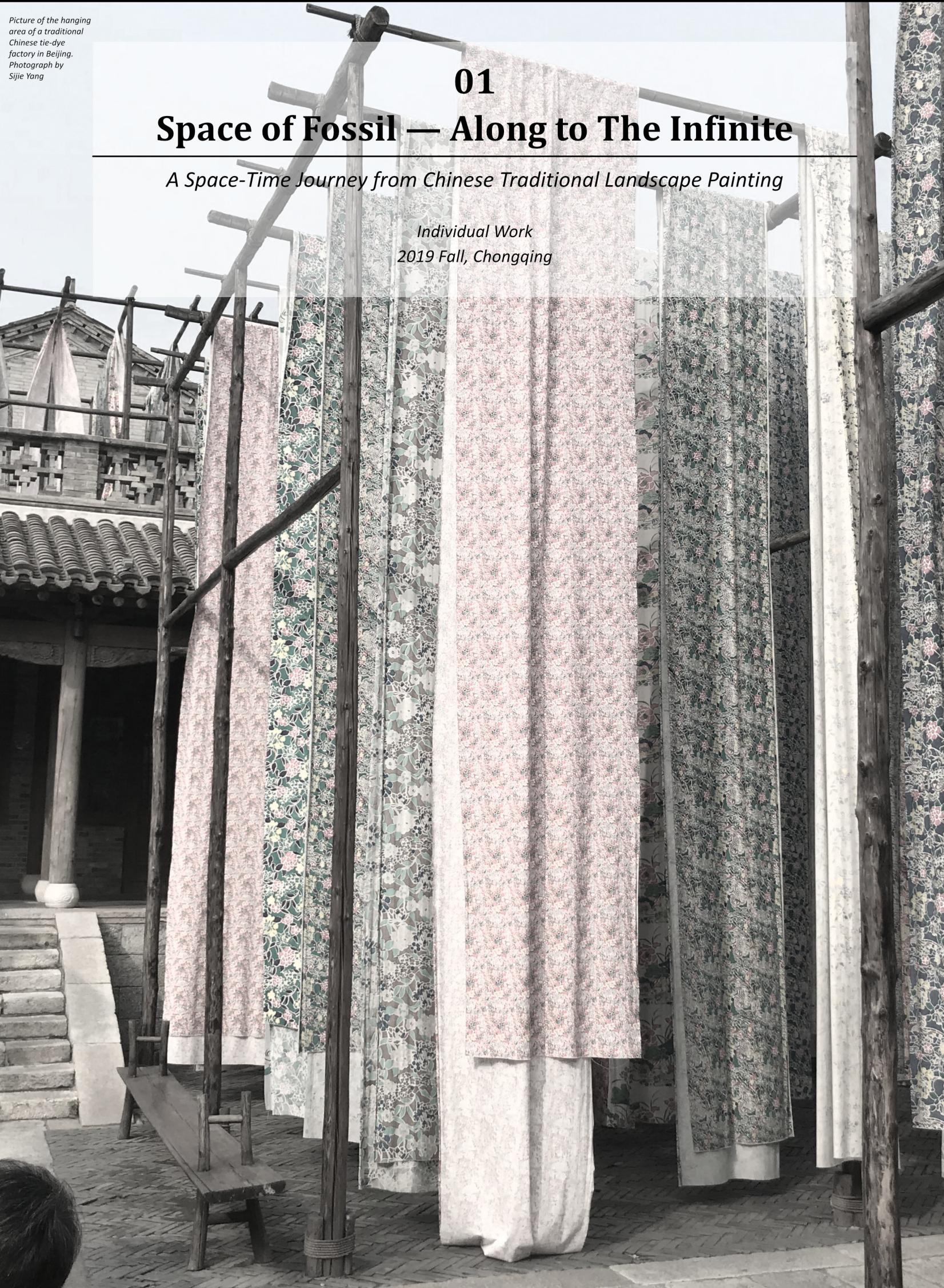


# 01

## Space of Fossil — Along to The Infinite

A Space-Time Journey from Chinese Traditional Landscape Painting

Individual Work  
2019 Fall, Chongqing



"There are three kinds of **Infinite Space** in Chinese Landscape culture: Looking up to the peak from the bottom of the mountain (infinite height); Look into the back of the mountain in front of it (infinite depth); Look forward from near mountain to mountain faraway (infinite far)."

Guo Xi, Ancient Chinese Literati Painter

"All the techniques of landscape painting could be summarized to compress the **Vast and Infinite Universe** in the small paper with imagination. We can only see one **Layer** of mountain, but we could image our **Journey among Layers** of mountain."

Shen Kuo, Ancient Chinese Literati Painter

### [1] From Reality to Layers - Deconstruct Hidden Space Concept of Ancient Painters in the Chinese Landscape Painting

Chinese landscape painting and Chinese garden are two important mediums for ancient Chinese literati to express their ideas of space. From the Chinese point of view, the universe is infinite and vast, which is one of the core ideas of ancient Chinese philosophy and often symbolizes the broad mind and temperament of Chinese literati. But at the same time, the medium of expression of literati is limited. How to express the infinite space in the limited space has become one of the core topics of ancient Chinese art creation. In Chinese terminology, this is called seeing the big in the small.

Because of the special recognition of space and art creation, the space expression of Chinese landscape painting is very unique. There is no physical perspective in Chinese landscape painting, and we can only see the superposition, the layers, of the landscape one by one. In such a superposition, ancient Chinese literati painters sought for the rhythm of aesthetics and the expression of the infinite world. Moreover, those famous painters with high techniques never drew their paintings according to what the real world looks like, but reconstructed their journey in the nature, the hidden journey of literati, with their residual image memory.

### [2] From Layers to Space-Time Journey - Reconstruct Chinese Landscape Experience based on Real Environment

The project explores how to deconstruct the space concept in the Chinese landscape painting, the infinite space and the hidden journey of literati, and how to reconstruct this Chinese landscape space in the real environment, building a Chinese landscape narrative experience. The design process of reconstruction repeated the creation mechanism of Chinese landscape painting: how to create the infinite space in a limited space, and how to hide the journey among the layers.

Ancient Chinese also had an advanced understanding of time. They believed that time was not only infinite, but also reincarnated. Through active observation, they became one of the first people in the world to set a time scale and they created the lunar calendar. Year after year, they used 24 solar terms according to the moon's changing track to help them with their agricultural production. In this project, time is served as an additional dimension, which is related to the local water environment yearly changes and is associated tightly to the layer element, to complete the creation of the whole spacetime journey.

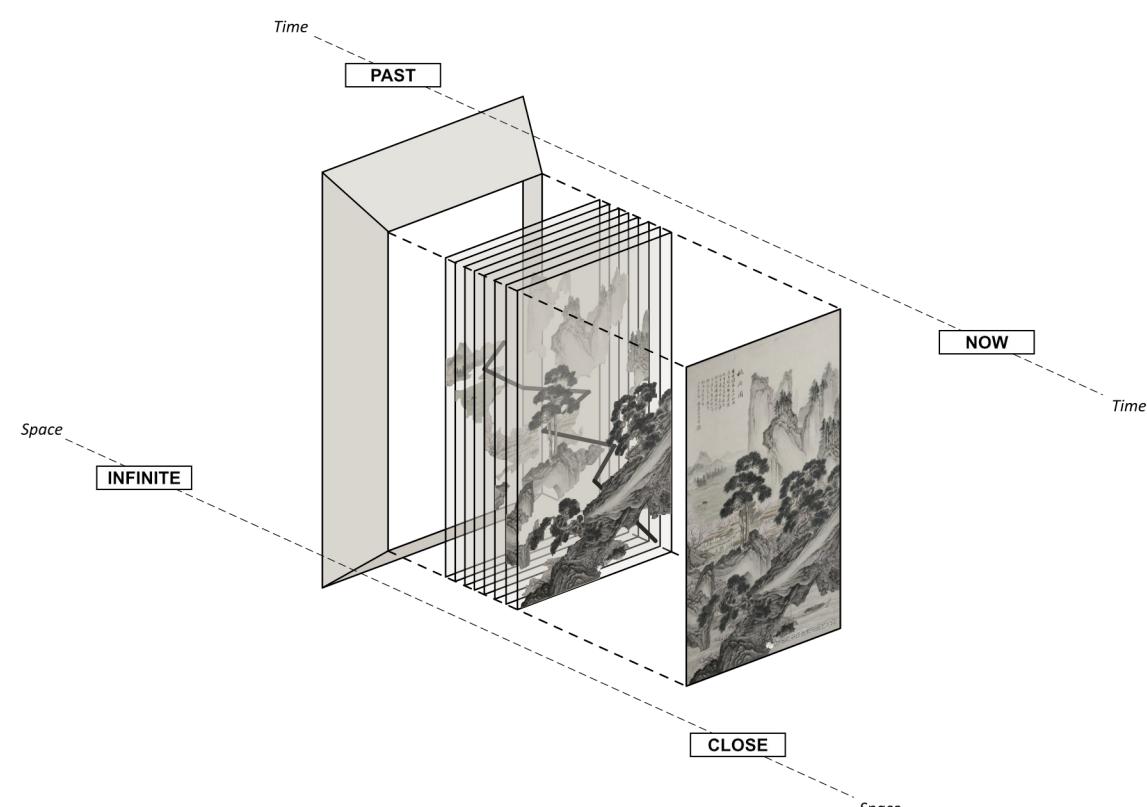
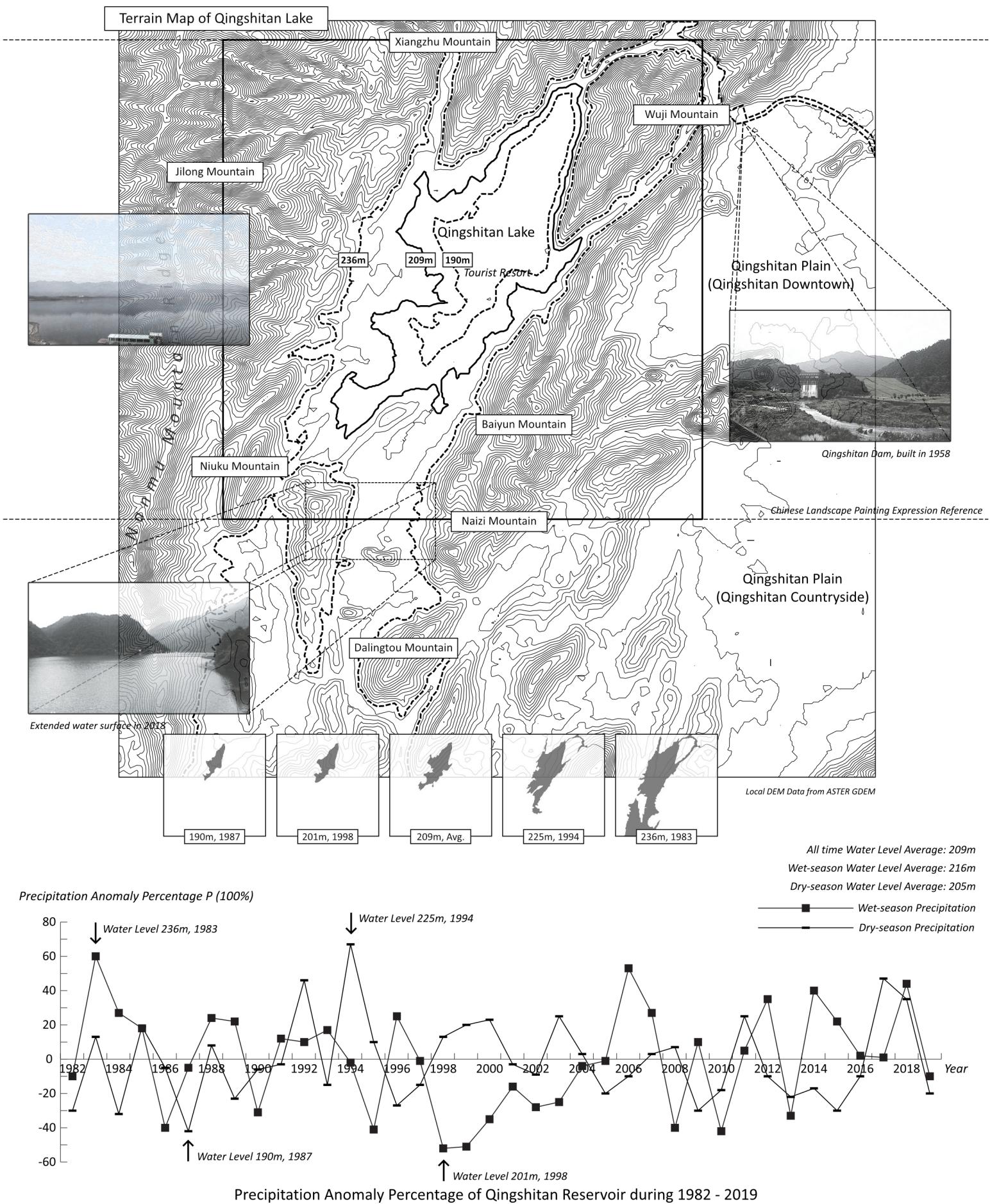


