

VOLCANO, HUT & DIVINE TREE

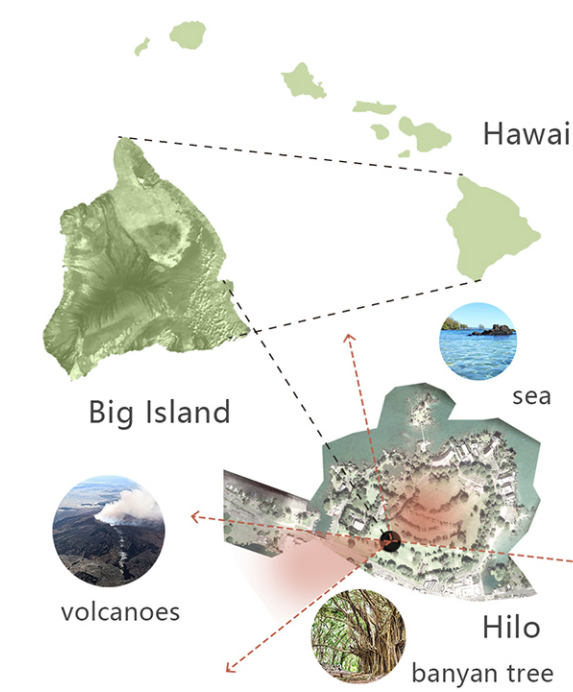
Cultural Center in Big Island, Hawaii

The impact of powerful civilizations broke the isolation between the island society and the western world, making the traditional Hawaiian society face comprehensive changes. Nowadays, lots of native Hawaiians in Big Island, Hawaii, especially the young generation, moves to American main land and somewhere else to seek for better education and opportunities, which leads to the simplification of local industry, and most importantly, the loss of local cultural and traditional heritage. There are also ecological problems in Big Island including unsustainable impacts of tourism, urbanization, impacts of climate change (such as sea level rise), pollution (especially marine plastic pollution) and invasive species.

This design of cultural center in Big Island, Hawaii is providing a space for bring natives back to seek for their spiritual home, which can benefit local cultural spread and revitalization as well as promote local education. It can also provide visitors the chance to experience the island vernacular culture, serving as a visiting card to reflect native spirit. It can also provide ecological education for natives as well as visitors. The building adopts timber as its structure as well as the main materials which derives from the local deep cultural characteristic and memory. The design abstracts three local characteristic objects, which are volcano, hut & divine tree to compose its main form and space, which manifests local culture, customs, history and beliefs. Most of the space is grey space, which is the feature of local architectural type. The functions consist of exhibition, ritual, research and public service. For the exhibition part, two visiting paths are provided, which gives visitors not only the view of outside beautiful scenery, but also the experience of exploring the light from the sky inside the three central "tree" structure while feeling local cultural spirit. Local residence can also have different rituals around "trees" to find their consistent spirit and consolation, which helps keep local cultural traditions. In addition, the research function provides space for scientists such as for geological, zoological, botanical, and environment studies, which can also be partly exhibit the knowledge of science to public, and benefit local environment and culture. Several ecological strategies are adopted into this design to protect local environment.



SITE



The site is located in Hilo, Big Island, Hawaii, near Hawaii Volcanoes National Park. The site can have not only a great view to the sea, but also the view towards the volcanoes. The surrounding large ancient banyan trees are also the characteristics of the site. However, local problems include the following:



CONCEPT



The Hawaii banyan tree has long history, which is also the reflection of local spirit. Since the crown of the tree is so big, local ceremony are often held under the crown, such as holding royal ball, memorizing major historical figures visiting and planting, and the space are filled most days with almost as many giggling children as chirping birds.



