YAMATO SPIRIT 大和魂



The 9th Virtual Design World Cup - OSAKA Dream Island,the Future City for Entertainment



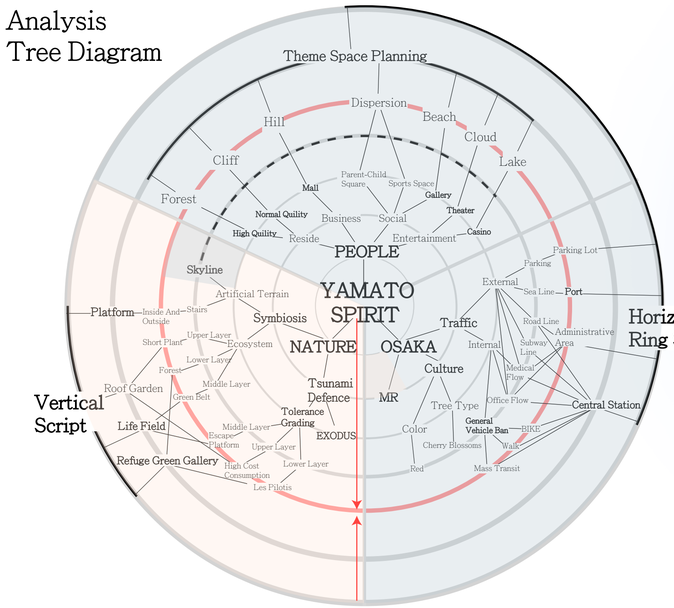
Introduction

"The Yamato Spirit" project combines virtual reality with daily life, creating a new type of entertainment resort. In this project, Virtual reality enhances the visual effect and human interaction, while physical construction builds the network of people,nature,and Osaka. In addition Yumeshima is the artificial island located at the mouth of sea, facing the threat of tsunami, therefore the complex evacuation route and disater problems are derived. Create a new life style for Yumeshima by integrating the entertainment and evacuation through the vertical and horizontal functional partition. Additionally, we plan the composite circular line, and import software analysis to improve operational efficiency.

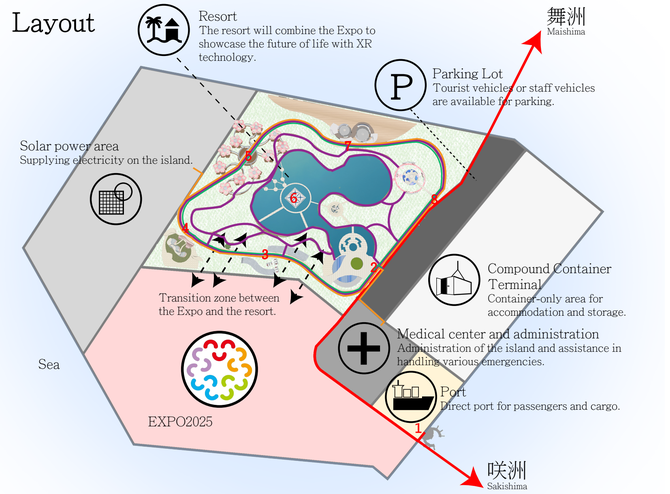
Concept

Yumeshima Resort consists of five themes, each with different characteristics. The landscape design is a rich natural skyline through fragments and continuous sections. And with the waterscape as the interface, the real and illusory scenes are mapped, like the contrast between day and night but not conflicting.

Analysis Tree Diagram



Layout



Traffic Planning

Applying the concept of resilient city, only the ambulances and trucks are opened on the ground floor, and the space is given to passengers and bicycles to create a spacious and safe activity field. In addition, due to the small size of the island and the lack of direct traffic, the resort will have a direct access port. The traffic on the island is to set up traffic nodes every 400m to forma circular line. On the upper part of the subway and the plane road, an elevated transport corridor is constructed to establish a perfect transportation network.

Horizontal Ring Script

1 Port
moored ship

As a seafront facade, we create parking spaces and entrances by extending the building to the sea.

2 Central Station
transportation hub

Visitors gather here to see the style of the resort, and then the cable car surrounds the resort to experience the level of natural landscape.

3 丘 Hill
mall&sport area

The resort's shopping mall is imaged by rolling hills and valleys, with raised hills as shopping plazas and flat valleys as public sports venues.

