This project is about the exploration of microparticles and the

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HAZE BLUE

the exploration of microparticles and the future environment.

Portfolio

Shuxiao Lin
20/21 MA Contemporary Art Practice
The University of Edinburgh

Artist Statement

SHUXIAO LIN |林抒晓

My works are presented in the form of installations, landscape architecture, short films, dynamic pictures, photos, web games, etc. Narrative physical and virtual spaces are constructed and presented in different forms. Elemental materials such as light, color and temperature are used to enhance the viewer's experience.

Due to the background of environmental design, I mainly discuss the urban spatial sequence, the relationship between man and nature, virtual space and real space, the narrative of space, the reflection of life forms, and the expression of time. At the same time, I pay attention to material sustainability in the production process. All creations are based on the "environmentally friendly" concept.

In the process of creating *HAZE BLUE PROJECT*, I used delayed shooting, real-time recording, interviews and other methods to study the public space in real space research methods, to find controversial nodes, and to find creative inspiration from specific issues.

In order to reintegrate the relationship between people, nature and space, my research content mainly includes the impact of environmental pollution and how to bring people closer to nature. I hope that by creating real or virtual space, we can establish more thermal connections between man and nature. Through the continuous update of *HAZE BLUE PROJECT*, people are concerned about environmental issues. I also explore the relationship between time and space, the relationship between virtuality and reality.

"Haze ✕ Blue" Project --- Online virtual space| Video production | Realistic physical space design

Film: https://youtu.be/iu4RrUbkI_8
Online Interactive VR: https://720yun.com/t/86vkcei9r7e
Showreel: https://youtu.be/W_ihKCAf8zM

In recent years, there have been frequent abnormal weather and environmental events. The beginning and renewal of *Haze Blue Project* is to hope that the audience pay attention to environmental issues and make some subtle changes in their daily lives after participating in the project in different places and in different ways to reduce the environmental burden.

Haze Blue Project is presented in a variety of ways, including online virtual spaces, short films, filters, and physical temporary movable spaces. I hope that people with different life circles in different parts of the world know the existence of this project in more ways. With narrative mode and no ending mode, the space is constantly updated from time to time, and accepts feedback and contributions from the audience. Everyone in the world can provide new story ideas for the project through social media or online virtual space. The project author will present each story in different ways and mprove the interaction between the audience and the work.

Haze Blue Project draws color from the sky covered by haze. With the more and more frequent occurrence of haze weather, by exploring the artistic and scientific characteristics of light and color, we pay attention to the psychological and physiological effects of light and color.

Haze Blue Project has two parts. Part One, Haze Blue -- Micro Particles in the Air. Part Two, NO.8: Plastic Island -- Invasion of Microplastic.

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Haze Blue Project
├── "Haze Blue"-micro particles in the air
│   ├── Virtual Production- Collaboration with visual artist Shuyang Lin
│   │   ├── Virtual Filmmaking
│   │   │   ├── Storyboard
│   │   │   ├── Scene Design
│   │   │   ├── Virtual World Building   (Unreal Engine 4)
│   │   │   ├── Shooting with Virtual Camera
│   │   │   └── Sound and Film Editing
│   │   ├── Online Virtual Space
│   │   │   ├── Storyboard
│   │   │   ├── Output From Unreal Engine 4
│   │   │   ├── Make Panorama with Photoshop
│   │   │   ├── Set up Levels and Interactive Nodes
│   │   │   ├── Add Sounds and Effects
│   │   │   └── Test and Show
│   │   └── Filer - on Social Media
│   │       ├── Output From  Spark AR Studio
│   │       └── Test and Show
│   └── Physical Space Design
│       ├── Analysis of Architectural Forms
│       ├── Model Testing and Analysis
│       ├── Indoor Space Layout          (This physical space has not been built yet)
│       └── Indoor Effect Diagram
└── NO.8: Plastic Island-the invasion of microplastics
    └── Virtual Production- Collaboration with visual artist Shuyang Lin
        ├── Virtual Filmmaking
        │   ├── Storyboard
        │   ├── Scene Design
        │   ├── Virtual World Building   (Unreal Engine 4)
        │   ├── Shooting with Virtual Camera
        │   └── Sound and Film Editing
        └── Filer - on Social Media
            ├── Output From  Spark AR Studio
            └── Test and Show
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Haze Blue- Micro particles in the air
09/2020 – 08/2021
Virtual interactive space and virtual production works

UE4, Maya, C4D, yun720, Pr, Garageband
Video Website
https://youtu.be/iu4RrUbkl_8
Interactive Platform Website
https://720yun.com/t/86vkcei9r7e

Haze Blue Space, through narrative methods, wants to tell how the various life forms that have been shrouded in dense fog for decades have survived, and what new ecological circulation systems have emerged. The story displayed in this space is a beautiful but pessimistic fantasy of the future world. Arrogant people always like to talk about protecting the environment and protecting the earth. In fact, before the birth of mankind, the earth already existed. After the extinction of mankind, the earth will continue to exist. Never need to save the earth. It's us, human itself, to be saved.

