## Equivision Habitat:

The CollectiveDreamworks LANDSCAPE THESIS

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URBAN RENEWAL, SOCIAL JUSTICE, COMMUNITY ENGAGE-MENT, CLT



## ABSTRACT

## INTRODUCTION

-Global phenomenon of urban renewal

## URBAN RENEWAL AND SOCIAL JUSTICE

- -Urban renewal and Social justice
- -Challenges of urban renewal
- -What is gentrification
- -Community participation and space justice

## COMMUNITY LAND TRUST MODEL

- -The American Community Land Trust (CLT) model
- -Differences between land management policies and CLT in China
- -Feasibility of implementing CLT in China's policy environment
- -New Trust model system
- -Fund system
- -Decision system

## WUHAN HANYANG IRON WORKS

- -History of Hanyang Iron Works
- -Site analysis
- -Relocation policy

## SITE DESIGN

- -New Trust model system
- -Community design
- -Phase 1
- -Phase 2
- -Phase 3

## CONCLUSION

## BIBLIOGRAPHY



In recent years, Wuhan, a dynamic city, has been experiencing significant social changes alongside rapid economic growth. The city's skyline is continuously expanding, and new commercial and residential districts are emerging rapidly, drawing in more middle-class families. As a long-term resident and observer in Wuhan, I have seen the allure of this shift towards a middle-class society, but I am also acutely aware of the social costs that accompany it.

Wuhan's move towards a middle-class society is evident not only in elevated consumption levels and lifestyle shifts but also, more critically, in the reconfiguration of urban spaces and community roles. Old neighborhoods that used to house low-income residents are being transformed into high-end apartments and commercial spaces. While this transformation has improved the city's overall image, it has also led to the displacement of original residents. This profound change highlights the double-edged sword nature of gentrification.

Against this backdrop, I have started to focus on the voices and needs of those

marginalized by this process. Elderly residents have lost their familiar community environments, and young people, despite their desire to join the burgeoning middle class, are struggling with high living costs. This increasing social stratification has made me reflect deeply on the fairness and sustainability of urban renewal.

This article proposes a community model based on collective ownership and management through a community land trust. This model shifts land ownership from individuals to a community collective, ensuring that development activities prioritize the community's long-term welfare over short-term commercial gains. The aim is not only to provide affordable housing but also to foster a community with a shared vision, exploring ways to sustain social diversity and

inclusiveness alongside urban development.

1. "Fifth Street Tavern and UPMC Braddock Hospital on Braddock Avenue" (2011). Credit... Courtesy of LaToya Ruby Frazier and the Brooklyn Museum



### Global phenomenon of urban renewaln

[1]In the 21st century, we are witnessing the largest wave of urbanization in human history. The global urban population is expected to increase to 7 to 8 billion, surpassing the current total global population, with most of this growth occurring in impoverished areas of developing countries. By the middle of this century, more than 60% of the infrastructure needed for human activities has yet to be built. Future investments in the construction of new cities and the reconstruction of old ones will reach trillions of dollars. Urbanization is closely linked to economic and social progress, but this large-scale urbanization wave has also resulted in slums being replaced by middle-class housing, forcing low-income residents to relocate and leading to gentrification. However, this change has not effectively boosted the economy and has instead consumed a significant amount of funds.

Many slums are temporary. If residents of poor communities could utilize their skills and talents, their economic conditions and the economy of their communities could improve. In [2]1972, John F.C. Turner, in his article "Housing as a Verb," compared the top-down model of government-built affordable housing (which he called "Housing as a Noun") with the bottom-up model of housing built by the poor themselves (which he called "Housing as a Verb"). In the former, the poor are isolated, further from economic opportunities, leading to concentrated poverty and continued failure; whereas, in the latter, the poor gather in places they prefer or need, closer to economic opportunities.

[3] The second approach not only saves the government a significant amount of money but also ensures spatial justice and housing equity for low-income groups. This paper explores the methodology for creating an ideal community with a shared vision, aiming to unleash the vitality and potential of urban residents and help them improve their development levels. By studying the Community Land Trust (CLT) model, which transfers land ownership from individuals to the community collective, this study aims to ensure that any development activities prioritize long-term community welfare over short-term commercial gains. This model not only provides affordable housing but also emphasizes the importance of collective vision and community building.

Given the significant policy differences between China and the United States, China needs to carefully consider the implementation of the CLT model. This paper examines these differences and adjusts the model to fit the Chinese context, focusing on a case study of the Wuhan Hanyang Steel Plant to evaluate the feasibility of this approach. The goal is to find a viable path to pursue urban development while maintaining social equity and inclusiveness. By strengthening infrastructure and connectivity, isolated slums can be transformed into economically viable communities, thus promoting urban progress and addressing broader global challenges.

[1]"UN-Habitat, Habitat III". (2016). The New Urban Agenda. Retrieved from https://habitat3.org/the-new-urban-agenda/

[2]"Turner and Housing as a Verb", John F.C., https://www.researchgate.net/publication/286863469\_John\_FC\_Turner\_and\_Housing\_as\_a\_Verb

[3]Arrival City: How the Largest Migration in History Is Reshaping Our World ,(2011) , D. Saunders ,https://www.semanticscholar.org/paper/ Arrival-City%3A-How-the-Largest-Migration-in-History-Saunders-Obeng-Odoom/8b55172c-2868ba75b3ac2b384896d489116f8dfa Introduction

2. Refurbished place, Collage



coexist



resource allocation



reconcile



interweave



complexity



Loop



fragmentation



evolution



order

4. Principle conceptual model

01.

URBAN RENEWAL AND SOCIAL JUSTICE

Urban renewal and Social justice

Challenges of urban renewal

What is gentrification

Community participation and space justice

## **Description**

This chapter will explore the global phenomenon of urban renewal and its impact, and analyze the gentrification problems caused by it. This phenomenon not only reshapes urban space and community functions, but also intensifies social stratification and stimulates discussions on urban spatial justice and social equity.

To address these challenges, current planning theory emphasizes the importance of "public participation" and "consultation."



3."Whose City?"

https://www.solidarityacrossborders.org/en/public-assembly-against-gentrification-whose-city



5.Jacobs, 1969: An ordinary mother committed to protecting her neighborhood (Credit: The New Yorker; Photo © Elliott Erwitt/Magnum and John J. Burns Library, Boston College)

[4] The New Urban Crisis, Richard Florida, https://archive.org/details/newurbancrisisho0000flor

[5]Athens Charter (CIAM), 1933, Le Corbusier,https://www.researchgate.net/publication/332425567\_Athens\_Charter\_CIAM\_1933

[6] The Death and Life of Great American Cities, 1961, Jacobs, Jane.https://archive.org/details/deathlifeofgreat0000jaco\_n0t5

[7]The Economy of Cities, J Jacobs, https://www.semanticscholar.org/paper/The-Economy-of-Cities-Jacobs/c094af11e038fa896971336b-162321feb8311225

[8]Cosmopolitanism and the Geographies of Freedom, Pete Green, https://brill.com/view/journals/hima/20/4/article-p213\_9.xml

[9]THE QUITO DECLARATIO, https://www.ciel.org/ Publications/QuitoDeclaration.pdf

[10]Ikeda, Sanford. "The Economy of Cities: Jane Jacobs's Overlooked Economic Classic." The Independent Review, vol. 24, no. 4, 2020, pp. 605–18. JSTOR, https://www.jstor.org/stable/48583526. Accessed 24 May 2024.

[11] "Telescopic urbanism and the poor." Amin, Ash.City 17.no. 4[2013]: 476-492

[12]Novikau, Aliaksandr. "Women, Wars and Militarism in Svetlana Alexievich's Documentary Prose." Media, War & Conflict, vol. 10, no. 3, 2017, pp. 314–26. JSTOR, https://www.jstor.org/stable/26392783. Accessed 24 May 2024.

## Urban space and power conflict

[4]All that is spatial is political. When we deeply study many actual spatial forms, we will find that the reality behind it deviates greatly from the mainstream narrative, and even completely contradicts it. A closer look often reveals more truths about power struggles that were previously ignored or deliberately ignored.

## Modernism and its discontents

In the summer of 1933, the fourth meeting of the International Association of Modern Architects took place on a cruise ship from Marseille to Athens. This meeting marked the beginning of a group of architects, led by Le Corbusier, to theorize their vision of the "functional city," which was eventually finalized in [5]Le Corbusier's Athens Charter, published in 1943. For a long time after the war, the Athenian Charter was widely used as a model of urban construction, and directly shaped the urban landscape of today: tall buildings, squares, green Spaces, roads, and "automatism."

Jane Jacobs was an early "no" to Le Corbusier. In The 1960s, when modernist architecture and urban planning were at their peak, she wrote [6]The Death and Life of Great American Cities, which promoted street vitality and diversity, emphasizing the importance of neighborhood and lived experience,

She fought urban renewal and demolition in New York and defended Greenwich Village, where she lived. After these efforts, people gradually realized the problems of Le Corbusier's path and began to accept Jacobs' criticism. Such changes ultimately contributed to the rise of "new urbanism" and the paradigm transformation of American urban planning and design since the 1980s.

[7]Richard Sanne developed Jacobs' ideas by emphasizing the simultaneous emergence and interlace of otherwise unrelated things in the city through "synchronic complexity," "imperfection" focusing on an open future and endless possibilities, and "porosity" calling on the encounter of strangers as essential to urban vitality. Similarly, [8][9]Sassen defines the city as a complex and unfinished system in which ordinary citizens can construct their history and culture, the dynamic and pluralistic nature of which cannot be fully controlled by those in power.

## The neoliberal street

In modern society, Jacobs' [10]ideas are often misinterpreted as urban anarchism, while Sannet considers her views closer to conservatism. Jacobs emphasizes the spontaneity and diversity of urban space, but this complexity and diversity ultimately follow laws similar to those of nature. However, Ashe Amin points out that modern urban planning often regards urban space as a powerful tool for economic development and ignores social inequities, a perspective he calls[11] "telescopic urbanism". This view reduces urban space to a local observation of commercial

and development potential, while ignoring the social and spatial justice of the whole.

JaJacobs's Street is just the starting point of a global movement - the wave of neoliberalism that began under Reagan and Thatcher, was thwarted by the 2008 financial crisis, and has yet to end. It was at this point in time and space that the Quito Declaration came into being.

The theoretical/political dilemma implicit in the manifesto is that social and spatial justice gave way to neoliberalism under the guidance of telescopic urbanism, and the demands of both political and commercial circles began to dominate and reshape the imagination of urban space. In their universal claims, the Quito Declaration and the New Urban Charter tend to obscure the inherent spatio-temporal heterogeneity of cities, ignoring the social and spatial needs of specific places.[12] Global capital realizes the comprehensive transformation and control of local life through this homogeneous spatial concept. The rise and proliferation of this "second-hand space" implies an erosion of local life and space that could ultimately destroy the diversity and vitality of the city.

In the face of these problems, we need to reflect on the prejudices in the current urban concept, start from the local, explore the broader spatial attributes, and re-examine social and spatial justice. Only then can we truly understand and respond to social injustice in our cities and rewrite our diverse and dynamic urban manifesto.

6."The dismantled Hanyang"

## Chinese cities are new

Beginning in the 1980s, Chinese cities embarkedonalarge-scalehousing demolition and renovation campaign, triggering the passive relocation of tens of thousands of residents.

