



A Dialogue

Mingyu Li

Project Details

Designer:	Mingyu Li
Design Participants:	UCA MA Architecture Students UCA MA Interior Design Students
Title:	A Dialogue
Type:	VR Research & Installation
Site:	Barbican / UCA Canterbury
Session:	20 September - August 2022





*Feeling always change
I understand that the past will never be the same again
But I expect that
You can touch the moments I once felt
-Mingyu Li*

Research Agenda and Process

Overview

“Dialogue” comes from the Greek word dialogos. Logos means ‘the word’, or in our case, we would think of ‘the meaning of the word’. And dia means through—it doesn’t mean ‘two’.... The picture or image that this derivation suggests is of a stream of meaning flowing among and through and between us.”(Bohm David 2003, On Dialogue)

A Dialogue aims to build an imaginary visual reality world in a physical world. In this part, it tends to discover a few questions below and use VR tools to create a digital world which includes sounds and abstract emotional expressions.

To discover the dialogue between performer and audience throughout the whole project. Importantly, Words are put together to form sentences, often bringing out different emotions. Approved to Bohm David, that dialogue is a multi-faceted process. Moreover, <The Messingkauf Dialogues> (Bertolt Brecht, John Willett) shows four characters formulating the conversation of a new theatre, which seems to be a unique space form. With technological growth rapidly, spatial design has changed its form to be more flexible and diverse. So it is vital to test the different emotional responses to this form of conversation in an unreal space.

Research Questions

1. Can the role of an audience be transferred to what on a performer using VR?
2. How can humans interact with the digital to invoke a sense of emotion, through the dialogue?

Significance and Contribution

To break the physical spatial boundaries and create an emotional experience.

Referring to (The theatre of the Bauhaus, 1961). It shows the typical theatre form with the performer’s ceiling, floor, wall and stages, and seats for the audience. The audience receives information passively.

VR builds the world immersed through a headset. It is fully immersive, and everything we see is artificially constructed. It is essential to explore intense human interactions through dialogues. The research of Term one <Rhythm> and Term two <A Dialogue>, based on the Architecture & Interior acknowledgement, is a step-by-step process for exploring.

From different perspectives, the dialogue is between inner and outer worlds. This project was split into two parts. Like a script, the narration is the first part, mainly to guide the audience to follow the story. To show the story happen, a short film will be displayed using the projector. The second part is to create a virtual world which transforms the audience into performers in the space with VR glasses.

[Animation click here:→](#)

Methodologies

1. Create a short visual animation which shows abstract feelings from the Barbican centre.
2. Collect sounds and dialogues from visitors for the animation.
3. To operate Unity and Enscape by connecting space with projectors and computers.

Design Proposal

On the first visit to the Barbican Centre, ducks swam in the river, and the buildings reflected on the water; the wind blew reeds like dancer's waves (see fig. 1). People sat next to it and chatted.

To memorize this moment. I record the sounds and video. To make a movie and capture abstract feelings.

Beneficial to show more details about this story; I will build up models by SketchUp and render them by Enscape. The models will be reconstructed and extracted from the actual sites. "On the question of realism, the

usual view is that the more easily reality can be recognised in a work of art, the more realistic it is. Against this I would like to set up the equation that the more recognisable reality is mastered in the work of art, the more realistic it is." (A Guide to the Plays of Bertolt Brecht 2012, P.37)

Consequently, making a conversation between the realistic and unrealistic world may lead to the invention of unexpected imagination.

Key outcomes of proposal

1. To design a combination of physical space and an unreal world.
2. To research different emotional states from the audience.
3. Delivery of the design by Unity and Oculus VR glasses.



Fig. 1 A scene in Barbican. (2022)

Design Research Context

Field of Work

The concept is committed to creating a pondering conversation with the unreal world, which makes the user fully immersive.

The whole project is going to explore the consequence of the two perspectives explained before.

People will experience two ways in this design. In the physical scenario, they will watch the movie as an audience. Once they wear the VR glasses, they will be transformed into another world; where their roles and emotions

Work by others

The research from Keio University, written by Hidekazu Nishimura talks about whether the motorcycle riders did not use non-motorcycle dedicated products, the research team built a viewpoint movement for it— Throughout the experiment, they measured the total street views using 3D glasses. (Refer to figure. 2.)

It inspired me to create an unreal world combined with physical views for my project.



Fig. 2 To record the street view with eye-mark, the comparison between Real world and Virtual world.

Design Methodologies

- **Can the role of an audience be transferred to what on a performer using VR?**
- **How can humans interact with the digital to invoke a sense of emotion, through the dialogue?**

The first step is to break the spatial boundaries. The relationship between the human body and space is explored in the book (See Fig. 3). Based on breaking the boundaries of space, from watching to being immersed in a virtual world and exploring it on their own.



Fig. 3 Scene from the 'Triadic Ballet'. Photo by Karl Grill. Bauhaus costumes, 1920s

To create a space based on this dialogue, storytelling real and imaginary scenes. As Bohm David says, dialogue arises as mutual communication.

Refers to the chapter on Emotional Engagement in VR, 'Aesthetic elements create an atmosphere and convey feelings, which guide how the story is experienced' (Bordwell and Thompson 2010).

Bernard Beckerman said, '...The performer adopts a fictional framework and acts according to the text's demands.'

After continuous research shows that awakening a person's emotions requires creating an atmosphere, I would build a scene with background music, different dialogues and moving objects.

Critical Design Elements

1. People experience the spatial feeling in a digital world.
2. Use VR to enhance memory and sensory perceptions.

Design Narrative

The first time explored the Barbican; there was an unspeakable emotion in my heart. The swaying reeds and noisy surroundings were inspired.

Promoting me to create a dialogue in which we could immerse ourselves in such an atmosphere.

Therefore, It took many steps to achieve the final goal. At the same time, they were incorporating some scenes from imagination so that the combination of reality and fiction makes for a more intense experience.