Realistic Physical Space Design — Analysis of Architectural Forms

Elevations
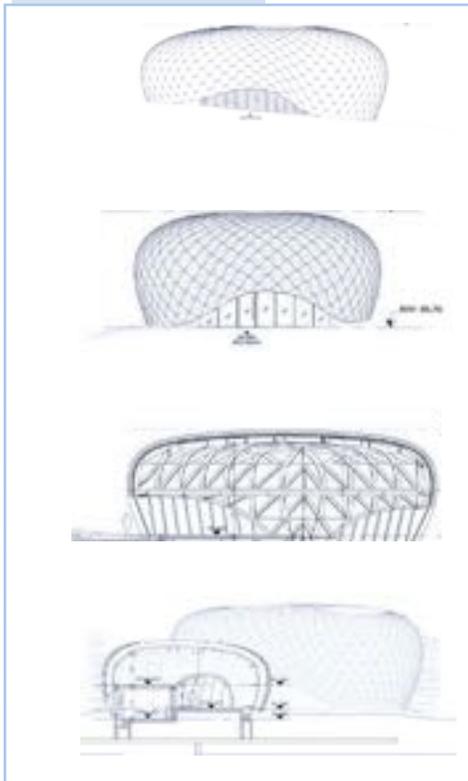
Effect Diagram

Inspiration

The architectural form is inspired by "Under the Dome", a documentary film of Chai Jing, a Chinese correpondent on CCTV, which traces the origin and evolution of haze in China. Through the analysis of various particle forms of haze, the two elements are finally combined. From a distance, the building looks like a huge haze particle. The two domes are located at the main entrance of the building. We interpret our mindset with simple, smooth lines and modern architecture. When we encounter haze, we face it calmly, such as the gray stability in blue, which is neither easy to change nor easy to give up.

Model Testing and Analysis

Model Night Effect
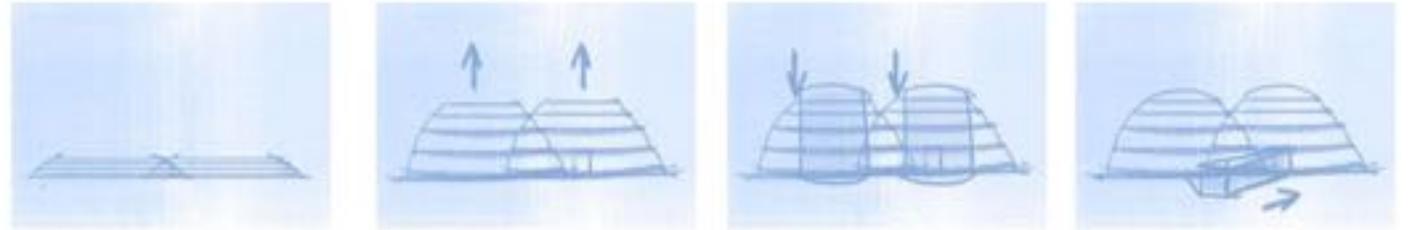
Painting analysis
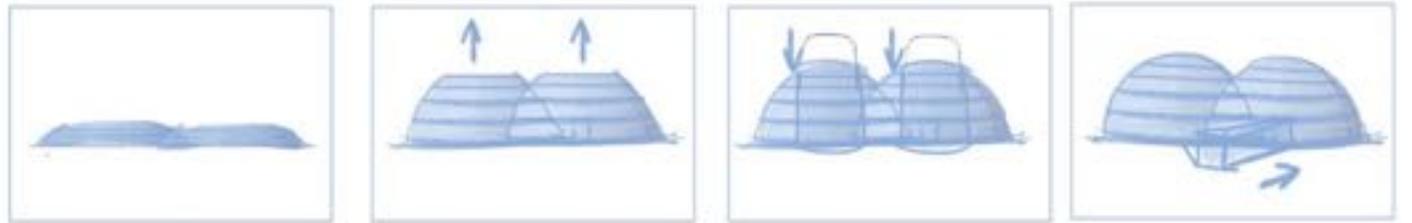
Physical model analysis

The structure is inspired by lanterns, which are an ancient Chinese traditional handicraft. The semi-circular dome structure and the central support load-bearing enable the concept of architectural modeling and the temporary requirements of the project to be realized at the same time.