Since the compensation and resettlement standards of the government and developers are mostly based on the material space or the number of families, the negative impact of demolition and reconstruction on individuals in psychological, employment, social network and other aspects is often ignored. Especially for those vulnerable groups who have lived in the community for a long time, the demolition and reconstruction have separated the social resources, space utilization and employment opportunities in the community, which has brought great challenges to their lives.

Domestic and foreign scholars have studied the residents' attachment to place and sense of place from the perspective of man-land relationship, in order to reveal the negative impact of housing demolition and renovation on residents' spirit and psychology. Modernity or Inequality?
Rethinking the problem consciousness of social science

## **Challenges of urban renewal**



7. Aerial photos hidden in various sports fields in the village of Guangzhou City

In recent years, with the normalization of China's economy, the ecology of urban villages provided for the bottom floating population has been repeatedly destroyed, and it is difficult for the bottom workers living in urban villages to make a living in the informal economy, and then be absorbed into the formal economy serving the urban population (emerging platform economy, etc.). In Shenzhen and other places, there have been many cases of transforming urban villages to provide long-term rented apartments for urban white-collar workers, forming a process of "gentrification".

## The potential dangers of gentrification

While China has in recent years advocated preserving urban villages rather than simply tearing them down, this shift in public opinion is itself seen as a good thing. In the context of a large number of previous demolitions, however, we should not fall into the binary thinking framework of demolitions and preserves, while ignoring the potential dangers of gentrification. How heritage and cultural discourse dominate our understand-

ing of urban villages. This view makes it easy to focus on buildings and Spaces rather than the people who live in them, ultimately leading to the transformation of houses in urban villages into viewable landscapes.

### Gentrification and spatial justice

In sociology, gentrification and urban renewal are almost synonymous. The combination of land, new assets and commercial forms will release the vitality of the old city space, but also ruthlessly erase the original social relations. On a global scale, the "gentrification" of urban central blocks is the main path of urban renewal and upgrading, which is an established reality and combines with urban consumption and economy to form a complex pattern. It should not be viewed only critically. How to balance gentrification and spatial justice, and there are more urban solutions to be discussed.

## Post-industrial society Idle land, waste land, brownfield land Green turn Environmental Environmental well-being nuisance Development, evolution Nimby facilities Green space Garbage dumps, Green Spaces, power stations, parks, riverfront, Attract sewage treatment etc plants, etc. Residential Middle class Lower income brackets Social differentiation Uneven allocation of environmental resources Environmental gentrification

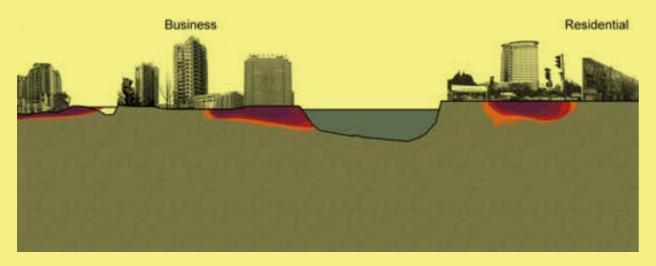
8.Describes the process diagram of gentrification

## Gentrification

Gentrification is the expression of urban renewal in sociology. In other words, the sociological term for urban renewal is gentrification. The concept was coined in the 1960s by British sociologist Ruth Glass. At that time, it was a critical concept, specifically referring to the process of urban renewal in which the bottom dwellers were driven out of the central city and gradually replaced by the middle class.

When the environment of a declining community is greatly improved, the tenants in the original community can no longer afford the rent, so they "have" to relocate to more remote places; The poorer residents of the original community were gradually replaced by the middle class, causing the problem of "gentrification".





9.Analysis of water pollution in Wuhan

## Community participation and space justice

## Do town planners have an obligation to ensure equitable planning?

Many people believe that planners have neither the obligation nor the skills to achieve spatial justice. The law often does not make strict provisions on the fairness of planning, so citizens can not challenge the legitimacy of a planning by fairness or not. At the same time, modern urban planning is not the blueprint of an ideal city, but the result of the game of various interests.

Planning for "locally undesirable land types" has long been criticized by some scholars because these undesirable land types are often located in marginalized communities with high concentrations of poverty or ethnic minorities.

## Susan S. Fainstein

In her 2009 article, "Spatial Justice and Planning," Susan S. Fainstein, a professor of urban planning at Harvard University, proposes practical planning principles in terms of fairness and democracy in urban planning. This article has deep theoretical connotation, starting from the philosophical definition of contemporary democratic forms and fairness and justice, and regards urban planning as a form of democracy and a means to realize fairness and justice.

She pointed out that current planning theory emphasizes "public participation" and "consultation", a paradigm called "communication planning". On this basis, the author puts forward his own "justice city paradigm".

As Mr Fainstein points out, current planning theory favours deliberative democracy.) He believes that a deliberative democracy, in which ideas are collated and reasoned, can lead to better ideas and decisions. The premise of deliberative democracy is that the parties in the game form a moral community of mutual trust, which is often difficult to achieve due to the diversity of public needs in reality. So is there a way for everyone's voice to be heard?

"We as a community value..."

## GUIDING PRINCIPLES

The proposal is self-development three key models: built on through Human-centered Design Community Land Trust Form Based Code

ANY NEW FRAMEWORK, AT THE LEAST, MUST FULFIL THE BASIC CRITERIA TO



**Economic security lively neighborhood** 



Many user groups make a lively neighborhood



shared vision a lively neighborhood



Planning for optional activities creates lively neighborhoods.



Envision an innovative development tool that can accommodate flexible land use



Consider all voices in the neighborhood

Jan Gehl, Gehl Architects is the source for these ideas, which were drawn from the "Seattle Public Spaces vv& Public Life" plan. http://www.seattle.gov/council/attachments/2010\_publicspaces\_publiclife.pdf

## 02.



10. A street singing eventIllustration by Lucía Coz

## COMMUNITY LAND TRUST MODEL

The American Community Land Trust (CLT) model

Differences between land management policies and CLT in China

Feasibility of implementing CLT in China's policy environment

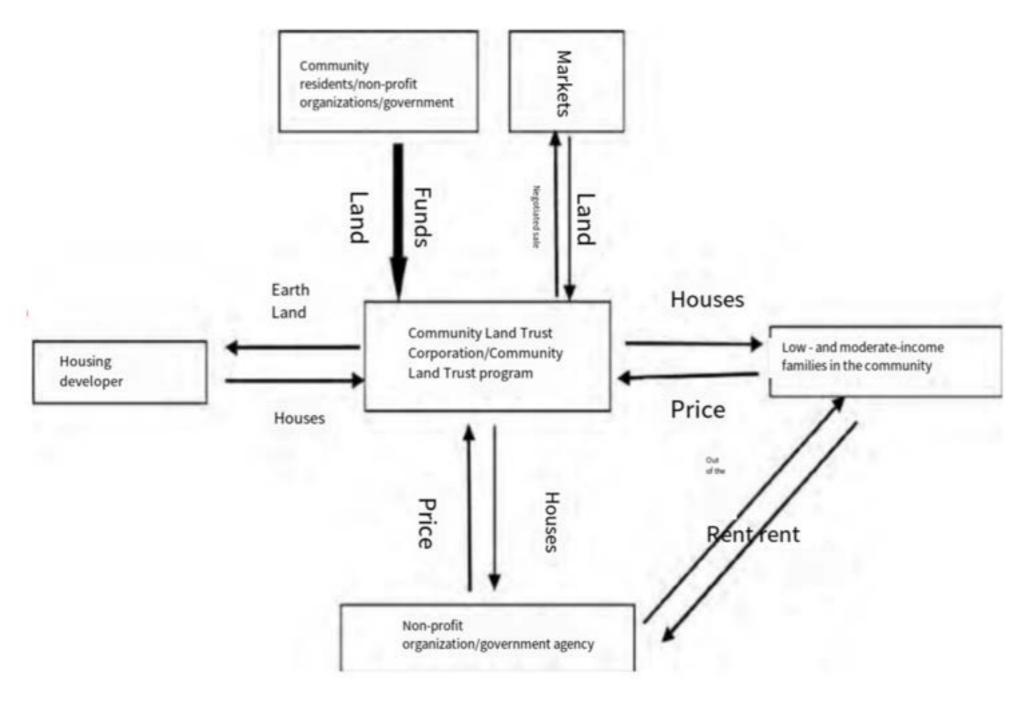
## Description

This chapter describes in detail the rationale, historical background, global application, and feasibility of the Community Land Trust (CLT) model in China. This chapter will provide readers with a comprehensive understanding of why the CLT model is an effective tool for addressing social injustice in urban renewal.



11. Illustration by Lucia Coz https://www.architectural-review.com/essays/reputations/

22



12. Community land trust operation map

COMMUNITY LAND TRUST is a nonprofit, community-base-dA organization that acquires. owns and stewards land permanently for the common good.

CLTs are best known for providing affordable homeownership opportunities that last for generations.

clt .They do this by retaining ownership of a plot of land and selling the housing on that land to lower-income householdsIn exchange for below-market prices, purchasers agree to resale restrictions that ensure the homes will remain affordable to subsequent buyers.

The CLT model allows lower-income households to build wealth through homeownership. CLTwhile also providing the community with a stock of homes that will remain affordable for generations.

## How to develop a community that can resist gentrification?

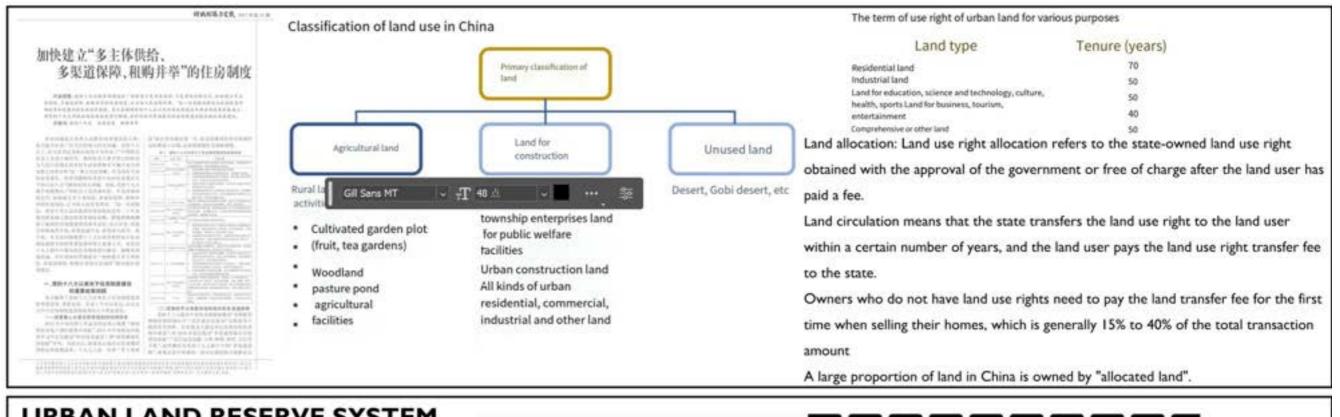
- 1.Address the growing affordability gap between what people canafford to pay for housing and how much that housing costs.
- 2. Provide wealth-building opportunities for families that otherwise would not be able to own a home, particularly families of low-to-moderate income and those that are Black. Indigenous or people of color (BIPOC).
- **3.**Preserve community control of land, reduce absentee ownership andresist processes of gentrification and displacement.
- 4. Capture the public's one-time investment in affordable homeownership for the long-term benefit of community members, over and over again.
- 5.Weather periods of economic downturn through effective property stewardship and homeowner support.

