuseppe Lignano
ada@lot-ek.com
giuseppe@lot-ek.com



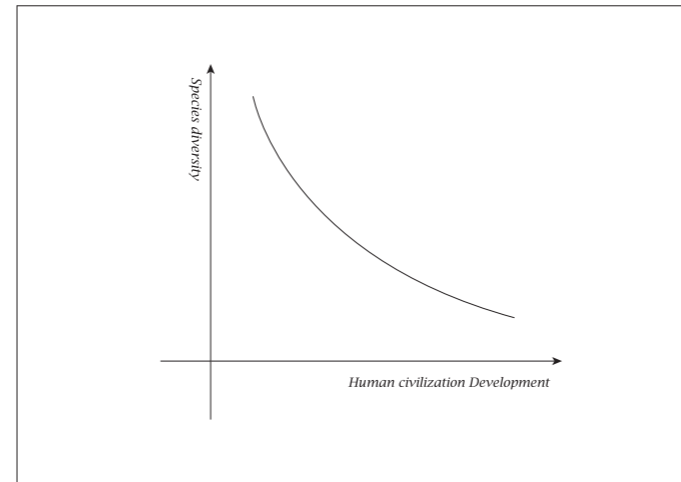
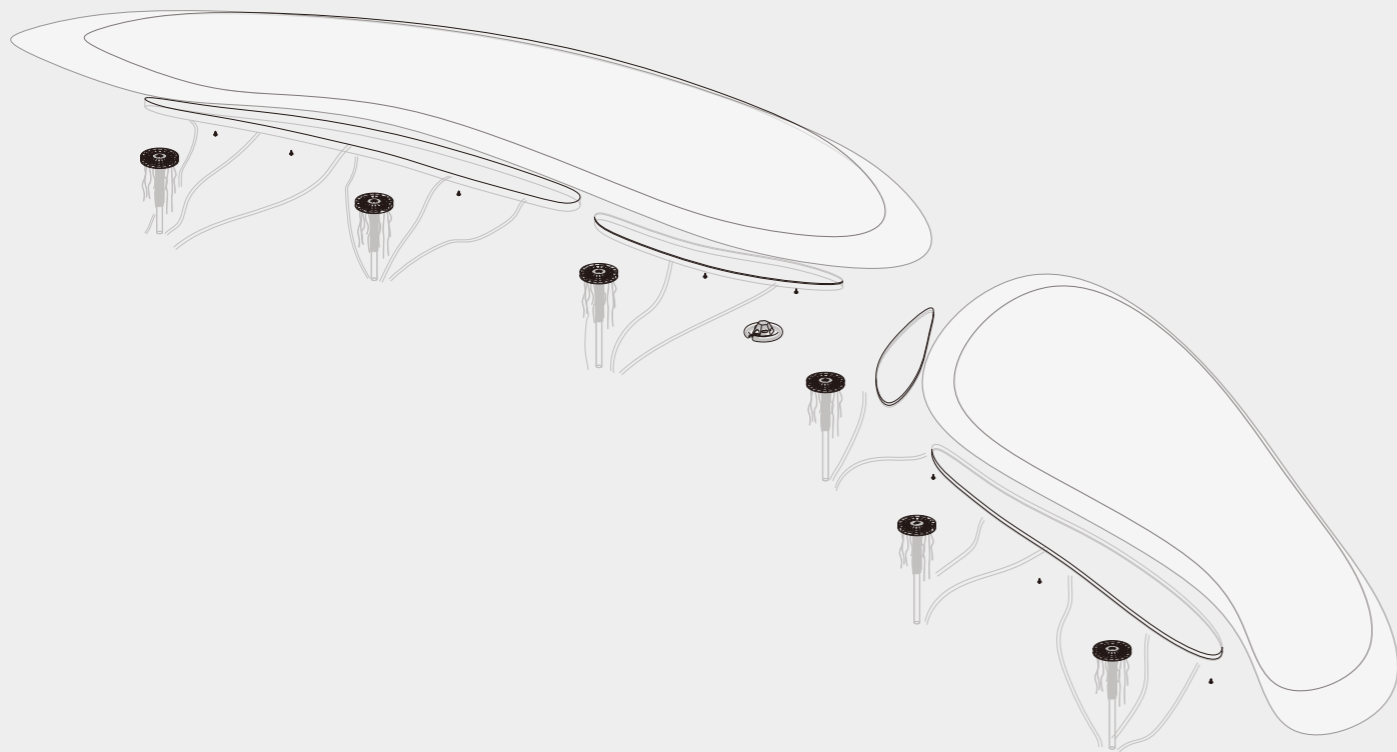
01 FINDING BALANCE IN CONSTANT CHANGE :
THE CORAL ARK

GSAPP SUMMER 2021

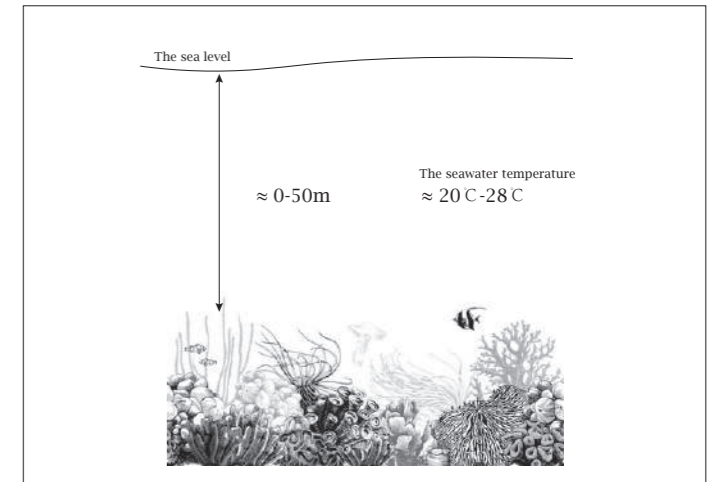
HAI NAN,
CHINA

"Ocean warming and the occurrence of heat waves will increase in frequency and intensity over the coming decades and we need to consider rather unconventional solutions to protect and sustain coral reefs."

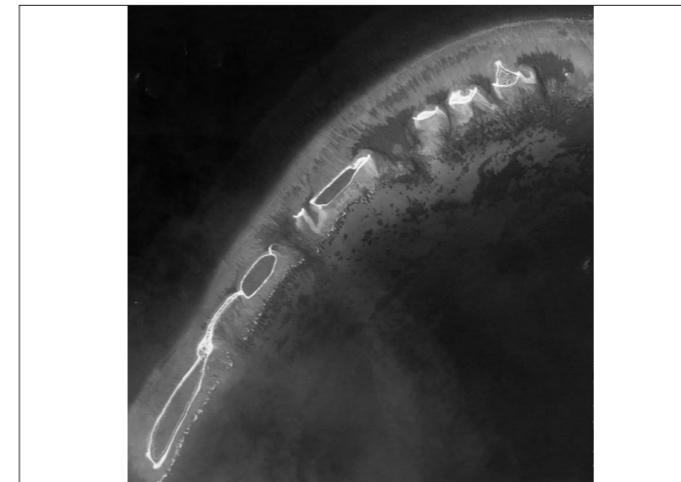
---Yvonne Sawall, Assistant Scientist,
Bermuda Institute of Ocean Sciences (BIOS)



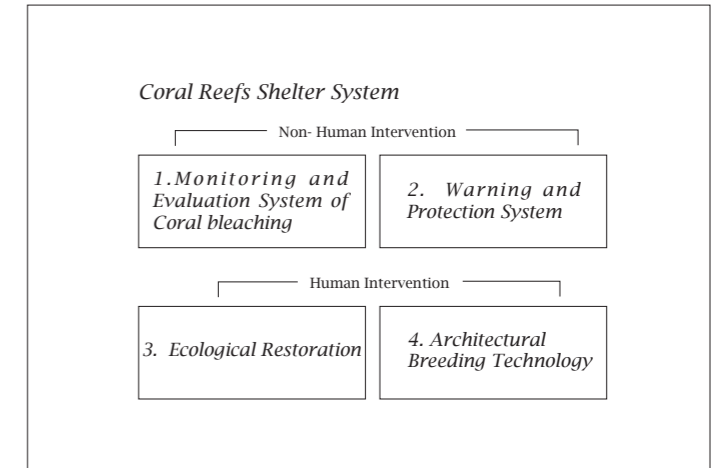
Part 1 decay



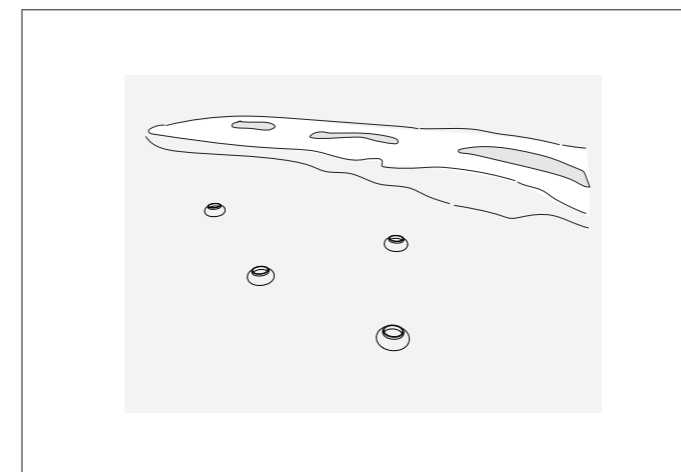
Part 2 coral reefs



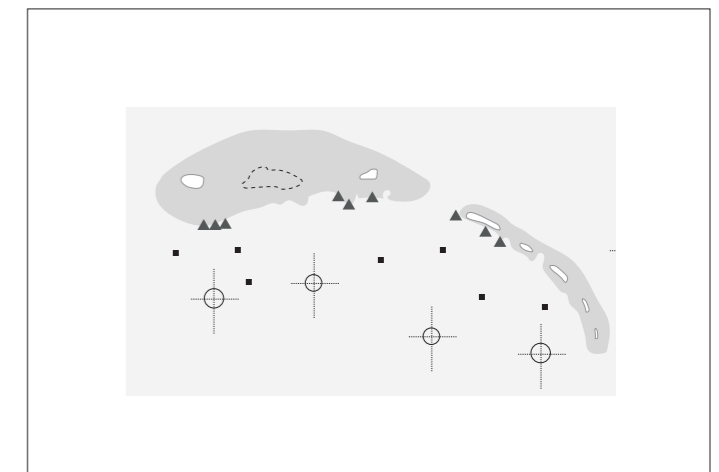
Part 3 site



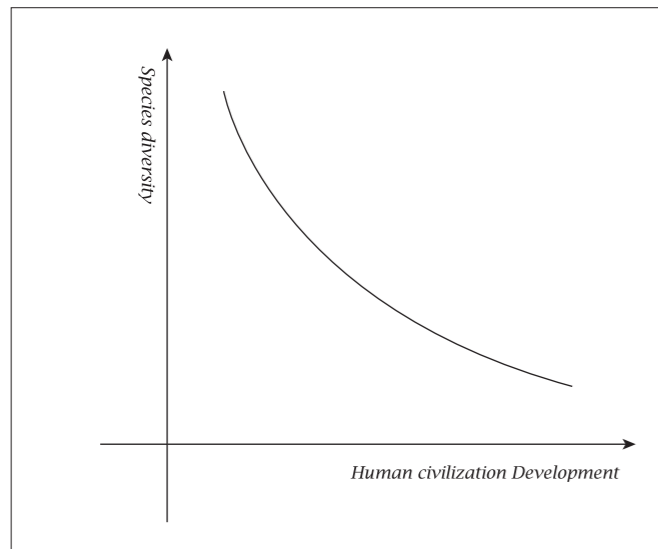
Part 4 system



Part 5 typologies



Part 6 narrativity

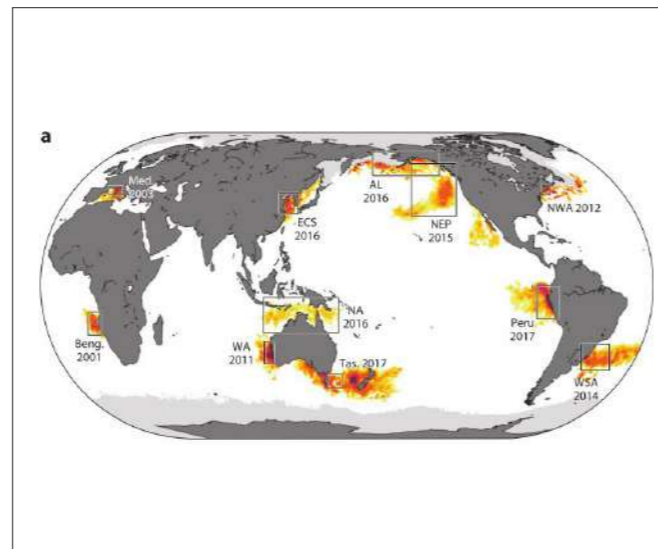


The Decay

In the Anthropocene, human activities have had a profound impact on the entire planet. Never before has the natural environment changed so rapidly.

All species, including human, are subject to such rapid change. Unlike humans, however, other species did not acquire the same ability to adapt under such intense changes, and gradually lost their habitable environment. Under the continuous impact of various disasters, such as Global Climate Change, some species are going extinct.

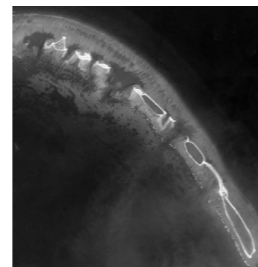
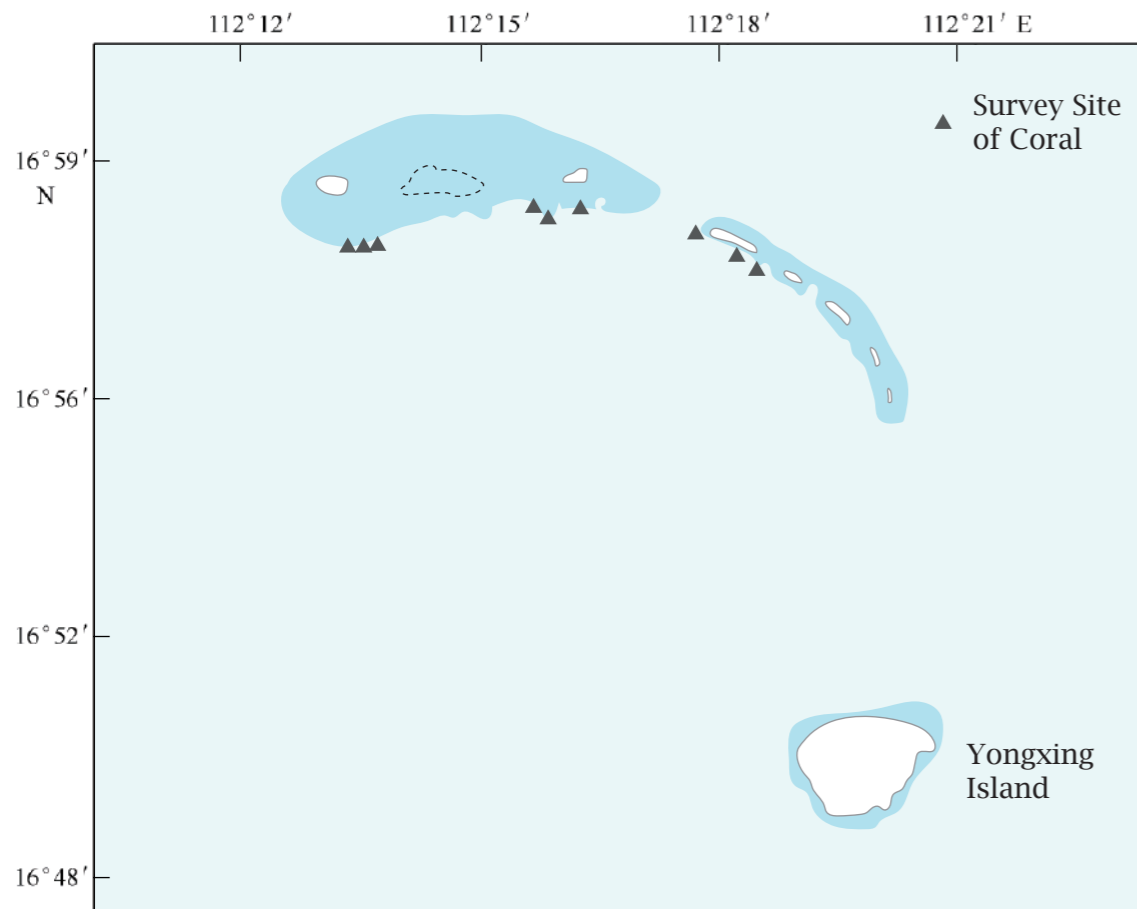
We are experiencing the sixth Biological Extinction.



Marine Heatwaves

A marine heatwave is a short period of abnormally high temperatures in a sea or ocean.

Marine heatwaves are a natural phenomenon. But as the impact of human activities on the earth's ecology intensifies, marine heatwaves appear more frequent and the duration of that heat waves increase.



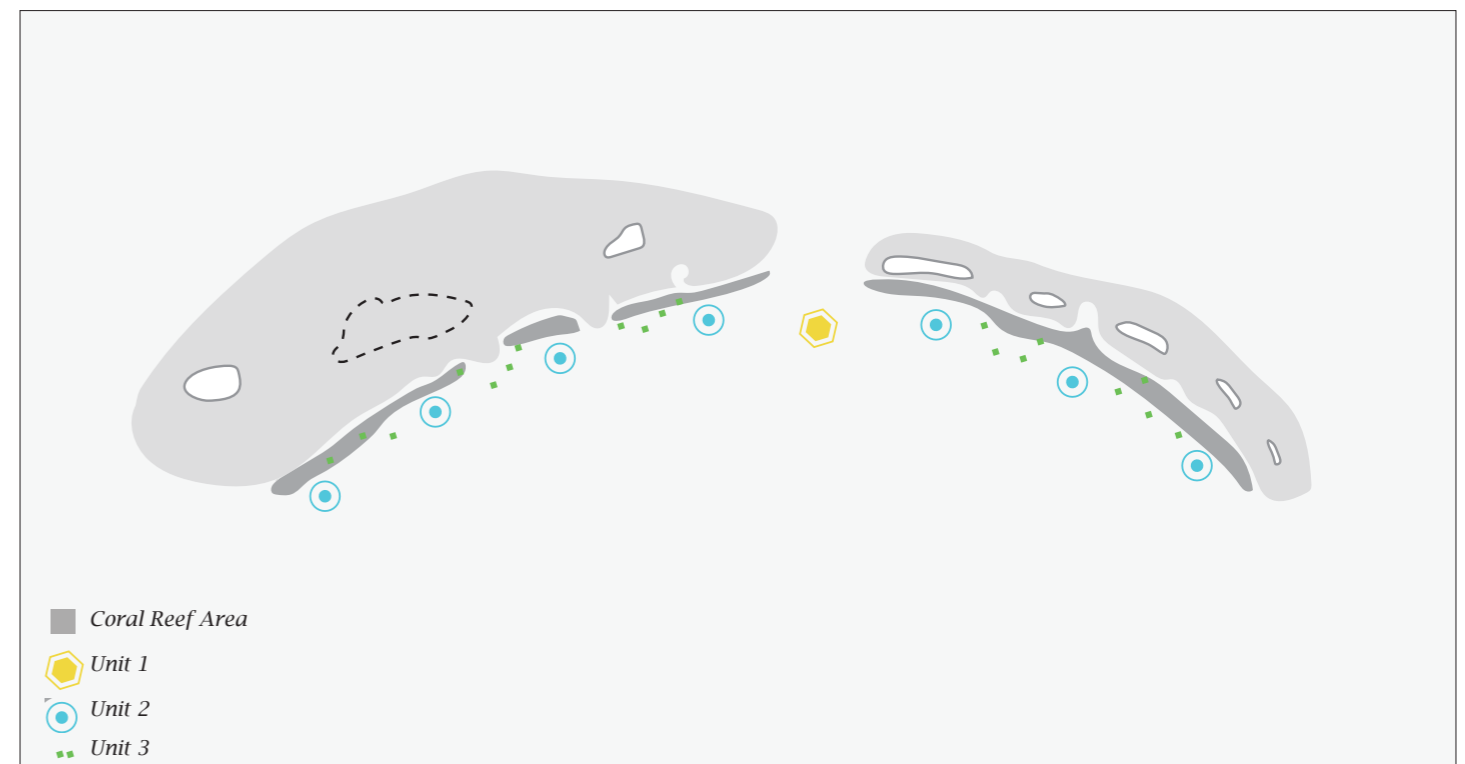
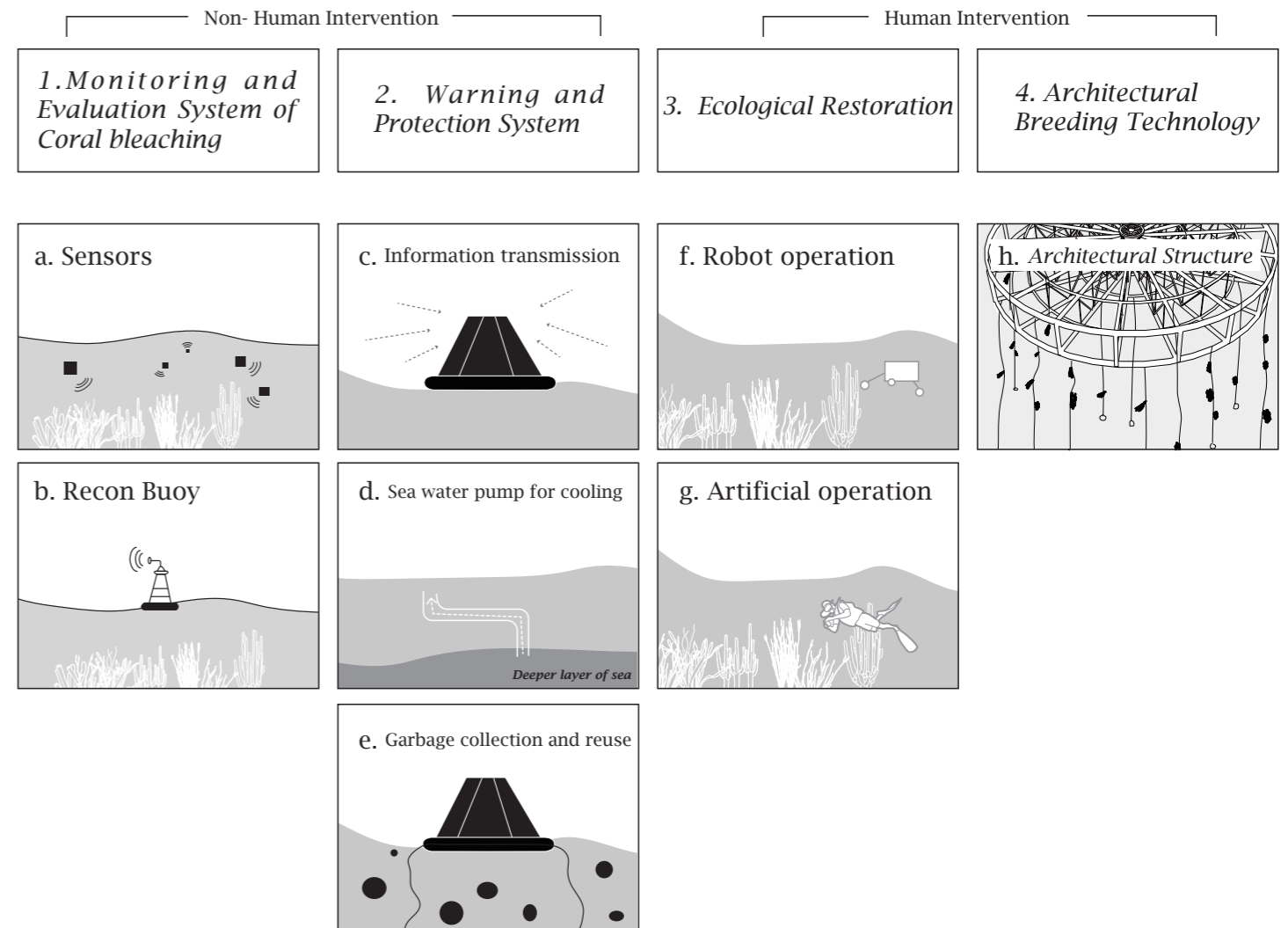
Qilianyu islands