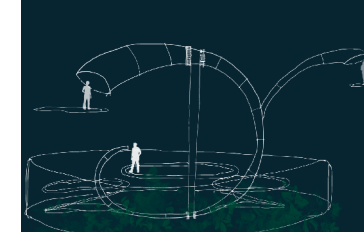


Fig. 4 Initial concept manuscript

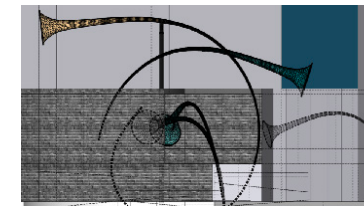


Fig. 5 create white models based on the sketch



Fig. 7 Simplified Installation based on research

a. Lost

There is an emotion in my brain that is hard to express. I was still limited to creating a dialogue in a figurative space at the site selection stage. Therefore, the horn was the element I wanted to use. (See Fig. 4&5)

b. Test

I decided to do an interview in Barbican as I could not continue the design. By interviewing visitors, I realised that creating an initiator can help the dialogue set. (See Fig. 6)

c. Reconstruct

The simplification of the design is to convey emotions better. The idea is to place speakers inside the stump, combined with coding, so there can be interaction when people are talking. (See Fig. 7)

Although I have not fully explored the design direction at this stage, I have come to appreciate the many possibilities of design in the process.

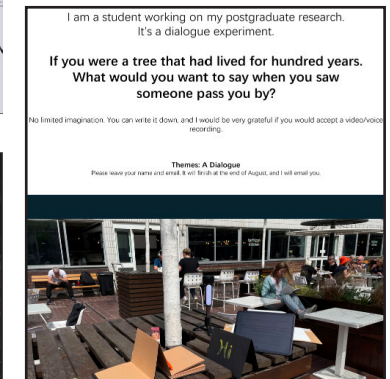


Fig. 6 Ask passers-by with one question



Fig. 7 Survey by people in the barbican centre.

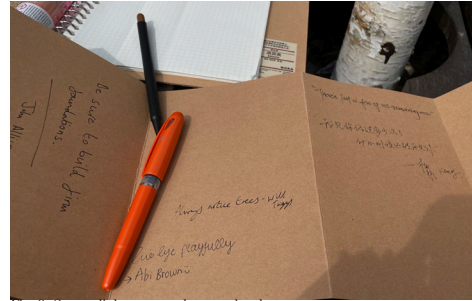


Fig. 8 Some dialogues on the note book.

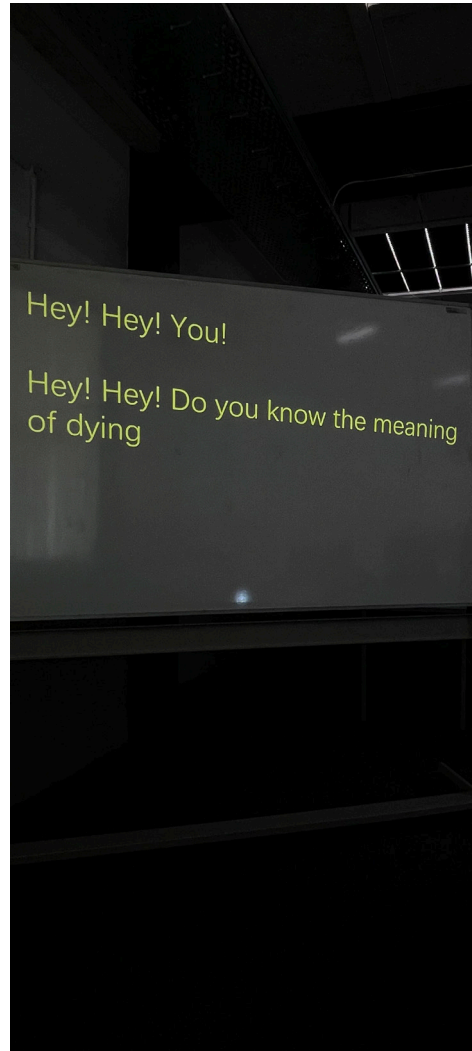


Fig. 9&10 Few abstract feelings on the projection, based on Term 2.

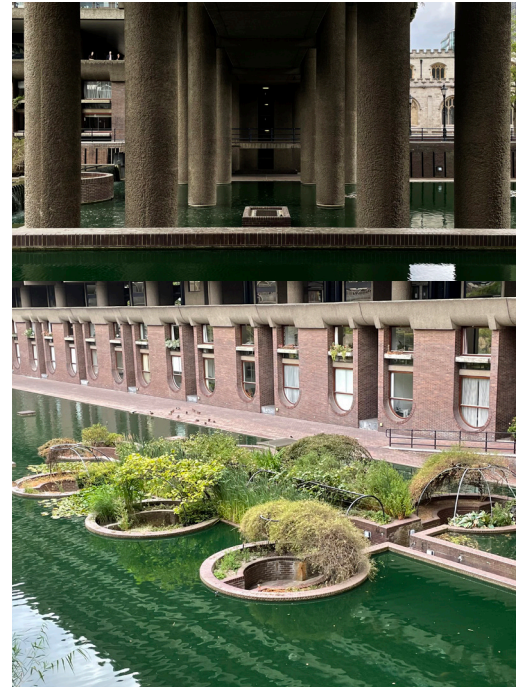


Fig. 11 The place where I took the scene.



Fig. 12 Shaking of the water.



Fig. 13 Bricks everywhere.

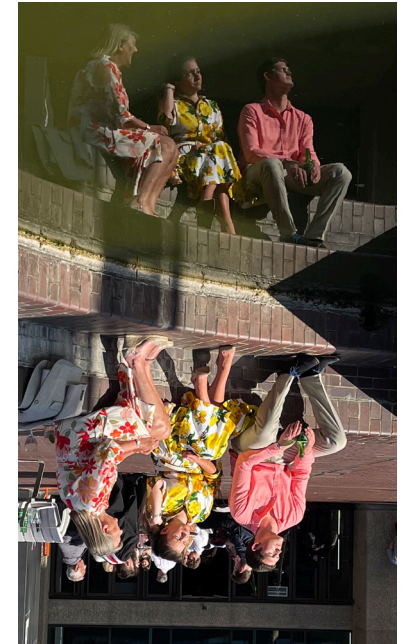


Fig. 14 People chatted.