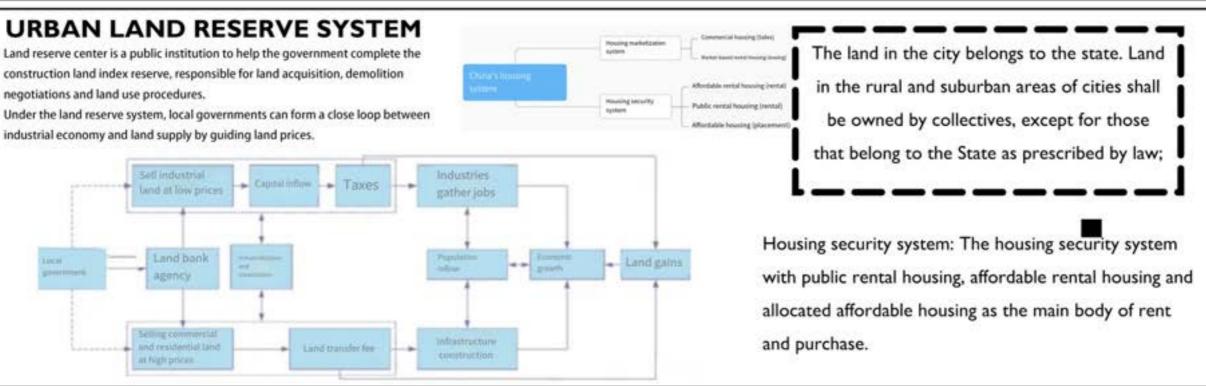
## What is a Community Land Trust?



