

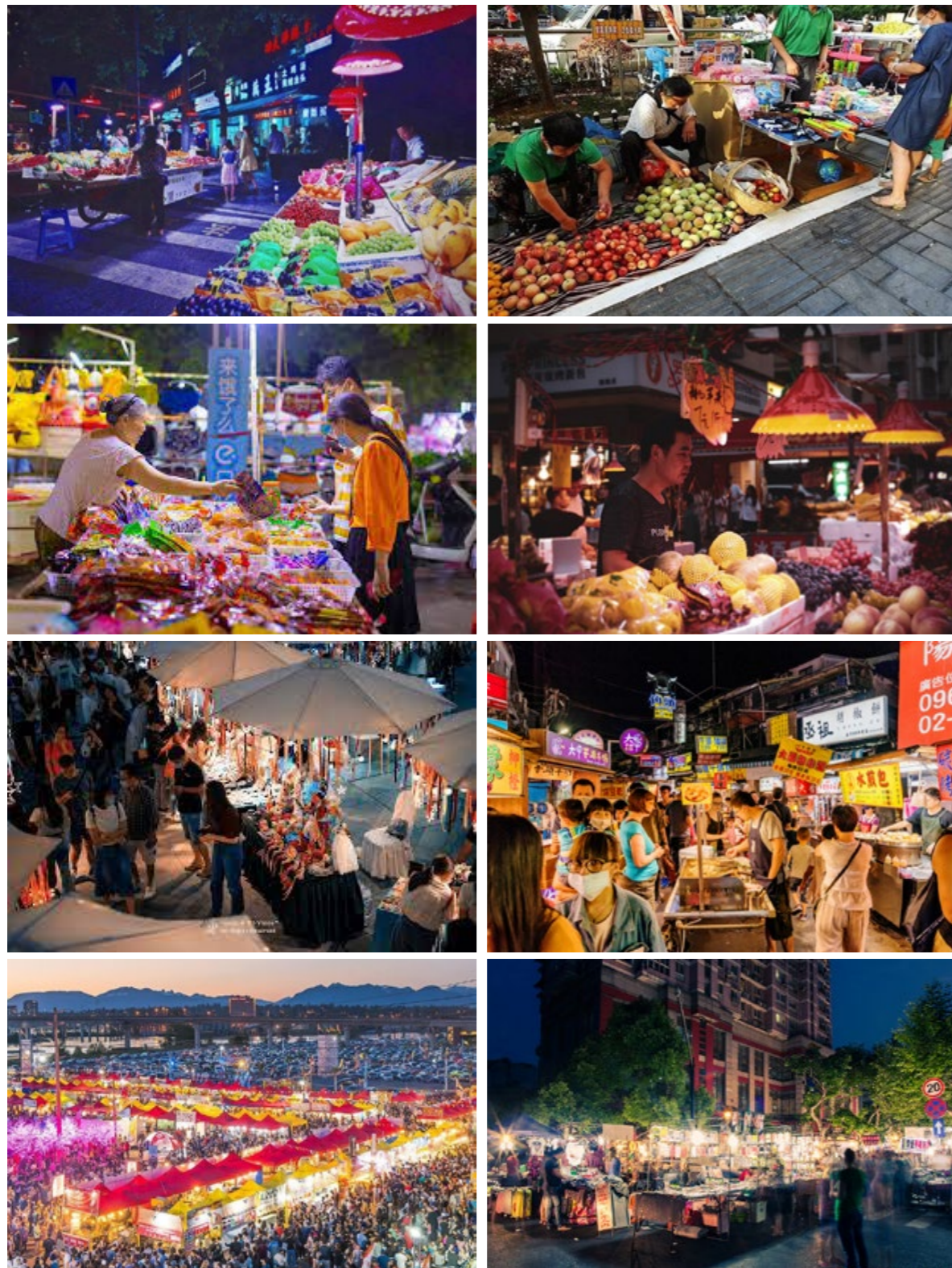
*Along the River During the Qingming Festival - Zeduan Zhang, Song Dynasty*

# Vendor Renaissance

Strategy for the vendor economy of Hulan old town



*Along the River During the Qingming Festival - Zeduan Zhang, Song Dynasty*



## PREFACE

Among the many economic models, one kind of trade behavior appears worldwide and is rarely regulated by rules. Due to taxation and other issues, this economy is called the informal economy. Among them, the vendor is the most common form of informal economy.

In modern society like today, this ancient and face to face way of trading is still alive and flourishing. "Wherever there is human activity, there are vendors." This type of trade brings undeniable benefits to the city, but it also generates increasingly obvious problems and conflicts with other city systems.

The project hopes to identify the causes of the problem and propose a series of solutions to the problems, so that the vendor economic behavior can operate well in the city. The proposal will include both policy and spatial aspects, hoping to develop the advantages of the stalls through policy planning and spatial design, and to reduce the negative effects of the stalls in the city. Hoping to provide directions for the development of the vendor economy in Chinese cities like Hulan in terms of urban management and spatial use.

**Keywords:**

vendor economy, stall, policy strategy, spatial strategy

Vendor scene pictures- Internet

## MOTIVATION

I have lived in both small villages and big cities in China, but in either place, the drawbacks of rapid urbanization such as the gap between rich and poor and social inequity are still evident, and they seem increase with the urban development. What struck me as a child was that the vendors on the street on the way home were fleeing around due to the presence of city police (城管 in Chinese), but these stalls were often an important source for my parents to buy supplies for their lives. After 2020, due to a double layer of epidemics and policies, this conflict has once again become evident. As an important economic source for the low-educated and low-income population in the city, I hope that I can design my own project so that they can better exist in the city and no longer be expelled and treated unfairly. Also, I hope I can make the vendor economy develop better in future city and become a more energetic and valuable component of city.



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## INTRODUCTION

The International Labour Organization describes the informal economy as:

*"The informal economy accounts for more than half of the global workforce, and work in the informal economy is often characterized by small or ill-defined workplaces, unsafe and unhealthy working conditions, low levels of skills and productivity, low or irregular earnings, long working hours, and lack of access to information, markets, finance, training and technology. Workers in the informal economy are not recognized, registered, regulated or protected by labor legislation and social protection. The underlying causes of informality include factors related to the economic context, legal, regulatory and policy frameworks, and a number of micro-level determinants, such as low levels of education, discrimination, poverty and, as noted above, lack of access to economic resources, property, financial and other business services, and markets."*

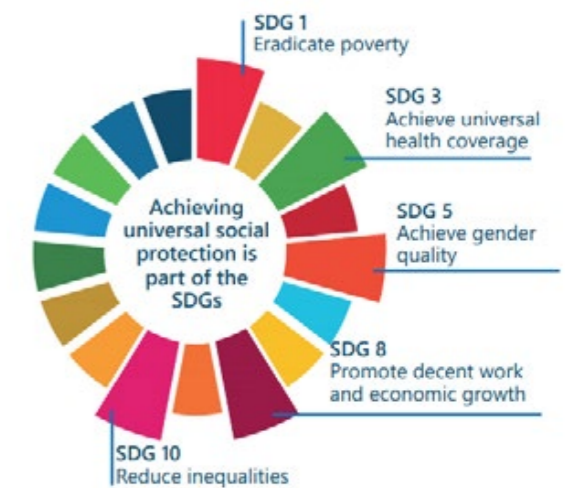
As one of the most visible types of informal economies, (ILO, 2013), the vendor economy has become a hot topic in China. According to statistics from the Baidu index, the term **vendor economy** soared in June 2020 searches. This is not only related to the central government's shift in attitude towards it in 2020, but also the vendor economy meets the needs of urban development. For the future, the **SDGs poverty (SDG 1), gender equality (SDG 5), equality (SDG 10), institutions (SDG 16) and partnerships (SDG 17)** have a lot to do with the vendor economy. (ILO, 2013)

However, at present, the vendor economy is not functioning as optimistically as expected in the cities. It will co-exist with Chinese cities for a long time, and the urban and spatial issues associated with it deserve to be studied. Related research will influence and help the vendor economy to develop in future cities.

## INTRODUCTION

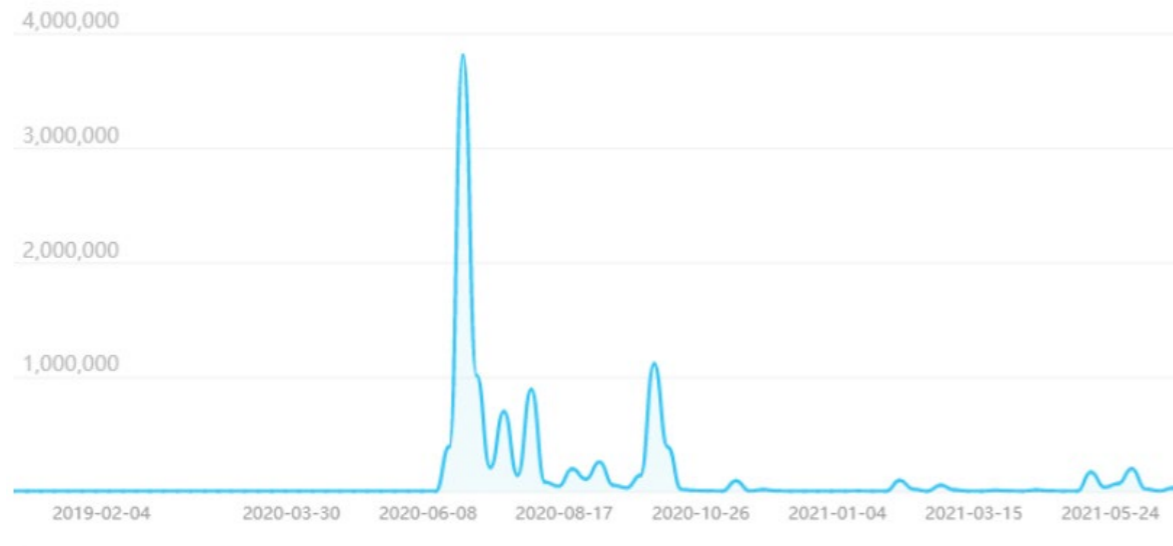
**Problem field  
Background**

Along the River During the Qingming Festival - Zeduan Zhang, Song Dynasty



ILO: International Labor Organisation  
SDG: Sustainable Development Goals

**VENDOR ECONOMY**



Baidu Information Index - Baidu

**SUSTAINABLE DEVELOPMENT GOALS**



SDG related to informal economy - ILO(2021)

**Problem field**

**CONCEPT**

The concept of the vendor economy has been around since ancient times, and includes both the broad "vendor economy" of **individual entrepreneurs** and the narrower type of **itinerant vendors without fixed premises or licenses**. (Chengdong, 2020) It is the most visible part of the informal economy and is closely related to the availability of urban **public spaces** such as sidewalks, parks, and roads (ILO, 2013). In China, street vending has been a means for **rural farmers to make a living** in the city and is associated with the formal economy such as retail, e-commerce, and vegetable markets (Xinhong, 2021). Although the street vending economy is very active in China, it is **not always available for government support**.

General research suggests that there are **six main categories of workers** in China who are driven by different reasons to join the "vendor economy" (Chengdong, 2020): 1. workers who flee low-wage, high-intensity factories or service sectors 2. farmers who want to alleviate the lack of income from farming and the pressure of survival in rural poverty, and who aspire to urban life 3. laid-off workers, disabled people, vagrants, ex-prisoners and other groups with employment difficulties 4. self-employed people who want to cope with and overcome business failures and difficulties 5. urban working class people who want to make up for their low wages and work part-time as street stalls to make ends meet 6. people with special needs or special skills who want to realize their wishes or satisfy their spiritual needs, such as college students who participate in stalls.



City polices expell the vendors - Internet



Goodsman picture - Hanchen Su - Song dynasty



Nandu market - Ming dynasty



Taiping spring market - Guanpeng Ding - Qing dynasty

## VENDOR HISTORY IN CHINA

In the history of China, the development of the vendor economy has a long history and is **an important form of economy** for the people to maintain their livelihood. (Jiyang, 2020) Among them, the Song, Ming, and Qing dynasties were the more developed dynasties in Chinese history in terms of vendor economy. For example, the famous painting "Qingming Shanghe Tu" of the Song Dynasty recorded the prosperity of the market at that time. In the Ming Dynasty, the "Southern Capital Prosperous Meeting Scene", and in the Qing Dynasty, the "Gusu Prosperous Picture". This informal economy used to be an important part of Chinese culture. Since the establishment of New China, Chinese society has undergone many periods of social background and economic system changes, and the vendor economy as an informal economy has also undergone constant role changes in the development of the state and society, and the government's attitude toward the vendor economy has been in a state of flux.

The government's attitude and governance toward the vendor economy can be roughly divided into four stages: (Xinhong, 2021)

### **Socialist transformation: 1949-1977 existence, restriction and transformation**

Between 1949 and 1977, the Chinese government initially used street vending to **promote economic growth**, but gradually imposed stricter controls on street vending as socialist transformation progressed. After the founding of New China, the Communist Party shifted the focus of development from the countryside to the cities, and street vendors were resilient during a period when the urban economy was severely damaged, a period when they **supported the commodity economy** of the cities. At one point, vendors were considered the **"tail of the capitalist economy"** (Song, 2020), and social attitudes at the time were extremely **repulsive and expulsive** to them. However, due to the value and social needs of vendors themselves, itinerant vendors, as individual economic components, were also the target of socialist transformation after the beginning of socialist transformation. (Cui & Wu, 2019) The high level of the government demanded **"restrictions and conversions"** of street vendors to avoid the increase of poor families and social conflicts. During this period, the government **restricted the scope** of their operations and **changed their class status** by forcing them to enter state-owned enterprises or cooperative groups. (Song, 2020)

From 1956-1977, China gradually entered the "planned economy" era, where vendors were seen as a **dangerously unstable group** due to the suppression of the urban commodity economy. (Cui & Wu, 2019) Therefore, the government **controlled and**



expelled them until 1978, when market oriented reforms began and urban vendors almost disappeared. (Xinhong, 2021)

#### **Economic Reform: 1978-1989 Relaxation and Tolerance**

After China's economy began to open up to the outside world in 1978, the government's attitude toward street vendors became more tolerant. Street vendors served to meet people's daily needs, expanded employment, and improved people's livelihoods. The central government implemented market-oriented reforms, supported the non-public economy, and introduced policies to encourage private enterprise, which led to the revival of street vendors. (Cui&Wu,2019) The government allowed individual households to rent stores and counters so that street vendors reappeared and flourished in the city. (Ma&Zhu,2010) In addition the growth and shift of population and the collapse of state owned enterprises led to a labor surplus and entrepreneurs chose to be street vendors, making street vending a good way to increase employment in the face of government ignorance.

#### **Competing within the city: 1990-2019 From repression to coexistence**

The pressure for national development shifted from the central to the local level during this period. (Cui & Wu, 2019) China established development zones to attract investment, which led to a fierce sense of competition between cities. In 2003, the central government introduced a national civilized city selection program. One of the criteria for judging the cleanliness and neatness of the urban interface led local governments to define street vending as a sign of filth, disorder and backwardness. (Xinhong, 2021) Then the city policies were sent to expell vendors on the street, the conflicts between police and vendors happened almost everyday. In 2010, the central government's development slogan changed to "building a harmonious society" and, in an effort to reduce conflict and create a harmonious urban environment, street vending policies became more inclusive after 2010. However, vendors are still not allowed to enter the CBD or tourist areas. (Xue&Huang,2015)

#### **After the epidemic: 2020 Support and development**

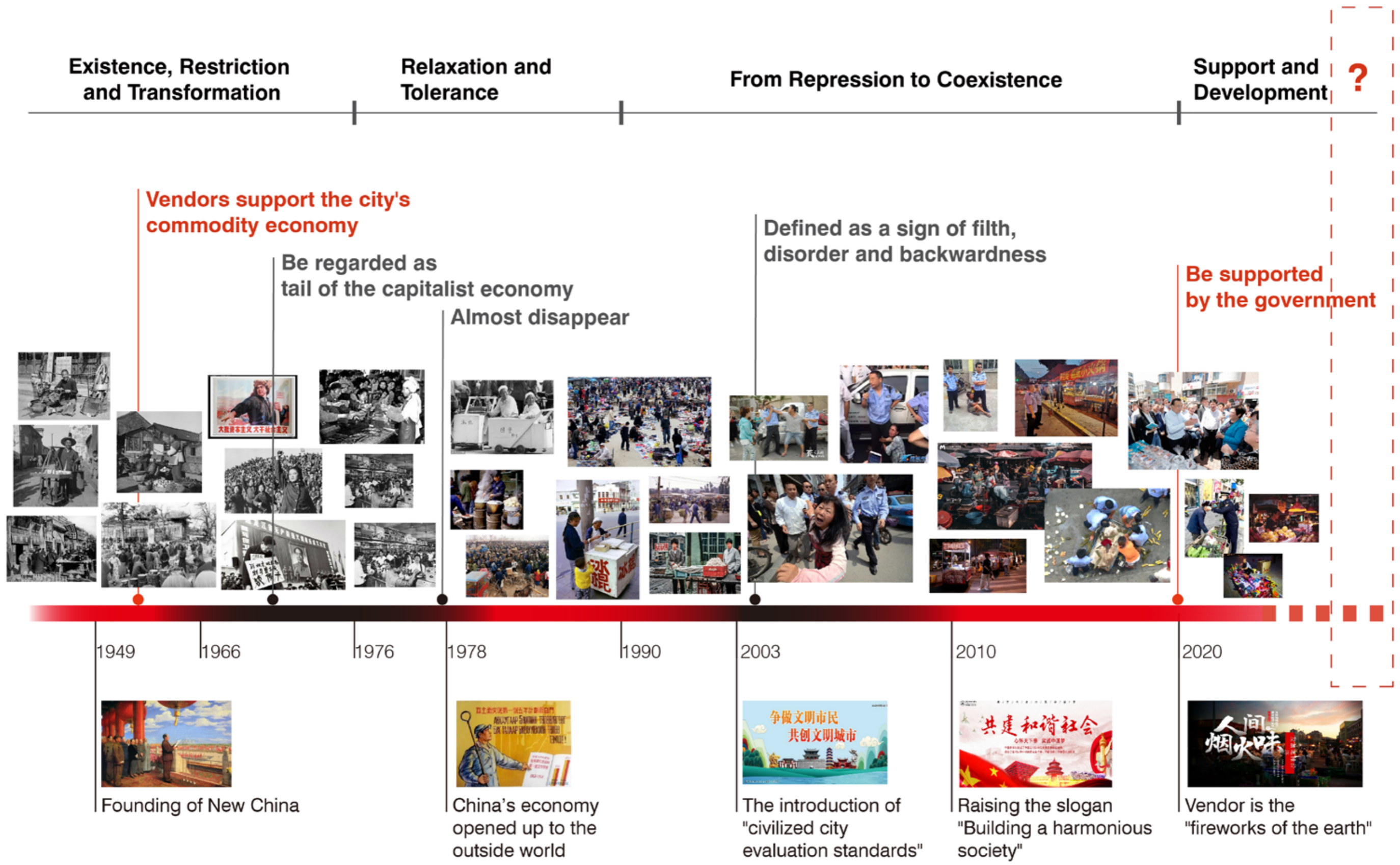
In 2020, Premier Keqiang Li told a press conference of the National People's Congress in May that 200 million people in China work in informal, self-employed ways and that the government must support them by removing unnecessary restrictions. (Della, 2020) At the same time, he said during a visit to Shandong province that the vendor economy is an important source of jobs, a human firework and, like the "high and mighty", the life of China. That same year, the unprecedented COVID-19 pandemic swept through China, raising unemployment in the country and affecting more than 100 million urban workers and some 25 million migrant workers. By March 2020, the urban unemployment rate reached 6%. (ILO, 2020) Since 2020, in an effort to alleviate unemployment caused by Covid-19, the State Council has issued further documents to allow street stalls within partial permits. (Xinhong, 2021) At the same time, the Central Civilization Office announced that street vendors would no longer be considered a negative factor in evaluating national civilized cities. Thus, vendors officially became an economic practice recognized and intentionally supported by the government. Various local governments have also introduced policies to support street vendors.

#### **Now and future**

Today, instead of being a cheap and low-grade consumption model, street stalls are now a more civilian and flexible business model. While China's central government has made clear its affirmation of the vendor economy, the urban problems it presents have not yet been fundamentally addressed. In the absence of a practical implementation strategy, even if the central government decides to support the vendor economy, local governments still feel powerless in resolving various conflicts. With government support, vendors are not operating as well as they should today, and conflicts between stall owners and city officials and nearby residents often occur.

#### **Conclusion:**

China's vendor economy is closely related to people's lives. It has been used as a pillar to support the city's commodity economy and a drawback that affects urban development. The government's attitude toward it has often oscillated between helping and resisting, influenced by the needs of people's lives, the impact on urban life, and the social and economic context of the time. Because of its positive effects on alleviating the financial and employment problems caused by the epidemic, the government recognized its value and political status. Today, the vendor economy is receiving more attention than ever. To make it better in the future cities, the issue of how to plan its space use in existing cities becomes critical.



History of vendor in China - Author

## Background

### URBANAZATION & FLOATING POPULATION

China's urbanization process has been maintaining a high growth trend. At present, the urbanizing rate of China's resident population has reached 63.89%, and by international standards, the urbanization process has entered the middle and late stages. Xiaochao Li, deputy director of the National Bureau of Statistics, has said that the urbanizing rate is expected to remain on an upward trend as China's economic and social development continues and various reform measures to promote urbanization development continue to advance. Although the urbanizing rate of China's resident population has reached 63.89%, data from the Ministry of Public Security show that the rate of China's population who has Hukou (户口) in Chinese, the registered certification indicating man belongs to the city) is 45.4% in 2020. There is still a large gap between the two. This gap reveals a critical message, as Yu Zhu, a professor at the Asian Population Research Center of Shanghai University, points out, "This shows that there are still a large number of people living in cities who cannot enjoy the same public services as the registered population. Urban development has a long way to go in promoting the equalization of public services."

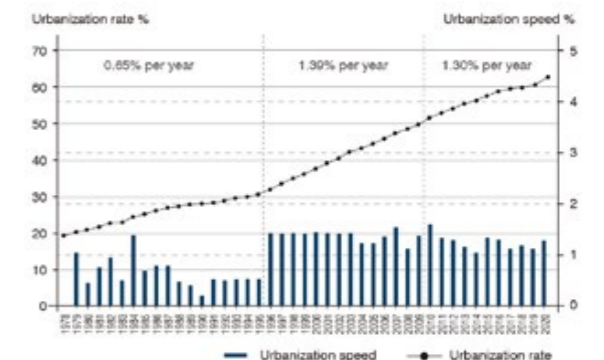
With relatively limited means of agricultural production, the agricultural ministry cannot provide more jobs. With the promotion of large-scale agricultural operations and mechanized production, the surplus rural labor force is faced with transferring to the non-agricultural sector and then to the urban areas, which is the mechanism of "rural-urban mobility" of the population. (Meilin, 2021)

Ge Yang, an associate researcher at the Institute of Population and Labor Economics, Chinese Academy of Social Sciences, said, "When there are not enough local jobs, the population will move to find space for development." As a result of rural poverty due to the state's focus towards urbanization, farmers have to move to cities to increase their income in non-agricultural areas because most of them say that "farming is not profitable" or "farming is only enough to feed ourselves." (Huang, 2014) Rapid urban expansion has swallowed up a significant number of farmers and low-educated people forced to become part of the city. In contrast, many rural workers enter cities with the dream of completing the identity change, and the number of farmers who have entered the city for work has been on the rise. According to the latest data provided by the government, in 2020, there will be 331 million people flowing to cities nationwide, accounting for 88.12% of the total floating population, an increase of 3.85% from 2010, of which 249 million people will flow from rural to urban areas, an increase of 106 million people from 2010 (Meilin, 2021).

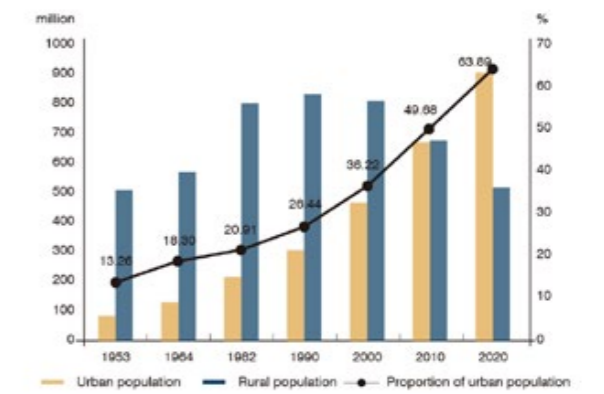
A famous theory is called 'population movement shift' in the international arena. According to this theory, after China's population urbanization enters the middle and late stages or reaches saturation, although the scale and intensity of long-distance migration between urban and rural areas and regions will tend to decline, inter and intra-urban population movements will become dominant and remain at high levels. In fact, data from the seventh national census have already confirmed the arrival of this trend: In 2020, the national intra-provincial floating population was 251 million, an increase of 85.7% in the past ten years; the inter-provincial floating population was 125

million, an increase of 45.37% in 10 years. It can be clearly seen that the intra-provincial floating population is growing more actively than the inter-provincial floating population. (Meilin, 2021) The reasons for this phenomenon are, on the one hand, the high housing prices and costs of living in first-tier cities, such as Beijing, Shanghai, Shenzhen, and Guangzhou, which make it difficult for some of the floating population to survive. On the other hand, the government's settlement policy has been tightened repeatedly so that the rural population has very little hope of becoming an urban population. So second-tier cities such as Chengdu, Xi'an, Hangzhou, Chongqing, Wuhan and Harbin will become the choice of the future floating population. The data show that the top ten cities with the highest population growth over the decade are Shenzhen, Guangzhou, Chengdu, Xi'an, Zhengzhou, Hangzhou, Chongqing, Changsha, Wuhan and Foshan. The population inflow to cities below 1st tier has surpassed that of some 1st tier cities.

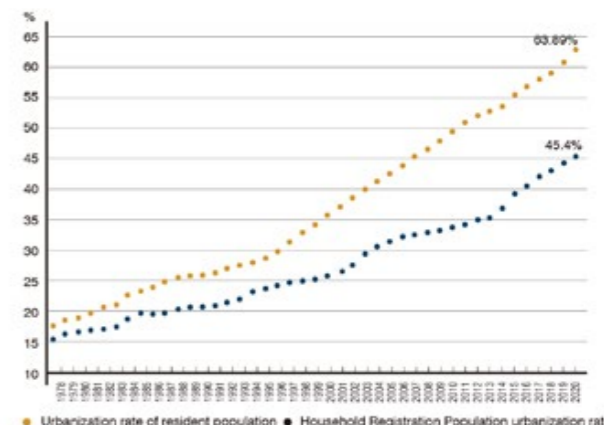
In general, although urban-rural mobility is gradually weakening, its scale is still massive. Inter-city population movement is rising, with the population gathering in cities below the first tier. As some of the second-tier cities become new first-tier cities, the rapid urbanization process will again squeeze the floating population to the next level of cities, and the development of the poor population and the floating population of migrant workers within the second- and third-tier cities will be similar to that of the first-tier cities (such as Beijing, Shanghai, and Shenzhen) more than a decade ago, which is not the state of good urban development.



Chinese urbanization rate and speed



Urban & rural population in cities



Resident and registration population in cities



Top 32 population increase Chinese cities

## EMPLOYMENT DILEMMA

Nearly 40% of China's 1.4 billion population is rural, and the urban migrant population is 376 million, of which **more than 70% are migrant workers** (Jizhe, 2021), most of whom work in service industries such as sanitation, construction, express logistics, and catering, and belong to low-income groups (Jingcheng, 2014). However, urban development makes it difficult for these people to enjoy the same resources of the city as other residents, and because their own attributes (e.g., lower education) are not adapted to the development of large cities, this makes employment difficult, and most of them have to choose to do informal jobs to earn money, with services, construction, and temporary merchandising becoming the mainstream. (Lurui, 2021) **Due to their limited education, they do not have many job options**, and some of them even said "they don't know what else to do besides working on the stalls. (Meilin, 2021)

Although the government is aware of the dilemma of the floating and low-income population in the city and has introduced some policies to protect the livelihood of these people, such as providing low-cost housing and distributing living subsidies, it still cannot solve the problem at the root. **For those who cannot make ends meet, many of them have to leave the city.** (Cui&Wu, 2019) In 1999, Professor Li Qiang of Tsinghua University conducted a survey on 234 family members of the migrant population who stayed in rural areas to examine whether the migrant population would return to their hometowns to settle in the future. The results show that the rate of those who want to stay in the city reached 62.5%, and now the will of the floating population to settle in the city will be even stronger.

In 2020, the spread of the epidemic has led to an increase in unemployment, and ordinary residents are choosing to set up stalls to supplement their families. (Meilin, 2021) Increased competition has made life more difficult for the poorer classes of society who are not wealthy themselves. The stagnation of the restaurant and service industries has led to a large number of migrant workers and the migrant population losing their jobs, **and it is especially important to teach people how to do instead of helping them do it well.** This is the reason why the vendor economy has become the main concern of society at this time.



*Rural migrant workers in cities - Internet*

## VENDOR ECONOMY BECOMES A BOOST

As the number of floating people entering second-tier cities continues to increase and the special feature of the floating population itself, practitioners of the vendor economy will continue to emerge. Already, **data suggests that a large number of street vendors are migrants from rural to inner-city mobility.** (Swider, 2015) A survey conducted in Guangzhou in October 2011 revealed that 92.5% of street vendors were migrant workers without a Guangzhou Hukou (Xue & Huang, 2015). Another study showed that street vendors in Beijing are also predominantly migrants from other provinces (Caron, 2013). Prior to working as a street vendor, some migrant workers worked in manufacturing or service industries under exploitative conditions, which can result in long hours, low wages, and unpaid wages. (Xinhong, 2021) In addition to migrant workers, some street vendors are unemployed locals, laid-off workers, and university students (Swider, 2015) who temporarily operate stalls while having difficulty finding suitable formal jobs. This category of people increased during the epidemic due to problems such as company closures and layoffs. (Xinhong, 2021)

The central government is keenly aware that the vendor economy can solve the employment problem of some people, while it brings positive impact to the whole social system. Especially during the epidemic, **the vendor economy created tens of thousands of jobs** for the government and created extremely high economic value, stimulating mass consumption and filling some gaps in the economic market. For example, in Chengdu, 36,000 street stalls were legally set up in 2 months, creating 100,000 jobs. (Xinhong, 2021) Zhou Tianyong,

director of the China Center for Strategy and Policy Studies at Northeast University of Finance and Economics, estimates that **promoting China's vendor economy could create 50 million jobs.** (Della, 2020)

Before 2020, the attitude of city managers towards vendors has been unresponsive. From life experience, urban residents have demand for the vendor economy, and the main group of such economic activities are low-income and low-educated people in the city, and it is the responsibility of future urban development to ensure the survival of such disadvantaged groups in the city. Unlike the uniformly planned markets in new cities, many street stalls in old cities still retain their original flexibility and freedom, and they travel from street to street, playing "guerrilla warfare" with city authorities (Cui & Wu, 2019), and the city's attitude toward them fluctuates according to policies and the number of complaints from residents, which results in their income of instability, while the city itself steadily grows with rising prices and housing, and one day this poor segment of the population will be **forced to leave the city.** Residents seem to maintain a habitual and accommodating attitude towards such vendors because of the convenience of buying goods or because the goods themselves are desired. **Uniformly planned hypermarkets and markets tend to be scarce in older cities, and there is great potential for stalls to grow in older cities because the streets and public spaces have not undergone or are undergoing new urban planning.** Tight land use in old cities and immature strategies for implementing a vendor economy put stalls in a dilemma in the city, while the physical environment of old cities amplifies the drawbacks of them.

Currently, we need to find a new way to incorporate this informal economy into the future development of the city and create positive feedback with the city in order to **safeguard the livelihood of the underclass within the city.**



Along the River During the Qingming Festival - Zeduan Zhang, Song Dynasty

## Problem statement

For the informal economy, a comprehensive and integrated strategy encompassing a range of policies involving various types of institutions and CSOs is needed to address the negative impacts of informality for less of management or mess space us, while maintaining its significant potential for job creation and income-generating potential. It should promote the protection and integration of workers in the informal economy into the mainstream economy. (ILO, 2021)

Chinese cities today lack a comprehensive development strategy to deal with the problems generated by the vendor economy, including ensuring a good business environment for stall workers in the city, avoiding the negative impacts of stalls, and providing a reasonable vision of the future direction of the vendor economy in the long term. Although some cities in China have introduced policies to support the street vendor economy, the policies are not yet complete. (Della, 2020) For example, cities such as Harbin still do not have an official policy to guide the behavior of vendors.

Most current theories make recommendations through the current state of the vendor economy, without a comprehensive, long-term planning and spatial design for the operation of the vendor economy. The potential participation and development potential of other industries have also been ignored. Currently, a strategy for developing the vendor economy that incorporates political policy, market regulation, urban management, and spatial planning needs to be studied and designed.

### PROJECT DEFINITION

<b>Problem statement</b>	<b>Theoretical Framework</b>
<b>Introduction</b>	<b>Methodology</b>
<b>Goals</b>	<b>Method</b>
<b>Research questions</b>	<b>Relevance</b>
<b>Conceptual Framework</b>	<b>Working process</b>
	<b>Time planning</b>

CSO: Civil Society Organization



Vendor economy in China - Jialun Deng

## Introduction

In the gradual development of urbanization, all kinds of activities within cities became more organized, and each region formed its own unique economic system in different national and cultural contexts, where trade behavior became organized and regulated. However, in the global economic system, **the informal economy accounts for 35% of GDP in low- and middle-income countries and 15% in developed economies**, and is a very important part of the economy. According to the International Labor Organization, the informal economy accounts for more than 60% of the global workforce, which means that more than 200 million people need to earn income through temporary work, most of them being low-income and low-educated people. (ILO, 2020)

Currently, **urbanization and policy restrictions have left a segment of the informal economy workforce in a quandary**. Some are actively or passively part of the city, but cannot be fully absorbed by it. In China, the experience with the expansion of the informal economy has been exceptional, with the government's "flexible employment" based program that allows laid-off workers, unemployed people, or farmers to obtain jobs through temporary contracts, part-time work, self-employment, and domestic service to achieve the national goal of "Six guarantees and Six stability". (ILO, 2020). However, in 2020, the epidemic led to a partial economic stagnation and a large number of unemployed and non-working people. The Chinese government proposed a strategy to promote a "vendor

economy" in the hope of promoting economic recovery and ensuring the livelihood of the population. **The conflict between the stalls and the city has once again become acute due to the gap between policy and operational strategy.**

As the oldest trade behavior, **the vendor is the core of the informal economy, and it has been the most characteristic part of the Chinese market economy** since ancient times. Based on one district of Harbin, China, this design investigates the characteristics and development rules of the vendor economy, summarizes the rules of the vendor economy, and studies related policies through literature review and case studies. Through interviews and questionnaires with the subjects and participants of the vendor economy, we will discover the shortcomings of the vendor economy in practice, find the needs of the participants in it, and explore the root causes of the conflict between the city and the vendor economy.

Taking Hulan District of Harbin City as an example, I analyze the operation and spatial attributes of the vendor economy within the city, and analyze and deal with the public space and other situations within the city. After careful study, through the improvement of government policies and spatial strategies, we hope to improve the current situation of the vendors in the city and provide feasibility and direction for the future development of the vendor economy in a city of Hulan District category.



Vendor economy scenes in China - Internet

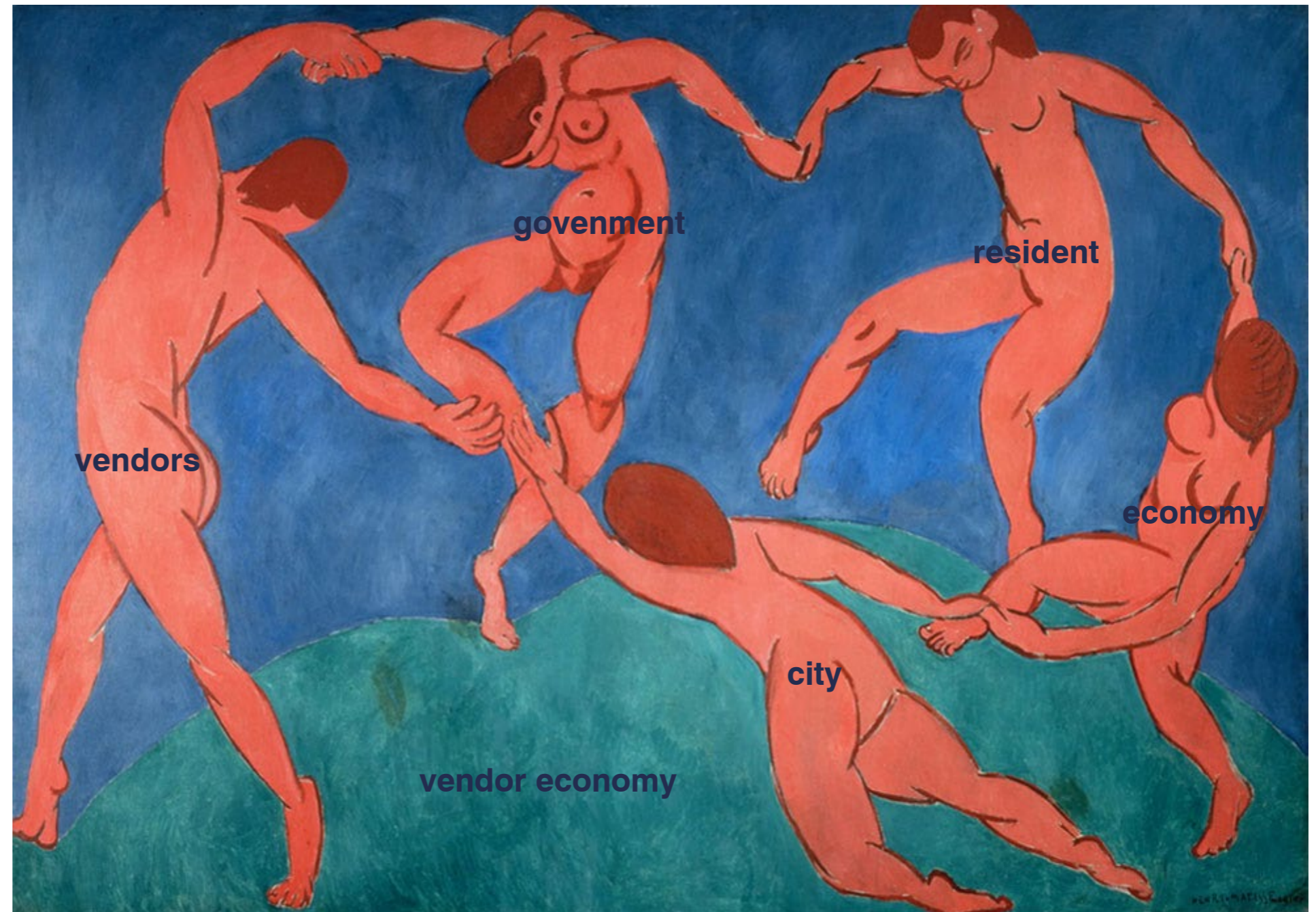
*Six guarantees and Six stability*

*The "six guarantees" refer to ensuring employment of residents, basic livelihood, market players, food and energy security, supply chain stability and grassroots operation.*

*The "six stability" refers to stable employment, stable finance, stable foreign trade, stable foreign investment, stable investment and stable expectations.*

## Goal

Based on the investigation of the current situation of the vendor economy in Harbin Hulan city and the conflict between it and the city, the current problems of the vendors are identified, with the aim of finding ways to enhance the sustainable development of this informal economy in the city. Through the study of policy and spatial aspects, I will find appropriate vendor development strategies to help its future direction in the city. All participants related to the vendor economy are allowed to form a state of self-management, self-regulation, and self-satisfaction, and through the development of strategies to preserve the characteristics of the vendor economy and solve the urban problems associated with it, more interested participants can benefit from the economy system.



*The Dance II - Henri Matisse*

## Research questions

**Main Q: What kind of strategy can make the vendor economy develop better in the central area of Hulan and benefit the city?**

Sub Q1: Why do we need to retain and develop the vendor economy?

(1a) Why has the government's attitude toward the vendor economy now changed to support and development?

(1b) What benefits can the development of the vendor economy bring to the city?

Sub Q2: What are the factors that hinder the development of the vendor economy (in the center of Hulan)?

(2a) What are the problems of the vendor economy in Hulan City?

(2b) What are the causes of the problem and how to solve?

Sub Q3: What strategies can be used to meet the needs of the vendor economy?

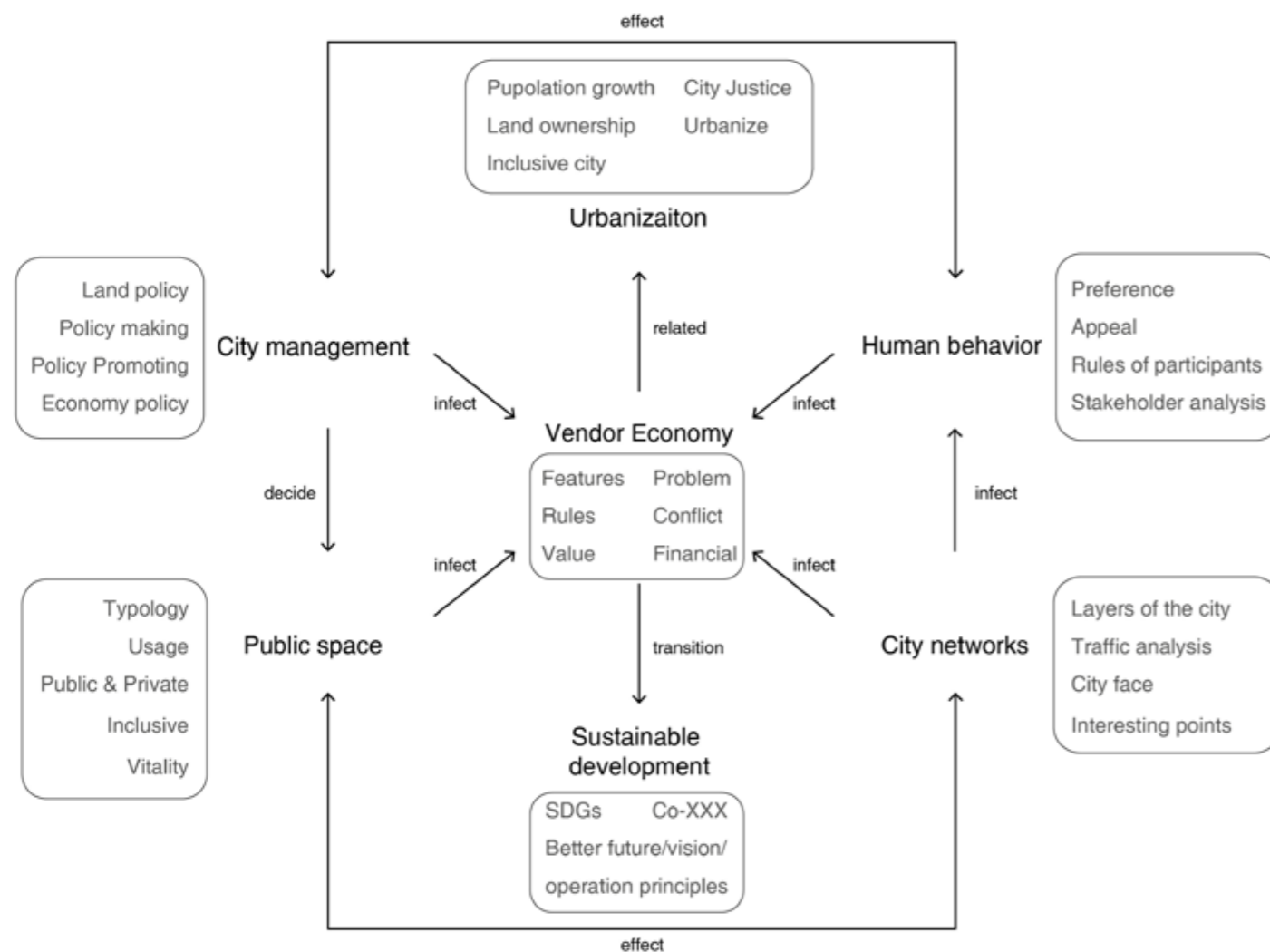
(3a) What are the needs to improve the current state of Hulan's vendor economy?

(3b) How can the space be transformed so that the vendor economy can develop well in Hulan city center?

Sub Q4: How to increase the urban vitality while ensuring the normal operation of the vendor economy?



