

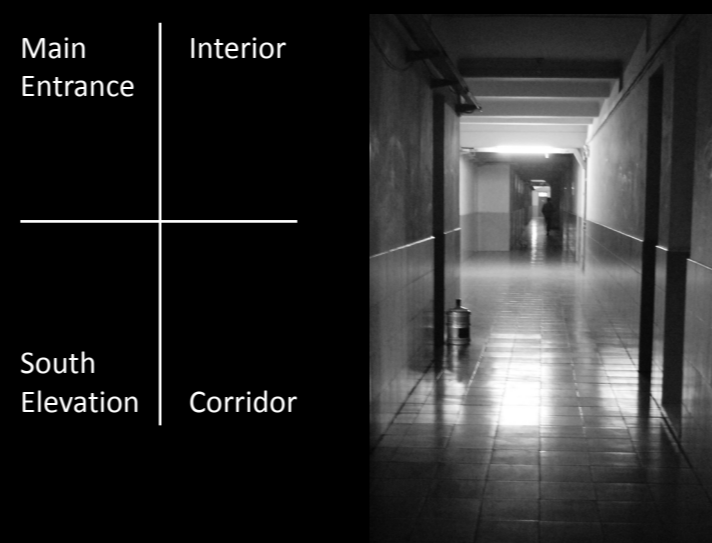
YOUR WORLD, REIMAGINED

Dormitory Renovation, Green Campus

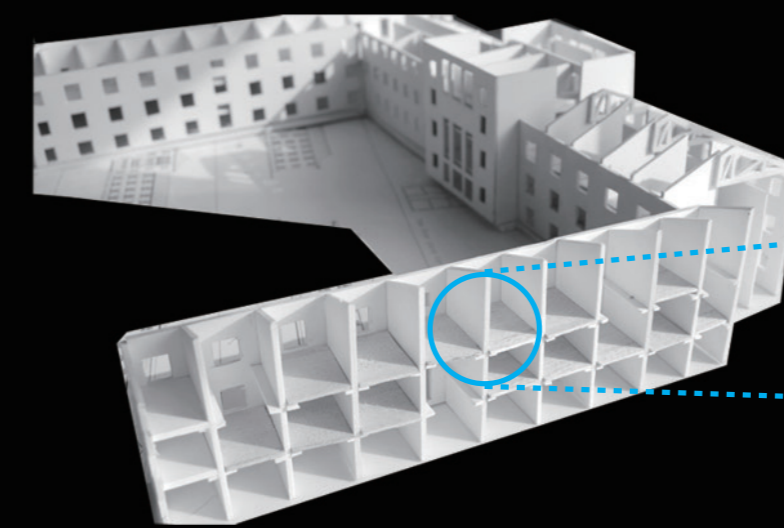
Project Name : Xinanyi Dormitory Renovation
 Site : Siping Campus, Tongji University
 GFA : 11252 Square meters
 Structure : brick-concrete structure



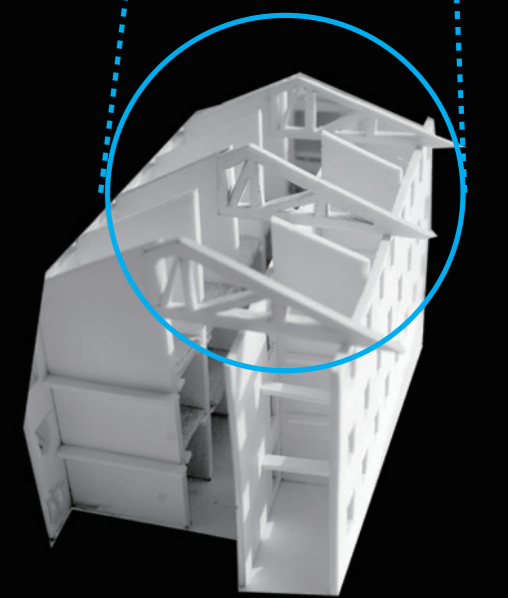
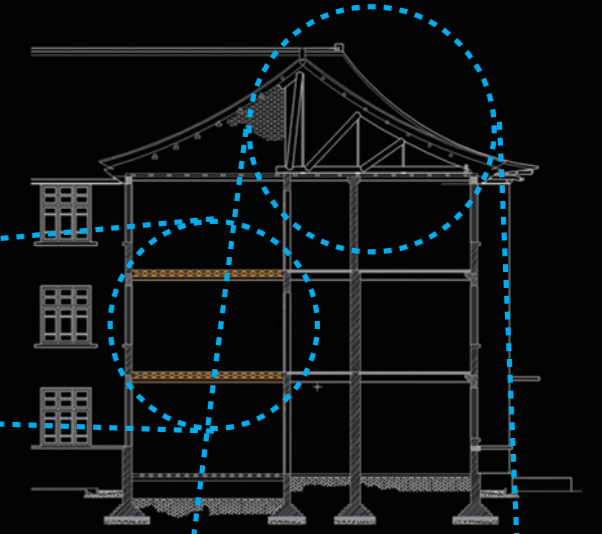
Site map, Tongji Campus, PRC



