Politecnico di Torino

Honors Thesis

Master of Science in Architecture Construction City

Abstract

Future Shan Shui City: water-based solutions for rural and urban prototypes in Lishui, Zhejiang

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Water is the most precious vital source. Water is indispensable for humans: it allows life, it benefits the spirit, it teaches to think, it teaches to be in the world. To understand the evolution of the Chinese reality we can't ignore water; we must start from it, investigate its bond with the Chinese population, understand its importance in the national, political and economic management and finally, analyze the climatic problems and the risk that threaten the present and the future. In fact, no nation can boast such a deep-rooted and indissoluble bond with the water element if not China: on the one hand, water, in Chinese culture, has been object of veneration to be observed, contemplated, and respected in order to achieve the balance between man and nature; on the other hand, it has been exploited beyond all limits, causing scarcity of water resources, pollution and damage to the environment and man. Today we have an increasingly anthropocentric vision of nature: man has exploited and shaped the natural environment according to his needs and ambitions, implementing interventions that have benefited the supply but have devastated the natural context, moving away from those ideals of respect and reverence. Water-related problems are pressing issues and ever new challenges that China must face to solve the crisis in which it pours. Inappropriate management of the water system is a limiting factor for China's sustainable development and, certainly, an increasingly serious wake-up call for the future.

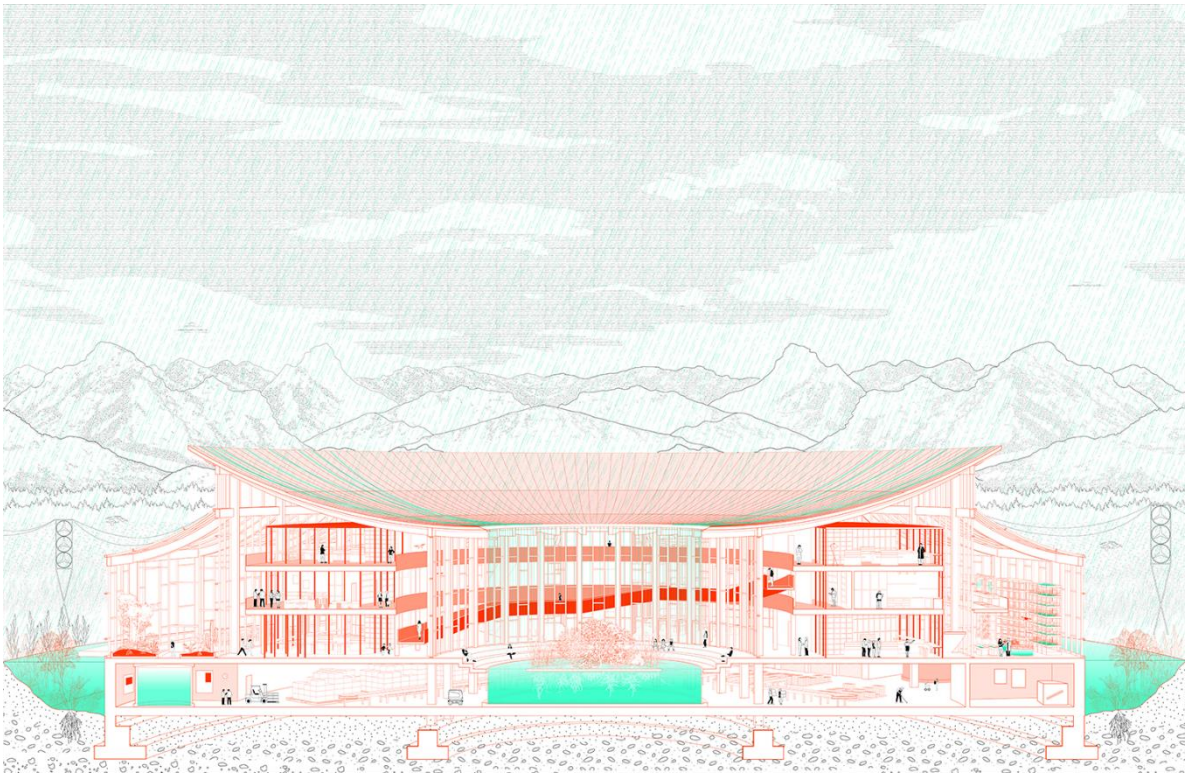
This thesis project contributes to the reflection of the Future Shan Shui City, as models of sustainable urban development that want to restore that ideal balance between man and nature, which has as its main purpose the protection of the ecology of water and mountain and a new urban awareness of the landscape.