## Conceptual framework



In addition to studying the characteristics, laws, and problems of the vendor economy, the process of analysis can be divided into six parts: **Urbanism, City management, Human behaviour, Public space, Urban fabric, and Sustainable development.**

First of all, as a kind of informal economy, the vendor economy has an important significance in the urban level. Due to the specificity of the subjects in the informal economy, it is important to **ensure the fairness of each citizen's rights** and interests in the city. An inclusive and equitable city should take into account the needs of the disadvantaged groups in the city. Currently, **cities are still not inclusive of low-income and low-educated people, and most of the participants in the informal economy fit this profile.**

Research on **urban management** can help me understand how cities work and how different sectors work together. Due to the specificity of the Chinese government system, this aspect focuses on **how policy and management can help to harmonize the vendor economy with the rest of the urban system, and how complete and realistic policies can bring about changes in the vendor economy.**

The analysis of **citizens' behaviour** will help to understand the preferences and attitudes of the participants in the vendor economy, and in combination with the **stakeholder analysis and questionnaire work,**

the roles and interrelationships in it will be clearly sorted out, which will help to identify the shortcomings of the current economy and to find out **which roles of the participants can be improved, and what new roles can benefit to the foundation of good vendor economy development.** At the same time, the life patterns and preferences of citizens will also help to formulate strategies.

The **urban fabric and public space** are the foundation for the vendor economy to take place in the city. A suitable environment is a necessary condition for the orderly occurrence of the vendor economy, and the study of the spatial properties of the city will help to find a suitable place for the economy to occur and become the basis for spatial strategy development. The analysis of the accessibility of urban space, the gathering of people, the type of public space and the urban transportation system will help to improve the space used by the vendors.

Finally, the informal economy is highly relevant to the world's **sustainable development** goals, and as an important and almost ever-present type of economy, its good or bad performance will directly affect many aspects of the future development of humanity. A well-functioning and healthy informal economy will have many positive impacts on cities and contribute to the achievement of urban sustainability goals as well as green development.

## Theoretical framework

The theoretical system that constitutes this project may include the following.

1. **The value of the informal economy** to the state, society, and the city. It helps society and government to embrace the vendor economy and lay the foundation for its redevelopment in the city.

2. **The floating population and its organization.** The floating population is an important component of the city, and studying the characteristics and needs is beneficial to urban development. Analyzing the floating population's organization will better help the informal economy participants join the urban development chain.

3. **Market and economical operation.** As a type of economy, the economic behavior of the vendor economy will help designers understand how goods and values circulate and the risks and opportunities that may occur.

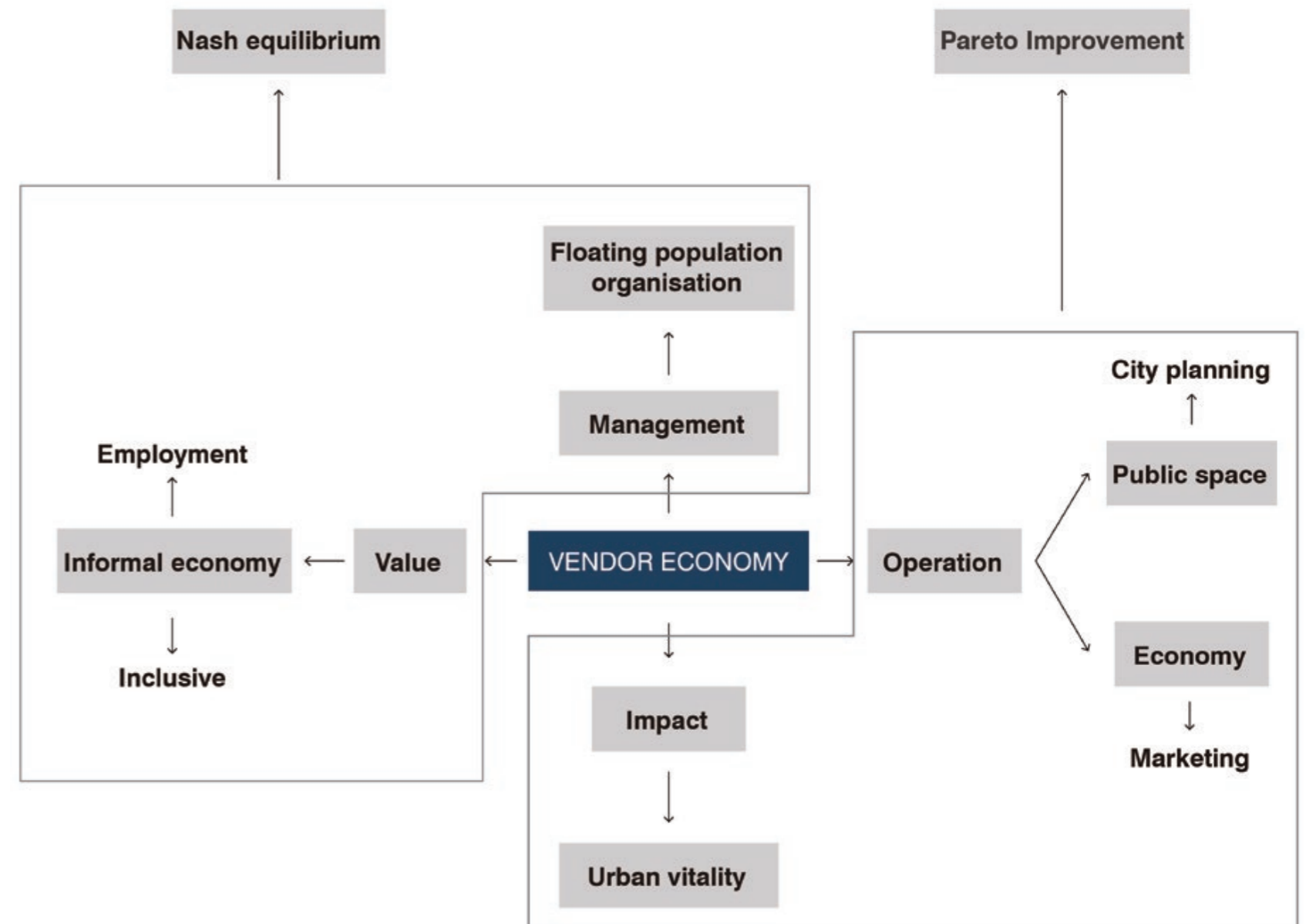
4. Types of **public space, use, and transformation.** The vendor economy is dependent on the physical space. Making it and the city coexist better through good spatial strategy is an important direction to be studied in the project.

5. The addition of **urban vitality.** The positive impact of the vendor economy on the city needs to be studied.

6. **Urban governance and future development.** It is crucial to investigate the role that new industries may play in the vendor economy and the potential help that the city can provide for the vendor economy.

7. **Nash equilibrium:** The participants in the vendor economy act according to their own interest perspective, which leads to the damage of the overall interests of the participants and eventually also leads to their own interests cannot be maximized. **Participants are unable to change their own strategies to get more benefits for themselves.**

8. **Pareto improvement:** The hypothetical analysis is for two competing competitors. It mainly explores **how to improve the welfare of the other party, or both parties, without sacrificing the welfare of either party.**



Theoretical framework - Author

## Methodology

### Literature research

#### Intended outcome

To have some understanding of the nature, laws of operation, and definitions of the vendor economy itself, to find theories that have been proposed that have been related to the study, and to use research data to make the conclusions in the study more credible.

#### Detailed description of method

Due to the complexity of the vendor economy, many scholars have conducted a certain amount of research on the vendor economy itself and its relationship with the city and life. By reading the relevant literature, one can gain a certain level of understanding of the characteristics, strengths, and weaknesses of the vendor economy itself, as well as the evolutionary process and the future vision. The researcher's findings can likewise be an important part of the new strategy.

#### Resources

Google Scholar, Baidu scholar, Books, Website, News



### Observation

#### Intended outcome

It is possible to show photos of conflicts in the vendor economy, actual scenes of the vendor economy in operation, photos of scenes of the use and demand of the space by different participants.

#### Detailed description of method

The main purpose is to understand how the real-life vendor economy works through observation of images, videos, streets and people, and more details can be obtained. And by observing the same thing from different perspectives or roles, more diverse directions can be obtained.

#### Resources

Pictures, Street views, Online image database,



### Case study

#### Intended outcome

The necessary conditions and strategy structure for the development of the vendor economy.

#### Detailed description of method

A few other Asian countries were selected to observe the current state of development of their vendor economy, analyze the reasons for the current state of affairs. The main purpose of the case study is to analyse what kind of process and what kind of result the vendor economy will go through in a certain situation by comparing the cases. From the analysis of the cases, the reasons for the success or failure of the cases can be analysed and thus help in strategy development.

#### Resources

Internet, Cases in reality, Advertisement



### Policy analysis

#### Intended outcome

The reasons for the government's change of attitude towards the vendor economy and what advantages the government needs from it. Finding the shortcomings in the current policies can improve the policy formulation or policy structure.

#### Detailed description of method

The Chinese government is strategic about the development of China as a whole, and every five years the state will issue policies that clarify the future direction of development. The strategy should be in line with these basic national policies in order to be feasible. By studying the policies one can find the design direction.

#### Resources

Government website, Government files, Government city plan,



### Questionnaire & Interview

#### Intended outcome

Various correlation analysis, pre-senting data results in the form of data and graphs, supports the de-velopment of new strategies. Different views of different participants in the vendor economy in terms of policy or space needs. The need of different groups.

#### Detailed description of method

A large amount of data can be collected through web-based questionnaires to support the conclusions. And it allows a higher general applicability of the conclusions and a better understanding of the needs. The analysis of the data can get the correlation of certain issues. The interview can be a good way to collect problems and conflicts, and find out the place where can improve in practice.

#### Resources

Online questionnaire servicer,



### Stakeholder analysis

#### Intended outcome

To find the players within the vendor economy, to clarify the relationships between them, to analyze the potential of each party in a new strategy for the future development of the vendor economy, and to adapt the role of each interest holder in the strategy.

#### Detailed description of method

By finding the players of interest in the project, it is possible to know which players have a greater interest in developing such an industry, which players may its hindering effect on the development, or to find potential players who can benefit from the development of the project in the future. By analyzing the rights, interests, purposes and expectations of each participant, it is possible to better arrange the mos of the project operation to eventually achieve a win-win cooperation.

#### Resources

Literature, News, Report



### Spatial analysis

#### Intended outcome

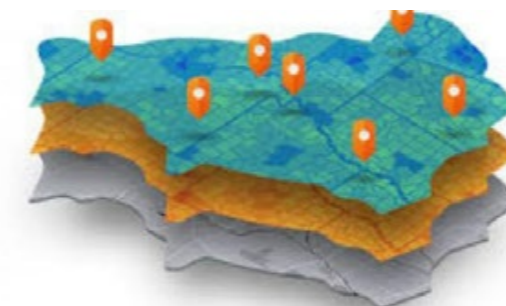
The spatial diversity of the vendor economy is satisfied by different designs for the neighbourhood ac-cording to different spatial types and traffic conditions.

#### Detailed description of method

Stratification of objects with different attributes at the urban scale, such as water, greenery, roads, buildings, public spaces, etc. By analyzing the rela-tionship between these layers, we can understand the geomorphology and urban texture of a city and provide more data for spatial strategies. The attributes of public space can be analyzed and classified to facilitate the development of spatial strategies. Issues that can be analyzed include accessibility, convenience, frequency of public space use, and which types of public spaces have more potential to become places for stalls. The analysis to find the spatial pattern of the operation of the economic activities of the vendor can make the design more perfect.

#### Resources

Geography database, Traffic institution, GIS system,



### Social media analysis

#### Intended outcome

Some video and pictures showing the current situation of vendor economy and what the conflict is. Collect the attitude of the public from the comment.

#### Detailed description of method

The emergence of self-media and the application of social media allow the public to express their views on a certain event on the same platform, while some problems and records of life can be the subject of dissemination, and more direct data can be obtained by analysing these contents. And by searching relevant events on common Chinese social platforms such as TikTok, Weibo and RED Book, we can understand the current urban de-velopment of the vendor economy according to the video content, we can find some problems and conflicts, and we can roughly understand people's attitude towards the vendor economy according to the comments. The search of news and social hotspots can understand the development process and the effect of the government on the vendor economy.

#### Resources

Tik Tok, Weibo, Red Book, Baidu



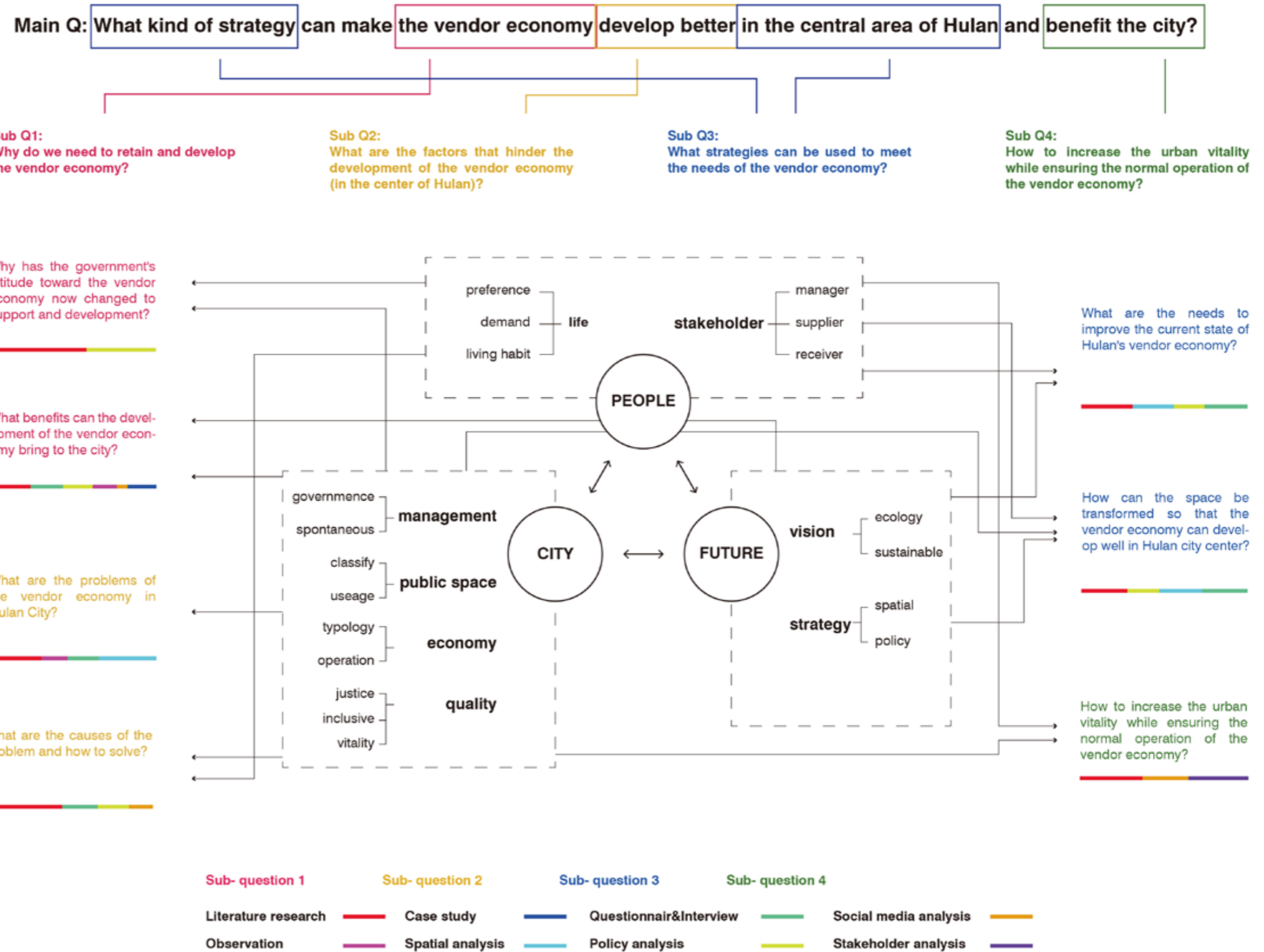
## Method

### Method & intended outcome

<b>(Sub - ) research questions</b>	<b>Method</b>	<b>Intended outcome</b>
Why has the government's attitude toward the vendor economy now changed to support and development?	Literature research, Policy analysis	Identify current and future urban development goals, social context and economic operations. To forecast future governmental attitudes.
What benefits can the development of the vendor economy bring to the city?	Literature research, Questionnaire&Interview, Policy analysis, Observation, Social media, Case study	Identify the benefits that the vendor economy brings to the country, society, and the city, and what it can promote and strengthen, and what positive feedback it brings to urban development.
What are the problems of the vendor economy in Hulan City?	Literature research, Observation, Questionnaire&Interview, Spatial analysis	Find out the existing problems as well as the main conflicts of the vendor economy in the central area of Hangzhou.
What are the causes of the problem and how to solve?	Literature research, Questionnaire&Interview, Policy analysis, Social media analysis	Know why conflicts arise and how to resolve them, propose some approaches that can help.
What are the needs to improve the current state of Hulan's vendor economy?	Literature research, Policy analysis, Spatial analysis, Questionnaire&Interview	Practical measures that can help the practitioners of stalls and consumers. Understand the requirements and hopes of each group.
How can the space be transformed so that the vendor economy can develop well in Hulan city center?	Literature research, Spatial analysis, Policy analysis, Questionnaire&Interview	Find suitable locations within the city for the future development of the vendor economy. Analyse their advantages and disadvantages, and clarify the reasons for choosing these locations. The space design of the selected space is based on the space requirements of the stall activities to ensure the advantages of the vendor economy and to avoid conflicts.
How to increase the urban vitality while ensuring the normal operation of the vendor economy?	Literature research, Policy analysis, Stakeholder analysis, Case study	Explore what other industries in the city can be driven by the vendor economy, so that more participants can join and benefit from it.

**Relationship between questions and methods**

The diagram shows the aspects that should be taken into account in the conduct of the project and the key words, each research question is connected to its related content and the method used is shown as a colored horizontal line below each question. The length of the horizontal line indicates the importance of the research method to the problem or the amount of effort expended.



Relationship between questions and methods - Author

## Relevance

### SCIENTIFIC RELEVANCE

Since the vendor economy itself is dependent on cities and people for its existence, research related to it involves several fields. If we want to achieve a better research purpose, we need to have some sociological and human behavior help firstly, so that we can better grasp the attitude of citizens towards the behavior of vendors and the possible attitude change in the future. Secondly, some causes of conflicts have to involve urban design, architecture, and transportation disciplines, such as what kind of external public space is suitable for the development of the vendor economy, and how to deal with the relationship between urban transportation and the vendor economy.

It is hoped that the analytical process and the theoretical framework of the project, when completed, will provide ideas and directions for the development of vendor economy in urban centers in China, such as Hulan.

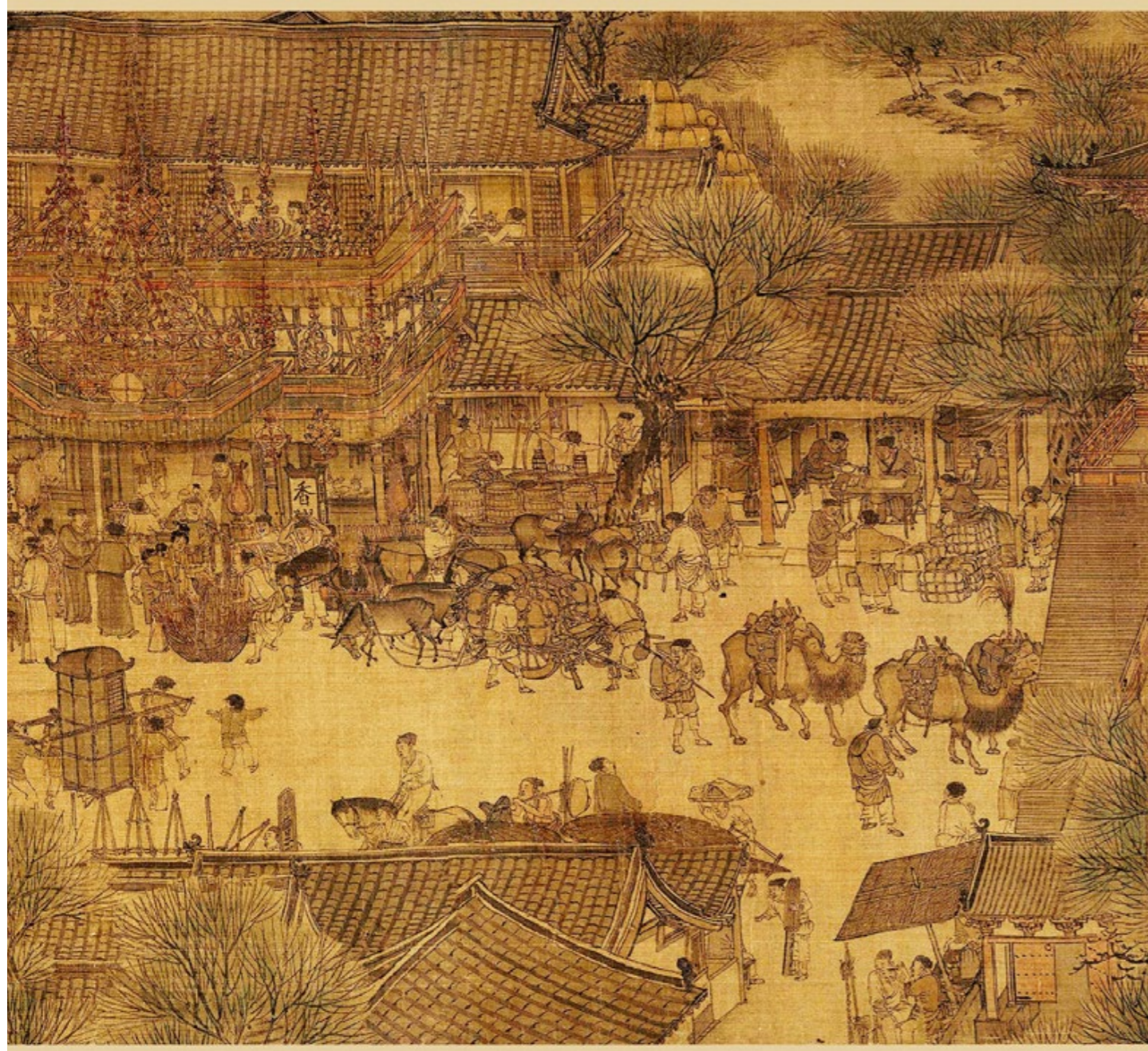
### SOCIETAL RELEVANCE

At present, the main body of the vendors is still the low-income or low-educated people in the city, these people can only rely on temporary jobs or vendors for survival, and the negative vendor economy operation will lead to the life of some people in the city is fundamentally affected. For social justice, it is fundamental to ensure that every city dweller lives in the city, and that everyone has the right to use the city, to take from it, and to pay for it. If the vendor economy can be made to run better in the city, the foundation of the lives of the bottom class can be secured, while also potentially improving the overall happiness of the city.



Recreation of Along the River During the Qingming Festival - Unknown author - Internet





## ANALYTICAL PROCESS

Floating vendors  
 The advantages of vendor economy  
 Developing defects  
 Harbin  
 Case study  
 Strategy framework

## Floating vendors

The composition of floating vendors is complex. In addition to those who work full-time in the floor economy as their primary occupation, unemployed, laid-off workers, white-collar workers who wish to increase their income, and students who start their businesses all fit this characteristic of mobility. Their freedom and flexibility are the most obvious characteristics of such vendors. To maximize the number of their customers, itinerant vendors choose to set up their stalls in areas of high population density. (Song, 2020) Examples include bus stops, subway station exits and places near university gates. Some vendors will park their merchandise carts at intersections or sidewalks. This will increase their income because of the high pedestrian activity. Some street vendors congregate in the gray areas of the city, such as the narrow areas behind the busy areas of the city. (Li, 2018) They deal with a complex variety of goods, fruits, snacks and other food, clothes, daily necessities, handicrafts, second-hand goods, electronic and digital parts and services, (Song, 2020) and their purchase sources are usually online or make goods on site. Some vendors carry their goods and tools with them or use crude means of transportation to transport and sell them. These people also generally earn less than the urban average and are vulnerable to external influences. (Xinhong, 2021)



Vendors and their goods - Internet

Vendor locaiton and tools - Internet

## The advantages of vendor economy

From the government's point of view, the vendor economy solves the **employment** problem of a large part of the population. It **provides livelihood security** for the lower class living in the city. Its low-cost, easy-to-use nature also offers young people the opportunity to **start their own businesses**, they can earn **extra income** or get **unique experiences** by doing vendor.

As a form of consumption, the stalls can also **stimulate consumption** and **promote the operation of various industries**. Some small food and clothing **enterprises** that rely on the vendor economy can run benignly.

For city dwellers, vendors can **enrich the lives** of urban residents. It also **meets the multi-level consumption needs** of urban users, and because there is no store rent, the price of goods has a significant advantage, and the **cost of living for citizens is reduced** (Jiyang, 2020). The inexpensive nature of vendor goods attracts many middle-income consumers (Bhowmik, 2010). The vendors around the community also provide **convenience** and a place for the neighborhood to **go for leisure**.

## The defects of vendor economy

Despite the existence and development of such informal economic activities as the vendor economy in the city, many drawbacks have not been solved in practice because of the lack of practical and effective design and inadequate policies and spatial strategy.

Specifically,

- 1, **Occupies the road**, which results in the miss of the original function of the road, resulting in different people's flow conflict or traffic accidents.
- 2, The city's street **hygiene** gets negative impacts, increasing the work pressure of sanitation workers.
- 3, Noise and smell **pollution**. The excessively noisy atmosphere and the odor generated when making food can potentially affect nearby residents.
4. The hygiene, quality, and after-sales service of the products **cannot be guaranteed**.
5. **Safety hazards**. Due to unreasonable use of tools or lack of safety awareness, some vendors can cause fires.
6. Conflicts due to **inappropriate competition** often occur between stall owners competing for favorable stall locations or with the real economy due to competition for customers.
7. Confrontation with city management. Conflicts between city police and vendors have always been a hot topic in society.
8. The **city's rejection** of practitioners and the stall owners' self-identification. The **lack of self-identity**.

The causes of these problems can be divided into:

**Lack of top-level design:**

The legalization of street vendor status is still in its infancy. **China has not yet developed formal and long-term policies and regulations for street vendor management**, and different cities have adopted different regulations for street vendors. (Xinhong, 2021) Inconsistent policies make it difficult to implement urban management. "Sometimes policies are put on hold; sometimes authorities suddenly stop existing policies and make new ones," said one city manager: This creates uncertainty in enforcement and can easily lead to conflicts between city managers and vendors. (Bell & Loukaitou, 2014) The current situation is that the government has **less control** over the policing of the vendor economy and **no reasonable management and supervision mechanism** has been formed. There is no unified information registration service for vendor operations, and there is **no special department** to deal with the relevant demands between stall owners and consumers.

For the vendor practitioners at the bottom of the society with low education and no skills, there is a **lack of information access** and they cannot get timely information and help, and for the disabled and the elderly, they **cannot get the benefits of the Internet era**, which makes it more difficult to operate. (Lin, 2021)

**Disorganization:**

Disorganization is perhaps the tricky part of managing vendor economy practitioners. Unlike the inner-city market-dependent and life-experiencing vendor economy, the floating population engaged in the vendor industry is territorial, autonomous, clustered, and informal. (Xiuyun, 2013) They often come from the same region or city and are introduced by their hometown to form their own entertainment and cultural circles, and the industries they engage in are naturally similar. The inherent mobility leads to the **loose organization** of these people, and there are **few organizations to discipline** the behavior of members. Under the current management system, **self-organized groups** still appear in the form of **informal organizations** and are **less binding**. (Xiuyun, 2013) For the floating population, self-organization is very important. If there is **no communication** between the government and the disadvantaged groups through self-organization of the floating population, it is difficult for the government to find a rational bargaining partner and a way to negotiate in case of disputes, and the scattered people, who are **unable to defend their rights**, are easily forced by the situation to engage in violence, causing great social damage. (Xiuyun, 2013) This is confirmed by the violent resistance of many vendors against the city administration.

**Lack of spatial planning:**

Due to the **lack of organizations** to negotiate with the government, vendors are unable to formally voice their demands, and they are unable to join any formal trade associations due to the **lack of business licenses**. The government's restrictive regulations on social organizations also make it difficult for vendors to form their own associations, and bringing all vendors together is difficult in practice due to the overly free and fragmented trade situation. (Huang, 2014)

Due to the freedom of business locations, stalls often **occupy** sidewalks and bicycle lanes in the city, which can lead to **traffic congestion and traffic accidents** that harm the normal transportation system of the city. Due to unfavorable factors such as **smell and noise**, vendors sometimes affect the rest of the surrounding residents at night. **Environmental pollution** adversely affects the sanitation of the streets and **increases the workload of city street maintenance**. Stall owners also need to compete for suitable space to secure their income. (Xinhong, 2021) And the poor handling of such behavior by the city administration can also damage the interests of consumers and stall owners. A segment of the population would rather risk eviction than rent government-established stalls because most of the currently approved areas in the city are in unpopular areas where there are fewer customers and less profit. As a result, some may risk vending in prohibited areas or try to extend their **business hours**. (Xinhong, 2021) Also inner-city markets have higher cost requirements.

**Market regulation:**

As an informal economy, **good market regulation** has been lacking. 2020 The proliferation of vendors has created competition and regulatory complications. Because the goods sold among vendors are similar, **product quality and prices** are difficult to control. Although good quality and inexpensive goods can attract a large number of middle and lower class consumers to buy, product quality is difficult to guarantee, and relevant government departments (health, quality control) have not formed a linkage mechanism to monitor unfavorably. The entry threshold of floor caterers is low and temporary, and the government has not conducted **systematic qualification examination** for a long time. The government has not set **clear market access standards and industry standards**, and the quality of tools and raw materials used by stalls varies, making it difficult to ensure **food hygiene**. (Xinhong, 2021)

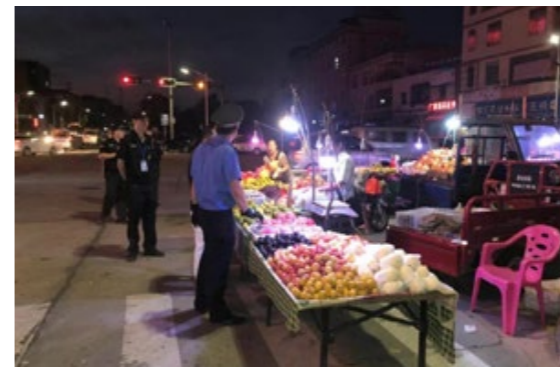
**City management:**

From the perspective of city managers, without policy guidelines and unified planning, operators **cannot anticipate its adverse effects** on other systems, leaving city managers in an awkward situation where it is difficult to balance policy and management. When city managers choose to evict vendors and even confiscate their vending tools (carts, etc.), they also deprive vendors of their right to live, and fierce resistance and conflict are inevitable. (Xinhong, 2021) In the absence of violent physical confrontation, vendors first pretend to leave, but actually move to a side street or wait for the city manager to leave and return to their original location. (Huang, 2014) Vendors resist by possibly fighting or blocking or following law enforcement vehicles, and such scenes often attract attention from those around them and related videos generate media attention. Sometimes, vendors also try to use **bribes** to get the city police to leave. Since some city policemen are not part of the official state service, they are quite willing to accept such extra income. (Huang, 2014) This is certainly a **blight on urban management**.

**No long-term planning:**

Although China's attitude towards the vendor economy has changed from opposition to support, there is no denying that the central government's attitude now is due to the fact that many formal economic practices have been affected by the **epidemic** and businesses such as stores, supermarkets, restaurants, and food processing have come to a standstill in order to stop the spread of the epidemic, making vendors a viable solution to employment and increasing citizens' income. However, when the epidemic is controlled and all economic activities return to normal, perhaps the vendor economy will once **again return to the gray area** of urban development. Although local governments are aware of the central government's attitude, they often adopt a passive management approach to the vendor economy due to the lack of practical management solutions. That is, they let the vendor economy behave freely and then suppress or manage it when problems or conflicts become too obvious.

This **unclear attitude** makes it difficult for informal economy practitioners to find their **own position** in the city. (Jingcheng, 2014) At present, the vendor economy **lacks the support of multiple economic forms**, and under the development trend of "Internet+", the vendor economy can only get help from traditional financial methods, and the government should guide the vendor economy to combine with new types of economy to **develop together**. (Lin, 2021)



Vendor problems - Internet

# Harbin

Located in Northeast China, Harbin, alias Ice City, is the capital of Heilongjiang Province and a mega-city of China. It is also an important central city in northeast China as approved by the State Council of China, and an important manufacturing base for the country. As the political, economic and cultural center of northeastern China area, Harbin is one of the few second-tier cities in northern China. With its unique winter tourism resources and the cultural influence of its long-standing trade relations with Russia, Harbin has become a famous winter tourism city and is known as the "Moscow of the East".



Hulan - Harbin location - Author



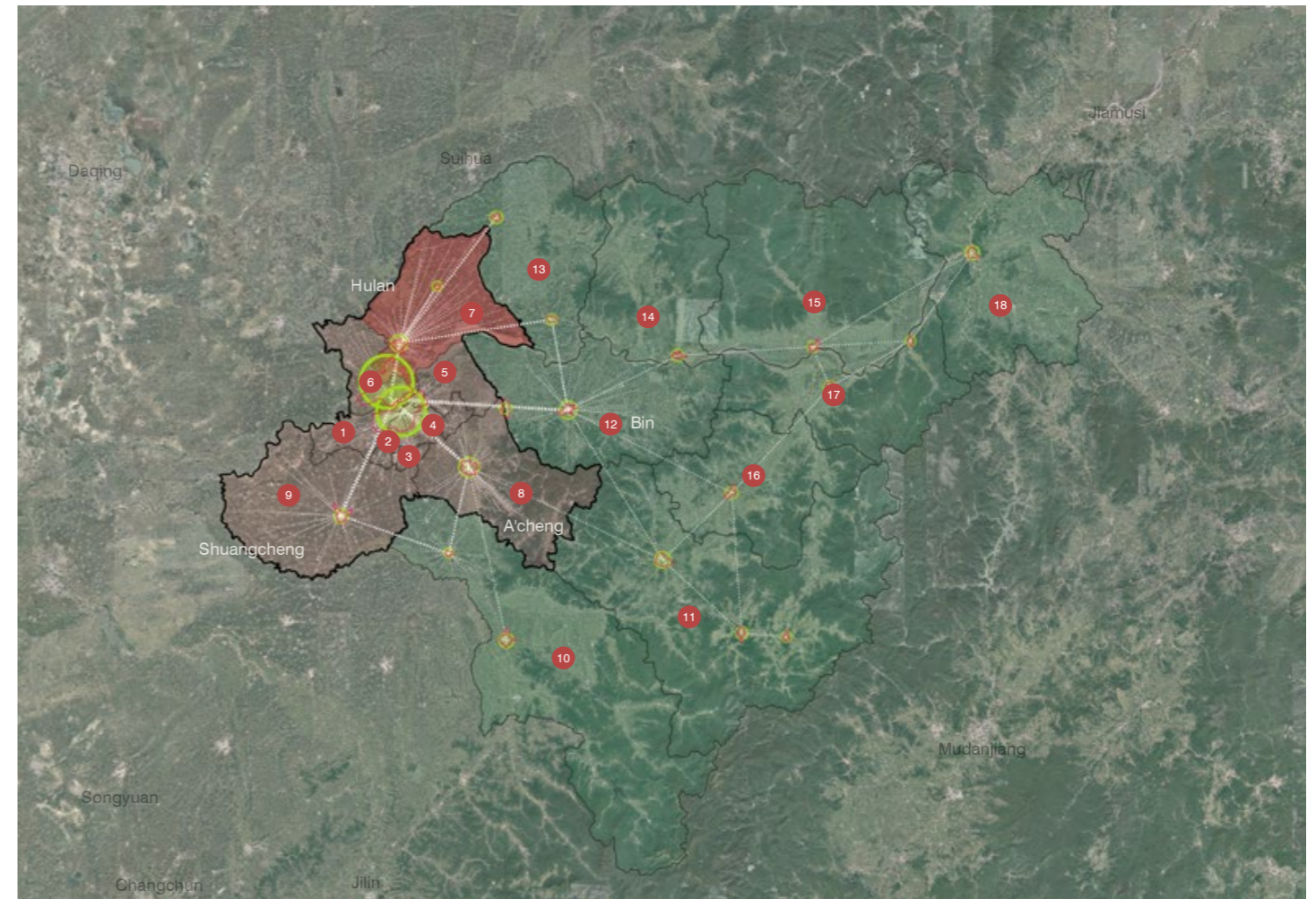
Harbin satellite map - Internet



Harbin geographic base map - Internet



Harbin cultural map - Internet



- 1.Daoli 2.Nangang 3.Pingfang 4.Xiangfang 5.Daowai 6.Songbei 7.Hulan 8.A'cheng 9.Shuangcheng
- 10.Wuchang 11.Shangzhi 12.Bin 13.Bayan 14.Mulan 15.Tonghe 16.Yanshou 17.Fangzheng 18.Yilan

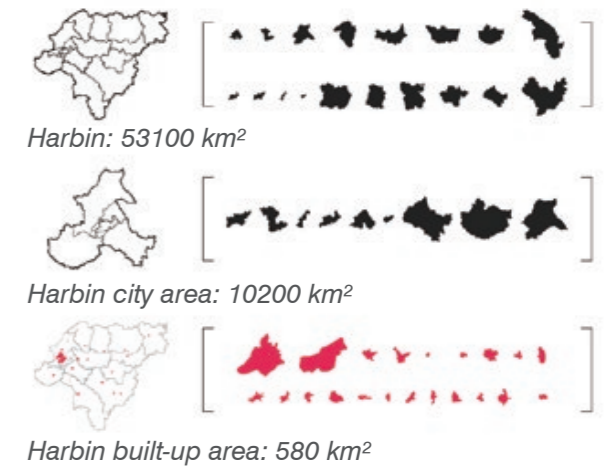
City Area (District): [Red box] 1 2 3 4 5 6 7 8 9

Rural Area (County): [Green box] 10 11 12 13 14 15 16 17 18

Satellite Cities of Harbin Central: [Red box] 7 8 9 12

Area Central: [Red circle] Population Movement: [Dashed line]

Urbanization Rate: Low [Green circle] [Green circle] [Green circle] High



Harbin administrative base map - Author

As a mega-city in northern China, Harbin is also the largest and the third most populous mega-city among Chinese provincial cities. The city has a land area of 53,100 square kilometers, with 9 districts and 9 counties under its jurisdiction and a population of 10.1 million.

Among them, the urban area is 10,200 square kilometers, the total built-up area is about 580 square kilometers, and the central city area is 444.4 square kilometers. It can be seen that most of Harbin is farmland and mountains, and residents are concentrated in the built-up areas of the city within each region.

### Urbanization process

Since the founding of New China, Harbin has undergone **five major urbanization processes**, with Hulan, Acheng, and Shuangcheng gradually being designated as urban areas, which have also undergone urbanization through changes in administrative hierarchy. In the seventy years after the founding of New China, Harbin was once called the "eldest son of the Republic" as an industrial province and grain warehouse that supported the national economy. However, with economic development and the transformation of the country's economic support industries, agriculture and industry gradually declined, and the development of the inland northern city was much slower than that of the southern cities of China, with **slow urbanization and low per capita educational attainment, which is a common problem in northern Chinese cities.**

The good thing is that Harbin has a unique scenic tourism resources, and every winter

the characteristic landscape of ice and snow will attract a large number of tourists into the city, **tourism flourishes.**

Due to economic development issues, Harbin became the only city with negative population growth among China's provincial capitals, decreasing by nearly 630,000 people in 2020 compared to 2010, and becoming **one of the last cities in the GDP per capita ranking** after two GDP adjustment reductions in 2015 and 2019.

### Floating population

It is difficult to use existing theories to accurately describe the migration phenomenon occurring in urban Northeast China. On the one hand, **Harbin (the whole of Heilongjiang) is in a state of net population outflow**, with an average annual outflow of more than 2 million people throughout Northeast China since 2011, and the number is increasing year by year, with the most serious outflow in Heilongjiang Province. Unlike other regions, **the proportion of population outflow from non-agricultural households is higher in Northeast China**, which shows some differences from previous studies in which the population flow is the transfer of surplus rural labor (Jiang, 2017). **While the number of people in the urban center region is still increasing year by year. In simple terms, the population outflow from the Northeast is characterized by increasing numbers and non-agriculturalization.** (Jiang, 2017) **While the inflow of population in city centers is dominated by rural population. This phenomenon is related to the backward economic development and urbanization process in the Northeast.**

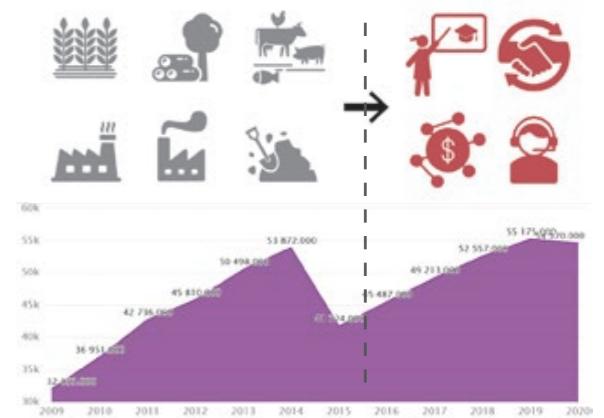
Farmers from rural areas enter urban centers to earn a living, while the original urban residents rely on their accumulated wealth to choose to live in better cities in China, this is particularly evident in the case of highly educated talent, with lower quality of people flowing into the urban centers; according to the 2014 floating population dynamics monitoring data, the average number of years of education for the outflowing population in the Northeast was 11 years, while the average number of years of education for the inflowing population in the Northeast was 9.1 years, and **the brain drain and lower quality of people led to the overall development and economic hindrance of the city.** (Jiang, 2017)

According to the latest population sample survey by Harbin's statistics department, the floating population has exceeded one million, reaching 1,222,800, accounting for 12.5% of the city's population.

In 2007, Wenyan Huang's team conducted a sample survey on the floating poor population in the central area of Harbin, in which the number of people with less than junior high school education reached 75% among 156 people, the average age of the survey was 40.2 years old, 82.7% of the survey respondents came from within Harbin. Bin, Shuangcheng and Suihua Districts accounted for a larger proportion, and **the floating population in Harbin showed an obvious "intra-provincial migration"** (Huang, 2007).

The slow urbanization process has preserved **the soil for the development of the vendor economy**, and also because of the low housing prices and cost of living, low-income and low-educated people live much more comfortably in northern cities than in the south, which has become an important reason for attracting the surrounding rural population and low-educated people to live in Harbin city area. At present, Harbin is based on the principle of "one river, two cities and nine groups", and starts a new round of urbanization development with Hulan old city, Shuangcheng, Acheng and Binxian as satellite cities.

**Hulan Old Town, one of the satellite cities, will be selected as the location for this project.**



GDP / per capita of Harbin

SOURCE: WWW.CEICDATA.COM | Harbin Municipal Bureau of Statistics



## HULAN

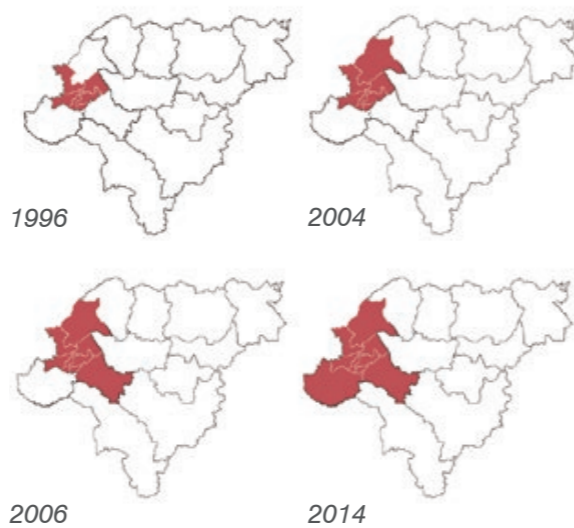
Hulan District is located in the north of Harbin city center, separated from the center of Harbin by the Songhua River. Originally it was a county town, Hulan County became the Harbin city district in 2004 and started to develop along with the Harbin city area. In 2011, Limin Development Zone on the south side of Hulan was partially promoted to become a national economic and technological development zone, and in 2015, Limin Development Zone became the first national urban new area in China, known as "Harbin New District". **The old city area of Hulan is used as a satellite city in Harbin's urban planning**, providing agriculture, leisure tourism and energy-saving and environmental protection industry functions for the city.

In the process of urban development, Harbin focused more on the construction of Harbin New District, which was transformed into a modern city from almost nothing, while **the urban renewal of Hulan Old Town was very slow**, which made it possible for the survival of the vendor economy in Hulan Old Town.

