



Flower Field Bamboo Pavilion, Beijiao, Shunde

Foshan City, Guangdong Province, China

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Project location: Foshan City, Guangdong Province, China

Site Area: 500 m²

Design year & Completion Year: 2020&2021/05

Located in the centre of Beijiao, Xianmo Flower Field is a civic park with flowers as the theme. However, due to the lack of shadings, there is no place for tourists to rest and stay, which have led to the extremely low utilization rate of the park.

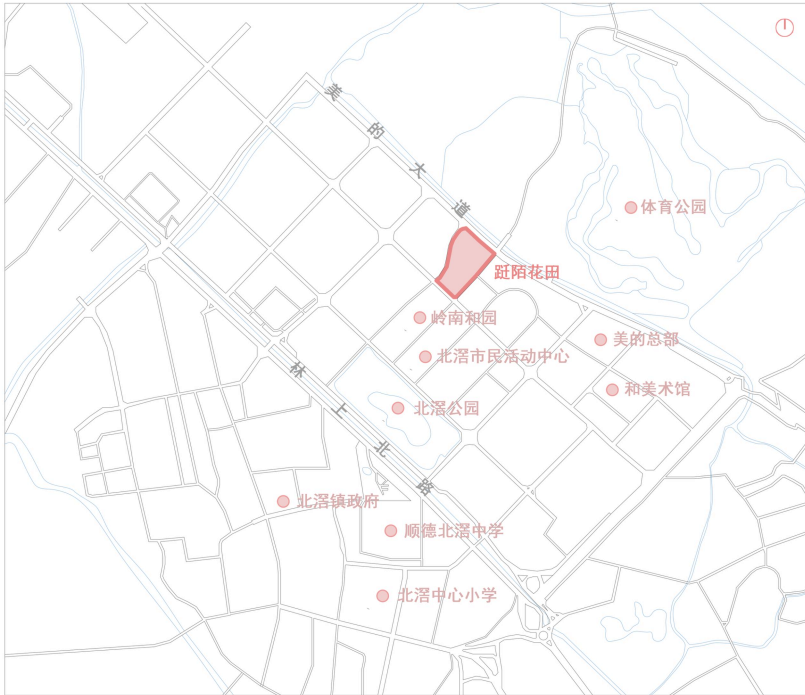
We combine parametric design with the traditional craftsmanship of low-carbon raw bamboo materials into two sets of bamboo-structured landscape pavilions to integrate with the surrounding scenery, which activate the site with a new life, and at the same time activate the exploration and application of traditional sustainable and environmentally friendly materials.

After completion, it became a popular, flexible and multi-functional hydrophilic rest space. Various activities were carried out under the bamboo pavilion: viewing and resting, parent-child entertainment, fitness, taking pictures, therefore, the flower field of Xianmo gathered more popularity. Everyone defines and interprets the story and scene in the space, making it possible to narrow the relationship between each other.



'ACUPUNCTURAL RENEWAL'

