
IDENTITY WITHIN
DIVERSITY
Rethinking the notion of
Megablock Planning Structures
in the Metropolization process

GLOBALIZATION: RESEARCH ON THE URBAN IMPACT (AR0400 & AR0401)

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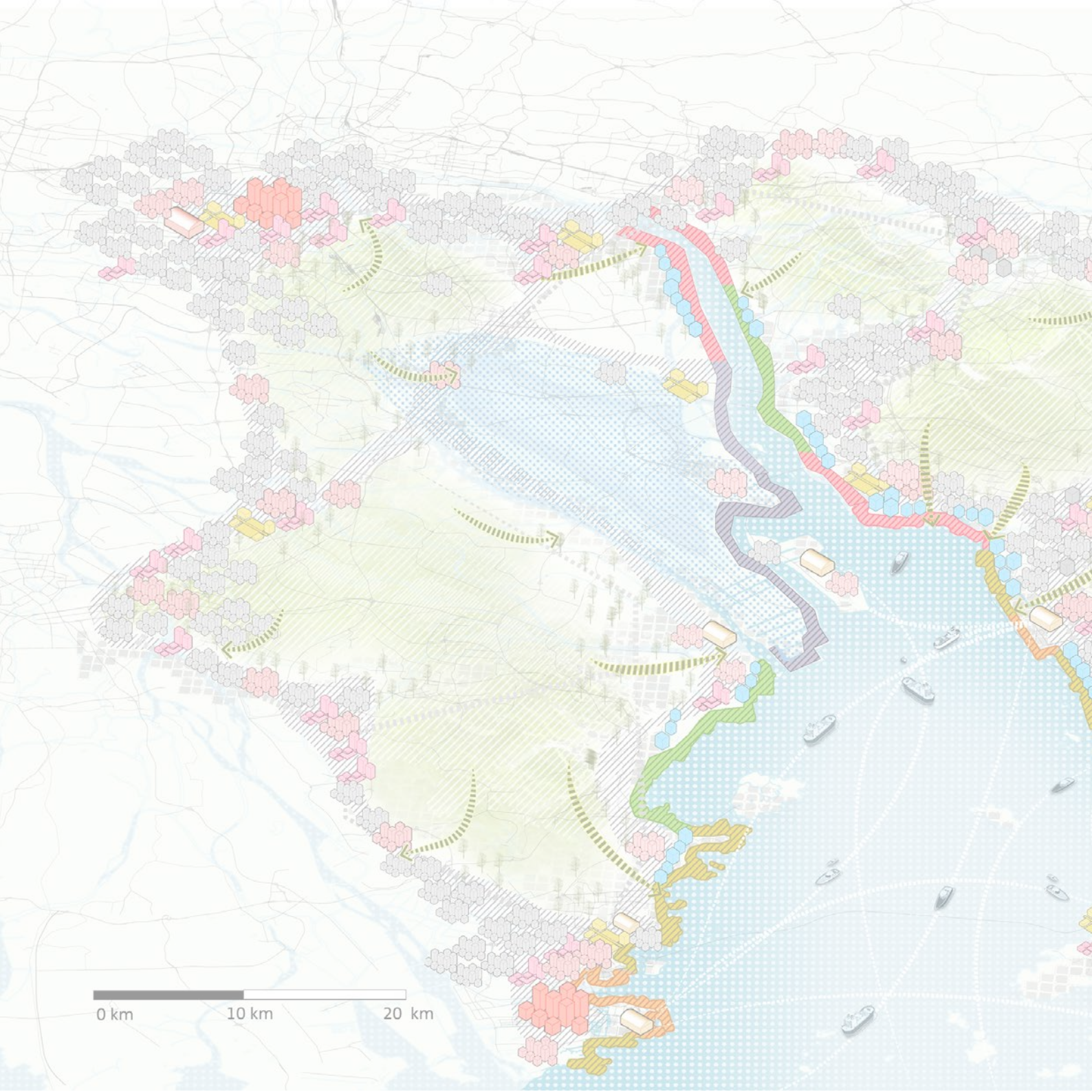
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ABSTRACT

This project displays an explorative attempt at redefining the megablock planning concept. The Greater Bay Area (GBA), as the site of interest, is undergoing rapid metropolization, with a risk of resulting in the formation of indistinguishable, generic urban structures. The fast development and the migration process have defined a region with multiple identities and diverse groups of people living in it. The social and spatial implications of the metropolization process reflect a segregation between the actual planning system and the diverse people that live in this region.

The proposal aims to transform the megablock, a traditional, structural form of planning that is a form of de-contextualized, top down planning based around an economic, private-driven market, into a planning tool that enables the cohabitation of multiple lifestyles that creates social networks of interaction, activates spaces of the existing context and relates them with new developments. Therefore, the redefining of the megablock intends to find how rapid urbanization and the enhancement of distinct local and external identities can go hand-in-hand in a multiplicity of urban contexts, creating a balance between quantity and quality and creating a process of place making that allows the enhancement and strengthening of the notion of identity in a local, urban and regional scale. The Megablock becomes a sustainable prototype for future urbanization and a morphological spatial structure that re-establish a spatial order and framework for the transitions and relations between diverse places and people.

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CHAPTER 01

INTRODUCTION

This chapter provides an introduction to the metropolization process, its components, and how this can be seen in action in the GBA. The effects of the metropolization process are then questioned, with a closer look on how it is impacting Hong Kong and its residents.

METROPOLIZATION

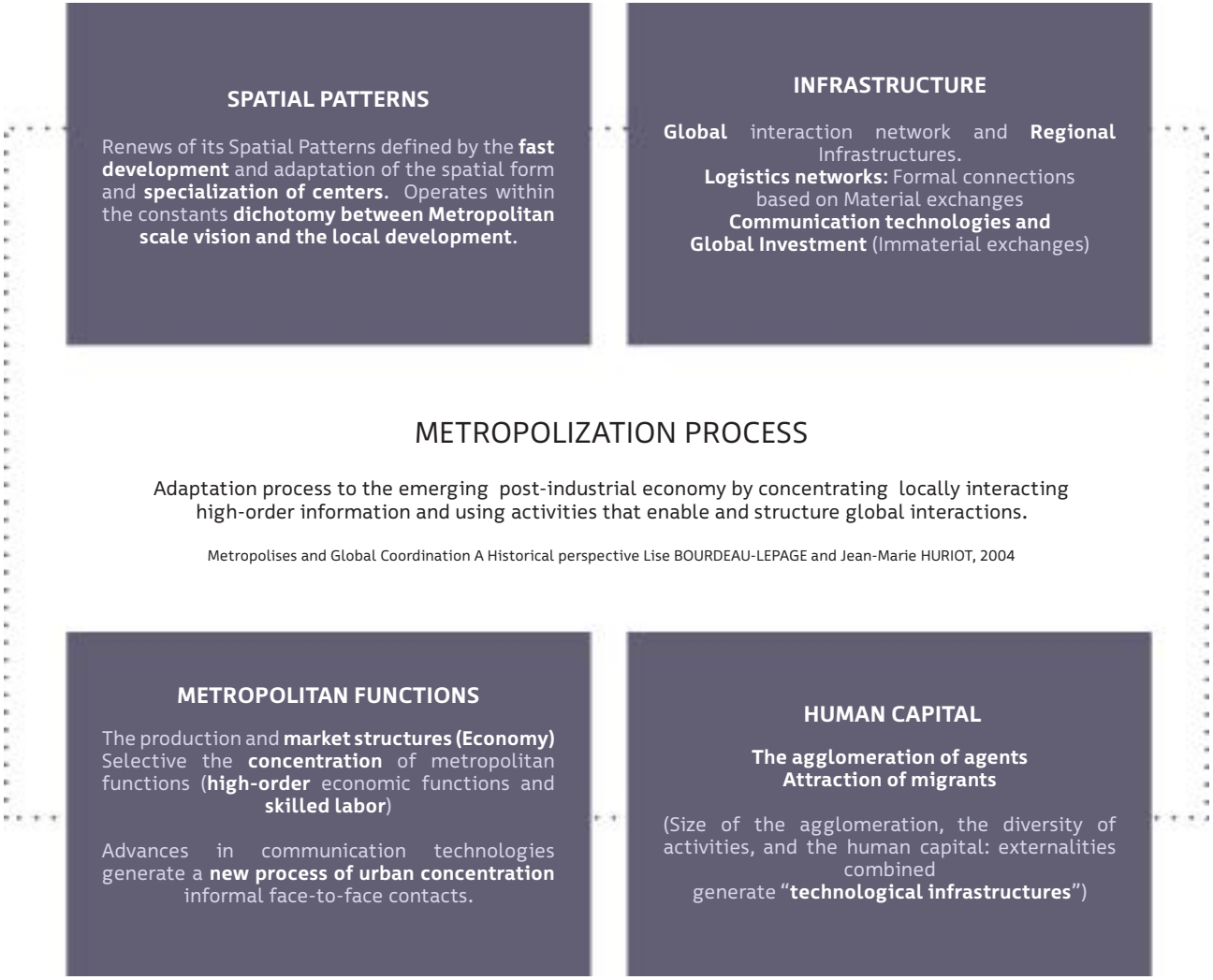


Figure 1.1 The metropolization process explained through its components; it is made up of the elements of Spatial Patterns, Infrastructure, Metropolitan Functions, and Human Capital, where an increase of either factor leads to advancements in others and furthers a city's metropolitan development.

SOURCE: Bourdeau-Lepage & Huriot, 2004

METROPOLIZATION

Figure 1.2 Insight into how the metropolization process has been embodied in Hong Kong's urban fabric.

SOURCE: Mortula, n.d.; Business News Today, 2018; Wehde, 2017; Issa,R. in South China Morning post, 2018

METROPOLIZATION IN THE GBA

REGIONAL DEVELOPMENT FROM 1975 TO 2015

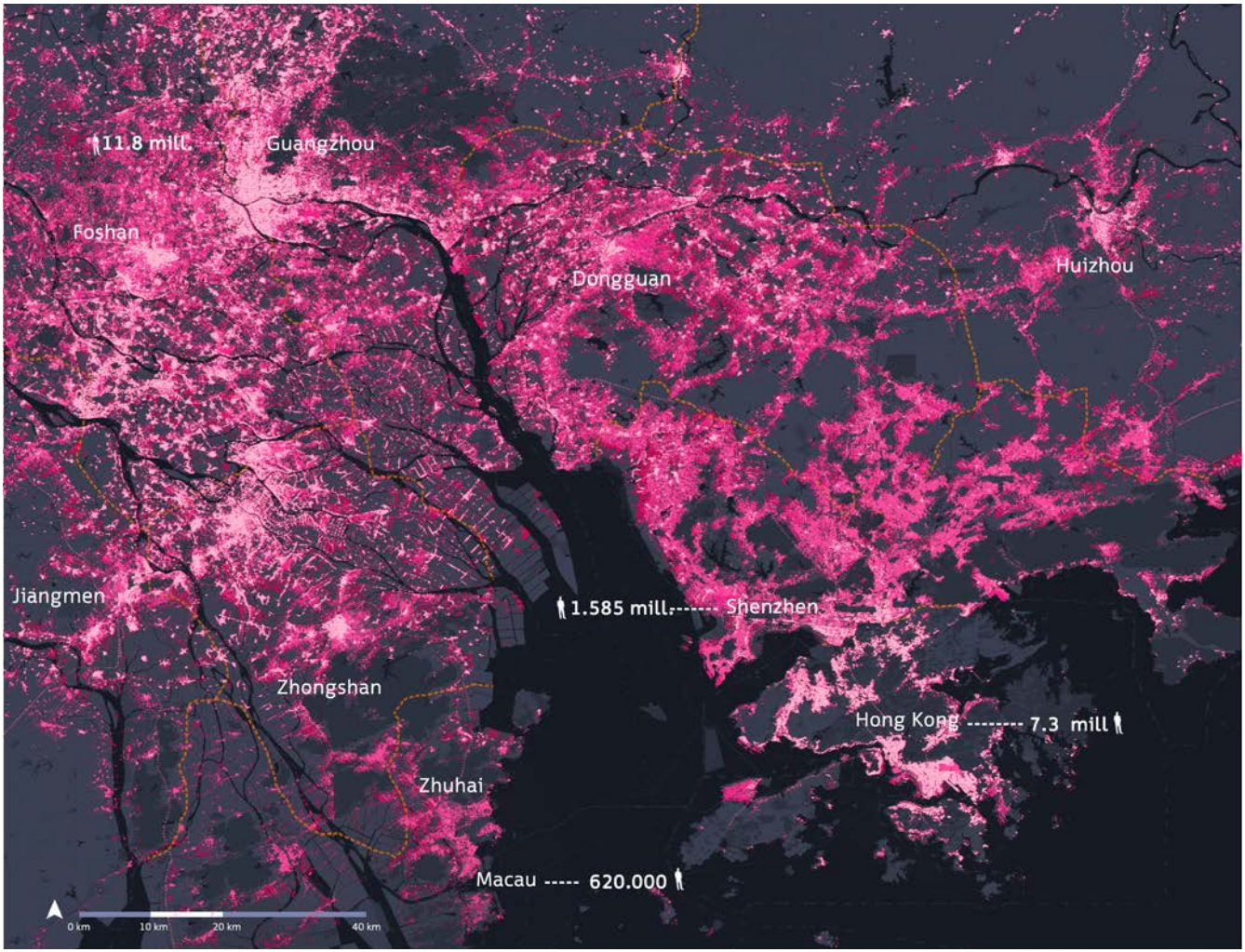


Figure 1.3 The gradual population increase in the Greater Bay Area between 1975 and 2015. Much of the development is along the coastal border, leaving room for agricultural industries along the western edge of the delta.

SOURCE: World Bank, United Nations, Census & GeoNames, n.d.

Over the past 40 years, there has been increased densification in the region of the Greater Bay Area. The GBA went from 7.2 million residents in 1975 to 66.7 million in 2015, a total increase of 59.5 million residents in 40 years. Hong Kong alone went from a population of 4.2 million inhabitants to 7.3 million within the same timespan and Shenzhen during this time grew from 35,500 inhabitants to 11.3 million. Despite the rapid densification of the region, the spread has mostly been controlled by the natural landscape, namely the mountain ranges and the delta borders. On the remainder of the land, while mostly focussing along the edges of the estuary and along rivers, a lot of the urban fabric sprawled across the land, with urban structures barely being linked through valleys, along large lengths of infrastructure, or along rivers.

The major cities of the GBA; Hong Kong, Shenzhen, Guangzhou and Macau, are the most globally recognizable cities. Aside from Macau, the other three are the cities with the highest densities in the GBA, while all four have a degrees of urbanisation. This can all be attributed to their benefiting from the metropolization process the GBA underwent, that made them significant nodes in the region, attracting more people, investment and infrastructure.

SOURCE: World Bank, United Nations, Census & GeoNames, n.d.

METROPOLIZATION IN THE GBA

DESTINATIONS OF GLOBAL INVESTMENT

The GBA is a region of high global investment, due to the taxation policies within it and its history of high industrial development. Out of all the GBA cities, however, Guangzhou, Shenzhen and Hong Kong stand out the most in terms of investment; as such, in order to strengthen their economic power, infrastructure connections will need to be put in place to integrate them.

Figure 1.4 Locations of high global investment in the GBA. The map shows the dominating economic importance of Hong Kong, Shenzhen and Guangzhou in the region.

SOURCE: Qu, 2019

METROPOLIZATION IN THE GBA

REGIONAL PROJECTS

Regional plans for infrastructure shows the development of a ring structure that ensures that all cities in the GBA are well tied to one another, allowing people to easily move between the cities.

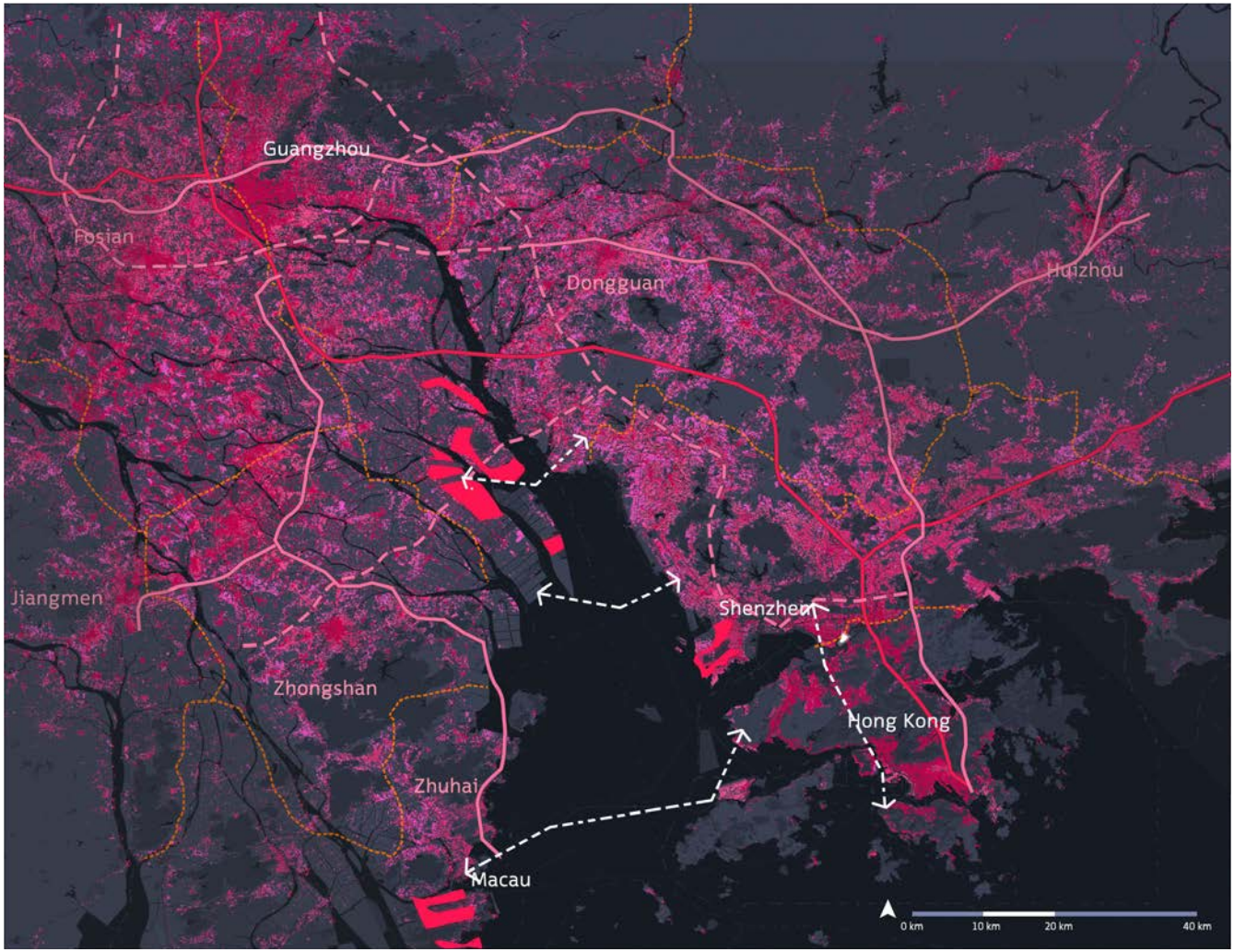


Figure 1.5 Regionally planned infrastructural connections between the cities of the GBA, showing the strive for a region with well-integrated cities and economies.

SOURCE: Greater Bay Area, n.d.

METROPOLIZATION IN THE GBA

REGIONAL INFRASTRUCTURE

While Mainland Chinese cities are currently well-connected to each other, they are not very connected to the Special Administrative Regions (SAR) of Hong Kong and Macau. The map shows a total of three main connection points into Hong Kong from Shenzhen, and one main connection point into Macau from Zhuhai.

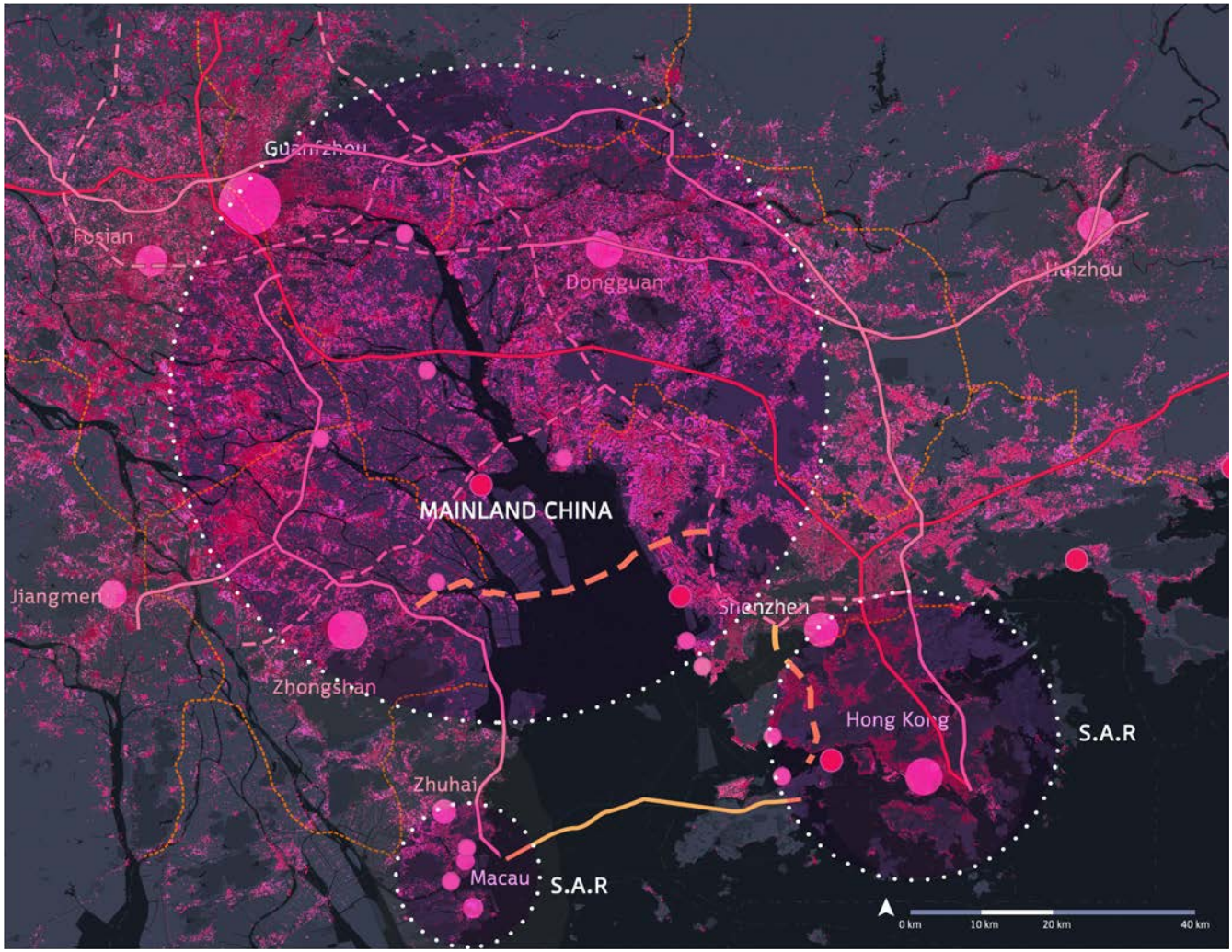


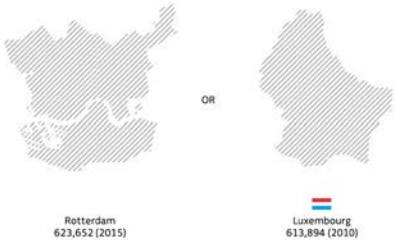
Figure 1.6 The current regional infrastructure, highlighting the difference of infrastructural integration between Mainland China and its two SARs; Hong Kong and Macau.

SOURCE: Greater Bay Area, n.d.

METROPOLIZATION IN THE GBA

INFRASTRUCTURE - BORDERS

Despite the efforts at increased integration through infrastructure, there is a hard administrative border between Hong Kong and Shenzhen, through which over 650,000 people cross on average daily. This is the same as the population of Rotterdam, or the population of Luxembourg crossing the HK-SZ border.



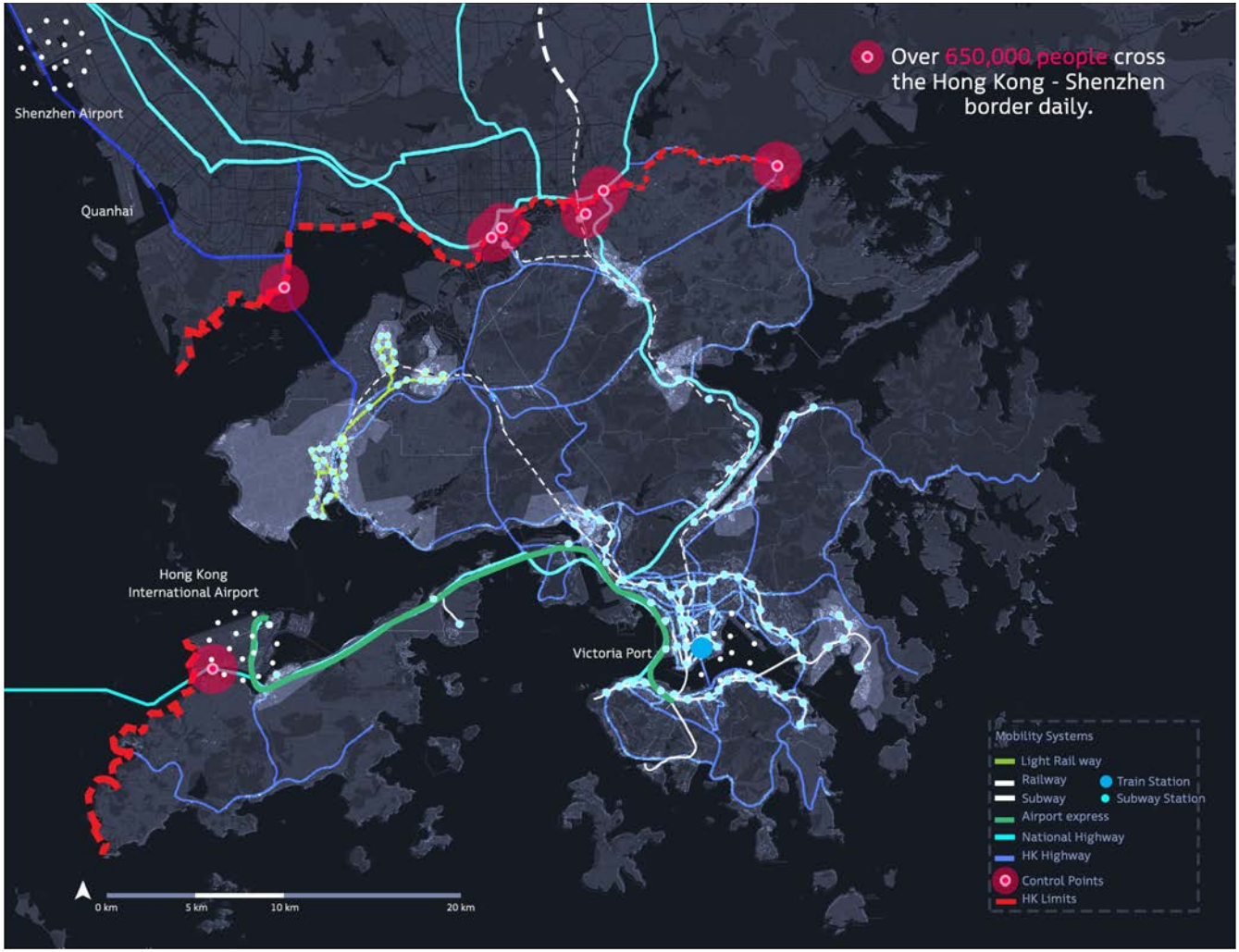


Figure 1.7 Hong Kong's main infrastructural connections, highlighting the points at which one can cross the border to leave Hong Kong.

SOURCE: Immigration Department, 2019

METROPOLIZATION IN THE GBA

MIGRATION FLOWS INTO THE REGION

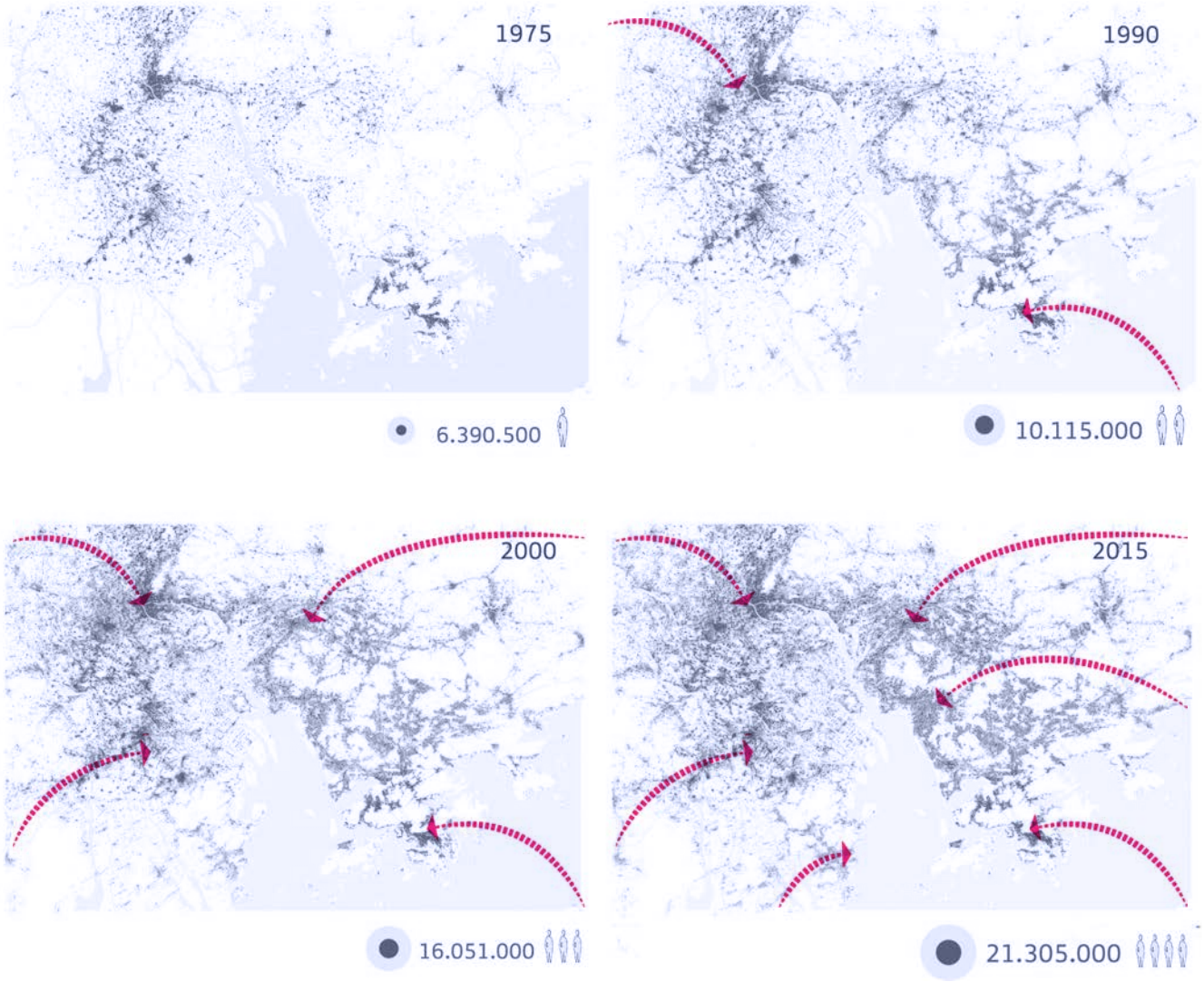


Figure 1.8 The population increase in the GBA's major cities, namely Guangzhou, Shenzhen, Macau and Hong Kong over the years.

SOURCE: World Bank, United Nations, Census & GeoNames, n.d.

The Greater Bay Area has been the destination for a large influx of migrants, the location of large infrastructure projects throughout the region, leading to increased metropolization that attracts increased foreign investment and even more migrants.

Due to the rapid development of the region, along with increased migration flows, predominantly from rural areas within China, a new type of region is formed, revolving around the migrant population. The migration pattern defines the majority population of the region, as shown in the extents to which the population has grown over 40 years. Furthermore, the migration pattern defines the kinds of people who are constantly in flux; defining a constant shifting of identity in the region, as well as significantly transforming the cities and regions spatially. There is therefore an opportunity, with this relatively new region, to explore how planning structures can influence social structures at different scales.

This, however, brings forth the question, how does this process impact Hong Kong, and even more so, the people caught within this process?

METROPOLIZATION IN THE GBA

FROM THE PERSPECTIVE OF PEOPLE

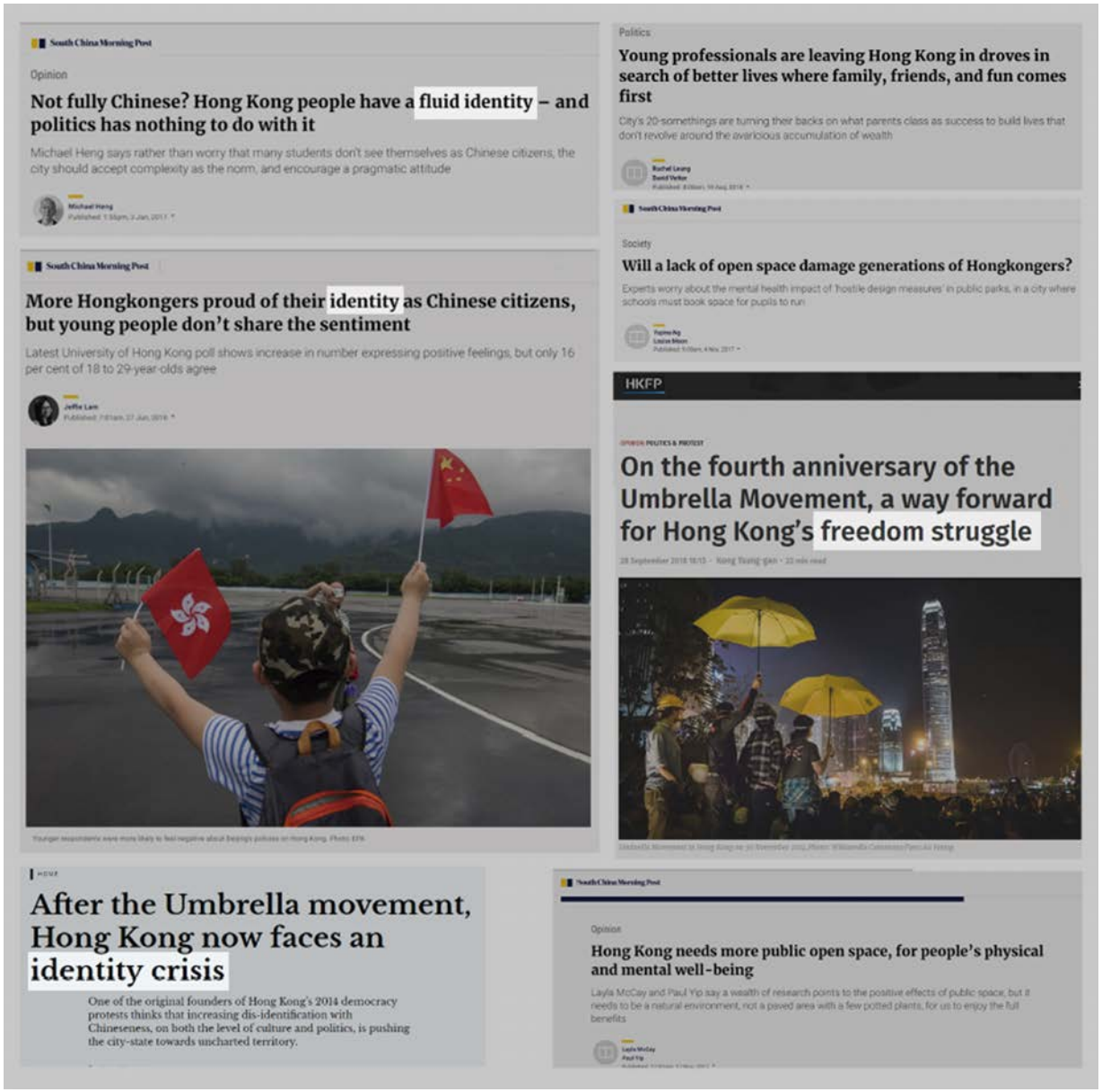


Figure 1.9 Over the recent years, there has been a surge in these kinds of headlines which highlight Hong Kong's struggle in defining its identity, often referring to Hong Kong as undergoing an "identity crisis".

SOURCE: South China Morning Post (SCMP), Hong Kong Free Press (HKFP)

METROPOLIZATION IN THE GBA

WOULD YOU IDENTIFY YOURSELF AS HONGKONGER OR CHINESE?

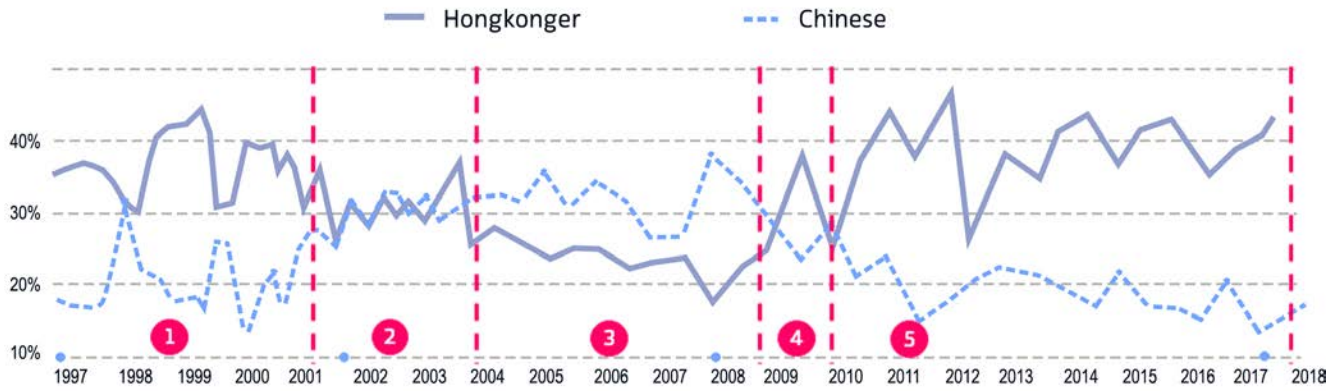


Figure 1.10: A graph showing, through gathered statistics, how Hong Kong residents identify, whether as "Hongkonger" or "Chinese". It is apparent that the identity of Hong Kong residents has fluctuated over the years between 1997 and 2018. It is apparent that a multitude of factors play into the reasons why Hong Kong residents are unsure of how they identify, whether it is Hong Konger, Hong Konger in China (considered Hong Konger in this graph), Chinese, or Chinese in Hong Kong (considered Chinese in this graph). The graph is overlayed with significant events in the time frames where there seem to be significant changes in identity, listed below.

1. Hong Kong handover to china; Hong Kong economy further than that of China, leading to a feeling of superiority.
2. China helps Hong Kong through the Asian financial crisis using the CEPA and helps Hong Kong combat the SARS outbreak
3. School curriculum change & 2008 Beijing Olympics
4. Hong Kong democratic party talking with Chinese officials for the first time since 1997 - Rise of Localism
5. Opposition of large influx of mainlanders and opposition of the "economy first" approach (starting with opposing demolition of a small village to make way for a railway) Limitations on press freedom

The event over the past years highlight the three most significant forms of factors that play a role in defining how the residents identify, namely changes in economic power, Chinese national events, and the residents' valuation on their rights to participate in the political context.

The process of metropolizing Hong Kong into the GBA significantly highlights Hong Kong's struggle with identity as Hong Kong further integrates into the GBA and the 2047 deadline for integrating with Mainland China approaches.

SOURCE: Public Opinion Programme, The University of Hong Kong; BBC, 2019

CONCEPTUAL FRAMEWORK

METROPOLIZATION AND IDENTITY

The fast development of cities within the Greater Bay Area owing to the presence of metropolitan functions, economic opportunities and infrastructure attracts migrants to this area. With an exponentially increasing population, a large portion of it being immigrants from various parts of China and the rest of the world, the region becomes a hub for diverse identities. This should be reflected in the spatial definition of the region, which is not considered in the current metropolization process. This is evident in the fact that the public space does not foster a social network.

There is a need for the inclusion of the effects of migration and the accommodation of multiple identities in the process of metropolization. As will be explained in the following chapters, this cohabitation of multiple identities is facilitated by understanding space as the carrier of social interaction that, in the current process of development, is accessible only to a privileged few, leading to a socially stratified region.

In order to explore how cohabitation can be achieved, the definition of identity and its spatial manifestation must be understood.

WHAT IS IDENTITY?

The notion of identity is defined by a culture, society and context, in which the different ways of thinking and using space, the daily life systems or the cognitions of the environment are shaping who people are as individuals, but also as a collective.

Identity prevails in different forms - in the individual and the collective, in plural form, reinforcing a strong need for belonging. With the onset of globalisation, the scales of identity range from the individual to a global identity.

Spatial definitions have an implication on identity at different scales (Fig.1.11), giving spatial planing and governance a big responsibility in the formation of this notion.