Figure. Analysis Diagram of Hidden Journey Space in the Chinese Traditional Painting

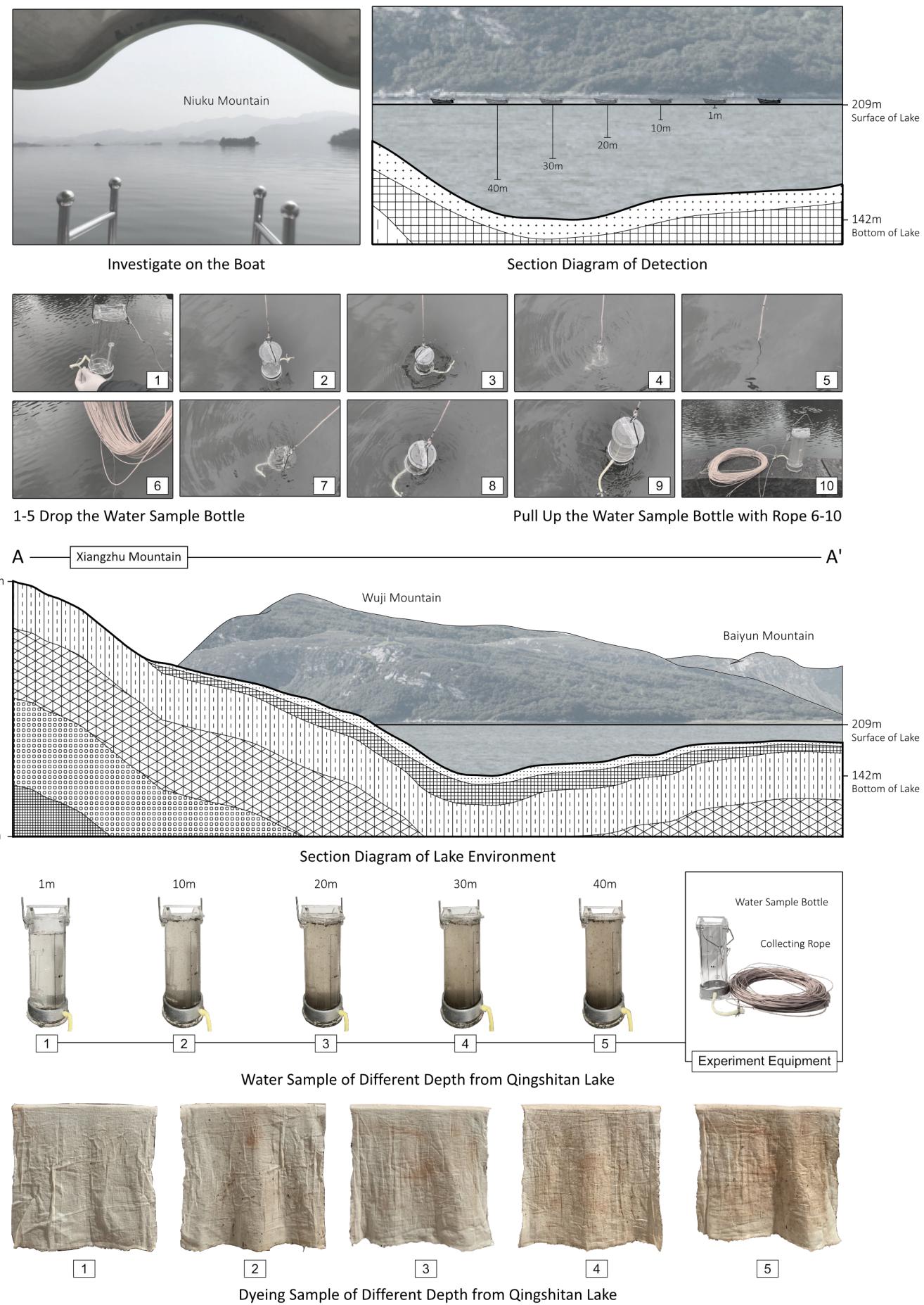
## Water Environment Changes in Qingshitan Lake (Space-Time Reality)

Located in Guilin, Guangxi, water level and water environment in Qingshitan Lake change every year. During the wet season each year, with rainfall and less transpiration effects, water level tends to rise significantly and lake is connected to surrounding rivers. There are often large numbers of fish and strong currents in the lake, and when there is heavy rainfall, there can be flooding. In the dry season, there is an opposite situation because if high temperature and more water evaporation, though high precipitation sometimes. The water level drops and fish stocks dwindle.



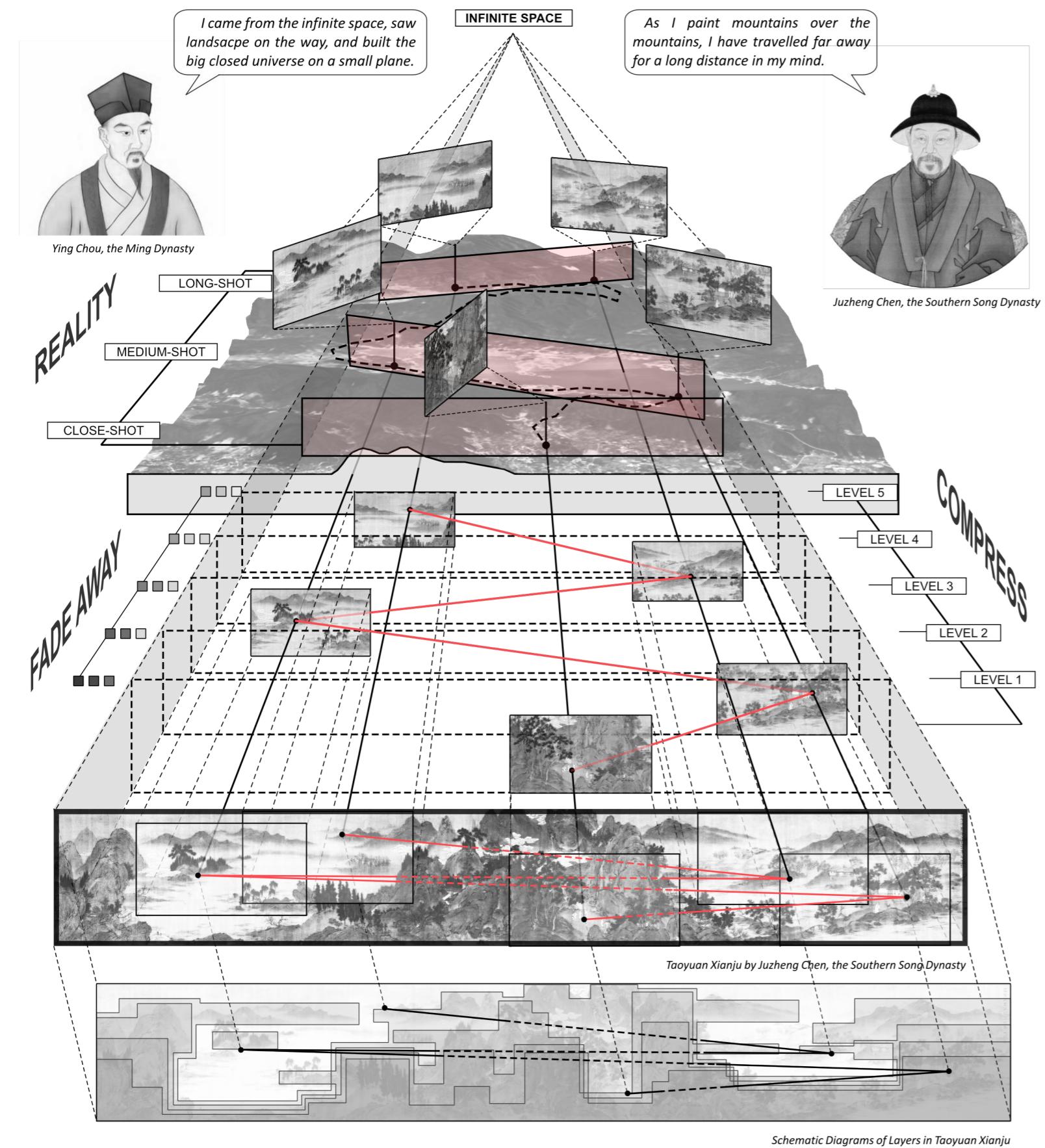
## Detection of Water Environment in Qingshitan Lake (Deconstruction)

Further, I tried to detect the water environment through some professional equipments, water sample bottle and collecting rope, which could help me to get to know more about the water quality and its relationship with the depth of the water. After the sampling on the boat, clear differences could be observed on samples from different heights of the lake: the deeper, the more turbid. Dyeing effects of these samples also showed the same tendency. This phenomenon may be because the water near the bottom is much easier to mix with soil under the lake.



