

BOOKLET OF CHONGQING CHANGBIN ROAD WATERFRONT RESEARCH AND REGENERATION

STRADA DEL CHANGBIN DI CHONGQING Ricerca waterfront e rigenerazione

POLITECNICO DI MILANO

SCHOOL OF ARCHITECTURE URBAN PLANNING CONSTRUCTION ENGINEERING

MASTER OF SCIENCE IN SUSTAINABLE ARCHITECTURE AND LANDSCAPE DESIGN A.A. 2018-2019 SupervisorProf. Stefano StabiliniCo-SupervisorProf. Alice Selene Boni

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KEY WORDS (ITALIAN)

RIGENERAZIONE DI WATERFRONT, STORICO PORT CITY, RICERCA UTENTE, CITTÀ MONTAGNA



ABSTRACT (ITALIAN)

Il lungomare della penisola di Yuzhong a Chongging era stato a lungo il confine del centro città. Era stata la zona portuale fin dall'antica Cina, tuttavia oggi il trasporto dell'acqua è stato sostituito dal trasporto su strada. Da guando la città è cresciuta, il traffico intenso per il centro città è condiviso da Changbin Road ed è stato trasformato in una strada principale. Tuttavia, la topografia montana, lo spazio pubblico sottosviluppato e lo squilibrio tra grattacieli da un lato e area di waterfront di livello inferiore, riducono l'accessibilità, la pubblicità e l'utilizzo dello spazio sul lungomare. Secondo la nostra ricerca sul campo, l'area del lungomare è ora in parte affollata di turisti, commercianti e lavoratori del settore dei trasporti, compresi i facchini, che è stata gentilmente chiamata bangbang dalle persone di Chongging. Attualmente, il conflitto tra residenti nelle vicinanze della comunità e lavoratori e uomini d'affari si protende verso i lavoratori. Poiché il governo ha pianificato di spostare in parte il luogo di lavoro per i lavoratori fino alla periferia della zona urbana principale, c'è la possibilità di sviluppare l'area del lungomare in uno spazio pubblico ricreativo per i residenti e uno spazio di esperienza naturalistica

per osservare la città montana. Il progetto conclude una visione del waterfront per una migliore connessione con il centro città e una continua accessibilità sul lungomare con i mezzi pubblici e una serie di punti di attrazione. Lo spazio limitato sul lungomare è diviso in nove zone in base all'accessibilità e alla funzione vicina. Il progetto propone un'estensione del collegamento esistente con il centro città nell'area del waterfront, utilizzando scale e ascensori per collegarsi tra Changbin Road e l'area del lungomare a un livello inferiore di 15 metri. Nove zone sono suddivise in quattro temi con la vita della città, la cultura, lo sport e la natura. Ogni zona fornisce un supplemento per lo spazio pubblico e l'infrastruttura per tutti gli utenti. Le aggiunte sfruttano l'altezza del muro di contenimento, creano nuove terrazze o piattaforme a struttura leggera per variare lo spazio lineare lungo. La serie collega una serie di nodi che segnano la connessione con il centro città. Il lungomare è un supplemento di spazio pubblico per il denso centro città e un nuovo margine tra spazio artificiale e natura. Trasforma anche l'antica area del waterfront del porto in uno spazio pubblico partecipato.

KEY WORDS (ENGLISH)

REGENERATION OF WATERFRONT, MOUNTAINOUS CITY, USER RESEARCH, HISTORICAL PORT CITY

ABSTRACT

ABSTRACT (ENGLISH)

The waterfront of Yuzhong Peninsula in Chongqing had long been the boundary of the city center. It had been port area since ancient China, however the water transportation has been replaced by road transportation nowadays. Since city expanded, the heavy traffic flow for city center is shared by Changbin Road and it has been turned into a main-road. However, the mountain topography, underdeveloped public space, and the imbalance between highrise buildings on one side and vacant lower level waterfront area, decrease the accessibility, publicity and usage for the waterfront space. According to our field research, the waterfront area is now partly crowded with tourists, retail and transportation business workers, including porters, who is kindly called bangbang by Chongging people. Currently, the conflict between nearby community residents and workers and businessmen lean towards the workers. As the government has planned to partly move the working place for workers to outskirt of main urban zone, there is a potential to develop the waterfront area into a recreational public space for residents, and a nature-experience space to

observe the mountainous city. The project concludes a waterfront vision for better connection with city center, and a continuous accessibility on waterfront area by public transportation, and a series of attraction points. The limited waterfront space is divided into nine zones according to accessibility and nearby function. The project proposes an extension of existing connection with city center into waterfront area, using stairs and elevators to connect between Changbin Road and the waterfront area on 15-meter lower level. Nine zones are divided into four themes with city life, culture, sport, and nature. Each zone provides supplement for public space and infrastructure for all users. The additions take use of the height of the retaining wall, create some new terraces or light-structure platforms to vary the long linear space. The series connects a series of nodes that mark the connection with city center. The waterfront is a supplement of public space for dense city center, and a new margin between artificial space and nature. It also transforms the ancient port waterfront area into a public participated space.

WORKING CONTEXT

The metropolitan cities in China with booming development of urban construction are now facing the problem of losing their own identity. The central city is with the same kind of skyscrapers, and this may result in the loss of sense of belonging for the inhabitants. On the other hand, the city loses its connection to its history and tradition, and so is the waterfront. Lots of waterfront cities in China has a long history of human activities in waterfront area, however nowadays they seem to lose their identity. We choose a disordered waterfront area in the city center of the largest city in southwestern China, with a mountainous topography environment, to understand its potential and role in the city, and try to figure out its indispensable future vision. Urban design creates new relation between metropolitan city, history and nature, while we also try to involve the sociological view to create a feasible plan for the inhabitants. The project thus would be a comprehensive urban design trial in fields both physical scale and social scale.

WORKING CONTEXT

OBJECTIVE

Waterfront

The objective we want to research is the waterfront area involved in city development. We choose a disordered waterfront area in the city center of the largest city in southwestern China, with a mountainous topography environment, to understand its potential and role in the city, and try to figure out its indispensable future vision. The coastline is the boundary between human and nature. The waterfront was port or factories in many cases, but now there could be a new way of using water front space. Thus, we want to find out the actual need of inhabitants in the city and combine their need in a natural context and using this way to provide a new kind of public space. With the development of city, the function of waterfront changed, it has often been about industry or infrastructure port areas developed in between the city and its waterfront, creating segregated spaces which didn't allow citizens to freely enjoy them.

Waterfront of Yuzhong Peninsula in Montainous City Chongqing, China

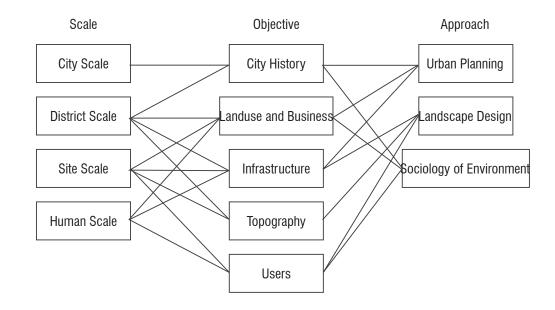
We choose our hometown as site to have a more sensible understanding of the city and a deep knowledge of the local lifestyle and culture. Yuzhong Peninsula is the city center of Chongqing, one of the cities manipulated directly under the Central Government. It has long been the port area since ancient times, with booming commercial activities, laying at the foot of the mountainous city.

PROBLEM

The metropolitan cities in China with booming development of urban construction are now facing the problem of losing their own identity. The central city is with the same kind of skyscrapers, and this may result in the loss of sense of belonging for the inhabitants. On the other hand, the city loses its connection to its history and tradition, and so is the waterfront. Lots of waterfront cities in China has a long history of human activities in waterfront area, however nowadays they seem to lose their identity. The waterfront area in Yuzhong District is near city center, however it is not fascinating both to inhabitants and tourists. The area is seemed to be undeveloped, that its transportation role is more important than its historical role or cultural meaning. After field research, we found that there are many other problems lies in transportation, function, sanitary and safety. It is a problem mainly of public space in landscape scale. Water is the historical and ecological symbol of Chongqing. The waterfront space thus could be a media, relating the public life style with the cultural memories of water, and providing a sustainable urban waterfront public space with entertainment, leisure, memory inside the metropolitan city. The new space should link with the city history and the need of the urban development.