13. Community land Trust concept http://dialogueonshelter.co.zw/projects.html

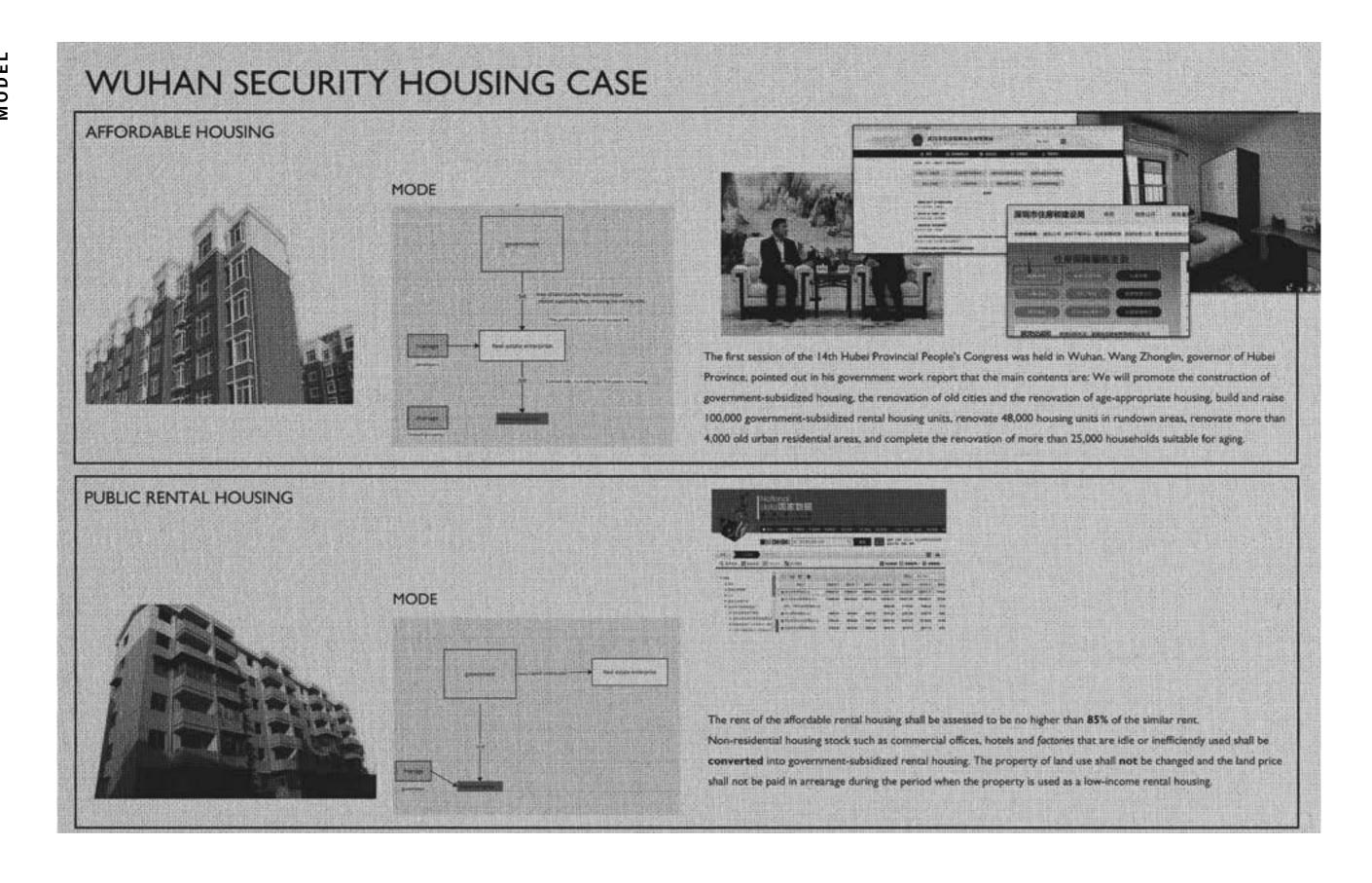
# security housing

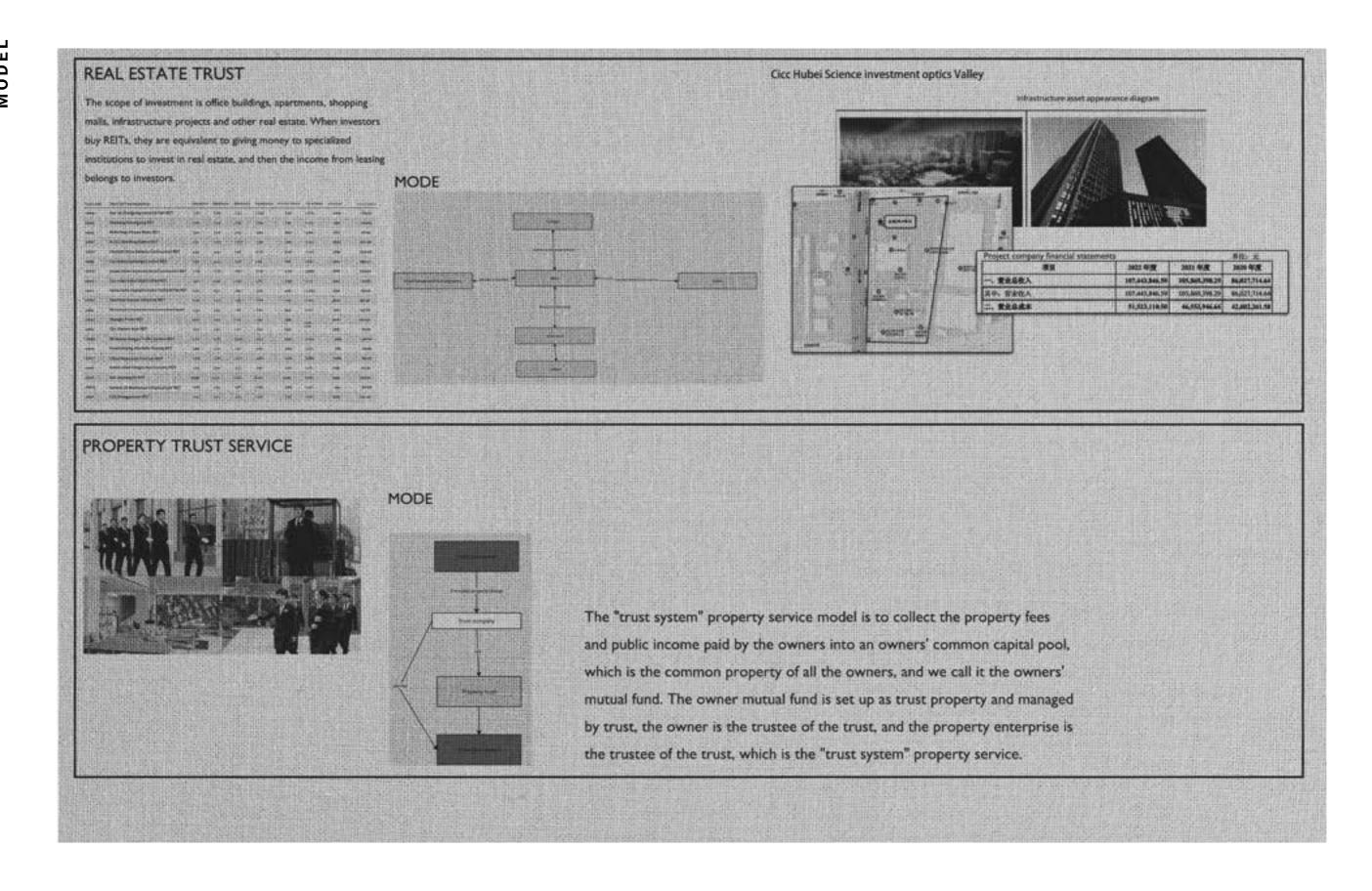




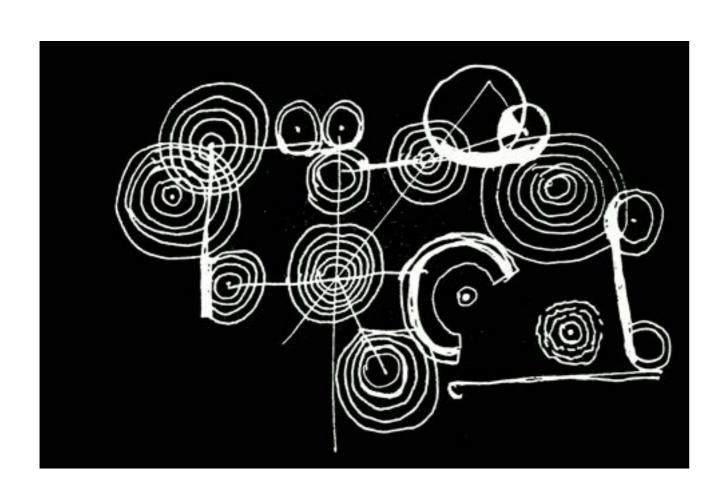
## THE MAIN CLASSIFICATION AND COMPARISON OF AFFORDABLE HOUSING IN CHINA

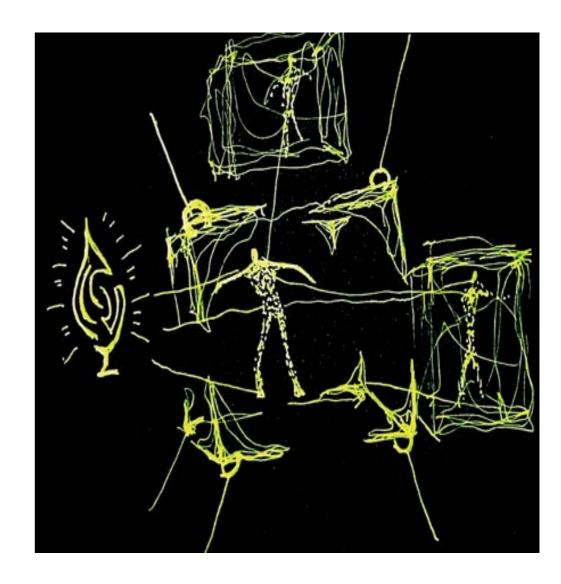
type	Affordable housing	Low-rent housing	public rental housing	Affordable rental housing	Housing with common
		Merged in 2014		And dable rental flousing	property rights
guarantee Objects	Low - and middle-income households in towns and cities	The lowest income families in cities and towns	Lower middle-income households in cities and towns with housing difficulties; In areas where conditions permit, newly employed workers without housing and migrant workers who are employed steadily in urban areas may be included in the supply scope	No income threshold shall be set for qualified new citizens, young people and other groups	Lower-middle-income families with housing difficulties in cities and towns, as well as farmers and other groups that meet the prescribed conditions to settle down in cities
equity Circumstances	Limited or complete property rights; And cannot be listed for trading within five years	No property rights	No property rights	No property rights	Limited property rights or full property rights (the share of property rights held by the purchaser is generally not less than 60%); And cannot be listed for trading within five years
Safeguard	The government-guided price shall be set on the principle of capital preservation and small profit	Monetary subsidies and rent allocation in kind	Rent subsidy, rent in kind (on the principle of slightly lower than the rent level of the housing market in the same area)	Rent in kind (the rent is lower than the rent of the same quality market rental housing in the same location)	Pricing is based on the principle that the price is lower than the price of ordinary commercial housing in the same area
groundSup portPolicy	In principle, supply by administrative transfer	Give priority to the land supply plan, and list it separately in the annual land use index, and adopt the allocation method; The proportion of net proceeds of land transfer used for low-rent housing security funds shall not be less than 10%	Include in the annual land supply plan and give priority to its protection. Land for the construction of public rental housing for the supply of affordable housing shall be allocated and supplied; For public rental housing invested in other ways, the construction land may be used for compensation by means of transfer, lease or investment	Affordable rental housing land can be taken outLet, lease or transferEtc.	Included in the annual construction land supply plan; Give priority to the use of existing construction land to ensure adequate security and priority supply; When land is transferred, construction land shall be listed by bidding, auction and auction





A model which addresses issues of land and tenure and includes community participation is the concept of Wuhan Community Land Trust.

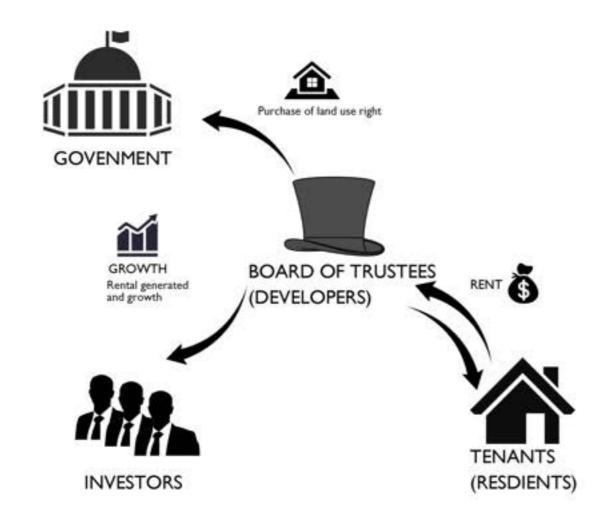




17. "Personal scale connects the heart"

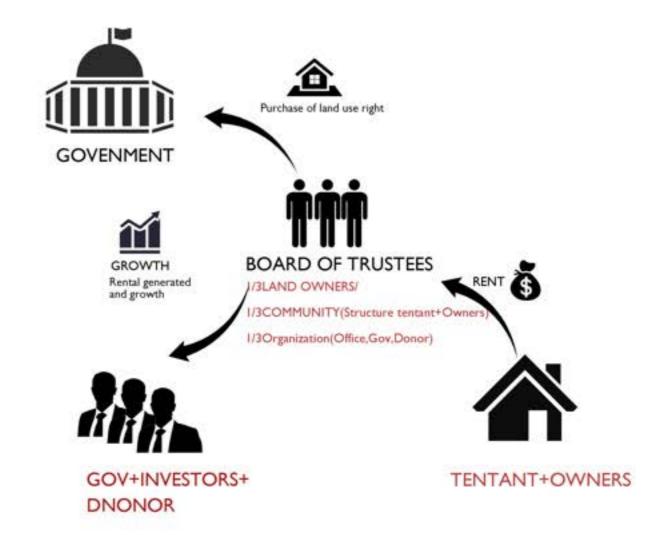
16. "The cogs of society"

## **EXISTING REIT**



THE WCLT CONSISTS OF THREE EQUAL COMPONENTS THAT MAKE EQUAL DECISIONS ABOUT THE PART THAT MAKES THE RIGHT. THE DECISIVE MAJORITY IS 75 PER CENT.

## W'CLT



## **Tripartite management**

## 1. Representatives of landowners' associations

Representatives will be made up of those whose land has been donated to WCLT and approved. The first part will include developers, governments, charitable organisations, private landlords and housing associations.

## 2. Community representation

The second part will be directly represented by the community (including homeowners and registered tenants). Representatives will be directly elected by voting members, first at the mass level, and these are regarded as the smallest business units. A representative from each industry will become a member of the board for a five-year term.

## 3. Community representation

The third part, government representatives from the community, as well as expert committees made up of professionals and ngos, work directly with the residents of the community and can be nominated and approved by the community. The School Board is elected every five years by voting members of the community. The Board will then be responsible for the various management and action committees for the operation and maintenance of WCLT.







THE VOICES OF RESIDENTS CAN
BE HEARD AT THE TOP BECAUSE
THESE VOICES ARE GENERATED
BY A BOTTOM-UP APPROACH,
PRESENTED THROUGH PROPOSALS

## **Community participation model**

The community participation in decision-making model is to establish a fourth level, with listening, educating and creating with residents as pillars. Representatives of both owners and tenants take a bottom-up approach to finding equal positions on the WCLT Board. To make a model viable at the technical stage, the most important thing is the participation of people.

## SED RUND AMOUNT FUND The market international funds, part of the land marragger and corporate social reaponability (CSA), can be used to build flowwere housing, indeed the purchase of land planning and construction of infrastructure and housing. HAINTENANCE FUND The sale and registerners of buildings and the lease of land. SED RUND allows community land trusts to become small financial institutions. The is a financial model that can generate the complexity of professible property which in complexity and structure and construction of the sale and registerners of professible property which is complexity and trusts to become small financial institutions. The is a financial institutions. The is a financial institution of professible property which is complexity and trusts are described in the complexity professible property which is complexity professible property and the complexity professible property which is complexity professible property and the land of the complexity professible property and the land of the lan

18. Finance model

## **FINANCE**

To launch WCLT, the seed funding will build low-income rental housing by pooling various funds and mortgaging land. The seed funds will be used for land acquisition, planning, infrastructure construction and housing construction. The funding model provides funding for the Operation and Maintenance Fund, which will be raised from the sale/transfer of buildings and the rental of land. In the third phase, the Support fund will enable the WCLT to operate like a microfinance institution.

### 1. Seed funding:

There are basically two options for WCLT's seed funding.

Option 1: Seed funding for WCLT comes from a pool of various funds available to the community:

- National government funds
- Central government funds
- International organizations
- Corporate social responsibility activities Option 2: After transferring ownership of the land to WCLT, a portion of the land can be mortgaged to raise seed capital.

## 2. Operation and Maintenance Fund:

An initial 5 years is proposed as a "cooling off" period, with no resale or transfer allowed for 5 years after the establishment of WCLT. After the first phase, WCLT is likely to make money from the following sources: During the sale/resale of the property, a portion of the land appreciation will be given to WCLT, which in turn makes the housing affordable.

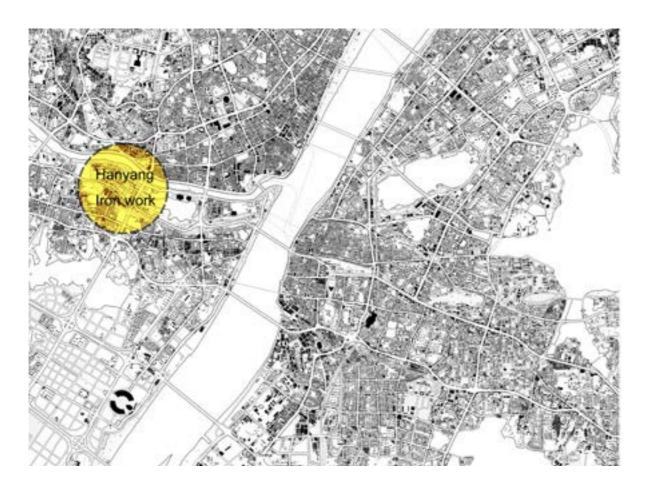
• The homeowner will enter into a long-term lease agreement with WCLT to secure ownership. This will generate marginal revenue. WCLT will eventually build, own, and oper-

ate some rental housing and community businesses that will employ employees and generate revenue that will be provided to employees who generate regular income.

### 3. Support Fund:

Once established, WCLT can apply for various national and international grants for individual poor families on behalf of community members for affordable housing and can help to further subsidize housing.

Land will be released block by block for sale development under a vision plan agreed at a later stage. This will bring in a lot of money for WCLT. The resale formula is as follows: Index-based: This is desirable because it leaves little room for corruption. Resale price = original purchase price +(purchase price \* index). WCLT can set up microfinance institutions with the help of state-owned banks to provide small loans for construction.



04.

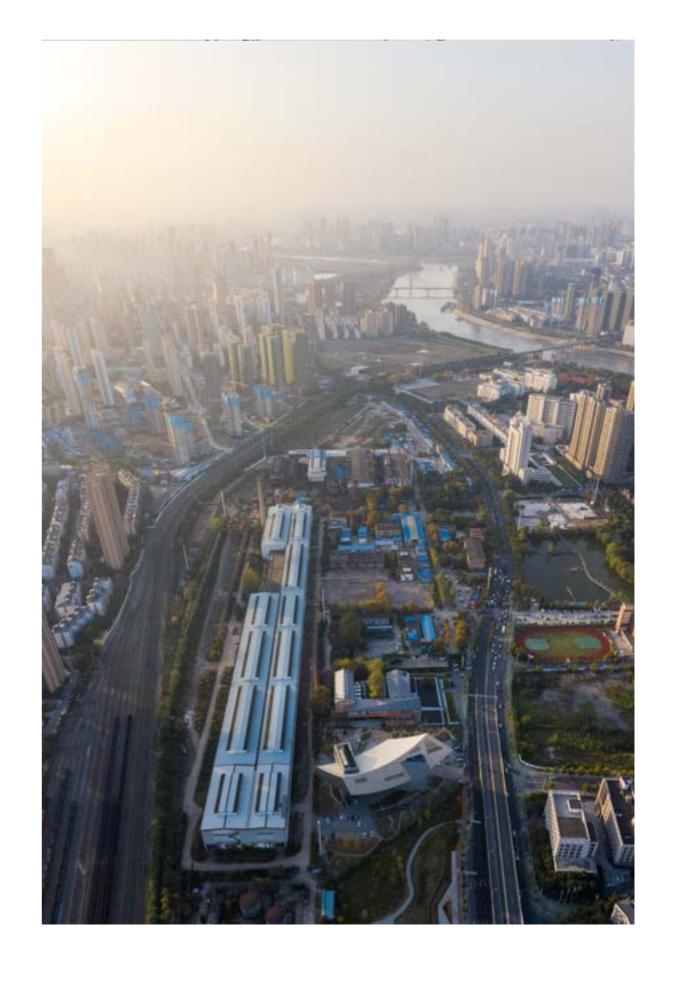
WUHAN HANYANG IRON WORKS History of Hanyang Iron Works

Site analysis

Relocation policy

Description

This chapter introduces the background, site selection and feasibility analysis of Wuhan Hanyang Iron Works project in detail.