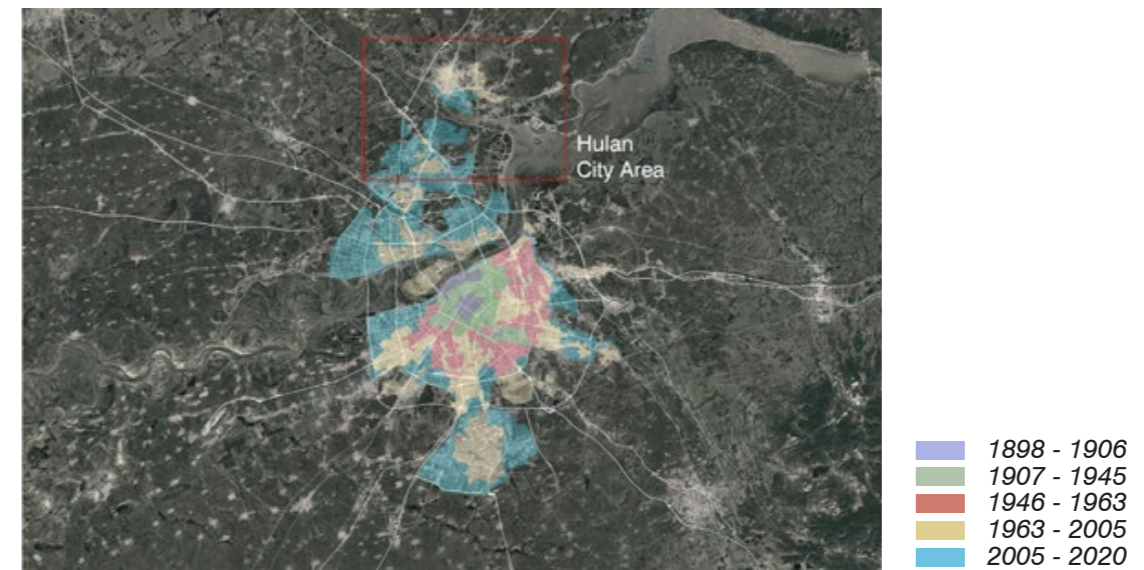
At present, the urban center of Hulan shows a state of urbanization spreading from the bank of Hulan River (landscape) to the original urban fabric. In the old city of Hulan, we can now see a mixture of the original backward county urban fabric and the urban fabric after urbanization and renewal. The low-rise bungalows surround the periphery of the modern residential area, and the public space and streets in the city are not reasonably planned, so **the urbanization process is clearly shown in this small urban area.**

Moreover, due to the continuous influx of low-income and low-educated population from the surrounding counties to Hulan and the continuous outflow of high-quality talents from Hulan, the urban development of the old city of Hulan, which is already lagging behind Harbin New District, has become more difficult, **the government has no charter to deal with urban problems**, and the city has just gotten rid of informal management rules (the triad forces that originally managed the public transportation, market, and real estate industries in Hulan were cracked down and eliminated by the central government in 2019), **the problems of the vendor economy are shown to the fullest in a "semi-modern" city like Hulan.**

Under the same process of urbanization, the old urban center of Harbin, similar to Hulan, and other cities in Northeast China are facing the same problems.



City area expansion of Harbin - Author

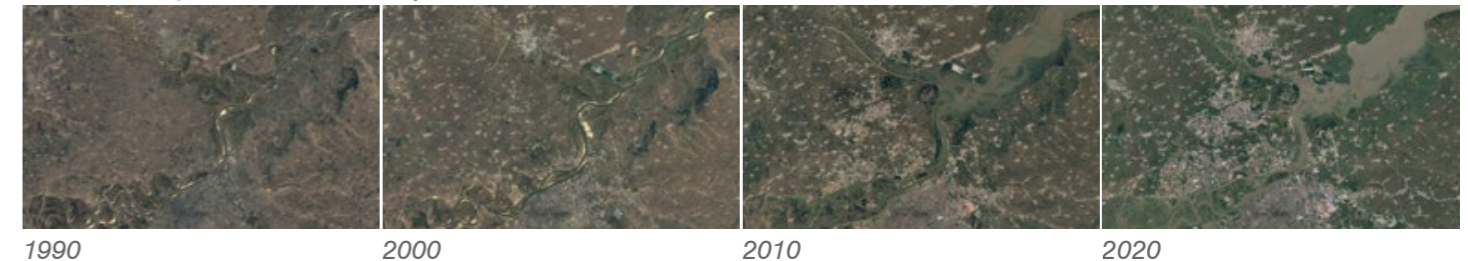


Urbanization process of Harbin center



Urbanization process of Hulan city

Hulan old town





Hulan old town city site plan - Author



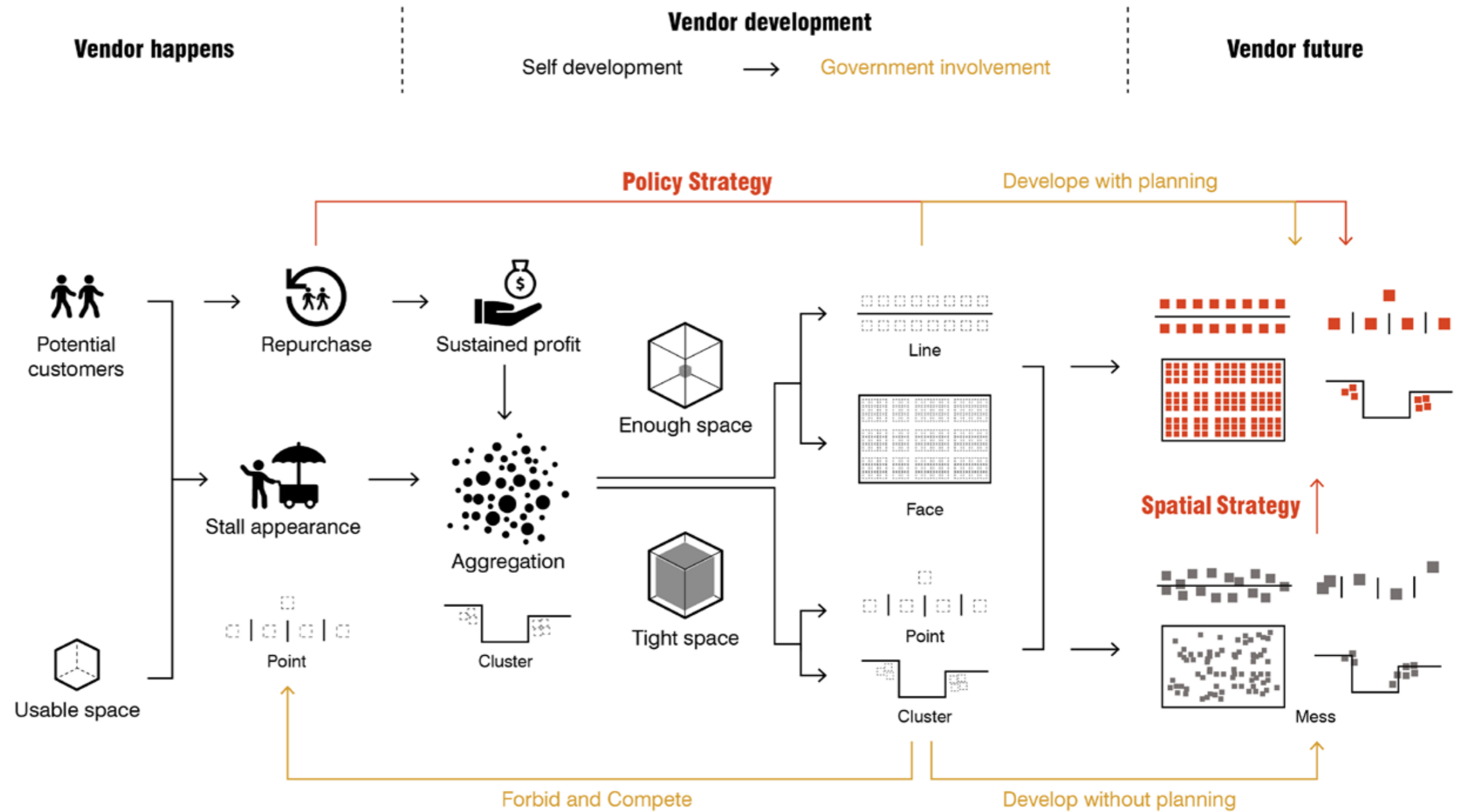
Hulan bird view picture - Internet

## Vendor analysis

### DEVELOPING PHAASE

According to the development law of the vendor and the summary based on the current situation can be found, the emergence and development of the vendor economy has certain rules. First of all, the emergence of floating stalls needs to meet the two conditions of the right flow of people and the right space, which are the two most important development factors in the vendor activities. In the city, the right flow of people means that there are sufficient sources of customers, more people see the goods for sale, which will increase the chances of goods being purchased, the vendor will also sell different goods in different locations according to local conditions to meet the needs of specific groups.

Based on the types of stalls observed so far, I have classified the stalls into different categories and studied them together with the development stage. To summarize, when a certain area has a stable flow of people and space, the prerequisite for the development of the vendor economy is established. When the market becomes more efficient and customers buy back, small gatherings of vendors will be distributed in clusters, often at different entrances and exits of the neighborhood, or at different locations on the street; at this point, if there is extra suitable space, the vendors will gather again and the result will be a linear or faceted distribution, like food street and morning market.

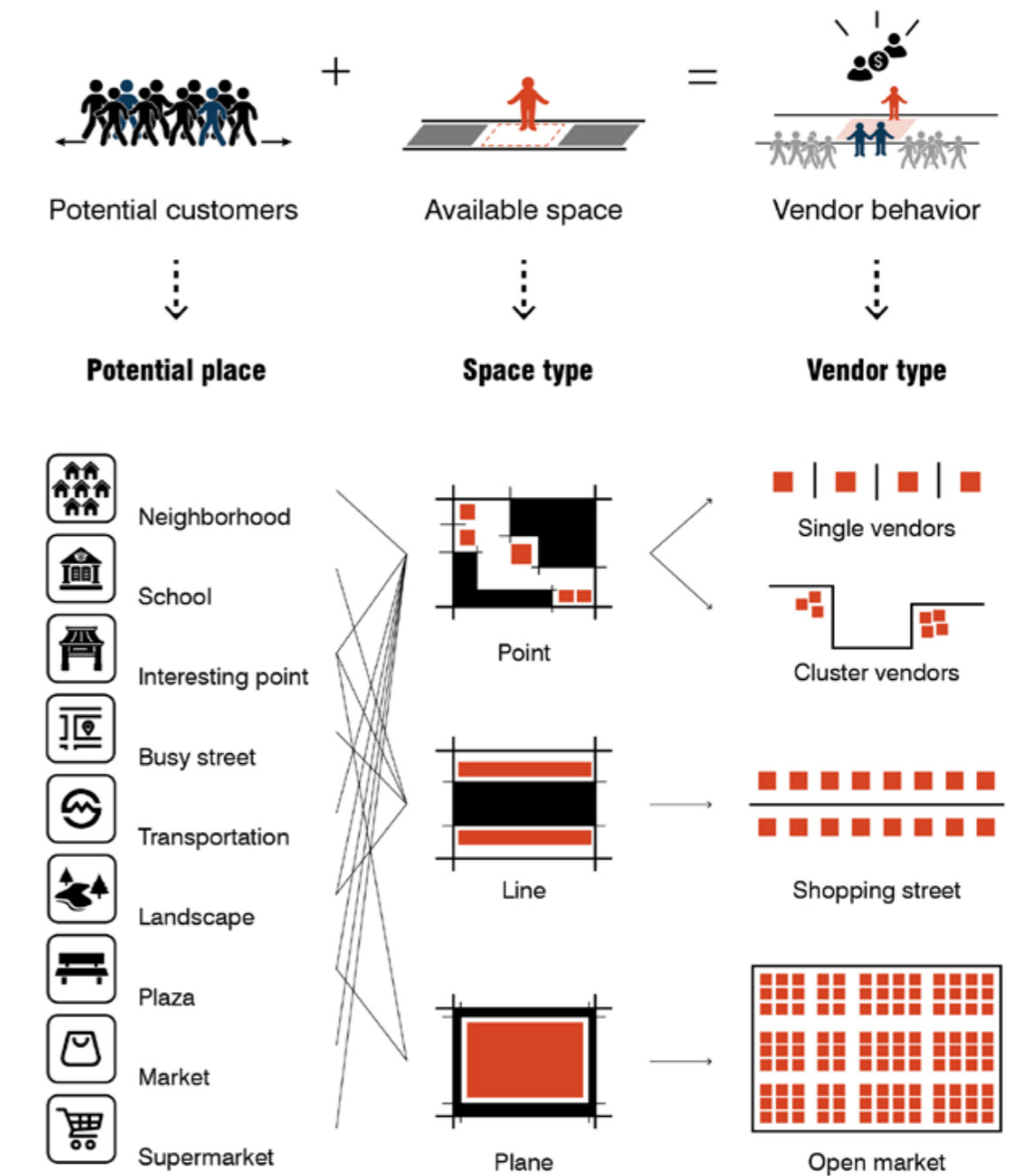


Vendor development - Author

In the absence of good policies and space use strategies, vendors are free to develop in a random and haphazard manner. The haphazard distribution of stalls can lead to space abuse, congestion, and traffic congestion. Often, at this stage, the government becomes involved, retaining or transferring established, long-standing markets, and establishing branded attractive markets for which fees are charged. The haphazard vendors are evicted, and the original gathering of vendors repeats the previous process of "tug-of-war" with the city authorities.

In general, the locations that meet the needs of customers and space are often found in residential areas, near universities, tourist areas, places with natural landscapes, man-made parks or squares, and busy streets (near large public services). The number of customers and the capacity, form of the space determine the size and type of floating stalls.

The strategic goal of the project is to identify and summarize the problems based on the current status of existing vendors in Hulan's old city, based on their space usage, and to make appropriate improvements to the already formed vendors to avoid the formation of a random and cluttered form leading to damage to other systems in the city.



Space and vendors type - Author

**Case study** Several different Asian countries were selected for this project to compare their respective vendor economies.

### Bangladesh - Dhaka

In Bangladesh, vendors are considered illegal trade, street vendors are constantly suppressed and cleared by the government, and in order to survive, vendors have no choice but to pay bribes to city administrators.

In Dhaka, the capital of Bangladesh, for example, there are about 90,000 vendors in the city, and they need to pay Tk.5 per day to the police to prevent themselves from being harassed. (Sharit, 2005) The presence of these vendors is so important that a survey of Bangladeshi slums shows that more than half of the population buys and eats food from street vendors every day. (Etzold, 2015) In cities, the government has not established safeguards or planned locations for vendors to operate, and vendors are free to choose their locations and hours of operation, illegally encroaching on the few public spaces available and causing traffic chaos.

The government is selectively tolerant of vendors' attitudes and behavior, and has not considered changing its attitude toward the vendor community despite its important role in livelihoods and the economy. Vendors have also formed some coalitions on their own, hoping to form a national force to talk to the government to protect their rights. (Sharit, 2005)



Source - Internet

## China - Hangzhou

In China's first-tier and new first-tier cities, itinerant vendors who are not in government-designated areas are considered to be operating illegally and are subject to eviction by city authorities. However, because the demand for urban space for the vendor economy is lower than the rate of urbanization in such cities, mobile vendors have disappeared in cities such as Beijing and Shanghai. **Flexible and free mobile vendors can only exist in cities below the second tier where urbanization is less renewed and there is no proper spatial planning and industry regulation.**

Starting in 2020, the government has given space to the vendor economy as much as possible under the rules. The Wulin Night Market and the Wushan Night Market in Hangzhou have become commonly cited cases during the period of China's vendor economy.

In the case of Wushan Night Market, for example, due to the longevity and necessity of the night market, the government planned the business area and hours for it in 2020. During business hours, both sides of the road where the night market is located will be artificially closed to traffic and street parking.

In the ground with lines to divide the stall area, the local government to manage and lease work. Due to the explosion of the vendor economy and the improvement of the epidemic in recent years, each stall (2mx1.5m) needs to pay a fee of about 1300-2000 RMB, a burden on some practitioners. All transportation and vending tools are taken care of by the stall owners, and water, electricity and sanitation facilities are not provided in the market. During non-business hours, the street is still open for normal traffic and parking. Since the streets are used as business sites, **there is often a conflict between the use of urban planning parking spaces and the use of vendors, while the residents of the surrounding areas have a negative impact of congestion and noise.**



Source - Internet

## Malaysia - Kuala Lumpur

Malaysia is one of the few Asian countries that provide some form of recognition to vendors and the government is seriously implementing a policy of assistance. (Sharit, 2005) It has helped vendors by providing financial and credit support in the form of funds to help them improve their facilities. In 1986, the government established the Department of Vendors (DHFT) to manage the affairs and provide regular training to vendors to help them improve their knowledge on health, hygiene and business practices. The government was very supportive of vendors and wanted to gradually move street level vendors inside the buildings. (Sharit, 2005)

Currently the government has set up a website where vendors need to register first to obtain a permit. However, the issuance of permits does not cover all vendors and types of business, and the lack of space use planning has not improved the use of urban space as expected.



Source - Internet

## Singapore

Singapore's model of setting up approved areas has been very successful as the only country where all street vendors are licensed and relocated to so-called vendor centers. Each vendor center has as many as 226 stalls, uniform furniture and fittings, and dedicated staff responsible for maintenance and cleaning. Most importantly, the vendor centers are located just steps away from residential areas, ensuring a steady stream of customers and the convenience of nearby residents. By setting up collective vending centers within walking distance of prime locations (e.g. residential areas, shopping malls, subway station exits, etc.), street vendors are more secure in their profits and residents can buy affordable food and necessities at affordable prices. Space becomes more organized. Moreover, it is easier for city authorities to manage street vendors.

In Singapore, hawking became a formal profession, but this sacrificed some of the freedom and flexibility of vendors and raised the bar for vendor practitioners. The space needed for stalls is no longer integrated with the city streets and public spaces, but becomes a constituent element (functional building) that, while avoiding the impact on streets and public services, adds a new type of project to be considered in urban planning or renewal.



Source - Internet



## Australian - Melbourne

Located in Melbourne, Australia, the world's third-largest open-air Market, the largest in the southern hemisphere, is also one of the world's most famous tourist attractions, attracting 10 million visitors every year, covering an area of more than 7 hectares.

The Market has been in operation since 1857. It is the only surviving 19th century market in the heart of Melbourne, offering fresh food such as seafood, meat, vegetables, and fruit, as well as a grocery area selling a wide range of inexpensive clothing, footwear, and related tourist items. This would be the largest parking lot in the city center. However, public outcry and a green ban prevented this from happening, resulting in the Market being managed by the National Trust. (Australia's national community-led, ungoverned, not-for-profit peak rights organization dedicated to preserving natural and historical heritage).

The Market is now well preserved and integrated into the modern city and now stands as an Australian icon with its logo, website, and entire business chain. It is a place where history, culture, the needs of the people, government, and the economy are well integrated. It brings economic benefits to the country and facilitates and enriches the lives of residents. Retailers can be residents and businessmen, and some brand names can be sold here as long as they are reported in advance to the Melbourne government, the event's organizer.

The area where the market is currently located has planned sites as well as facilities that provide the basic tools and resources for business operators. Except for the market part, the rest of the site is used as a city parking lot. **The disadvantage is that during non-business hours, the area occupied by the stalls is not suitable to be opened for public use due to the placement of tables and chairs.**



Source - Internet

**Conclusion**

Several different Asian countries were selected for this project to compare their respective vendor economies.

For Bangladesh, the legality of street vendors is not recognized, while there is no reasonable spatial planning to regulate the space used by vendors. The situation of the vendor operators in Bangladesh is very similar to the situation in some backward cities in China. A part of trading behavior that is important to the lives of residents needs to secure itself in the city in an illegal way. **The lack of government policies and spatial strategies has left Bangladesh's vendor economy in disarray**, and the poor survival of vendors confirms the point made in the previous section that spontaneous organizations can help them solve some problems.

The level of development in China varies greatly from city to city, and there is no room for floating street stalls in the more urbanized cities; vendors with a living atmosphere can only exist in cities below the second tier. In the context of China's economic development, the stalls are surviving in different forms in different cities. The more developed and urbanized the city, the more formal the vendors will be, and **the relevant regulations and strategies are gradually developed and implemented**.

As the implementation of the vendor economy is lagging behind the development of urbanization, there are still many problems with the current vendor economy in China, and again there is no

proper strategy for the development of the space use. **Both are in the process of being established and improved stage.**

Malaysia, as a country that has shown recognition for street vendors, has a commendable governmental attitude towards the vendor economy. But again, **without proper spatial planning, the goals of management are difficult to achieve and the limitations of permits are evident.**

Singapore has formalized all street vendors in the country, which sacrifices the mobility and freedom of vendors. While vendors no longer affect streets and other public spaces, the barriers to entry are correspondingly higher, and centralized vendor centers become an additional public amenity to be built in community plans. **For a certain type of Chinese city, a fully formalized vendor economy might be a form of future development in a first-tier Chinese city, but not for a city like Harbin.**

The power of Melbourne's spontaneous organization is not to be taken lightly, and it has led to the development of large markets being recognized and intact by the state, with the end result that the preserved market have brought economic benefits to the city or country as a whole and driven the surrounding industries. **However, the use of large sites occupies the public space in the area, and when the market stops this part of space cannot be returned to the citizens, and the public space loses its flexibility and universality.**

From the experience of other countries, China's vendor economy first needs to have a clear supportive attitude, recognize the legal status of vendor practitioners, establish a special department and help vendors to establish their own organizations, formulate reasonable legal regulations and flexible industry thresholds, and provide them with assistance while retaining freedom.

The spatial strategy can be set up in different cities according to the type of vendors according to local conditions. The use of space should be guided by rational use and supplemented by management constraints to ensure that the space can serve both the vendors and the public. The current focus is on dealing with the existing problems of the existing vendors in the city, providing the foundation and time for the healthy development of the vendor economy.



	 Government Attitude	 Supporting Policy	 Spatial Strategy	 Certification	 Spontaneous Organization	 Current Situation
<b>Bangladesh</b>	☹️ Reject	⊗ None	⊗ None	⊗ None	☑️ Yes	★☆☆☆☆
<b>China</b>	😊 Support	◯ Some	◯ Some	⊗ Some	⊗ None	★☆☆☆☆
<b>Malaysia</b>	😊 Support	☑️ Yes	◯ Some	◯ Some	⊗ None	★★★★☆
<b>Singapore</b>	😊 Support	☑️ Yes	☑️ Yes	☑️ Yes	⊗ None	★★★★☆
<b>Australian</b>	😊 Support	☑️ Yes	☑️ Yes	☑️ Yes	☑️ Yes	★★★★☆

Case study - Author

## Strategy framework

A complete strategy should include both **political support and spatial strategy** support. For the problems of the vendor economy, spatial strategy can only help practitioners to be more rational in their use of urban public space and does not solve many of the inherent problems. While the informal economy is not as organized and systematic in its economic structure as the formal economy, it does not mean that it is completely free, a consequence that may lead to its negative impact on the city.

In China, the outcome of urban policy implementation is largely tied to the performance of the city manager, and the image of the city during his or her administration means whether the person in power can be re-elected or promoted. (Huang, 2014) In the past, governments often used strategies that could achieve results in the short term, such as eviction or relocation, for good performance. **In contrast, the formation and development of the vendor economy is a long-term process**, and policy formulation as well as governance should also be a long-term process, and authorities should make it a long-term plan to develop a good and complete policy strategy.

**Government regulation and corresponding policy support are essential for the vendor economy**, which uses urban streets as a location for trade, while urban spaces still receive government jurisdiction, and most national constitutions delegate regulatory authority over urban public spaces to local governments (Roever, 2014), which is a side note that **informal economic behavior is also subject to policy and regulatory constraints**. The policy of promoting the vendor economy is not only addressing the space use of the vendors, but also promoting the employment and identity of the urban poor, market consumption, and the quality of life of urban residents, which often require policy and space to work together.

The project hopes to establish a complete **"policy+space" system** to analyze and support the different aspects of the vendor economy, and to implement spatial strategies under the premise of reasonable policies. The relationship between policy and spatial strategy is like the relationship between **thought and action** where policy can clarify the direction to help it and spatial strategy is the method to achieve the goal.



Strategy structure - Author

**Policy pillar**

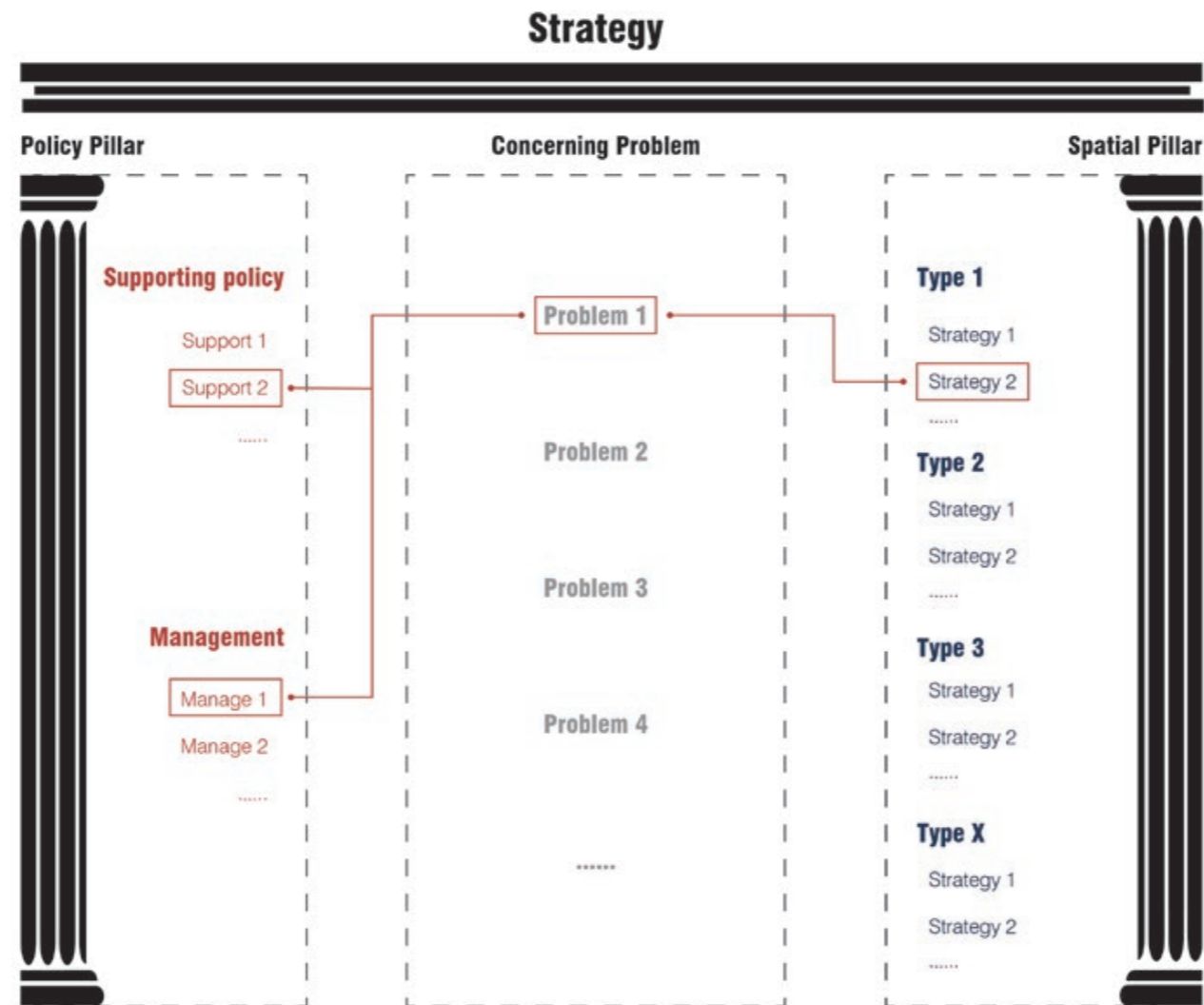
The main issue that the policy pillar should address is to change the attitudes of all participants and increase the normality of the informal economy market. The policy should be used as a guide to avoid the emergence of confrontation between city management and vendors, and between citizens and vendors. The policy should be developed with the participants as the leaders, focusing on the history, the current situation and the cause-and-effect relationship behind it, and sorting out the problems for the existing situation of the vendor economy and trying to solve them one by one. Forecast the future development of the groundvendor economy, constantly adjust policy planning, and take into account the links between the groundvendor economy and other industries. Help the practitioners of the vendor economy to form their own organization and management system, and ensure the efficiency and popularity of policy information delivery.

In conjunction with the spatial strategy, we will prevent the streets and public spaces from becoming "dirty, messy, and poor" again, and build a hygienic, orderly, and beautiful urban space, thus improving the cleanliness and vitality of the city.

**Spatial pillar**

The spatial pillar should focus on improving the original environment of the vendors and eliminating the negative impressions people have of traditional vendors. For practitioners, it is important to know when, where, and in what form to conduct the activities of the vendor economy, while ensuring the traditional convenience of the vendor economy. From the consumer's perspective, there is a need to create a good buying environment and buying experience. The use of urban public space needs to be planned to increase the functional diversity of public space and thus the vitality of the city, to activate as much as possible the "negative space" in the city, and to improve the quality and artistry of streets and public spaces.

With policy and management support, spatial strategies will guide the behavior of those who work in the vendor economy and consumers, maintaining the advantages of the informal economy while avoiding the negative impacts of the previous vendor economy.



Strategy structure - Author



**STRATEGY DESIGN**

**Policy pillar building**  
**Spatial pillar building**  
**Reference**  
**Vendor aggregation in Hulan**  
**Summary**

*Along the River During the Qingming Festival - Zeduan Zhang, Song Dynasty*

## Policy pillar building

The policy aspect will propose strategies to address the problems in the vendor economy with a **Problem-Reason-Approach** step.



The questions were sourced from questionnaires, interviews, literature reviews, observations, and life experiences. The list of issues is not complete, but covers the main conflicts of the vendor economy.

For each problem, the causes of the problem are explored based on previous research, with the main focus on the policy-related part.

The approach is based on research on the shortcomings of the vendor economy in the previous chapters, advice from literature review, research on new policies introduced in other cities, and experience gained from case studies.



Informal Economy Monitoring Study Sector Report  
Street Vendors - Sally Roever



"Vendor Economy" Sustainable Development  
Research Questionnaire - Author

Sally Roever's team conducted the Informal Economy Monitoring Study (IEMS) in ten countries worldwide (Accra, Ghana; Ahmedabad, India; Bangkok, Thailand; Belo Horizonte, Brazil; Bogota, Colombia; Durban, South Africa; Lahore, Pakistan; Lima, Peru; Nakuru, Kenya; and Pune, India) in 2012 and 2016. Through qualitative and quantitative research methods, Roever's team provided valuable insights into street vendors' current situation and aspirations and what policy support to provide for the vendor economy.

According to the IEMS, factors related to city governance are most important to vendors, with the highest-ranked detrimental factor in the survey being the abuse of power (harassment, eviction, and bribery by city officials) (Roever, 2014). The power abuse was also evident in the interviews and questionnaires conducted for this report. City officials voted first in matters that hinder practitioners in the vendor economy, indicating that the vendor economy is very needed for a set of supervision and management policies.

In terms of type, there is a high degree of similarity among vendor economy practitioners across countries: those who directly sell goods (selling fruits, vegetables, and clothing); those who manufacture goods (cooking food); and those who provide services (repair types). These vendors are in great need of a fixed workplace, with 90% of those in the IEMS saying they conduct their activities in the same place every day. If there were viable spaces to accommodate street vendors, they would be the most active force in activating urban spaces. (Roever, 2014)

Regarding the income of vendors, IEMS notes that vendors often experience disruptions in their income, such as confiscation of goods or bad weather. Combined with the current situation of Hulan's vendor economy, the cold weather of winter in northern Chinese cities becomes a hindrance to vendor activities. The unsold goods are also part of the unstable income, but the vendors fear raising the selling price regretting the loss of price advantage. Chronic low profits, unstable incomes, and lack of capital forced vendors to borrow from "loan sharks," which could trap them in a cycle of debt. (Roever, 2014) Ensuring a stable income for vendors and providing formal interest-free loans are the best ways to help them survive.

Urban infrastructure and public services are also important influencing factors. Lack of storage locations, inadequate water, electricity, toilets, and bins are systemic factors that undermine and limit the productivity of the vendor economy. Where infrastructure is provided, higher costs can also undermine vendor productivity. (Roever, 2014) In the morning market area of Hulan, there are no infrastructure or sanitation facilities, and vendors are forced to urinate at the corners of the square or use the toilet of the surrounding hospital. The need for water and electricity to be rented additionally from neighboring stores or to bring their own related equipment has caused dissatisfaction among the vendors who pay the fees, and almost all interviewees mentioned that the management fees paid were too expensive or that they wanted the equipment provided.

The IEMS survey on the effectiveness of organizations: the most helpful organizations for vendors are: MBOs, Other workers, NGOs, Trade unions, Local government, Polices, Large retailers, National government. (Roever, 2014) It can be seen that member-based organizations and other vendors are the most powerful helpers for stall practitioners, while there are no organized vendor groups in Hulan at the moment.

From the questionnaire results, 85% of the population believes that stalls should be present in the city, and 88.7% have consumed on carpets. The population is not opposed to the vendor economy but rather resents the negative impact it has on the city. Three of the most unpleasant aspects are hygiene pollution, quality of goods, and space abuse; the three most desired improvements are the hygiene situation, government regulation, and after-sales merchandise.

NGOs: Non-governmental organizations  
MBOs: Membership-based organizations

According to IEMS, the report makes several recommendations to help vendors.

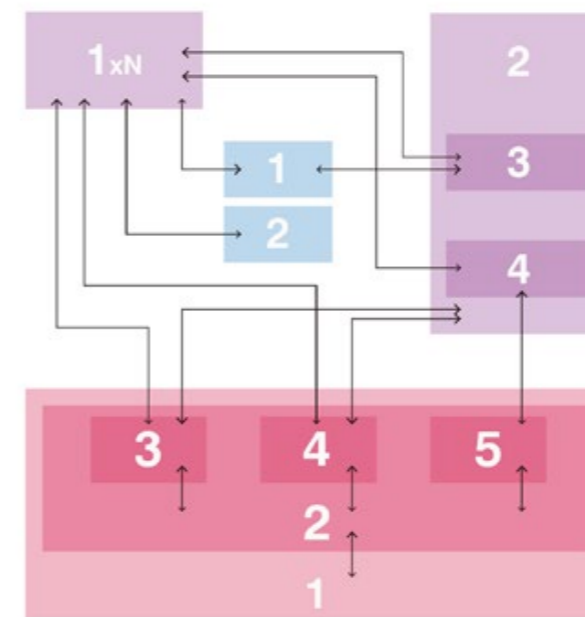
1. To **recognize the vendor economy as an economic activity** carried out in public places and to avoid moving all vendor economy into commercial properties
2. **Respecting the legal rights** of those involved in the vendor economy if the goods they sell are legal
3. Provide some **infrastructure help**, mainly in water, electricity, and toilets, which is conducive to the vendor economy to expand the business model
4. Provide **canopies and awnings** to help form a fixed business location, which can actually reduce management costs in the long run, and even possibly improve the security of the region
5. The provision of **warehouses** can reduce the pressure on the cash flow of vendor practitioners while preventing theft
6. Allow the region's vendor economy practitioners to spontaneously **form a membership form of organization**. The government, through consultation with the organization, can reduce communication costs
7. Do not ignore the impact and influence of the **macroeconomic cycle on the vendor economy**

### Stakeholder analysis

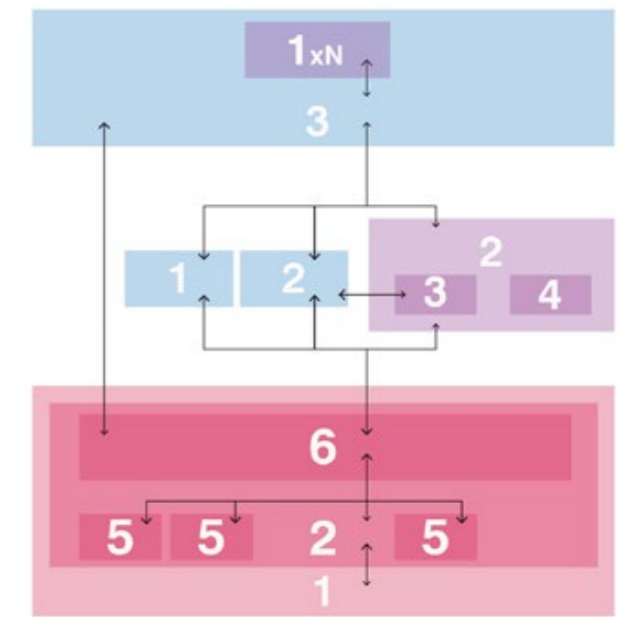
The diagram shows that the connections between the major stakeholders in the current vendor economy are separate and do not constitute a structured system now. When conflicts occur, even if the participants are interested in solving the problems, they are unable to find appropriate and quick ways to do so. There is also a lack of effective connection between government and vendors, and between consumers and government. Often vendors have to deal with multiple players such as city policy, cleaning staff, and consumers, and the scattered vendors as well as various government departments make problem solving complicated, and it is difficult for each player's demands to be quickly understood by the other.

When vendor groups and government vendor ministry were established, the scattered vendors were aggregated into organizations with dedicated government personnel to deal with issues related to the vendor economy, and the various players could quickly convey information to those they wanted to, making managing vendors and solving problems simple and efficient. This also reflects the need for vendor groups and government ministry.

### Now



### Future



INDIVIDUAL	GOVERNMENT	ORGANIZATION	Connection
1 Vendor	1 Center Government	1 Neighborhood/Community	—
2 Customer	2 Local Government	2 Shopkeeper	
3 Resident	3 City Policy	3 Vendor Group	
4 Tourist	4 Cleaning-keep Department		
	5 Tourist Ministry		
	6 Vendor Ministry		

Stakeholder analysis - Author

The problems in the policy pillar were derived from questionnaire research, interviews, literature review, and observations.

The approaches to the problems were derived by combining the advice of the IEMS report recommendations, questionnaire research results, and interview results with the actual situation in Hulan.

The problems are divided into three categories: related to the policy system; related to economic interests; and related to business models.

#### **Policy system related**

- 1.How to address the confrontation between vendors and city management.
- 2.How to address the city's rejection of practitioners and the lack of self-identification of stall owners.
- 3.How to make the needs of vendor practitioners valued by planners.
- 4.How to integrate the informal vendor economy into the formalized management system.
- 5.How to deal with disputes related to vendors.
- 6.How to ensure efficient transmission of government information.
- 7.How to avoid irregularities in management (bribery, violent law enforcement).
- 8.How to plan the vision of the vendor economy in the city.

#### **Economic benefits related**

- 9.How to improve the income of the vendor economy practitioners.
- 10.How to keep the income of vendor economy practitioners stable.
- 11.How to help people interested in joining the vendor economy to start their own business.
- 12.How to deal with the impact of macroeconomic cycles on the vendor economy.
- 13.How to help those in the ground-floor economy financially.

#### **Business model related**

- 14.How to avoid street misuse while ensuring that the stalls are not affected.
- 15.How to deal with the negative impact on the hygiene of the city streets.
- 16.How to avoid the negative impact of noise and odor pollution on the surrounding residents.
- 17.How to guarantee hygiene, quality and after-sales service of the products.
- 18.How to deal with the safety hazards brought about by the stall equipment such as water, electricity and gas.
- 19.How to deal with the conflicts that occur between stall owners, customers, and the formal economy.
- 20.What assistance is provided to the practitioners of the vendor economy in terms of space.



## Question and reason

### Question

1.How to address the confrontation between vendors and city management.

2.How to address the city's rejection of practitioners and the lack of self-identification of stall owners.

3.How to make the needs of vendor practitioners valued by planners.

4.How to integrate the informal vendor economy into the formalized management system.

5.How to deal with disputes related to vendors.

6.How to ensure efficient transmission of government information.

7.How to avoid irregularities in management (bribery, violent law enforcement).

8.How to plan the vision of the vendor economy in the city.

9.How to improve the income of the vendor economy practitioners.

10.How to keep the income of vendor economy practitioners stable.

### Reason

1.The confrontation arises because the behavior of the vendors adversely affects the city, and the duties of the city manager, as a group that maintains order in the public space of the city, are in conflict with the chaotic status caused by the vendors. If the vendors' behavior no longer adversely affects the rest of the city system, the issue of confrontation between the two sides will not arise. Instead, the role of the city manager in the future becomes that of a facilitator and supervisor of the vendor system.

2.The problem of urban exclusion is very complex. For informal economy practitioners, the exclusion mentality of most practitioners comes from the low income and the lack of local household registration( 户口 ), which requires a fixed residence in the city, which requires a stable income. So the best way is to improve the income level of the vendor practitioners.

3.Currently the needs of the stallholders cannot be effectively received by the government, and there is no channel for practitioners to pass their opinions to the planners. At this point there should be a special organization to aggregate all kinds of opinions and present them to the government in a holistic form, and the establishment of vendor groups can be a good way to achieve this.

4.First of all, there should be a formal department to deal with issues related to the vendor economy, and secondly, practitioners should have their own organizations or groups to develop the vendor economy system in a way that is mainly autonomous and supplemented by government assistance.

5.The government set up a special management department to deal with disputes, and at the same time combined the dispute reporting method with the WeChat platform to facilitate the interface between consumers or practitioners and government departments.

6.Currently vendors do not have a unified channel to receive information. With the current high popularity rate of WeChat in China, information can be delivered to vendors through online in the form of WeChat public platforms combined with offline ways, while information can be effectively delivered through the media or offline advertising boards.

7.Violations arise because the policy has loopholes, while vendors are unable to respond to the situation upwards. The establishment of government departments and online platforms allows vendors to make quick complaints about violations and ensure fairness in enforcement.

8.In the past, the government's attitude towards the vendor kept reversing according to the actual situation, the future should be the development of the vendor economy as a long-term plan, the development of policies to dynamically adjust the strategy, but to maintain a positive attitude

9.The government can do something from three aspects: reduce costs, reduce expenses and increase profits. The current cost of vendors are mainly the cost of goods, transportation costs and payment of management fees, expenditure costs that is the cost of life living, the government can consider reducing management fees, providing a unified storage location of goods and other ways to reduce costs, good economic operation of the stalls can also increase the income of vendors.

10.The current causes of unstable income for practitioners are: confiscation of goods by managers, cold weather in winter when customers becomes less, the impact of epidemics or their own reasons. The policy should help both in terms of management style and ensuring the flow of customers.

**Question****Reason**

10.How to keep the income of vendor economy practitioners stable.

10.The current causes of unstable income for practitioners are: confiscation of goods by managers, cold weather in winter when customers becomes less, the impact of epidemics or their own reasons. The policy should help both in terms of management style and ensuring the flow of customers.

11.How to help people interested in joining the vendor economy to start their own business.

11.For new practitioners, the previous channel to obtain information is to ask other stallholders. The establishment of online platforms, government departments and vendor groups helps to aggregate and transmit relevant information.

12.How to deal with the impact of macroeconomic cycles on the vendor economy.

12.The impact of the epidemic or the overall economic fluctuations of the society on the vendor economy is difficult to be solved by a single policy. The rule that can be grasped is that when the whole economy is poor, the number of informal economy participants will become more, and the policy should be relaxed appropriately at this time.

13.How to help those in the ground-floor economy financially.

13.First of all, the qualifications of the practitioners should be reviewed, and the threshold of the vendor industry should be limited by applying for a license to ensure that the limited capital resources flow into the most needy groups.

14.How to avoid street misuse while ensuring that the stalls are not affected.

14.The current government planning is arbitrary in terms of where and how it is done, with cases where lines are not clearly drawn or planned locations are not used, and management is very loose. The spatial strategy should be developed to circumvent these situations and cooperate with city management to ensure the implementation of the spatial strategy.

15.How to deal with the negative impact on the hygiene of the city streets.

15.As the stall owners are too scattered, it is difficult to correct the impact on the street and monitor each other, while the sanitation facilities are not complete. The spatial strategy should pay attention to increasing sanitation facilities, forming mutual supervision and self-management within the vendor groups, while the collection of information on stall owners and the establishment of permits also help the city administration to distinguish responsibilities for punishment.

16.How to avoid the negative impact of noise and odor pollution on the surrounding residents.

16.Stalls that have a greater impact on the surrounding residents should be prohibited from operating near residential areas, and the planned area should be partially distant from the main living areas of the residents.

17.How to guarantee hygiene, quality and after-sales service of the products.

17.Among the government's consumer complaint cases, there are far fewer problems related to vendor goods than in the foemal economy (stores). This does not mean that the quality of vendor goods is better than that of stores or supermarkets, but because the problems are difficult to solve. Firstly, consumers can directly select during the buying process, which reduces some of the risks, and secondly, the prices of vendor goods are lower, so even if there are quality problems with the goods, consumers may be too much trouble to deal with them. At the same time consumers know that this type of dispute is more difficult to deal with, for example, can not prove whether it is the goods in this stall goods (no invoice), or no management staff dedicated to deal with. The quality of the product can be bound by a licensing scheme, while considering the combination of online platform and vendor economy, using online platform channels can ensure quality and after-sales issues.