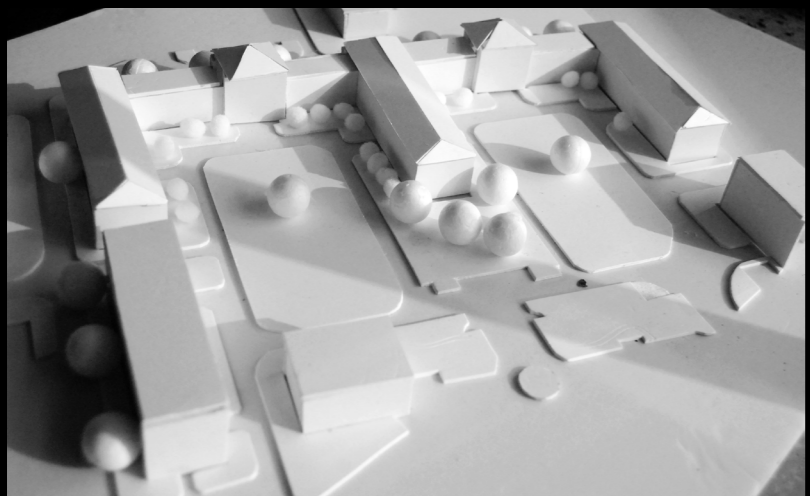
Main Entrance Interior
 South Elevation Corridor



The building is based on brick-concrete structure



The wall is in the material of brick, while the floor and roof is in the material of wood.



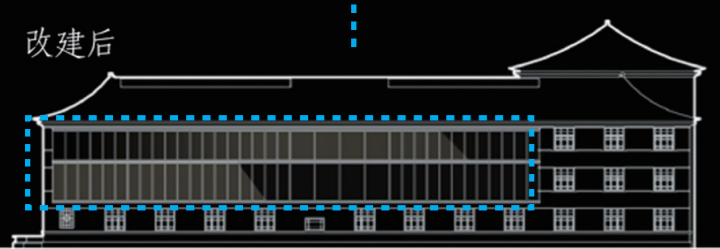
Site Study Model

Project Overview

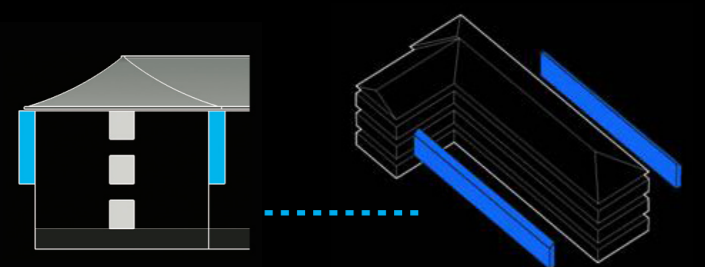
The Xi Nan Yi Dormitory, which was built in 1954 with a GFA of 11,252 square meters, is located in Tongji University campus. It is a brick-concrete building with more than fifty years history. With its outstanding performance on the socialism national style and long history, it belongs to the Outstanding History Protection Architecture of Shanghai City. While it still been used as a student dormitory. The situation seems worse and worse. Fifty years has passed, the quality of this building's criteria of sunlight, ventilation, day lighting is too low, which cannot meet either the need of resident or the standard of modern sustainable criteria. It need to be improved immediately.



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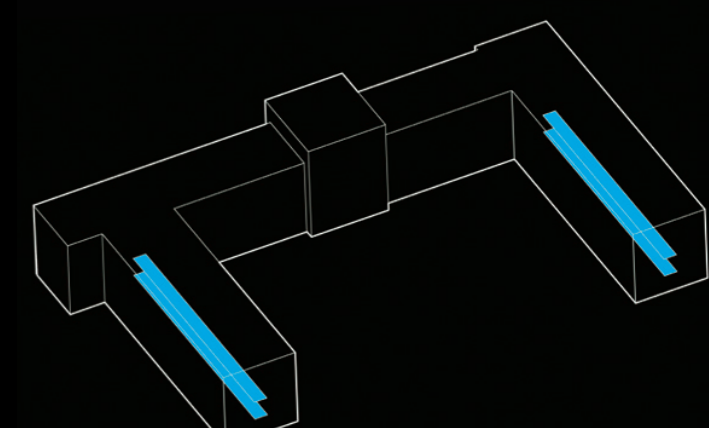
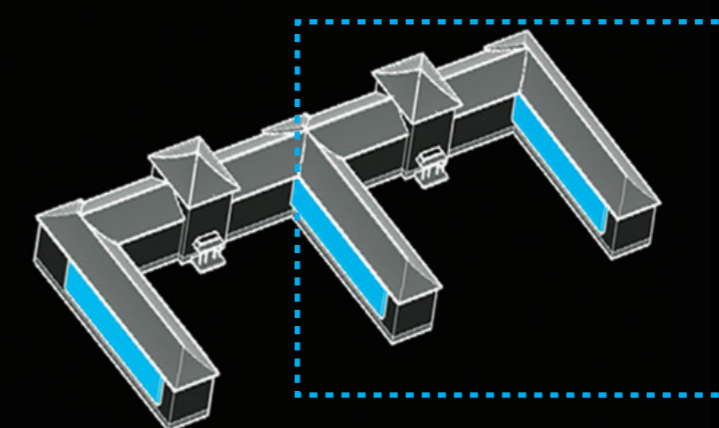