Initial Idea

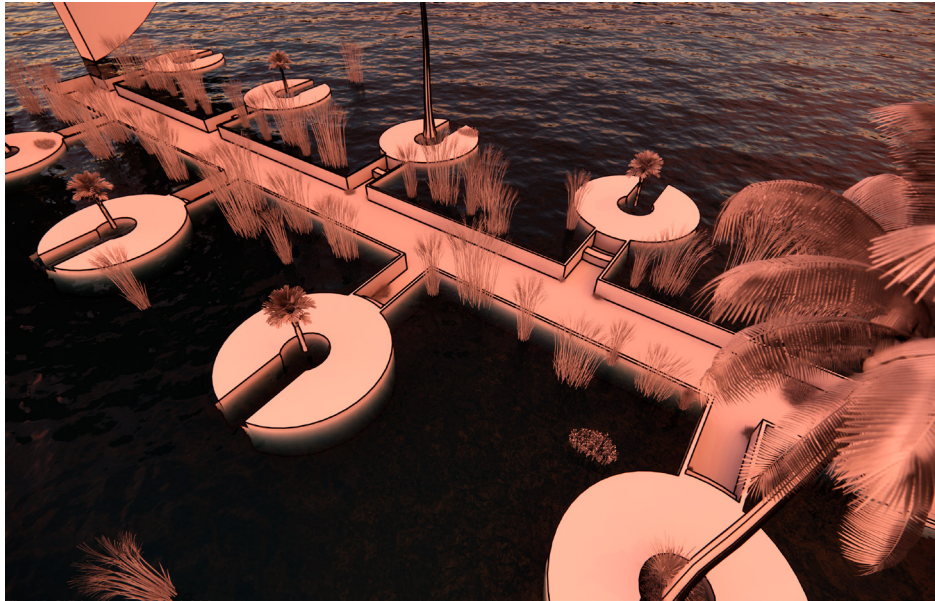


Fig. 15 White model of initial ideas.

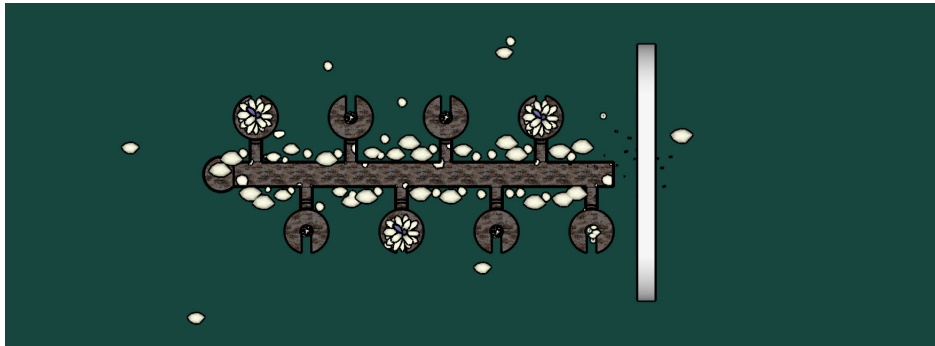


Fig. 16 Sketch up models

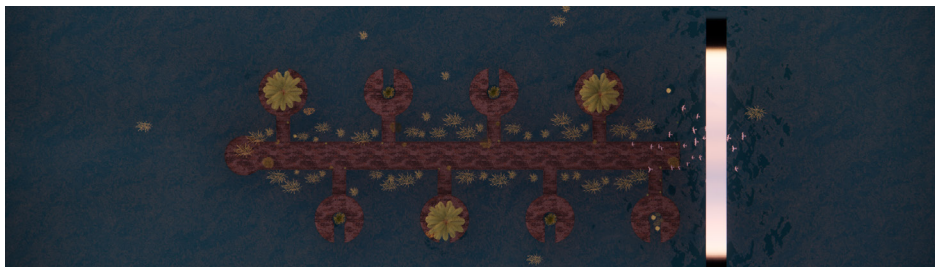


Fig. 17 Renderings

Exhibition



Fig. 18 Exhibition site: UCA Canterbury campus, behind reception.
Considering to make a place where can interact,



Fig. 19 Rendering for school exhibition.

- 01 Digital screen
- 02 Projection
- 03 Post
- 04 A sensor/phone

- 05 Projector
- 06 Speaker
- 07 A basket for oculus VR glasses

Visualisation and Realisation Techniques

The set design focuses on the main elements of the Barbican - bricks and water. I also added reeds, flowers, and plants to create the atmosphere for this design. The main aim was to create a virtual world combined with the real world. So the technique this time was mainly model building and scene creation.

a. Element testing

As the teachers said, I created the space myself, so I was skilled in exploring the tools. But when it was time for the teachers and students to use them, they were new to the scene and had difficulty using the handles.

b. Digital screen

I was hoping to use a projection in the original concept, but it was obvious that a vertical, movable screen would be more suitable.



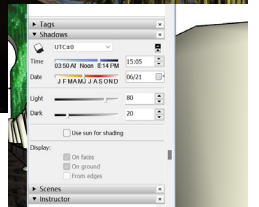
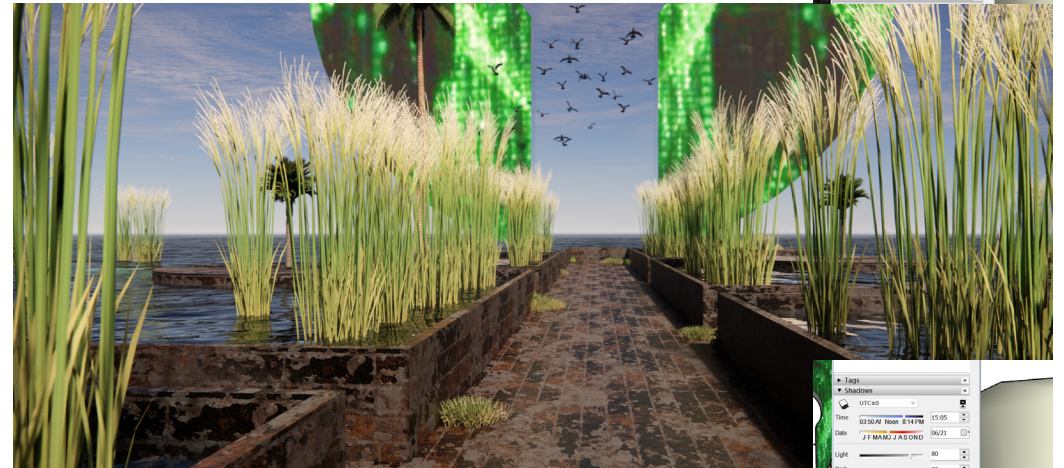
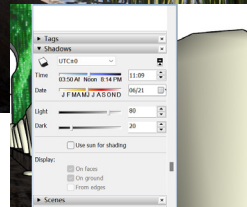
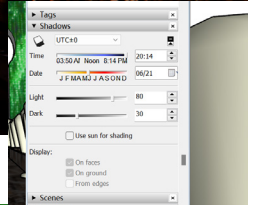
Fig. 20 (left)
VR Testing by teachers and students.