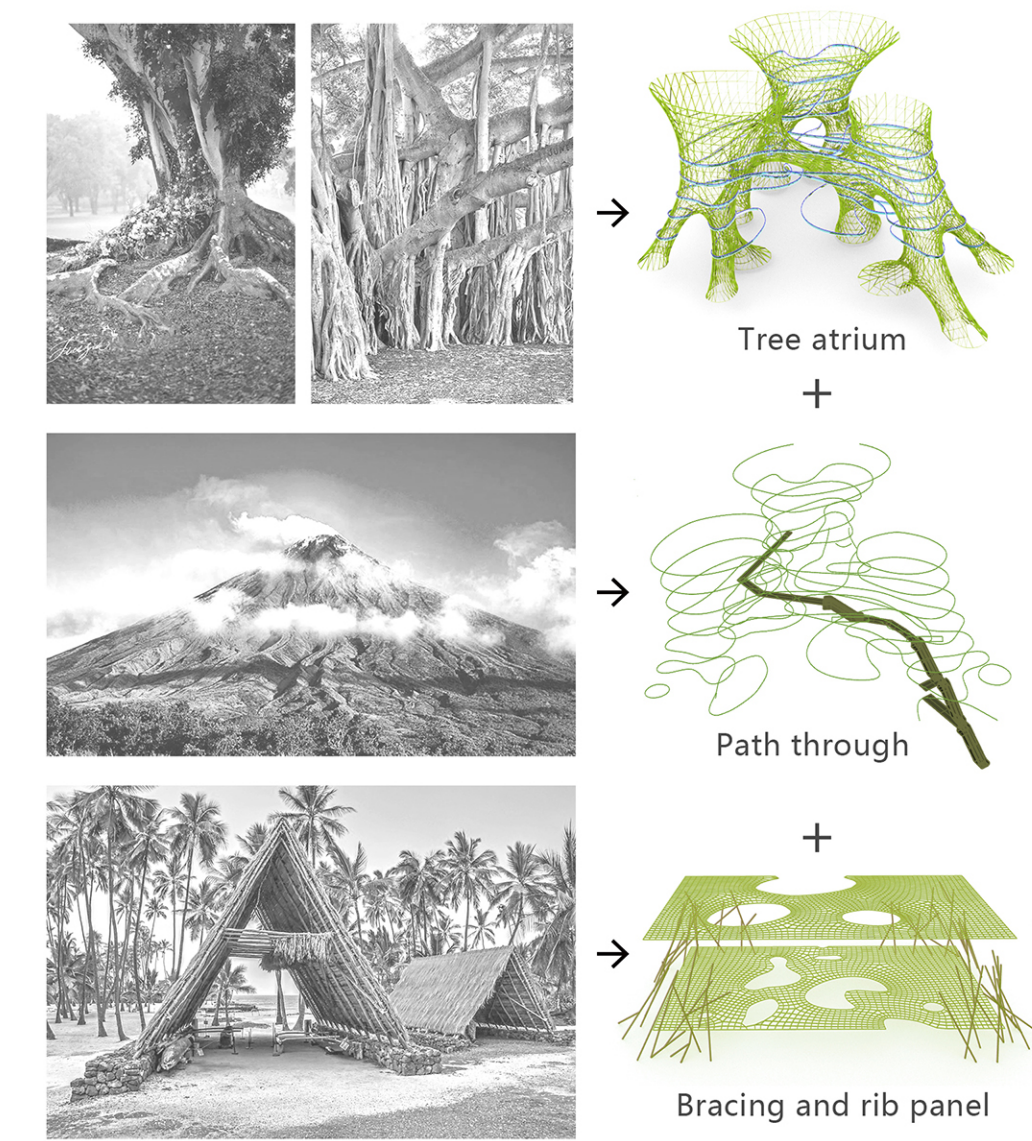
The Big Island is the youngest of the Hawaiian Islands. There are six volcanoes that have worked together over the last (give or take) one million years to create the Big Island. These volcanoes formed one after the other and partially overlap.



This design abstracts the form of volcano as well as the experience when climbing the volcano via a long zigzag trail to the mountain. The corridors system inside the building and the floor slabs with holes symbolize the impression of the volcano.