4 岩 Cliff
normal quility hotel

Create towering man-made hills on flat islands, trying to blur the boundaries between nature and architecture and create new landscape features.

5 林 Forest
high quility hotel

The dense cherry blossom forest is an independent superior accommodation area where you can experience the romance of Osaka.

6 水 Lake
casino

The pyramid shape symbolizes the image of the casino, along a special path into the psychedelic water shadow, through the water reflection can look at the entire resort skyline.

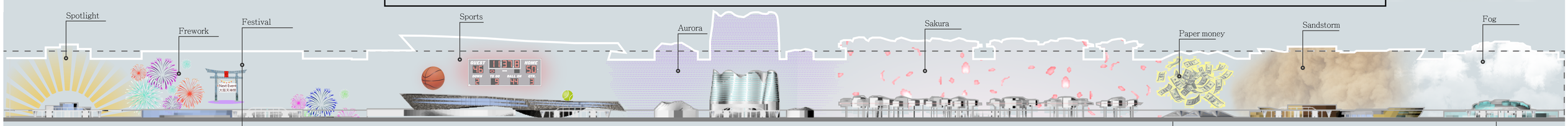
7 砂 Sand
gallery&beach

The resort's art center is characterized by quicksand, and the curved lines symbolize the long sandy beach. The starry sky theater symbolizes the swirling center of the quicksand.

8 雲 Cloud
theater

Create a floating walk through the elevated passages and use glass to connect the boundaries of the building to the sky.





Vertical Script

Platform

The platform is an important node in the resort,showing our opnion to the vertical flow,which builds the connection between architecture and nature by the stair

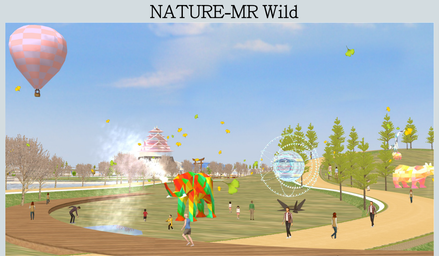
- Life Field
- Platform
- Elevator
- Stairs
- Energy Station
- Service Space
- Bicycle Parking Area
- km/hr Speed Change



OSAKA-Tenjin Festival



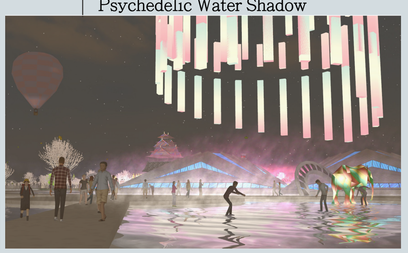
NATURE-MR Wild



Digitized Nature

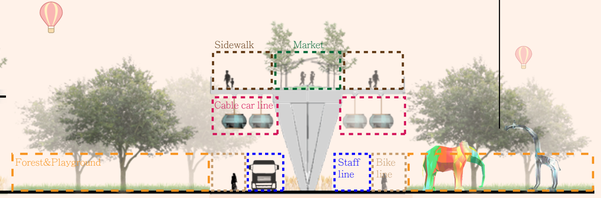


Psychedelic Water Shadow



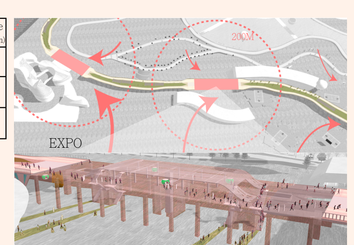
Mix Reality Display

The project combines the real world with the virtual world to create new environments and visual effects. Mixed reality is not limited to happening in the physical or virtual world, but also a mixture of reality and virtual environment, providing visitors with a wonderful experience of future entertainment.



Stairway	Stair Width	Evacuative Time(500man)
2	1.3 m	5 min
4	1.3 m	3 min
4	2 m	2 min

10.5m Tolerance Grading Line



EXODUS

Horizon

There are three stations,Cliff,Hill,and main station close to the Expo site,and instantly evacuating people while disaster occur.
This test explores the station distribution with the evacuation efficiency.

Vertical

The platform and corridor become the refuge platform while tsunami coming.There are four escape ladders on each platform.This test explores the evacuation capacity of each platform.