METHODOLOGY

Urban design creates new relation between metropolitan city, history and nature, while we also try to involve the sociological view to create a feasible plan for the inhabitants, and use landscape design to develop the project. The project thus would be a comprehensive urban design trial in fields both physical scale and social scale.



WORK ACTIVITIES

Our work is divided into 3 phases:

In the first phase, we interpreted the urban context and defined current scenario. We studied the morphology and found out the main features of the landscape. Using analysis of field work, visual, desk, documents, historic, data, analysis, we can visualize in proper scale how human-nature transition can be observed. Selecting the relevant issues relate to the project. A field research was undertaken from 27th March to 1st April in 2018, to have a direct observation of the environment and people. We also visited Chongqing City Planning Exhibition Hall to study the planning for the area from Chongqing Department of City Planning. From user's point, we took pictures, shot videos and interview the local, to understand the cultural background of the living habit in the mountain city, and to find out the desperate need of the people in the site.

The second phase is to find out the key issue in land use, mobility, human behavior, etc. and then to study the landscape design method to define the strategy of regeneration.

The last step was to use the strategies to propose an project with masterplan, and to give the visual scenario for the area.

CITY CONTEXT

Chongqing is one of the most important inland ports in China. There are numerous luxury cruise ships that terminate at Chongqing, cruising downstream along the Yangtze River. Most of the river ferry traffic consists of mostly leisure cruises for tourists. Improved access by larger cargo vessels has been made due to the construction of the Three Gorges Dam. Coal, raw minerals and containerized goods provide the majority of traffic plying this section of the river. Several port handling facilities exists throughout the city, including many impromptu river bank sites. The municipality is featured by mountain and hills, with large sloping areas at different heights. Built on mountains and partially surrounded by the Yangtze and Jialing rivers, it is known as a "mountain city" and a "city on rivers".

CITY CONTEXT



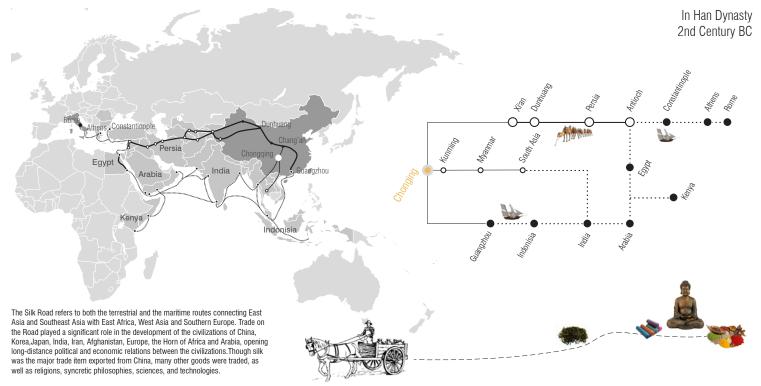
Chongqing is a major city in southwest China. Administratively, it is one of China's four direct-controlled municipalities (the other three are Beijing, Shanghai and Tianjin). It is a major manufacturing center and transportation hub. Chongqing have developed dramatically during the past 20 years. Main urban area of Chongqing has a significant history in the history of the city, and now it serves as the center of culture, economy, education and politics.

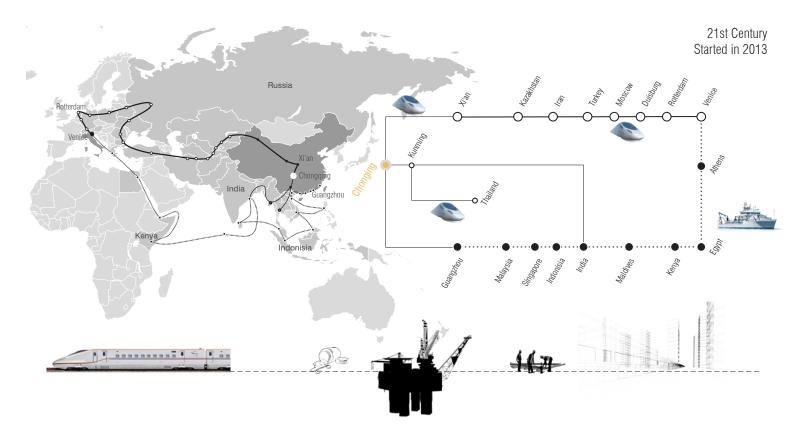
Data of Chongqing

Area: 82,300 km² Urban area: 472.8 km² Regional production value:1,500 billion yuan (2017) Population: 31.75 million(2017) Main Urban Area of Chongqing

Southwestern China, Upper reaches of Yangtze River

Chongqing in Ancient Silk Road and New Silk Road





Economic Center in Southwestern China



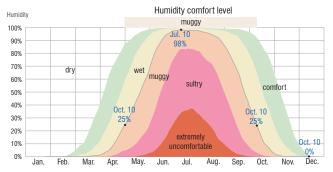


Chongqing serves as the economic center of the upstream Yangtze basin. The Chengdu-Chongqing economic zone will encompass Chongqing, Chengdu, 14 cities along the major expressways, railways and golden waterways and the economic circle around Chongqing,

Inter-continental railway project promises to be 'New Silk Road' by connecting businesses of East and West. To that effect, Chongqing, the southwestern municipality and an increasingly important manufacturing and trading hub of inland China, is already positioning itself as the latest crucial link of this Eurasian land bridge.

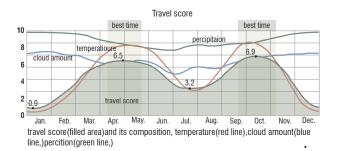
Climate and tourism

The climate in Chongqing is subtropical monsoon humid climate, with an annual average temperature of 18° C. The minimum temperature in winter is $6-8^{\circ}$ C, while in summer the high temperature stays above 35° C. Rainfall is plentiful, especially in spring and summer. Chongqing is called as the city of fog, with annual 104 foggy days. The fog prevents a far sight during the day, however in the night, when the city is lit up, the shape of the building and mountain could be seen clearly. The city is featured with mountains as the mainstay, and its mountainous area accounts for 76%. According to the survey by WEF of *The Travel & Tourism Competitiveness Report 2017*, visitors arrivals in Chongqing reached 450 million, ranking second in the whole China.



Percentage of time spent in different humidity comforts (according to dew point): Dry < 13 $^{\circ}$ C < Comfort < 16 $^{\circ}$ C < Moisture < 18 $^{\circ}$ C < Sultrv < 21 $^{\circ}$ C < Repression < 24 $^{\circ}$ C < Lincomfortable.

Traveling Experience Evaluation Variation in a year with humidity



Traveling Experience Evaluation Variation in a year with temperature

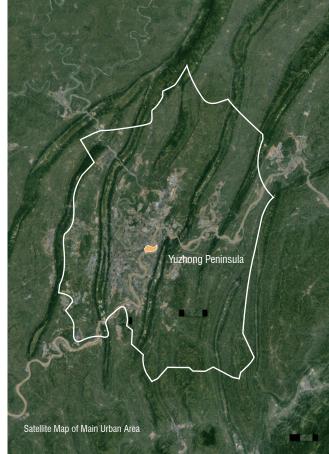
The high humidity and high temperature has a striking negative impact on the travelling experience during summer times, while they are not so annoying in winter. Thus shelter is needed in open space during summer to block the sun and have a more comfortable outdoor stay.