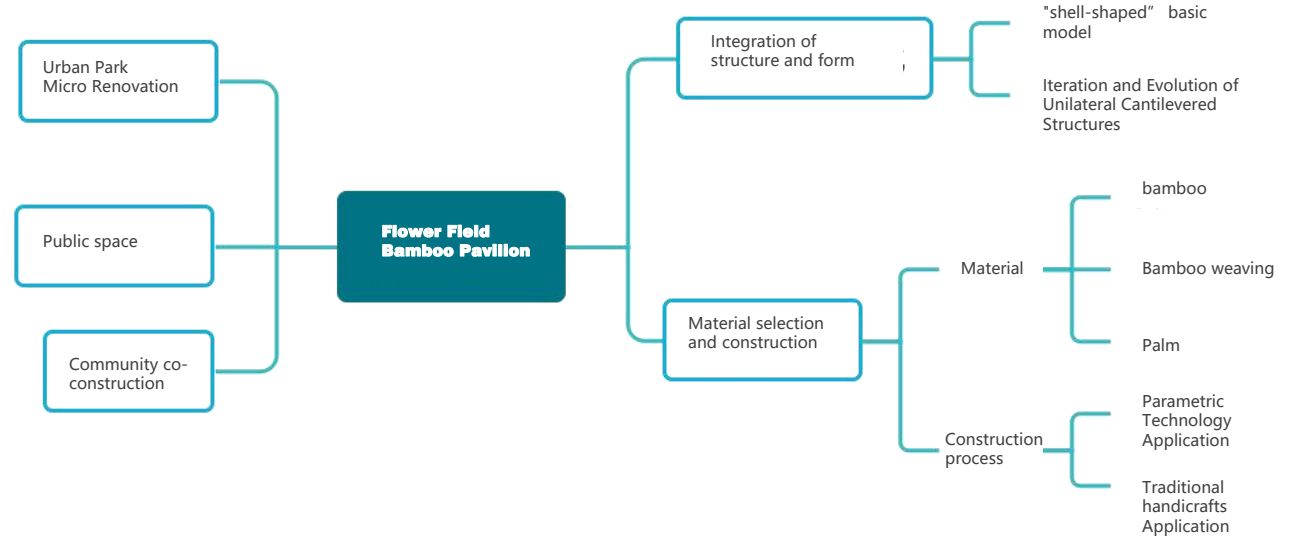
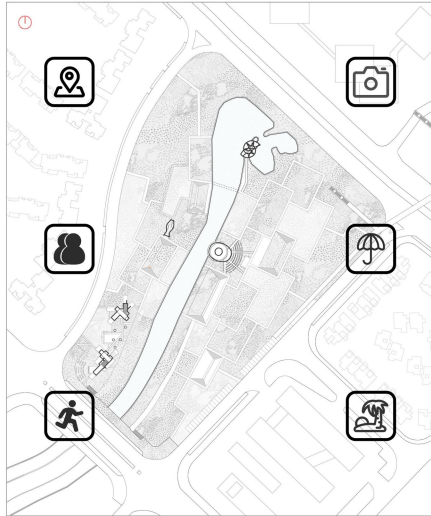
Site General Overview



Located in the centre of Beijiao, Xianmo Flower Field is a civic park with flowers as the theme. Large areas of seasonal flowers are planted throughout the year and the blooming time is beautiful. However, due to the lack of shadings, there is no place for tourists to rest and stay, which have led to the extremely low utilization rate of the park. Therefore, only around the evening people would gather in the park and most of the other time people would visit the park without stopping. Therefore, improving the service facilities have become the primary purpose in the design, in an attempt to improve the satiability of the park, extending the use time, and increasing the utilization rate of the Xianmo flower field.

'ACUPUNCTURAL RENEWAL'

Design Strategies



We hope to provide residents with a sheltered space by placing two sets of bamboo-structured landscape pavilions. At the same time, it can not only hold small events, enrich the sightseeing experience, and view the waterfront. In turn, it would become a landscape landmarks with composite functions.

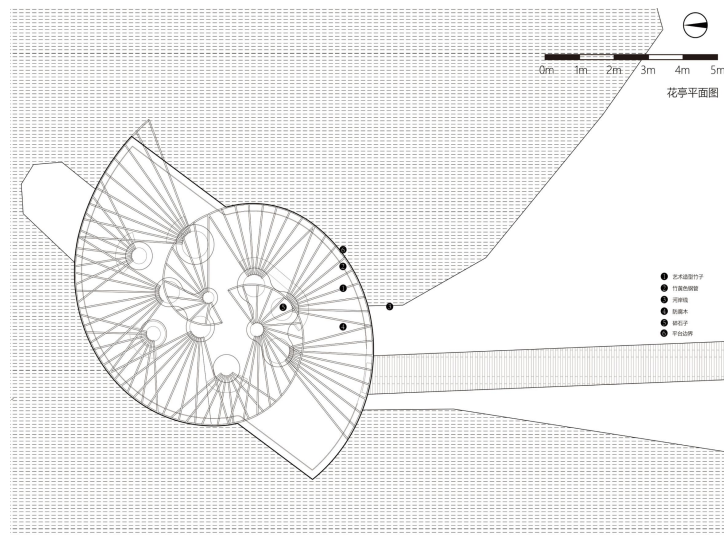
'ACUPUNCTURAL RENEWAL'