However, the main reason for the development of the physical space to the virtual space is due to preliminary building model testing, material selection and other experiments. I found that completing the physical space requires a lot of waste of resources. The original intention of *Haze Blue Project* is to call on people to protect the environment. Besides, due to the impact of COVID-19, the construction of a virtual space allows viewers to participate in the space without being restricted by space and time. In order to maintain the original interactivity of the space, I will try to restore as many devices in the environment as possible online. At present, I mainly study the construction of virtual environment and the combination with virtual engine. Finally, we hope to obtain a visual short film and an online virtual space display platform.

Online Virtual Space | Video Production | Filer - Storyboard

Azure Inventory

Approach:
Short film| Online platform| Filter (in social media studio account)
Concept:
Stock the last fresh oxygen in order to feed the plants (in the oxygen bottle in the previous image) which then purify the air through plant growth and provide oxygen to people. This is a new cycle created after the atmospheric system has been destroyed. All living things survive with the help of artificial oxygen. This is optimistic pessimism and a beautiful vision of future technology.

Support

Approach:
Short film| Online platform| Filter (in social media studio account)
Concept:
Give artificial nutrient solution and gas for plants as nutritional supplement. Keep plants alive through artificial means. Add a new ecological cycle by unnatural means.

Oxygen Inhalation

Approach:
Short film| Filter (in social media studio account)
Concept:
Show footage of people inhaling oxygen. Attempt to make character production. Show the part mainly in short films and filter production. Reinforce the connection and interaction between the person and the project.
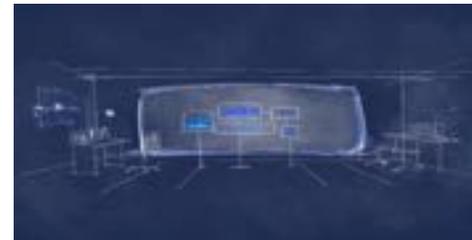
Video Production – Storyboard
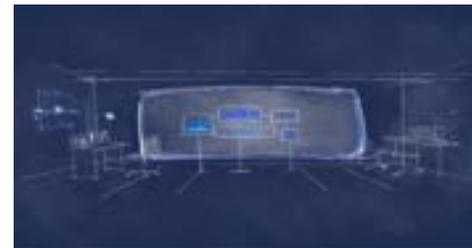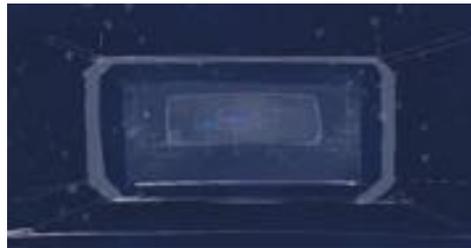
Zoom In → Track-right → Zoom In
Use the Zoom In to give the audience a feeling of entering the scene.

Establishing Shot
Haze particles are getting brighter and brighter.

Establishing Shot → Zoom Out
All fresh green plants look as if they were in an unnatural world. End the film with the Zoom Out, which echoes the beginning.

Scene Design

Smoke Tunnel

The first scene directly enters the theme Haze Blue to present the work's title and authors'names. The picture can be called *Blue Ecology*, influenced by Eliasson's *Dark Ecology* (2016). You seem to enter a diffuse smoke tunnel, which looks endless. You will hear some meaningless noise, but you cannot hear any human voices. The scene is constantly spinning, which is inspired by Edward Lorenz's Ring, with the core idea is that in a chaotic system, small changes in initial conditions may cause long-term and huge chain reactions. This reflects the Butterfly Effect and shows that each person's behavior will make influence on the environmental system.

Monitoring Room

The outdoor air condition is monitored in the monitoring room. The real-time updated news about the environment is shown on the screen. Weather forecasts, news, and monitor alarms are mixed in the entire space. Red lights are flashing everywhere, telling people that our environmental problems are getting worse and losing control.