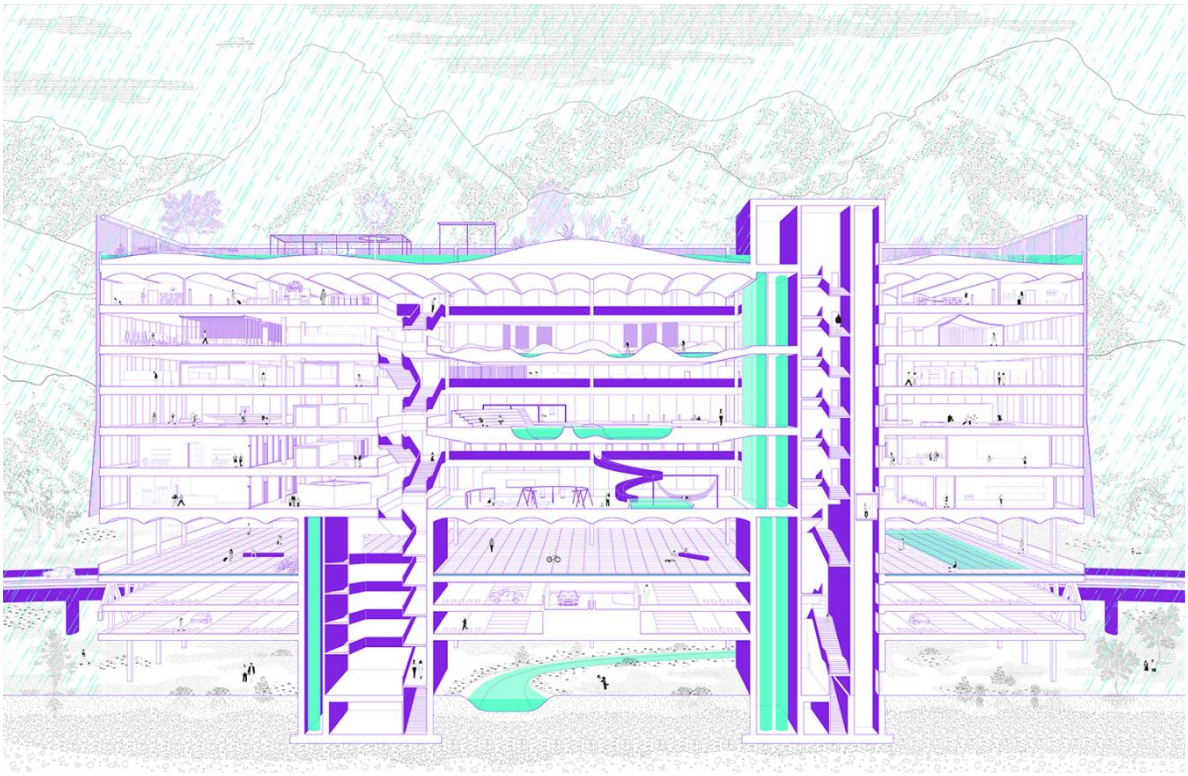
The research is part of the context of the international competition "Future Shan-Shui City: Dwellings in Lishui mountain" launched in 2020 by the Government and set in Lishui, Zhejiang Province. The aim is to define specific solutions for the Chinese cities of the future, starting from the Shan-Shui tradition to achieve sustainable urban development. The Polytechnic of Turin, together with the South China University of Technology, won third place with the proposal "Prosperous Lishui. One valley, three landscapes", which identifies two faces of the city: rural in the valley and urban close to the mountains. These two aspects are considered within the thesis as two different ways of using and managing the water element, that is permanent and productive on the rural side and temporary and for leisure on the urban side. The project involves the design of two prototypes of public buildings that constantly relate to water with the aim of managing risk and restoring human-nature relation.

In the first two chapters water is investigated through cultural and territorial analyses that shows its importance from a spiritual point of view and the close contact that the Chinese people have established with it, and its relation with the urban context exploring it both as resource and risk.

These analyses have led to the creation of spaces capable of managing water resources in unfavourable climatic situations and, at the same time, to restore the proximity and harmony between humans and the natural elements of the Chinese landscape. The proposal of architectural solutions that use risk management to generate resilient public spaces wants to be a starting point to trigger a reflection

on the development of the Shan Shui city. Finding conscious methods of action that start from the awareness of the landscape and its ecological value represents the main challenge for a near future in which man and nature coexist in harmony.





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