## Chinese Landscape Painting Expression - From Reality to Layers (Medium Prototype)

In order to express the infinity and vastness of natural space, there is no physical perspective in Chinese landscape painting. The painter shows the depth of field by adding layers to layers. In the process of creation, they do not start from a specific point of view, but rather collage the images of different locations he had been during the journey to complete the whole work. Layer is the main method of their creation, and they also hide their journey in layers. This symbolizes that the ancient Chinese scholar himself lived freely in the vast nature.



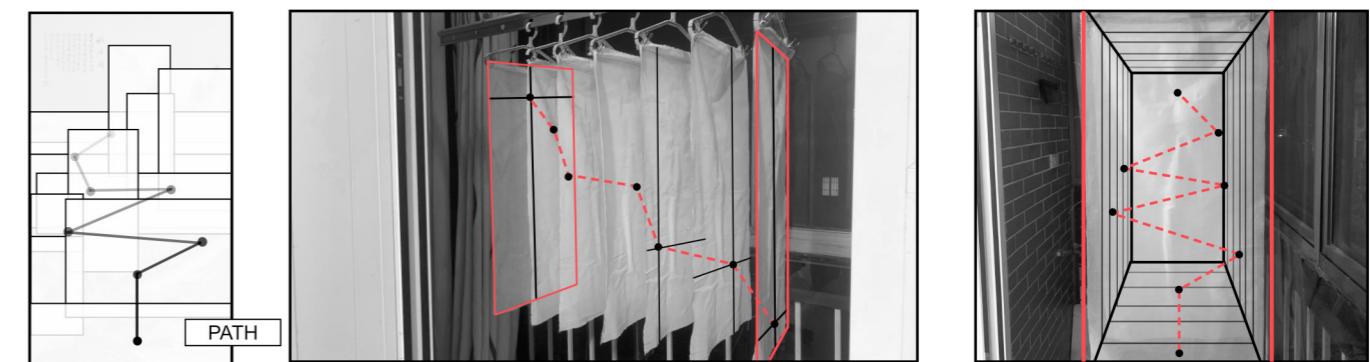
## From Layers to Space-time Journey (Reconstruction)

Based on the concept of layers, the design reconstructs the space and translates the two-dimensional painting space into the three-dimensional reality. Each layer is a separate dyeing machine unit, and the special one-layer effect is achieved by dyeing and record the water environment at the bottom of the lake at a certain time. Different layers are designed to record different water environment at different time, in order to be a document of water environment changes. The superposition of the layers eventually forms the whole space and space-time experience. The paths are interspersed among different levels to form a unique spatial narrative experience for people, making people feel the spacetime concept of Chinese.

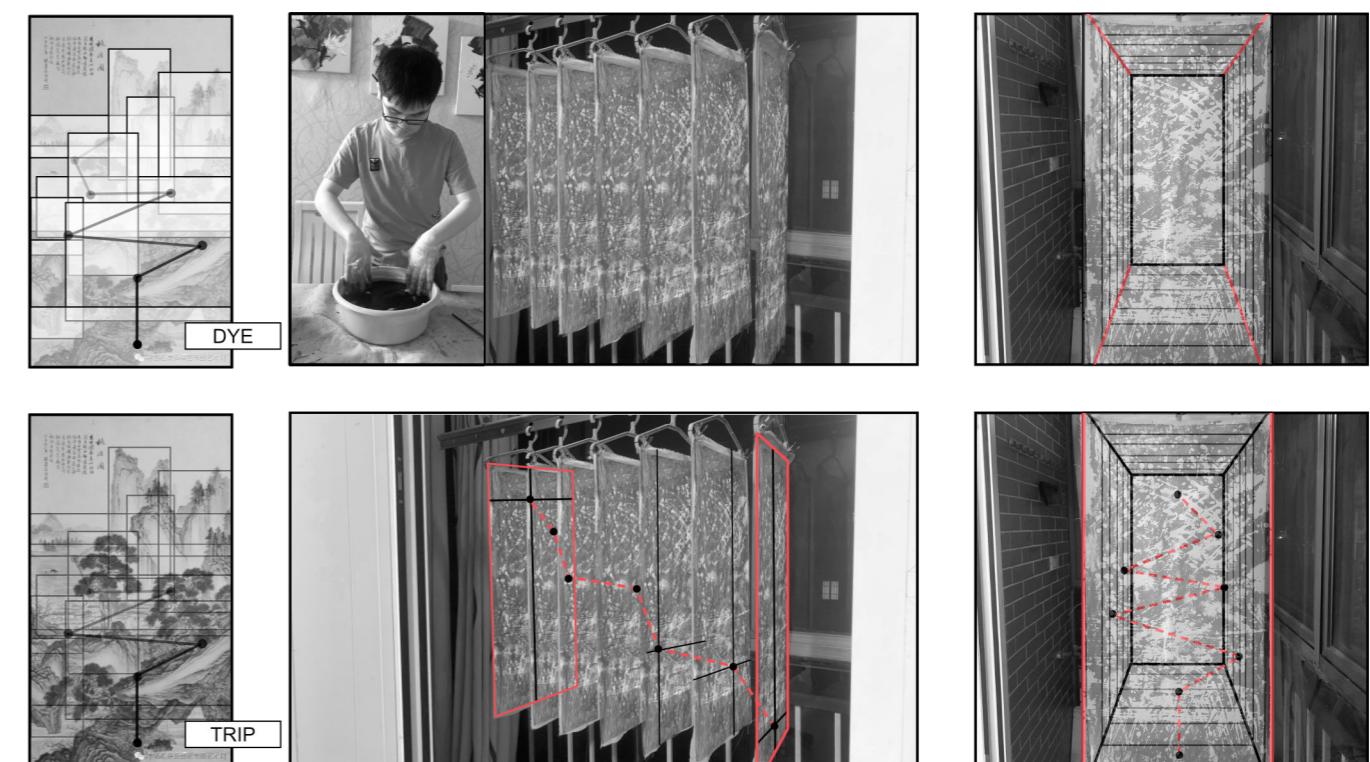
**Step 1 - Layer:** Identify the layers as the basic elements for the space. And deform these layers to reconstruct the infinite space.



**Step 2 - Path:** Design and create the path and narrative space experience through the layers, connecting those separate levels into a physically complete journey.

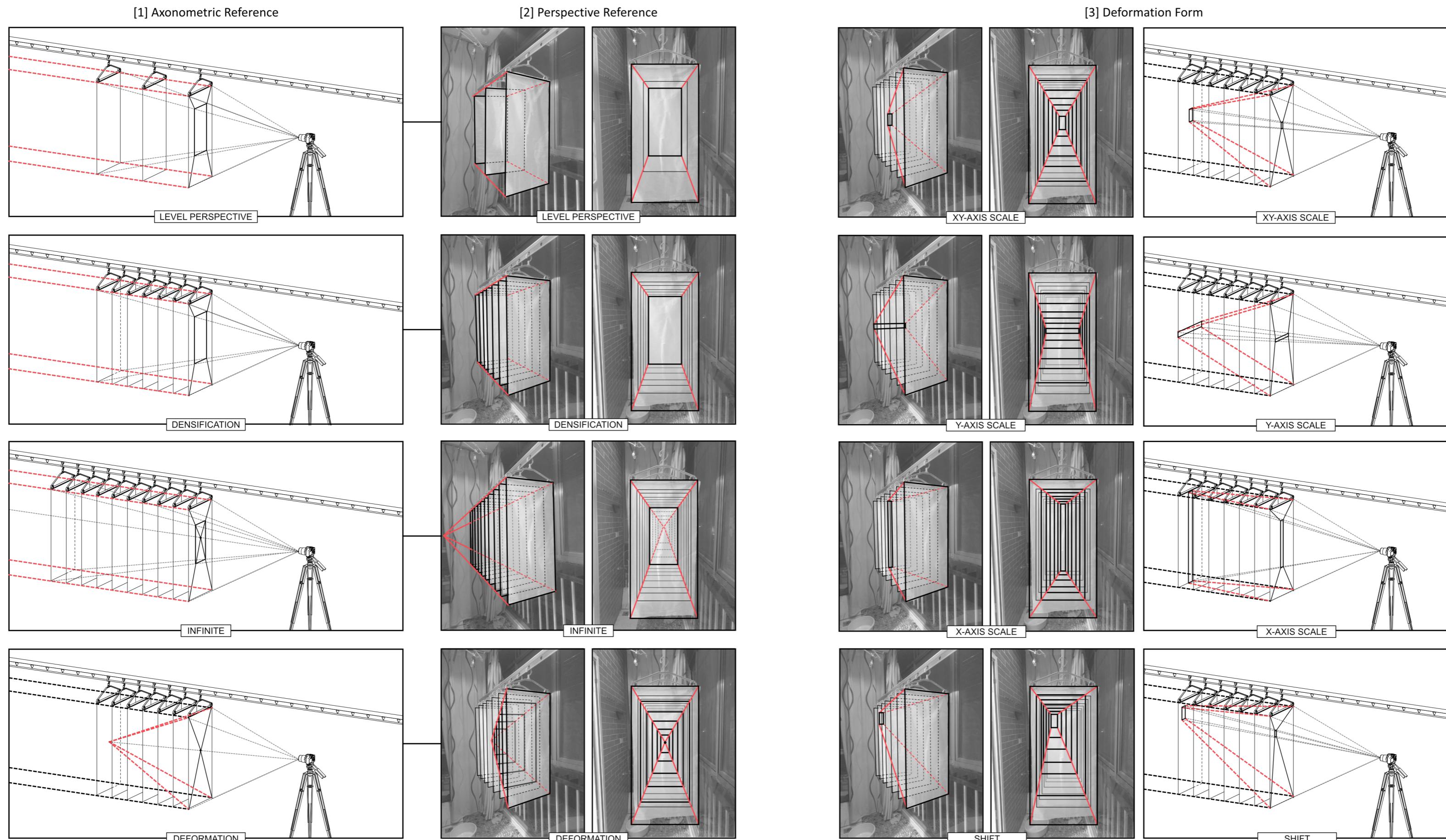


**Step 3 - Dye:** The dyeing device and the final dyeing effects of water environment finally form a complete space experience. All the layers' effects come together to be a document of water environment changes. And the experience is inserted a time axis and become a space-time journey.