Architectural Drawings

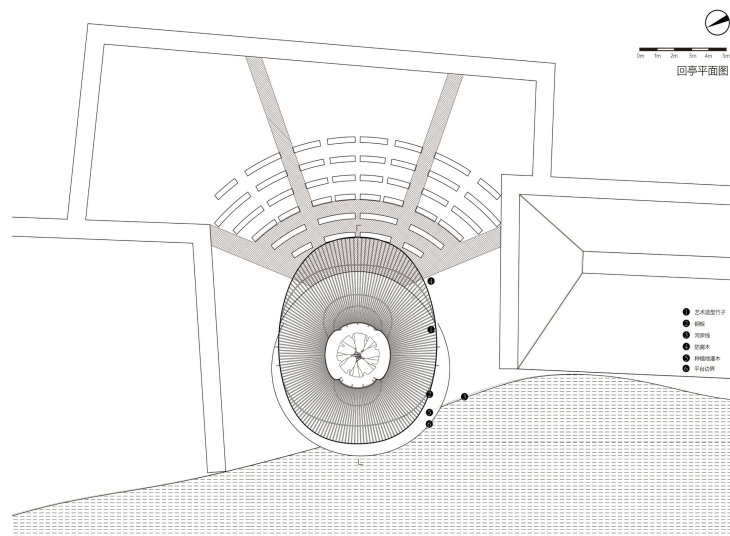
■ Master plan



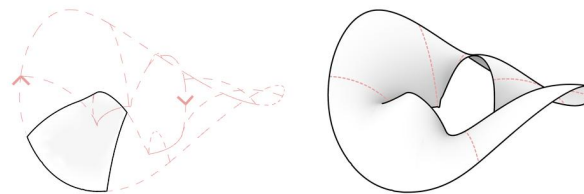
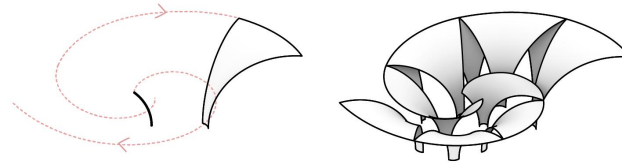
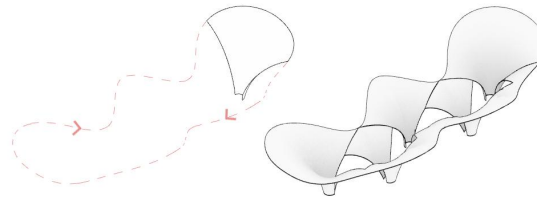
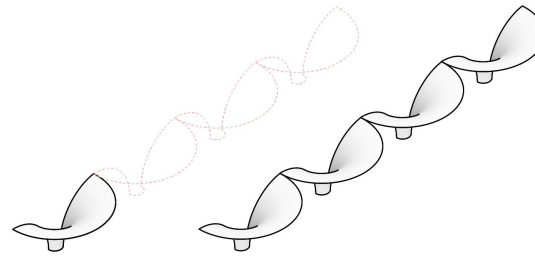
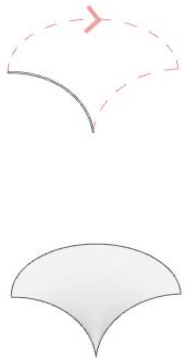
■ Flower Pavilion plan



■ Embrace Pavilion plan



INTEGRATION OF STRUCTURE AND FORM



■ 1.0 version-Changqi Stadium Bamboo Corridor



■ 2.0 version-Huanglong Waterfront Bamboo Pavilion



■ 3.0 version-Flower Pavilion



■ 4.0 version-Embrace Pavilion

Completed the iteration and evolution of the bamboo structure from 1.0 to 4.0 in terms of form logic and construction details.

