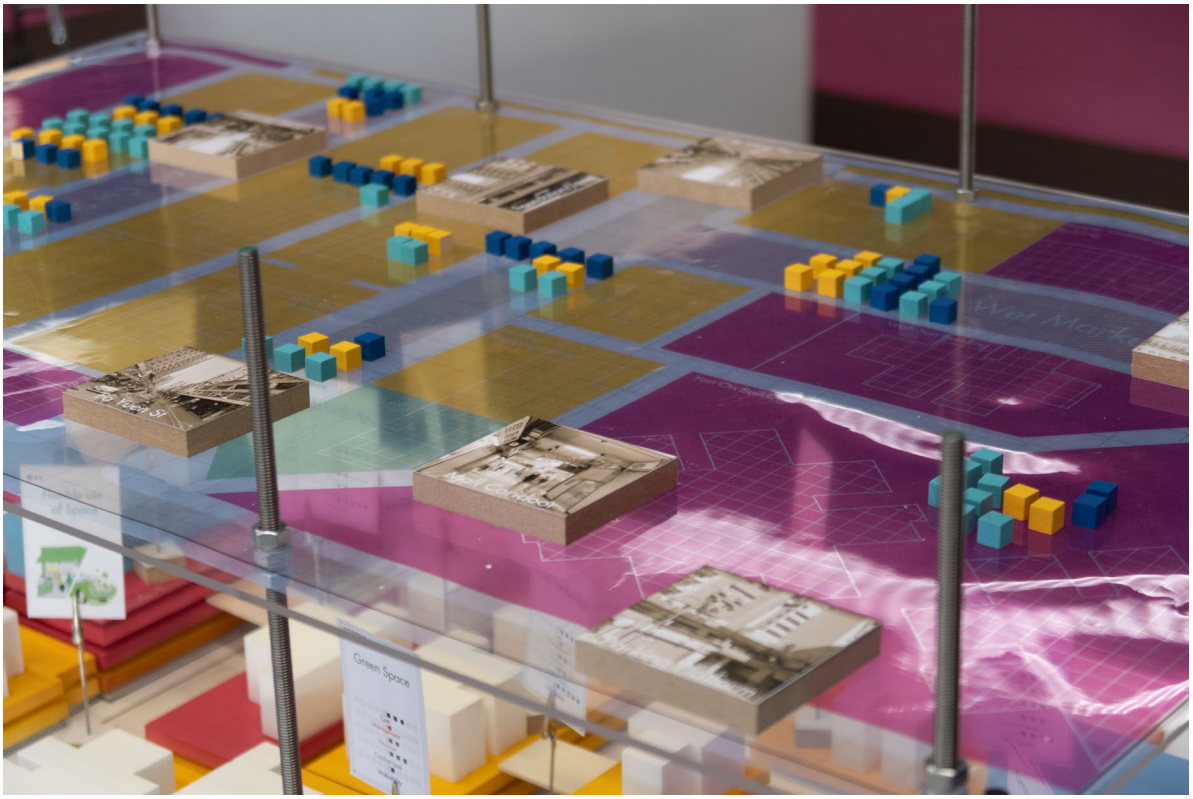
REVITALIZING THE URBAN LIFE

Design a three-dimensional public space system
through serious gaming in Mong Kok, Hong Kong



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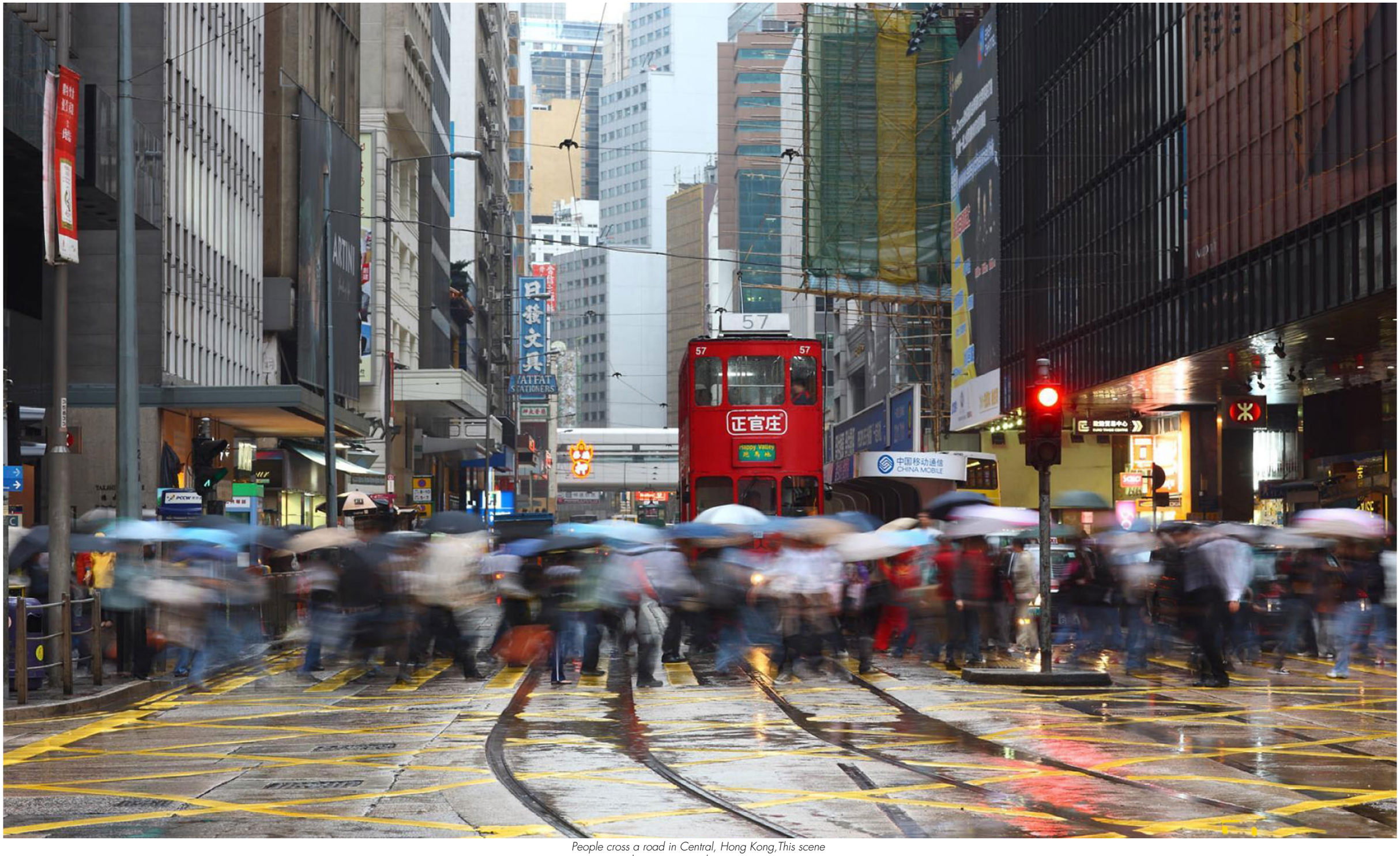


People cross a road in Central, Hong Kong,This scene happens every three minutes.
Image Source: Brian Yen

Contents

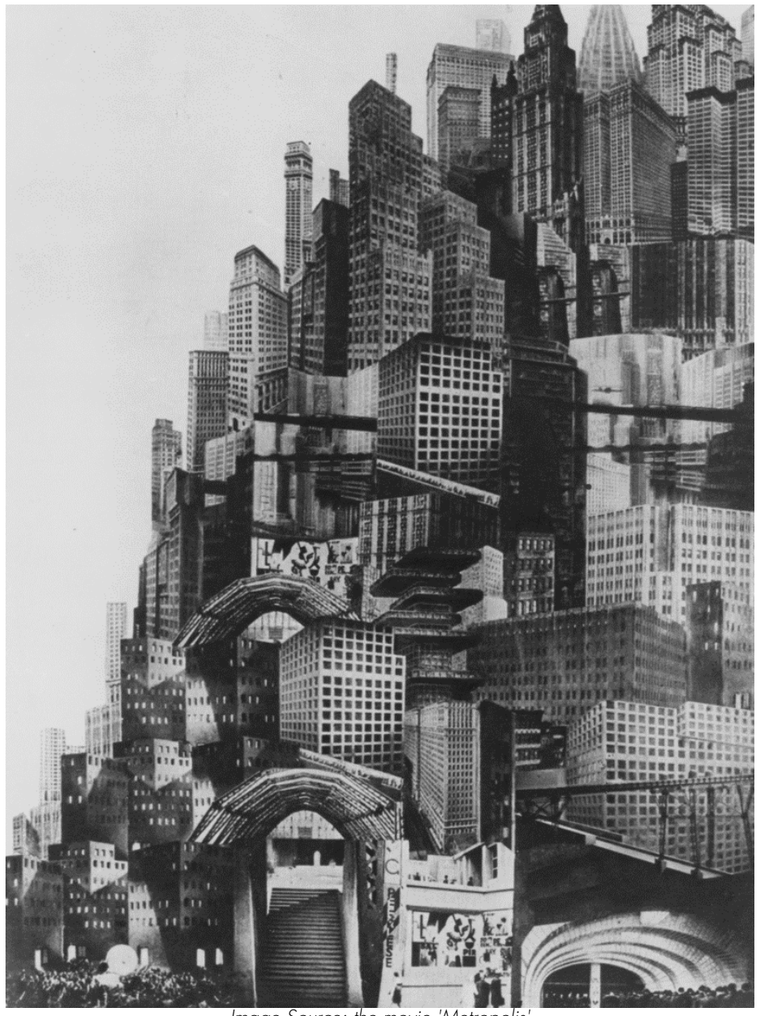


Image Source: the movie 'Metropolis'

01
Introduction

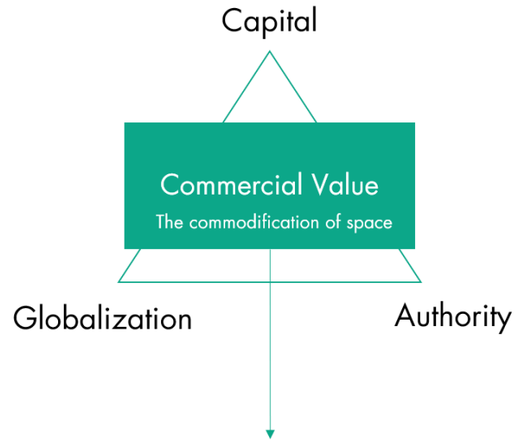
Image Source: the movie 'Blade Runner'

Image Source: the movie 'Metropolis'

1.1 Metropolis, The Opposite of Ideal Life?

As urbanization and globalization advance, numerous megacities have emerged, serving as nodes within the global network. These cities accumulate vast resources and information, attracting people in pursuit of a better life. However, these megacities seemingly fail to meet people's expectations, characterized by hectic work schedules, fragmented interpersonal relationships, difficulties for laborers in finding suitable living spaces, residents losing control over their environment, and the inevitable homogenization of the cities. Megacities seem to have become the opposite of an ideal life for people.

Artists have been acutely aware of this predicament. From the exaggerated, cold urban machinery in Metropolises to the dazzling neon-lit yet perpetually sunless cyber-city spectacles in Blade Runner, these exaggerated visual expressions reveal the alienation of contemporary urban life. This phenomenon is closely related to the globalization and urbanization of the past few decades. In the process of globalization, the accumulation and flow of capital and information have led to an increase in international trade and the formation of global industrial chains. Regional megacities not only represent the highest efficiency and largest scale within their respective areas, but also connect the unique resources of the region. As a result, these spaces obtain immense exchange value, becoming the centre of capital



competition, while their public and functional aspects are subordinated to exchange value. (Harvey, D., 2012.)

Different forms of capital have distinct interests; when they compete for urban space, the dominant capital invariably transforms the urban space according to its own logic. As a result, the landscape within the space is constantly changing and being rebuilt, leading to issues such as the excessive capitalization of public spaces and the fragmentation of the urban landscape. In many Asian cities, such as Shanghai, Hong Kong, and Singapore, government fiscal revenue partially depends on land finance, further promoting the formation of monopolistic land rent.

When capital and power collude, the living spaces of ordinary laborers are entirely subject to the decisions of others, passively enduring compression, reshaping, or even complete exclusion from quality spaces. Laborers produce urban spaces, but the spaces and labour itself are gradually alienated, and the collective fruits of labour are occupied by private interests (Harvey, D., 2012). As large industrial facilities withdraw from the city, residential and commercial spaces become the focus. The utilization of urban space is determined by the rise and fall of its spatial value. Parks, squares, and green spaces serve as tools to enhance spatial value, but when they fail to elevate economic value, they are ignored by

Hong Kong Residential Area
Image Source: Peter Stewart

1.2 The Right to the City

In response to this, Lefebvre proposed the concept of right to the city (Lefebvre, H., 1967) , which involves allowing various groups to participate in spatial activities and spatial management, readjusting the relationship between exchange value and use value in the production of urban space, and ultimately achieving spatial justice. Lefebvre believes that we need to break through the restrictions on urban residents' use of space caused by property rights, allowing people to continuously produce and change their surrounding spaces according to diverse lifestyles. This approach also permits the coexistence of different spaces, endowing cities with organic vitality and growth, and preventing them from becoming a fixed image in planning. As a result, the true power of the city belongs to the people, making the overall city an integral part of their lives. We can utilize this differential space to replace the abstract space under the logic of capital. (Lefebvre, H., 2012.)

Public Space

Lefebvre emphasized the crucial role of public space in realizing this right, viewing public spaces as arenas where urban residents practice their rights and participate in urban politics, social, and cultural life. In Lefebvre's view, the quality and accessibility of public spaces are vital criteria in assessing whether a city has realized the right to the city. (Lefebvre, H., 2012.)

David Harvey interprets the right to the city as the autonomy of urban residents over city life and the equitable distribution of urban resources. He believes that public space is a significant manifestation of this right. Public space is not only a place where community members communicate and interact, but also where they fairly share city resources. According to Harvey, the existence and use of public spaces are important reflections of urban justice. (Harvey, D., 2012)

The relationship between urban rights and public spaces is intimate and complex. Public space is an essential vehicle for urban rights, the primary place where urban residents practice their rights. Simultaneously, urban rights also influence the design, usage, and accessibility of public spaces, which in turn affects the realization of urban rights.

Informal space

In fact, we can catch a glimpse of this vision in some informal spaces. Informal spaces, sometimes referred to as slums, often stand in contrast to strictly planned formal cities, tending to be ungraded and organically grown. They lack a centre and have no clear boundaries. These spaces are often mixed-use and possess diverse structures. Hong Kong's Kowloon Walled City and Chungking Mansions can be regarded as representatives of such spaces. Examples can also be found in Syros, Greece, and Medellín, Colombia. Admittedly, although these bottom-up informal spaces can promptly meet residents' needs, they often present a chaotic scene and lack scientific guidance. (Cabannes, Douglass, & Padawangi, 2018)

Top-down and bottom-up

The realization of the right to the city requires a combination of top-down and bottom-up approaches, each with its own advantages and drawbacks. Contemporary mega-cities need to construct an optimal model to achieve maximum efficiency and returns, which is the primary goal of top-down urban planning. However, at the same time, cities are spaces rich in cultural connotations and humanistic spirit, requiring diverse cultures and lifestyles brought by different groups of people. An ideal urban life allows residents to have their own homes, the power to use and change urban spaces, and the power to produce spaces according to their needs, making the entire city a part of people's lives. Active public participation can help build a city with vitality and life, endowing urban spaces with the ability to continuously self-iterate according to residents' needs. Urban spaces are no longer a fixed image in planning, and people continuously produce spaces while allowing the existence of differential spaces.

Capital operations should be cautiously used as a means to promote urban development, rather than the sole determinant of urban development. The government will lead the basic framework of the city (transportation, ecology, indicators, policies), but the decision-making power for specific urban spaces will be shared by the stakeholders of the space, with the government acting as a coordinator and implementer. The concept of "cities for all" is also recognized in the New Urban Agenda (2016). In this sense, public participation transforms the government's single dominance over urban space into a form of pluralistic governance.

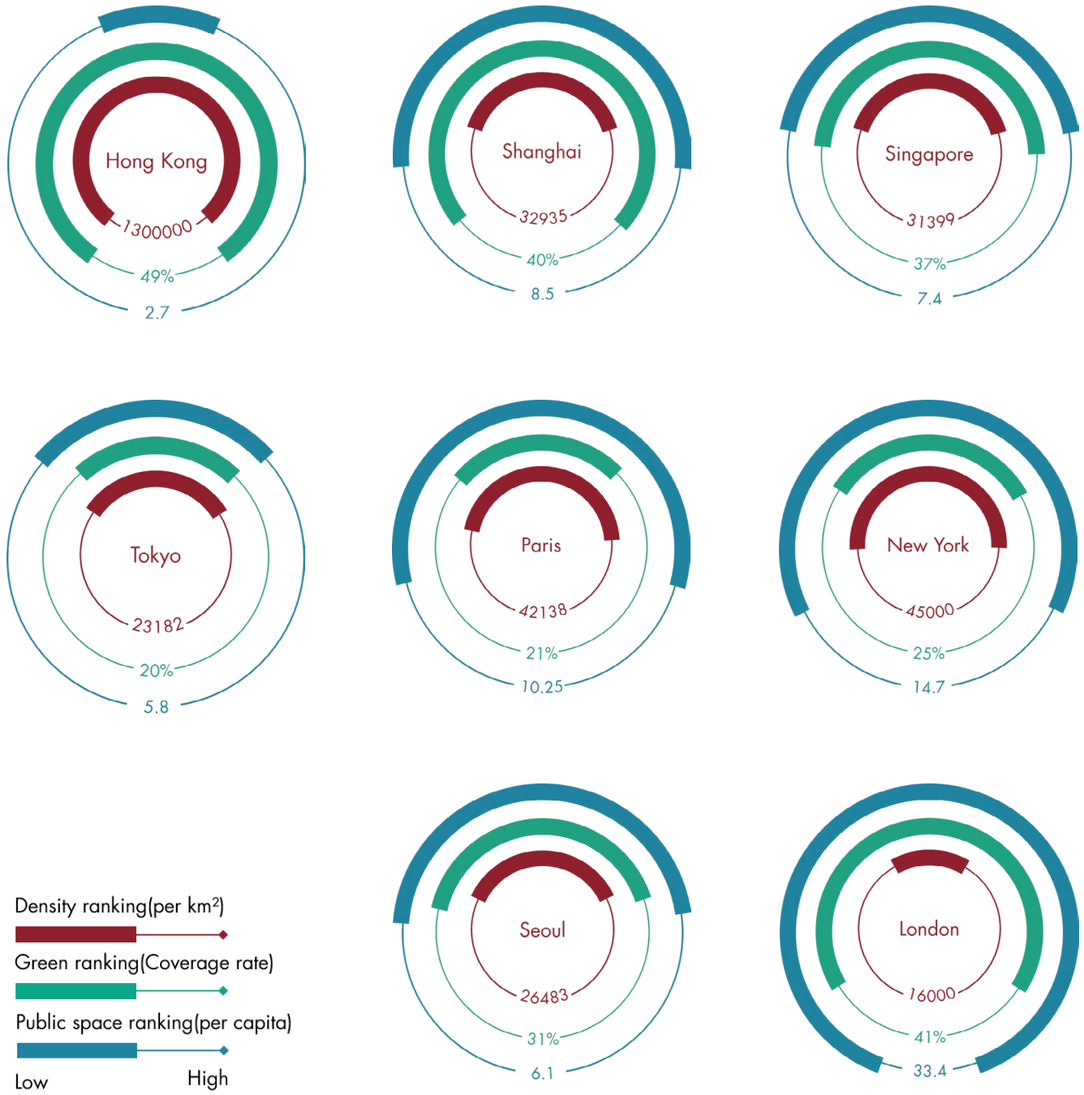
Project aim

Therefore, this project aims to explore the implementation of urban rights in contemporary mega-cities' public space system by combining the traditional top-down urban planning with bottom-up approaches to revitalize the urban life.

1.3 Metropolis

Public space shortage in Hong Kong

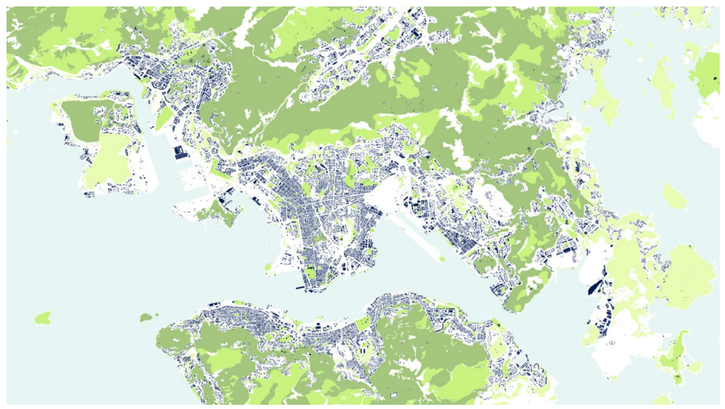
Comparing data among several developed mega-cities, it is evident that Hong Kong has the highest population density. As the densest area in Hong Kong, Mong Kok reaches 130,000 people per square kilometre. Hong Kong also has the least amount of public open space per capita among these cities, with an average of 2.7 square meters per person. The city closest to Hong Kong in this regard is Tokyo (with 5.8 square meters per person), yet there is still a more than two-fold gap between them. However, at the same time, Hong Kong has the highest proportion of green space among these cities, with nearly half of its area covered by vegetation.

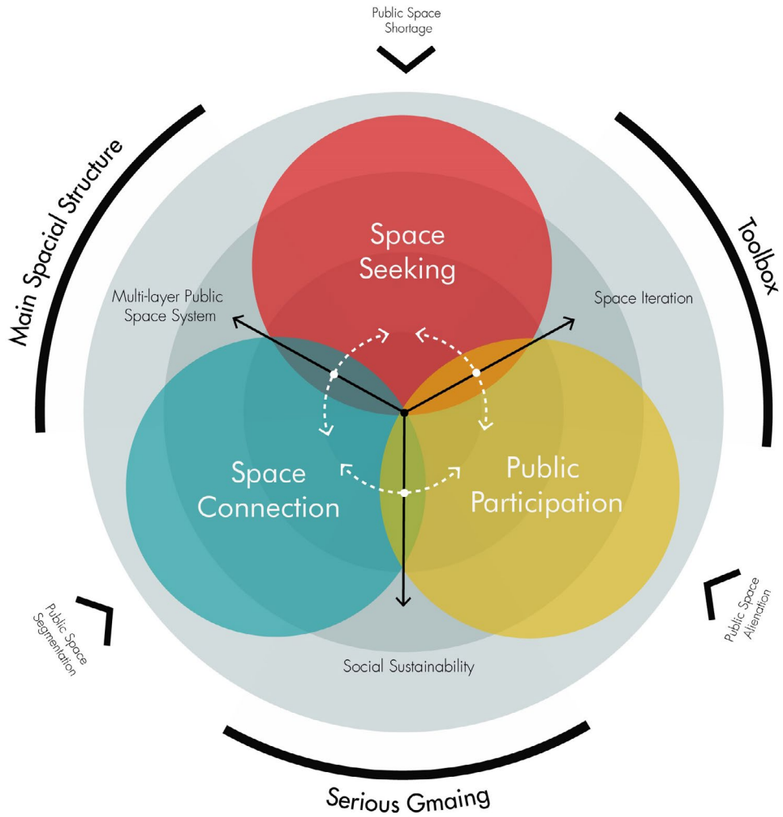


Density and public space data comparison in mega-cities

This phenomenon is partly due to Hong Kong's location in a mountainous region where steep terrain is unsuitable for high-density urban development. As a result, these areas have been preserved as large green spaces. This situation leaves limited flat areas for urban development in Hong Kong, with most of them located near waterfronts, riverbanks, and the Kowloon Peninsula. To secure more land, Hong Kong has historically expanded its territory through land reclamation. Due to these unique topographical conditions, Hong Kong's urban and green areas are distinctly separated. Although the overall green coverage rate is high, there is a scarcity of accessible open spaces within the city itself.

Hong Kong, as an important node in globalization and a renowned vertical city with a high demand for democracy from the public, facing the situation of public space shortage, serves as an appropriate location to discuss this topic.





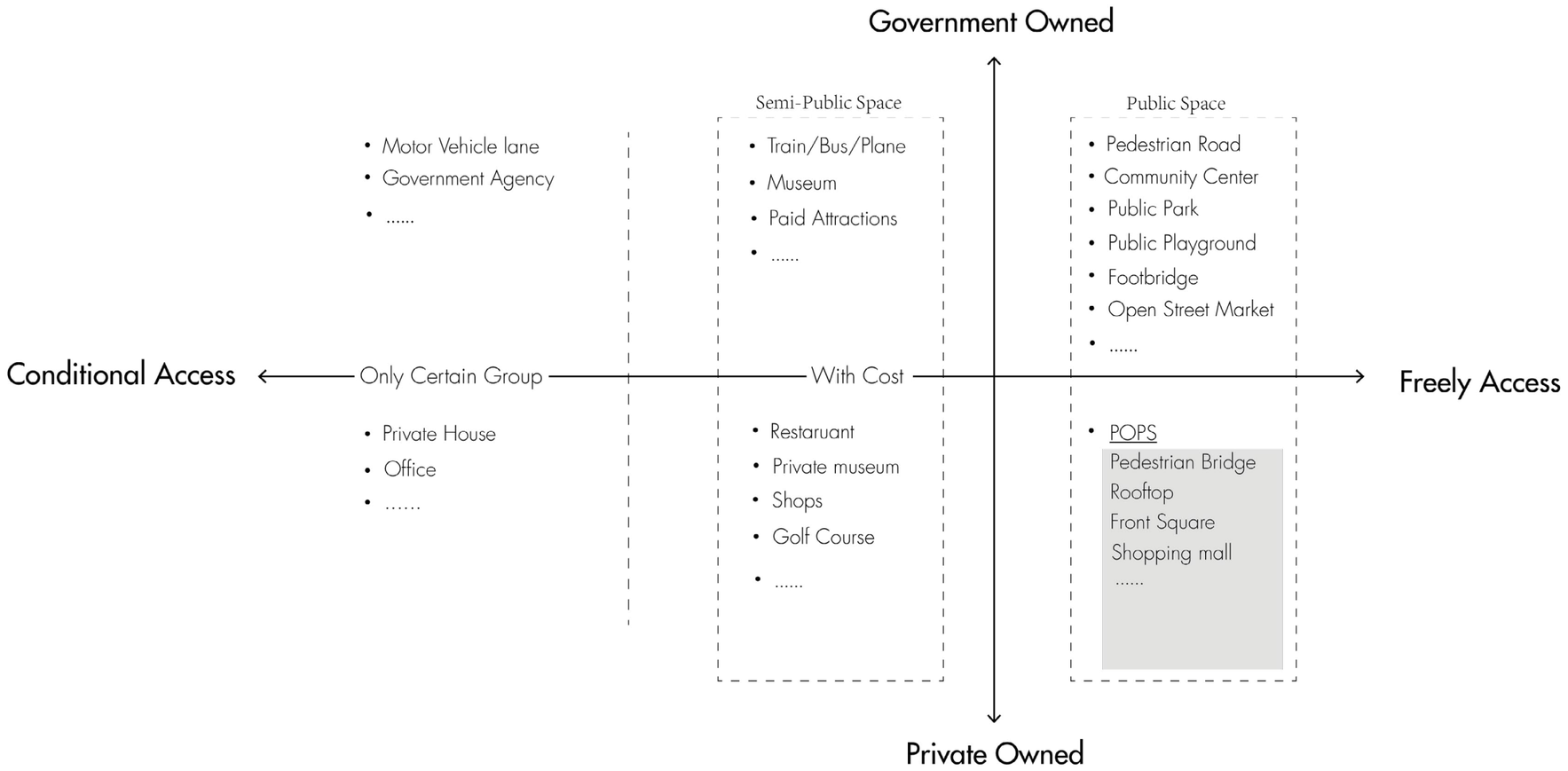
02

Theoretical Framework

2.1 Definition of the public space

Before commencing, it is essential to define the scope of public spaces discussed in this project. In this study, public spaces refer to areas that can be freely accessed and used by anyone without any prerequisites. These include spaces of varying ownership, such as government or publicly owned urban parks, sidewalks, street markets, public footbridges, city squares, as well as privately owned spaces like shopping centres and rooftop areas. The latter, commonly found in regions such as Hong Kong and New York, are a product of a series of related urban policies where developers can exchange the construction of public spaces for an increase in floor area ratio beyond the standard limit. This approach contributes a significant portion of public spaces to compact cities, but their public nature is often criticized due to various restrictions. (Luk, W.L., 2009)

When discussing urban public space systems, external open spaces tend to be the focus. However, internal public spaces within buildings and rooftop areas are often considered separately from the urban public space system context due to different ownership structures. In vertical cities like Hong Kong, urban life is not limited to externally distributed horizontal public spaces, as internally distributed vertical spaces also accommodate a considerable amount of urban public life (Lau, S.S. & Zhang, Q., 2015.). Especially with the shrinking of external spaces, people in Hong Kong organize public activities on different horizontal planes, such as shopping centres, footbridges, and rooftops. Buildings no longer serve as strict boundaries between public and private spaces, blurring the distinction between the two. Therefore, when discussing public space systems supporting urban life, the consideration and design of privately owned public spaces must be incorporated into the overall urban public space system.



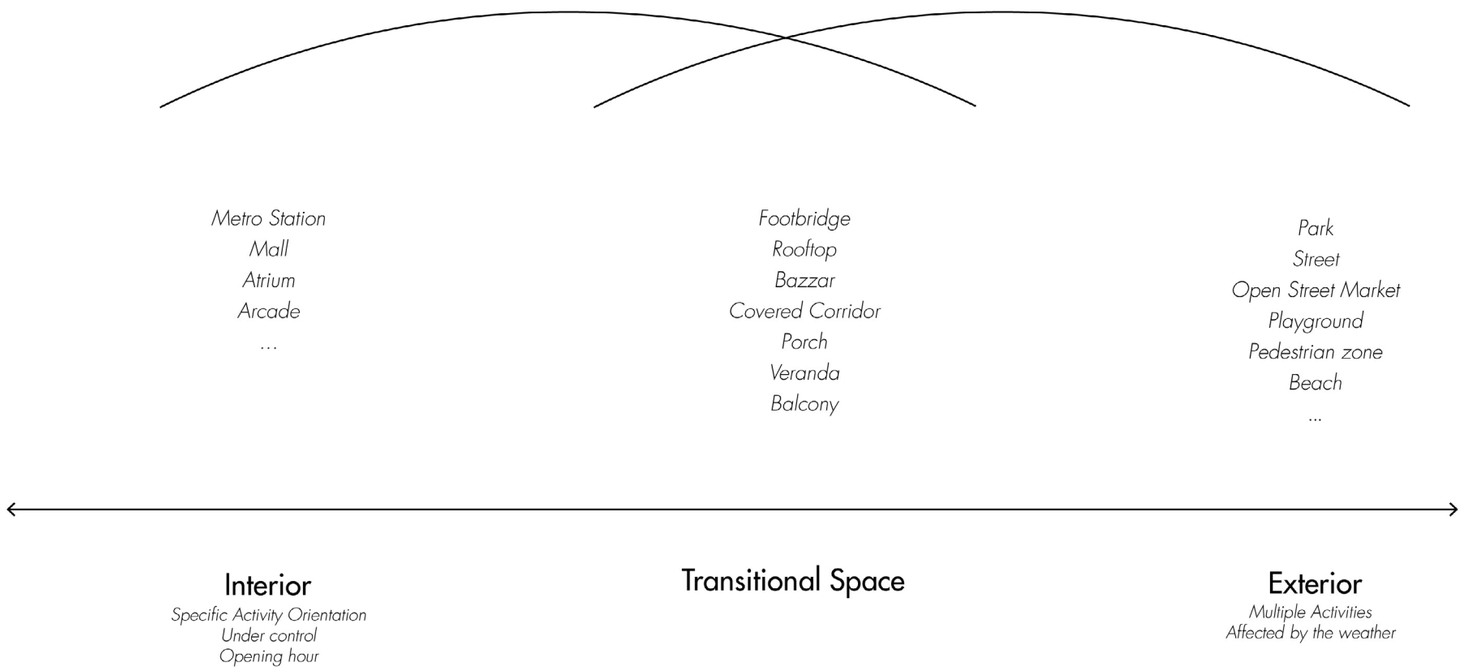
Areas such as museums, restaurants, and public transportation, which require prerequisites for entry and use, are considered semi-public spaces and are not within the scope of discussion for this project.

These public Spaces can be divided into three types according to their spatial characteristics: external space, internal space, and transitional space.

External public Spaces include the public open Spaces we are familiar with in cities, such as pocket parks, sports arenas, open markets, pedestrian zones, and so on. This type of space usually has no top interface and is greatly affected by the weather. At the same time, the inclusiveness is also high, it does not exclude the occurrence of diverse activities.

Internal public space mainly refers to those building areas that people can freely enter, including shopping malls, subway stations, building atriums and so on. These Spaces tend to have specific activities, are often controlled by a group, and have specific opening hours.

The definition of transition space is relatively vague, mainly refers to those areas between the interior and the exterior, the vertical interface is loose, and some Spaces have a canopy. Such Spaces include skybridges, roof Spaces, Bazzar, balconies, and more



2.2 Working Framework

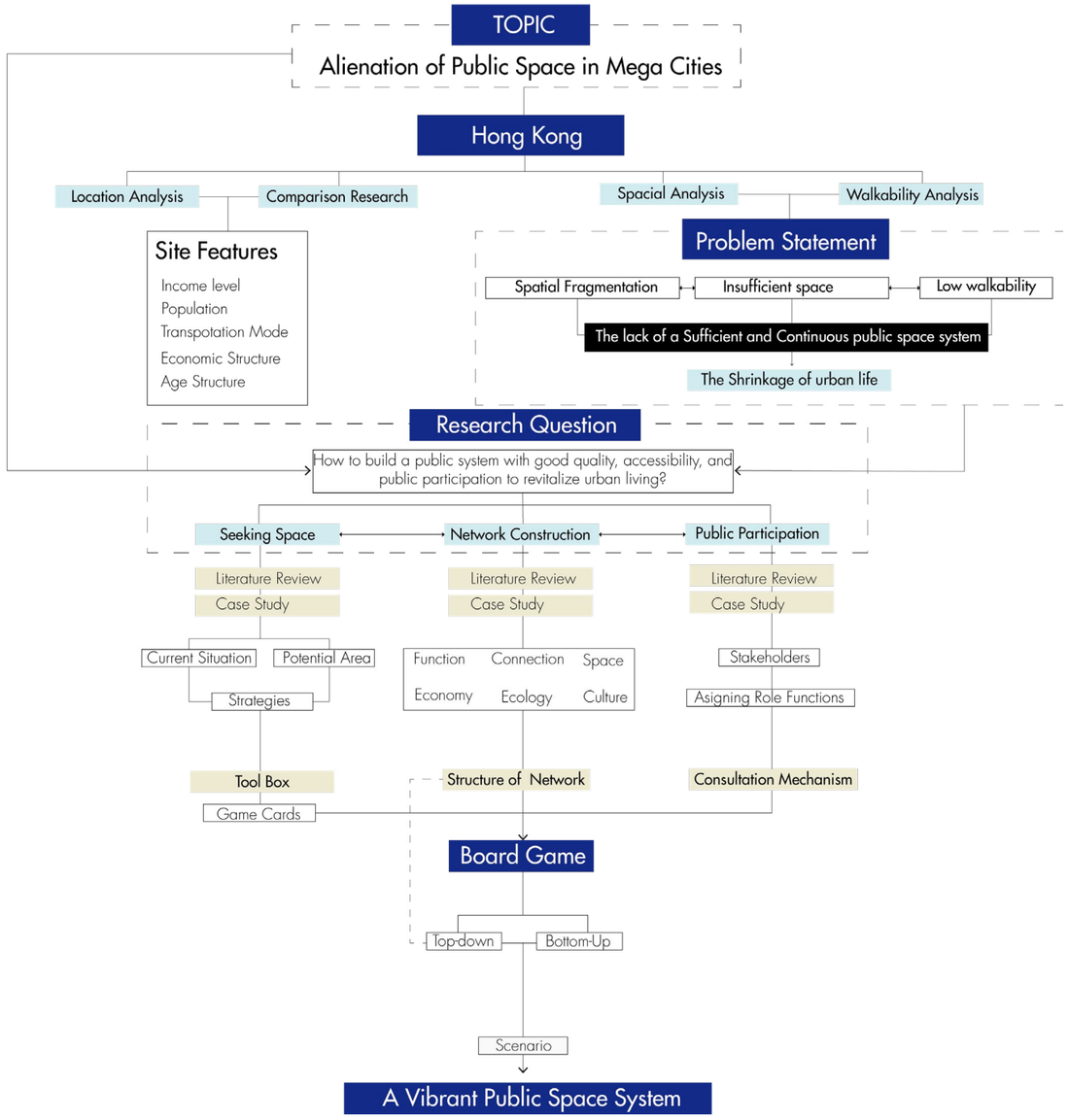
Topic
This project follows the working framework in figure 2.1.1. The theme of the project is the alienation of urban public spaces, with Mong Kok in Hong Kong as the research site.

Site Analysis
First, the project conducted a site analysis and data analysis to understand the characteristics of the site. Then, public open space analysis and walking space analysis were made. The current public open space in Mong kok can be divided into four categories: Passive spaces, activate recreational spaces, pocket parks, and roadside spaces. (Xue, C.Q., Manuel, K.K. & Chung, R.H., 2001)

Problem statement
Based on the spatial analysis of the site, the public spaces and walkability in Mong Kok were studied, and three problems with the current Mong Kok public space system were identified: insufficient space, spatial fragmentation, and low walkability. In conjunction with the project's theme, this project elaborated on the mismatch between these spatial situations and the current trend of publicizing private life, presenting the problem statement for the project: Mong Kok lacks a continuous and sufficient public space system, which also leads to the shrinkage of urban life in the area.

Research question
Combining the problem statement with the project theme, the research question for the project was proposed: how to build a public space system with public participation, good walkability, and sufficient space to revive urban life. This question was divided into three topics for investigation: seeking space, creating networks, and public involvement. In the seeking space section, I conducted a classification study of the current public spaces in Mong Kok, then proposed potential spaces as supplements. Targeted strategies were proposed for these different types of spaces, forming the toolbox for this project; in the creating networks section, this project used the Layer Approach to combine functionality, connectivity, space, culture, economy, and ecology in constructing the main structure of Mong Kok's three-dimensional public space network. In the public involvement section, I employed a biography approach to display the changing relationship between Hong Kong's urban spaces and the public and analyzed the stakeholders in Mong Kok's public spaces, studying their respective identities and capacities.

Serious game and spatial design
Next, combining the achievements of the above three topics, the serious game method was used to bring public participation into site design, exploring the integration of top-down and bottom-up approaches. Based on the results of the serious game, a future vision for the site was obtained and used for detailed public space design.



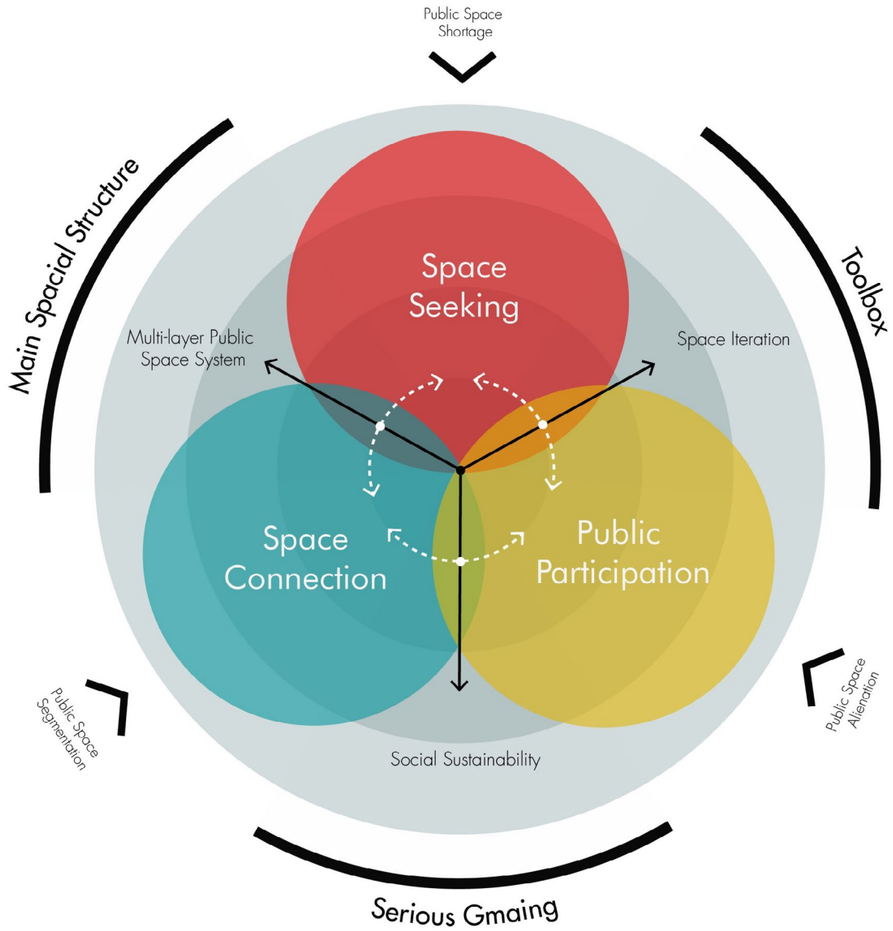
2.3 Methodology

To address the research question, this project divided it into three sub-research questions: seeking space, creating networks, and public involvement. First, the shortage of public spaces in the area requires optimizing existing spaces and transforming potential spaces. Second, for the fragmented spaces, effective connections are needed to enhance the walkability of the Mong Kok area and integrate scattered public spaces into a network. Finally, a multi-stakeholder participation mechanism is needed to ensure fairness, diversity, and resilience in urban spaces in the face of ever-changing urban demands.

These three sub-questions are interrelated, and the outputs obtained for different problems will also benefit the resolution of other issues. The project has three main outputs.

Toolbox
First is a toolbox, which contains targeted strategies for different space types in Mong Kok and can be combined to create ideal spatial models based on various needs. The toolbox is used both for finding more public spaces and optimizing existing ones, as well as for promoting public participation: strategies are transformed into cards used in serious games played by stakeholders.

Structure of public space system
Second is the main structure of public spaces, which is established using the Layer Approach method after balancing various urban subsystems. This structure selects more valuable spaces and creates connections between them. Based on the different types and ways of connecting spaces, the structure can be divided into sub-structures to meet different functional requirements. As a top-down approach, this structure regulates urban spaces from a more macro perspective, in line with urban development.



Involve public participation by Serious Gaming
Finally, serious games are used to introduce public participation. The term serious games refers to games designed to support other functionalities than solely for entertainment Michael, D. & Chen, S., 2006 . According to Zyda (Zyda, M, 2005) "applying games and simulations technology to non-entertainment domains results in serious games". He also provides a definition for serious games, claiming that they are "a mental contest, played with a computer in accordance with specific rules that uses entertainment to further government or corporate training, education, health, public policy, and strategic communication objectives"(Poplin, A., 2011) Serious game in this project would be a role-playing board game. Different stakeholders are given a voice in this role-playing game, participating in negotiations about urban spaces based on their interests and abilities. Previously designed game cards are assigned various attributes according to their real-life situations for use in in-game negotiations, and the main structure of spaces is integrated into the game's settings, with players in the government role striving to implement this main structure. As a result, other stakeholders will adopt different strategies to change urban spaces to meet their needs based on the implementation of the main structure; of course, the implementation of the main structure in the area may be opposed by other groups, and if consensus cannot be reached in the negotiations, the government role will need to seek alternative solutions in the game to modify the original structure. In this gaming process, top-down and bottom-up approaches are combined, and the abstract urban structure's outlook attempts to materialize itself in space. This process not only requires finding feasible methods to realize the structure in actual spaces but also simulates different groups' reactions to the structure. The game reveals the gap between the abstract and the concrete by reproducing this process. From a public perspective, serious games grant them a voice in urban spaces, providing a means to participate in urban space construction; in the negotiation process of the game, the use and negotiation of urban policies help improve the public's understanding of urban space construction, and communication between different roles helps deepen mutual understanding, potentially leading to cooperation and gaining greater voice when interests align.

Hong Kong Street
Image Source: Steveandjobs

03
Site Analysis

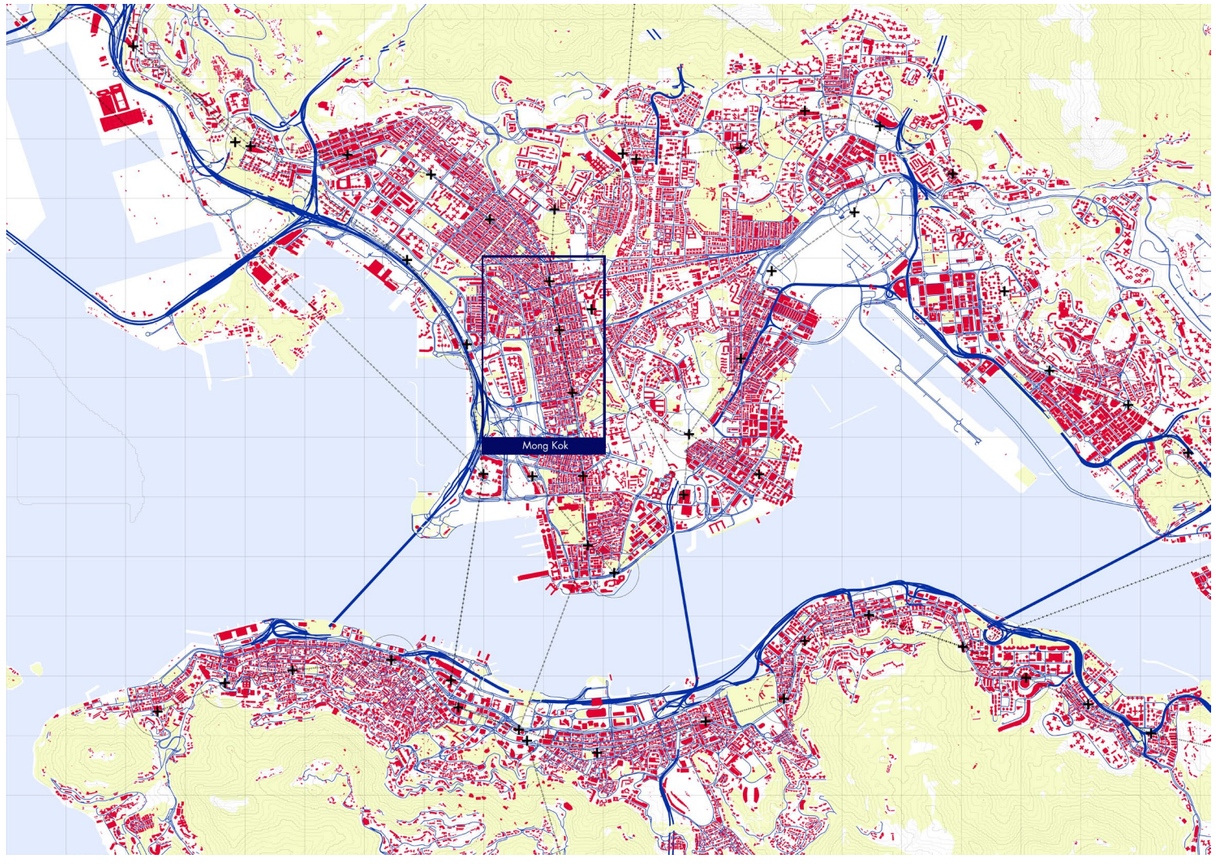
Mong Kok,
The Hurried and Bustling Center

"Pedestrians flow like a stream on the street, with shops displaying a variety of colors. The bustling atmosphere is mixed with salespeople's hawking. Walking among them, it feels like being pushed into a colorful and magical world, with excitement and thrill in the heart."