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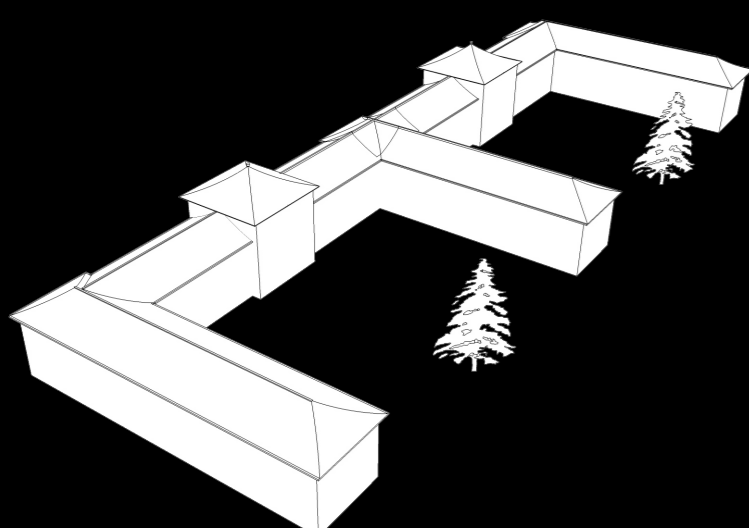
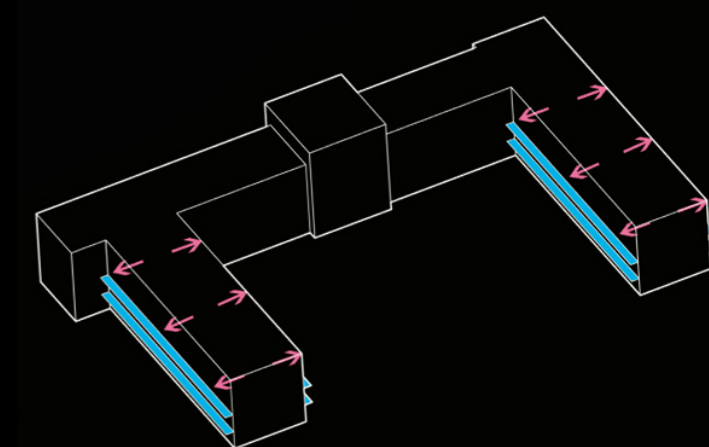
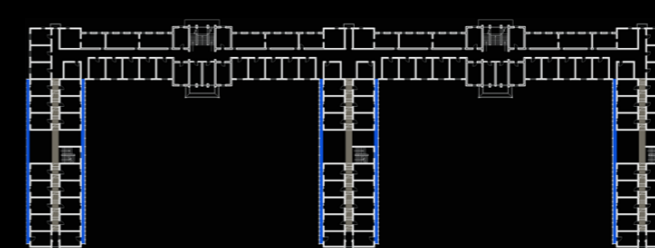


Renovation Strategy

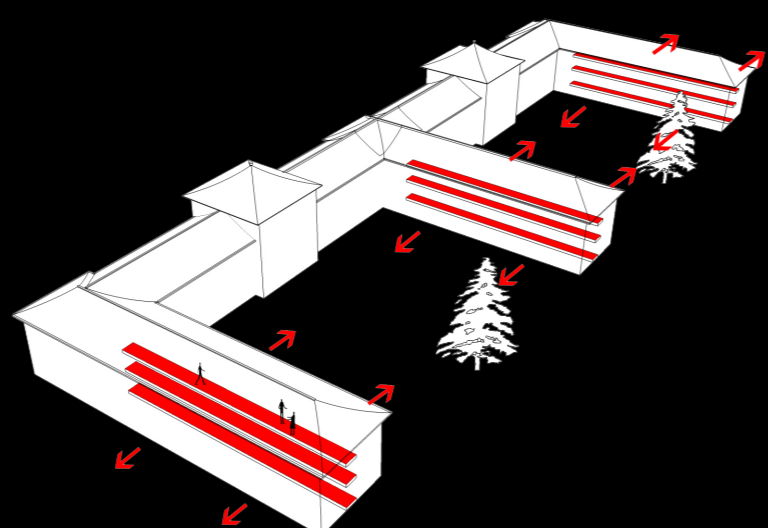
As the building is brick-concrete structure. It is found that the floor is very easy to be removed since it use different materials to build. Changing the original corridor space into a atrium, in this way the interior space will have a sufficient sunlight and can be an enjoyable shared communication space. Adding exterior corridors with glass facade, to have a minimal impact on the original architectural style, while at the same time can improve the environment.