18.How to deal with the safety hazards brought about by the stall equipment such as water, electricity and gas.

18.At present, the water and electricity used by the stalls basically rely on the surrounding commodities and their own gas facilities, water and electricity facilities should be set up by the government to ensure safety, the stalls with greater safety hazards to rectify the situation.

19.How to deal with the conflicts that occur between stall owners, customers, and the formal economy.

19.Such problems usually arise because the stalls take up part of the business, occupy too large a site to prevent the normal operation of the store, or the stall owners themselves are of low quality. The government should work on both improving the quality of stall owners and ensuring the reasonable use of space.

20.What assistance is provided to the practitioners of the vendor economy in terms of space.

20.The current way of planning areas is too rudimentary to enhance the image of the city, provides little help to stall owners, and can produce impracticality. For stall owners who sell in the morning market, the return on the payment of fees is low and better facilities should be provided for the morning market.

## Policy approach

### Approach

1. The government clarifies the legal status of vendors, sees them as part of the normal functioning of the city, recognizes the legitimate rights and interests of vendors, and no longer has a negative attitude towards them. And provide help and guiding advice to vendor groups through reasonable planning and strategies.

2. Have a long-term plan for the vendor economy, consider the integration with new industries, accept loans and help from large enterprises, lower the threshold for entry into this industry, and provide special help for people in need.

3. Consider the impact of macroeconomic fluctuations on the vendor economy when they occur, and prioritize helping people with lower incomes. Appropriately reduce the level of management in poorer economic times.

4. Establish a special regulatory organization or government department to handle matters such as behavior and disputes related to the vendor economy. Handle vendor demands as well as feedback on strategies.

5. Help vendors form their own vendor groups, encourage the formation of self-management, self-monitoring mode of operation, turning pieces into whole.

6. Following the case of Singapore, regular quality training is organized for those working in the vendor economy.

7. Establish a perfect information system (website, WeChat platform), through the vendor group's spontaneous propaganda, WeChat public number, Weibo, in the stalls out of the way to place a notice to promote the vendor norms, collect the personal information of the vendors and commodity information, to facilitate classification management and information transfer and feedback.

8. Establish uniform entry criteria (e.g. monthly household income or education level) to qualify practitioners of the vendor economy. Based on a time-sensitive, commodity-differentiated license, practitioners are required to apply periodically in order to control the number and distinguish responsibilities.

9. The government helps to promote offline combined with online way, based on online shopping platforms, to ensure product quality while combining the use of online platforms for storage and transportation functions.

10. To control the working hours of the vendor behavior within a reasonable range by researching the actual situation.

11. Combining vendors' demands, the actual public space, and the current situation, a more reasonable space use strategy is established with the help of planners to help the vendor economy form a regulated and spontaneous system.

12. According to the situation of different locations, use the spatial strategy with clear markings to delineate the vendor area to guide the behavior of sellers and consumers.

13. Uniform provision of basic service facilities at vendor gathering places, mainly in water, electricity and sanitary places.

14. Provide rain shelters and shade facilities in some delineated areas.

15. City management irregular inspection patrols to urge vendors to keep the site neat and clean, check permits, and require on-site correction of irregular behavior, and fine or expel those who do not keep the norms.

16. More rational planning of fee-based markets and provision of better facilities.

17. Try to adapt the space to the existing vendor economy to ensure customer volume and convenience.

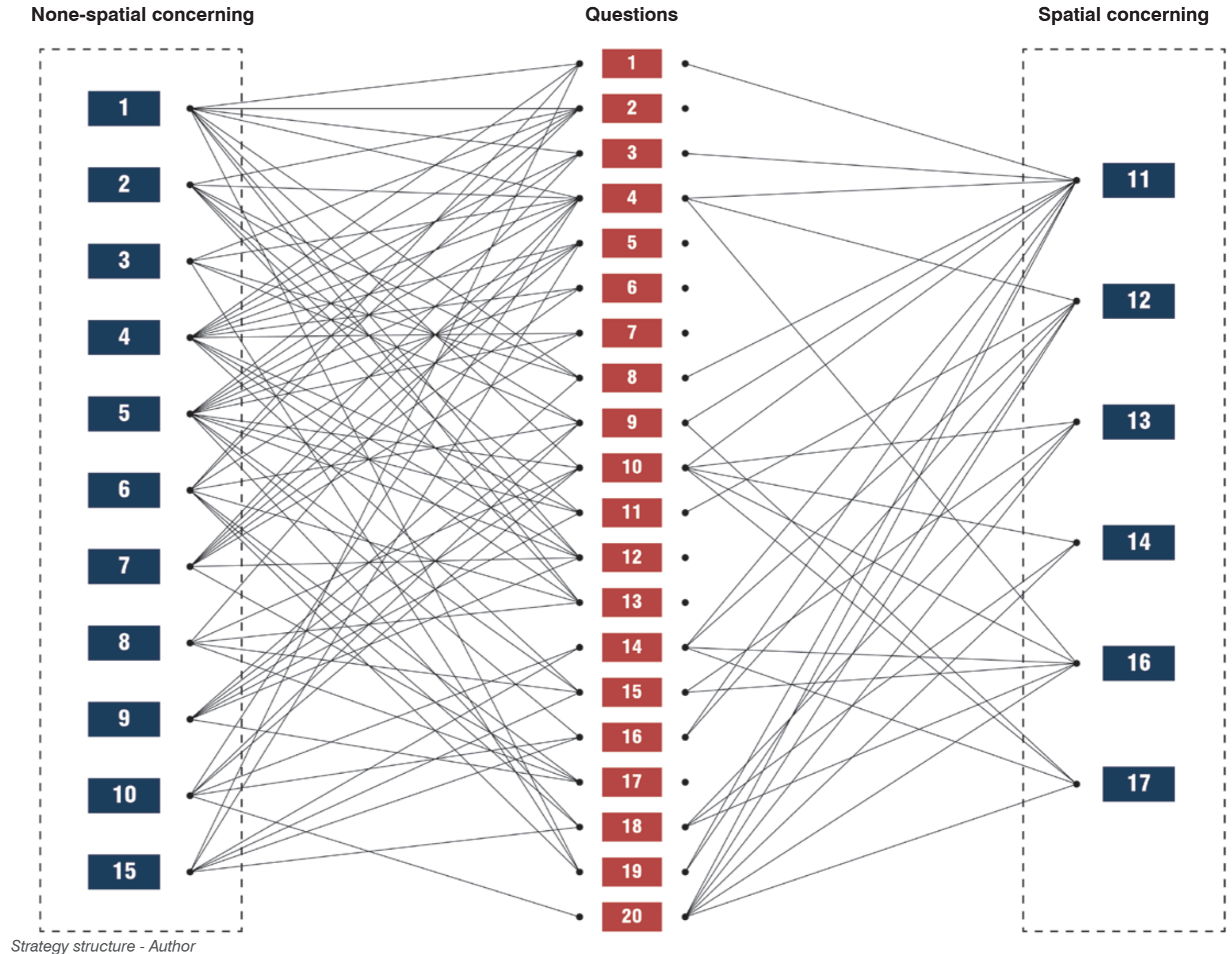
Source	Approach (combine with the actual situation)
IEMS report	1 3 4 5 7 8 13 14 16 17
Questionnaire & Interview	13 14 16
Literature review & Case study	2 6 7 8 9 10 12 15 16 17
Spatial related	11 12 13 14 15 17

**Summary**

This diagram represents the relationship between the problem and the approach. The spatially related ones in the approach are listed separately on the right side, and this part of the policy approach needs to be combined with spatial strategies together to solve the problems in the vendor economy. Each of these problems requires several different aspects of policy to work with each other.

As can be observed in the diagram, issues related to policy systems and issues related to economic benefits require a more directional policy approach, while issues related to business models require a combination of spatial strategies and urban management aspects. When using the policy pillar, the corresponding policy approach can be found helpful through this diagram when faced with the corresponding problem.

The methods used in the process of building the policy pillar can give direction to the development of a complete policy, and when there are a sufficient number of problems, it may be possible to form a complete strategy for the development of the vendor economy, which can help it in terms of government management and city development direction.



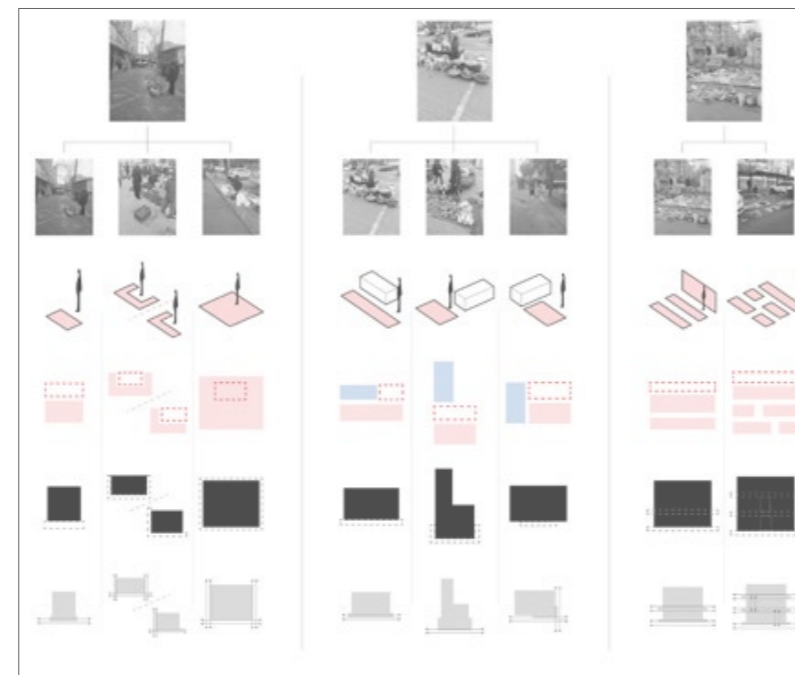
## Spatial pillar building

The spatial pillar will provide spatial strategies for the vendor economy for different locations and scenarios.

In the establishment process, a **typological analysis** of the current situation of Hulan's vendor economy was first conducted, and the data used were photos obtained from observation. Through classification and research of vendor aggregation, **the habits, characteristics and drawbacks** of city public space use by the vendors in Hulan are clarified, and the **usage patterns of public space** by the vendors are summarized, and then corresponding spatial transformation strategies are proposed for different scenes. In turn, the corresponding **space transformation strategies** are proposed for different scenes, forming a scene transformation toolbox.

The project also investigated the **locations** where the vendor economy emerged within the central city of Hulan, **the infrastructure** of Hulan, and **the points of interest**. The data sources were observation method + Gaode map POI data, and combined with the analysis of spatial syntax method, a spatial strategy use indication map was synthesized to show which type of spatial strategy in the toolbox should be used in different areas within the old city of Hulan.

This type of method can provide direction for other cities to carry out spatial strategy development for the vendor economy.



**TYOLOGY ANALYSIS**



**CURRENT SITUATION**



**SPACE SYNTAX**

## Typology analysis

Due to the complexity of the stall behavior, it is difficult to accurately classify all the types of vendors. This project summarizes the observed stall behavior through "Tool based" and "Layout based" classification methods based on the phenomenon observed in Hulan Old Town, and summarizes the characteristics, space occupied and location preference of each vendor type. I also summarize the characteristics, space occupied and location preference of each type of vendor.

### Tool Based

Tool based refers to the tools used by vendors to display their products. Based on observations, these can be roughly divided into

- 1) ground-based
- 2) table-based
- 3) vehicle-based

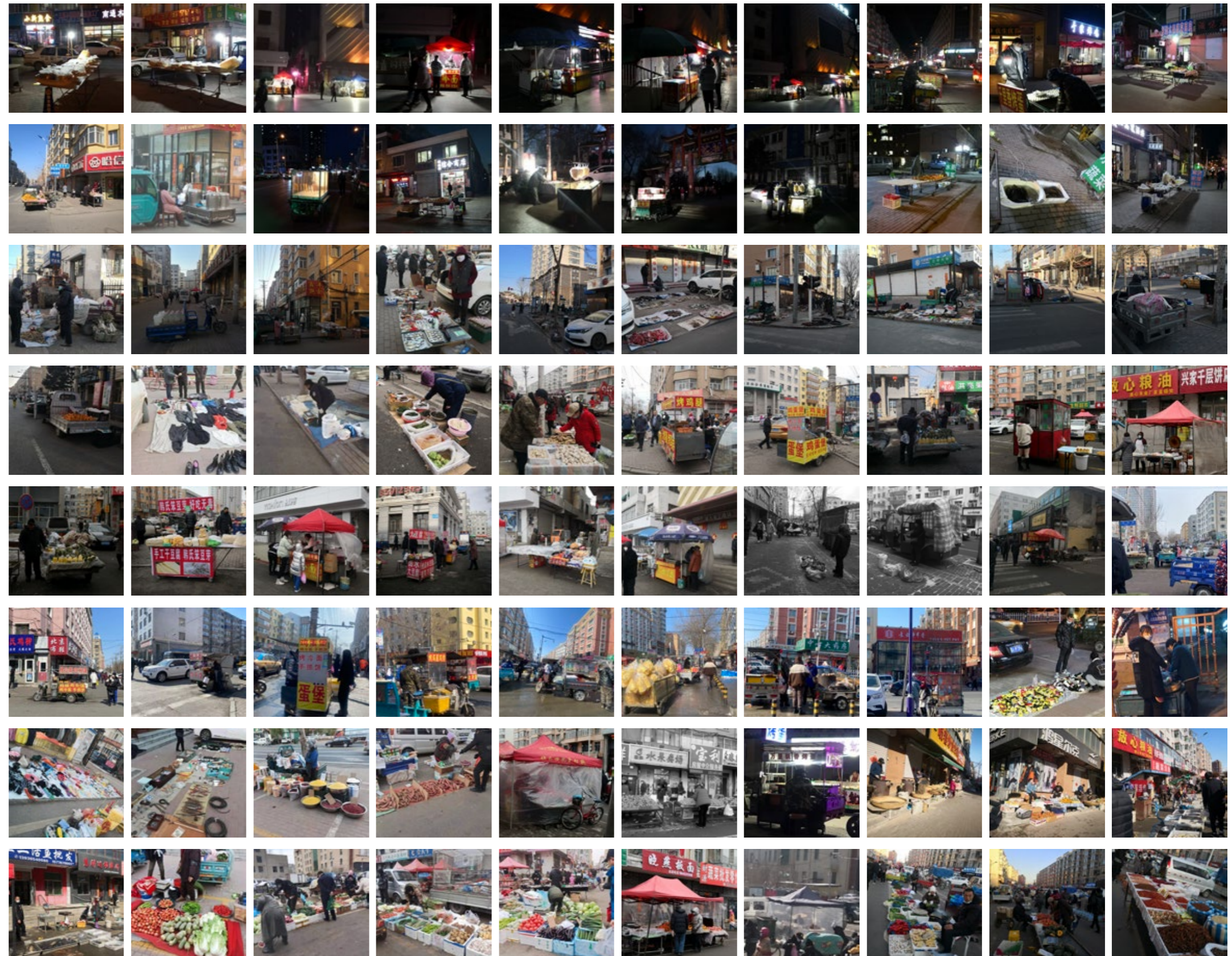
The size of the space and the location of each type varies.

### Layout based

Layout based refers to the location where the operator chooses to display the goods for sale. Due to the spatial aggregation characteristics of stalls, they can be divided into

- 1) point (cluster) layout
- 2) line (long) layout
- 3) plane (array) layout

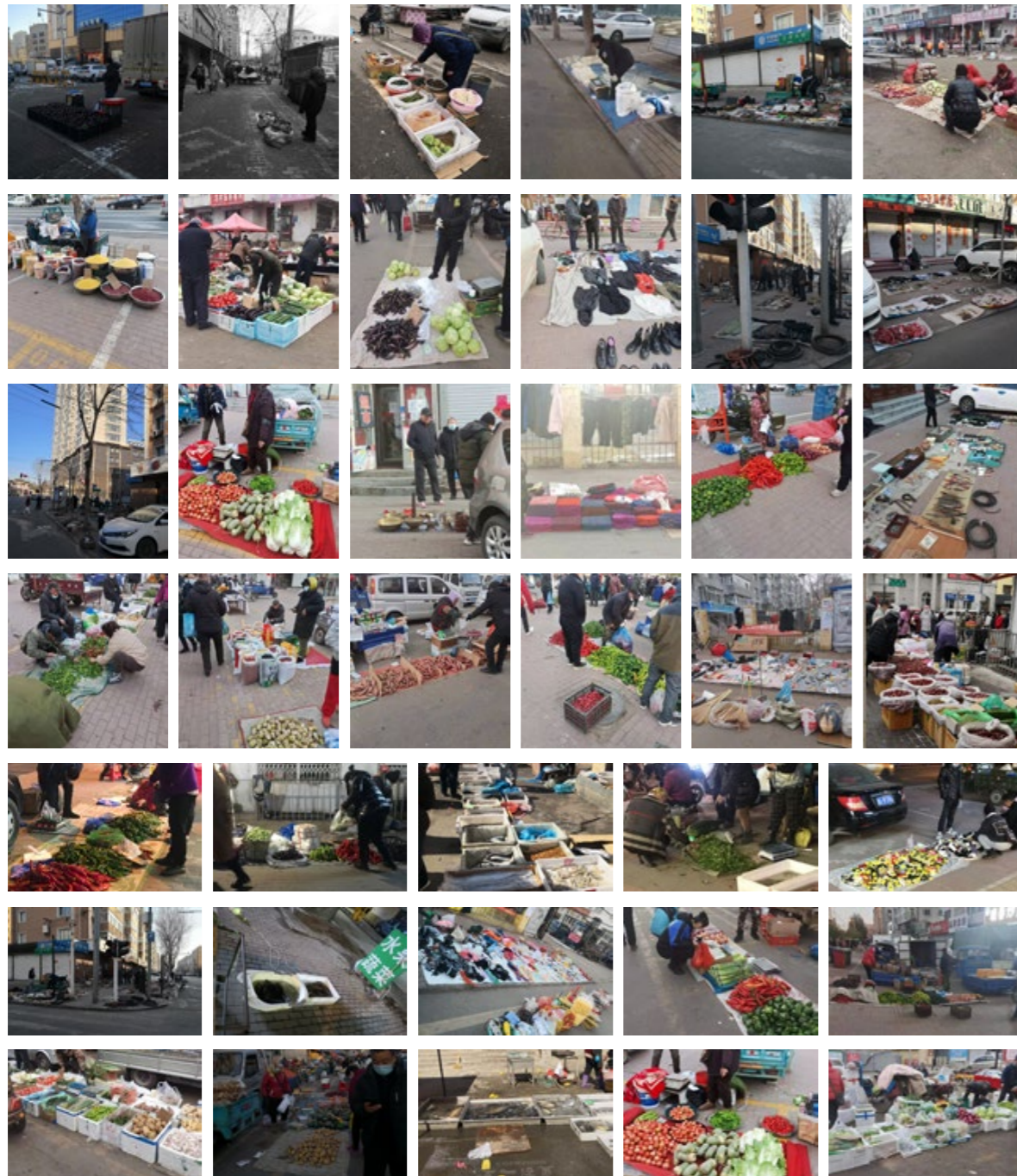
based on the type of space. Different layouts will appear in different urban spaces.



Vendor observation - Author

### Tool typology analysis

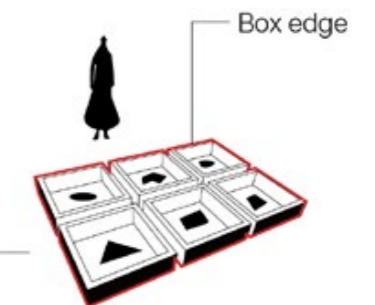
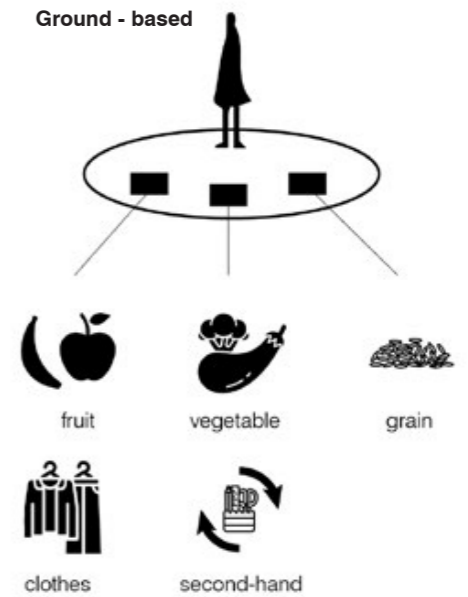
#### Tool-based Ground



Vendor pictures - Author

This type of stall is the most convenient and simple for displaying goods, as the vendor **directly shows the goods on a cloth on the ground** to consumers. The goods sold are often items that do not need to be made or cannot be used (eaten) directly, including food material, clothing, and second-hand goods.

Because they are difficult to move, these stalls do not change places after they are set up until the end of the business and occupy their space for a long time. **The size of the area occupied depends on the goods they sell and their division.**

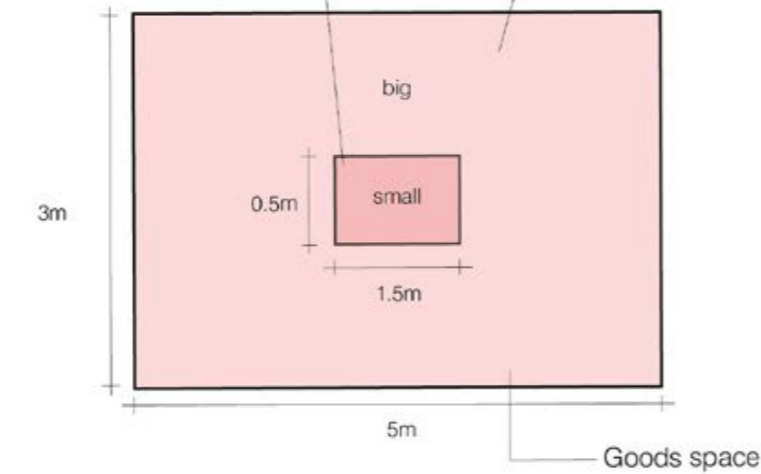


According to observation, the smallest single-stall occupies a space of about 50cmx150cm (selling food material), and the largest is 3mx5m (selling clothes), while the vendors themselves are freer to move around. After observation, I can see that vendors selling second-hand goods and clothes need a larger display surface, while vendors selling foodstuffs will use containers to set up their stalls more orderly.

If not based on physical stores, such vendors will park their means of transportation nearby, such as pickup trucks and private cars. The transport will be parked in their own line of sight, and the advantage of doing so is convenient to look after, but as soon as possible to restock, when the city police also come convenient to escape.

Vendors are on the side facing the customer or the same side for the placement of goods and introduction of goods. The activities of customers and vendors themselves are free. However, there will not be a space occupied that completely blocks the original road, making the pedestrians unable to walk. Generally speaking, customers need space around the stall; 0.5 m wide is sufficient.

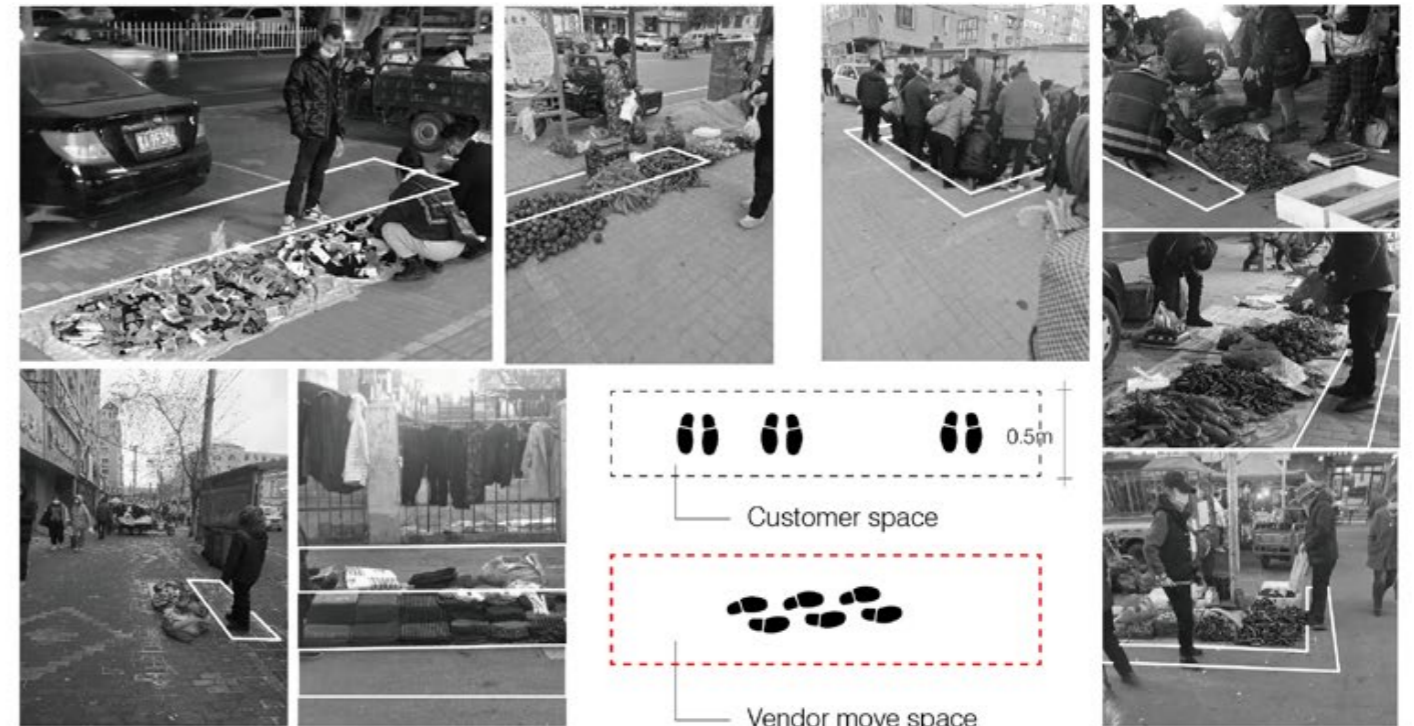
**Ground - based space analysis**



ground-based vendor goods space size



ground-based vendor parking space size



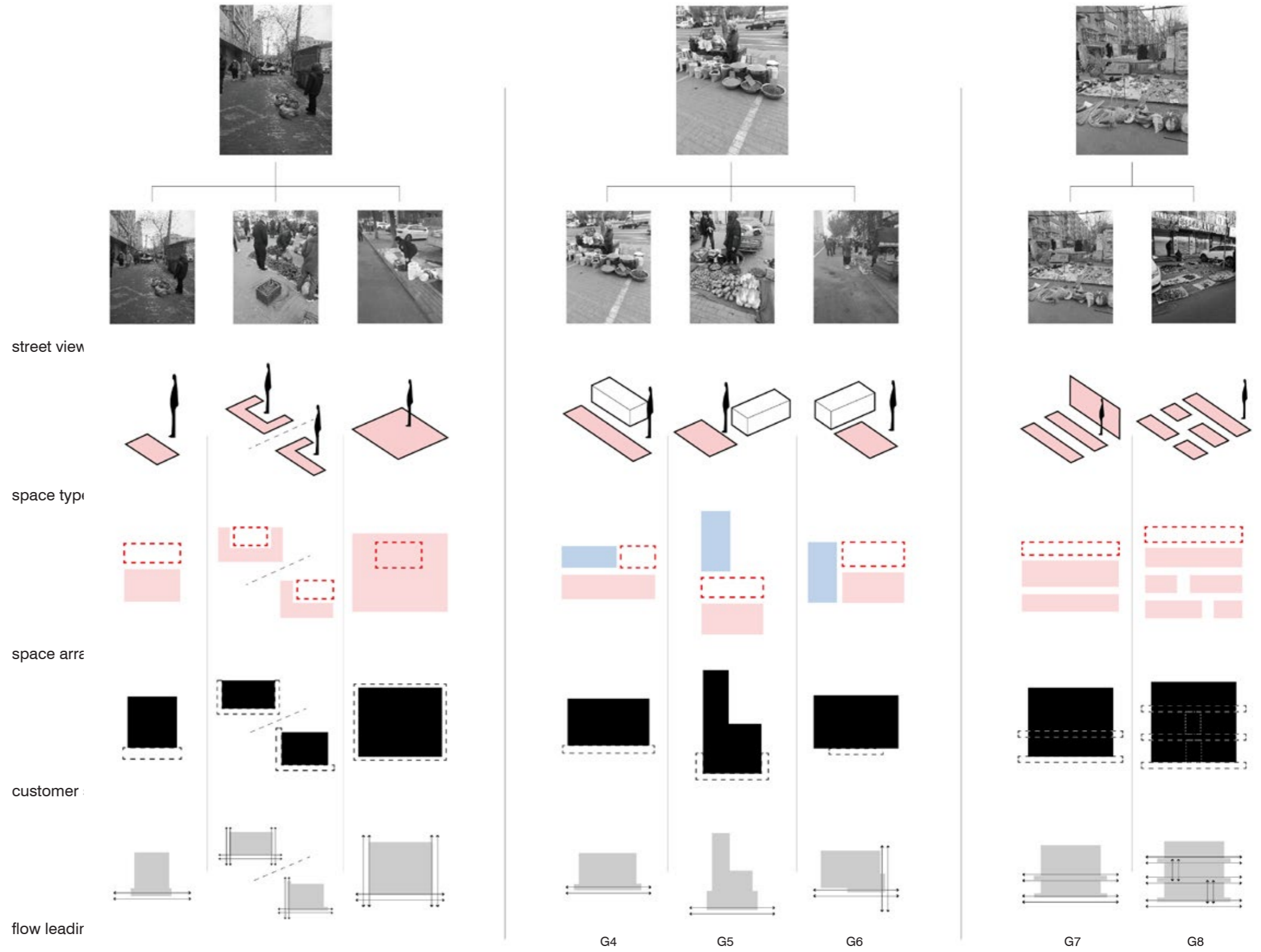
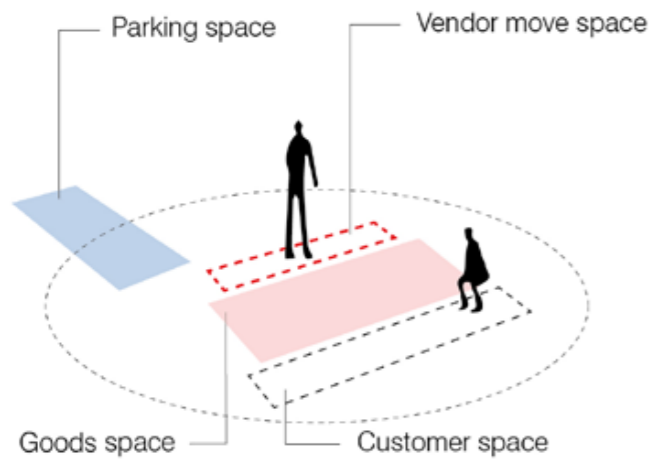
ground-based vendor people space size



**Ground - based space use typology**

Vendors will also have the habit of arranging goods. **The stall will occupy as much space as possible (including the space for their own activities) to form a regular square to avoid a clutter of goods or difficulty to take care of.** And different placements will guide customers to move around the vendor in different ways, but the common thing is to keep at least one entire display surface.

Based on the observations, several types of ways to arrange stalls for vendor placement can be summarized under the ground-based classification. Some of these ways are rational and very efficient in space utilization and can be used as the basis for future space planning of such ground-based stalls.



### Ground - based vendor locations

The project authors recorded the locations of the vendors on the streets **with the help of residents who live in Hulan old town**. The helpers and the project authors used WeChat video to connect with each other. The helpers walked on the streets in Hulan city and showed the street scenes, and the project authors recorded the locations of the stalls on the streets one by one. Due to the inconvenience of remote research, a complete and accurate information survey is not possible, and some data will be missing.

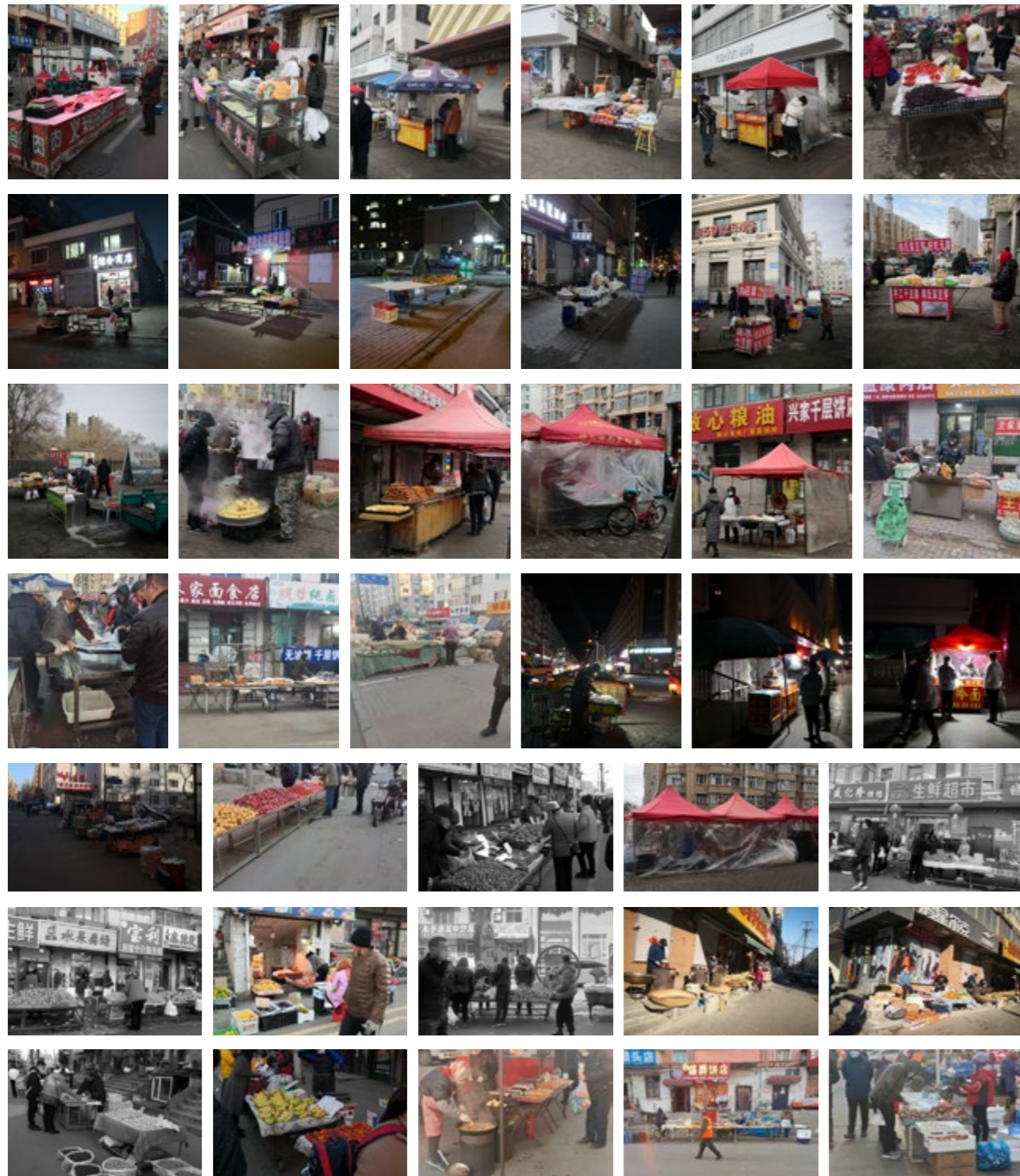
The project recorded data on three different dates:

06.04.2022 (Wednesday) afternoon  
 09.04.2022 (Saturday) noon  
 10.04.2022 (Sunday) afternoon

Data source: Observation  
 Date:  
 06.04.2022 5:40 pm  
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 10.04.2022 6:00 pm

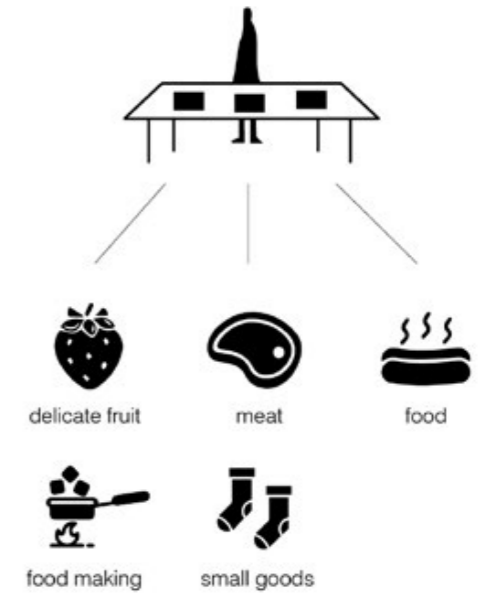


**Tool-based Table**



Vendor pictures - Author

These types of vendors usually place their goods on a table or operating table, compared to directly on the ground, this way is more hygienic and more standardized. Most of these stalls are extensions of the stores on the street or fixed vendors that have existed in a certain location for a long time. The goods display space is bounded by the size of the table, and buyers do not need to crouch down to select goods, which is more acceptable. The goods sold are mainly finished food, food that needs to be prepared on site, meat, easily damaged fruits and vegetables, and some small goods. The food vendor will use a sunshade to reduce the natural impact, at which point the boundaries of the vendor become the edge of the sunshade.



Vendor tables are also **rarely moved during non-profit hours**, and will be fixed to occupy part of the city space, while also preventing the stall location from being occupied by illegal parking at night. The rest of the stalls will choose to lock their tables to the street fence when they go back home. The size of the table width is about 60cm-100cm, the stall owner will put multiple tables or use custom-made tables in order to increase the display surface. Some of the food preparation vendors do not have space to display their products, so they need to use signs to attract customers, which can be set up either in a physical store or separately, with the ingredients and equipment placed under the table. Handwritten price lists are also placed on the stalls to make it easier for the vendor to look after the store behind him.

Vendors who need to make and display their goods will integrate their production area with the goods display area for easy production and accessibility. These vendors need better space to ensure the quality of their food, and it can be observed that for vendors who are susceptible to natural factors (dust, rain) affecting the quality of their goods, they will modify the sunshade (surrounded by transparent plastic film) to increase the confinement of the stall. The size of the umbrellas has an uniform standard, commonly 2mx2m and 3mx3m, and larger spaces can be made by splicing several umbrellas together. Stall owners without sunshades can only use thatch for the protection of their goods.

**Table - based space use typology**

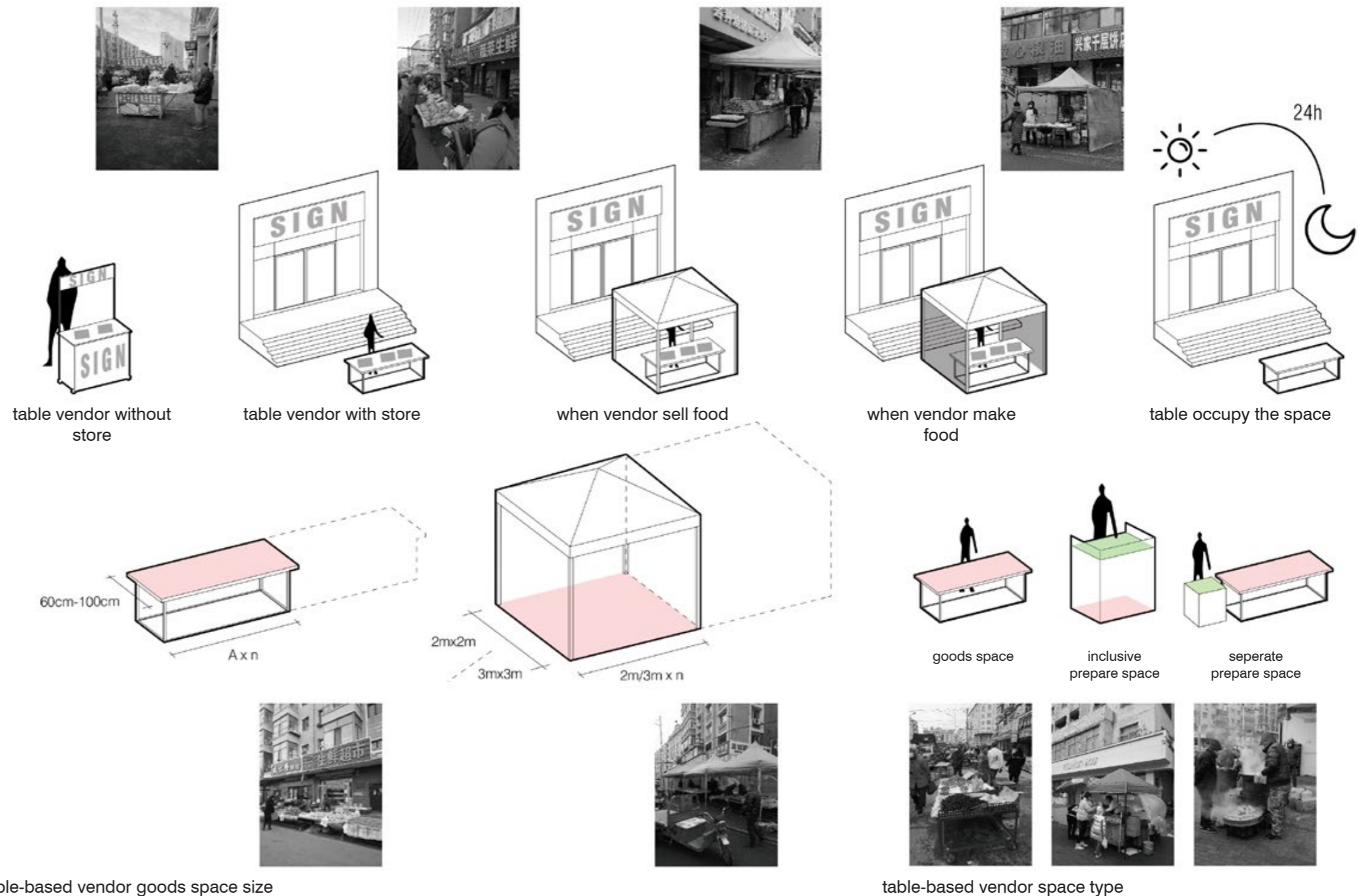


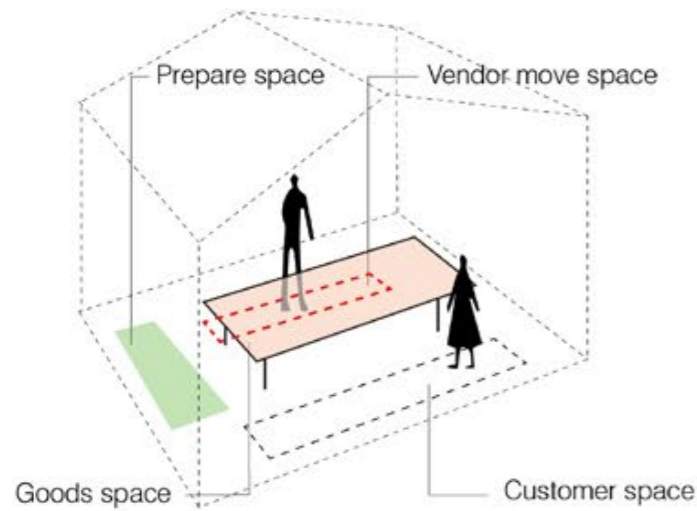
table-based vendor goods space size

table-based vendor space type

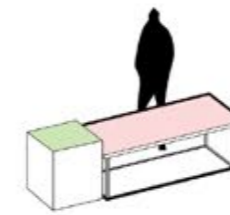
**Table - based space use typology**

Based on observations, I conducted a typology analysis of table-based types of vendors, summarizing their space-use habits and how to guide customers.

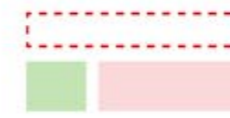
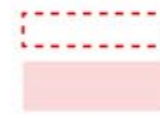
It can be found that customers' behavior is more fixed when dealing with table-based stalls, and customers will move on one side of the table.



street view



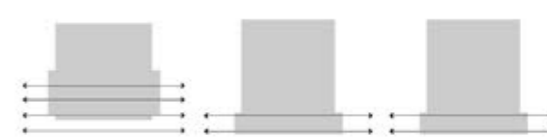
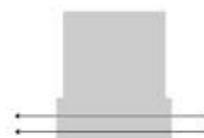
space type



space arrangement



customer space



flow leading

T1

T2

T3

T4

T5

T6

### Table - based vendor locations

The project authors recorded the locations of the vendors on the streets with the help of residents who live in Hulan old town. The helpers and the project authors used WeChat video to connect with each other. The helpers walked on the streets in Hulan city and showed the street scenes, and the project authors recorded the locations of the stalls on the streets one by one. Due to the inconvenience of remote research, a complete and accurate information survey is not possible, and some data will be missing.