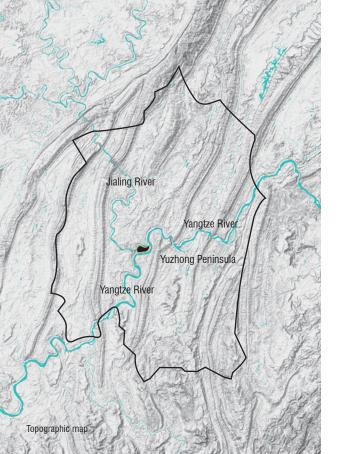
Shanshui City - a city among mountains and rivers

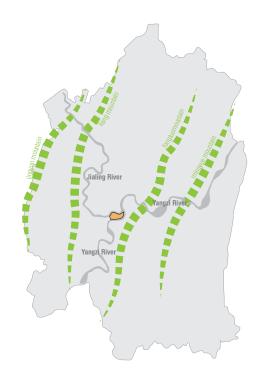
The municipality is featured by mountain and hills, with large sloping areas at different heights. Typical karst landscape is common in this area, and stone forests, numerous collections of peaks, limestone caves and valleys can be found in many places. Specifically, the central urban area is located on a huge folding area (similar to the landscape of the Appalachian Mountains in the United States). While along the mountains, Yangtze River and Jialing River join. The feature with mountain (Shan) and water (Shui), indicates a repeated theme in traditional Chinese painting - Shan-Shui City. Thus the scenery with natural landscape of Chongqing become a unique traditional Chinese city image, with a balance of composition and form in nature and human world.

According to the Analysis and evaluation of urban image elements based on perception of residents in the main districts of Chongqing, the most precepted city image by inhabitants are important road, bridges and traffic joints, mountains and rivers, squares and pedestrian streets, cultural heritage and historical relics, marked buildings and public green space.

The research of city image suggests that mountains and rivers are one of the important factors in the public space design. To keep the perception of the natural mountain and rivers, is of vital importance to maintain the space quality, and the identity of the city.











Chaotianmen Port



Dongshuimen Bridge

Port City

The port of CHONGQING is located along the shores of the Yangtze, Jialing and Wujiang rivers. It's the deepest inland port that's open to direct foreign trade in China. It's divided into eight port areas and has over 180 production berths. In Main City Port Area, there are 7 passenger port around the city center-Yuzhong Peninsula, and Chaotianmen Port is one of the largest tourist port in the city with cruises setting out to Three Gorges and night cruise running on Jialing River and Yangtze River for city sightseeing.



Tourist Cruise Type 1

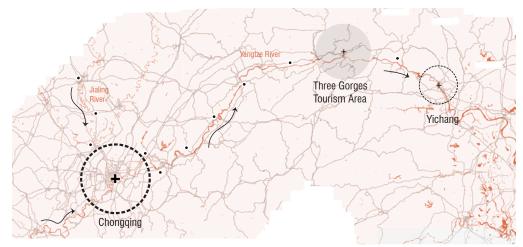
Tourist Cruise to Three Gorges

Chongqing is the main berth for sightseeing boats due for the Three Gorges. The cruises setting out everyday.

Tourist Cruise Type 2

Night Cruise for two-river sightseeing

This is a typical tourist attraction in Chongqing Main Urban Area. The foggy city could hardly be viewed uncovered during the daytime, so most tourist choose to view the city with all lights on during the night.

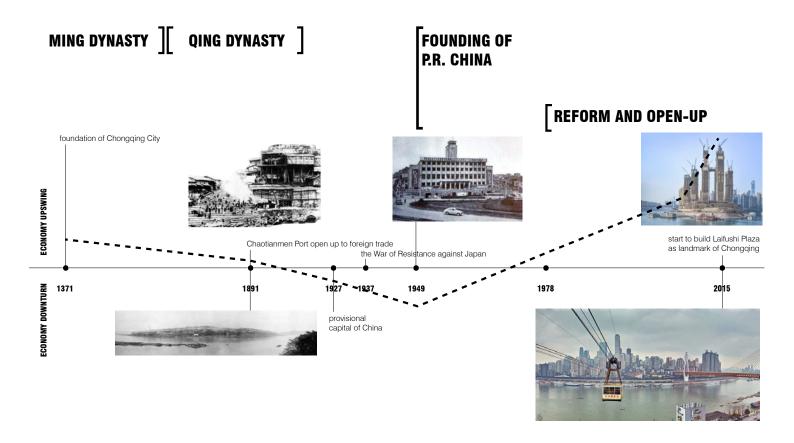




CONTEXT OF YUZHONG PENINSULA

The history of the Yuzhong Peninsula dated back to Ming Dynasty (1368-1664). The City is constructed with a city wall and 17 city gates. In 1662, the city is restored, and it becomes full-functioned. In 1891, Chongqing became the first inland commerce port open to foreigners. During the Second Sino-Japanese War (1937–1945), it was Generalissimo Chiang Kai-shek's provisional capital. In December 1978, the Chinese economic reform has started in People's Republic of China. In the late 1970s and early 1980s, involved the decollectivization of agriculture, the Opening-Up of the country to foreign investment, and permission for entrepreneurs to start businesses. On 14 March 1997, the municipality became to be ruled directly under the central government.

CONTEXT OF YUZHONG PENINSULA



Ancient City

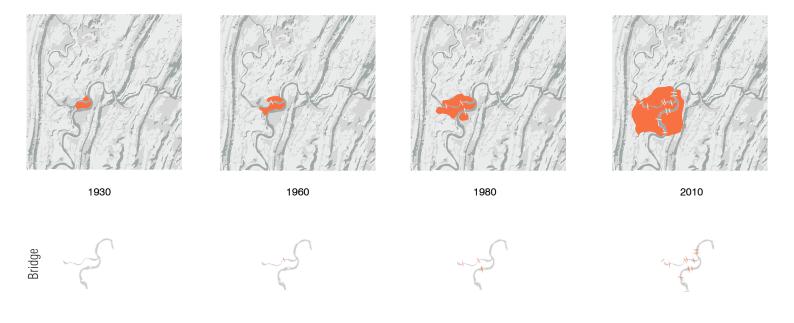


The city wall firstly constructed in 1368 marked the birth of Chongqing in Yuzhong Peninsula. At that time, outside the city wall, on the foreshore lives the working class. The working class works on the dock, transporting goods between Chongqing and middle and lower reaches of Yangtze River. Along the streets on the foreshore, there were the shanty houses and religious temples for the workers. The business activities were strong in the streets. Inside the city wall, the street network is even denser. Through the city gate, the goods from central and eastern China came into the city, and the goods made in Chongqing will be shipped to other part of the country. The business activities ensure the booming of economic of the city and grows with the society. The working class on the dock formed its own dock culture in food, entertainment and living, thus became a markable culture which represents the city history.



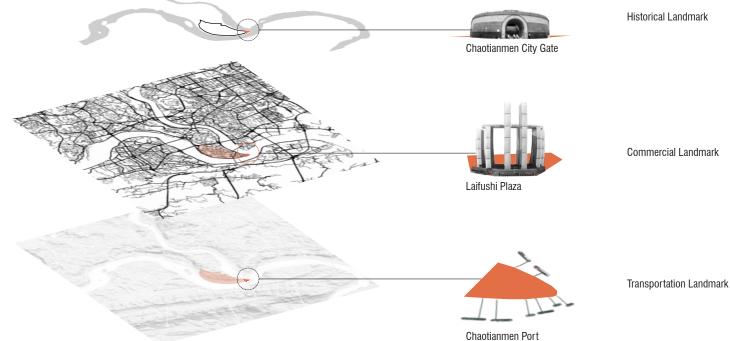
Yuzhong Peninsula in Chongqing Main Urban Area

Evolution of city center around Yuzhong Peninsula In 1927, the city was set as the modern city. To have more space for construction, and to solve the heavy traffic problem inside the city wall, the city wall was torn down. From the 1990s, as the means of transportation gradually changed from water transport to land transport, the port has shifted from cargo dock to ferry port. More bridges are constructed to connect Yuzhong Peninsula with the other part of the city across Yangtze River and Jialing River.