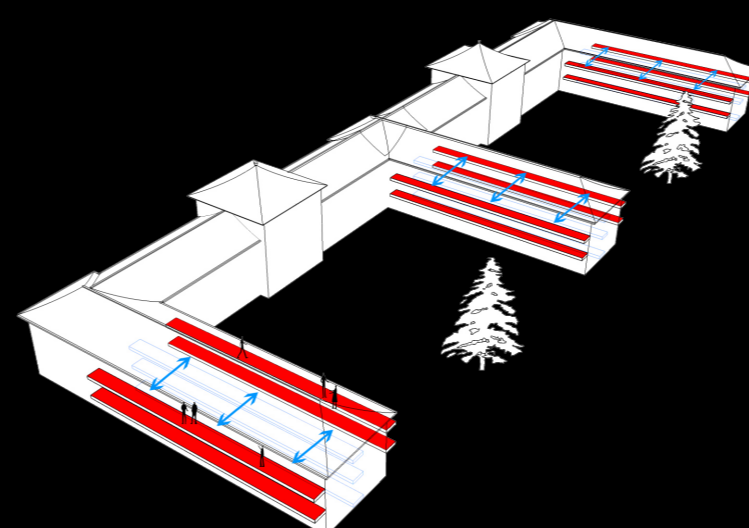
Changing the original corridor space into a atrium, Adding exterior corridors on two facades.



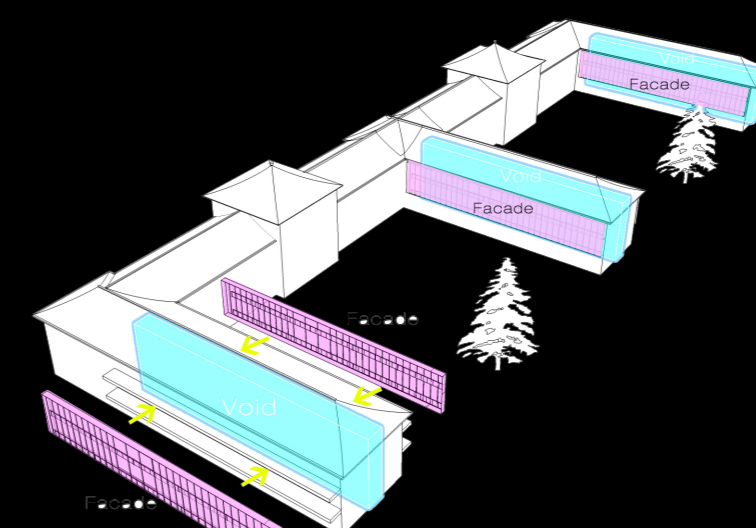
1. The original building has a long history, distinctive style. But fell into aging and disrepair, it can't meet modern accommodation needs



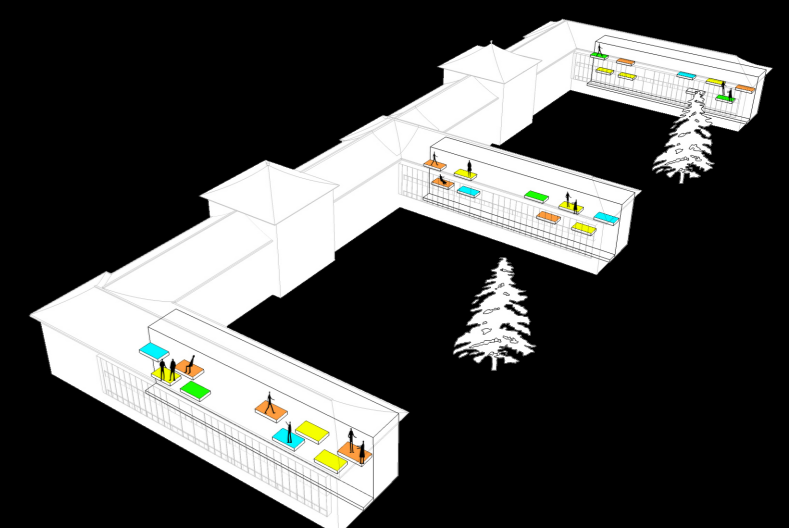
2. Remove the existing corridor, Adding exterior corridors on two facades. It will greatly improve traffic flow lines, as well as the quality of interior space,