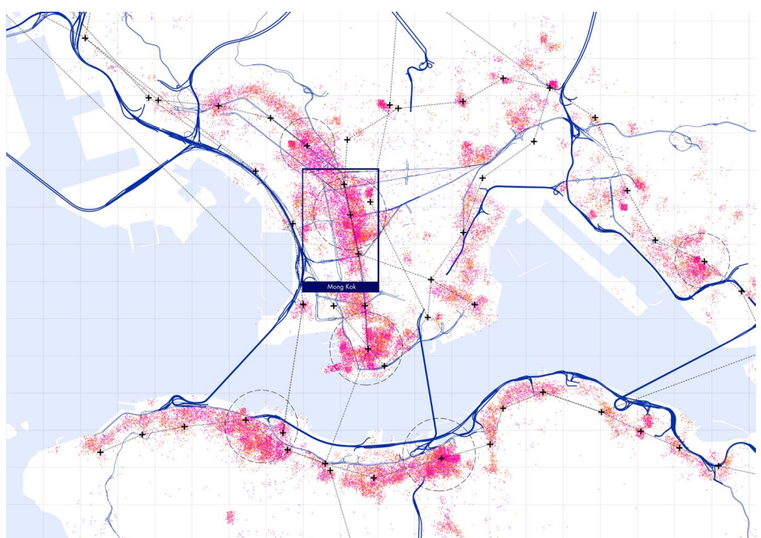
3.1 Mong Kok, The Hurried and Bustling Center

Mong Kok in Hong Kong

Mong Kok, located in the western part of the Kowloon Peninsula in Hong Kong, is one of the central areas of the bustling Kowloon urban district and a famous shopping center and tourist destination in Hong Kong. Mong Kok is densely packed with old and new buildings, resembling a concrete urban jungle. With a population density of 130,000 people per square kilometer, it gathers people from different cultures worldwide, generating a diverse urban lifestyle. From shopping malls to street markets, from skyscrapers to neighborhood streets, from luxurious restaurants to street food, the world's variety is compressed into this area. Neon lights and billboards occupy the sky of Mong Kok, and the bustling streets have become the impression of Mong Kok. A wide range of shopping options is one of the identities of Mong Kok, catering to different product categories and consumer levels. There are women-oriented markets like Ladies' Market, the artistic Shanghai Street 618, the trendy T.O.P for young people, and a variety of fresh street markets to choose from. With convenient public transportation, crowds flood into Mong Kok at sunrise and return along the rails at sunset.

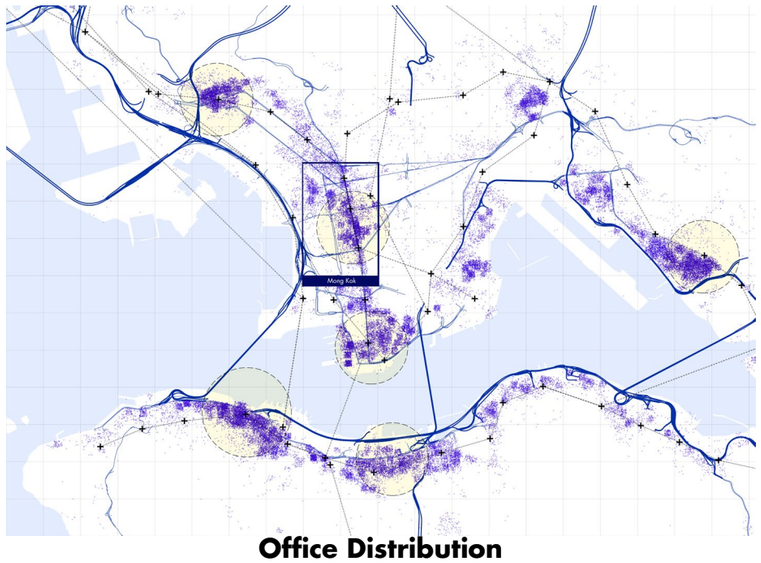


Hong Kong Street
Image Source: Visualchina



Commercial Distribution

Image Source: www.HK01.com



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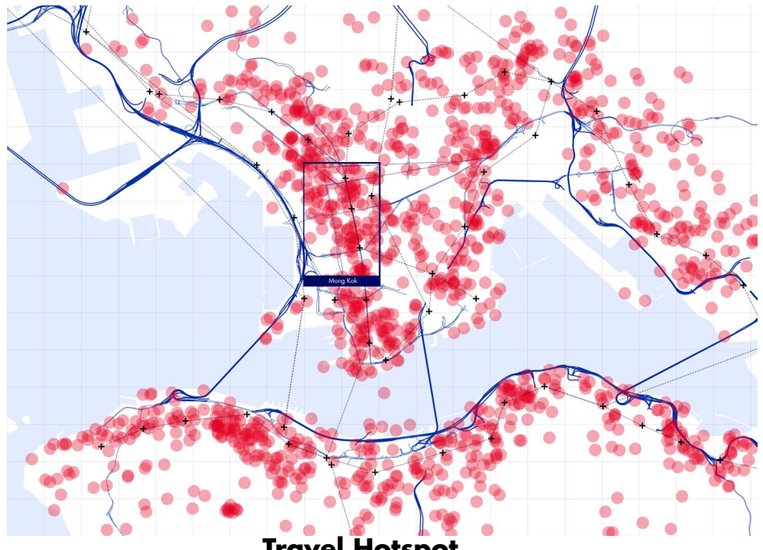
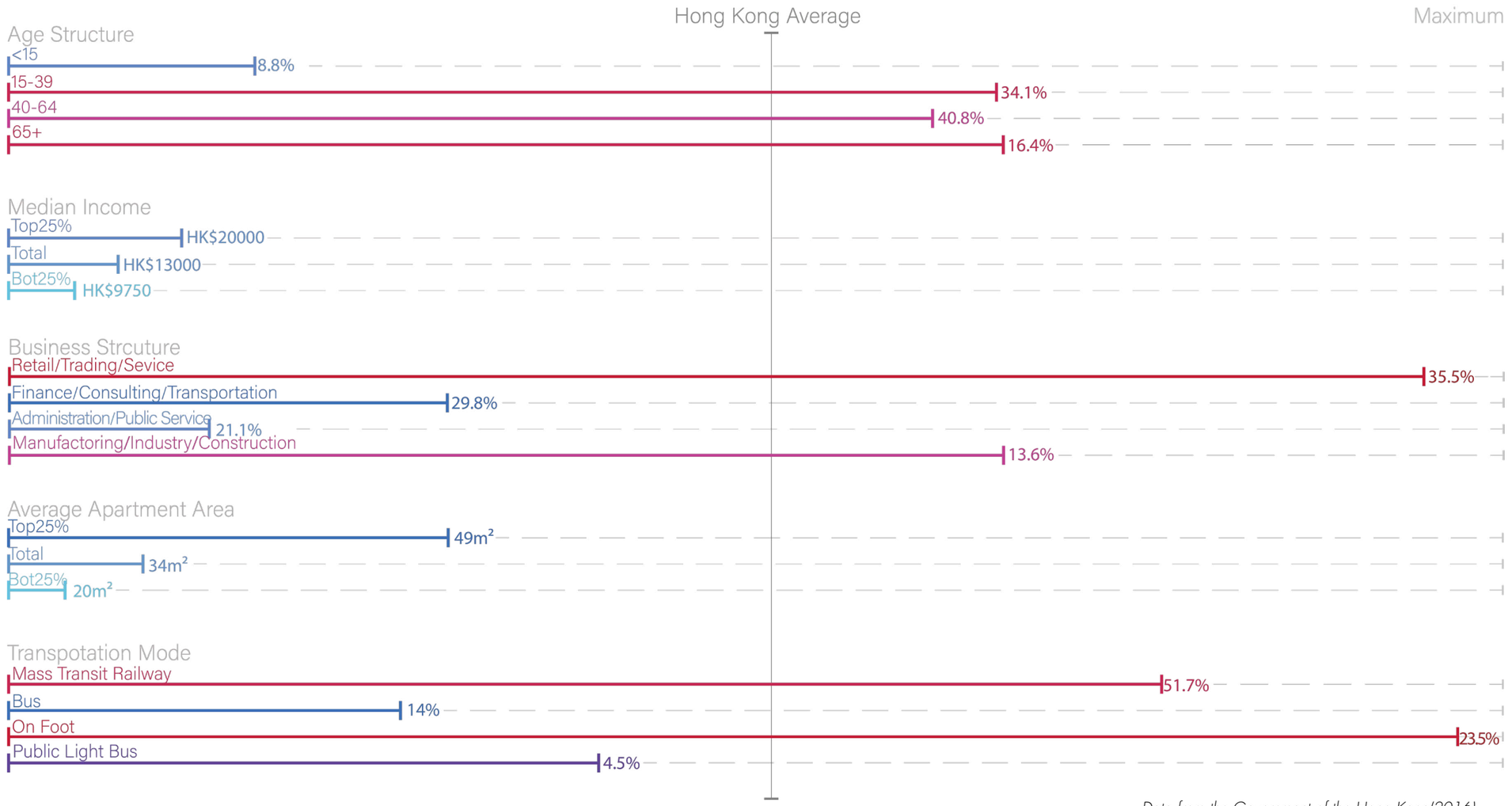


Travel Hotspot

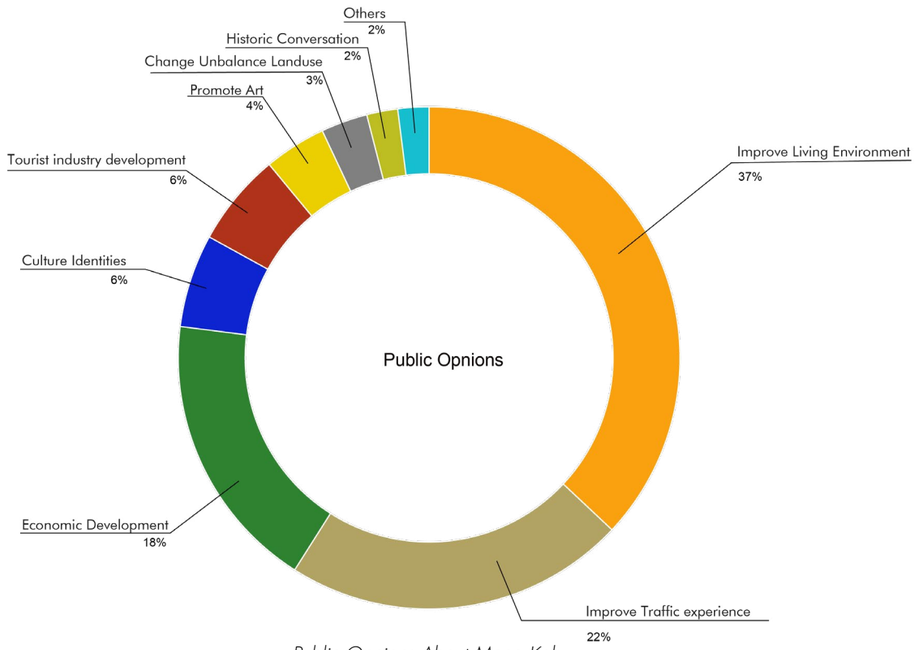
High population, low public space

However, the prosperity of Mong Kok does not imply ideal urban living. According to a survey report published by the Civic Exchange think tank, residents enjoy only 0.6 square meters per capita of public space (Civic Exchange, 2018), equivalent to a quarter of a toilet stall, far below the government's 2 square meter standard. Moreover, Mong Kok has a high population density, high traffic flow, and many old buildings. With early development and a lack of proper planning, air pollution has been a persistent issue, often regarded as a heavily polluted area.

Comparing Mong Kok to other districts in Hong Kong helps me better understand the current situation of the Mong Kok area. Economically, Mong Kok relies mainly on retail, service, and finance, accounting for over 65% of the industry share; compared to other districts, Mong Kok's retail and service industries are also very prominent. Demographically, Mong Kok has a higher proportion of middle-aged and young people and is among the districts with higher aging in Hong Kong. In terms of transportation, more than half of the population relies on rail transit, nearly a quarter walk, making it one of the highest walking rate districts in Hong Kong, while private cars are used less. From an income perspective, Mong Kok's residents are far below the average level in Hong Kong, with a median monthly income of 13,000 Hong Kong dollars. Corresponding to the low income is a lower standard of living, with an average housing size of 34 square meters, the lowest quarter of the population only having



Data from the Government of the Hong Kong(2016)

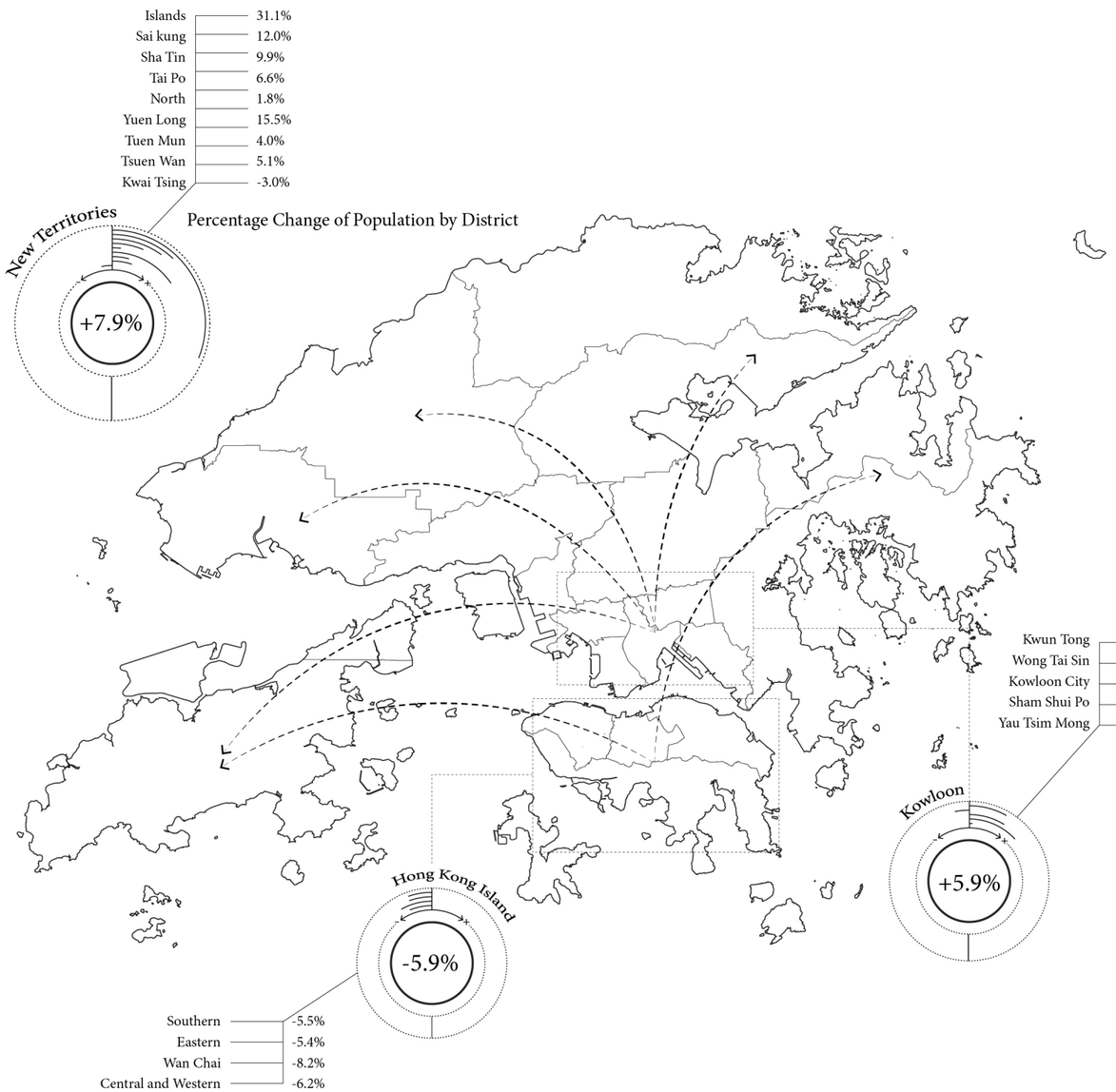


Public Opnions About Mong Kok
Data from report of Unopened Space by Civic Exchange (2017)

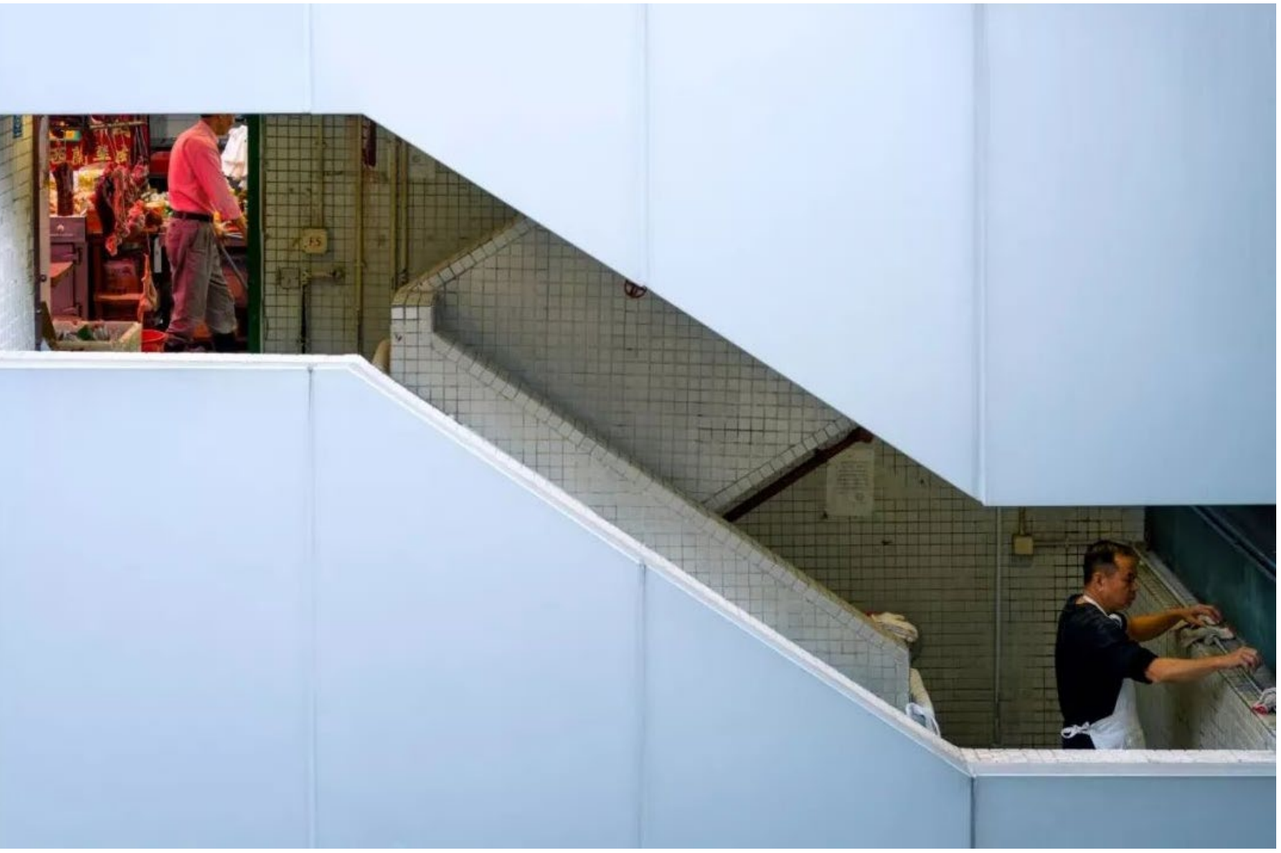
an average housing area of 20 square meters, far below the Hong Kong average. (Hong Kong Census and Statistics Department, 2016)

From residents' opinions, improving the living environment is their primary concern, followed by enhancing travel experience and economic development (Lai, C., 2017). The cramped living space and low living environment are partly reflected in the population change in the area; from 2006 to 2016, Hong Kong's overall population continued to rise, but the population of the Yau Tsim Mong district, which includes Mong Kok, only grew by 0.9%, remaining virtually unchanged. In the past five years, Mong Kok's population has gradually decreased.

From data analysis, the public space situation in Mong Kok is indeed poor, with a severe shortage of public spaces.



Population change in Hong Kong(2006-2016)



A staircase in Mong Kok residential building
Image Source: Xizhilang

Transfer of private life

However, although the compact urban area has a shortage of public spaces, the lives of the residents present more publicness. Due to the smaller living areas, many functions that would be found in private homes have been transferred to the public domain of the city. A lack of space for washing machines has led to the use of public laundromats; cramped kitchens have resulted in a reliance on affordable and diverse restaurants in the community to meet dining needs; without living rooms, leisure time is spent relaxing in the city's abundant entertainment venues, with friends often choosing to meet in cafes, bars, or restaurants. Here, the boundaries between private and public become blurred. Although there is a shortage of public spaces and few urban activities for crowds to gather, residents still rely on the spaces within the city to carry out their private lives. These life services are purchased by the public as commodities, mainly regulated under the free market, but the public itself has no control over these basic activities of private life, and is mostly in a passive acceptance situation.

3.2 Public Space in Mong Kok

Figure 3.2.1 shows the plan of Mong Kok, which is divided into a grid and includes four subway stations, with Mong Kok Station being the busiest and located in the central area of Mong Kok. Buildings and dense road networks occupy most of the area, with public spaces scattered in the gaps between buildings.

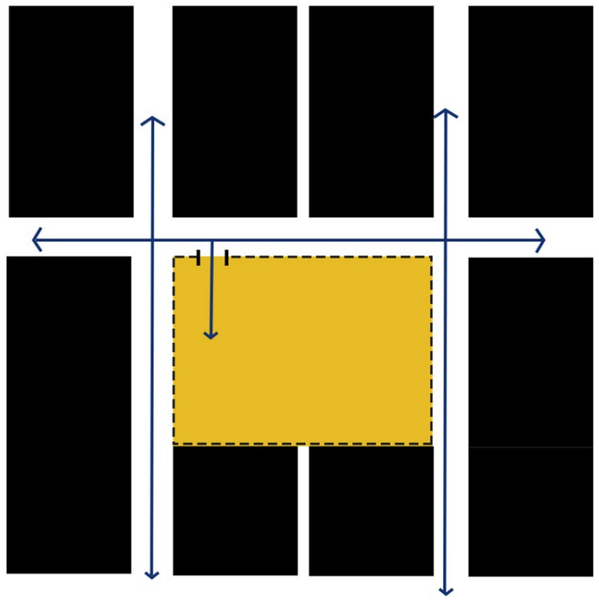
Current Public Space in Mong Kok

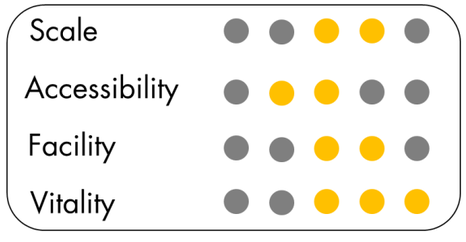
Public open spaces within the area can be roughly divided into four categories: Active recreational space, Passive space, Roadside space, and Pocket parks(Xue, C.Q., Manuel, K.K. & Chung, R.H., 2001). In terms of spatial distribution, pocket parks are concentrated in the residential areas in the southwest. The site has a total of four active recreational spaces and three passive spaces, mainly distributed in the northwest and east of the site. There are no public open spaces in the residential areas in the northeast.

The area has no large open spaces, but is close to three relatively large open spaces on the edge of the site. However, the sports field on the northern boundary and the linear park on the western boundary are both separated by wide roads, while the woodland on the south side is occupied by private property, making them less accessible.

Active recreational space

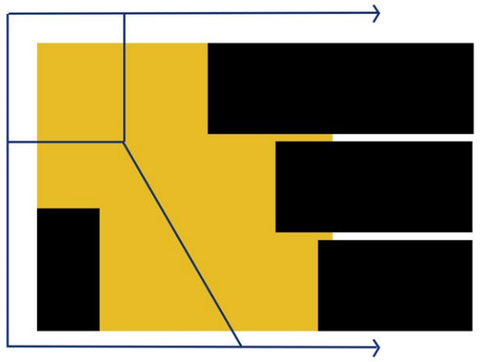
The first type of space is active recreational space, equipped with sports and fitness equipment, mainly for sports activities, such as soccer fields, basketball courts, etc. These spaces usually have specific user groups and usage times, with well-defined boundaries and are generally not used for crossing. Active recreational spaces, due to their explicit sports functions, attract crowds to gather. On one hand, sports enthusiasts frequently use these spaces; on the other hand, competitive activities also attract spectators. However, the clear boundaries and single activity make these spaces somewhat exclusive and difficult to integrate into the city's pedestrian system.

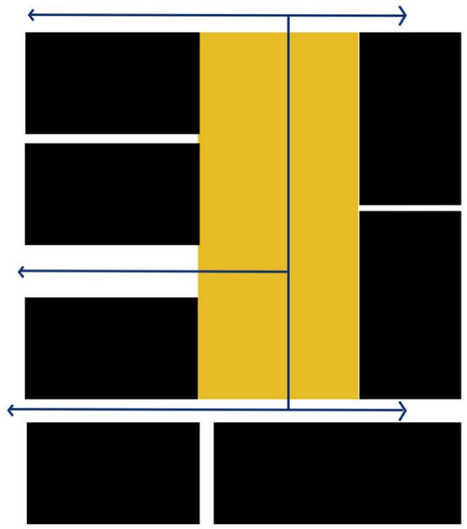


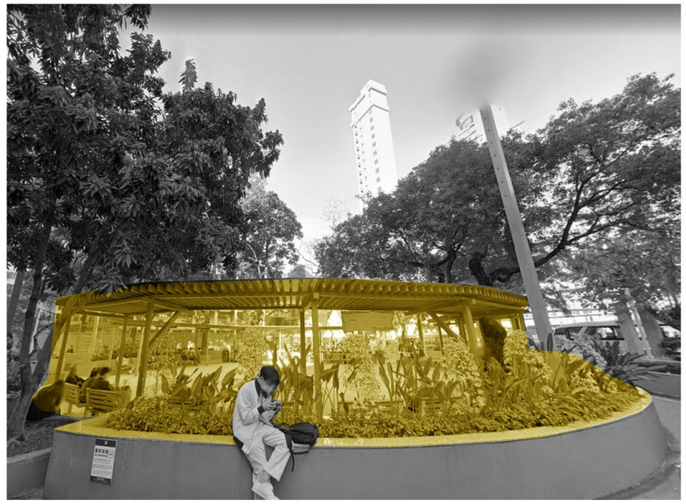


Passive space

The second type of space is Passive space, which includes parks and gardens. These spaces are the most vibrant in Mong Kok, with citizens enjoying themselves through conversation, rest, or entertainment. At the same time, they create many opportunities for public interaction, both visually and behaviorally. These spaces are usually closely integrated with pedestrian systems, with paths for crossing and a positive attraction for people. However, there are only three such spaces in Mong Kok.

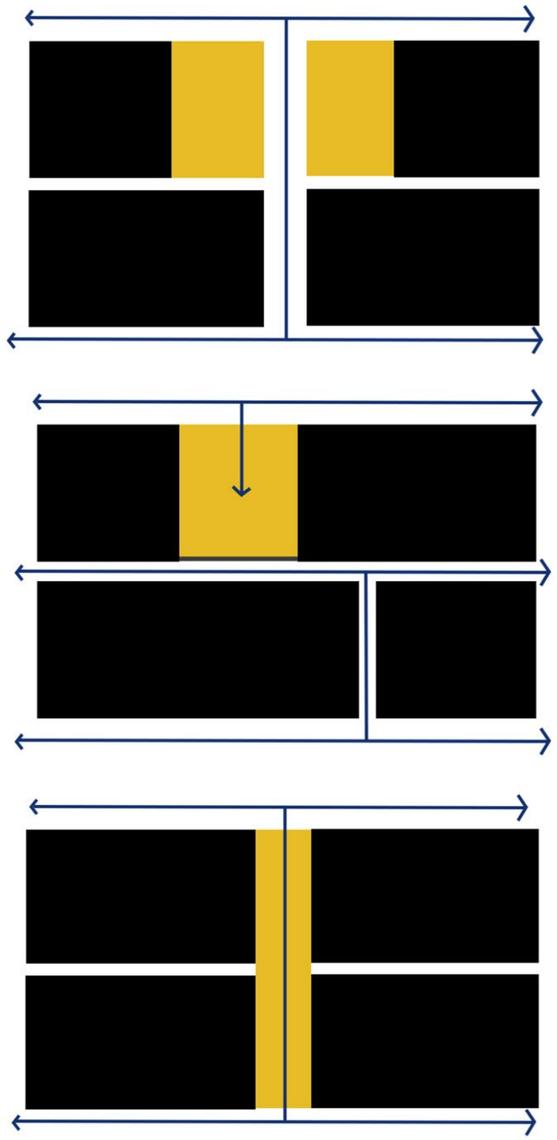


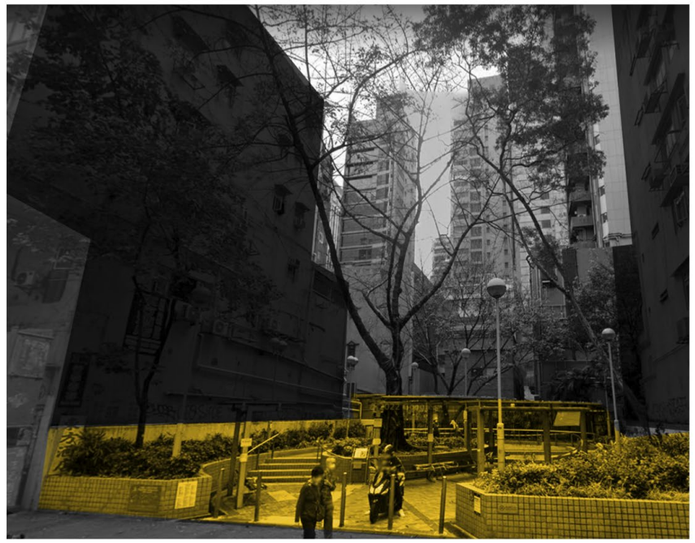




Pocket Park

The third type of space is pocket parks, which are small in scale and highly accessible. A total of 15 pocket parks are located within the site, all of which are distributed in the old residential neighbourhoods dominated by Tenement Houses in the southwest of the site. These pocket parks can be divided into three categories: the first type is corner parks, located at the intersections of streets, characterized by high accessibility and a diverse user population. The second type is situated between gaps in buildings. Although both sides of this type of space are adjacent to streets, they usually only open to one side while the other side is blocked by greenery or walls and cannot be accessed. The spatial form of this type of space is relatively fixed, with three sides enclosed and the boundaries surrounded by greenery. Trees provide shelter for users, and fitness equipment is placed within the space, which is primarily used by elderly residents in the area. The third type is passage-oriented, converting short-side passages of blocks into pocket parks. This type of space has high accessibility but is long and narrow, not suitable for recreational activities, and is mainly used for crossing or taking a short break.



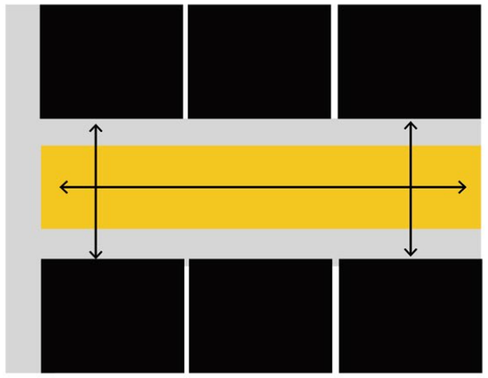


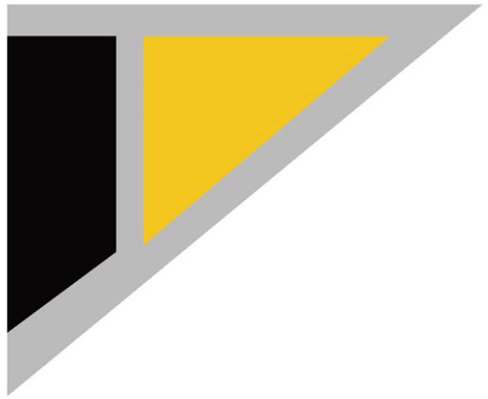
Roadside space

The fourth type of space is roadside space, which are independent spaces separated by roads. Some are separated by three roads into triangular plots, typically used as intermediate transition zones for people crossing and for taking short breaks; limited by the scale and sharp angle of the shape, these spaces have few other uses. Another type is rectangular spaces distributed along the middle of streets. Generally, this type is larger in scale and can support some activities, but its current use is mainly occupied by urban infrastructure such as garbage disposal stations and motorcycle parking lots, dividing the space into fragmented pieces.

Conclusion

From the perspective of the current public open spaces in Mong Kok, there is a severe shortage of space, with some areas lacking any open spaces at all. In terms of spatial form, there is a lack of connection between spaces, and some spaces are not effectively utilized, being separated into scattered places within blocks, merely filling gaps in the urban fabric like enclaves.



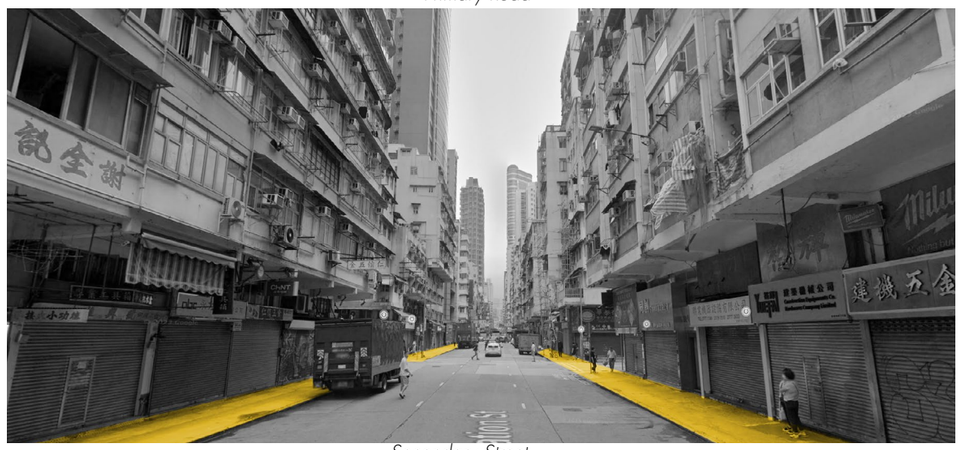


Walking space

Mong Kok has a dense street network, with walking being one of the primary modes of transportation in the area. Streets also serve as essential external public spaces in Mong Kok. From a pedestrian perspective, the streets of the area can be divided into three forms: main roads, secondary roads, and pathways between buildings.

The main roads are centered around Mong Kok Station, with two perpendicular arteries forming the primary structure of the urban space of Mong Kok. Large shopping centers and office buildings are mostly distributed along the north-south axis, making the area extremely busy. These streets have a strong barrier effect on pedestrian spaces, with wide six-lane roads separating areas on both sides, only allowing pedestrians to cross at specific locations. Furthermore, despite the large volume of pedestrians, the pedestrian areas are relatively narrow, and with street interfaces mostly consisting of entrances to shopping centers or office buildings, crowds tend to gather, resulting in slowed walking speeds during peak periods. The ground floors of buildings are set back, with billboards forming a canopy over the sidewalks. Overall, main roads are spaces more suited for vehicle use, prioritizing vehicular traffic efficiency to meet the demands of these bustling thoroughfares, while the pedestrian experience is relatively poor.

Primary Road



Secondary Street

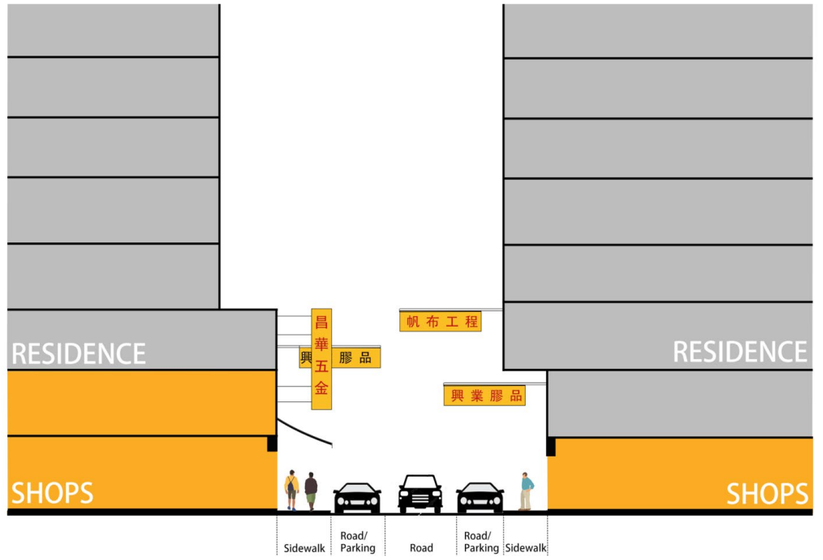
Narrow Alley

The second type of streets are secondary streets, which are typically one-way, three-lane roads with a central lane for traffic and two side lanes for parking. These streets are characterized by a dense array of shops and restaurants, offering convenience for daily life. The D/H ratio of these streets is more conducive to walking, and more advertising billboards are distributed overhead. Although these streets are primarily used for walking by the local population, the pedestrian areas remain very narrow and are solely for passage, with no space available for greening or seating infrastructure. If you want to take a break and sit down, the quickest way is to find a small shop to consume and sit down, rather than looking for public seating.

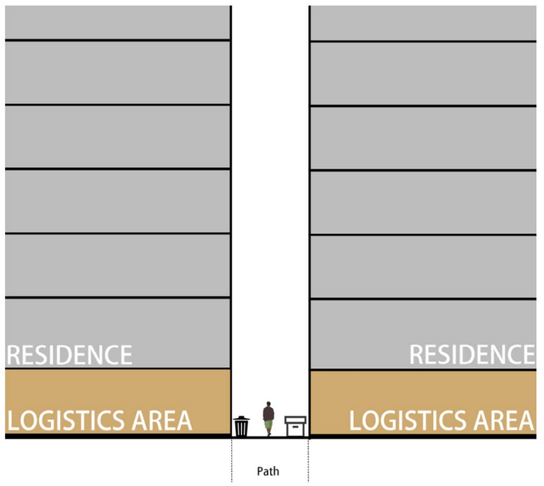
The third type of space is the narrow alleys between buildings. These spaces resemble leftover areas, occupied by water pipes, garbage, and miscellaneous items. Apart from local residents and merchants of the street, most people avoid using these paths due to the cramped space and feelings of insecurity.

These three types constitute the main pedestrian spaces in Mong Kok. Although walking is a crucial mode of transportation connecting various areas of Mong Kok, the walking experience is generally poor. Streets serve merely as places to move from one point to another, rather than venues for urban activities.

Primary Road



Secondary Street



Narrow Alley

3.3 Problem Statement
The lack of a Sufficient and Continuous public space system

In summary, the public spaces in Mong Kok face the following issues: a shortage of public spaces, fragmented spaces, and poor walking experiences. These problems result in a lack of a continuous and adequate public space system in Mong Kok, with few opportunities for urban public activities to take place. Meanwhile, lacking public participation makes the situation more difficult to fix.

Differences between the publicization of private life and public life

The public relies heavily on urban spaces outside their living spaces to meet their private needs. There are some differences between the transfer of private space functions and public participation in public life, both of which involve the use of public spaces:

Purpose and reasons: The transfer of private space functions is driven by limited dwelling space, which cannot accommodate all functional needs, thus requiring some functions to be transferred to public spaces. This transfer is driven by physical space constraints and life necessities. Public participation in public life emphasizes active involvement, including cultural, political, and social activities, with the goal of enhancing community cohesion, improving communication and connections among citizens, and expressing individual or collective views and demands.

Nature of activities: The transfer of private space functions mainly involves meeting basic daily needs such as laundry, dining, and leisure. These activities typically serve individual or family needs. Public participation in public life covers a broader range, including political participation, social activities, and cultural exchange, often with stronger social and interactive components.

Social impact: The transfer of private space functions has a relatively small social impact, mainly reflected in improvements in individual living standards and the sharing of public resources. Public participation in public life has a more significant impact on society, possibly involving the expression of public opinion, social change, and cultural heritage, all of which are crucial to the development and progress of society as a whole.

Shrinkage of public life

Although there are differences between the transfer of private space functions and public life, they are, to some extent, complementary. The transfer of private space functions may encourage people to participate more in public space activities, increasing opportunities for interaction and creating conditions for participation in public life. Participation in public life also helps improve the urban environment and enhance residents' quality of life, making the transfer of private space functions more rational and efficient. However, at present, public life has become a missing part, and there is a lack of mechanisms for residents to participate in decision-making within the limited urban public spaces. This leads to a loss of city rights, as people cannot adjust their living environment according to their needs and instead passively accept their circumstances. Over time, citizens are more inclined to immerse themselves in the predictable and controllable private life and are excluded from urban public spaces, resulting in the alienation of urban public spaces, and the tendency of social atomization is further deepened. Therefore, from this perspective, the existing fragmentized public space system is not able to become the carrier of rich and diverse public life, meanwhile the decision mechanism of urban space also excludes the public, making it impossible for them to transform the space as they wish. These two reasons together lead to the shrinkage of urban public life.

The Alienation of urban life

3.4 Research Question

How to build a public space system with good quality, walkability and public participation to revitalize urban life?

This question was divided into three parts to be answered:

Space Seeking

Network Construction

Public Participation

04

Space Seeking

A toolbox for public space in Mong Kok

Seeking Space

As previously mentioned, the private lives of Hong Kong residents have partially shifted into urban spaces, such as restaurants, cafes, karaoke bars, and laundromats, which fall under the category of semi-public spaces. These spaces grant partial usage rights for a specific period through purchase. The transformation from private spaces to semi-public spaces actually relies on an urban public space network, with public spaces intervening in this process from two aspects. Firstly, as transitional spaces, they are necessary for the conversion process, such as streets, stations, and pedestrian footbridge in Hong Kong. These spaces are associated with transportation nodes, attracting a large volume of pedestrian traffic, leading to diverse demands and activities. Secondly, they enhance the appeal of semi-public spaces, such as shopping centers creating comfortable spaces and spectacles to attract more public, or street-facing shops organizing attractive streetscapes and vibrant outdoor seating areas.

In Mong Kok, these spaces are mainly pedestrian footbridges, open markets, and architectural spaces. The current state of these spaces is either restricted to the people entering and using the space or the space planning and public facilities only allow for a single activity, thereby weakening the public nature of the space. Although not considered formal urban public spaces, these areas with public characteristics support urban life to a large extent and have the potential to be regarded as part of the urban public space system.

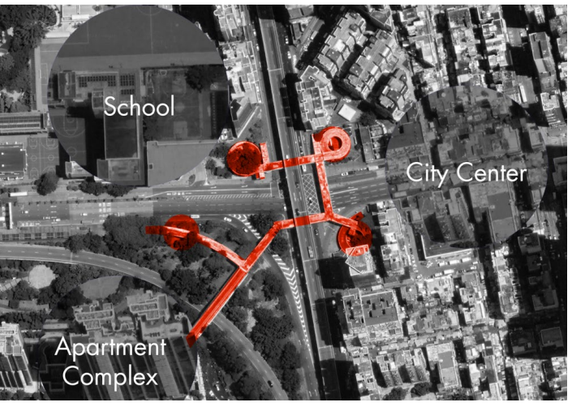
Mong Kok's Open Street Market, Image source: Mike Pickles
Mong Kok pedastrian footbridge, Image source: Wu Xin Jian Ying
Shopping Mall, Image source:www.century-cn.com

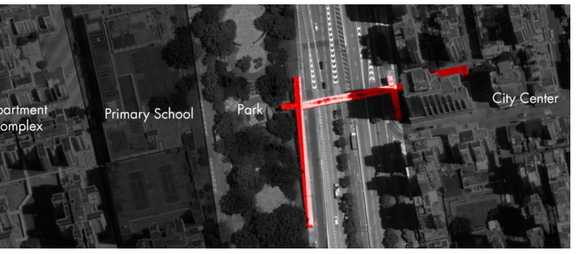
Mong Kok open street market
Source from: Xiaohongshu

Open Street Market

Firstly, the street markets are an essential part of daily life in Mong Kok, occupying street spaces and experiencing functional transformations over time. These spaces possess remarkable vitality as part of the road network and are easily accessible, attracting a large number of people. Street markets are where small vendors spontaneously gather, forming a space entirely established by them. This group lacks the capital to invest in spaces beyond their stalls and does not rely on a pleasant environment to attract people. Instead, they build a unique competitive advantage through establishing trust-based procurement and sales networks, offering fresh and affordable shopping options, and forming diverse markets with fellow vendors (Cabannes, Y., Douglass, M. & Padawangi, R., 2018). Unlike supermarkets with clear pricing and self-service shopping, street markets encourage communication between vendors and customers. Through inquiry and conversation, consumers can obtain more information about products, negotiate discounts, learn about product usage tips, and exchange interesting anecdotes. In turn, vendors can gain customer trust, secure stable customer flow, and adjust sales strategies based on market demand through conversation. This series of interactions can be referred to as everyday politics, with street markets serving as crucial settings for citizens to participate in urban life. In the current situation, apart from shopping, linear street market spaces have almost no other activities occurring. The space is always in a state of flux, with customers following a fixed route to navigate through the market. Street market spaces can be well-utilized, leveraging the high pedestrian traffic generated by the market, integrating other urban leisure facilities, and transforming them into spaces that encourage diverse activities.

Open Street Market in Mong Kok





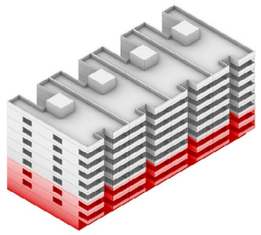
Footbridge

The second type is the footbridge, an essential component of walking in Mong Kok, which is also beginning to transform into public spaces. Footbridges are used to connect different urban spaces and are necessary infrastructure. Some of them are purely used as transportation spaces for crossing streets, while others take on a part of leisure and entertainment functions, with the potential to become part of the urban public space system. Currently, there is a footbridge in the central area of Mong Kok, initially designed to connect Mong Kok Station and Mong Kok East Station, improving the interchange efficiency between different subway lines. To accommodate the massive pedestrian flow, the footbridge is 11 meters wide and features multiple entrances and exits connecting to the ground level. Thanks to its excellent accessibility, spaciousness, and shelter from sun and rain, this footbridge is often used for leisure activities such as resting, small gatherings, and sightseeing (Villani, C. & Talamini, G., 2019). Therefore, in the design, the footbridge space has the potential to be transformed into a public space with rich activities. One part of the footbridge will connect important locations in the area, providing a quick shortcut to the ground level walk, while another part of the footbridge space can be equipped with different facilities, such as seating, viewpoints, greenery, etc. The part that connects to the building can also become an extension of the building's function, for a richer urban space experience.

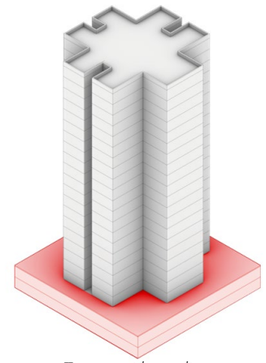
Footbridge in Mong Kok

Architectural Space

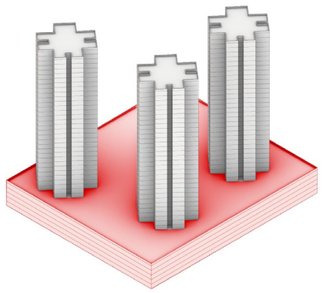
The third type is architectural spaces, which include interior spaces and rooftop areas. Due to the limited land in Hong Kong, vertical and multilevel buildings provide additional spaces for urban activities. The Mong Kok area has a large number of traditional architectural forms, such as Tong Laus and their variations(Shelton, B., Karakiewicz, J. & Kvan, T., 2013.). These buildings have open commercial spaces on the ground floor and residential spaces on the upper floors, which were traditionally used as family workshops. As development progressed, tong laus maintained the ground floor commercial space and upper-level residential space, but the number of floors increased to 6 to 10. In busy streets, the upper floors of tong laus have also been converted to offices or commercial spaces. The podium-tower building typology prevalent in Hong Kong similarly follows a mixed-use pattern, with the podiums typically housing shops and restaurants, and larger ones becoming shopping centers, often featuring organized circulation spaces and atriums with generous ceiling heights. Tower spaces are used for residential or office purposes, with separate access points. Two other building types, mansions and early public housing, also exhibit publicness in their interiors.