The project recorded data on three different dates:

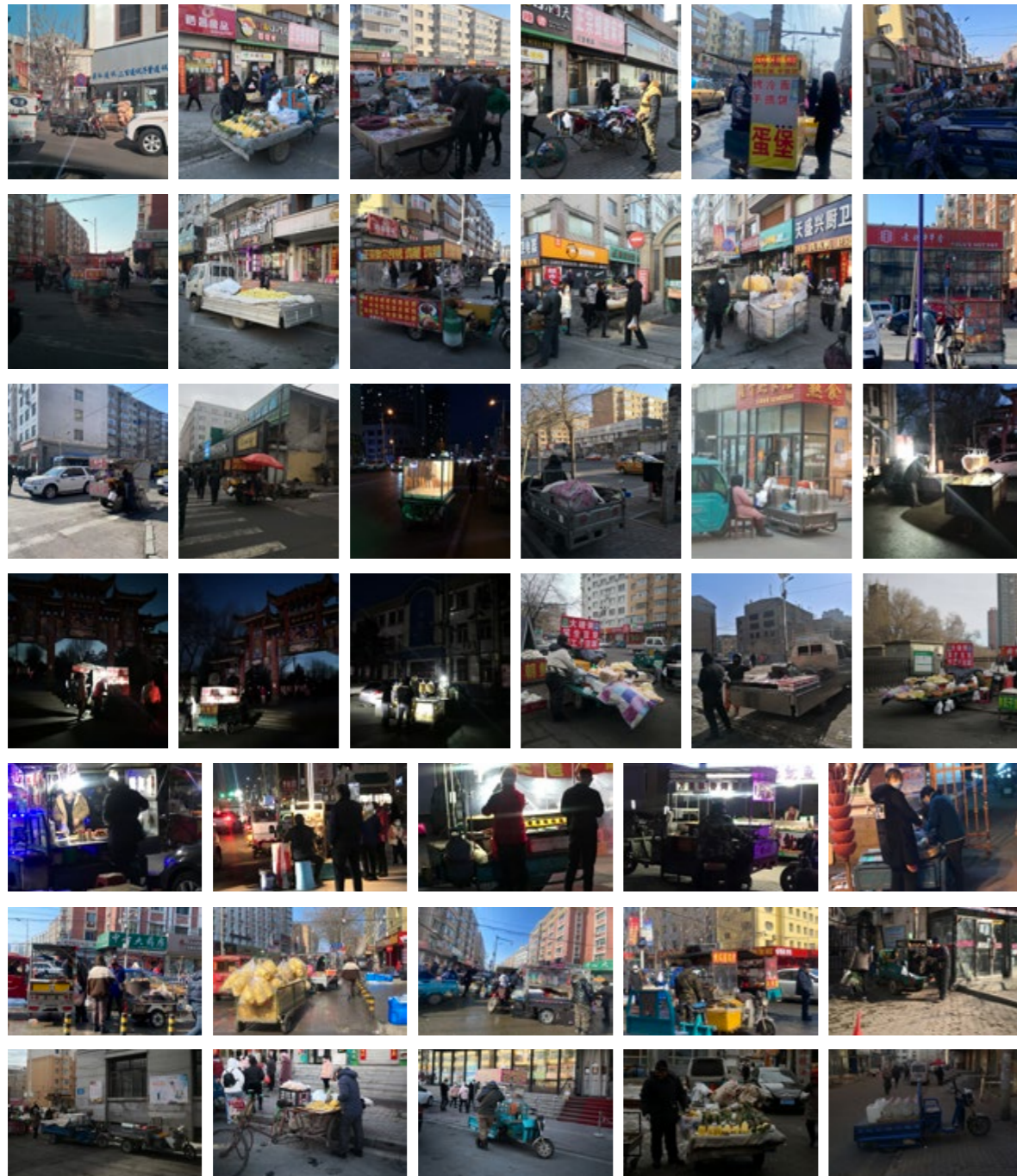
06.04.2022 (Wednesday) afternoon  
 09.04.2022 (Saturday) noon  
 10.04.2022 (Sunday) afternoon

Many of the table-based vendors are the extensions of the physical stores on the street. In the production of this map, in addition to the observed locations, **the POI data of the stores in Gaode data are added**: the points shown in the map include fruit stores, vegetable stores, grain and oil stores and snack shops in the old city of Hulan.

Data source: Observation & Gaode POI  
 Date:  
 06.04.2022 5:40 pm  
 09.04.2022 11:30 am  
 10.04.2022 6:00 pm

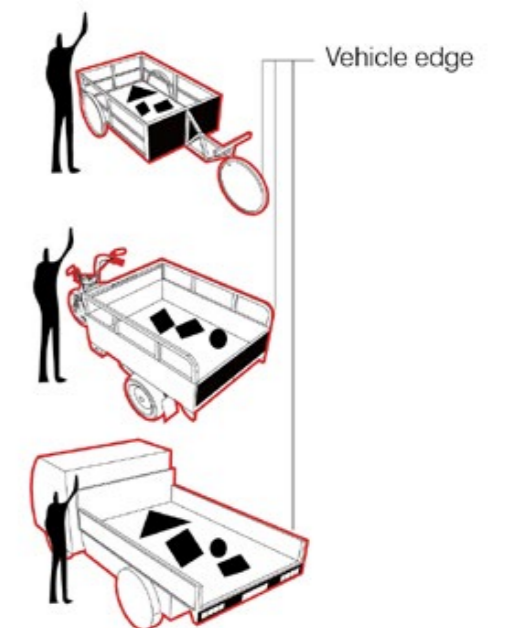
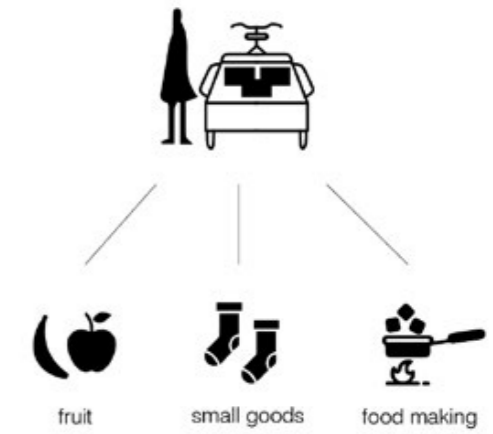


**Tool-based Vehicle**



Vendor pictures - Author

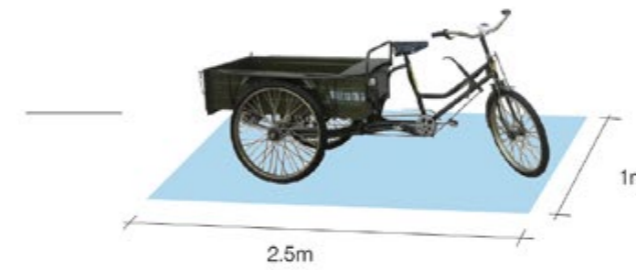
This type of vendor **uses the vehicle as its own stall**, and the vendor blends the mobility of the vehicle with the attributes of the table, modifying the vehicle to fit the form of the stall. **The mobility and freedom of this type is high, and the location can be changed at will, usually without a fixed stall location.** They often parked on the street or on the sidewalk for activities, the stall owner will stand next to the car. The goods sold are food, fruits and small snacks made on site. **The scope of the vendor is bounded by the vehicle**, and all the ingredients, equipment, and signs needed for selling are installed on the vehicle. Because of the nature of the transport, this type of vendor will use the sidewalk and driveway space, they also caused the greatest impact. Due to the modification of transportation, its safety hazards such as fire and the chance of falling goods compared to the other two are also increasing.



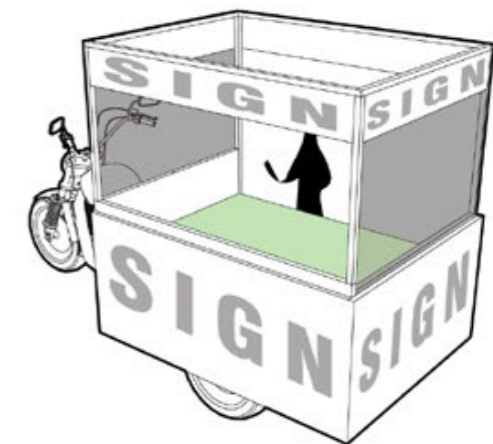
For food sellers, vendors usually add frames to their cars to protect the food, and sign to attract the customers, but these does not affect the area occupied by the stall.

The size of the space occupied by such stalls is related to the vehicles used, commonly human tricycles, electric tricycles and a small number of mini-vans. The tricycle size is about 1m/1.5mx2.5m and the mini-van size is about 2.5mx5m, and more space is needed for parking and selling.

**Vehicle - based space use typology**



vehicle-based vendor parking space size



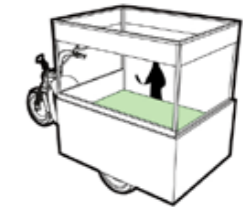
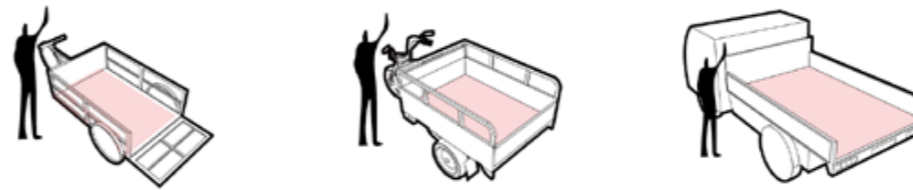
vehicle vendor transform



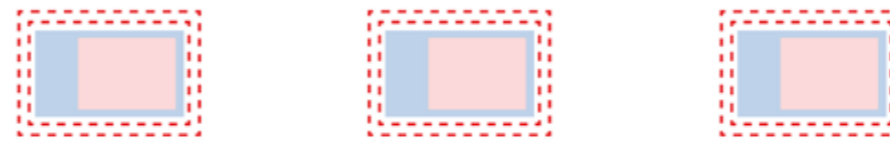
**Vehicle - based space use typology**



street view



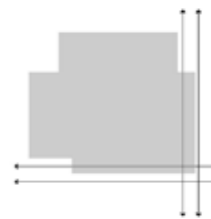
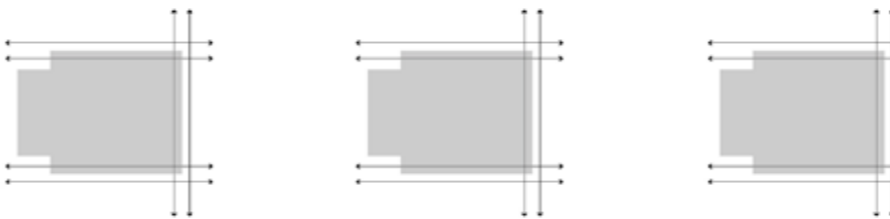
space type



space arrangement



customer space



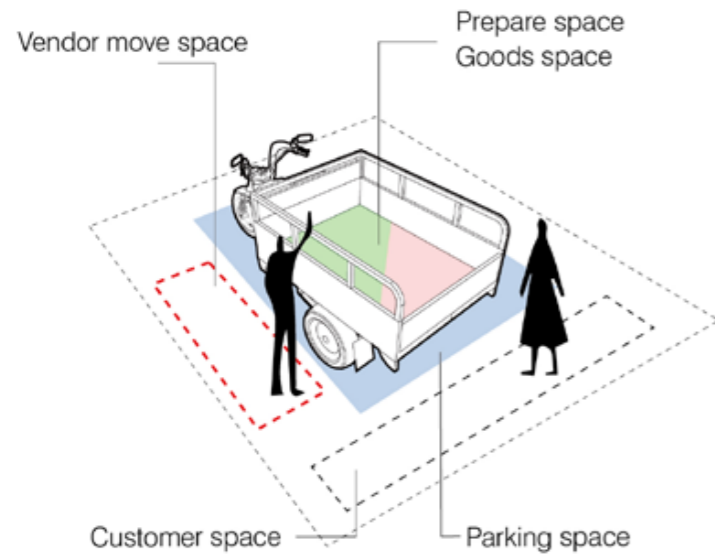
flow leading

V1

V2

V3

V4



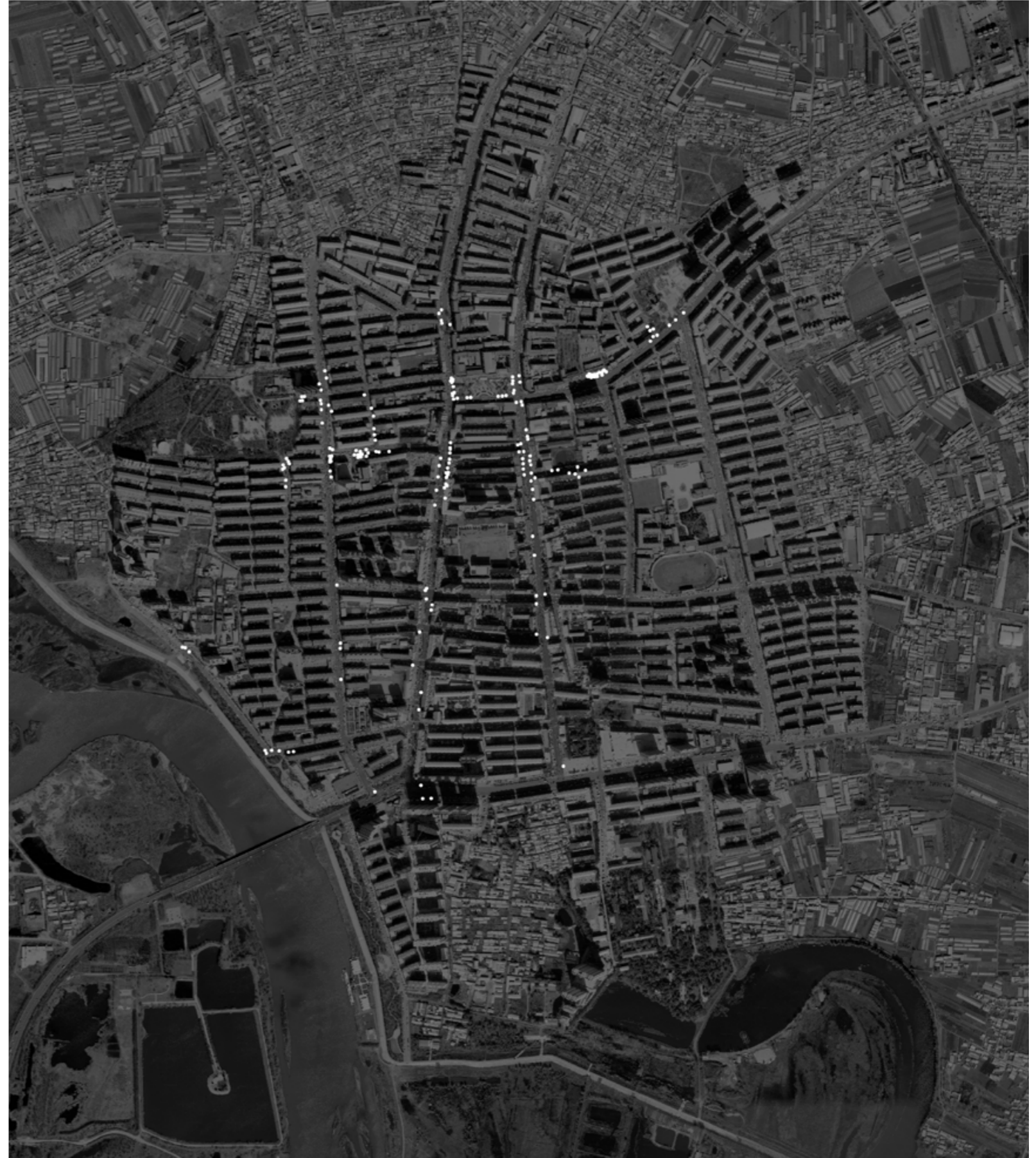
### Car - based vendor locations

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Data source: Observation  
Date:  
06.04.2022 5:40 pm  
09.04.2022 11:30 am  
10.04.2022 6:00 pm



**Tool - based typology analysis**

**Tool-based Typology Summary**

Through the analysis of different kinds of vendors using tools, handling space and the guidance of customer routes, it can be concluded that different types of vendors have similarities.

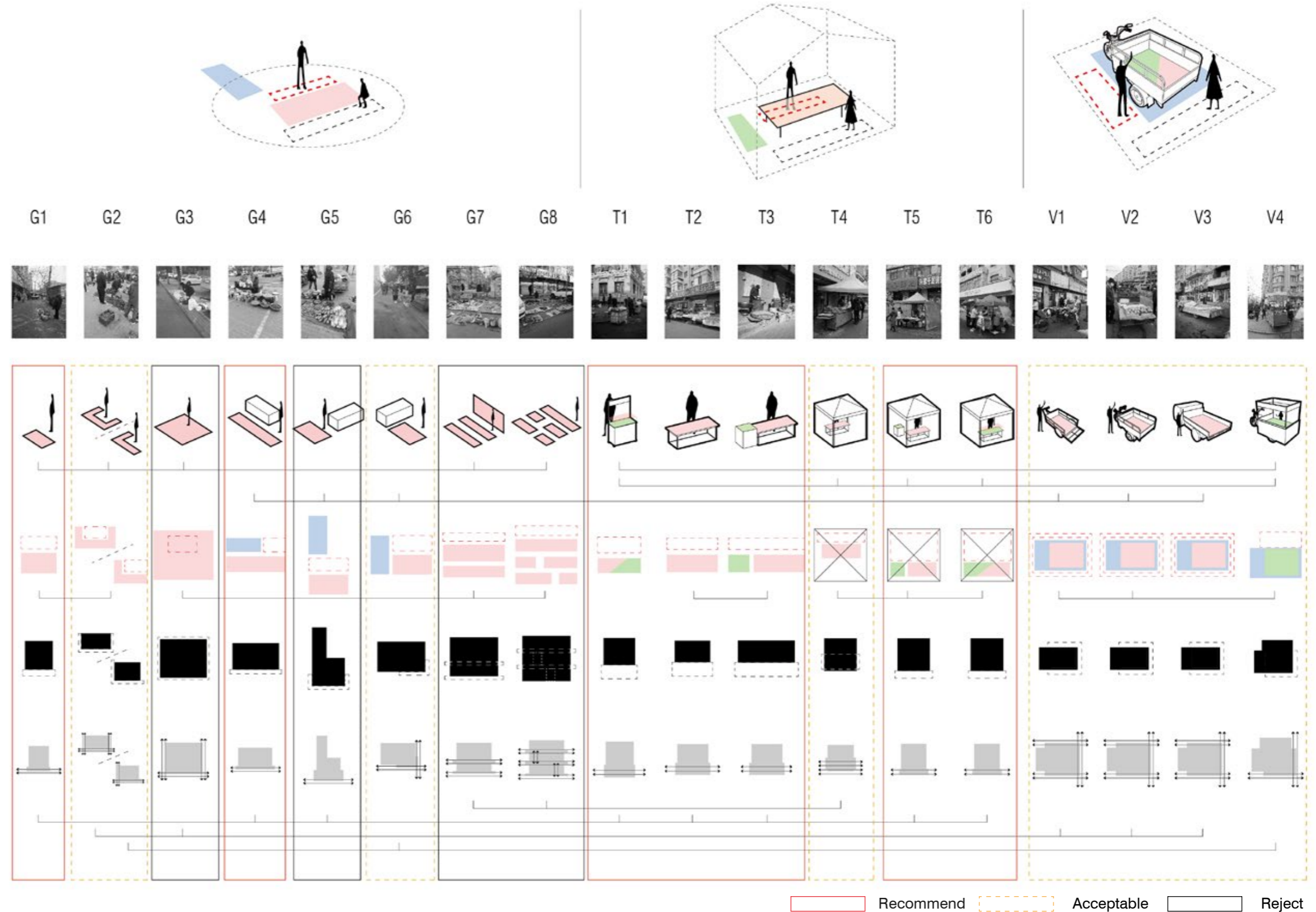
**Similarity 1:**

**Type of space needed:** Only need space for displaying goods: G1 G2 G3 G7 G8 ;  
 Need parking space: G4 G5 G6 V1 V2 V3 ;  
 Need shading equipment: T1 T4 T5 T6 V4

**Similarity 2: Size of space needed:** Use similar sized spaces: G1 G2; G3 G7 G8; T2 T3; T4 T5 T6; V1 V2 V4;

**Similarity 3: The way to direct the flow of people.** Customers on one side of the stall: G1 G4 G5 T1 T2 T3 T5 T6; Customers on both sides of the stall: G2 G6 V4 ; Customers around the stall: G2 G3 V1 V2 V3; Customers have access to the inside of the stall: G7 G8 T4

In the actual use of space, it is hoped to plan the same type and size of vendors together as much as possible, and hope that the flow lines of different groups are separated from each other, so that customers can be on one side of the stalls as much as possible to reduce crowding and confusion. At the same time, we consider the rational use of space, such as reducing the space occupied as much as possible and making the space more efficient. Therefore, several types were selected among the types used as the form of space used in the planning, while some types were avoided in the planning as much as possible due to wasting space or causing confusion to the buyers. The rest of the types can be changed to make the space more reasonable and efficient.



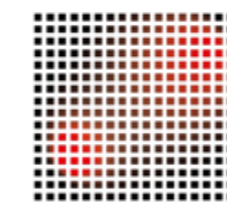
Floating vendors have an obvious aggregation, and according to Guo Xiaoqing's research on the aggregation of vendors, **this aggregation broadly includes three aspects: Spatial aggregation, Temporal aggregation, and Commodity type aggregation.** (Guo, 2012) Generally, they are centered in a certain area and gathered and distributed around it.

**Spatial aggregation** shows that vendors are mostly distributed on both sides of the street to form a commercial street, or concentrated in an unused area, and the scale will continue to grow in the case of lax control; **Temporal aggregation** shows that similar vendors will concentrate their stalls at certain times, and different selling times will be presented according to the commodities. For example, selling breakfast concentrated in the morning, the night market will be in the afternoon at four or five o'clock to start preparing. **The clustering of goods** shows that vendors operating similar goods are usually concentrated, which helps each other to understand the market and form "Attraction benefits", but also brings some competition problems.

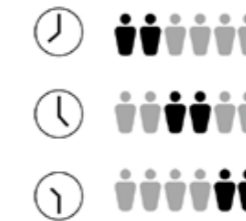
Due to this aggregation, individual vendors will gradually form different types of groups and accordingly occupy different public spaces in the city. The project classifies the way the vendor economy appears in the city as

1. Point-layout (cluster-layout)
2. Linear-layout
3. Plane-layout (array-layout)

Combining the different types of vendor monoliths will guide a better quality spatial strategy.



**Spatial aggregation**



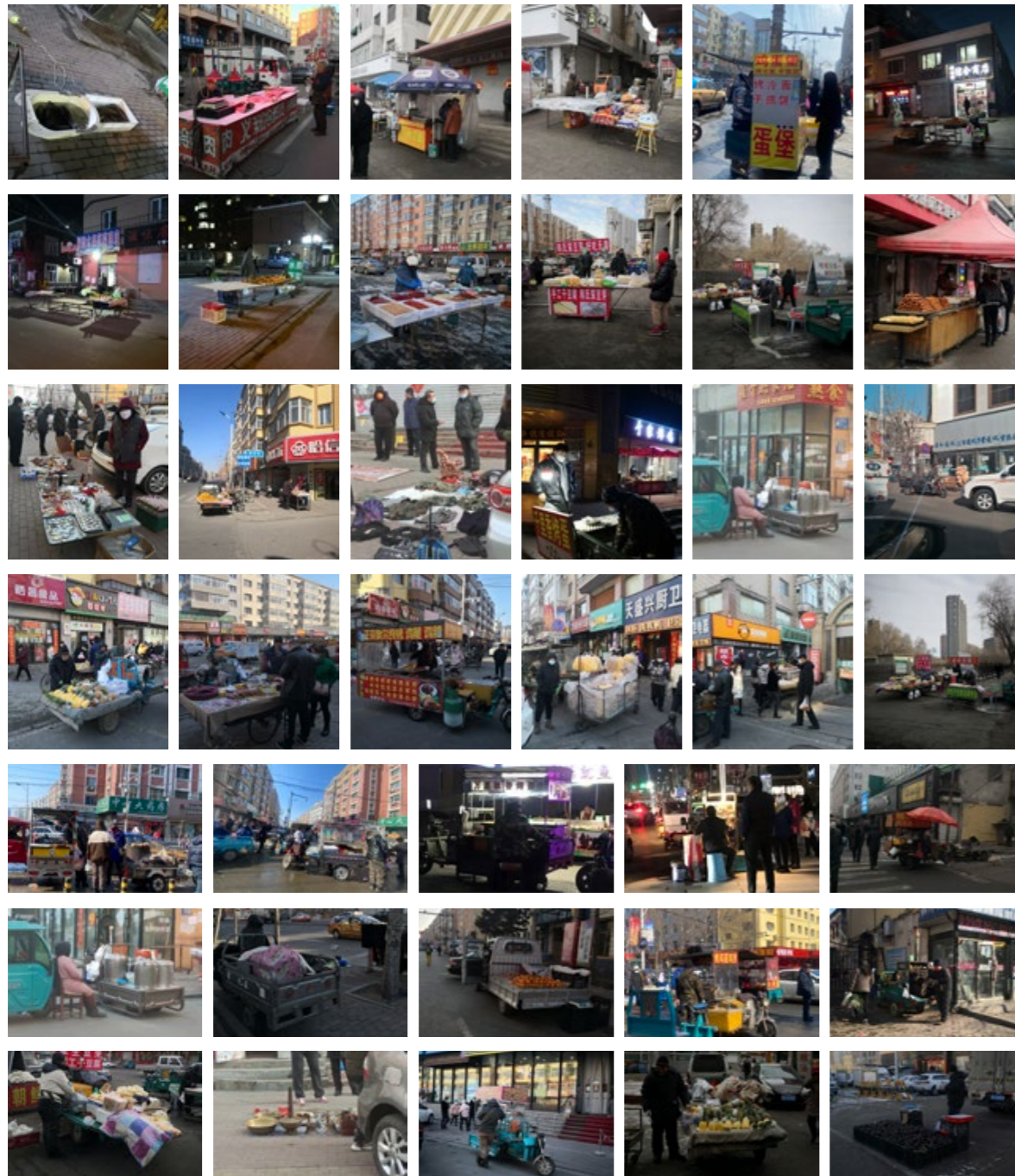
**Temporal aggregation**



**Commodity type aggregation**

## Layout typology analysis

### Layout-based Point



Vendor pictures - Author

The point - layout of vendors refers to the **stall in the form of single** in a public space, or a cluster of several similar stalls that occupy a small area of space, and they are usually found in smaller "pinch spaces" in cities, such as in front of neighborhoods or at road intersections.

Since there are no restrictions on the scope, length and cost, the operators are free to decide where to appear, and if they find the city police they will quickly leave, wait for the city police to leave and return or find another location. **This type of stall is one of the most difficult for the city to manage.**

Usually vendors selling the same type of goods form a group, but on a smaller scale due to space constraints, but if they are buying the same goods, they deliberately keep a distance from each other.



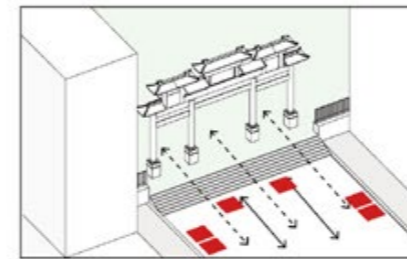
Based on observations and life experience, point-layout stalls will be found at:

**Entrances of neighborhoods, parks, and public service:** they usually serve people living the neighborhood or public service space, are small in scale. They will occupy the space on both sides of the **pathway at the entrance of the neighborhood**, and goods that are usually food materials and food. **Ground-based and vehicle-based are the main component.**

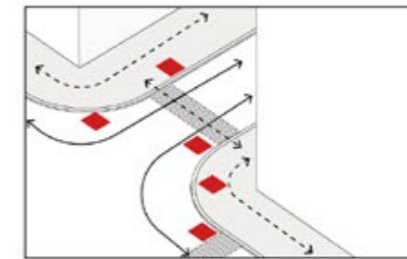
**City road intersections:** vehicle-based is dominant and usually chooses the corner of the sidewalk at busy road intersections, **occupying part of the sidewalk or driveway space for business**, which is usually the main cause of traffic obstruction.

**Fragmented space on sidewalks:** These types of vendor will be found on busy sidewalks, **using a random space that will be close to the main pedestrian flow but try not to interfere with pedestrian walking.** Usually they will be at the intervals of street trees, street lights, and bus stops; near trash cans or billboards; and some food preparation vendors will produce sewage or trash, and they will choose the roadway drainage or next to sanitary facilities. There are also some vendors who take up space with people who park irregularly on the sidewalk. These types of spaces are also the types of spaces that are rarely used by pedestrians.

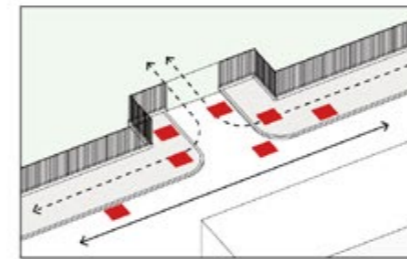
**Point layout analysis**



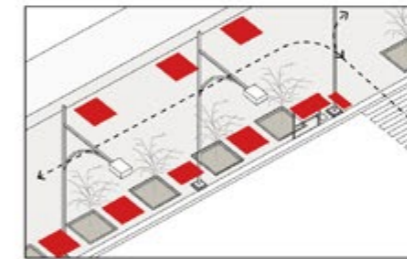
Entrance of the park



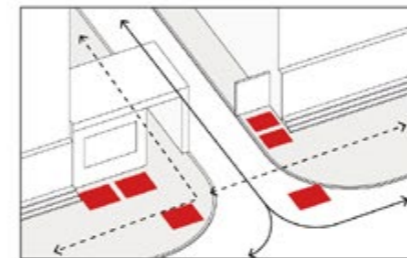
Busy road intersections



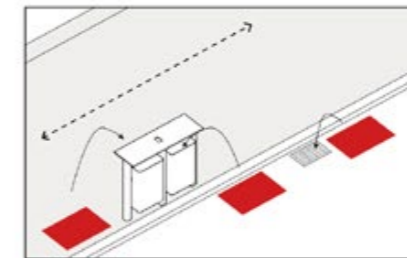
Entrance of the park



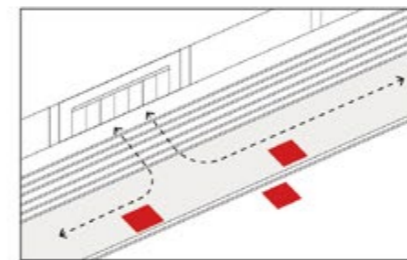
On the fragmented street spaces



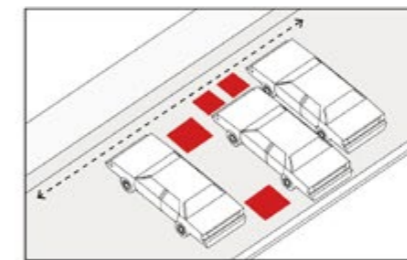
Entrance of the neighborhood



Besides facilities



Near the public service

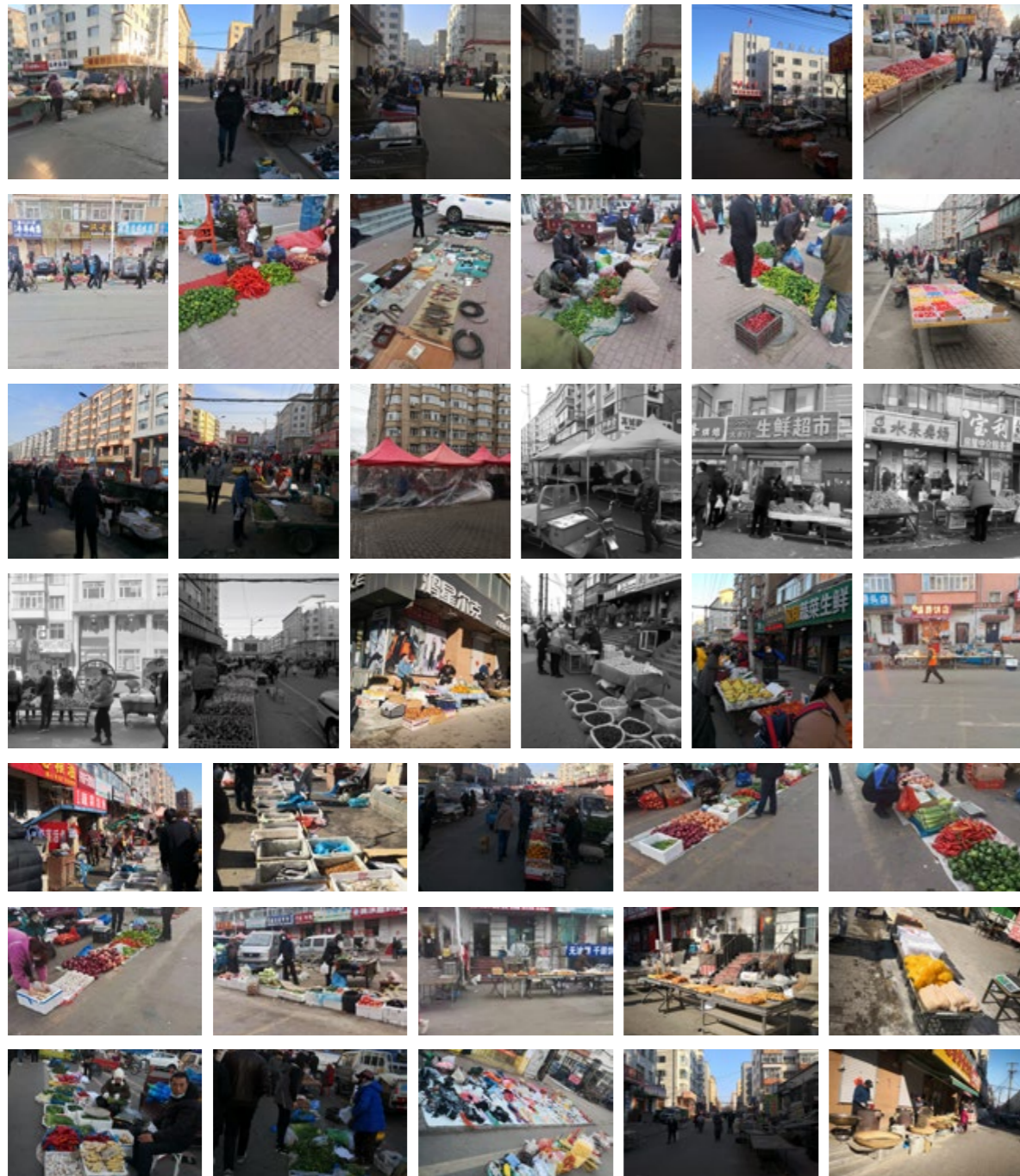


Between the parking

<---> Pedestrian <--> Car ■ Vendor



Layout-based Line



Vendor pictures - Author

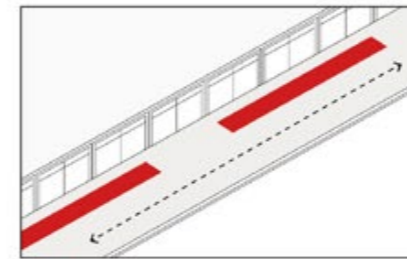
Linear distribution means that single vendors will gather on the street and gradually form a horizontal arrangement in order not to interfere with the normal flow as much as possible, occupying a linear space in public space as a whole. This type of stall is often table-based, with the store as the backbone, and the adjacent stores will have the table tops of the stalls in front of the stores close to each other. However, this is rarely the case that single stall operators join the store vendor ranks, it seems that some advantages of single vendors may lose when contrast to store vendors. Usually, store floor stalls form a row and single vendors form a row on other streets.



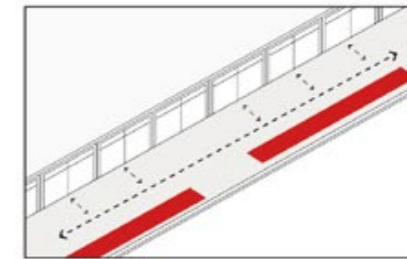
These vendors are usually distributed **along the curb, on the driveway and sidewalk**, with the stalls being placed close to the store or on the side near the driveway. When there is enough sidewalk space, two rows may also be formed. It creates a privatized occupation of a portion of the sidewalk space as tables are placed on the sidewalk for long periods of time even they stop business. Sometimes such vendors occupy roadway parking spots, which conflicts with the normal parking function of the street. **Store stalls are often equipped with sunshades to optimize the trading environment.**



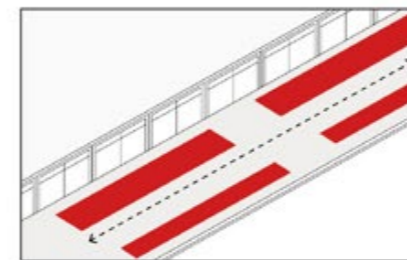
In contrast, individual vendors comprise a more loose and free street of small goods, but are also arranged along the street level. Since the lines formed by single vendors are mainly ground-based and vehicle-based, there is no organization of these vendors when arranging the stalls. **Such aggregation occurs in the streets leading to the market and near the pedestrian streets.**



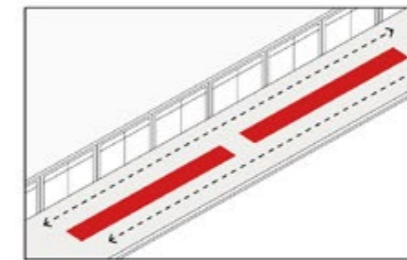
Near the store



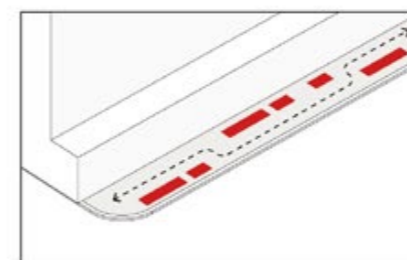
Near the driveway



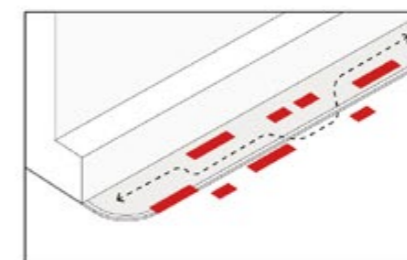
Two lines in wide space



Use the sidewalk middle



Single vendor lines



Single vendor lines in narrow space



<---> Pedestrian <—> Car ■ Vendor



## Layout-based Plane



Vendor pictures - Author

A plane layout of vendor requires a complete piece of ground and a sufficient amount of stall operators gathered in a certain location. At this stage the government has already started to intervene and will designate locations to establish complete markets, which also means formalization of the vendor economy, while for the stall holders there is an additional fee to use the planned site.

The informal market would appear in the plaza in front of the mall in a plane arrangement, with vendors spontaneously arranged in rows, often in a chaotic situation. This is due to the lack of government planning. Ground-based and vehicle-based vendors are the main types of plane market. Since the government wants to return public space to the public during non-business hours, there will be no all-day occupation.



A formal government-led market has been set up on the site, one block away from the Hula Center Market, about 30mx150m. The stalls are planned in 1.5mx2m size, and the government has tried to use signage to zone the site, but the actual use is not good, and the signs have been removed now.

The business hours are from 4:00 am to 9:00 am. After 9:00 am, city managers will come to tell the vendors to stop operating, but a small number of vendors will still return to the site after they have left.

The cost of each stall is 5,000 RMB/year, vendors decide on their own where to set up their stalls in the market, and the government divides each vendor's area on the ground with a line. Still, it is of little use, and there are often cases where the occupancy exceeds the demarcated site, and the manager will depart in the form of a fine for the offending vendor, but it is actually a bribe.

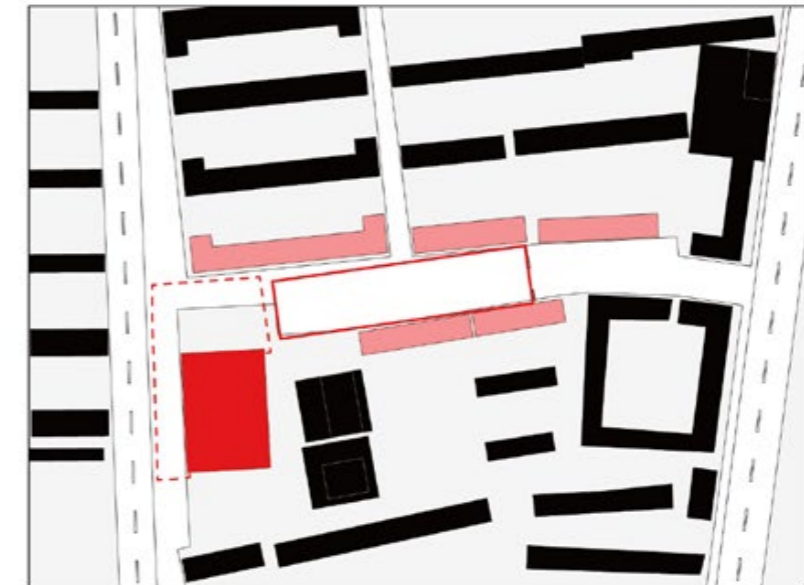
More vendors will appear outside the delineated area of the morning market, can enjoy the morning market to attract the flow of people, and do not have to provide site rental fees. They just need to beware of the city management eviction.