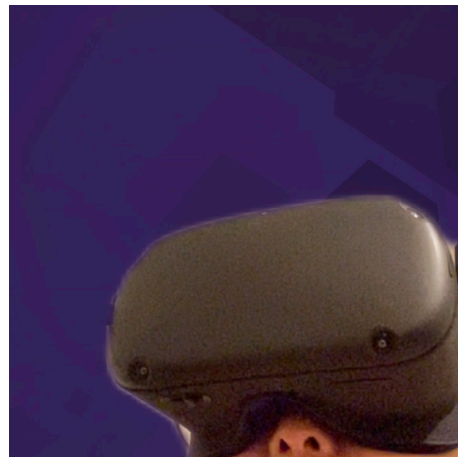
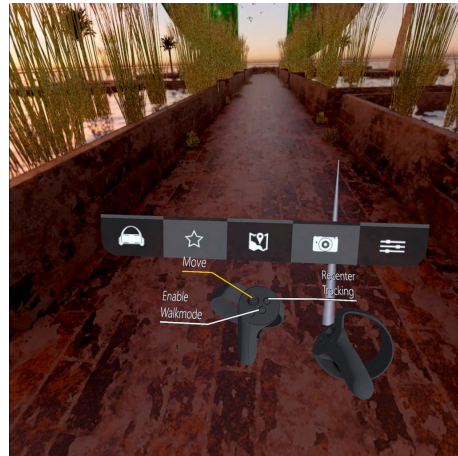
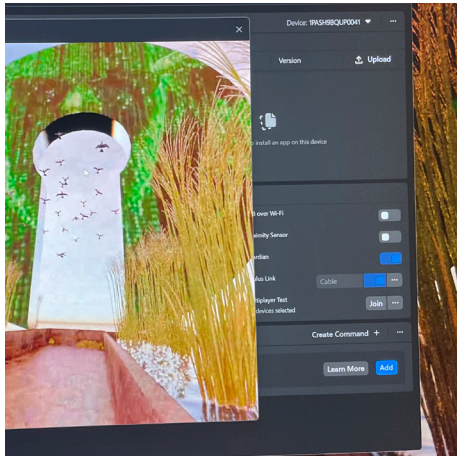
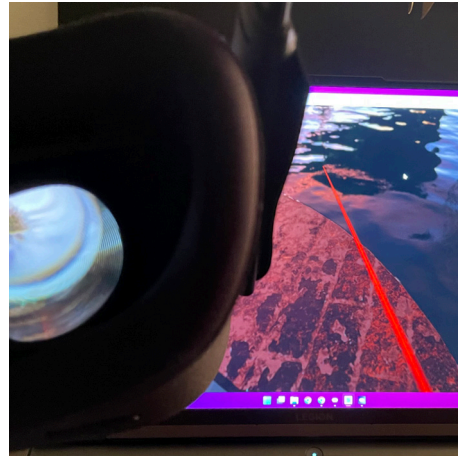
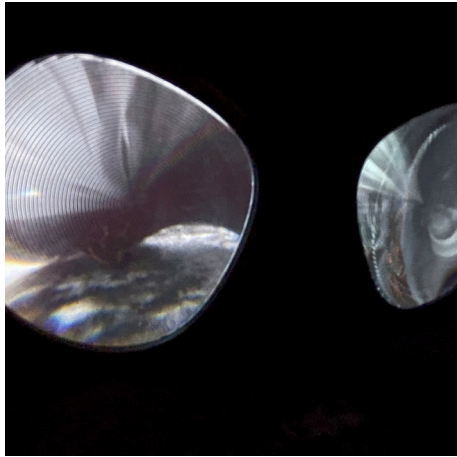
Fig. 21 (right)
Hisense Moveable screen.





Fig. 22 Different scenarios(time zone) for this design.





Challenges and Opportunities

The biggest challenge throughout the design process was the inability to identify a core theme. I kept changing design directions and concepts, drifting away from the research. So, how to adjust my mindset and start afresh was my biggest takeaway from this time. There will be constant frustrations in the design process, and the best measure to deal with the confusion is to take action.

it took more time to learn the software first. This led to me losing the design concept for a while.

b. Challenge 2

Every time the oculus changes location and direction, the contact is not sensitive, resulting in a poor gaming experience. The solution is to fix a place and not change networks.

a. Challenges 1

I was unable to use codes to implement my design ideas when I first tried to use unity. Therefore,

c. Opportunities

At first, my VR glasses could not connect to the model, and for a while, I felt unable to use them as the platform did not sense the oculus connection cable. It was only after reading many previous tutorials that I was able to find a solution by poking around.