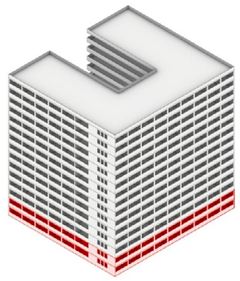
Tong Laus



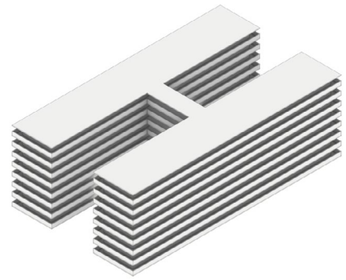
Tower with podium



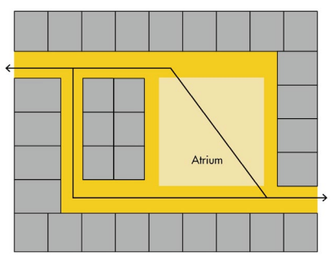
Towers with podium



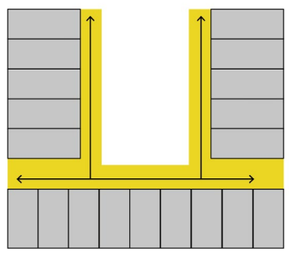
Mansion



Early public housing



Podium



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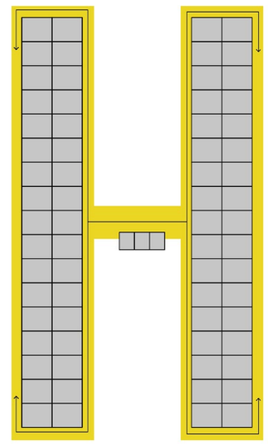
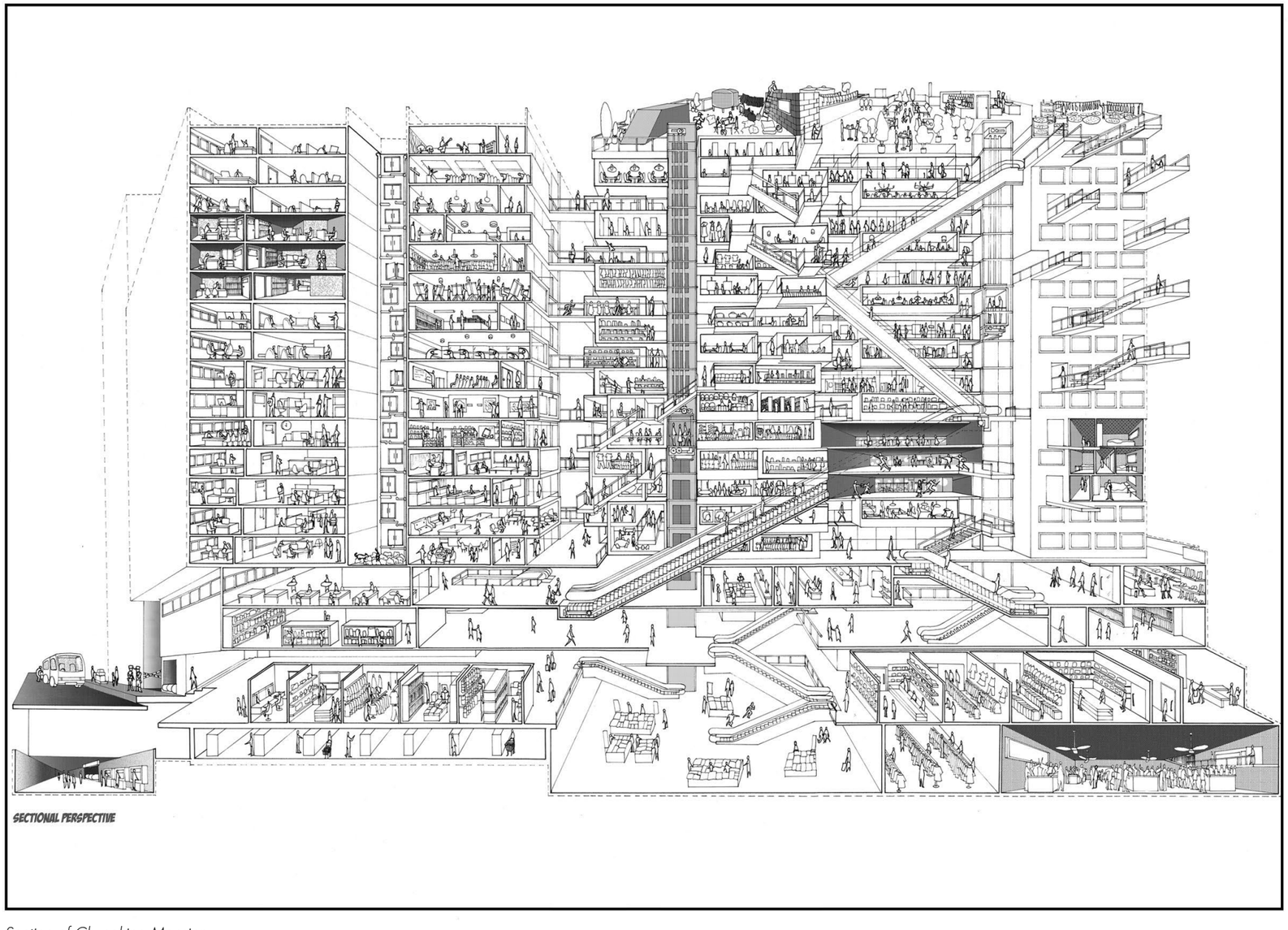


Early public housing

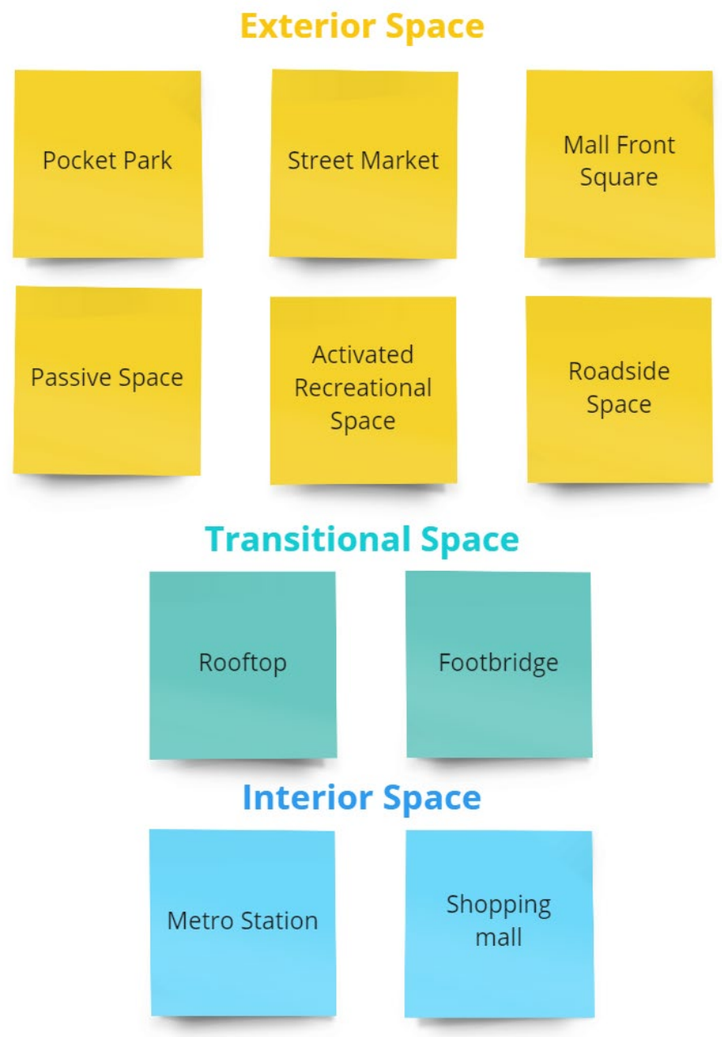


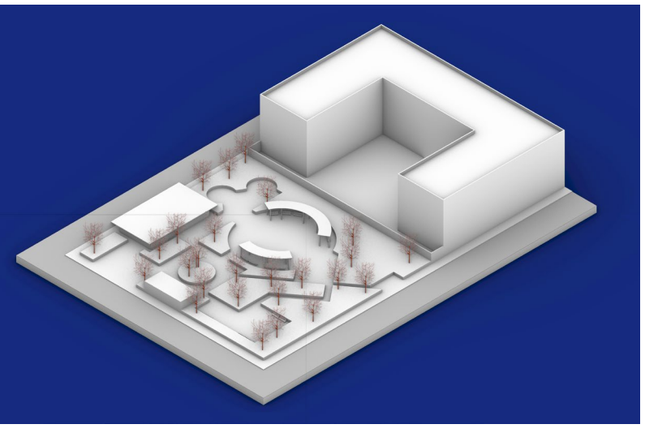
Section of Chungking Mansion
Source from:Hong Kong University (2012)

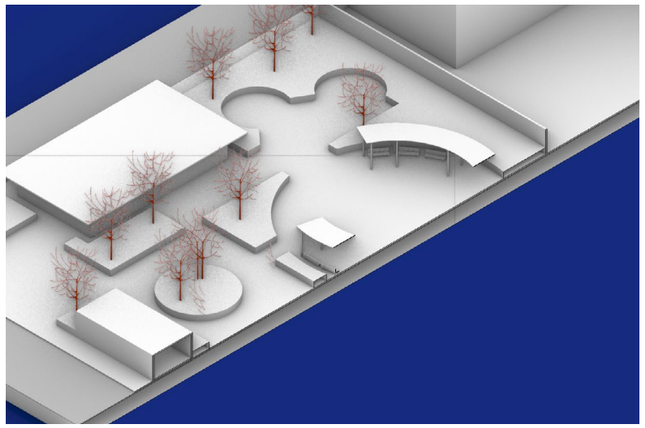
The Chungking Mansions in Hong Kong is a typical example of mixed-use development, where convenient transportation and low rents make it a preferred destination for international immigrants to start businesses. Hundreds of people of different nationalities gather here, making it a microcosm of globalization. Shops, restaurants, barber shops, accounting firms, labor agencies, stationery, daily necessities, laundry services, pharmaceuticals, and law offices all coexist within the building, forming a self-sufficient ecosystem where one can spend weeks or even months without leaving (Mathews, G., 2011). Due to the diverse environment and high density of Chungking Mansions, its interior public spaces constantly change with the evolution of shops and cultural communities. However, the building is also effectively disconnected from the surrounding urban spaces, becoming an enclave of multiculturalism that thrives under a bottom-up logic. While the interior environment is rich and varied, many residents perceive it as a symbol of chaos and danger. Chungking Mansions is just one prominent example among several mansions in Hong Kong, and the disconnection between the interior and exterior urban spaces can also be observed in the mansions of Mong Kok. By connecting the public spaces within the building to the urban public space system and maintaining the informal operation mode of the interior spaces through a holistic grasp of the main structure and planning, the scope of urban public spaces can be expanded, and the disconnection between the interior and exterior scenarios can be bridged, serving as a link for semi-public spaces.

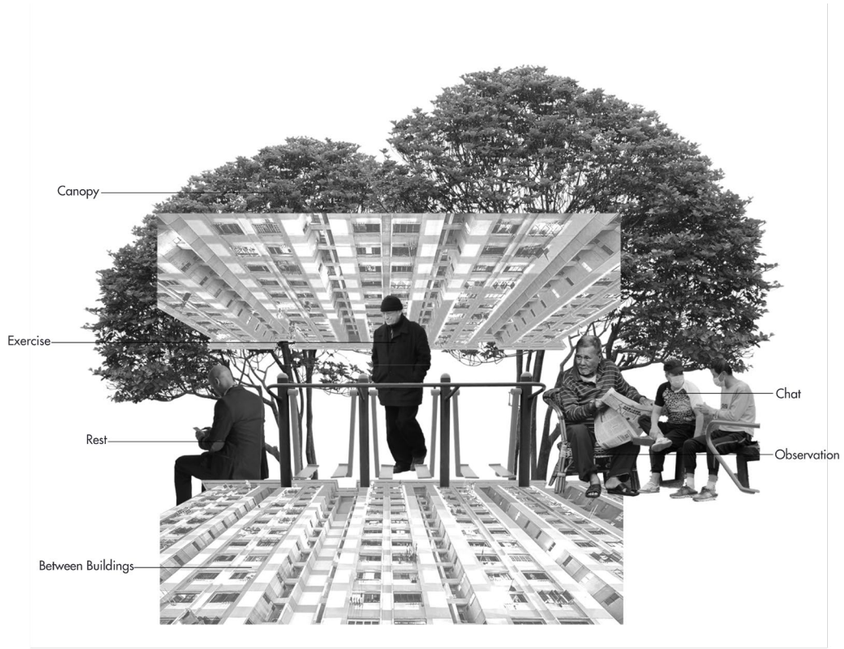
Strategies for 10 different spaces

Combining potential spaces with the analysis of existing open public spaces in Mong Kok, ten types of spaces can be identified as components of a three-dimensional public space system in the area, including six exterior spaces (Passive space/Activated recreational space/Pocket Park/Roadside Space/Street Market/Mall Front Square), two transitional spaces (Rooftop/Footbridge), and two interior spaces(Metro station/Shopping mall). Targeted optional strategies have been developed for each type of space based on their characteristics and usage habits.



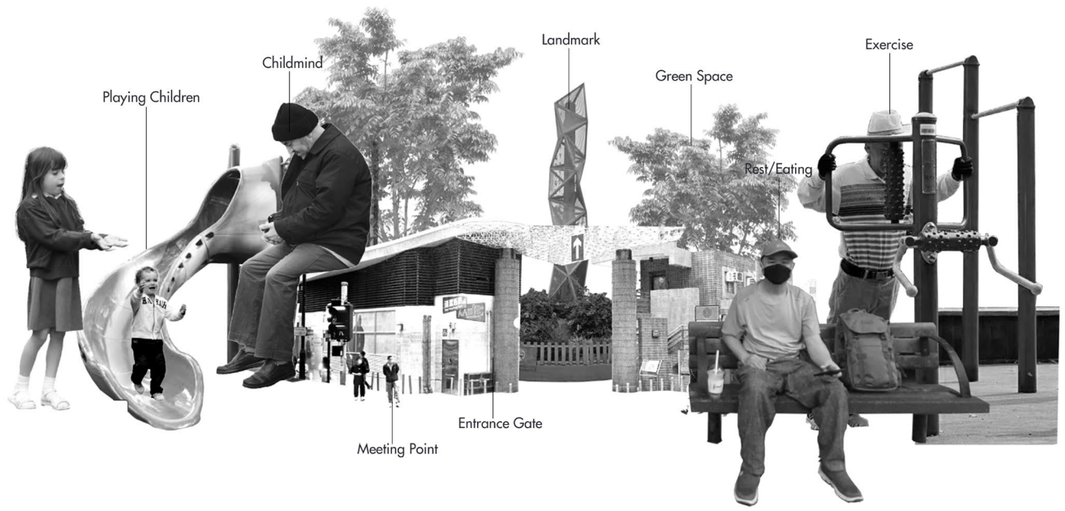


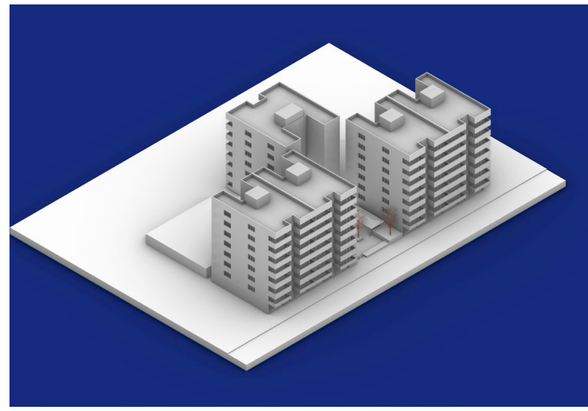




Passive Space:
This type of space is relatively larger in scale within the Mong Kok area and serves as one of the focal points for urban leisure, reflecting local culture and lifestyle.
Strategies include:

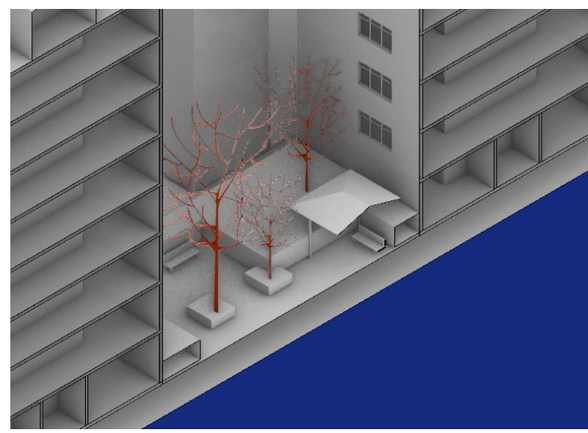
- Blurring spatial boundaries to increase accessibility and encourage mixed-use
- Introducing service-oriented businesses such as coffee shops, teahouses, retail outlets, and food trucks to provide supporting services while enhancing identity
- Being age-friendly, improving barrier-free accessibility, providing public restrooms, and children's play facilities
- Encouraging community, cultural groups, and individuals to organize public events
- Optimizing green spaces, introducing rain gardens, planting trees to create a canopy, or reducing vegetation to provide more activity spaces

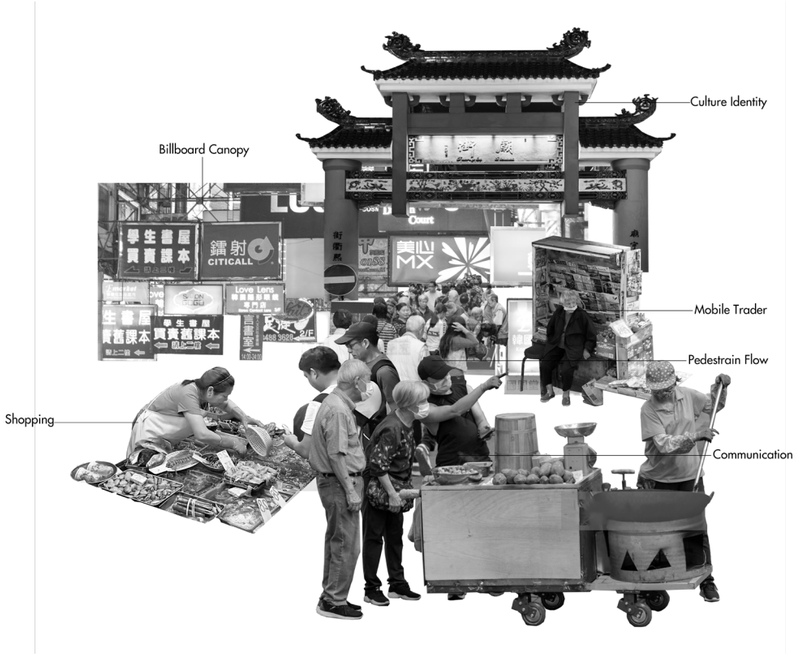


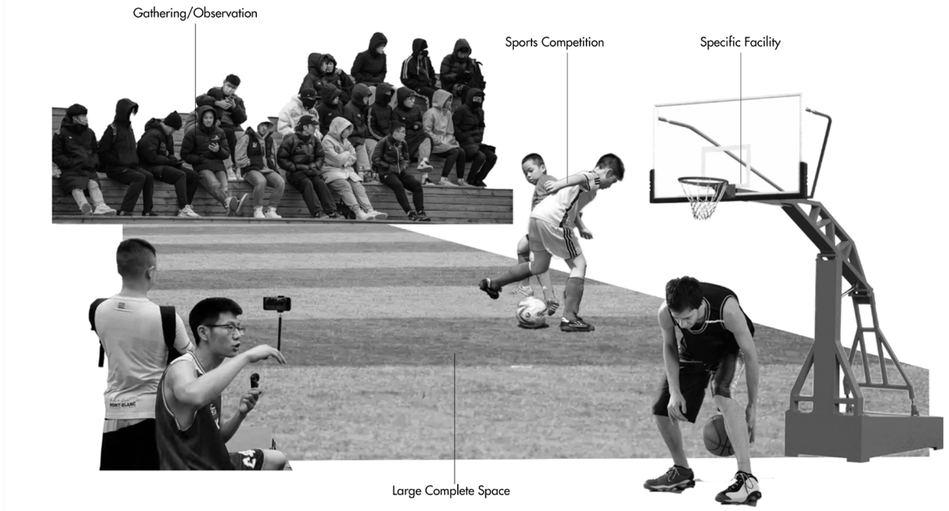


Pocket Parks:
Pocket parks are distributed among residential areas in Mong Kok, primarily used by community residents. They will be endowed with greater flexibility, allowing users to alter the space. Different user groups will endow the space with varying identities during the process. These spaces, like diverse bubbles, are scattered throughout the neighborhood, providing nearby and accessible public spaces.

Strategies:
- Increasing entrances and creating shortcuts
- Expanding the space, opening boundaries, and integrating with streets
- Implementing diverse spatial layouts based on usage habits
- Providing flexible facilities
- Creating multi-level spaces





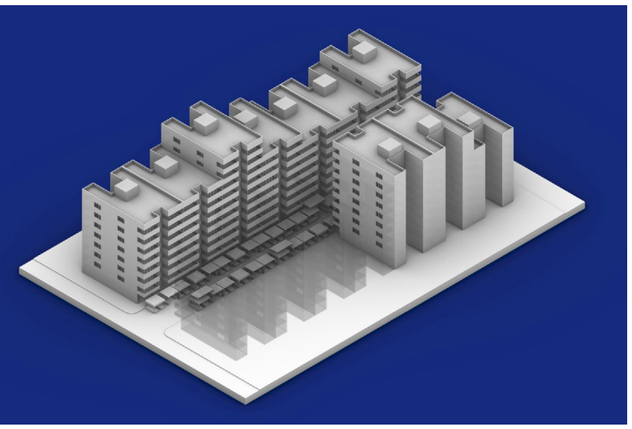


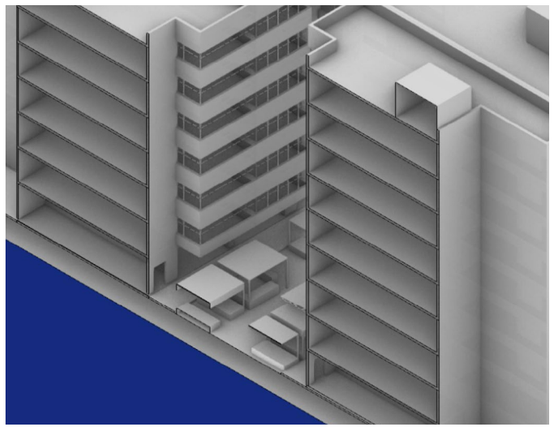
Open Street Market:

As a unique cultural symbol of Hong Kong, open street markets not only serve as daily life destinations but also as channels connecting different places. They are places where citizens establish trust, purchase goods, and interact with each other. Small public spaces will be inserted into the market, serving as transaction gaps for resting and promoting interaction, street performances, and other activities.

Strategies:

- Introducing various types of small public spaces
- Designing market layout to guide pedestrian flow
- Establishing pedestrian-only zones
- Flexibly using space
- Changing pavement design
- Enhancing connections between different street areas
- Transforming architectural spaces as part of the market

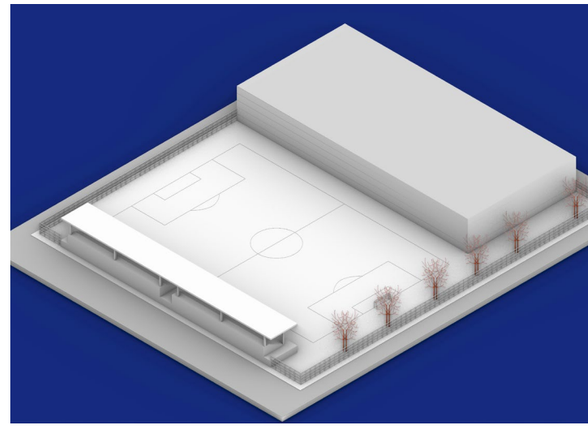


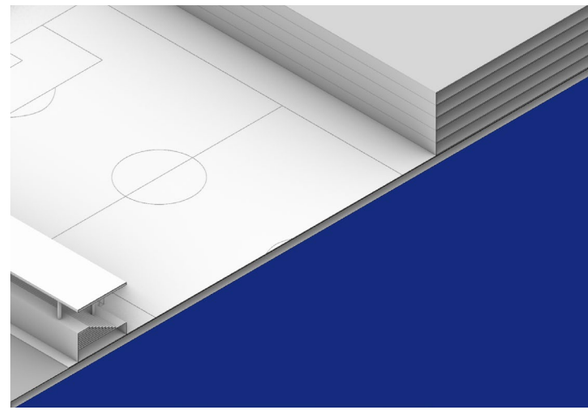


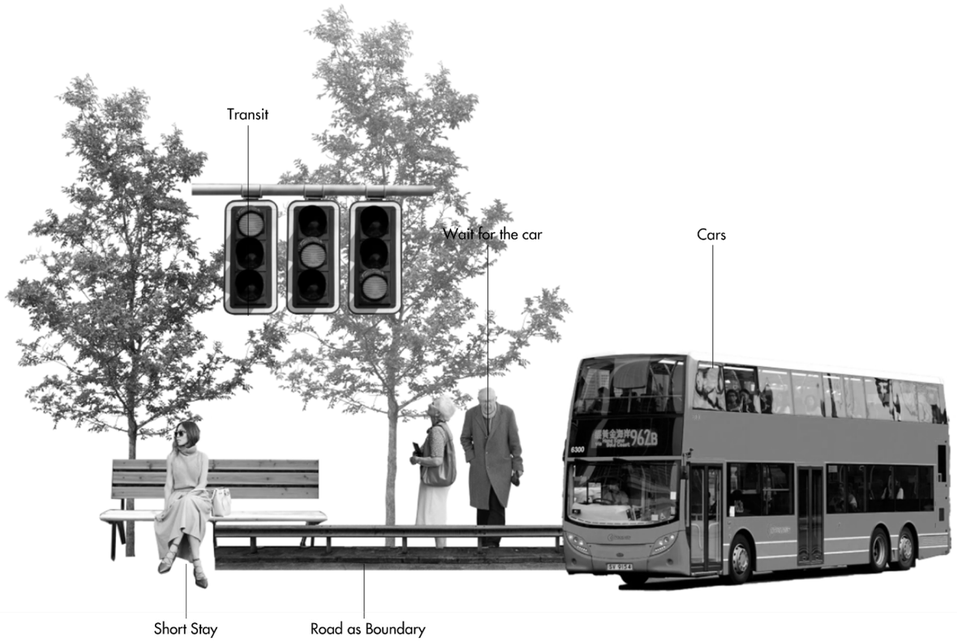
Activated Recreational Space:

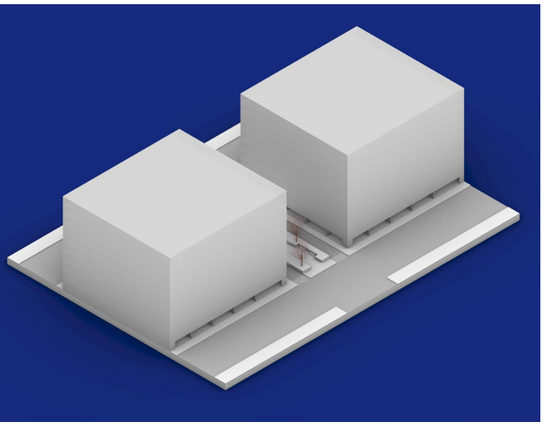
This space serves as a natural stage in the city, where sports activities are not only participated in by enthusiasts but also attract spectators. As one of the few larger public spaces in Mong Kok, its public nature and utilization can be further improved through the following strategies:

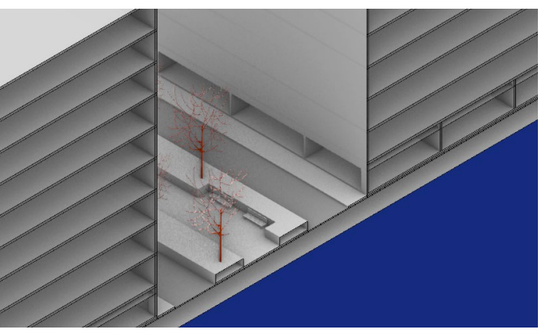
- Increasing entrances and softening hard boundaries
- Being age-friendly
- Transferring some sports activities indoors and converting some space for public park use
- Flexibly utilizing the space, transforming it into other uses during low-usage times, introducing service-oriented businesses for convenience, and managing the site
- Flexible facilities











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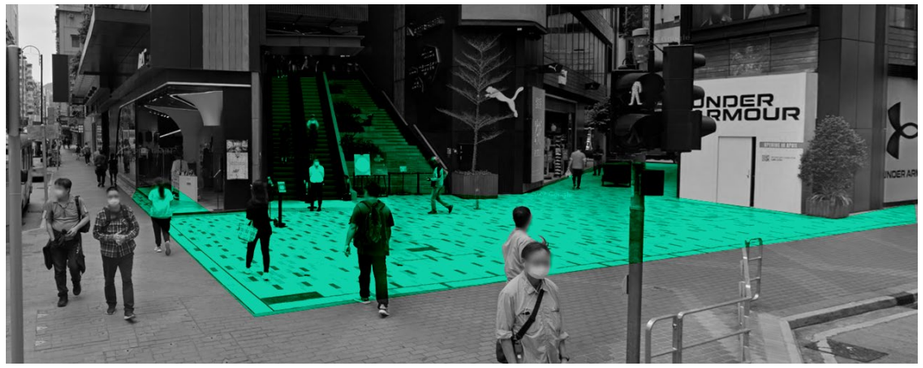
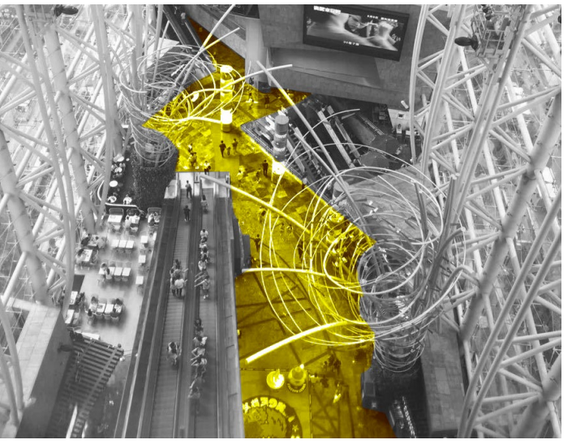


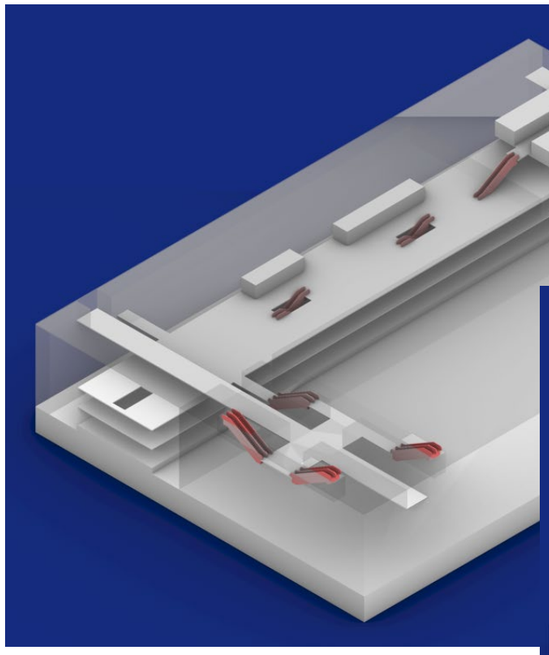
<u>Mall Front Square:</u>
This space serves as a transition point between indoor and outdoor spaces and is often used as a meeting point or promotional space for businesses. To enhance the mall's recognizability, large sculptures or installations are usually placed.

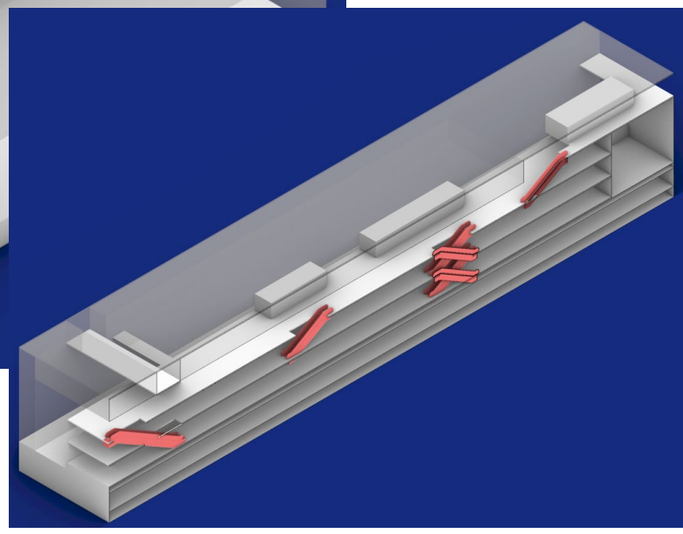
Strategies:
- Urban sculptures
- Green spaces
- Activity organization
- Transportation integration



Shopping Centers:

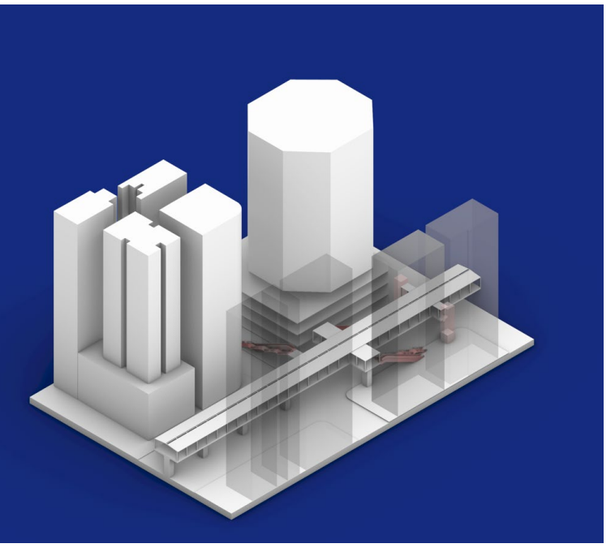
Shopping centers are one of the symbols of Mong Kok, with dazzling products and services scattered across various heights, resembling a folded urban playground. However, they are like enclaves in the city. Early shopping centers aimed to create an upscale and clean image, using rigid boundaries to separate themselves from the surrounding environment and turning the interior into a closed island. As commercial forms have gradually diversified, the importance of shopping centers in public life cannot be ignored. Many buildings have become real urban centers. However, such urban centers are spatially separated from the city itself, leading to a fragmented urban landscape. Therefore, the strategy is to integrate shopping centers into the urban system with an open attitude, while also serving as a transportation hub, connecting the spatial system from underground to the air.



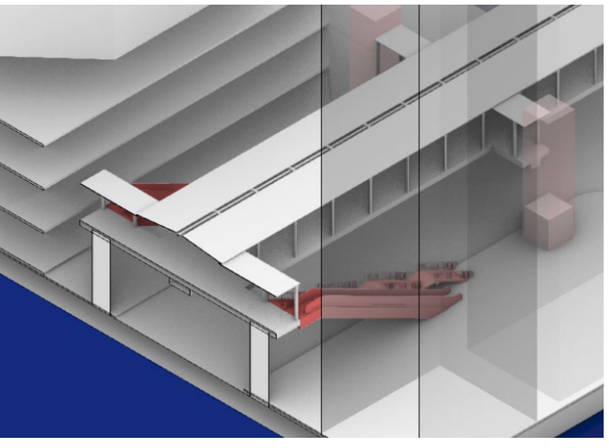


Subway Stations:

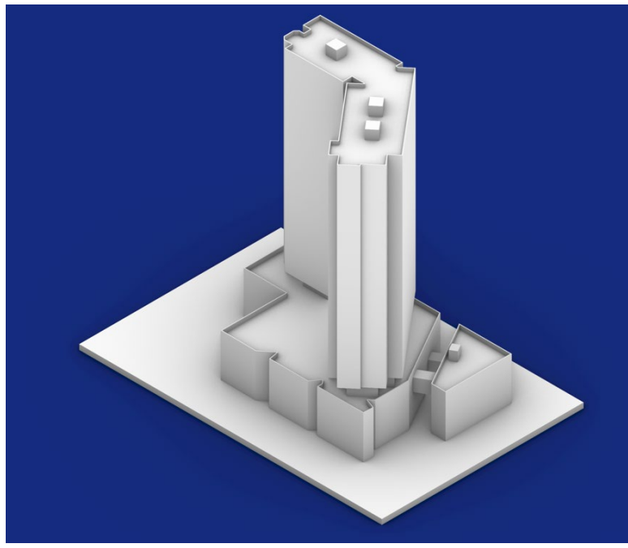
Subway stations are crucial cross-regional nodes, gathering large numbers of people and connecting other nodes in the area with the subway station as the starting point. It is one of the starting points of the network. Mong Kok's subway stations are closely linked to shopping centers, forming a robust network that conveniently transitions pedestrians to their destinations.

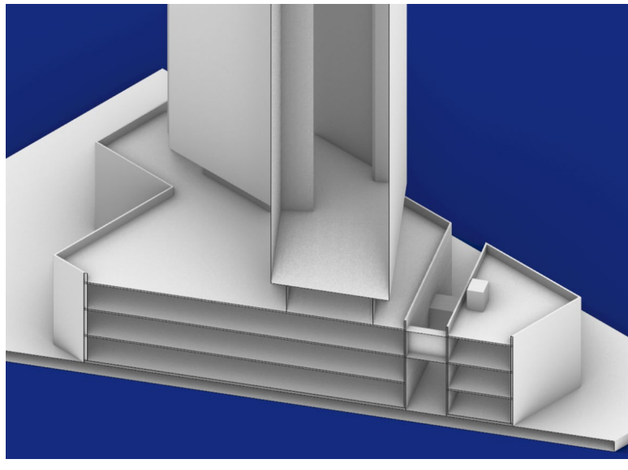


Footbridge:
Footbridge will become one of the arteries of this multi-layered public space system, leading pedestrians to various city areas. Simultaneously, footbridges enable the realization of a second ground level by connecting the existing buildings' higher public spaces, creating a spatial network above ground level. At this point, footbridges are no longer just independent, single-function tunnels but public living corridors that change with building functions.

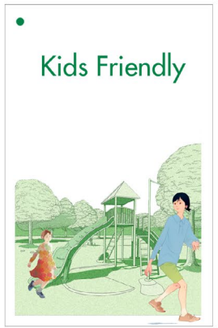


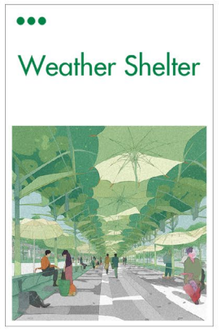
Rooftop Spaces:
As the public space system extends from the ground level to the upper layers, connected by overpasses and vertical movement structures, rooftop spaces will be integrated into this system, becoming more accessible than ever. They can be gardens, sports fields, community spaces, etc. As a second ground level, this change will also lead to a functional transformation of buildings at this vertical height.

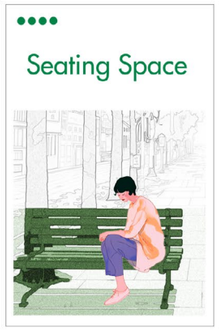


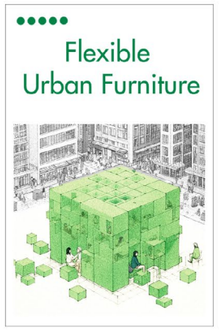


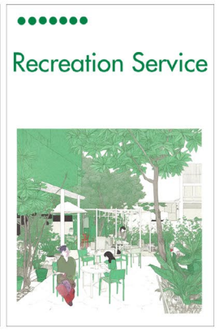
Improve Spacial Quality

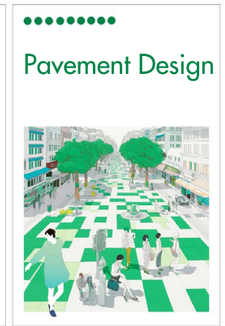


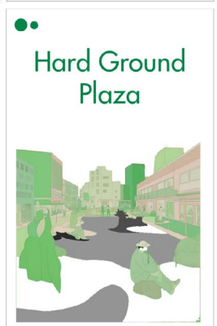




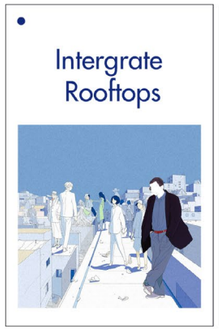


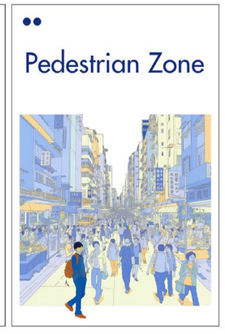


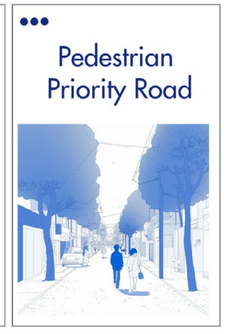


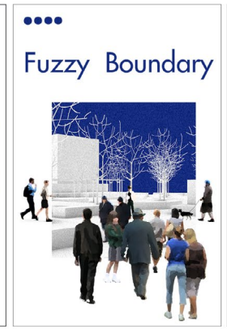


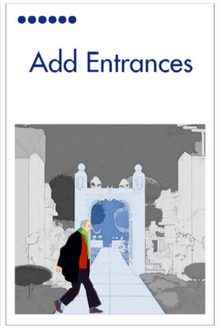
Increase Walkability

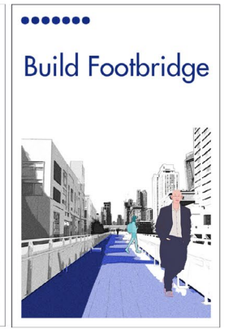


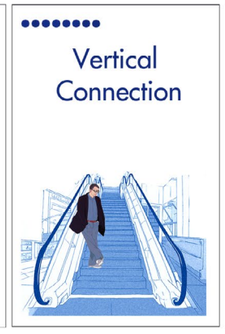




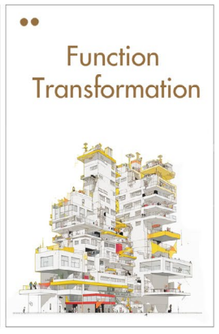


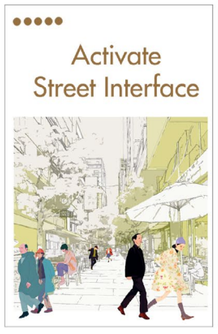


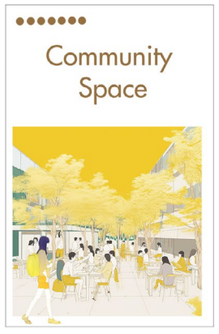




Activate Site







Toolbox

After the positioning of the ten spaces within the system is clarified, corresponding strategies are developed for selection. These strategies are transformed into game cards, and the future development of specific spaces will be negotiated by stakeholders in the game, eventually producing spaces that comprehensively consider the needs of all parties. These strategies are divided into three major categories: improving spatial quality, enhancing walkability, and activating sites.

Hong Kong foot bridge
Source from www.sohu.com,2021

05

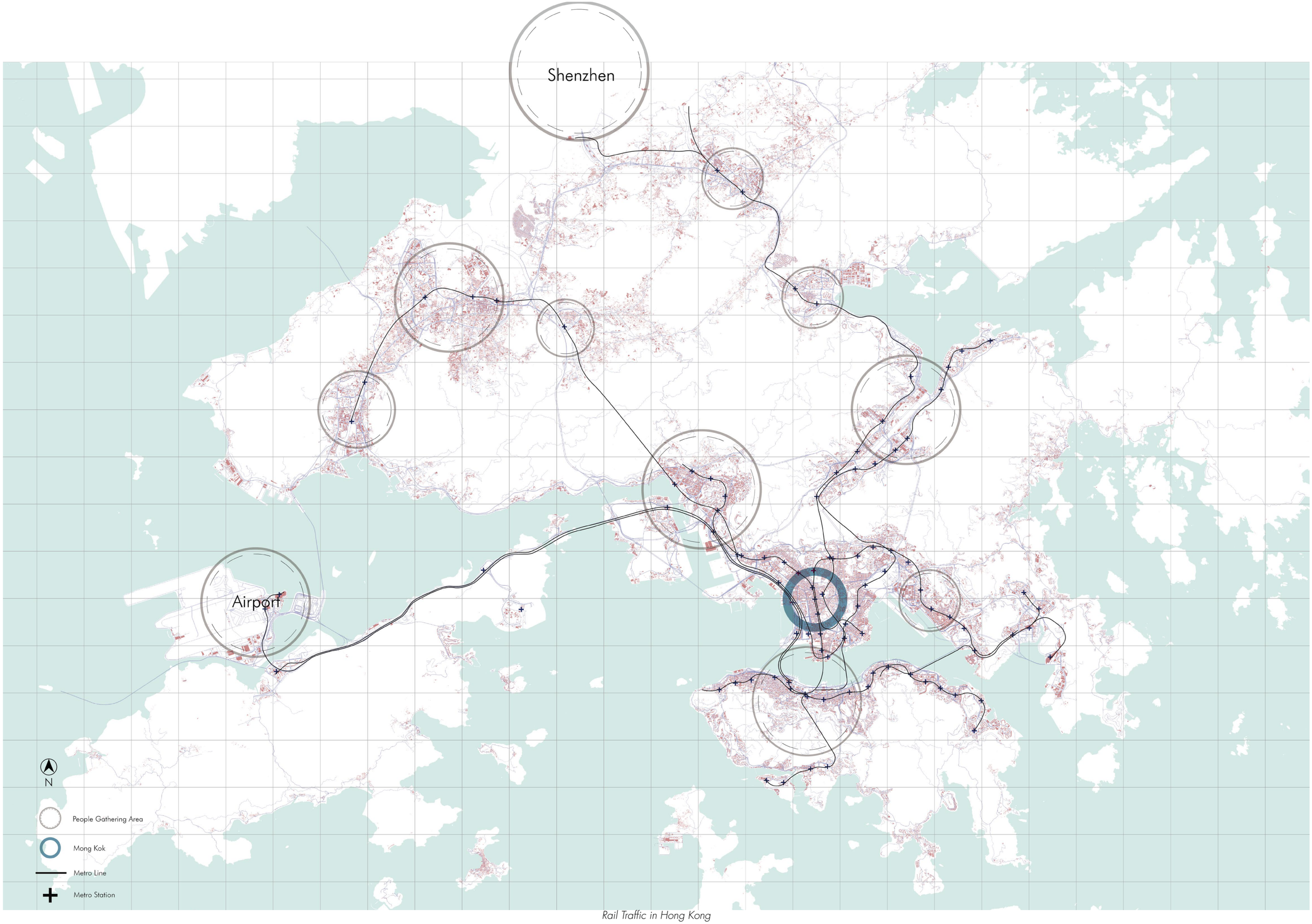
Network Construction

The structure of the three-dimensional public space system

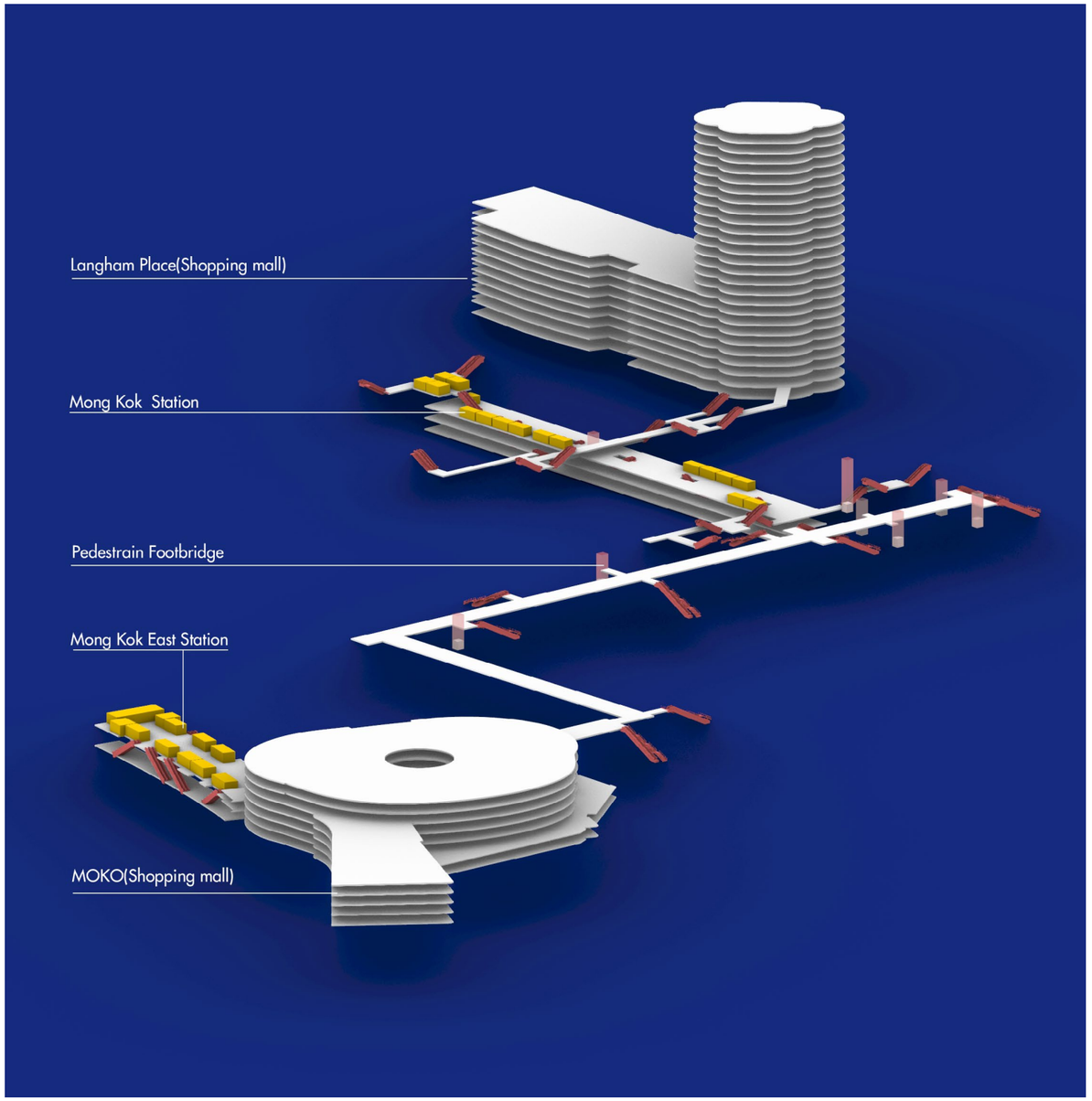
”

As a former British colony, Hong Kong's urban development blends theories and ideas from both East and West. One of the impressive points is its elaborate and complex elevated pedestrian bridge. I enjoyed walking between the pedestrian bridge and the MTR station connected to it. In this changing subtropical climate, such a pedestrian environment provides easy access to the city, rain or shine.