Scene Design

Particles
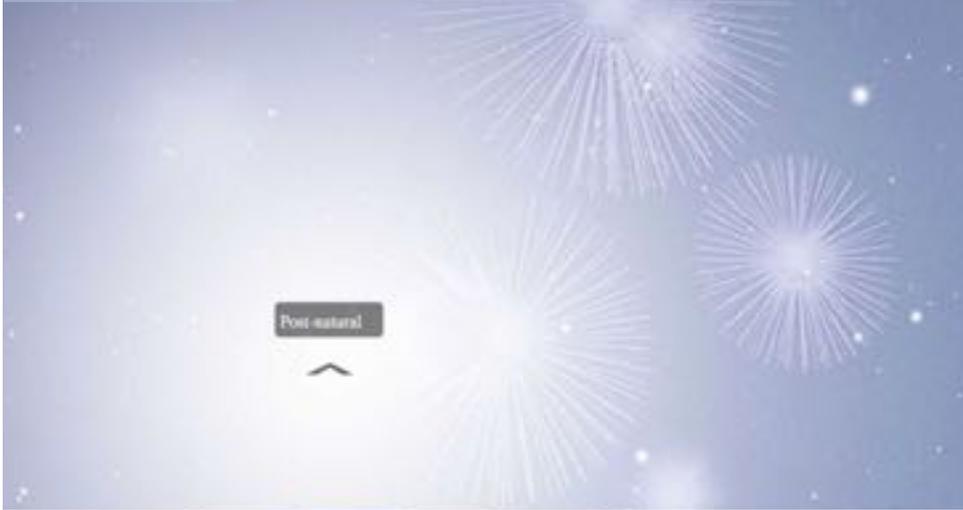
Large flocculent particles represent fog-like particles, which float around in an unbounded space. As the viewers increase, the particles will become brighter and brighter, and finally the scene turns into white, accompanied by harsh sounds, similar to the roar of airplanes and factory machines. It illustrates the relationship between people and smog. Humans have many unconscious behaviors in their daily lives that affect the environment. Haze problem is getting worse.

Post-natural State

This is imaginary of the future earth, the post-natural state. Trees are grown in glassware in the natural world. There is no pure air anymore. All lives are kept in the glassware to continue their lives, beautiful but untouchable. The distance between Man and nature is getting farther and farther. There is less and less breathable air. In the future, how long will life last? Who knows! But the current peace and beauty still bring hope to people.

Future Control Room
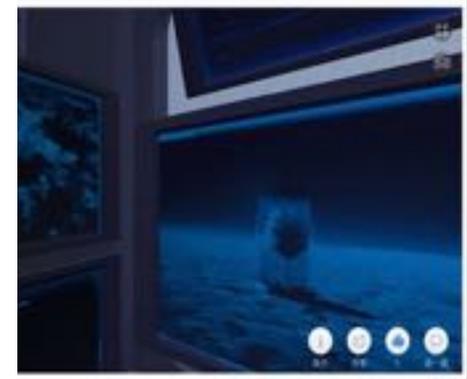
Online Virtual Space Introduction

Website Link：https://720yun.com/t/86vkcei9r7e
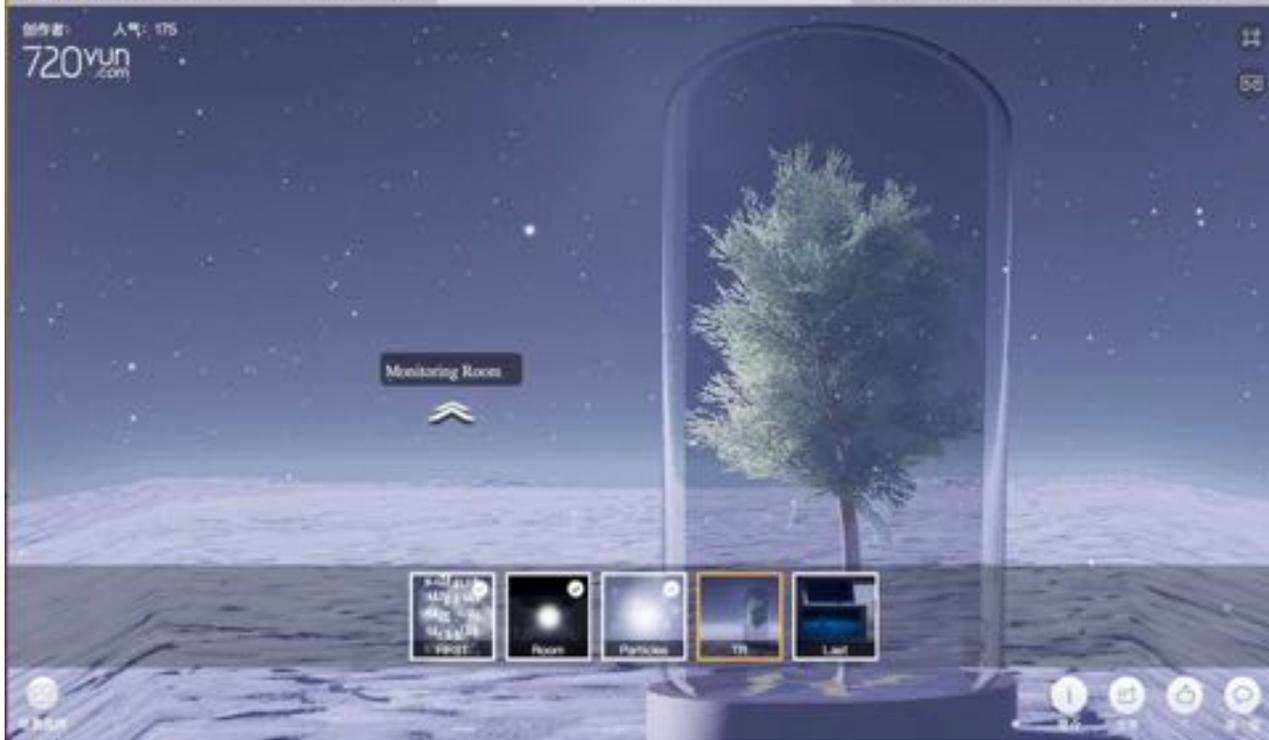
The online virtual space currently consists of five spaces. The audience can follow the arrows to explore the virtual space. At the same time, the web page contains works introduction, video links, etc.