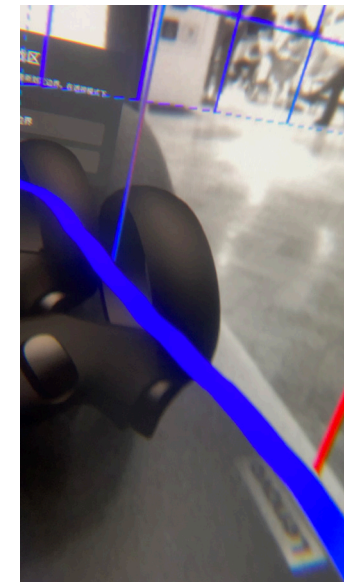
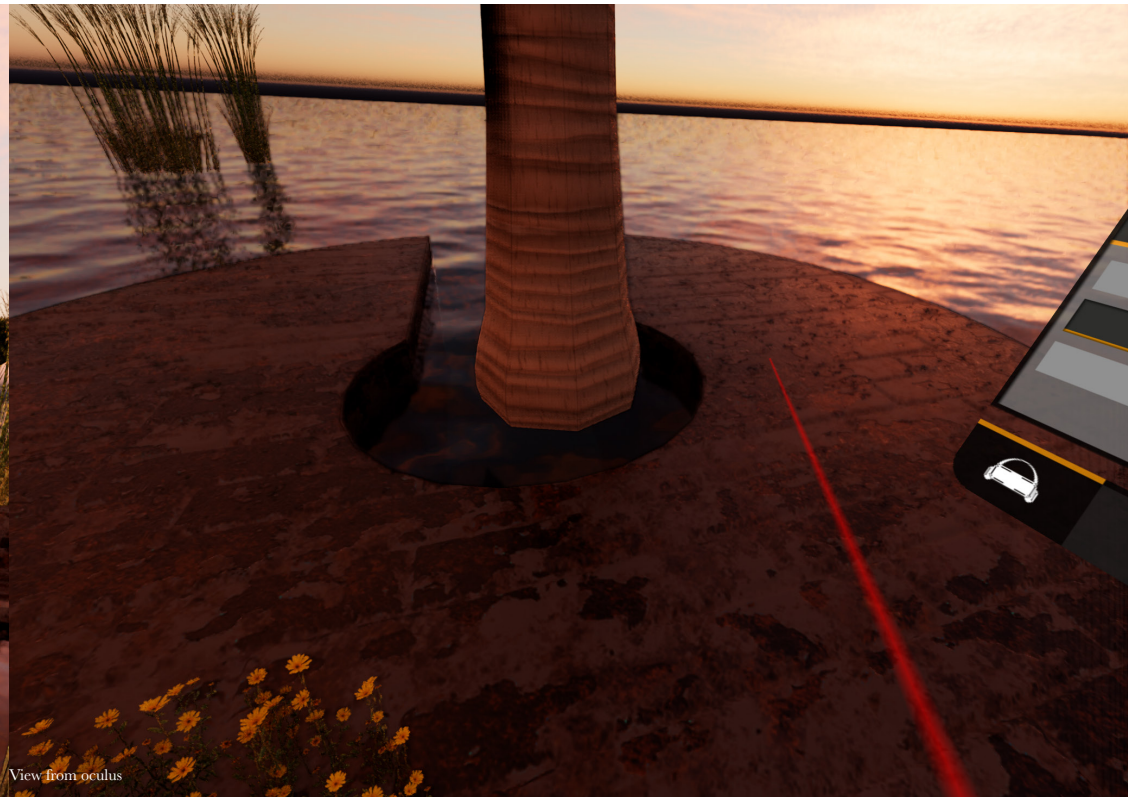
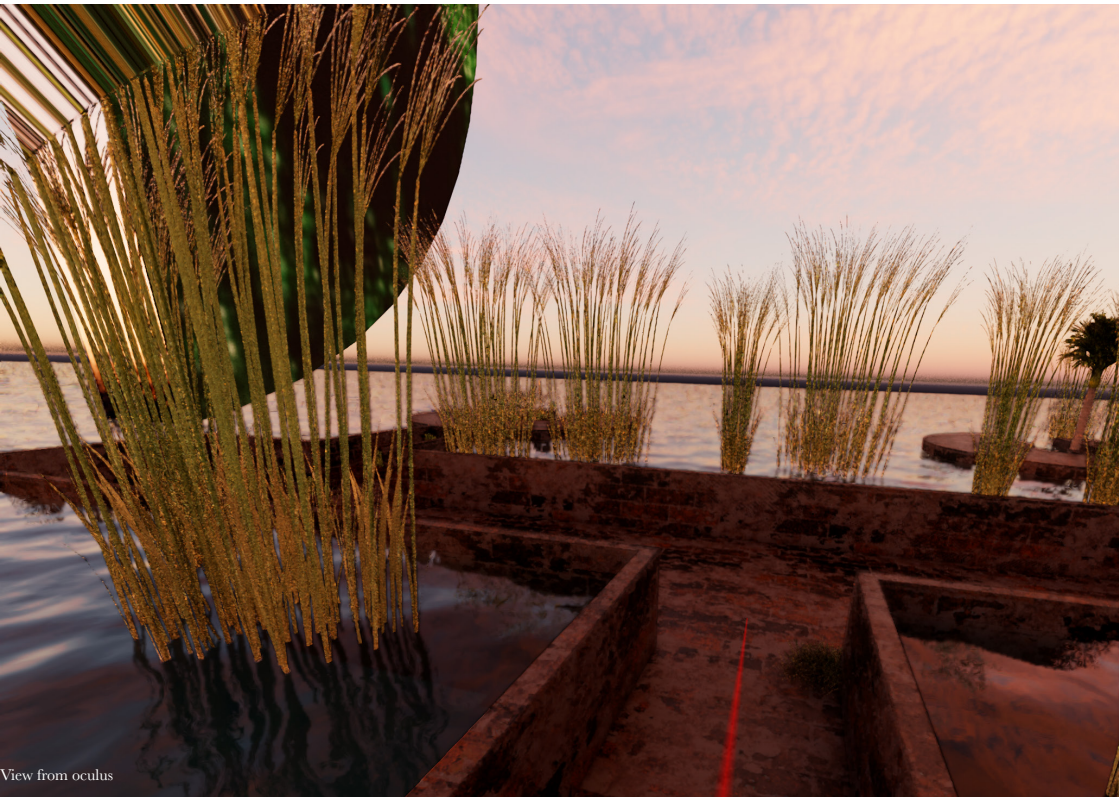


Fig. 23 (left)
Photo of using VR glasses.

Fig. 24 (right)
In the Oculus glasses, real world turn to black.



Inhabitation and Interaction

Experiencing virtual reality is a continuous process of refinement, with headsets and operating software, all of which need to be tested and completed.

Can I switch my role quickly? The answer is yes. VR provides an immersive experience that enhances visual and auditory perception within Exquisite graphics and interactive music.

Based on repeated use and experimental results, it is clear that there is a process from passive reception of information to active exploration of information when people use virtual glasses.

I kept using the oculus glasses to unlock the game part before I started the project design, the glasses are very thick and heavy and therefore not suitable for long-term use. But they are perfect for short periods of operation, such as working out or watching a short film.

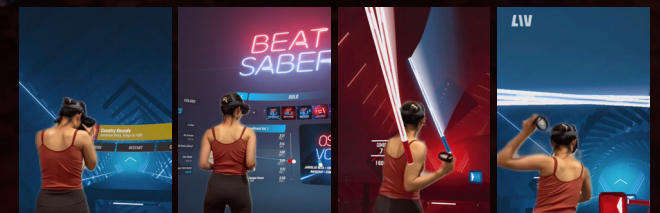


Fig. 25 (*up*)
While using VR to play the games and combine with LIV.