Qilianyu refers to seven nearby islands in the Paracel Islands, the islands are similar in size, distributed in long clusters, and are of the same distance.

There is an environment suitable for coral reef growth. Due to rising sea temperature and marine pollution, the coral reefs here are also suffering from bleaching.

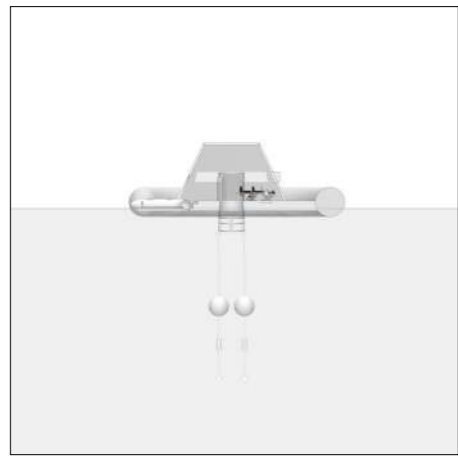
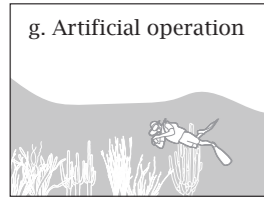
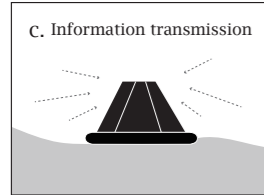


Coral Reefs Shelter System

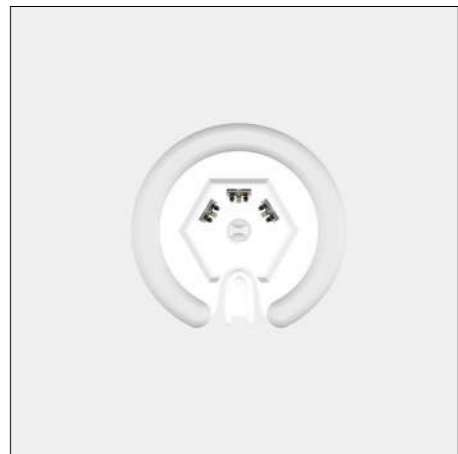


Location

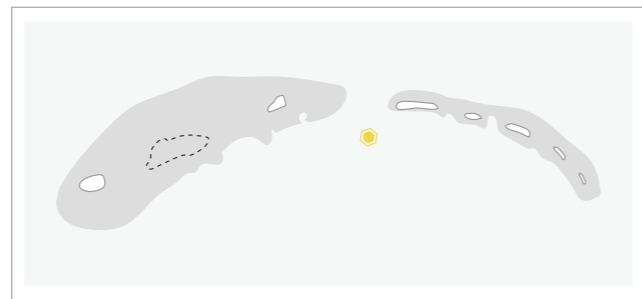
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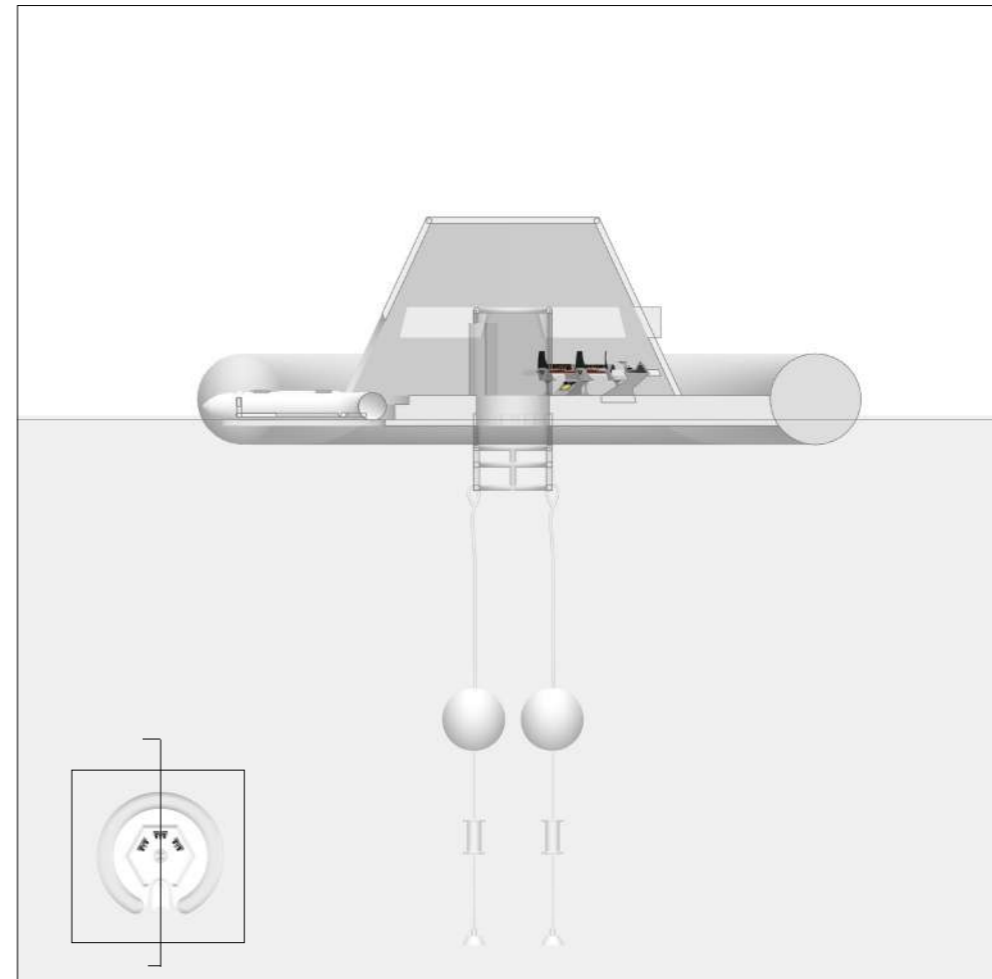
Section



Plan

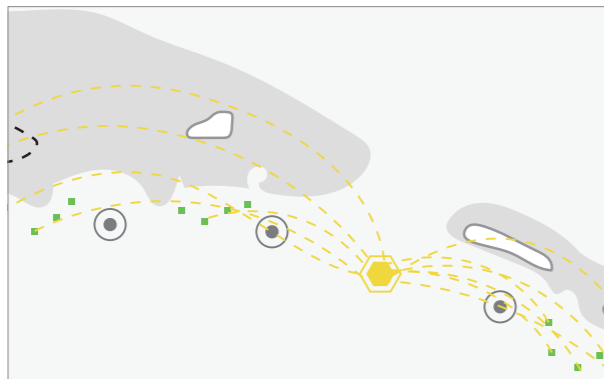


Location

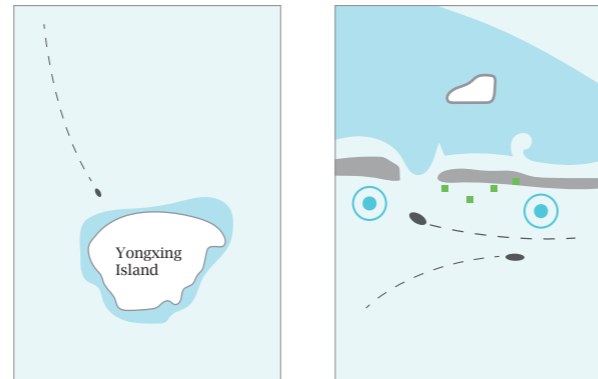


Section 1

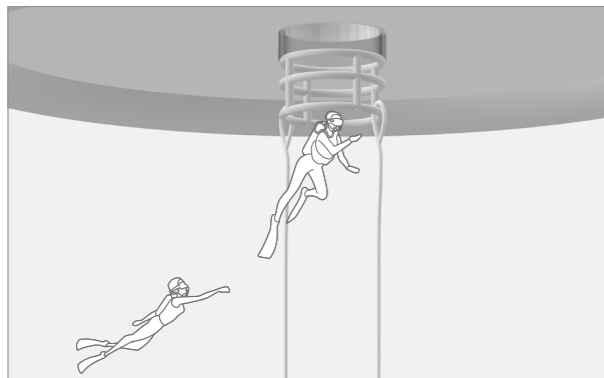
① Information Collection and Processing



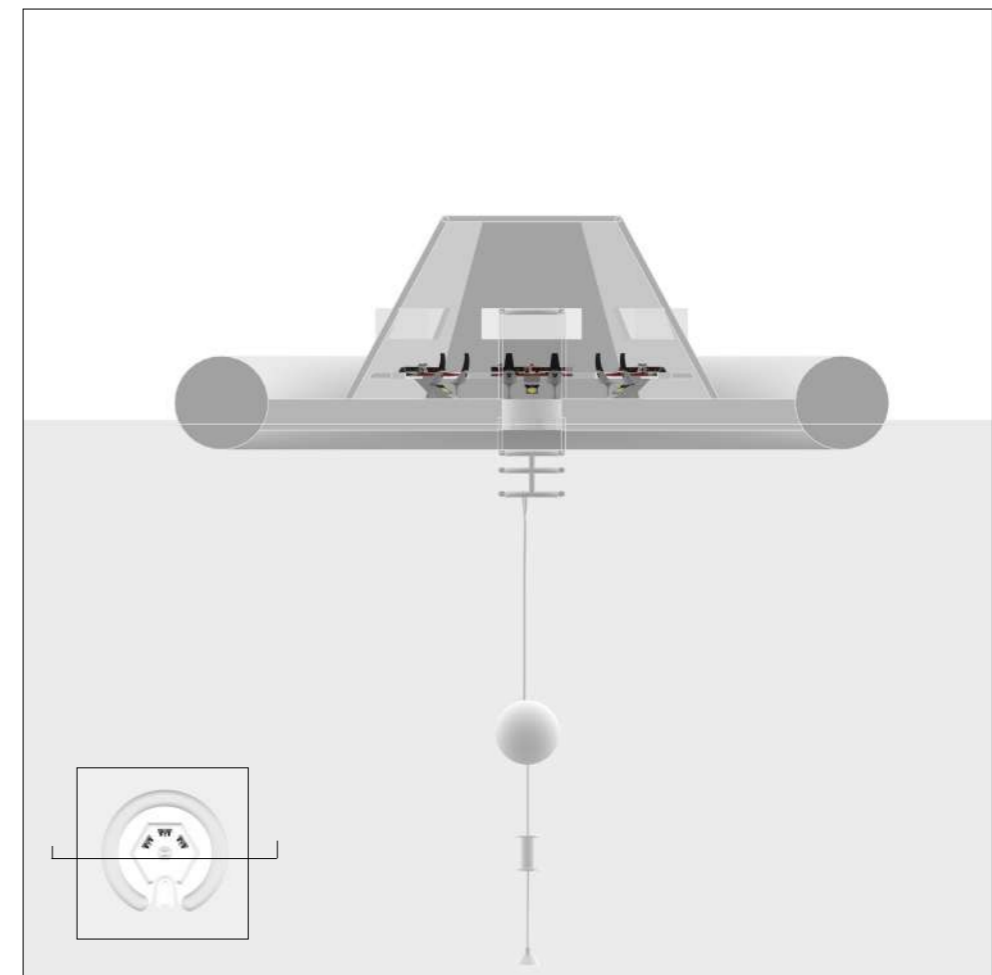
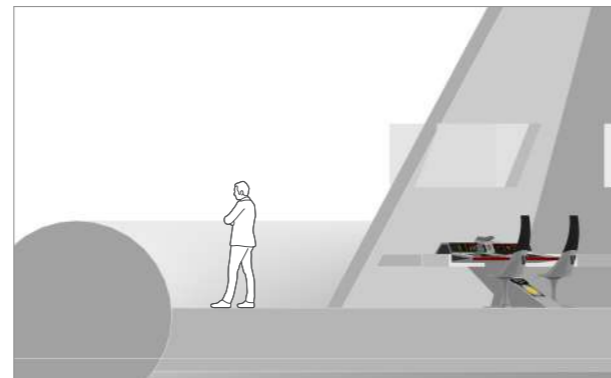
② Commuting Vehicle



③ Diving and Moving

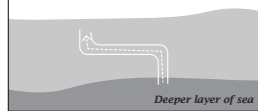


④ Observe and Record

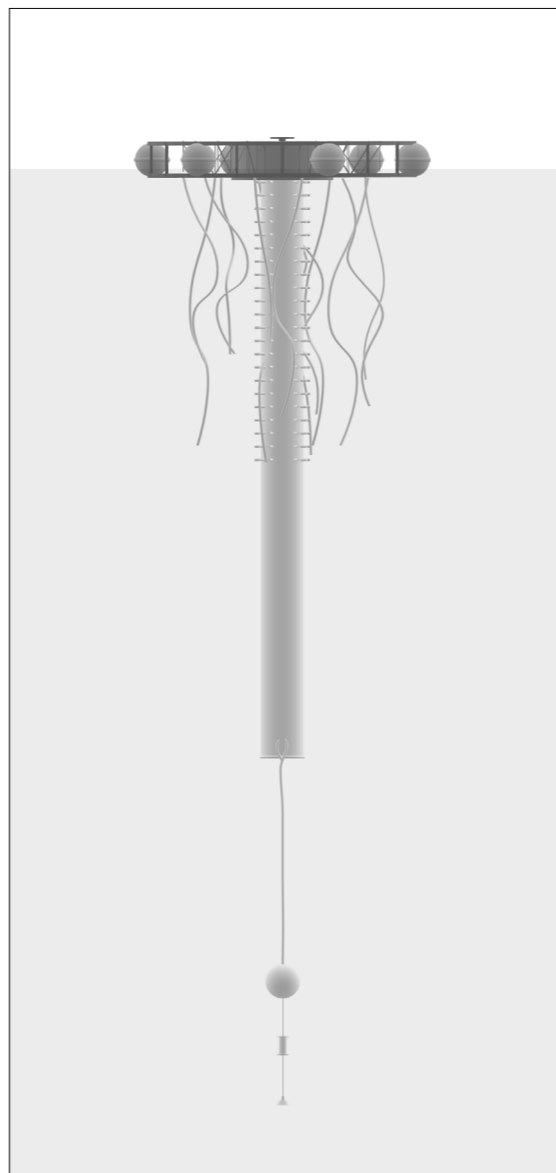
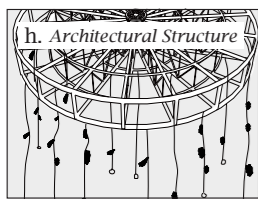


Section 2

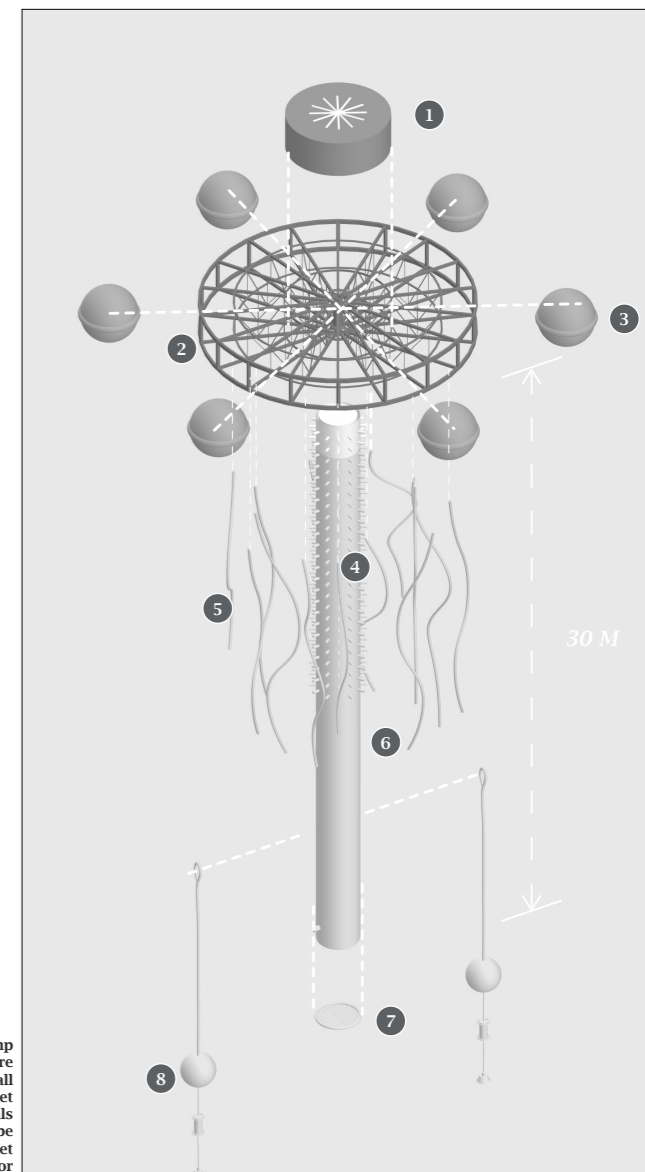
d. Sea water pump for cooling



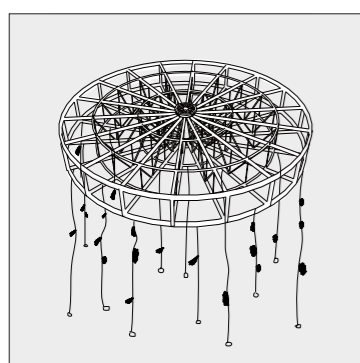
h. Architectural Structure



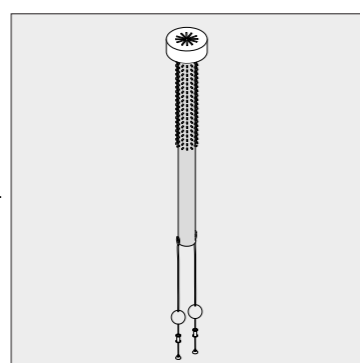
Part 1



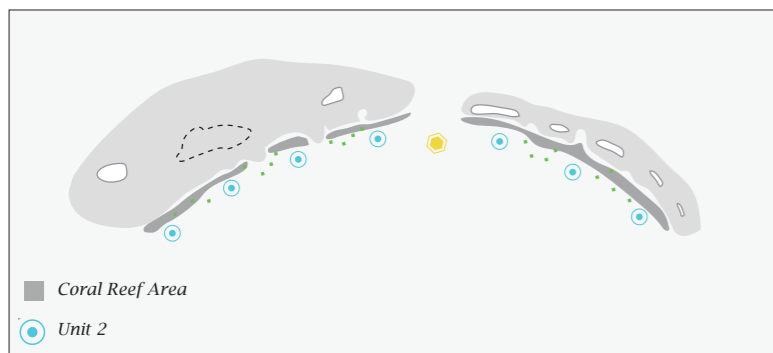
- 1 Wave pump
- 2 Architectural Structure
- 3 Buoyancy ball
- 4 Water Outlet
- 5 Rope for Corals
- 6 Pump Tube
- 7 Cooling water inlet
- 8 Anchor