Frampton et al.,2012



Rail Traffic in Hong Kong

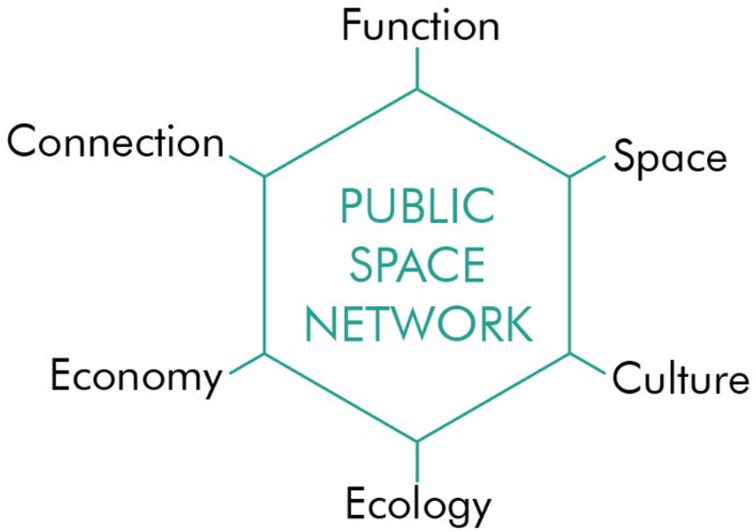


Footbridge connects two stations

Current connections

To date, many regions in Hong Kong have been actively constructing spatial connection systems based on subway stations(Solomon, J., Wong, C. & Frampton, A., 2012.), with notable success in Central and other areas. However, Mong Kok is a dense, old neighborhood where this network system has not yet been well-developed. The current, relatively clear structure is the system connected by Mong Kok's pedestrian footbridge. This footbridge is dedicated to connecting Mong Kok Station, Mong Kok East Station, and the combined shopping centers of these two stations, mainly for transfers between three important subway lines. These lines connect the airport, Shenzhen, and multiple new towns in Hong Kong to the Kowloon Peninsula and Hong Kong Island areas, with Mong Kok as the intersection of these routes.

Footbridge in Mong Kok
Source from Xue Xianyu (2018)



This section focuses on the structure of this three-dimensional public space system, considering cultural, economic, ecological, spatial, connectivity, and functional aspects to form a spatial structure that adapts to the future development of Mong Kok.

Culture Identities

Based on this current situation, the public space network of Mong Kok will be further developed. As one of the busiest centers in Hong Kong, history, shopping, and street culture are the distinct identities of Mong Kok. Street markets, tenement buildings, shopping malls, street performances, neon signs, fashionable men and women, traditional snacks... These cultural imprints are born in the unique spaces of Mong Kok. Therefore, when establishing the future space system, spaces that preserve and develop these cultural imprints should also be retained and developed. For example, Mk culture is a youth-led trend culture initiated by Mong Kok. Since the Mong Kok area is the main concentration of trendy goods in Hong Kong and has many entertainment venues (e.g., karaoke and theaters) and shopping malls targeting young people, it has gradually become a popular gathering and dating spot for young people pursuing trends. Generally speaking, males are colloquially referred to as "MK Boys," and females are referred to as "MK Girls." Mong Kok has become a tourist attraction not because of its landmark grand architecture or individual historical buildings but because of its dazzling consumption spectacle, the harmonious coexistence of trends and history, bustling urban vitality, and affordable delicious snacks. Mong Kok's identity is deeply rooted in its space and culture, actively present in people's minds as a whole image.

Historic Culture

The activation and renovation of historic buildings

Consumer Culture

The integration of public space

Street Culture

The establish and management of pedestrian zones

Spatial Strategies

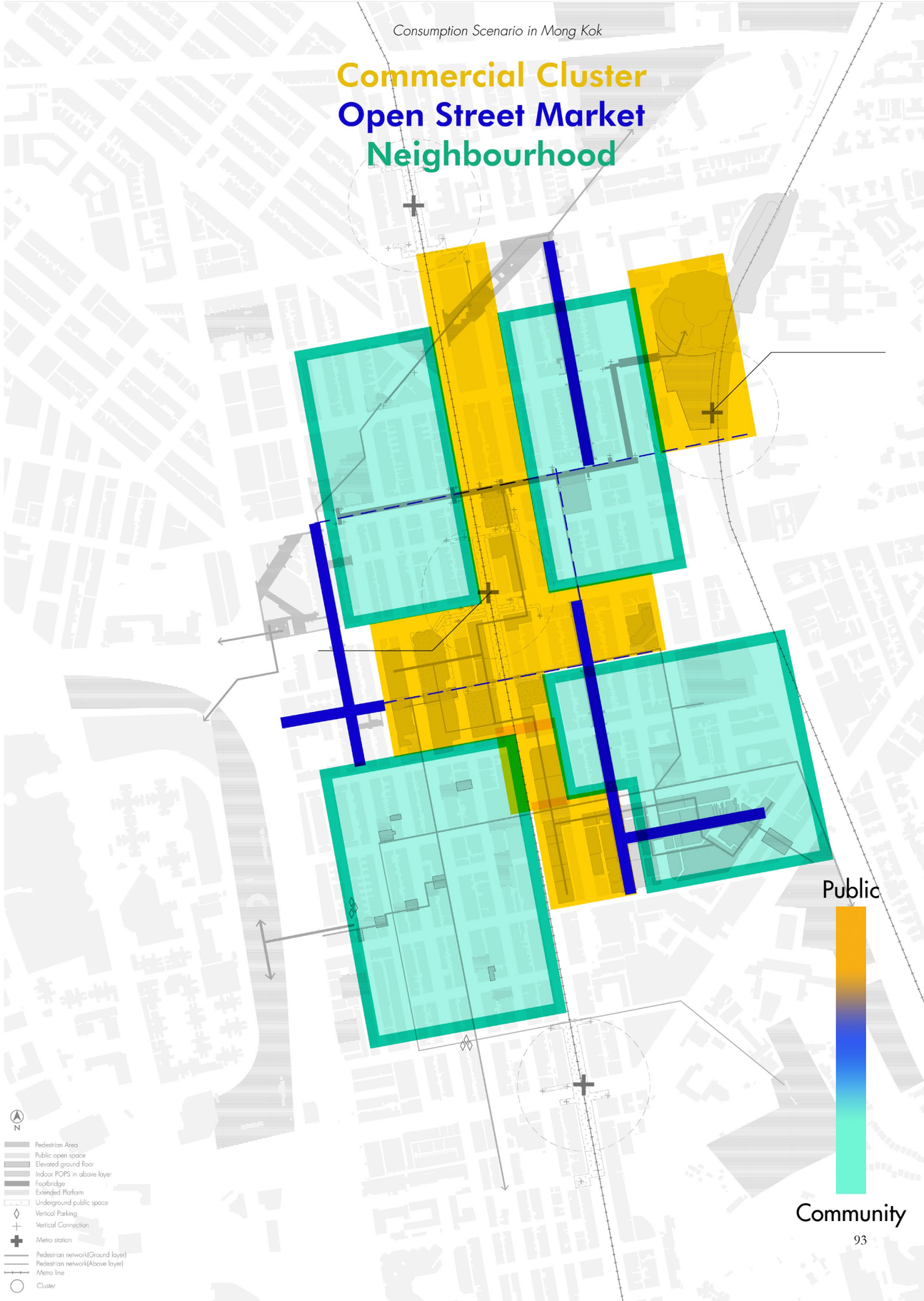
Commercial Cluster

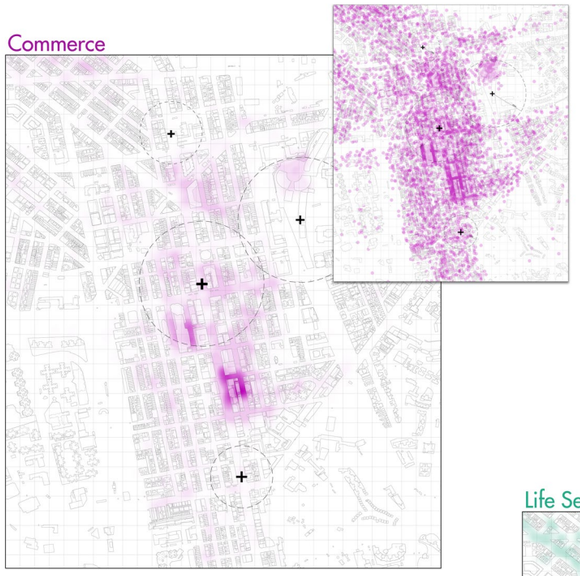
Open Street Market

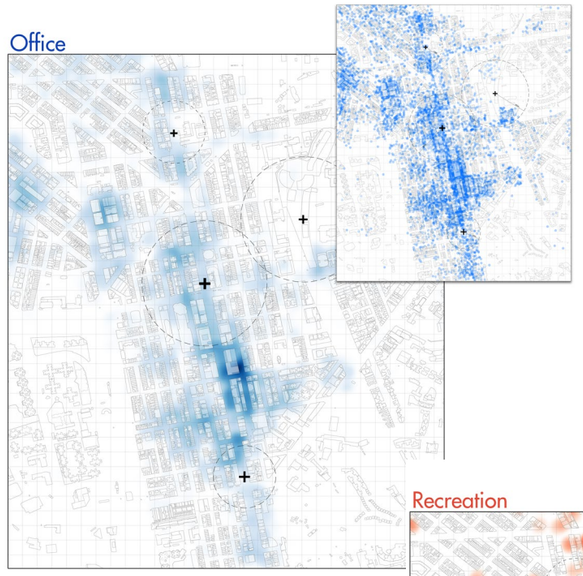
Neighbourhood

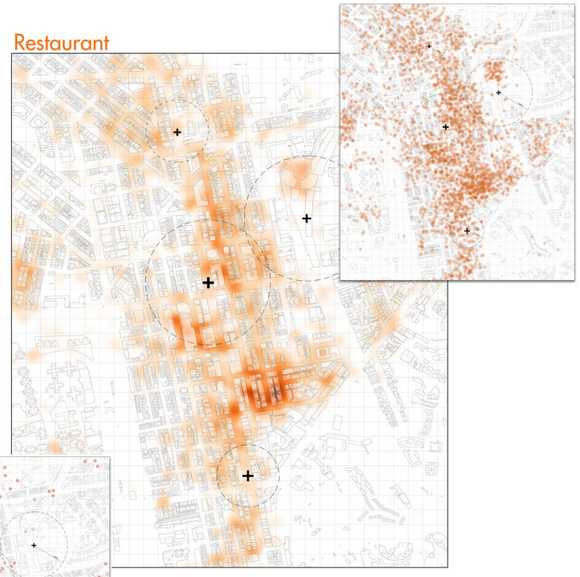
Consumption Scenario

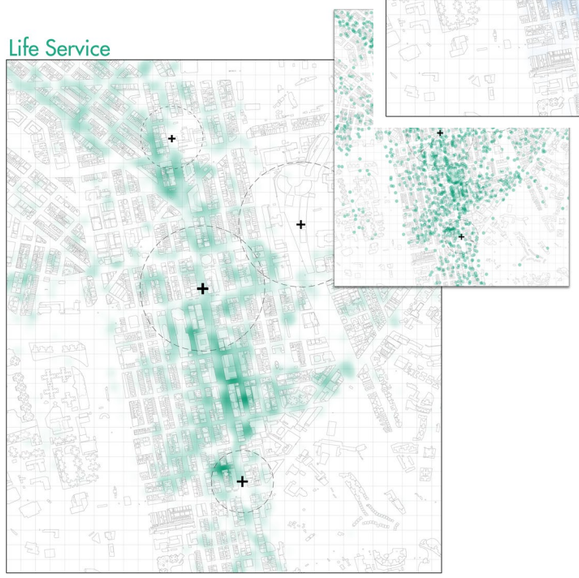
Retail and service industries are the pillar industries of Mong Kok, and its life and development can be said to revolve around them. Consumer behavior in Mong Kok can be divided into three scenarios: commercial blocks, open markets, and neighborhood communities. They each have their distribution patterns and pose different requirements for public spaces within the area.

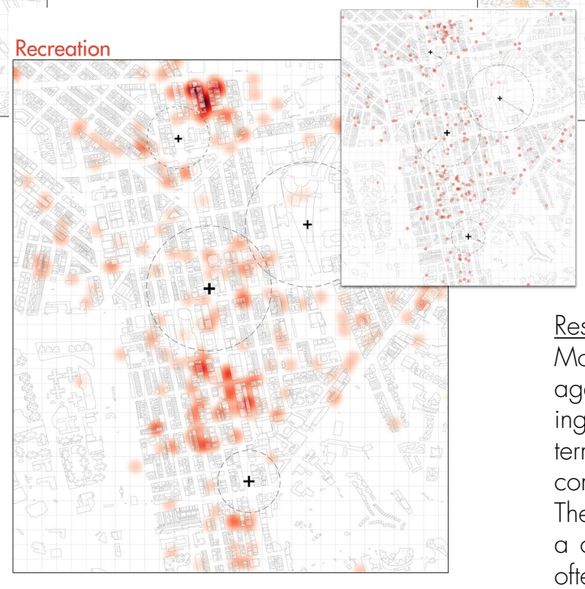












Function

The functional distribution of Mong Kok has been analyzed in five aspects: commerce, office, restaurant, living services, and recreation.

Commerce

Commerce is a typical characteristic of Mong Kok, spread in every part of this area and is the main way for the public to participate in the city life. Among them, a large number of trade and commerce are distributed around the 200 meters of the MTR station, especially Mong Kok station. And there is also a cluster in the south. These commerce exist in the form of shopping centers, relying on modern management tools and logistics networks, focusing on integrated experience and efficiency, attracting a large number of visitors and therefore other sectors layouts, and this high degree of mixing makes Hong Kong people spend their weekends around shopping centers. The other form of Mong Kok commerce is the linear open street markets, which are more for local residents and closer to residential areas, offering more flexible and affordable shopping options, with vendors building their personal business networks through trust. These markets also facilitate the creation of other public events, such as street performances, festivals, etc. Open markets and shopping centers form a complementary relationship.

Office

The distribution of offices is influenced by efficiency, rent and density, and they are laid out based on transportation facilities. A large number of offices are distributed along the north-south axis, which is the same as the distribution of main roads and subway lines. Currently, two east-west sub-axes have developed based on this main axis. Another agglomeration pattern is close to the highway, an area with easy access to transportation and relatively low rents, generally for companies that need warehouses with large amounts of transportation, such as construction materials.

Restaurant

Mong Kok has a well-developed food and beverage sector, serving different target groups, ranging from civilian fast food to high-end dining. In terms of plan layout, they follow the demand of commerce and office, forming multiple clusters. The vertical distribution, on the other hand, shows a clear differentiation, with high-end restaurants often occupying the upper floors of shopping centers.

Life Service

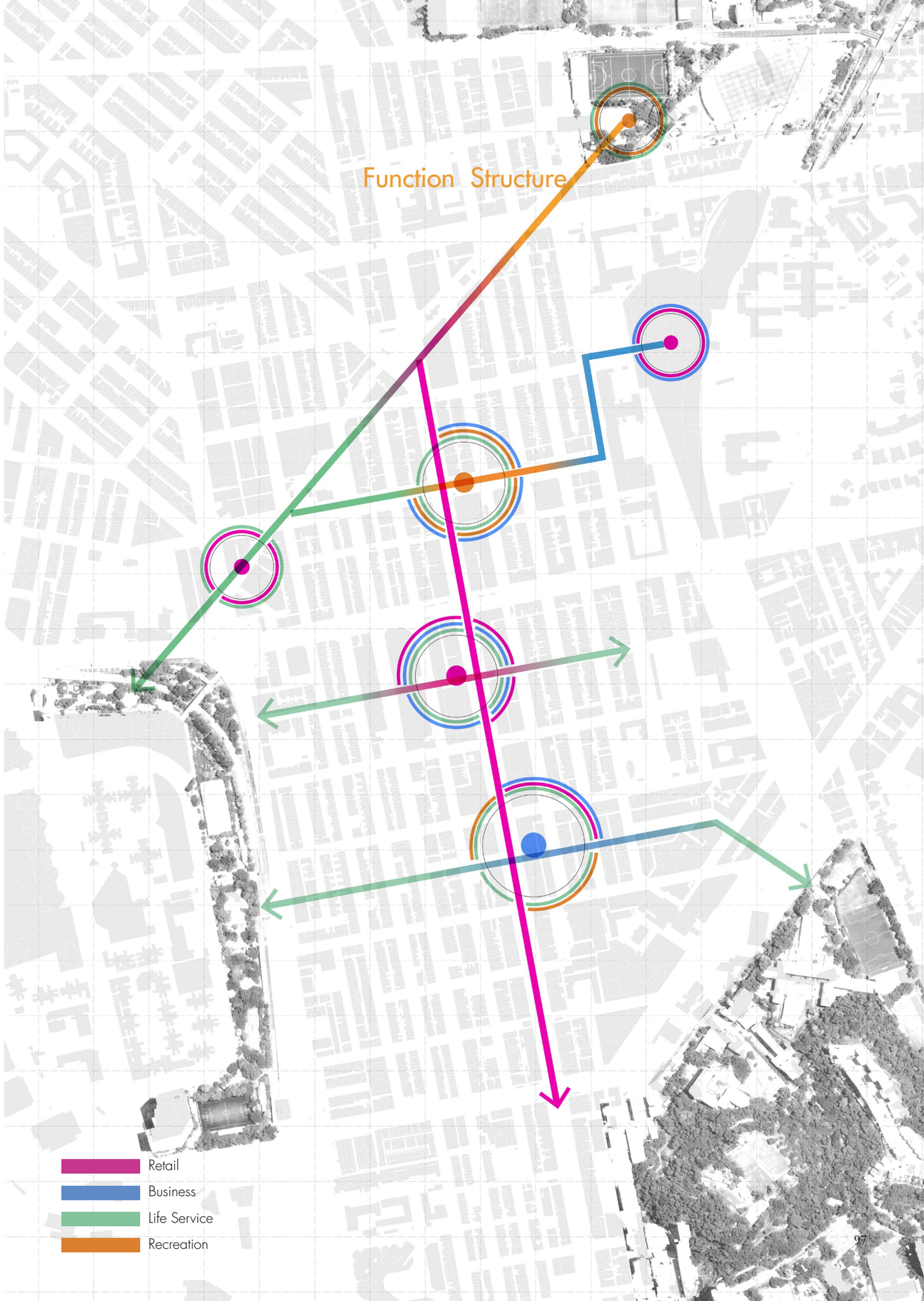
The distribution of life services is more complex, they partly follow the layout of other categories as a way to get more passenger flow, such as hairdressers, labor intermediaries, consulting services, etc., and are mostly distributed around transportation facilities and other clusters. The other part can be considered as infrastructure, aiming to cover as much area as possible, so it is

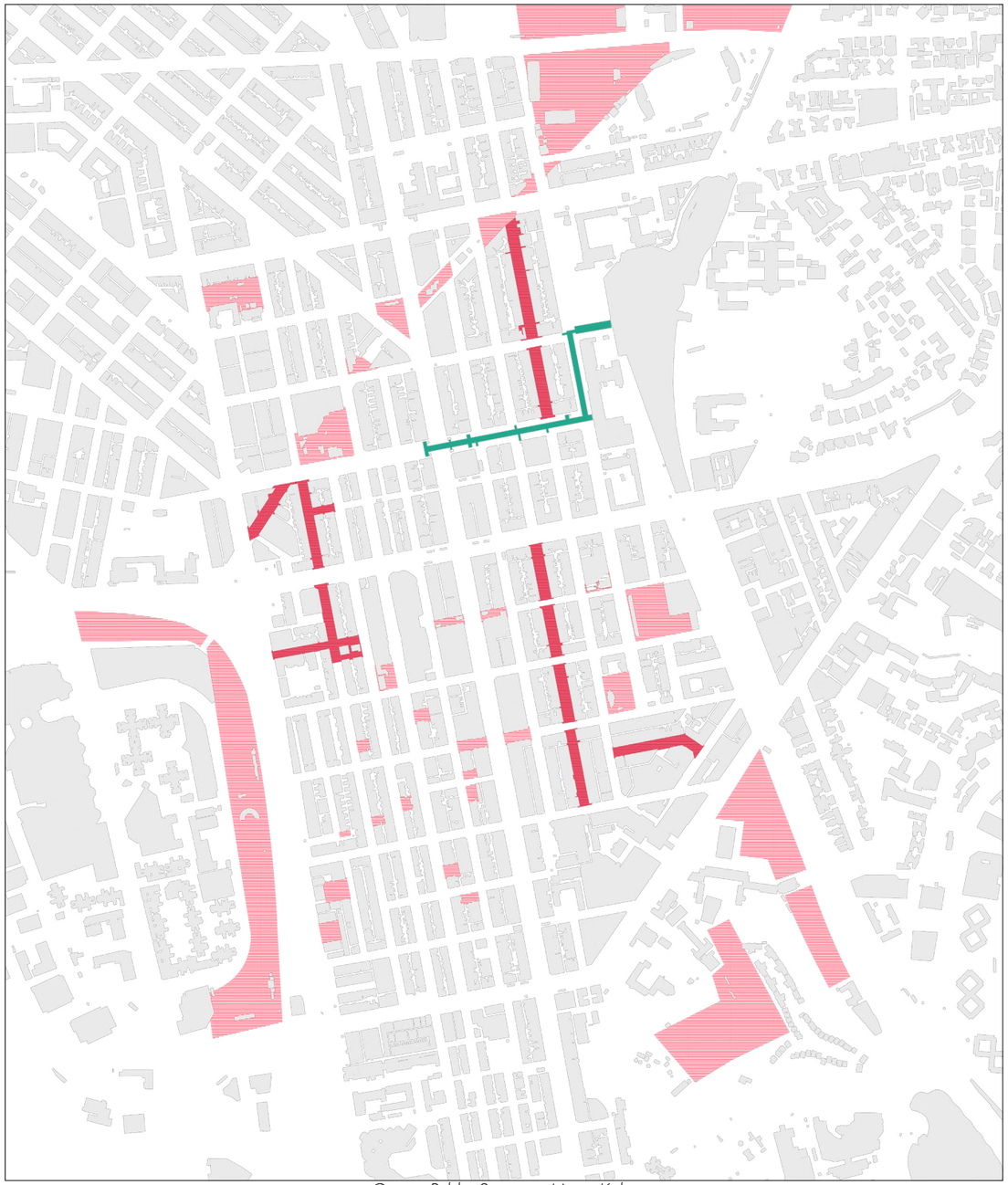
scattered in a network in residential areas, such as logistics, laundry, etc.

Recreation

The distribution of the recreation industry shows several different patterns. One is attached to commercial clusters, and one relies on the gathering of the same kind of entertainment industry to attract people, such as karaoke street and bar street. The other is more oriented to local residents, with chess and card rooms, senior recreation and small theaters, scattered in residential areas and close to daily life.

Therefore, by synthesizing the above distribution of functions and development trends, a commercial-dominated axis following the north-south main road can be discerned, accommodating three important clusters in Mong Kok and numerous office buildings. Three sub-axes have branched out from these clusters in east-west directions, dispersing the massive flow of people aggregated by the clusters, thereby achieving a transition from the clusters to the community.



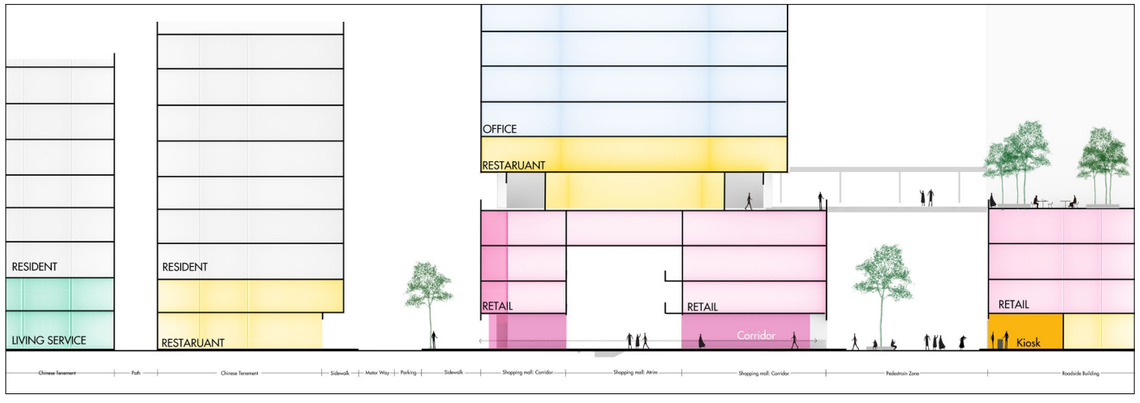


Current Public Space in Mong Kok

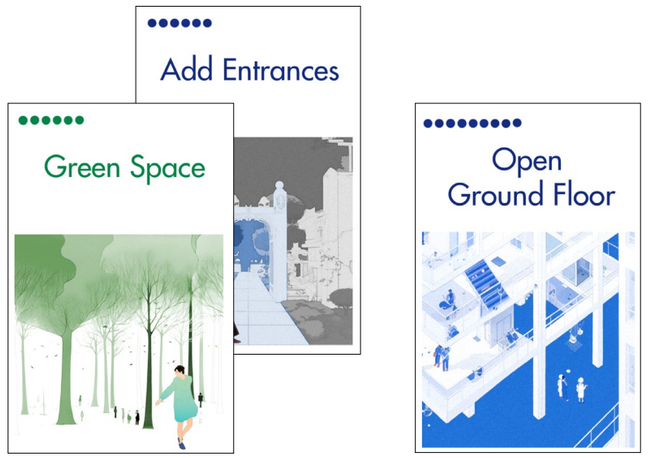
Public Space

The image on the left depicts the current structure of public spaces in Mong Kok. Open public spaces are mainly distributed as points, while footbridges and free markets connect these spaces to a certain extent. With the toolbox established in the "Seeking Space" section, the existing spaces on the site are optimized. Simultaneously, the spaces in the above-ground floors of the buildings are analyzed and evaluated in the following text, to establish the above-ground layer of the public space system. For different spaces, corresponding strategies are combined to achieve respective objectives, such as connecting pedestrian pathways, opening pocket parks, and so on.

Connecting Pedestrian Pathways



Open Pocket Parks



Activities on above-ground level

The image on the right displays the buildings in this area where public activities occur on the floors above ground, from which we ascertain the distribution of currently active buildings on the above-ground level. However, the subsequent challenge is to discern the most valuable architectural spaces to be connected, and whether these spaces have operability for connection. Therefore, this project continue to investigate the degree of functional mixing of the buildings in this area, the types of buildings, building heights, and the existing vertical connections, and have created a comprehensive evaluation system from this analysis to select the buildings with the highest potential for above-ground development.

Activies on above-ground level

Mix-use Degree

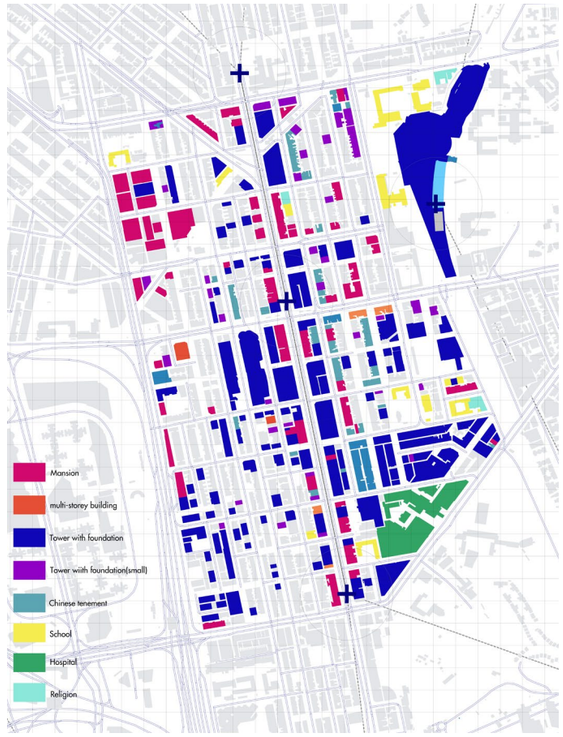
Functional mix refers to the number of different functions that can be accommodated within the building. The higher the degree of functional mixing, the more likely the space is to promote the diversity of activities, able to attract and meet the needs of different people in different time periods; In addition, it can also effectively improve the walkability of the area and meet more needs in a limited space.

Building Height

Building height is related to density, the higher the building is more likely to accommodate more functions and people, and there are more requirements for building accessibility and supporting service facilities. The development of vertical public space systems in these areas helps to improve the accessibility of buildings and also provides support for public Spaces such as roof gardens

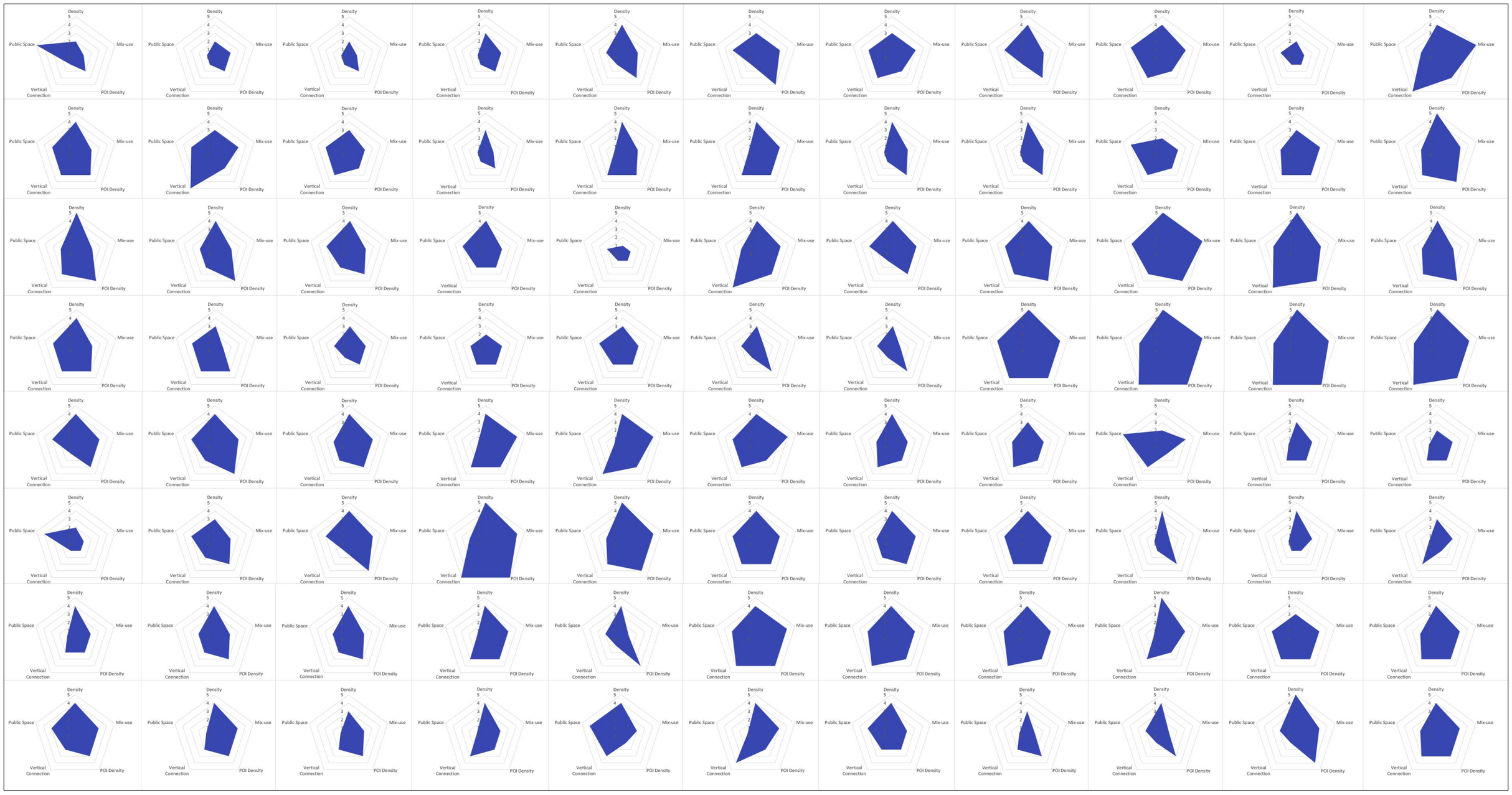
Vertical Connectivity

This analysis helps to distinguish which buildings in the region have the spatial basis for the development of 3D public space network under the current situation.Buildings with high vertical connectivity are mostly multi-story shopping malls that connect three levels of space: underground, on ground, and above ground.

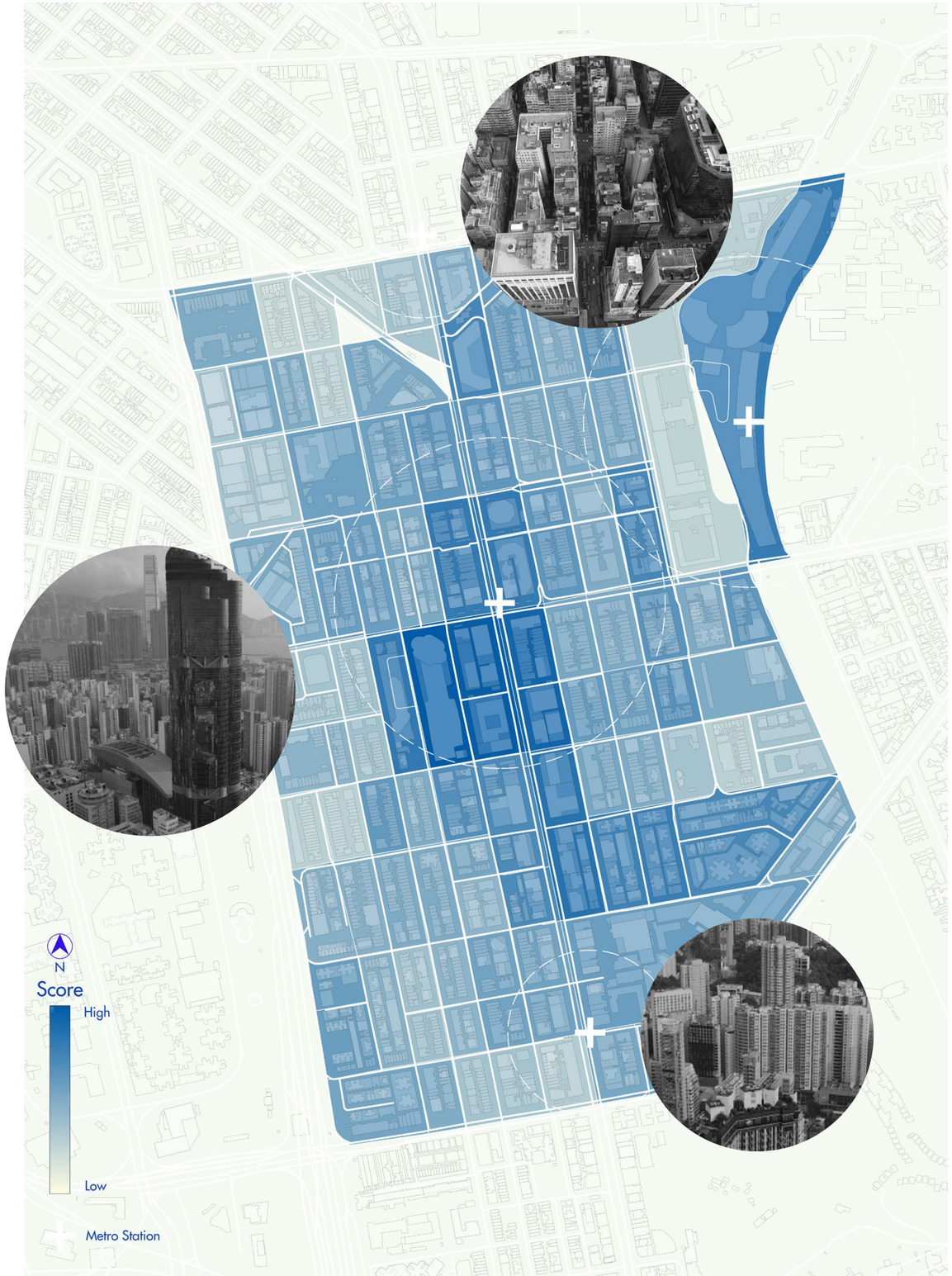


Building Types

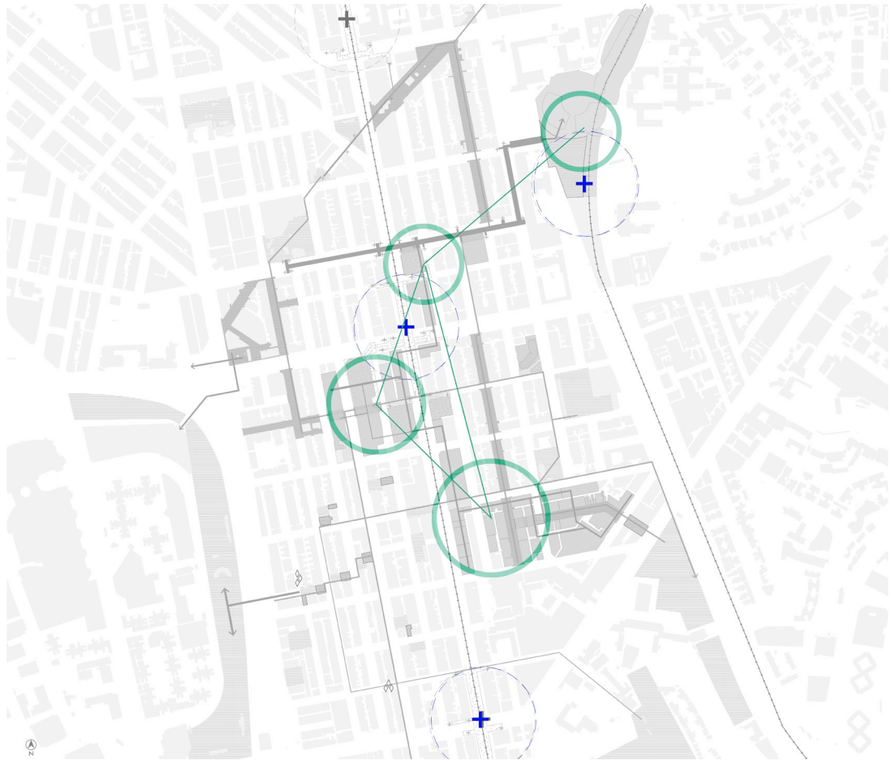
The building type reveals the operational difficulty of integrating the building into a three-dimensional public space system. In Mong Kok, the form of a tower with foundation is the easiest to integrate, as the interior often already has a shared space equipped with public circulation, while the roof of the foundation has the potential to be transformed into a public space. Older tenement buildings are more difficult to develop vertically because the space is smaller and the entire floor is for private use.



Vertical Development Potential Evaluation



Potential areas



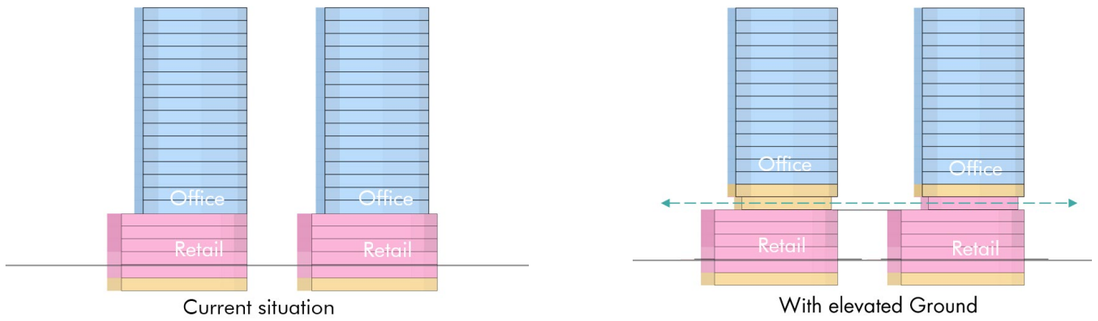
Potential Area for Above Ground Level

From the evaluation, these buildings with high potential for vertical public space development are primarily located in three areas: the Langham Place commercial cluster, the T.O.P commercial cluster, and the southern office cluster. These spots are all areas of high density in Mong Kok with a high degree of functional mixing. The buildings are mostly a combination of high towers and podiums, with public spaces inside the podiums.

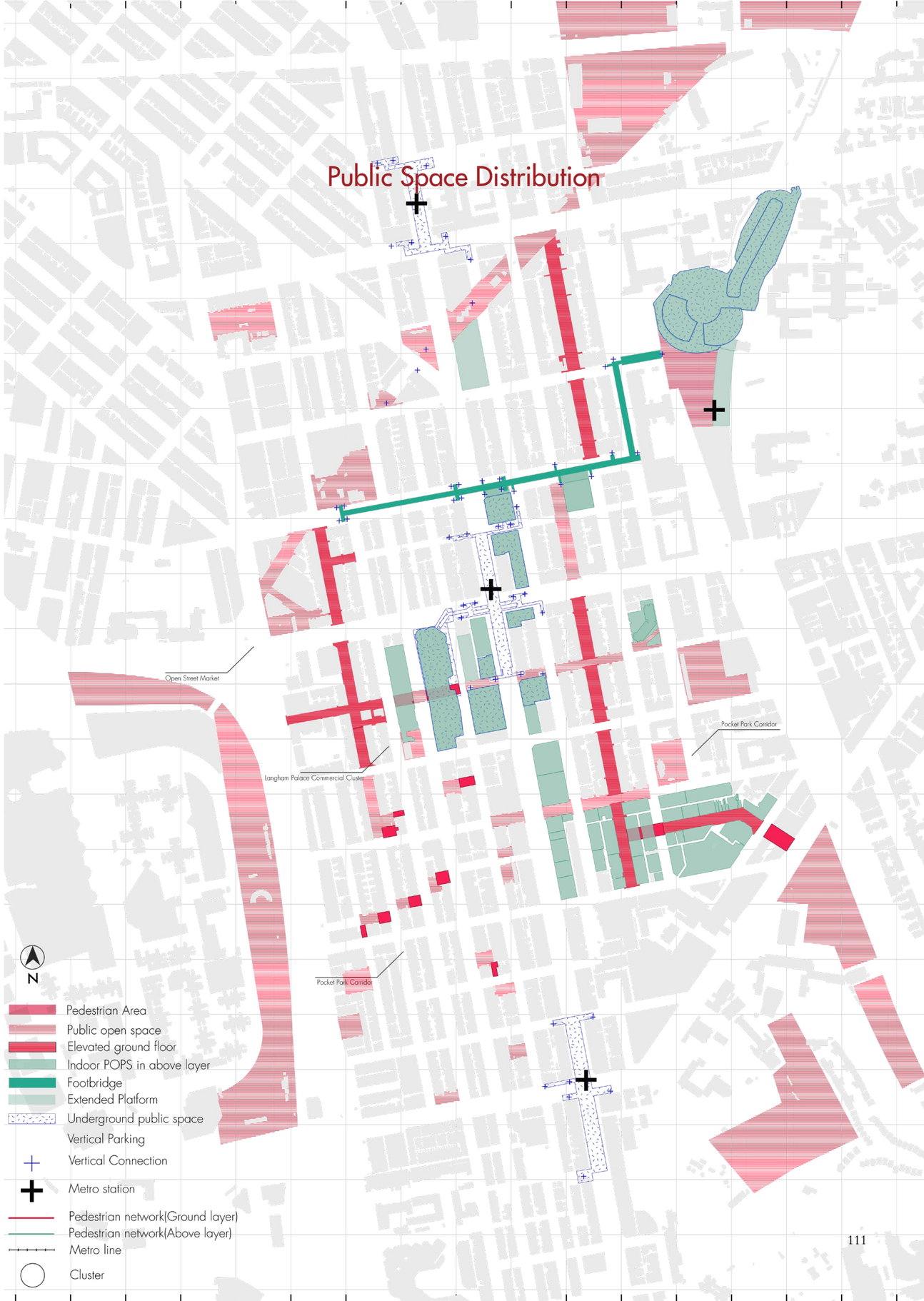
These three areas, along with the relatively new MOKO mall at Mong Kok East Station, act as nodal areas for the above-ground public space system. The development of vertical spaces will also affect the functional layout of these areas, with more pedestrian traffic being introduced to the above-ground spaces. Hence, these spaces will attract businesses and industries that depend on pedestrian traffic, resulting in functional transformations.