Source: Golubovic, 2010

CONCEPT OF IDENTITY

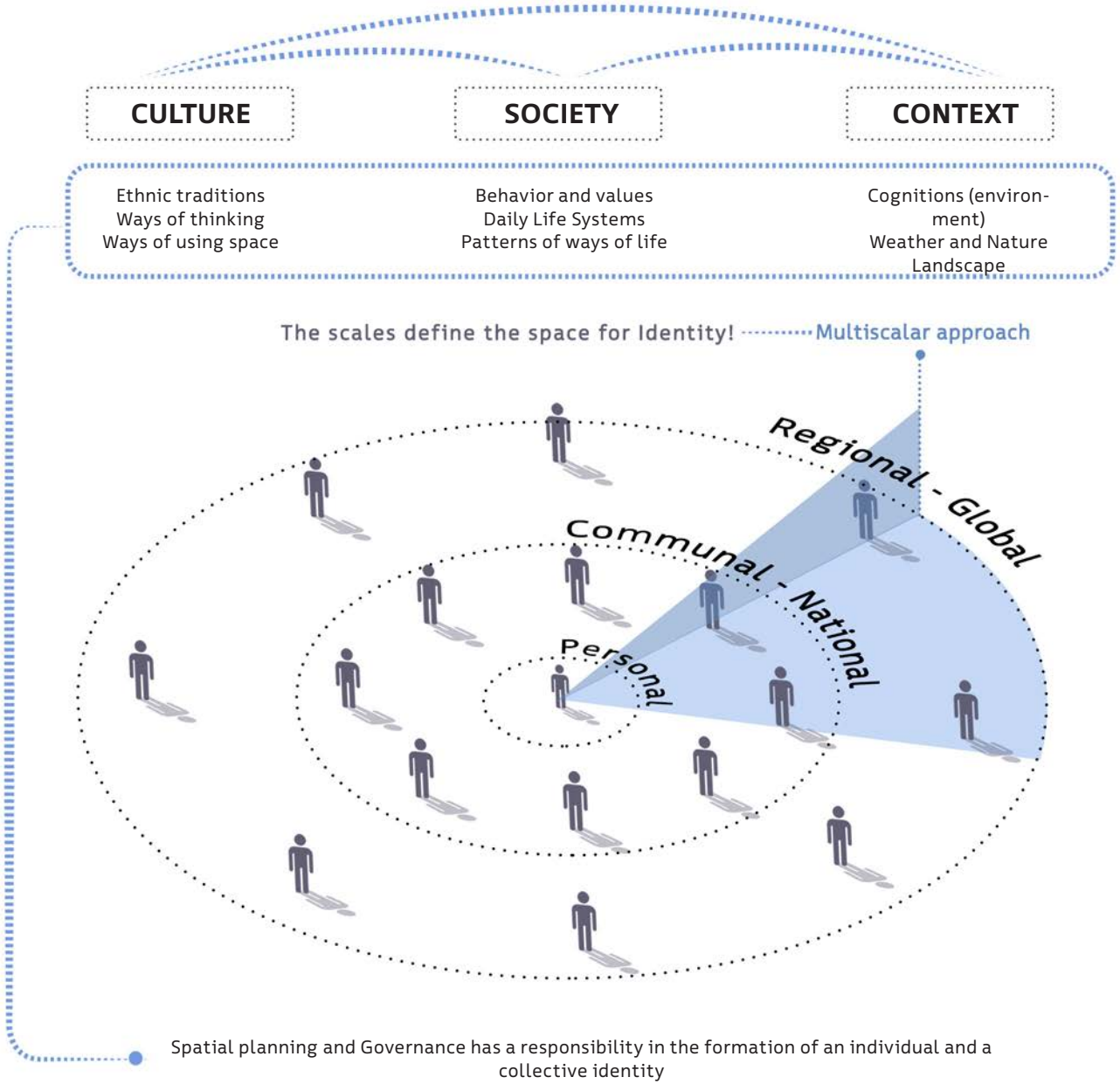


Figure 1.11: Concept of Identity and its multi-scalar manifestations (Data Source: Golubovic, 2010)

WHY IS THE NOTION OF IDENTITY IMPORTANT?

A high attraction of migrants in the metropolization process is forming a regional identity of diversity in people. The question then remains - how does one create a place in which diverse identities can cohabitate?

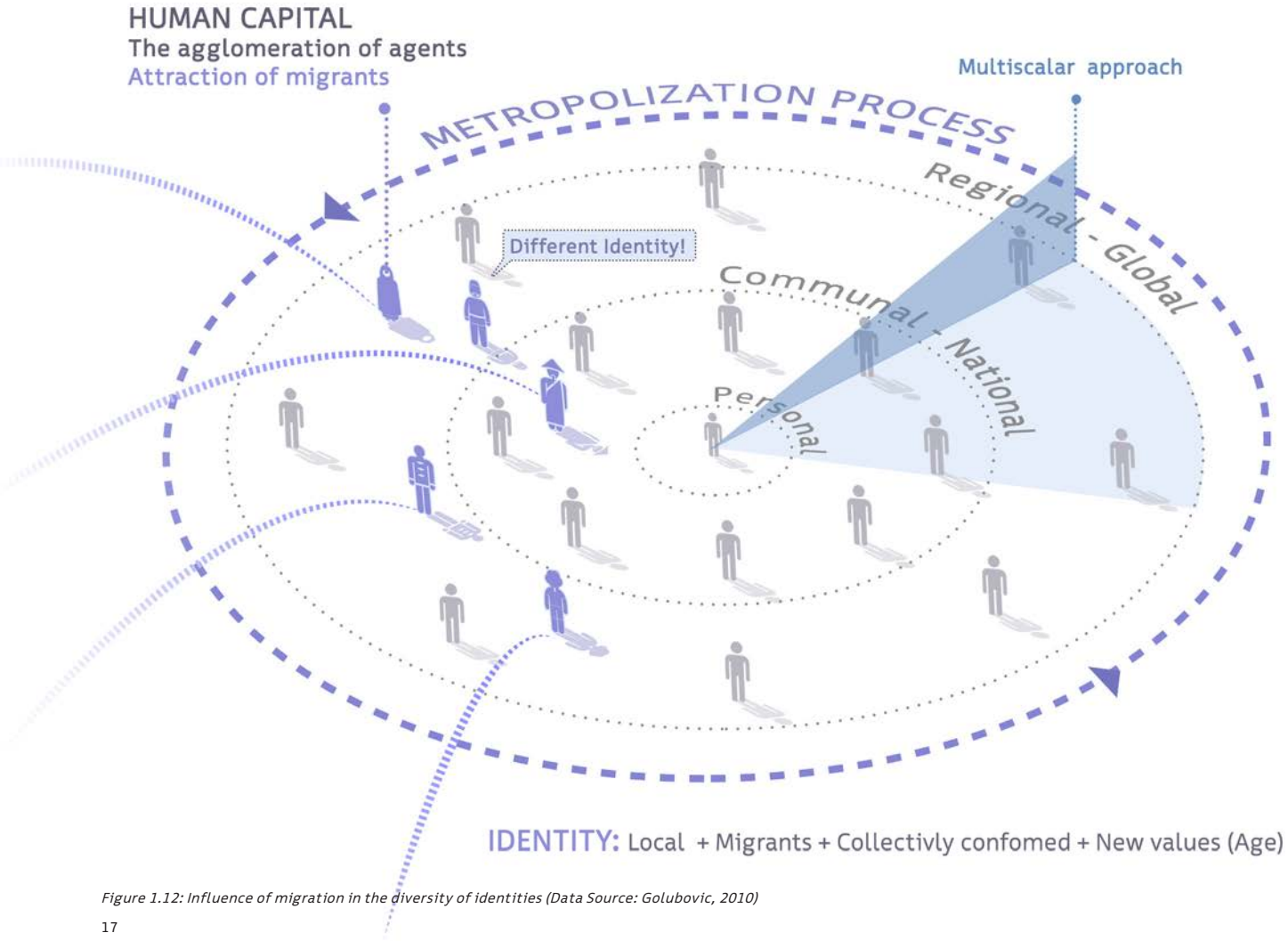


Figure 1.12: Influence of migration in the diversity of identities (Data Source: Golubovic, 2010)

The recognition of multiple identities, as an integral part of place-making, should be considered in parallel with the construction of the physical, social and natural structure of the place.

"Place making does continue to be meaningful, if we can combine the earlier idea of culture as 'the way of life of people' with a more contemporary idea of culture as 'the information and multiple identities available from the global cultural supermarket' ".
- Global Culture/Individual Identity: Searching for Home in the Cultural Supermarket (2000) Mathews G.

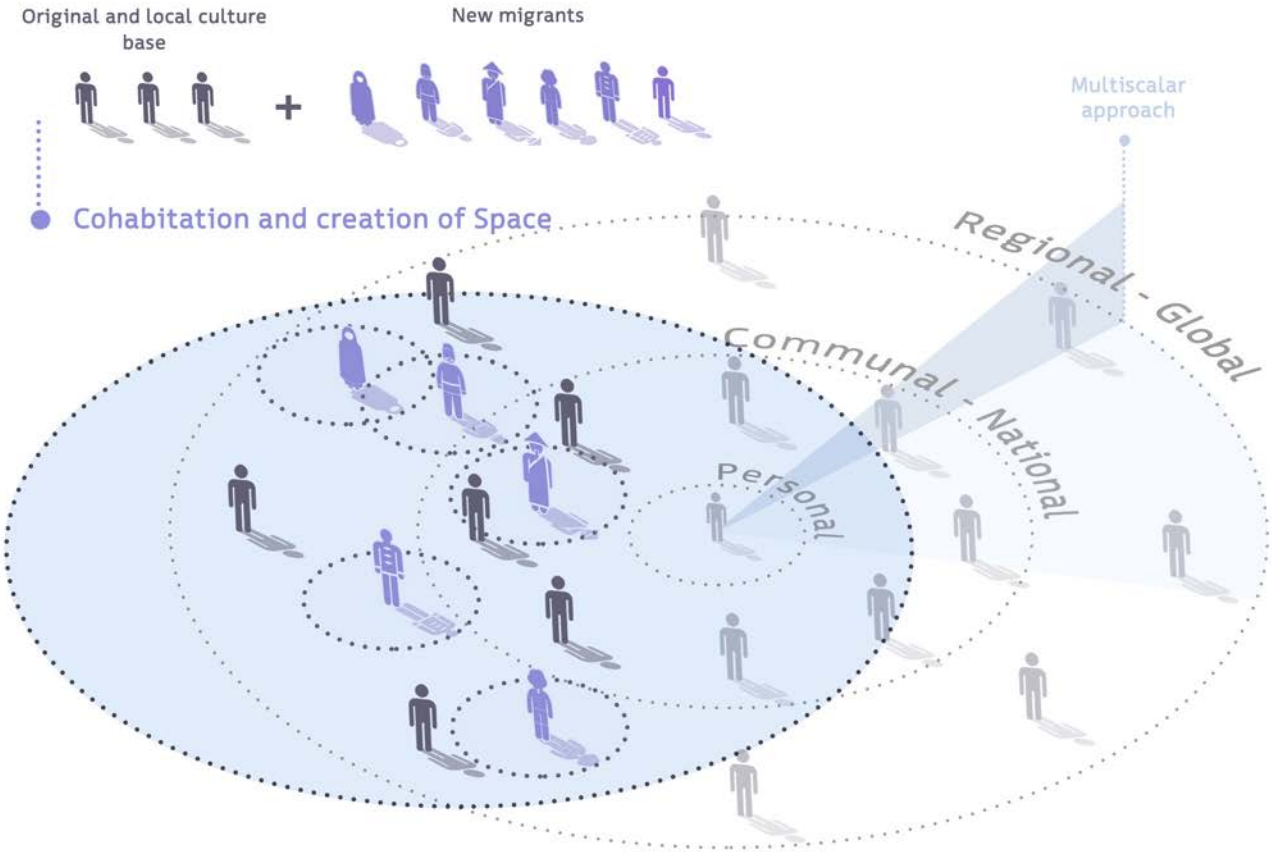


Figure 1.13: Importance of place-making in the process of cohabitation of diverse identities (Data Source: Golubovic, 2010)

HOW TO SPATIALIZE THE CONCEPT OF IDENTITY?

Individual or collective identity manifests itself spatially in multiple realms - private, semi-private and public. The constructs of identity such as daily life systems, ways of life, ways of using space, behaviour and cognitions of the environment are expressed through space in these realms. Private space, working space, collective space, networks of interaction and landscape are the spatial indicators that facilitate the expression of identity, and in turn shape identities.

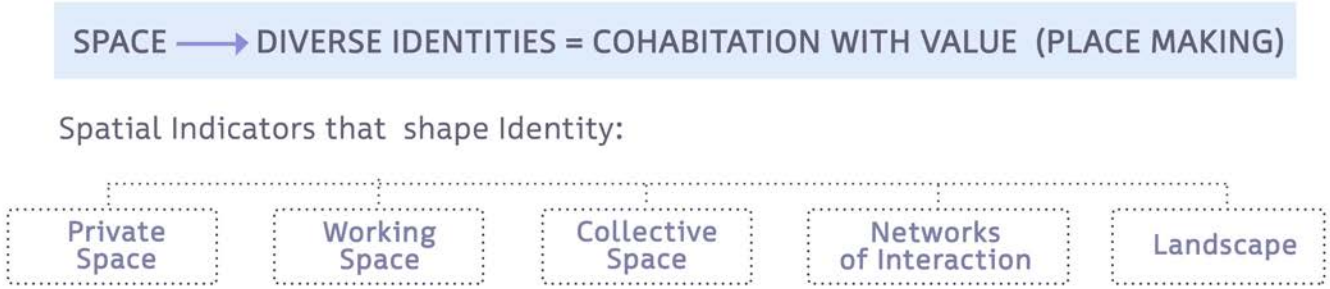


Figure 1.14: Spatial indicators that shape identity

OBJECTIVES - SPATIALIZING THE NOTION OF IDENTITY

Figure 1.15: The multi-scalar objectives for spatializing identity

The notion of identity previously defined necessitates that space has to respond to the expression of and shape multiple scales of identities, thus allowing them to co-exist.

IDENTITY AND COHABITATION

COHABITATION ⟷ PUBLIC SPACE

Public Space: Place for spatial expression and dominion of a community. The most powerful places in the daily system of the city. (Janches and Sepúlveda, 2009).

A community or an inhabitant expresses a different type of use and perception of their public space (Local identity of an area. Cities differentiate from one another by their abundance of local identities.)

Intensity and quality of the social relations that the public space facilitates, creates the potential to make groups, strengthens interactions and encourages symbolic identification, expression and cultural integration. (Janches and Sepúlveda, 2009).

Public space ⟷ Sense of community ⟷ Cohabitation ⟷ Identity of a place

Elements:

- Physical form

- Function

- Social and cultural significance

- Multitude of transactions that can take place (cohabitation)

- Connections between the elements

PUBLIC SPACE NETWORK

Mobility / Accessibility / Connectivity

Land Use / Activities

Social Dynamics

Safety

Source: Briet, Sepulveda and Bekkering, 2010

REDEFINING THE MEGABLOCK - ENABLING COHABITATION

The megablock, which is a result of the planning process that exists in the GBA, drives fast-paced market-oriented development within the region. This process leads to the creation of a fragmented and segregated urban fabric that hinders the social interaction between different groups of people.

The reconfigured megablock, acknowledges this process as a necessary tool for the fast-paced metropolization process, while addressing its shortcomings by configuring a spatial definition that prioritizes a continuous social realm that stitches together the urban fabric.

CHARACTERISTICS OF EXISTING MEGABLOCK

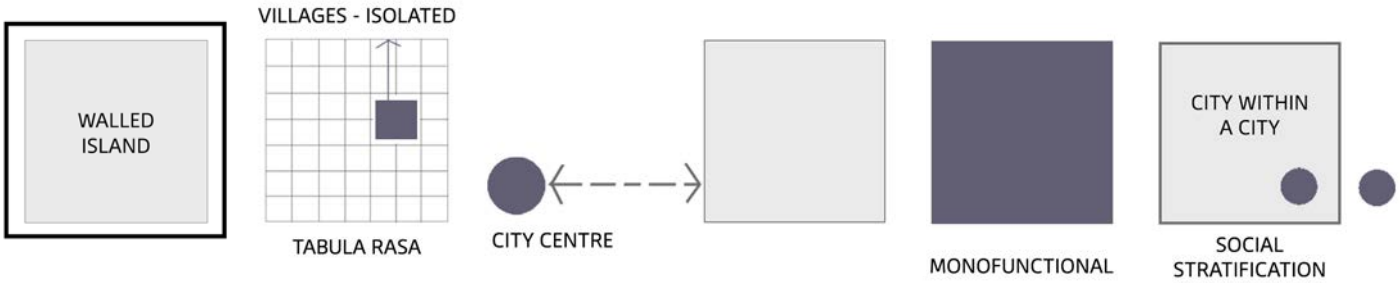


Figure 1.16: Characteristics of current megablock (Data Source: Johnson, 2015)

CHARACTERISTICS OF RECONFIGURED MEGABLOCK

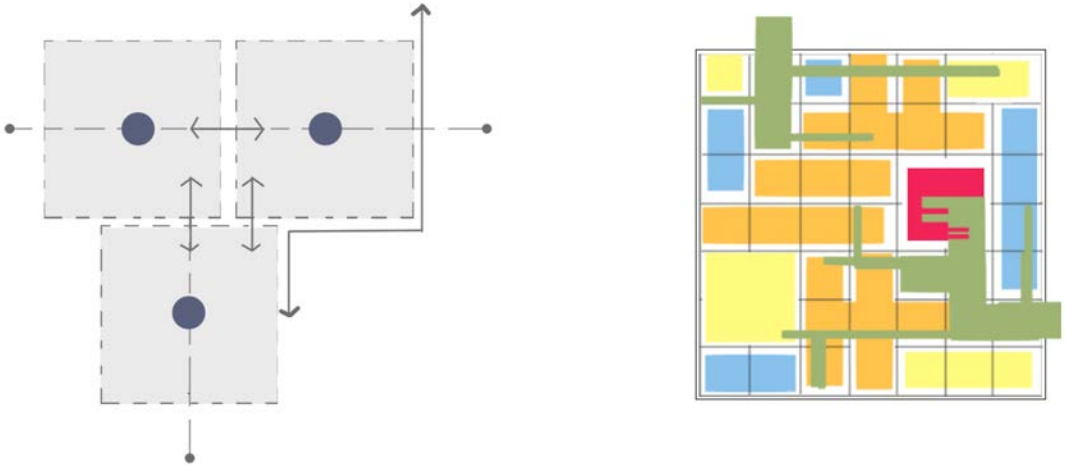


Figure 1.17: Desired characteristics of the megablock

CONCLUSION

In conclusion, the reconfigured notion of the megablock as a planning tool, consisting of spatial relations and governance policies, creates a social network of public spaces.
This network of spatial relations facilitates cohabitation of diverse individual and collective identities, thereby enriching the process of metropolization.
This responds to the effects of migration within the GBA, which demands the cohabitation of these diverse identities .
This project acknowledges that migration, a result of the metropolization process, has the potential to enrich the urban fabric with diversity and vibrancy and defines spatial strategies to enable this.

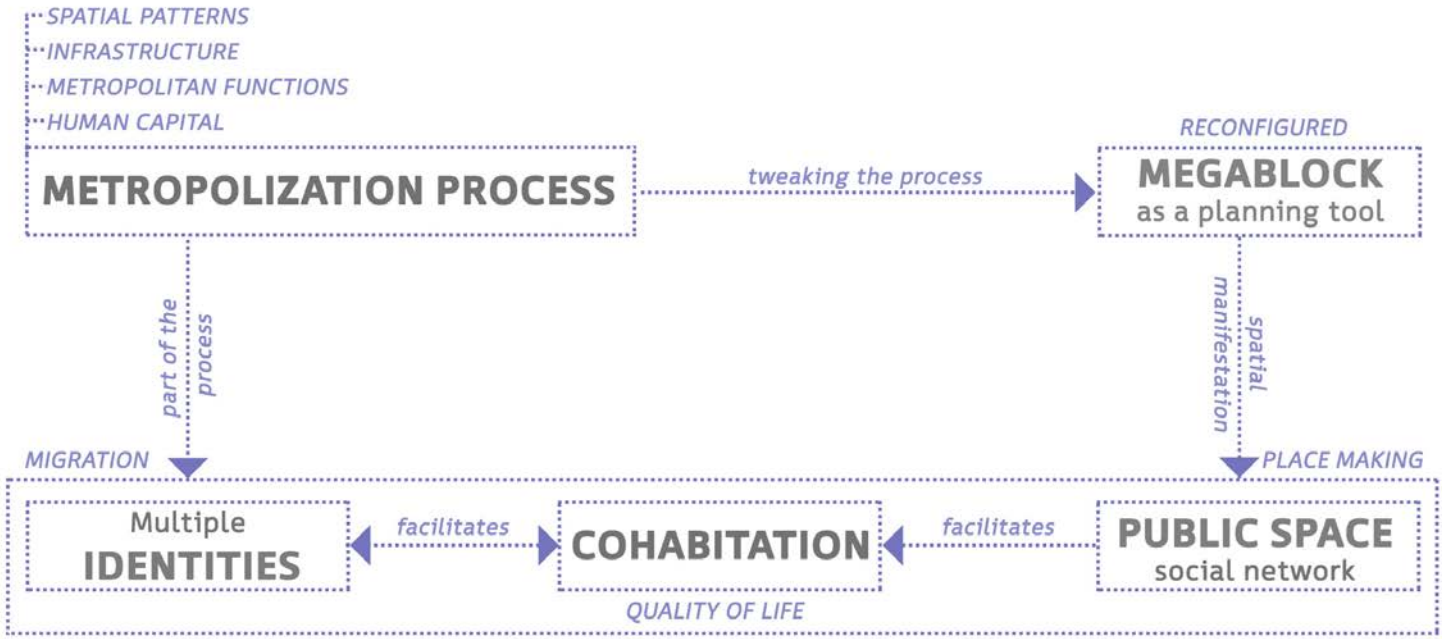
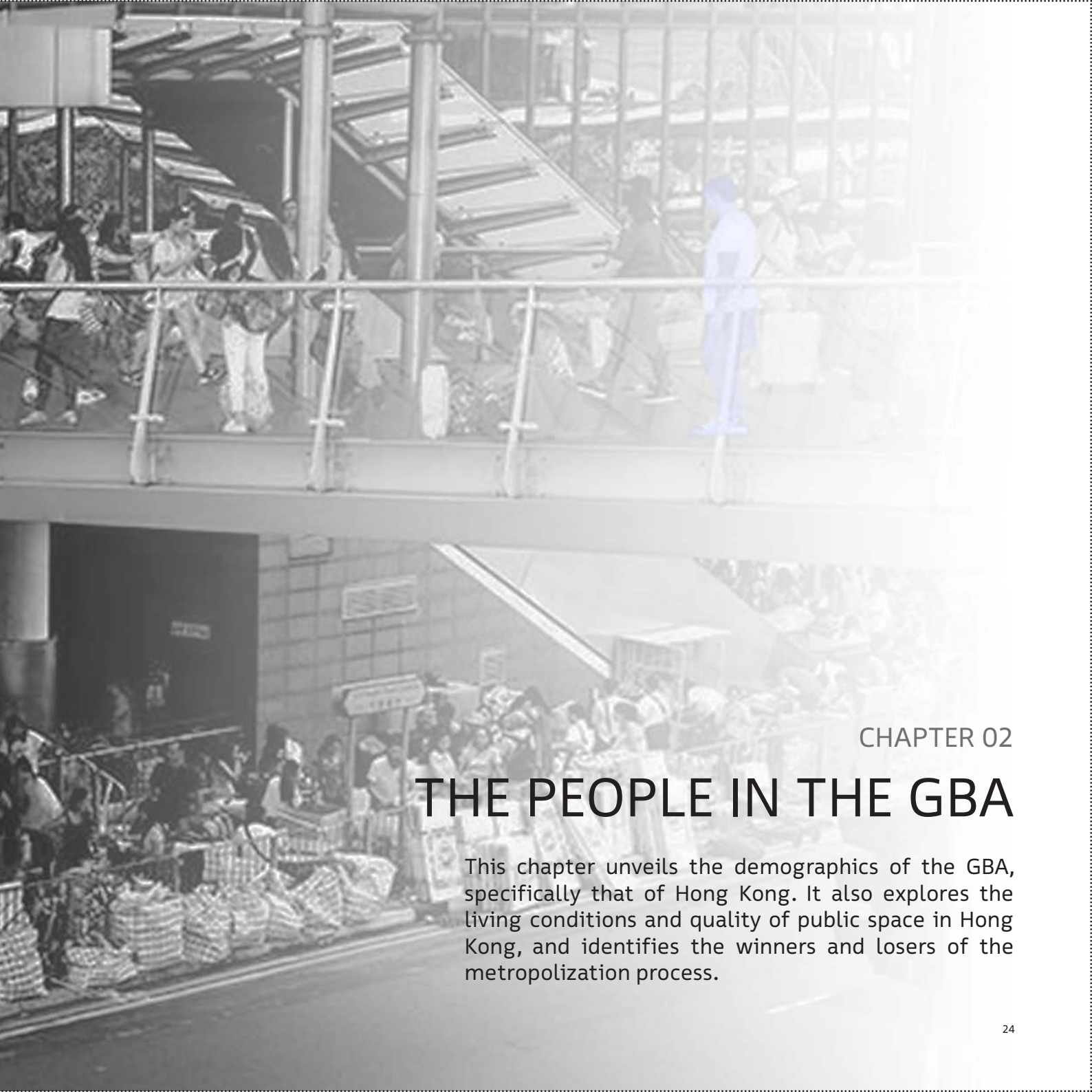


Figure 1.18: Conceptual Framework

Source: From “Weiwenku“, 2017, (https://www.weiwenku.org/d/102045588)



CHAPTER 02

THE PEOPLE IN THE GBA

This chapter unveils the demographics of the GBA, specifically that of Hong Kong. It also explores the living conditions and quality of public space in Hong Kong, and identifies the winners and losers of the metropolization process.

DEMOGRAPHIC ANALYSIS OF THE CITIES IN GBA

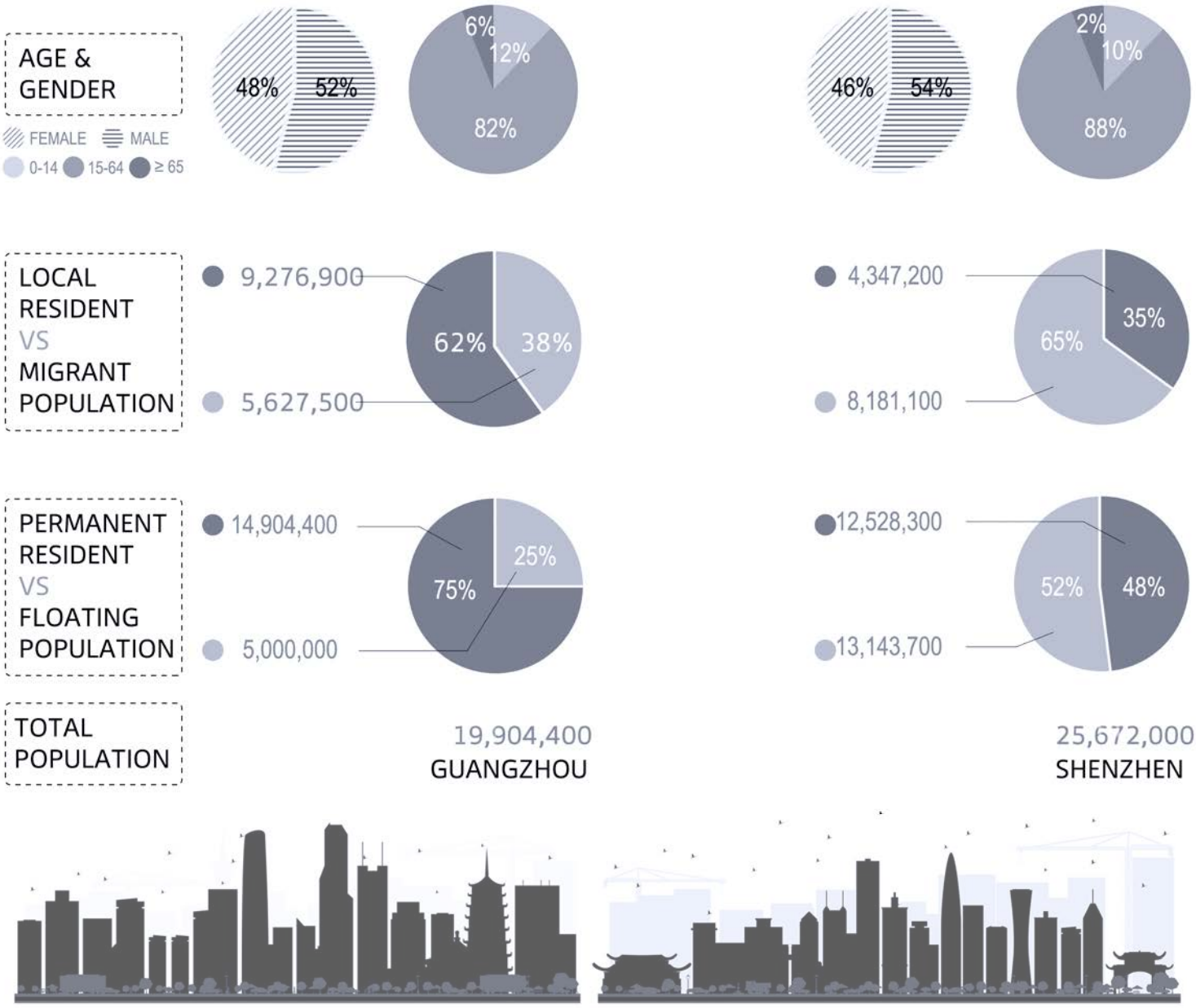
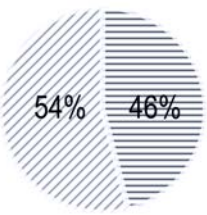
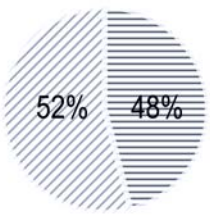
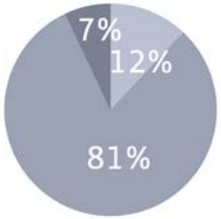
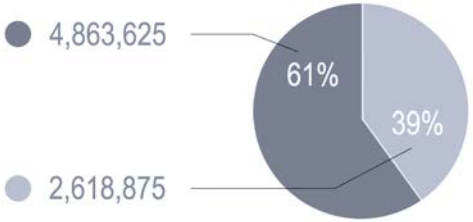


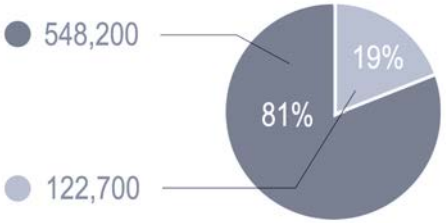
Figure 2.1 Demographic analysis of the cities in GBA. (Source: Citypopulation; Census and Statistics Department, Hong Kong Special Administrative Region; DSEC)

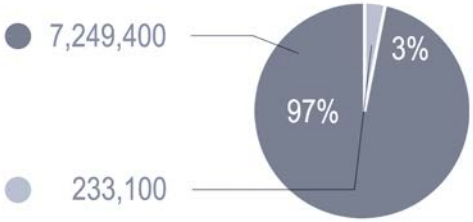






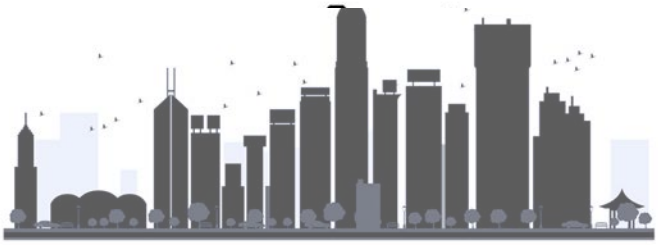






Looking into the people that live in this region,we see large proportion of population in the 4 main cities is composed by migrants, and if we look further into Hong Kong we can see that about 40% of the population are migrants with the number of 2.6 million people. But the residents appear to be very stable compared to the other cities.

7,482,500
HONGKONG



670,900
MACAU

HISTORY OF POPULATION & IMMIGRATION IN HONG KONG

The growth of a population is influenced by two factors: natural increase and migration.

Migration was the major factor contributing to the growth of Hong Kong's population in the 19th century and in the first part of the 20th century. Chinese inhabitants were allowed free entry into Hong Kong until April 1949 when immigrant controls had to be introduced due to the large inflow of immigrants into Hong Kong caused by the change of Government in China.

Natural increase gained increasing importance in Hong Kong's population growth after the People's Republic of China established.

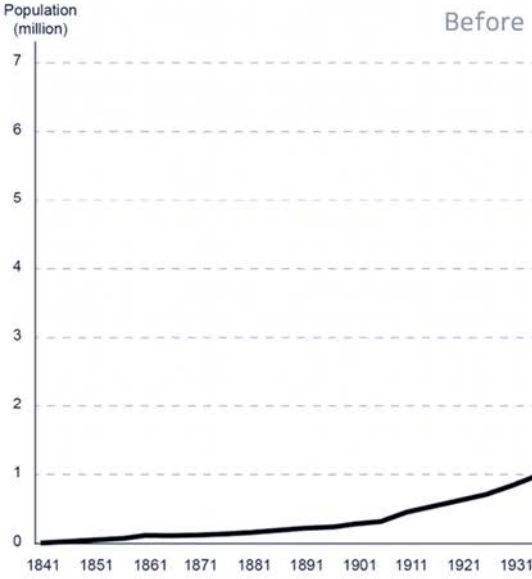


Figure 2.2 Hong Kong population history

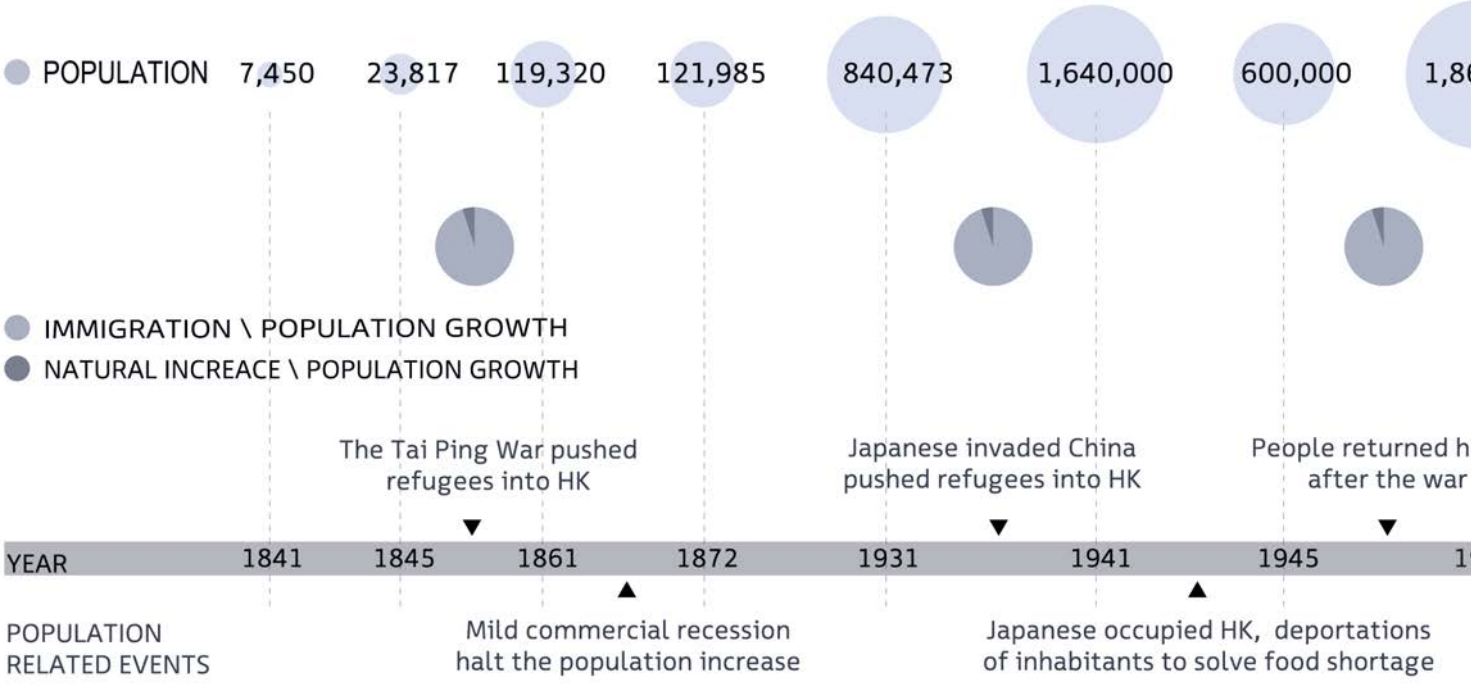
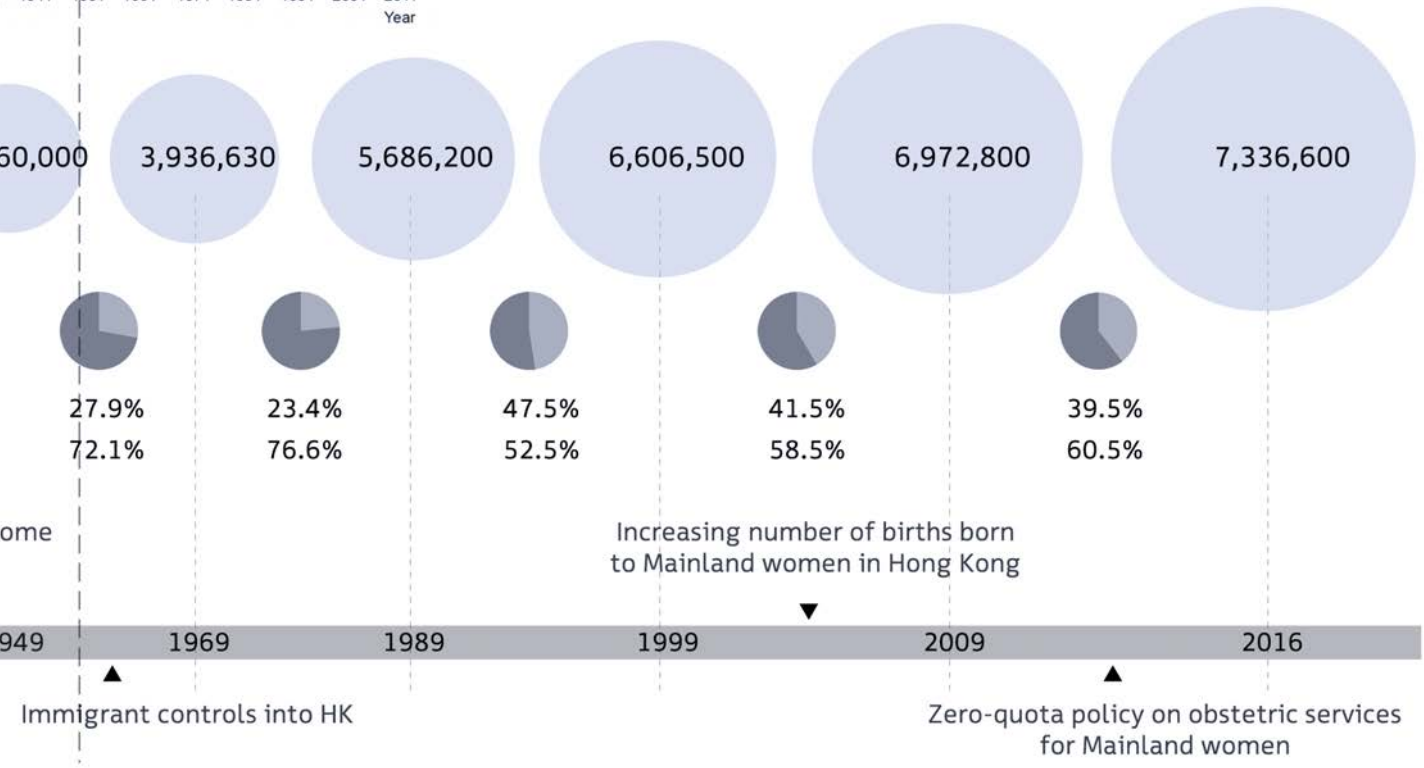


Figure 2.3 Hong Kong population, migration history and important relative events.

Source:
1. Demographic Trends in Hong Kong 1986–2016
2. Fan, S.C., 1974. The population of Hong Kong.
3. Fujimori, R., 2015. Evolution of urban form in Hong Kong: a study of development controls and high-density housing models. HKU Theses Online (HKUTO).
4. Hong Kong Government (2001) Hong Kong's Population: Statistics and Trends Chapter II
5. UNICEF (2013) Migration Profiles: China, Hong Kong Special Administrative Region



IMMIGRATION POPULATION & DISTRICTS

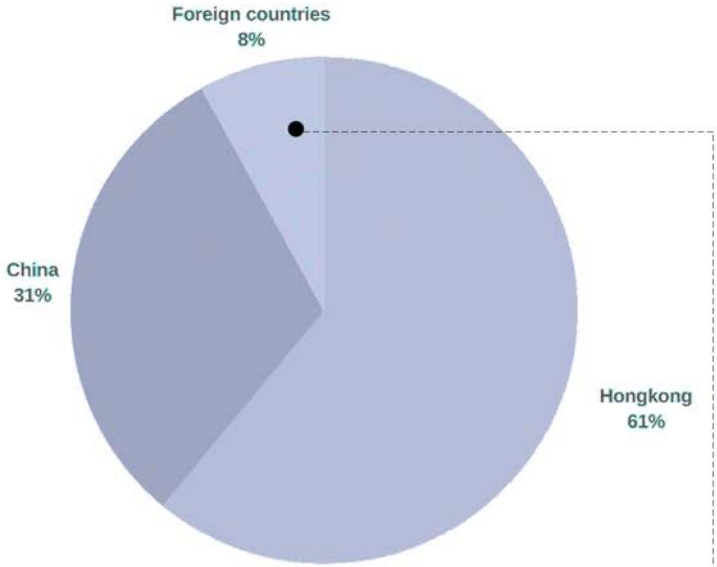


Figure 2.4 Where do people in Hong Kong come from

WHERE DO PEOPLE IN HK COME FROM?