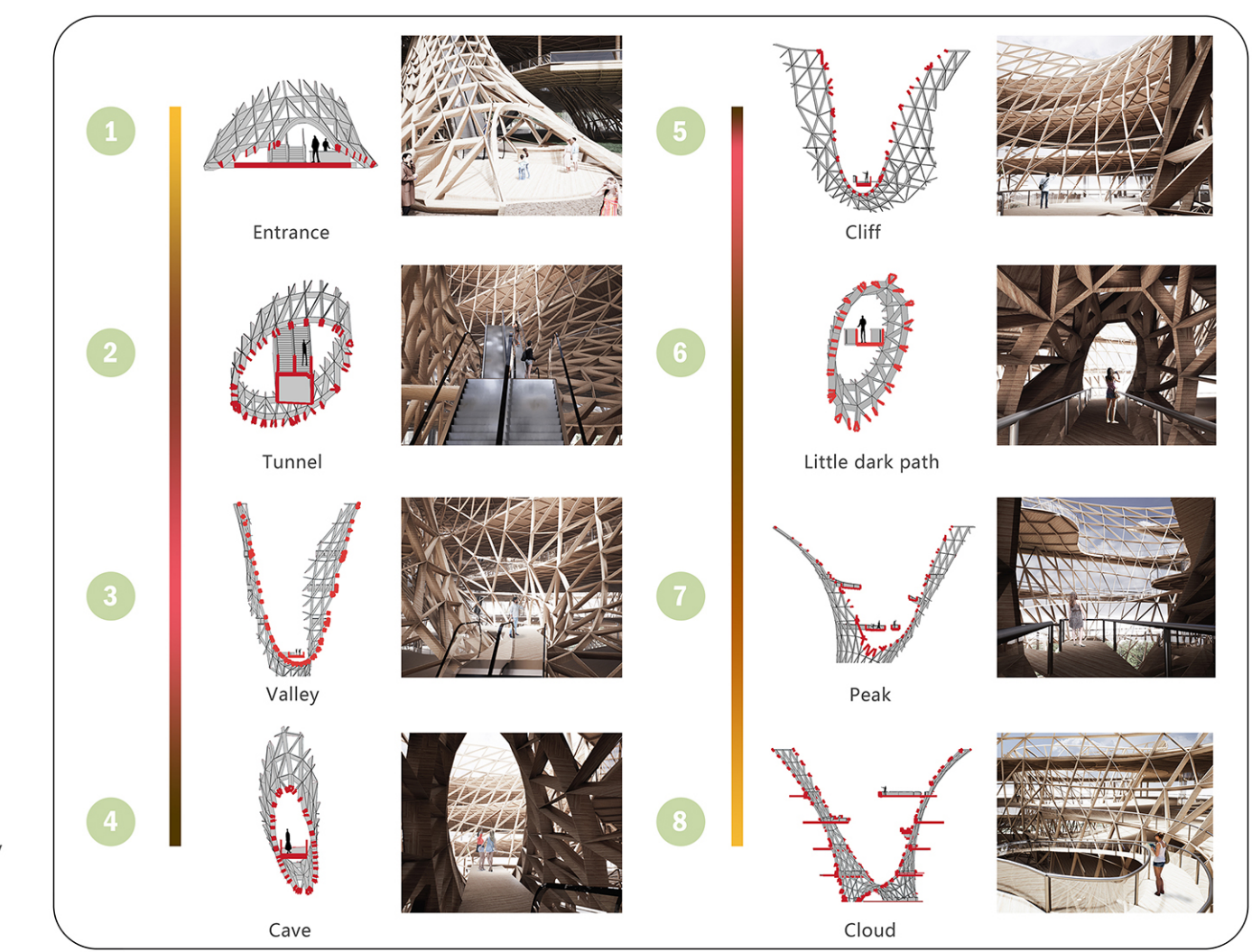
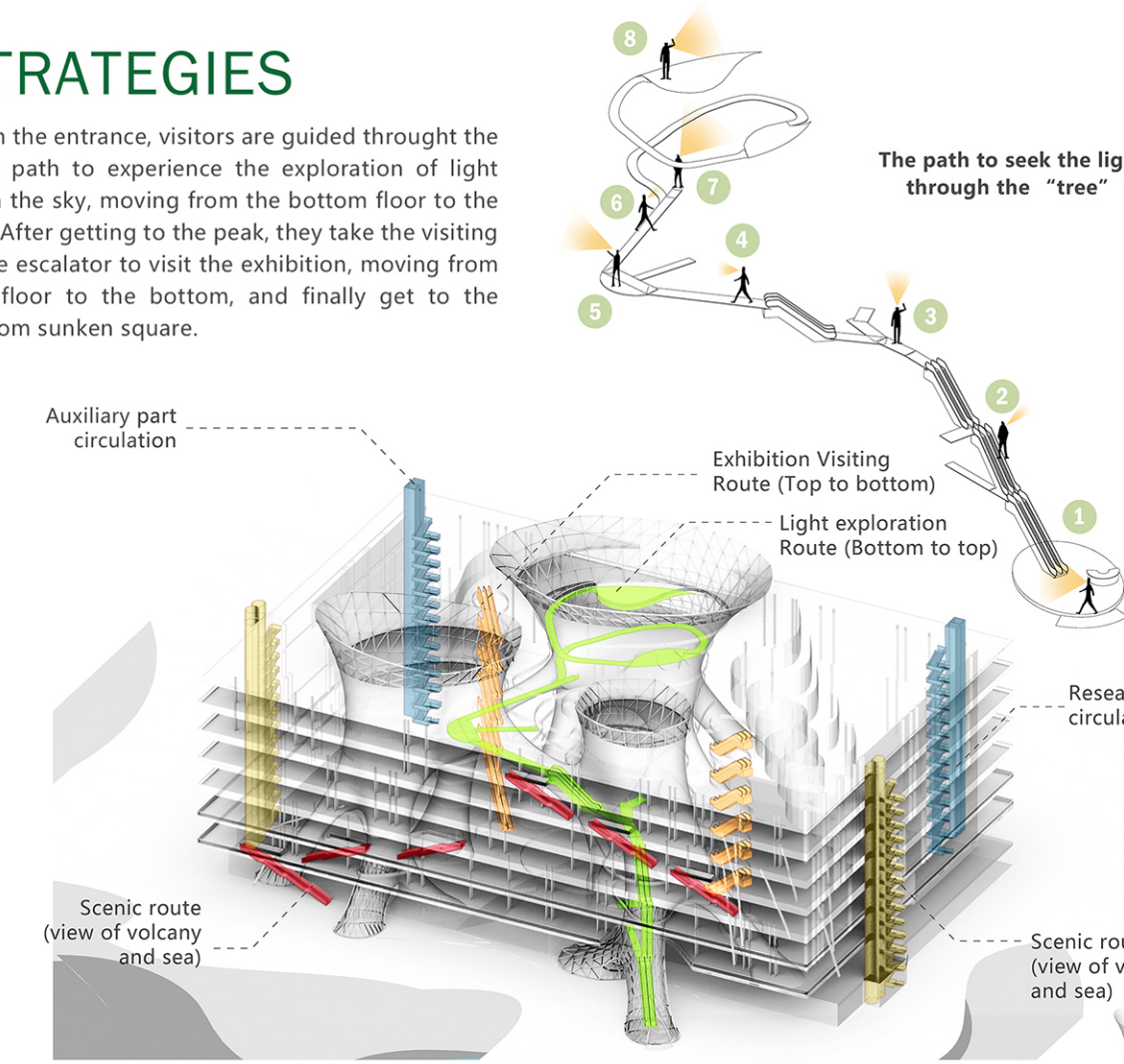
The earliest form of Hawaiian architecture originates from what is called ancient Hawaii—designs employed in the construction of village shelters from the simple stacks of out-casts and slaves, huts for the fishermen and canoe builders along the beachfronts, the shelters of the working class makaianana. The patterns in which dried plants and lumber were fashioned together could identify caste, skill and trade, profession and wealth.