▶ Entrance

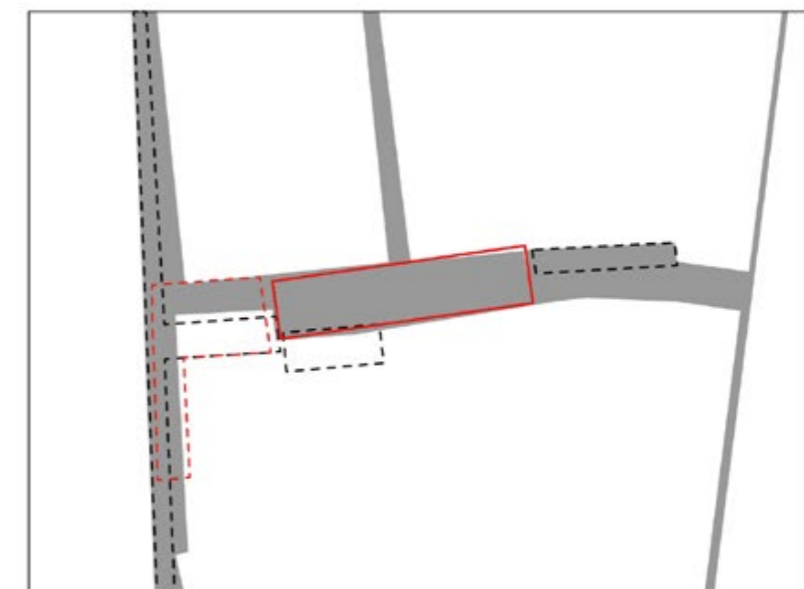


Informal  Formal



Market surrounding

Mall  Residence



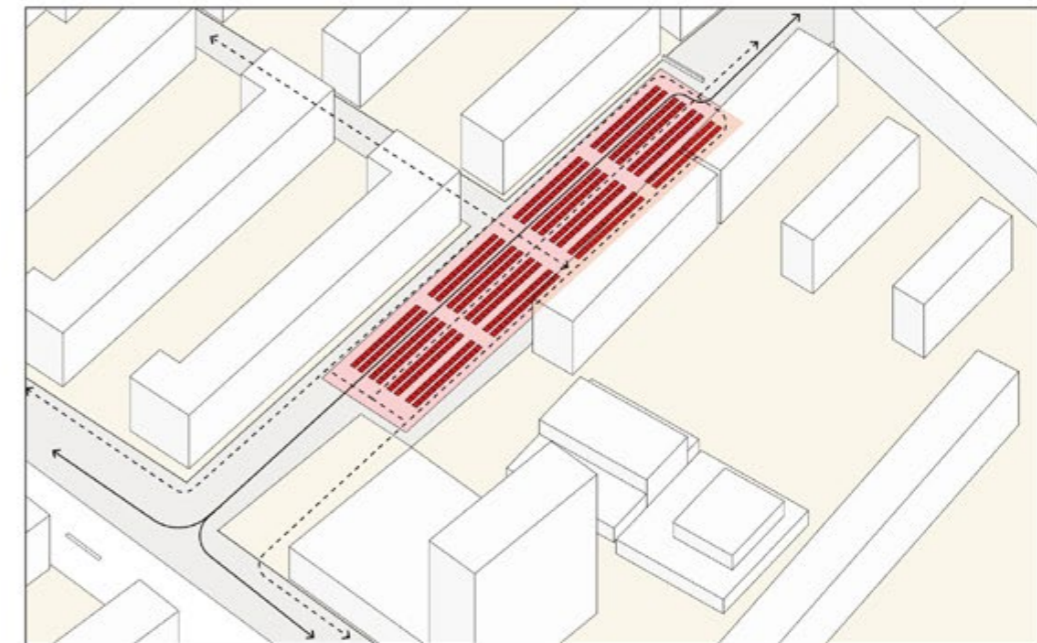
Market space use

Parking

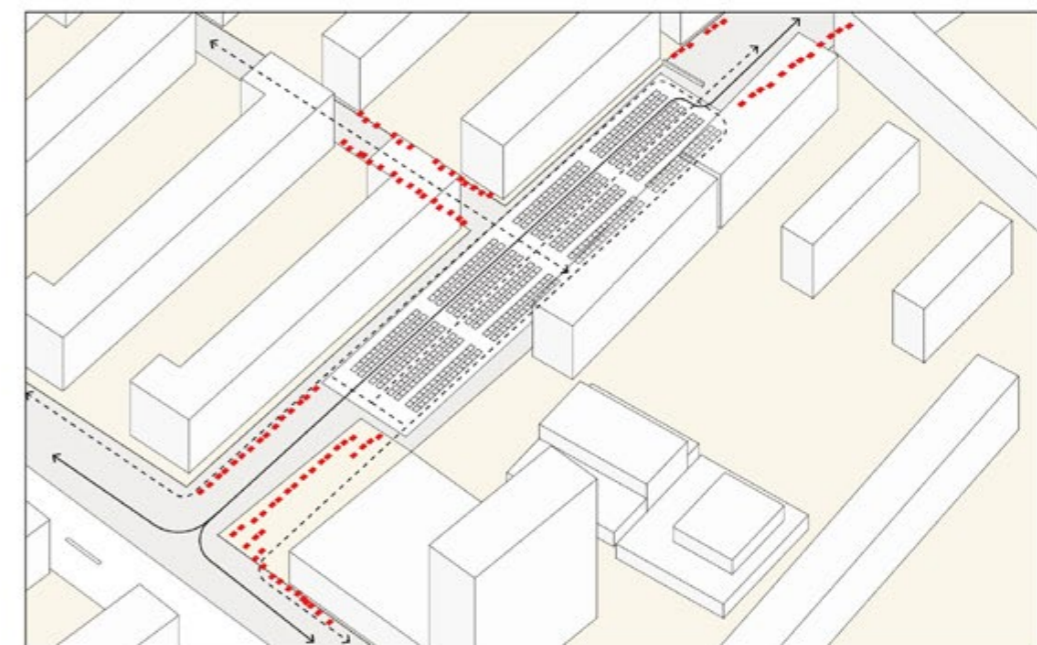
Vendor

There are no sanitation, heating, or utilities on the market. Due to the low winter temperatures in northern China (-17 degrees Celsius on average), the market operates poorly in winter. In winter, vendors concentrate on the north side of the market because they can enjoy the sunshine, and in summer, when the temperature is correct, there are not enough stalls. Then vendors spread to the west side of the market in front of the supermarkets, which is also the location where informal face markets appear.

The current flow within the market is chaotic, with a mix of vehicles, customers, and vendors, and chaos is caused by the presence of not only vehicles in the market, but also vendors' cars entering the market. Residents and vendors park their vehicles in front of the mall, on the street, and inside the market, a space that lacks organization. The vendors' compliance with the "rules" depends on their own volition and requires spontaneous gathering, and different kinds of goods are mixed together. Due to the lack of sanitation facilities, the sanitary condition of the site is poor and vendors complain about the crowded space usage and sanitation facilities, as there are no toilets provided in the site, resulting in vendors having to walk a block to use the public toilets in the hospital to solve their problems. The lack of lighting at night and the lack of cleanliness of the site means that few people come to the market area during non-business hours.



Formal market



Informal market

←- - - -> Pedestrian   ← - - - -> Car   ■ Vendor

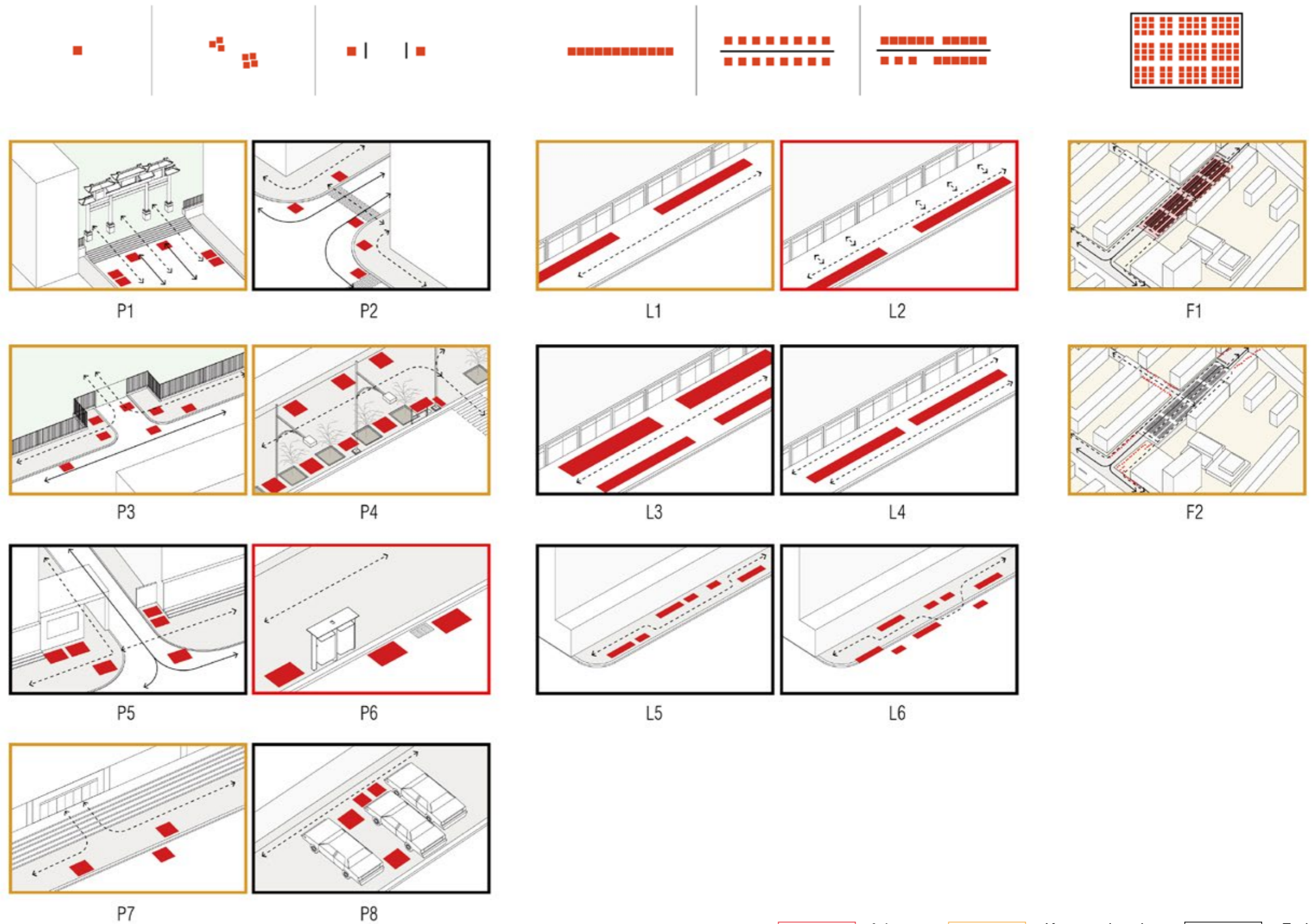
### Layout-based Typology Summary

By analyzing the space occupation of different types of vendors, it is clear that in some cases can cause confusion and disturb the normal flow of traffic, which lead traffic obstruction and reduce the quality of the vendor economy. Depending on the type and the impact on other urban systems, **some types of layout should be prohibited**, while some practices are more reasonable than others.

In the Point layout, **P1 P3 P4 P7 are relatively reasonable uses of space**, but they can also affect traffic or be chaotic, and these situations can be improved by redesignating areas with higher rationality, while **P2 P5 P8 need to be banned** because they block motor and pedestrian traffic too much. **P6 can use the city infrastructure to improve their business environment and are worth promoting.**

In Line layout, **L3 L4 L5 L6 has a negative impact on pedestrian flow**, while **L1 and L2 are better** in that pedestrian flow is not interrupted and there is no excessive occupation of motor vehicle space.

In Plane layout, the established markets and spontaneously formed **markets can be improved in quality through spatial strategies**, and their treatment should be combined with the current situation and problems, and the market should be targeted for improvement.



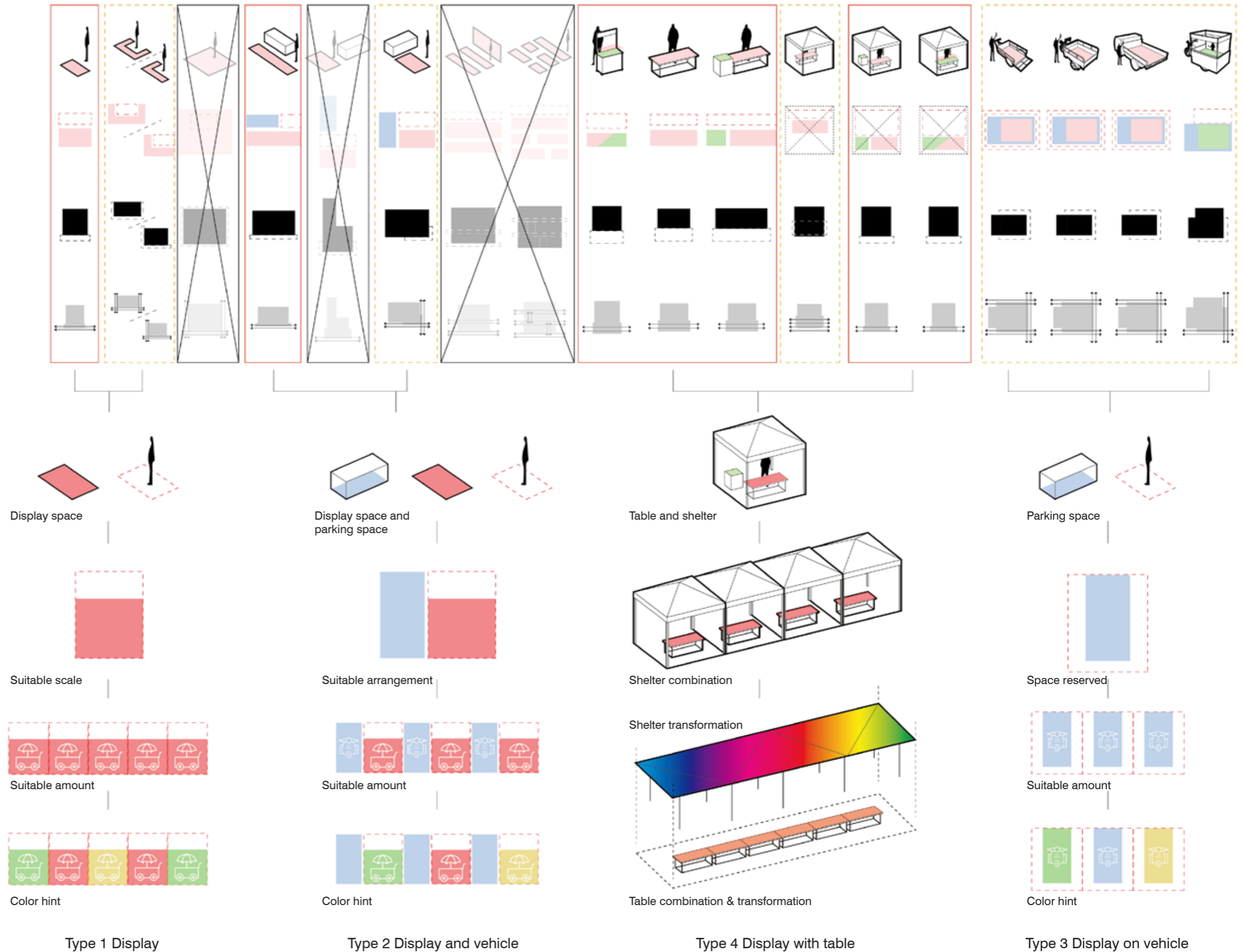
Advocate Keep and update Forbid

### Improvement propose

Through the analysis of different types of vendors' stalls, stall tools, the type of space needed, and the guidance of pedestrian flow, some types of stalls are hoped to be avoided in future strategies due to their less efficient use of street space or obstruction to other flows. **The strategy hopes to combine different types of stalls as much as possible to make the use of space more efficient and easy to operate in practice.**

After finishing, the strategy proposes three kinds of results after carrying out integration, different results are applicable to different types of vendor needs. **The type 123 is suitable for the type of stall without shading or equipments, and the type 4 is suitable for the type of stall with a more fixed street space and requiring equipment assistance.** For type 123, the use of eye-catching signs on the street is the appropriate choice, through the combination of different colors can also make the street vibrant.

**Type 4, on the other hand, requires additional equipment.** Now that the tables and chairs have been used for a long time to privatize the common space, consider making the joint umbrellas into **iconic canopies** or street installations, while the tables and chairs needed for the stalls can be replaced with **urban furniture**. Such urban accessory public facilities can be used by vendors during business hours, while during non-business hours, these facilities can provide quality leisure functions for city residents, and iconic canopies can complete the street space.



## Space layout improvement

Based on the previous analysis, among the types of urban space use by vendors, some undesirable space uses should be prohibited in the policy, on the grounds that they would reduce the efficiency of other urban systems too much. **The scenario on the right side simulates the normal space usage scenario after using the strategy.**

P2: Stalls use street corners, which create an obstruction to turning motor vehicles and pose a danger to passing pedestrians (distracting them or blocking their view).

P5: Stalls in front of neighborhoods can cause congestion at entrances and exits and have a degrading effect on the quality of the neighborhood.

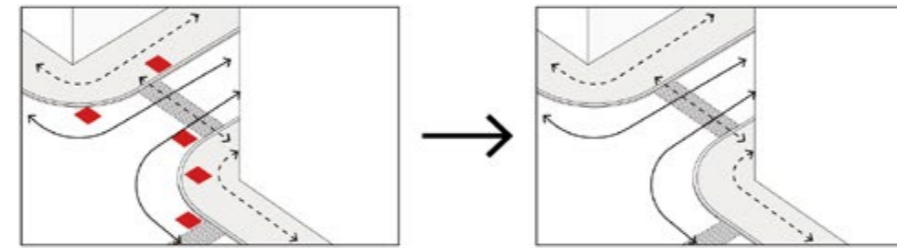
P8: Motor vehicle parking on sidewalks is illegal in itself, and if stalls are needed here then appropriate ways should be found to keep motor vehicles from parking on the sidewalk or to plan for more street parking.

L3: The double row of stalls occupies too much of the sidewalk.

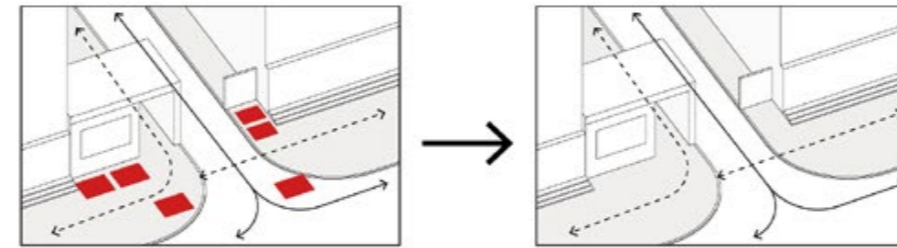
L4: Stalls occupying the middle of the sidewalk can make the pedestrian street use experience worse.

L5: Stalls are allowed to form rows as much as possible to ensure smooth flow.

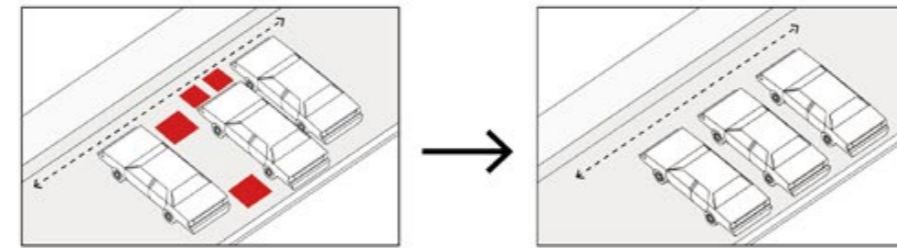
L6: Unplanned stalls can make the pedestrian flow too scattered. Consider using the street side of a motor vehicle if there is not a lot of sidewalk space and it is located in an area that does not have heavy traffic flow.



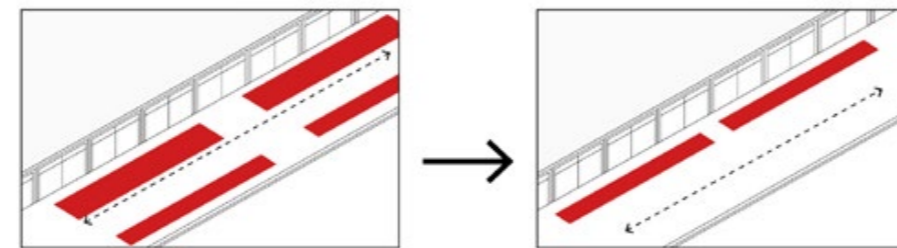
P2



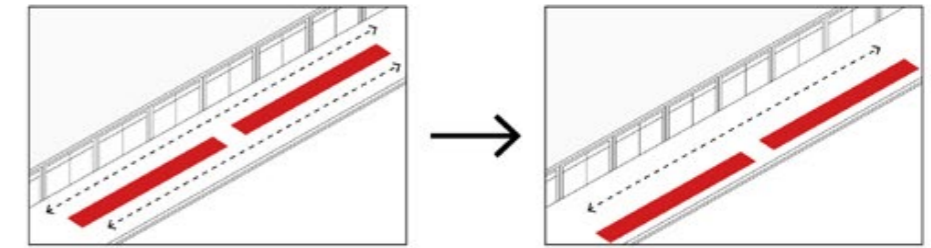
P5



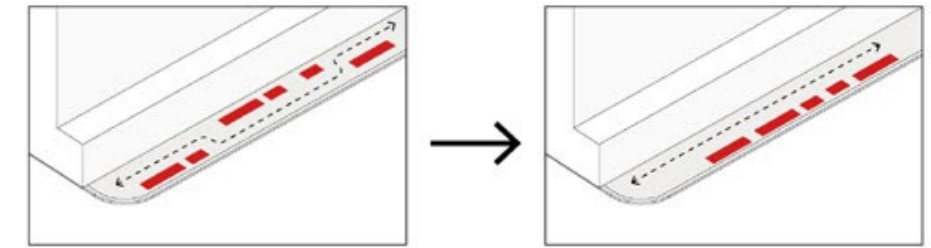
P8



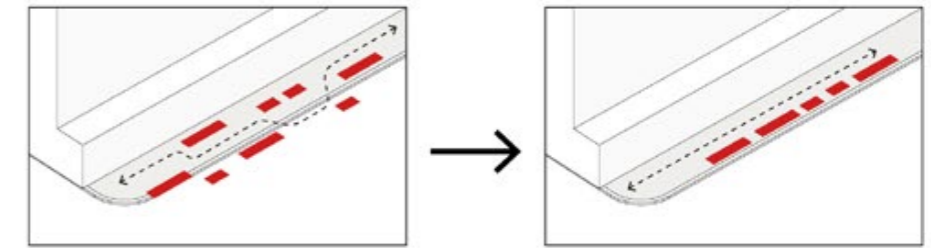
L3



L4



L5



L6

Space layout improvement

P1: The open space in front of the entrance to the scenic spot should allow the vendors to have its own business space and direct the flow of shoppers to the sides that do not obstruct other pedestrian and vehicular traffic.

P3: The entrance to the park or square is divided into areas on the side near the fence that do not interfere with pedestrians using transportation to and from the area.

P4: Use the fractional space on the sidewalk as much as possible without obstructing traffic.

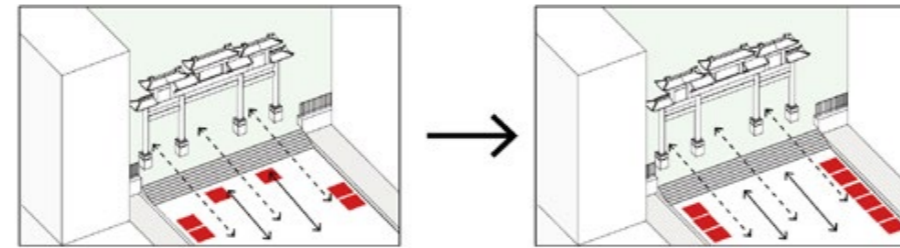
P7: Supermarkets or public services with a large flow of people in and out should locate stalls slightly away from the main entrances and exits of pedestrian traffic, otherwise they are likely to cause congestion.

P6: Urban infrastructure, such as garbage cans and sewage outlets, can be increased appropriately according to the delineated location of the stall as well as the type. It is conducive to ensure the cleanliness of the street.

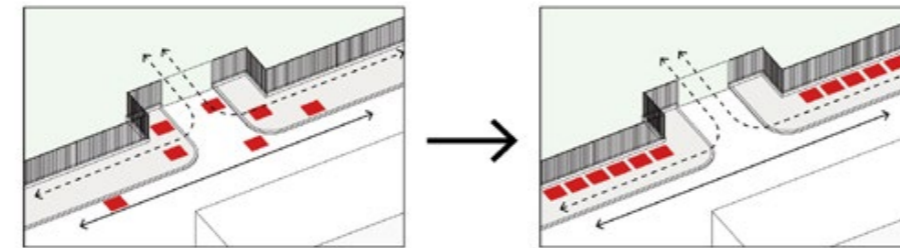
L1 L2: Single-row strip stalls should be as close to the road as possible to reserve space for people entering the stores, and canopies and other equipment can be added to the streets in conditions.

F1: Have a clearer and more eye-catching plan for the formal outdoor market, add infrastructure and auxiliary facilities, such as winter heating equipment, shading equipment, restrooms and utility rooms.

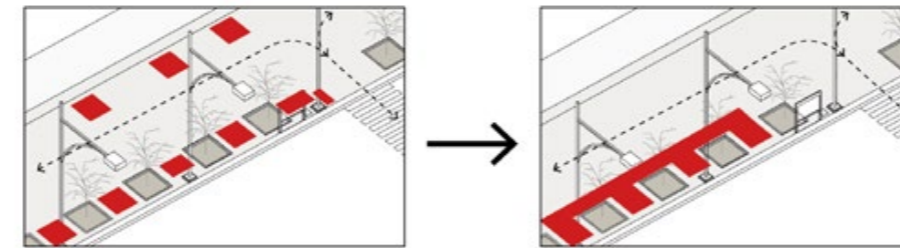
F2: The same L type of vendor form.



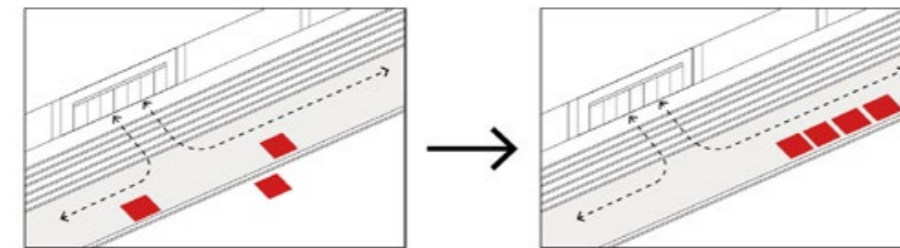
P1



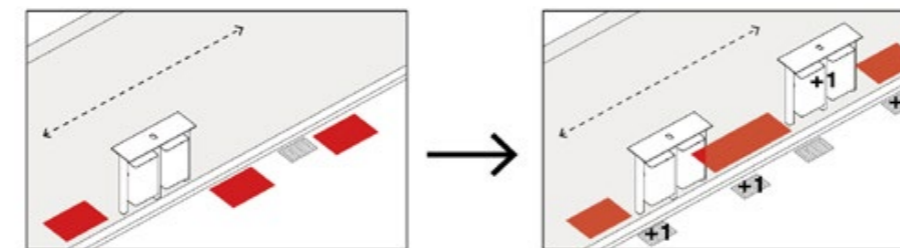
P3



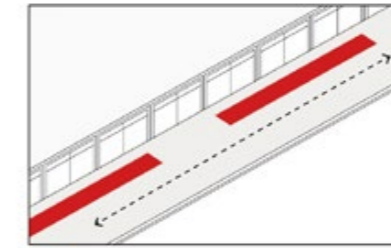
P4



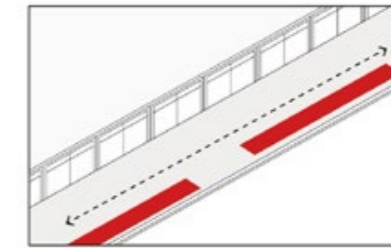
P7



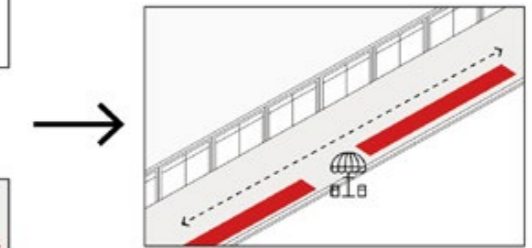
P6



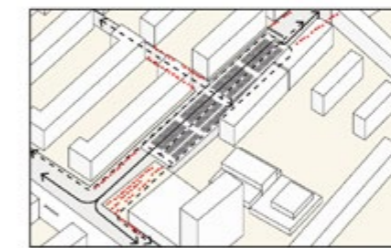
L1



L2



F1



F2

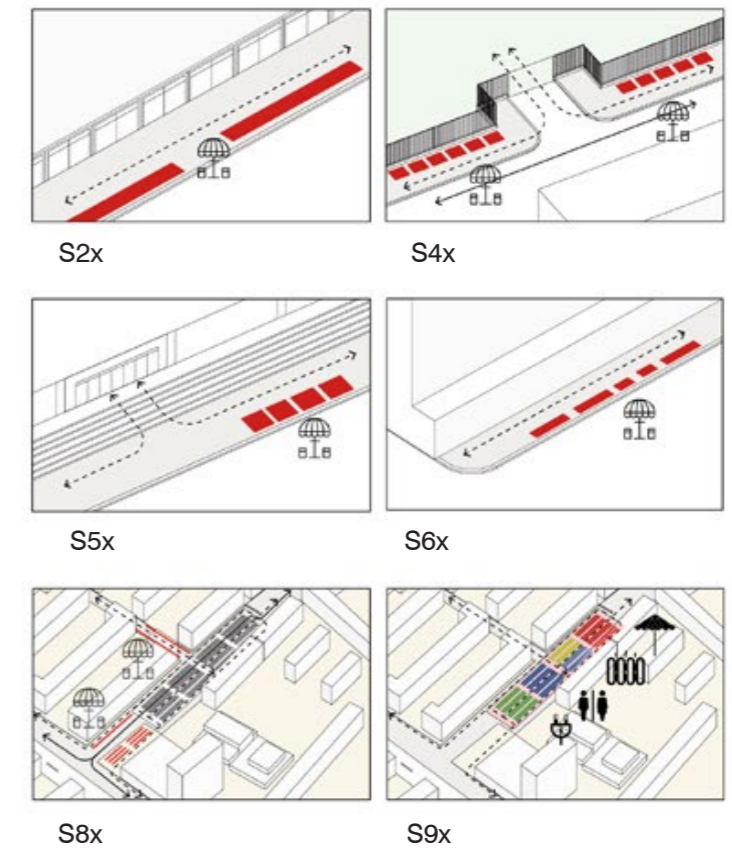
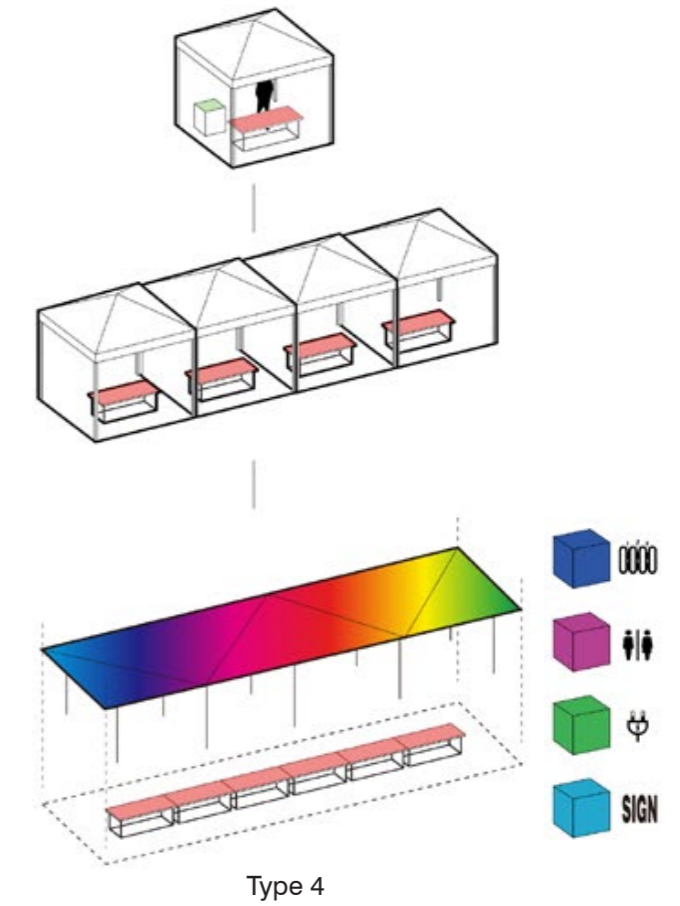
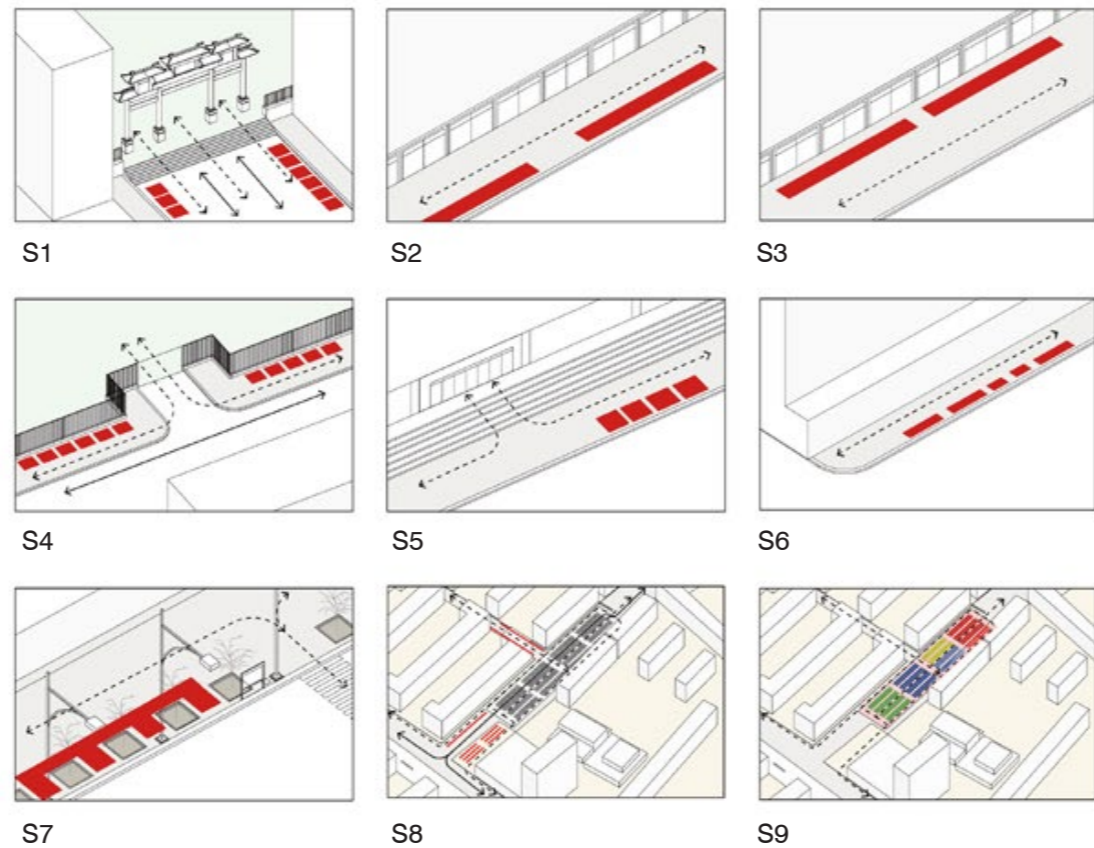
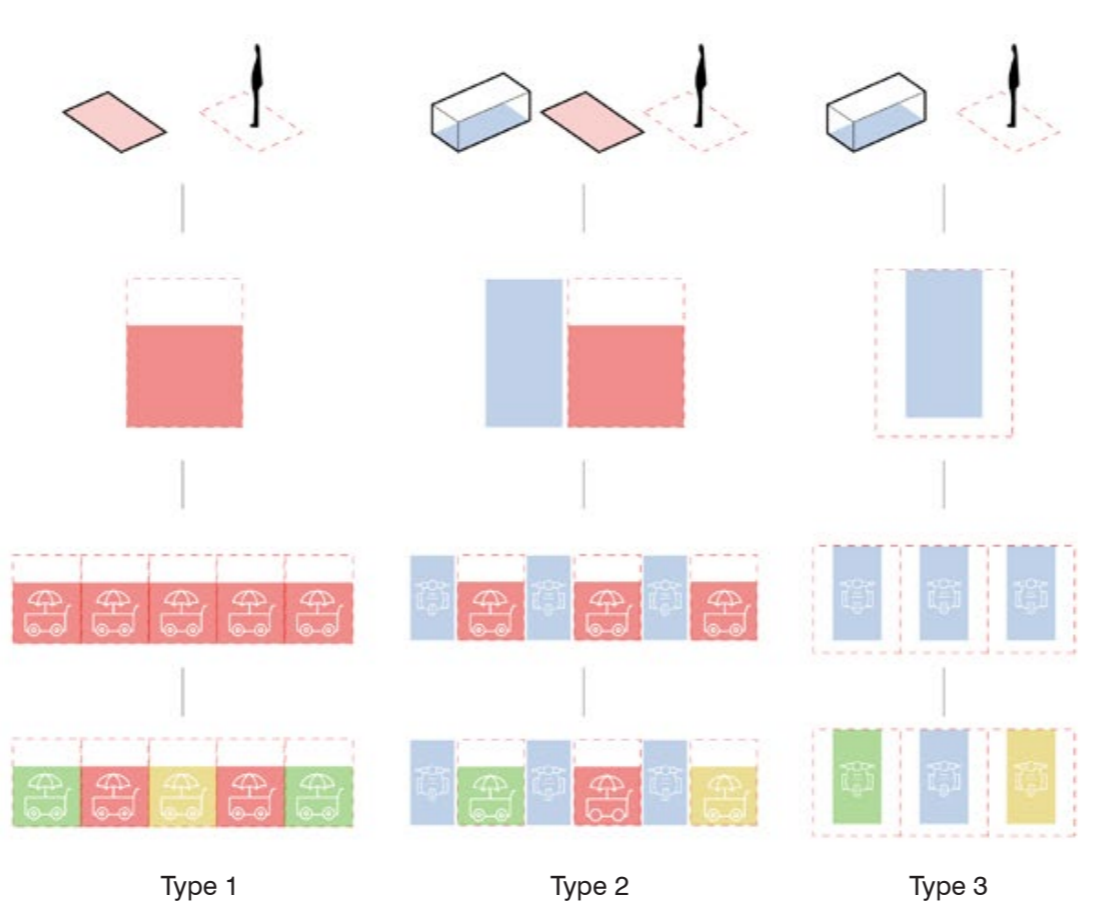
Spatial tool box

Combining the stall types with the layout, different strategies can be used in different improved scenes.

For the type123 that does not require the addition of fixed facilities, more suitable for streets with limited space and locations not suitable for long-term gathering of people, such as all kinds of entrances and exits.

And provide additional facilities type4 is more suitable for the long-standing long-standing floor economy, formal or informal market, the number and scale of the added equipment to be adjusted according to the different scenes, for large areas of space, the canopy form will produce more suitable for the change of space size, and can be centralized different functions.

Each type contains different spatial tools, corresponding to different scenarios. In the actual application, you can find the suitable scenario in the spatial strategy toolbox according to the actual situation, and then use the spatial improvement method corresponding to the scenario to improve the public space.



x: Equipped with multi function shade facilities

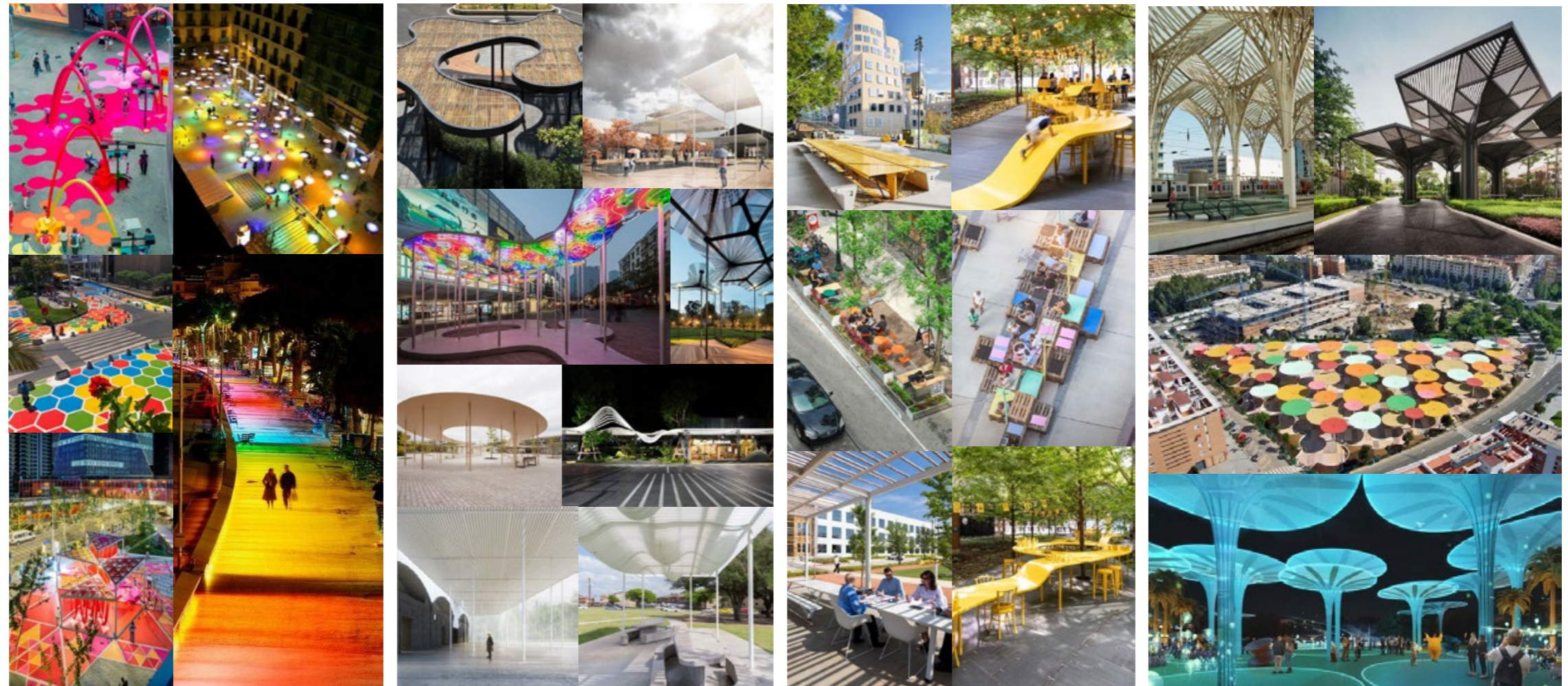


## Reference

The right side shows some scenarios that can be referenced in the spatial strategy, mainly showing how to delineate the space for vendor activities with color hints, how to use street furniture and street canopies to add vibrancy to the city public space, and references to heating, electricity, and infrastructure that can be added at the opening market.

Reference image source from the internet.

Through the implementation of spatial strategies, the flow of urban public space can be re-plan so that normal walking pedestrians, stall owners, and purchasers do not interfere with each other, and stalls are placed in a way that avoids conflicts with other transportation systems. With the joint cooperation of government policies and urban management, the vendor economy, as a type of urban vitality element, can enhance the streetscape while maintaining a good street image.



Color hint

Street canopies

Urban furniture

Market facilities

Reference pictures - Internet

## Vendor aggregation

By placing the three types of vendor locations on the same map, it can be seen the overall distribution of vendor economy practitioners in the old city of Hulan. It can be observed that there is a clear aggregation behavior of vendor operators and the use of urban public space in the form of points, lines and surfaces. Practitioners are not evenly distributed throughout the city, but appear in dense patterns at certain locations. The locations of appearance are related to the location of points of interest in the city, the type of streets and public spaces, the flow of customers, and the habits of city residents.

### Hulan vendor locations

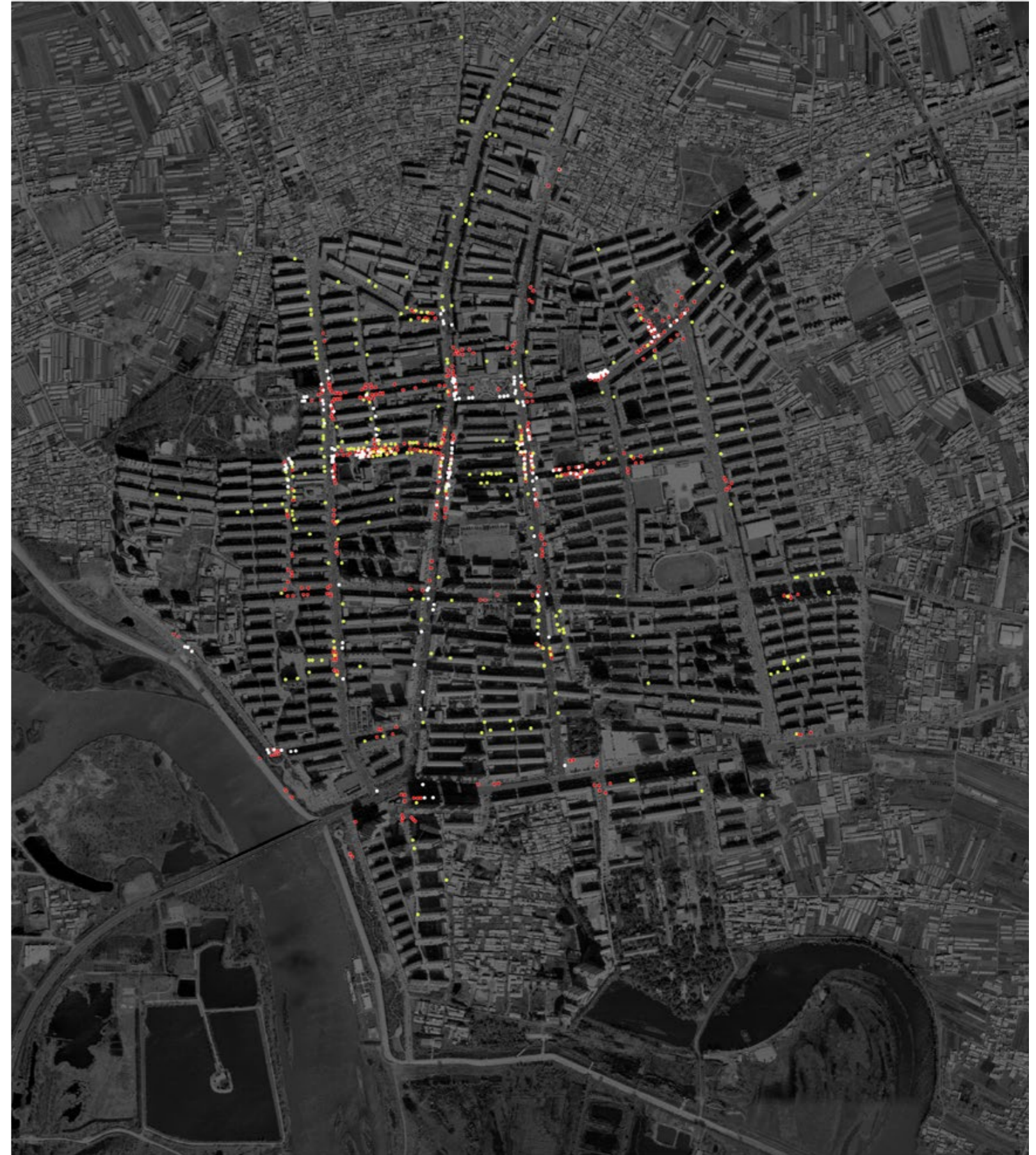
Data source: Observation & Gaode POI

Date:

06.04.2022 5:40 pm

09.04.2022 11:30 am

10.04.2022 6:00 pm



Space syntax, as one of the methods to analyze the accessibility of urban streets and the openness of public spaces, can help explain the location patterns of the vendor economy and future potential vendor economic planning sites.

