

SHINKIBA

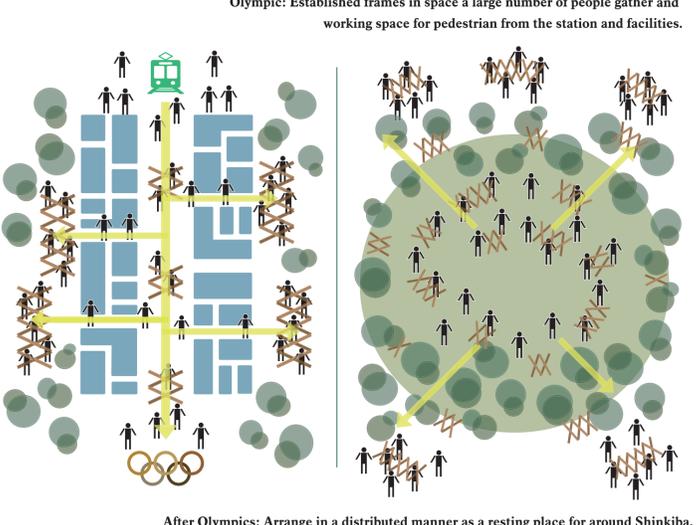
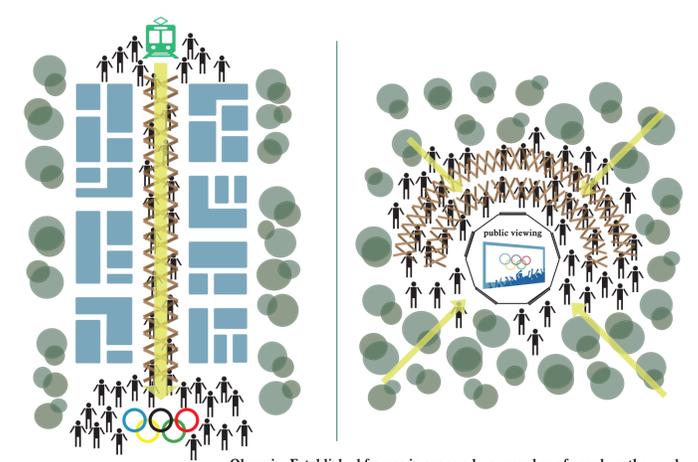
In Tokyo Olympic and Paralympic in 2020, athletes compete and the situation is reported all over the world. Along with that, massive accommodations and sports facilities have been built. While these are necessary conditions in order to hold Olympic Games, as a sufficient condition of local or host country, we need items to welcome guests and to enliven the overall Olympic. Therefore, we think "compact" of the Olympic keywords = "the space that we can walk", "omotenashi" = "the space for receiving the bustle leaking from the sports facilities. And we propose roofs for the staying and walking. Under the influence of the Olympic Games, in the future, Shinkiba will become the place crowded with a lot of people who come from outside the Shinkiba daytime by advancement of companies. At that time, in Shinkiba "tree town", our Olympic roofs will provide the spaces for people that incorporates a new history of the Olympic Games. And therefore, we assume the spaces crowded with merchants and office workers, and design the spaces for the merchants and the office workers. With the BIM, as proposing roofs for the staying and walking, we try proper placement planned by estimating flows of visitors, frame designs bring people comfortable wind and shade, and integration of materials for efficient construction.



SITE | Assume the walking around the Shinkiba and place frames.



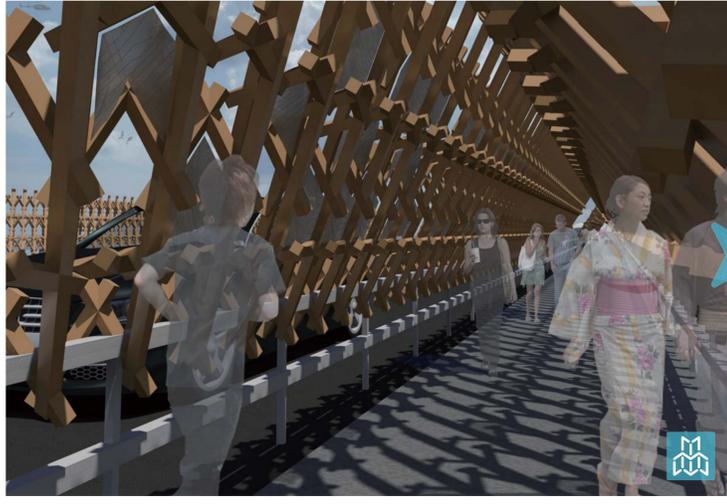
CONCEPT | Design the space according to the amount and flow of people.



OLIMPIC | Produce "compact" Olympic and "Omotenashi" for tourists from home and abroad.



AFTER OLIMPIC | Produce resting places for tourists and office workers in Shinkiba.



SIMULATION OF SHADOW | Enjoy shadow of Japanese pattern reflected in the ground by a change in the sunlight.



SIMULATION OF WIND ENVIRONMENT | Change in the wind direction and wind pressure due to material interval.



SIMULATION OF PRODUCTION | Study of cut out the material without waste of using 3D model designed by a material unit.

- (3.Reduce logging cost by evolving cut) (out orders as gene)
- 1. First Fit Algorithm
- 2. Best Fit Algorithm
- 3. Generative Algorithm

SIMULATION OF SHAPE wave | Large frames during Olympic and move frames unit after Olympic.



SIMULATION OF SHAPE ring | Combine the five rings of Olympic symbol.