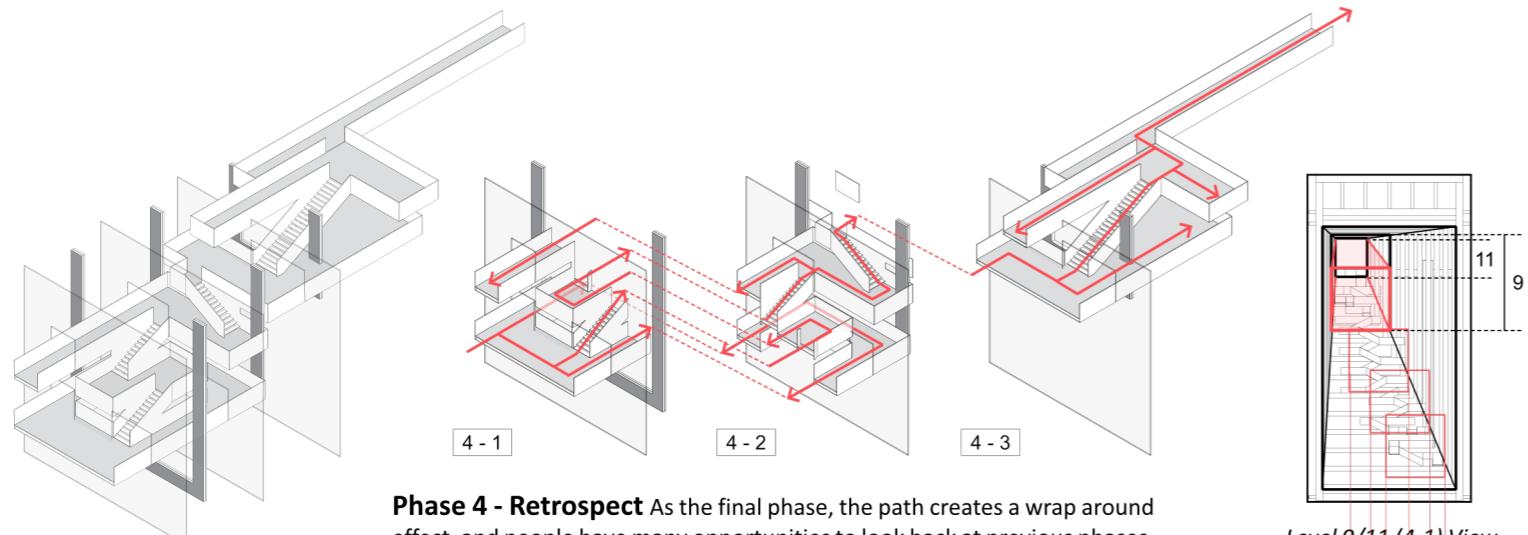
## Deformation of Infinite in the Limited Space

After identifying the layer as the basic element of space, these layers need to be deformed so that the infinite can be expressed in a limited space. Through controlling of the size and position of the layer and creating gradual changes, the infinite space comes into being. In order to fit the slope angle of the mountain in the site, the infinite space is transformed to the top of the frame.

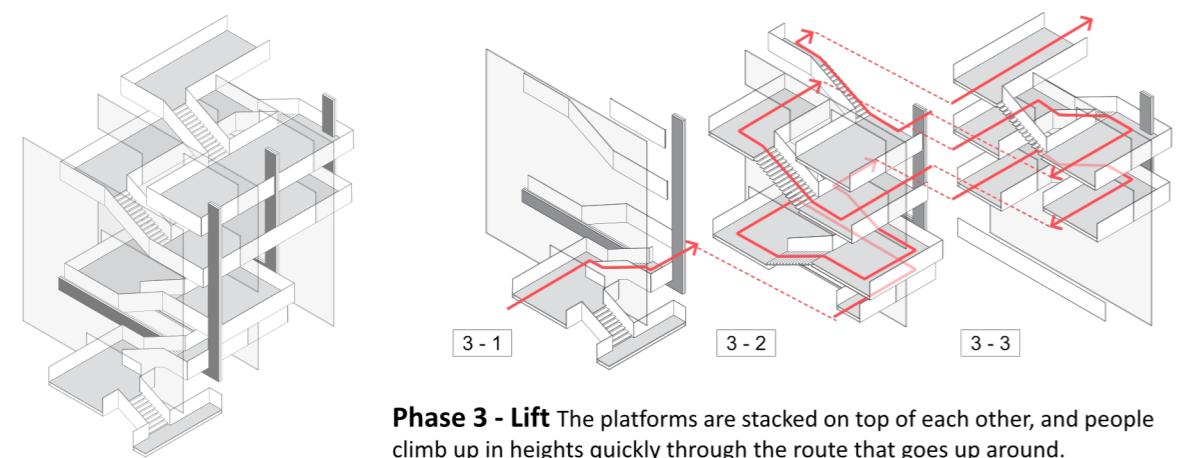


## Path System Up to Infinite Space - Narrative Experience & The Philosophy of Yin and Yang

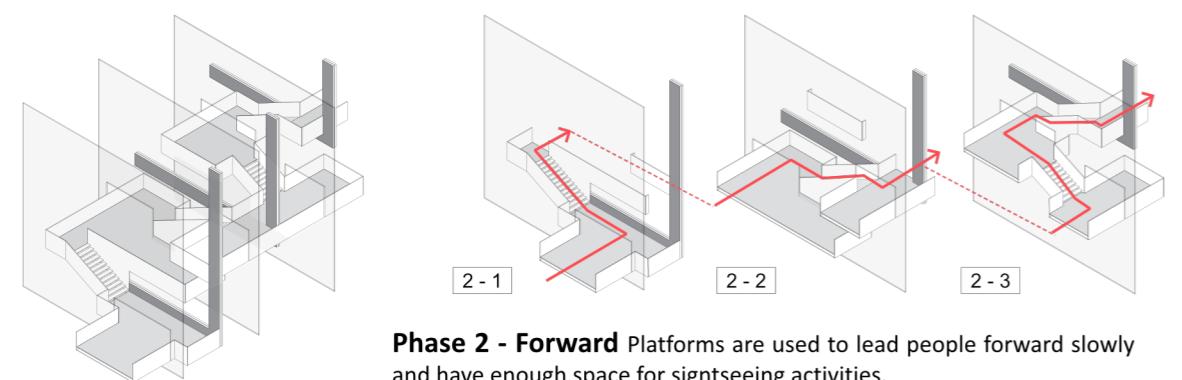
After the infinite space is formed by the layers, people need a path to experience the space process. The different relationships among the path, the platform and the layer structure constitute the whole narrative space experience. In addition to the path of space journey to the infinite space, space out of the infinite space (the chaos space) has its own path, which shows the the philosophy of Yin and Yang.



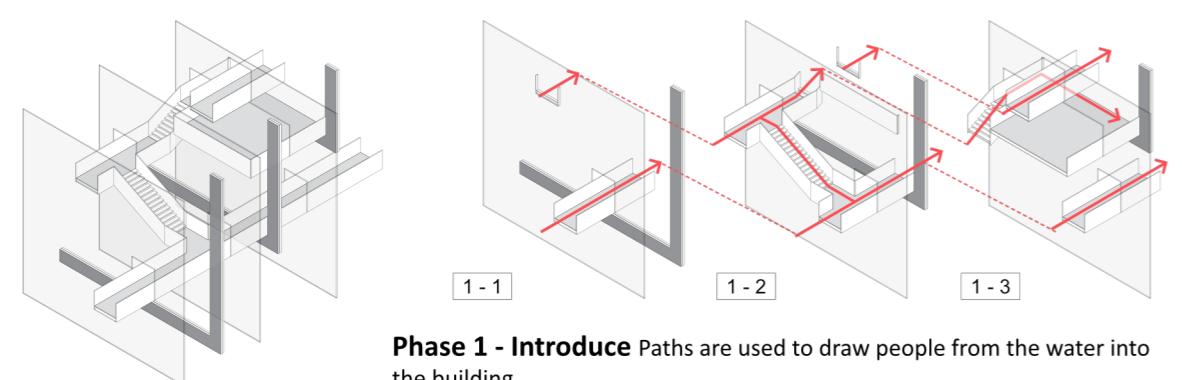
**Phase 4 - Retrospect** As the final phase, the path creates a wrap around effect, and people have many opportunities to look back at previous phases.