Integration map: Indicates the standardized distance from a person from a space to all other spaces in the system, indicating a space's potential to attract arrival traffic, with warmer colors representing high accessibility to that space.

Choice map: indicates the number of occurrences on the shortest path, which measures the potential of an element to attract crossing traffic. Warmer colors indicate that people are more likely to choose to walk this space.

From the two maps of space syntax analysis, it can be seen that **the accessibility and connectivity of north-south access roads in Hulan's old town are high**, which matches the actual situation, and vendors often occupy locations on both sides of the busy streets (1st Avenue, 2nd Avenue) for business. As a city with a long history, 1st and 2nd Avenue are the earliest streets in Hulan, and they are busier than other streets.

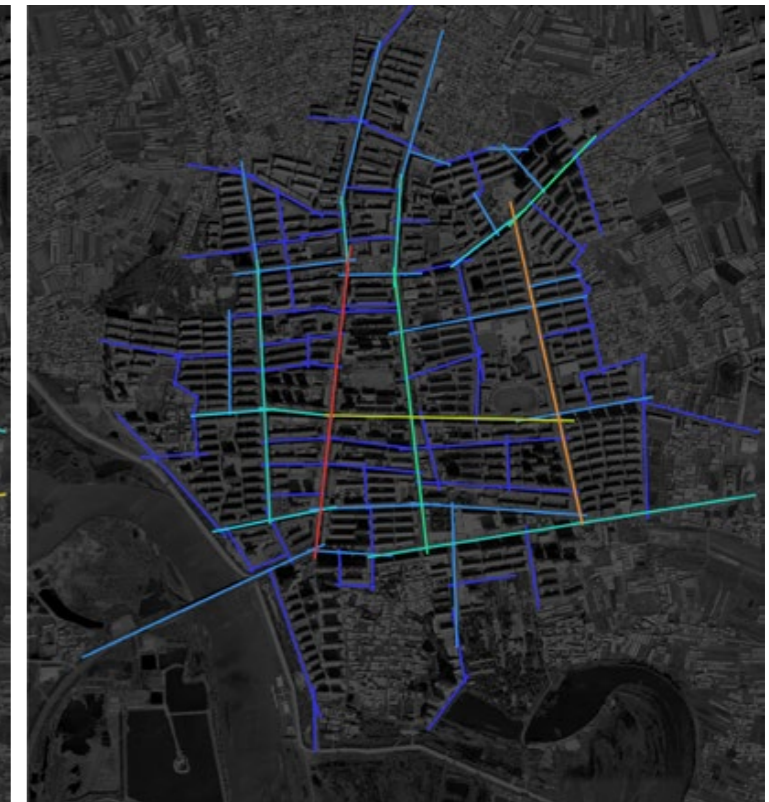
However, the space syntax analysis cannot fully explain the living habits and gathering behaviors of citizens in the city, but needs to be analyzed together with the points of interest in the city.



Hulan vendor map



Hulan space syntax - Integration



Hulan space syntax - Choice

### Hulan interesting points map

On the right is a map of Hulan with interest points that may be attractive to city residents or the vendors, including: places of interest, parks, plazas, shopping malls & supermarkets, schools and hospitals. The POI data in the Gaode Map database shows the restaurants, hotels and public toilets in the city.

According to previous studies on the economic development process of vendors, a stable and sufficient amount of pedestrians (enough potential customers) is an important factor for vendors to choose a location for their stalls, while **points of interest and accessibility are important factors to attract people to certain locations**. This leads to the conclusion that practitioners of the vendor economy often choose locations with a high density of points of interest and sufficient pedestrian activity at a given time to set up their stalls, while their number and the way they are arranged depend on the condition of the actual public space near the points of interest.

- Place of interest
- Park
- Plaza
- Shopping mall & Supermarket
- School
- Hospital
- Restaurant
- Hotel
- Public toilet



### Hulan vendor aggregation map

Combined with the map of Hulan's points of interest, the most densely populated area for vendors is located in the northwest side of Hulan, and the neighborhoods centered on Xigang park, Center market, and Leisure plaza are the places where most pedestrians usually appear, as indicated by the gathering of stalls.

Other locations where stalls gather include Church plaza, located in the northeast corner of the city, with basketball courts and fitness facilities, serving several neighborhoods;

Coach terminal, with ample space in front of the station plaza, located along the main street to Church plaza;

Shunji hutong, a hutong with history and culture.

Dongfanghong primary school, the most populated and best educated elementary school in Hulan, with dense old residential areas nearby.

East and west entrances of Center market and the surrounding area near 1st and 2nd amarkets, with a comprehensive supermarket next to it.

Two entrances of Xigang park.

In an old town like Hulan, the habitual nature of life is more important. What these locations have in common is that they have existed for a long time, are surrounded by a dense residential area, and have a public space that can accommodate some of the people working in the vendor economy.
















The rest locations such as intersections, entrances of neighborhoods are also locations that vendors would choose.

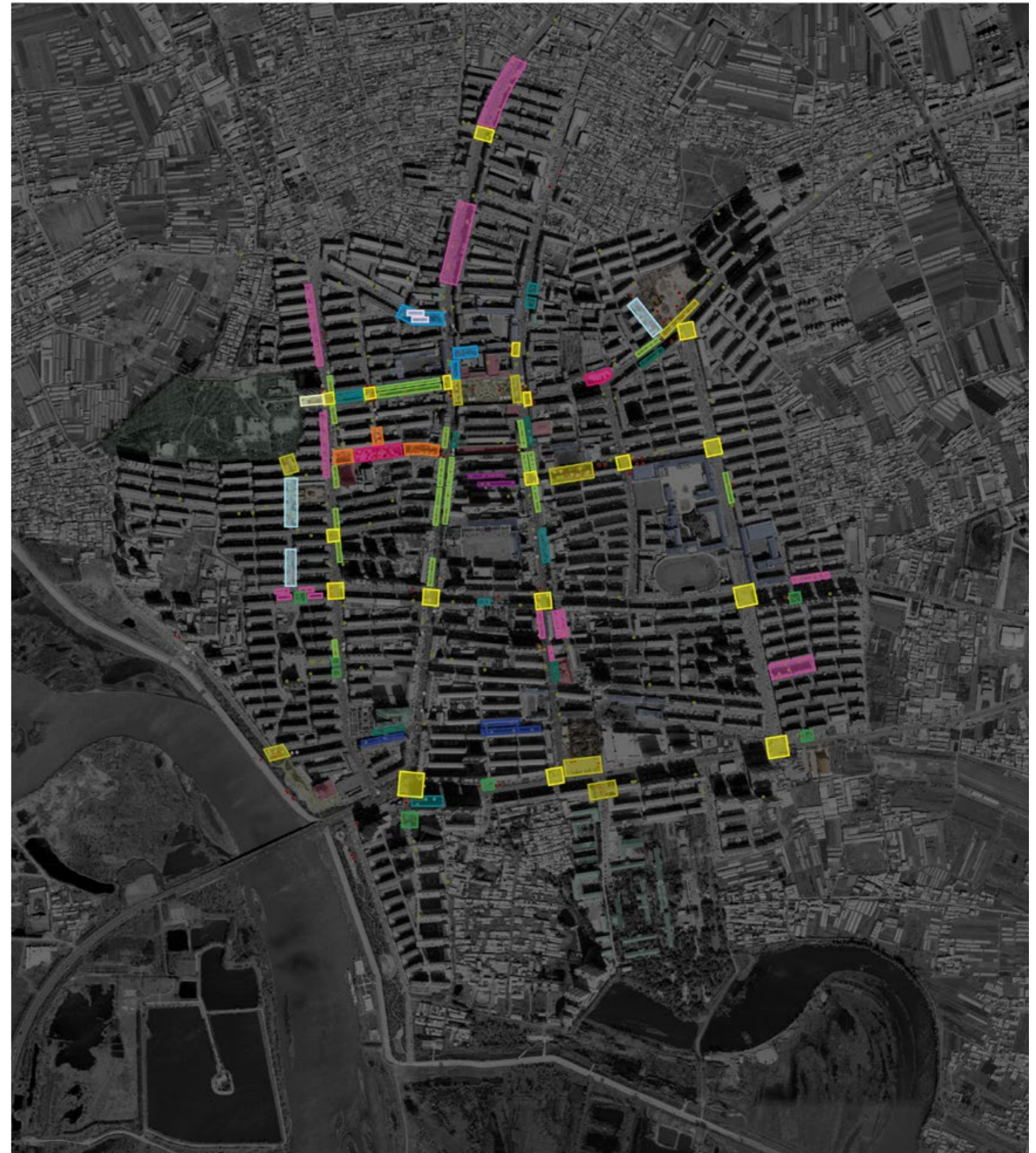


### Vendor layout map

The Vendor layout map shows the location of different types of vendors in Hulan Old Town, each with its own improvement strategy.

Due to remote research and time restriction of the project, this section of information is currently incomplete, but based on the current understanding of the current status of Hulan's vendor economy, this map can still be used as a part of the complete spatial vendor strategy for Hulan's vendors. When there is enough time and power, this map can become gradually complete through the establishment of a online platform in the policy pillar. And this map will become the basis for the use of spatial strategy tools.

	P1		P8		L6
	P2		L1		F1
	P3		L2		F2
	P4		L3		
	P5		L4		
	P7		L5		



### Spatial strategy use map

The spatial strategy use map shows the locations of different scenarios in the spatial tool in Hulan old town. Based on the current situation of the vendor economy collected in the city area of Hulan, the scenarios and strategy tools for different locations are linked, so that planners and strategy implementers can quickly find the appropriate spatial strategy. The orange squares in this map indicate the need to add or provide "urban furniture" or infrastructure.

Again, the complete strategy map needs to be supported by more data and research.



## Summary

In this chapter, firstly, through the analysis of questionnaires, interviews and literature review, **this project collect and organize the problems of the Hulan area's vendor economy, combine the conclusions of "policy strategy + spatial strategy" drawn from the case study and related research in the previous chapter, propose strategies for these problems at the policy level, and sort out the relationship between the problems and the policy strategies.**

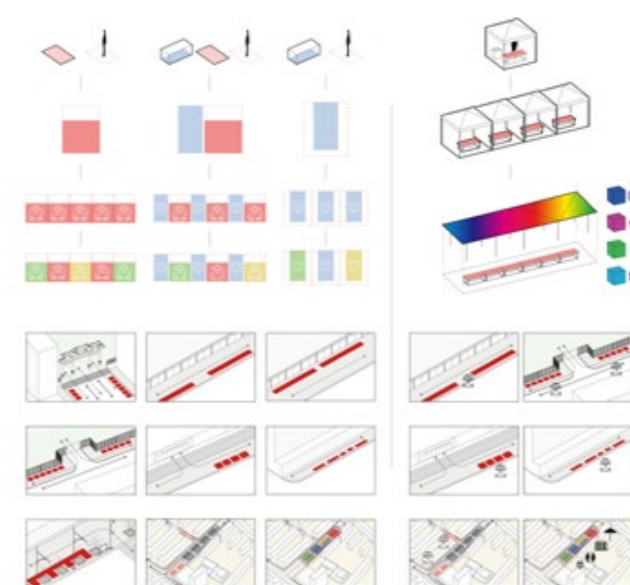
Then, through typology and observation, we conducted a study on **the current situation of the Hulan vendor economy** with the help of project helpers, including the space occupied, tools used, types of goods sold, and suggestions for the current situation. Based on the behavioral, pedestrian flow, space use analysis and map data for each type, **the project proposed spatial strategies to improve the use of public space in the city for different scenarios.**

Finally, after integrating information on the location of stalls, spatial syntax of city streets, and urban points of interest, **the project mapped the spatial strategy use to provide clearer guidance for strategy users and city managers.**

The analytical methods used in deriving the strategy process can provide a clearer direction for the renewal and improvement of the vendor economy in the future city.

	 Government Attitude	 Supporting Policy	 Spatial Strategy	 Certification	 Spontaneous Organization	 Current Situation
<b>Bangladesh</b>	☹️ Reject	⊗ None	⊗ None	⊗ None	☑️ Yes	★☆☆☆☆
<b>China</b>	😊 Support	◯ Some	◯ Some	⊗ Some	⊗ None	★★★★☆
<b>Malaysia</b>	😊 Support	☑️ Yes	◯ Some	◯ Some	⊗ None	★★★★☆
<b>Singapore</b>	😊 Support	☑️ Yes	☑️ Yes	☑️ Yes	⊗ None	★★★★☆
<b>Australian</b>	😊 Support	☑️ Yes	☑️ Yes	☑️ Yes	☑️ Yes	★★★★☆

"Policy + Spatial" strategy



Spatial pillar



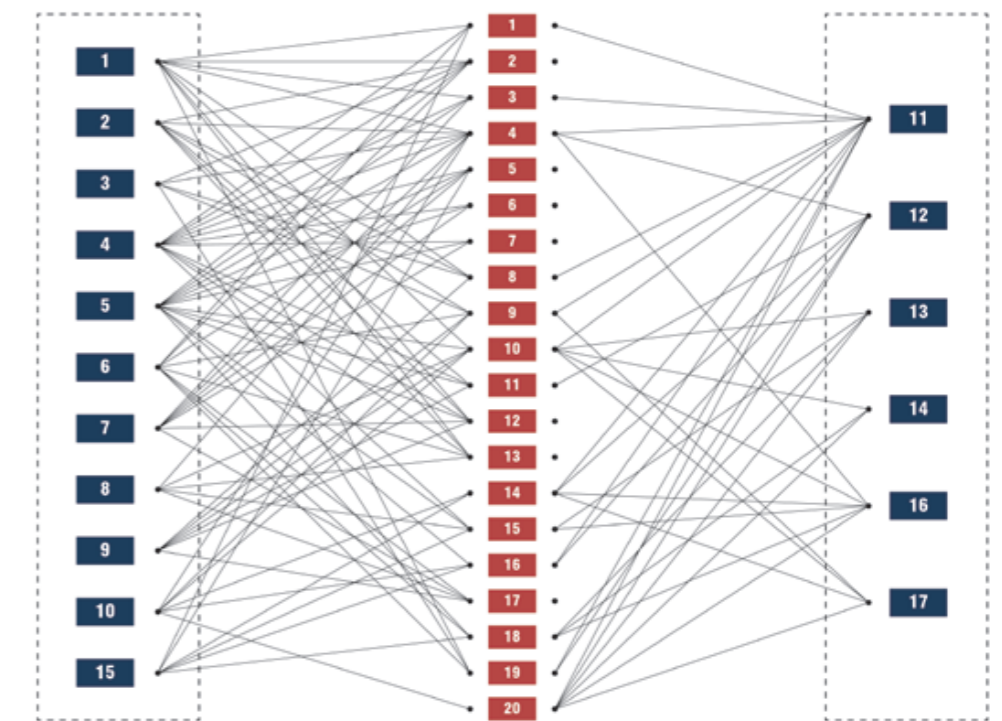
Vendor location and aggregation



Vendor type map

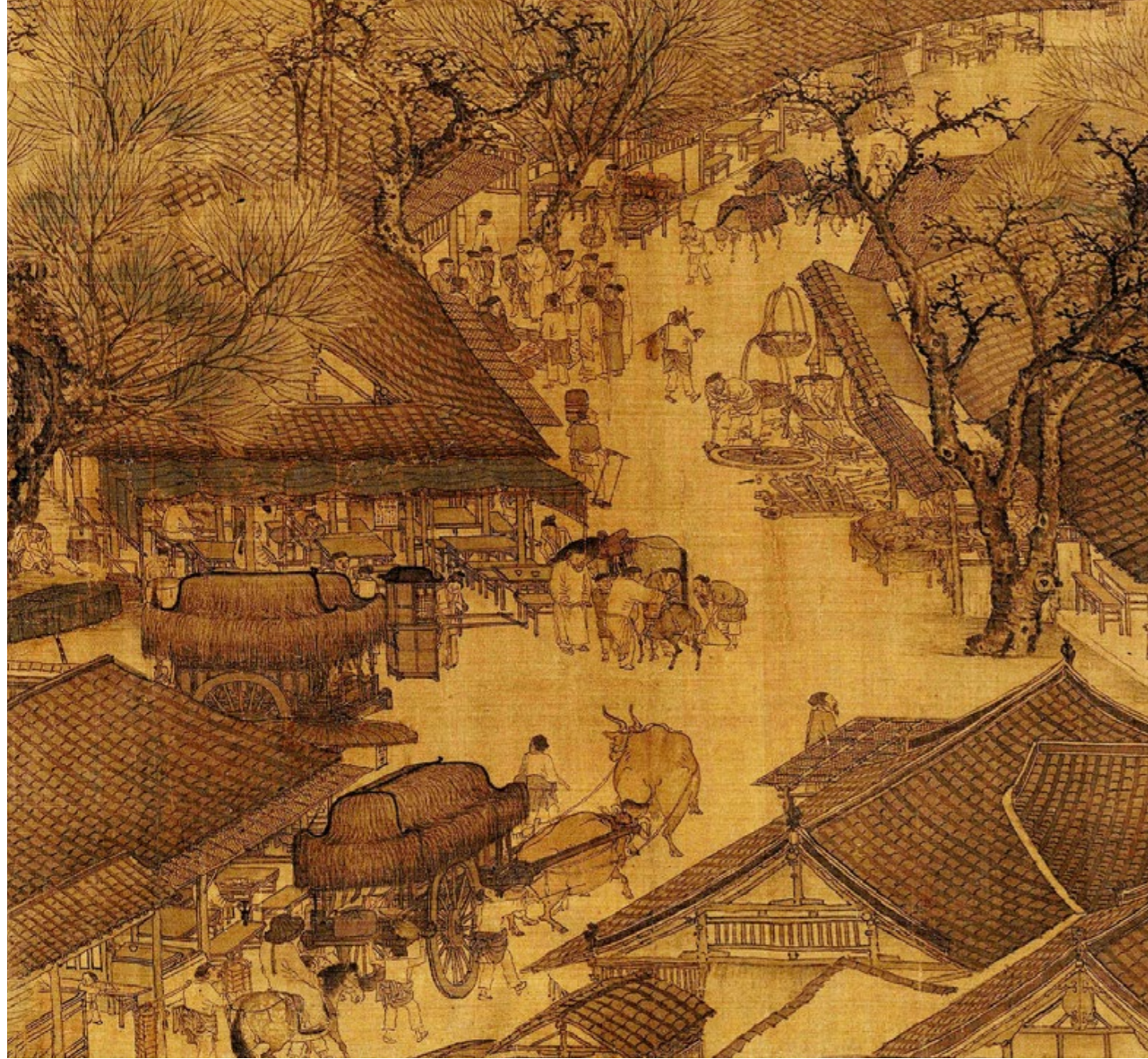


Spatial strategy use map



Policy pillar





## Site analysis

### Site selected map



### SITE DESIGN

Site analysis  
 The sunshine morning market  
 Fenghua road  
 1st Avenue



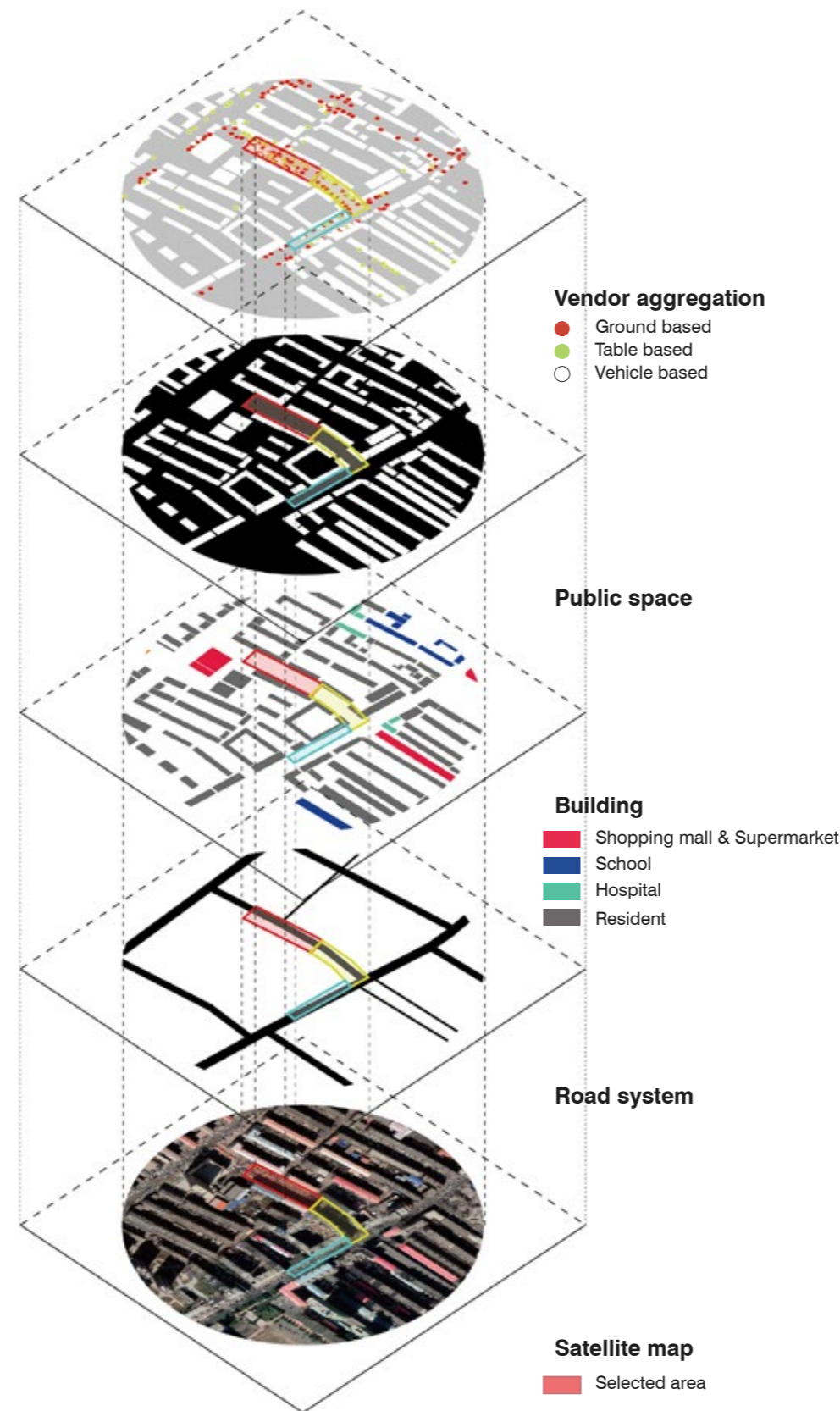
Hulan pictures - Author

The project selected a part of Hulan public space to put the strategy into practice.

The selected sites are in the **Hulan Sunshine Morning Market**, the main entrance of the morning market (Fenghua road), and sidewalk of the 1st Avenue. This area is close to the central market and a large supermarket, and it is the earliest street in Hulan city, which has a large customer flow. At the same time, the establishment of the morning market makes this area more busy, and traffic congestion and poor traffic flow often occur. According to the current observation of the project, there are a large number of stalls set up in this area.

The selected sites include informal floating vendors as well as formal marketplaces that are already managed by the local government, presenting three scenarios in the spatial strategy toolbox. Without good planning, hygiene and space abuse are serious problems, but due to the uniqueness of the morning market in the city, citizens and stall owners still choose to buy and sell their goods here.

The project will use a spatial strategy to transform the spaces in the selected areas to show the feasibility of the spatial strategy and to demonstrate the quality of the urban street space brought by a well-planned vendor economy, and the increase in urban vitality.



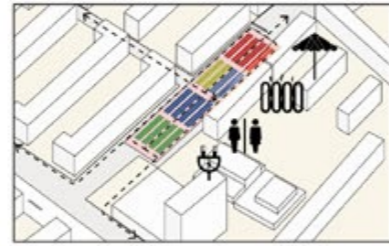
## Sunshine morning market

The Sunshine Morning Market has existed in Hulan for more than a decade, initially managed by informal organizations and charging fees to stall operators, before the government took over after 2019 and contracted it out to individual managers. The vendors pay a rental fee to the individual managers, and each year the managers pay an annual fee to the government, which is managed in collaboration with the city administration.

Currently the government has planned the location of the stalls within the site with a size of 1mx3m, while the actual use of the site will result in mutual encroachment and confusion of flow lines. The absence of any infrastructure within the site, along with motor vehicle traffic and illegal parking, adversely affects the user experience.



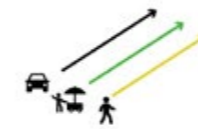
Sunshine market pictures - Author



Scenario 9



Re-zoning



Flow organization



Additional facilities

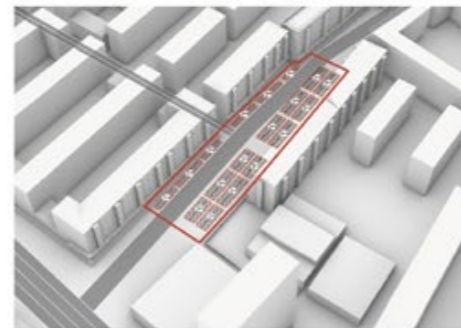
For the spatial improvement of formal market, the spatial strategy corresponds to **Scenario 9** in the toolbox, and the strategy includes **rational zoning of vendors, planning reasonable flow lines, and increasing basic sanitation facilities.**

The practical application of the spatial strategy should also be flexible with the actual situation of the place of use.

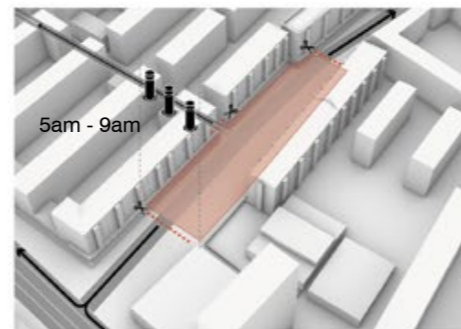
Through interviews with vendors in the market, due to the cold weather in winter, fewer people set up stalls in winter than in spring and summer, and the lease fee is charged annually, many stall owners choose to transfer their stalls in winter time or set up their stalls on the side of the market where there is sunlight, which leads to space conflicts.

After analysis, the main problems within the market are:

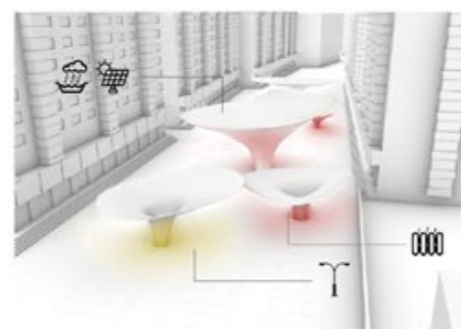
1. **chaotic traffic flow in the site, no reasonable diversion measures.**
2. **unreasonable planning of stalls, no signs and indications.**
3. **space abuse, vendor activities and parking needs compete for space.**
4. **no basic sanitation facilities.**
5. **poor environment and hygiene as a formal market.**
6. **poor condition of the site during non-business hours, wasting public space.**



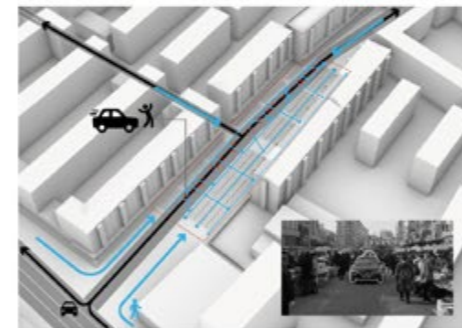
The current planning circumvents the carriageway, the size of the stalls does not meet the appropriate demand, the pedestrian walkway is narrow, and the lines used to divide the site have been blurred.



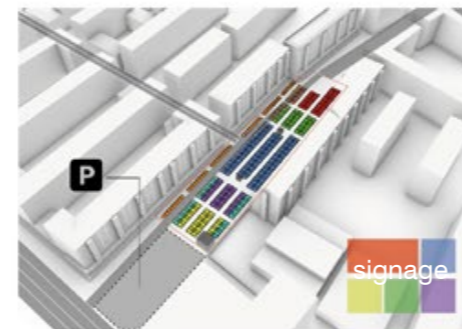
There should be traffic control during the morning market business hours to ensure the functional integrity of the market during the working time, which will help to improve the quality of the market.



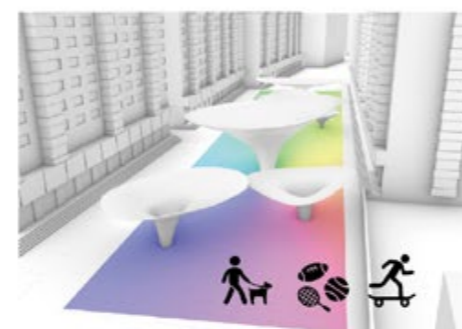
Canopies can be combined with lighting, heating, rainwater harvesting and clean energy to provide a more comfortable environment for vendor activities, while providing the market with an atmosphere for civic activities during non-business hours.



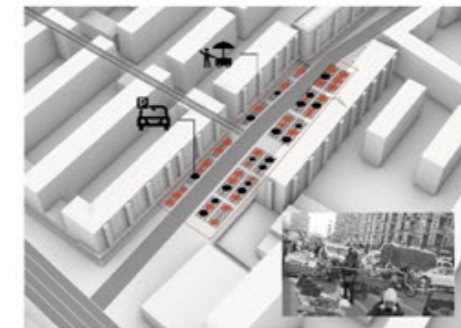
Vehicular and pedestrian flow lines cross each other, which has an impact on both consumer experience and car operation, and has the risk of generating traffic congestion and traffic accidents.



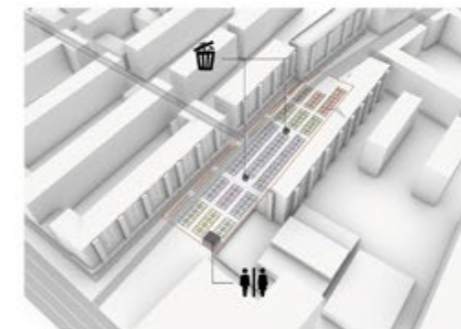
According to the situation, use obvious markings to partition the goods on the ground and set up signage. Establish parking lots in suitable areas around the site to address parking needs.



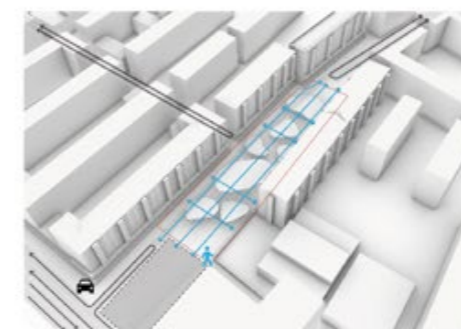
During non-business hours, the clean site and canopy can be opened to the public to become a civic square, providing possibility for urban recreational activities.



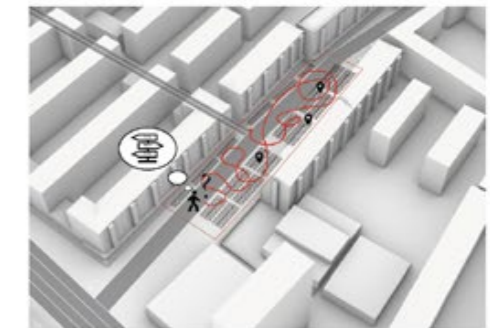
The site has a large number of private cars of surrounding residents and motor vehicles of vendors, which unreasonably occupy a lot of space, but also shows that there is a demand for parking here.



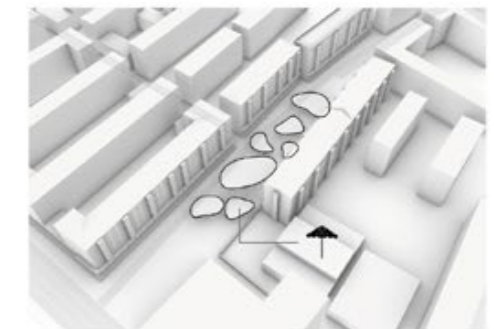
Increase sanitation facilities (hand washing sinks, trash cans) and infrastructure (public toilets) in the site to reduce environmental pollution caused by vendor activities.



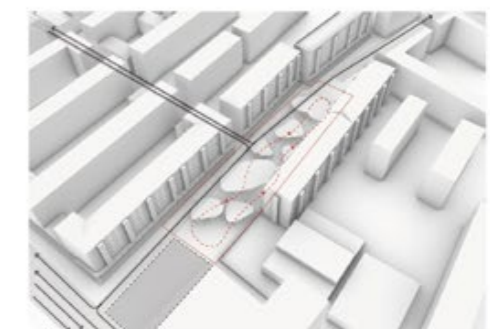
During business hours, the pedestrian flow in the market no longer conflicts with the traffic flow, and the pedestrian flow is more reasonable, which is convenient for vendors and consumers to walk.



There is no road sign or indication sign in the market, and there is no zoning according to the type of goods sold, so consumers need to spend time to find the intended goods.



Adding canopies in suitable locations to provide protection to the activists in case of bad weather. A well-designed canopy is also an excellent public facility and landscape facility.



During non-business hours, the site still retains the function of vehicle traffic, forming an open leisure space on the side of the car-road for the surrounding citizens to carry out leisure activities.

### Sunshine morning market strategy use



Business time



None- business time

## Fenghua road - Entrance of morning market

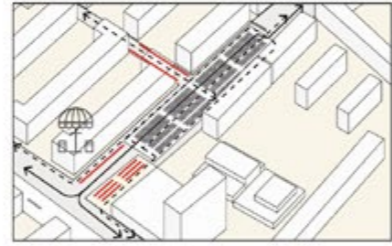
The intersection of Fenghua Road and First Avenue is the main entrance of Sunshine Morning Market, which is directly opposite to Hulan's earliest established large indoor shopping mall, the Central Market. As the middle area between Sunshine Morning Market and Central Market, the attraction of these two has created a constant flow of people in this area from morning to night, so this street has become the location with the most potential customers, and stores and floating vendor operators along the street choose to start their business here.

Due to the proximity of the Sunshine Morning Market, which requires payment of rent, and the fact that this street does not require payment of fees, the operators in the morning market have negative feelings towards the itinerant vendors in this area, and constant complaints lead to frequent evictions of vendors selling their goods in this area by the city police. In contrast, vendors who rely on physical stores choose to place their tables and chairs outdoors as an extension of their stores, and use this as a reason to argue with the city police to avoid eviction.

The store owner's tables and chairs are placed on the street for a long time to prevent stores or vendors next to them from occupying the space. This means that this part of the street remains occupied by the owner of the floor stand after the store closes.



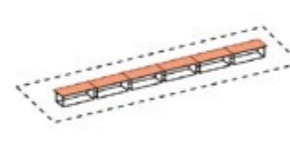
Fenghua road pictures - Author



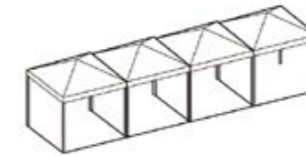
Scenario 8



Color hint



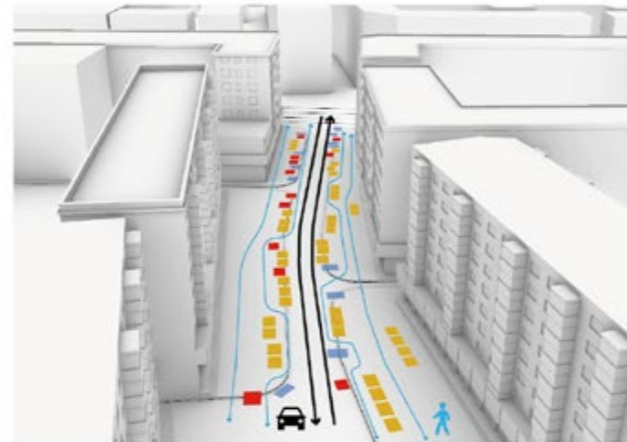
City furniture



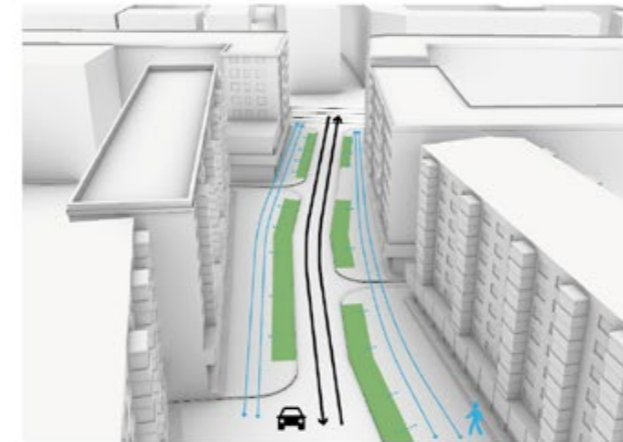
Canopy

This area corresponds to **Scenario 8**, which includes **setting vendor areas** on the street, setting up the right number and type of stalls through a survey of the types of vendors here, and **distinguishing the different areas with clear colors**. Convert the tables and chairs that have been placed in front of the stores for a long time into **suitable urban furniture** for the public to rest during non-business hours. Prevent canopies in suitable places. Well-designed canopies can be used as landscapes to improve the ornamental aspects of the street interface.

Through the establishment of urban furniture, **the problem of space being unreasonably occupied by stall tables for a long time can be solved**, while ensuring the feasibility of vendor activities. The delineation of the vendor activity area can help form a reasonable and smooth route for vehicles and pedestrians, and **the street will no longer be crowded and cluttered**.



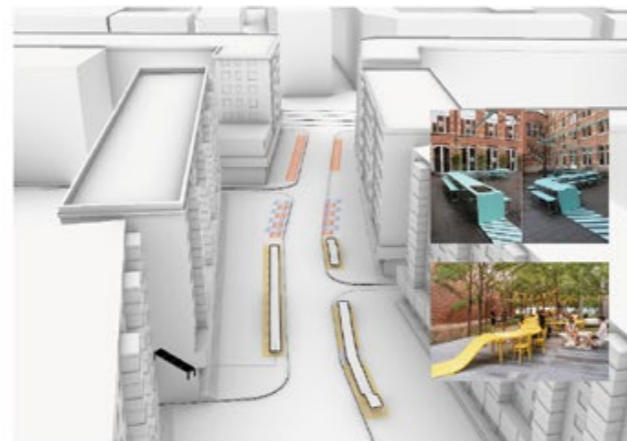
The current arrangement of street stalls is very disorganized. Vendors have a large impact on the pedestrian flow, and when the city police expel the vendors will cause traffic congestion and chaos.



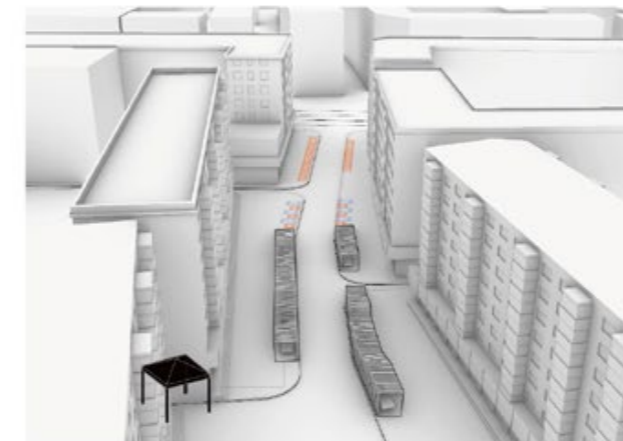
Combined with the previous research on the role of vendors in guiding the flow of people, the vendor area is defined according to the street size to ensure the smooth flow.



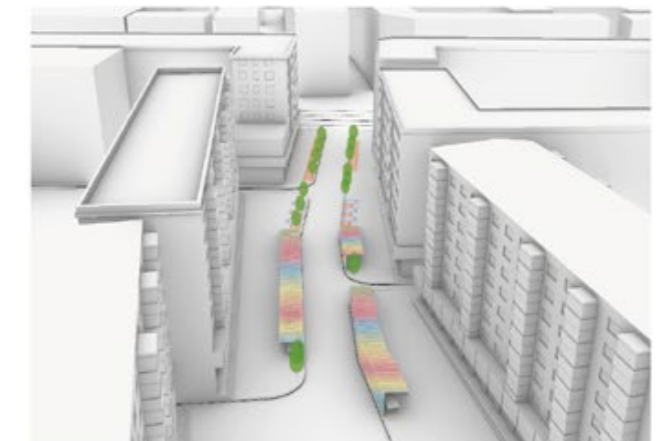
According to the actual situation, the different types of stalls will be classified and arranged, using obvious colors to explain the function to users.



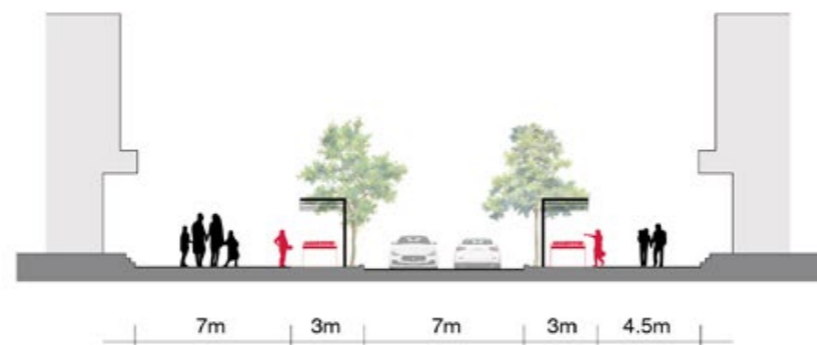
The tables and chairs that occupy the street for a long time are replaced by urban furniture to ensure the function of the stalls while providing the possibility of other urban leisure activities.



Provide canopies according to the actual situation.



The canopy can be designed as urban landscape to enhance the image of the street interface and add other functions.



Fenghua road section



Fenghua road section

### Fenghua road strategy use



Business time



None- business time

Collage pictures - Author



## The 1st Avenue

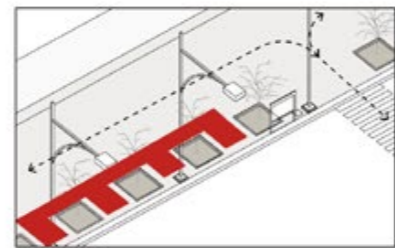
First Avenue, also known as the South Street, is the first road that appeared when Hulan Old Town was established, connecting the pedestrian plaza, the central market, the earliest established middle school and the Hulan River Bridge leading to Harbin City, and is the most profound memory in the hearts of Hulan people. With the development of urbanization, several other parallel roads were gradually built, but the First Avenue is still the most prosperous and busy street in the whole Hulan city.

There are many floating vendors in the area near the intersection with Fenghua Road. The proximity to the central market and the entrance to the morning market provides enough customers for the vendors, also the movement of city policies' vehicles can be observed more quickly here, making it ideal for ground-based and car-based vendors to operate here.

With the busy motor vehicle traffic on the road taking up almost all the motorway lanes, the sidewalks become a living space for the vendors, and they have a tacit agreement to occupy the little-passed space on the sidewalks for their business to avoid overly blocking the busy pedestrian flow.