3. Hung corridors on the external walls, build light well above corridor space



4. Adding the glass facade, Which will not conflict with the original style.

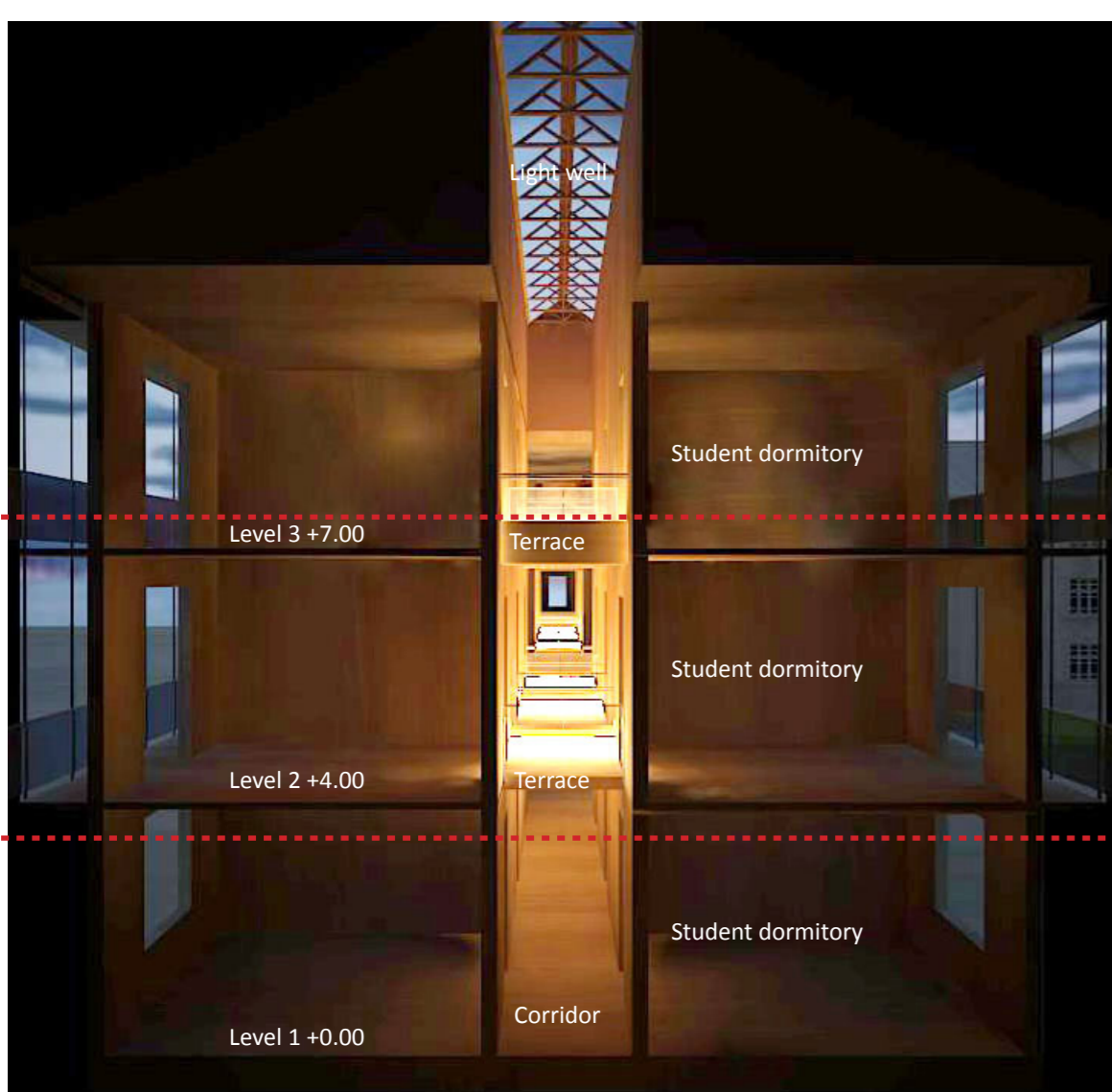


5. The original dark interior corridors become an enjoyable communication space



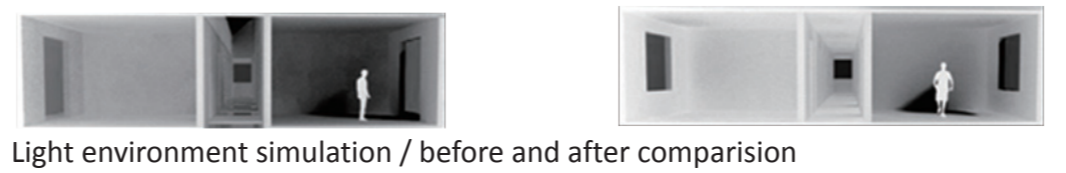
KANG Jian
Dormitory Renovation, Green Campus
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Interior Renovation



Building physical performance compared before and after renovation

Open up the corridor to become a light well will dramatic contribute to the dormitory's environment.