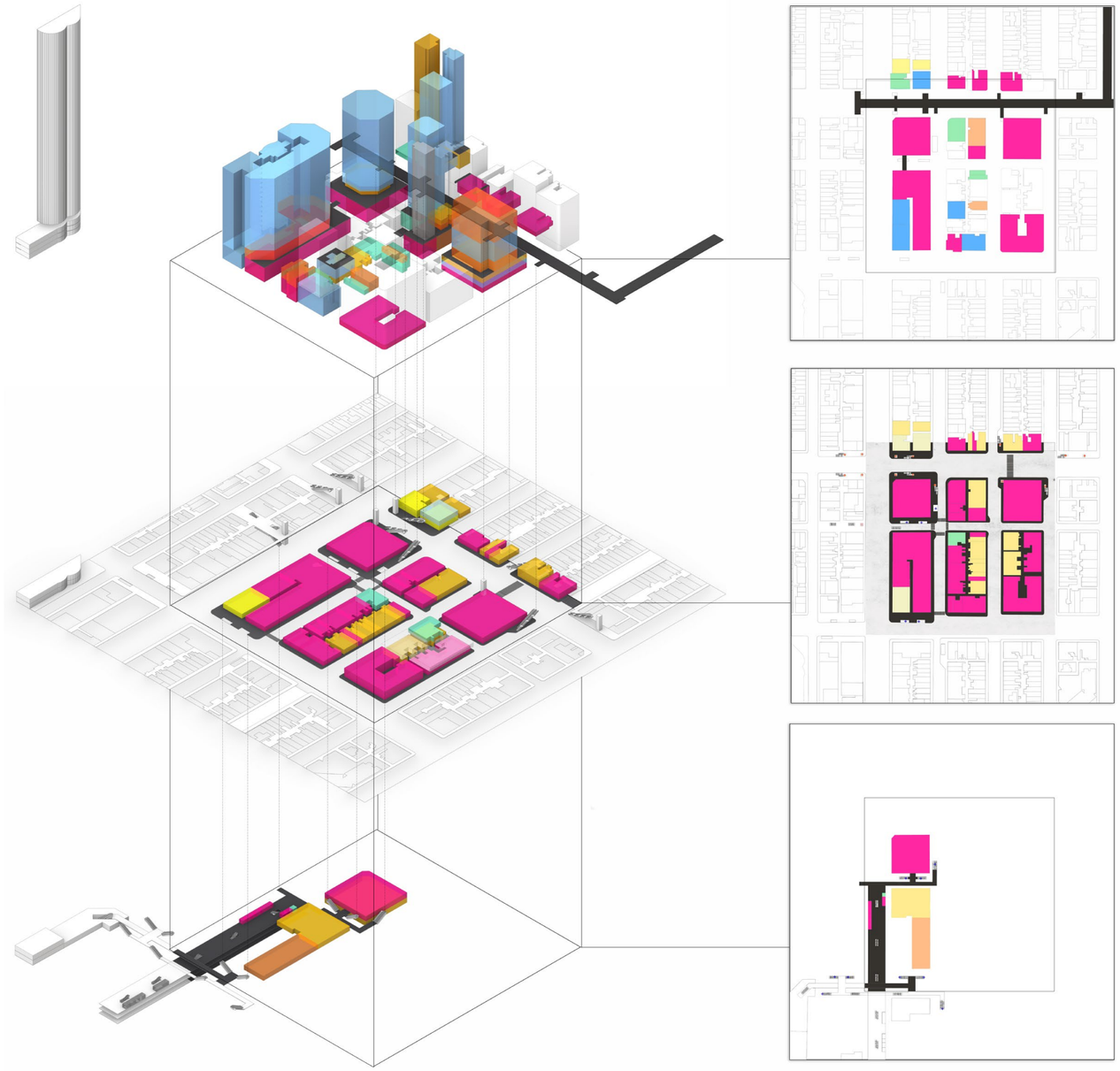
Public Space Distribution

Therefore, with the help of the toolbox, I have constructed a new distribution of public spaces in the Mong Kok area. These spaces are primarily distributed on the ground level, as well as the above-ground levels formed by internal building spaces, rooftop spaces, and footbridges.

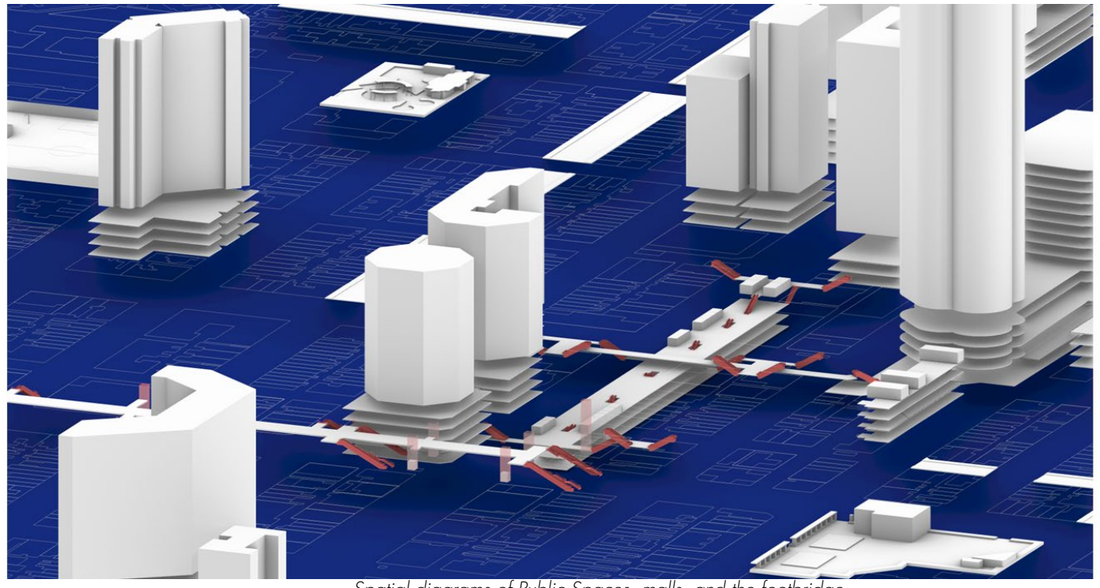


Functional transition with public space on above-ground level





Function Distribution in different levels



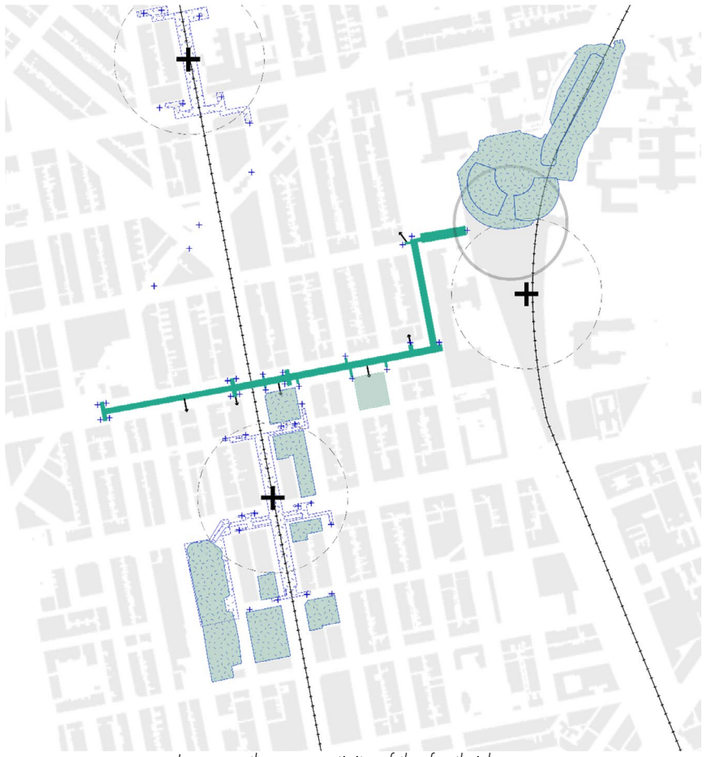
Spatial diagrams of Public Spaces, malls, and the footbridge near the Mong Kok metro station

Connection

Mong Kok footbridge

Currently, Mong Kok has built tight connections between the two stations. After analyzing Hong Kong's subway/railway lines, we can see that Mong Kok is a crucial rail transit hub. People from other areas of Hong Kong who want to reach the bustling Central district usually need to pass through the Mong Kok area, which has several stations. Mong Kok Station and Mong Kok East Station are the most important among them. These two stations cater to different regional rail lines, and Mong Kok serves as the exchange area for these lines. An footbridge has been built in Mong Kok to connect the two stations, as well as two shopping centers nearby - Langham Place and MOKO.

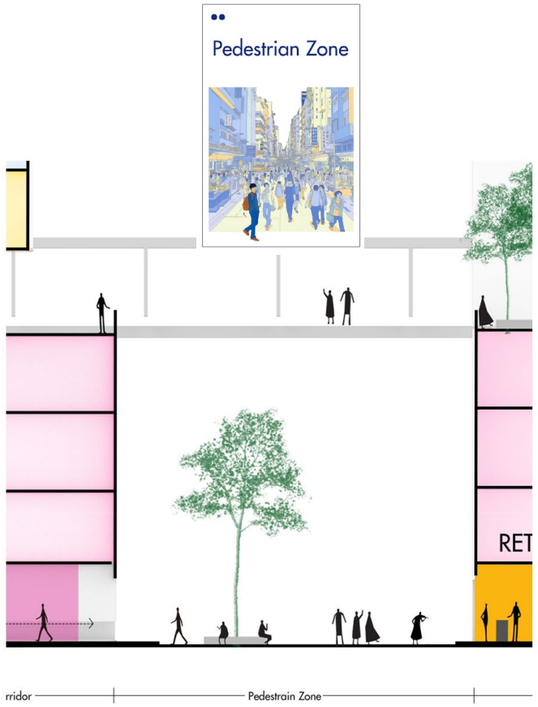
However, when we zoom in on this area, we find that although the footbridge runs through the urban spaces in the eastern part of Mong Kok, it is severed from the surrounding urban spaces, especially the buildings. It acts like an aerial tunnel running between buildings, without establishing spatial connections with them.

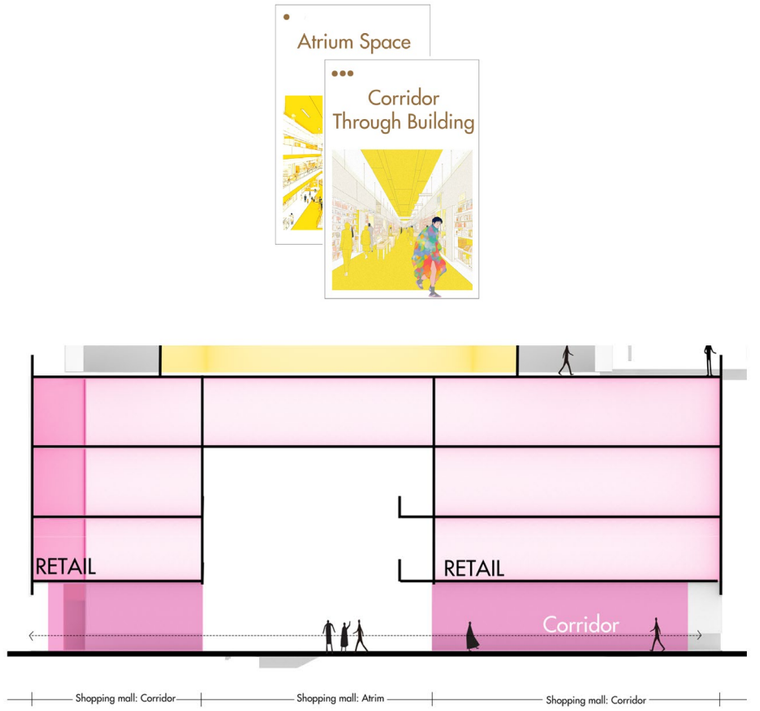


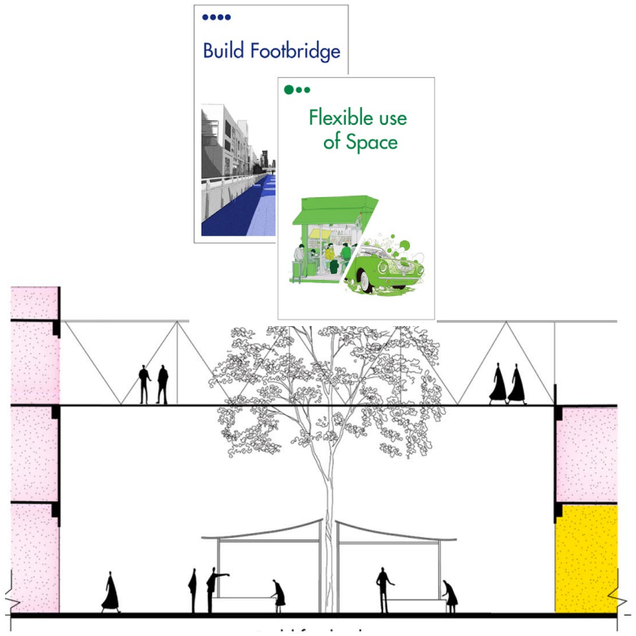
Increase the connectivity of the footbridge

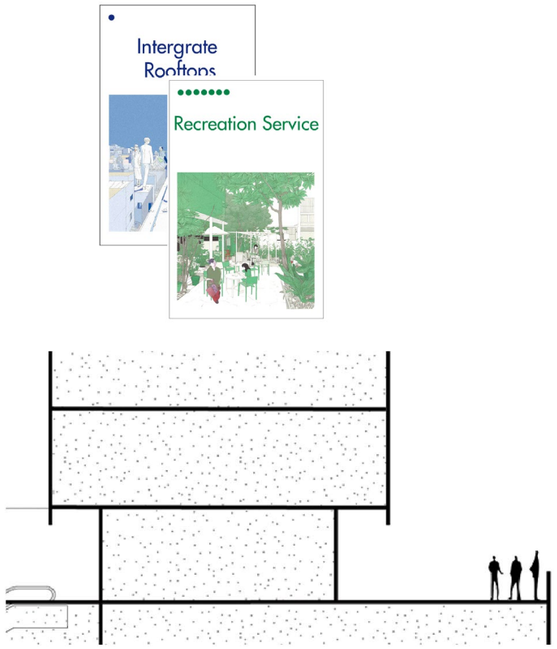
In the project, this pedestrian footbridge will be used to better connect the different regions of the city. It will extend towards the west, connecting the interior spaces of significant public buildings nearby, integrating them into this system. Based on the functions of the connected buildings, the footbridge will evolve accordingly, with parts becoming extensions of the buildings. Furthermore, several buildings in this region are connected vertically from the underground to the ground and above-ground levels. These buildings will have their vertical connections enhanced, becoming a hub for vertical transit, quickly dispersing crowds from the metro station to various places.

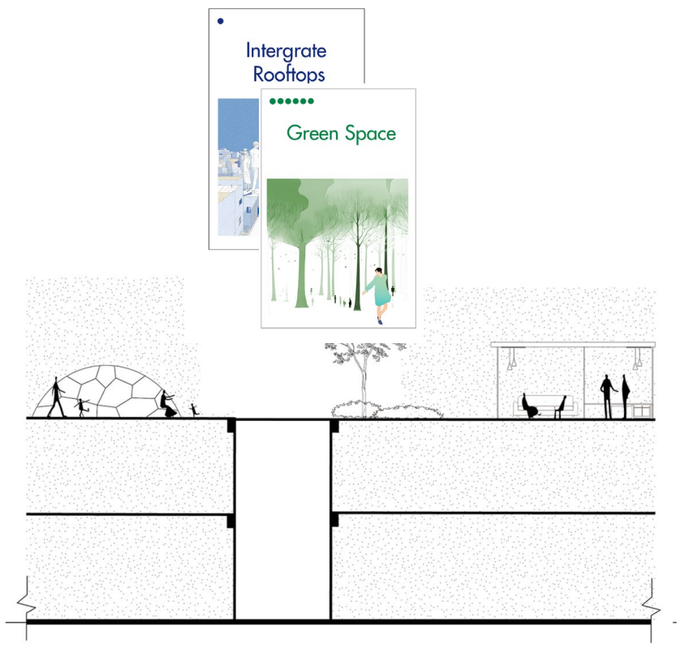
Mong Kok pedestrian footbridge
Source from HK01



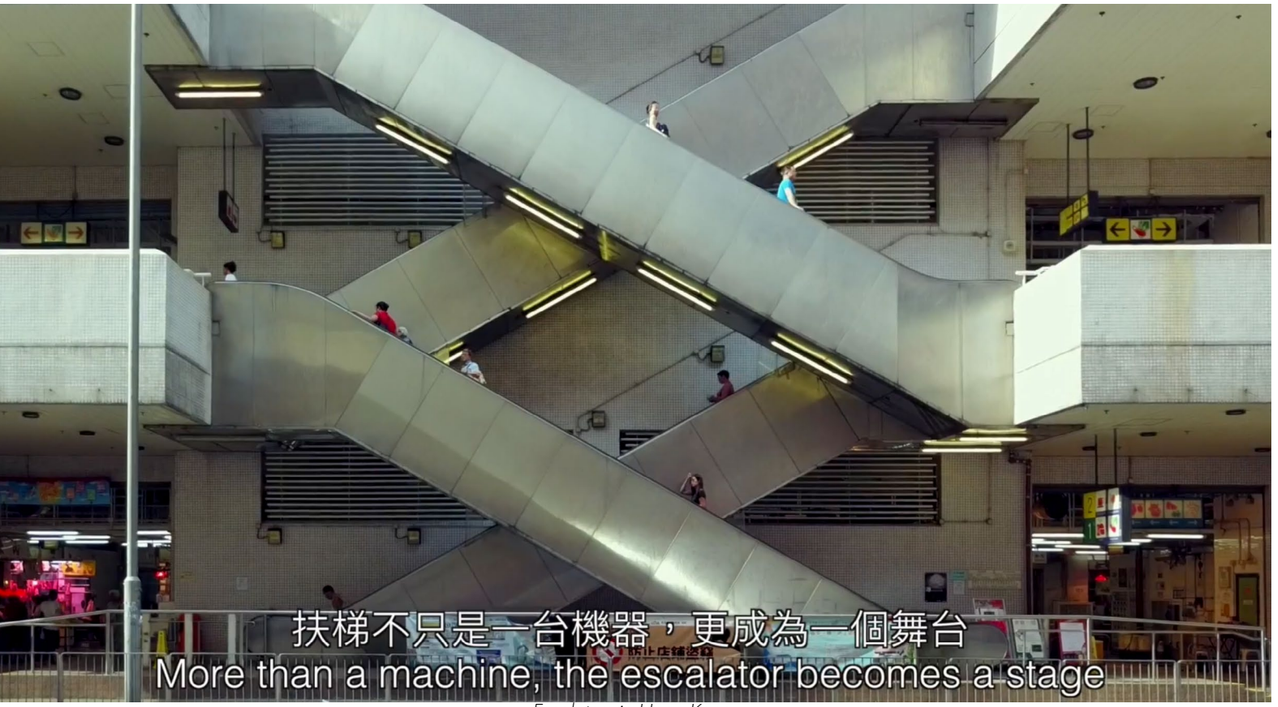






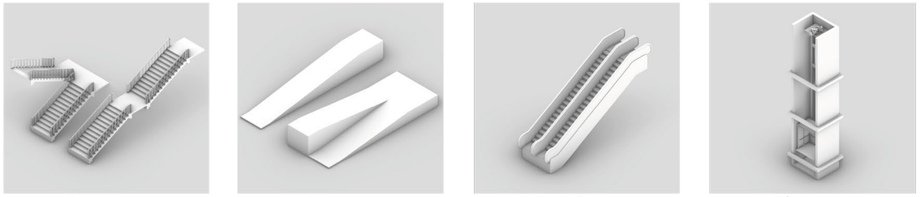


Use the toolbox to increase the connectivity



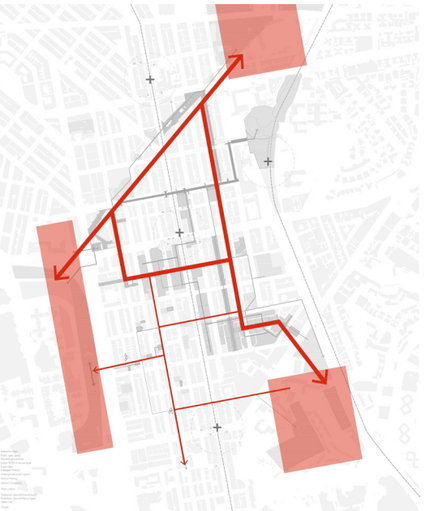
Escalators in Hong Kong
Source from: Middle Man Hong Kong - Episode 3

Vertical Movement Modes

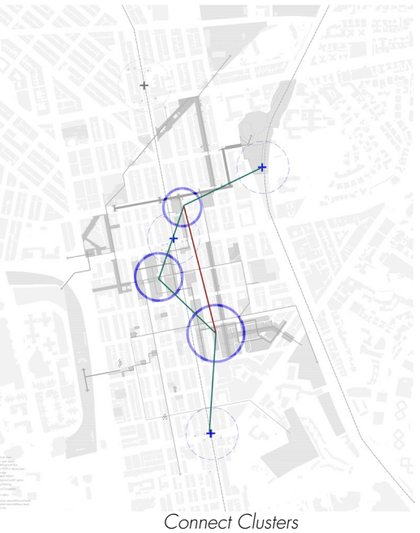


	Staircase	Ramp	Escalator	Elevator
Size	◐	●	◐	○
Efficiency	○	○	◐	●
Flexibility	●	●	○	○
Capacity	●	●	◐	○
Eye contact	●	●	◐	○
Wheelchair accessable	○	●	◐	●
Management	○	○	◐	●

The creation of Mong Kok as a vertical city relies on multiple modes of vertical movement, mainly including stairs, slopes, elevators and escalators, which take on different spatial characteristics. Taking the escalator as an example, its recognizable shape highlights this special space. Although the pedestrian does not move, the scene in front of him is constantly changing. Through the sight line and the surrounding information exchange, the rising perspective allows the city to be grasped on a larger scale. At the same time, the pedestrians on the escalators have become part of the urban landscape.



Connect open spaces in the edges



Connect Clusters

Pedestrian Connection

Using strategies from the toolbox, such as creating pedestrian zones, pedestrian-priority roads, internal corridors in buildings, footbridges, and integrating rooftop spaces, this project aims to establish a more pedestrian-friendly network in Mong Kok. This network connects essential nodes, street markets, and other public spaces in the area, as well as three large open spaces on the site boundary. This network Will be built on three levels.

Underground Level

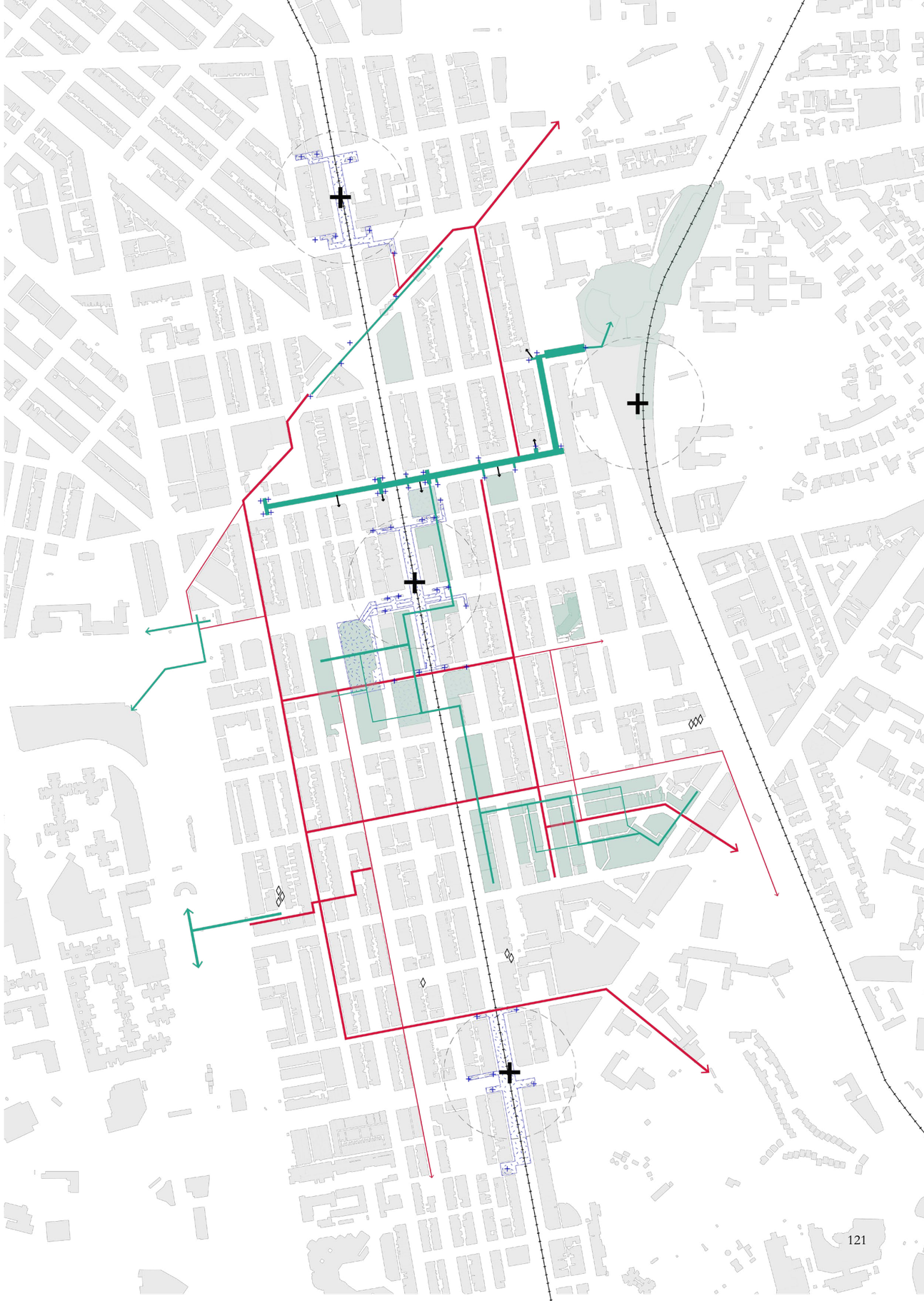
The first level is the underground, formed by four subway stations and parts of the underground spaces of some buildings. The subway stations are the network's bases, bringing in significant pedestrian flow. They can transition to street level through elevators, escalators, stairs, or directly enter buildings for spatial transition.

Ground Level

The second level is the ground level, primarily consisting of various open public spaces, open markets, and interior spaces of shopping malls. Mong Kok's open markets occupy streets, distributed linearly, and are already functioning as pedestrian zones. Based on these pedestrian-only zones, plus additional pedestrian-priority roads, and corridors traversing buildings, this level will connect Mong Kok's essential nodes and open spaces with multiple functions, including living, shopping, cultural, etc., serving as the main space for public activities.

Above-ground Level

The third level is the above-ground level, composed of pedestrian footbridges, rooftop spaces, and the interior public spaces of buildings. It extends from the existing pedestrian footbridge to connect the three significant Clusters and Mong Kok East Station identified earlier. The connections on this level focus more on pedestrian efficiency, providing a fast transit method between nodes.

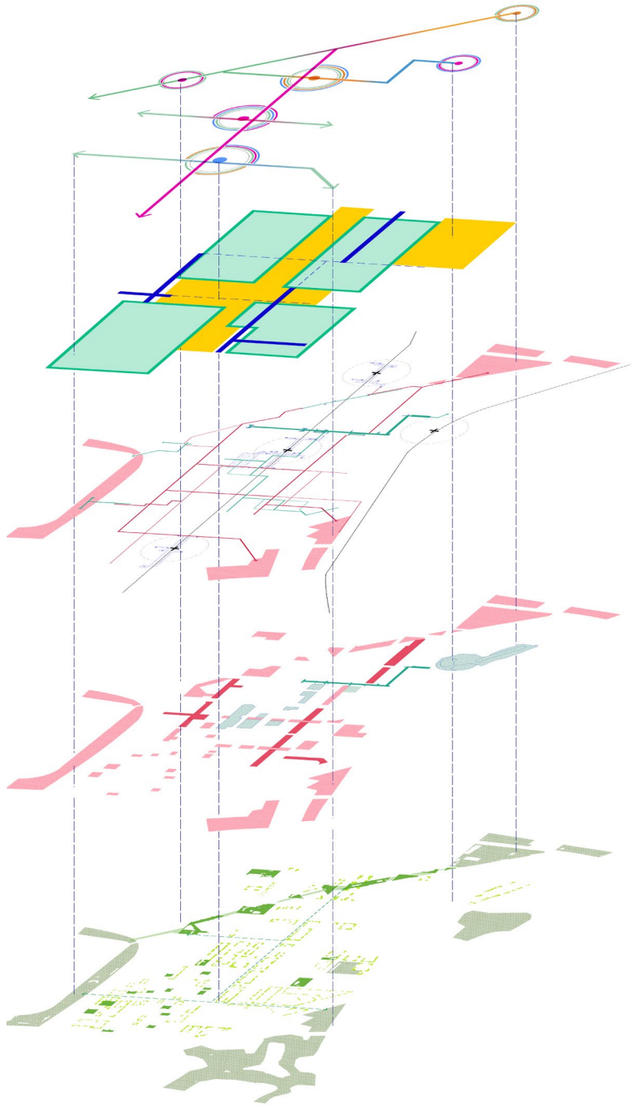


Green Structure

The green structure of Mong Kok is based on the new public space system, and a green axis from northeast to southwest is established, connecting the two parks on the border. This axis is also part of the Mong Kok drainage system, adding green space to make better use of collected rainwater and relieve the pressure of flood drainage.

As the use of roof space increases, the construction of roof gardens will gain more support and momentum. On the one hand, the new system brings people to the upper floors, so the construction of the roof garden will not be left unused. On the other hand, with the use of the upper floor space, the landscape quality of the roof space will in turn affect the value of the building. In addition, the construction of roof gardens helps to create more microclimates and also reduces energy consumption.

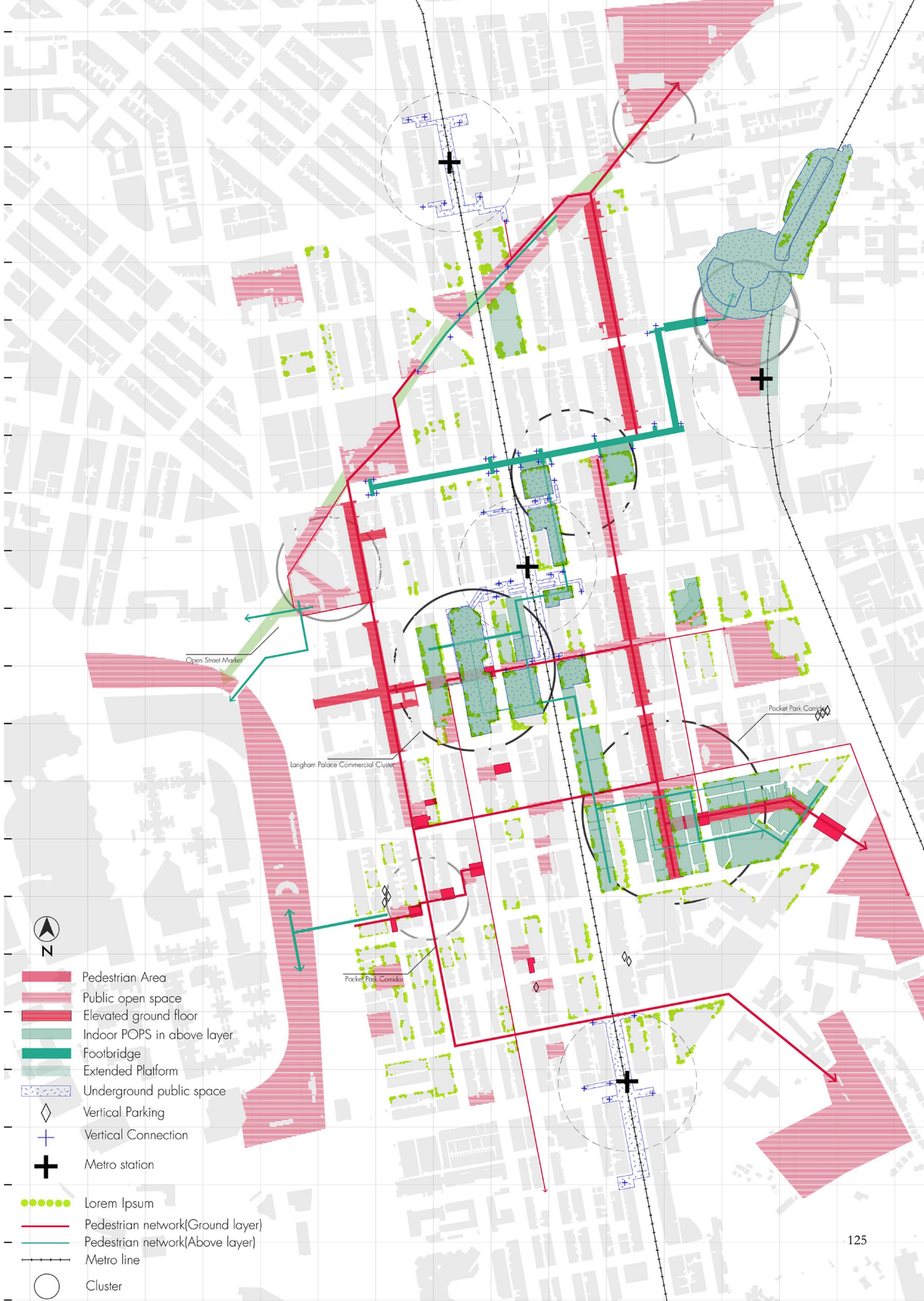
For Mong Kok, the use of roof gardens can effectively increase the amount of green space in the city, and avoid competing with other infrastructure for road space; In addition, it also avoids the further closure of the already closed urban environment by the ground greening

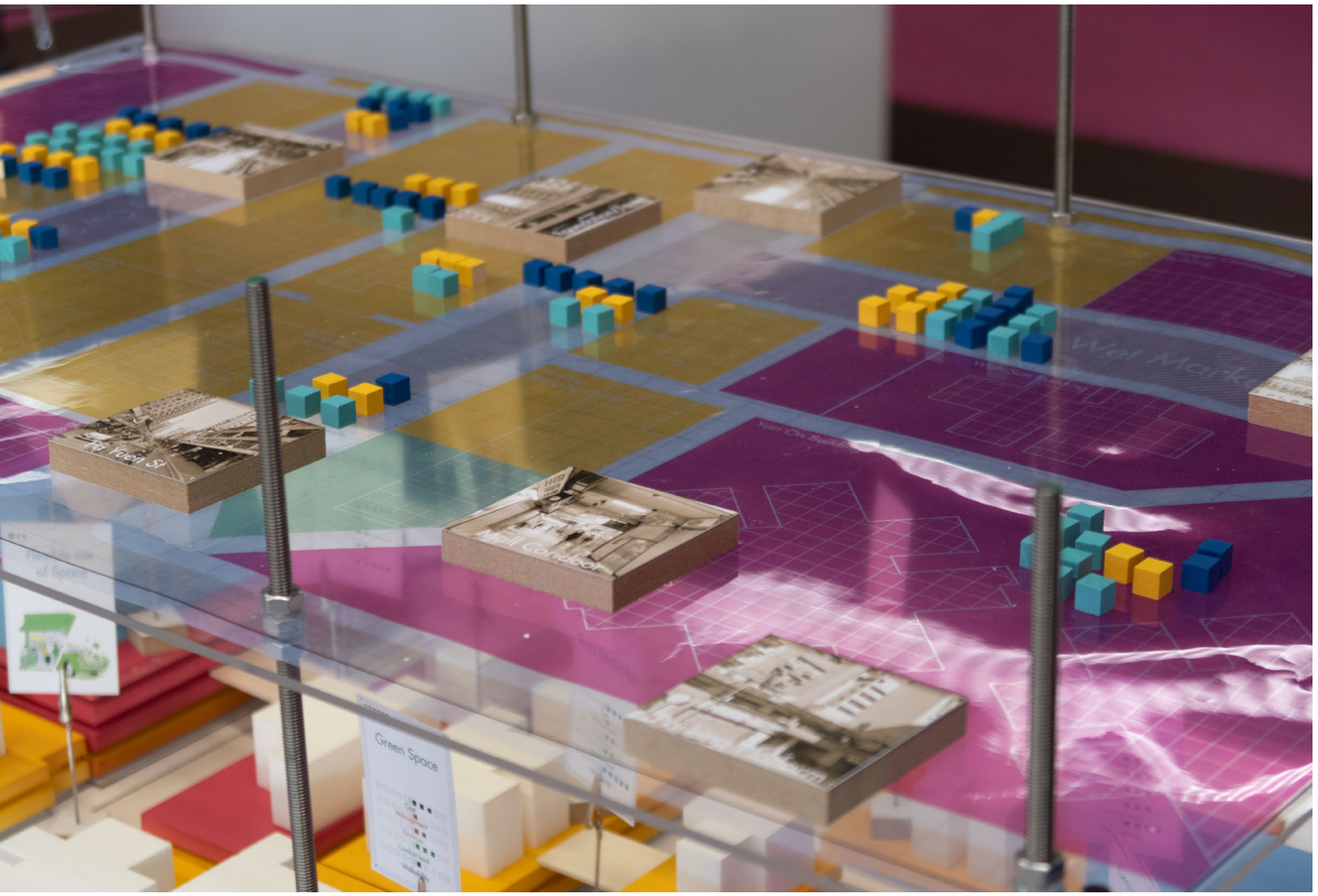


Three-Dimensional Public Space System Vision

After integrating six factors - culture, economy, function, space, connectivity, and ecology - a vision for the region's three-dimensional public space system is constructed. This system consolidates the currently fragmented public spaces into one 3D network, enhancing the overall walkability of the space, and providing a richer array of vertical movement points to integrate the spaces across the three layers. These three layers offer a variety of public space types and spatial experiences, allowing for diverse activities to take place. The integration of above-ground spaces forms a second ground for this vertical city, consequently providing Mong Kok with more public spaces. Fast transit routes are established, connecting crucial clusters in the region.

This new spatial network paints a promising vision. However, it remains largely abstract at this point, and has not yet been amalgamated with real urban spaces, particularly in terms of connecting with the people inhabiting these spaces. To achieve this, we need to delve into a smaller spatial scale, placing this top-down created abstract network within real spaces, and under public participation, integrating this vision into the existing urban fabric.

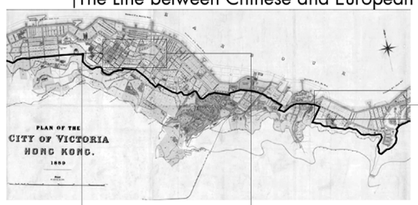


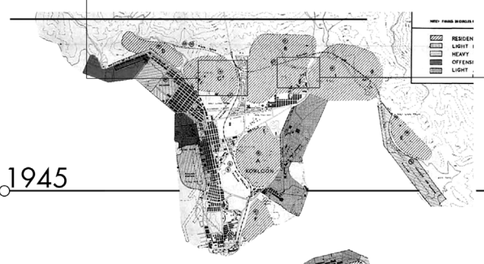


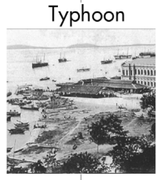
06

Involve Public

A board game to involve the public







Biography: Hong Kong People and Urban Space

Reviewing the relationship between Hong Kong's people and urban spaces, we can roughly divide it into three stages, reflecting the continuous rise of public awareness towards urban spaces.

In the early colonial period, the British colonial government strictly divided the city into white residential areas and Chinese communities, without concern for the living conditions and demands of the Chinese community. However, subsequent natural disasters destroyed the Chinese community, forcing the government to respond. Fires and epidemics drove the planning and reconstruction of the Chinese community, while typhoons prompted the government to build more typhoon shelters for the city. In this stage, changes in urban spaces were primarily a response to sudden disasters.

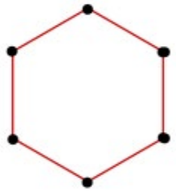
After the war, a large influx of people arrived in Hong Kong, seeking a foothold in the city. They gathered together, spontaneously constructing spatial logic in their settlements, striving to meet life's demands at the lowest possible cost, creating their own regions and generating numerous informal spaces, or slums, some of which even became self-sufficient independent areas. Kowloon Walled City is a representative of such spaces. Overall, these spaces were entirely established from the bottom up, meeting various life demands in unique ways; the spaces were constantly changing, often presenting a compact, chaotic, and even dirty appearance. The term "orderly chaos" is used to describe these spaces in "Asia Cities: By and for the People." However, a fire swept through the slums, leaving a large number of civilians homeless, and the government began to systematically construct public housing. Public housing policy eventually became a fundamental public affair in Hong Kong, with 45% of the population now living in public housing. In this stage, space began to be holistically and strategically planned, while informal spaces continued to grow.

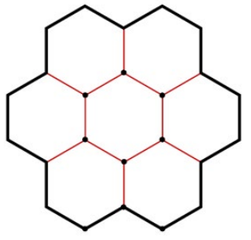
Entering the 21st century, civic consciousness gradually awakened, with a portion of the public actively participating in various people's movements, expressing their political stances. These movements took place in urban public spaces, with some making their voices heard through parades and occupation of urban spaces, such as the Occupy Central movement. Others targeted public spaces themselves, like the campaign to preserve Queen's Pier. People began to consciously reclaim public spaces to meet their own needs. During this period, numerous non-profit organizations focusing on urban spaces were established, such as Designing HK, Hands on HK, and the Hong Kong Public Space Initiative, among others. At the same time, street performers and street artists frequently engaged with urban spaces, developing Hong Kong's Street culture. In this era, the Mong Kok pedestrian zone was constructed and, along with the trendy district of Mong Kok, propelled the spread of MK culture, becoming the most popular place in Mong Kok. However, different groups vied for control of the pedestrian zone in various ways, making it difficult to balance the interests of all parties, leading to frequent conflicts and eventually the cancellation of the zone by the government. In this period, Hong Kong people imbued urban spaces with more meaning, and their awareness of urban public spaces continued to rise. This public consciousness and the limited public spaces in Mong Kok formed a stark contrast.

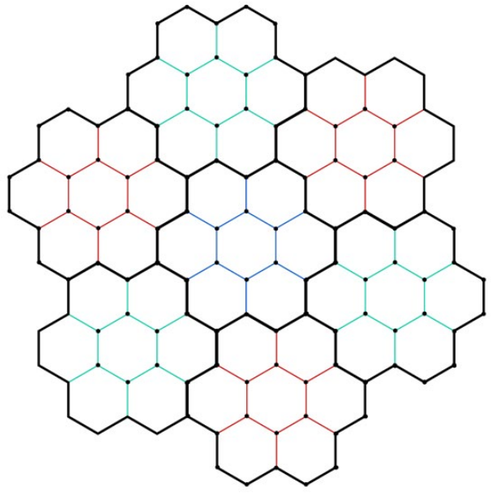
From the changes in the relationship between urban spaces and Hong Kong people, we can observe the interaction between them: overall, urban spaces are still controlled by the government, with the public in a passive responsive position. They either appeal to like-minded groups to protest a specific policy or passively accept it. If the public pressure is strong enough, it can force the government to abandon its actions. The public is still excluded from the decision-making process of urban spaces, and exercising urban rights requires a considerable amount of energy and time, leaving the public with limited say in urban spaces.

Children playing on the rooftop of Kowloon Walled City
Photo by Greg Girard

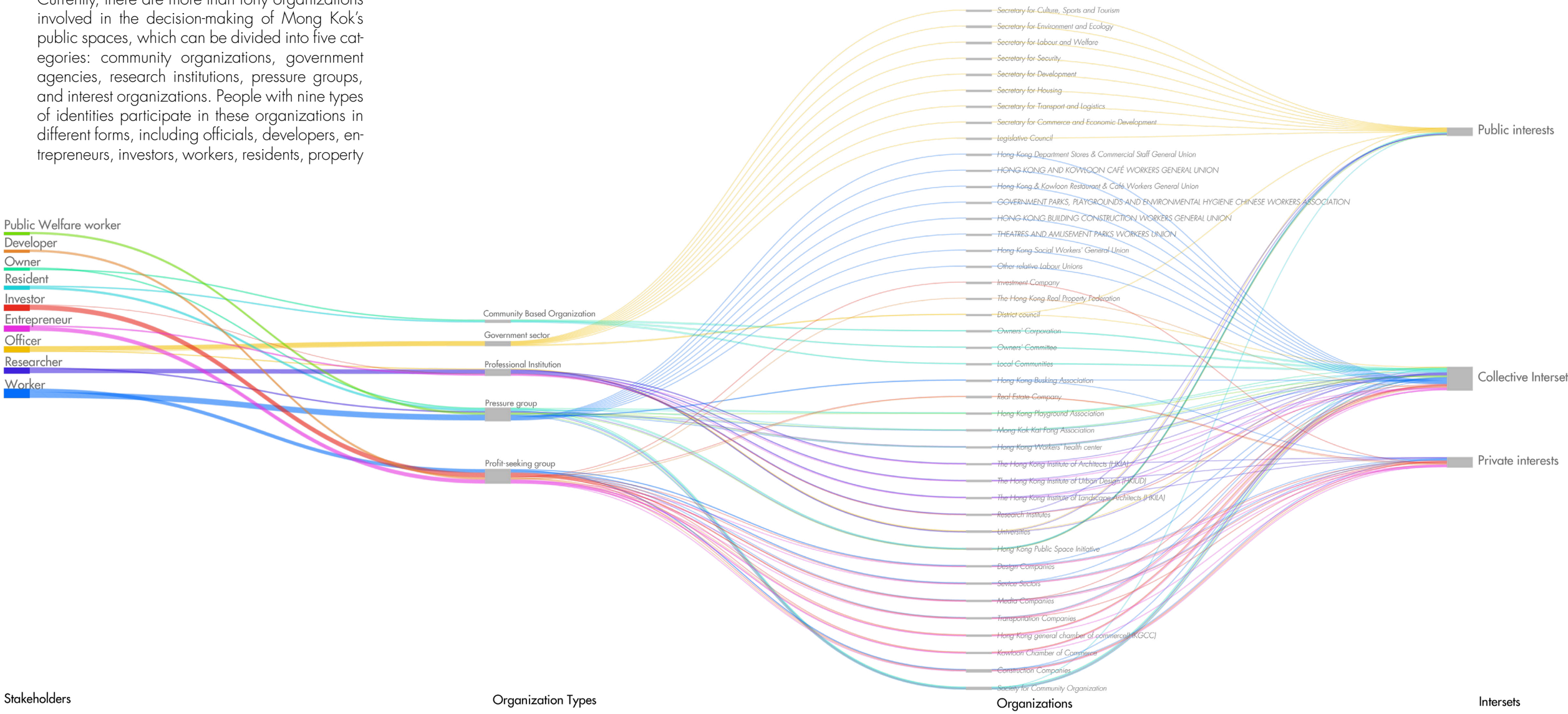
Therefore, this project focuses on how to more actively involve the public in urban space decision-making, reducing the cost of exercising urban rights, enabling the public not only to have the power to reject changes in urban spaces led by the government and developers, but also to more proactively propose opinions on urban space changes, truly gaining a say in urban spaces. Soja believes that urban power is not an individual's power, as individuals have difficulty influencing urban spaces. It is a collective power, relying on the collective to gain greater influence. This power has a nested, honeycomb-like structure: individuals with similar identities form a small group, and small groups with similar demands form a larger union. This is a bottom-up decision-making process. Depending on the scale of a specific project, urban rights are implemented at different structural levels.







Based on this mechanism, it is first necessary to identify the stakeholders in Mong Kok's public spaces and then divide them into multiple groups. Currently, there are more than forty organizations involved in the decision-making of Mong Kok's public spaces, which can be divided into five categories: community organizations, government agencies, research institutions, pressure groups, and interest organizations. People with nine types of identities participate in these organizations in different forms, including officials, developers, entrepreneurs, investors, workers, residents, property owners, researchers, and public welfare workers.