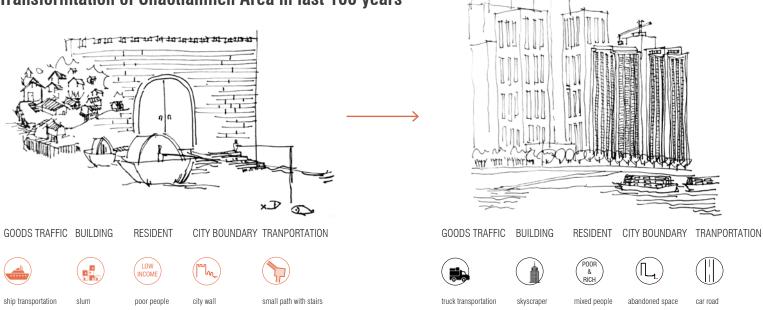


Chaotianmen as the landmark of Chongqing

The name of Chaotianmen is like the symbol of the city, while it has three different meanings. Chaotianmen city gate was the most important entrance connecting the city with other cities along the Yangtze River. The Chaotianmen Port is one of the largest dock in the city. In 2012, the area around Chaotianmen Port is planned to be a new commercial and cultural district near Jiefangbei CBD, and local people call it as Chaotianmen Skyscraper.



Transformtation of Chaotianmen Area in last 100 years



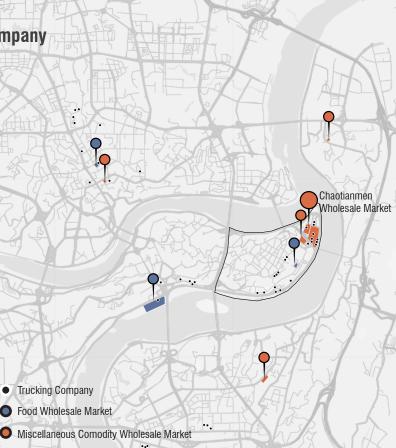
In ancient times, among the docks outside the city wall, Chaotianmen port has been the largest one since the ancient time. The busy water transport brought large flow of people and cargo ships, which breed the market for small commodity. It was also served as the entrance and exit for officials working for the royal court to announce news or receive the noble guests. It was the most circulated area of news and information in the city. However only poor workers live there who survived on transportation business. Since the modernization of the city, ship transportation has been replaced by truck, the slums were torn down and skyscrapers for resident and commercial activities have been built. However the waterfront space has been left out and becomes either a desolate area or logistic area.

Chaotianmen Wholesale Market and Trucking Company

The area from Chaotianmen to Xiaoshizi has been the commercial trade and retail area since then. Southwestern China has been the rich resources of goods including grain, tea, salt, cloth and medicines. In Chaotianmen area, there was one of the city gate facing the mouth of the rivers, and there was the largest dock in southwestern China, becoming the symbol of the city.

Near the Chaotianmen port has long been the area for commercial activities, because of the large flow of people and goods. Chaotianmen Wholesale Market was built in 1991, being transformed from warehouses. With an area of 370,000 m^2 , the market is running for goods including clothes, accessories, make-up, daily necessities, handcrafts, cloth, food, business service, construction material, photographic equipment. There are more than 15,000 stalls or shops in the market. The daily passenger flow is more than 200,000. It's one of the most important market in southeastern China of little commodities. In the last 20 years, it has extensively helped the economic development of Chongqing. The market occupies as large area as from Xinhua Road to Changbin Road. The buildings are connected by paths and stairs under the shelter, creating a sheltered circulation between the market.

Together with the wholesale market, some trucking companies are also working there. These companies collect goods from the retail traders and distribute their needed stock. They also work for all the other shops and residents in the surrounding.



BANGBANG

In Chaotianmen Area, there are porters working for shop owners, truck drivers or tourists. Bangbang is the name of these workers, called by Chongqing people. Coming from rural areas, they live on providing manual lift service, for anyone who paid a little amount of fee. They are particularly popular where there are lots of stairs.

This is a unique occupation in the mountain city Chongqing. Bangbang has become one icon of Chongqing, representing the hard-working labor workers in the society. The first appearance of Bangbang was in 1980s, at the beginning of China economic reform. Young farmers came to city and to find a job with their ability and strength. Nowadays Bangbang is becoming harder and harder to get one run of carrying. The existing Bangbang are usually elderly workers.

In the documentary the Last Stickman of Chongqing, the interviewed Bangbang are optimistic however. Although they live in tiny houses with no heating or gas, have no insurance or even not registered in census, they are still happy after work, talking about the news from the newspaper, playing card games, watching movies of the last century, with a dream of having a lot of money and have their own store.



Green Space in Shan-Shui City



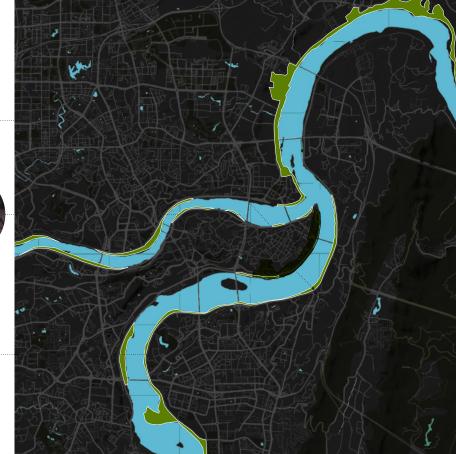
Renmin Park

Existing Waterfront on Nanbin Road

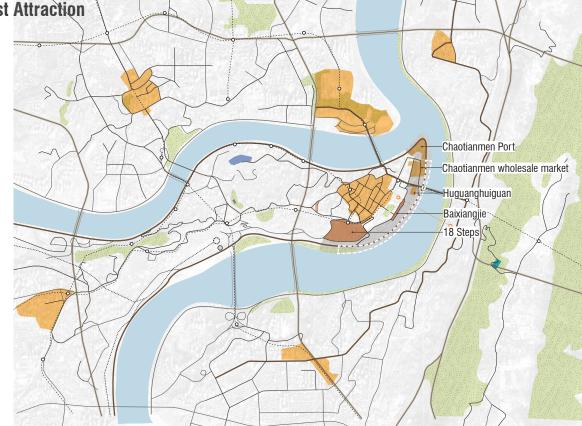




Nanshanyikeshu Observation Tower



Public Site and Tourist Attraction



train station ;; long-distance bus station cable way---metro line and car road--main road--car road--railway----CBD area historical building area cultural building scenic spot green area

cable way station •

metro station •

CONTEXT OF CHANGBIN ROAD



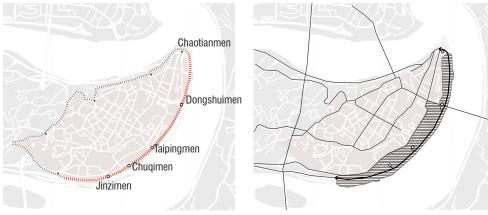
Connecting Chaotianmen and Caiyuanba Train Station, Changbin Road is a waterfront road, at the south edge of Yuzhong Peninsula. Before the Chinese Economic Reform, along the Changbin Road, there were only old factories, shanty houses on the foreshore. In the current situation, the existing historical spots are Chaotianmen City Wall, Huguanghuiguan (an ancient building complex for migrant traders to gather and manage their unions), Baixiang Street (a street with ancient buildings dating back to opening commercial port in 1891), Renhemen City Wall Site, 18 Steps. These historical sites are popular tourist scenic spots, which attract people in other part of China to visit Chongqing.



Building Function, Users and Public Space

The abundance of history and culture in Yuzhong Peninsula has made it a symbol of Chongqing city. During the last century, the enormous change of society, technology and rapid economy development has made it into a complex place, showing features both of tradition and modern world. The dilemma of timing is especially striking in Changbin Road, as it has been left out during the modernization of the city.