Viewers can post voice or text messages to all corners of the virtual space, and the records will be stored in the space. The audience know each other's existence and can interact through language and text. The audience can also communicate with the author, and the author will get feedback from the audience. Text and sound will become part of the work. The audience can browse through mobile phones, experience VR, and be more immersed in the space.

However, after initial construction and audience experience feedback, I have encountered some problems. One is that the route to browse the scene is relatively simple, and the other is that the way of audience interaction is relatively simple. These two main aspects affect the narrative of the virtual space and the audience's sense of experience. Therefore, I will focus more on video creation and AR filter production in the follow-up to solve the problems of browsing, interaction and spatial narrative.

Virtual Filmmaking

Film Link: https://youtu.be/iu4RrUbkI_8
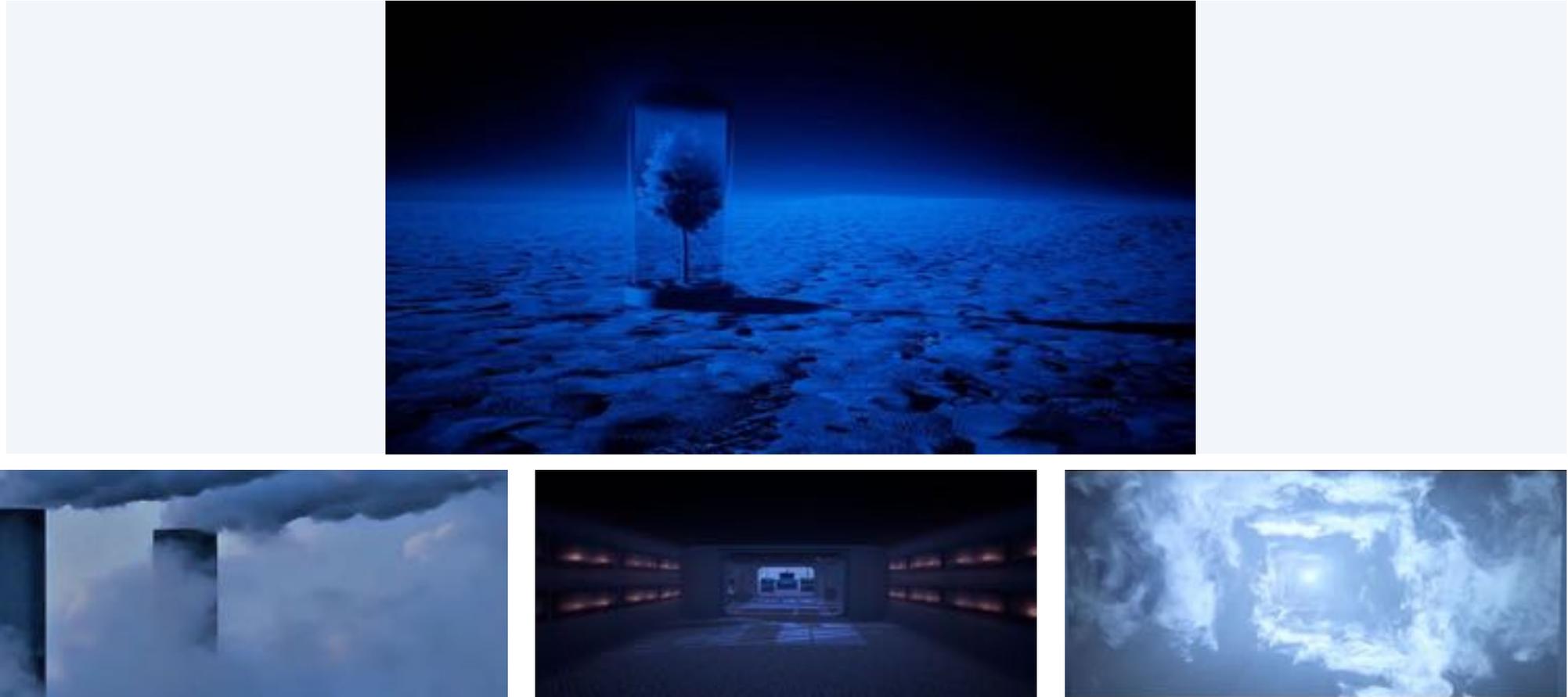
Most of this part is done by Unreal Engine 4. In this process, I learned and basically understood the entire process of Virtual Production. The theme of this movie is Haze Blue.