Stakeholders of Mong Kok public space

A. Adaptability of development to the changing needs

B. Availability of local job opportunities

C. Economic benefits

D. Harmonious development of different local economic activities

E. Accessibility of locations of activities or works

F. Creation of a safe, convenient, comfortable and legible pedestrian circulation and transportation network

G. Availability of amenities, community and welfare facilities and provision of public of public space

H. Green and sustainable development

I. Prevention and mitigation measures against air, water and noise pollution

J. Building design in terms of aesthetics, density, height and visual permeability

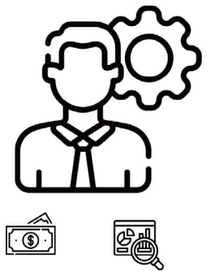
K. Unique local characters

L. Conservation of local cultural and historical heritage

M. Good for marketability

As showing in figure 4.3.2, the concerns of these people for public spaces can be divided into thirteen categories(Li, T.H., Ng, S.T. & Skitmore, M., 2012). Identifying the demands of different stakeholders helps promote cooperation among them and helps us predict potential conflicts.

Developer



Identity
Developers buy land and build houses, offices, shops, or factories on it, or buy existing buildings and retrofits them to meet market demand.

Capacity
Owners of many properties and lands, also have the capital to support proposals. The focus of the decision is on whether it can bring profits or whether it will benefit marketability.

Investor

Identity
Investors put money into an entity such as a business for a financial return. The main goal of any investor is to minimize risk and maximize return.

Capacity
Investors are one of the main sources of capital. Capital support is available when the proposal meets the profit expectations of the investors.

Entrepreneur

Identity
Entrepreneurs are someone who have idears and who work to create products or services that people will buy, as well as an organization to support that effort.

Capacity
Entrepreneurs run many services which supporting the urban life. Good entrepreneurs are able to attract crowds. They are also usually the organizers of various city activities.

Officer

Identity
Officers are the managers of the city and own capital. They care about the whole city, including economy, people's livelihood, culture, environment, etc.

Capacity
Officers have the most power to enact policies and decrees, and the capital to fund its actions. As managers of city, they need to balance the interests of all parties.
.

Researcher

Identity
Researchers are experts and possess knowledge and technology. They are oriented towards an academic perspective rather than economic interests.

Capacity
Researchers have the knowledge and expertise to be able to propose a variety of strategies for the city and to be able to evaluate different strategies
.

Owner

Identity
An owner is someone who owns properties. Majority of them are long-term residents. Some owners will rent their house for profit.

Capacity
Owner are the core members of the community . They can make appeals, participate directly in the management of the space, or raise funds to transform the community. They also have rights to renovate their properties.

Resident

Identity
A resident is someone who lives in a place. They prefer good living enviornment, high quality public space and also high accessiability to their working places.

Capacity
Residents are the core members of the community organization. They can make appeals, participate directly in the management of the space, or raise funds to transform the community.

Public welfare worker

Identity
Public welfare workers care about the interests of society and vulnerable groups.

Capacity
Public welfare workers have a supervisory role in policy and can be part of the urban space management team. They actively participate in political activities to practice public welfare.

Worker

Identity
A worker is someone who gets paid to work for a person or company.They want more job opportunities and better working conditions.

Capacity
Workers, who are numerous, are one of the main users of public space. Through workers union, they are able to participate in political activities and present their demands for space.

How to involve public participation?

How to promote communication among stakeholders and balance their interests?

How to bridge the gap between top-down and bottom-up approaches?

Why Serious Gaming?

After identified the stakeholders in the area and their demands, we still face these questions in exercising the right to the city:

How to involve public participation, give them the approach to actively participate in the process of urban space change, and practice the right to the city?

How to promote communication among stakeholders and balance their interests?

How to bridge the gap between top-down and bottom-up approaches?

Serious games are introduced into the design process to address these issues. Realizing the right to the city is an important goal of this project, and its essence lies in urban residents being able to participate in spatial transformation according to their own wishes. However, contemporary urban public spaces are not controlled by the public, the introduction of serious games aims to create a more direct and equal way to balance the interests of government, capital and public, especially to strengthen the weight of public aspirations and avoid the division of power by barriers constructed by capital and professional discourse.

At present, urban planning is the main approach of guiding urban development. The city is a complex and random system, and urban planning transforms the real first space into an abstract second space, attempting to shape the city by understanding the interactions between systems and gaining control over the structure of each system. This approach endows urban planning with higher operability, utilizing the externalities of the subject structure to achieve comprehensive control over the city (Soja, E.W., 1998).

However, traditional top-down urban planning, although capable of guiding the direction of urban development, often lags behind the real environment, leading to conflicts between real space and planning, manifesting as conflicts between individuals and the subject structure. Due to the small and dispersed nature of individual power, it is usually difficult to resist the planning structure that carries out the will of the main power, and the result is often the suppression of individual aspirations and the erosion of individual characteristics. These conflicts not only continually impact the stability of the subject structure and question the legitimacy of the main power but also affect the resilience and sustainable development capacity of the city by reducing its inclusiveness and diversity. Soja's concept of the third space emphasizes full democratic participation and diversity, striving to construct a more equal and direct urban power structure, democratizing and diversifying urban planning, and safeguarding the urban rights of all groups. This bottom-up approach complements the shortcomings of traditional top-down urban planning, endowing space with the ability to transform promptly according to public wishes, ultimately, in turn, correcting the development of the subject structure.

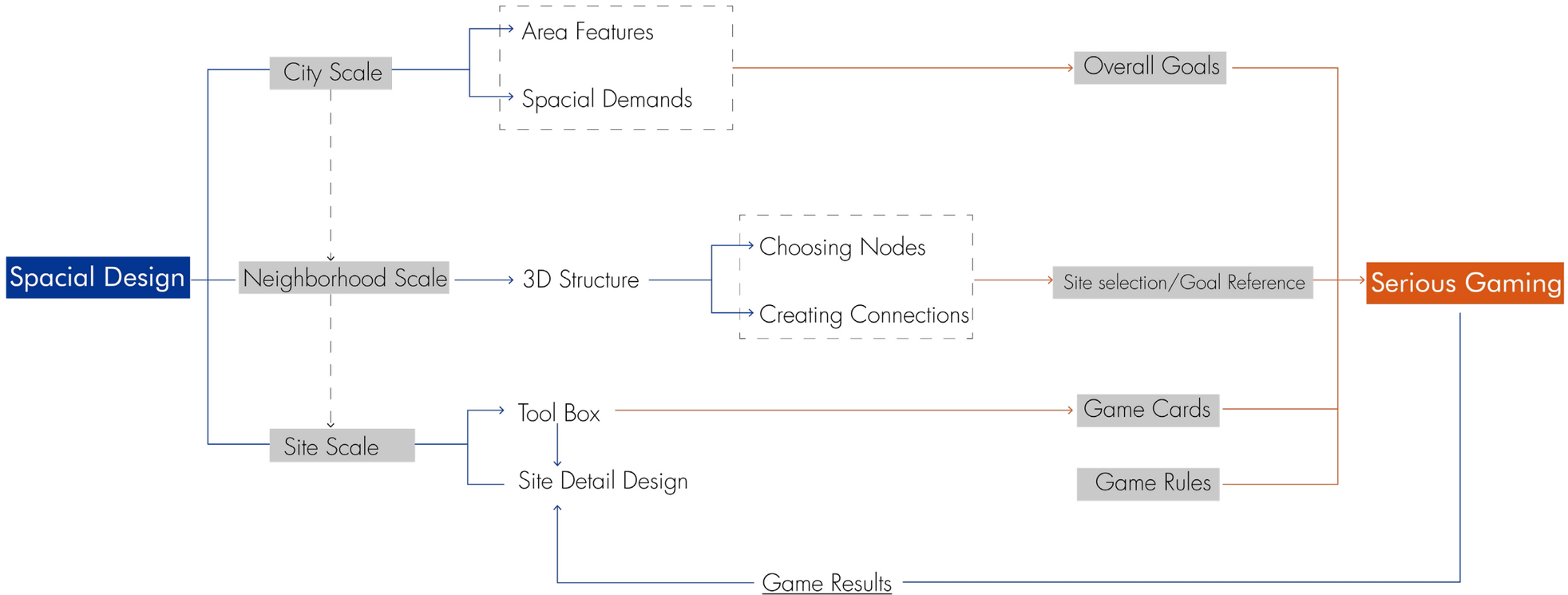
Therefore, this project is based on the design of the urban public space system and introduces serious games to try to give the public more power over public spaces.
The serious game method in this project has three objectives:

To help citizens understand their living environment, and to help different groups understand each other's demands.

To use the process and results of the game to clarify and better balance the demands of stakeholders.

To combine top-down urban planning with bottom-up urban design, amend the vision of the public space system, and assist in spatial design.

The relationship between serious games and design



The relationship between serious games and design

City Scales: First, based on the project background, an analysis was conducted at the urban scale to discern the characteristics and issues of the area and to clarify the overall need for spatial development. This step is also intended to define the overall goal of the game, which is to construct a three-dimensional public space system with ample space, good walkability, and public participation.

Neighborhood Scales: At this scale, the project sorts out the spatial status quo of the area, integrates the various subsystems of the city, selects the nodes of this public space system, determines the connection methods between nodes, and constructs the main structure of the system. These nodal areas will become the venues for the game. The main structure, as a top-down plan, will be attempted by the official role among game players to be built on this site.

Site Scales: In the study of different spatial types of the site, the project offers various strategies. These strategies are used as a toolbox for the project and are also transformed into cards for serious games, to be used by players during negotiations. The results of the serious game reveal the areas of greatest concern to stakeholders, who negotiated and implemented strategies for these areas, allowing designers to understand their spatial demands and determine the spaces most in need of intervention. Based on these results, specific spaces will be designed, reflecting both the public's demands and the requirements of the public space system structure.

Game Rules

This serious game uses a role-playing board game approach, where players represent their own groups in negotiations. The game is divided into several parts: goals, bargaining chips, and strategies. To make the game more accessible, I further categorize the nine roles into four groups in this project: Profit-seeking group, government sector, Community Organization, and Pressure Group, and the negotiation takes place among these four groups.

Aims

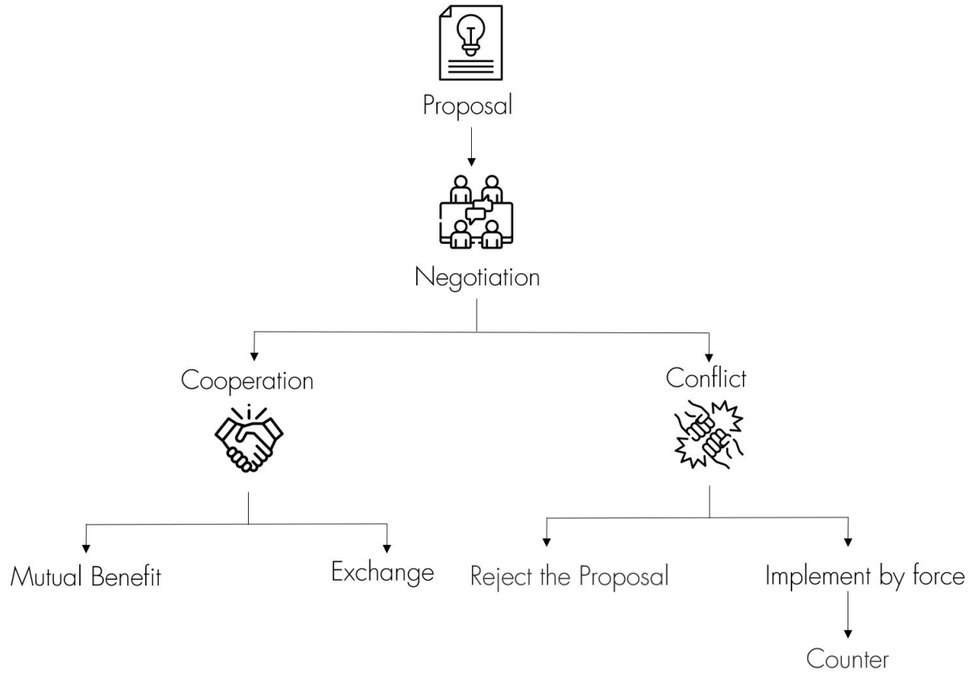
Four different groups have different game objectives, which are set based on the reality and dictate the players' guidelines in the game.

Currency

Based on reality, each team has different financial resources and management capabilities, which are essential elements for exercising strategies. Players with fewer bargaining chips are encouraged to negotiate with other players for cooperation. The setting of the bargaining chip value controls the game's duration, and strict restrictions promote the frequency of negotiation and cooperation among players.

Strategy Cards

Derived from the toolbox mentioned earlier, these strategies are divided into three main categories: Improve spatial quality/ Increase Walkability/Activate Site. These strategies have their own attributes, serving as a reference for selection. Depending on the needs, different strategies are implemented after negotiation.



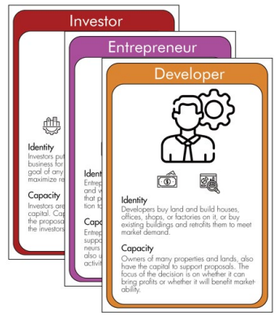
In this project, since the participants are not actual stakeholders of Mong Kok, an introduction to the game and site conditions is provided before playing, along with corresponding site analysis and photos for player reference. The game process involves proposing strategies in role order, which are then allowed to be implemented or fail due to opposition from other players or insufficient bargaining chips. Due to the limitation of bargaining chips, many strategy implementations require cooperation among different stakeholders. For strategies that demand space rights concessions, they can be exchanged by implementing other strategies beneficial to the respective players. In some cases, certain roles may also ignore other players' opinions and implement strategies, but they may face countermeasures and isolation from other players later on.

Game Roles

Government Sector

Money:20 Management:16

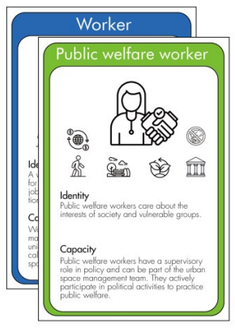
As the direct decision-makers and managers of urban spaces, the government has the most funding and management capacity in the game. Their goal is to implement the main structure of public spaces in this area according to the public space system planning mentioned earlier. In addition, they are committed to balancing the interests of different groups They will act as the first player to make proposals.



Profit-seeking Group

Money:16 Management:8

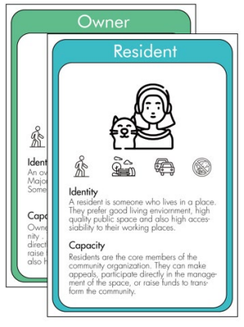
Comprising investors, developers, and entrepreneurs, this group aims to maximize their revenue through strategic implementation as much as possible. In the game, high-revenue strategies are often related to spatial transformation, making them closely related to other players and requiring frequent negotiation. They can consider actively responding to the demands of other roles in exchange for their support for their



Pressure Group

Money:8 Management:8

Composed of labor unions and NGOs, this group represents the interests of workers and the overall welfare of urban public spaces. In the game, they pay more attention to walkability and the quality of public spaces, making judgments based on the public interest of the strategies.



Community Organization

Money:8 Management:8

This group consists of property owners and residents who live in the area, and changes in urban spaces directly affect their lives. Their goal is to express their demands for the area's spaces based on their living experiences and implement strategies with the help of expert roles. At the same time, this group also needs to actively imagine the impact of other players' strategies on their daily lives and ultimately judge

Researcher

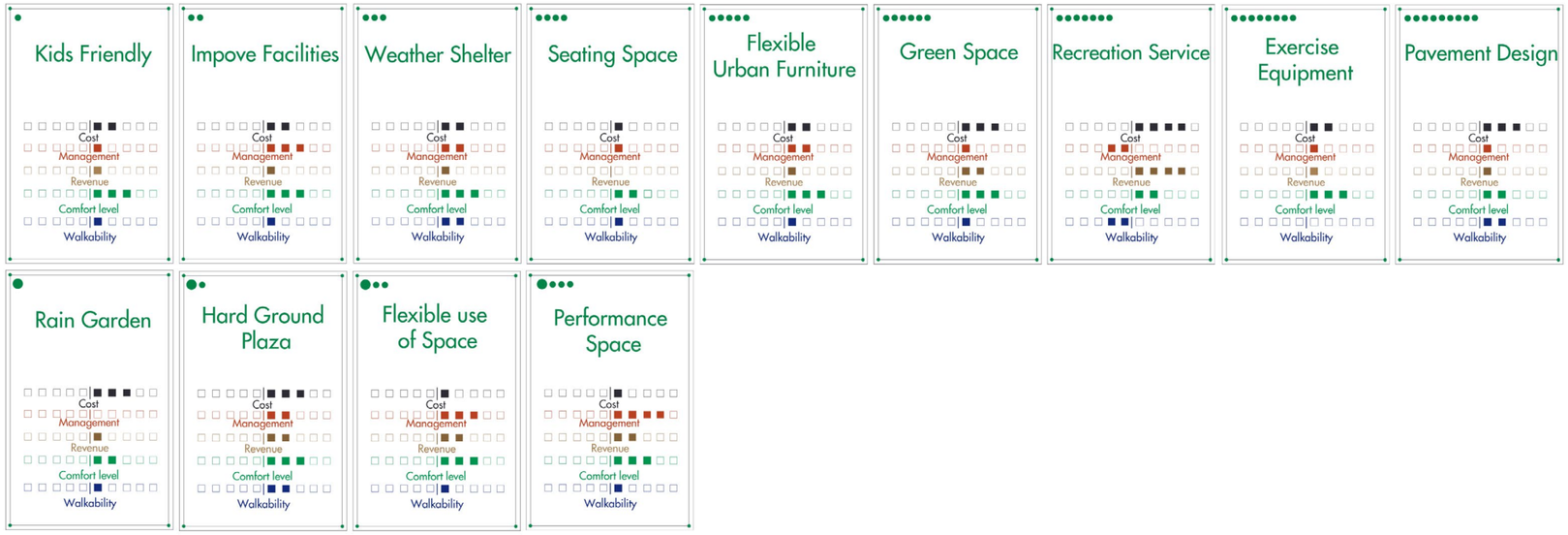
Money:0 Management:0

The researcher team does not directly participate in the game; instead, they evaluate and provide suggestions on the players' decisions within the game.

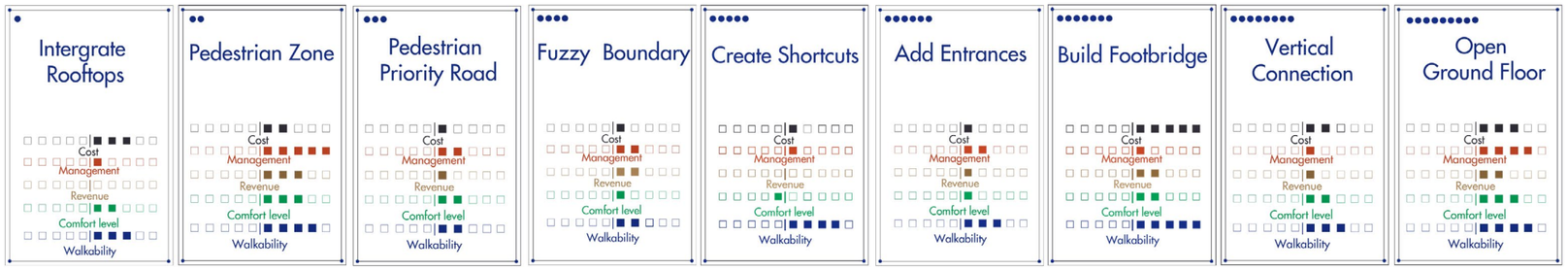
Strategy Cards

There are three main categories and a total of 29 strategy cards to choose from in the game. These cards are assigned five attributes: Cost, Management, Revenue, Walkability, and Comfort level. Cost and Management represent the number of bargaining chips required to implement the strategy. Revenue represents the return on strategy implementation. Walkability reflects the overall accessibility, continuity, and walking experience of the space. Comfort level represents the quality of public spaces, reflecting factors such as the quantity, size, facilities, and spatial experience of public spaces. The implementation of strategies is based on the actual conditions of the space; therefore, the strategies that can be implemented may differ depending on the space, and some strategies may require the implementation of prerequisite strategies. As a result, experts will conduct real-time evaluations during the game. Additionally, blank cards are prepared for unexpected solutions that may arise during the negotiation process, which can then be added to the cards.

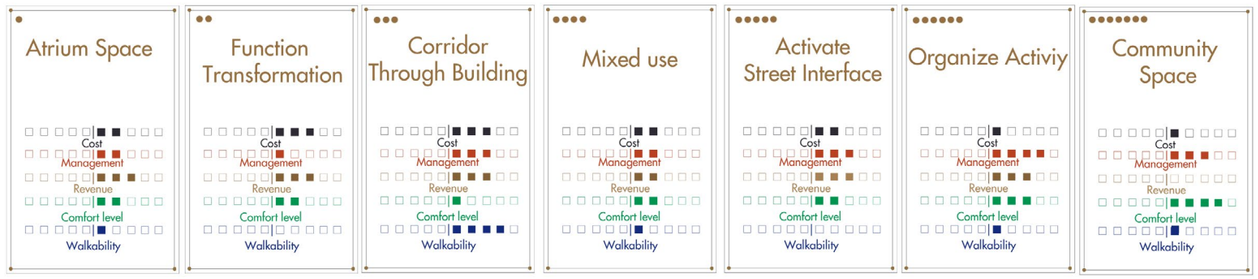
Improve Spacial Quality

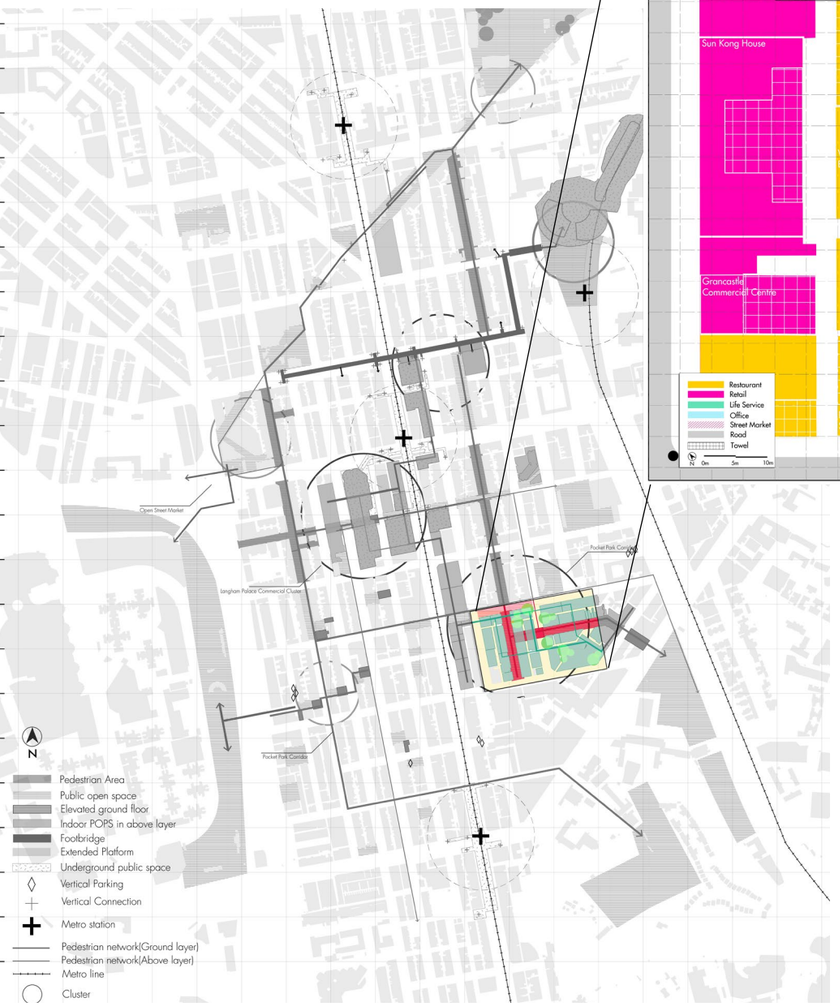


Increase Walkability



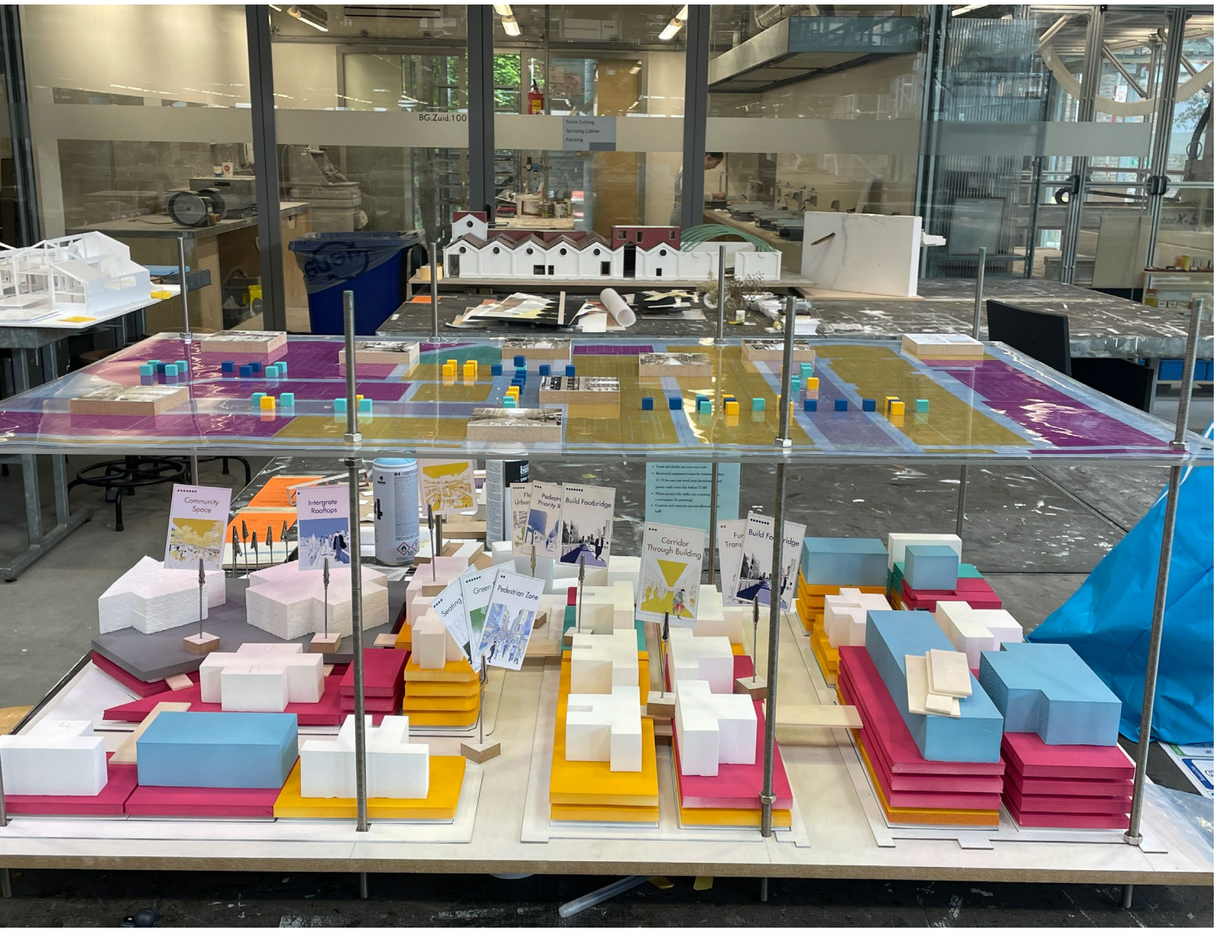
Activate Site

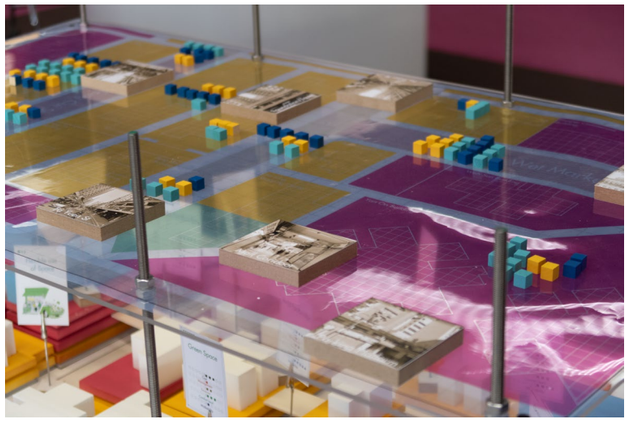




Game Site

The game selected the Cluster in the southern part of Mong Kok. This is a highly mixed-use area with generally tall buildings, characterized by podium and tower configurations, which has shown high potential for developing three-dimensional public spaces in spatial assessments. Both the Tong Choi Street Market and Vegetable Market are located in this area, occupying street spaces. This space involves numerous stakeholders, and urban life unfolds on different levels, making it an appropriate location for constructing a new three-dimensional public space system in this tabletop game.



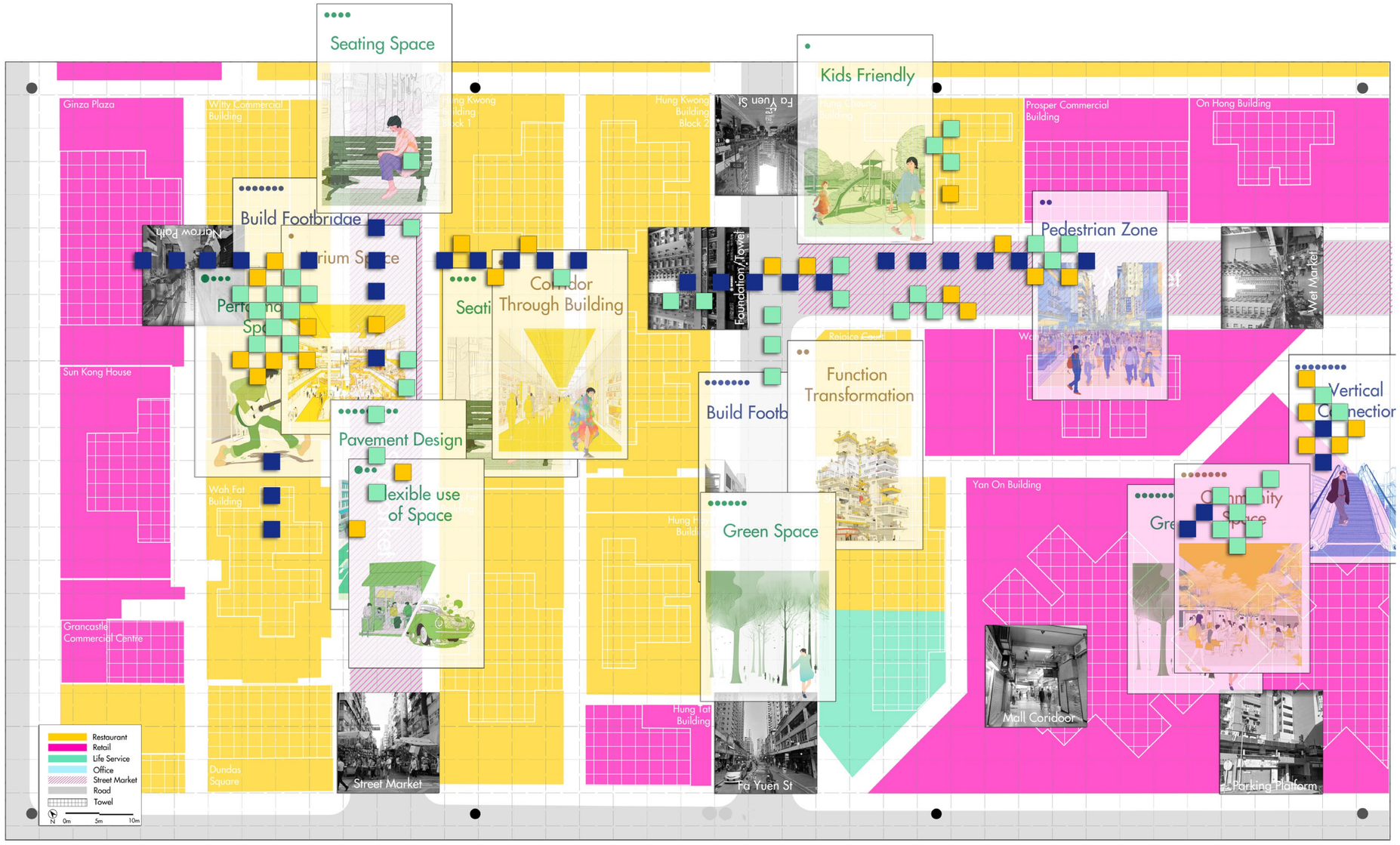


Game Board

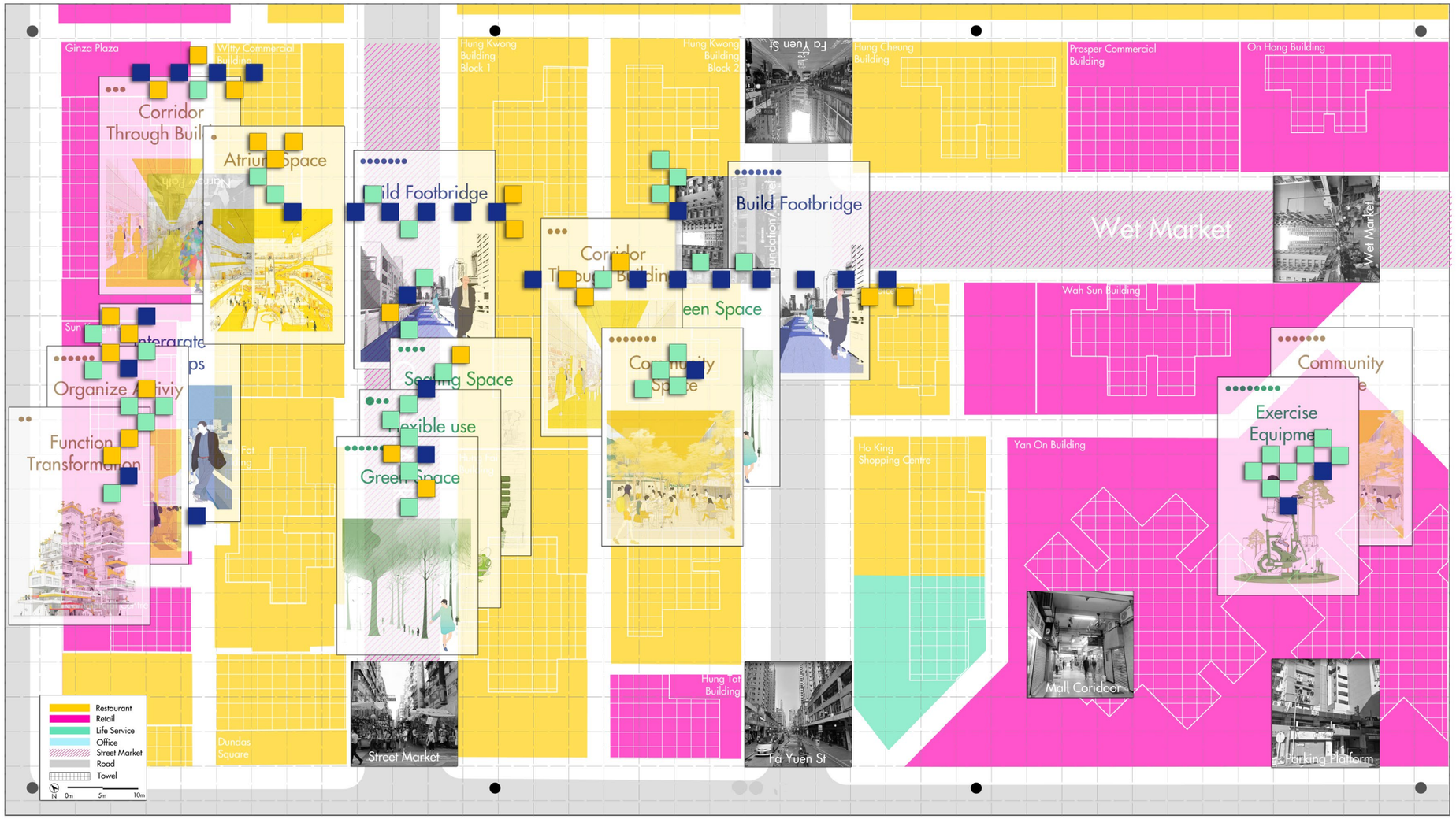
The game board consists of two layers. The first layer is the urban model of the area, with different colors representing the functions of the buildings for easy player discussion. Implemented strategies are placed in corresponding spatial locations. For strategies involving pedestrian overpasses and rooftop space integration, wooden pieces can be used to build models in real-time. The second layer is a flat plane showing the ground floor plan of the area and placing photos of key areas. Additionally, the benefits generated by strategy implementation are represented by small wooden blocks placed on this layer.

Game Result

The game was played twice after testing. The first playthrough was conducted by landscape architecture students, while the second included participants from other fields, such as transportation engineering, transportation planning, urban design, and architectural design students. The result of the first game is as follows: During the early and mid-game, players focused on the western open market and surrounding areas, actively discussing and implementing many strategies for this space. Simultaneously, an east-west axis perpendicular to the open market was established on both the ground and above-ground levels, integrating indoor public spaces and partially converting rooftop spaces into public spaces. The players then shifted their focus to the eastern vegetable market and residential areas. Under the conditions promised by the government and developers to improve rooftop space quality, provide convenient access, and strengthen management, residents agreed to transfer the rooftop space usage rights. This decision increased the public nature of the eastern space, attracting more people to use it. Subsequently, based on this decision, players were willing to invest in the vegetable market area to improve its spatial quality.



The result of the second game was somewhat similar to the first in the early and mid-game, but different situations emerged in the later stages. The community organization refused to allow others to use the rooftop space, so other stakeholders abandoned the development of this area and continued to improve the western area. The profit-seeking group integrated the rooftop spaces of the western podium, attempting to obtain more revenue through functional conversion and activity organization.



Players' Feedback

There are some feedbacks from the players:

- The role-playing aspect of the game facilitated perspective-taking among different groups and exposed potential conflicts in the area during the gameplay.
- The game prompted frequent interaction and negotiation between players.
- The game was easy to grasp, engaging, and provided an enjoyable playing experience.
- The game board effectively facilitated interaction.

Some suggestions from the players for the game are:

- Predict conflicts between players in the game design and prepare corresponding measures.
- Impose more restrictions on the government role, as the current game makes the government role too friendly to the strategies proposed by other roles.
- Adjust the game's teams, add more subdivisions, and make the goals of different roles more explicit (Initially, there were nine different roles with their own objectives in the design. However, to simplify the game, improve the playing experience for non-professionals, and control the game duration, these roles were eventually grouped into four main categories for gameplay).
- Adjust the revenue mechanism. The current game has strategy revenue, but players cannot truly obtain corresponding rewards and apply them again in the game (In the early version of the game, a time system was introduced, and revenues were distributed to players as time progressed. However, the time system required a more comprehensive mechanism to be of reference value to reality. Therefore, due to limited project time and the consideration of simplifying the game, this mechanism was removed from the final game version).
- The numerical settings of the strategy cards led to controversy.

In summary, the players gave a generally positive evaluation of the game, affirming the playing experience and the interaction between players, and believed that the game promoted a better understanding of urban space to some extent. However, the game can still be further optimized by clarifying game objectives, increasing restrictions between players, and enriching game content.

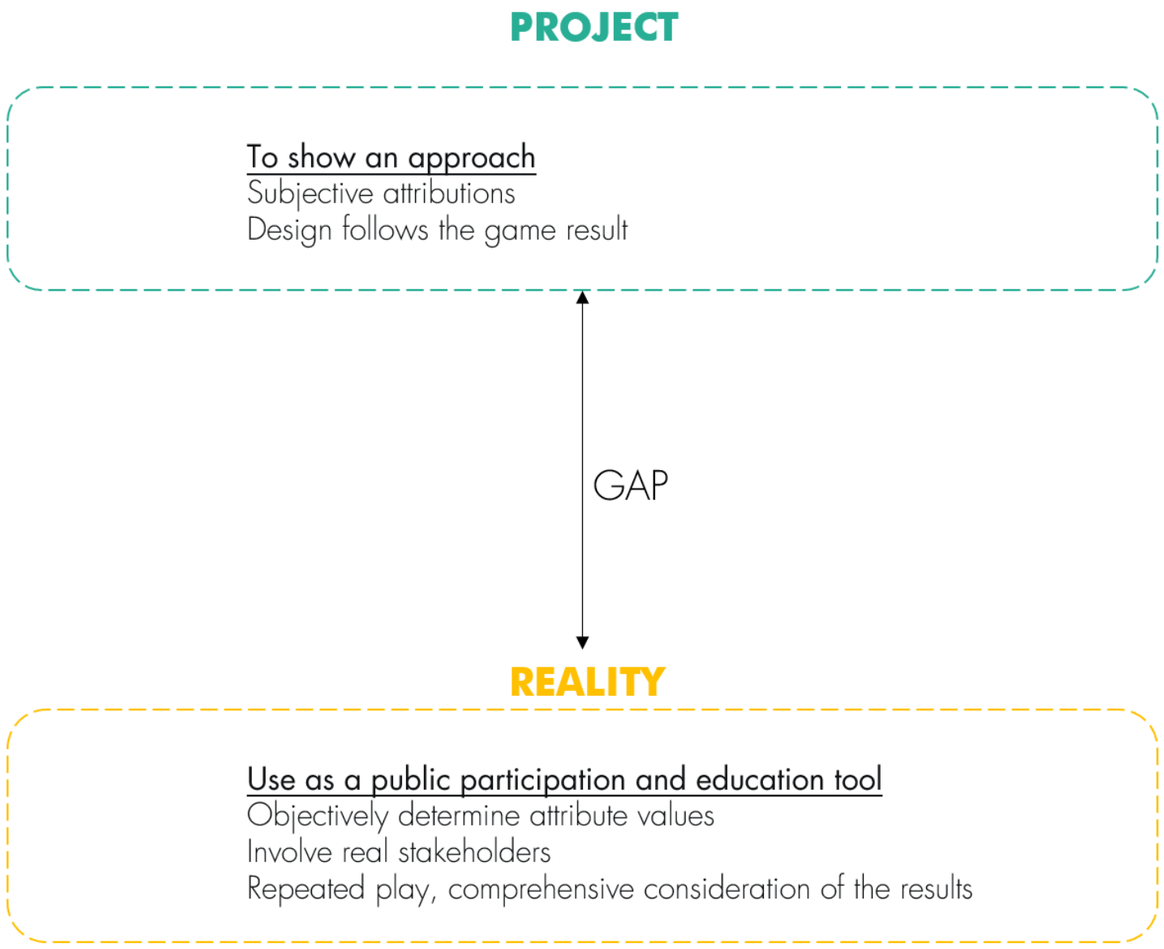
The Gap Between Reality and the Game

In this project, serious games are used as tools for coordinating top-down and bottom-up approaches. However, due to time and energy constraints, the project primarily demonstrates this design method rather than fully reflecting the reality. This is manifested in the following aspects:

- The game players were Chinese students studying at Delft University of Technology, not the real stakeholders of Mong Kok.
- The attribute settings of the strategy cards were somewhat subjective and could not fully reflect reality.
- During the design process, the game was only played twice, and the spatial design was directly based on the synthesis of these two results.

If this method is to be integrated into the real urban design process, the game needs to be further developed in the following aspects:

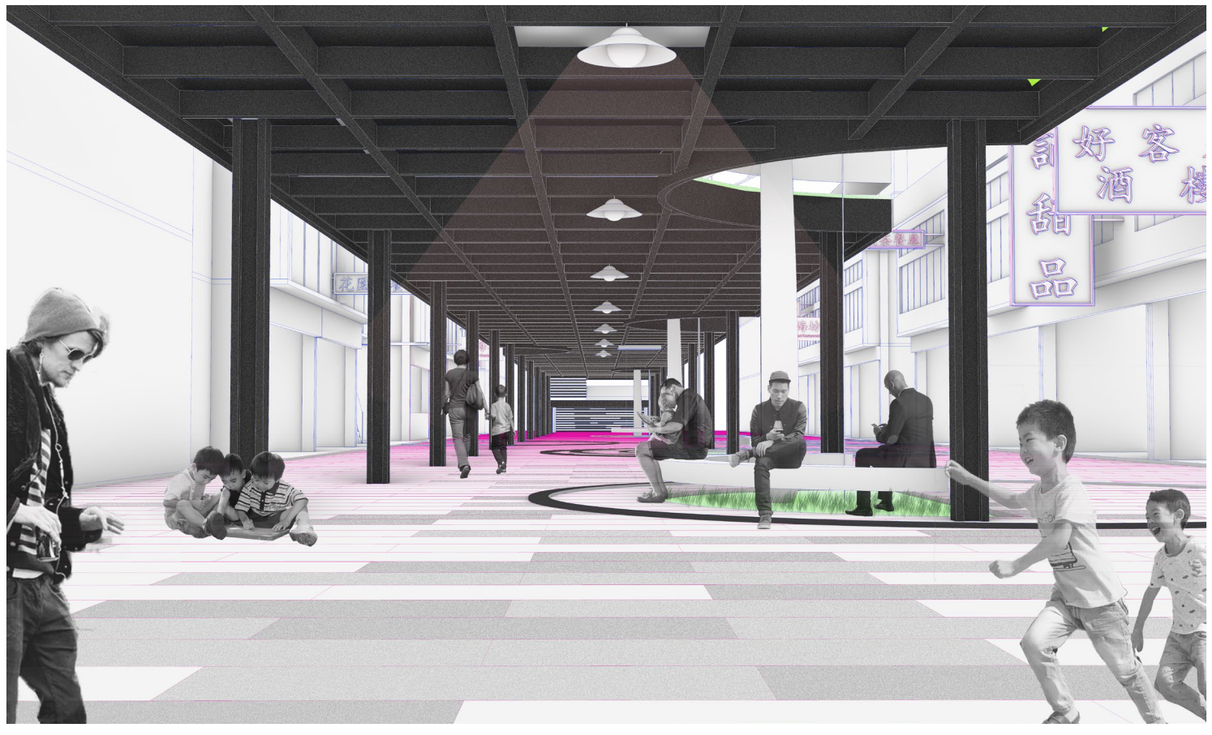
Strategy cards will be made clearer and more diverse, with their values determined by experts from different industries after thorough assessment. At the same time, these values will fluctuate within a certain range depending on the site; moreover, different strategies can interact with each other, thereby strengthening or weakening the corresponding attribute values. The reward system needs further development to clarify the interests between different groups. This series of improvements requires collaboration between different professions and a well-rounded team to support the game process.



Secondly, the game will be played by real stakeholders. These participants represent their respective groups, need to fully understand the game's background and objectives, and possess a certain level of negotiation skills. At the same time, these representatives need to communicate extensively within their groups before the game to clarify the group's interests. This requires the government to truly regard the game as an essential part of the urban space design process and promote it in society. By participating in the game, different groups can genuinely strive for their interests through negotiation.

Lastly, the game will be played more frequently, presenting one or more visions after fully considering and synthesizing different results. These visions will then be re-evaluated by the stakeholders and ultimately transformed into actual urban spaces.

In addition to being part of the spatial design process, the game can also independently serve as an educational tool to be promoted within communities, inviting the public to play different roles. The goal of this educational tool is to raise public awareness of urban spaces, stimulate interaction, and foster mutual understanding.