INTEGRATION OF STRUCTURE AND FORM

Iteration and Evolution of Unilateral Cantilevered Structures



■ 1.0 version-Changqi Stadium Bamboo Corridor



■ 3.0 version-Flower Pavilion



■ 2.0 version-Huanglong Waterfront Bamboo Pavilion

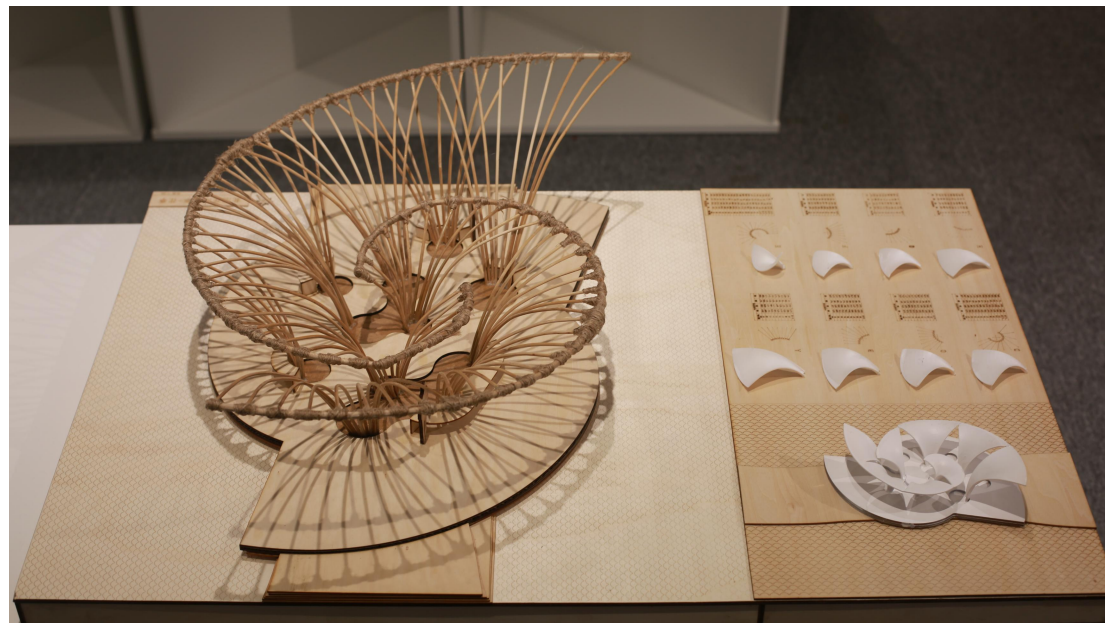
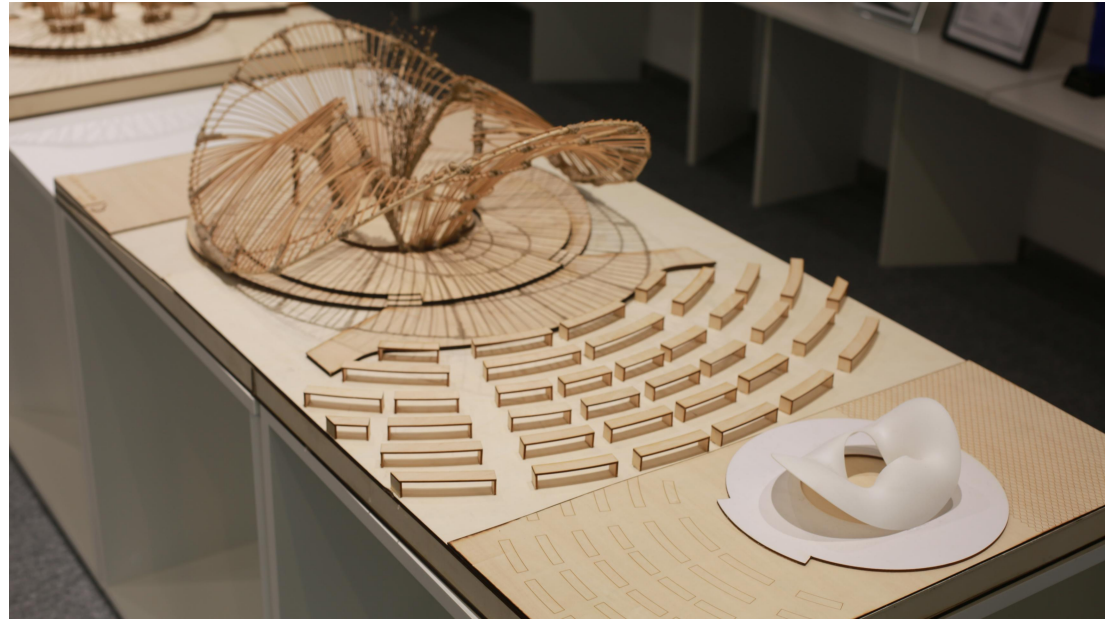