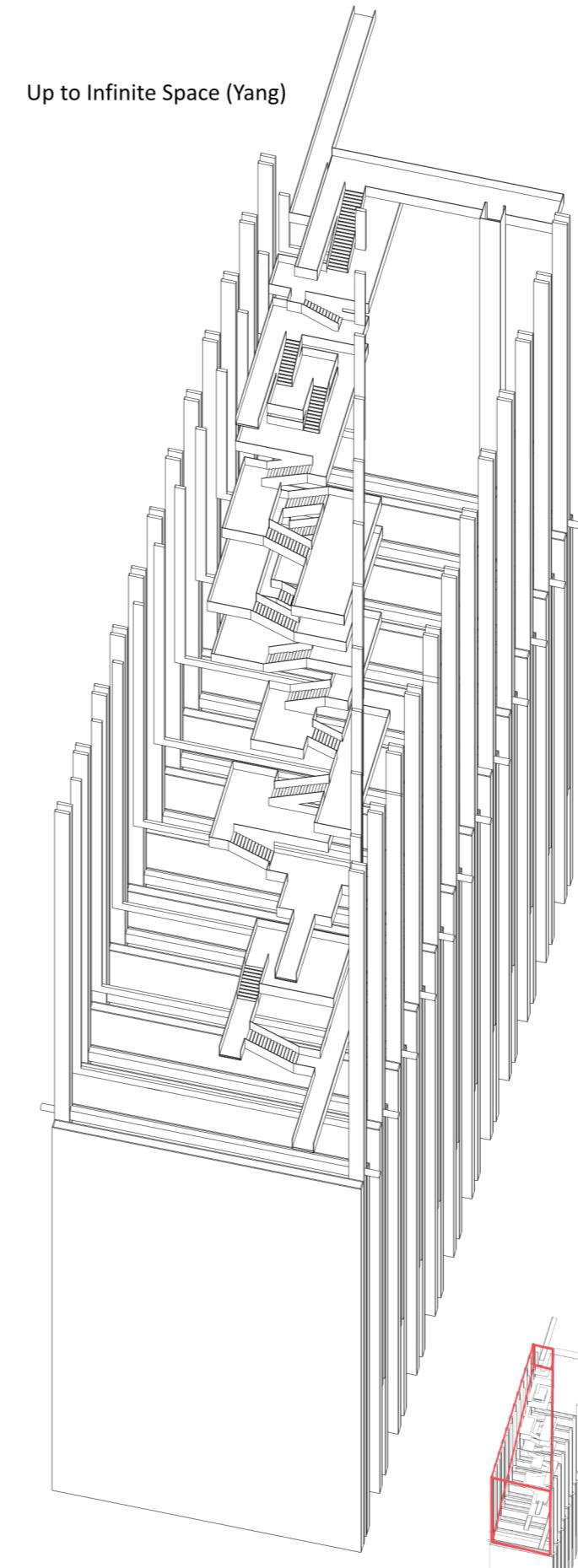
**Phase 3 - Lift** The platforms are stacked on top of each other, and people climb up in heights quickly through the route that goes up around.



**Phase 2 - Forward** Platforms are used to lead people forward slowly and have enough space for sightseeing activities.

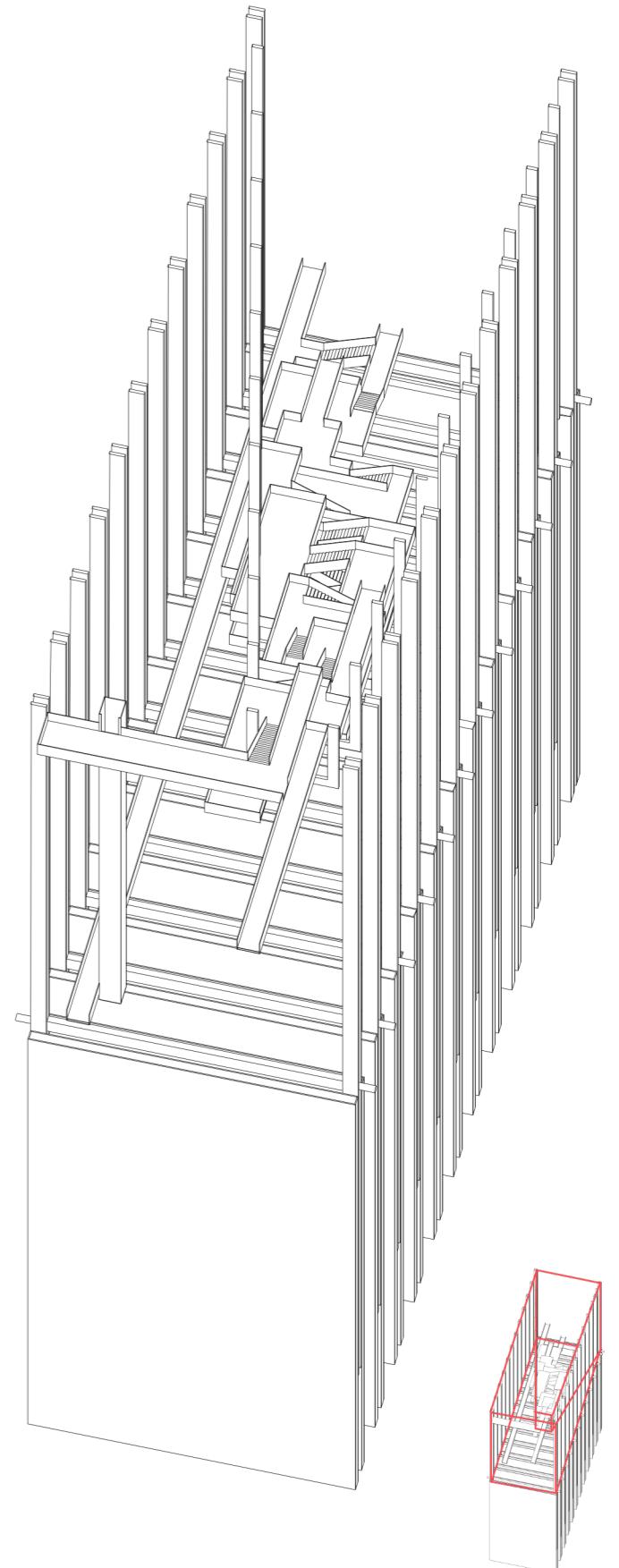


**Phase 1 - Introduce** Paths are used to draw people from the water into the building.



Up to Infinite Space (Yang)

Out of Infinite Space (Yin)



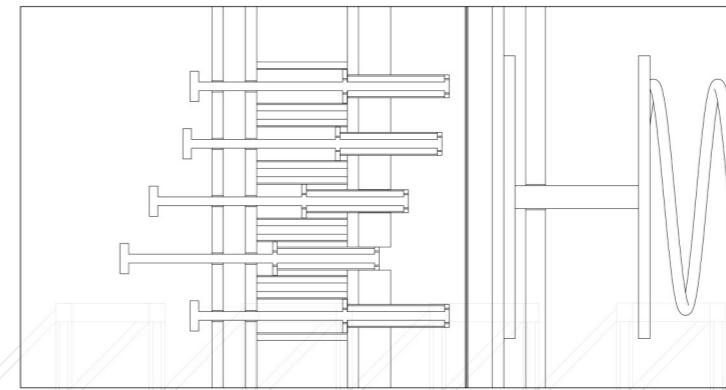
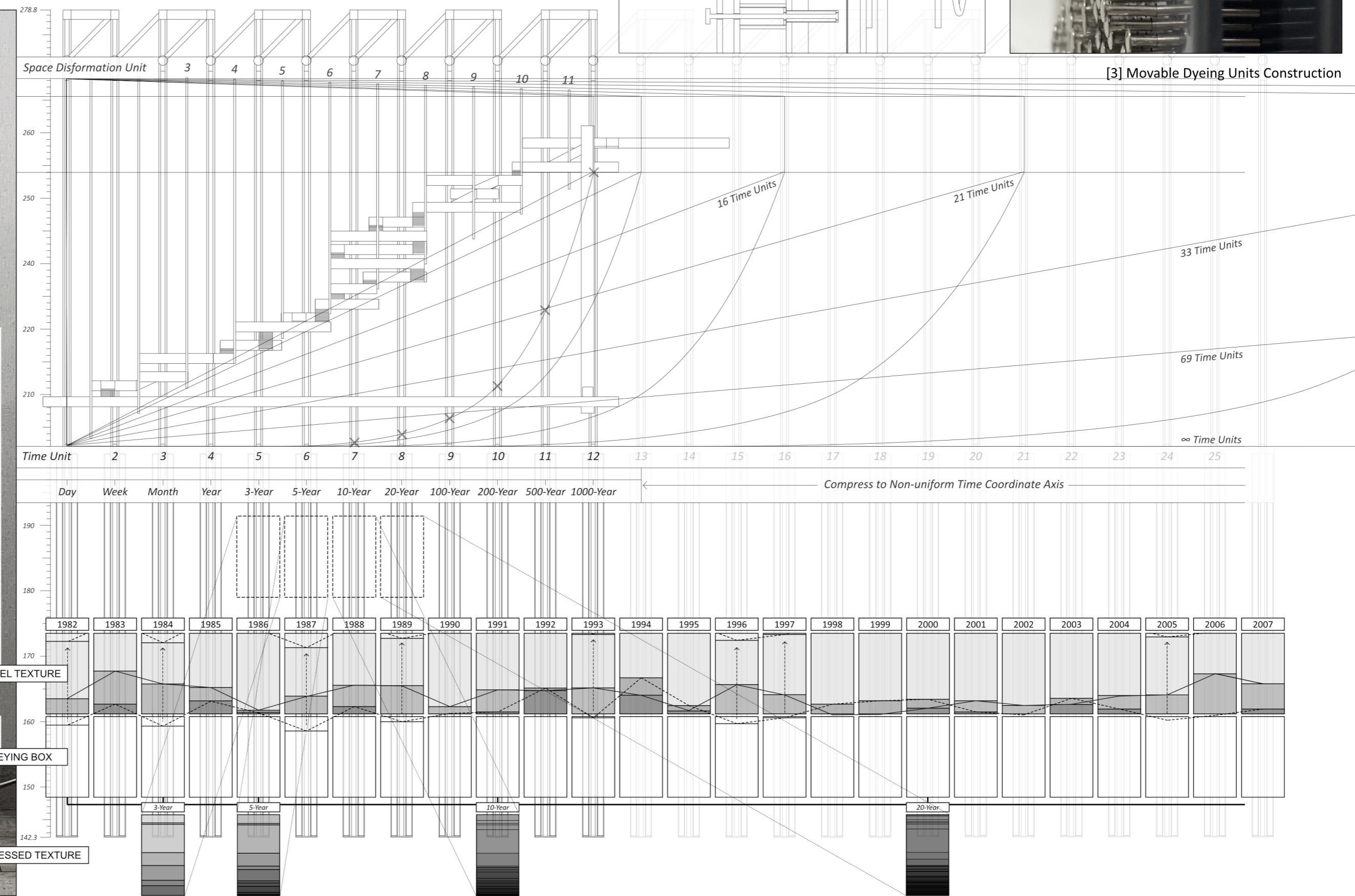
## Level Unit of the Space-time Journey - A Dyeing Apparatus

Layer unit is the basic component of Space-time Journey. In space, its set completes the expression of infinite space and supports the path structure to create the narrative experience. In terms of time, it is a dyeing machine, which is used to record the changes of water environment at different moments, form a history document and materialize time. The mechanical lifting structure at the top and the dyeing and timing structure at the bottom make up the whole dyeing system.