Light environment simulation / before and after comparison



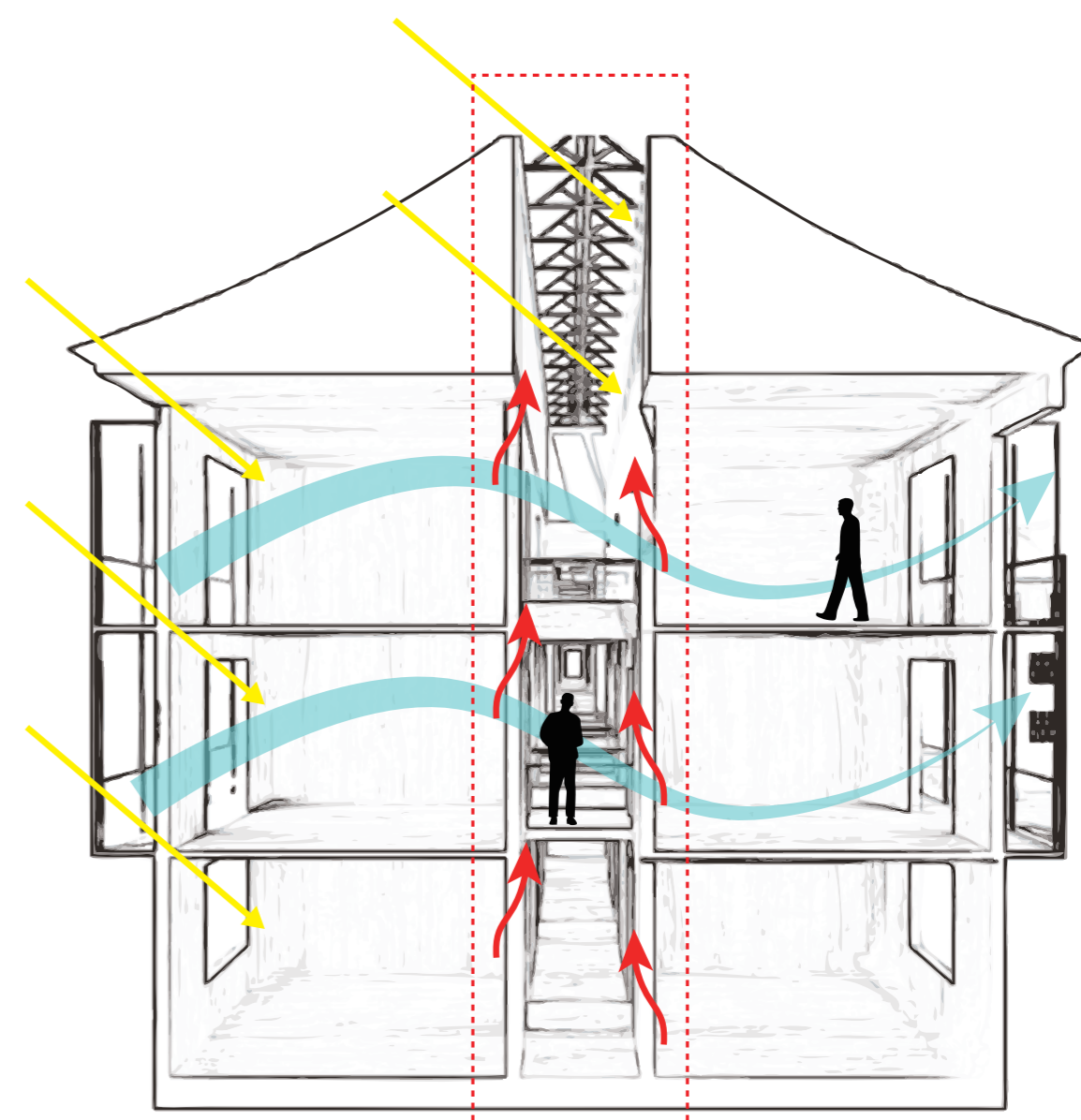
Light curve / before and after comparison