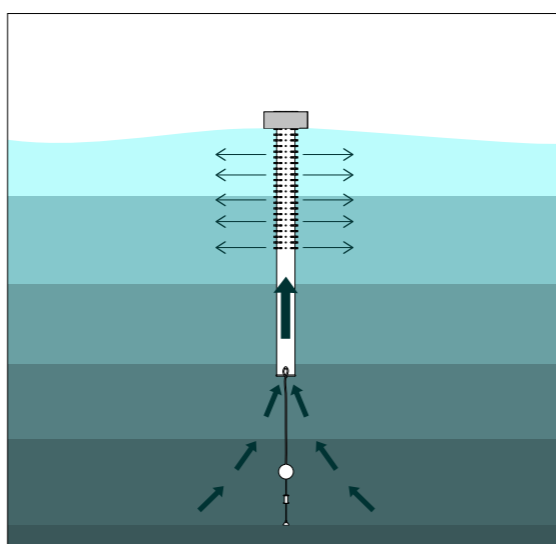
Architectural Structure for Coral Breeding



Artificial Upwelling System



Location

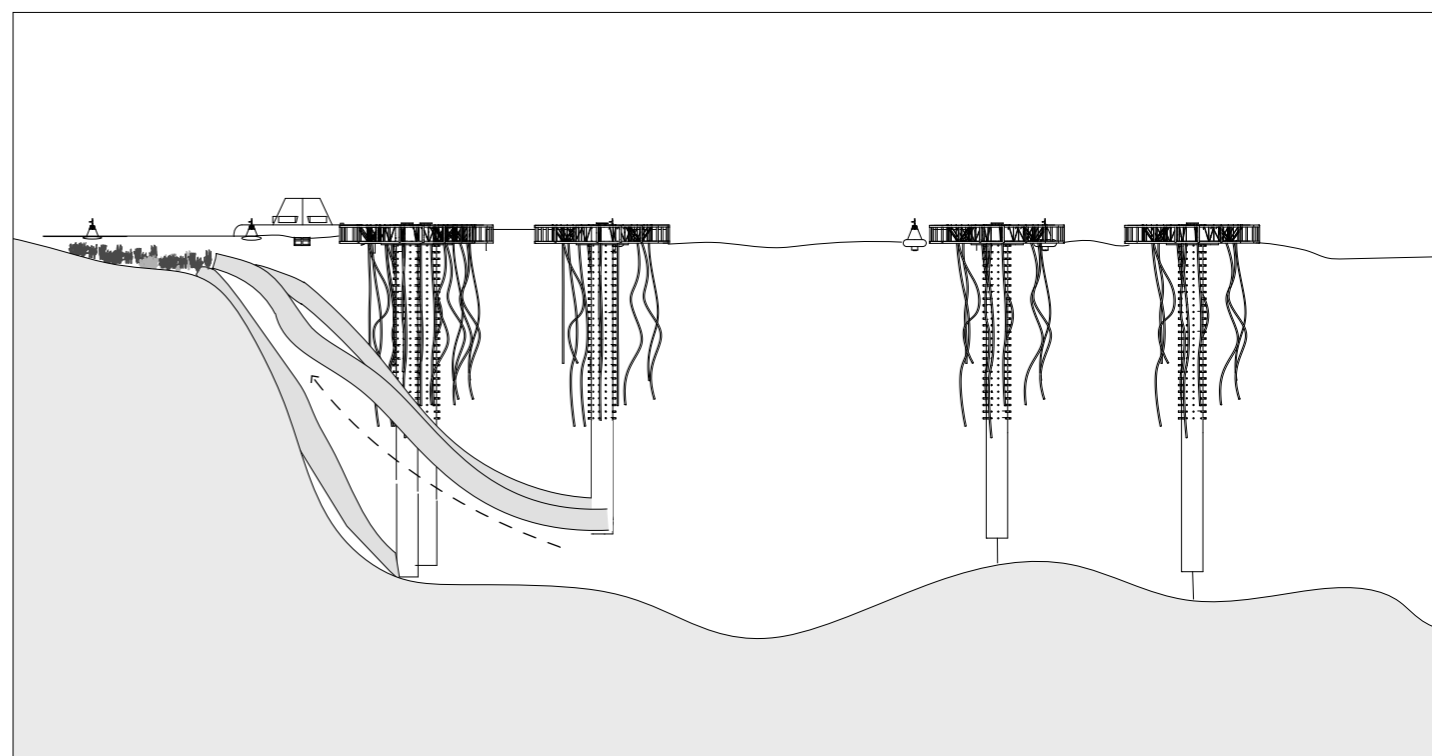


Artificial Upwelling

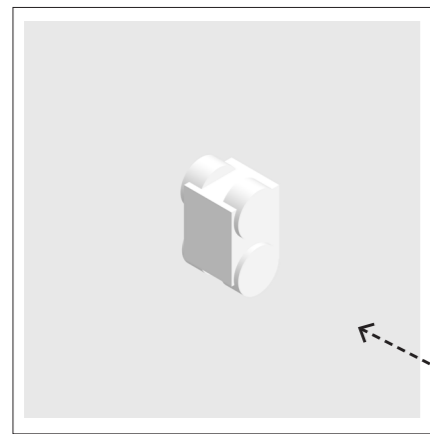
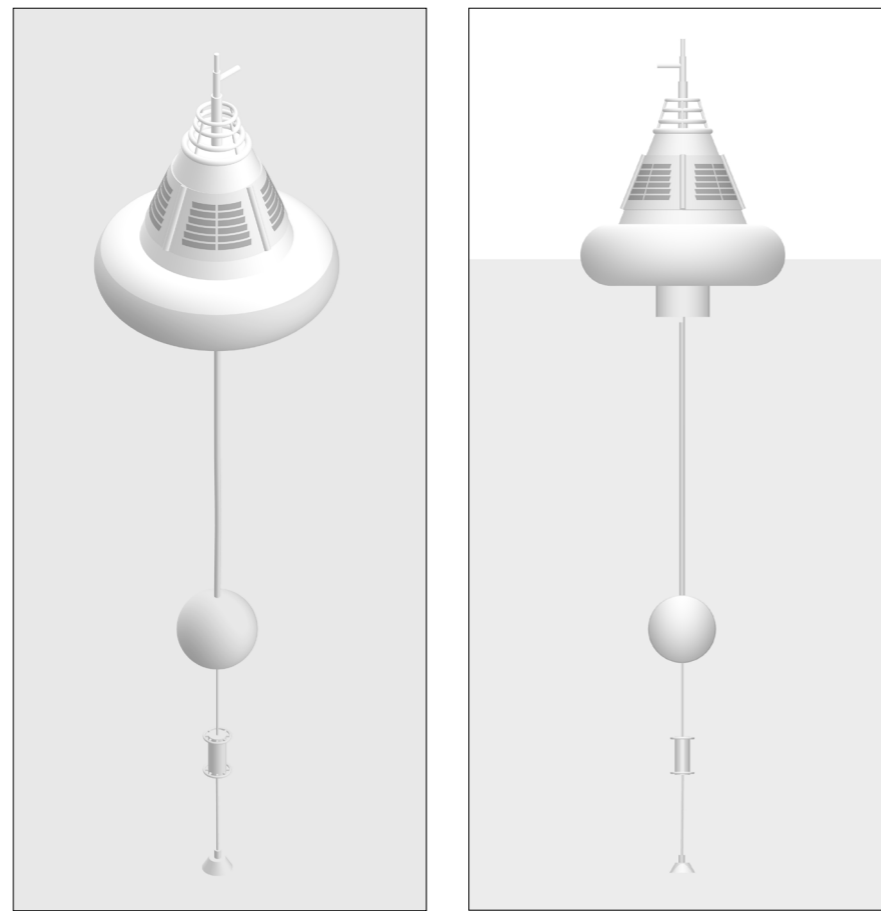
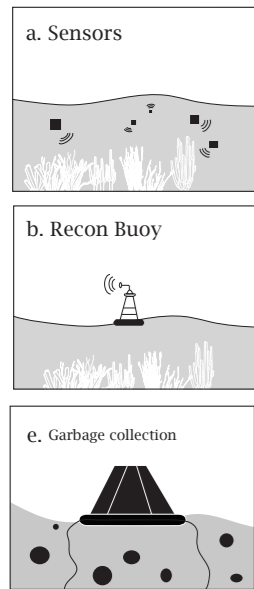
"Upwelling" happens naturally when winds push surface water away from coastal regions, allowing deep ocean water from below to move up and take its place.

Deep-ocean pumps are used to *manually imitate the process*. This is known as "artificial upwelling," and it was used to help increase fish stocks in surface waters.

Now some research showed that artificial upwelling *could be used to prevent coral bleaching*, by *cooling the waters in which reefs are located*.



Part 2



Sensor

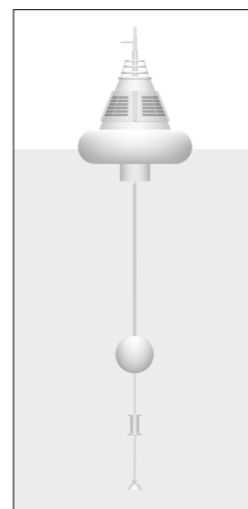
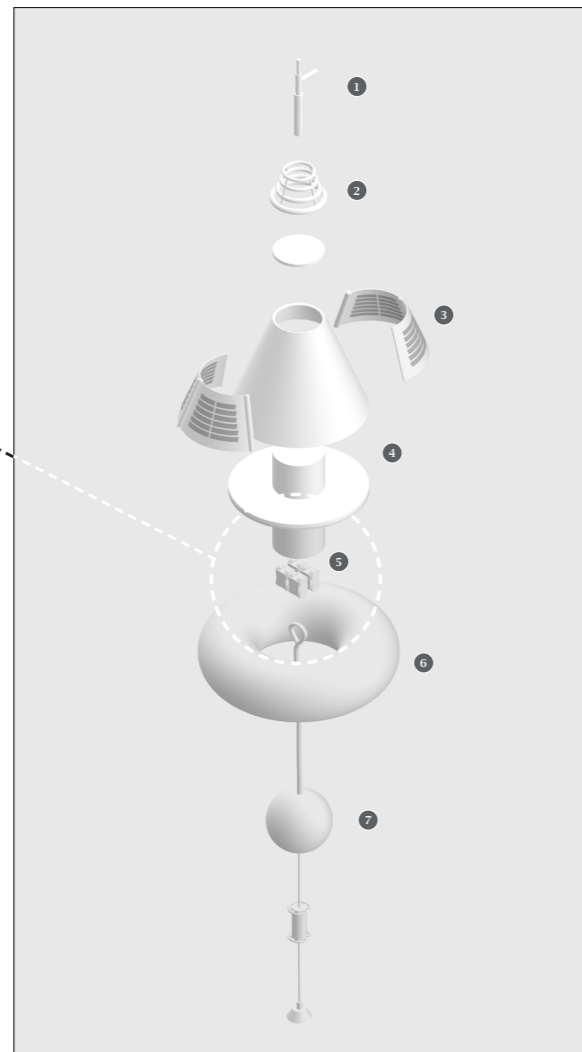
Remote control

Store and send information

Sensor Functions

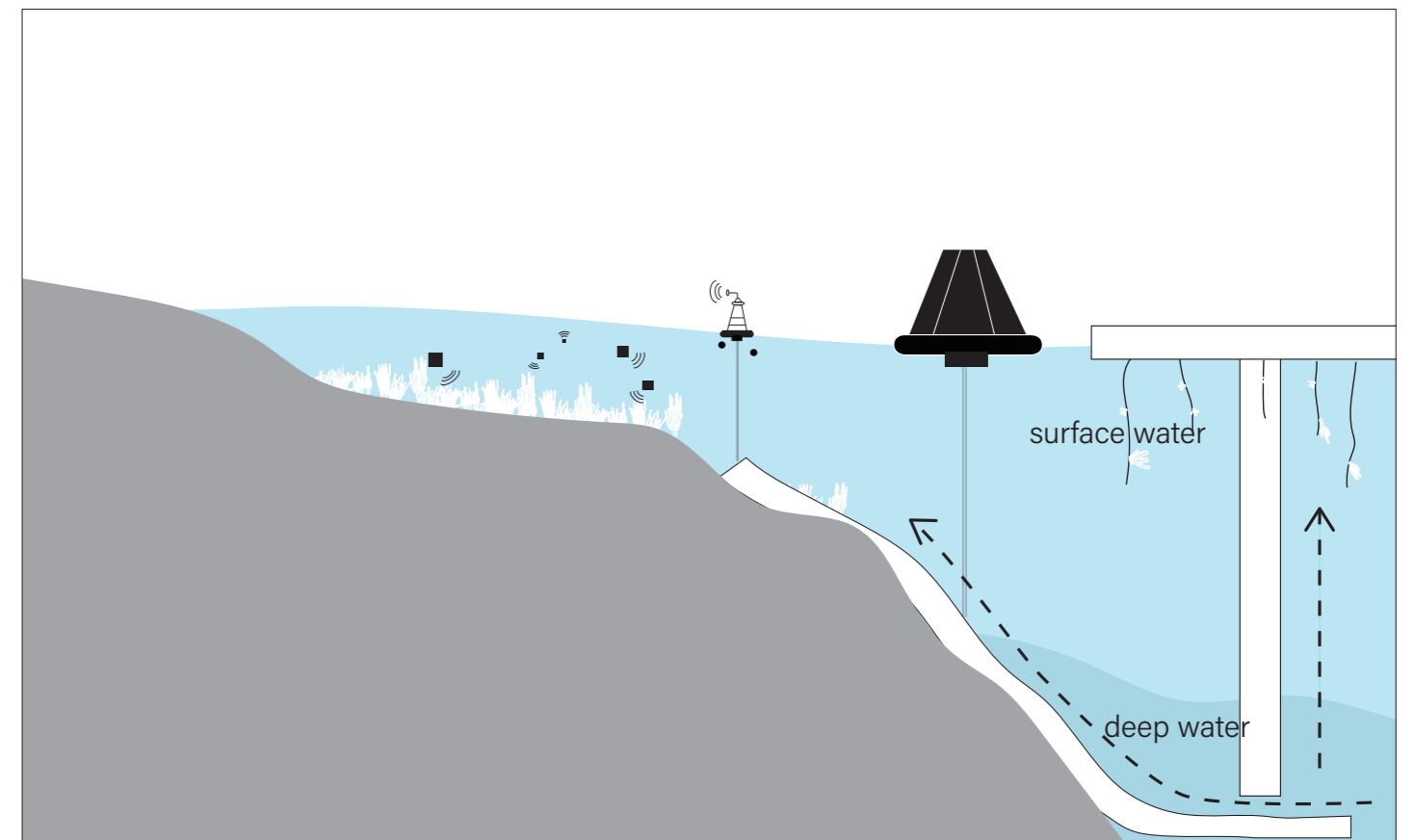
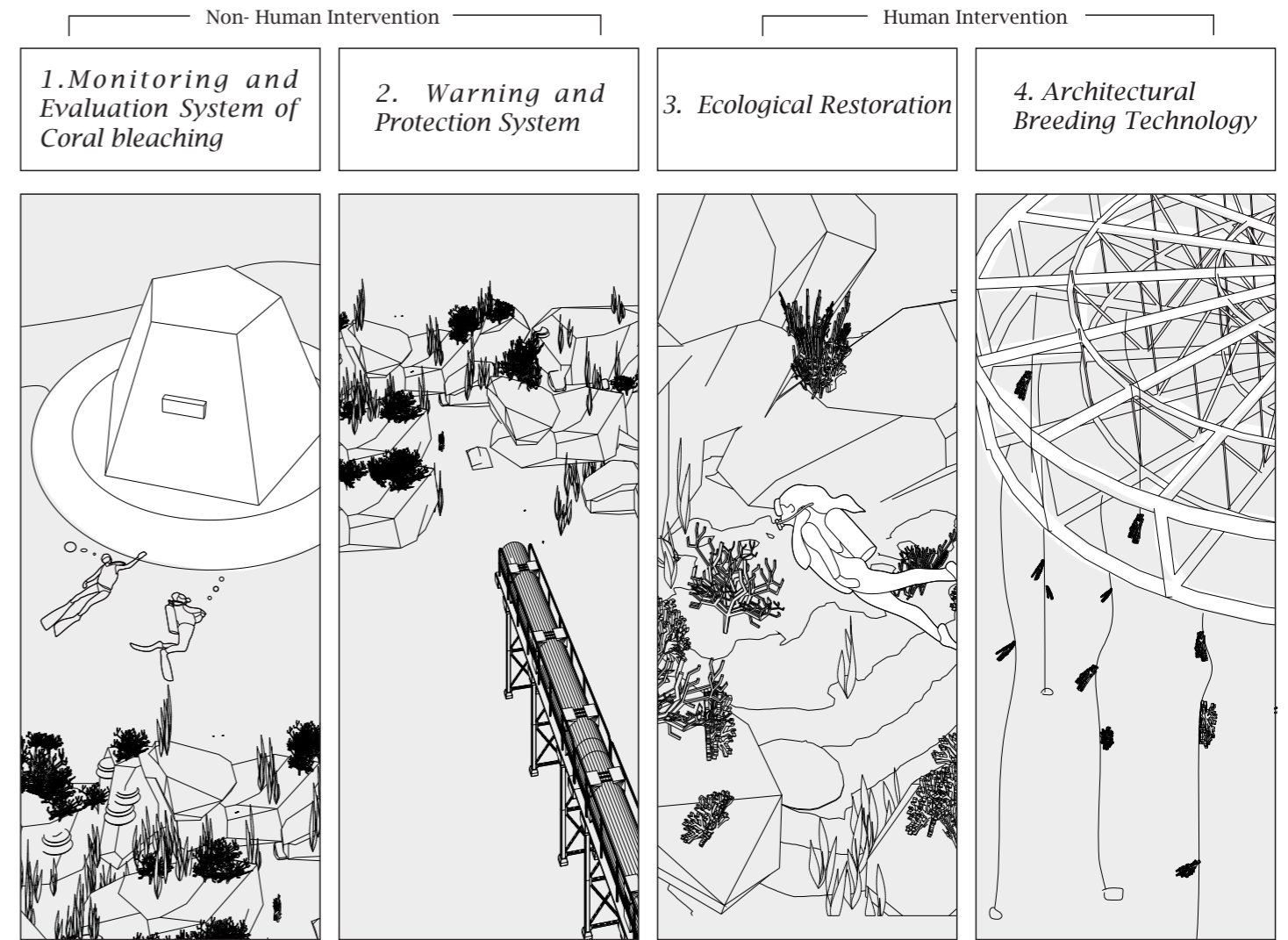
Close shot of coral from multiple angles