[1] Dyeing Apparatus



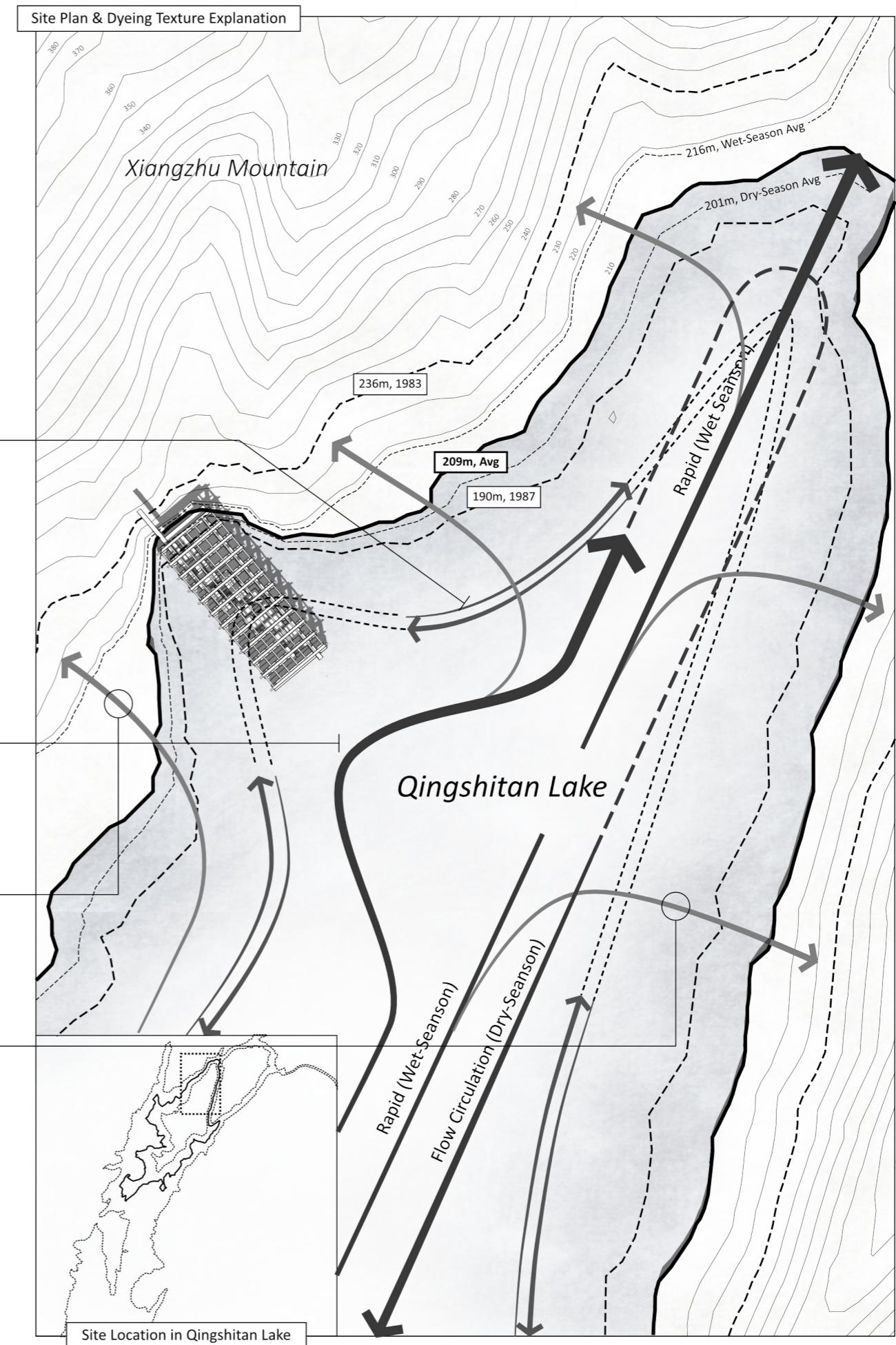
[2] Spacetime Disformation Section Diagrams



[3] Movable Dyeing Units Construction

## Unit Dyeing Texture of Water Environment Changes

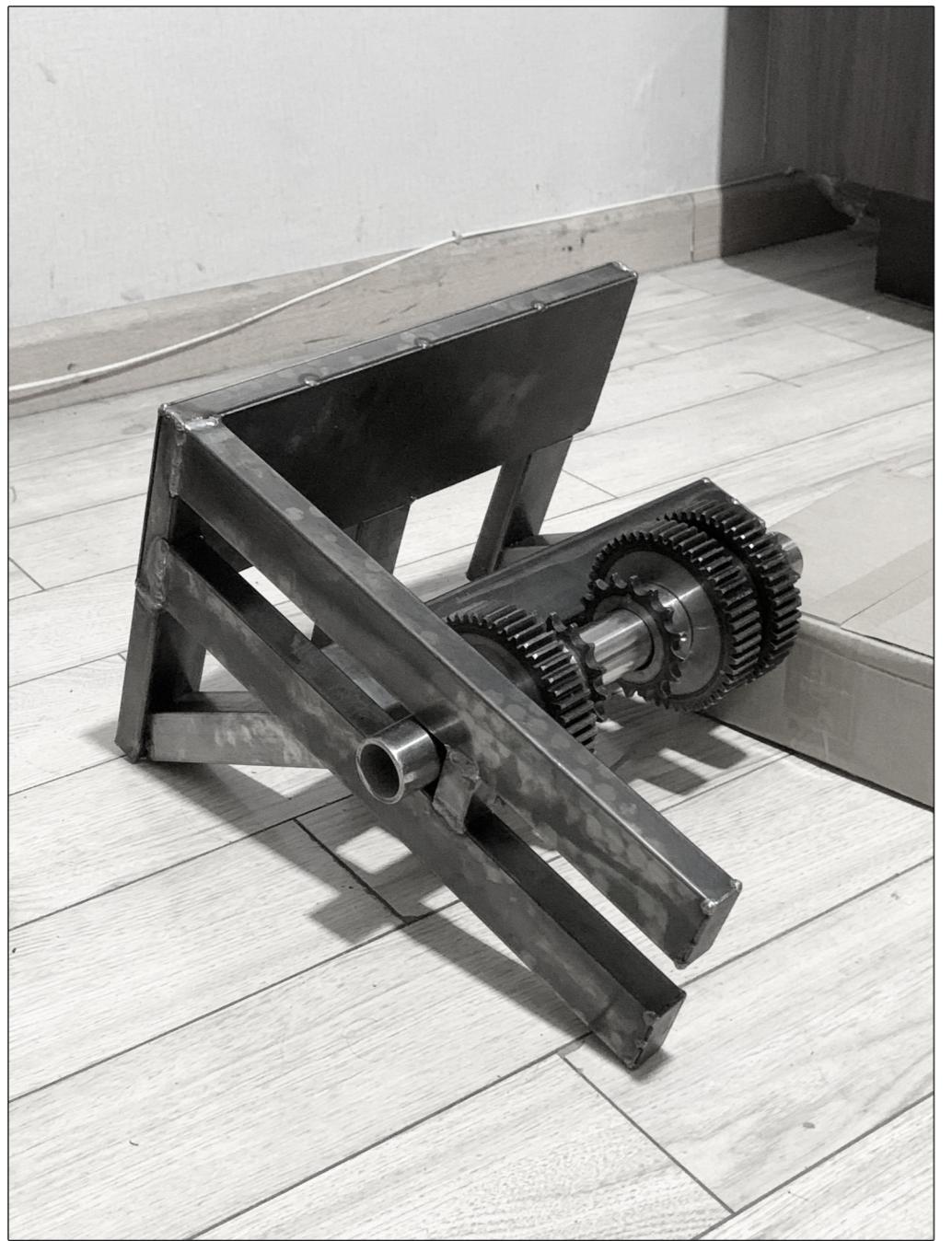
After being affected by the change of water environment, the movable dyeing units present different textures, which are finally produced on the dyeing clothes. These textures will reflect the changes of water environment in different years in Qingshitan Lake, including fish schools, rapids, floods, earthquakes, and so on. As a record through spacetime, the dyed clothes with textures become an important part of the spacetime experience construction.