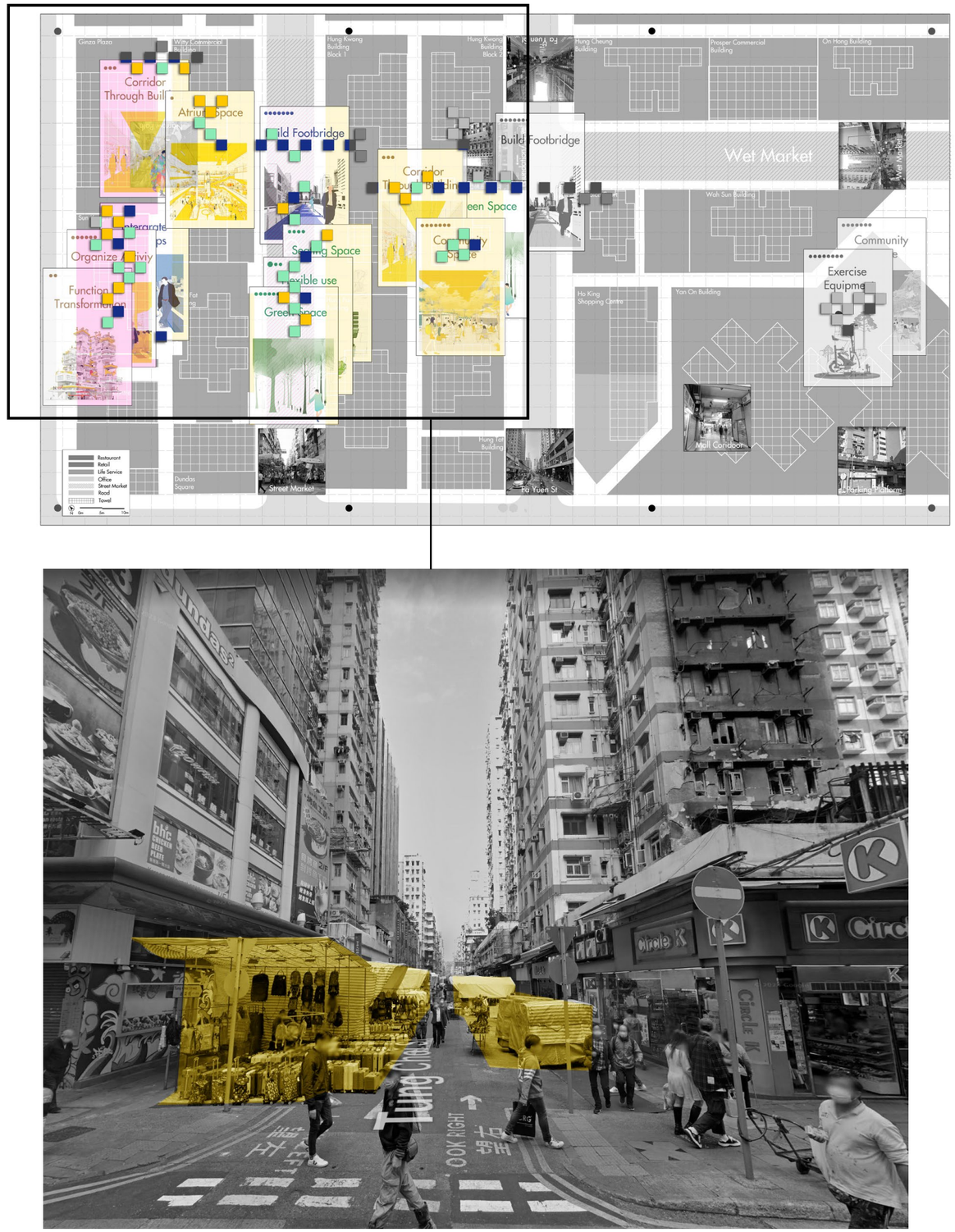


07
Space Design

Results from the serious game indicate that the open market and its surrounding areas are focal points for the players, who hope to implement strategies beneficial to their respective groups. Thus, this project selects this area for specific spatial design. Currently, this area is located at the end of the captivating Sai Yeung Choi Street / Ladies Market in Mong Kok, which operates from 11 a.m. to 10 p.m., offering an array of myriad goods. Vendors occupy both sides of the road, leaving a passage in the middle for customers, much like a tunnel built of commodities. People from all directions converge here, brushing shoulders, occasionally pausing and colliding in the regular flow. After a day's work, vendors lock everything related to their shops - shelves, canopies, tools, etc. - into a movable two-meter-high cabinet that doubles as a stall background and shelving unit. The cabinet is placed in the street by the owner, waiting to be opened again the next day. Consequently, the street space is always occupied; although not officially recognized as a pedestrian zone, vehicles find it challenging to enter the area. Buildings on both sides of the street are typically podium-and-tower structures, with towers for offices or residences, and ground floors filled with eateries. Retail shops gather on the second and third floors, hidden behind the vendors and slightly quieter than the bustling market.

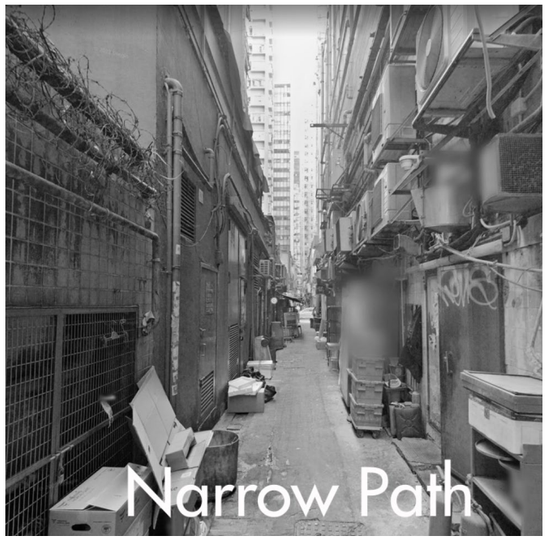
Demands of different groups

For the vendors, they hope to maintain the market status for their livelihoods. Residents wish to improve their pedestrian experience in the area and increase public spaces and amenities, especially areas for sitting and resting. For the interest group comprising developers and entrepreneurs, they hope to attract foot traffic from the west and north to consumption places by improving spatial quality and increasing transit routes. Simultaneously, they are dissatisfied with the market's layout because its arrangement along both sides of the street obstructs the view of the storefronts. The cramped market focuses people's gaze. Through the serious game, people tried to balance these different demands, but the results still require detailed specific spatial design for this limited space. Therefore, this design selected this area, utilizing Mong Kok's flexible use of space and vertical space division to achieve this goal.




Street Market


Fa Yuen St


Narrow Path


午市11點起
供應點心、特色粉麵
Foundation / Towel


Fa Yuen St
Fa Yuen St

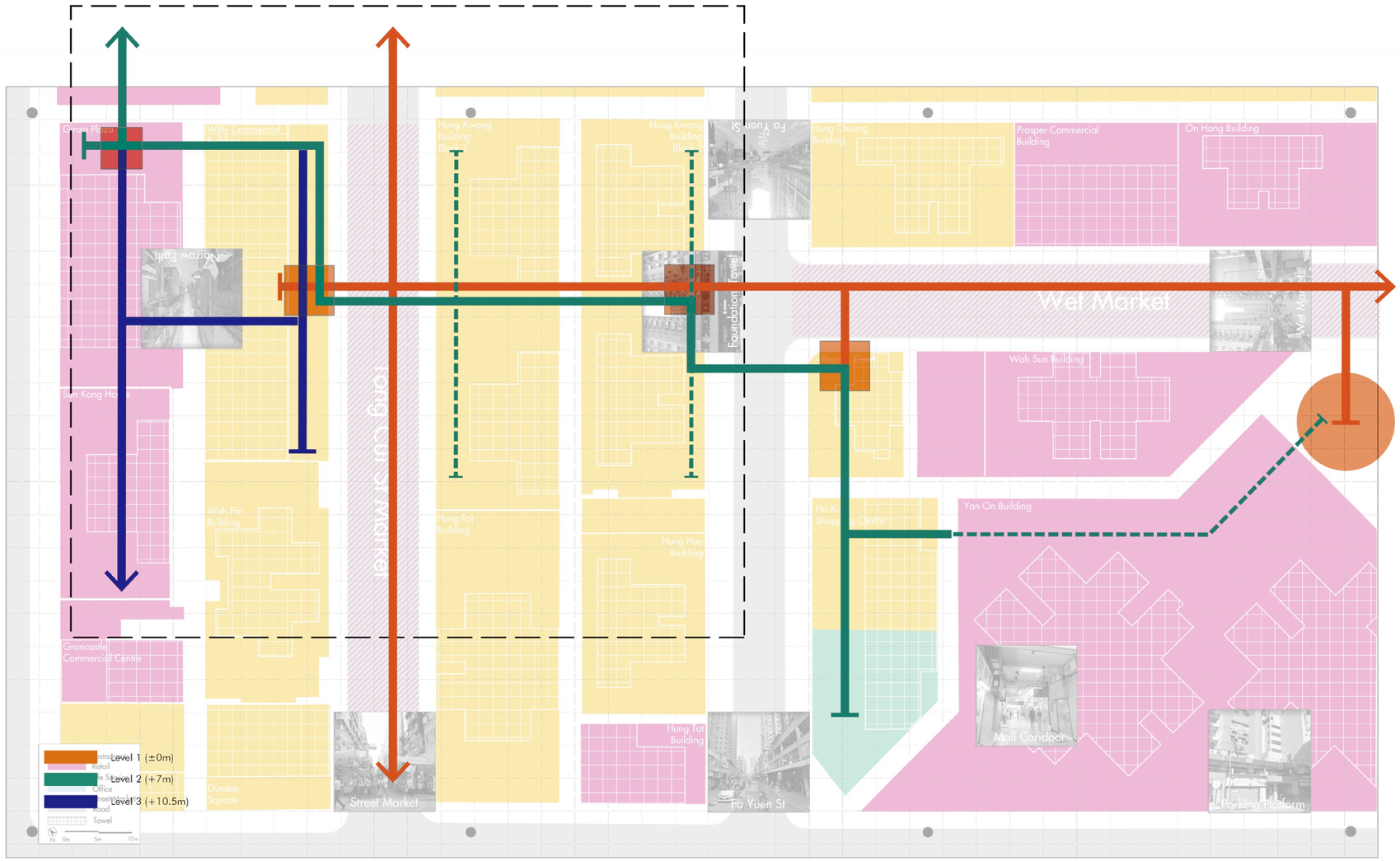

Mall Coridoor

Create an east-west axis

The first step is to establish an east-west axis, organized both on the ground and above ground. The ground-level axis provides a transit route for the crowd, connecting Sai Yeung Choi Street Market with the vegetable market. This axis is achieved by reorganizing the existing public spaces inside the buildings and hollowing out the ground floors, thereby incorporating the interior of the buildings into the public space system and attracting people to activate the internal spaces. The above-ground axis aims to provide a rapid transit pedestrian system between the region's significant buildings, connecting rooftop spaces and internal spaces, thereby increasing their public nature. This axis is implemented by adding pedestrian overpasses, integrating rooftops, and reorganizing internal circulation within the buildings.

Enhance Vertical Connection

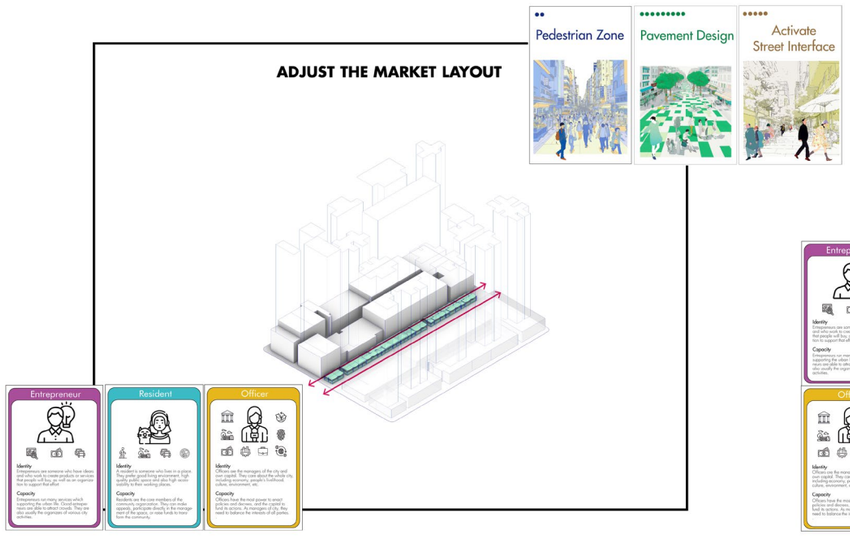
In the construction of the public space system across different horizontal planes, the most important issue is to design vertical connections between these planes. The public space available at the ground level is already limited, making it challenging to allocate more space for vertical structures. Therefore, this design relies on the extension and public usage of existing vertical channels within buildings. This strategy, in conjunction with the horizontal axis, increases the traffic pressure within the buildings. For newer buildings, an internal atrium is typically present, which can be used to alleviate the additional traffic pressure. On the other hand, some older buildings do not have atriums, with the interior relying on a single staircase and separate horizontal corridors on each floor for circulation. Considering the current architectural situation, the creation of additional atrium spaces is contemplated, not only to address internal movement but also to enhance the shopping mall's interior environment and distribute the additional flow of people within the building.

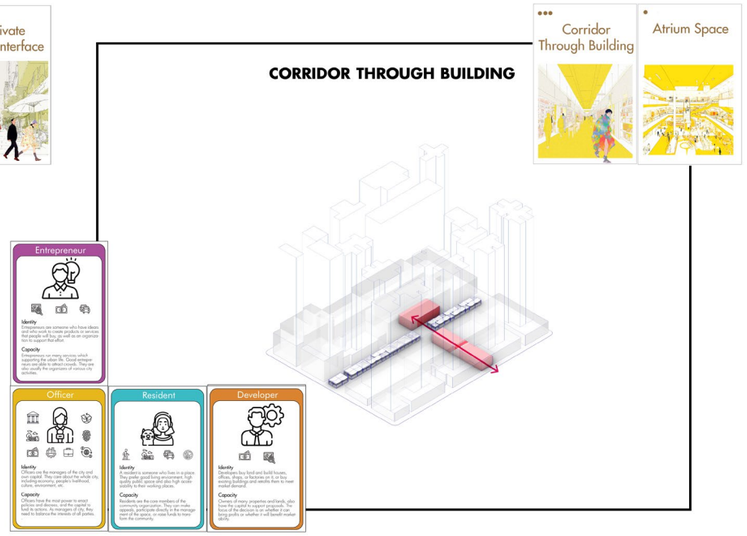


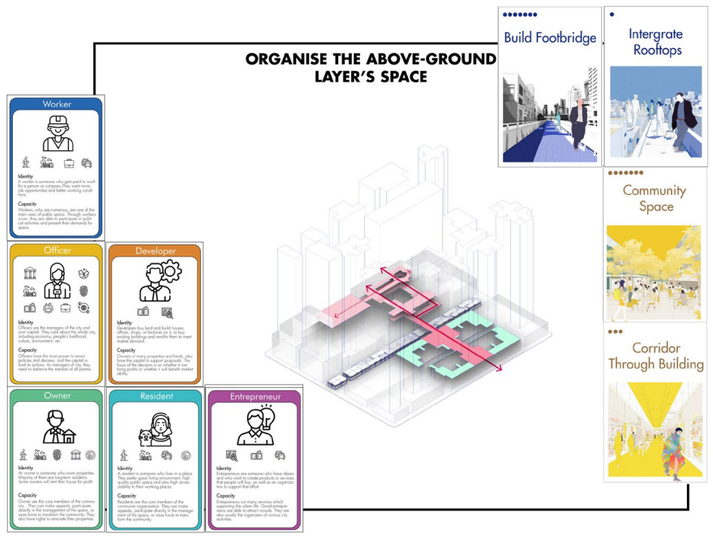
Integrate rooftop spaces

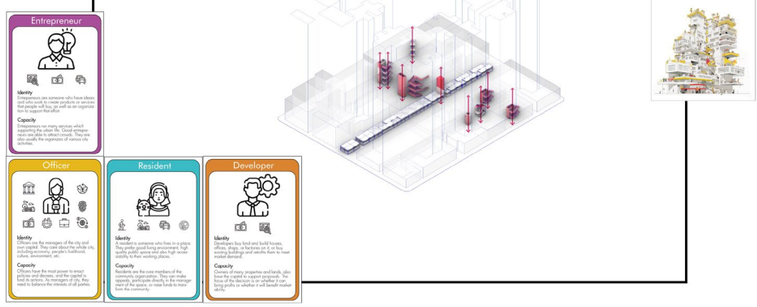
Another issue lies in balancing community space with public space. In constructing public spaces at the above ground level, the usage of podium roof spaces faces two different scenarios. The first is where the tower is an office building. In this case, the roof space is well managed, with leveled ground connecting the roof and stairs connecting different elevations. The rooftop level is transformed into a shared space between adjacent office buildings, and the layer where the tower connects to the roof can be converted into service-oriented businesses such as cafes. The interplay of staggered platforms and the transition between interior and exterior spaces create a rich spatial experience. The second scenario is where the tower is a residential building, which presents two issues: space allocation and vertical circulation. The space is currently for community residents only, and transforming this space into a public one requires negotiation with residents. Access to this space is often for residents only, necessitating the addition of separate vertical transportation systems. To address the first issue, a serious game simulation was used. The existing podium rooftop space is generally only used for transit and temporary stays, with low usage rates and quality of space often overlooked due to budget constraints. In the game's proposal, residents did not resist the space transformation because the construction of the pedestrian bridge brought convenience to their lives, and they also made demands: part of the space should be divided into public space and part into community space; developers and the government should be responsible for improving the quality of the space, with residents participating in daily management. The second issue is more difficult: to maximize the benefits and accessibility improvement brought by the rooftop space, the interior of the base must be connected to it, either by reducing merchant area to increase internal transportation space or by partially converting resident-only stairs.

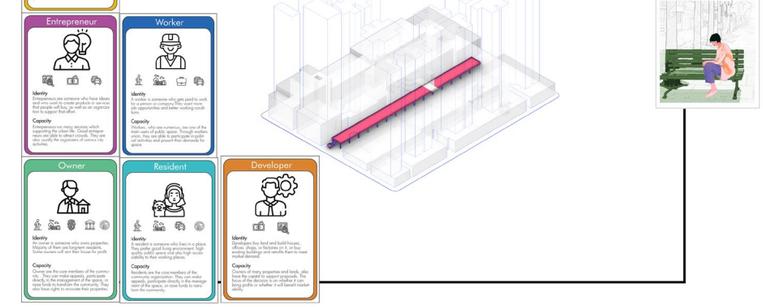
Generation of Design

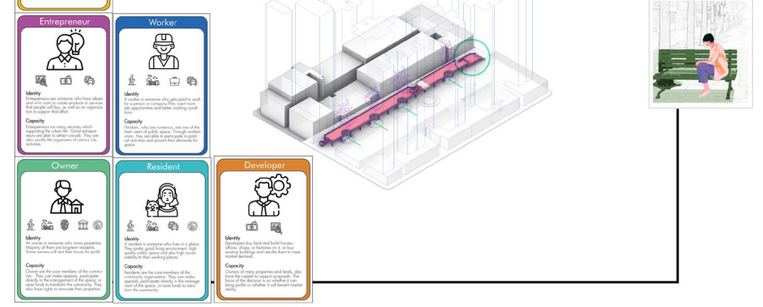


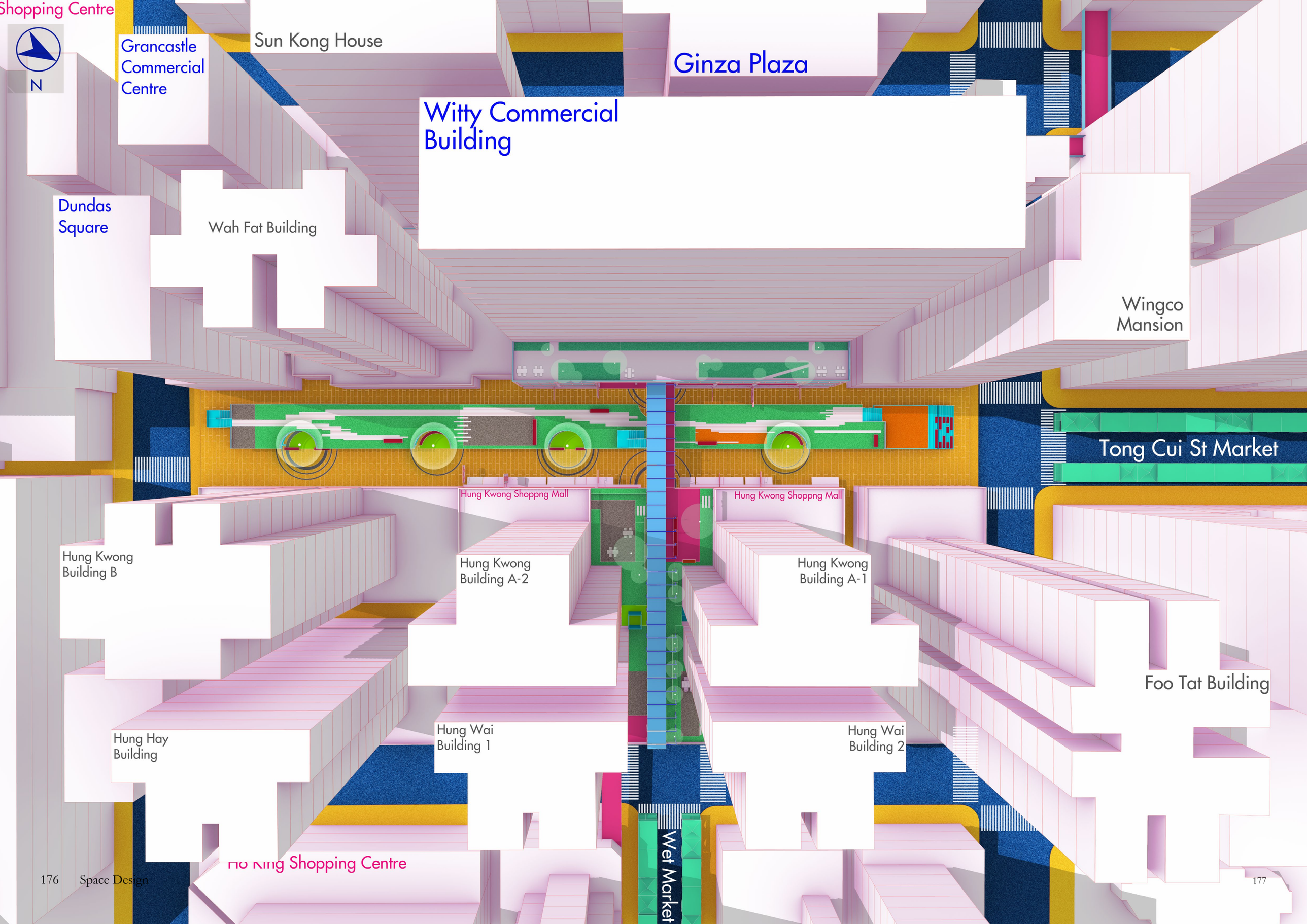






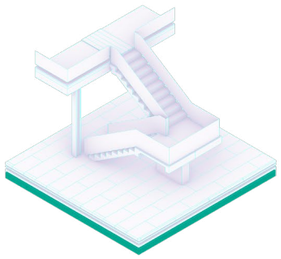




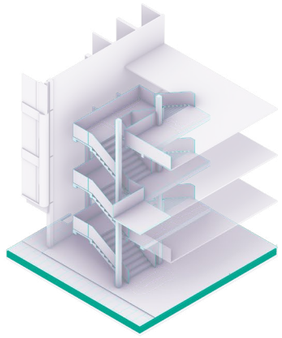

Shopping Centre
N
Grancastle Commercial Centre
Sun Kong House
Ginza Plaza
Witty Commercial Building
Dundas Square
Wah Fat Building
Wingco Mansion
Tong Cui St Market
Hung Kwong Shoppng Mall
Hung Kwong Shoppng Mall
Hung Kwong Building B
Hung Kwong Building A-2
Hung Kwong Building A-1
Foo Tat Building
Hung Hay Building
Hung Wai Building 1
Hung Wai Building 2
Wet Market

Spatial Strategies

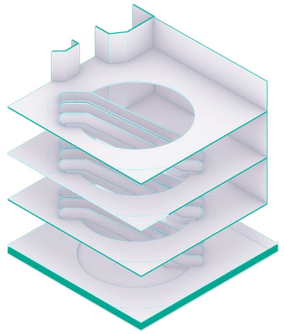
Vertical Connection



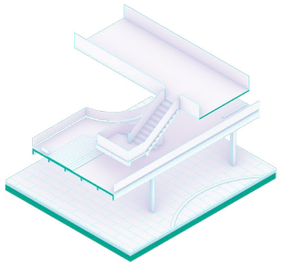
Exterior Staircase



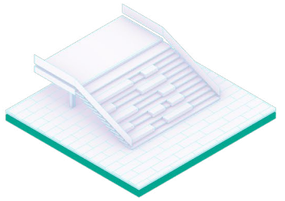
Staircase



Atrium Escalater

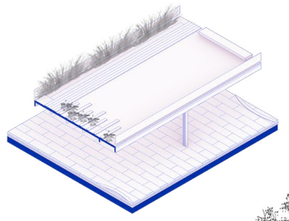


Exterior Staircase

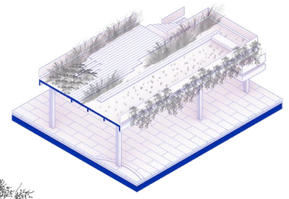


Sit-able Large Step

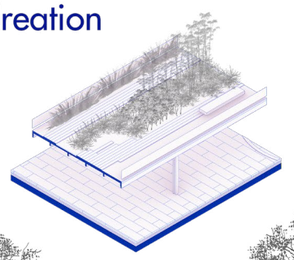
Space Creation



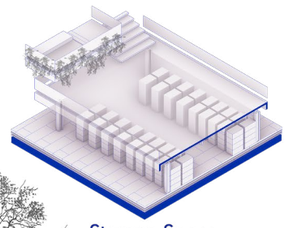
Sit-able Large Step



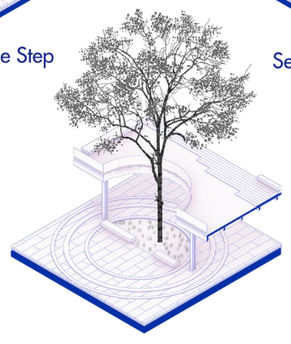
Seating Space



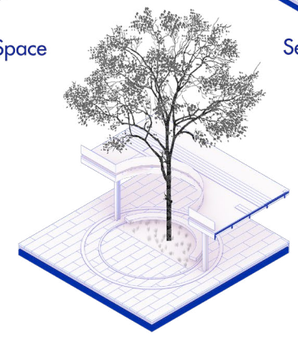
Seating Space



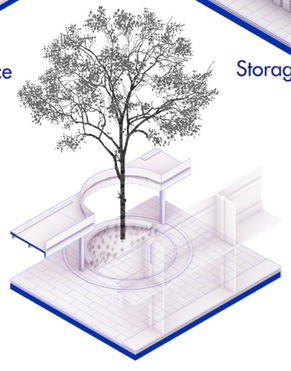
Storage Space



Seating Space

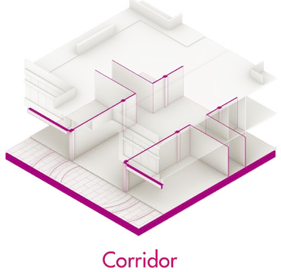


Conversation seat

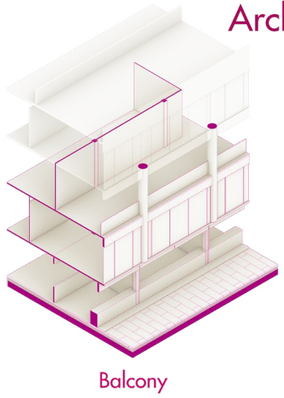


Pedestrain Path

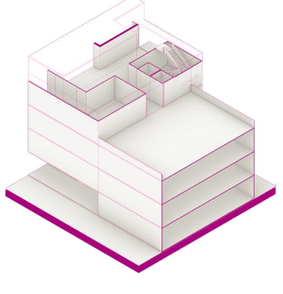
Architecture



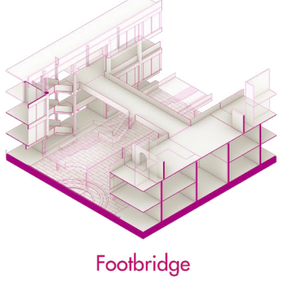
Corridor



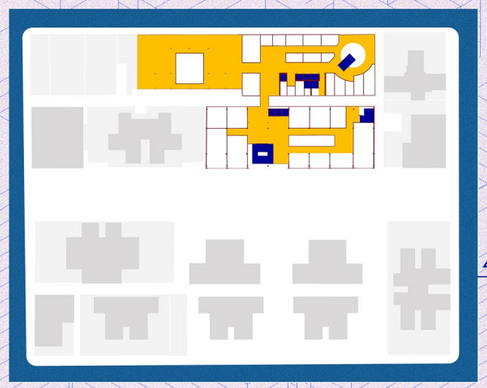
Balcony

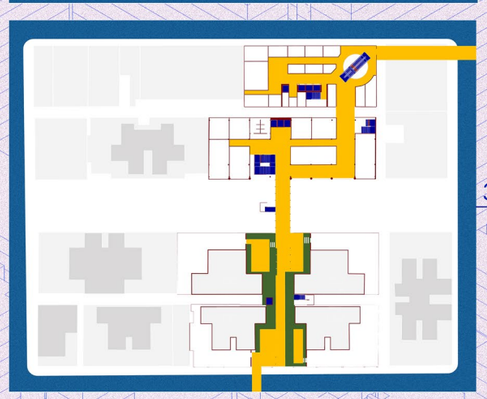


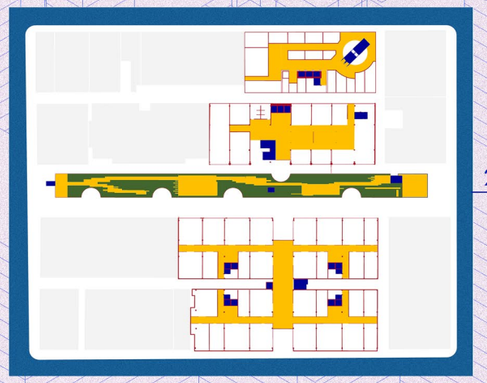
Integrate Rooftop

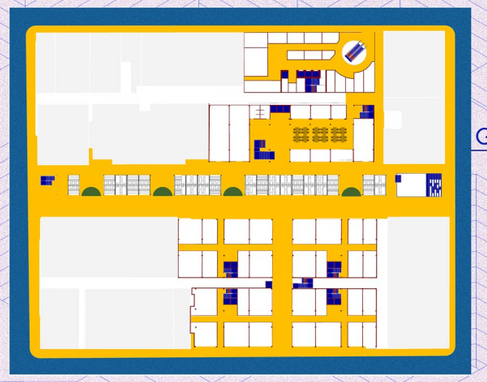


Footbridge







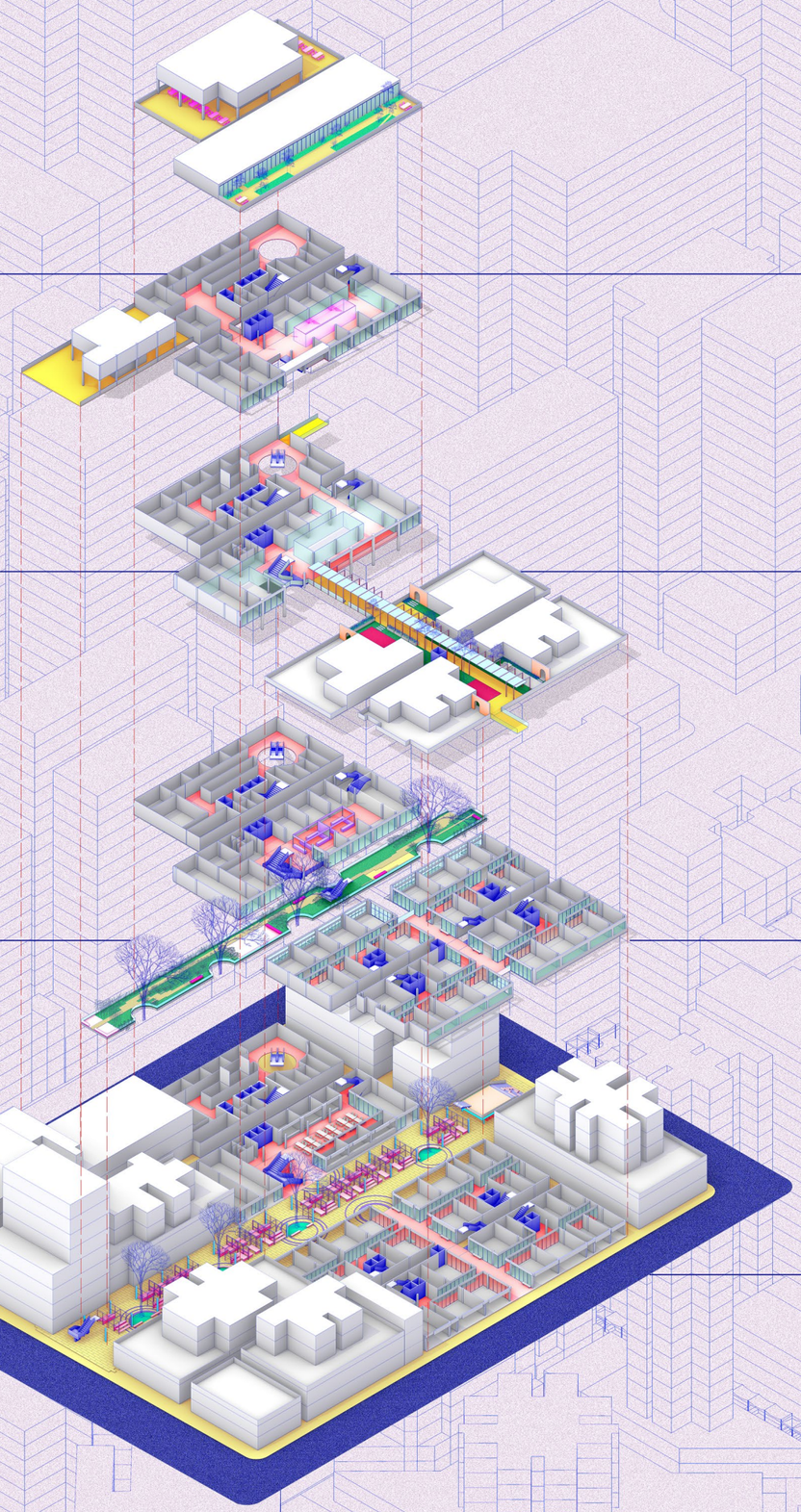


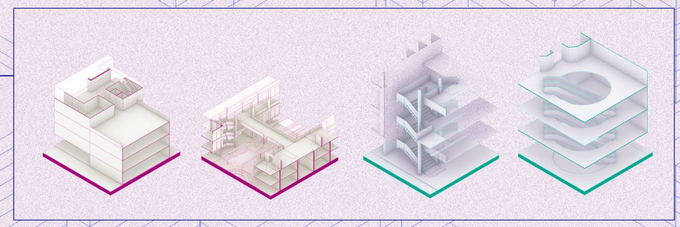
4th Floor

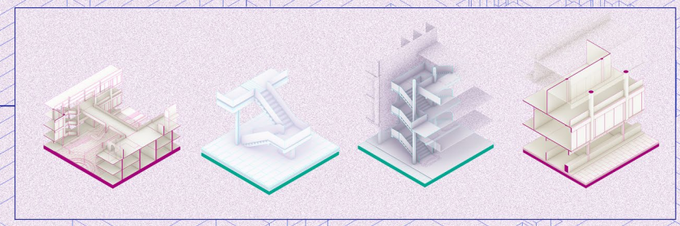
3rd Floor

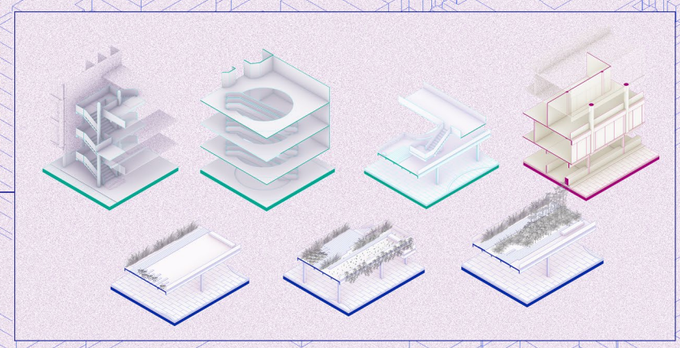
2nd Floor

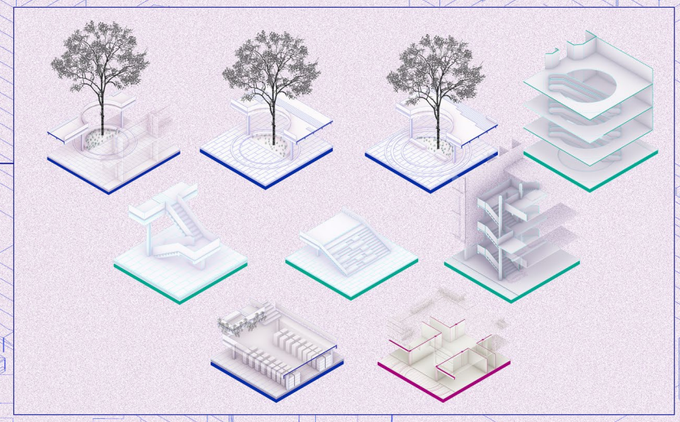
Ground Floor



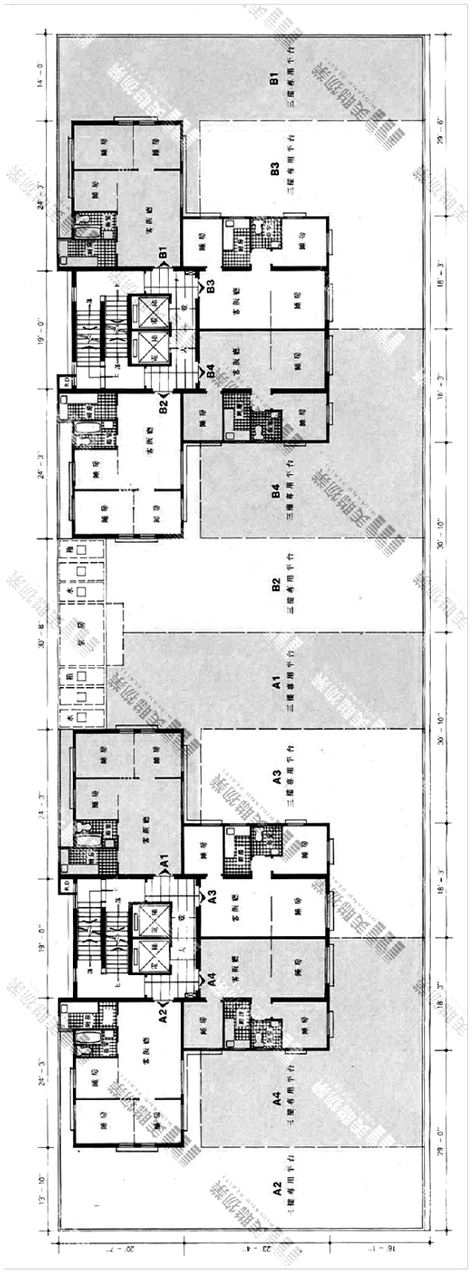




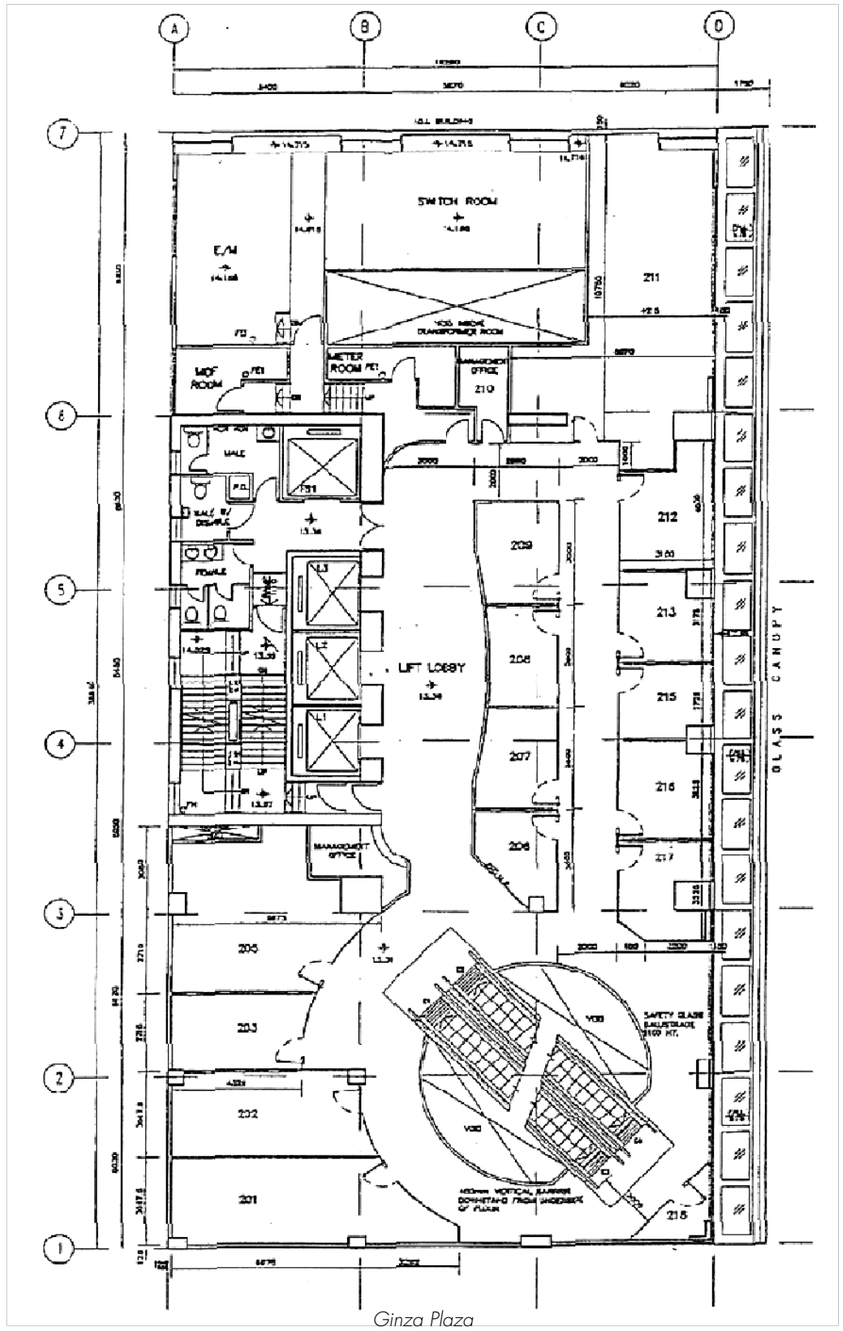




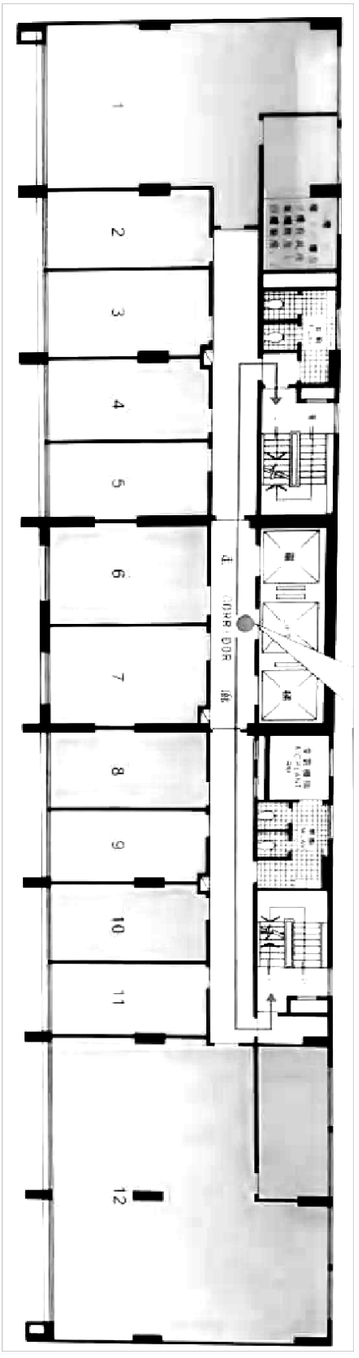
Current Floor Plans



Hung Kwong Building



Ginza Plaza



The tower of Witty Commerciail Building

Vertical Connection

A prominent staircase was created in the mall to provide a new three-dimensional public space system with a more convenient vertical connection to the public. The tough boundary of the shopping center is broken, the publicity is enhanced, and more people are obtained.

Atrium

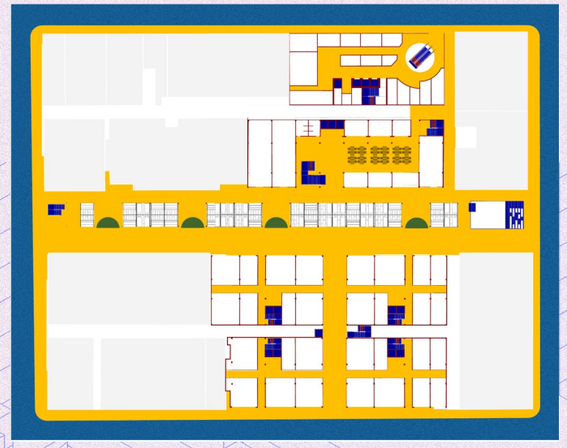
The establishment of the atrium space is intended to further enhance the connection between the mall and the public space system, and activate the neglected internal space. By providing a space for the public to talk and rest, merchants also gain more customers

Pavement

The use of pedestrian-friendly paving forms to integrate the street into a complete underside, and the introduction of circular paving forms to emphasize small public Spaces and important entrances within the area

Space Division

By introducing a platform, a new canopy is created, and the street are divided into three parts, main street, vendors' area, and shopping path. This action provides different spaces for diverse activities, also improved the walkabilities of the street.



The Street Market

The market space is moved from both sides of the street to the middle of the street, easing the contradiction between it and the shops on the ground floor and providing more space for pedestrians. The booths use a modular structure that allows them to be placed in a new storage space after the market closes, thus avoiding taking up street space

Flexible Space

Now, the space can be used more flexibly. The platform provides the roof interface and lighting for this space, while the ceiling and pillars allow for variety spatial arrangements, such as community, festivals and exhibitions

Stairs with Seats

The interface area between the two Spaces is a popular choice for people to stay, so more seating is added to provide a public space for observation, waiting, communication, and rest. In addition, it is a grand staircase that leads to a more natural and diverse platform of public Spaces

Residential Access

The original stairs and elevators remain unchanged and are still used by the residents. Next to the corridor, a new staircase and elevator are added for public use.