One by one, much of London's working class was usurped by the upper and lower middle classes. Dilapidated, shabby huts and huts were taken over when their leases expired and turned into elegant, expensive dwellings... Once the process of 'gentrification' begins in an area, it continues rapidly until most or even all of the working-class residents are uprooted and the social character of the whole area is changed."

## How to develop a community that can resist gentrification?

The wave of global urbanization is rapidly changing urban landscapes and social structures around the world. Over the past few decades, a phenomenon known as "gentrification" has become a common socioeconomic challenge for international cities. This process has also triggered a series of social problems, especially for residents of low-income communities. In many cases, aboriginal people have been forced out of areas where they have lived for generations because they cannot afford increased housing costs, a phenomenon often referred to as "gentrification". This not only leads to the dispersion of community members, making vulnerable groups receive unfair treatment, but also destroys the social structure and cultural traditions in the area.

So I tried to develop a community that centered on community decision making and collective decision making, bringing people together and empowering them to make decisions about their homes. Through the Community Land Trust (CLT) model, to maintain affordable housing issues and develop a collective culture and build communities that make decisions and organize together. Create a lifestyle where people have many opportunities to interact and enjoy building a public life together, not just a private one. The project starts with the Hanyang Iron Works in Wuhan, which was originally a large industrial area but was gradually marginalized and forgotten as the city expanded and the industry declined. By introducing the CLT model, we plan to activate the potential of this historic site and transform it into a vibrant and sustainable community where residents are not only users of space but also participants in decision making. By developing this site as a methodology for gentrification of local branches

## THE CITY OF WUHAN IS NEW



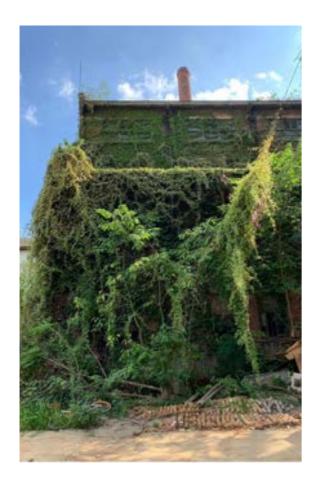




20. Wuhan city photography

## Wuhan is different every day

Chinese cities grow very fast and change every few yearsbibendum magna lacinia sit amet.





21. Remains of Hanyang Iron Works



22. History of Hanyang Iron Works

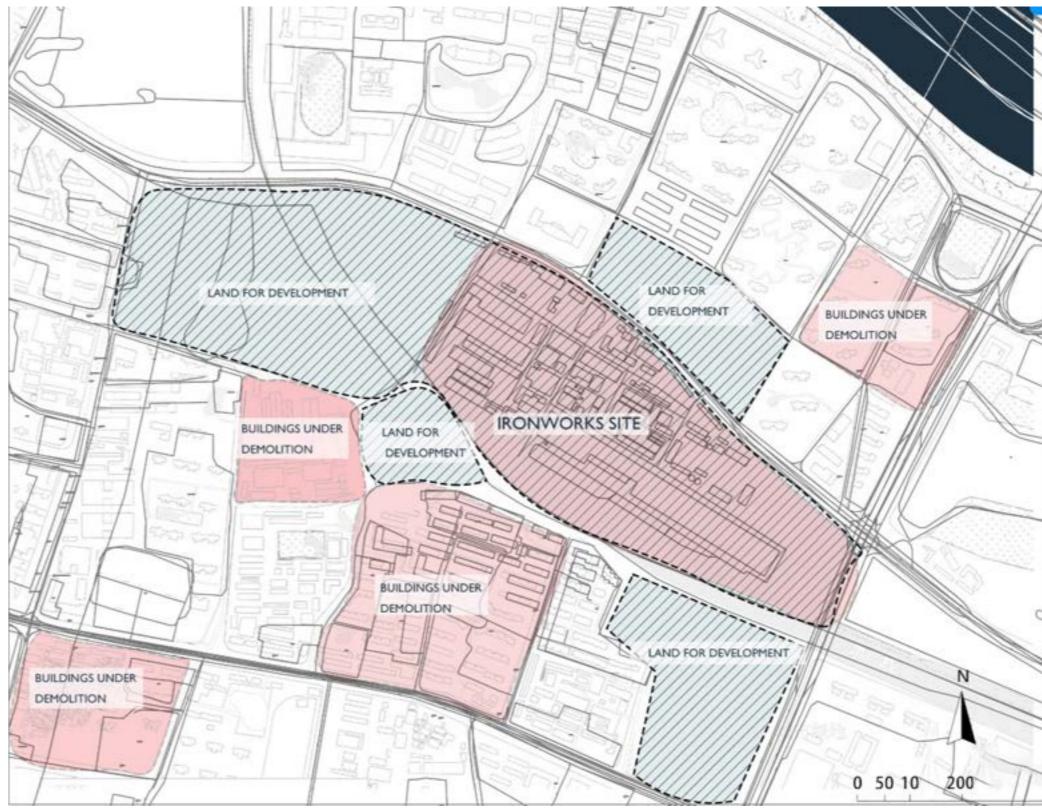
Wuhan Hanyang Iron Works was founded in 1890 by Zhang Zhidong, an important minister of the late Qing Dynasty. It is the first large-scale iron and steel conglomerate in modern China and even Asia. Its birth marked the beginning of China's steel industry and was regarded by the West as a sign of China's awakening. In 1938, due to the war, the factory was completely destroyed. After the fouvnding of New China, the Hanyang Iron Factory was rebuilt on the site of the former Hanyang Gunpowder Factory. After a series of urban renewal, the entire iron works site and machine remains were finally preserved.

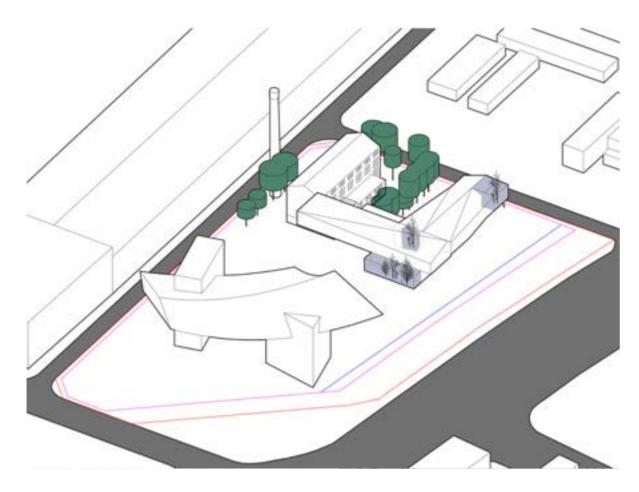


Aerial photo of Hanyang Iron Works



The selection of Hanyang Iron Works as the experimental field of community land trust project is based on its unique historical and cultural value, superior geographical location, good social and economic conditions and high project feasibility. And a venue for renewed failure. If the experiment is successful, it could prove a different approach to urban demolition and a new one







Sunac China, a real estate developer, plans to build a commercial complex in the Hanyang Iron Works area. During the development process, due to capital chain problems and policy changes, Sunac's development project had to be suspended after completing part of the infrastructure construction and preliminary architectural planning. This has resulted in a number of unfinished buildings and facilities in the Hanyang Iron Works area, affecting the overall landscape of the area and residents' lives.

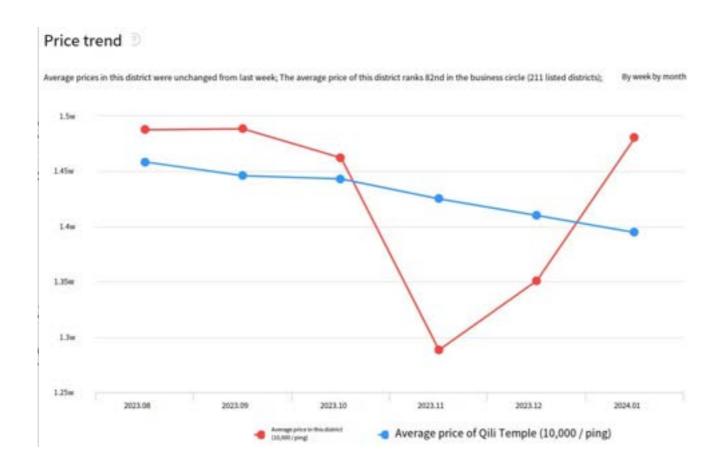


## Surrounding housing price space justice

Yuehu Garden is a residential area planned and developed by Hubei Hejiang Real Estate Co.

3 buildings with a total of 286 households, no elevator.

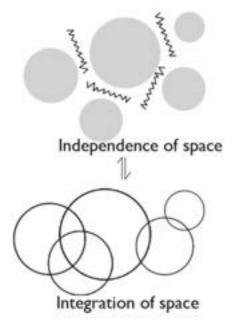
The rent of this community will be lower than that of the surrounding area before 2020, and higher than that of the surrounding area after the renovation of the project is completed

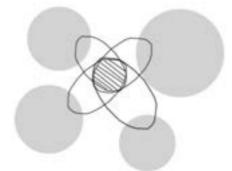




25. Hanyang iron works Google map

26. Price chart





To connect all parts of the community by means of ties. Enhancing community connectivity without compromising private space



Private Transition Public

05.