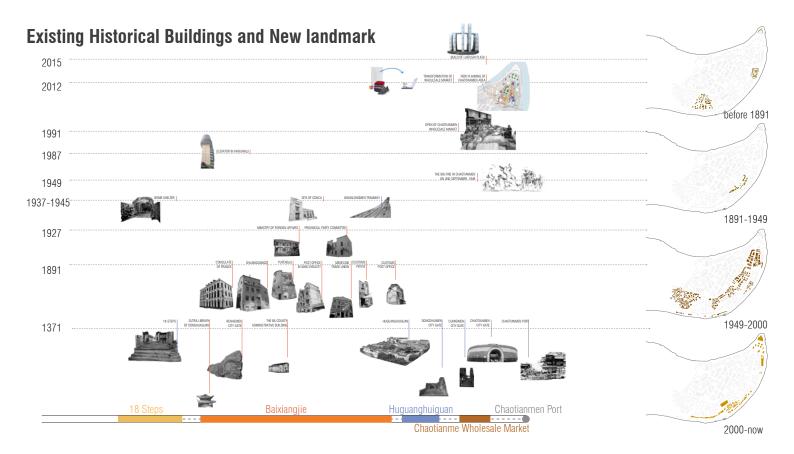
Existing City Gate



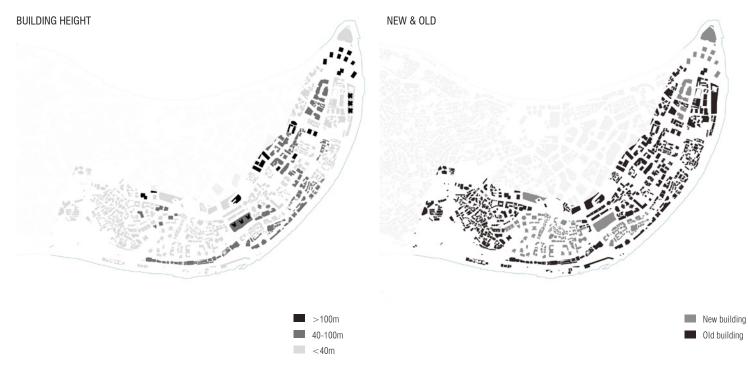
Original City Wall and City Gate

Existing City Gate along Changbin Road

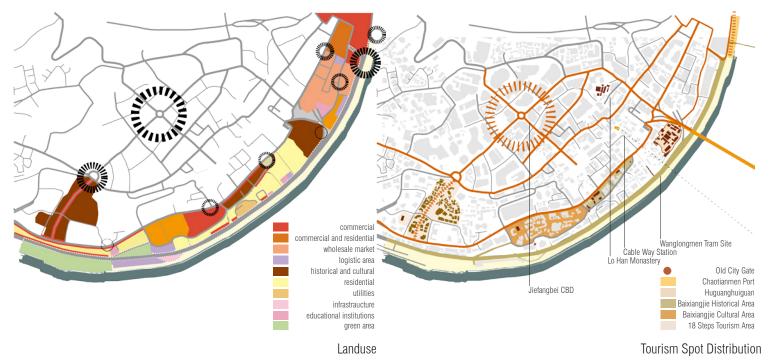




Building along Changbin Road



Landuse and Tourism Spot





Starting from the Laifushi Plaza, the road is crowded with skyscrapers of office or apartment built in the last twenty years. The main existing buildings along the road are residential buildings with shops on ground floor. The office buildings include Yangtze River-Chongqing Waterway Engineering Bureau, Chongqing Yangtze River Shipping Co., Ltd., a real-estate development company and Chongqing Drainage Ltd. Some infrastructure facilities such as police station, kindergarten, primary school and middle school, and a school for the disabled. On the riverfront, there are some ships served as offices for water rescue and waterway transport companies. These ships are staying day and night in the same place.

FUNCTION ALONG CHANGBIN ROAD ON NORTHWEST SIDE

LOW DENSITY BUILDING TOURIST UNDER REINOVATION 18-STEPS POPULAR TOURST SPOT RESIDENT TRADITIONAL BUILDING STYLE

> NO PUBLIC SPACE RESIDENTIAL AREA RESIDENTS HIGH-RISE HIGH DENSITY BURDAULDING NOTHERTRADE AND SOUTH ENTRANCE

ON DIFFERENT HEIGHT LEVEL

SURROUNDED BY RESIDENTIAL AREA HARD TO FIND HISTORICAL NO TOURIST BUILDINGS RESIDENTS BAIXIANGJIE

HIGH DENSITY BUILDING

HIDDEN STAIR PATH TO ENTER THE AREA **ABANDONED AREA** HIDDEN CITY WALL UNDER CONSTRUCTION COMMUNITY UNDERCONSTRUCTION SKYSCRAPER LAIFUSHI PLAZA LAIFUSHI PLAZA COMMERCIAL CENTER OPEN IN 2019 350M

FULL OF TRUCKS RETAILER CROWDED TRUCKING WHOLESALE BANGBANG COMPANY MARKET BANGBANG COMPANY WORKER OPEN FROM EARLY MORNING TO EARLY EVENING

HUGUANGHUIGUAN TOURIST SURROUNDED BY ANCIENT CITY WALL POPULAR TOURST SPOT OPEN DAYTIME ON A NICHER LEVEL THAN CHANGEIN ROAD

NO PUBLIC SPACE RESIDENTIAL AREA RESIDENTS QUIET HIGH DENSITY BUILDING HIGH-RISE SCHOOL

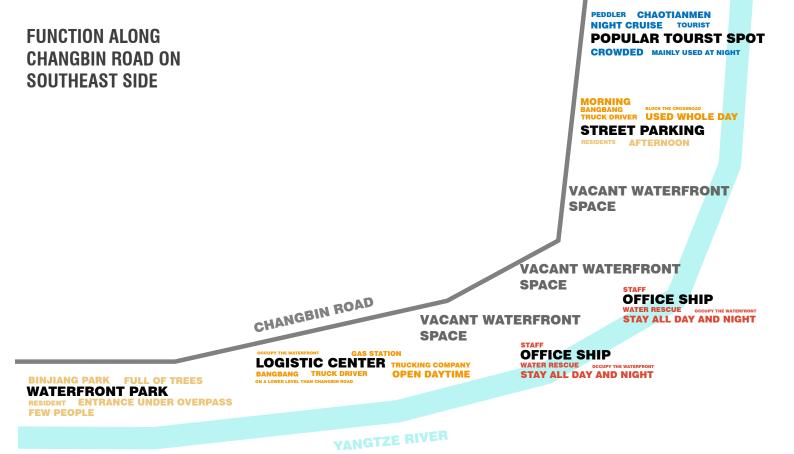
NO PUBLIC SPACE RESIDENTIAL AREA RESIDENTS QUIET HIGH DENSITY BUILDING HIGH-RISE SCHOOL

CHANGBIN ROAD

BANGBANG TRUCKING COMPANY TRUCK DRIVER SHOPS UNDER OVERPASS POPULAR WITH RESIDENTS RESIDENT

BANGBANG TRUCK DRIVER





Users relate to tourism

For tourism, the main users in Changbin Road are tourists, ticket sellers from travel agency or self-employed salesman, peddlers, supermarket and restaurant keepers and bangbang. For the tourists, the number of tourists rises from 2 pm till 10 pm. They come here by bus, taxi, tourist bus, motor tricycle, metro station Xiaoshizi, cruises from Three Gorges. They come in couples or with family members, taking their young child or old parents for a trip, or with a group of friends. Many of them choose to take a group tour, which offers the most famous destinations and bus transfer between hotel and destinations. There are also few foreign tourists.













Places relate to tourism

Hotel



Residents

Thought there are dense residential buildings along Changbin Road, currently the residents do not stay in the site. Usually they just pass the road to go to the shop or go back home. The infrastructure for residents are also insufficient, as there is no seat nor shelter for staying. Another factor for few stay is the inconvenient accessibility. They have to go down 50 meters by stairs to enter Changbin Road. The lack of attraction and lack of convenience lead to the few energy in waterfront area.





passers-by



waiting people



kids



Places relate to Resident



Users relate to Wholesale Market and Truck Transportation

In public space of Changbin Road, users relates to marketing and truck transportation area mainly bangbang, truck drivers, and trucking company stuff. The activities of traders, retailers and customers are mainly happening inside the market. However, the truck drivers use public street parking to park and to load goods. Bangbang walk along Changbin Road a few times a day, to transport between market and trucks. The trucking companies occupy the pedestrian to stock their goods needed to be distributed. As the market and shops open every day except Spring Festival, these users also work every day and night along the road, and become a unique street view of the Changbin Road.