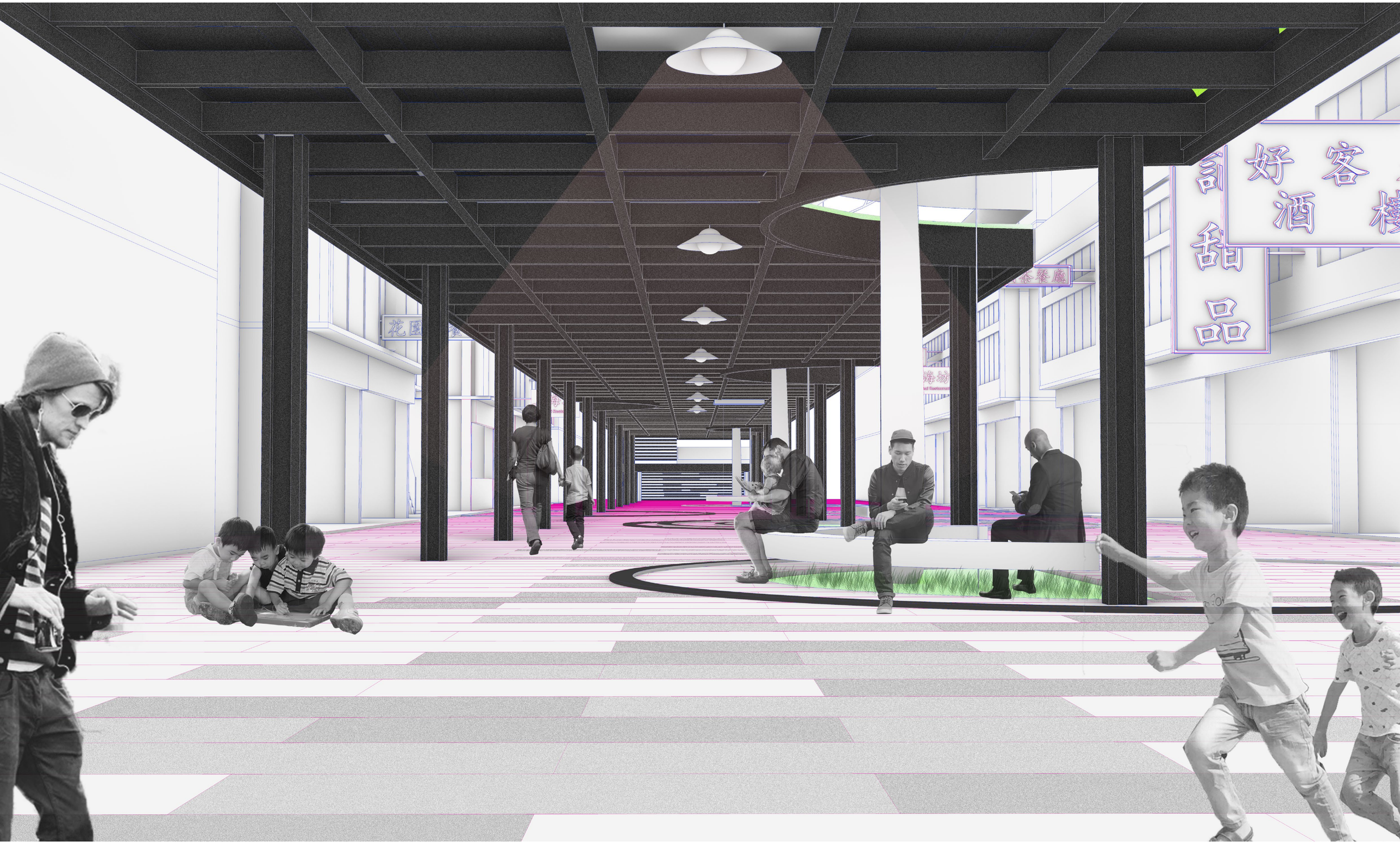
Mini Resting Point

Those mini rest points break the blockade of the street market on both sides of the building, but also to enhance the experience of the market, increase the communication space of rest and waiting. The trees and grass add comfort to the space, provide a more layered Canopy, and also serve as a drainage for the street

Corridor through Building

The corridor through the building was created in order to connect the two streets to open the market and relieve the traffic pressure from the western Cluster of the site to the east. On the one hand, it increases the walkability of the area; On the other hand, this corridor also increases the publicity of this food shopping center, introducing more passenger flow, and the quality of the space inside the building will get more attention from merchants to attract customers.

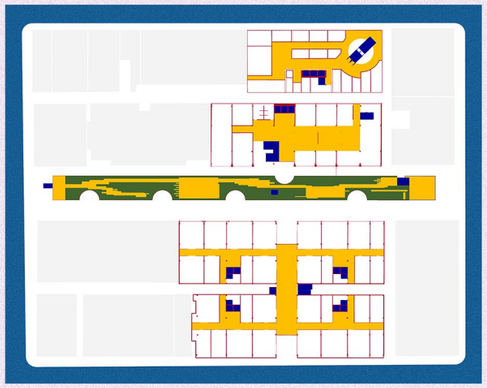
Staircases with seats



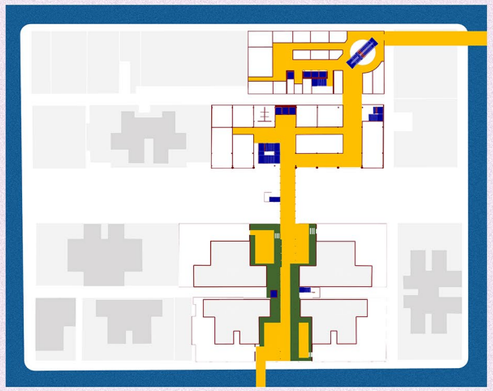
Under the Platform

Integrate Interior Spaces

The establishment of the upper level transportation system connects the existing independent Spaces within the building and provides a more efficient way to move. This strategy connects the shopping mall with the food floor so that the two complement each other. The upper floors also get more foot traffic, which will lead to a redistribution of the functional layout inside



The Second Floor



The Third Floor

Footbridge

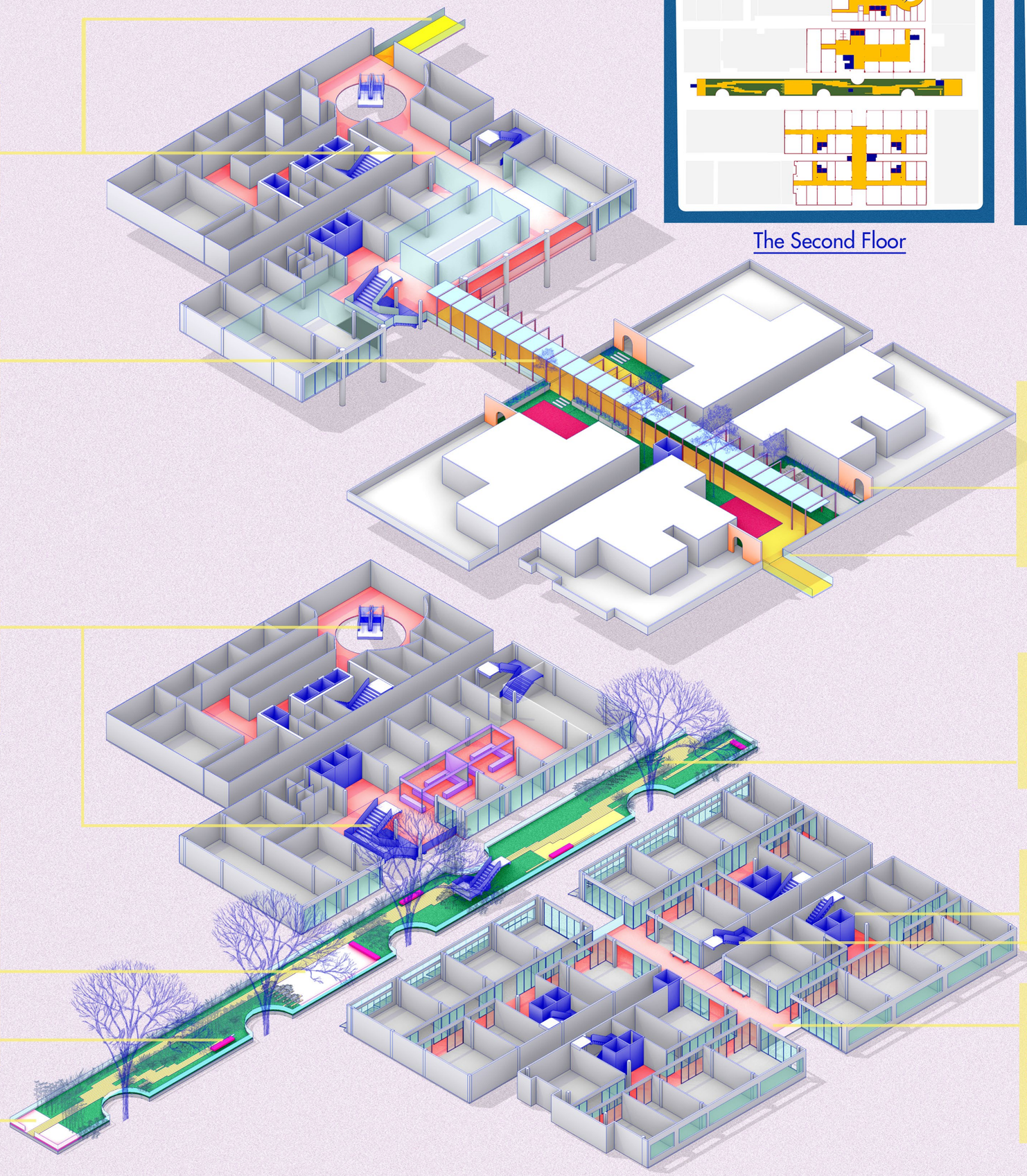
A footbridge with a roof is built to connect the building Spaces on both sides of the street and become part of the transportation system on the above ground. Seats are provided on the bridge floor to welcome pedestrians to stay, while also creating a richer visual exchange

From public to community

In negotiations, residents agreed to release the roof space for public use in exchange for helping to build community space. As a result, public space is restricted to the vicinity of the passageway, and several Spaces for rest and communication are provided. Thanks to the new connection, residents will also use the roof space more frequently, thus making the roof more potential to become a community space, increase the cohesion of the community, and provide more space for residents to move

Vertical Connection

A prominent staircase was created in the mall to provide a new three-dimensional public space system with a more convenient vertical connection to the public. The tough boundary of the shopping center is broken, the publicity is enhanced, and more people are obtained.



Trees

Several holes were cut in the platform to improve the lighting on the ground and to introduce Jacarandas to create space. These trees are used to divide the space of the platform, while also breaking up the linear layout of the ground market and providing space for rest.During the flowering season, jacaranda will create a beautiful street scene

The Platform

To face the demands of more public space, a platform is introduced. It creates a floating green area in the street, also produces a canopy for the ground. The platform. The platform connects the ground level with the above-ground level and has a high visual appeal to guide people to use it.

Residents/Public

After transforming the base of the building into a network of connected public Spaces, new staircases and elevators were added for public use, avoiding the disruption of the paths dedicated to residents

Diverse Mini Spaces

By using different combination of plants and pavements, the platform is divided into five mini spaces, which own diverse atmospheres to suit different demands.The seasonal changes of plants deepen the connection between memory and this space

Break Boundary

Connecting the two adjacent buildings, the second floor becomes a whole. This also allows the view through the building's obstruction to reach both streets, thereby reducing the internal closure of the building. This also provides a window into the building's inner space from the exterior.

Flexible use and transformation of the space

Spatial transformation will become an identity of this place.

From day to night: the function of the street changes throughout the day. During the day, it thrives as a bustling marketplace, while at night, it transitions into a public space. The market operates from 11 am to 8 pm, during which vendors occupy the space under the platform for their businesses. As night falls, the platform provides shelter and illumination for the space below, defining a comfortable activity space. The structures used as vendor stalls during the day are transformed into movable seating that users can arrange according to their needs. At this time, the street is not only a place for activities but is also transformed into a stage. Occupying the center of the street, it is observed from all sides. The platform's minimal supporting structure now serves as a natural framing device. At the same time, the lower part of the plaform is used as a storage places for the vendors, to avoid their stuffs to occupy the street when the market are closed.

The growth of plants: the planting design differs above and below the platform. Under the platform's openings, trees are planted for three considerations: first, to define the space through the trees. The area around the trees is transformed into a space unsuitable for vendors, creating gaps in the marketplace for pedestrians. Second, as the trees grow, they will create a canopy for the block and above the platform, enriching the spatial experience. Along with the seasons, the blossoming and falling of flowers and leaves create a changing neighborhood ambiance and spatial experience over time. Third, they create a microclimate for the area and provide a habitat for other urban fauna.

On the platform, the choice of plants leans towards herbaceous plants and some shrubs. On the one hand, it provides a natural setting for activities in this dense neighborhood. On the other hand, it delineates and shapes the space through plants. The platform's structure can hardly support the growth of trees, and too many trees would make the narrow street overly shaded. Herbaceous and small shrubs can be planted directly on the platform's ground, and larger shrubs can be accommodated in planters.

The Iteration of Urban Space: Currently, the primary function of this platform, apart from providing vertical transition, is to offer additional public space in this area for leisure and communication. To shape the space as a place for dwelling rather than merely transiting, the platform only provides an essential staircase for connection without any other connection with surrounding buildings. Through visual aesthetics, interplay of light and shadow, plant life, and auditory elements, the platform becomes a distinct space that contrasts with the surrounding urban fabric, thus attracting the public to it. As the vertical public space system in this area develops, more rooftop areas and interiors of buildings are converted into public spaces. Once the public's need for rest and leisure spaces is met, more entries and exits can be created on the platform to connect the buildings on both sides, transforming it into part of the pedestrian system and turning it into a flowing linear garden.

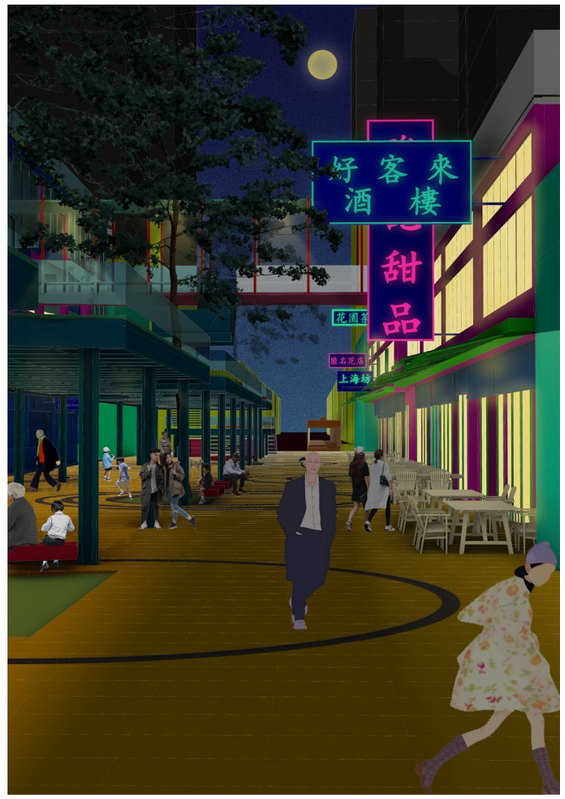
Transformation of the Street

In the day

During the day, the space below the platform provides space for vendors. People to stroll through the pleasant scale of the street, the outdoor space of the shops along the street provides a place to rest and relax, and meeting with friends accidentally will be offered an opportunity to continue the conversation just in the mini-spaces by the street.

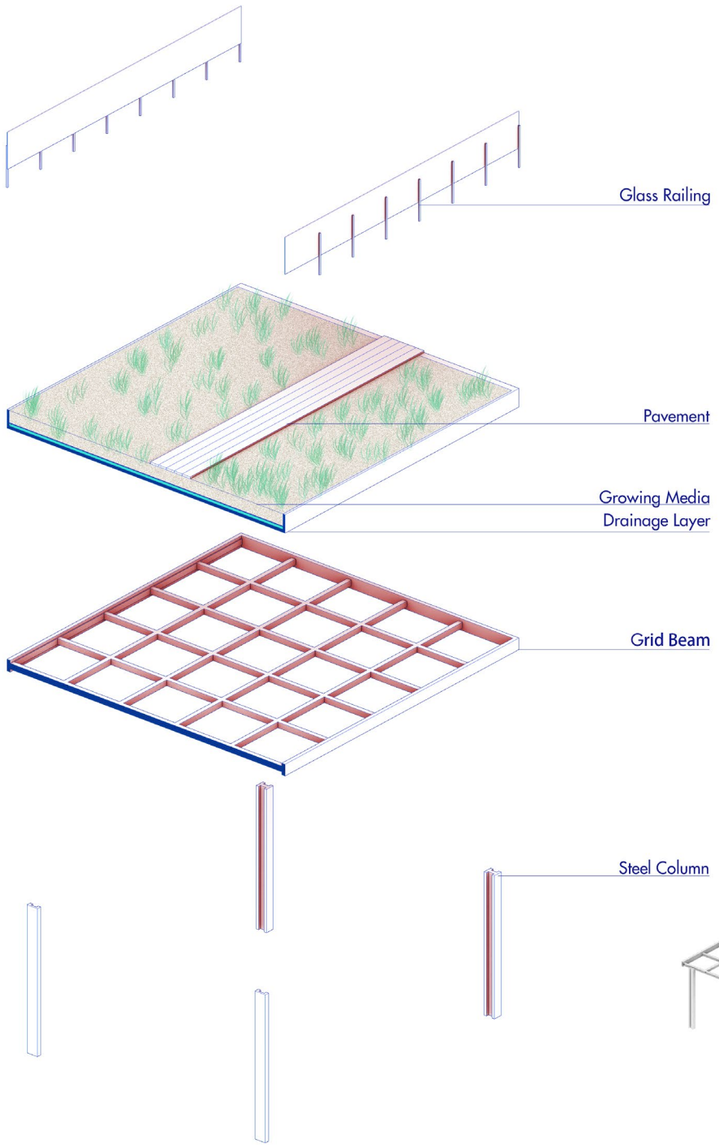
In the Festival

During the festival, the tables and chairs of the shops along the street are put away to provide more activity space for the festival, and the upper and lower sides of the platform become the audience seats or become part of the event. Windows, roofs, footbridge, terraces... Eyes converge on the street from everywhere.

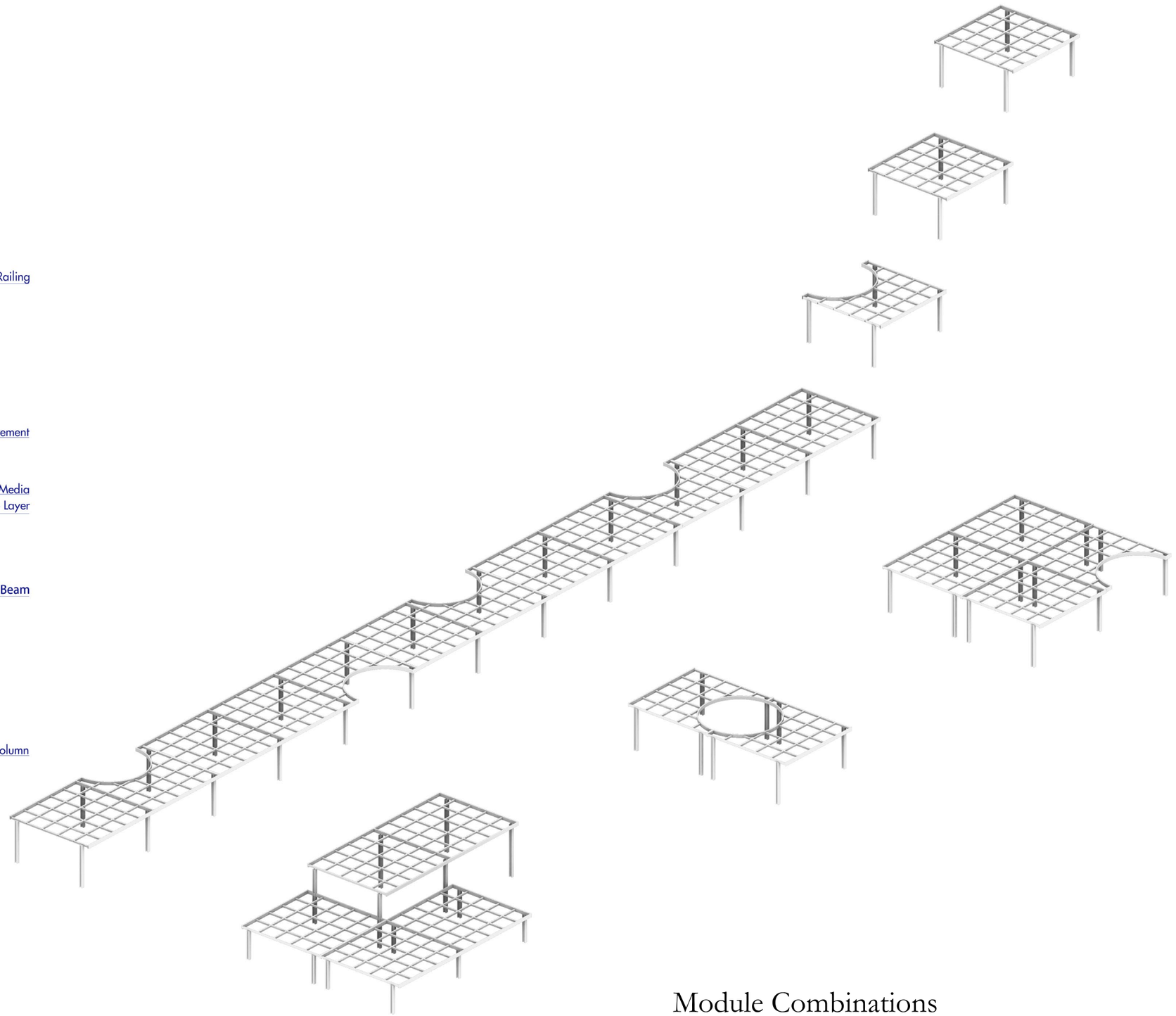


In the Night

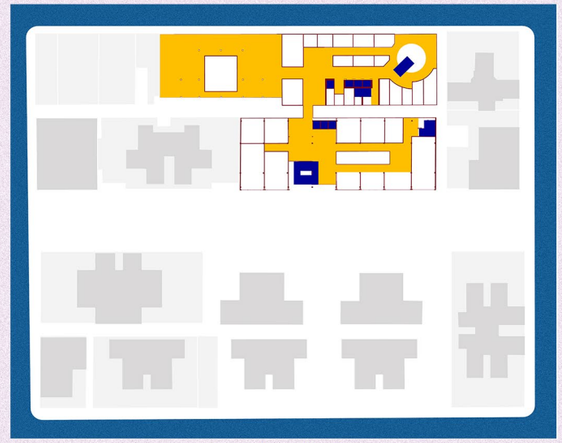
As dusk falls, the vendors recede from the street, and the space beneath the platform reemerges as a public space. The streets are illuminated with neon lights, a symbol of Mong Kok's lively nightlife.



The Construction



Module Combinations

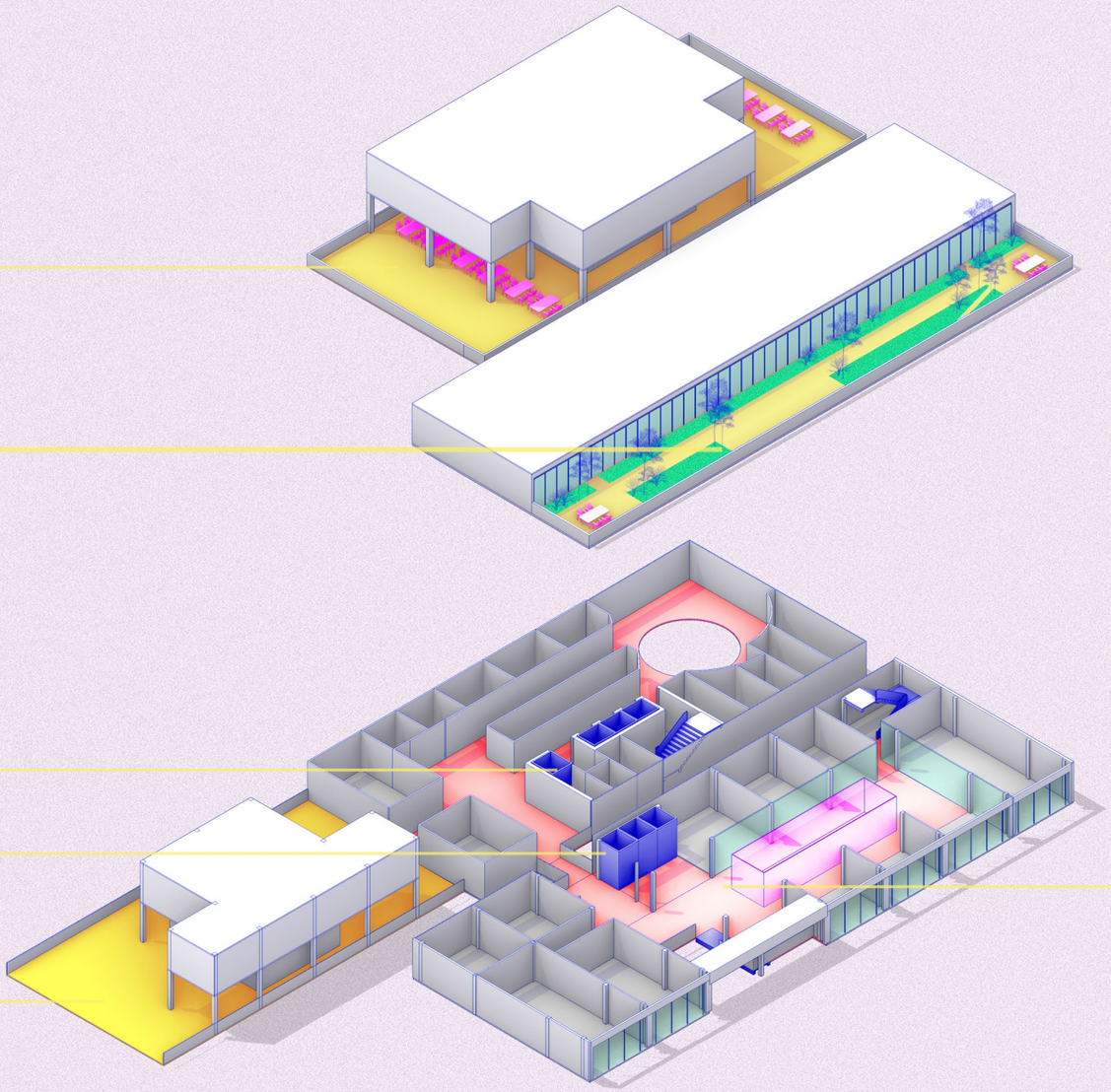


The Third Floor

Rooftop Spaces

The roof space will be better integrated with the surrounding interior of the building, and parts of the space will be opened up and converted into transitional Spaces for use. The leisure space of the office, as well as the restaurant and cafe located in the fundation part can also be spread into this floor, so as to provide a more comfortable leisure environment for workers. The introduction of plants creates a microclimate for the roof space, improving the air quality in the city, as well as providing additional insulation and reducing cooling source consumption.

The integration and improvement of the roof space not only creates more public space, but also increases the value of the building.

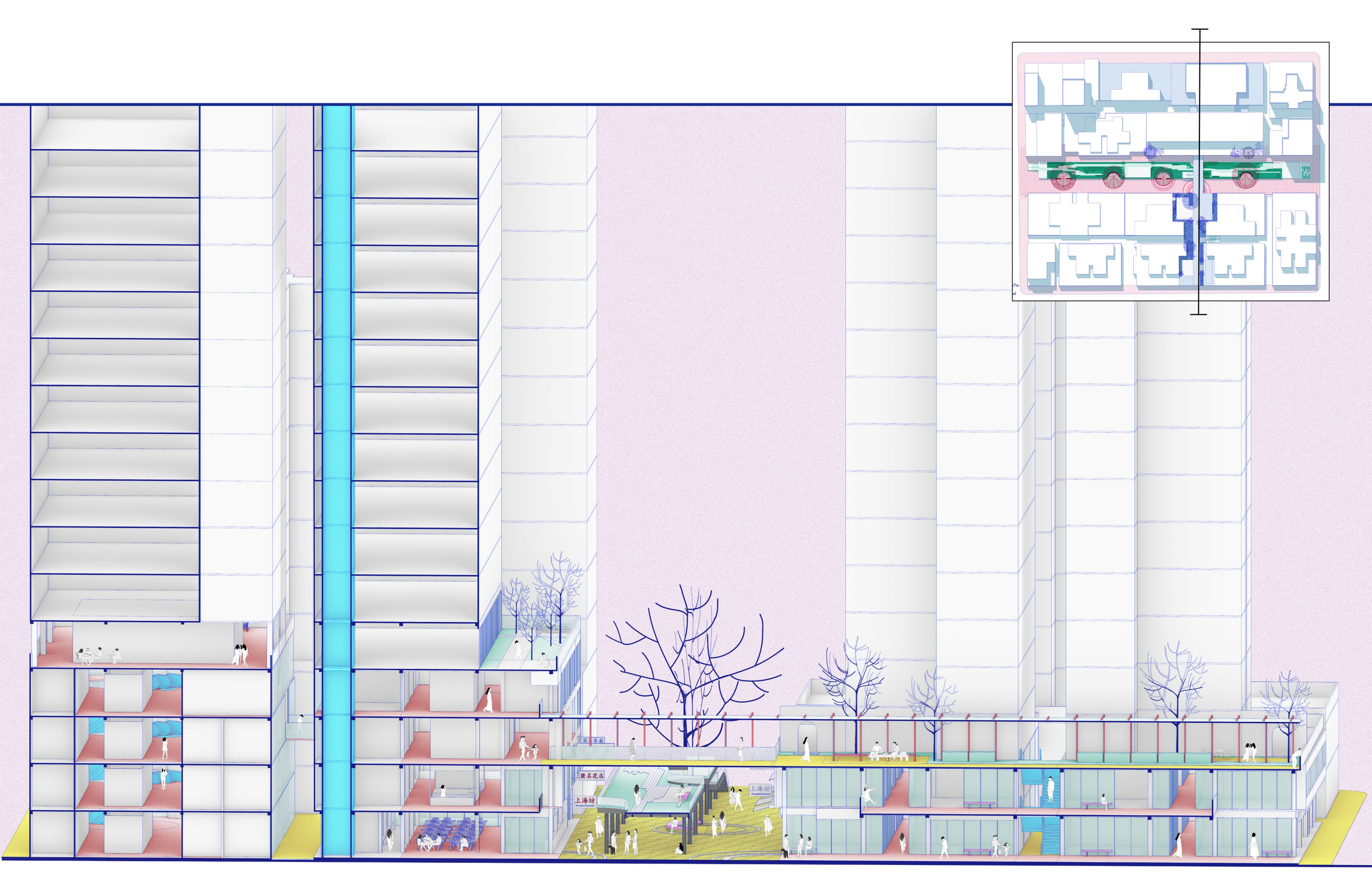


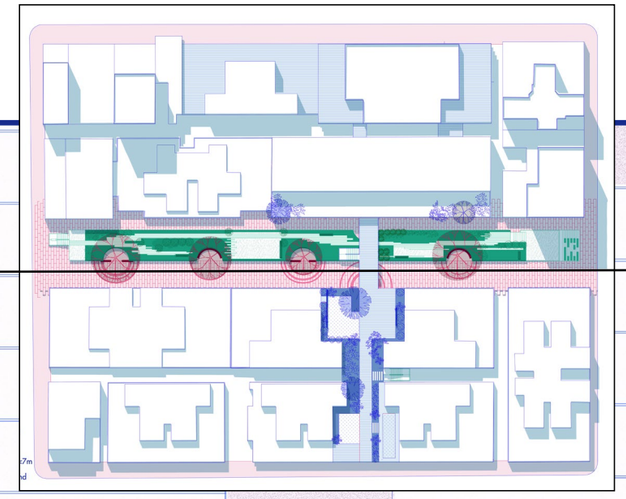
Retain Original Transportation Core

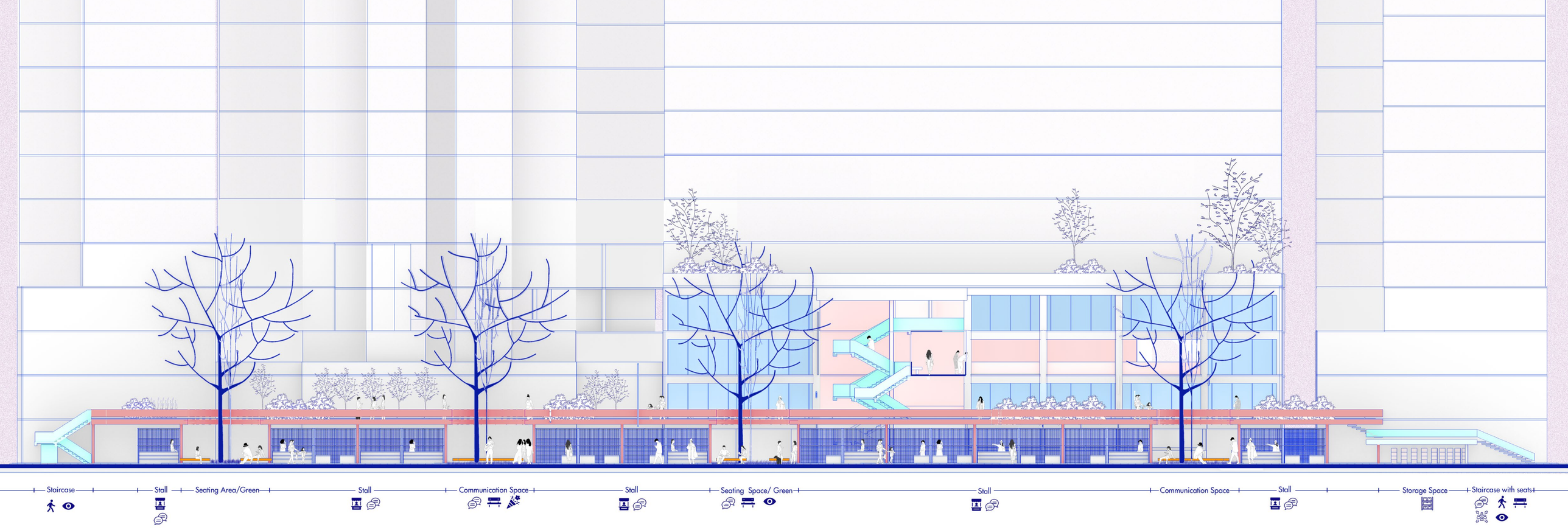
The new spatial system builds on the old building layout and is arranged around the existing vertical transportation core. Because the high-rise of the building is an office building, the elevator is originally mixed with the users of the base, so there is no need to consider the difference between residential and public

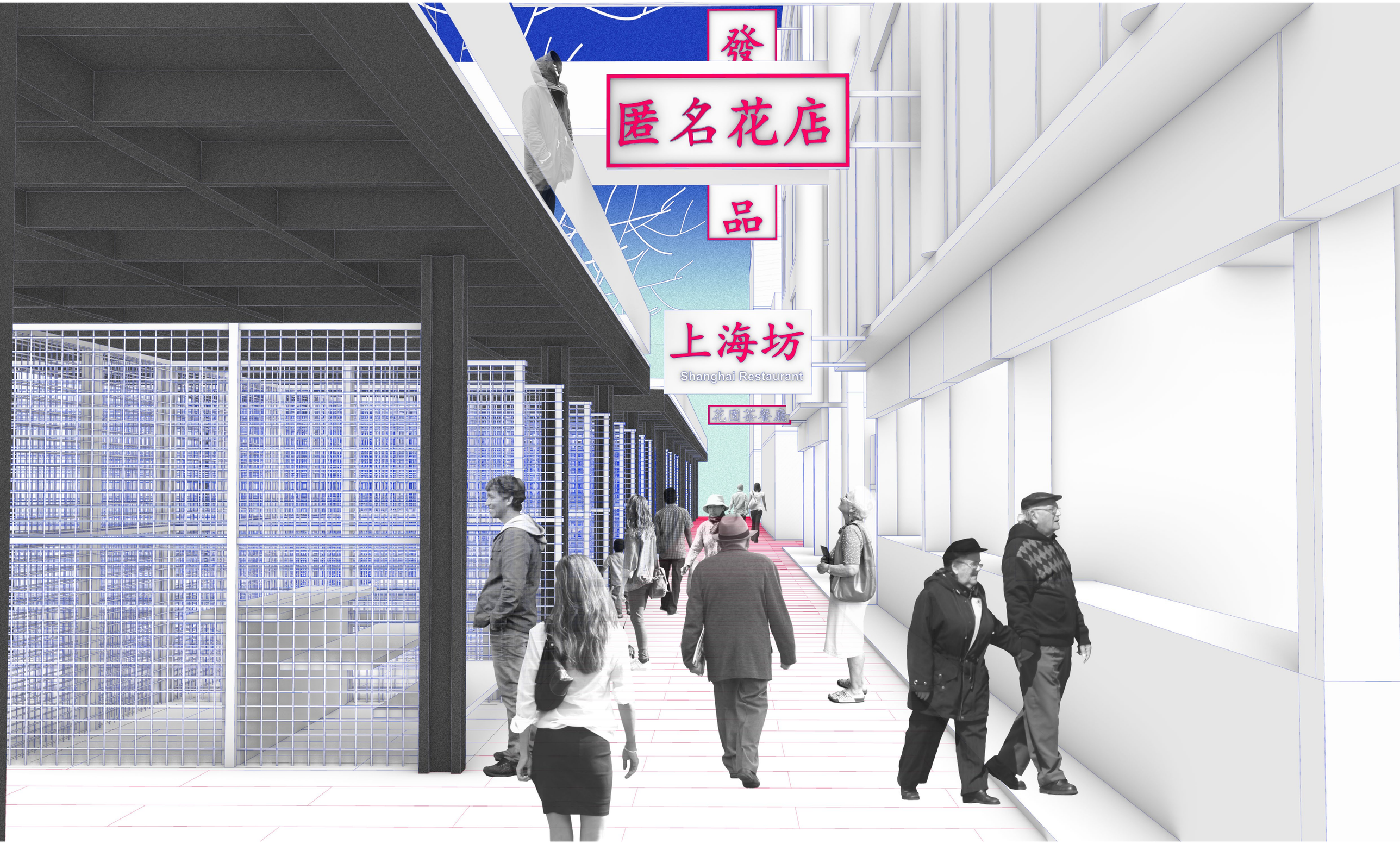
Integrate Interial Spaces

Similarly, the interior Spaces on the third floor of the two buildings have been integrated to better serve the workers in the towers, providing them with a more convenient service and experience. The new route also provides workers with a convenient way to take a break in public Spaces.


匿名花店
上海坊
Sidewalk
Shop
Mall Aisle
Shop
Alley
Elevator Space
Atrium
Shop
Path
Platform(Market)
Main Pedestrian Path
Corridor
Staircase
Corridor
Sidewalk
Road

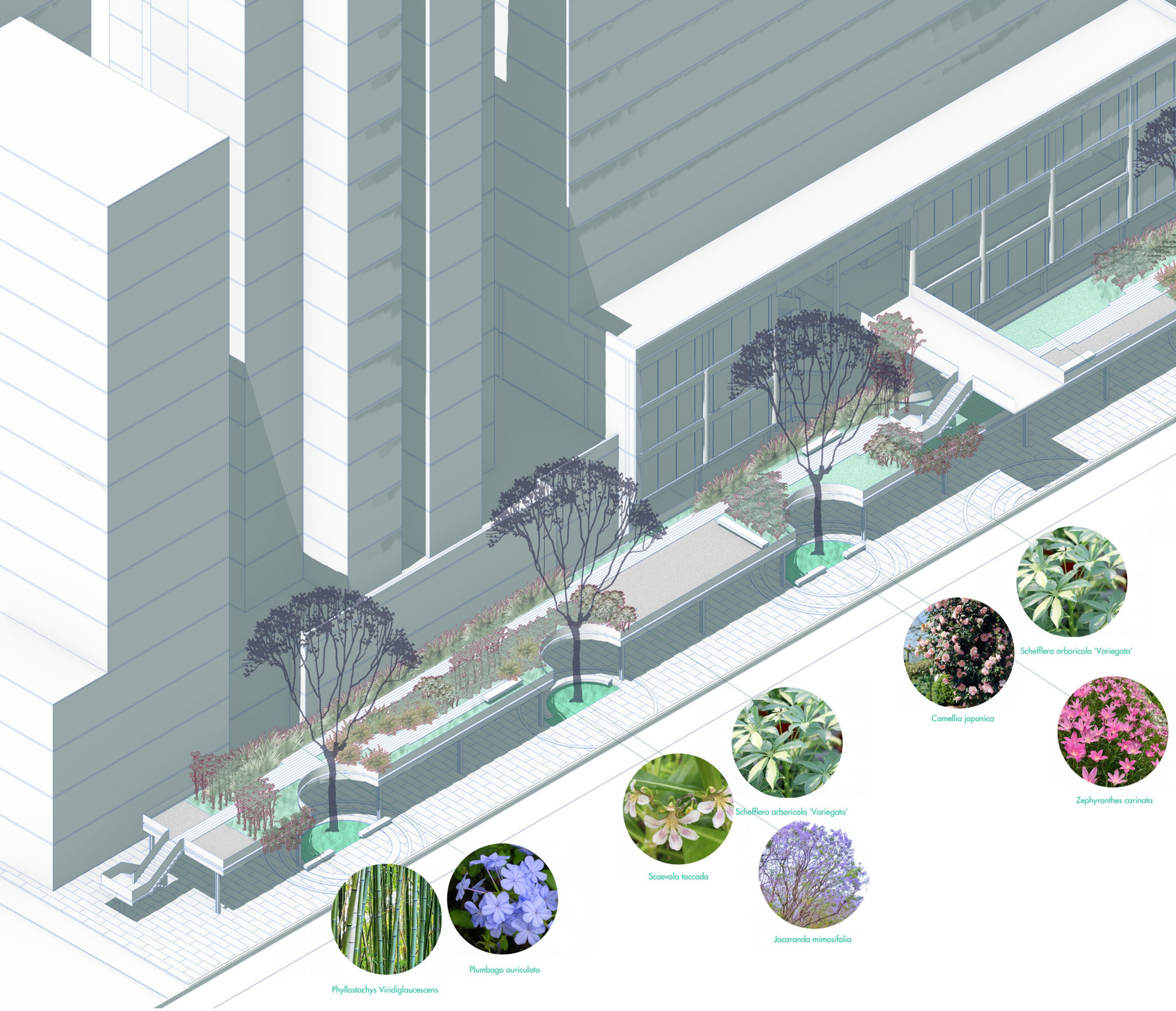



Staircase
Stall
Seating Area/Green
Stall
Communication Space
Stall
Seating Space/ Green
Stall
Communication Space
Stall
Storage Space
Staircase with seats



Market Path

Footbridge



Japanese honeysuckle

Zoysia Grass

Axonopus Compressus

Schefflera arboricola 'Variegata'

Camellia japonica

Zephyranthes carinata

Schefflera arboricola 'Variegata'

Scaevola taccada

Jacaranda mimosifolia

Phyllostachys Viridiglaucescens

Plumbago auriculata

Blooming Time

Plants Design

On the Platform

08
Conclusion

In this project, serious games are closely integrated with the research content, and the results of the games are successfully translated into actual urban spaces. The process aims to demonstrate the interaction and cooperation between top-down and bottom-up approaches in urban public spaces, a method strategically shaping the city while empowering the community. The binary depiction of urban construction overlooks the combination of these two, and when the context is contemporary megacities, the division these two methods impose on urban space is even more pronounced: the renewal process of high-value urban spaces is dominated from a top-down perspective, suppressing individual spirit and creating homogeneous, faceless cities; informal spaces born from bottom-up initiatives appear as enclaves in megacities, left to grow wildly uncared for, and struggle to handle basic infrastructure like traffic or garbage, offer interconnected public realms, or mitigate the impacts of climate change.

Creating a scenario where both can converse was a challenge for this project. By leveraging serious games, the project manages to translate complex urban spatial knowledge and strategies into more straightforward models, using the interactive process within the game to gradually deepen spatial understanding. Top-down urban development plans are no longer fixed, cryptic diagrams requiring additional knowledge for interpretation, but instead, these abstract plans are progressively converted into real spaces within the game, explained and negotiated with the public.

Establishing this three-dimensional public space network within megacities also cannot proceed without consultation with the public. Traditional urban public open spaces can no longer support contemporary urban public life, which happens in indoor or outdoor, vertical or horizontal, fragmented spaces. These spaces belong to different groups and involve a broader range of stakeholders, so integrating public spaces will involve more cooperation and negotiation between these different groups. This process also advances the implementation of the right to the city, helping to better incorporate public participation in the decision-making process, thus making the created spaces more aligned with public expectations and lifestyles.

Even though more diverse public spaces are provided in this three-dimensional system, fulfilling different needs, some special spaces still gather the focus of different groups, such as the Vegetable Street Market in this project, and the new axis founded based on this market. Flexible use and transformation of space are seen as effective solutions to this situation. This transformation of space is considered not only on a daily or seasonal basis but also in relation to the impacts of urban area development, contemplating the possibilities for space transformation in this long-term process.

In conclusion, this project is an attempt at multi-stakeholder governance in a compact city. This spatial decision-making mechanism is established in the context of contemporary megacities, addressing issues about public space integration, social resilience, urban iteration, and more. Under this approach, a continuous, diverse, and flexible public space is established in Mong Kok. However, this method is not confined to this area; after adjusting the research details according to different location information, it has the potential to be applied to metropolises facing similar dilemmas.

09
Reflection

The relation between this project, the studio topic, and my master track

Landscape is a broad and complex concept. As a reflection of culture and ideas, it is shaped and in turn affects human society. As a complex product of human civilization, city also presents a special landscape. The superposition and synthesis of various systems build the contemporary city. Human beings have always tried to make the most rational decisions on cities according to disciplines. However, we have never fully mastered cities, their complexity and contingency have become an inseparable part of urban development. In this graduation project, I hope to explore the generative logic of this urban landscape from the perspective of open space and understand the relationship between public space system and other urban systems. In the past, designers were considered to be the dominator of space, but faced with the complex and dynamic changes of the city, designers' fixed overlooking perspective cannot cope with. Therefore, turning to the participants in this landscape is essential. Urban residents have the most direct perception of the city and always subtly and sensitively change the space to meet their own needs. Dynamic and contingency are no longer regarded as unstable elements, but participate in the construction of urban landscape as a dynamic change.

Therefore, I chose this studio to explore the public space form in the modern high density giant cities, while also exploring the more flexible and elastic urban space generation logic. The four lenses highlighted in the master's program will also be integrated into this design to consider the future state of the site more comprehensively.

The relevance of this graduation work in the larger social, professional and scientific framework.

A network of three-dimensional public Spaces with high quality and walkability can help improve the living standards of the residents of the contemporary mega-city, provide qualified Spaces to carry urban life, and break the status quo of vertical development of residential Spaces while public Spaces are always confined to the ground. The network will also reshape the form of these cities, providing a more resilient and sustainable city. This pattern of public space has a positive significance in the contemporary urban development of China, such as Beijing, Shanghai, Guangzhou and other compact mega-cities also have the potential to develop three-dimensional urban public space.

The approach of using serious games is to bring public participation into urban decision-making in a more active and educational way. It is a combination of top-down and bottom-up approaches, and an attempt of the right to the city, with the potential to revitalize urban life and empower cities with resilience.

Admittedly, accomplishing this combination is no easy task; it is, in fact, an attempt to combine a top-down and bottom-up approach. This project situates this attempt within a specific urban context to explore its feasibility. However, due to my personal limitations in knowledge, as well as constraints in time and space, this project focuses on demonstrating the logic and structure of this approach, but does not truly provide a viable design scheme that fully reflects the reality of Mong Kok. To achieve the latter, it would require close collaboration among experts from various disciplines and the involvement of the actual stakeholders of the site during the operational process. This would undoubtedly demand a considerable amount of manpower and time, but I believe that this method will present us a way to create more inclusive, diverse, and resilient urban public spaces.

What did I learn from this year?

From the inception of the project, I harbored a profound interest in it. The complexity of compact urban spaces has always dazzled me, and Hong Kong, with its unique culture, is a place that fascinates me. I felt numerous possibilities were embedded within it, and I sought out various materials to read. From the urban utopia depicted by Archigram to the right to the city advocated by Lefebvre and Harvey, to the future city envisioned in a highly developed autonomous driving and AI technology context... At one point, I attempted to develop this project into a utopian design filled with futuristic fantasies. However, if disconnected from real urban spaces and physical environments, such discussions might easily turn into one-sided and hollow dreams. Hence, I decided to develop this project using Mong Kok as a backdrop. In this process, I learned to extract and organize content from a wealth of materials, gradually constructing the theoretical framework for this project.

The initial question concerning this project was how to establish a mechanism that could actively develop these spaces, aiding the city to become more inclusive, resilient, and vibrant. At first, through continuous analysis akin to unravelling a skein, it became clear that this was indeed exploring the relationship between people and public spaces. People have an inherent tendency to transform spaces, as it serves not only to create an environment that better suits their lifestyle, but also manifests the control individuals have over their own lives. Discussing urban public spaces inevitably involves discussing how to balance the rights of different groups for space.

As you can see, this project did not have a clear direction at the outset, but was continuously adjusted and advanced during the process. Sometimes, I felt lost amidst the overwhelming amount of material, but every progress made was a cause for joy. This experience allowed me to break away from more conventional and patterned design approaches, enabling me to construct suitable methodologies based on different goals.

Another learning outcome concerns narration and communication. During the project, I had many conversations with others, and clearly and succinctly presenting this project was not an easy task for me. Sometimes, I wanted to present all the information about the project, only to find that after an exhaustive long description, the audience would get lost in the wealth of information, failing to understand its structure. At other times, brief comments effectively highlighted the project's theme, but could easily fall into a one-sided situation. Throughout the project, I constantly tried to adjust my narrative style, making some progress. The reflection on this process actually helped me to sort out the logic of the project. Communication is the foundation of design, and I hope to continue refining this skill in the future.

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