This design abstracts the prototype of Hawaii native hut by using the diagonal bracing and rib floor panel, which can evoke people's deep impression of native architectural language. Most of the space is grey space, which is the feature of local architectural type.

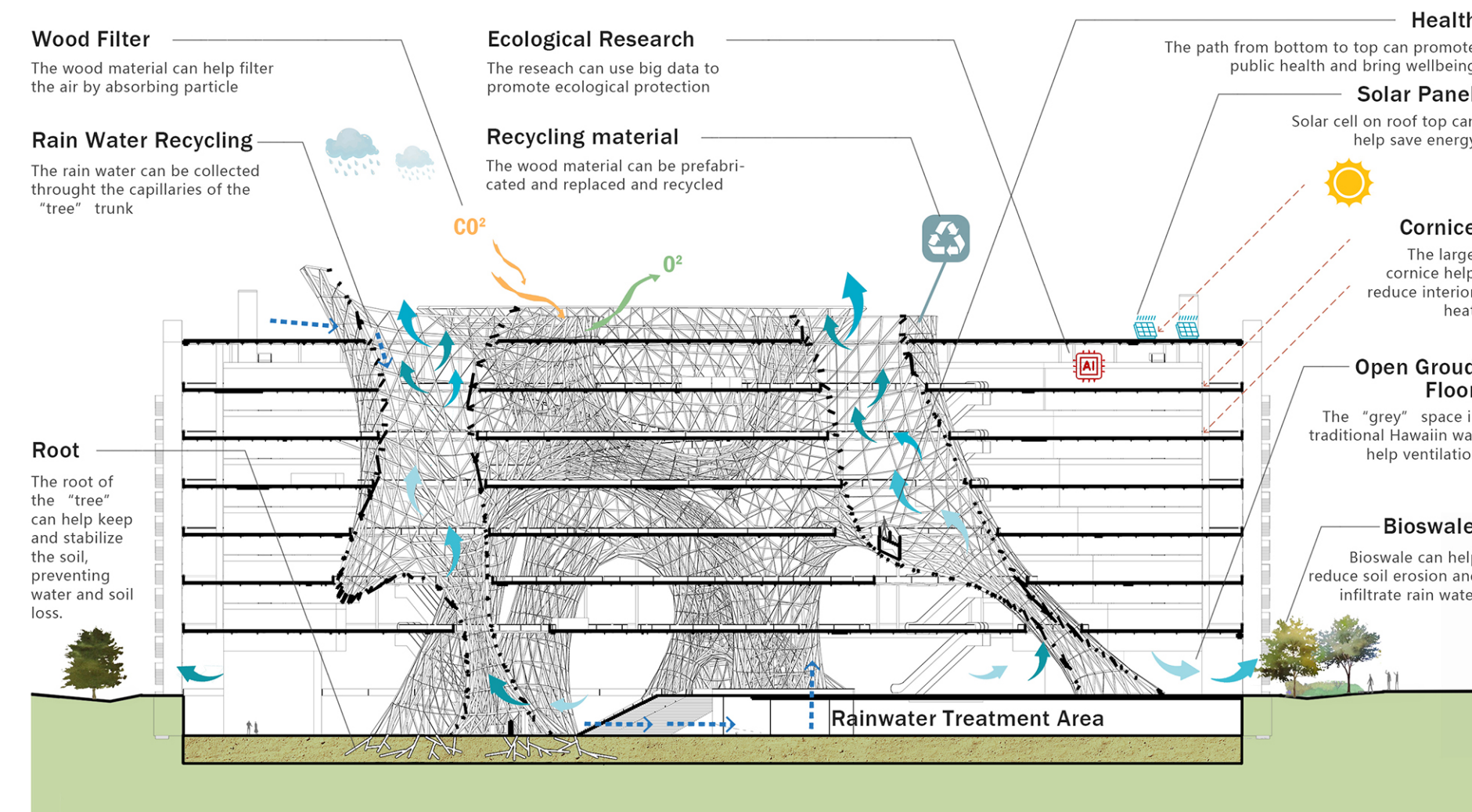


STRATEGIES

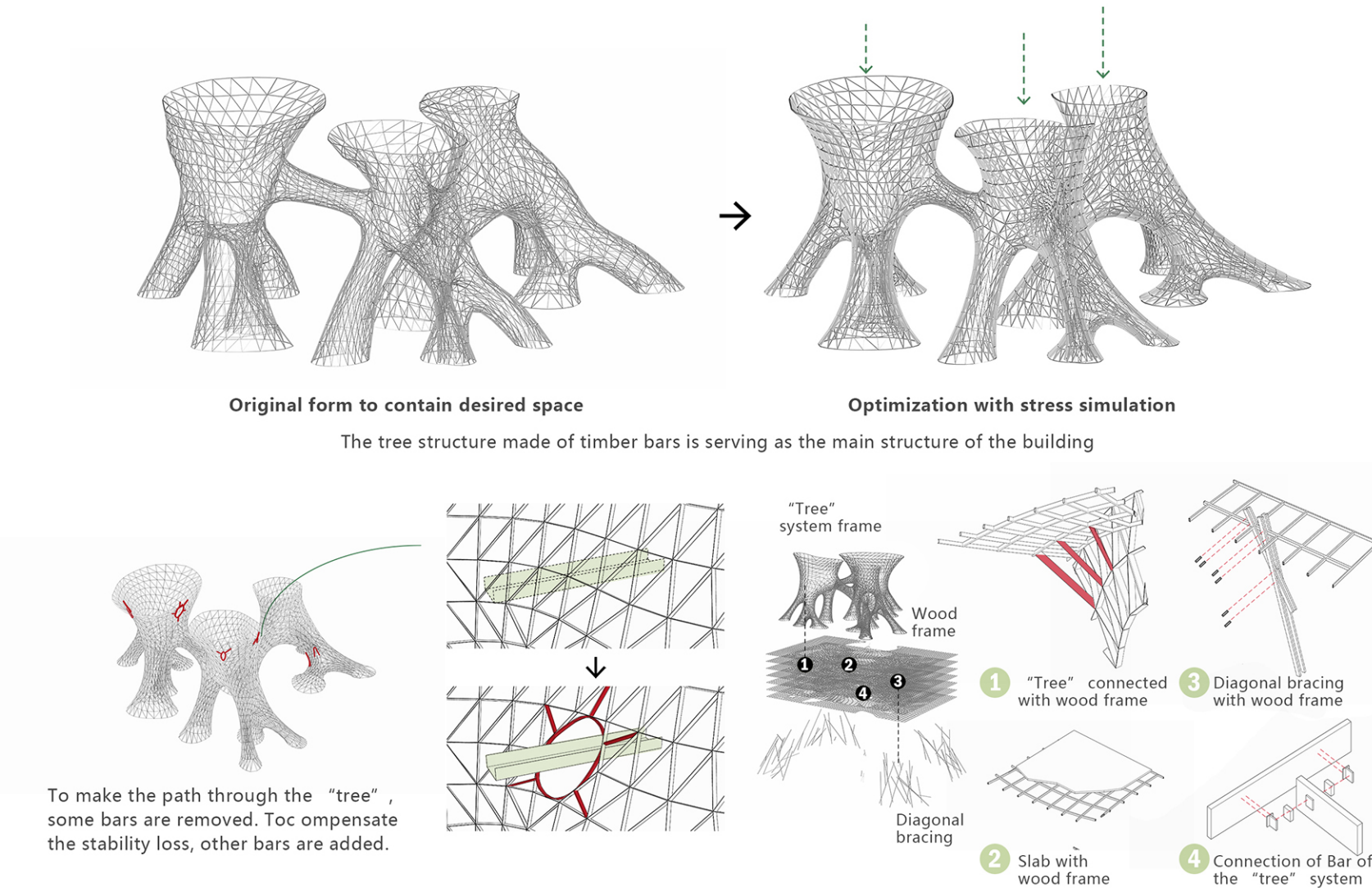
From the entrance, visitors are guided through the little path to experience the exploration of light from the sky, moving from the bottom floor to the top. After getting to the peak, they take the visiting route escalator to visit the exhibition, moving from top floor to the bottom, and finally get to the bottom sunken square.



