



Country / City China

University / School Southwest Jiaotong University

Academic year 2019-2020

Title of the project Renewal of Shanhaiguan Ancient City Community under Climate Change

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TECHNICAL DOSSIER

Title of the project	Renewal of Shanhaiguan Ancient City Community under Climate Change
Authors	Yuqian Tang ; Qiu Li ; Shuman Deng
Title of the course	Landscape Design
Academic year	2019-2020
Teaching Staff	Sixiang Zhou ; Ya Fu
Department/Section/Program of belonging	School of Architecture and Design
University/School	Southwest Jiaotong University



Written statement, short description of the project in English, no more than 250 words

This project is located in the famous ancient city "Shanhaiguan" in Qinhuangdao City, Hebei Province, China. Shanhaiguan has retained most of the historical monuments. It is one of the few cities in China that still retains the ancient city walls.

Under the rapid changes in the global climate, a series of problems such as a decline in tourism rates, weakened cultural awareness, and economic depression have occurred in the affected ancient cities. The project focuses on solving a series of social problems caused by climate change, retains its cultural heritage, and fully promotes the identity of the site as a "Millennium Ancient City". Based on the investigation and analysis of the site, the project creates four categories of "cultural fields", including "Core Cultural Field", "Historical Cultural Field", "Social Cultural Field", and "Activation-Needed" Culture Field.

The project proposed different detailed solution for different types of cultural fields to enable the entire site to reach a "live balance". What the project want to do is, let culture participate in life and inherit it by using it, meanwhile, let the old city have the ability to cope and renew itself in the face of external climate change.

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CLIMATE CHANGE AGAIN

11th International Biennial Landscape Barcelona

Barcelona September 2020
SCHOOL PRIZE



Renewal of Shanhaiguan Ancient City Community under Climate Change

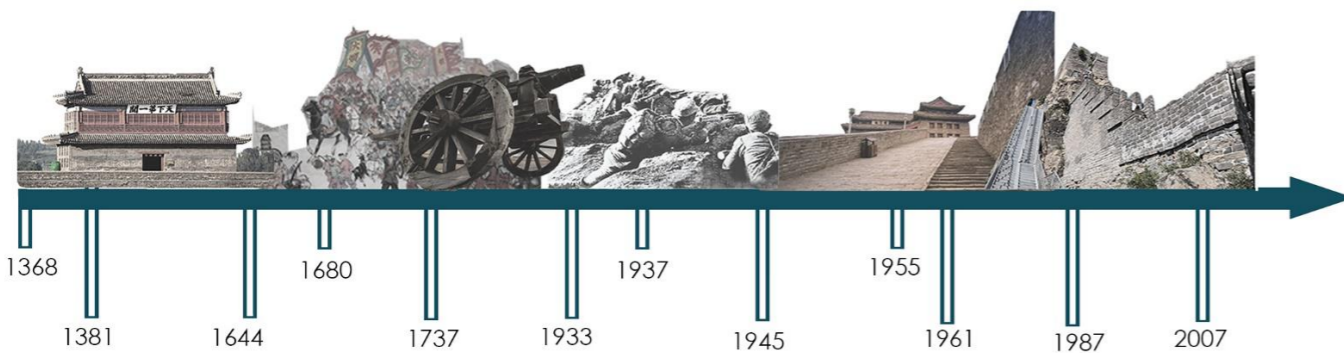
District Analysis

Shanhaiguan is located in Qinhuangdao City, Hebei Province, China. To the west is Beijing, and to the east is the Bohai Sea. Shanhaiguan is mainly composed of the ancient city, the Great Wall, and the old Longtou Bay. The layout of the streets in the ancient city originated from the Ming and Qing Dynasties.