SITE DESIGN

-Decision system

-Community design

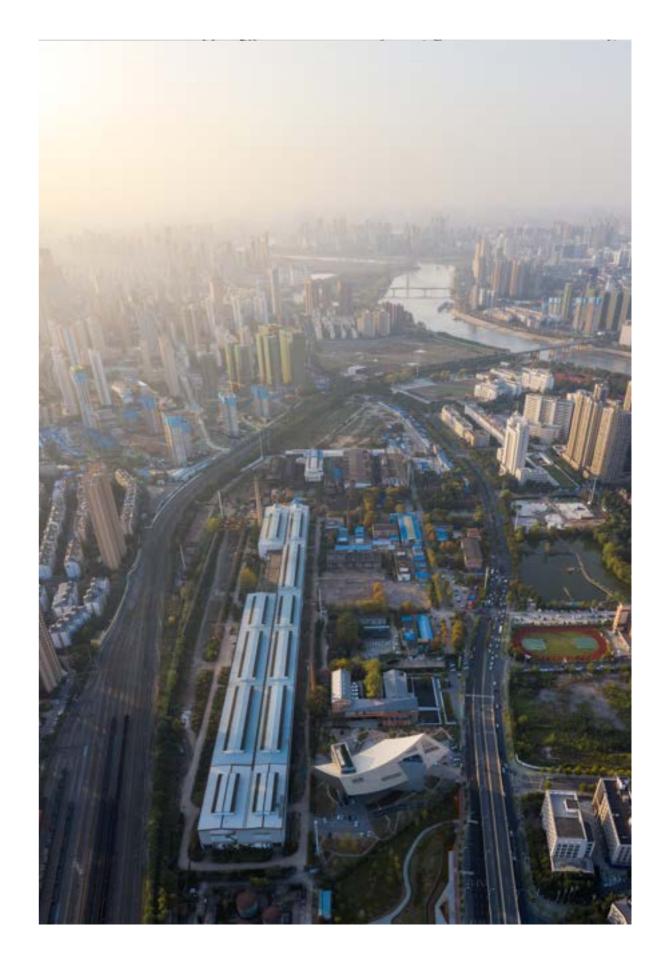
-Phase 1

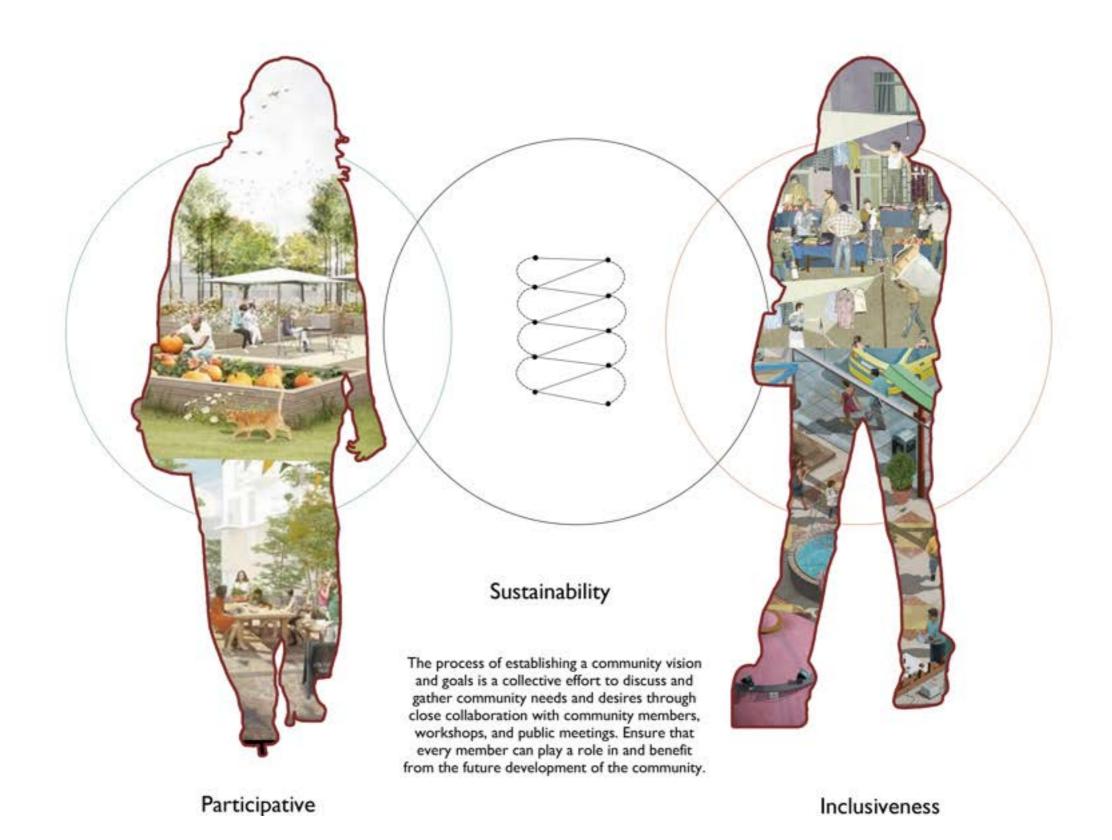
-Phase 2

-Phase 3

Description

This chapter discusses the possibility of design implementation through detailed design and implementation strategies. Design innovative community engagement models, effective management structures and comprehensive design solutions ensure the overall operation. These strategies provide a way of thinking for research







Participatory framework: Develop a framework that allows community members to actively participate in the decision-making process, not only through cooperative agreements to determine future economic and social development, but also through the design of practices to achieve this.

Multi-scale consideration of spatial planning: Considering spatial planning at different scales in community design, from shared social Spaces between units to the connection of the community to the surrounding environment, ensures that the design is both responsive to the needs of residents and integrated into the wider social and environmental context.

Environment and History Improve the historical pollution and environmental conditions of the site, integrate environmental restoration, and use historical sites and cultural elements as the characteristics of the community as the key driving force for community reconstruction.

-- Using modular components to improve public space in the old city --



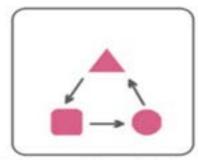
## 1 Autonomy

To meet the different needs of residents, let residents participate in the construction and utilization of public space.



## 3 Minimum interference

The module can be moved and disassembled, and the interference to the old city building streets is minimized.



## 2 Functional elasticity

activates the elasticity of the old city public space, so that the space from one to many.



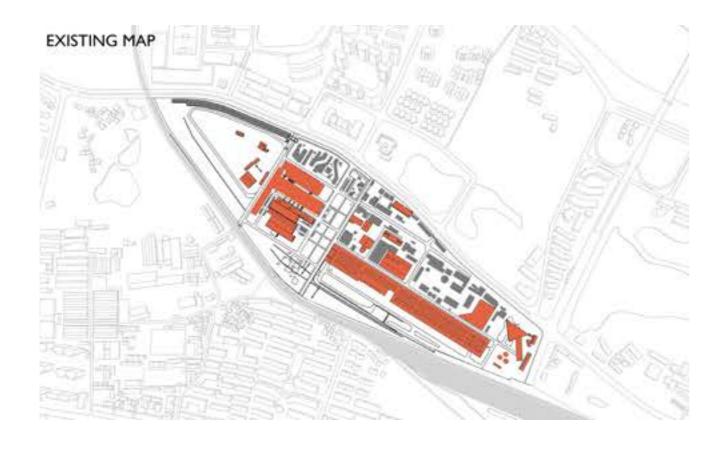
4 Adaptability

The portable and flexible characteristics of the module enable it to adapt to the space types of different scales in the old city



Site architectural status map

The site is surrounded by a mixed use area consisting of residential, commercial and a small industrial area. The infrastructure in the region is relatively perfect, but the overall environment needs to be improved.



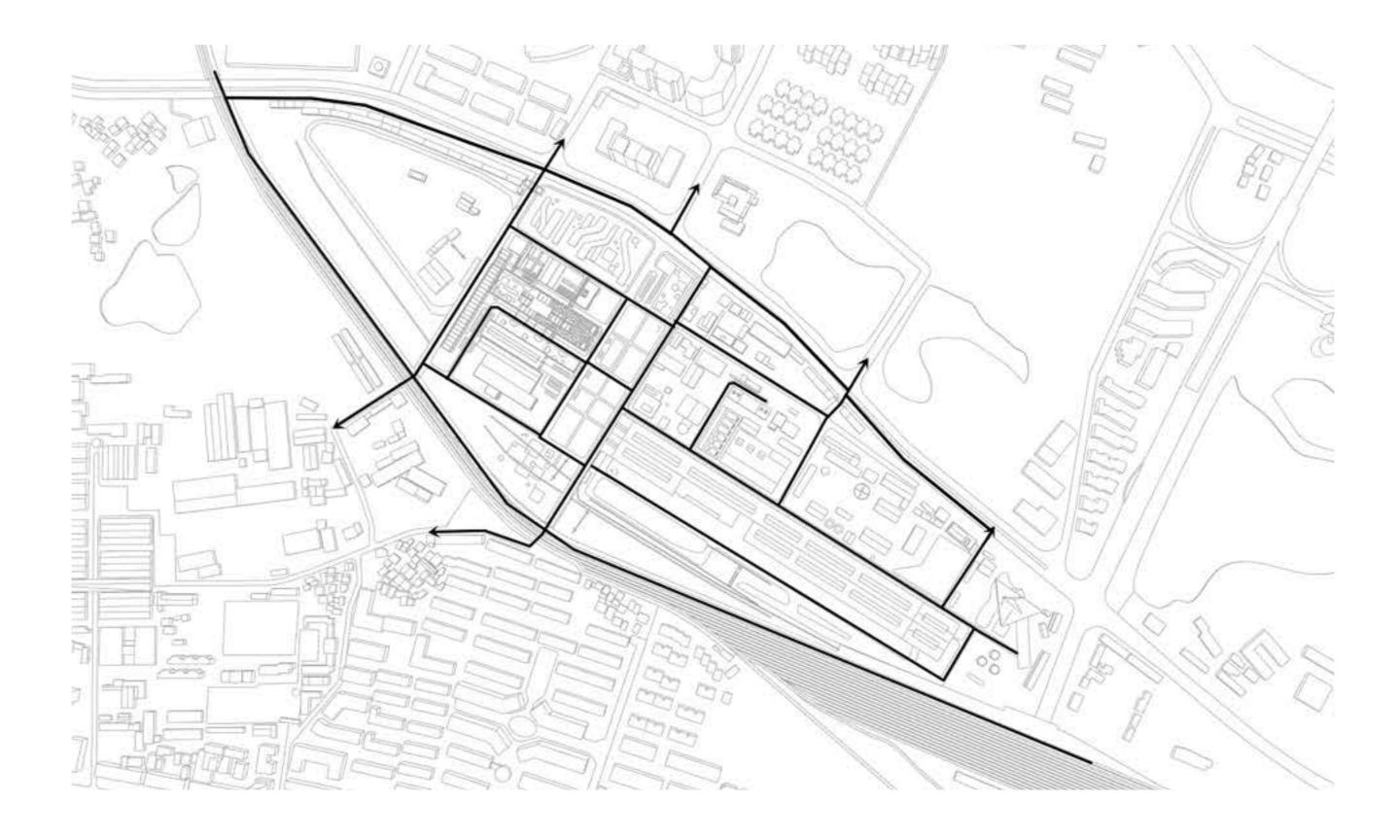
## The city of Wuhan is new







Due to the cessation of industrial production and the shelving of some development projects, a large number of abandoned industrial buildings and facilities have been left behind in Hanyang Iron Works. The structure of these buildings is relatively strong, but in disrepair, there are safety risks.



Hanyang Iron Works is located in Hanyang District, Wuhan City, with advantageous geographical location and convenient transportation. There are many main roads and public transportation lines around it, connecting the three towns of Wuhan. There's a railroad next to the bridge, and there's a passageway under the bridge