Ventilation / before and after comparison

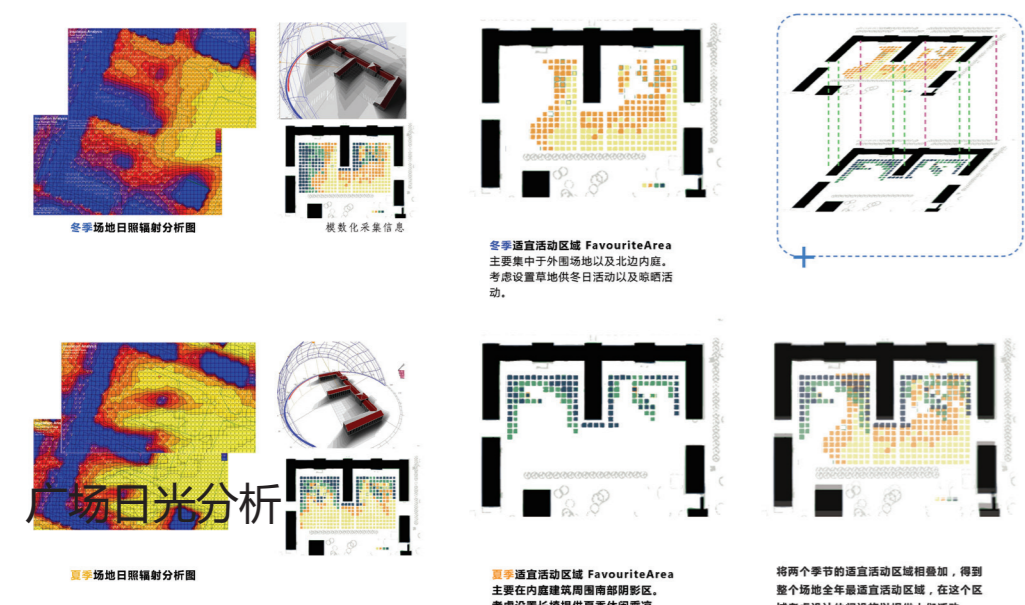


Socail Activities / before and after comparison

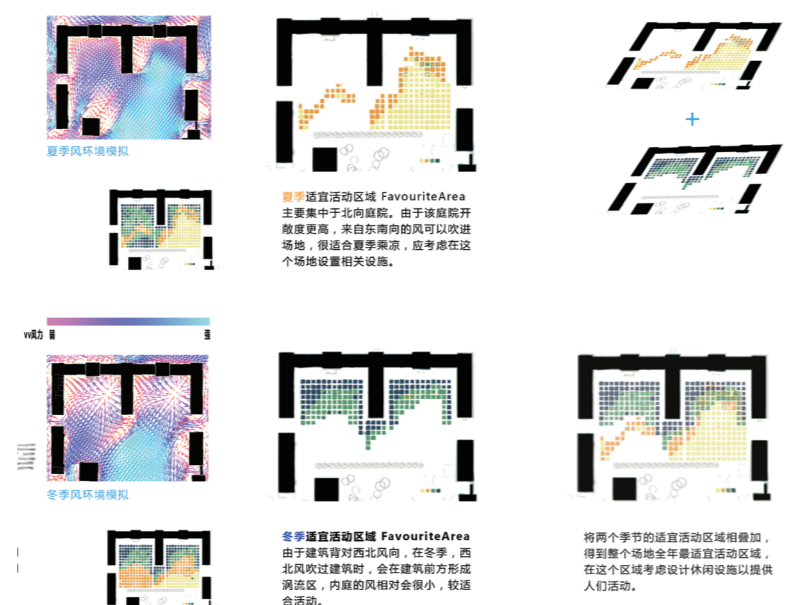


Landscape

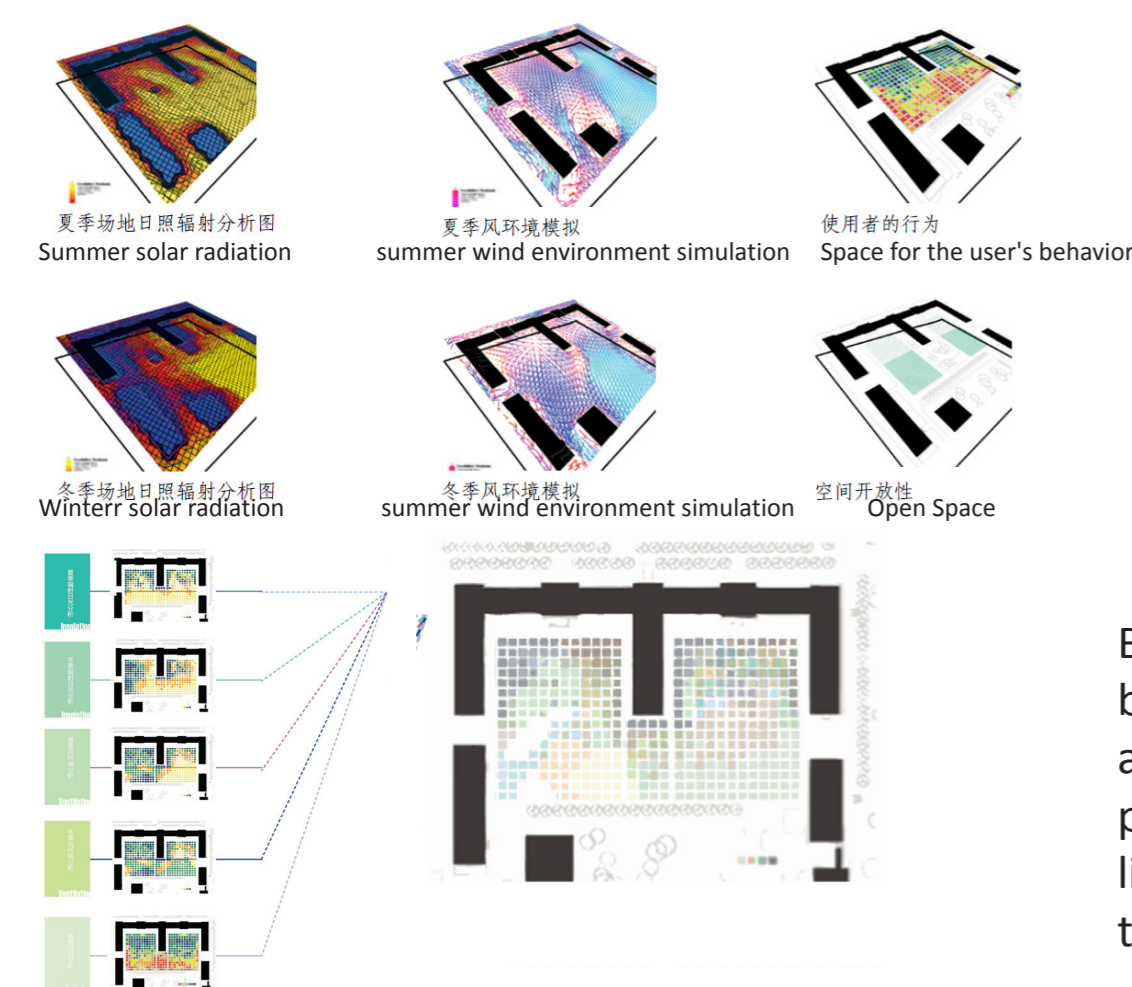
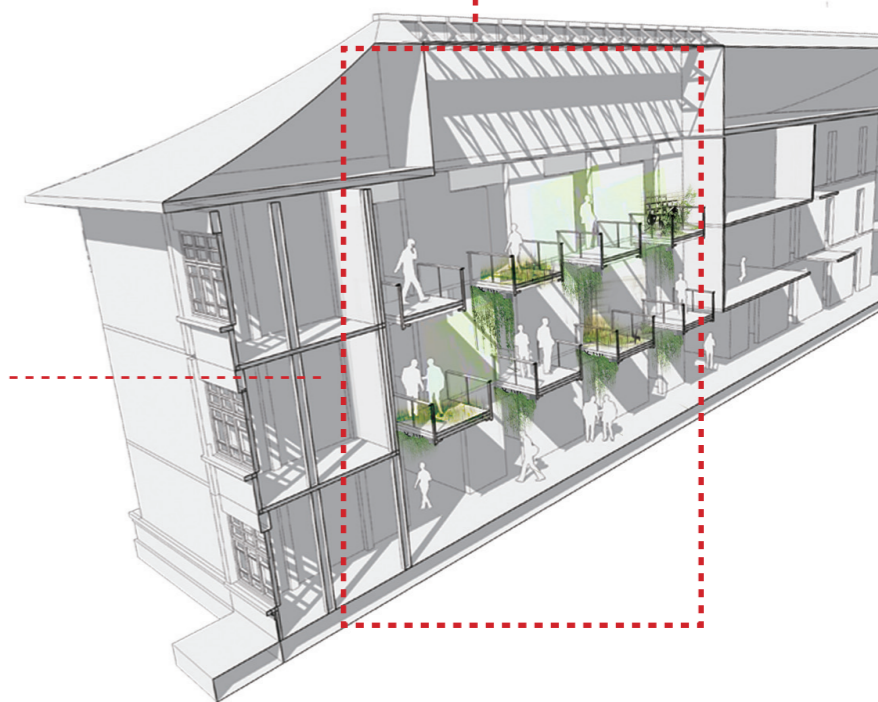
Sun Shine Analysis



Ventilation Analysis



The original buiding is lack of interaction and communication spaces. After renovation, two quarters rooms will share a unit to use as a communication balcony. As they are staggered, they won't cover the atrium's sunlight. but also offer a diversity possibility of communication. Planting greenery in this communication space, change the past monotonous dull feeling of interior space. Combined with the sun well photosynthesis, produce oxygen, purify the indoor air quality.



Based on the above information, to be superimposed on all layers, giving a landscape plan, the landscape process to fully consideration of the lighting, ventilation, construction and transport

Water Reuse



Dormitory unique enclosed space formed two squares, use these two squares collect rainwater of this region, and directly provide the surrounding landscape with irrigation water, form a good utilization cycle.