Figs. 26 (*background*)

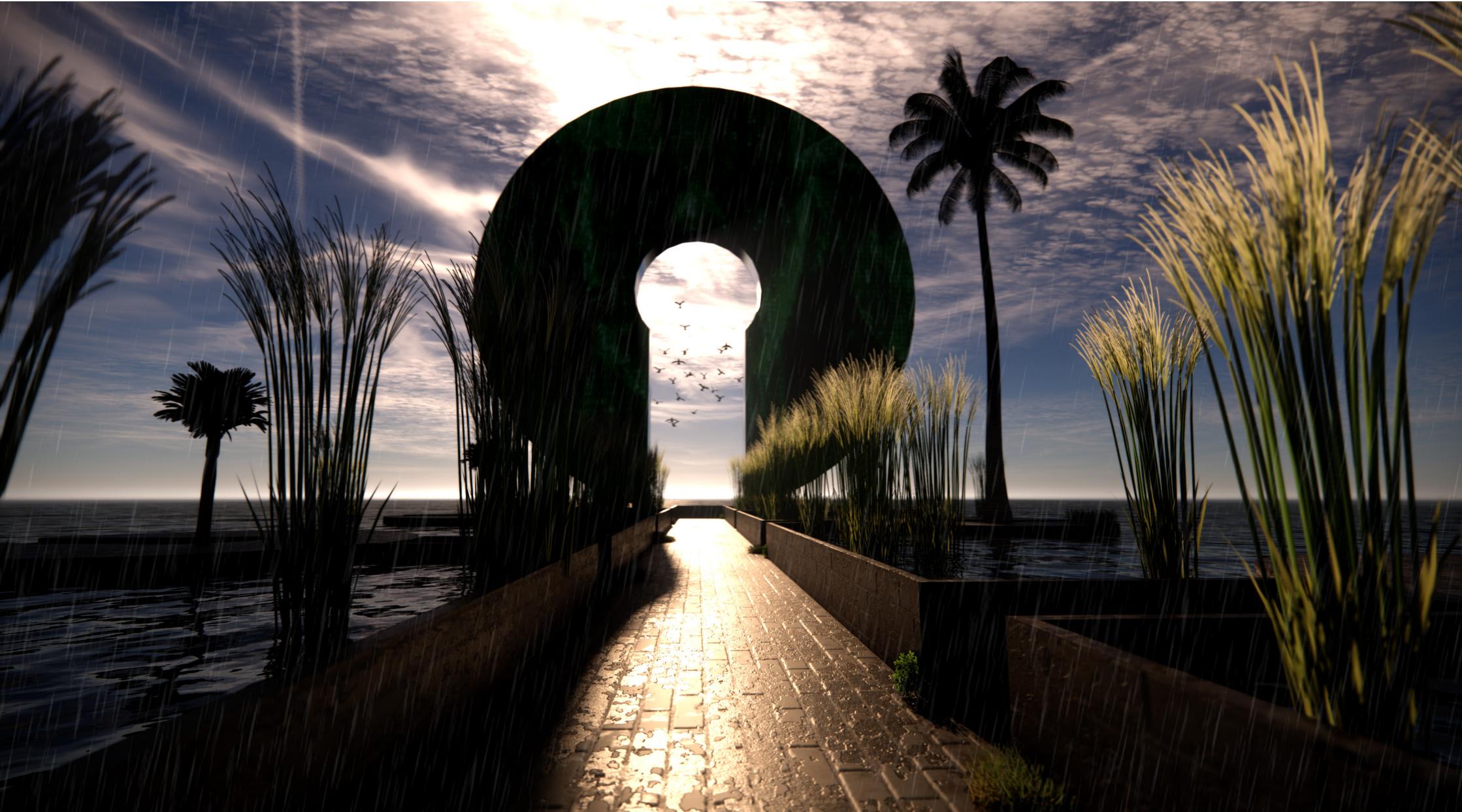
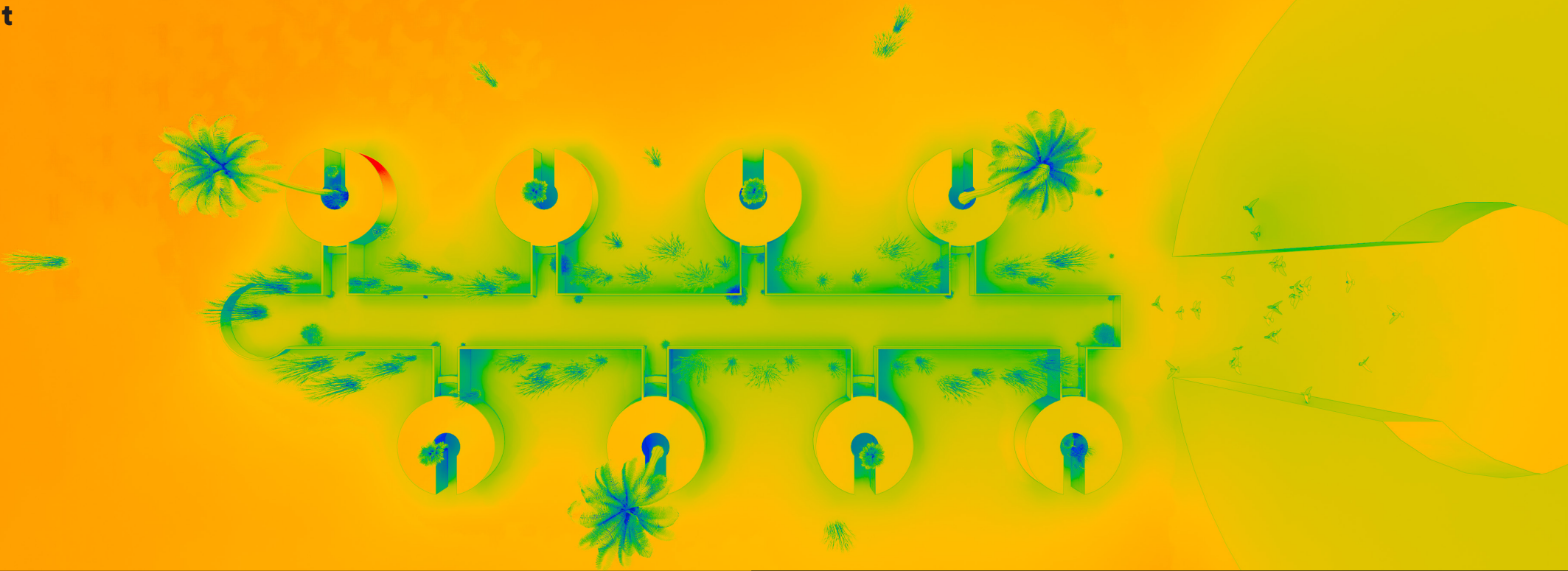


Fig. 27 The sun is about to rise on a rainy day.