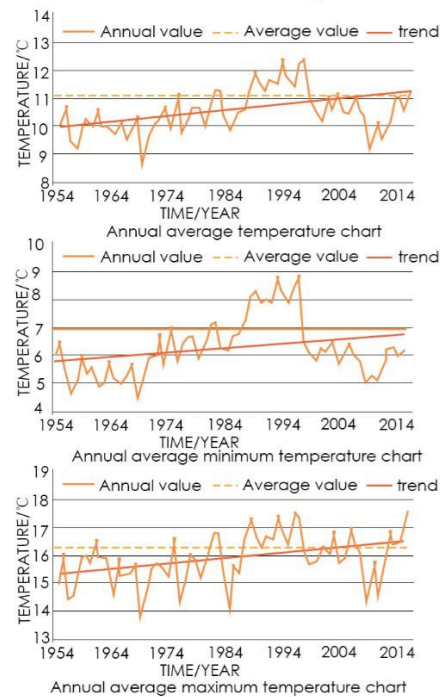


Historical Analysis

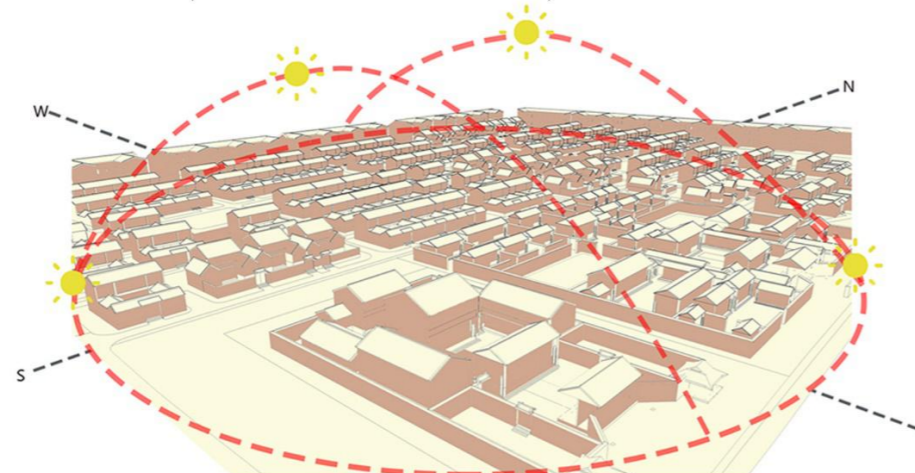
Shanhaiguan is an ancient cultural city with a long history and one of the representatives of the world cultural heritage, the great wall of China. Shanhaiguan has experienced more than 600 years of history since its establishment, and every historical event in the past 600 years has made today's Shanhaiguan.



Climate Analysis



In the past few decades, the annual average temperature of Shanhaiguan, the annual minimum temperature and the maximum temperature have fluctuated greatly, but overall they have shown an increasing trend. Climate change will have a bad impact on the lives of ancient city residents.



Problem Analysis

Weak infrastructure and poor living

Because the economy of the ancient city of Shanhaiguan is depression, its infrastructure cannot meet the needs of people in contemporary society.



Many fire hazards

The ancient city of Shanhaiguan is mostly wooden buildings, and the roadways are narrow, and there is a phenomenon of disorderly construction, leaving many hidden safety hazards.



Lack of greenery

There are few green areas in the ancient city. The planning of the ancient city pays more attention to the change of the architectural form, and the consideration of greening is insufficient.



The relocation of residents caused the ancient

The poor living conditions have caused many local people to move away from the ancient city. Most of the people who are staying in the ancient city are elderly people.



General plan



Fight against climate change

HUMAN & OBJECTS



CULTURAL FIELD



HUMAN & HISTORY



SOCIAL SECURITY MECHANISM



HUMAN & HUMAN



Internal Equilibrium of living heritage

"Activation-Needed" Culture

Infrastructure improvement: Highway improvement, Power supply, Water supply, Building, Ecological cycle.

Attract People to Enter: Landscape interaction, Intelligent landscape, Wayfinding.

Shared Space Creation: The plant is used as soft boundaries to create public space for inside&outside people; Combine modern sketches with traditional buildings to form a impact; Guarantee rest seats and privacy space.

Humanistic Care: Medical, Exercise&Barrier free, Wellness landscape, Mutual help landscape.

Social Culture Field

The Shared Space: Highway improvement, Power supply, Public space; Waste recycling, Increase green area, Green Building; Activity Center, Exercise, Horticulture.

Dynamic Build: New villagers, Residents Lifestyle integration; Community assessment by group, Harmony; Enrich cultural life; Residents are close to tourists.

Service Improvement: Set up a smart group to collect ideas; Implement Beautiful home; Obtain knowledge; Increase employment opportunities.

Live in a Friendly place: Barrier free, Transportation Facilities, Culture Facilities; Intelligent community, Democratic decision, Education; Wellness landscape, Regular free clinic, Medicine popularization.



Historical Cultural Field

Place Space Formation: Building reconstruction, District Space, District Space; Microspace update, Courtyard space, Texture integration.

The Continuation Of the Historical Context: Culture line, Function update, Wellness landscape.

Scene Building: Timing landscape, Landmark, Sense landscape.