■ 4.0 version-Embrace Pavilion

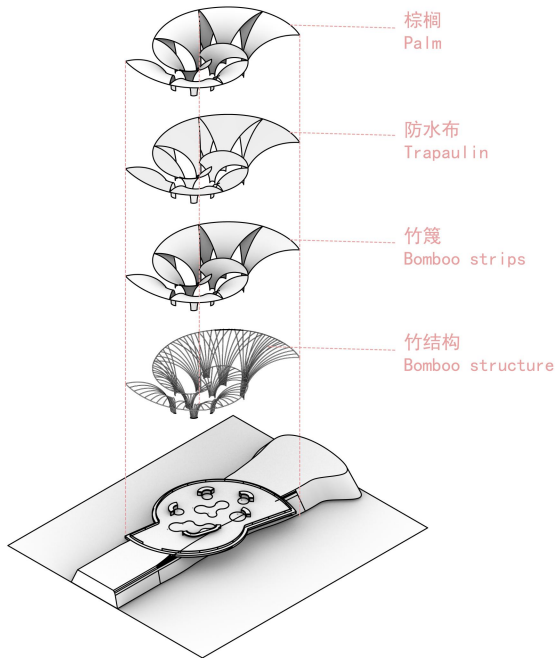
In the 1.0 version , we copied the array of four shell-like shape to provide shade space for the sides of the cour. In the 2.0 version , by deforming 5 shell-like shape in two directions to deform and reconnecting them, we create a shelter between the village square and the river-way, which could serve both the square and the rest space in the water-viewing deck. In the 3.0 and 4.0 version of Flower Pavilion and embrace Pavilion in Xianmo Flower Field, we have created more possibilities of different status for space usage by enriching the use of the shell-like shape.