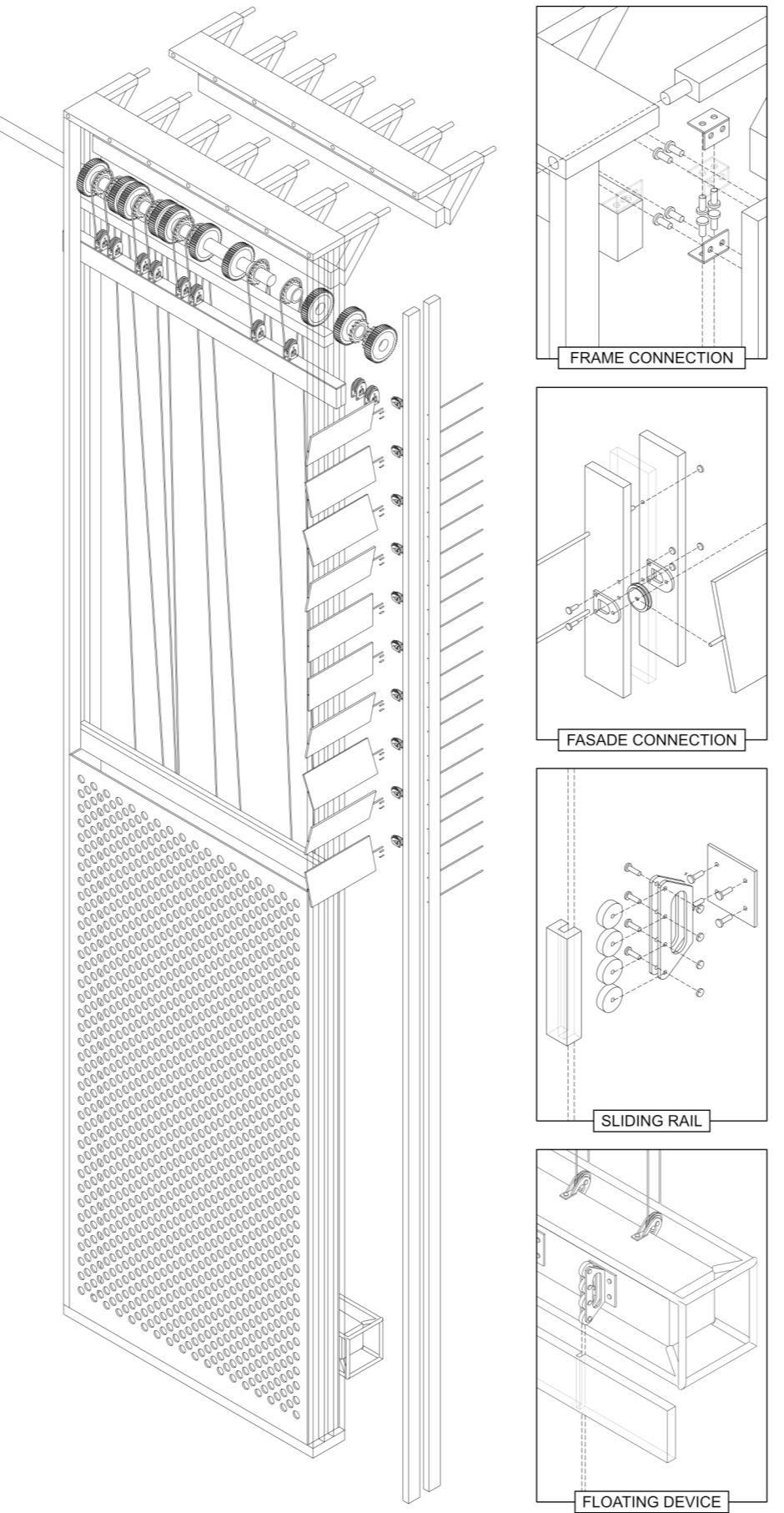
## Construction Detail - Dynamical System and Fasade System

At the top of the device is a dynamical system consisting of five sets of gears that pull ropes to control whether the dyeing cloth rise or fall, thereby controlling the dyeing process. The gears are powered by a buoy in the water, which pulls the ropes by floating up and down. The buoy uses airbags to control its weight, which finally controls what depth it floats in the water. The whole apparatus consists of 12 units, and the structural connections among these units eventually becomes the basic form of the facade system.

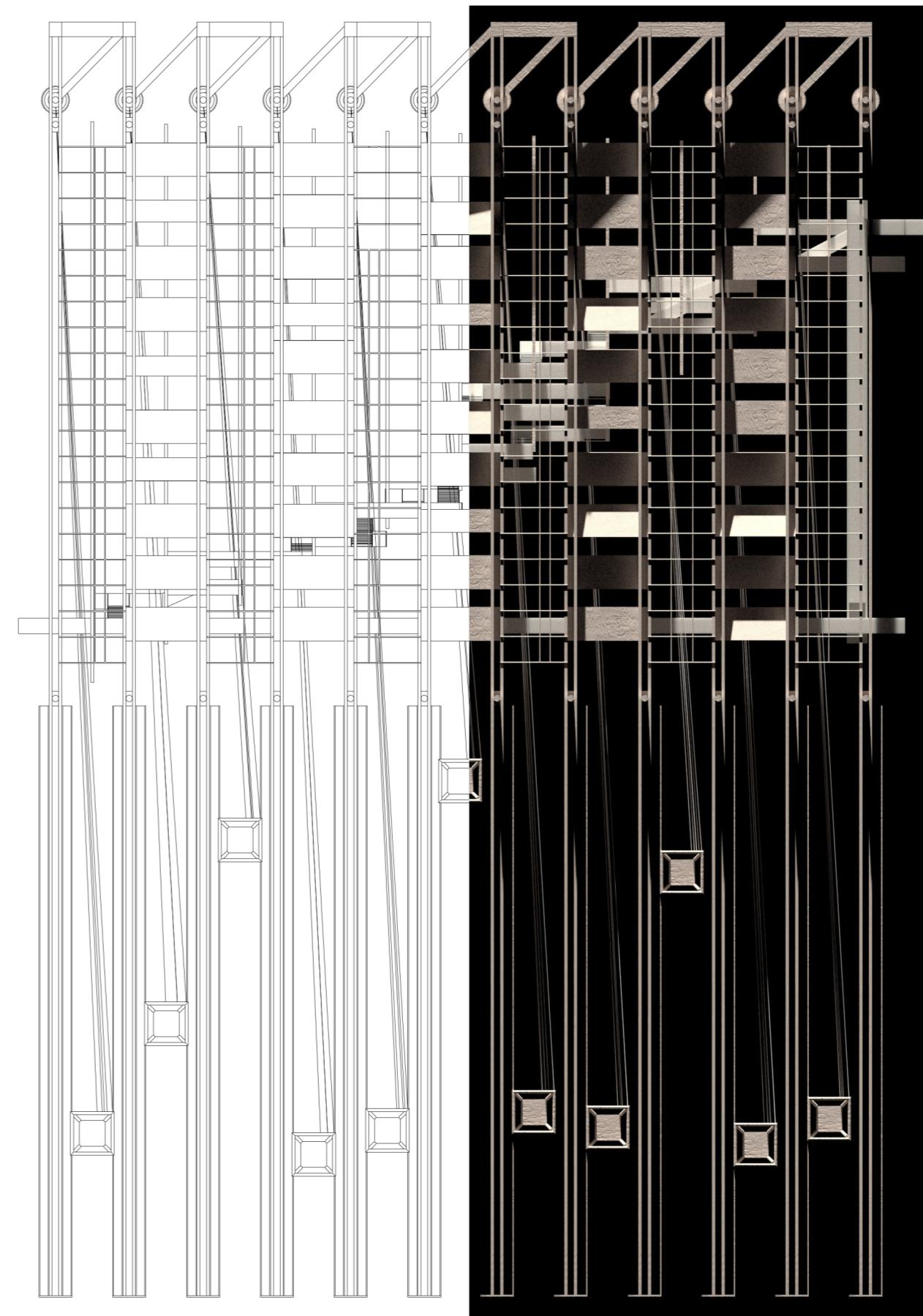
[1] Gear Construction Model



[2] Construction Drawing



[3] Fasade System

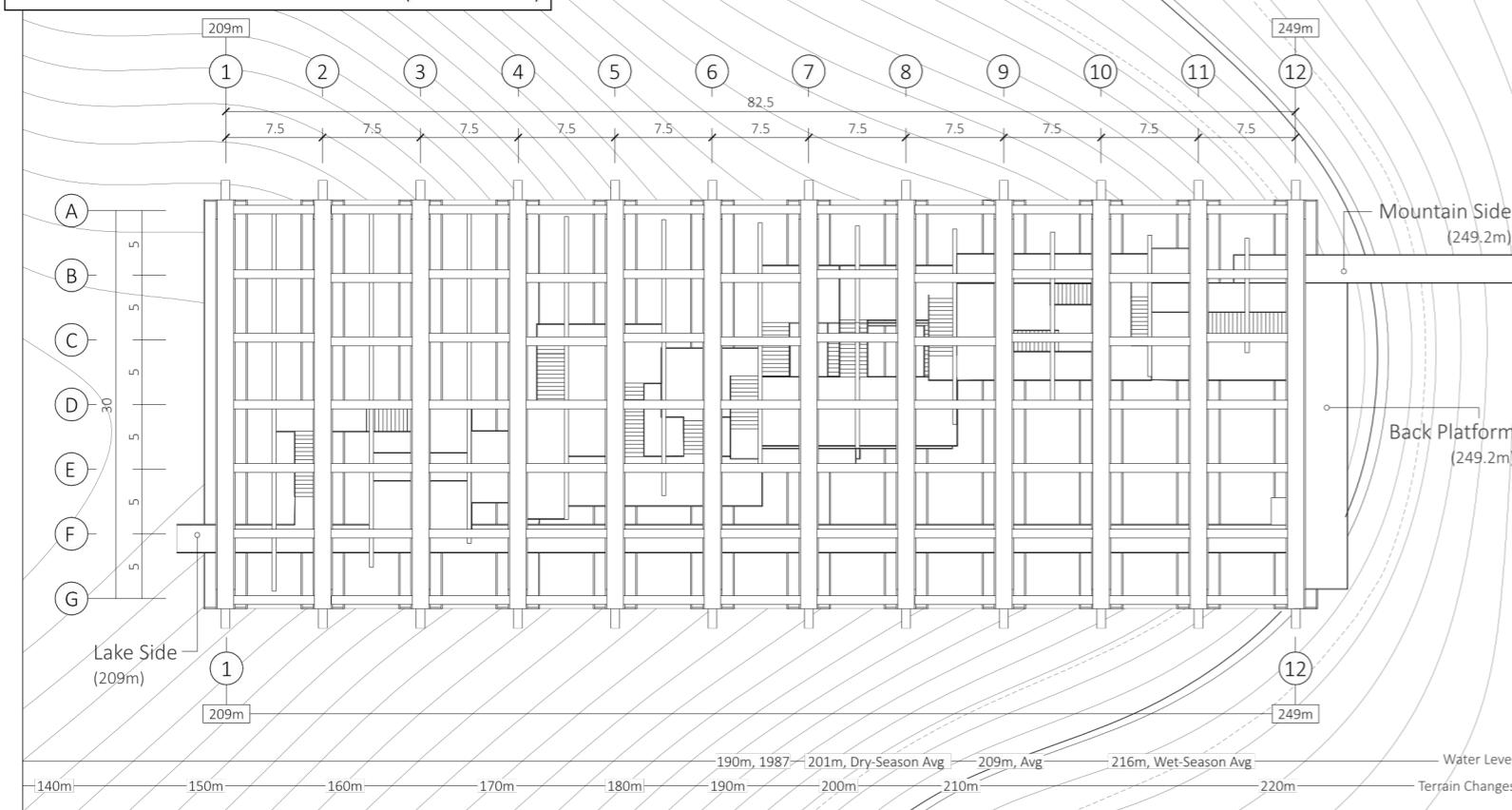


## From Lake to Mountains

Lake and mountains are the two main elements of nature in Chinese philosophy, and ship was the main tool to connect them in ancient times. There is a saying that says "*I greet my friends on water, see off my friends back to water*". In this context, the building serves as a pier connecting the lake and mountain, welcoming the tourists from the water. At same time, it connects different elevation differences of the local mountain terrain, providing people with unique narrative experiences. Eventually, visitors could leave by boat.