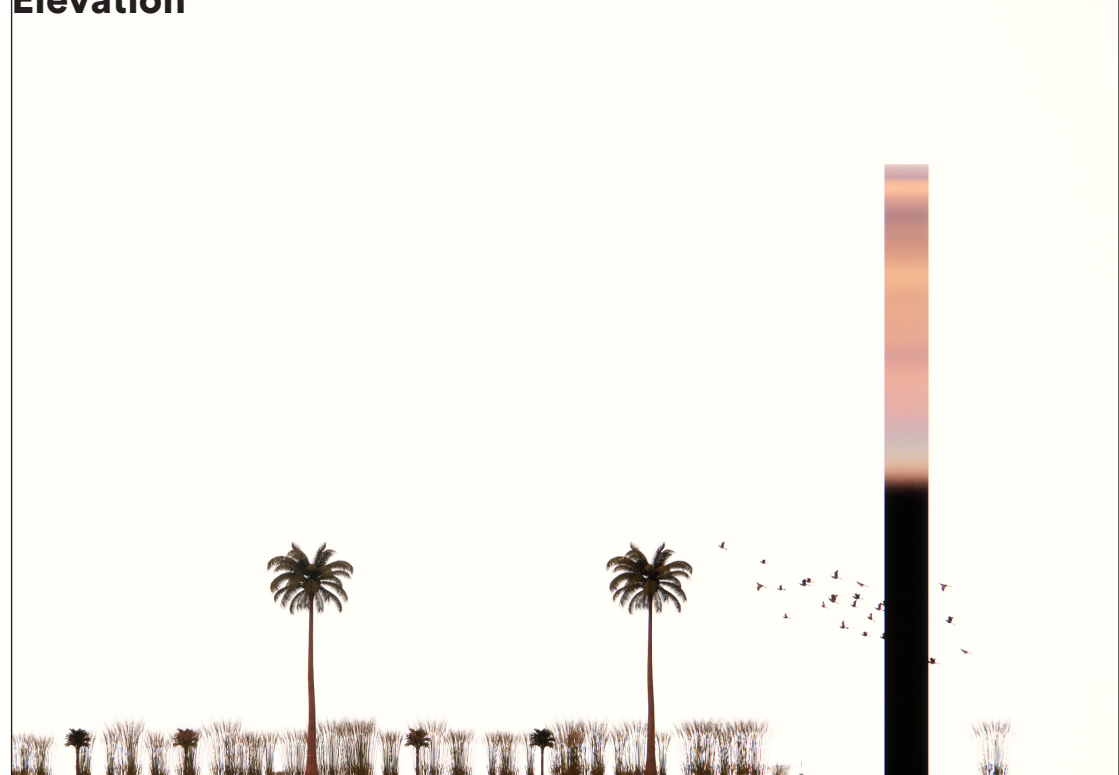
Layout



Front View



Elevation





Different scenarios(time zone) for this design - Sunrise



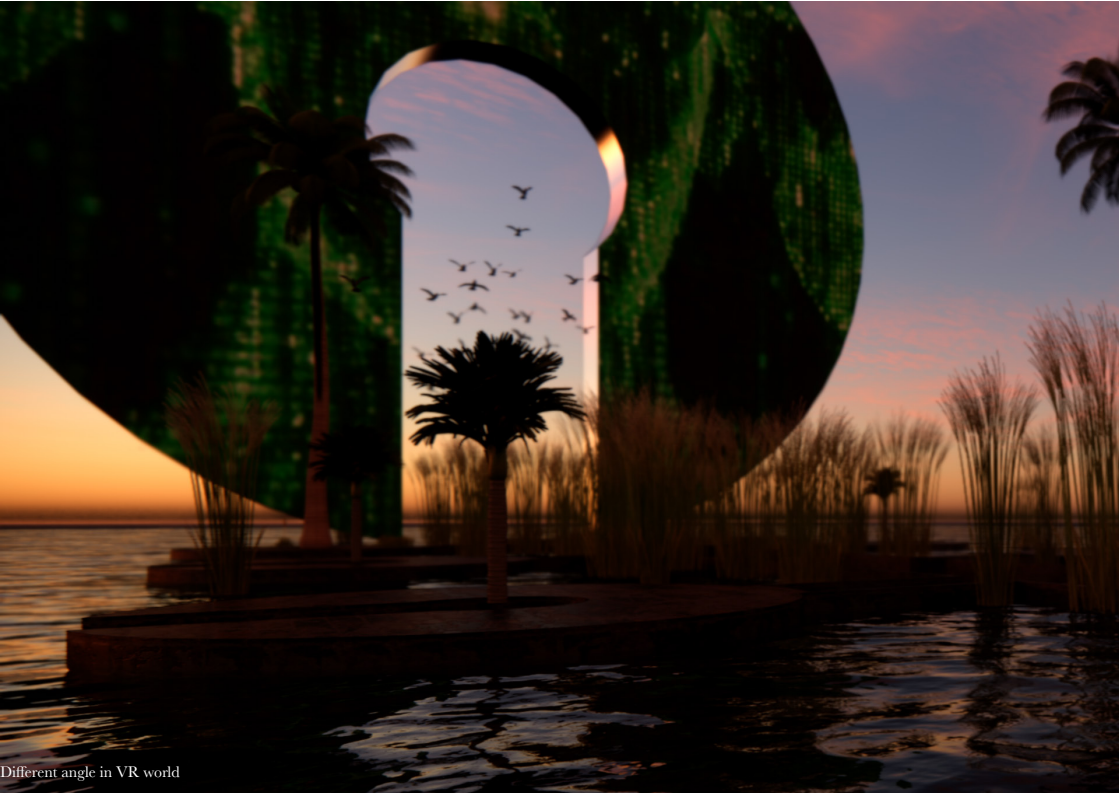
Different scenarios(time zone) for this design - Morning