1st Avenue pictures - Author



Scenario 7

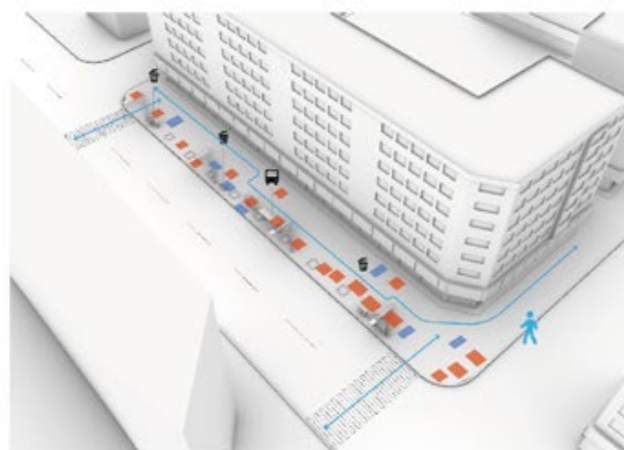


Color hint

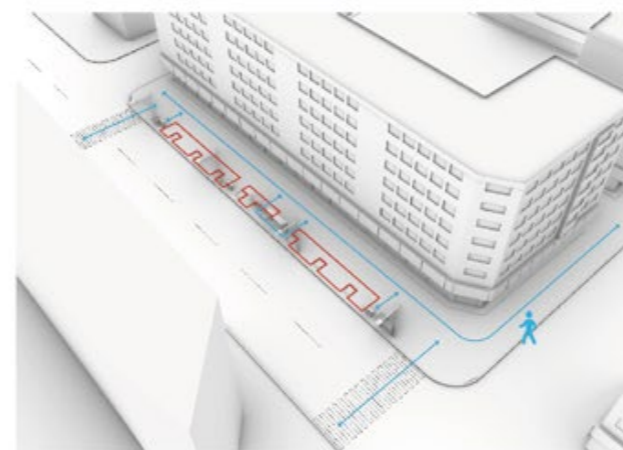


Flow organization

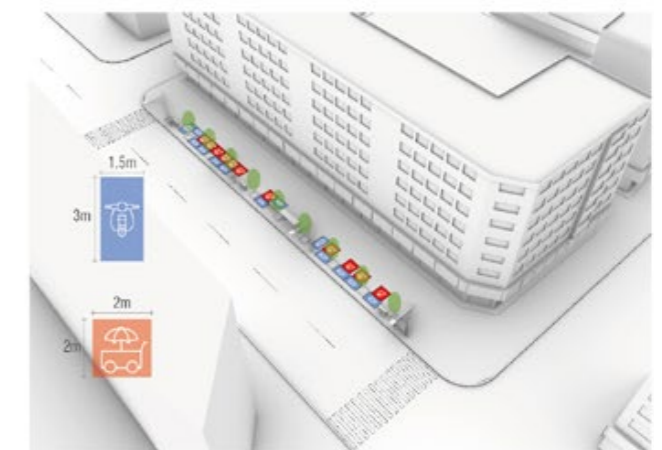
First Avenue corresponds to **Scenario 7**, and the strategy includes **defining areas with colors** that indicate the function of the area and **separating different flows**. For busy streets, vendor spaces can be set up in **"scattered spaces"** that do not interfere with pedestrian traffic, such as in the middle space between landscape trees, near billboards, next to trash cans, etc. The establishment of vendor areas can enrich street life while ensuring that other formal public services can be used properly. The current choice of locations for vendors still affects normal flow and traffic sometime. With the use of spatial strategies, **the behavior of vendors will be more regulated and conflicts between vendors and city polices will be reduced.**



At present, vendors will subconsciously choose not to block the normal pedestrian area for business, but due to the aggregation of them, a certain number of vendors will have a greater impact on the street.



Set the vendor business area on the side of the road, using the scattered space of the street, not only does not affect the normal passage of pedestrians, but also can guarantee the normal business of vendors.



Use obvious signs and colors to explain the function of the area, vendors will carry out their business in the corresponding area.



Fenghua road section

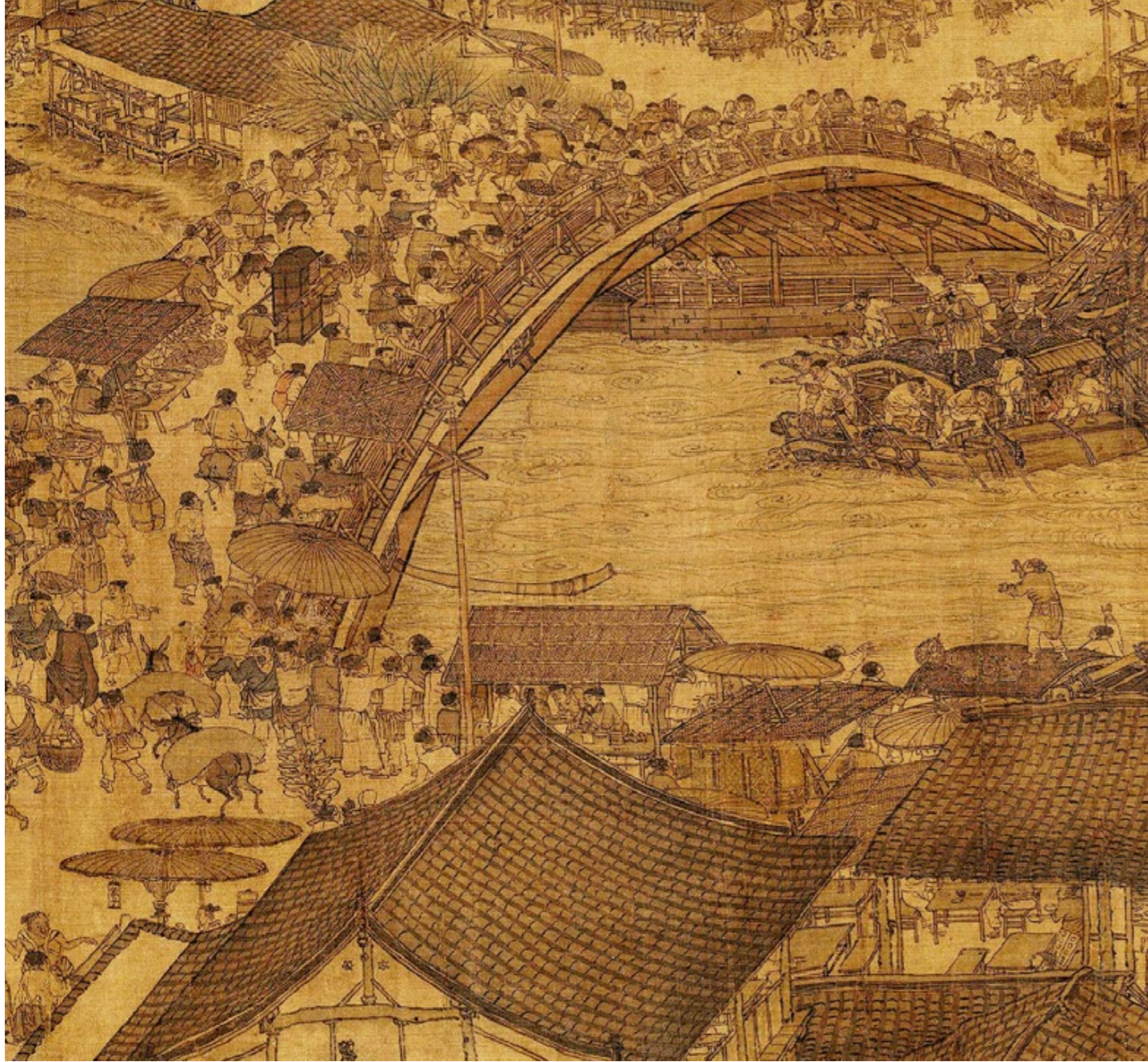


Fenghua road section

1st Avenue sidewalk strategy use



Collage pictures - Author



## CONCLUSION

Conclusion  
Reflection

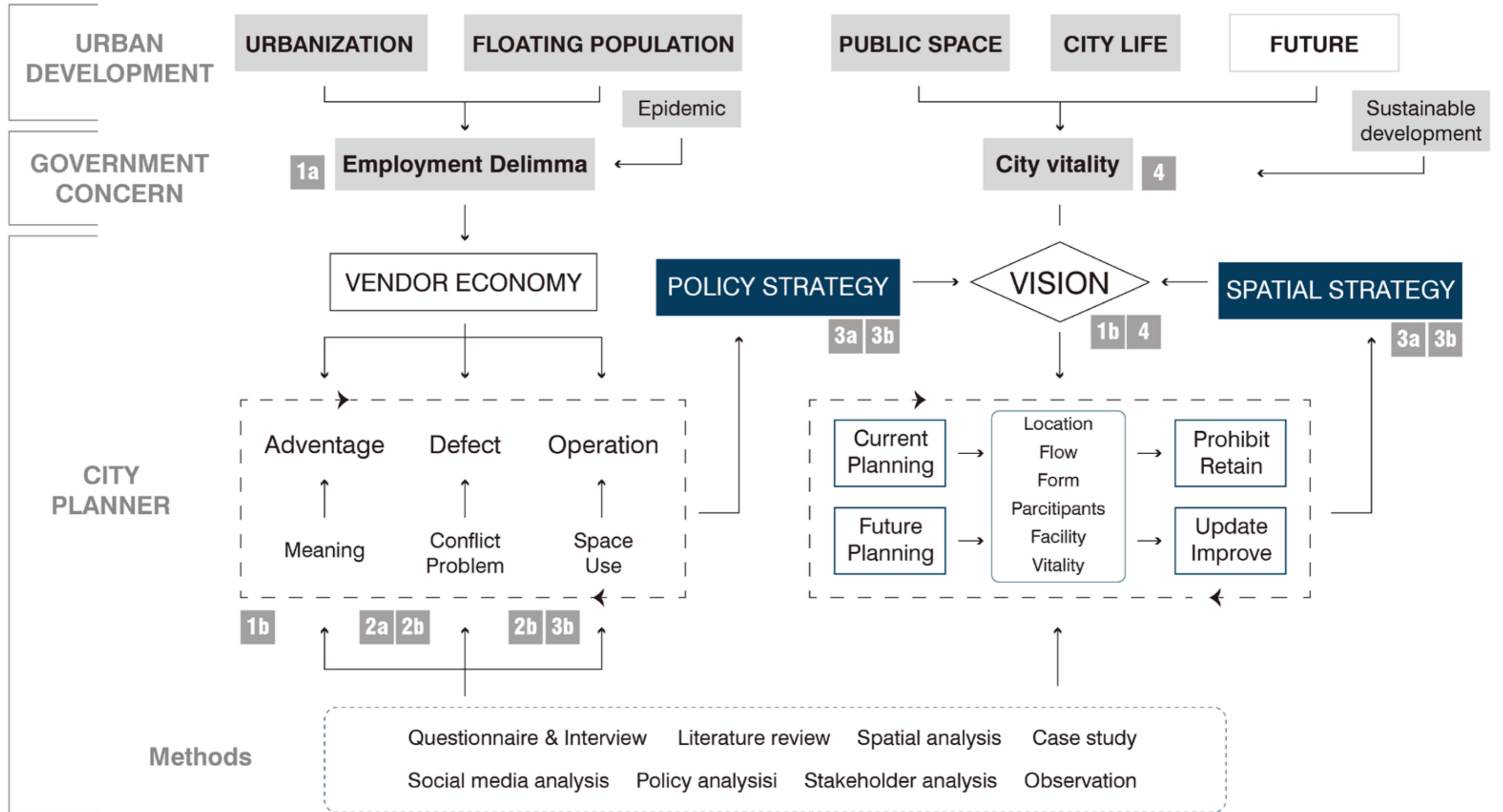
## Conclusion

In the context of the Chinese government's intention to support the vendor economy, this project selects the old town of Hulan in Harbin, a typical city in northern China, as the site for conceptualizing a strategy for the development of the vendor economy. Hoping that it can help solve the disadvantages of the vendor economy while building on its strengths. The strategy will establish a research basis for the harmonious coexistence of the vendor economy and the city and provide ideas and research methods for developing the vendor economy in other cities. Some public areas in Hulan have been selected to practice the use of the strategy.

The project includes:

- **Research on the vendor economy**  
(chapter 1)
- **Project definition**  
(chapter 2)
- **Strategy establishment**  
(chapter 3 & chapter 4)
- **Strategy practice**  
(chapter 5)

**Project conclusion**



Project conclusion - Author

### Research on the vendor economy

First, the authors investigated the history and development of China's vendor economy through literature research and other means. It has been found that this informal economy has a history of thousands of years in China. Its development is related to the social background, economic situation, and political attitude in which it is located. The vendor economy had once gone from prosperous to declining and eventually existed in the gray zone of urban development and was negatively correlated with the degree of urbanization in Chinese cities.

Until 2019, the new corona virus epidemic led to a setback in the real economy and a significant increase in unemployment in China, which led to a rise in the number of stalls. The government began to confront the role of the informal economy in releasing employment pressure and, for the first time, made the development of the vendor economy one of China's development goals. In this context, the research and practice of the vendor economy gradually increased, and this project gained a basis for development.

After a more profound understanding, the project found that the vendor economy is dominated by the low-income, low-educated floating population in the city, and the

employment problem of the floating population in Chinese cities has been a problem that needs to be solved. Many rural people who enter the cities cannot find employment due to their low education level and gradually become low-income people, working in the informal economy to earn a living. Some of them are unable to integrate into urban life due to low income and inability to have a household registration, and eventually return to rural areas or go to the next level of cities to make a living. The development of a good vendor economy has the effect of increasing employment, increasing citizens' income, and increasing urban vitality, especially in the period when the epidemic is widespread. The low employment threshold and low cost make more people choose to increase their income in this way. However, the drawbacks of this cannot be ignored, such as space abuse and impact on traffic and residents, which has led to conflicts between urban development and the vendor economy and between vendor practitioners and urban managers. The government does not have reasonable measures to resolve the conflict, making it impossible for the vendor economy to coexist with the city.

### Project definition

The project is designed to eliminate the negative impacts of the vendor economy, retain its advantages, and increase the practitioners' income. It is hoped that the project's research process will lay part of the foundation for developing the vendor economy in Chinese cities and eventually form a vendor economy suitable for China's development model. This entails analyzing the reasons behind the conflicts in the vendor economy and its own operating rules and designing a comprehensive strategy to develop the current vendor economy to help create a more appropriate working environment for the participants.

Although the selected city does not represent all Chinese cities, the research process and strategies derived from the project can still lay the foundation for other cities to develop their vendor economies. Due to the complexity of the vendor economy and the uneven development of each city in China, the strategy for the development of the vendor economy varies from city to city, so to ensure the depth of the research within the time limit, the project is a holistic study of the vendor economy itself, and the strategy is based on the old city of Hulan selected for the project.

The project's focus is on improving the development of the vendor economy in Hulan Old Town and increasing the vitality of the city.

For addressing this issue, the project designed a conceptual model (p. 31) and theoretical framework (p. 33) of the project and used various research methods (p. 35) to investigate and analyze the content related to the research question. The workflow and timeline of the project are described in Chapter 2.

### Strategy establishment

By studying the developing defects of the vendor economy, there are different reasons behind the drawbacks of vendors in real life. Such as lack of top-level design, unorganized, lack of spatial planning, and no long-term planning. (Page 58) Based on case studies of the current situation of the vendor economy in other countries and research on related policies in other Chinese cities, the project concludes that a well-functioning vendor economy requires government policies and spatial planning in conjunction with each other. The strategy composition also consists of two main components: policy strategy and spatial strategy, called "policy pillar" and "spatial pillar." (Page 89)

The policy pillar addresses government attitudes, management, development strategies, and development directions. It is built using the "problem-reason-approach" method. Firstly, the questions were collected and organized to identify the needs and difficulties in the economic development of Hulan vendors. Questions come from the author's online questionnaire, interviews with the vendor operators, literature research, and life experience. Combined with relevant surveys, the project analyzes and responds to these problems

and proposes feasible solutions, specifically clarifying the legal status of practitioners, providing loans to reduce the threshold of the industry, using permits to control the number, and providing infrastructure. (Page 94)

The spatial pillar is a tool used by the government for specific space-related measures in the policy ending approach, addressing mainly the physical space issues related to the vendor economy. Its purpose is to guide and explain the behavior of the practitioners, aiming to assist in improving the quality of the practitioners' business space as much as possible. Since the vendor economy is dependent on the existence of urban public space, another role of the spatial strategy is to enhance the quality of urban public space together.

The process of building the spatial pillar uses a typological analysis, combining tools such as the current situation, big data, and spatial syntax. In the typological analysis, the project analyzed the types of vendors and their space and identified two categories: "tool-based" and "layout-based," to study the characteristics of different kinds of stalls, and the way stalls use their space after gathering. (p. 111) With the help of project helpers, the authors recorded and analyzed the size of space occupied by different types of stalls in Hulan Old Town, their

impact on pedestrian flow, and their locations. Combining the preferred locations where vendors gather and the habits of space use, the author screened and integrated the types and ways that have a greater impact on public space. Also, the project proposes spatial improvements and concludes the improvements in different scenarios, and finally, a spatial strategy toolbox is organized to propose a more feasible spatial improvement strategy. (Page 163)

Through spatial syntax, urban point of interest research, and combined with the current situation, the authors made a spatial strategy use map of Hulan Old Town. Different locations and scenes in Hulan correspond to the scenarios in the spatial strategy, marking the locations for different spatial improvement use, and this map can guide the strategy users on how to use the spatial strategy. (Page 178)

### Strategy practice

Finally, the project selected three locations in Hulan City with a high number of vendor practitioners: Sunshine Morning Market, Fenghua Road, and First Street, to simulate spatial strategy use. These three locations represent different street vendors: markets that occupy a large area, streets where vendors gather spontaneously in groups, and main roads where vendors often appear. The first step was to find the spatial strategies that should be used in the corresponding areas according to the spatial strategy use map, and a site analysis was conducted for the different sites. The project showed experimental spatial improvements for each of the three sites according to each scenario's diverse needs and actual conditions. It used effect drawings and other forms to provide an outlook on the public space after using the spatial strategies to verify its feasibility.

## Reflection

Vendors have appeared on the streets of cities in China. And even after the historical urban renewal of thousands of years, this behavior, now known as the informal economy, still represents a part of the city's vitality regardless of dynasty, culture, and geography. For Chinese cities that have entered the modern era, it seems that the negative effects of vendors are no longer used in modern cities. However, they are still alive in the city as if they can always find a way to survive under the policies and urban management models of that time. In my own life, I remember the "garbage street" (the student's term for the street where vendors gather) next to my high school and the joy I felt when I bought the food I liked. As an integral part of my childhood memories, following my mother on the street carpet to buy vegetables and snacks is precious. As I conceived of this project, I suddenly realized that the fruit on my table at home and the food I chewed on my walks came from those unlicensed street vendors, and I also recalled the scenes of vendors fleeing with their carts when the city police arrived. As a child, these scenes seemed to me to be like an alley war taking place within a peaceful country.

In 2019, the sudden emergence of the epidemic dramatically changed how human society functions. For my project, the epidemic's severity has nevertheless highlighted the

importance of informal economies. Without massive unemployment and a setback in the real economy, the vendor economy would not have overgrown. The Chinese government might not have realized so quickly that the vendor economy would be a solution to moderate socio-economic problems and conflicts at a particular time. In 2020, for the first time in China's recent history, the Chinese government began to support the development of the vendor economy.

Whereas previous policies would have driven street vendors away and suppressed them or allowed them to survive in a gray area of the city and its policies, China now intends to develop this as a separate economy, which could have a substantial impact on the functioning of the city. For example, in the case of Singapore, hawker centers within communities are required to be equipped, which affects urban construction, physical space, and the way people live. As a student of urbanism, I am very excited to see how China's vendor economy will evolve in the future and am happy to contribute to its development.

As my project research progressed, I discovered that the informal economy is more important than I thought and that several scholars worldwide have recognized this importance. Compared to Western countries, China has made

little progress in this area of research; vendor behavior patterns are no different than they were thousands of years ago, and the benefits and negative effects of the vendor economy on cities remain mutually resistant. City managers with scales in their hands have done little about it. Some scholars' research on the vendor economy is only at the level of policy theory, without providing substantive advice to operators, which has led to the demise of the vendor economy in Chinese cities.

At the beginning of the project, I set the site in Hangzhou, a new first-tier city in China, where I lived for five years. I remembered that Hangzhou had a thriving vendor economy. Still, after more profound research, I found that there is no place for floating vendors in the city area after just under a decade of development, and only a few bazaars have been preserved. Vendors have lost their original mobility and freedom. In China's urban planning, vendors are not an aspect that needs to be considered, so street vendors have been abandoned in urban development and now exist only in people's memories in China's big cities. Fortunately, the street vendor economy still exists in the more slowly developing cities of northern China. Through this project, I hope to make the vendor economy not disappear in the city's rapid development but

integrate it into the city life in another mode. As a district of Harbin, Hulan represents thousands of northern cities. I believe this project can give these cities ideas for future urbanization development and incorporate the development of the vendor economy into the urban development map, with the positive attitude of developing the vendor economy in China now.

The project investigates the advantages and disadvantages of the vendor economy, identifies the current difficulties and analyzes and strategizes the vendor economy in Hulan based on this premise. The project process also encountered many challenges. Firstly, the change of site wasted some time. After entering the Hulan site, although I was familiar with the selected city, I did not have any experience of living in a Chinese city in the context of the epidemic. Since I was unable to go deep into the site myself, the site research was done under my guidance and with the help of my parents. Some of the information and data collection is not complete and accurate, but it reflects the state of affairs in Hulan city as much as possible. The analysis and spatial scenarios presented in the project are based on the data observed so far, and the lack of data leads to some incomplete analysis and strategies, such as the location of the different vendor types. The lack of data has led to some incomplete analysis



and strategy, such as the study of the locations of different vendor types and the locations of different strategies used in Hulan City.

No suitable research has been found on the criteria of spatial strategies on the degree of spatial improvement. However, the proposed strategies are still feasible, combining with life experience and analysis of other street renovation cases. They have partially improved the current situation of the vendor economy. The method used in the proposed strategy process is more important, which is the main element that other cities similar to Hulan can learn from to develop their vendor economy. The spatial strategy should be proposed according to the habits of vendor practitioners in different cities and the real physical environment of the city, which also reflects the limitations of the project: the spatial strategy proposed in this project may not be fully applicable to all Chinese cities of the same level, and even for the more urbanized cities such as Beijing and Shanghai, some of the strategies are hardly applicable, and the spatial strategies corresponding to these cities require more time and workforce.

It is difficult for me to give an accurate description and prediction of the future vision of the vendor economy. With events of a global nature like the

new epidemic impacting perhaps still occurring, and technologies such as artificial intelligence and virtual reality constantly developing, only a vague concept can be used within the current project to propose hypotheses for the short-term future of the vendor economy. The emerging industry that is currently closely related to the vendor economy is the network economy, with a large number of online consumers and suppliers with a well-established supply chain, warehousing, and logistics industry to match. In the future, the combination of the vendor economy with the network economy can be considered, which is beneficial to solve the quality uncertainty of the vendor economy products and the digestion of unsold goods. It can improve product quality and reduce the vendor's cost; warehousing and logistics can allow the vendor practitioners to save costs and thus increase their savings, which is also a way to help the urban underclass. Related research and spatial strategies can be carried out on the basis of this project.

Returning to the topic of the complex city studio itself, the informal economy of the vendor involves many fields of economics, sociology, urban design, and urban management, which means that the vendor economy cannot function well with the spatial strategies of urban designers alone. The most

important point is that spatial strategy is only a single tool to achieve a good operation of the vendor economy in the city, and other tools such as urban management are needed to achieve good future results.

The determination of the tools to be used is in the hands of the local government, and the current positive attitude of the central government towards the vendor economy has created a delicate balance between the vendor community and the local government. Still, more efforts are needed to make the vendor economy sustainable. In China's regulatory system, all strategic feasibility is based on government support, and what the government cares about may be different from what the space designer thinks. Dealing with this issue is the main part of the project to be put into practice, which requires a very complicated political and commercial process that cannot be done by the designer alone.

As the designer of this project, I would like to see the future development of a "Chinese characteristic" of the vendor economy in Chinese cities, which can exist in each city, be well integrated into urban life, and even bring bigger industries and benefits. It is a great honor that my research and project content can be a small contribution to the development of the vendor

economy.

I am very grateful to my mentor team for their guidance and help during the project and to my parents for helping me with the site research. I hope that the vendor economy will have a place in the future development of China's cities.

## APPENDIX

### Questionnaire

The questionnaires were distributed and collected online through WeChat, QQ, Weibo, and other online platforms. I set roughly 30 questions and collected participants' personal information such as age, income, and living cities. Also, the most important is I collected their experiences and opinions related to the stalls in their lives. Finally, 233 valid questionnaires were collected. The questionnaire can be found at the right.

The observation of the vendor behavior took place in the site - Hulan old town, and the photoshoot was done with the help of my family members.

For such informal behavior, the inherent informality of the vendor makes it challenging to be accurately recorded in a database, while this behavior is very close to the point of living and distributed throughout the whole country. For the problem I am studying, the method of using questionnaires to collect data can be closer to the citizens' living conditions and reflect the respondents' real attitudes, while the internet can be used as a tool to expand the scope, allowing a wider source of data and improving the credibility and generalizability of the conclusions. At the same time, the observation method can cope with the difficulties brought by the flexibility of vendors.

Although there are partial patterns in the locations of vendor operations, it is difficult to predict the behavior of stall owners due to factors such as time periods, weather conditions, and city management, and on-site observation can well compensate for this uncertainty.

#### Questionnaire - "Survey on the sustainability of the "vendor economy"

The purpose of this survey is to collect information about the "Sustainable development of the ground stall economy in the city" from students of the Department of Urban Design at Delft University of Technology. The term "vendor / stall" refers to a highly mobile, less government-organized type of vendor in the city, such as individual stalls, periodic open-air bazaars, temporary merchandise streets, etc.

1. What is your age? [Single-choice] \*

- 18-30
- 30-45
- 45-60
- 60 or more

2. In which cities in China have you lived? [Fill in the blank] \*

3. What is the proportion of your usual consumption places? [weighted question] \*

The consumption goods here are goods that can be bought at the ground stall (such as fruits and vegetables, food and clothes, small goods, small electronic products, etc.). Luxury goods, expensive goods, etc. are not included in this category.

Physical stores (various types of stores) \_\_\_\_\_

Internet platforms (e-commerce, micro-business) \_\_\_\_\_

Ground stalls (roadside stalls, open-air bazaars, food streets) \_\_\_\_\_

Hint: Please fill in the numbers, the sum of all items must be equal to 100

4. What comes to your mind when you think of the "stall economy"? (Not required) [Fill in the blank]

5. Do you think floor stalls should appear in cities? [Multiple Choice] \*

The term "street stalls" refers to open-air vendors and bazaars in cities that are highly mobile and less organized by the government.

- Yes
- No

6. What is the scale of street stalls you have seen? [weighted question] \*

You can drag the slider or enter by hand in the text box

Individual vendors (food carts, vegetable carts, on-the-go equipment)

Medium-sized market (vegetable market, open-air bazaar) \_\_\_\_\_

Large market (Christmas bazaar, temple fair) \_\_\_\_\_

Hint: Please fill in the numbers, the sum of all items must equal 100

7. Are you (were) a participant in the ground-floor economy? [Single-choice] \*

- Yes
- No

8. Do you work part-time or full-time? [Multiple choice] \*

Full-time means that all your living income comes from the act of floor stall.

- Part-time business
- Full-time

9. Where do you operate your business? The reason is? [Fill in the blank] \*

10. Your business goods are? [Multiple Choice] \*

- Food  
 Clothes (clothes, pants, hats, socks, etc.)  
 Small goods (all kinds of household goods)  
 Digital goods (headphones charging cables, etc.)  
 Other \_\_\_\_\_ \*

11. Why choose such goods? [Fill in the blank] \*

\_\_\_\_\_

12. why choose this kind of goods? [Fill in the blank] \*

\_\_\_\_\_

13. What is your average daily income? [Enter a number from 0(0RMB) to 2000(2,000RMB)] \*  
 Please slide to 2000 (two thousand dollars) or more

14. Does your income from your stall meet expectations? What do you think the reason is?  
 [Single-choice] \*

- Yes, it can make money \_\_\_\_\_  
 No, there are costs lost \_\_\_\_\_  
 Fair, break even \_\_\_\_\_

15. What is the biggest obstacle in carrying out the activity? [Sorting question, please fill in the numbers in order in the middle bracket] \*

Please rank the biggest hindrance or difficulties you encountered in conducting your own ground stall.

- City management obstruction  
 Complaints from residents  
 Source of goods  
 Unsatisfactory income  
 Other \_\_\_\_\_

16. Which area do you think needs the most help? [Fill in the blank] \*

Help can come from any type of government policy, nearby residents, product suppliers, etc.

\_\_\_\_\_

17. Do you shop and spend money at the ground floor? [Single-choice] \*

- Yes  
 No

18. What are your purchases? [Multiple choice] \*

- Food  
 Clothes (clothes, pants, hats, socks, etc.)  
 Small goods (various household items)  
 Digital goods (headphones charging cables, etc.)  
 Other \_\_\_\_\_ \*

19. What are your reasons for spending money at ground stalls? [Multiple choice] \*

- Low price and high quality of goods  
 Personal preference for its unique consumer atmosphere  
 To solve a need at the time  
 Temporarily attracted by the products

Other \_\_\_\_\_ \*

20. What is the time period you spend at the stalls? [weighted question] \*

- Early in the morning (e.g. to buy breakfast) \_\_\_\_\_  
 Morning (e.g. buying coffee and snacks) \_\_\_\_\_  
 Noon (e.g. for lunch) \_\_\_\_\_  
 Afternoon (e.g., buying afternoon tea and snacks) \_\_\_\_\_  
 Evening (e.g. for dinner) \_\_\_\_\_  
 Late night (e.g. to buy a late night snack) \_\_\_\_\_

Hint: Please fill in the numbers, the sum of all items must equal 100

21. Your monthly income is? [Single-choice] \*

- 0 - 3000  
 3000 - 6000  
 6000 - 10000  
 10,000 - 15,000  
 15000 - 20000  
 20000 or more

22. What is the average amount you spend per visit to the ground floor? [Enter a number from 10 (10RMB) to 1000 (1000RMB and above)] \*

23. Do the ground stalls around you now have more of a positive or negative impact on the city? [Enter a number from 0 (negative impact) to 100 (positive impact)] \*

Negative impact is: your normal life is affected and disgusted because of the ground stall economy.

Positive impact is that you are satisfied with the stall economy because it adds to your enjoyment of life.

24. What do you think are the positive effects of the stall economy on the city? [Multiple choice] \*

- Increase the vitality of the city  
 Increase employment rate  
 Reduce the cost of living  
 Meet multi-category consumer demand and promote consumption  
 Low-cost entrepreneurship  
 Other \_\_\_\_\_ \*

25. What do you think are the unpleasant aspects of floor stalls? (Sorting) [Sorting questions, please fill in the numbers in the middle bracket in order] \*

- Quality of goods and after-sales  
 Operator behavior and attitude  
 Noise pollution  
 Health pollution  
 Occupied business  
 Others

26. Which aspects of the ground stall activities do you think need to be improved? [Multiple choice] \*

- Hygiene situation  
 Business location

- Quality of goods and after-sales
  - Quality and behavior of stall owners
  - Government regulation and management
  - Others \_\_\_\_\_ \*
27. If your city has ground stalls or organized ground stall activities such as snack streets and open-air bazaars, where would you like it to be located? [Multiple Choice] \*
- Somewhere inside the residential area
  - Outside the residential area near the street or the entrance of the neighborhood
  - A place within 5-20 minutes walk from home
  - Somewhere in the city that can be reached by bus/subway within half an hour
  - It doesn't matter, anywhere is fine
28. If a good ground-floor economic activity started in your city, in which way would you participate in it? [Multiple choice]
- Try to be a stall owner
  - As a consumer
  - An organizer/manager of the ground stall activities
  - Not willing to participate
29. What do you think is the "ideal future" of the booming stall economy? [Multiple choice] \*
- Maintain the status quo of free, flexible and decentralized
  - Open-air bazaar or specialty goods street
  - A large urban-level bazaar
  - Other \_\_\_\_\_ \*
30. Have you been affected by the change in shopping and lifestyle as a result of the stall economy? Yes, I hope you can elaborate. [Multiple choice]
- For example, you have the habit of going for a walk in the evening; you use open-air bazaars as a place to go when you have nothing else to do; you actively pay attention to or look for the kinds of goods you have in mind, etc.
- Yes \_\_\_\_\_
  - No
31. Do you have any comments or suggestions on various problems of the ground stall economy in the city? (Not required) [Fill in the blank]
- \_\_\_\_\_

### Participant Survey

As of October 21, 2021, 233 valid questionnaires were collected from 23 Chinese provinces (figure 1) and 103 cities were involved in the survey. The top five cities with the highest number of participants come from Harbin, Beijing, Shanghai, Hangzhou and Chengdu. The respondents were mainly 18-30 and 45-60, with only 1.7% of all participants aged 60 or older. (figure 2) The reason for this is that the questionnaire was collected online, which makes it difficult to cover all age groups. 26.2% of the participants had an average monthly income of 0-3000 RMB, 56.3% had an average monthly income of 3000-6000 RMB, according to the data of the National Bureau of Statistics of China in the first half-year of 2021, the per capita disposable income of urban residents in China was 24125 RMB, with a median of 14897 RMB, most of the survey participants' income fell within the normal range, and high-income earners with a monthly income of more than 15000 RMB accounted for 6.8%, the data response participants are closer to ordinary urban residents. (figure 3)

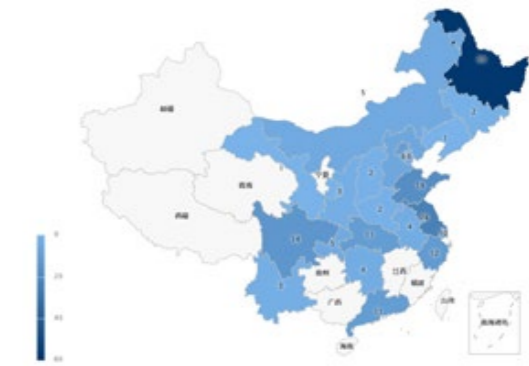


Figure 1

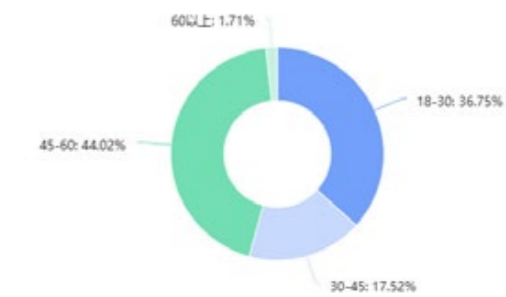


Figure 2

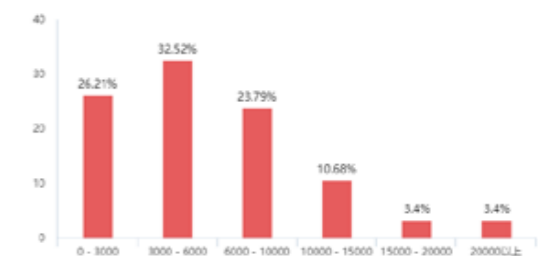


Figure 3

### Consumption survey

According to the survey on consumption, the average person spends 109RMB per visit at the vendor, with a median of 61RMB. The most consumed goods are food (79.1%) and small goods (74.7%). (figure 4) According to the observation, food such as fruits and snacks, and small goods such as hair cards, dishes, and toys are also the most common goods at the vendor at the same time. (Image 1 2) The majority of consumers consume at the vendors to solve their needs at that time (63.1%) or are temporarily attracted by the products (57.7%), (figure 5) which is a side indication that vendor products are hardly a daily consumption choice for consumers.

The consumption places chosen by participants also reflect the same conclusion: When choosing where to buy the same type of products, physical stores and online shopping are still the main places for consumption, with vendors accounting for only 16.6% of all consumption markets. (figure 6) The low price and high quality of the products are also important reasons consumers choose vendors (49.0%). (figure 5) The consumption period is mainly morning, evening and midnight, (figure 7) and it can be guessed that food demand such as food material, breakfast and late-night snacks are the main consumers. It is also observed that the behavior of vendors is more active during this time period, and at the same time, the stall owners have aggregation during this time and will form small groups or markets spontaneously. (image 3 4)

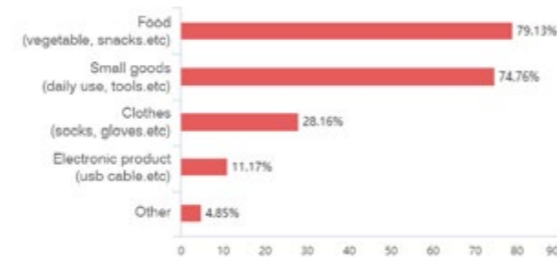


Figure 4

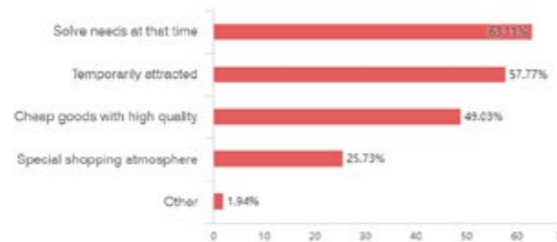


Figure 5

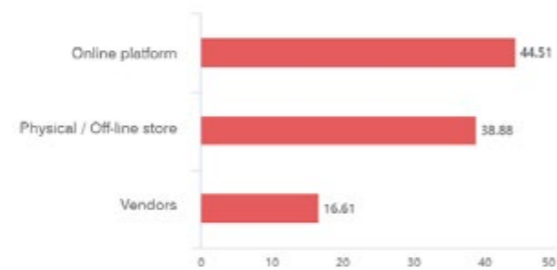


Figure 6

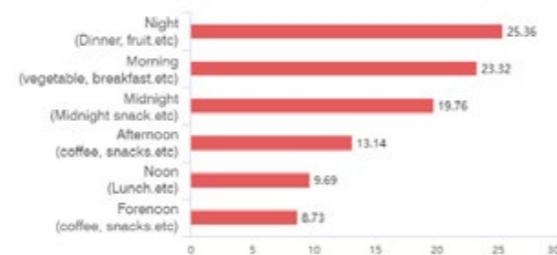


Figure 7



Image 1



Image 3



Image 2



Image 4

### Subjective Willingness Survey

The majority of participants believe that stalls should be present in the city (84.1%) and have spent money on them (88.4%). On the question of "positive and negative effects of street stalls in the city," the participants gave more positive effects (61.7), which indicates that street stalls are still recognized and needed by most citizens. They are an important part of the residents' lives and the city itself. The survey on the positive significance of vendor behavior showed that: 1, meeting multiple types of consumer demand and promoting consumption 2, low-cost entrepreneurship 3, increasing employment rate 4, increasing urban vitality 5, reducing the cost of living are all positive aspects of the vendor economy. (figure 8) The negative effects are, in descending order: 1, health pollution 2, quality of goods 3, occupying the road 4, noise pollution 5, operator behavior and attitude. (figure 9) In the observation, it can be found that the vendor behavior does occupy most of the streets and public space, and at the same time has a greater impact on the hygiene of the location, and the merchandise sellers rarely take hygiene safeguards such as wearing gloves, masks and displaying government business permits. (image 5 6)

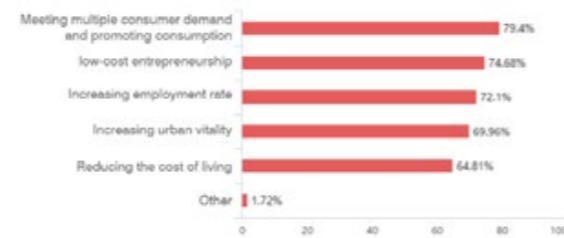


Figure 8

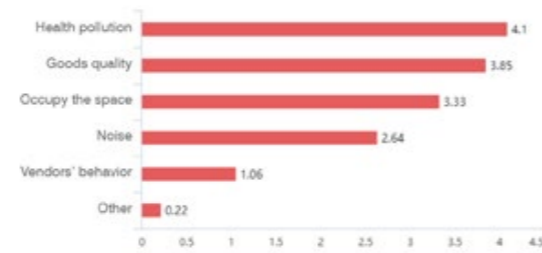


Figure 9



Image 5



Image 6

### Operators study

Among the 233 participants, 15 participants had ever had a vendor behavior, 12 of them were part-time entrepreneurs and 3 were full-time stall owners. They provided business locations for the Street corner, roadside, flyover, commercial area, neighborhood entrance and night market. (image 7 8) The characteristics are crowded places with high customer traffic. The reason for choosing such commodities is that they are FMCG products and have a market with good profits. The income survey shows that whether part-time or full-time, the income from stalls is in line with expectations. Two-thirds of the stallholders can make a profit, and the remaining one-third, showing that stalls positively impact increasing extra income or maintaining living costs. However, income ranked second among the dissatisfaction items of stall owners, and the first one is the obstruction of city management. For the desired help, more than 80% of stall operators hope to have policy support to solve the obstruction problem of city management. It can be seen that the improvement for the vendor economy practitioners should start from the policy.



Image 7



Image 8

### Futuristic survey

The results of the survey on the improvement of the vendor economy indicate that 63.9% of the participants want the government to have supervision and management of the vendor behavior, and improvement of hygiene (86.7%), quality of goods (63.1%), and business location (55.4%) are the main demands of the public (figure 13), while for the business location, 65.2% of the participants said they want the vendor activities to be in a place that is 5-20 minutes walk from their homes. 46.4% said they wanted it to be in front of the street or neighborhood outside the residential area (figure 14), which can be summarized as the residents want the vendors near where they live to be easy to reach. The future government can formulate policies and spatial planning strategies based on the relevant information.

In the hypothetical question, if there is a well-functioning vendor economy in the city, 20% of people would try to become one of the stall owners to increase their income. (figure 15) Currently, there are many individual vendors and medium-sized markets in the city, and 79.8% of the people would like to see the scattered stalls gathered into open-air markets or specialty goods streets. (figure 16) Some constructive ideas like "retaining flexible and scattered operations according to different street scales and specific conditions are also suggested.

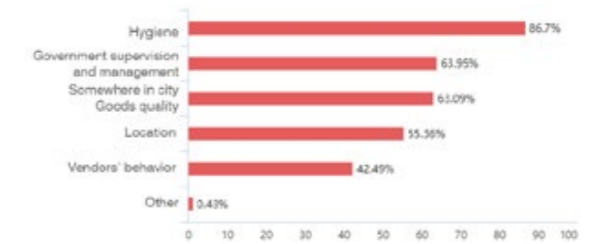


Figure 13

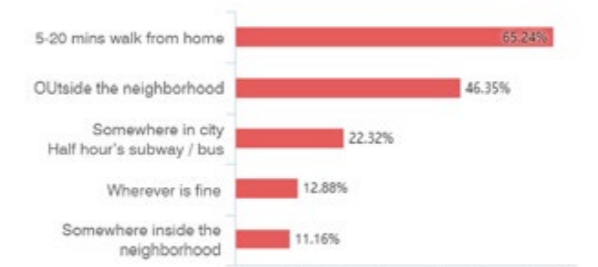


Figure 14

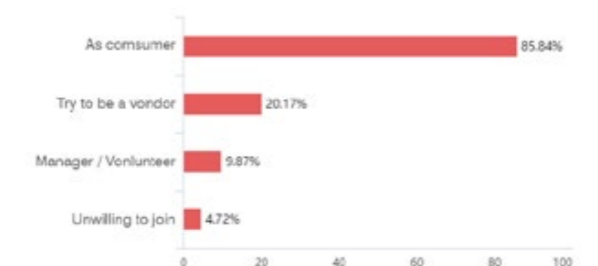


Figure 15

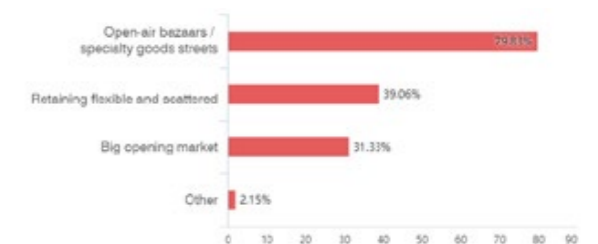


Figure 16

## Interview

With the support of the helpers, the project conducted random interviews with vendors and citizens in the old city of Hulan. The purpose of the interviews was to **collect information about the problems that exist when the Hulan stalls are currently running and to understand the attitudes of the participants.**

### Vendor:

"I am in the sunshine morning market for the second year, the market has not changed much during this period, except that the stall has increased by 400 yuan, and there is no water or electricity."

"Hygiene all depends on self-awareness, and no one is in charge. Garbage is generally thrown away."

"A toilet must be good, we usually go to the hospital bathroom, or just put up with it."

"In the winter, less people come out as it is cold. We can not earn much money. Generally in winter I will transfer the stall to others. If no one takes over, I just sell something when I want to. I will come early and choose the place with sunlight, because it will be warm."

"Generally speaking we see the city police car to hurry up and go, and then come back when the city police left, and now they do not confiscate things, but to ask a fine of 50 yuan."

"The city police will come during the morning market time and dinner time, the rest of the time they do not care. If you can give a bribe, it works."

"If someone comes back (because of product quality problems), give him his money back, but not many people do that."

"If the residents feel noisy, we first change the place, but a little later we will come back. If they call the police, the police do not care much."

### Customer:

"I think (stall) is good, usually buy some food is also very good, but sometimes there is a lot of garbage and not very hygienic."

"I don't think (the market) is very noisy, but I'm worried about the quality of food, if something happens, there is no way to find them responsible."

"The morning market area is very congested in the morning, too many people and cars, but we still need them (vendors)."



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*Along the River During the Qingming Festival - Zeduan Zhang, Song Dynasty*

# Vendor Renaissance

Strategy for the vendor economy of Hulan old town