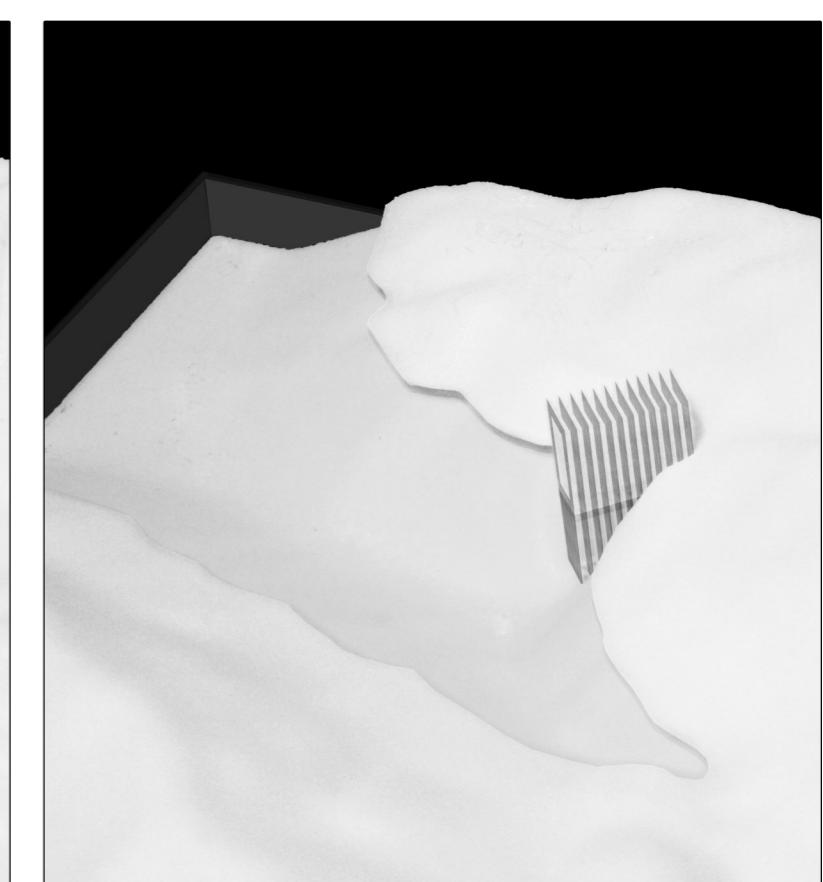
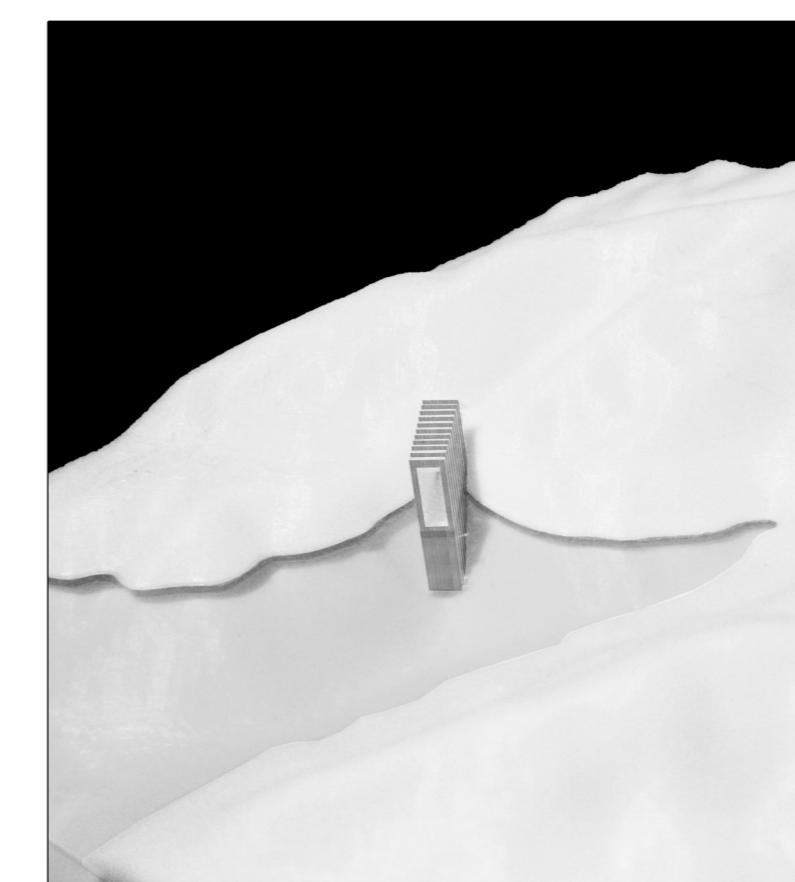
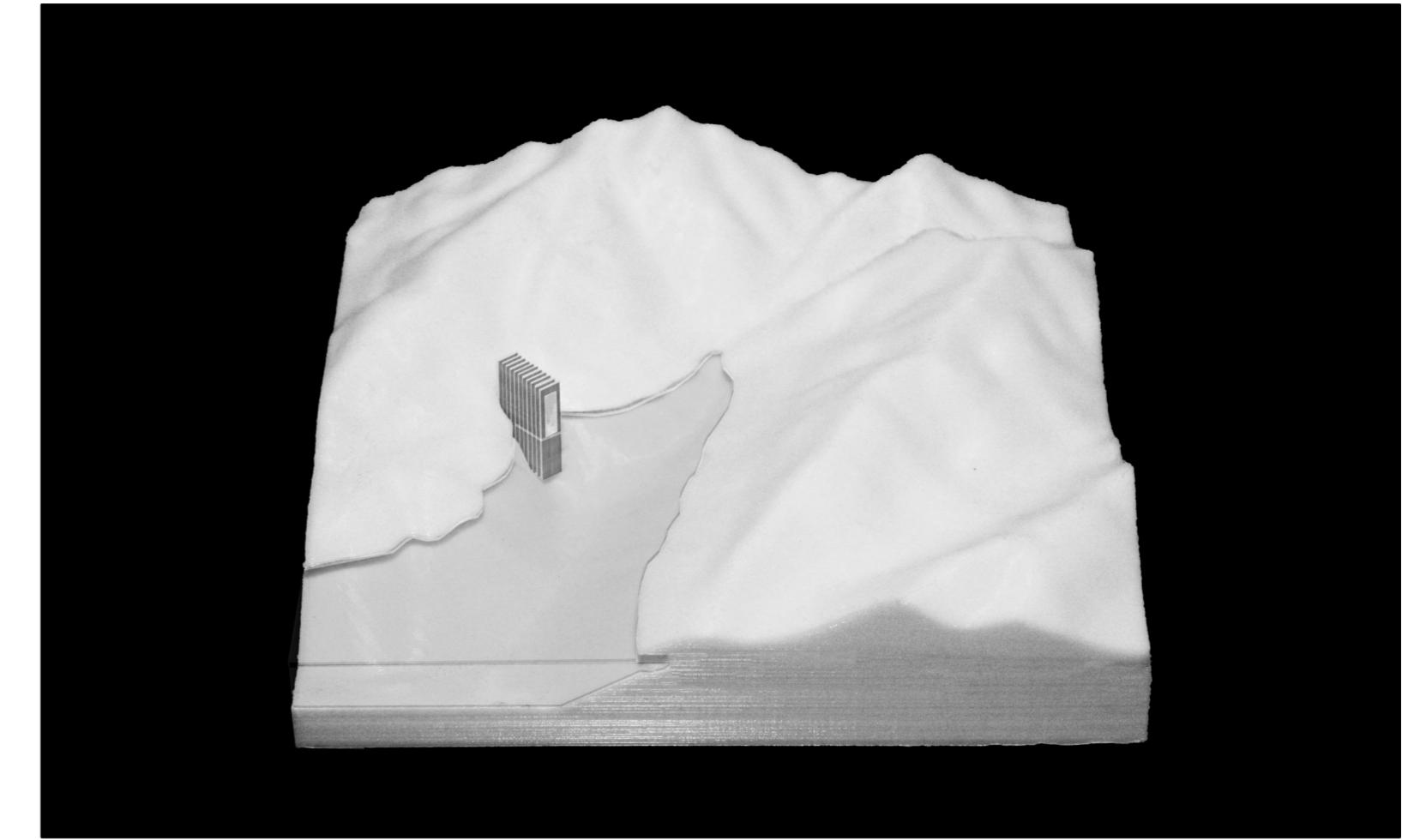


Plan of Architecture and Terrain Condition (Elevation > 270m)



## Integration with Mountains Environment

Mountains environment surrounding Qingshitan Lake is a very typical one in Chinese landscape artistic style. The building is embedded in the mountains, accompanied by mountains and the lake. In the natural environment, it symbolizes a humanistic existence, but with the passage of time, it will eventually be integrated with nature. The mechanism designed to the work, the dyeing mechanism crossing spacetime, helps it achieve this fusion.



## Path Experience - Climbing to the Infinite, and the Mountains

The experience of the path is not only a process leading to the Infinite, but also a process of climbing the mountain. This isvipassana space and time, and each step will bring different experiences in people's spatial perception. The whole path is divided into four phases according to the intention of the space of traditional Chinese landscape, that is, Introduce, Forward, Lift and Retrospect. Moreover, as visitors walk along the path, they also walk through the dyed cloth, through the space and time reconstructed by the dyed cloth.