Automatic self-charging

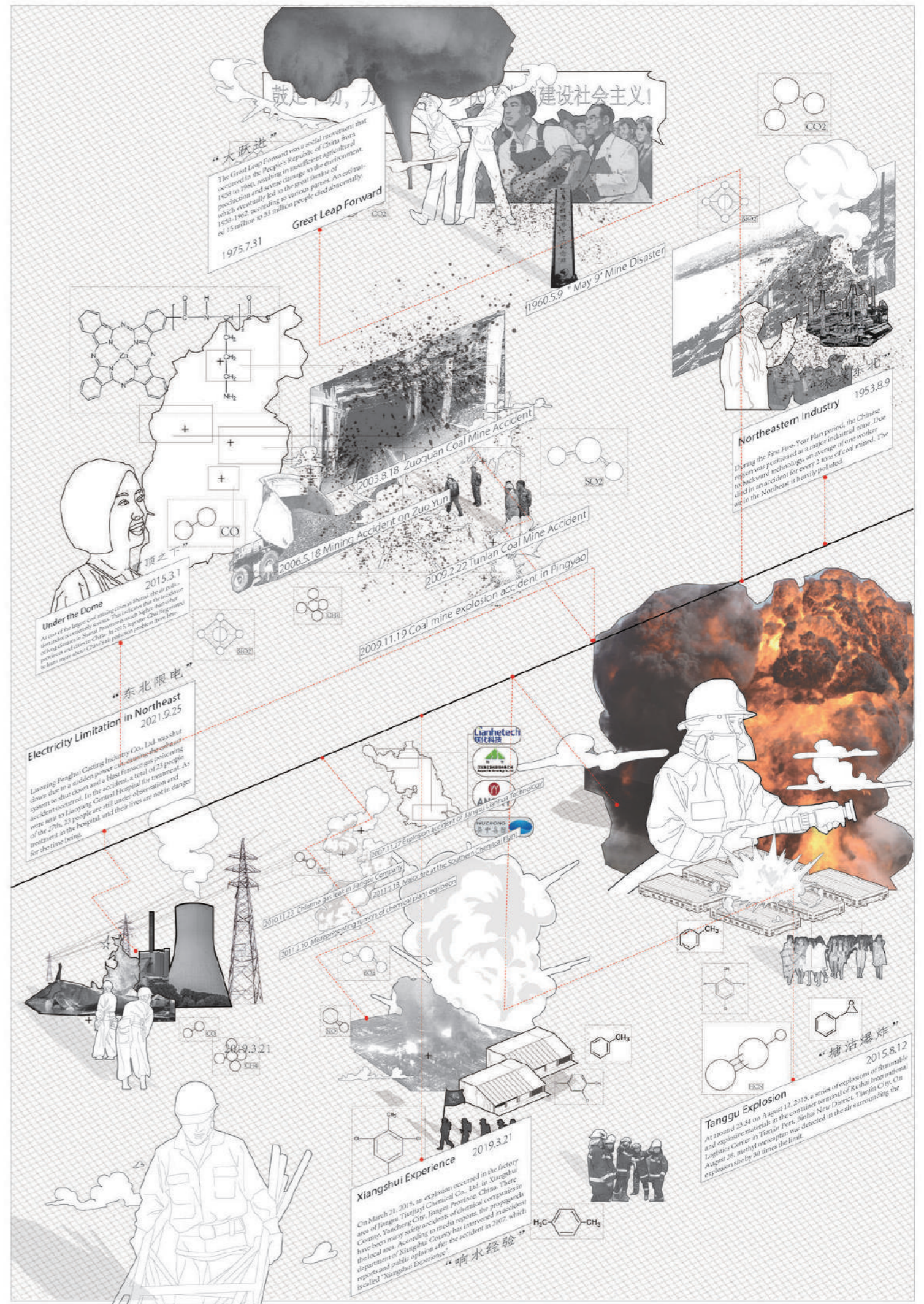
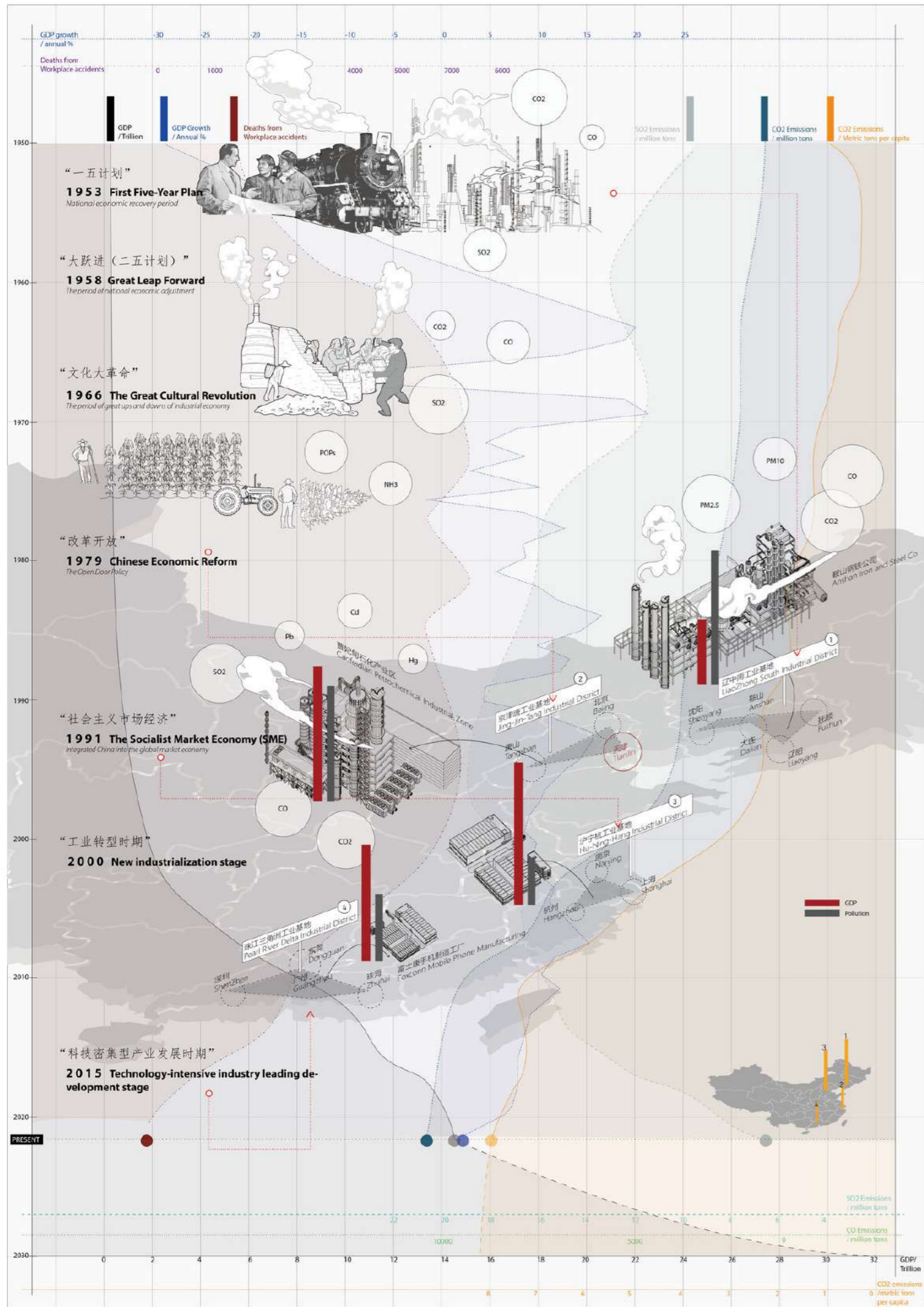


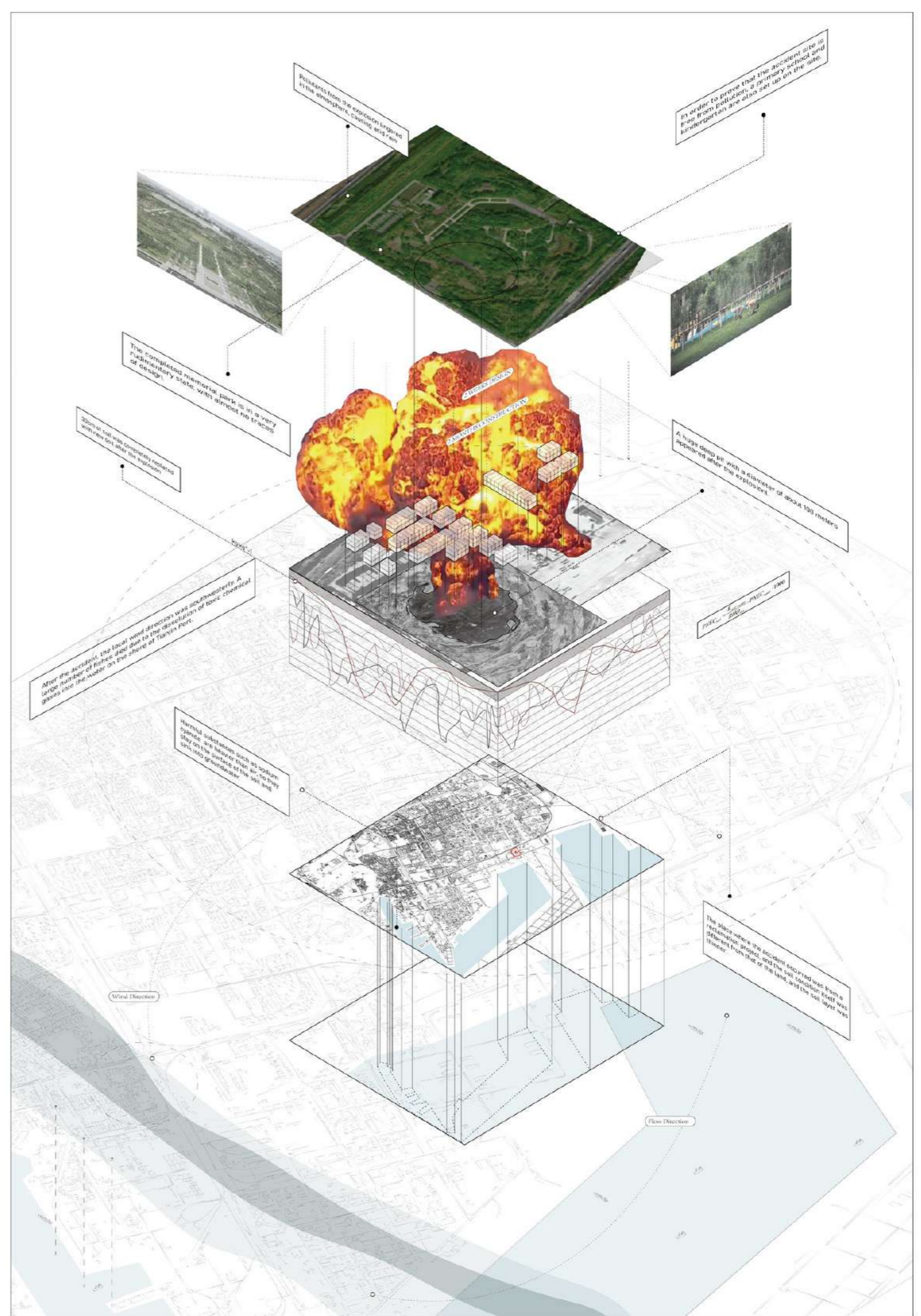
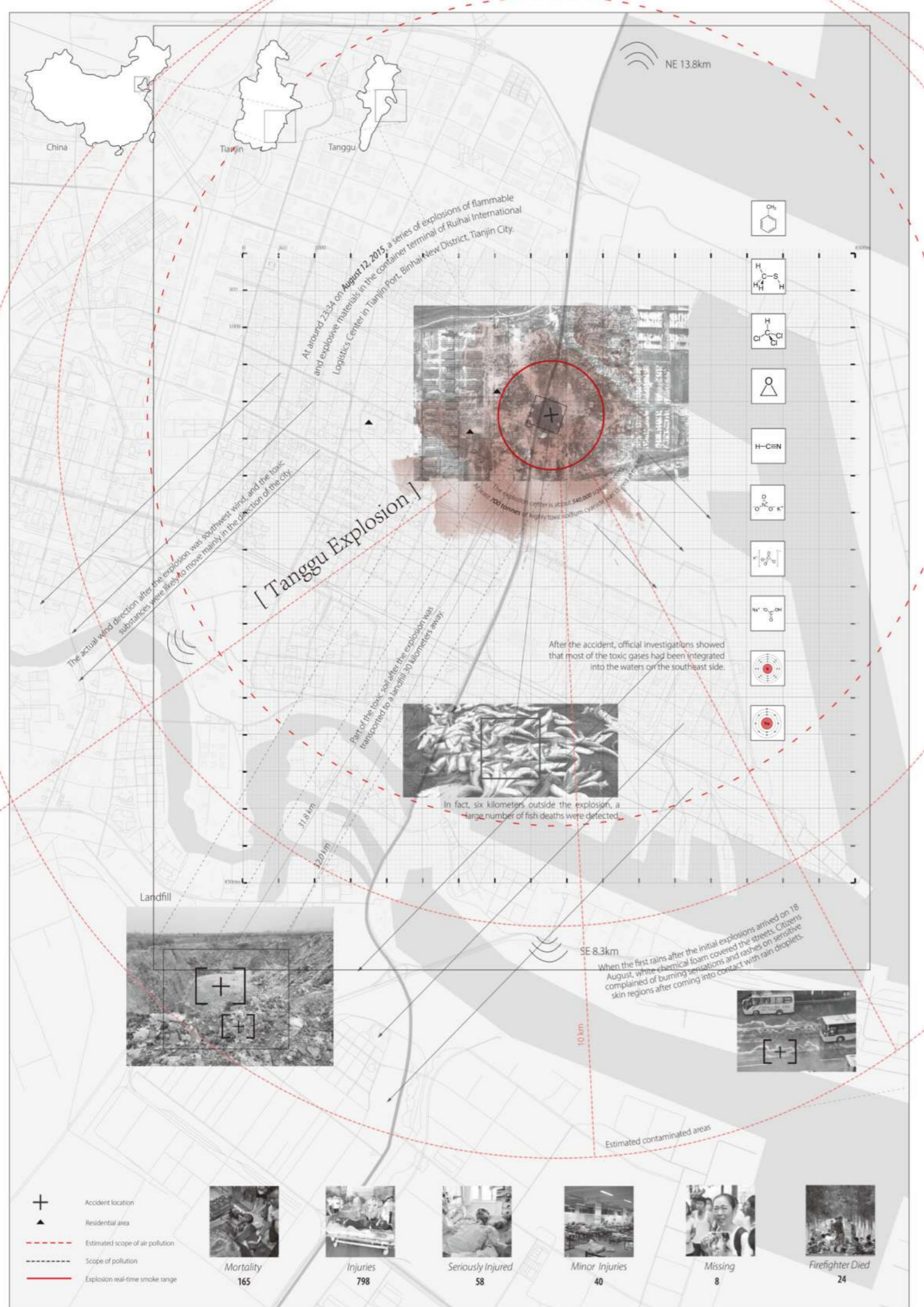
- 1 Signal receiver and Climate sensor
- 2 Holder
- 3 Fabric Solar collector
- 4 Garbage collection and storage
- 5 Sensors and Charging pile
- 6 Floating Ring
- 7 Anchor

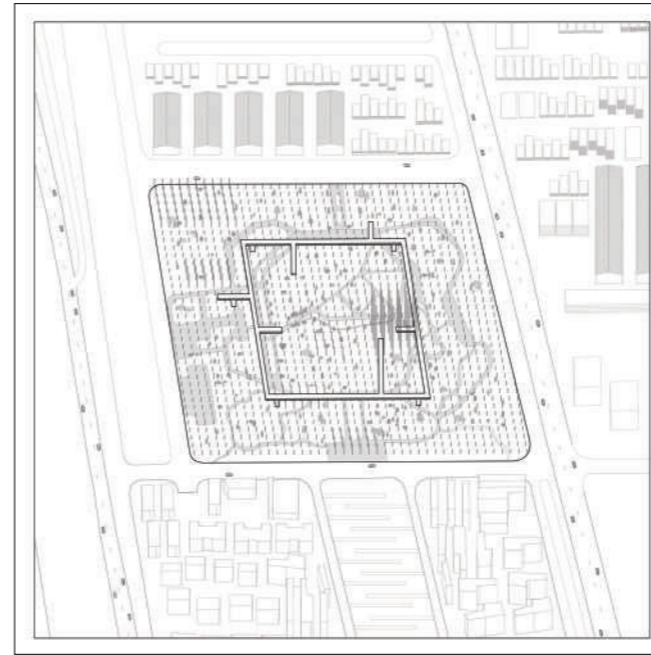
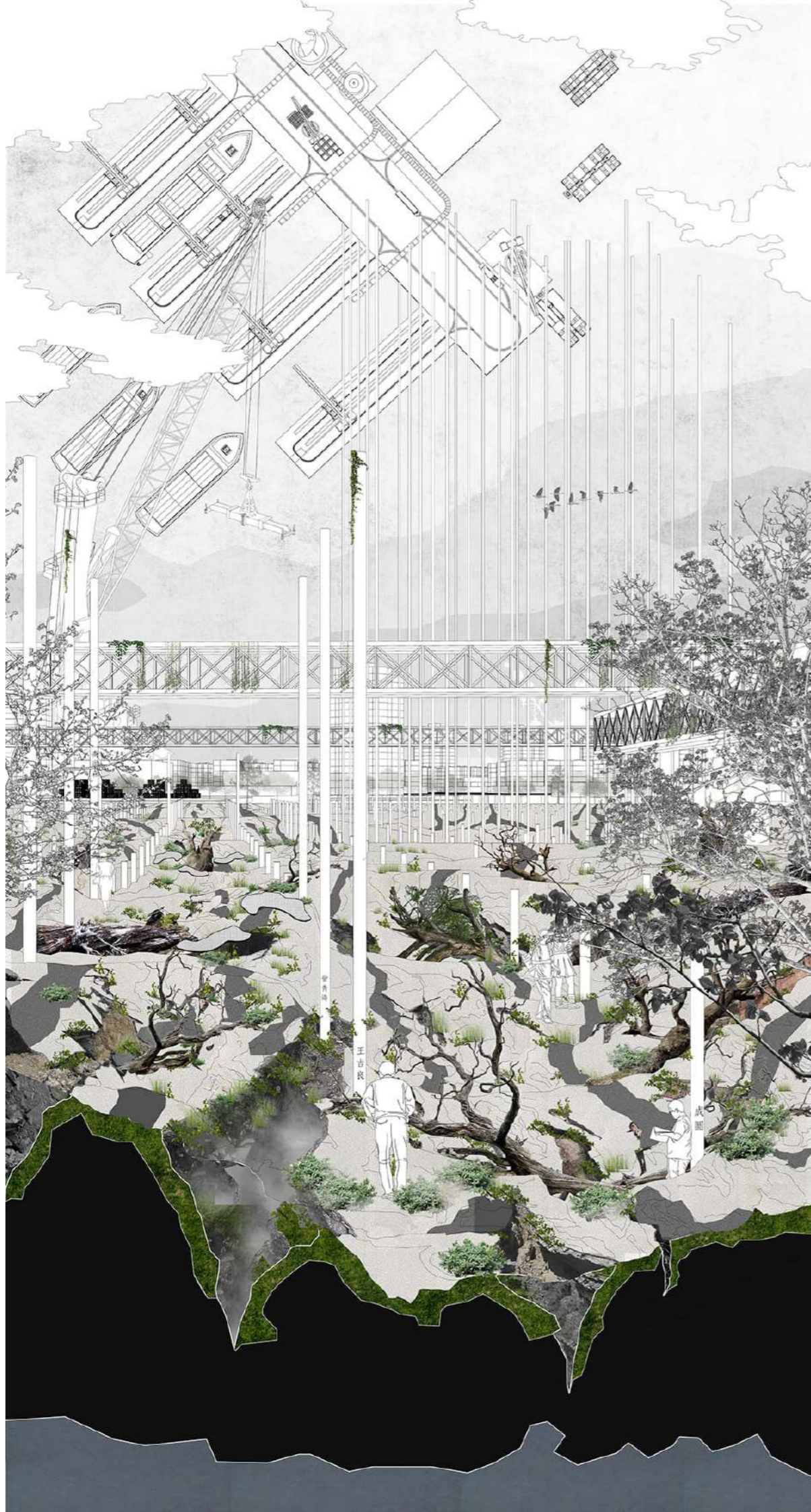
Coral Reefs Shelter System