Places relate to Wholesale Market and Truck Transportation



Public Space and User



User Map

Active Frontage

Problem of Building Function, Users and Public Space

A need to develop tourism

The waterfront is facing a need of developing its tourism. In the new silk-road plan which creates a new trade connection between China and the Europe, Chongqing is among the cities open to the new market. The booming economy because of direct-controlled municipality, the special city image as a city set on the mountain, the traditional spicy food, all makes the city attracting and bring in 542 million tourists in the year 2017, as the second largest tourism city in China. However the tourism in the peninsula is under imbalance developing. The numerous historical buildings in central peninsula have been transformed into tourism spots, together with Jiefangbei CBD and crowded streets with shops have increased the tourism economy largely. The unique space on waterfront with beautiful view of mountainous city on the opposite side of Yangtze River however is totally unpopular with tourists. The natural view and the close-towater space are still under development for tourism.

Inadequate public space for residents and discontinue waterfront

During the field survey, we found taking a walk along Changbin Road is unpleasant, either too crowded or too abandoned. To extend the urban network on central peninsula onto waterfront to connect with other part of the city, it is necessary to make a continuous space with high quality on waterfront. Thus, we need to reorganize the space to make its utilization reasonable all along the waterfront. As the road transportation gradually replaced the water transportation, the sailors and port for boats disappeared, and the car roads take the place on waterfront. More modern residential buildings have been built replacing the slums, which leads to a more variety of classes of residents in waterfront neighborhood. This leads to a need for more open public space on waterfront, for the residents and communities. The space users are also distributing either too crowded or too few. In the area near Chaotianmen, the large flow of tourists and of transportation workers become in conflict, as they require different space quality and one space could not meet all their needs. In the area near Baixiang Street, the transportation workers and urban management staff are the main users, which results in the public space are totally occupied as working space. In order to make the public space more pleasant and to the development of tourism, it is important to keep either tourist or resident as the main user, while creating a harmony space also for workers and staff, to keep the diversity of users.

Connection, Transportation and Accessibility

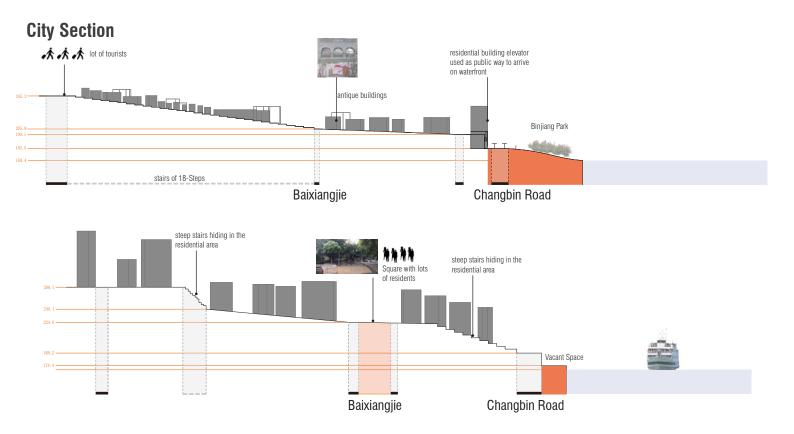
Changbin Road is kind of isolated from the city center, as a result of lack of road connection with Jiefangbei CBD. Because of the sharp falling in altitude, for car road connection, there are only two roads winding all the way along the slope to the higher level, and a bridge connecting Xiaoshizi with Nanbin across the Yangtze River. Unfortunately, the entrances of the community and shops are all on the higher level street. However, for people walking on foot, there are some staircases inside the apartment buildings are used as public, to connect the roads on different levels. Even some shops and restaurants are set inside the building near the staircases. This unique vertical on-foot transportation is the main connection of the site with city center.

stairs connecting 30m height difference



Dongshuimen Bridge and overpass







Section on 18-Steps area



Section on Baixiangjie Area

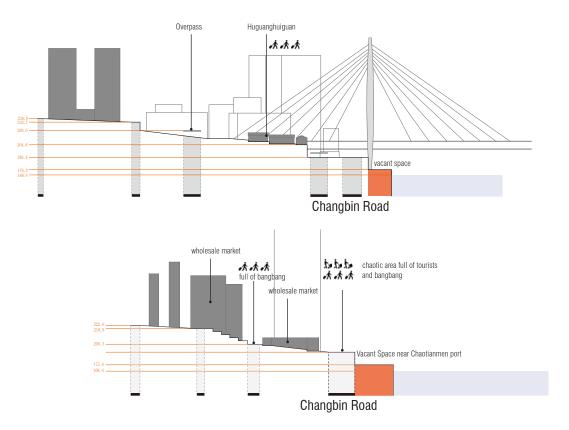
Situation in Waterfront Area in 18-Steps Area

As the overpass bridge for vehicles connected with Caiyuanba arises, the space beneath is blocked form sunlight. It's a safe place with little car flow, and now are occupied by transportation companies, vehicle repair, glass sale, and the pedestrian are occupied by the companies with goods. It is also blocked from Binjiang Park with fences, that people cannot enter the park in waterfront directly from under-bridge space. However, it's still a potential space for public use as its nearby buildings are residential high-rises

Situation in Waterfront Area in Baixiangjie Area

Along the Changbin Road, the situation on both sides of Changbin Road are different. On the city side, the area is in proper use by the residents of the residential communities, while on the riverside, the space is used only as a passage. The pedestrians are disturbed by the parking vehicles, while they have few crosswalks to come from the communities. On the lower level, the rescue ships and the office boats are not so welcoming and made the space occupied unpublic. The connection with the Baixiangjie block is also hidden inside the residential buildings, and all with steep stairs.

City Section





Section on Huguanghuiguan Area



Section on Chaotianmen Area

Situation in Waterfront Area in Huguanghuiguan Area

The Huguanhuiguan has already been renovated during 1999 to 2003. The renovation mainly restores the historical buildings according to its historical value, and implement the parking lots, figure out the façade to the nearby residential blocks. There are mainly two remaining problems: firstly, it ignores the disturbance by trucking company trucks and porters' activities, that makes the area in a disorder situation. Secondly, although there were restaurants and souvenir shops, they were all on the higher level than Changbin Road, that people on the pedestrian could not see them.

Situation in Waterfront Area in Chaotianmen Area

The users related to tourism and to goods transportation become conflict users in the zone. The tourists hope to see the unique city view, while the street is largely occupied by wholesale market workers. The facility for tourists is insufficient, as public toilets and shaded rest areas are not enough. For the bangbang, truck drivers, and trucking company staff, they need space on pedestrian to put their large boxes and packages of goods. The sight disturbance, the race control of pedestrian space and parking space, make this zone annoying both for tourists and workers. The height difference between the bank and Changbin Road reaches 10 meters, and now could only be crossed by stairs. An elevator or ramp is needed for disabled or the elderly.

Transportation

Public Transportation

Public Parking



Problem of Connection and Transportation between Waterfront and City Center

Isolated waterfront from city center but a potiential in connection with across Yangtze River Area

Crowded street parking

After the torn-down of city wall in 1927, the Chongqing city has begun its urban expansion. As the restriction of mountainous topography along the rivers, the road networks are not as dense as other city centers, and the waterfront space remains marginalized.

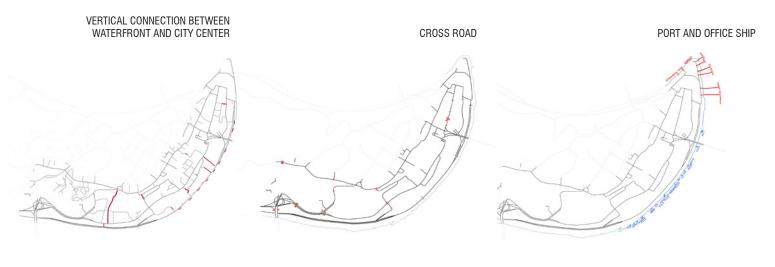
For city center and city, the stripe site is the entrance to the river. While for river, it is the place where river touch with city. But, unfortunately, it now shows a split phenomenon, the stripe site show a boundary role which separate city and water.

For the connection with the area across the Yangtze River, Dongshuimen is the important bridge which runs both metro lines and road for pedestrian and cars. The bridge is lighted up during night and becomes one scenic spot for cruises. The bridge was built in 2014, before which people went across the river here by cable car. The cable car station locates near the metro station, and now it becomes a sight view trip for tourists.