Scene Model Building Process
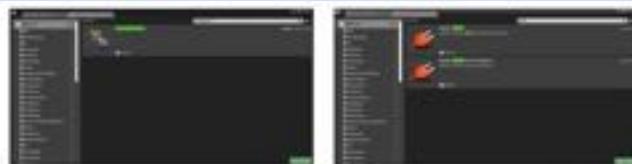
Video and online virtual space — Produced by YANG and XIAO — Software: Unreal Engine 4 (real-time shooting, scene building), Cinema 4D, Maya
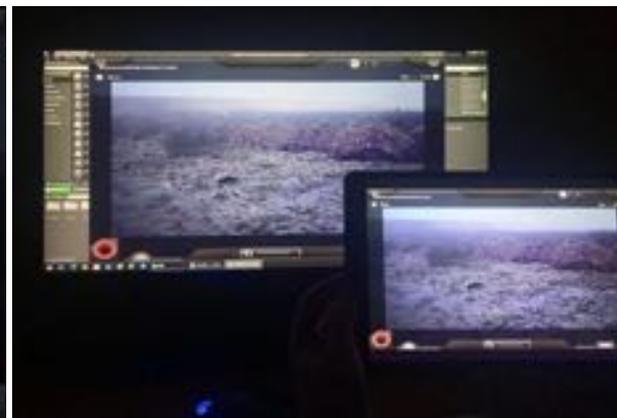
Virtual Filming and Editing

Create Virtual Camera and Connect with ISO Equipment

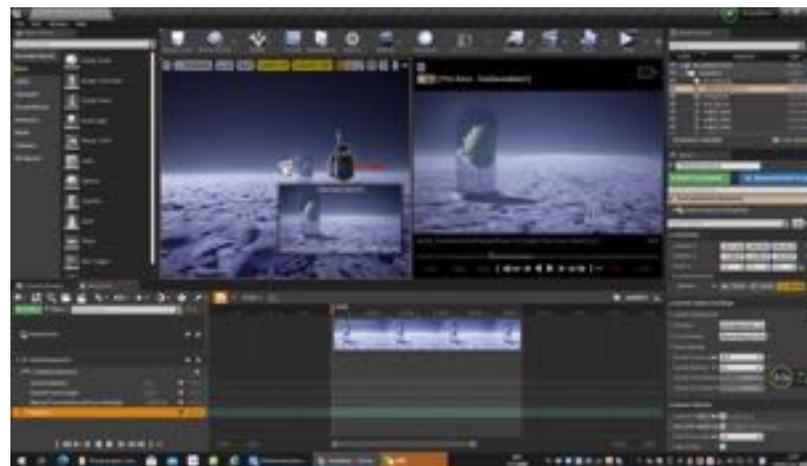Using an external device to bind the camera in the virtual engine can make shooting scenes smoother. You will experience the entire virtual world more intuitively, just like a game. This part can be used in physical exhibitions to increase the interaction between the audience and the space.

Use Sequencer Editor
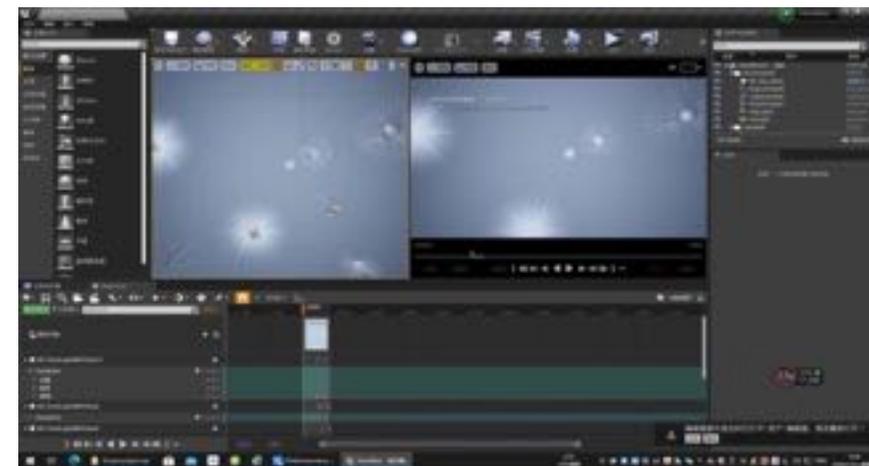
NO.8 : Plastic Island - Invasion of Microplastic