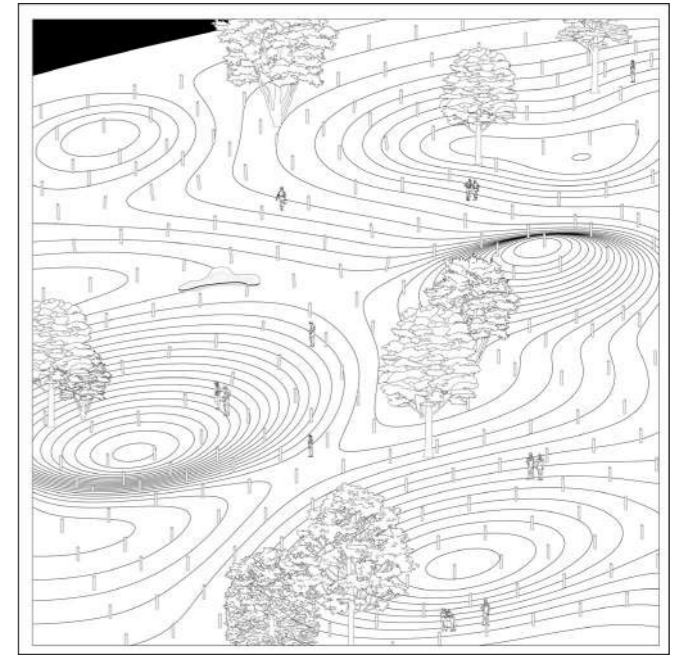
System Map



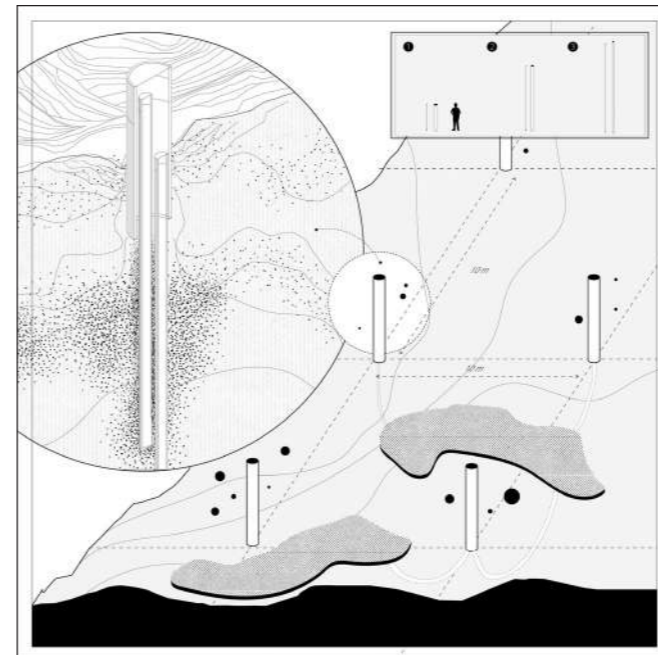




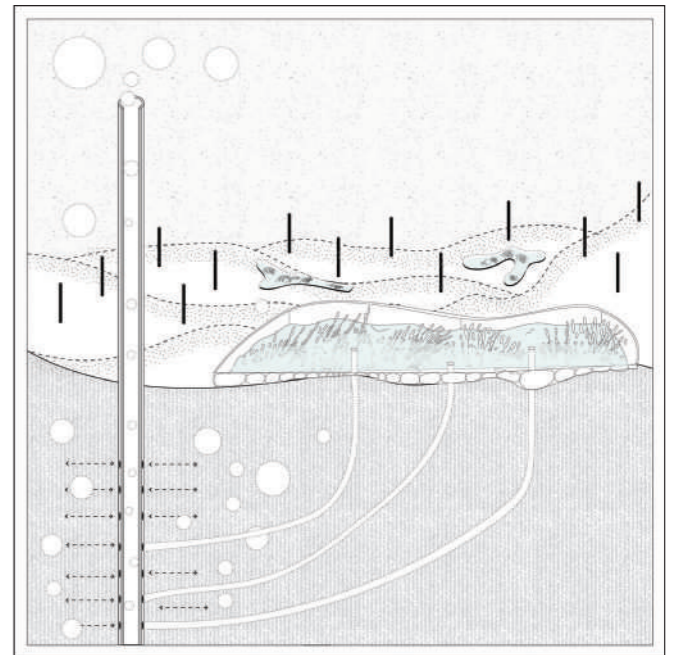
Plan



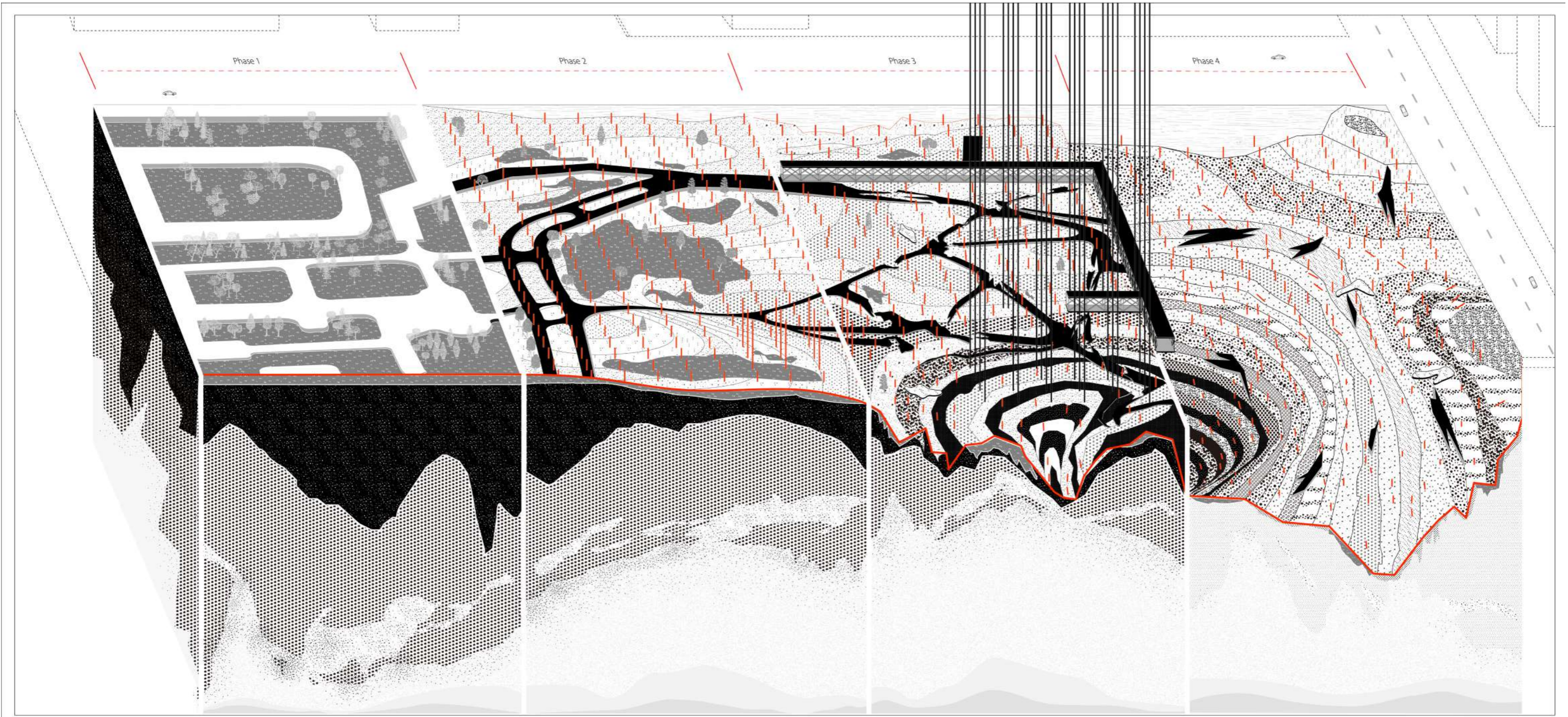
Memorial Ground



Air Sparging Remediation System



Biofiltration System



Phasing Diagram

Phase 1
 The park built under the direction of the government: "Tianjin Port Ecological Park". The entire park has few memorial designs related to the explosion. The whole park displays a peaceful and casual atmosphere.

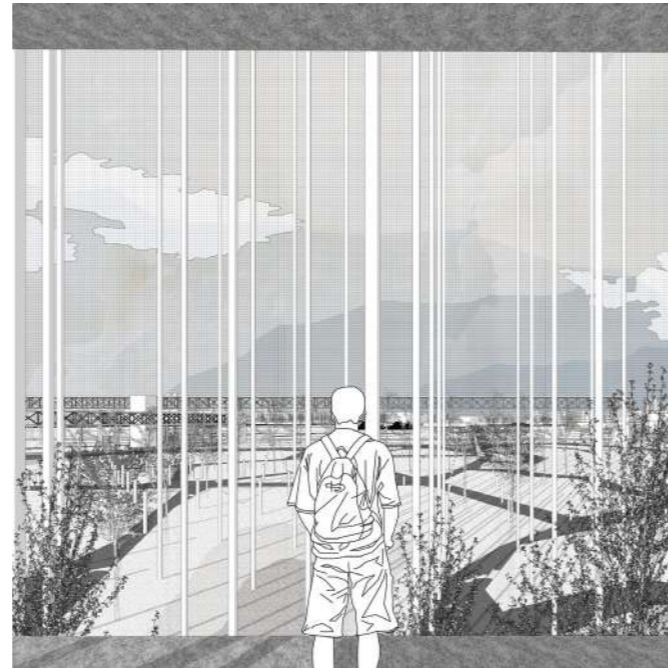
Phase 2
 The air sparging remediation system is applying to the whole site. The original surface of the park is gradually being disintegrated and decaying. Areas with more pollution underground will sink more. A memorial ground then will be formed.

Phase 3
 A bridge is built over the entire site. The Memorial Ground began to undergo more drastic changes. People could see from the bridge that the whole site was gradually disintegrating, leaving only broken pieces of the former park.

Phase 4
 The Pit at the center of the explosion is growing larger, roughly similar to the huge smoke from previous explosions. The Memorial Ground is able to use air as a medium, forming a dramatic new landscape to expose violence in the air.



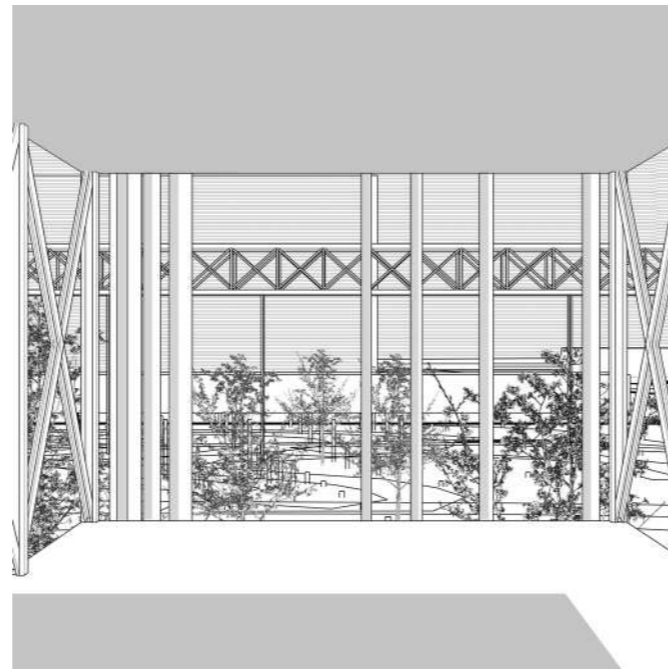
Phase 1



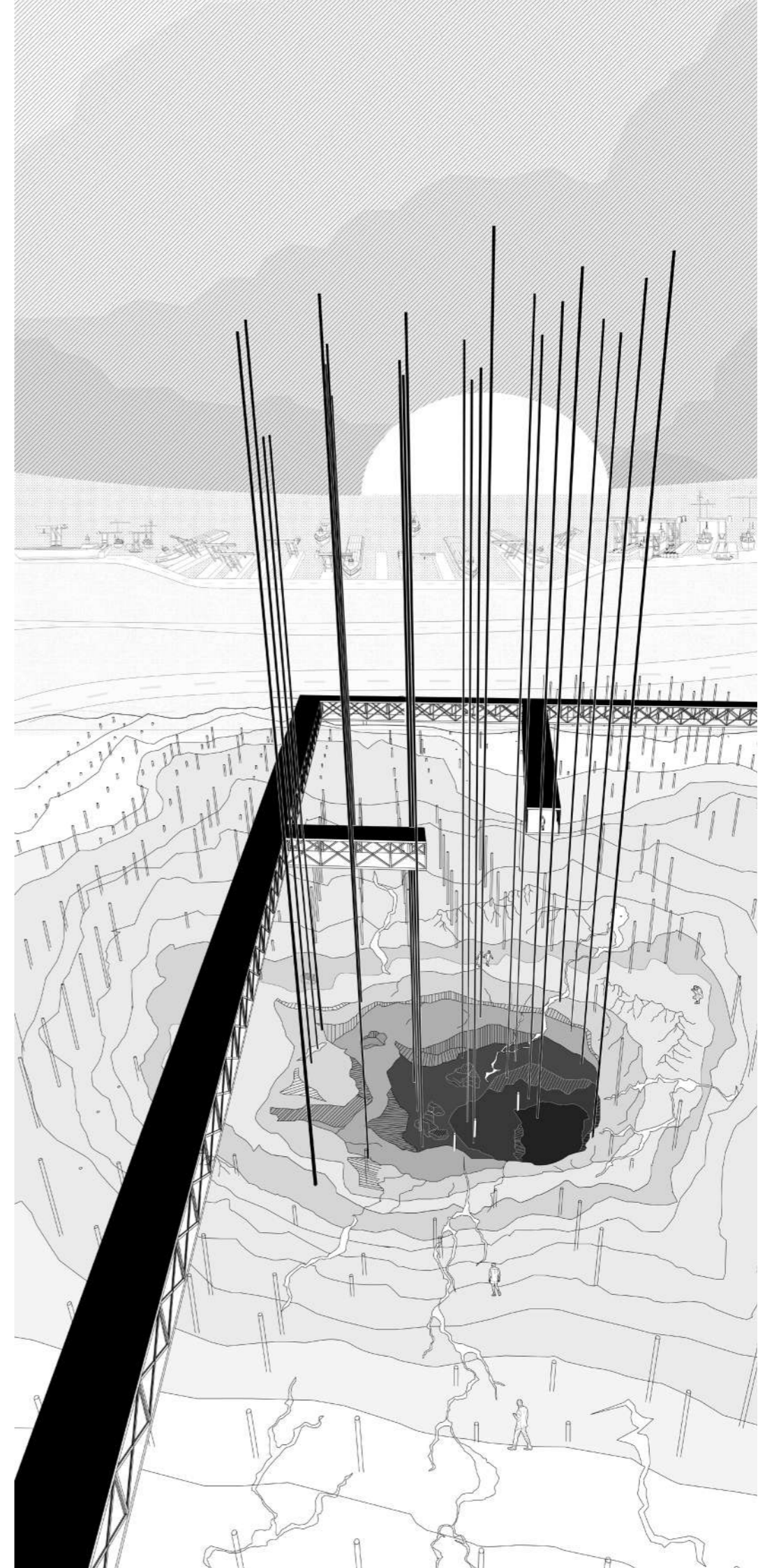
Phase 2



Phase 2



View from the Bridge



Phase 4

GSAPP SPRING 2022
MAKERGRAPH,
LOTEK

NEW YORK,
U.S.

1

This is my book, this is also myself
The book is called Twinning, and it's called
Shuang in Chinese.
This book is my first attempt to explore myself,
to try to understand myself, and to express
myself

I tried to go back to the original form of me:
born as a twin, raised as a twin, and seeing the
world through the eyes of a twin

If you open my book, please look out for the
twins in it

They may be identical, they may be quite
different
They make up the world as I see it, and as I see
myself.

2

My book is all about twins
I happen to have two eyes, two arms, two legs,
I have a left brain and a right brain
I also have two iPads, two tables, two lamps,
two closets in my room
I manipulate these twins like I manipulate my
body.

I try to use twins to explain the relationship
between my body and the material.

Plastic-Head
Wood-Torso
Metal-Hand
Fabric-Leg

I feel the connection between the material and
my body, and I visualize it in the form of twin.
I am creating more twins, and more of me

3

I create things, I create books, I create twins,
and I create myself

This is my book, it's called Twinning, 双
This is me, April, 非

Welcome to read my book, and me!

EXTRA

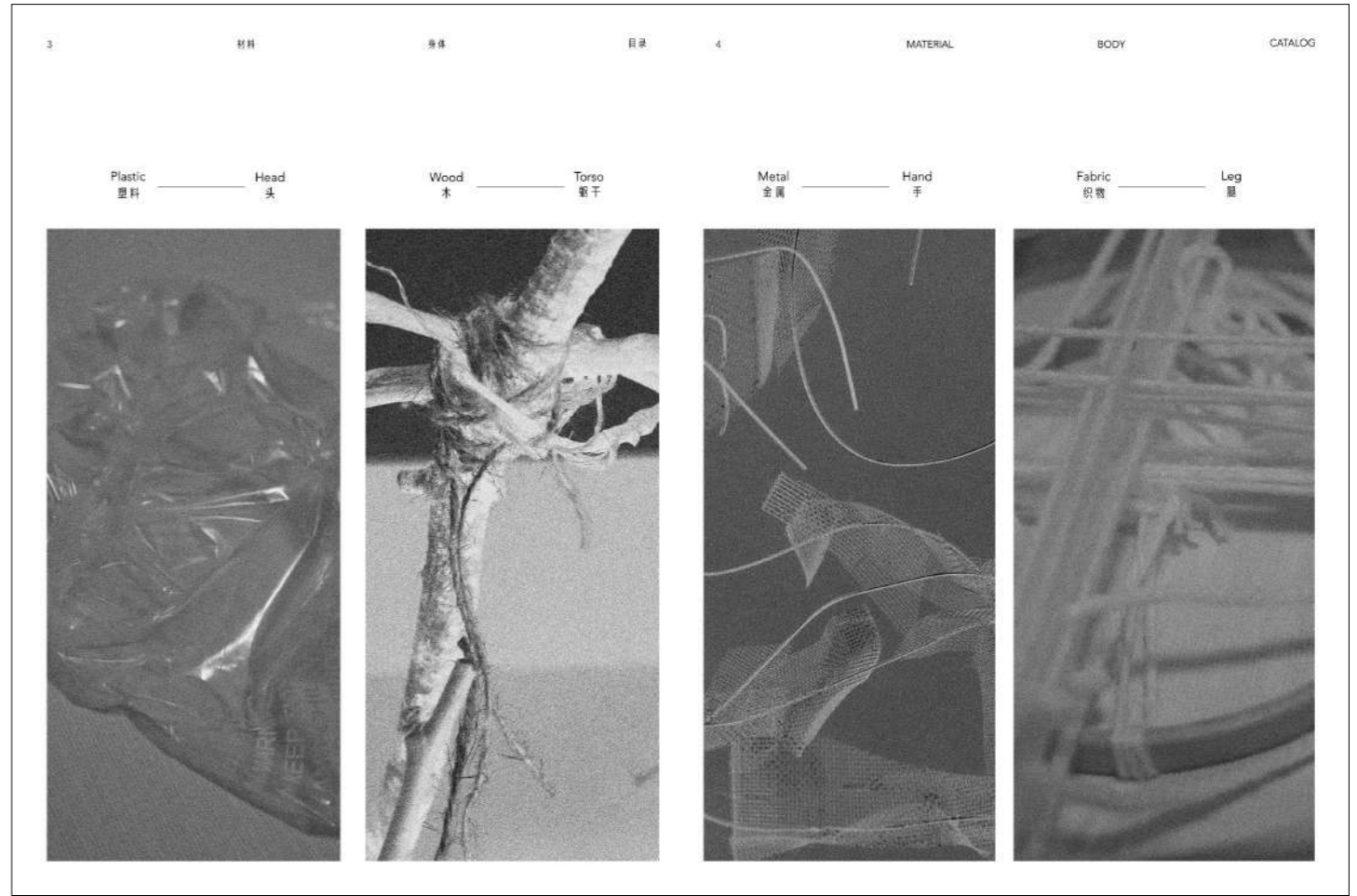
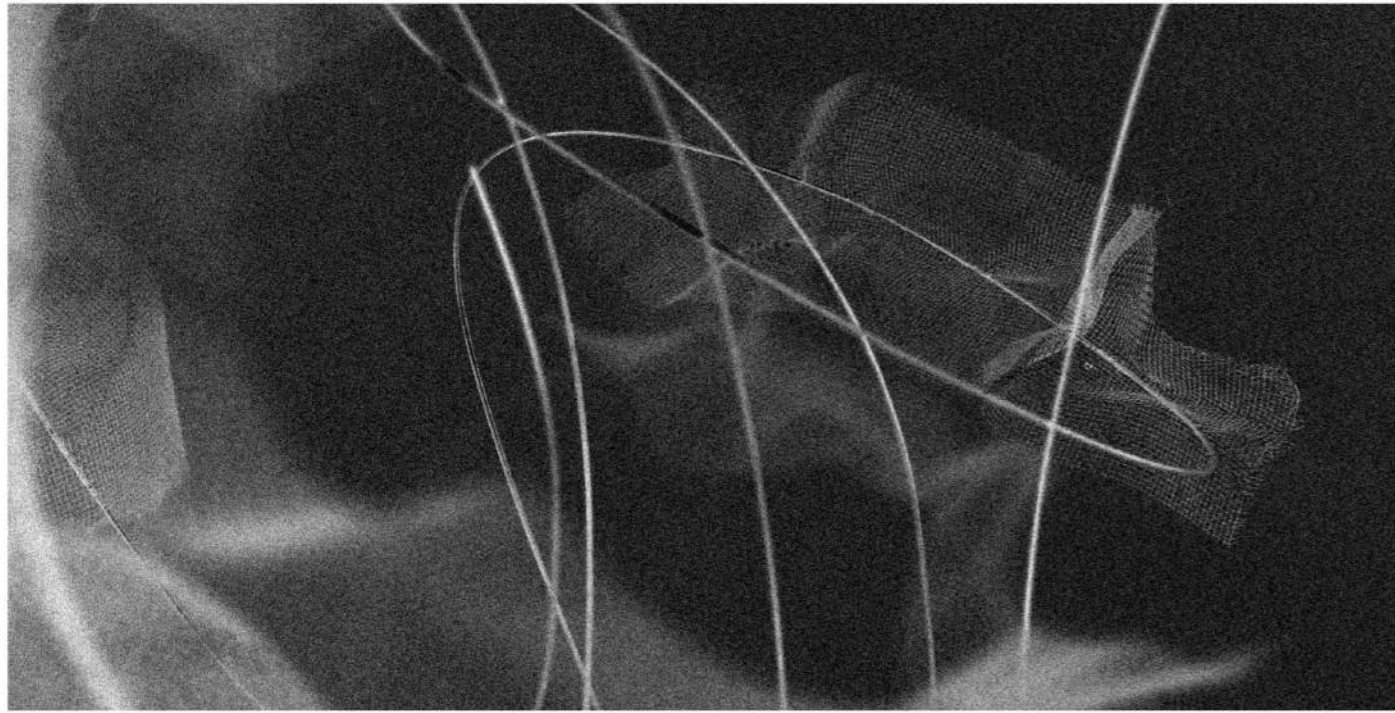
FEI FAN
非凡
EXTRAORDINARY

ORDINARY

AGAIN

SHUANG
双
TWINNING

AGAIN



1 材料 身体 前言 2 MATERIAL BODY FOREWORD

Twins, Multiplicity and Manipulation

非 (fei) is my name. 凡 (fan) is my sister's name.