60% of the population of Hong Kong are local. 31% are from China mainland. And only 8% are immigrants from foreign countries.

WHICH COUNTRIES DO FOREIGNERS COME FROM?

Among the 8% of the population that come from foreign countries, most of them are Filipinos and Indonesians. There are also a small amount of Indian, Nepalese, Pakistani, Thai and white people.

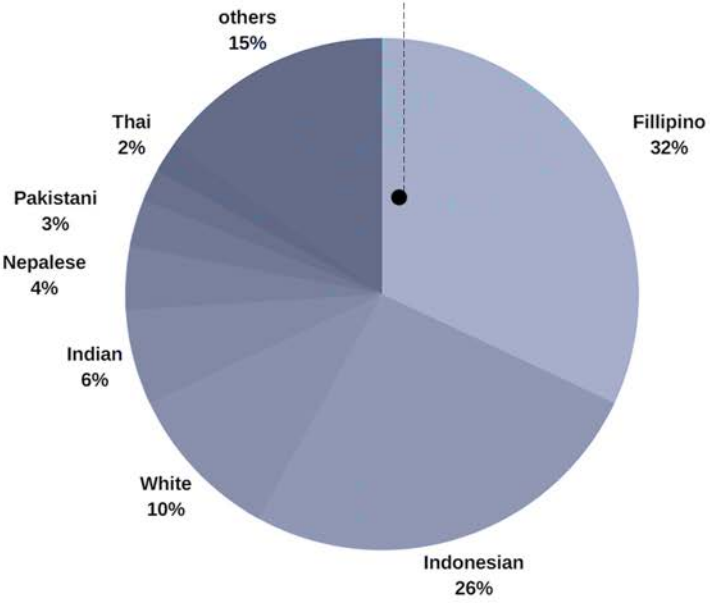


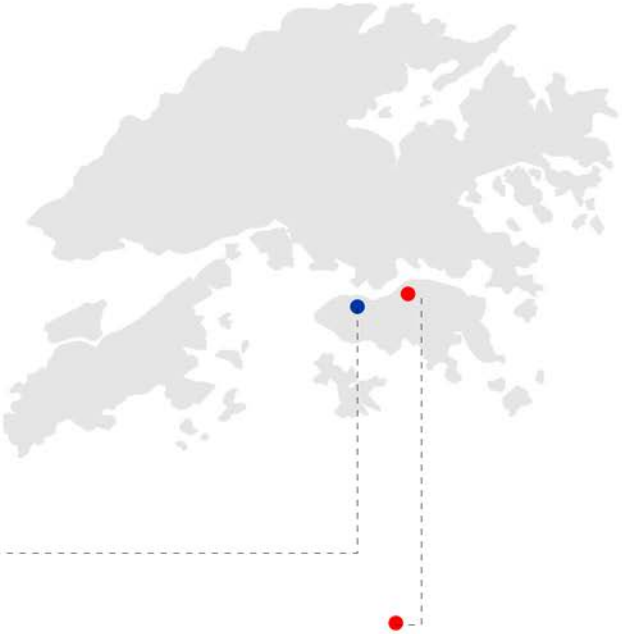
Figure 2.5 Which countries do foreigners in Hong Kong come from?

Source: https://en.wikipedia.org/wiki/Demographics_of_Hong_Kong

THE CASE OF FOREIGN MAIDS

Hong Kong's economic took off in the 1970s so more and more families have begun to rely on the salary of the couple to maintain a certain standard of living that stay-in-home maid service was urgently needed. However, most of the local and mainland immigrants are reluctant to work as maids.

In the case of short supply, Hong Kong has only sought out and started to import Filipino & Indonesian maids to fill the shortage of the maid market. As of October, 2017, the number of foreign domestic helpers increased to 360,000, of which 54% from the Philippines and 44% came from Indonesia.



FILLIPINO MAIDS
Statue Square, Central, Hong Kong
Chater Road

INDONESIAN MAIDS
Victoria Park
Yee Wo St, Causeway Bay

Another reason is the salary. The minimum wage of foreign domestic helpers in 2017 amounted to 4310 HKD, 150% of the wages higher than the average wage over the same period of the Philippines; Indonesia than the average wage it is about 190% higher.

On Sundays and holidays, lots of foreign maids gathered in parks, flyovers or roadside open spaces. In recent years, some District Council members and the media have pointed out that foreign servants are occupying places, which has caused residents to "have no way" and described the situation as a contradiction between foreign workers and local residents.

Figure 2.6 Map of gathering areas of Filipino maids and Indonesian maids. (Source: Epochtimes; Theinitium)

WHAT IS THE INDIVIDUAL USE OF COLLECTIVE SPACE?

CASE OF FOREIGN FILIPINO MAIDS

STREETS

BUILDINGS

Figure 2.7 Where and how the Filipino maids occupied the public space in Hong Kong center. (Source: Butterflyhk; Aedas; Fenghuang News; The Hong Kong shopper; Sohu)

Here are pictures showing how Filipino maids occupied the space of streets, buildings, footbridges or squares in center of Hong Kong and turn the collective space into their individual use with their own identities.

FOOTBRIDGES

SQUARES

WHERE DO THEY RECREATE?

Open space in Hong Kong is very less compared to other major Asian cities - with 2 sqm standard open space per person. This, however, accounts for open space within private developments and hence does not consider the disparities in accessibility for different social groups.

Figure 2.8 Map of open space in Hong Kong

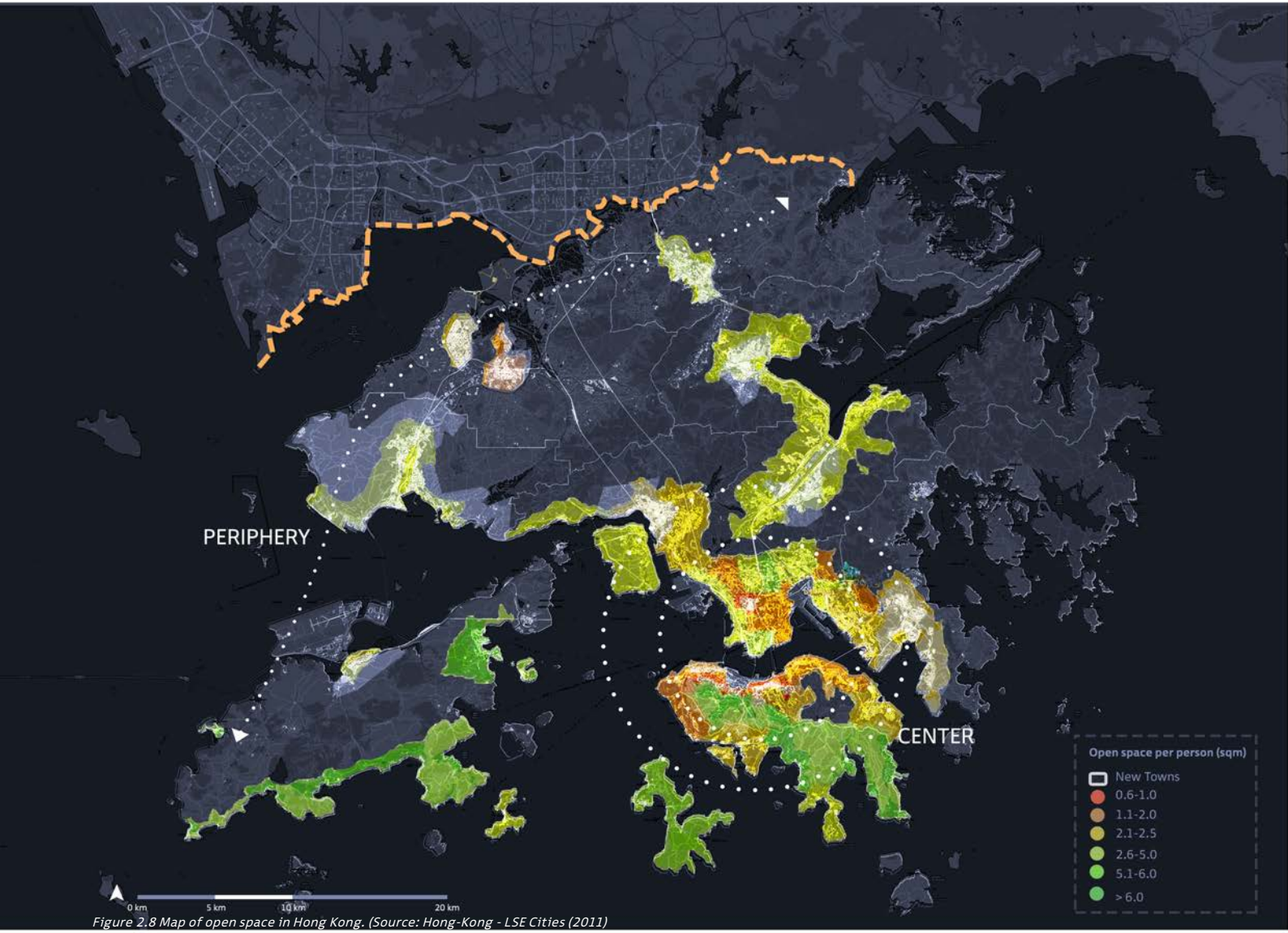
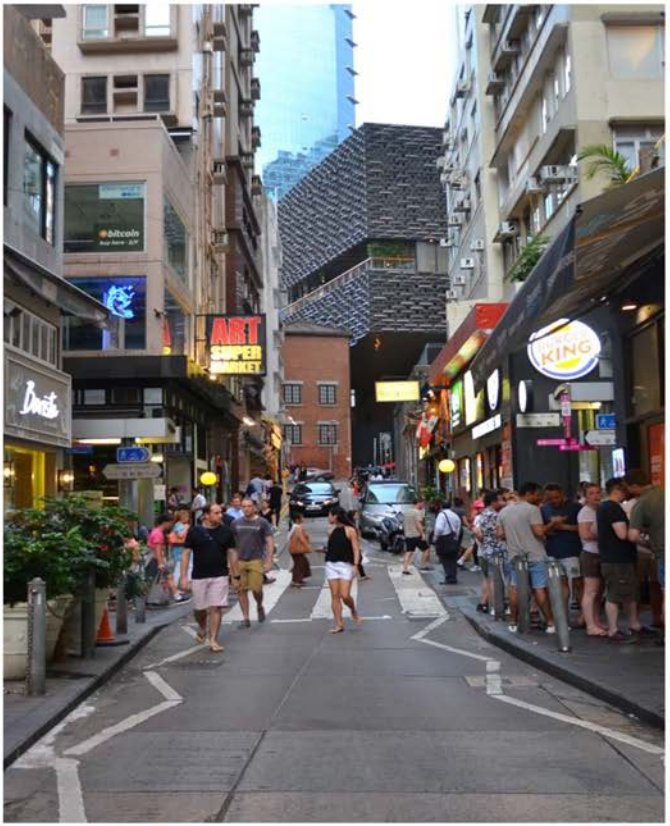


Figure 2.8 Map of open space in Hong Kong. (Source: Hong-Kong - LSE Cities (2011)

PERIPHERY

CENTER



In the periphery areas there are more public space, but they are mono-functional and lack of street life. In central areas they have less public space but more multifunctional and more lively.

In central area, although people have less public space to use, the space are more multifunctional and more lively than the periphery areas.

Figure 2.9 A comparison between public space in periphery areas and center areas in Hong Kong

OPEN SPACE PER PERSON (M2)

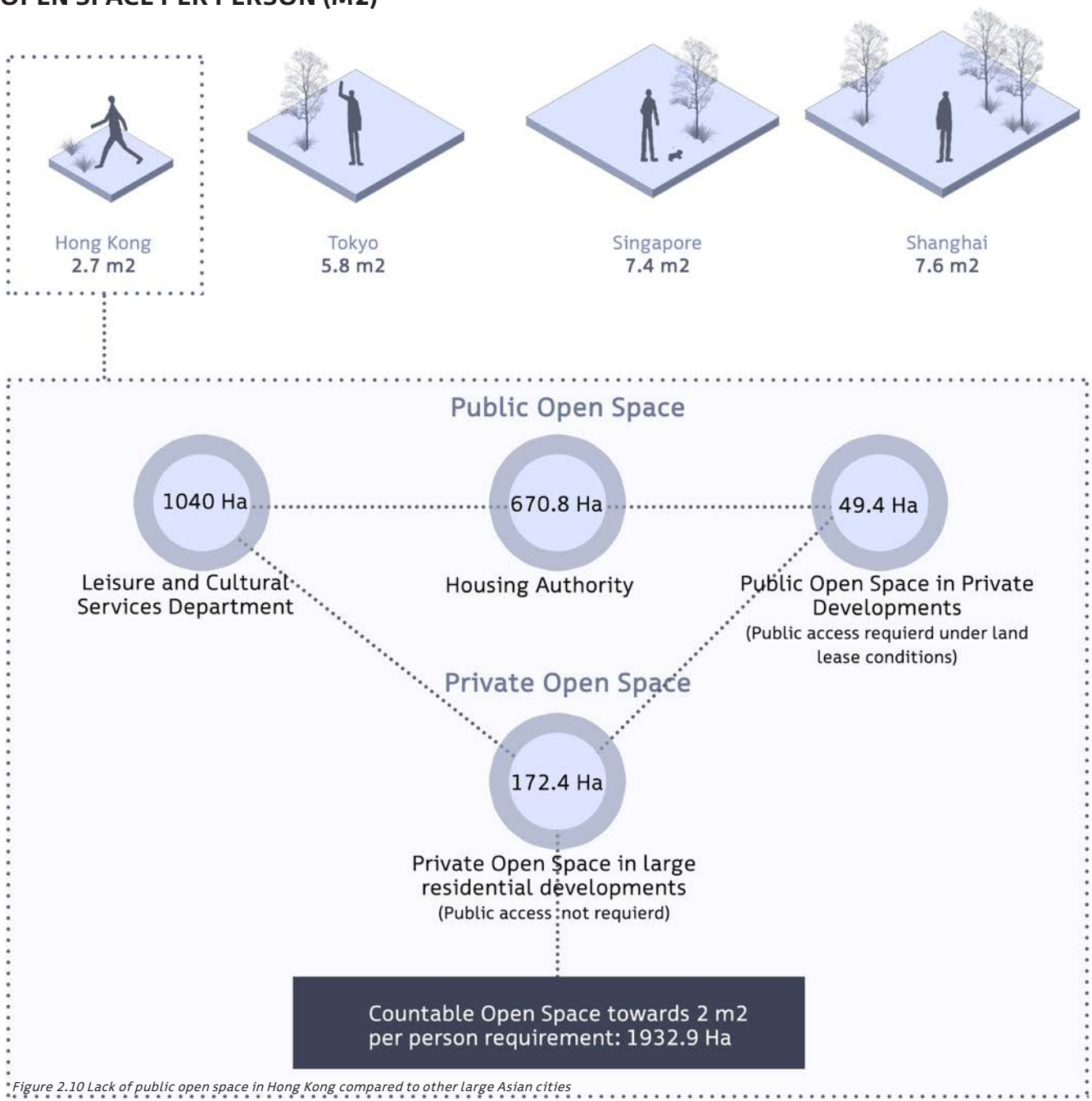


Figure 2.10 Lack of public open space in Hong Kong compared to other large Asian cities

HONG KONG

Source: CY Club; Designing Yen

SINGAPORE

JOB DISTRIBUTION

In the job distribution map, we see that the center is highly concentrated in comparison with the rest of the city, creating different kind of opportunities and accessibility in the periphery.

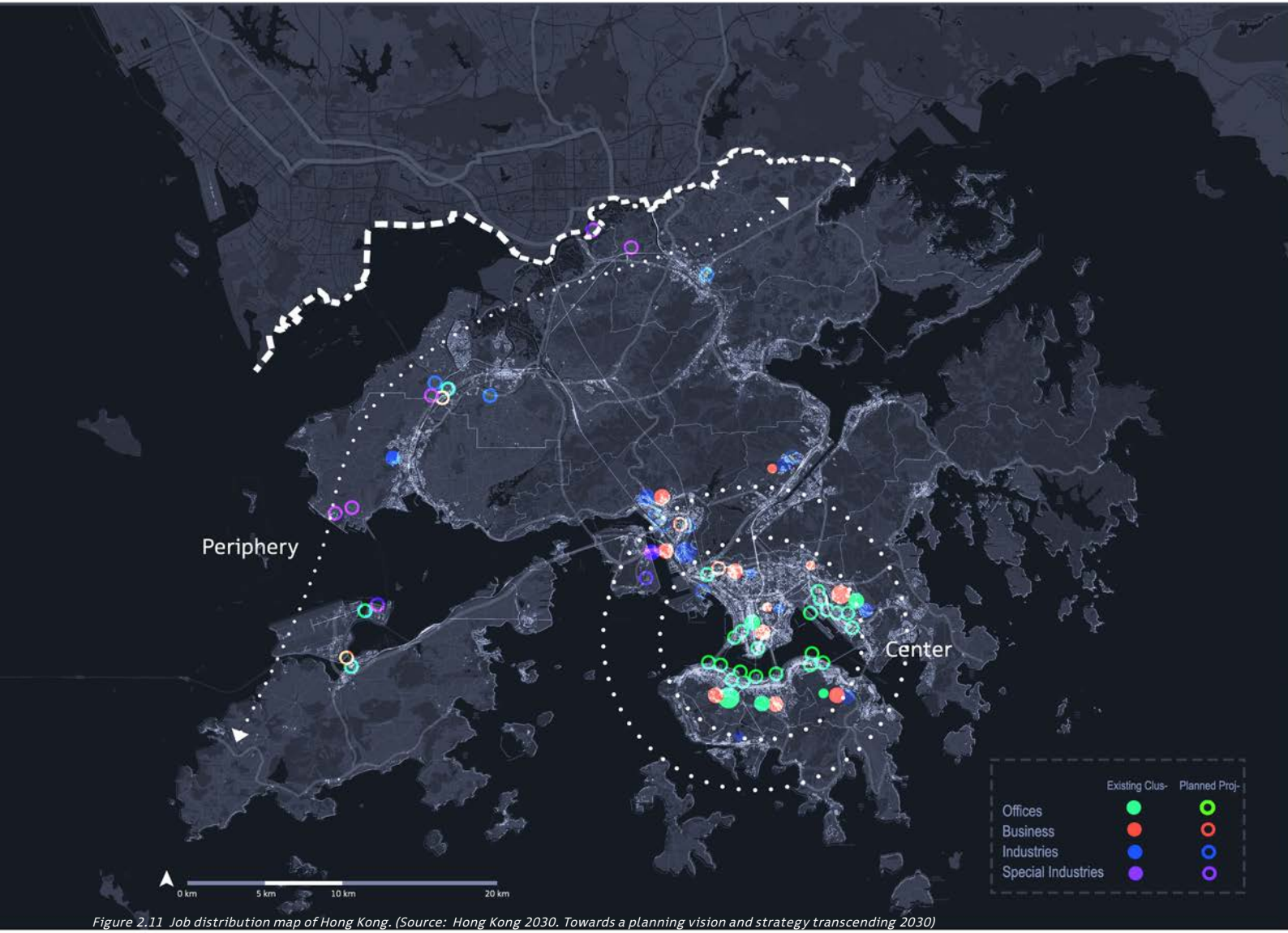


Figure 2.11 Job distribution map of Hong Kong. (Source: Hong Kong 2030. Towards a planning vision and strategy transcending 2030)

INCOME DISTRIBUTION

In the income distribution, we can see the central areas have higher income than the peripheral areas.

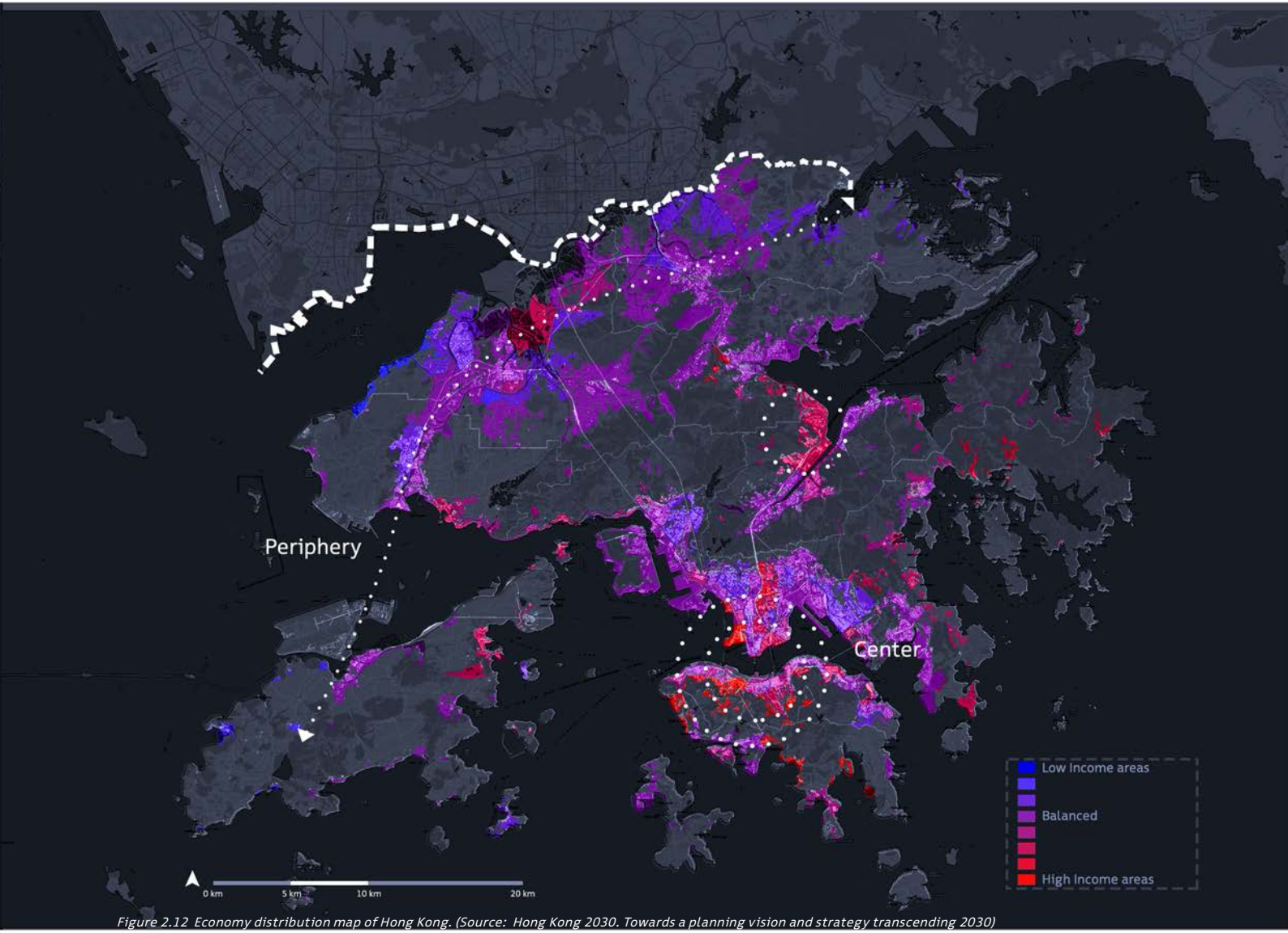


Figure 2.12 Economy distribution map of Hong Kong. (Source: Hong Kong 2030. Towards a planning vision and strategy transcending 2030)

WHERE DO THEY LIVE AND HOW DO THEY MOVE?

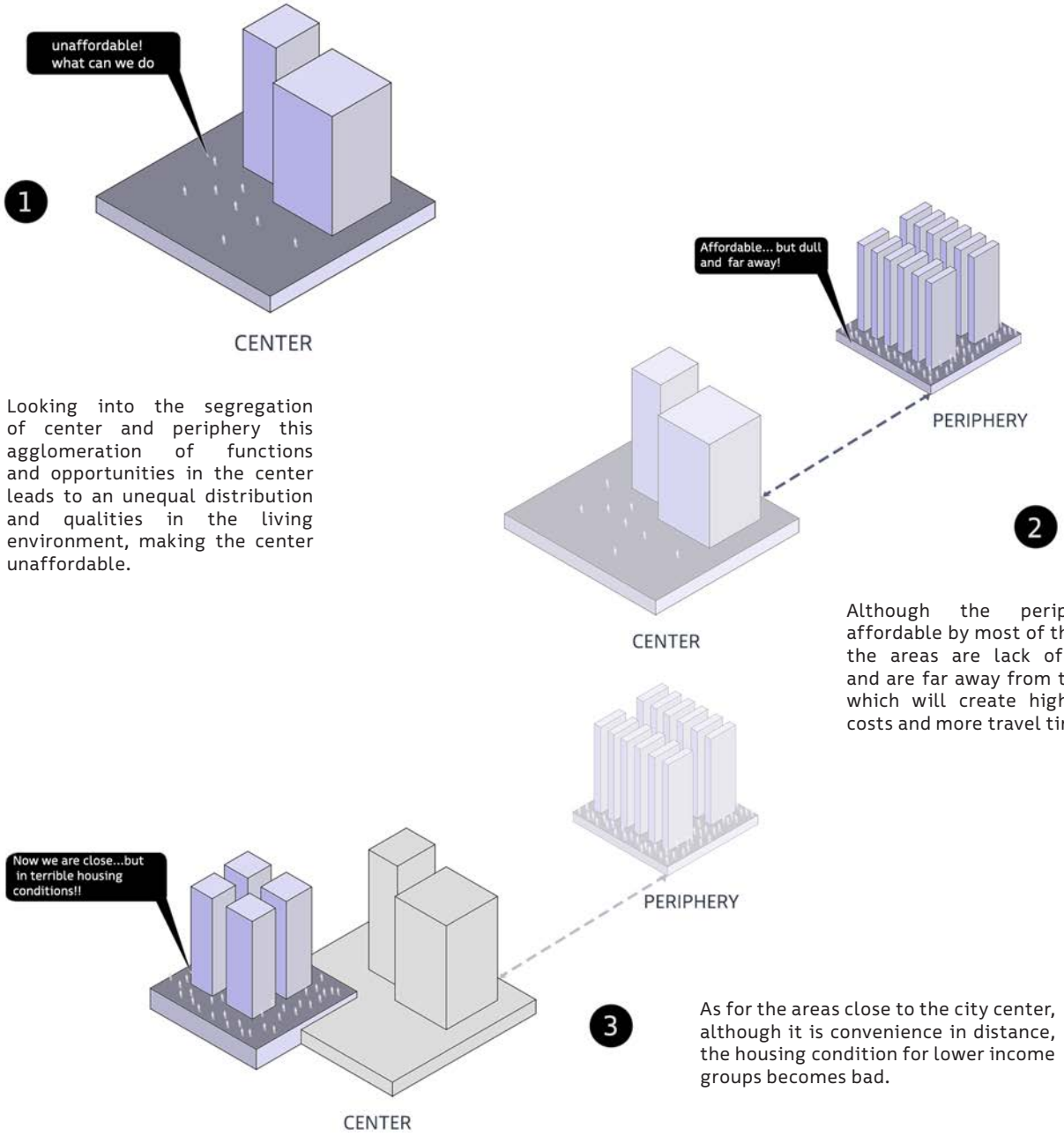


Figure 2.13 Three types of areas where Hong Kong people live in

Source: Photorator; Dornob

HOUSING CONDITIONS - INFORMAL SETTLEMENTS

Informal housing settlements within the dense core areas due to proximity to metropolitan functions and workplace

Informal settlements are residential areas (UN Habitat, 2006):

1) With no security of tenure vis-à-vis land or dwellings
2) Which lack, or are cut off from basic services & infrastructure
3) Which may not comply with current planning and building regulations, and are often situated in geographically and environmentally hazardous areas.

Conclusion:
Unequal economic capacities and distribution of economic resources indicate presence of informality despite improved development of infrastructure.

Rooftop informal settlements

Shanty street structures

Pocket informal settlements

Caged houses

Figure 2.14 Informal settlements in Hong Kong; (Source: Soyinka, O., & Siu, K. W. M. (2017). Investigating informal settlement and infrastructure adequacy for future resilient urban center in Hong Kong, SAR. Procedia engineering, 198, 84-98.

SPATIAL STRUCTURE OF HONG KONG?

In summary we can conclude that the spatial structure of Hong Kong is strongly segregated into a strong core surrounded but peripheral urban areas in which a large part of the population is excluded from the metropolization process.

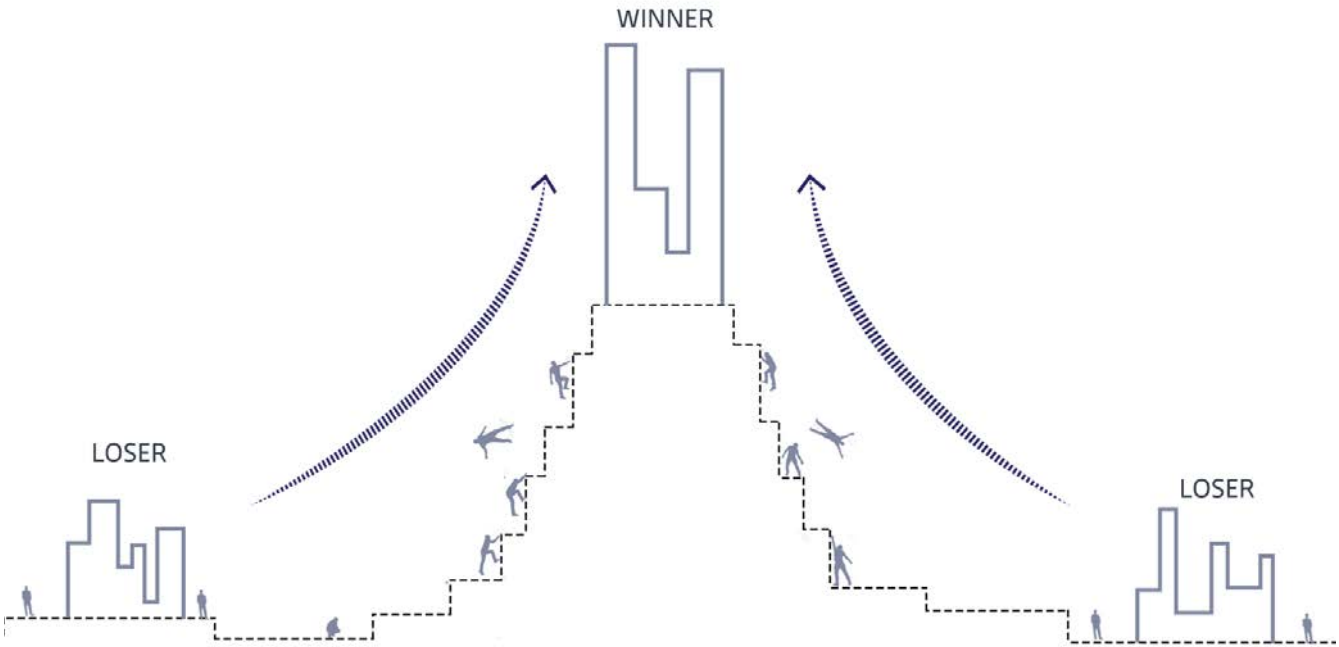
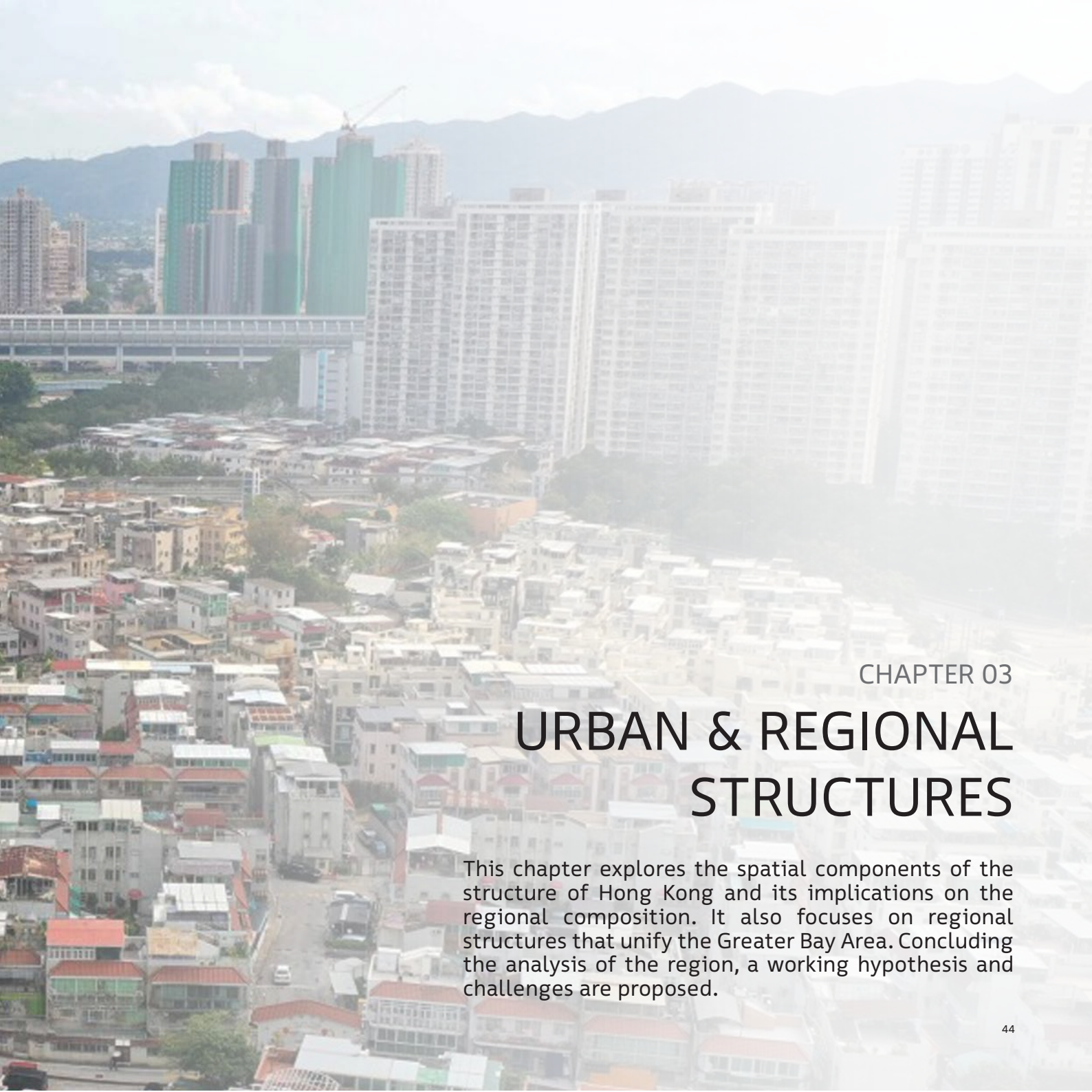


Figure 2.15 Hong Kong spatial structure conclusion

Source: Aerial drone view of village houses in Yuen Long. From"South China morning post," by Winson Wong (https://www.scmp.com/comment/letters/article/3005896/small-house-policy-akin-having-two-systems-within-hong-kongs-one)(Source: Photo by Winson Wong)



CHAPTER 03

URBAN & REGIONAL STRUCTURES

This chapter explores the spatial components of the structure of Hong Kong and its implications on the regional composition. It also focuses on regional structures that unify the Greater Bay Area. Concluding the analysis of the region, a working hypothesis and challenges are proposed.

SPATIAL STRUCTURE OF HONG KONG

TOPOGRAPHICAL CONSTRAINTS

The built environment and spatial structures of Hong Kong are largely influenced by the topography of the region. The presence of large areas of protected land forces development to concentrate on the peripheries. This is also the reason for extensive land reclamation in Hong Kong.

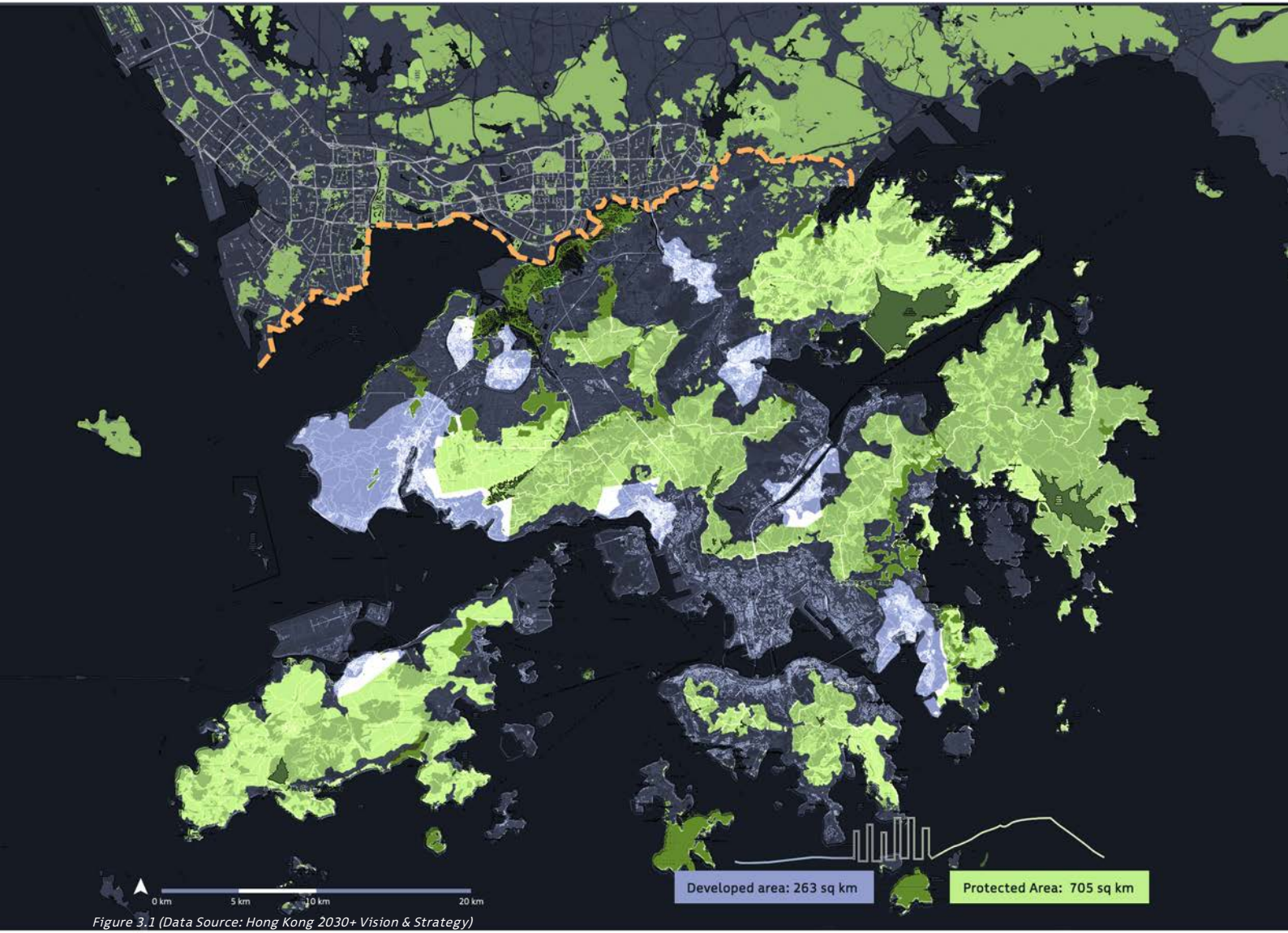


Figure 3.1 (Data Source: Hong Kong 2030+ Vision & Strategy)

SPATIAL STRUCTURE OF HONG KONG

DEVELOPMENT OF THE BUILT ENVIRONMENT

The built environment of Hong Kong is composed of the villages, New Towns and New Development Areas. The villages in Hong Kong differ from those across the border (Shenzhen).