05/2021 – 08/2021
Virtual interactive space and virtual production works

UE4, Maya, C4D, yun720, Pr, Garageband

Video Website
https://youtu.be/iu4RrUbkl_8

"The Eighth Continent", Plastic Island is an island formed by plastic and other garbage. It is located between California and Hawaii in the depths of the Pacific Ocean. It is six times the size of the United Kingdom and is called "The Eighth Continent". This huge garbage island is also known as "the Great Pacific Garbage Strip." Microplastic has now entered all corners of the world. The harm of microplastic is reflected in their small particle size, which is why it is more harmful to the environment than general non-degradable plastic. There is no solution for microplastic. The plastic produced today will age and shatter. It is carried to various places by people, animals, wind and water. Nature will screen out organisms that adapt to the environment. Maybe it is us, maybe not... In the future, there may be new types of organisms and human beings after the invasion of plastic.
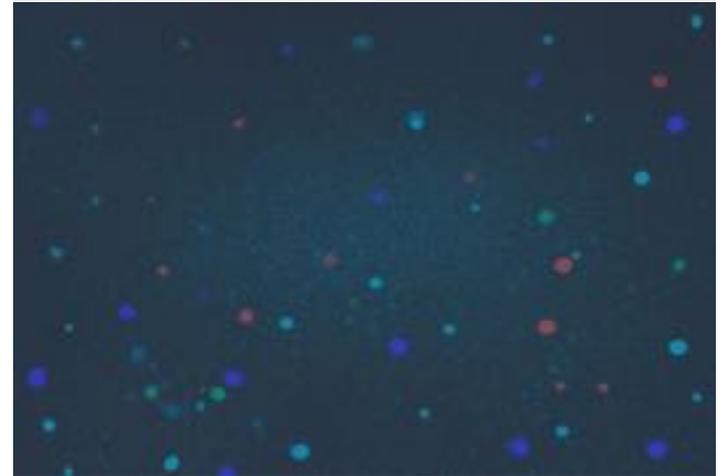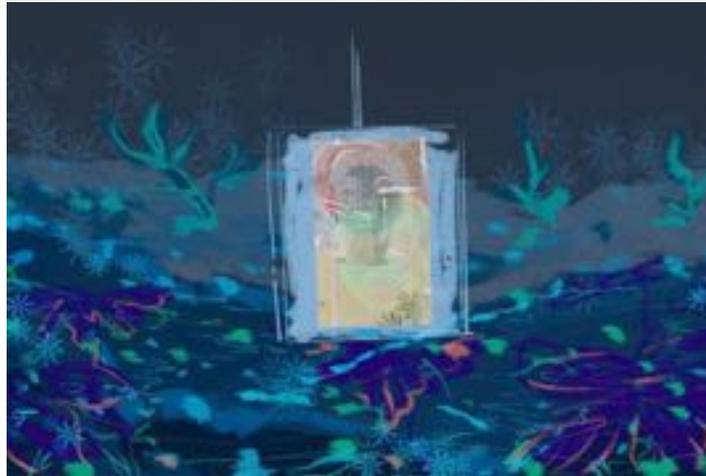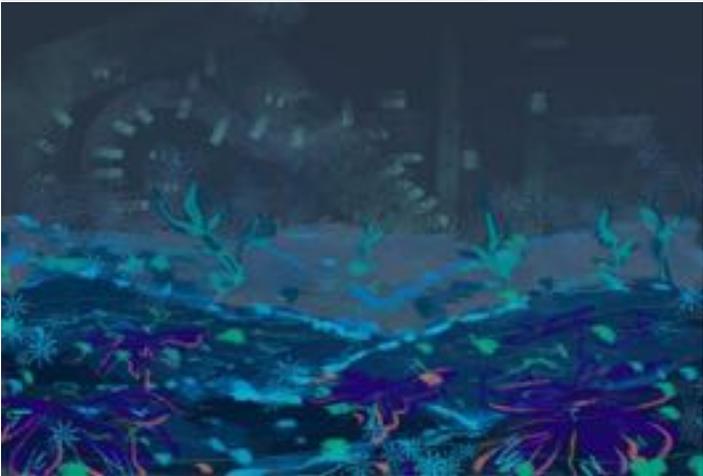
A lot of plastic appears in the sea.
A plastic island appeared in the sea, the eighth continent.
The city sequence of Plastic Island is very different from the cities in our daily life.
Many new species have appeared on Plastic Island.
At the same time, humans after the invasion of plastic micro-particles have also appeared.
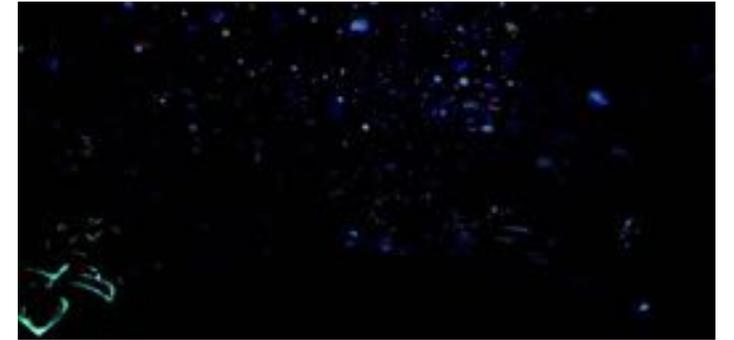The plastic in Plastic Island is aging and broken, and those microplastics are carried to all corners of the world by wind and water.
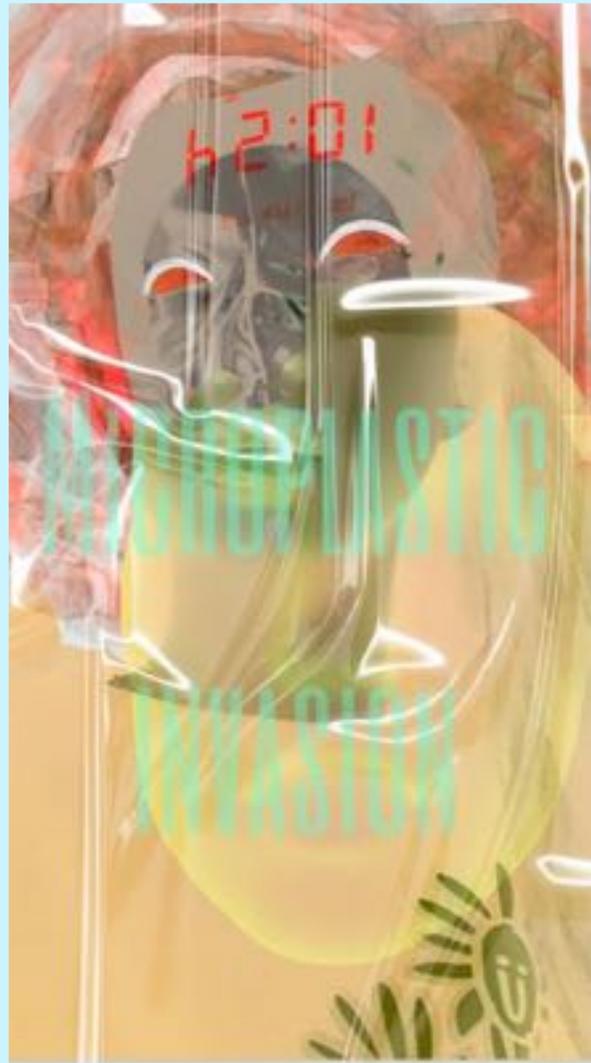
Virtual Filmmaking