Core Culture Field

"Three-dimensional" Interface Transformation: Top interface extension, Gray space, bottom space division.

Street Space Creation: Core node prominent, District Space, Improve the microclimate.

Crowd Communication Space: Enrich children's space, Residents square, Ecologicalization of places.

Linkage of Activities Within The City: Local foreign business is booming; Tourist activities are abundant in tourist seasons; The two are merged and intertwined most closely in the core cultural field; Residents are rich in activities during the festival; Rural businesses such as antiques and old things.

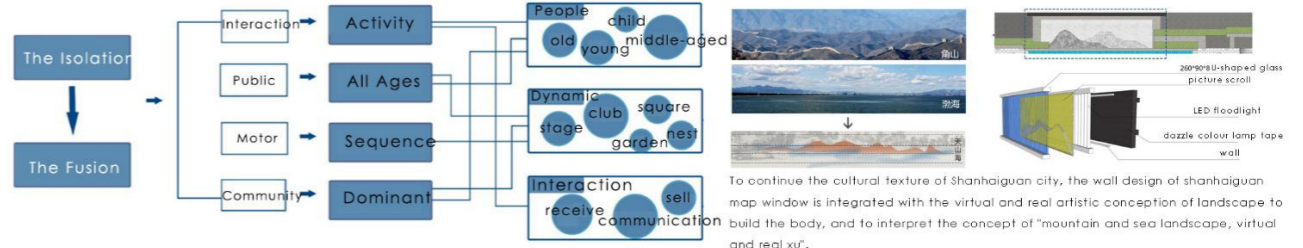
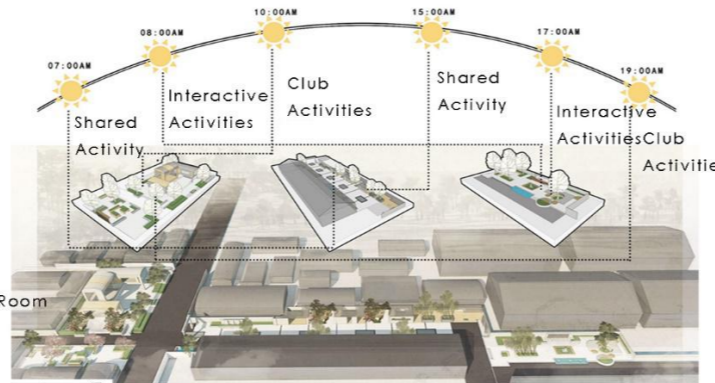


- Residential
- Commercial and business facilities
- Cultural
- Ancient artifacts
- Educational land
- Public space
- Active factor of living heritage
- Core Culture Field
- Historical Cultural Field
- Social Culture Field
- "Activation-Needed" Culture Field

Activity Center



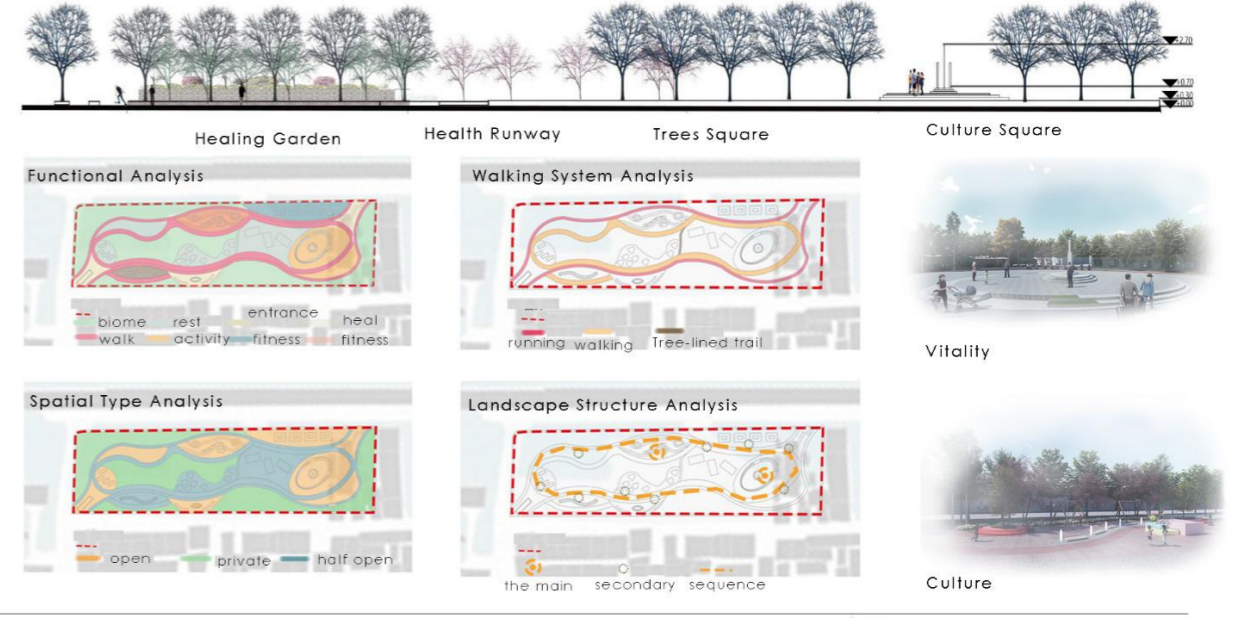
The site creates a public space for residents to have activities in the relatively intensive street space. Considering the cold winter climate of Shanhaiguan, the design inspiration is extracted from the traditional roof building to create a multi-functional community activity hall integrating the indoor space and outdoor space.