In my hometown, when twins were born, the parents would use a word to name the two.
非凡, "extraordinary," is the name our parents give us.

However, the word 非 (fei) in Chinese usually means [mistake] [wrong] [error], 凡 (fan) means [ordinary] [characterless].

The interesting thing is, only two characters together can mean 非凡, "extraordinary."

I often feel like this is telling us that the two of us are always co-existing, that we can't live without one.

Being born as a twin has affected me subconsciously. Being close to my sister enabled me to better understand people in a different world and build my own worldview, giving me multiple perspectives.

In many cases, this is also the source of my creativity. I tend to experiment with different approaches to achieve different effects, and I make "twins" to compare them with each other, exploring different structures in such differences. In my exploration of myself, I was accustomed to using the same language and trying to create different effects.

But one language that is always present in different explorations is the sense of human touch and manipulation.

My touch and movement help me to better understand the structure of the world. I want to use this manipulation in my work as the same, as a living language that helps us understand the meaning of the work.

These works are incomplete without the intervention of human activity.

April
04.25.2022

杂生、多重与操纵

“非”是我的名字，“凡”是我妹妹的名字。

在我的家乡，当双胞胎出生时，父母会用一个词来命名两个孩子。非凡，是父母给我们的名字。

然而，“非”一词在中文中通常意味着[错误]，“凡”意味着[普通][没有个性]。

有趣的是，只有两个字在一起才能表示“卓越”。

我常常觉得这是在告诉我们，我们两个人始终是共存的，我们不能失去彼此。

生为双胞胎对我的影响是潜移默化的，与妹妹亲近使我能够更好地理解不同世界中的人，建立自己的世界观，让我有多种视角。

有时候，这也是我创造力的来源，我倾向于尝试不同的方法来达到不同的效果，我创造“双胞胎”来进行对比，在这种差异中探索不同的结构。

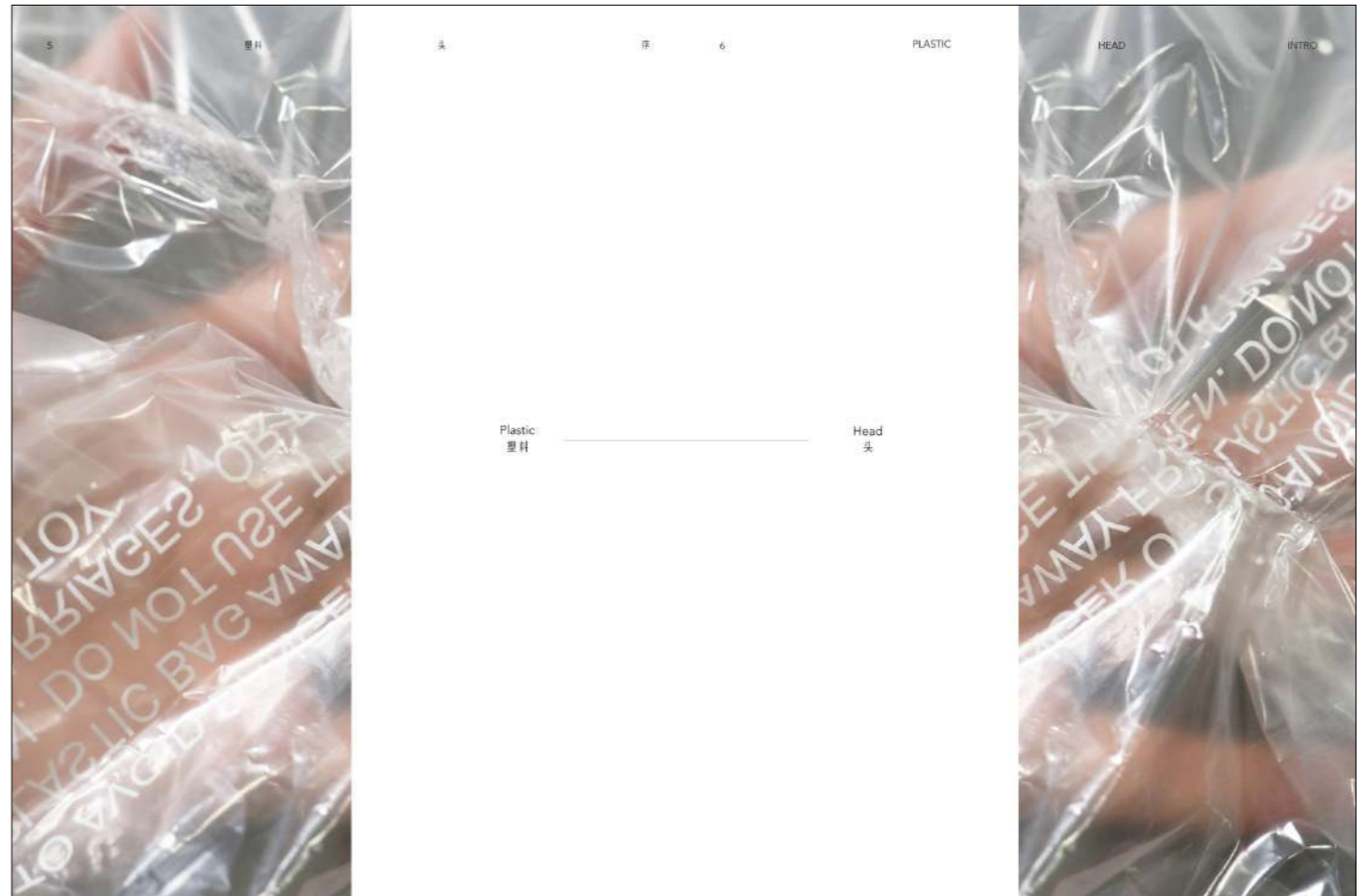
在我对自己的探索中，我习惯于使用相同的语言，并试图创造不同的效果。

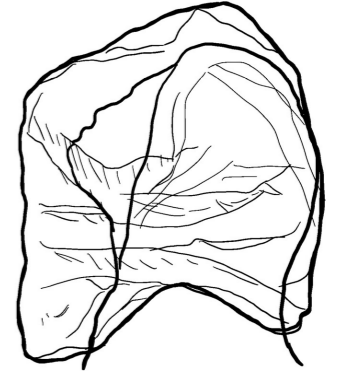
但有一种语言始终存在于不同的探索中，那就是人类的触觉和操纵。

我的触摸和运动帮助我更好地理解世界的结构，我想在我的作品中也使用这种操纵，作为一种生动的语言，帮助我们理解作品的意义。

没有人们行为的介入，这些作品是不完整的。

非
04.25.2022





Heat
热

Heat melts plastic and creates wrinkles.
Air is enclosed in plastic.

热熔化塑料，并产生褶皱。
空气被封闭在塑料中。





Twining
缠绕

I try to represent my dual personality with plastic bags.
The melted plastic surface is wrinkled and torn, but in these wrinkles, innovative colors are also born.
On the other side, intact plastic bags are joined in sequence to form a consistent and standardized shape.
I merged the two different parts with colored tape and placed them on either side of my neck, wrapping them around my head.
I was enveloped in these two distinct forms and thought about them.

我会用塑料袋表现我的双重个性。
被融化的塑料表面出现了褶皱和破损，但是在这些褶皱中也会诞生出新奇的色彩。
另一边完整无损的塑料袋依次连接，形成统一规范形状。
我用彩色的胶带连接两边完全不同的形态，并且把它放在我的脖子两边，用它们围绕我的脑袋。
我被这两种截然不同的形态包围着，思考着。



Two Souls

I often forget that I am breathing.
I use plastic bags to magnify my breath and feel my own presence.

I have two souls.

There are three girls in my family, me and my two sisters, a twin sister of mine and a sister who is six years younger.

When my youngest sister was born, my parents were disappointed because they wanted a boy.

So my mother always told me, "You're the oldest child in the family, you should have been a boy."

When I was little I always liked to act like a boy, trying to act the way my mom liked.

Subconsciously, I used to cover up my own personality.

Plastic is my container.
Breathing, I fill these plastics with my breath.
Vapor follows my breath and clings to the surface of the plastic.

Blurring the boundaries.

I have two souls.
And the two souls are parallel.
They intertwine in my brain, confusing my thoughts.
Two personalities are entwined in my brain.
They both need my breath.

And yet I can only choose one side at a time.
When I blow on the left side, the right side deflates.
When I blow on the right side, the left side deflates.

One side is neat, coherent.
One side has more folds, more colors, as well as more diversity.

They are twining in my mind.

两个灵魂

我常常忘记自己正在呼吸。
我用塑料袋来放大我的呼吸，感受自身的存在。

我有两个灵魂。

我家有三个女孩，我和我的两个妹妹。我的一个双胞胎妹妹和一个比我小六岁的妹妹。

当我最小的妹妹出生时，我的父母很失望，因为他们想要一个男孩。

所以我母亲总是告诉我，“你是家里最大的孩子，你<应该>是个男孩。”

当我小的时候，我总是喜欢表现得像个男孩，试图按照我妈妈喜欢的方式行事。

下意识地，我习惯于掩盖自己的个性。

塑料是我的容器。
呼吸，我用我的呼吸填充这些塑料。
水汽跟随我的呼吸，附着在塑料的表面。

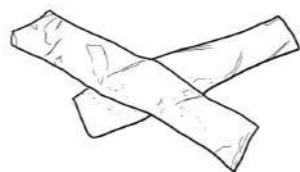
模糊了界限。

我有两个灵魂。
而这两个灵魂是平行的。
它们在我的大脑中交织在一起，混淆了我的思想。
两个人格在我的大脑中纠缠在一起。
它们都需要我的呼吸。

然而，我一次只能选择其中一面。
当我向左边吹气时，右边就会泄气。
当我对着右边吹气时，左边也会泄下去。

一面是整齐的，连贯的，平坦的。
一面有更多的褶皱，更多的色彩，还有更多的多样性。

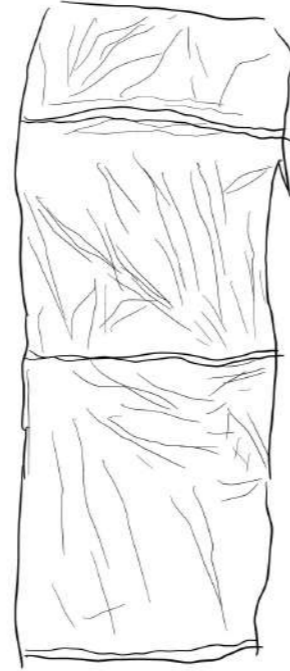
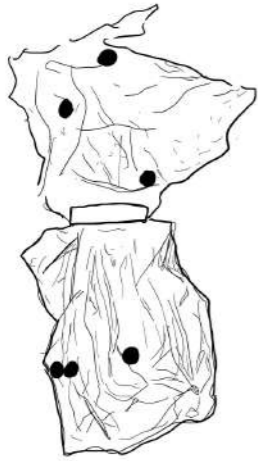
它们在我的脑海中纠缠着。



Breathe
呼吸

I am breathing.
I keep ignoring the fact that I'm breathing.
I put a plastic bag over my head and tried to magnify my breathing.

我在呼吸。
我常常意识不到我在呼吸。
我在头上戴了一个塑料袋，试图放大我的呼吸。



左 LEFT

右 RIGHT

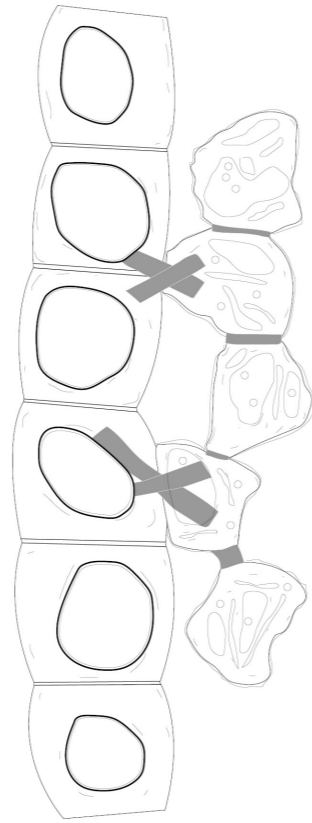


左 LEFT

右 RIGHT



SECTION 1



SECTION 2

Tree
树

I stepped in the snow.
I wanted to find some branches that had been broken in the heavy snow.
In the contrast of the white snow,
The bare branches became particularly visible.

They had stopped growing,
and were slowly decaying.
I wanted to give new meaning to these rotting branches.
So that they could grow again.

我踩在雪地中。
我想要找到一些在大雪中被折断的树枝。
在白色雪地的对比下，
光秃秃树枝变得格外明显。

它们已经停止了生长，
在慢慢腐烂。
我希望给这些正在腐烂的树枝赋予新的意义，
使它们得以再次生长。

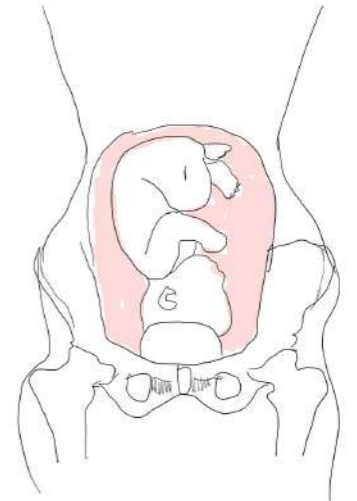
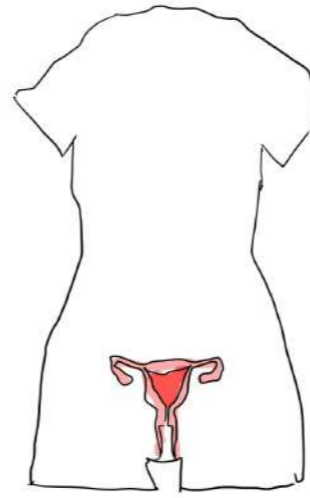


Wood
木



Torso
树干

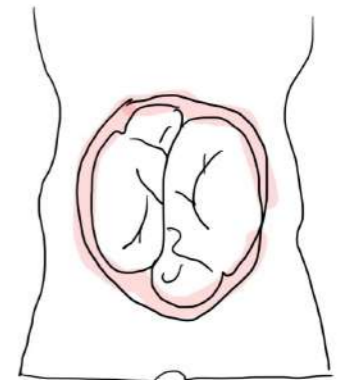




Uterus
子宫

-
Torso :
Heart
Liver
Stomach
Lungs
Uterus
Kidney
Spleen
.....

-
树干 :
心
肝
肺
子宫
肾
脾
.....



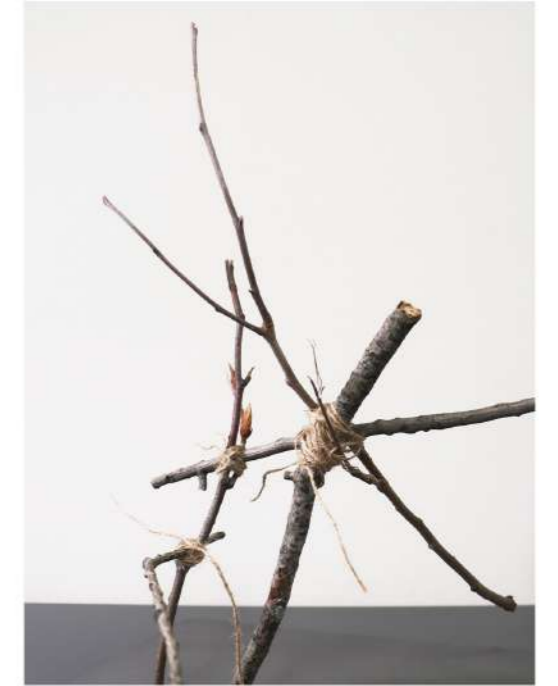
My twin sister and I.
We spent 32 weeks in mom's body.
We are intertwined and interdependent.
Mother's body gives us shelter,
We formed our closest bond in our mother's body.

我们在妈妈的身体里度过了32周。
我们相互缠绕相互依存。
妈妈的身体给我们庇护。
我们在妈妈的子宫里建立了最亲密的关系。

Knot
结

I tie knots.
I want to create a connection in the organ.
This is the matrix where life is born.
The energy comes from the knot,
And spreads out.

我打结。
我想营造出器官中的连结。
这是孕育生命的子宫。
能量从结中而来。
又向四周扩散。







We intertwine and develop together

我们相互缠绕 共同发展



Even though we have the same DNA
Our life still develop different possibilities

即使我们有一样的 DNA
我们的人生仍然呈现出不同的可能

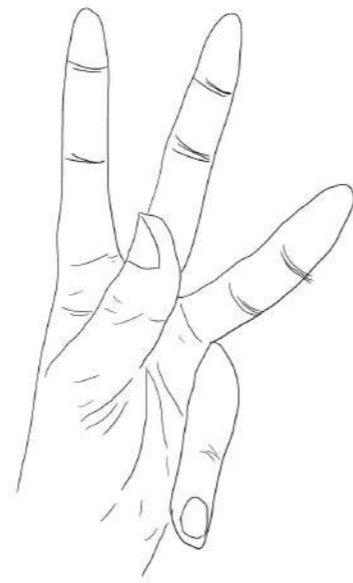


Metal 金属 ————— Hand 手



Flow 流动

-
We use our hands frequently and we do everything with them because they are so flexible.
Just like the hand, metal can be very flexible and used very often in our lives.
So I used wire, trying to simulate the various forms of the fingers.
-
我们经常使用我们的手，我们用它们做任何事情，因为它们是如此灵活。
就像手一样，金属也可以很灵活，在我们的生活中也很经常使用。
所以我用金属丝，试图模拟手指的各种形态。



FLOW 1

I first picked a wire that was easy to bend, and I want to use these wires to simulate the movement and form of the finger.

I drilled five holes at random in a block of wood, the diameter of these holes is slightly larger than the wire.

I cut the wire to a length of about 18in, and then straighten the wire to simulate the appearance of straight fingers.

After that I imagine the shape of my hands when I play the piano. I bended the wire simulate the shape of the raised hand joints.

Then I created more bends and added wire mesh to magnify the shape of the wire and also simulate the skin of the hand.