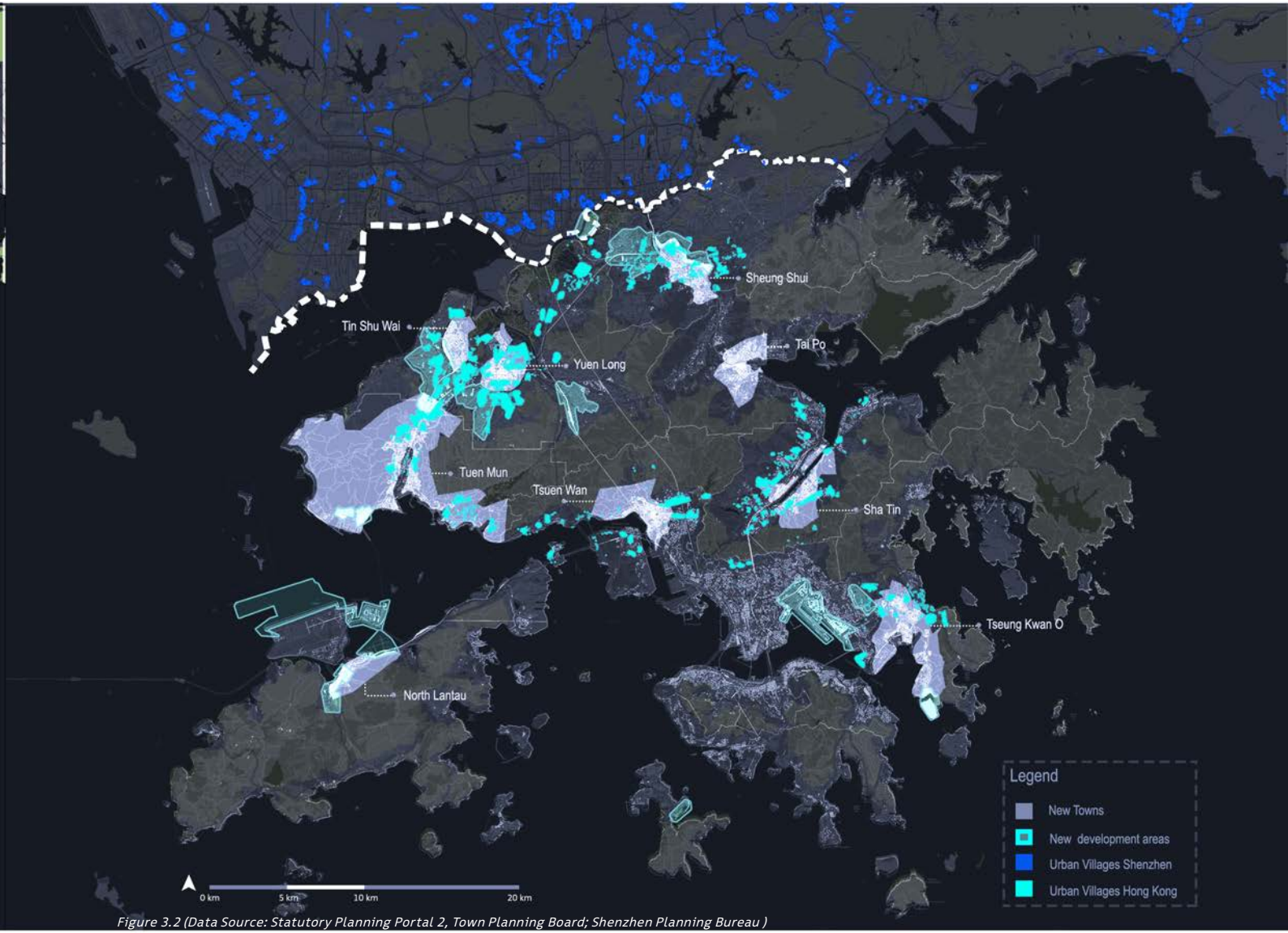


Figure 3.2 (Data Source: Statutory Planning Portal 2, Town Planning Board; Shenzhen Planning Bureau)

SPATIAL STRUCTURE OF HONG KONG

DEVELOPMENT OF THE BUILT ENVIRONMENT

Owing to the exponential growth in population due to large scale immigration, there was a greater concern about access to housing, employment and transportation as compared to the history of the land.

The New Town model became a means for urbanisation at a rapid pace.

The city structure predominantly consists of megablocks of housing estates, with isolated islands of villages between them. Due to the land ownership process, the villages are left untouched while new development takes place around them. They predominantly consist of a floating migrant population of lower income groups.

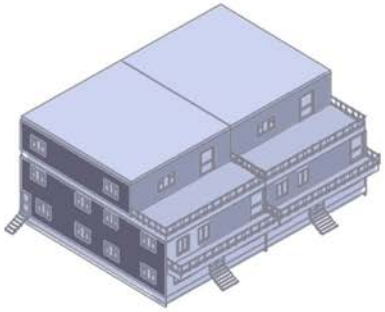
Why do the villages still exist?

1. 1898. Legislation on the New Territories

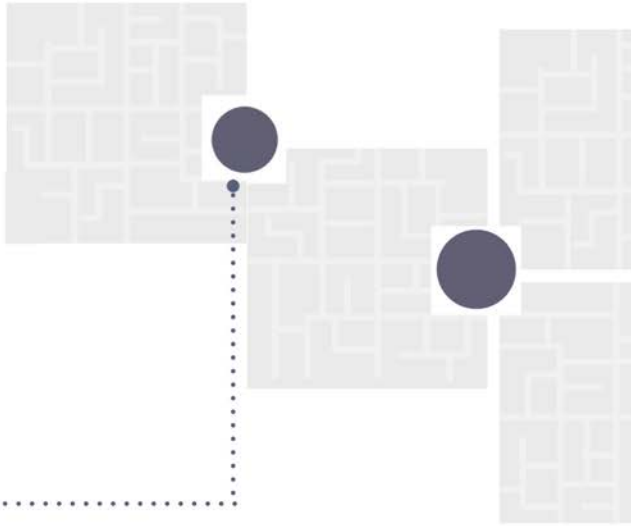
- Property rights

2. Small House Policy (SHP):

- Villagers right to build (3 storeys Height)
- Replace houses (rent out floors)
- Sell the right (transferred to developers)



VILLAGES



URBAN VILLAGES

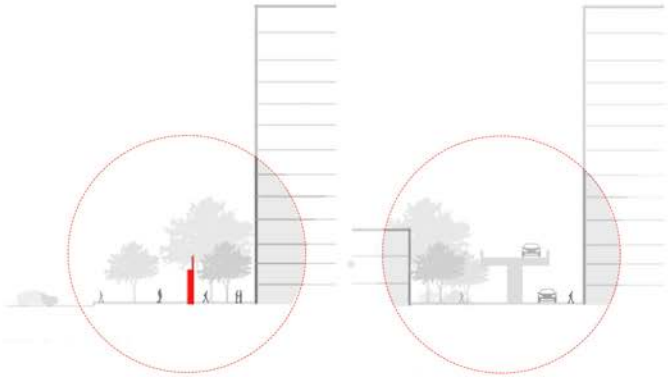
Existing structures that are not responding to the new developments.

Villages are hardly considered indigenous anymore and are isolated from new structures.

Figure 3.3: Spatial structures in Hong Kong (Data Source: Google maps; Van Dijk and Weitkamp, 2017)

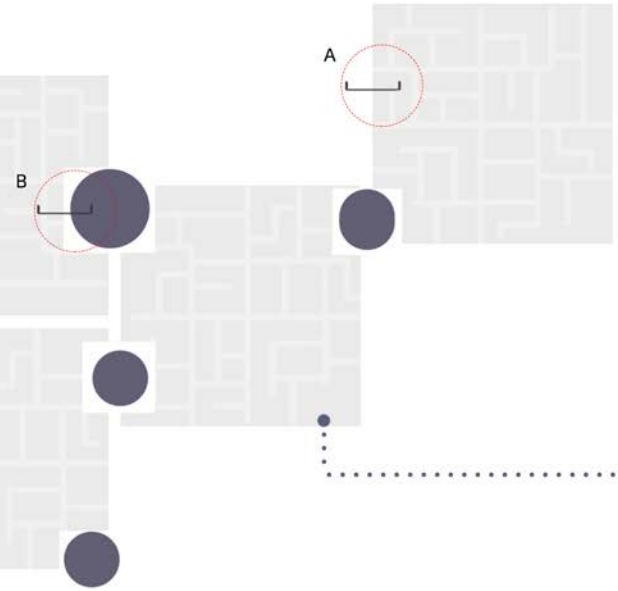
The housing estate megablocks are each developed by different private actors, and are walled and enclosed for security reasons.

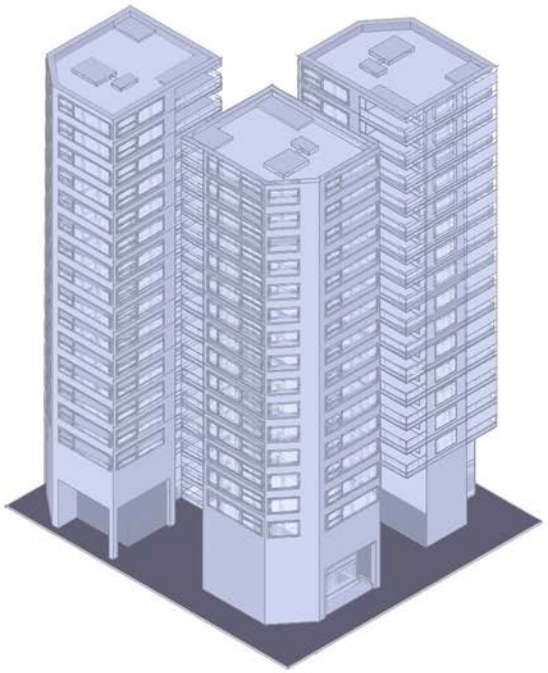
The street networks between these fabrics also vary to a large extent in scale and geometry. The isolation of the villages within the sea of megablocks creates a discontinuity in the flow of people between them.



SECTION A
WALLED MEGABLOCK

SECTION B
EDGE CONDITION





HOUSING ESTATE MEGABLOCKS

NEW TOWN DEVELOPMENT

MEGABLOCK:
Housing estate (stamp urbanism)
Different identities that are not connected with the space.

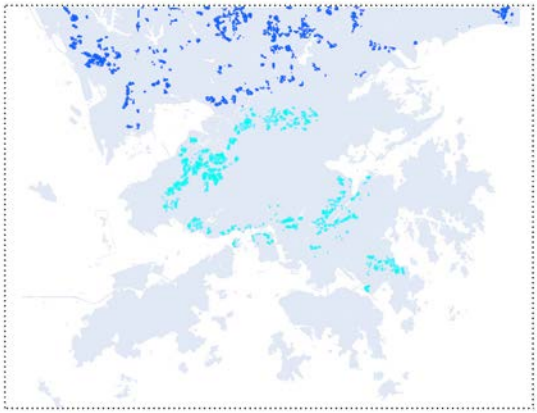
History of New Towns that ignored rather than integrated former settlements.

EVOLUTION OF THE SPATIAL STRUCTURE

VILLAGES

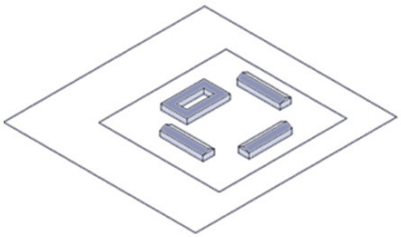
1978 - Most significant changes to Chinese policy have been the urban planning system reform and the establishment of the housing market.

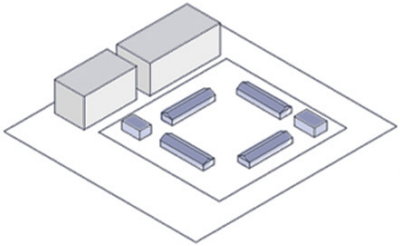
The control of the city was gradually transferred from the government to the market (now the most powerful factor in adjusting the society and urban form)

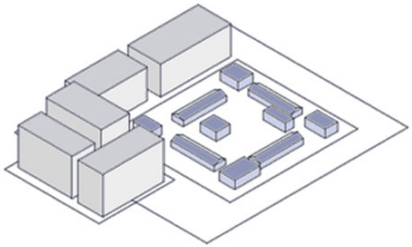


SHENZHEN

Illegal housing construction
Land leasing market opened







Traditional village settlement

Farmland acquisition.
Urban expansion

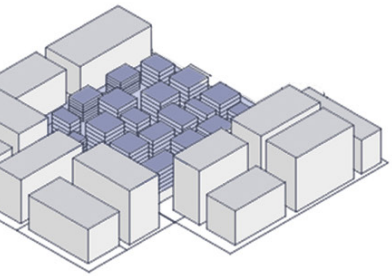
Small House Policy (Urban Villages)
Urban expansion (New towns)

HONG KONG

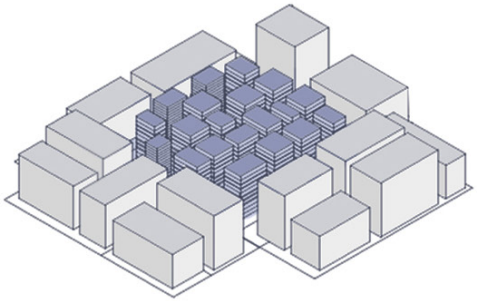
Figure 3.4: Evolution of villages in Shenzhen and Hong Kong (Data Source: Yang, 2017)

Spatial planning reflects economic planning (market economy)

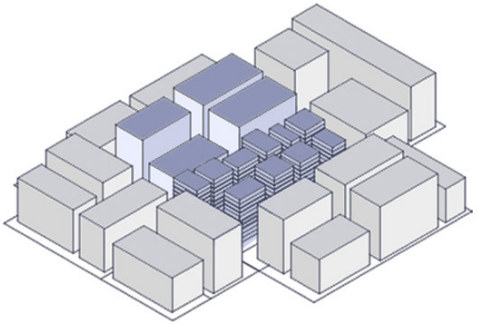
Gradual expansion of housing (4 6 floors) to accommodate more migrants

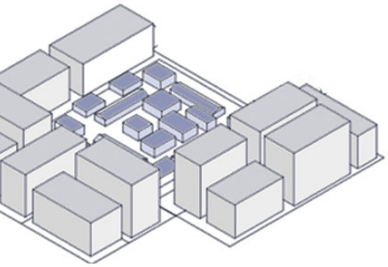


Further expansion (7-15 floors) and conflict with government

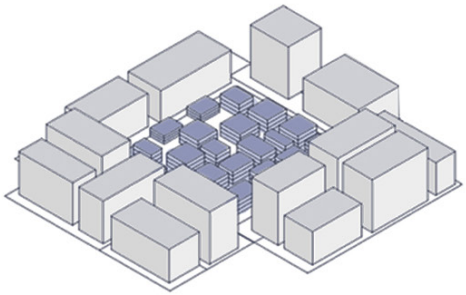


Disappearance of urban villages replaced by urban superbocks

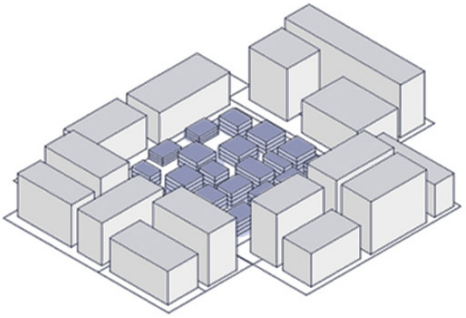




ew Town Megablock development llages growing (3 floors max.) to accommodate more migrants



Villages up to 3 floors (subdivision of space to accommodate migrants)



Urban villages disconnected from the new developments

VILLAGES IN SHENZHEN

The urban villages in Shenzhen, though normally associated with overcrowding and disconnected from the surrounding fabric, have a vibrant street life full of economic opportunities.

AERIAL VIEW

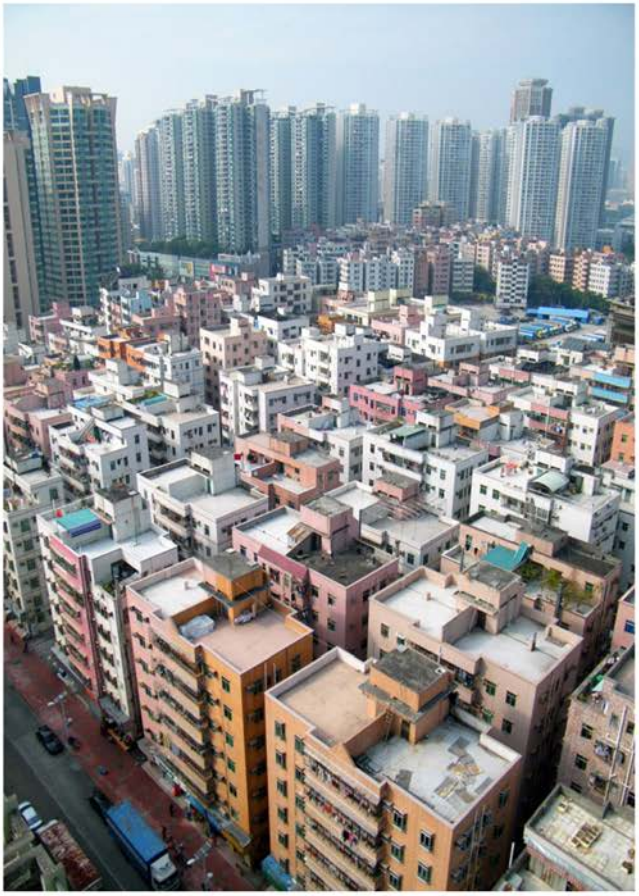


Figure 3.5: Urban village (Source: Pinterest)

STREET VIEW

Figure 3.6: Street life in urban villages of Shenzhen (Source: The Proto City)

VILLAGES IN HONG KONG

The villages in Hong Kong are retained, rather than developed, leaving a large gap between them and the planned and enclosed housing estates.

AERIAL VIEW

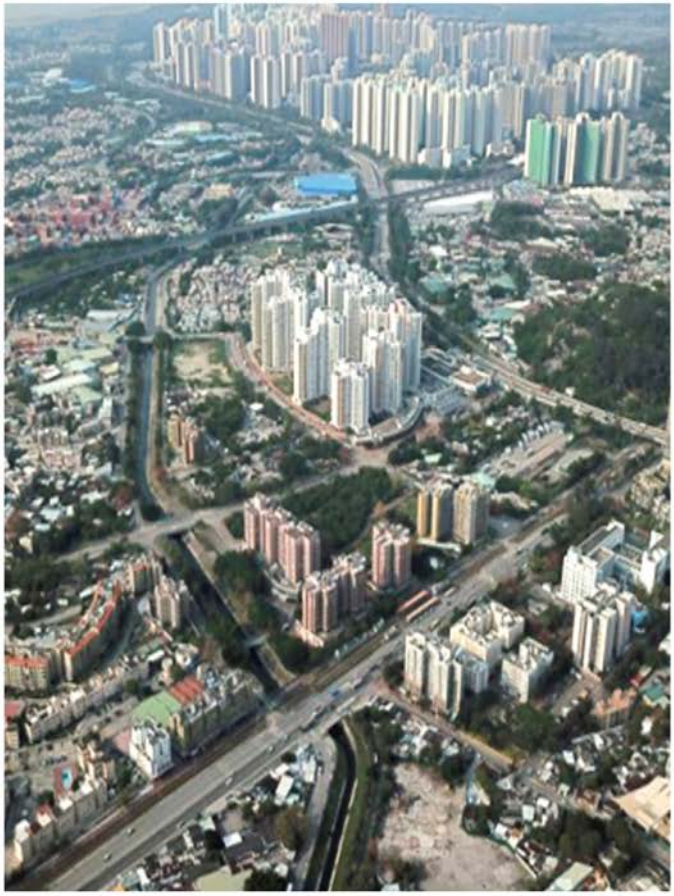


Figure 3.7: View of enclosed estate housing and villages (Source: SCMP, 2018)

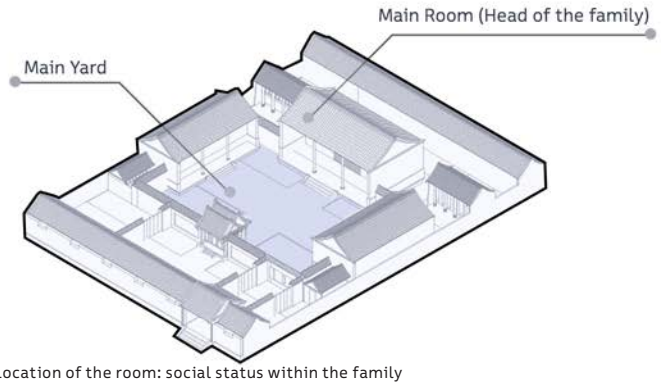
STREET VIEW

Figure 3.8: Street character of villages in Hong Kong (Source: Google Street View)

EVOLUTION OF LIVING BLOCKS IN THE CHINESE CONTEXT

SIHEYUAN BLOCK

Void: provided a common ground for collective life
Symbolic axis - Hierarchical spatial layout



Location of the room: social status within the family

Figure 3.9: Siheyuan courtyard unit (Source: Wang, 2012)

Principals: City making Unit

Spatial Hierarchy defines a single spatial element as part of the entity.
Individual is defined as part of a group by the events that occur at different scales.

Spatial Order and the form of the building are set up by a political purpose (not just utilitarian) and are productive in terms of **collective social systems by the idea of sharing.**

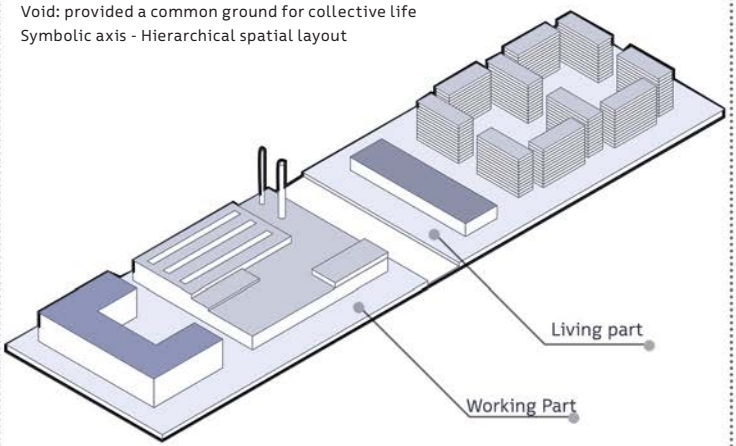
A common framework is occupied by different programs (flexible)

Enclosed autonomy (socially and spatially). Inside and outside enable the independence of the system. Each courtyard opened to the next with free access.

People's daily lives happened in their own courtyard which acted as a social space. In the hierarchical system, space contained different events from private to collective. The system of sharing was a system of typical and collective events.

DANWEI BLOCK

Void: provided a common ground for collective life
Symbolic axis - Hierarchical spatial layout



Principal of social equality

Figure 3.10: Danwei unit (Source: Wang, 2012)

The Danwei had partly inherited the basic spatial principle of social units, transformed from traditional family to institutions. Members were no longer tied by kinship, but to a welfare distribution system.

The work unit offered lifetime employment and services controlled by the Danwei department. The individual had to rely on the group and the miniature society they belonged to, contributing to a public interest.

Collective social system by the idea of sharing:

Three to five families shared toilets and kitchens on the same floor, two to three buildings shared facilities (laundries and garden) and at the Danwei level shared hospitals and larger facilities

Source: Wang, 2012; Gajer, 2015

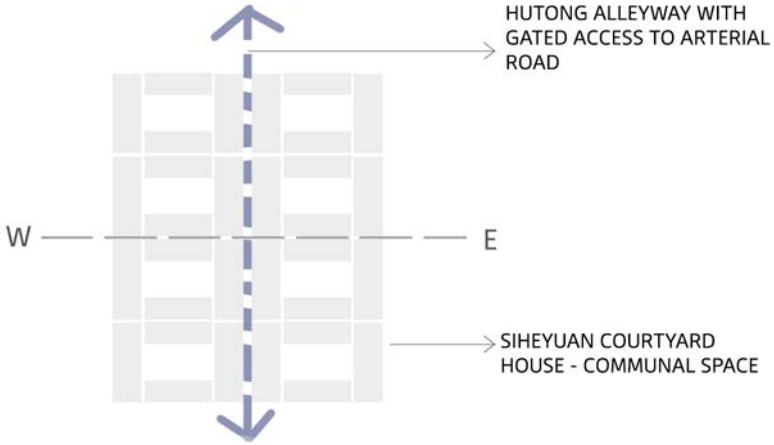


Figure 3.11: Hutong - axis of communal space (Data Source: Gajer, 2015)

The courtyard blocks were clustered around a central axis called the Hutong / Lilong, where informal communal activities used to take place, gated and enclosed to create a sense of privacy.

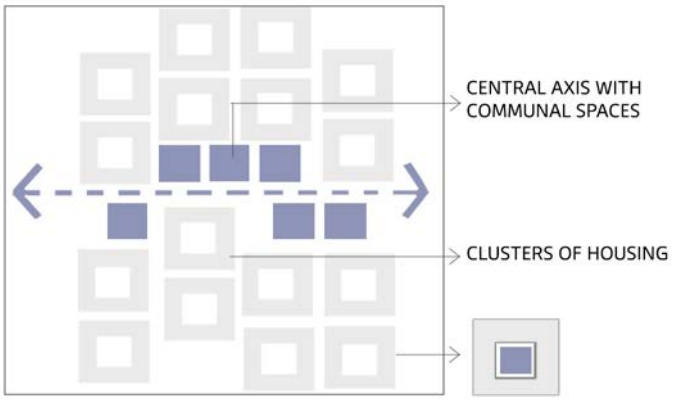


Figure 3.12: Axis of communal spaces (Data Source: Wang,2012)

Communal spaces were clustered together along a central axis. Further, the central courtyard was the smaller scale communal space for every house. These housing blocks were walled and introverted, intent on creating a sense of community.

PRIVACY & FLEXIBILITY IN HIGH DENSITY

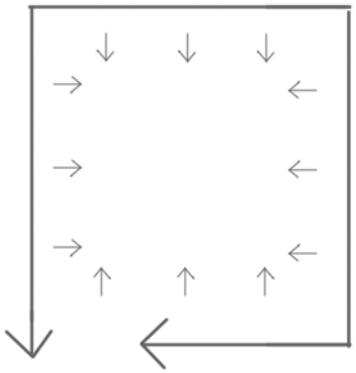


Figure 3.13: Sense of enclosure & privacy within the block

A sense of enclosure of the block has prevailed. This rises from a need for security and privacy in high density environments.

SENSE OF COMMUNITY

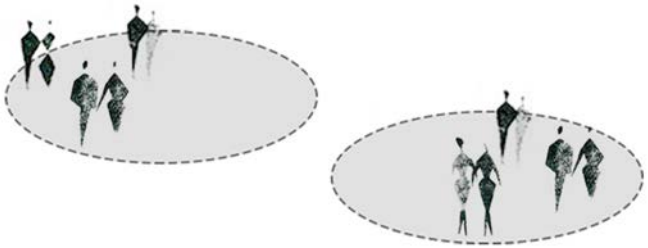


Figure 3.14: Sense of community belonging

The introverted nature of the block, with its self contained communal spaces places an emphasis on the community over the individual.

THE MEGABLOCK – CURRENT STATE

SOCIAL STRUCTURE AND GOVERNANCE

The Megablock structure evolved after the Reform of 1978, after the privatisation of the housing market. Once the government stopped providing public housing, large parcels of land were sold to private developers.

The basic infrastructure, the block center and its characteristics were defined, with the rest left up to the private individuals to develop, including the infrastructure required.

This model has allowed for the fast pace development required to meet the housing demands.

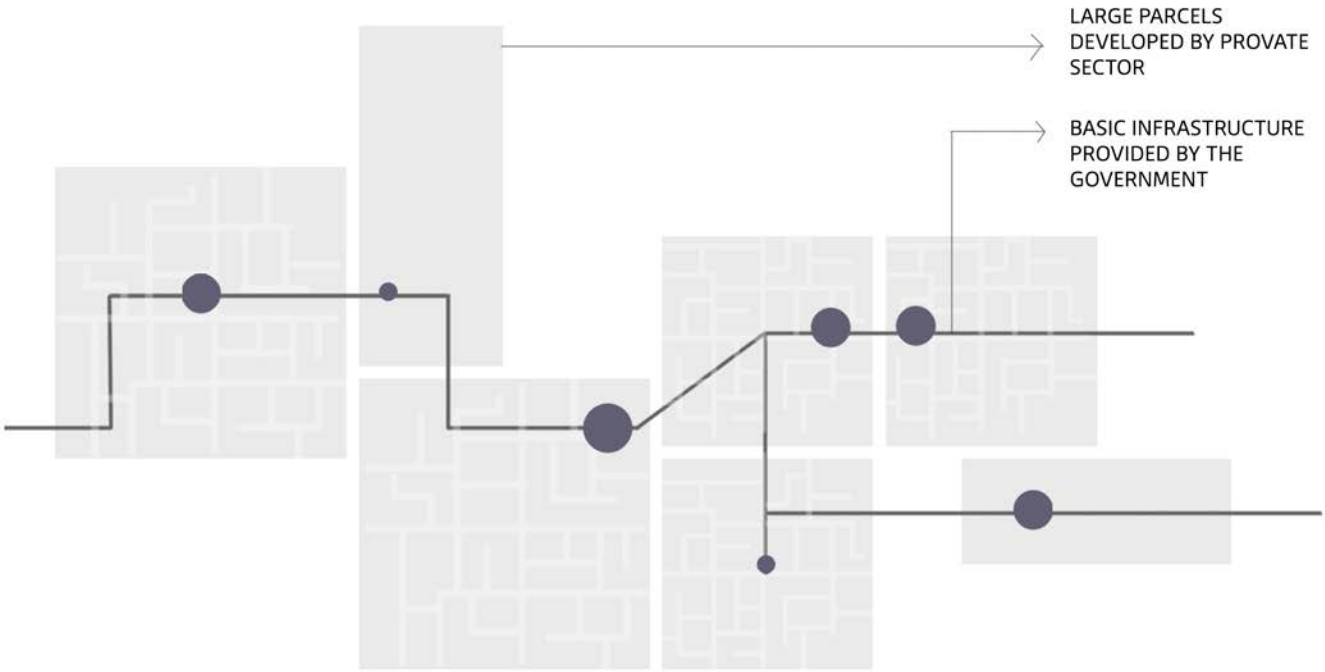


Figure 3.15: Market-driven megablock structure (Source: Chung & Koolhaas, 2001)

THE MEGABLOCK - CURRENT STATE

MEGABLOCK CHARACTERISTICS

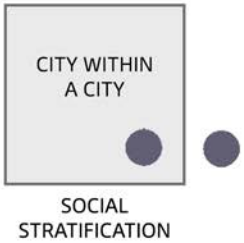
The characteristics of the living blocks of the past when adapted to the evolved megablock, gave rise to mono-functional walled islands that isolated the existing context (villages), increasing the social divide between various economic groups in the urban fabric and hindering easy movement of people.

URBAN WALLED ISLANDS:

Possibility of sense of community within, however relationships between blocks are not considered and the flow of people, movement and public spaces are hindered.

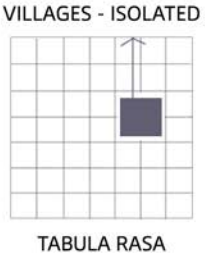
MONO-FUNCTIONAL:

There is a lack of multi-functional spaces and vibrancy and are often referred to as 'bedroom developments'.



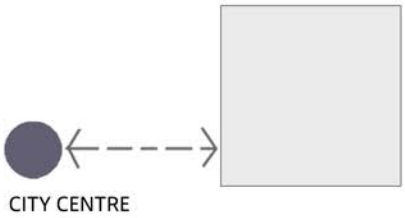
SOCIAL STRATIFICATION:

The model propagates social exclusion, where every housing estate is its own isolated island, accessible to only a certain economic class.



TABULA RASA:

These megablocks often removed all existing context and started from a clean slate. The villages in between were just excluded and isolated.



DISCONNECTED FROM CENTRE:

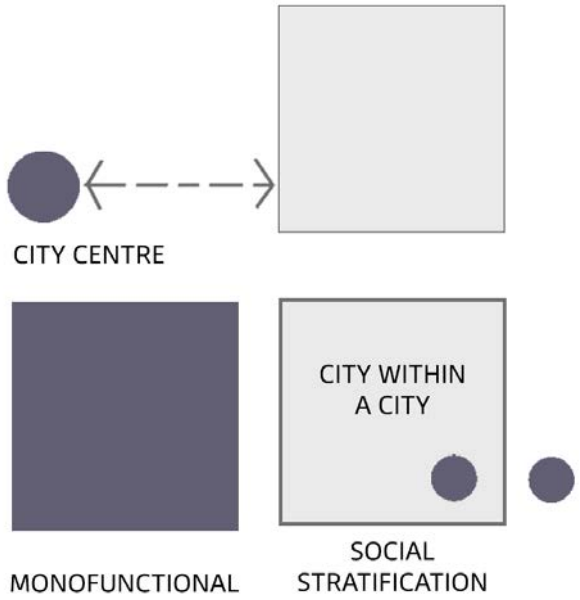
These megablocks are disconnected from the city centre, emphasising a vehicular prominence.

Figure 3.16: Characteristics of Megablock (Data Source: Johnson, 2015)

SPATIAL IMPLICATIONS OF THE MEGABLOCK STRUCTURE

INTROVERTED BUT FRAGMENTED

The walled and privatised megablocks continue the introverted and enclosed nature of living blocks of the past. However, this enclosure fragments the city into smaller island cities. It also redefines the flows of people in the realm of the city.



WORLDS APART WITHIN THE SAME CITY

This process of development results in a fragmented society, where the middle and high income groups live in megablock estates in luxury, with high end facilities, while the megablock estates for lower income groups are worlds apart, often just mono-functional "bedroom estates" disconnected from the city centre.

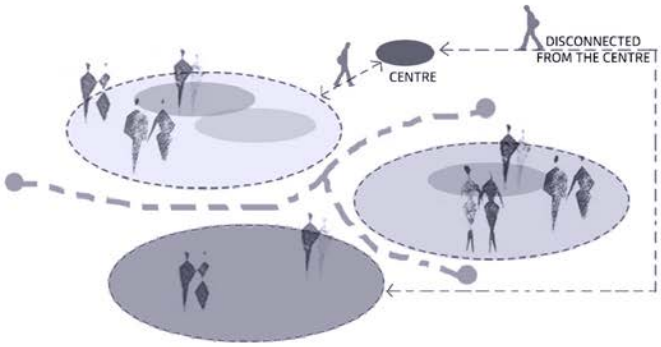
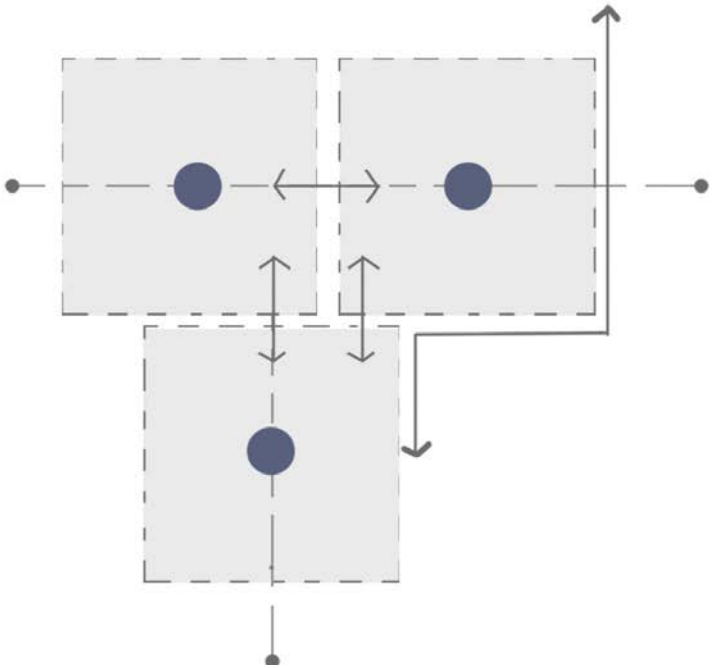


Figure 3.17: Characteristics of Megablock (Data Source: Johnson, 2015)

Figure 3.18: Fragments of the social fabric in housing bubbles

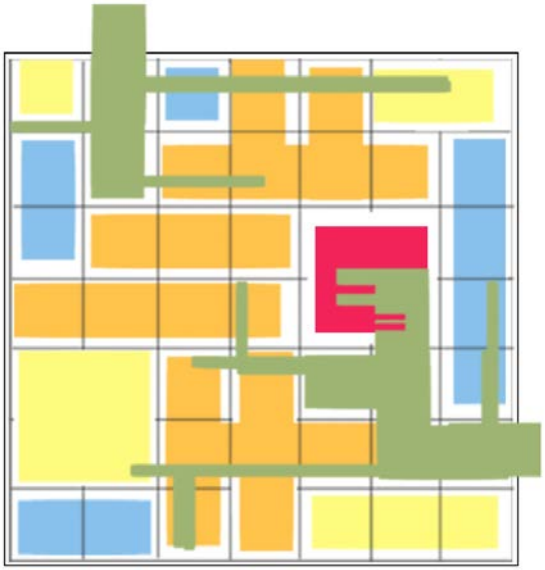
RECONFIGURING THE NOTION OF MEGABLOCK



INTROVERTED BUT CONNECTED

Considering megablocks as a series of connected islands also offers the opportunity to consider bottom up planning and governance strategies.

The megablocks can retain the introverted nature that has a historical precedence, while still being well connected too the adjacent megablocks and creating a flow of public space.

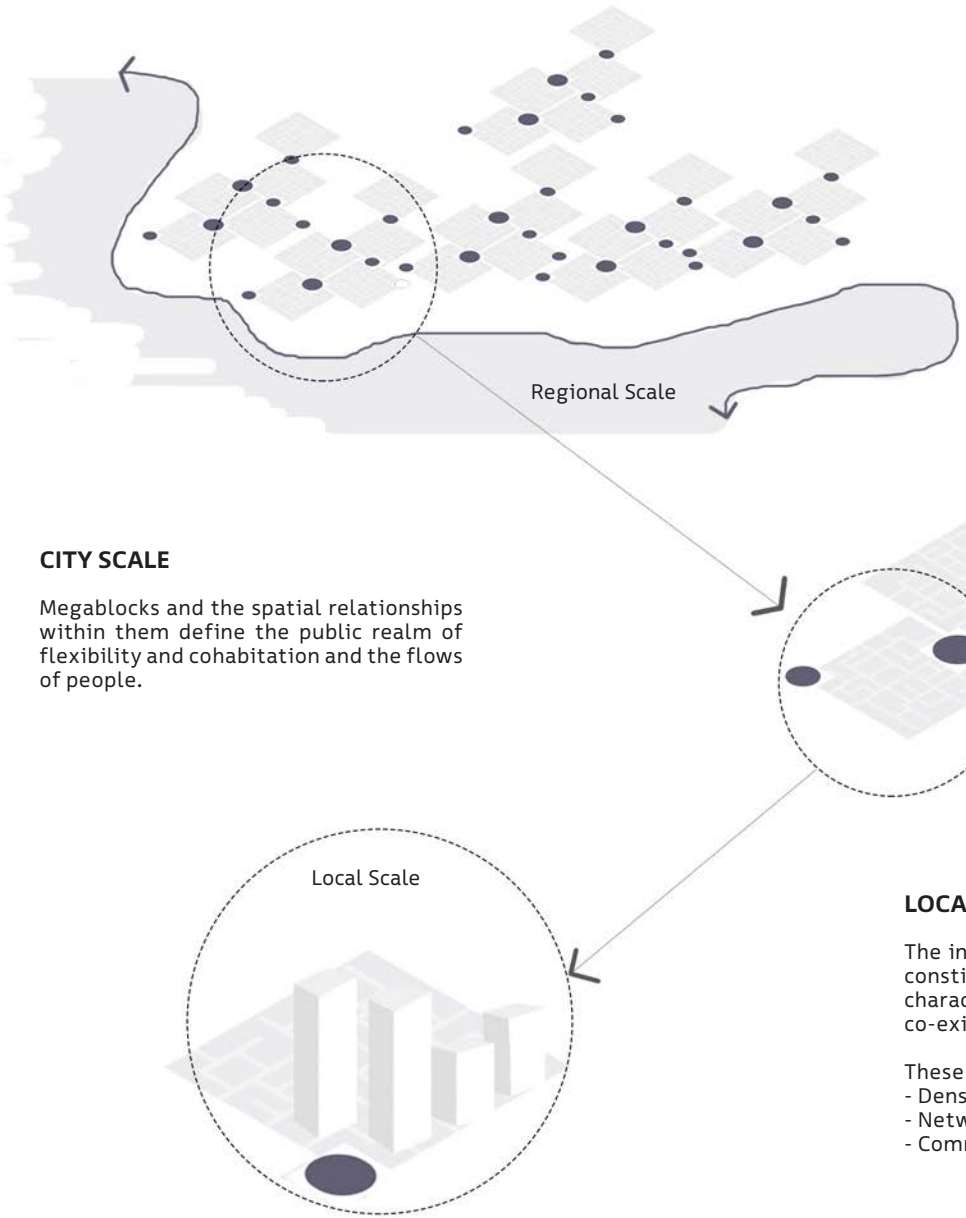


SPATIALLY INTEGRATED MEGABLOCKS

Megablock structures must start considering existing context and find better ways to integrate the villages they engulf. Varying networks and forms of the megablock can enable more diverse functions and people to exist within them.

Figure 3.19: Characteristics of the reconfigured megablock

MULTI-SCALAR IMPLICATIONS OF THE MEGABLOCK



REGIONAL SCALE

The interrelation between megablocks at a regional scale can define the identity of the city. This constitutes a structural framework for the city, while allowing for flexibility of change .

CITY SCALE

Megablocks and the spatial relationships within them define the public realm of flexibility and cohabitation and the flows of people.

LOCAL SCALE

The internal configuration of the blocks that constitute a megablock define the spatial character and facilitate multiple identities to co-exist.

These properties are defined by
- Density and functions
- Networks
- Communal spaces

Figure 3.20: The Megablock at different scales

HOW DOES THE SPATIAL STRUCTURE INFORM THE REGIONAL COMPOSITION?

Source: From"Inkstone News", by Roy Issa, (https://www.inkstonenews.com/tech/china-unveils-greater-bay-area-plan-drive-innovation-and-growth/article/3000864)

SPATIAL STRUCTURE OF THE GBA

DEVELOPMENT OF THE BUILT ENVIRONMENT

The regional structure reflects the process at the urban scale in which the villages are isolated or engulfed within the growing metropolitan region, slowly disappearing from the agglomeration areas.