INTEGRATION OF STRUCTURE AND FORM

Experimental model



INTEGRATION OF STRUCTURE AND FORM

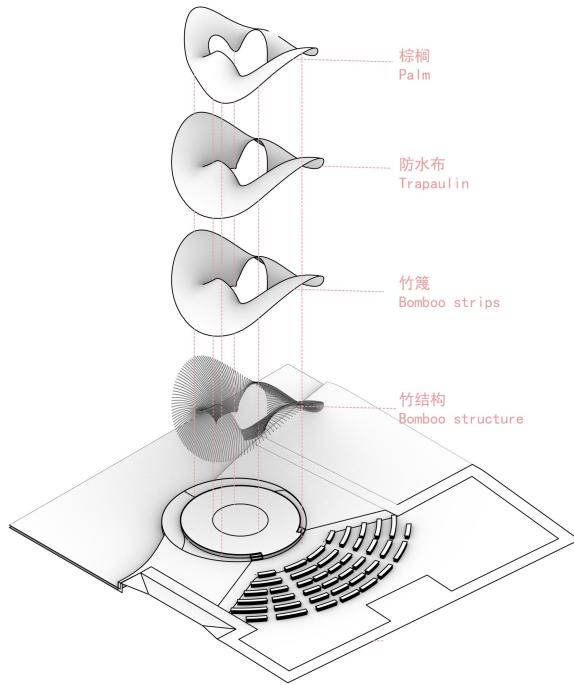


structure layers: Flower Pavilion

As the 3.0 and 4.0 versions of the bamboo pavilion, the Flower Pavilion and Embrace Pavilion continues the basic logic of combining the "shell-like" shape based on the design of the Changqi Bamboo Corridor and the Huanglong Waterfront Bamboo Corridor. The spiral line is used as the lofting control line to form the rhythm of the Flower Pavilion's structure which could create a spatial hierarchy that full of changes. Embrace Pavilion consists of two groups of reverse shell-like shape connected end to end to form a closed loop.

INTEGRATION OF STRUCTURE AND FORM

Dramatic spatial twist



structure layers: Embrace Pavilion

Three-dimensional two-way curved surfaces are cantilevered on the structure to achieve a span of 12m. Through the scale change of the shape, a large-scale stage space is created and a small-scale waterfront viewing space is formed and it created a dramatic spatial twist at the transition between the two.

MATERIAL SELECTION AND CONSTRUCTION PROCESS

Community Co construction Experiment

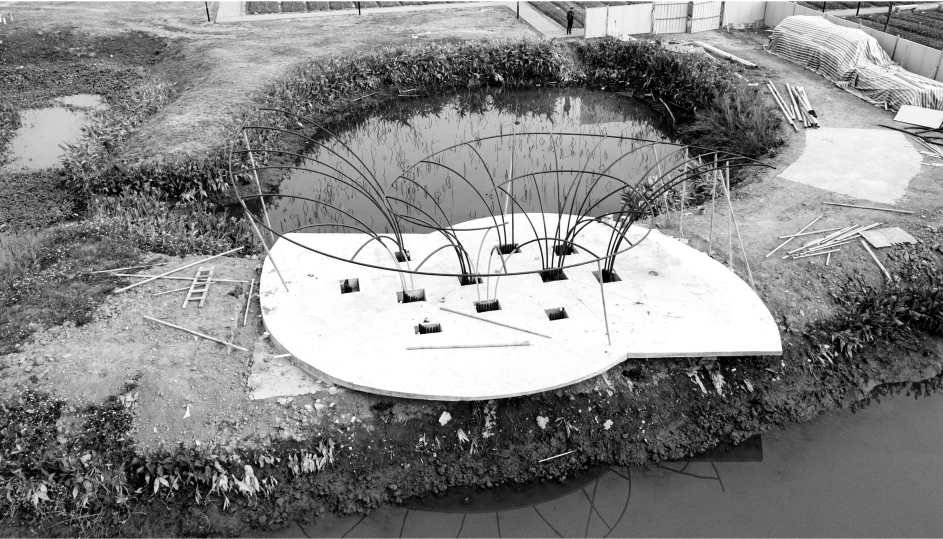


During the construction, we mobilized the local traditional artisans and the volunteers from South China University Of Technology to participate. Moreover, neighbouring residents also spontaneously joined the workshop of bamboo weaving learning, and contributed their strength to the co-construction. It becomes a process with multi-participation and diverse vitality.