## The Hanyang Iron Works Community Land Trust (CLT) project was implemented in three phases:

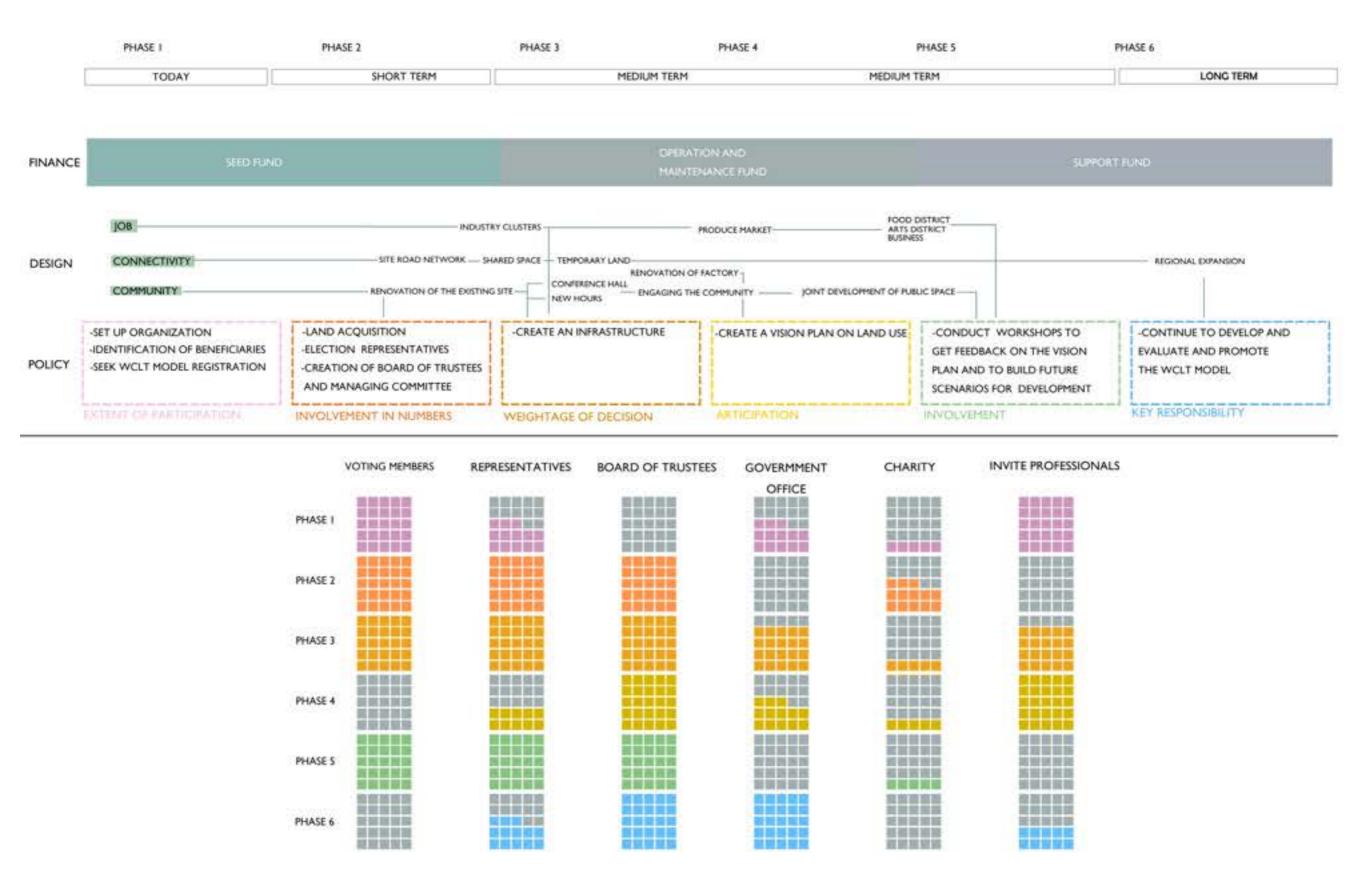
The first phase focuses on the construction of infrastructure and the initial improvement of community functions, providing basic living conditions and public space through the rehabilitation of roads, water and electricity supply and drainage systems, the construction of affordable housing and community centers;

The second phase will focus on the preservation and transformation of historic sites and the construction of cultural facilities, including museums, cultural centers and Spaces for artistic creation, to enhance the cultural value and attractiveness of the community;

The third phase is through the development of business and service industries, the introduction of green industries and sustainable economic projects, and the majority of public Spaces are decided through meetings, which always focus on community participation and social equity.



THE VISION PLAN IS PHASED OUT TO DISTINCTIVELY MARK THE CONTRIBUTION OF THE COMMUNITIES TOWARDS BUILDING AN IMPROVED NEIGHBOURHOOD ALONG WITH OTHER STAKEHOLDERS.

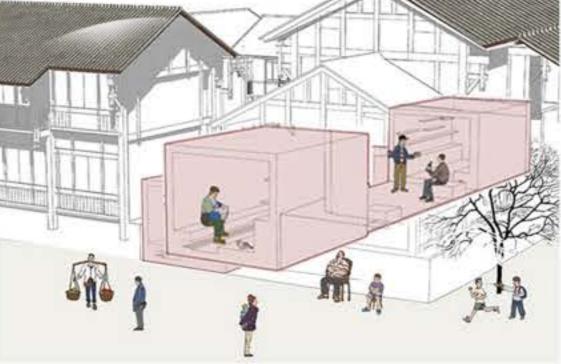


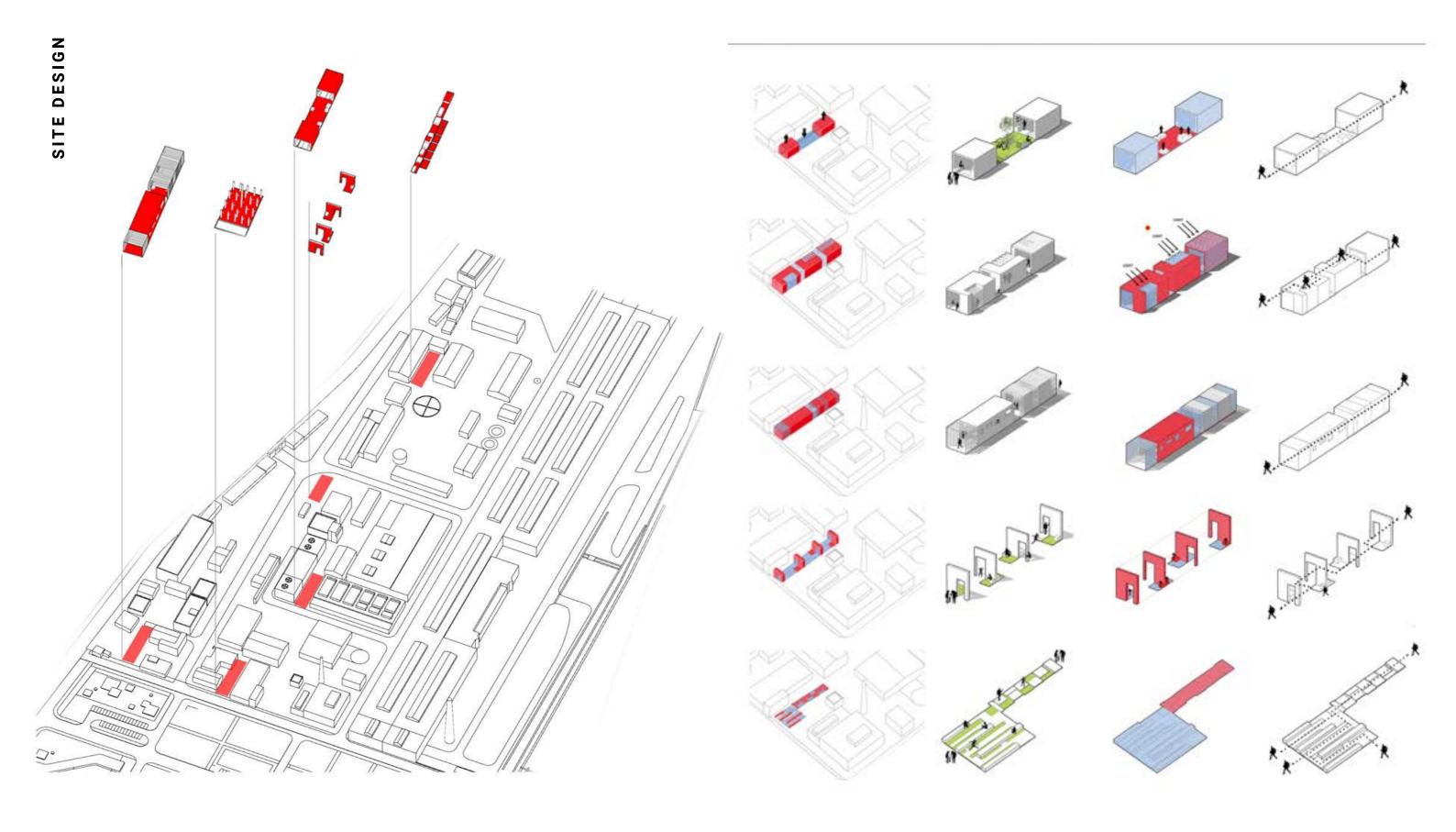


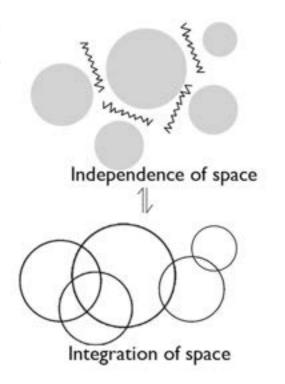
Make use of the gap gray space between the buildings to form a rich and interesting inter-house activity space, and increase the interest and circulation between the street buildings.

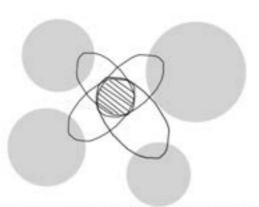
In the first phase, we will implement a multi-functional leisure space by cleverly utilizing the free space between the different buildings and setting up temporary structures. By repairing roads, installing seats or walls, and improving infrastructure, we turn these vacant areas into the heart of community activity.









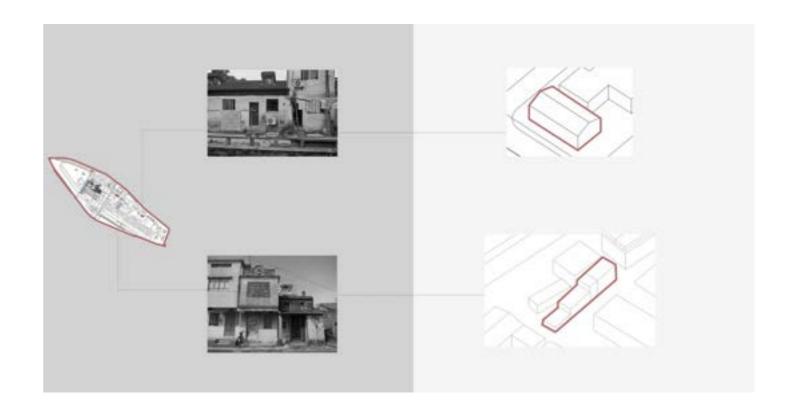


To connect all parts of the community by means of ties. Enhancing community connectivity without compromising private space

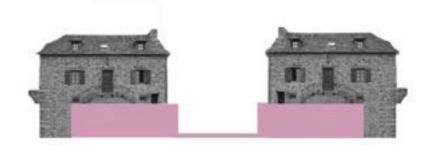


Private Transition Public

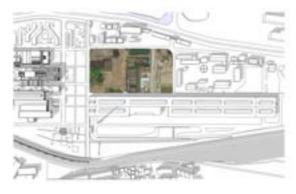
Enhance community cohesion and resident interaction. The classification of different existing houses and the connection of new and old buildings at the same time, through rational planning and flexible design, these Spaces can be gradually transformed into permanent facilities as the project progresses, laying a solid foundation for future community function enhancement.