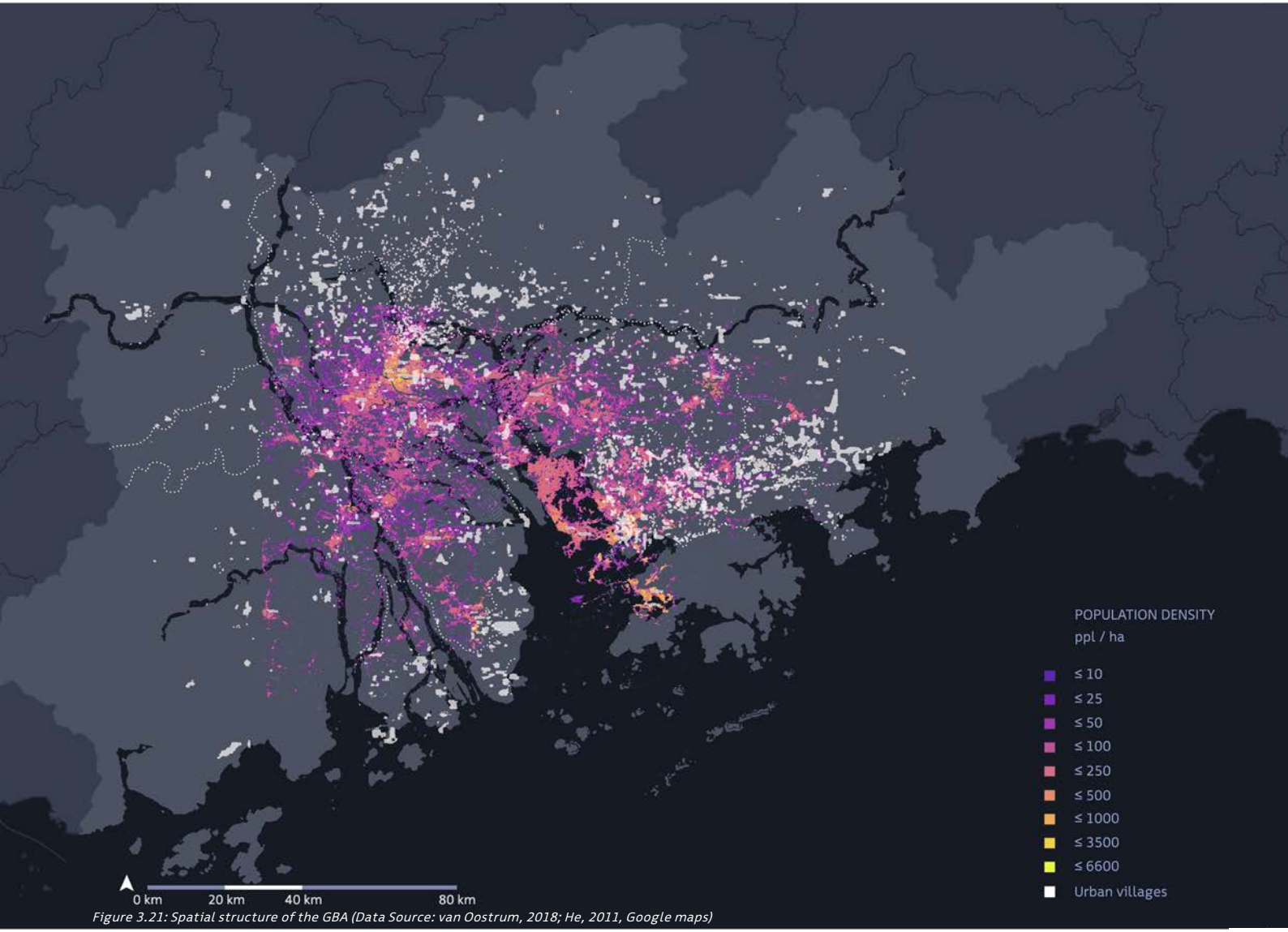


Figure 3.21: Spatial structure of the GBA (Data Source: van Oostrum, 2018; He, 2011, Google maps)

FUNCTIONAL IDENTITIES IN THE GBA

COMPLEMENTARY IDENTITIES

The cities within the Greater Bay Area also reflect complementarity between them, where each has different identities and characteristics that sets them apart within the region.

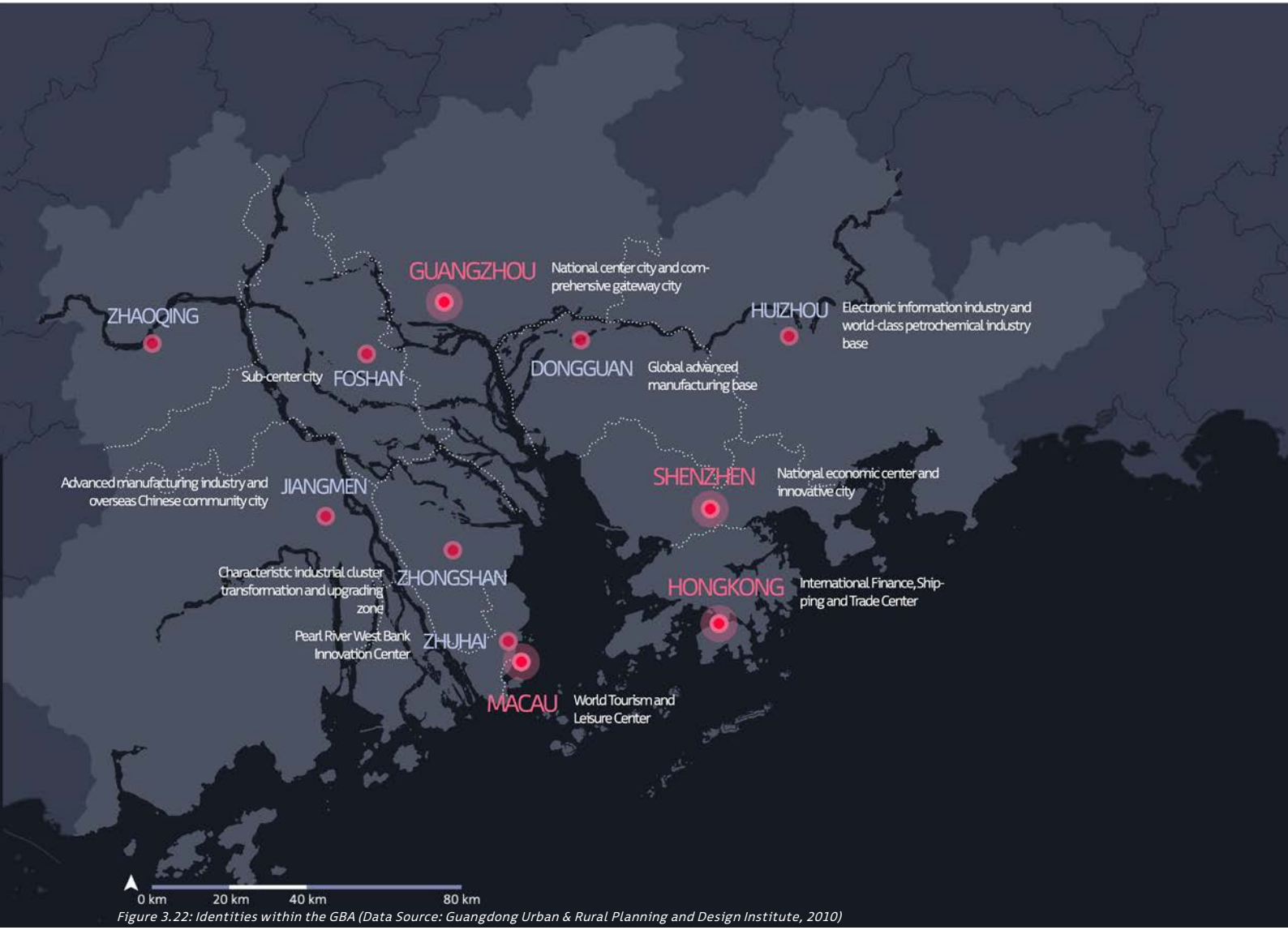


Figure 3.22: Identities within the GBA (Data Source: Guangdong Urban & Rural Planning and Design Institute, 2010)

AGGLOMERATION OF IDENTITIES

REGIONAL DEVELOPMENT STRUCTURES

There is also an agglomeration of identities that exists in which these areas have started working together, increasing regional cooperation within the Greater Bay Area.

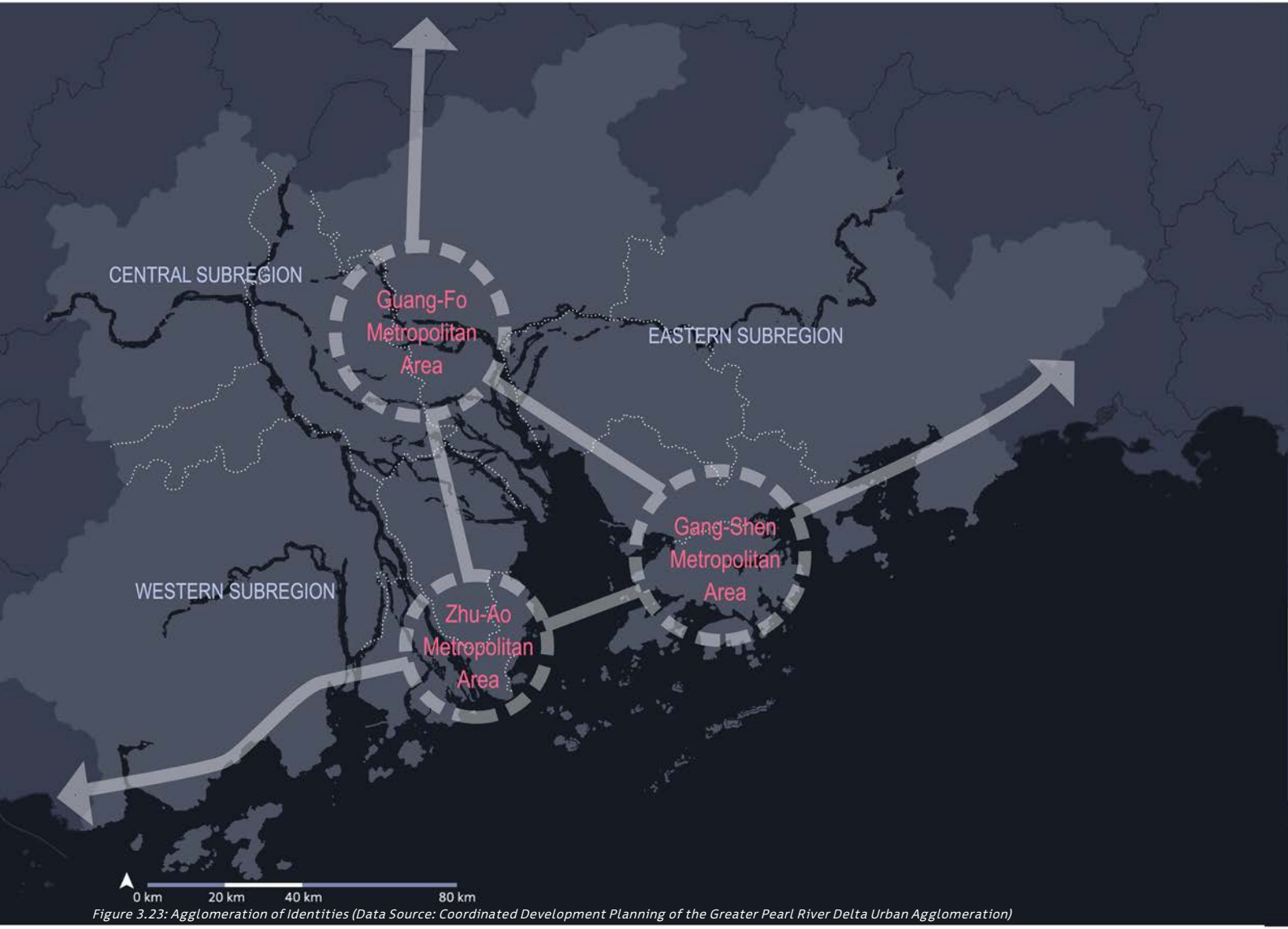


Figure 3.23: Agglomeration of Identities (Data Source: Coordinated Development Planning of the Greater Pearl River Delta Urban Agglomeration)

REGIONAL ECOLOGICAL NETWORKS

NEED FOR A COMMON REGIONAL IDENTITY

Despite diverse functional identities of the cities within the GBA, there is a plan to emphasise a regional ecological structure that binds the bay area cities. However this is not reflected in the built fabric, nor does it include Hong Kong.

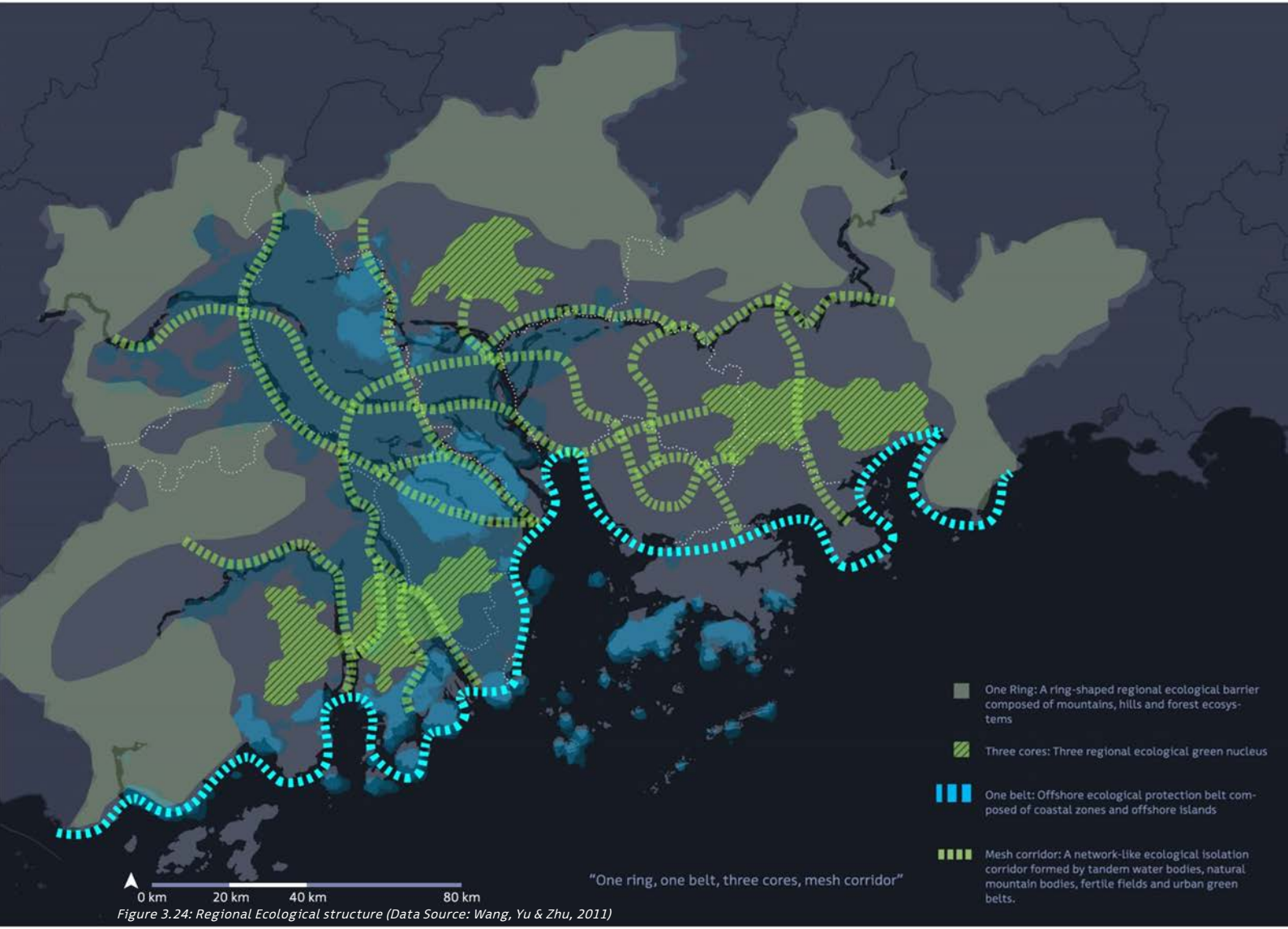


Figure 3.24: Regional Ecological structure (Data Source: Wang, Yu & Zhu, 2011)

WORKING HYPOTHESIS

a planning tool composed of spatial and governance strategies that is replicable throughout the region while allowing for flexibility and adaptation to local context

of people and places, at multiple scales

How can a **planning structure** facilitate the cohabitation of **multiple identities** in order to achieve a balance between functionality and quality of space as a response to the needs of the **fast development** in the metropolization process?

rapid urbanization responding to an exponential increase in population with migration

CHALLENGES

LIVING ENVIRONMENT:

Private - Public Sphere (Diverse Identities in the Built environment enable social interactions)

URBAN STRUCTURE:

Reinterpretation of the Megablock structure as a spatial frame that enables diversity and fosters spatial and social integration.

REGIONAL NETWORK:

Strengthening diverse polycentric network with a common regional ecological identity.

CHAPTER 04

THE GAME

This chapter introduces the game and provides the steps taken from the conceptualisation of the game, through the rules and game play, leading towards the conclusions of the game. From this, sites are chosen for further spatial elaboration of the megablocks with respect to identity.

INTRODUCTION TO THE GAME

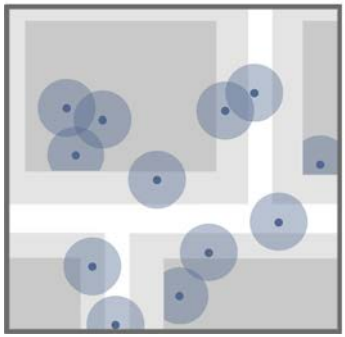
By linking the megablock notion as established, including its supporting theory and concepts, with the challenges defined at the different scales identified in the Greater Bay Area, relationships can be established in the implications of the morphological composition of the challenges.

To understand how the megablock structure can work from the global scale of the GBA to the local scale of individual spaces, a degree of conceptualisation is needed, with which the GBA challenges can be laid out in a simplified manner before further being elaborated.

THE MULTI-SCALAR CHALLENGES AS INTERPRETED THROUGH THE MEGABLOCK

The challenge of the regional network stimulates thought into the different ways of approaching the agglomeration of the GBA cities into one region, using the megablock structure and the theories underlying it, by creating visions of the future possibilities for the region.

The challenge of the urban structure advances the consideration of the relationships between blocks and how they work together to integrate the collective urban fabric in a coherent manner.



The challenge of the living environment focuses on the composition of individual blocks and how the spaces interlink to create an environment where different identities and lifestyles can coexist and co-create.

Figure 4.1: Challenges illustrated through megablocks. This image shows how the challenges defined in the previous chapter can be seen in the megablock structure.

CONCEPT

The megablock is often closely tied to the concepts of the non-stop city and stamp urbanism. We therefore see the analysis of these two concepts as key for understanding the guidelines required for us to rethink the megablock and achieving the goal of the game.

THE NON-STOP CITY (Archizoom)

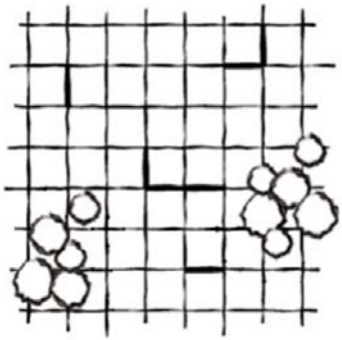


Figure 4.2: The concept of the non-stop city.

The notion of the non-stop city is that of an infinite city made along a structured grid, where only the natural elements of the existing landscape breaks the endless expanse. This infinite grid provides a uniform base structure, within which people can fill in the spaces according to their preferences and identity, which makes every space within this structure unique. The non-stop city defines that the grid of the megablock structure must have a hierarchy to allow smooth flows within and between megablocks and to connect it with its surroundings.

This idea aids in our goal of reconfiguring the megablock by helping us establish a spatial structure for the megablock, the layout of which allows for ecological infrastructure to form a major part of the regional identity. This ecological structure can therefore be the point of connection, or dialogue, between the spatial structures of the megablock, as it will form part of the common identity between them. The contrast between a uniform structure and unique spaces allows for the cohabitation and flexibility in the local scale of the identities that use the spaces within and between the megablock structure. To guide us towards the goal, the morphological structure of these spaces must be composed in such a way that they reflect the identity and use of the space. The transitions between urban and local interventions are most crucial here.

STAMP URBANISM

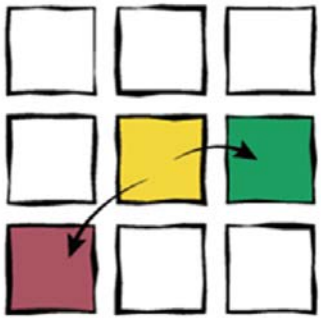


Figure 4.3 Stamping relationships between blocks.

The notion of stamp urbanism focuses on the idea of the repeatable unit. Applied to the megablock, this could refer to the repetition of megablocks with the same block composition, or, as a more flexible approach, the repetition of relations between these blocks.

Using this notion, the aim is to create a planning strategy that can have both rigid and flexible elements that can respond to the demands of fast development, while still enabling cohabitation and place-making within these developments.

Source: Artemel, n.d.; World Bank, UN Habitat from Radai, Kesarovski & Purwanto, 2016

DEFINING THE GAME BOARD

INTRODUCTION

To start off the game play, we need to define the game board, laying down a base with the fixed elements within the GBA based on the scales of identity defined earlier.

SCALES OF IDENTITY **WHERE DO THE IDENTITIES MANIFEST ?**

Individual Sphere

Native Identity (Villages)

The individual identity scale, through the lens of the regional GBA map, is defined by the local village structures scattered within the GBA. These spaces define the initiative of local residents in creating their own residential structures and displays a freedom of expression of the residents' daily life systems, that are apparent through their customisation of their own spaces and appropriation of shared spaces.

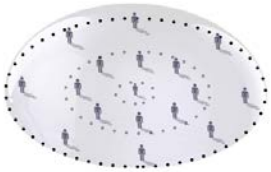
Collective Sphere

Regional Mobility (Control Points, High Speed Stations, Regional Airports, Port)

Existing strong cores

Secondary cores

The collective identities in the GBA scale refers to the identity of the cities. As such, a place that must then manifest the identity of these spaces at first glance must be the major spaces of regional infrastructural entry points, where people make their first impression of the city. Other spaces where the collective identity of cities are made apparent are in the busy city cores, while the collective identities of districts can be seen in some of the smaller cores within the city, as these spaces are ones where many city or district residents collect, making these cores spaces where collective identities are empowered.



Regional Sphere

Global Gateways (International Airports and Ports)

Planned Infrastructure Nodes

The regional identity of the GBA refers to a space where one can grasp the GBA as a physical entity at first sight. These, like with the collective identities, are more so centred around infrastructural entry points, however, at the regional scale, these entry points are at a larger scale and account for larger flows of people daily. These international nodes are the first impressions foreigners develop of the GBA, and are therefore crucial and important to the GBA's regional identity.

Figure 4.4: How the multi-scalar identities can be represented through elements in the urban fabric.

THE GAME PIECES

INTRODUCTION

After defining the pieces for the game board and creating the base, the playing pieces of the game need to be defined. These are based around the different identities of spaces that could manifest in a city, based on degree of activity and connectivity to landscape elements, as well as retaining the multi-scalar pieces used to define the game board.

Blue Block
(Connection with Regional Water Structures. Transition of Urban to Water Infrastructure)

Green Block
(Connection with Regional Green Structures. Transition of Urban to Natural Infrastructure)

Pink Block
(Connection between Urban development and Local-Native Identity Structures)

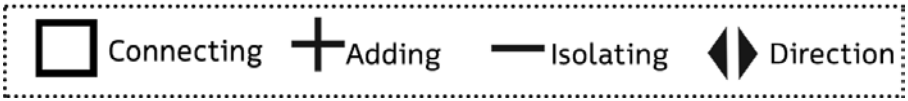
Red Block
(High Density, Concentration of mix uses with high economic or recreational identity)

Orange Block
(Global Gateways)

Yellow Block
(Regional Entry Point, Mobility Cores, Reinforcing Regional Identity)

Gray Block
(Potential Development Areas)

TOOLS OF THE GAME



In the beginning stages of the game, these tools were used to help us understand what the goals of locating certain megablocks across the GBA were, helping us define what kinds of structures and connections we were aiming for.

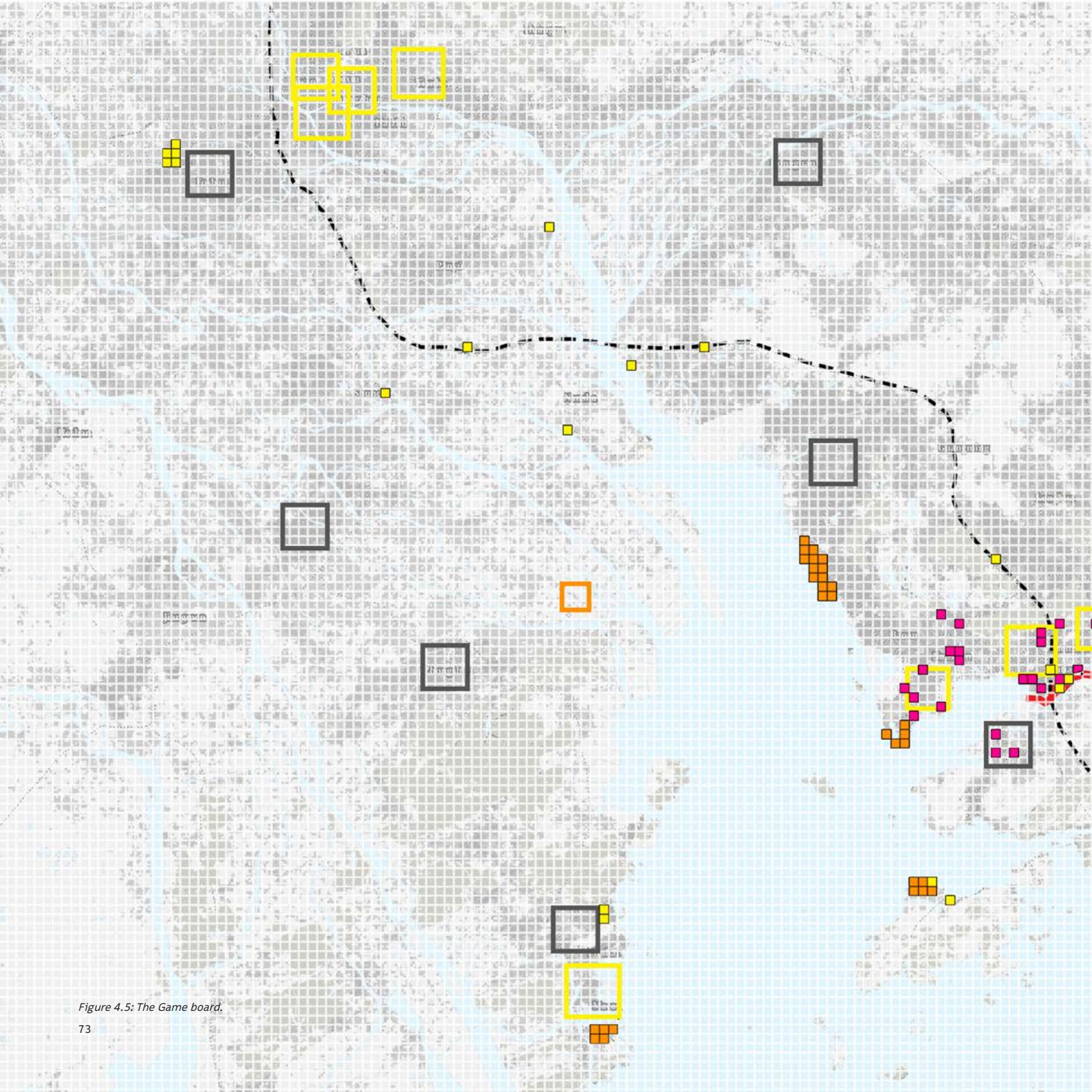
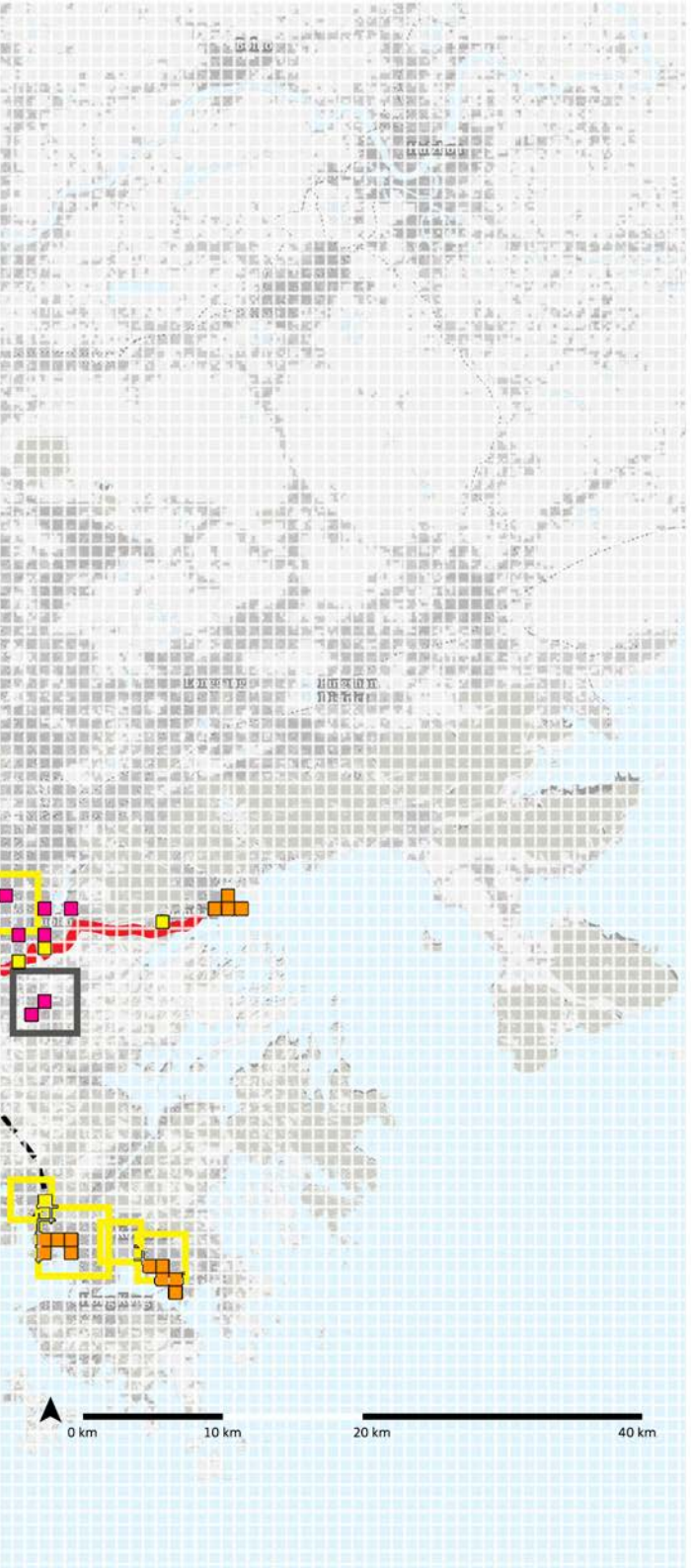


Figure 4.5: The Game board.



GAMEBOARD
IDENTITY SPACES

Conventions

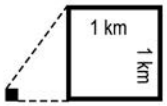
Native Identity
(Villages)

Regional Mobility
(Control Points, High Speed Stations, Regional Airports and Ports)

Global Gateways
(International Airports and Ports)

Existing Cores

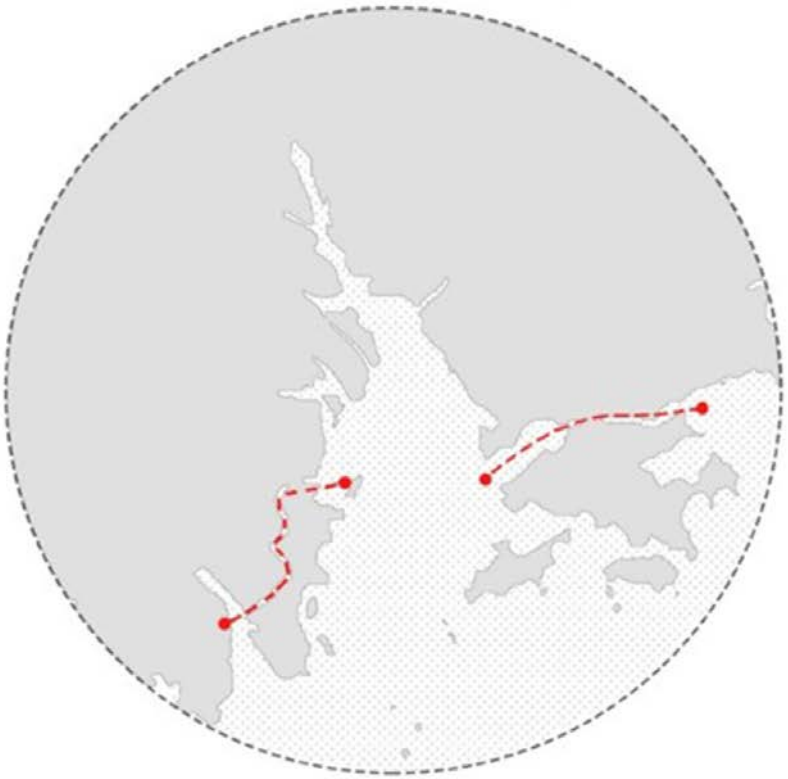
Potential Cores



GAME OBJECTIVES

Once we defined the rules and operations for the formation of the megablocks, we considered three scenarios to play the game with. These scenarios were a direct result of the regional challenges we identified and resulted in three different structures for the GBA. We used these results to then create a framework for the development of the GBA.

OBJECTIVE 01: GBA WITHOUT BORDERS



The first scenario we considered was one where the political borders in the greater bay area disappeared. Therefore, we tried to understand the direction of growth and the patterns of urbanization that would take place in such a situation, and we played the game to structure and direct this growth, based on the key challenges we had identified previously.

OBJECTIVE 02: GBA A

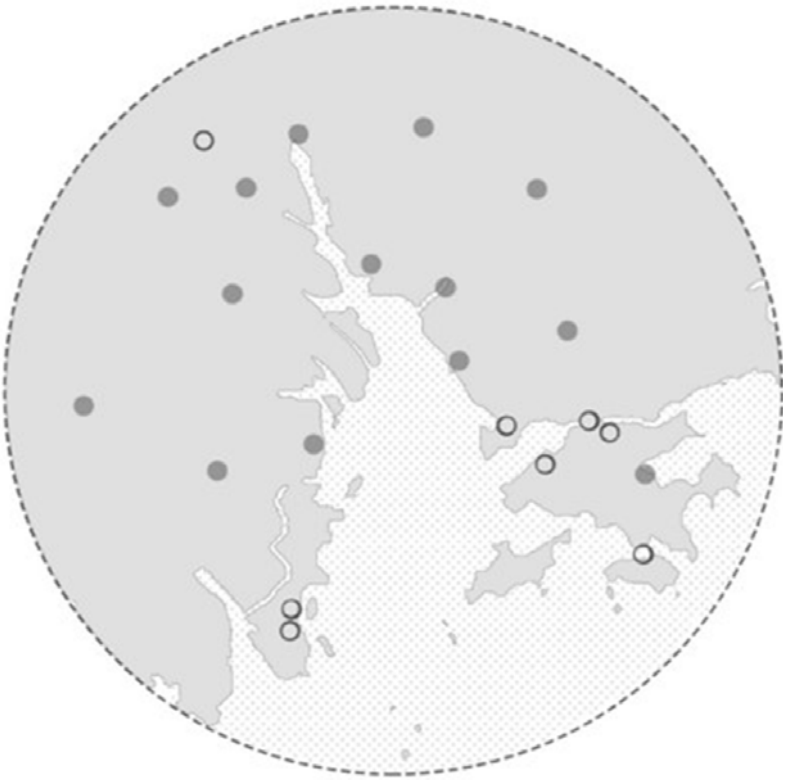
In the second scenario, we explored the located along the bay area waterfront the water edge provides the opportun allowing for the strengthening of the

Figure 4.6: The desired objectives to achieve within the GBA based on contextual analysis of urban relationships.

ALONG THE WATER

idea of all important urban cores being
t. The emphasis on the accessibility to
ity to create a regional identity, while
local Identity.

OBJECTIVE 03: POLYCENTRIC GBA



In the final scenario, we tried to understand the evolution of a more polycentric GBA, with the current peripheral and mono-functional cities gaining more importance and functionality, and forming a network in the process.

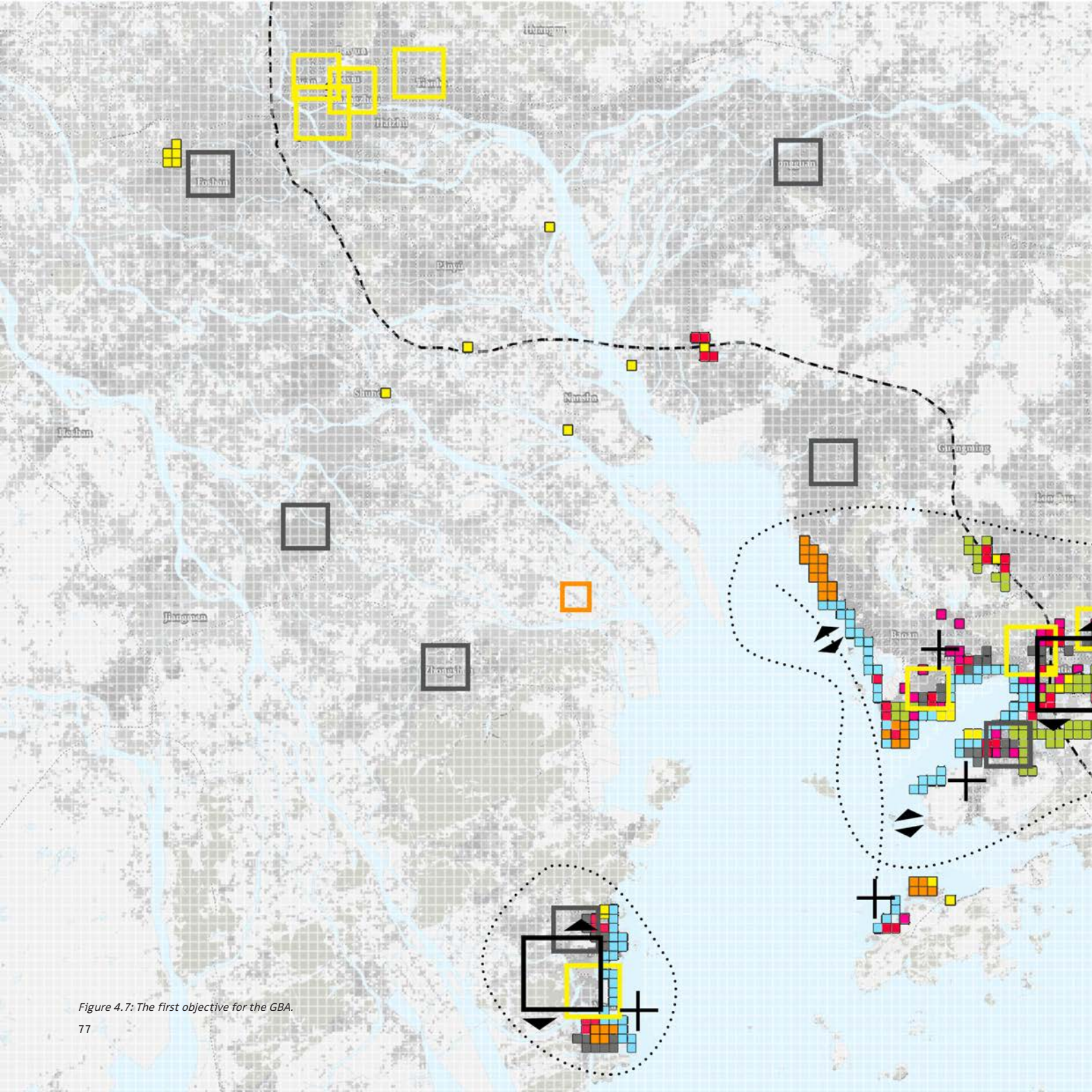
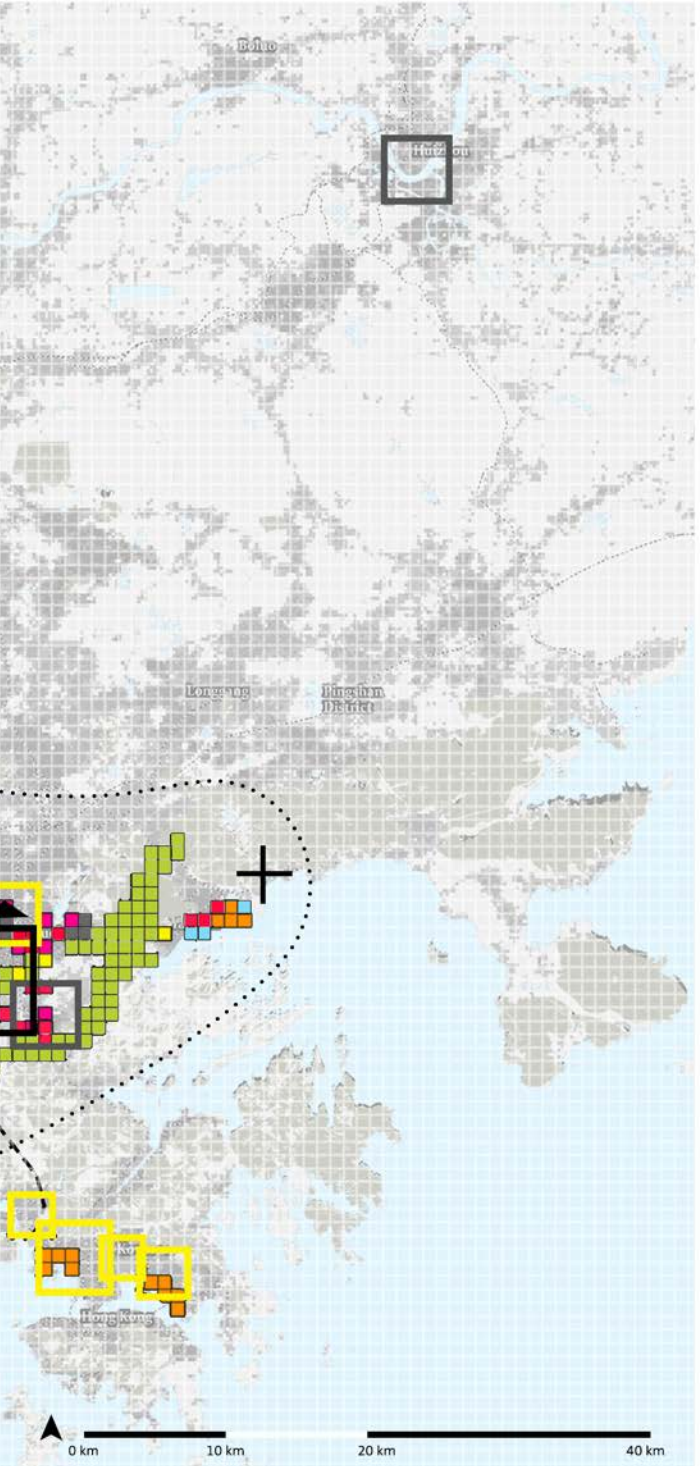


Figure 4.7: The first objective for the GBA.