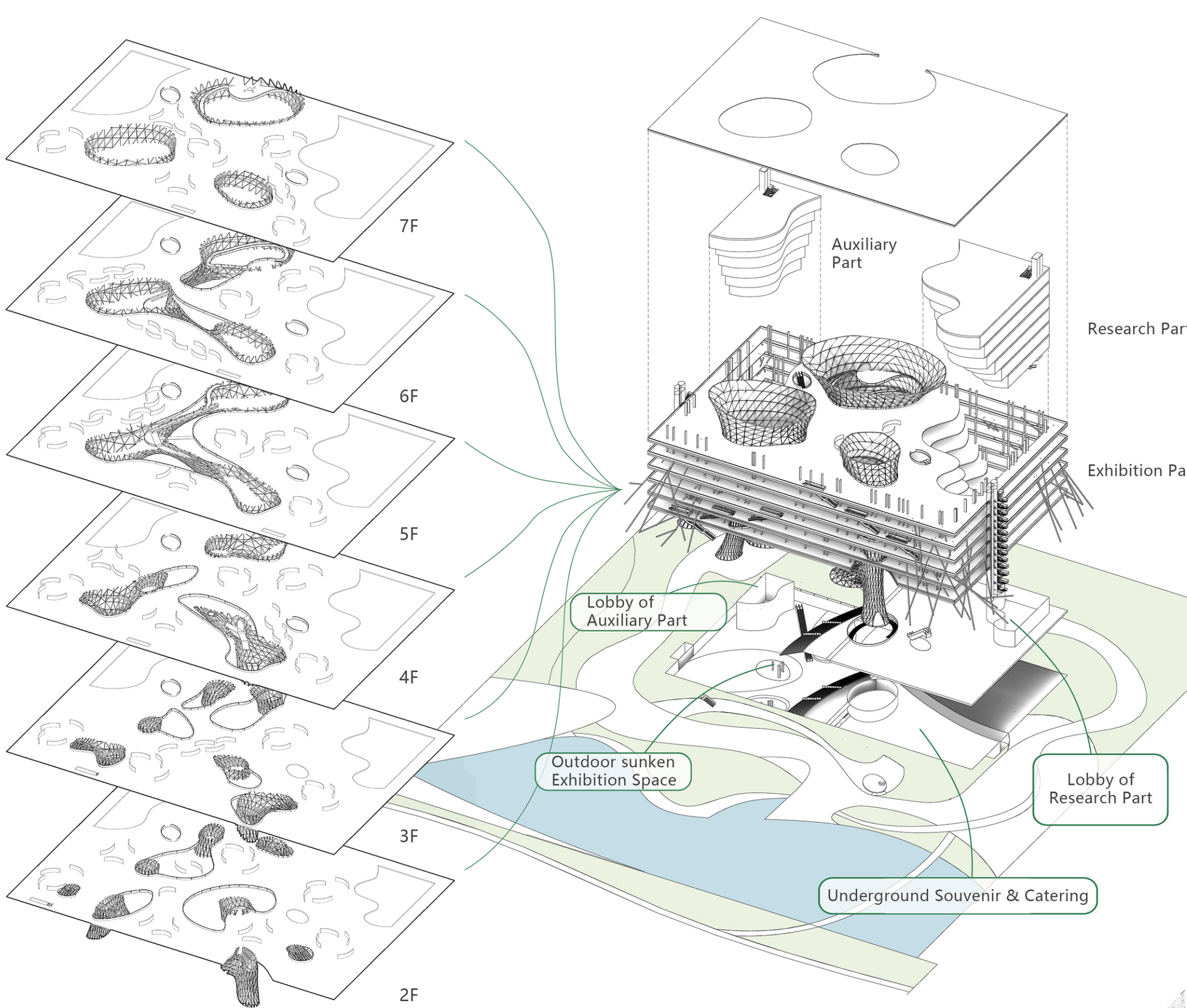
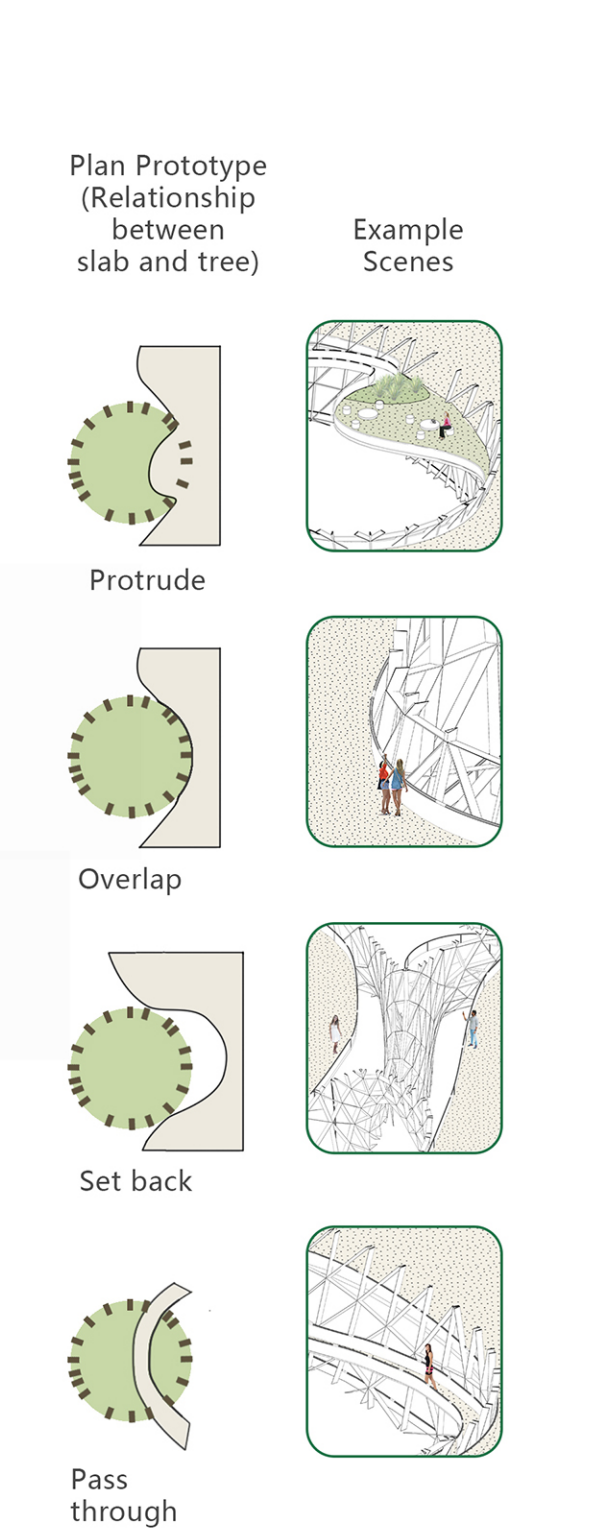
SUSTAINABILITY



TIMBER STRUCTURE



STRATEGIES



Ritual & Exhibition space

Sunken Exhibition Square

Research Communication Space

Activities around The "Tree"

Exhibition space in different levels

Functions