Film Link: https://youtu.be/iu4RrUbkI_8

Currently, I put the two parts in the same video. I want to make the virtual space more narrative and the story more complete.

Plastic Invasion — Filter

After being invaded by microplastics, humans have undergone mutations, and part of their skin is made of plastic. At the same time, they also use plastic materials to cover up, embellish and decorate themselves. Human beings no longer have only one face. The part that the plastic invades has become a part of the human body, and it will also be painful to lose it. Humans who inhale a large amount of microplastics also have plastic components in their blood ……

Using the method of making filters and posting them on social media can increase the connection and interaction between the audience and the work. However, due to current technical limitations, it is impossible to achieve different effects through filters for different viewers. But I learned that some filters are made by AI algorithms, and they can get a thousand faces of effects. In this part I will continue to explore and learn.

Connecting Virtual and Reality - Virtual World Entrance

Use LED screens in public places to put HAZE BLUE QR codes.
It's like an entrance into the virtual world.
When the audience raises their mobile phone and scans their faces, they will be taken into a virtual world.
All passing people become participants in this virtual space.
Because this project is about the changes in people's living environment, this virtual world is more suitable to be placed in public space to allow more people to enter. It is Not a gallery or personal collection.
Although this approach seems a bit commercial, it is more conducive to getting more people to participate in the project.