OBJECTIVE 01: GBA WITHOUT BORDERS



Conventions

- **Native Identity** (Villages)
- **Regional Mobility** (Control Points, High Speed Stations, Regional Airports and Ports)
- **Global Gateways** (International Airports and Ports)
- **Activated Cores**

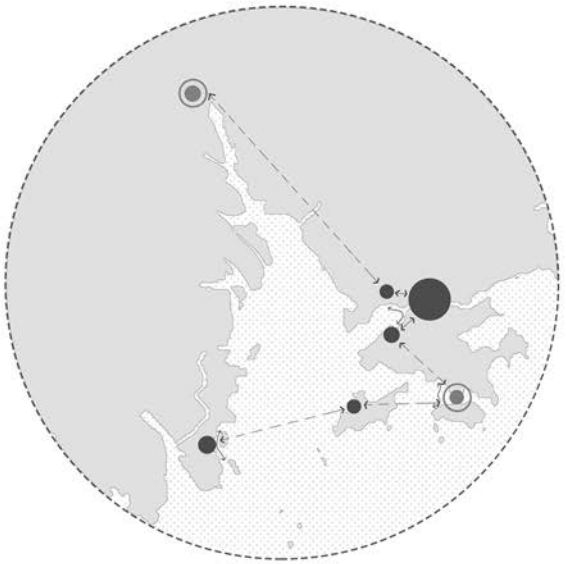
1 km × 1 km

Identity Blocks

- **Blue Block** (Connection with Regional Water Structures. Transition of Urban to Water Infrastructure)
- **Green Block** (Connection with Regional Green Structures. Transition of Urban to Natural Infrastructure)
- **Pink Block** (Connection between Urban development and Local-Native Identity Structures)
- **Red Block** (High Density, Concentration of mix uses with high economic identity)
- **Orange Block** (Global Gateways)
- **Yellow Block** (Regional Entry Point, Mobility Cores, Reinforcing Regional Identity)
- **Gray Block** (Potential Development Areas)

Rules of the game

Connecting + Adding — Isolating ◆ Direction



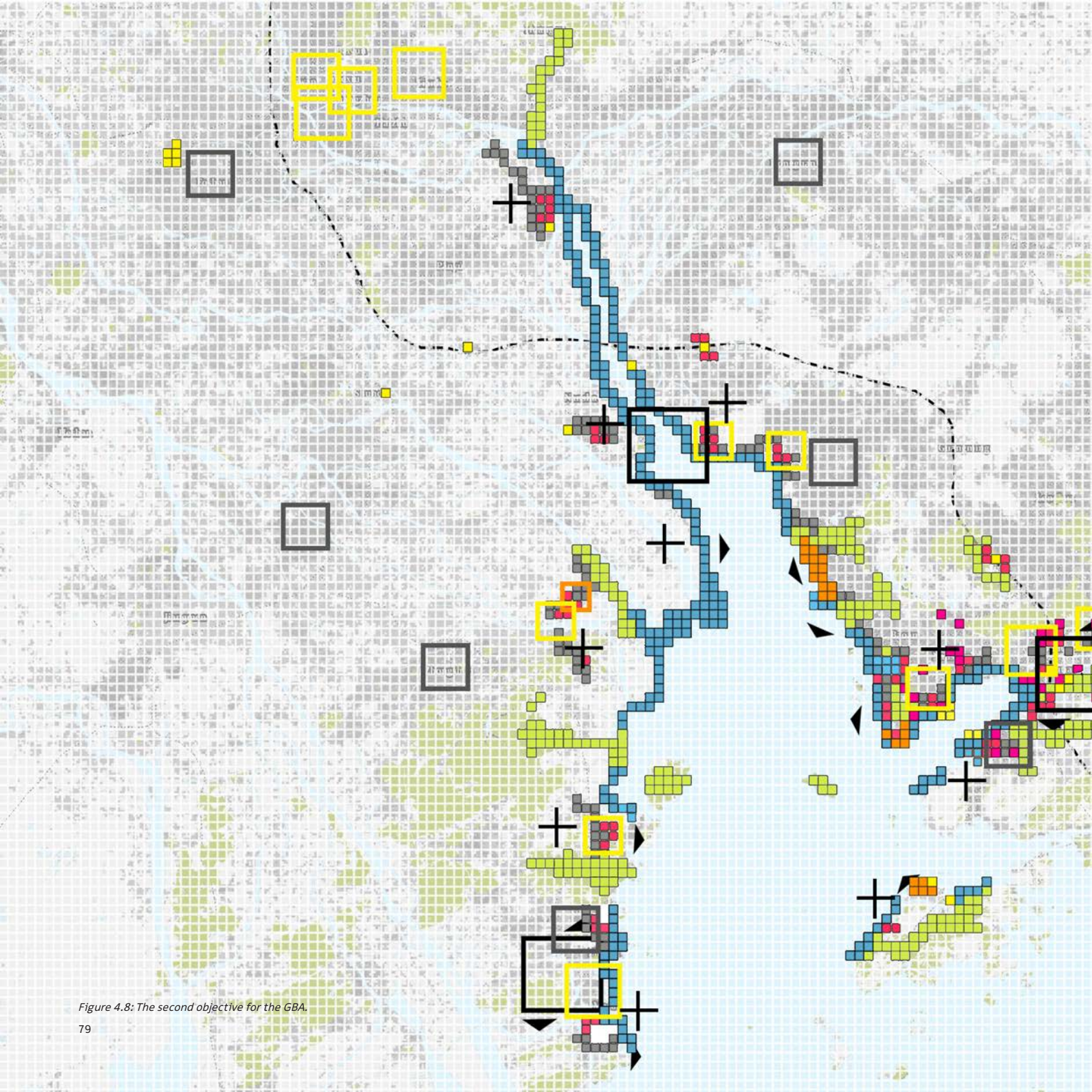
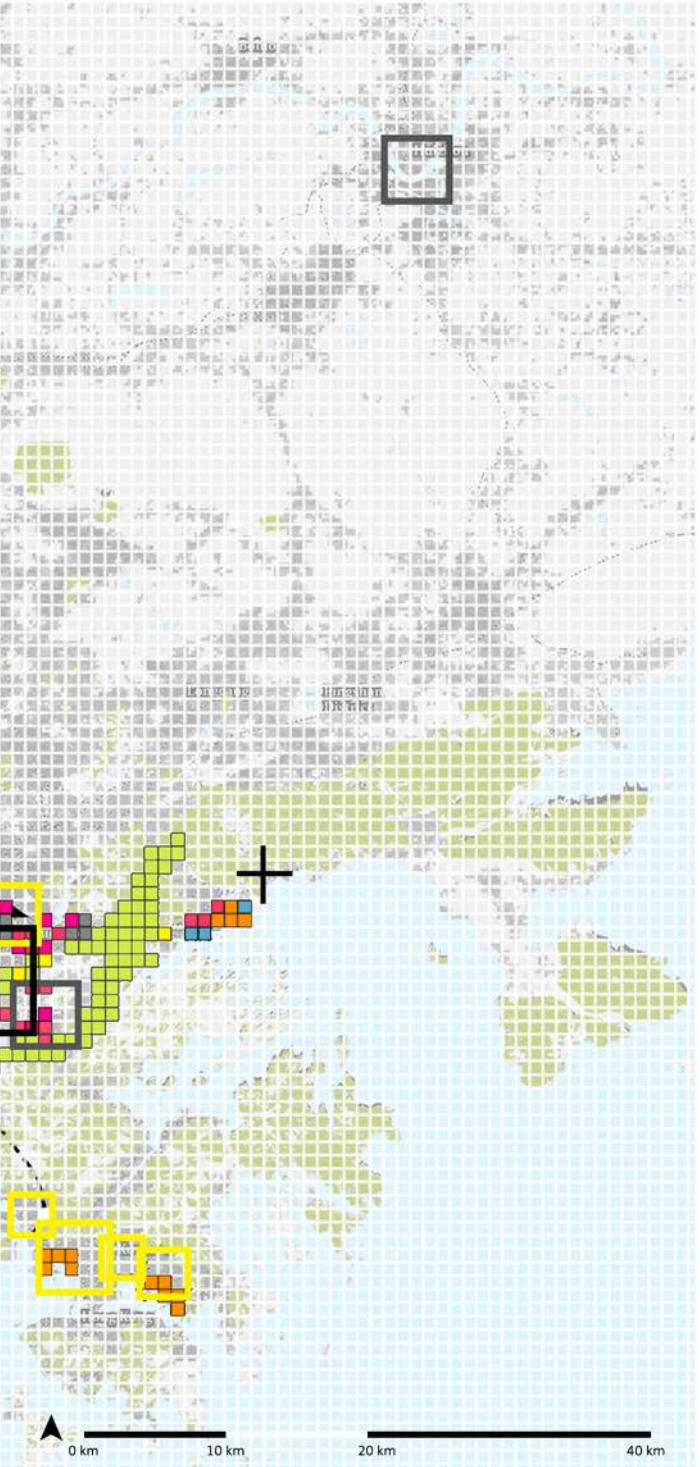


Figure 4.8: The second objective for the GBA.

OBJECTIVE 02: GBA ALONG THE WATER



Conventions

- **Native Identity** (Villages)
- **Regional Mobility** (Control Points, High Speed Stations, Regional Airports and Ports)
- **Global Gateways** (International Airports and Ports)
- **Activated Cores**

1 km × 1 km

Identity Blocks

- **Blue Block** (Connection with Regional Water Structures. Transition of Urban to Water Infrastructure)
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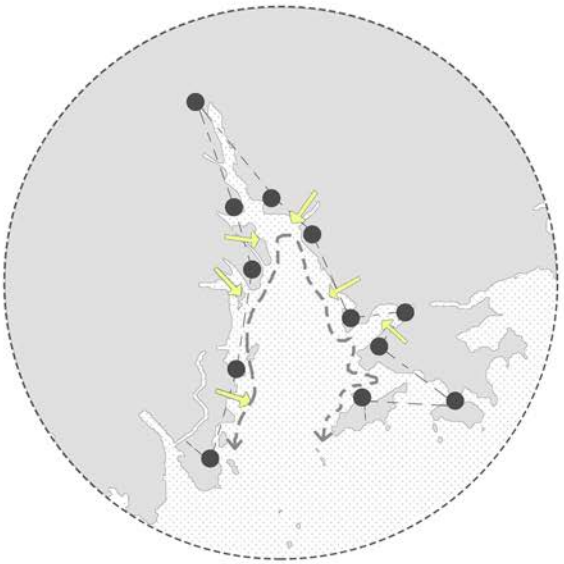
- **Orange Block** (Global Gateways)
- **Yellow Block** (Regional Entry Point, Mobility Cores, Reinforcing Regional Identity)
- **Gray Block** (Potential Development Areas)

Rules of the game

Connecting · Adding · Isolating · Direction



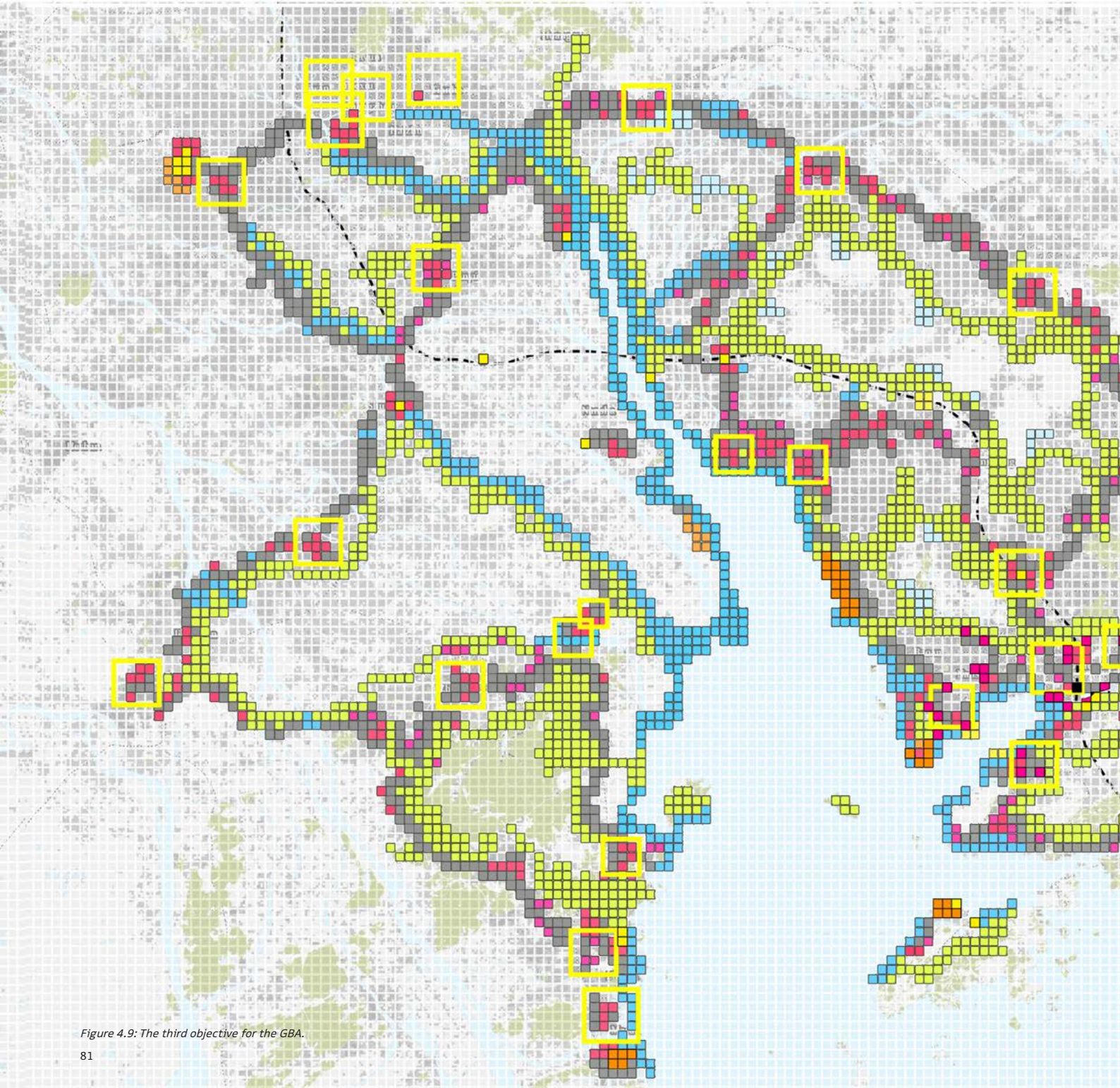
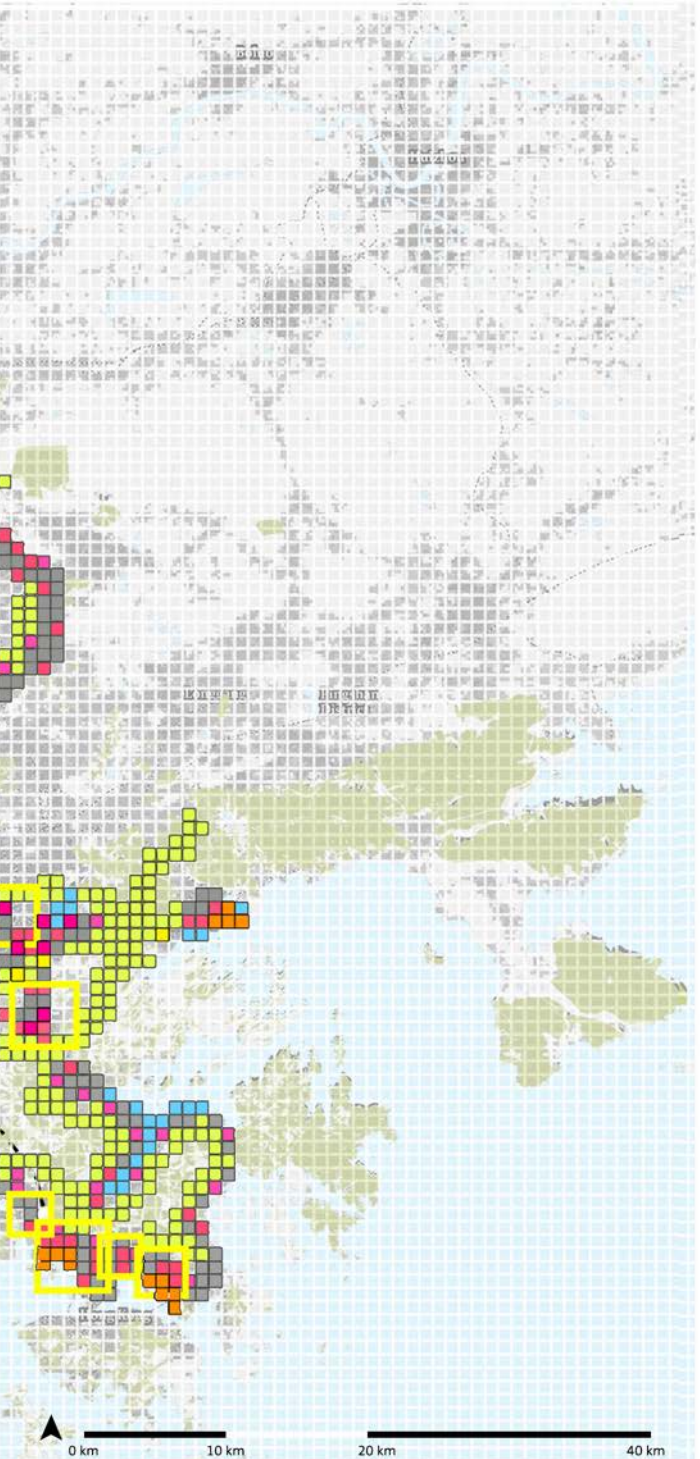


Figure 4.9: The third objective for the GBA.

OBJECTIVE 03: POLYCENTRIC GBA



Conventions

- **Native Identity** (Villages)
- **Regional Mobility** (Control Points, High Speed Stations, Regional Airports and Ports)
- **Global Gateways** (International Airports and Ports)
- **Activated Cores**

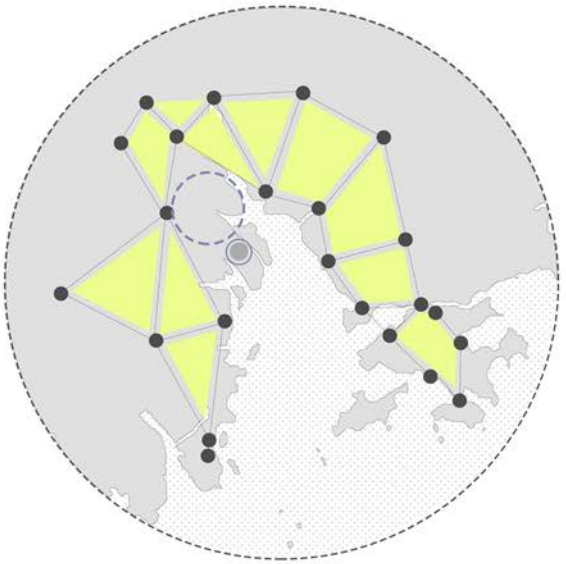
1 km × 1 km

Identity Blocks

- **Blue Block** (Connection with Regional Water Structures. Transition of Urban to Water Infrastructure)
- **Green Block** (Connection with Regional Green Structures. Transition of Urban to Natural Infrastructure)
- **Pink Block** (Connection between Urban development and Local-Native Identity Structures)
- **Red Block** (High Density, Concentration of mix uses with high economic identity)
- **Orange Block** (Global Gateways)
- **Yellow Block** (Regional Entry Point, Mobility Cores, Reinforcing Regional Identity)
- **Gray Block** (Potential Development Areas)

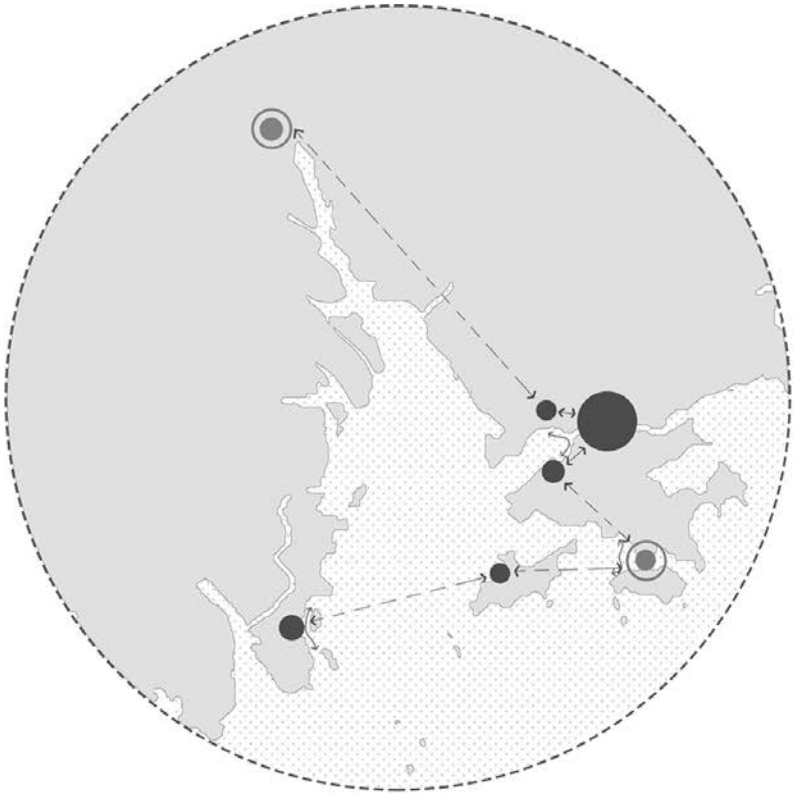
Rules of the game

Connecting | Adding | Isolating | Direction



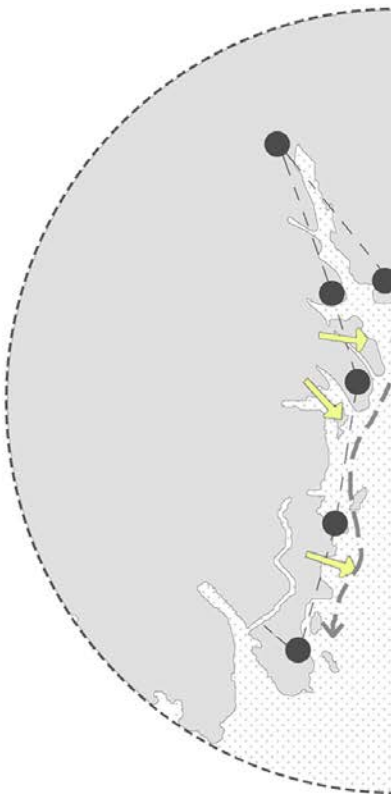
FINAL GAME RESULTS

OBJECTIVE 01: GBA WITHOUT BORDERS



This scenario leads to the strengthening of the points of regional connection. At the Shenzhen - Hong Kong border, a large clustering of development and activities takes place. Shenzhen becomes one of the most important clusters of the region, with connections to other important nodes such as Hong Kong central and Guangzhou.

OBJECTIVE 02: GBA A



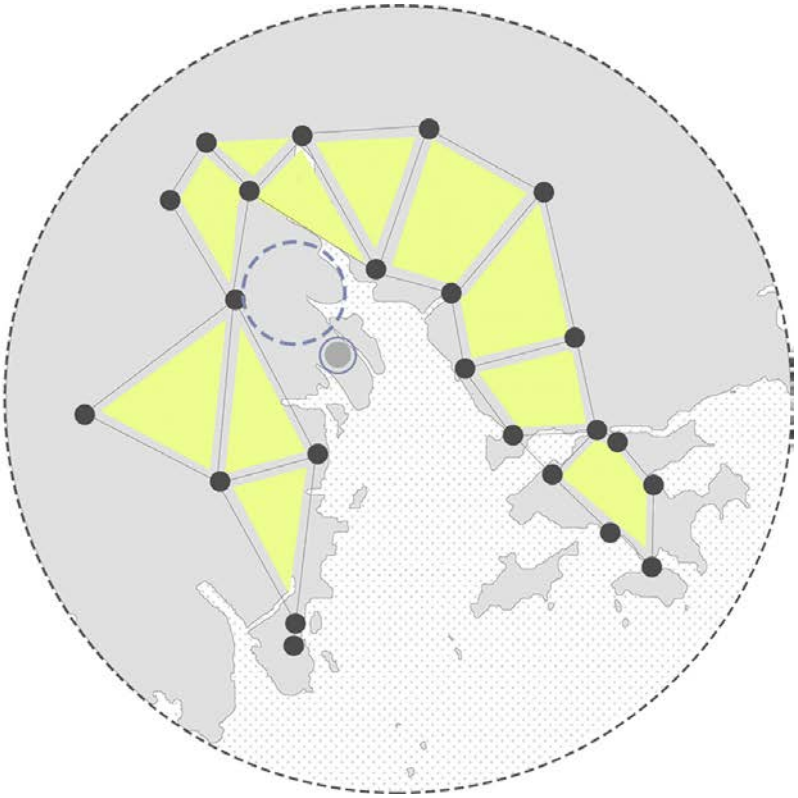
This scenario leads to a network of ci
waterfront becomes an element of re
along the water accommodate the stre
proximity.

Figure 4.10: the result of the game play based on the earlier defined objectives and where the resulting focus of development lay.

LONG THE WATER

ties along the edges of the delta. The
egional identity. Existing strong cores
ngthening of new cores that are in their

OBJECTIVE 03: POLYCENTRIC GBA



In the process of activating the different cities, a polycentric structure is created, with an ecological centre . The cities develop as rings around these central green structures. This allows a strengthening of the regional green identity, while bringing the landscape into the cities.

REDEFINING THE GAME PLAY

RE-CLASSIFICATION OF GAME PIECES

Through playing the game using these objectives as a guide, we noticed how the game pieces were working individually and were inwardly-focussed on what kinds of activities would be within one piece. It became a process of imposition of desired activity patterns in areas we were not familiar with. As such, we reorganised and reclassified the game pieces with an approach that focusses more on the relationship between them, when they happen together and with what proportions, or what this means for the location of these pieces; defining a set of rules for playing the game. The pieces were also reclassified into three types of blocks; a concentration block (that defines an area of increased activity), the transition block (which is defined as a transition between different built, or unbuilt, structures), and the threshold block (one that defines an infrastructural entrance into a space). The idea of defining rules for the relationships between blocks helps in that it is not only about mapping what's there, but also finding potentials for new development based on existing preconditions for certain blocks to flourish.

The rules for the different blocks have been defined in the following pages. These rules define the spatial relationships of relational requirements for the different identified block pieces, based around centrality, activity, and need for integration of these elements with the context.

The rules can be used, not only as a tool to compose megablocks based on existing conditions, but also as a tool with which to use existing preconditions to determine sites for development potentials. The rules define the game play, while the visualizations show what is meant by the interaction of these blocks.

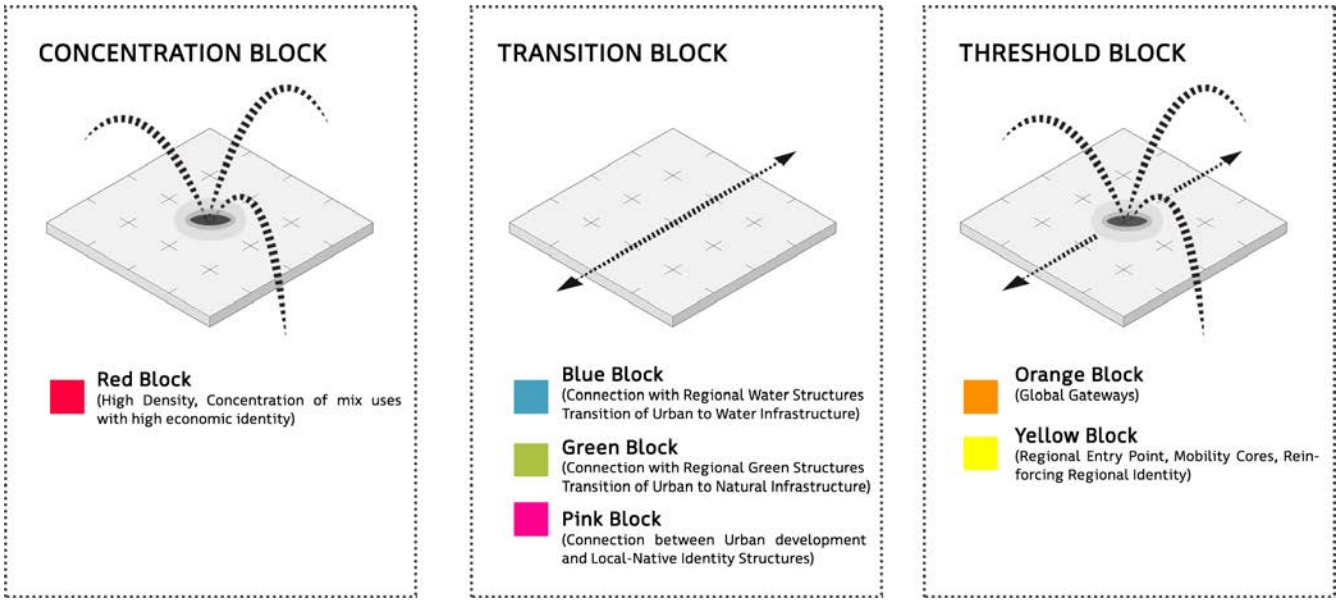


Figure 4.11: The block classification categories.

RULES OF THE GAME

Transition Block

Pink Block
(Connection between Urban development and Local-Native Identity Structures)

1.

Needs to be next to a point of urbanisation (minimum 1 grey block)

2.

Needs to be next to a point of ecological connection (minimum 1 green block)

Figure 4.12: The rules for the Pink transition block.

RULES OF THE GAME

Concentration Block

Red Block
(High Density, Concentration of mix uses with high economic identity)

1. Needs to have a green link (1 green block)

2. Needs to be within a grey context (minimum 3 grey blocks)

Figure 4.13: The rules for the Red concentration block.

RULES OF THE GAME

Threshold Block

Yellow Block
(Regional Entry Point, Mobility Cores, Reinforcing Regional Identity)

1. Next to a point of concentrated activity (1 red block)

2. Needs to be next to a green link (1 green block)

Figure 4.14: The rules for the Yellow threshold block.

RULES OF THE GAME

Threshold Block

Orange Block
(Global Gateways)

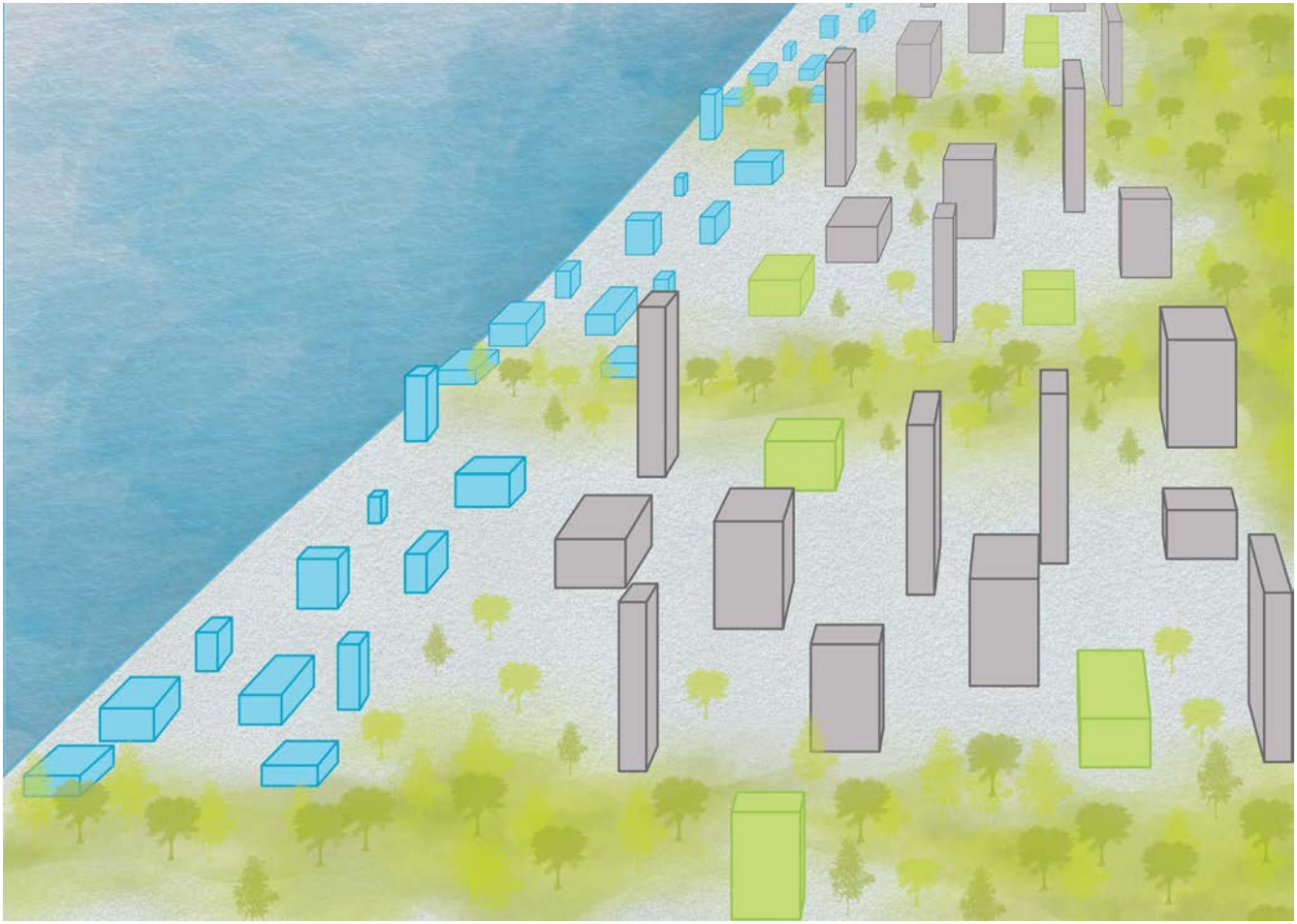
1. Needs to be next to a large point of concentrated activity (2 red blocks)

2. Needs to be at a blue edge (minimum 3 blue blocks)

3. Needs to have a green link (1 green block)

Figure 4.15: The rules for the Orange threshold block.

RULES OF THE GAME



Transition Block

Blue Block
(Connection with Regional Water Structures
Transition of Urban to Water Infrastructure)

1. Always adjacent to another blue block

2. A green transition block must be adjacent for maximum every 5 blue blocks

3. At least 1 other color

Always adjacent to a concentration, gateway or grey block

Transition Block

Green Block
(Connection with Regional Green
Transition Urban to Natural)

1. Always adjacent to another green block

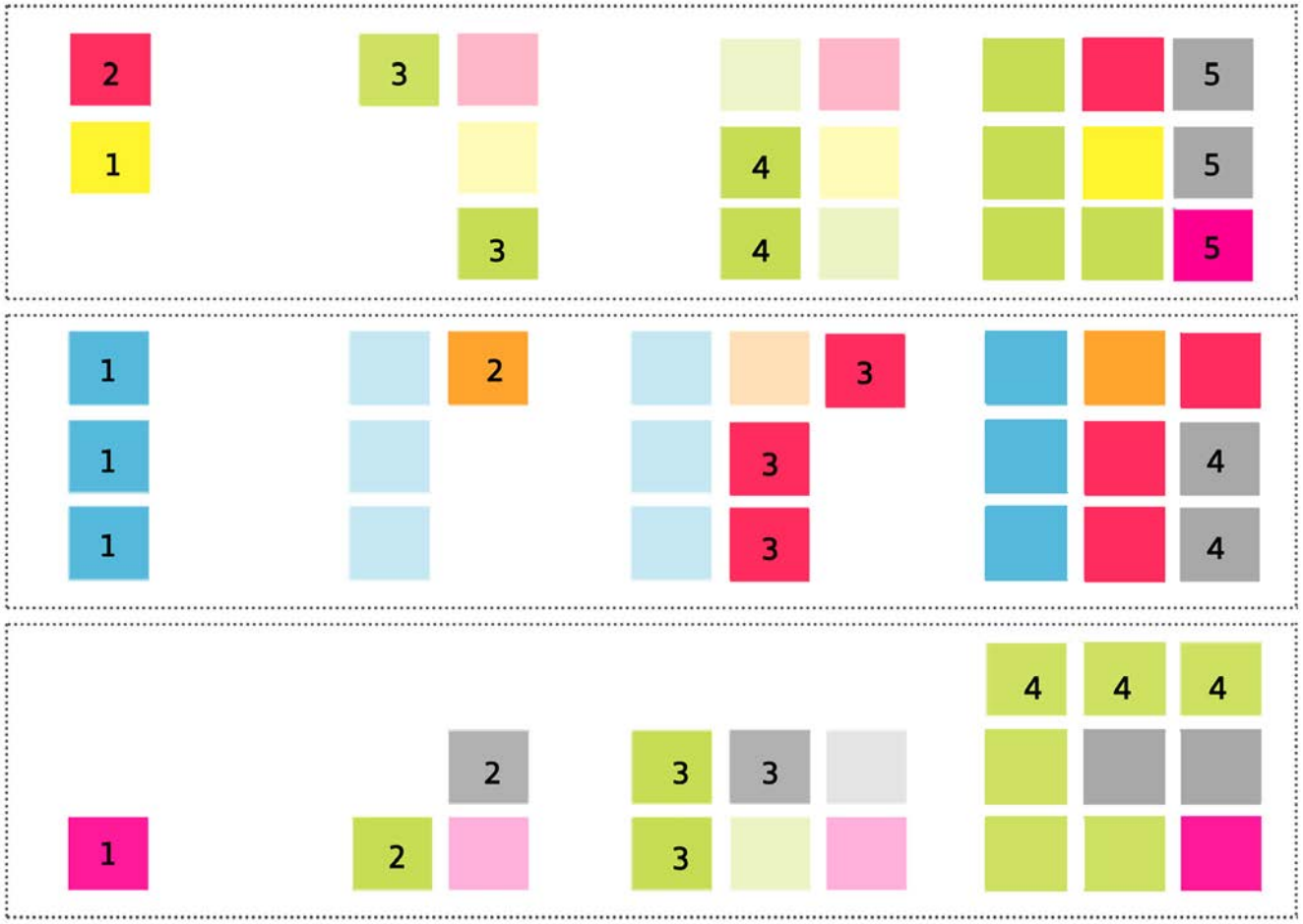
2. At least 1 other color

Needs to be next to at least two concentration, gateway or grey blocks

Figure 4.16: The rules for the Green and Blue transition blocks together.

MEGABLOCK COMPOSITION PROCESS

The megablock can be composed using the rules as shown below; starting with one block or set of blocks, finding based on context, intuition and preconditions, where the blocks with required relationships can be located.



STEP 1 - establish the first element in the area, either based on existing elements or conditions
STEP 2 - according to the rules of the game, these elements need other elements to function properly, or the conditions prove to be suitable for locating certain elements in the regional or local fabric
STEP 3 - the new elements also have their own set of rules governing them, which will also have to be met
STEP 4 - the resulting structure can inform, through creating conditions, where more threshold or concentration blocks can be placed in the future.

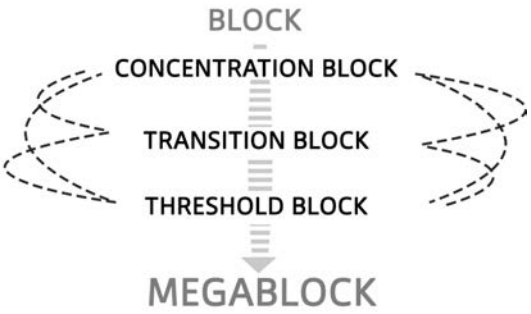
MEGABLOCK PROTOTYPES

The blocks make up various compositions to form megablocks and have the flexibility to be composed in different ways based on their spatial rules. Each colour has a basic spatial configuration that is replicable and certain edge conditions based on proximity to other blocks, which define the relationships between the blocks. These megablocks adapt to the existing conditions, creating context-specific structures.