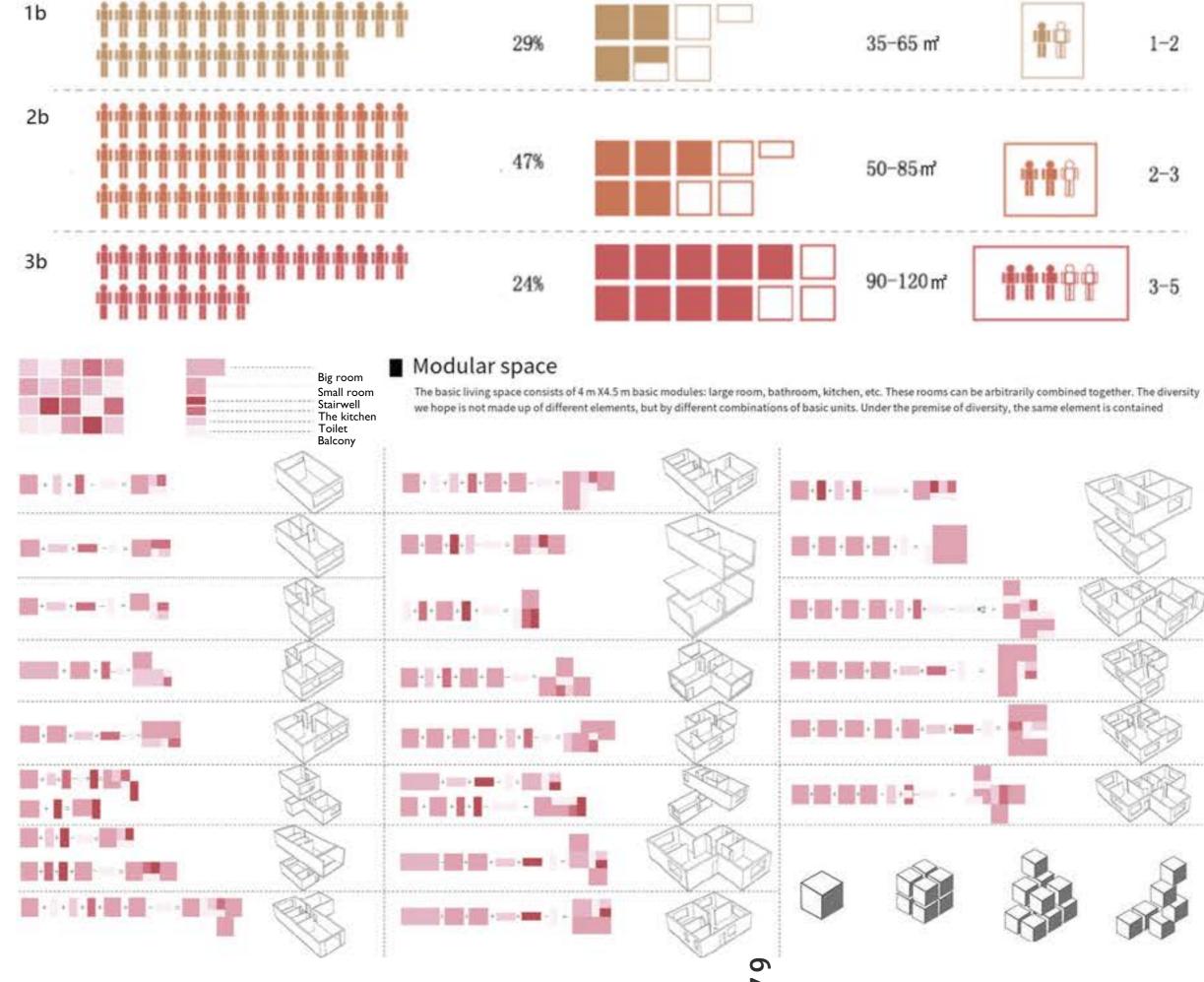
OPEN THE FIRST FLOOR







Community Connection

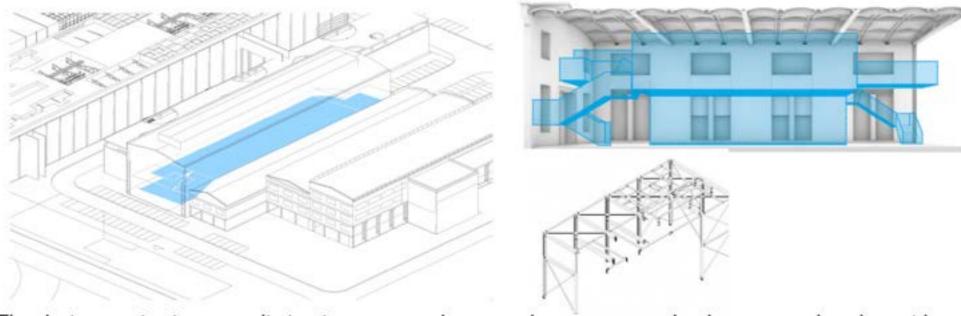


Due to the ambiguous features of the facade and the low level of protection, I completely renovated it. The internal structure was selectively preserved. In addition, the chimney inside the site has been completely preserved.



At the beginning of construction, these reserved elements were carefully peeled, retained and professionally processed from the building.

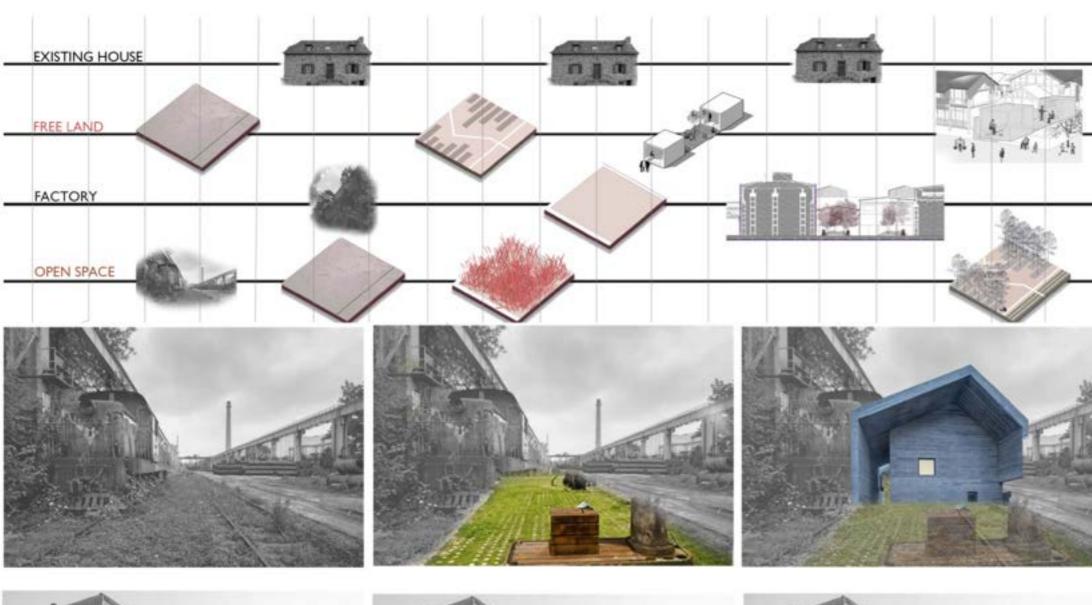
# II CHANGE THE STRUCTURE



The design retains its most distinctive structural part, and new structural columns are placed outside the steel frame to form a steel frame structure.

In order to repair the facade of the building, six facade restoration strategies were adopted during the construction process: 1, the existing wall cleaning pointed, brush colorless transparent permeability waterproof protective liquid. 2. Fill the hole wall, and repair the exterior color with the surrounding wall. 3, the new wall site plastering, reserved 10mm thickness, coated with art mortar, color with the surrounding walls. 4. Update of door and window openings. 5, outdoor overhead pipeline and facade pipeline repair; Pipe exterior rust brush dark gray anti-rust paint. 6. Repair and repaint the line base.

These renovations have been done to preserve the original features and add a second floor to make it more accessible. There are temporary lands to be built at different stages, which will also have temporary functions, and the utilization rate of land will be planned through timetable.









When the construction of the first stage is carried out, the vacant land in the scheduled construction area of the second stage can be temporarily set as a lawn or other type of temporary landscape. Increase the beauty and practicality of the area, the waste of resources caused by idle land.

### ■ Phase III



I envision developing a cloud system where citizens can discuss freely and the board of directors can make decisions to determine community development. There will also be a capital industry chain so that those in need can have some economic sources, such as supermarkets, farms, and art studios.

In 1871, residents of Berlin protested against rent reduction.

# CONCLUSION

Never forget the potential impact of community development, the fear of displacement that accompanies the gentrification process, and the changing needs of future communities over time. Consider the Minneapolis art district. Since 2002, when parts of northeast Minneapolis were officially designated an arts district, the area has been under pressure from gentrification, with housing prices and rents soaring in what has become a common dilemma for low-income creatives living in post-industrial corners of American cities. Many cities have been going through this process over the past two decades, as artists who have shaped the area into a creative and vibrant place have unwittingly sown the seeds of their own displacement. We need to think more about who we're designing for when we're designing.

So is there a common "affordable housing development framework"?

How to control the real estate market in a reasonable framework, so that it can meet people's housing needs, without being affected by the negative impact of the capital market. We need a "framework." Different from the previous housing countermeasures, this framework is to respond to the challenges and development needs of the new situation, and is a "transformational framework" for the development of housing issues. Therefore, my thesis is to propose a feasible framework



### **BIBLIOGRAPHY**

Geographies of Freedom,
Pete Green, https://brill.com/
view/journals/hima/20/4/article-p213\_9.xml

[9]THE QUITO DECLARATIO, https://www.ciel.org/Publications/QuitoDeclaration.pdf

[10]Ikeda, Sanford. "The Economy of Cities: Jane Jacobs's Overlooked Economic Classic." The Independent Review, vol. 24, no. 4, 2020, pp. 605-18. JSTOR, https://www.jstor.org/stable/48583526. Accessed 24 May 2024.

[11]"Telescopic urbanism and the poor." Amin, Ash.City 17.no. 4[2013]: 476-492 [1]"UN-Habitat, Habitat III". (2016). The New Urban Agenda. Retrieved from https://habitat3. org/the- new-urban-agenda/2868 ba75b3ac2b384896d489116f8dfa [4]The New Urban Crisis, Richard Florida, https://archive.org/details/newurbancrisisho0000flor

[5]Athens Charter (CIAM), 1933, Le Corbusier,https://www. researchgate.net/publication/332425567\_Athens\_Charter\_ CIAM\_1933

[6]The Death and Life of Great American Cities, 1961, Jacobs, Jane .https://archive.org/details/ deathlifeofgreat0000jaco\_n0t5

[7]The Economy of Cities, J Jacobs, https://www.semanticscholar.org/paper/The-Economy-of-Cities-Jacobs/c094af11e038fa896971336b-162321feb8311225

[8]Cosmopolitanism and the

[17].Kennen, Kate, and Niall Kirkwood. Phyto: Principles and Resources for Site Remediation and Landscape Design. New York: Routledge, 2017.

[18].Hirsch, Alison B. "From "Open Space" to "Public Space": Activist Landscape Architects of the 1960s." Landscape Journal 33, no. 2 (2014): 173-94.

[19].Li, J. (no date) Revitalizing cities through design of Waterfront Brownfields. dissertation.

[20].Coulthard, Glen Sean. Red Skin, White Masks: Rejecting the Colonial Politics of Recognition. Chicago: University of Minnesota Press, 2014.

[21]. Harvey, David. Spatial Justice and the City. Chicago: University of Chicago Press, 2009.

[12]Novikau, Aliaksandr. "Women, Wars and Militarism in Svetlana Alexievich's Documentary Prose." Media, War & Conflict, vol. 10, no. 3, 2017, pp. 314–26. JSTOR, https://www.jstor.org/stable/26392783. Accessed 24 May 2024.

[13]Tonkiss, Fran et al. "Book Reviews." Local Government Studies 36 (2010): 587 - 593.

[14]DeFilippis, James. "Searching for the just city: debates in urban theory and practice." (2009).

[15].Trancik, R. (1986) Finding lost space: Theories of urban design. New York: Van Nostrand Reinhold.

[16].Hollander, Justin B., Niall Kirkwood, and Julia L. Gold. Principles of Brownfield Regeneration: Cleanup, Design, and Reuse of Derelict Land. (Washington: Island Press, 2010),