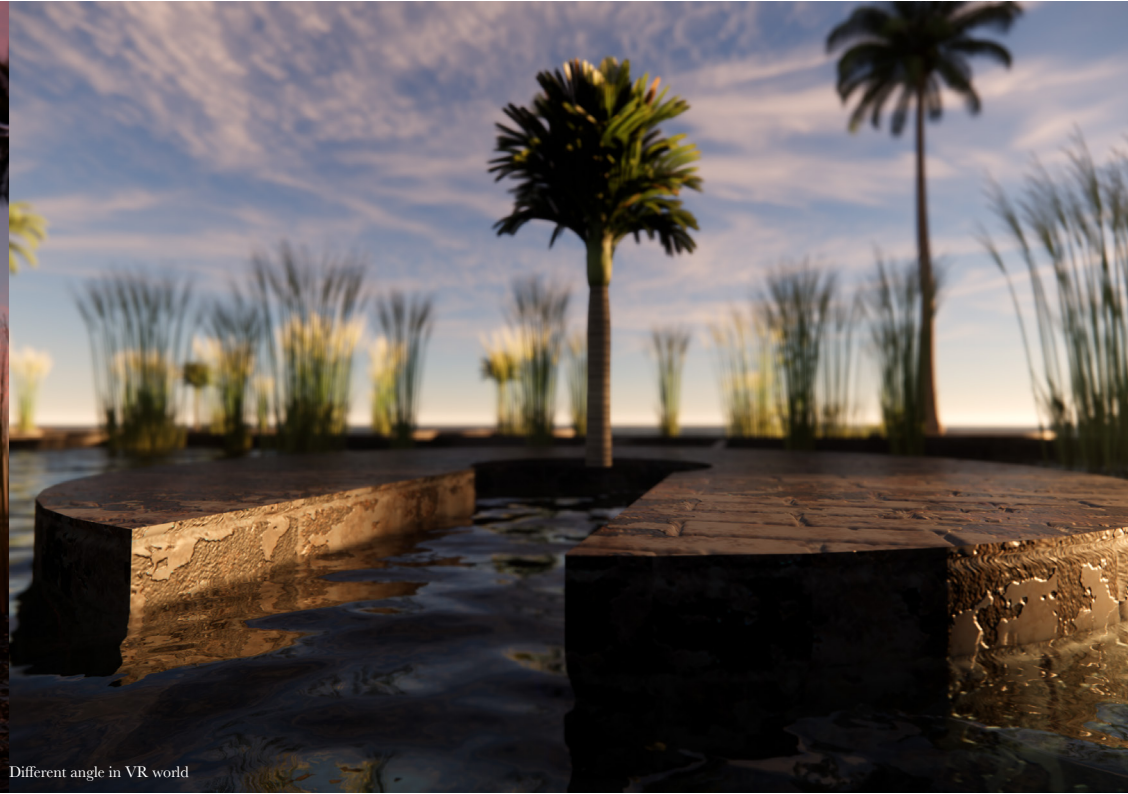
Different scenarios(time zone) for this design - Sunset



Different scenarios(time zone) for this design - Rainy day



Different angle in VR world



Different angle in VR world



Different angle in VR world

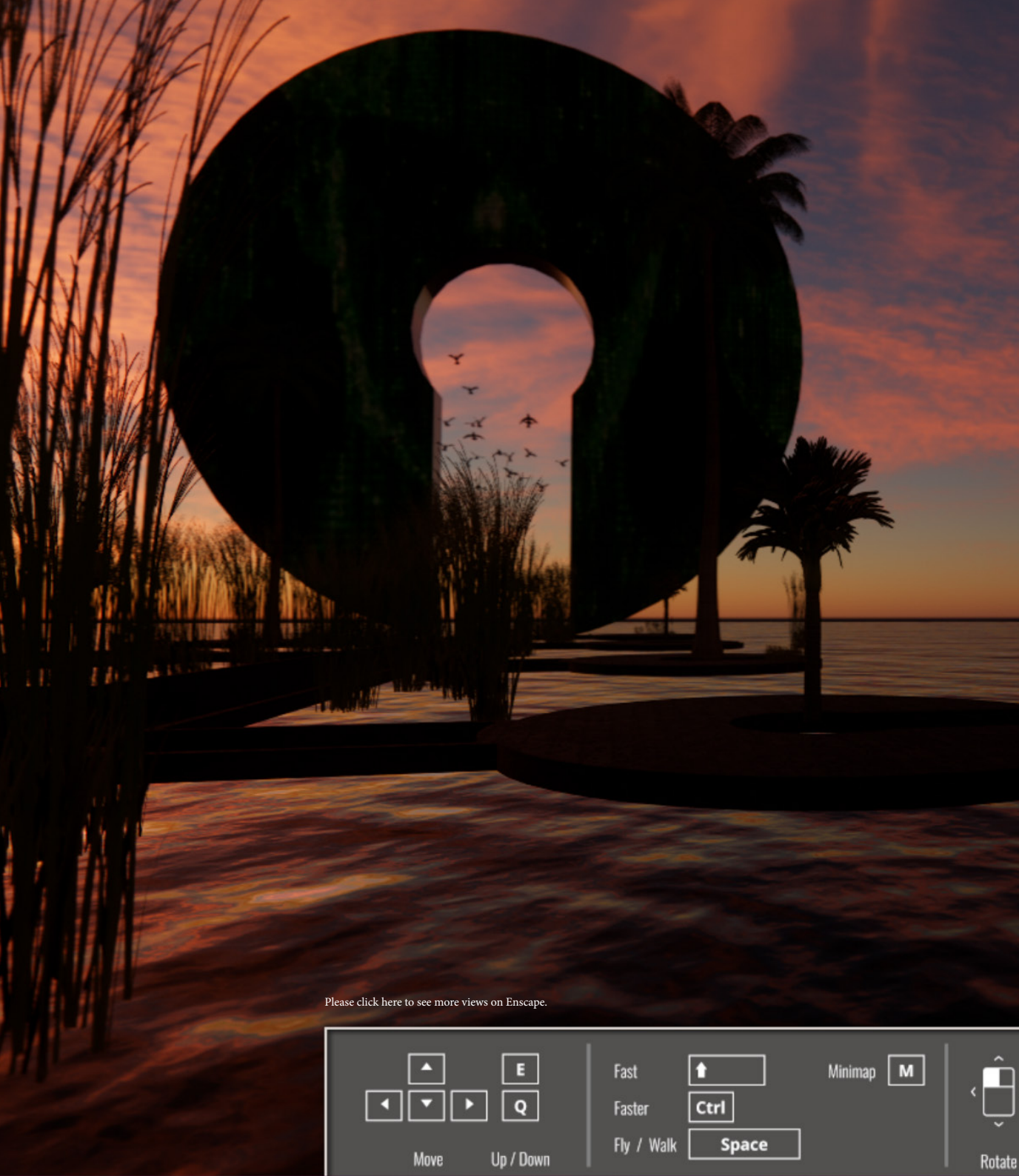
Different angle in VR world



Visual reality from real world



Nature in Barbican Centre



Dissemination and Future Work

When I'm creating virtual worlds, aren't they already real?

In the near future, we can see a more diverse world through VR and designers can convey more emotions. An experiment video on Youtube has inspired me of the future VR life.(See Fig. *)Cultures that were once lost can also live on. In a virtual world, we still feel the real touch.

Aa

I hope this project reaches more people, so next, I will record a documentary about my exploration of VR space design. But does the virtual world allow us to abandon the real world? I need to explore this answer.



Fig. * Screenshot of a Youtuber who made an experiment within a headset for 168 hours.

Please click here to see more views on Enscape.



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