Embracing a multi-scalar notion of Identity from a spatial and morphological view

FRAMEWORK OF DEVELOPMENT:

Resilient adaptable framework



MEGABLOCK PROTOTYPES - FRAMEWORK

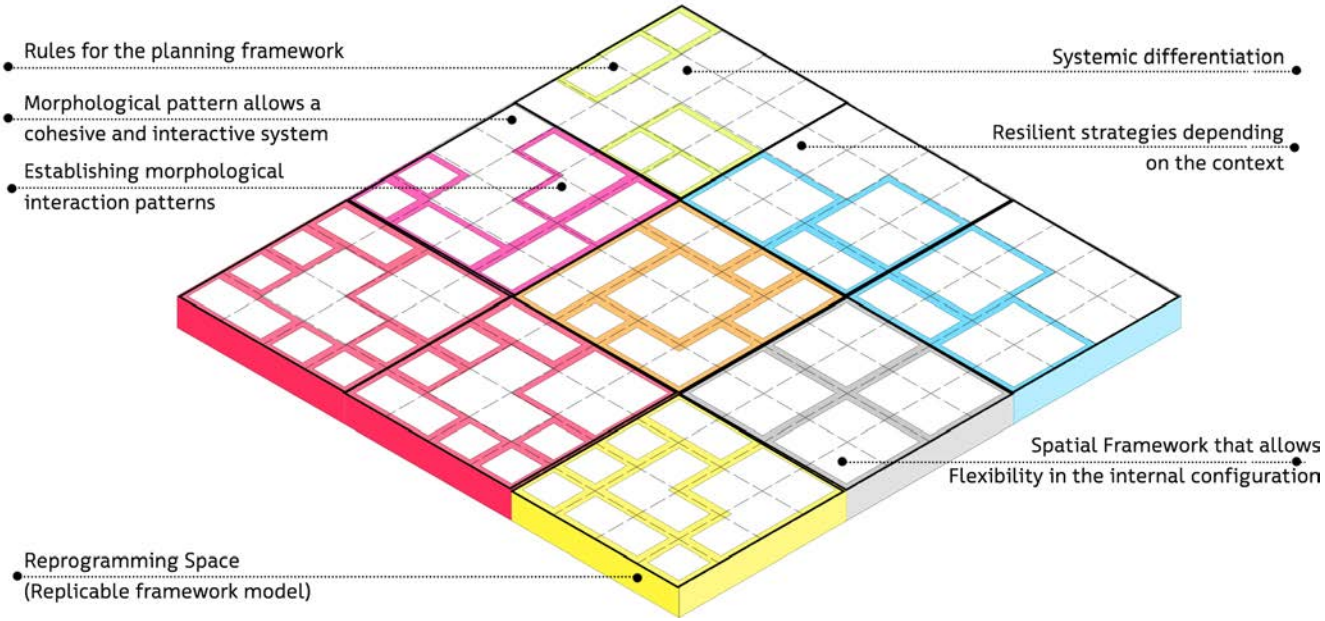


Figure 4.19: The megablock framework. This figure shows what actions need to be implemented at the scales of the block and the megablock to create a replicable base.

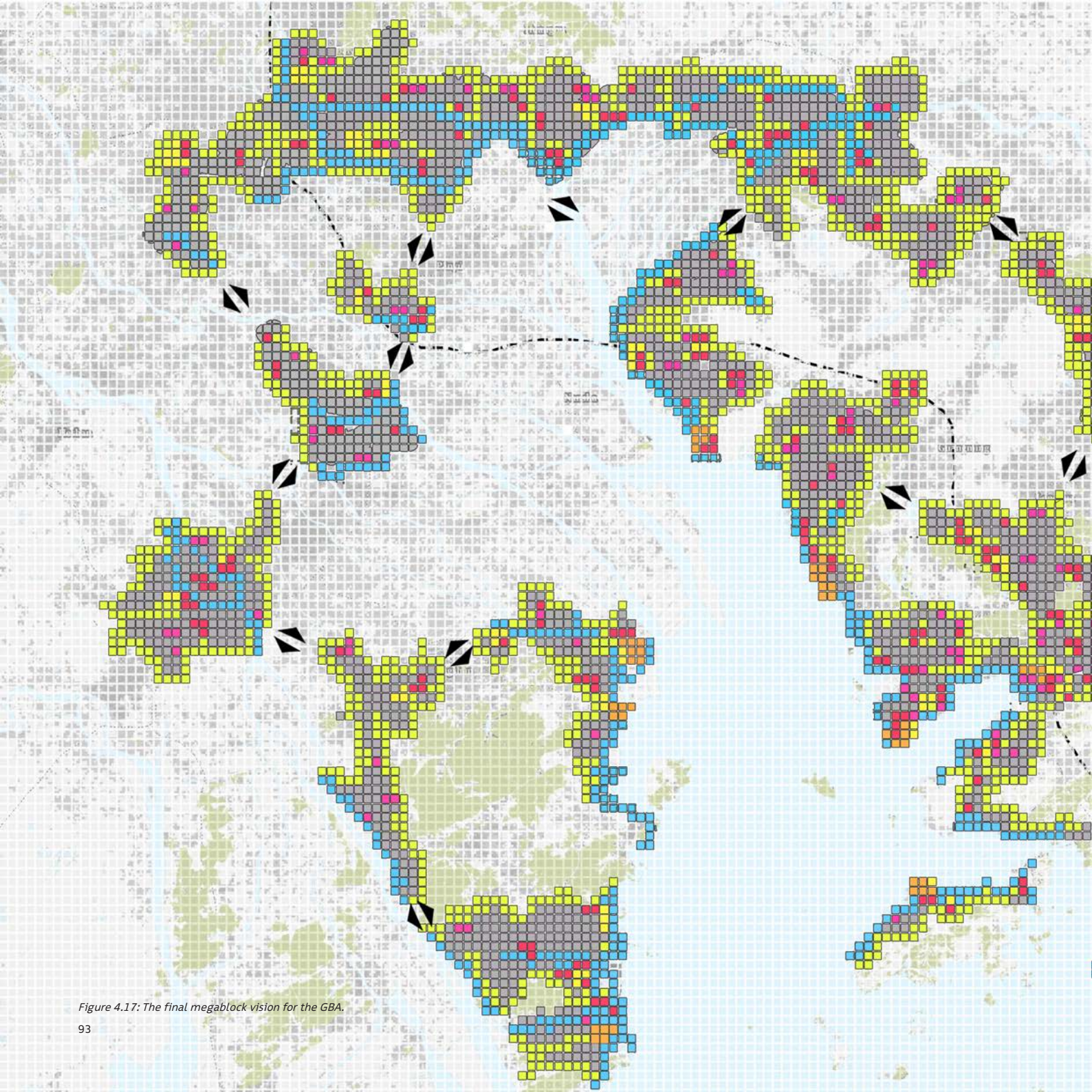
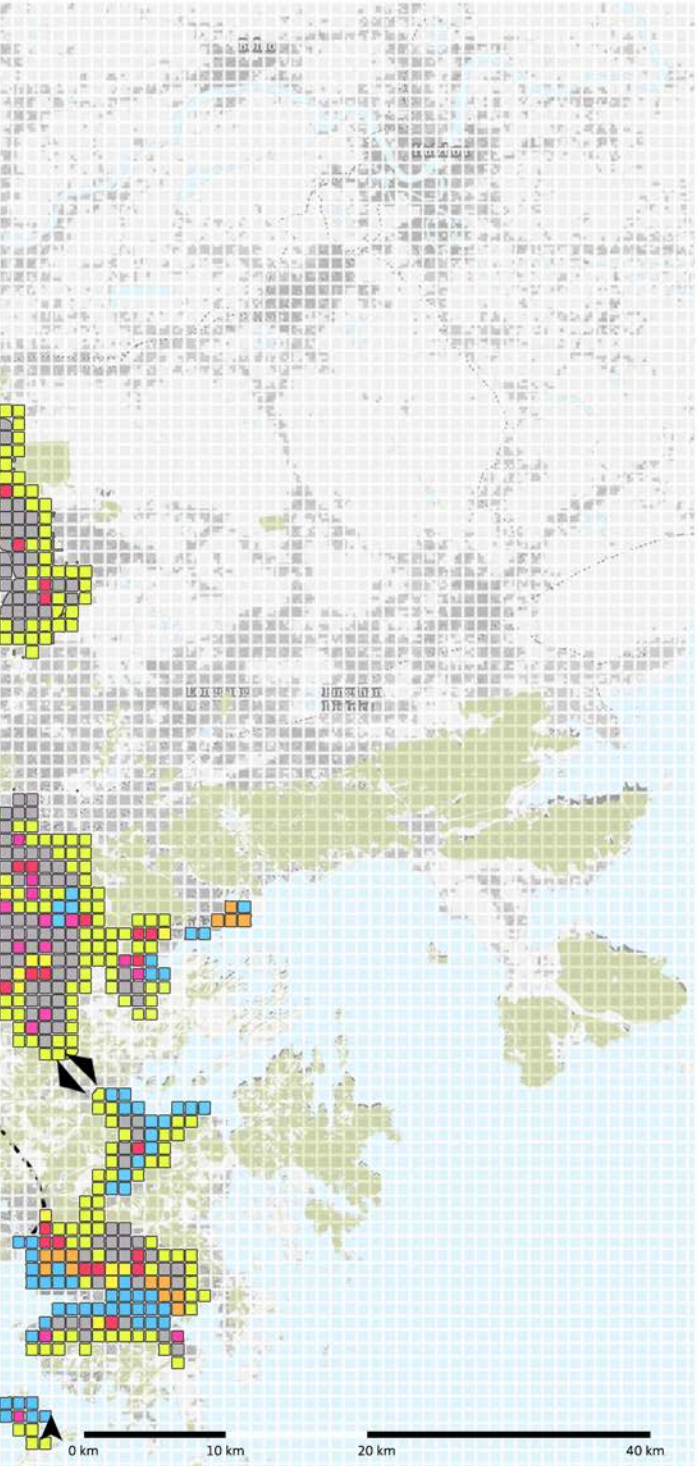


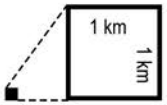
Figure 4.17: The final megablock vision for the GBA.

FINAL VISION



Conventions

- **Native Identity** (Villages)
- **Regional Mobility** (Control Points, High Speed Stations, Regional Airports and Ports)
- **Global Gateways** (International Airports and Ports)
- **Activated Cores**



Identity Blocks

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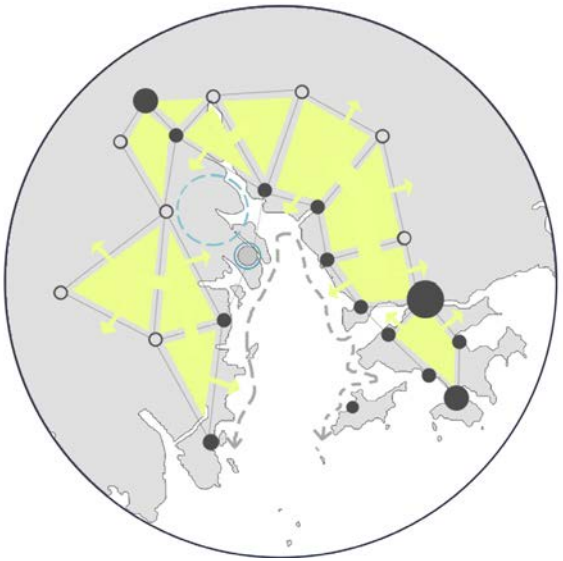
- **Gray Block** (Potential Development Areas)

Rules of the game

Connecting · Adding · Isolating · Direction



FINAL VISION

Hong Kong, Shenzhen, Macau and Guangzhou become important nodes. The cities along the water have different characteristics than those that are inland. Nanshan gains a distinct identity as a node located on the ecologically sensitive flood plains characterised by agriculture and fishing ponds. The pearl river becomes a central element that ties together the region. The development of the water edge results in increased accessibility, strengthening this identity.

The green rings form a strong connection to the ecology, emphasising the green structure as a regional identity. Green wedges cut through the urbanised area, connecting to the water and the mountains.

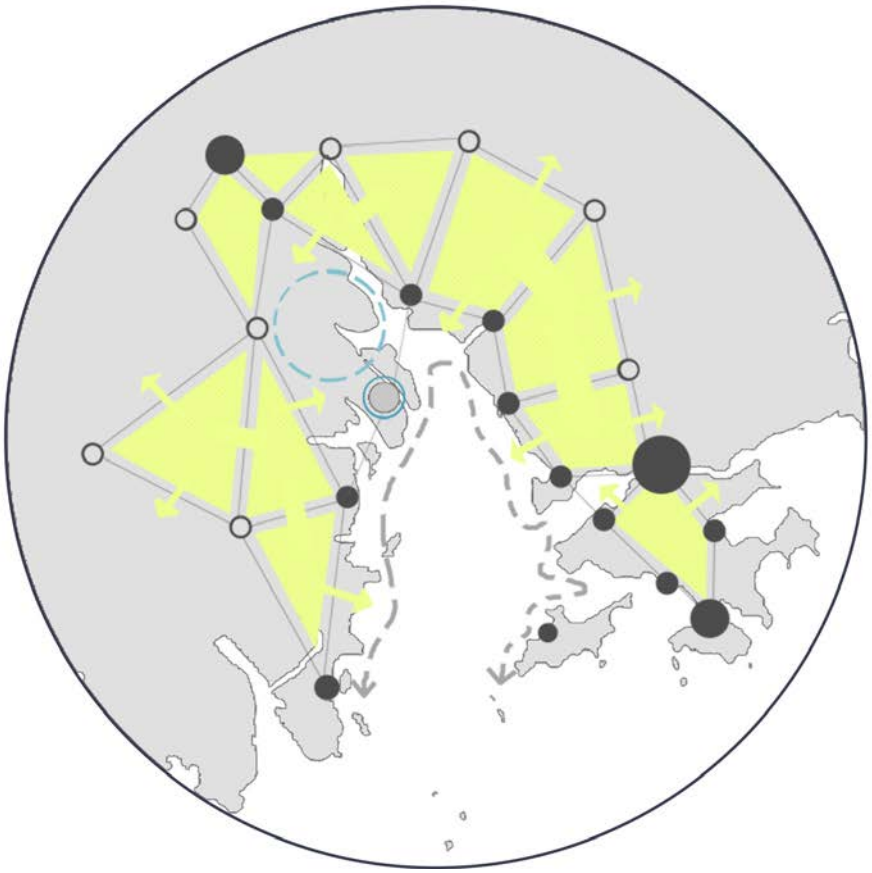


Figure 4.20: Final Vision Diagram

The framework for the GBA consists of a network of cities that are formed in rings around central ecological structures. These green centers puncture the urbanized areas at different points to meet the waterfront. Shenzhen, Guangzhou , Hong Kong central and Macau become important nodes. The cities on the water edge acquire a different characteristic from those that are enclosed by the ecological structures.

MULTI-SCALAR APPROACH OF THE MEGABLOCK

The multi-scalar approach of the megablock explores the tool as forming a regional network, providing a common ecological structure, emphasising a polycentric network of cities. On an urban scale, the megablock structure provides the spatial frame that enables diverse identities to co-exist. These, on a local scale, are composed of specific spatial relations within the block and between blocks that create living environments for diverse identities. The megablocks composed together at the regional scale forms the structure of GBA that is defined at key locations but is flexible to change within the structure.

Regional Network:

Strengthening diverse polycentric network with a common regional ecological identity.

Uniform fill-in structure across the region

Urban Structure:

Reinterpretation of the Megablock structure as a spatial frame that enables diversity and fosters spatial and social integration.

Relationship between megablocks define spaces for cohabitation (social realm)

Living environment:

Private - Public Sphere (Diverse Identities in the Built environment enable social interactions)

Internal configurations of the blocks facilitate interaction

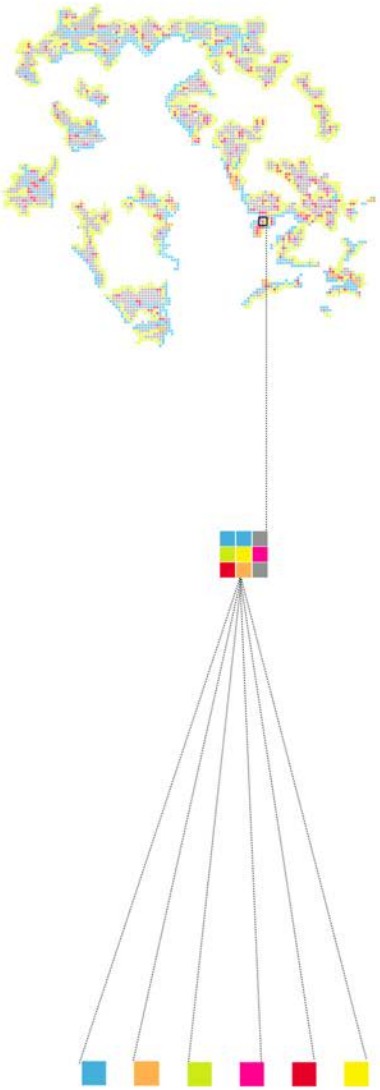
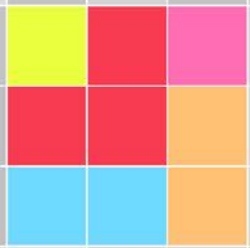
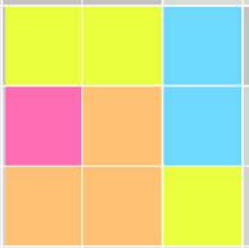


Figure 4.21: The multiple scales of the megablock. This defines which actions need to be taken and what needs to be defined at what scale in the re-conceptualization of the megablock, whether it is the regional composition, the framework at an urban level, or the fitting out of the individual blocks.



CHAPTER 05

TESTING THE PROTOTYPES

Selection and analysis of zoom in sites to understand the local implications of the regional structure, in order to inform the regional plan with further complexity and definition.

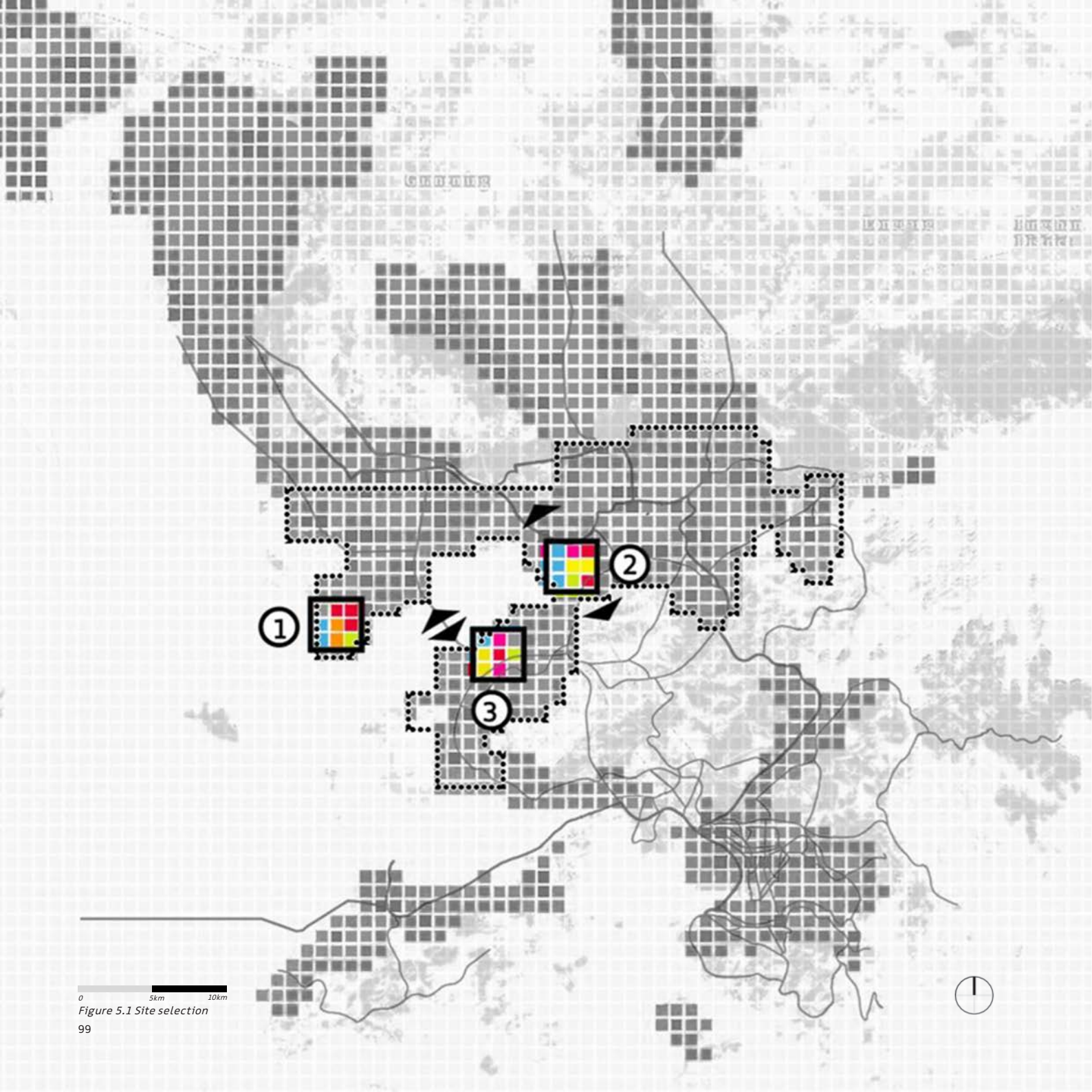
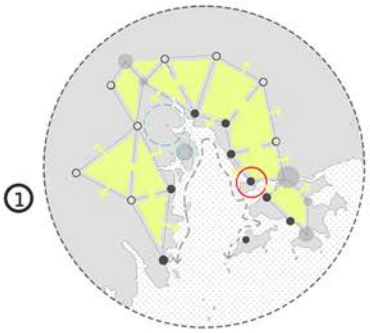


Figure 5.1 Site selection

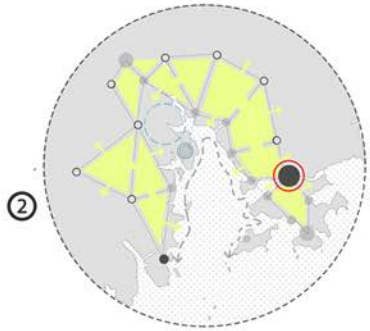
SITE SELECTION CRITERIA

Having formulated a regional strategy, the next step was to test this hypothesis in local sites. To do this, we chose sites that would exemplify the three objectives of our game. This would illustrate in all three cases, the dialogue between the Mega block definition and the existing contextual challenges in each of them. Contextually, there were three factors of importance – large infrastructure, ecological structures and the relationship between the old and the new.



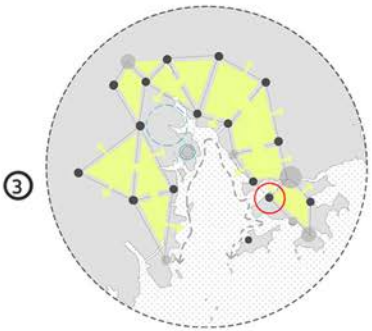
WATER NODE

Coexistence of large infrastructure and a social network



BORDER CONDITION

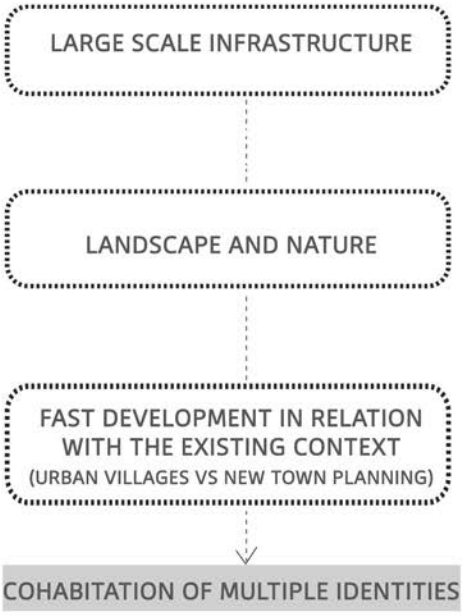
Effects of removing the Shenzhen - Hong Kong the border.



PERIPHERAL NODE

Coexistence of old context and new developments in peripheral areas.

Existing megablock system needs to be reshaped in the current times of consolidation and expansion - Moment of shift!



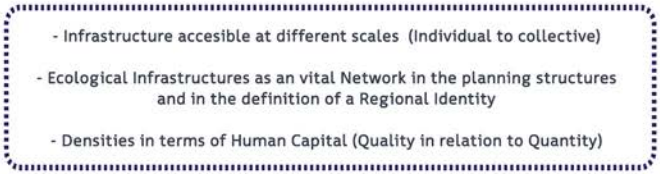
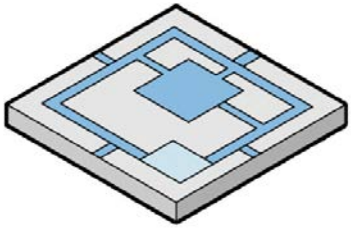


Figure 5.2 Three objectives of the game

CONDITIONS FOR COHABITATION

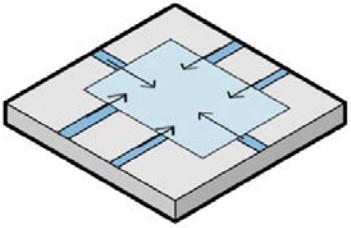
FLOWS



Connectivity
Permeability
Type of Spaces (transition)

A network of public system, accessible by multiple routes and by diverse user groups. User groups are defined by age, income, location of residence and activity type. This ensures easy accessibility of the space, allowing different people to use it, while also ensuring that different activities take place throughout the day. Accessibility for different kinds of people to various activities also ensures a flow of people through the day, providing a sense of security as well as vibrancy.

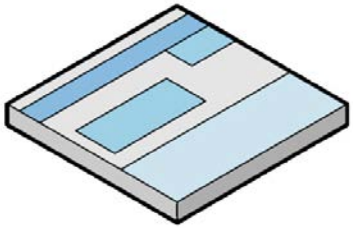
SAFETY



Visibility
Accesibility
Flexibility (Time)

As postulated by Jacobs, maximum visibility of a public space allows for eyes on the street, ensuring a feeling of safety and comfort. (Jacobs, 1961) This can be ensured by facilitating many small shops in these spaces, different type of activities and an introverted nature, with windows and balconies opening up into the space.

ACTIVITIES

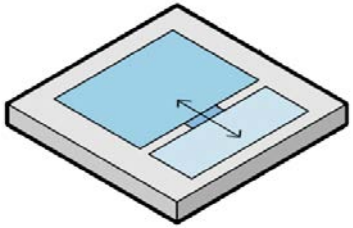


Necessary activities
Optional activities
Social activities

Necessary activities are those that have to happen irrespective of the type or quality of public space. Optional activities depend on the quality of space and are a result of how usable and inviting the space is. Social activities are those that are a result of a long pattern of the other two types of activities. They are a result of spontaneous interactions between different people who are using the same space. A successful public space is one which find a way to facilitate all these three types of activities. (Gehl, 2011)

Figure 5.3 Spatial conditions for cohabitation; Data source: (Briet, Sepulveda, & Bekkering, 2010)

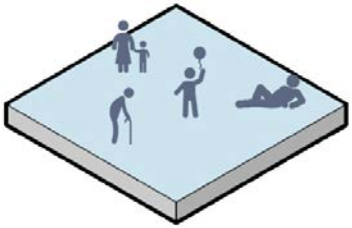
ECONOMIC



Social and
economic program

Social and economic programmes are required to activate public spaces and draw people to them. User requirements at different time of the day, different parts of the week and throughout the year must be taken into account. For example, spaces for shelter from the rain, shade from the sun and strolls for a pleasant day can ensure economic and social activity through the year.

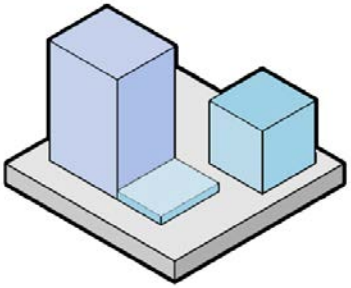
SOCIAL



Diferent lifestyles and
livng environments
(Age, Family, Cutlure)

Public spaces must be accommodating for different ages, people and activities in terms of functions, usability and comfort. Places to sit, eat, work and shop must reflect the diverse user groups present. This becomes viable when these spaces are not just a destination for different user groups, but also part of the journey, on the way to different destinations.

DIMENSIONS



Functional:
Quality of housing/services
Interactive:
Quality of semi public space
Participatory:
Appropriation possibilities

In addition to the quality of public space, its accessibility and usability by diverse groups, public space must also allow for certain flexibility. The ability for functions and uses to temporarily extend or shift in a space results in a blurred transition between public and private realms. This makes the space more usable for a wider variety of functions, also making it more vibrant and interesting to users.

Figure 5.4 Chiwan Port. Shenzhen; Source: Shenzhen port Day time lapse Shipping truck . From " Shutterstock" by Dimid

CHIWAN PORT, SHENZHEN

The Chiwan port , a busy transportation hub on the coast of Shenzhen, has a huge potential to evolve into a vibrant and important node in the GBA. However, this raises the question of how the large infrastructure required to sustain the port functions can coexist with a social realm of culture and recreation

CONTEXT ANALYSIS

The Chiwan port is the busy container terminal of Nanshan district, adjacent to one of the most expensive neighbourhoods in Shenzhen. There is a clear divide between the city and the port, with the port not having much accessibility from the rest of the city.

The privatised nature of the port results in a completely inaccessible water edge to the general public for a stretch of more than 18km. Surrounding the port, there are many industries, forming monolithic city blocks which are large and vehicular, minimising pedestrian access. The area is characterised by three patches of ecological structures, that are completely cut off from the city surrounding it.

The Nanshan area, a developing Special Economic Zone, is close by to the port. It is developing into a new centre of Shenzhen. However, there are no plans to integrate this area better with the new developments.

With the metropolization of the GBA,owing to its location, the Chiwan port area has the potential to become an important regional recreational and social node, in addition to its industrial nature.

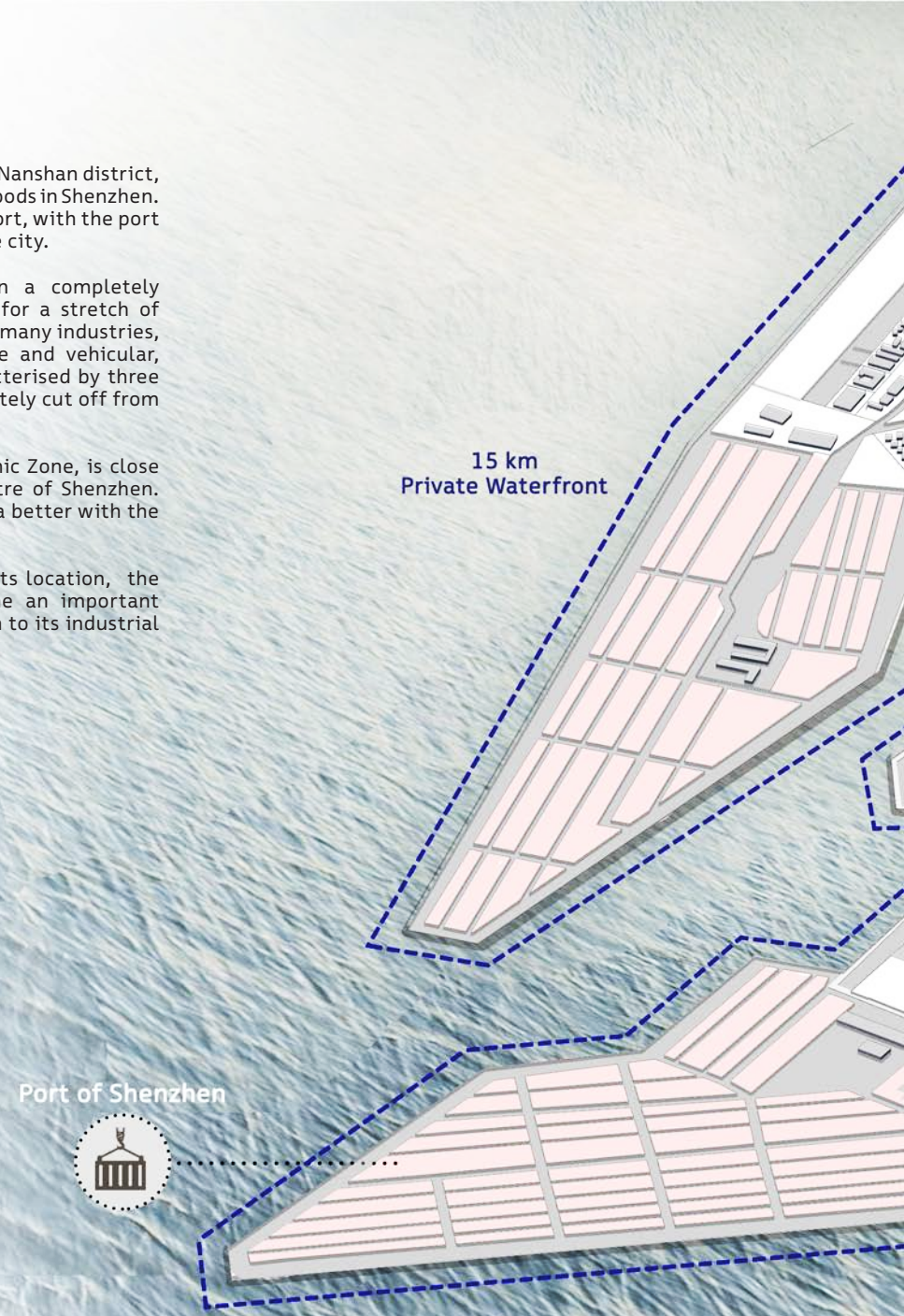
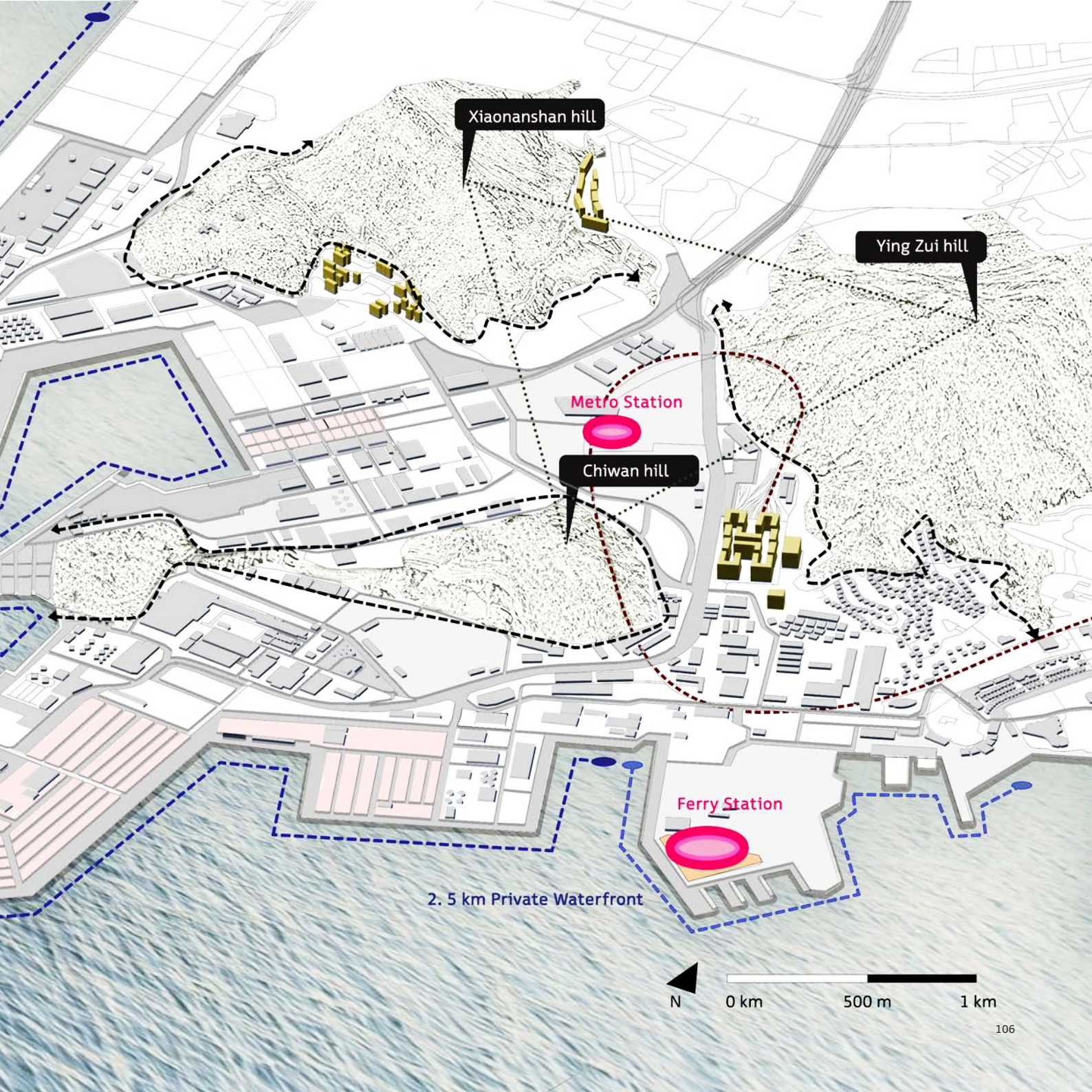


Figure 5.5 Isometric view of the port area


Xiaonanshan hill
Ying Zui hill
Metro Station
Chiwan hill
Ferry Station
2. 5 km Private Waterfront
N
0 km
500 m
1 km

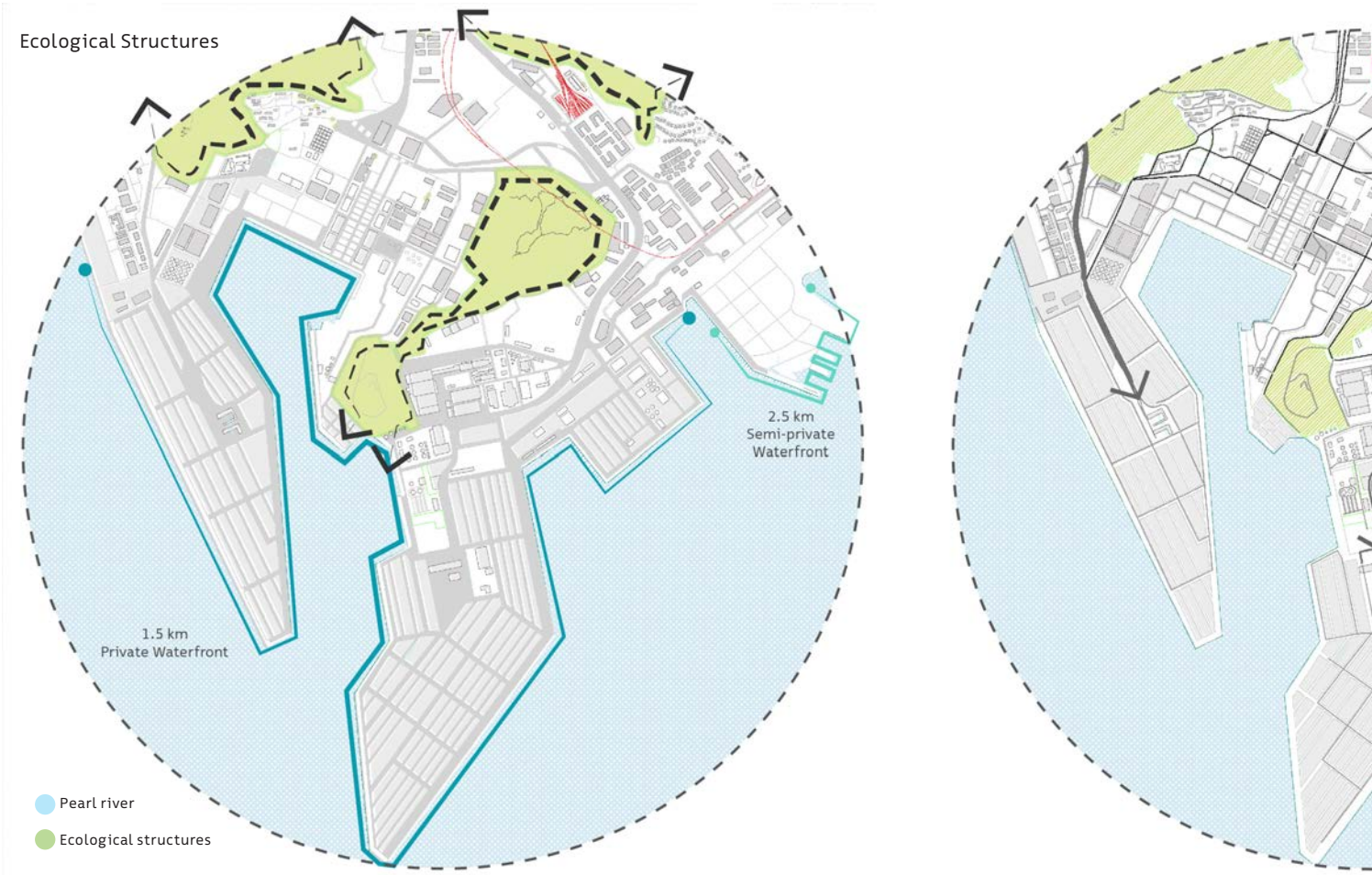
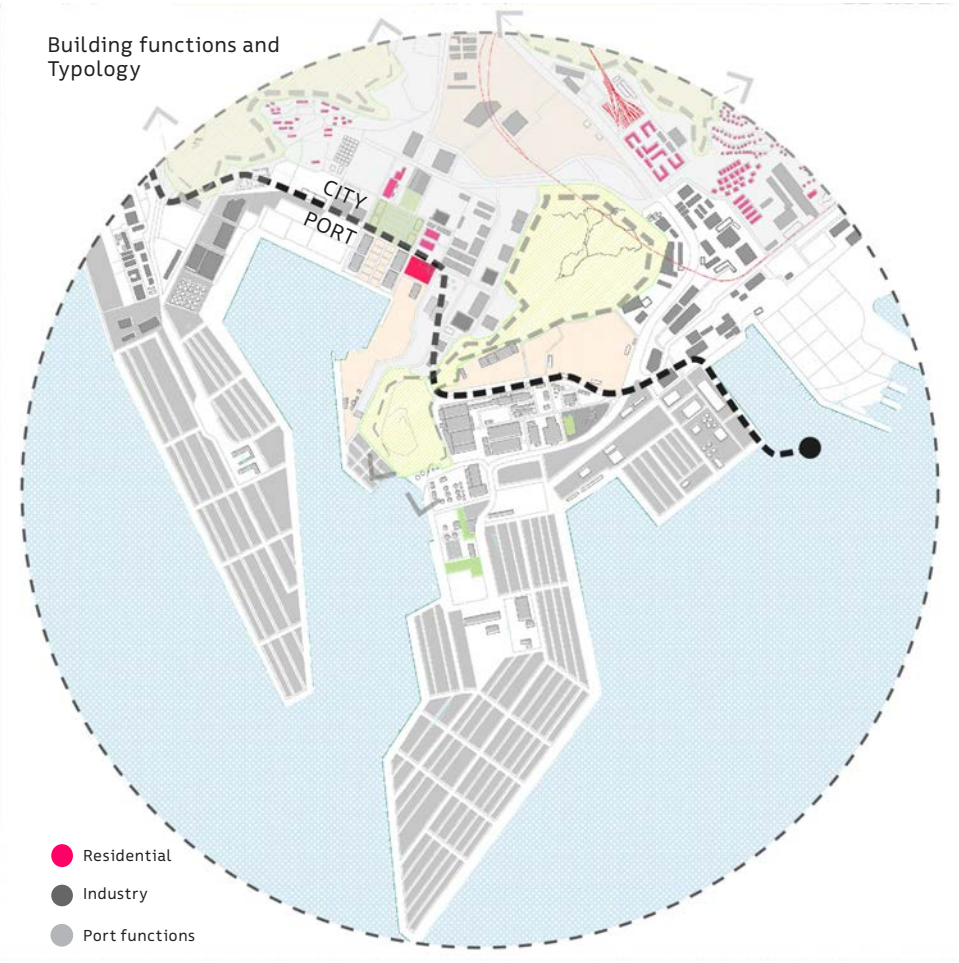
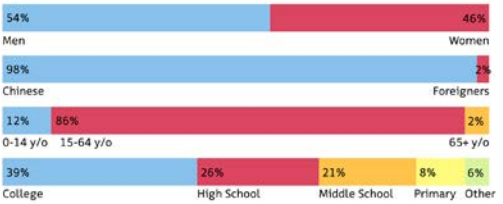


Figure 5.6 context diagrams - Port area



Demographics:

Nanshan is where Shenzhen's Hi-tech park is located, with headquarters of major firms such as Tencent, ZTE and CR Beverage. Along with this, it is home to 8 of Shenzhen's 11 Universities, and contains 7 primary schools, 8 secondary schools and 6 international or private schools. The low number of primary schools in comparison to the rest can be traced back to the average household size in the district being 2.17 people per household, meaning the predominant household composition is that of couples.