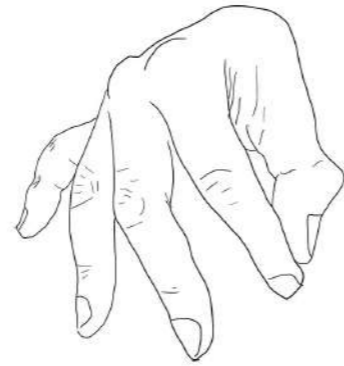
我首先挑选了一种容易弯曲的钢丝，我想用这些钢丝来模拟手指的运动和形态。

我在一块木头上随意钻了五个孔，这些孔的直径比钢丝稍大一些。

我把金属丝剪成大约18英寸的长度，然后把金属丝拉直，模拟出直手指的样子。

之后我想象我弹钢琴时的手型，我把铁丝弯曲，模拟出手部关节凸起的形状。

然后我创造了更多的弯曲，并添加了金属网来放大金属丝的形状，同时也模拟了手的皮肤。





FLOW 2

I apply the curved wires and when I put them on the block, I found them to be similar to the shape of a closed hand.

When I make a fist, the joints of my fingers become very visible. So I use the wire to mimic the texture of the skin on my hand, and added it to the wire.

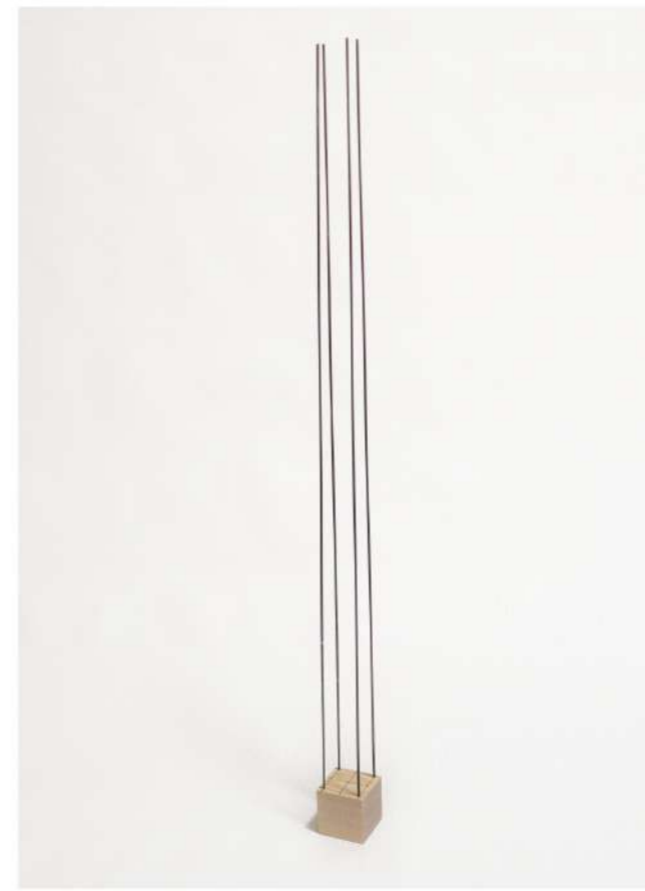
Each part can be moved flexibly to create a different shape.

我使用弯曲的电线，当我把它们放在木块上时，我发现它们类似于一只合拢的手的形状。

当我握拳的时候，手指的关节变得非常明显，所以我用金属丝来模仿我手上的皮肤纹理，并把它加在金属丝上。

每个部分可以灵活地移动，以创造不同的形状。





MANIPULATION 1

Next I tried to use a more controlled way to create a connection between the material and the hand.

I use a music wire that has a higher carbon content, which means it would be stiffer and less pliable, making it harder to bend.

I drilled holes every 1 inch in the block.

I fixed four music wires to a small square block with a side length of 1.2inch, and then inserted the other end of the music wire into the large block.

I found that I can turn the small block at will to make the music wire also turn together. And the music wire could be recovered by turning back.

By connecting these music wires in this way, they can be flexible and elastic.

接下来我试图用一种更可控的方式在材料 and 手之间建立联系。

我使用了一种碳含量较高的钢琴弦，这意味着它将更硬，更少的弹性，使它更难弯曲。

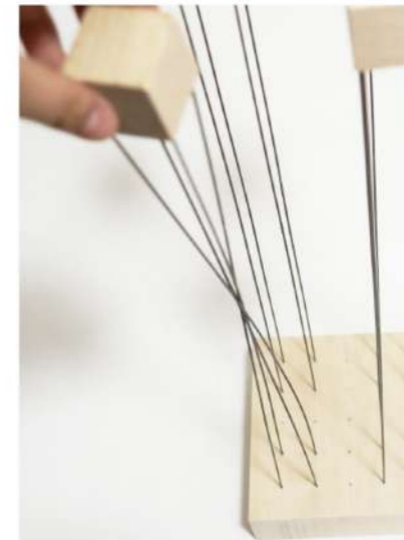
我在木块上每隔 1 英寸就钻了一个孔。

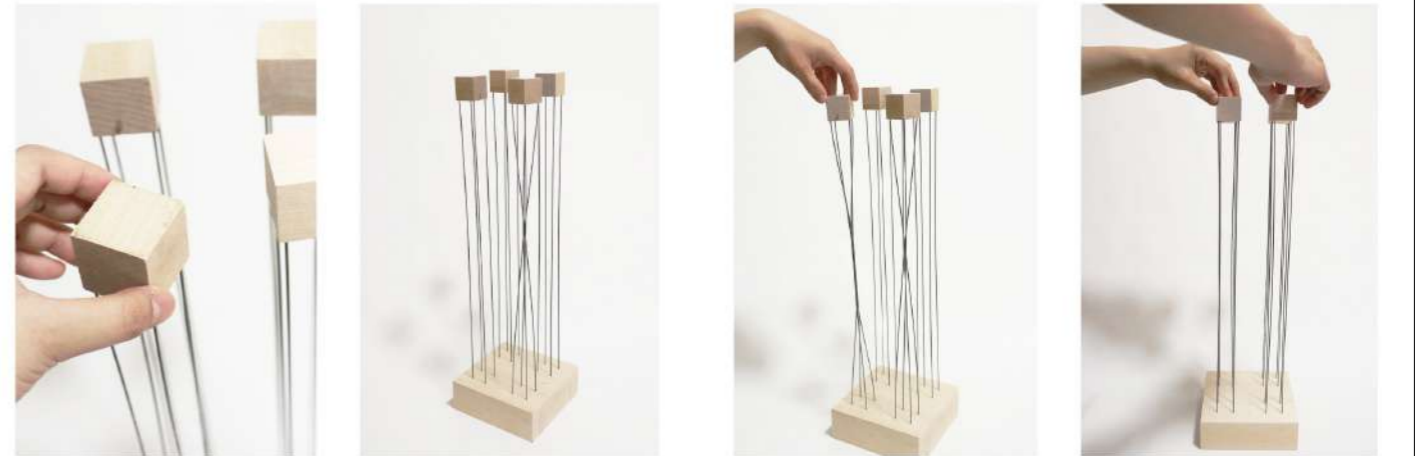
我把四根钢琴弦固定在边长为 1.2 英寸的小方块上，然后把钢琴弦的另一端插入大方块。

我发现，我可以随意转动小块，使钢琴弦也一起转动，而钢琴弦也可以通过转回来恢复。

通过这样的方式连接这些钢琴弦，它们就可以变得灵活而有弹性。

Manipulation
操纵







MANIPULATION 2

I inserted 18inch 15inch 12inch 9inch 6inch music wire into the wooden blocks.

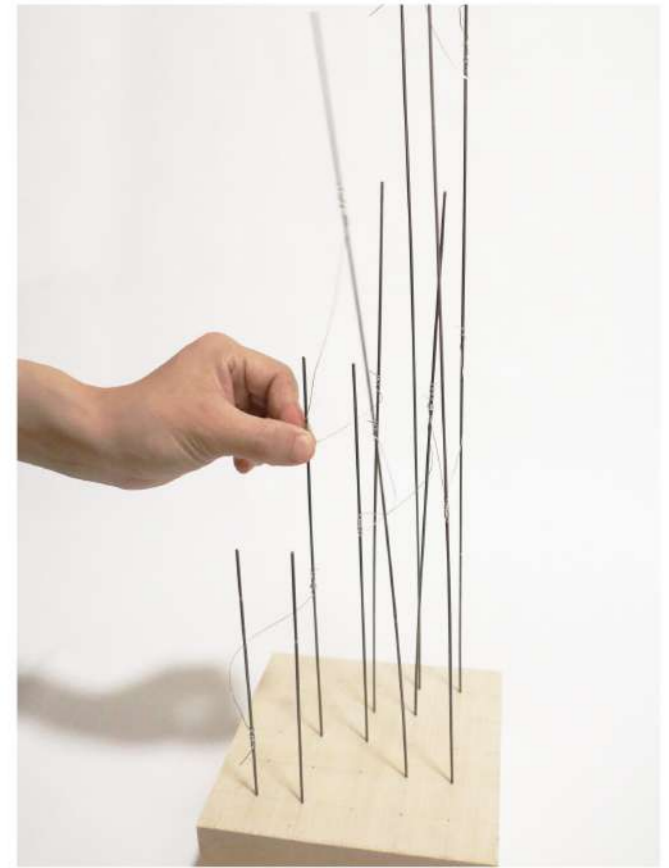
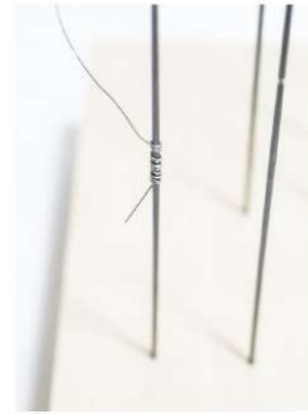
Then I connected them irregularly with thin wires.

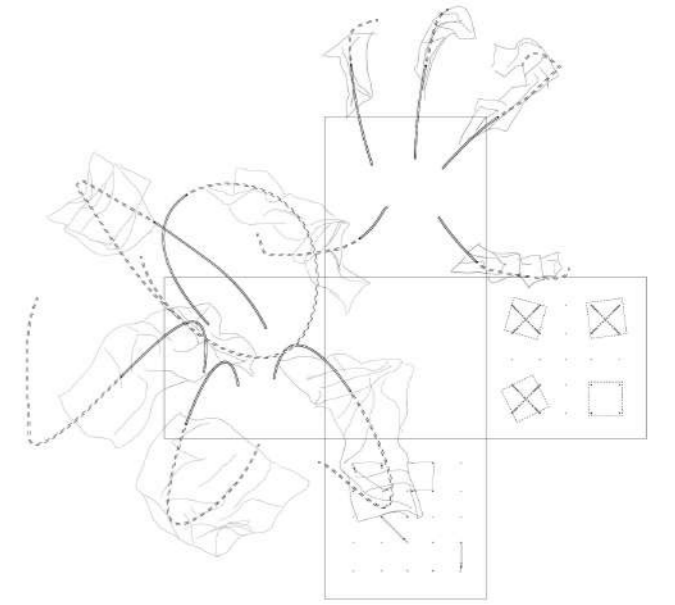
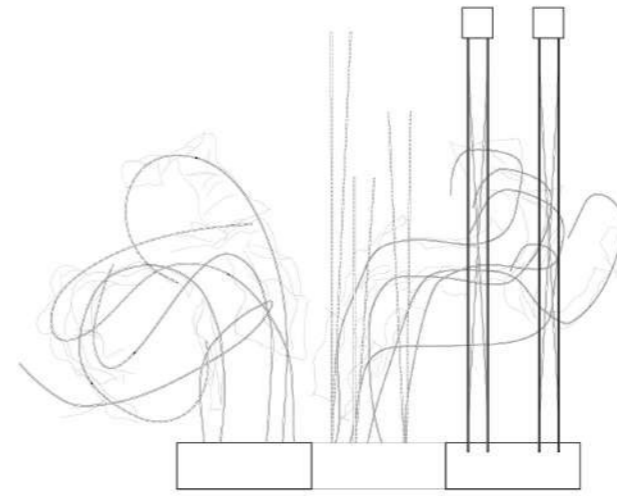
When the knot of the thin wire is moved up and down, the adjacent wires will also change.

我把 18 英寸、15 英寸、12 英寸、9 英寸、6 英寸的钢琴弦插入木块中。

然后我用细线不规则地连接它们。

当细线的结点上下移动时，相邻的钢琴弦也会发生变化。





Fabric 织物 ————— Leg 腿



Fibre
纤维

The fabric is composed of different fibers.
 I loved watching my grandma knit sweaters when I was little.
 Watching her hands deftly playing with the wooden poles to manipulate the wool.
 Little by little, she would weave a structure out of these fibers.
 She can always knit any shape she wants with these woolen yarns.

I always thought that these stitches really have magic power.
 It's as if these stitches have their own legs and can go anywhere they like and create any form they like.

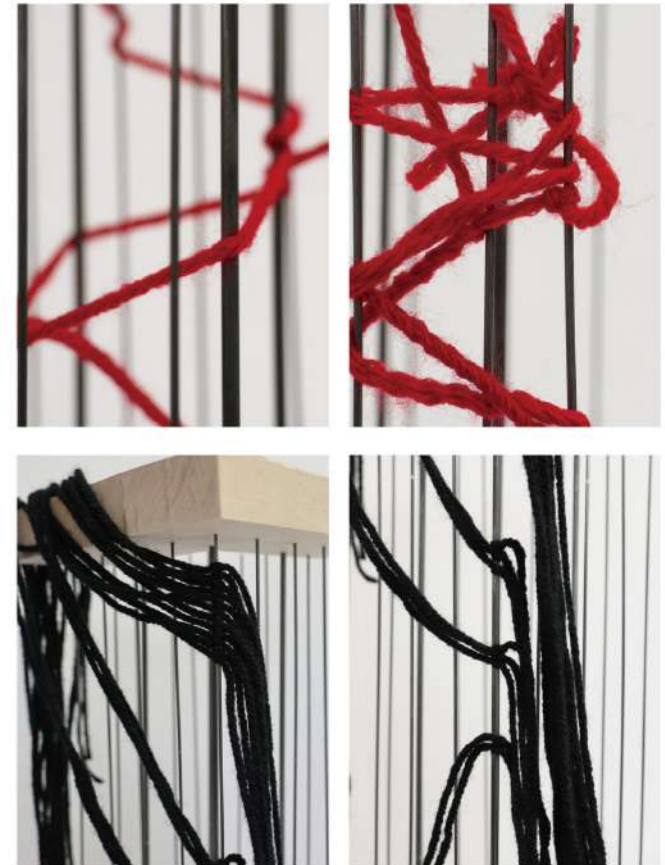
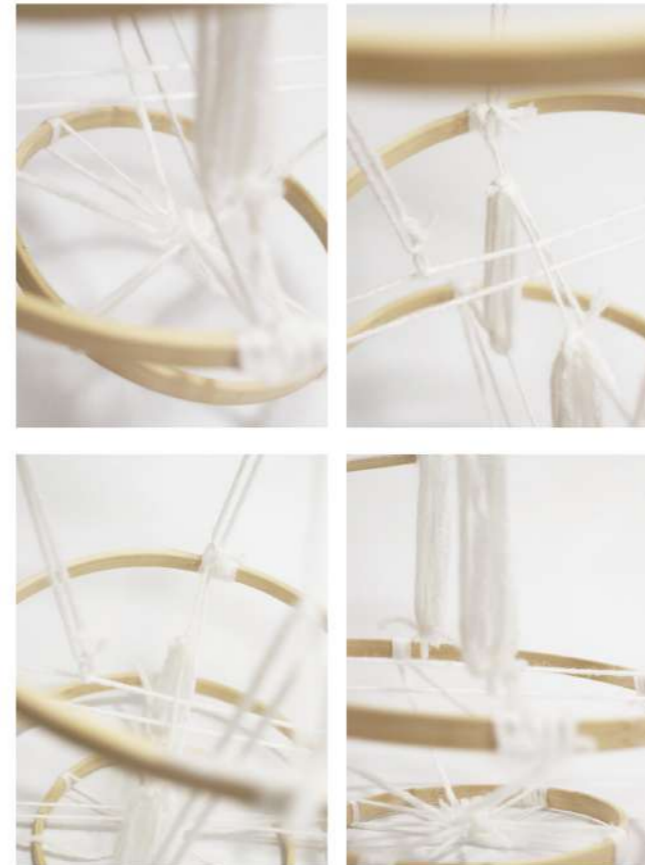
The wool itself is soft and needs structure to support them to form shapes.

Square and looped, the two shapes give them different states.

织物由不同的纤维组成。
 我小时候很喜欢看我奶奶织毛衣。
 看着她的手灵活地使用木杆推动着羊毛。
 一点一点用这些纤维编织出结构。
 她总是可以用这些毛线编织出任何她想要的形状。

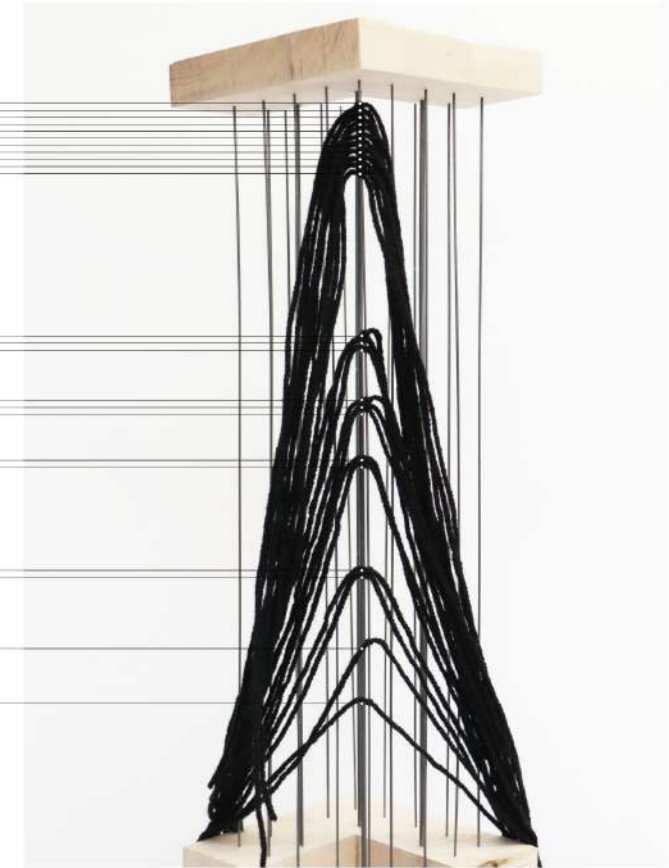
我总是想，这些针脚真的有着魔力。
 仿佛这些针脚也有着自己的双腿，可以去到任何它们喜欢的地方，
 创造出任何它们喜欢的形态。

毛线本身是柔软的，需要结构来支撑它们形成形状。
 方形和圆形，两种形状给了它们不同的状态。





- 0-11
Xingtai
邢台
- 11-14
Shijiazhuang, China
石家庄
- 14-17
Luancheng, China
廊坊
- 17-19
Suzhou, China
苏州
- 19-21
Liverpool, UK
英国利物浦
- 21-22
Shanghai, China
上海
- 22-23
New York, US
美国纽约



Map
地图

-
I imagined the wool as my legs and feet.
These strands of wool would travel instead of me to the places I have been.
In the 23 years of my life, I have moved around and lived in many different places.
Xingtai, Shijiazhuang, Luancheng, Suzhou, Liverpool, New York
Step by step, I moved further and further away from my home.
I gained more knowledge, a greater perspective, a better education
I've seen better scenery and met more friends.

-
I used red wool threads to help me walk through those lives again.
A thread represents a year, and all these intricate structures became the trajectory of my life.

-
I use black wool threads to represent my heart. My longing for my home, and the loneliness and sadness that sometimes pops up in a foreign land.

-
When I see them, it's as if I see myself.