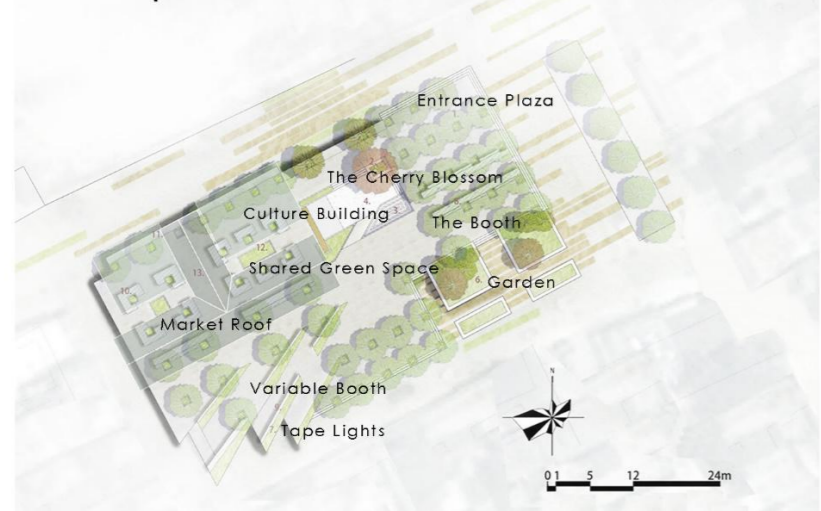
Shan Hai Park



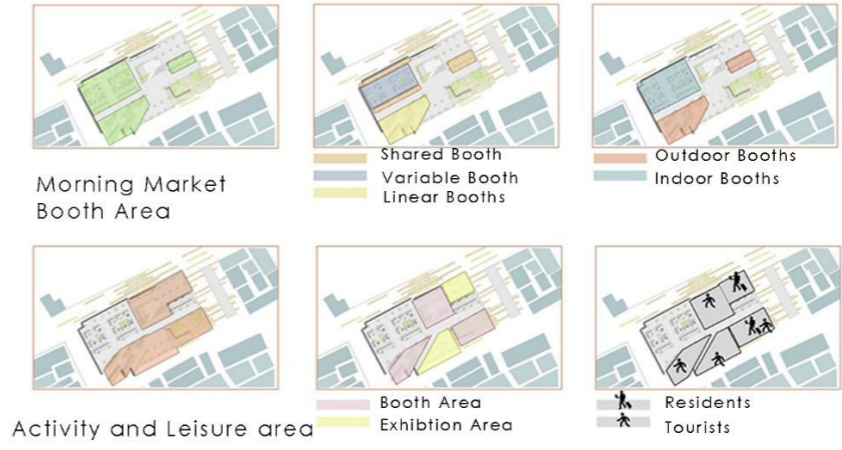
The design meets the needs of ancient city residents and tourists through improving functions, infrastructure and landscape space. In addition, the design integrates Shanhaiguan's culture into the site, and then forms a cultural field corresponding to the function and culture. Cultural Park, Vitality Park and Sunset Park tell the story of the ancient



Antique Market



Due to the large number of elderly people and children in the site, the height difference was not treated too much, but only changed appropriately on the basis of the original height difference. The site boundary and stage area were also treated in the form of slope release.



On the basis of the original market through the permutation combination and the injection of design elements to form a more orderly market to deal with extreme weather.