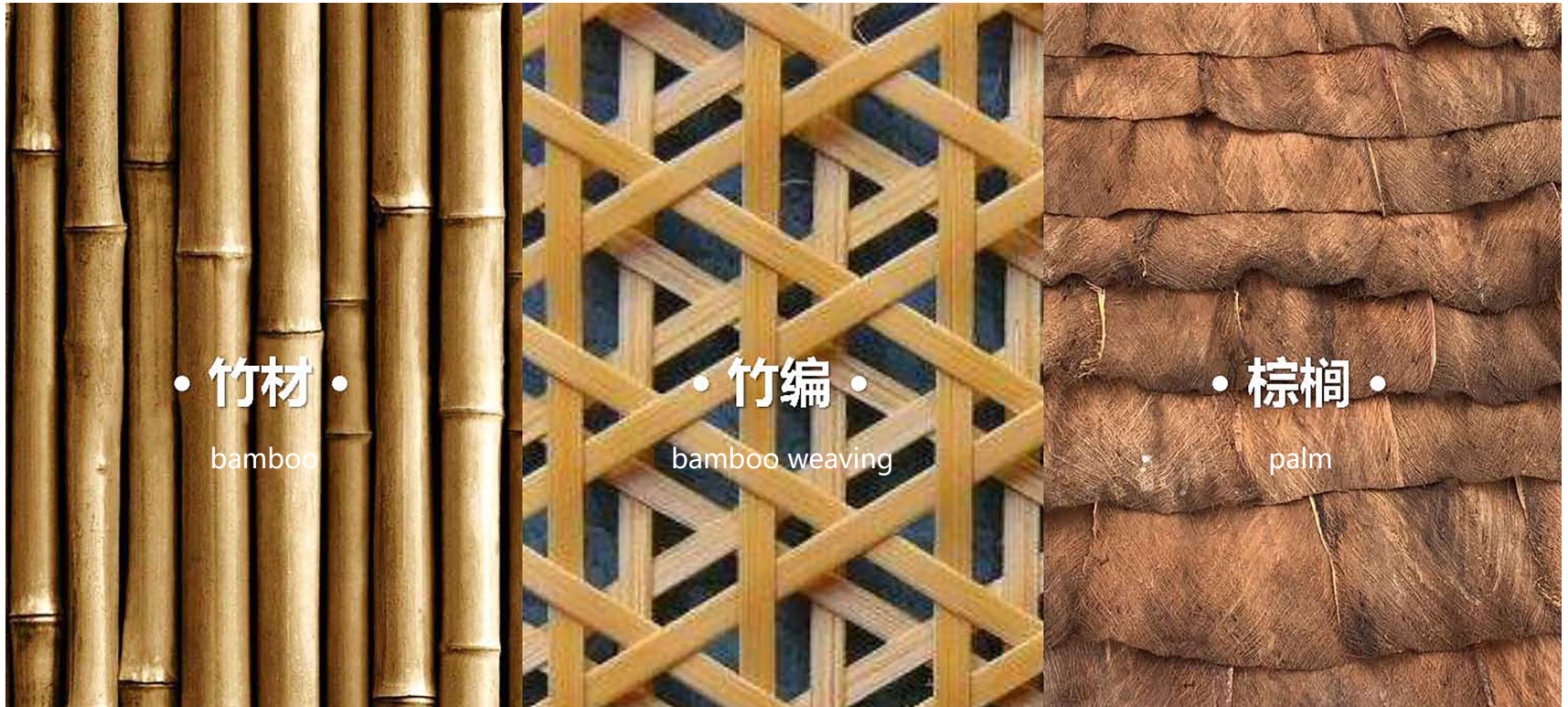


MATERIAL SELECTION AND CONSTRUCTION PROCESS

Traditional bending bamboo craftsmanship



MATERIAL SELECTION AND CONSTRUCTION PROCESS



The bamboo structure material continues the construction logic of the whole series, adopting a curved cantilevered bamboo to form a shell-like shape, which is combined with traditional bamboo weaving skills, and the roof cladding is woven with bamboo strips which covered with the Palm Tree Bark. Because the roof is translucent, the light and shadow under the roof show the beauty of bamboo structure. The application of Palm Tree Bark ,which is inspired by straw rain cape coat, is a major breakthrough in the structure of bamboo pavilion.

MATERIAL SELECTION AND CONSTRUCTION PROCESS



Palm Harvesting



Palm rope processing

In cooperation with the local village government in Hubei, we mobilised the villagers who stayed in the village to participate in the production and processing of palm tree bark and coir ropes. Not only completing the processing of the materials in their place of origin, but also driving the cause of poverty alleviation in the local villages and contributing to the cause of rural revitalisation.

INTERPRETATION OF PUBLIC SPACE

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