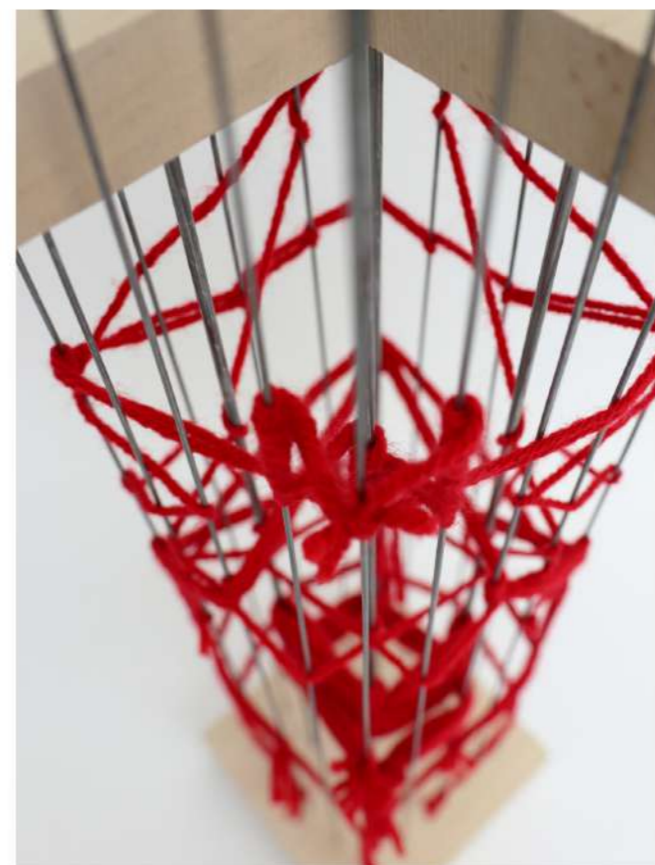
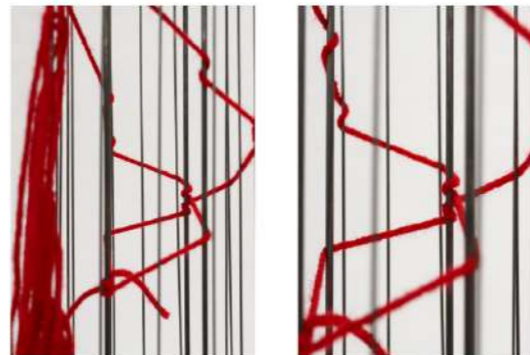
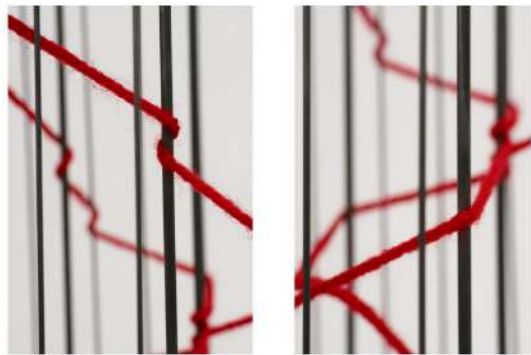
-
我把毛线想象成我的腿和脚。
这些毛线会代替我去我曾经去过的地方。
在我人生的23年中，我辗转生活在过很多不一样的地方。
邢台、石家庄、廊坊、苏州、利物浦、纽约
一步一步地，我离我的家乡越来越远。
我获得了更多的知识，更大的视野，更好地教育
我看见了更好的风景，遇见了更多的朋友。

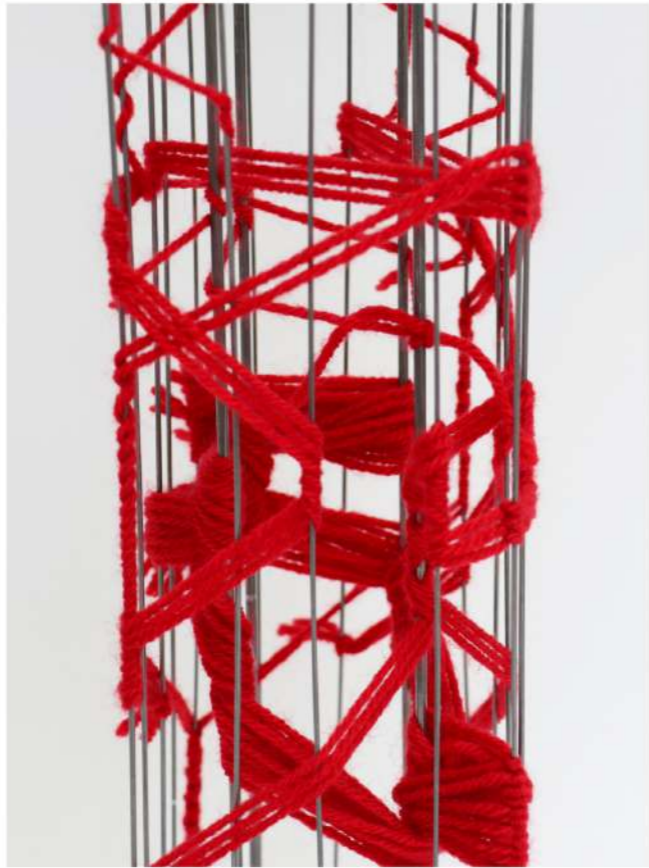
-
我用红色的羊毛线来帮助我重新走过那些生活。
一根线代表一年的时间，这些错综复杂的结构都成为了我人生的轨迹。

-
我用黑色的羊毛线代表我的内心，我对我的家的渴望，和有时会突然冒出来的孤独感和在异乡的感伤。

-
我看到它们，仿佛就看到了我自己。

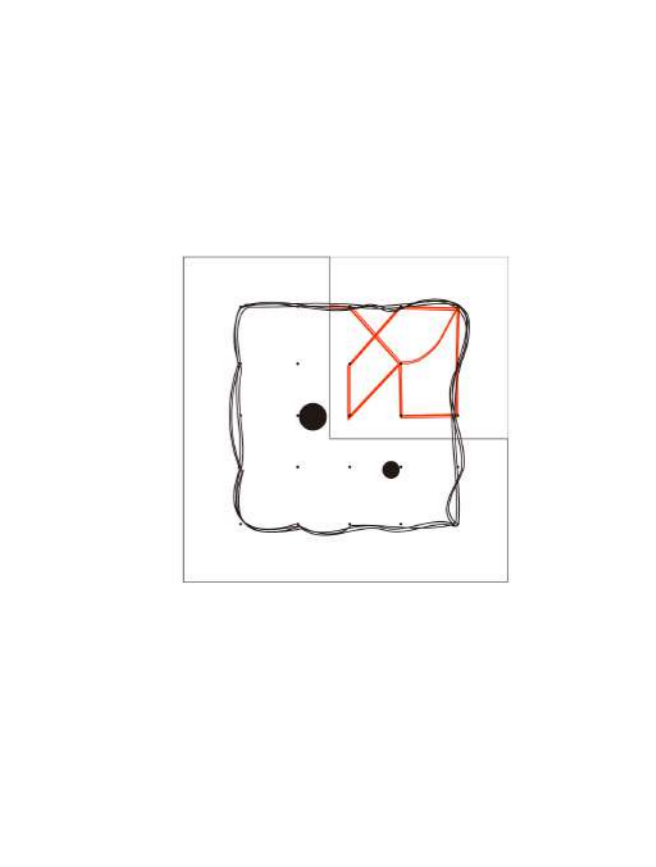
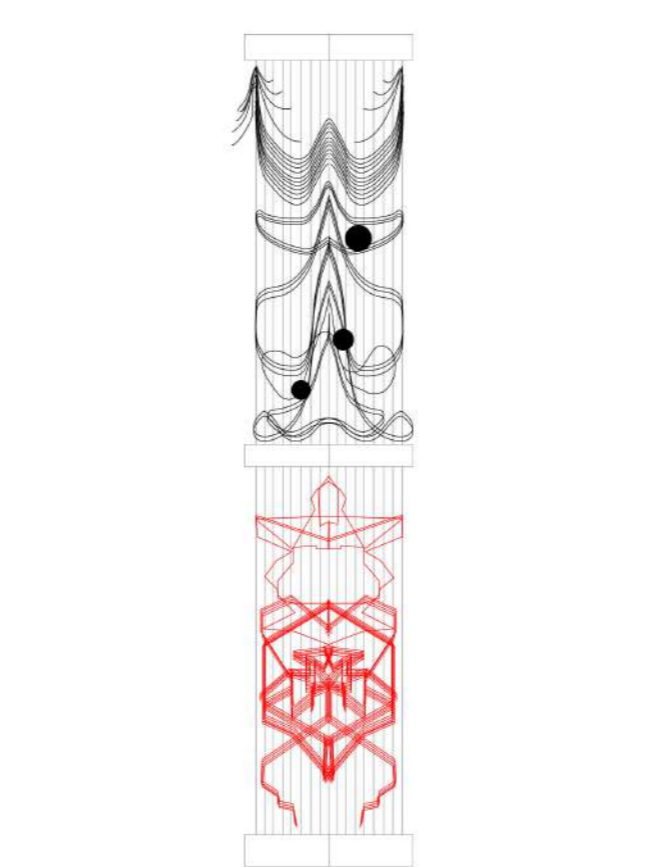
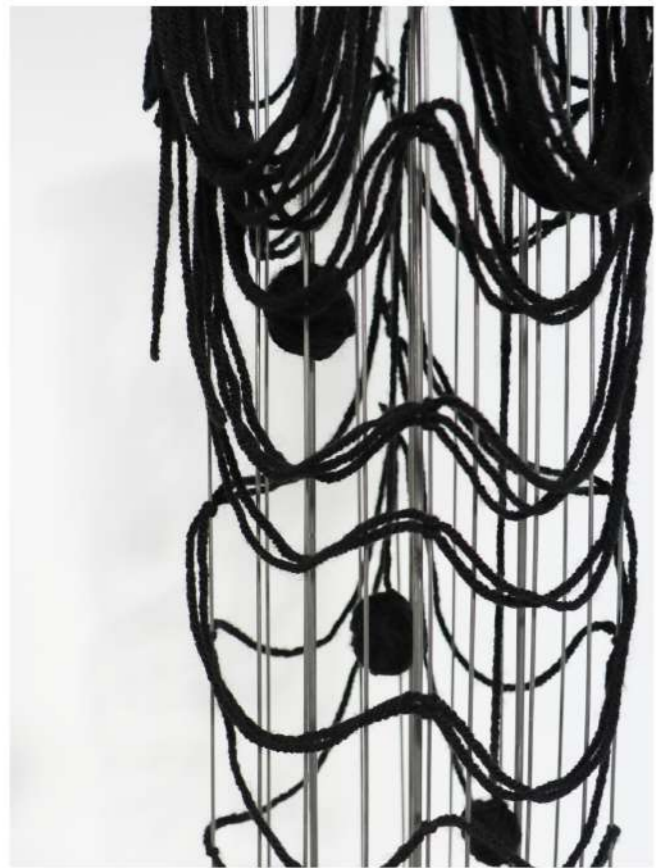


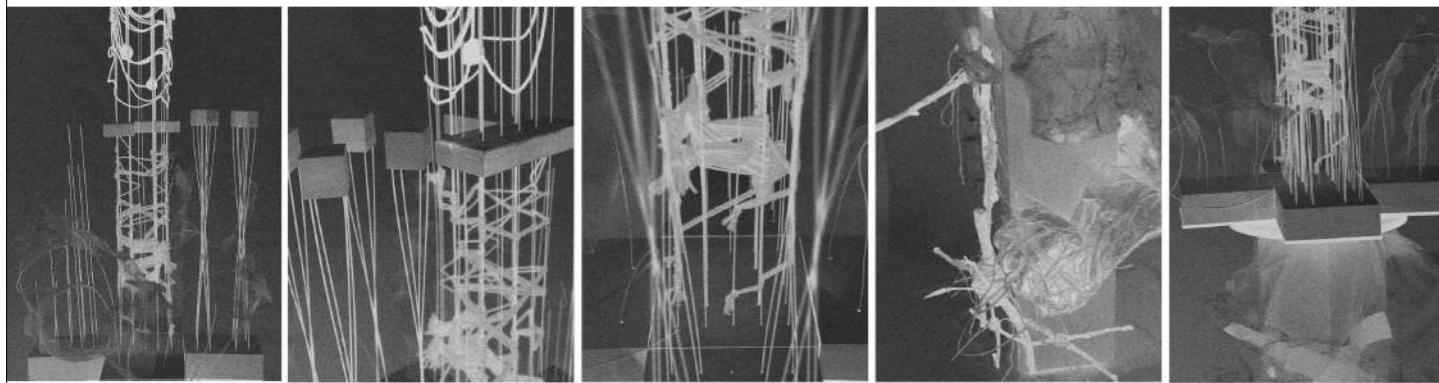
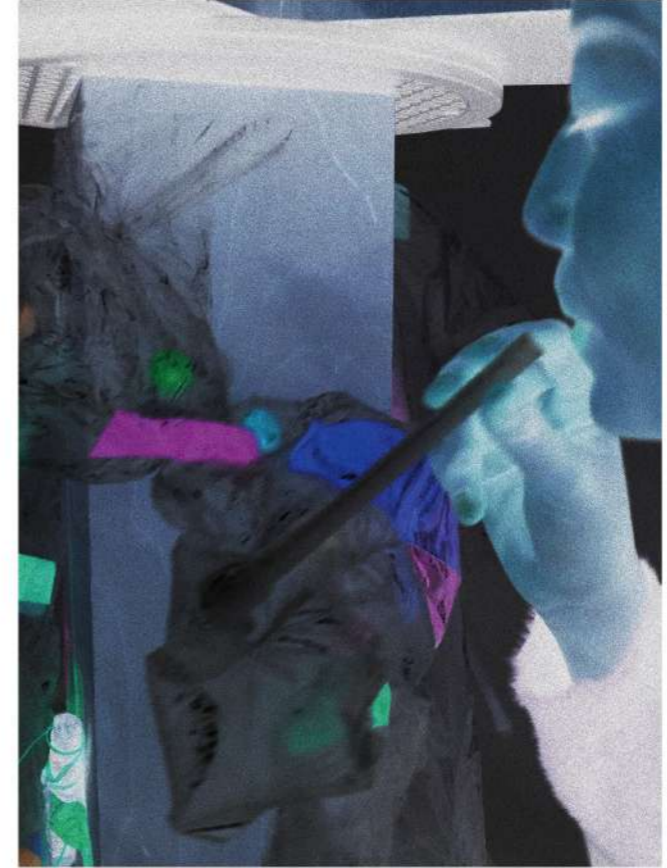
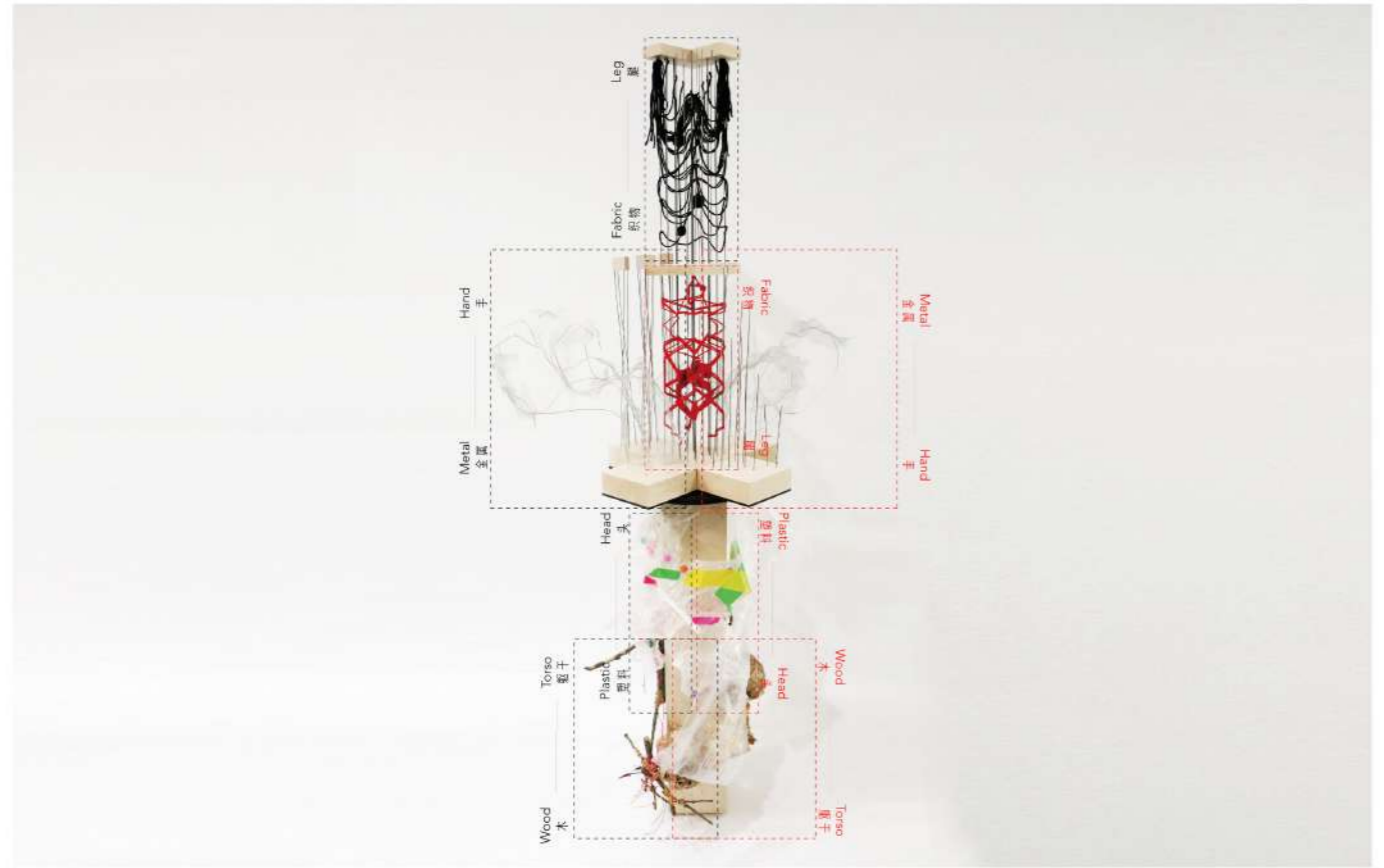




Physical Mental



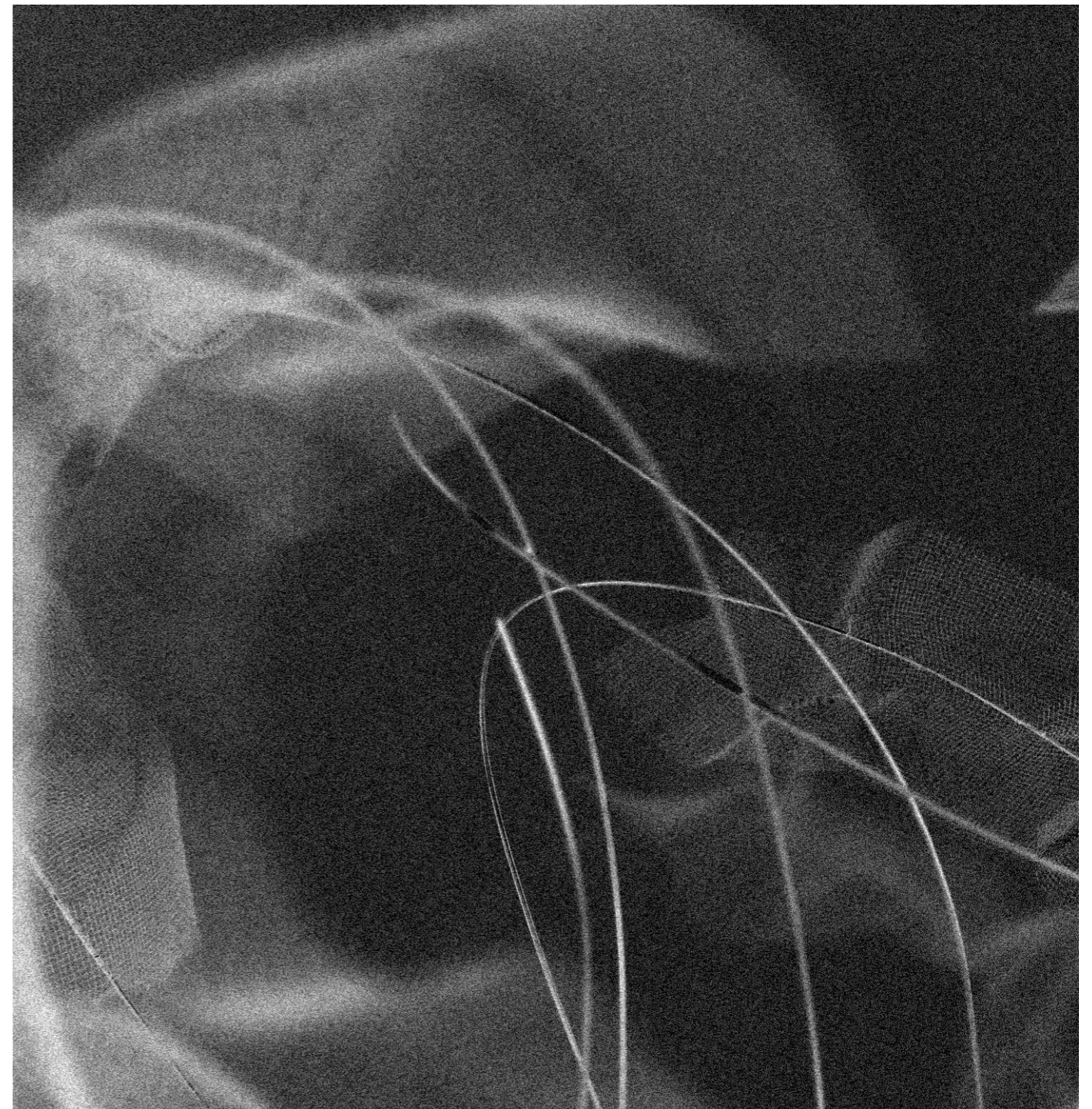






EXTRA-ORDINARY
非 - 凡

非



TWINNING
双