The lack of accessibility on waterfront makes it abandoned from the center of the peninsula. But the direct view of Dongshuimen Bridge and Cableway makes a sight connection with across Yangtze River Area.

The increasing car transportation raises the need of parking area. The street parking and underground parking have been the two common solution. During our survey, we found out that, although the parking space along the pedestrian has been used time-phase. Everyday since the early morning, the trucks working for the trucking companies and wholesale market comes to the area, waiting for the porters taking the goods to be distributed to other part of the city and country. After two o'clock in the atternoon, the trucks were almost filled up with goods, and left the area. Then the cars from the nearby communities are coming to the area. Also, some cars taking tourists also coming. IThe gas station also requires some parking space with busy traffic. It's a common problem in our site that the public parking lots are occupied by some specific kinds of car. The parking lot is in full use, but because of the different means of transportation, it sometimes becomes a mess for parking in the site.

Waterfront Accessibility



Stairs connecting different height levels

Pedestrian bridge and cross line

Cruise Port Office Ship

Problem of Accessibility to Waterfront



Entrance to hidden stairs



Entrance to Waterfront



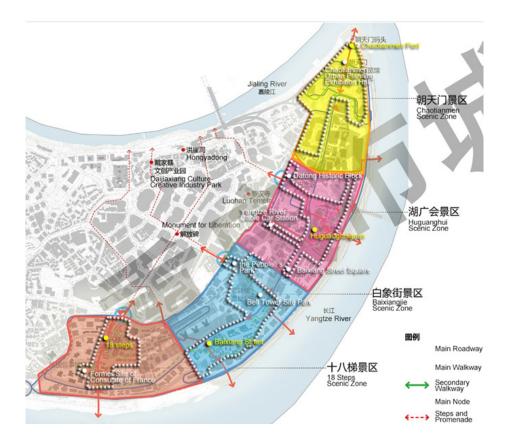
Office ship

The stairs connecting city center with Changbin Road are stopped by Changbin Road, as there is no crosswalk for pedestrian. The entrance of waterfront area on Chanbin Road is not welcoming and lack of entrance space. The Office ship could be part of unwelcoming factor that occupy too much of the lower level of waterfront area. Thus it is necessary to connect the entrance to waterfront with the stairs to city center, and create an entrance space on waterfront that is independent from office ship.

The Urban Planning Bureau's plan

On urban planning bureau's bulletin, the Changbin Road area together with the nearby blocks were planned as the Lower Part of Yuzhong Peninsula, with the aim of developing as a tourist area. The planning considered to develop the potential of tourism of historical scenic spots, as the theme of the area. It uses the existing road connection with the city center and will add some new pedestrian overpass to cross Changbin Road, to guide tourist to waterfront area. We consider it as a good strategy to make full use of tourism for the city center, however the waterfront area is not designed considering the background of the dock history. As it's part of the icon of Chongqing, the area needs an identity of mountain city as well as the dock regeneration.

As for the existing market, the new urban planning of Chaotianmen Area, it will be moved to a suburban market, but part of the market will be kept, to reduce the number of people in the crowded area and alleviate the transportation tension. We think this strategy is considering the needs of most residents living nearby, but ignore the life for bangbang and their life.



PROBLEMS AND MANIFESTO

The metropolitan cities in China with booming development of urban construction are now facing the problem of losing their own identity. The central city is with the same kind of skyscrapers, and this may result in the loss of sense of belonging for the inhabitants. On the other hand, the city loses its connection to its history and tradition, and so is the waterfront. Lots of waterfront cities in China has a long history of human activities in waterfront area, however nowadays they seem to lose their identity. We choose a disordered waterfront area in the city center of the largest city in southwestern China, with a mountainous topography environment, to understand its potential and role in the city, and try to figure out its indispensable future vision. Urban design creates new relation between metropolitan city, history and nature, while we also try to involve the sociological view to create a feasible plan for the inhabitants. The project thus would be a comprehensive urban design trial in fields both physical scale and social scale.

PROBLEMS AND MANIFESTO

PROBLEMS

a. The urban expansion stops at waterfront The urbanization of Yuzhong Peninsula started in Ming Dynasty in 1371. Before 1927, the city was in a traditional form with city wall all around as its boundary. After the torn-down of city wall in 1927, the Chongqing city has begun its urban expansion. The peninsula with an abundance resource of history and cultural relics, and the settlement of municipality offices, continues to be one of the city centers. However, as the restriction of mountainous topography along the rivers, the road networks are not as dense as other city centers, and the waterfront space remains marginalized. The lack of accessibility on waterfront makes it abandoned from the center of the peninsula. b. Inadequate public space for residents

The transformation in transportation also affects the space quality on waterfront. Before 1927, the waterfront was in chaos with sailors working for water transportation, who lived in the slums outside the city wall. As the road transportation gradually replaced the water transportation, the sailors and port for boats disappeared, and the car roads take the place on waterfront. More modern residential buildings have been built replacing the slums, which leads to a more variety of classes of residents in waterfront neighborhood. This leads to a need for more open public space on waterfront, for the residents and communities.

c. A need to develop tourism

The waterfront is facing a need of developing its tourism. In the new silk-road plan which creates a new trade connection between China and the Europe, Chongging is among the cities open to the new market. The booming economy because of direct-controlled municipality, the special city image as a city set on the mountain, the traditional spicy food, all makes the city attracting and bring in 542 million tourists in the year 2017, as the second largest tourism city in China. However the tourism in the peninsula is under imbalance developing. The numerous historical buildings in central peninsula have been transformed into tourism spots, together with Jiefangbei CBD and crowded streets with shops have increased the tourism economy largely. The unique space on waterfront with beautiful view of mountainous city on the opposite side of Yangtze River however is totally unpopular with tourists. The natural view and the close-towater space are still under development for tourism.

d. Discontinuity decreases space quality

During the field survey, we found taking a walk along Changbin Road is unpleasant, as the public areas are either too crowded as a mess, like area near Chaotianmen Port, or too abandoned, like the area near Baixiang Street. To extend the urban network on central peninsula onto waterfront to connect with other part of the city, it is necessary to make a continuous space with high quality on waterfront. Thus, we need to reorganize the space to make its utilization reasonable all along the waterfront.

e. Imbalance distribution of users

There are main 3 types of users near our site, residents, Bangbang and tourist. Now along the site. In the Changbin road. East and west shows quite different phenomena. At the Chaotianmen port area. Bangbang and tourists gather here. Traffic become slowly, working people like Bangbangs occupy road as unload site, so when cars try to go through this area. Car speed becomes slow. The road is chaotic and noisy. The area is a disorder and has many conflicts. When we go along the road to the west. Because of the building function changed, the Bangbang decreased remarkably. And some residents begin to appear in the site. They walk and have a meal here. And then leave this area. For tourists, because of some hotels here, they gather at some specific point to wait for the bus. But the area now cannot provide more activities for these two types of users.



The regeneration of waterfront area aims to revitalize the space close to nature and stimulating its potential in tourism, to provide an attracting space that could be the recreational space for residents, the sightseeing space for tourists, the rest area for people working in the nearby.

The waterfront tourism activities should be diversified, as an implementation of the historical travelling and metropolitan experiences on the center of peninsula.

RECREATIONAL SPACE

Rest area for tourists, residents and working staff Public gathering area Entertainment facilities on cliff for sport: climbing wall New entrances from Changbin Road to new city deck Free connection for disabled people



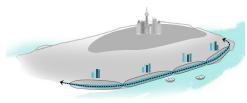
ACCESSIBILITY

Landscape design for stairs going down from main roads More visible scenic spots Road signs for main roads and city deck

Function transformation for certain buildings allowing for public stairs and lift, connecting Changbin Road on lower level and main roads on higher level



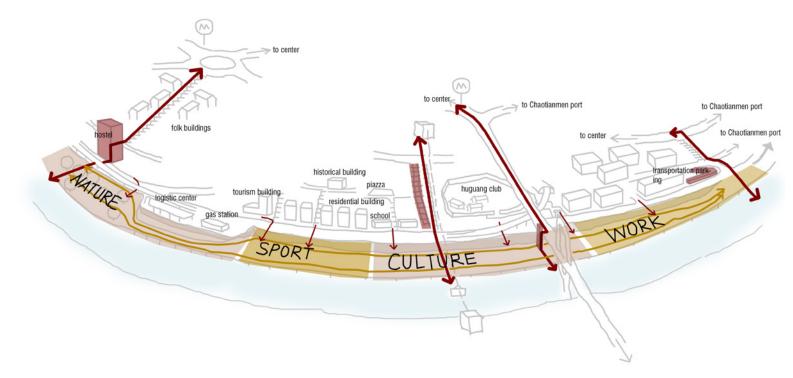
NATURAL TOURISM CIRCULATION Implement tourist activities and improve variety for tourism Bicycle path and pedestrian on waterfront level Tourist services: information, luggage store and transport service, toilet, lost and found



CONTINUITY OF HIGH QUALITY SPACE



AIM



SUPPLEMENT OF CONNECTION WITH CITY CENTER



EXISTING CITY CENTRAL AREA

SPATIAL ORGANIZATION supplement for connection between city and waterfront EXISTING CONNECTION BETWEEN CITY AND WATERFRONT

SUPPLEMENT FOR CONNECTION

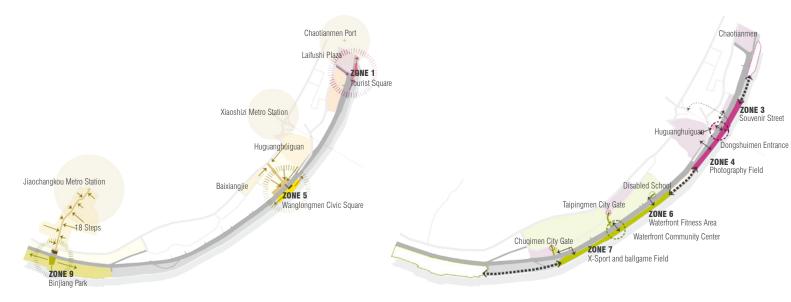
We try to change the isolation that city and water separate by the site to connect by it. Gradually guide people to go from the city to the waterfront and experience the water. We compare the vertical connection between our sites to the upper city. We find that 4 stairs or roads have more potential to be used in the future. And each of them has something special characteristic. From the east to the west, they respectively have work, bridge, tram, and historical street characteristic. These features are the potential power to attract more users' use in the future. So, we propose these 4 lines to 4 axes as the connection where the city can go into the site. And find out the key problem and happened along these axes and give a solution. And at the end point of these axes provide a platform which will attract people to outlook water.



SPATIAL ORGANIZATION 3 stripes, 5 node, 9 zones

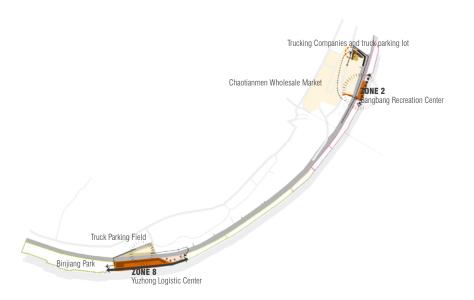
After solving how to go into the site, we try to find out what happen in the site. And then, based on the building function near site, the current users and activities happened on the ground and the current situation in the site. We divide the site to 4 zones, creating places that have a distinctive identity and give them topic that is: work, culture, sport and nature. Then in it give corresponding facilities. Use these words to explain the atmosphere and activates content in the site.

FUNCTION DISTRITUTION



3 main nodes for city tourism, culture and nature

2 zones for sport and 2 zones for culture



2 zones for trucking company and bangbang

5 themes for 9 zones

1) The topic of zone 2 is consider the transportation function in the Chaotianmen port. This area has special meaning for Bangbangs' work. So here add Bangbang relax area and then propose a container street sell some folk souvenirs.

2)The next topic culture is come from the Huguang club and school function. So, we will provide some cultural activities here such as exhibition on the lawn and wedding take photo points (considering the good view of Dongshuimen bridge) and add some sculpture to reflect the culture meaning of the city and water.

3)Topic 3 sport comes from the nearby residents need. Diverse and distinguished sport activates which suit for different age users will be added here.

4)The last topic comes from the current lush trees park. Keeping the good quality plants, only add some light activity and use the existing building for new function.

WATERFRONT SELF-CONNECTION



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bike path

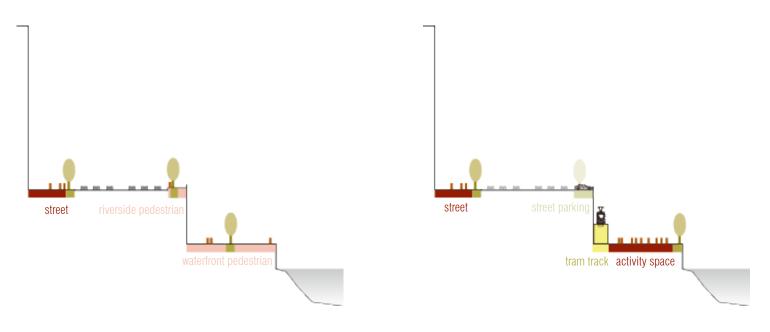
tram stop

street parking tourist bus parking

2 stripes linking 9 zones

We need to use something continuously in the site to connect the 4 zones. So we propose 2 stripes, one is bike lane mainly used by residents near water, another one is a tram road mainly used by Tourists near the roadside.

SELF-CONNECTION ON SECTION



enlarging space and adding tram track

original waterfront section

USERS RELATED TO TOURISM

TOURIST



WAIT FOR BUS







GATHERING







SIGHTSEEING

淤 æ



ASK FOR HELP

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REST



CRUISE TICKET SELLER



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IN THE MIDDLE OF ROAD





NAP ON ROAD



WAIT ON ROAD



PEDDLER



IN A BOOTH

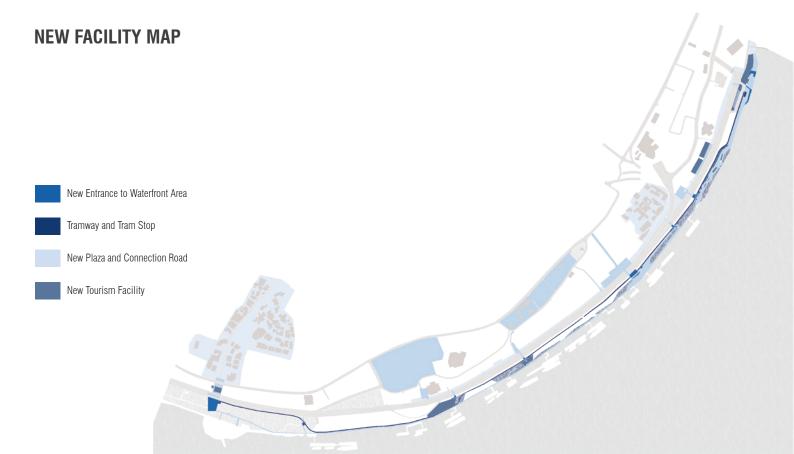






SELL ON ROAD

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USERS RELATED TO TRANSPORTATION AND LOGISTIC

TRUCK DRIVER







NAP ON ROAD



EAT NEAR TRUCK

TRUCKING COMPANY STAFF



WORK ON ROAD



REST ON ROAD

WAIT NEAR TRUCK CARRY GOODS i, 🚣 🚖 🛵 🚛 🖴 G

ki i 🛥 🝙 🛵 📖 🖴 **~**

BANGBANG





WALK ON STAIRS

WORK ON ROAD

CHAT ON ROAD



PLAY CHESS ON ROAD

REST ON ROAD





NEW FACILITY MAP

New Wholesale Market Parking Building

New Parking Lot for Wholesale Market

Bangbang Recreational Center

RESIDENTS

NEAR RESIDENTIAL COMMUNITY



PASS BY

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[A]

ခို

EAT ON ROAD

ŔŦÅ



WAIT ON ROAD





TAKE EXERCISE ÷ ပါ၆ Ŧ Ê

PARK



FISHING





REST 济 **~**,



SHOPPING









PLAYGROUND





WAITING PARENTS















NEW FACILITY MAP



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