VISION

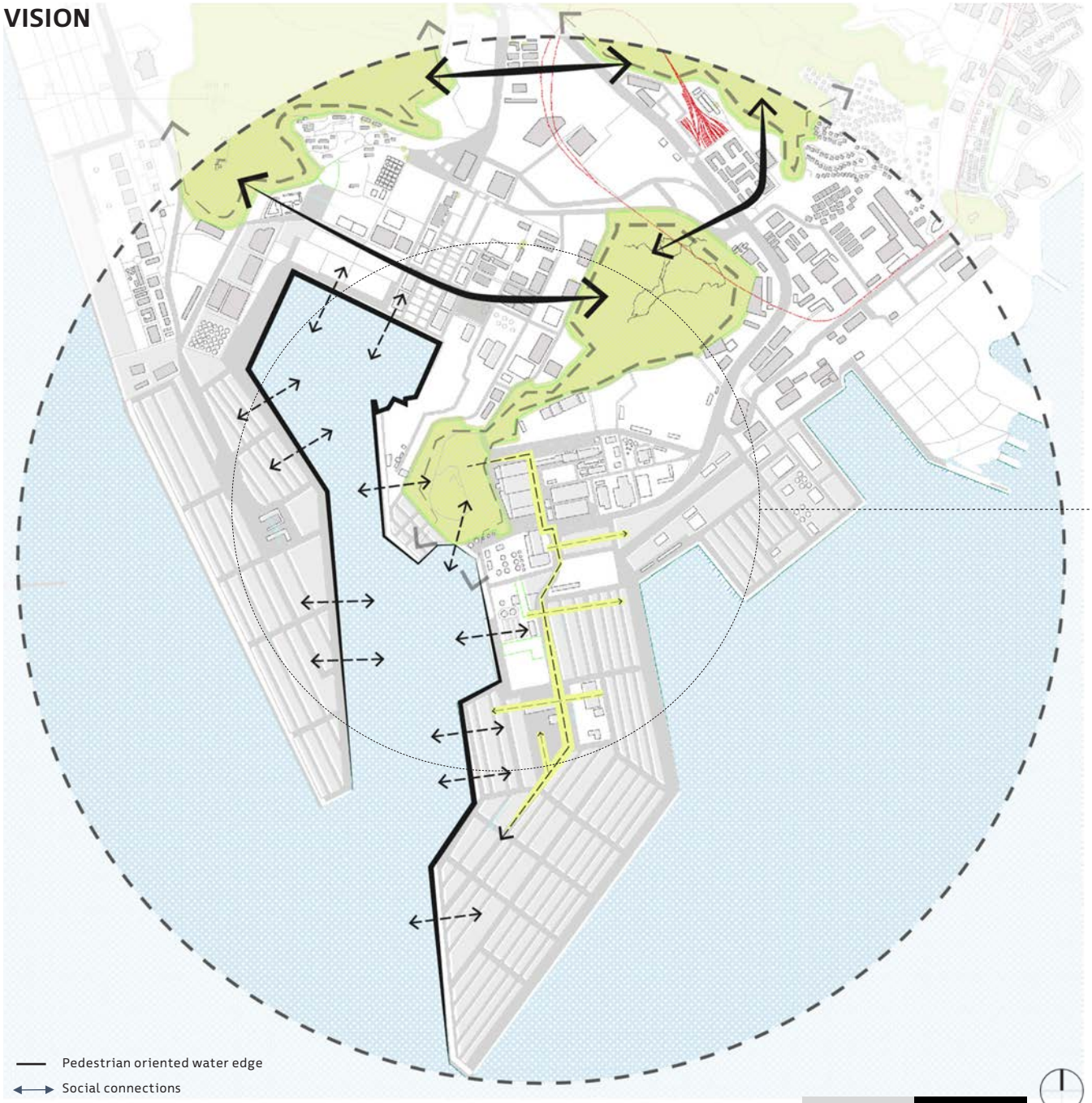


Figure 5.7 Vision map

The Chiwan area is re-imagined as a mixed use space that brings the port back into the city. Diverse activities are planned along a green pedestrian realm connecting larger ecological green to the water edge. This activates portions of the water edge as a pedestrian realm with communal and recreational spaces, with high permeability into the city block

Figure 5.8 Vision map

MEGABLOCK STRUCTURE

We chose to analyse and define the portion of the megablock depicted below as we consider this axis to be the defining intervention of this area, facilitating the puncturing of the port with an axis of social networks, activated by recreational and commercial activities, while also connecting the larger green structures to the water edge. This enables the definition of a unique destination in the GBA, and a characteristic entry point into Shenzhen from the rest of the region.

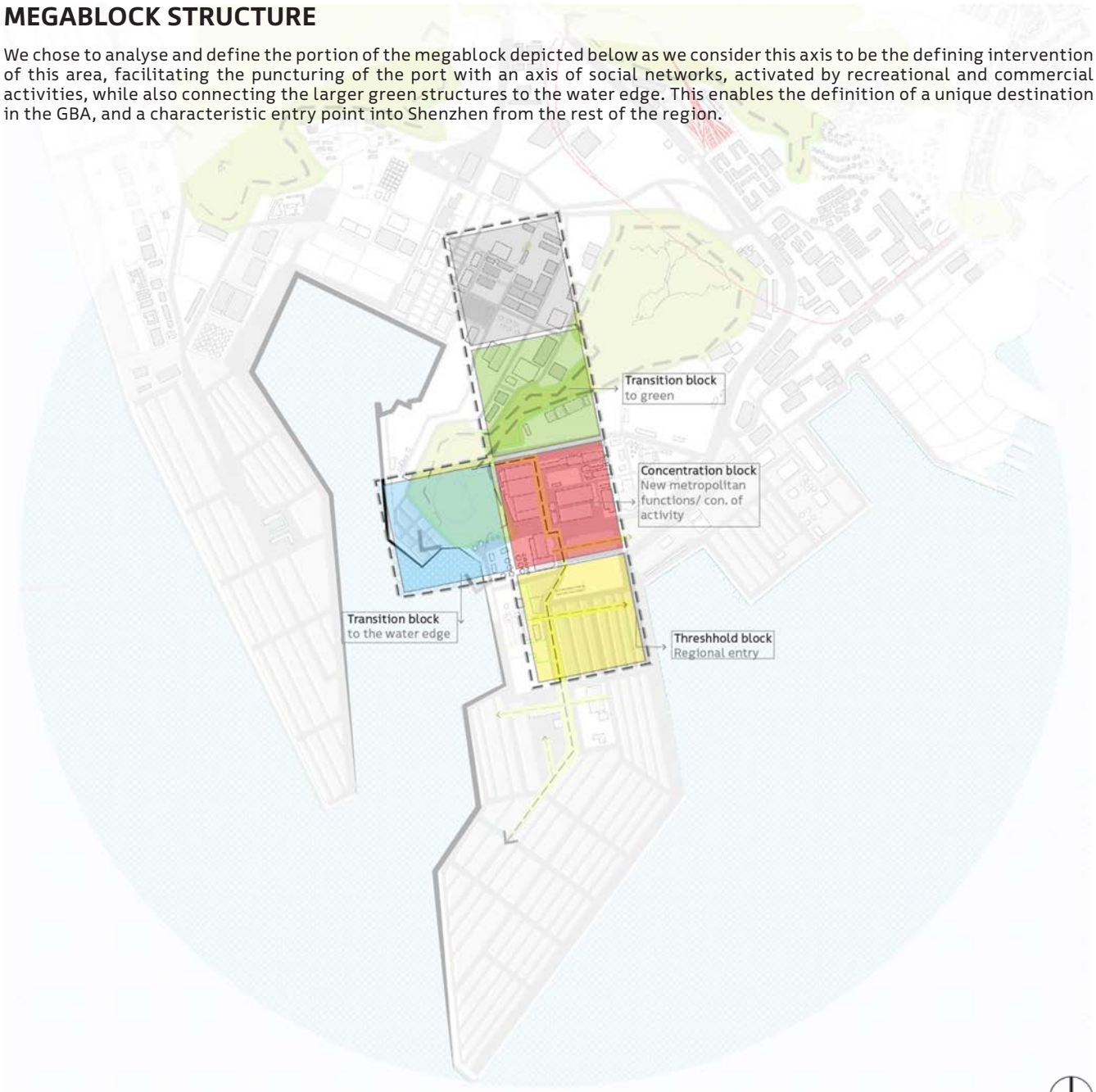
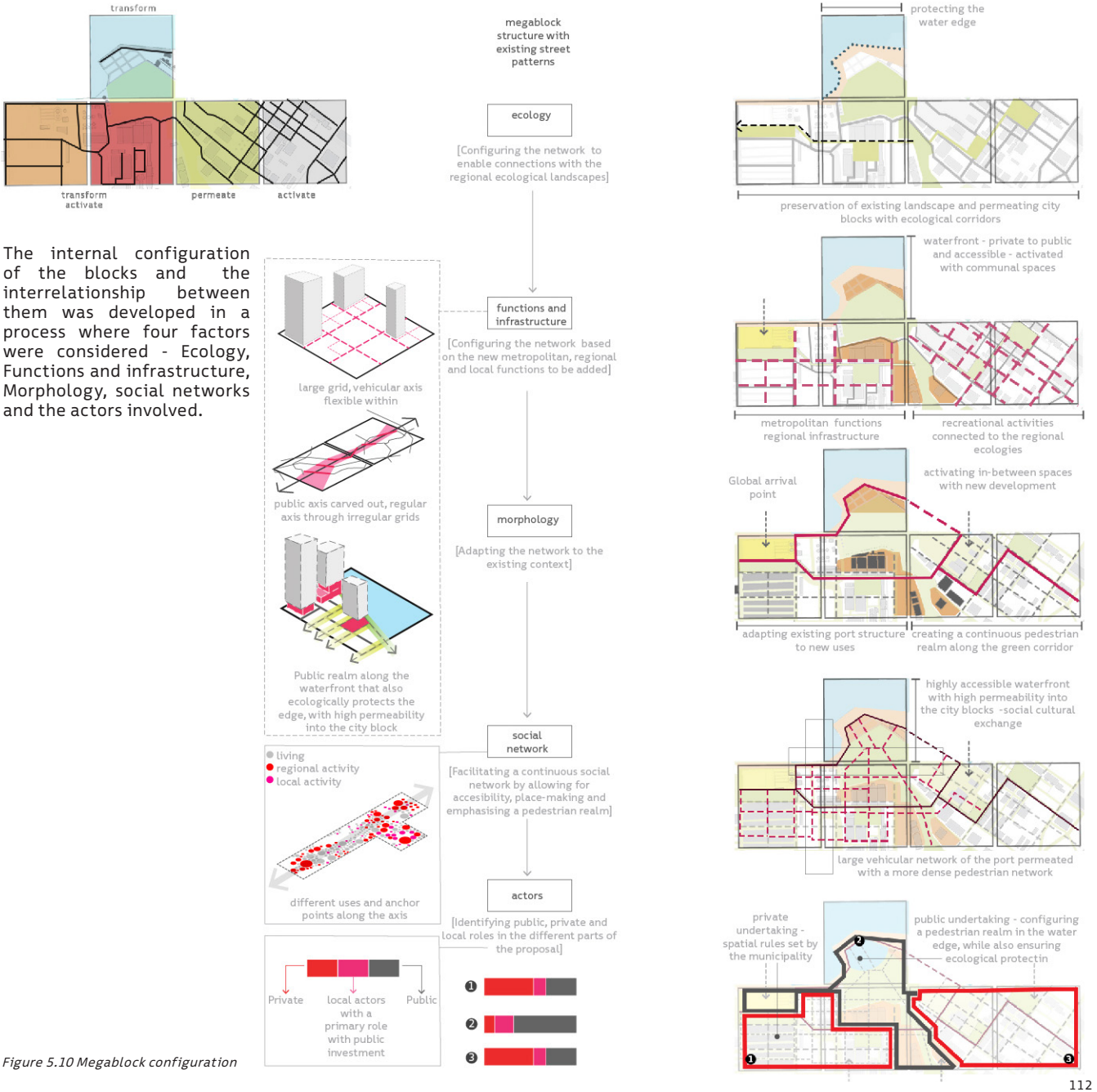


Figure 5.9 Megablock structure

MEGABLOCK CONFIGURATION



The internal configuration of the blocks and the interrelationship between them was developed in a process where four factors were considered - Ecology, Functions and infrastructure, Morphology, social networks and the actors involved.

Figure 5.10 Megablock configuration

DESIGN EVALUATION OF EXISTING CONDITION - SPACE SYNTAX

BEFORE

Figure 5.11 Space syntax evaluation - existing condition

DESIGN EVALUATION OF PROPOSED INTERVENTIONS - SPACE SYNTAX

AFTER - LOCAL INTEGRATION

Figure 5.12 Space syntax evaluation - proposed interventions

RECONFIGURED MEGABLOCK

The reconfigured networks of public space, activated by new social and economic functions, creates a new social realm and activates these spaces.

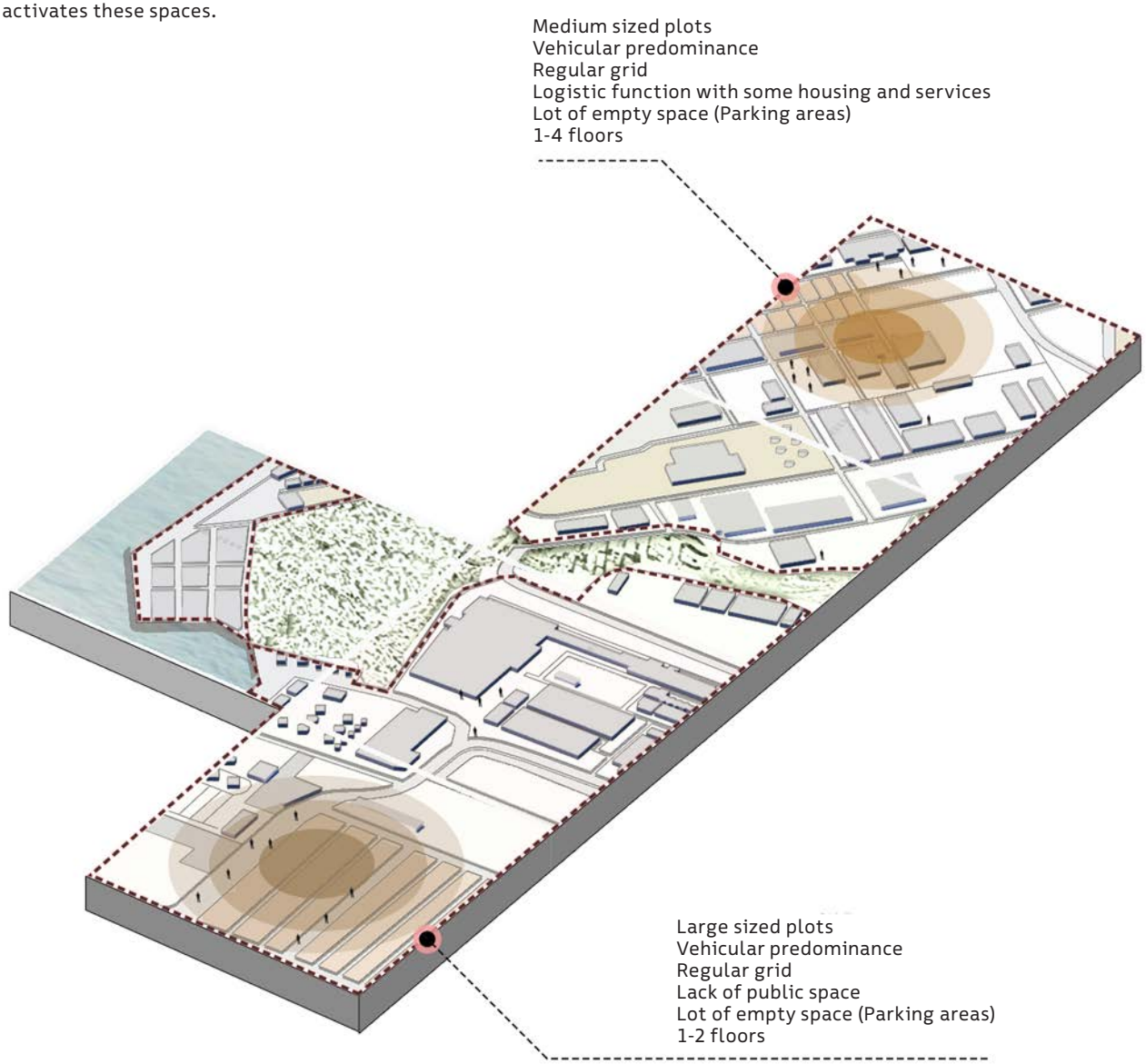
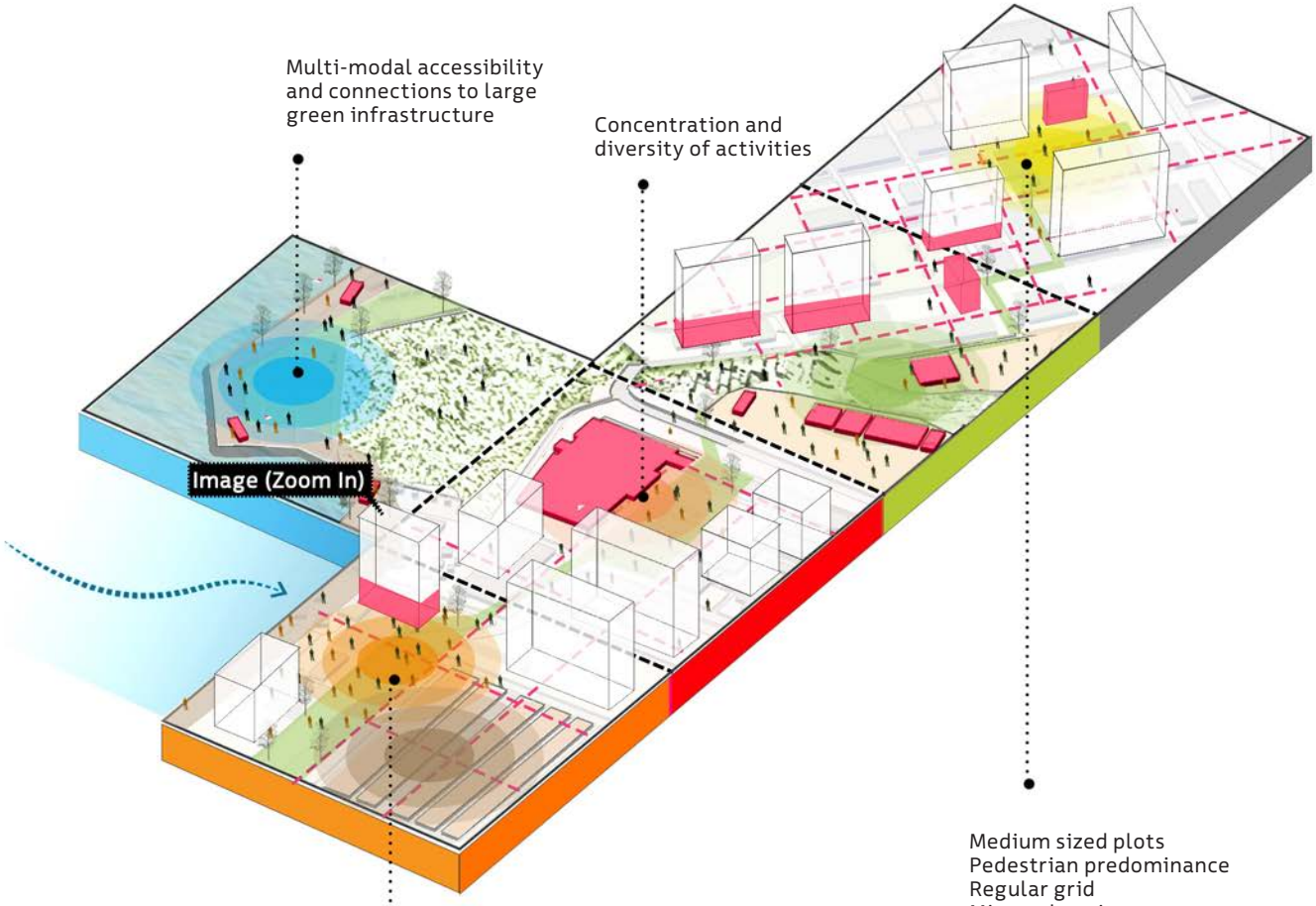


Figure 5.13 Isometric view of existing condition vs activated communal spaces

Tourists
Locals
Migrants
High skilled workers
Logistics employees



CHIWAN PORT AREA - VIEW

Figure 5.14 View of the port area

Figure 5.15 Shenzhen - Hong Kong border control point; Source: From "Google Maps", by ArYin ,2019

HONG KONG - SHENZHEN BORDER

In a well integrated GBA, where there are no borders to restrict the flow of people, agglomeration of metropolitan functions will start appearing on the Hong side as well. This raises the question of the nature of the dialogue between this new development and sensitive ecological structure as well as the definition of this space as a transition from one city to another within the region

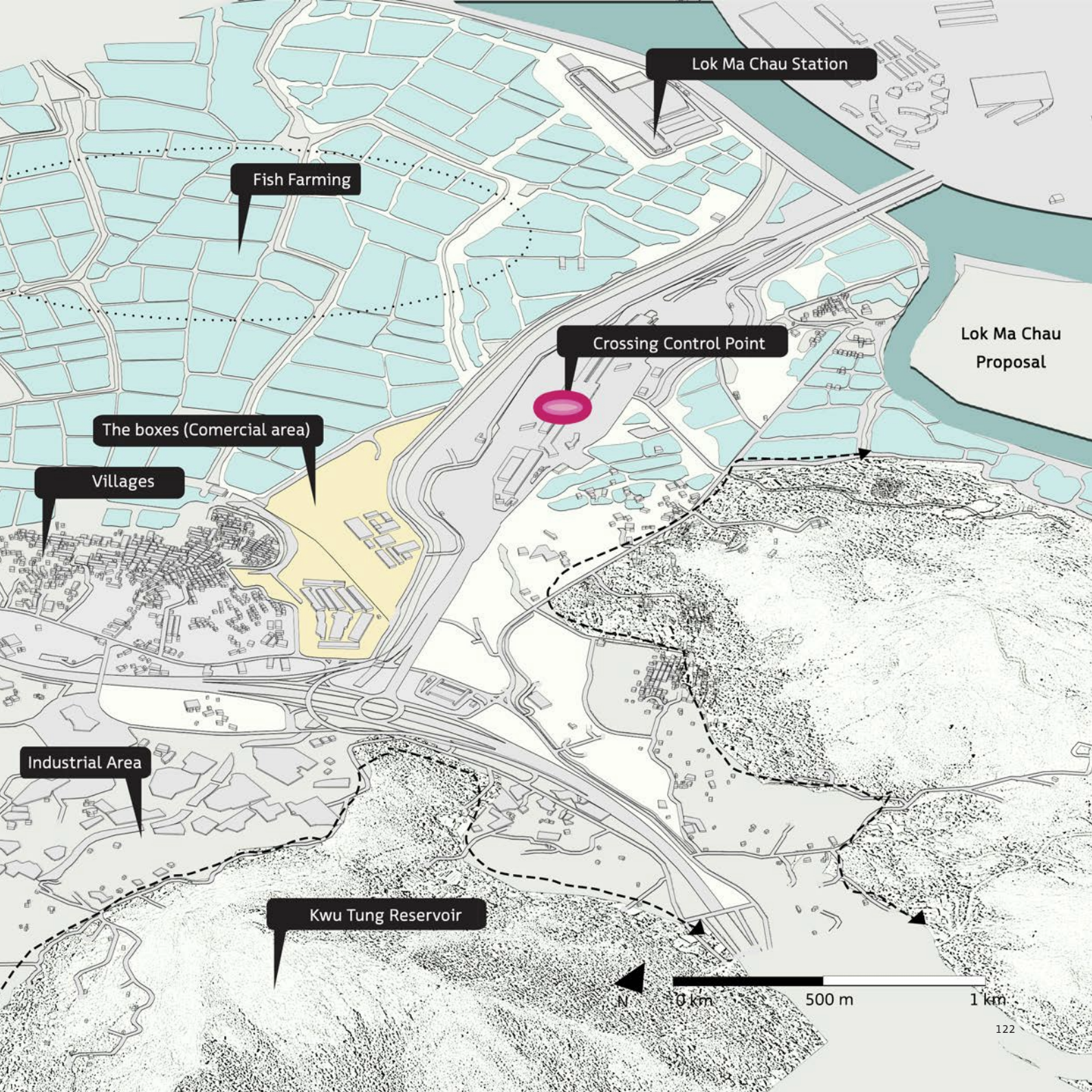
CONTEXT ANALYSIS

The Hong Kong Shenzhen border is characterised by very different environments on either side. While the city core of Shenzhen is concentrated linearly along this border, in Hong Kong, there is predominantly ecological and agricultural structures here. Large ecological structures are present here, fragmented by large infrastructure and minimal development. The area is characterised by the many fishing ponds present here, along with the villages that depend on it. There is also a large sprawl of industrial development t be found.

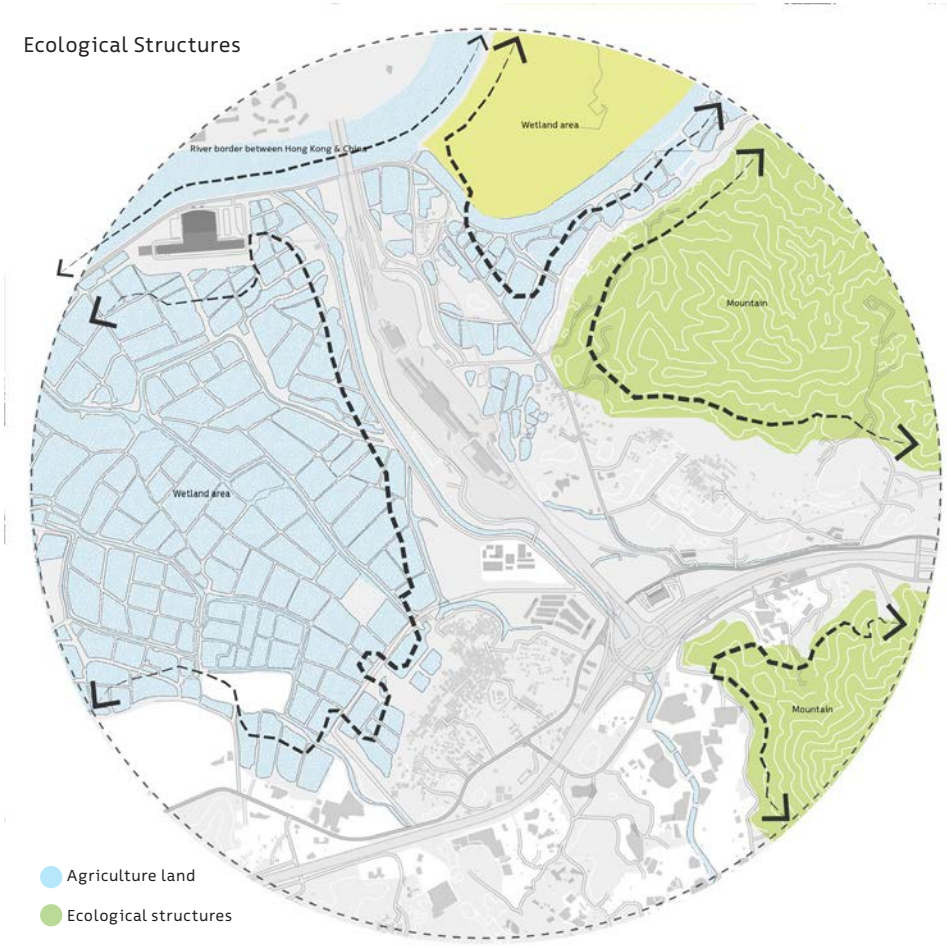
The unique contrast in environments on either side of the border leads to the inevitable metropolization on the Hong Kong side, in a scenario where the border is removed, allowing the free flow of people. Another interesting factor to consider in this case is the large amounts of land currently occupied by the crossing control point, that has the potential to be re-purposed in the future.

Currently, the only development plans on the Hong Kong side is the Lok Ma Chau area, a collaboration between the two cities to transform the place into a business and innovation hub. However, these plans require to be considered critically, as it destroys large portions of greenfield sites and is built on the ecologically sensitive river banks.

Figure 5.16 Isometric view of the Shenzhen - Hong Kong area


Lok Ma Chau Station
Fish Farming
Crossing Control Point
Lok Ma Chau
Proposal
The boxes (Comercial area)
Villages
Industrial Area
Kwu Tung Reservoir
N
0 km
500 m
1 km

CONTEXT ANALYSIS



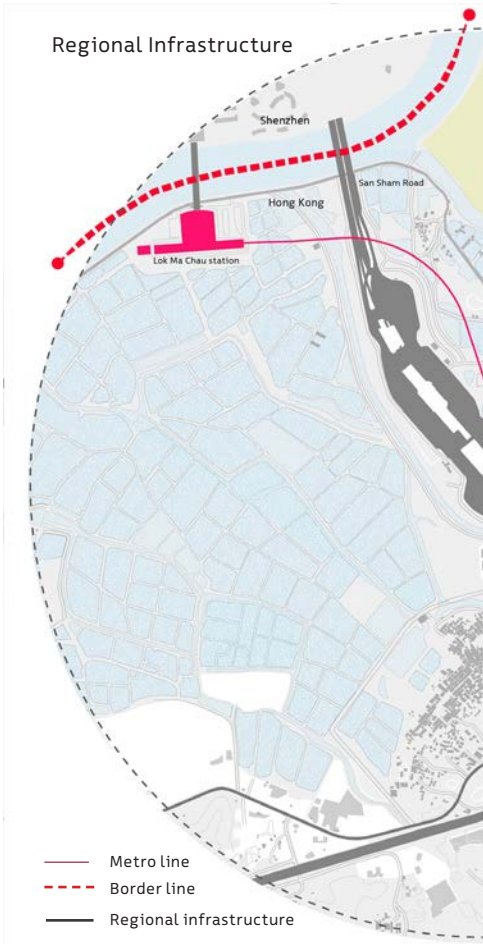
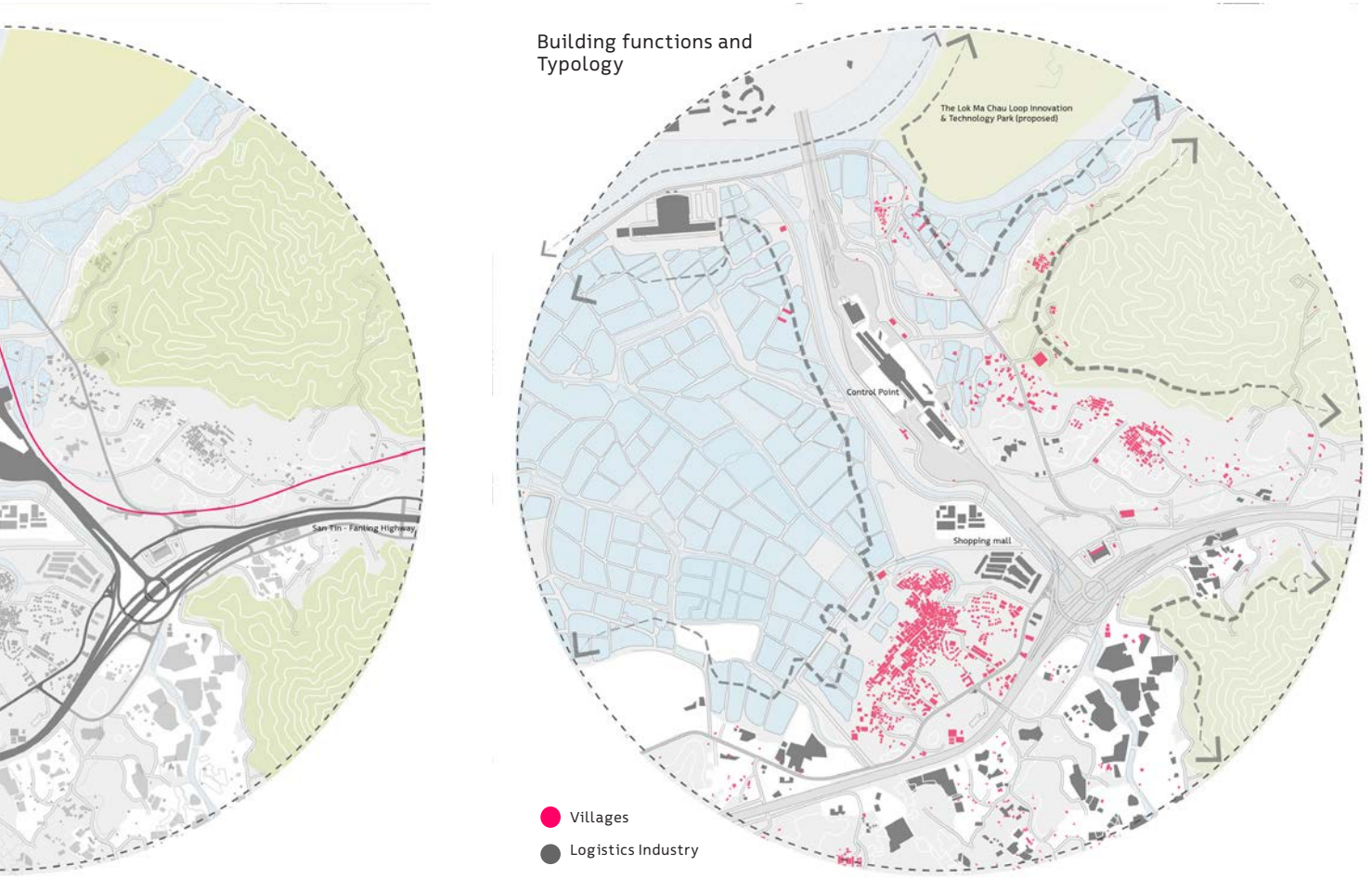
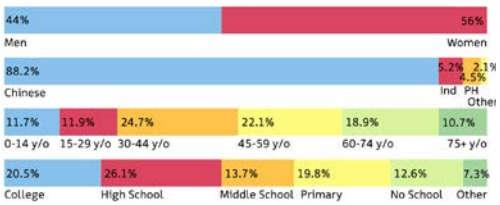


Figure 5.17 context diagrams - Shenzhen - Hong Kong area



Demographics:

The average household size within the district is 2.9 people per household. These households are mainly composed of couples (19%), couples with unmarried children (28%), and one person households (24%). While the majority of the demographic lived there for an extended time (65%), 10.4% of residents moved in from outside Hong Kong over the past 5 years. 55% of its residents are active in the labour force, but due to its peripheral location, only 5% of the residents employed work within the district and 23% work at home. For the same reason, 9% of the students living in the district study within it, Excluding foreign domestic workers, most people are employed as managers and administrators (20%) and associate professionals (20%). (Shenzhen Nanshan, 2019)



Data source : (Shenzhen Nanshan, 2019)

VISION

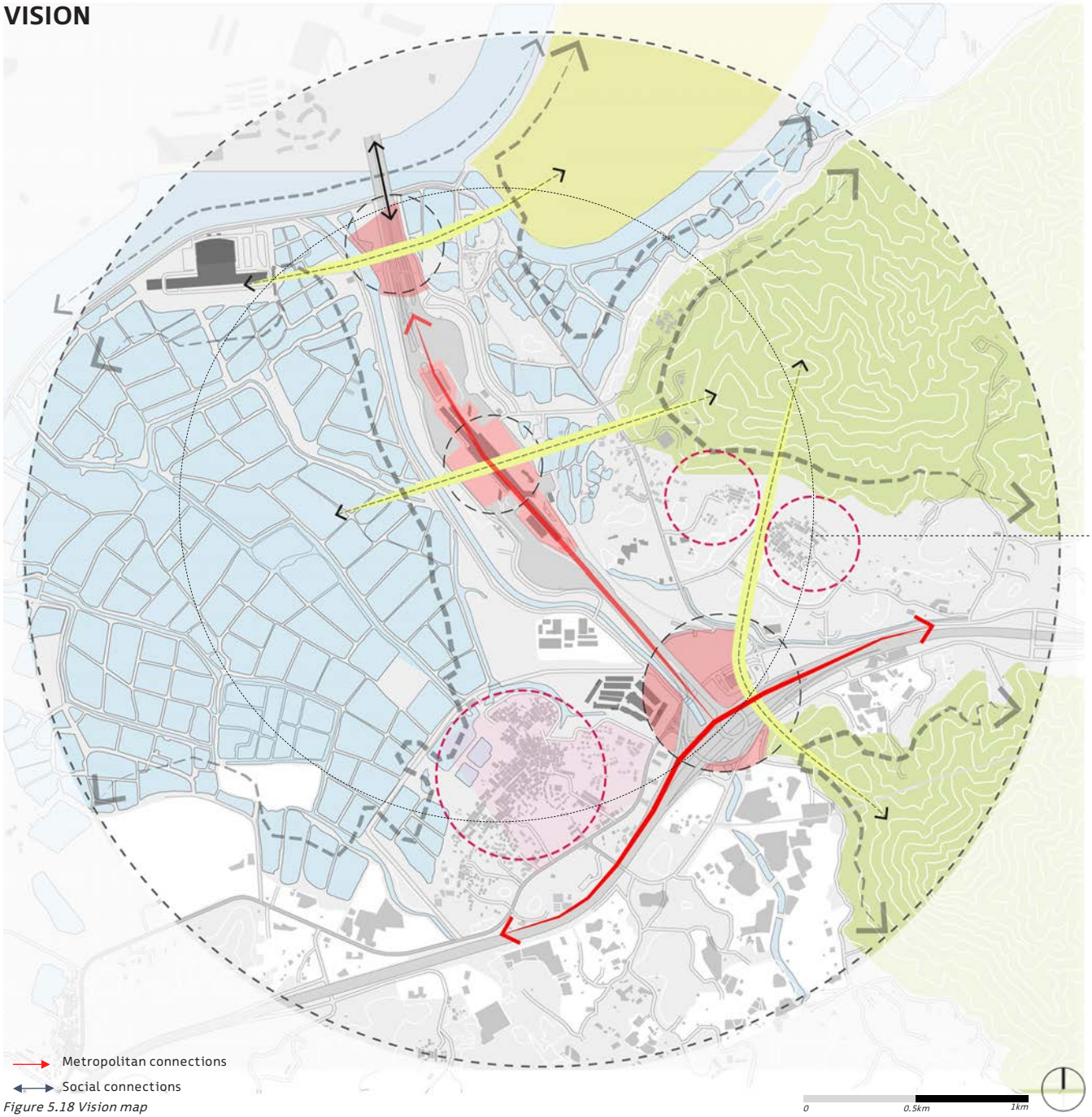
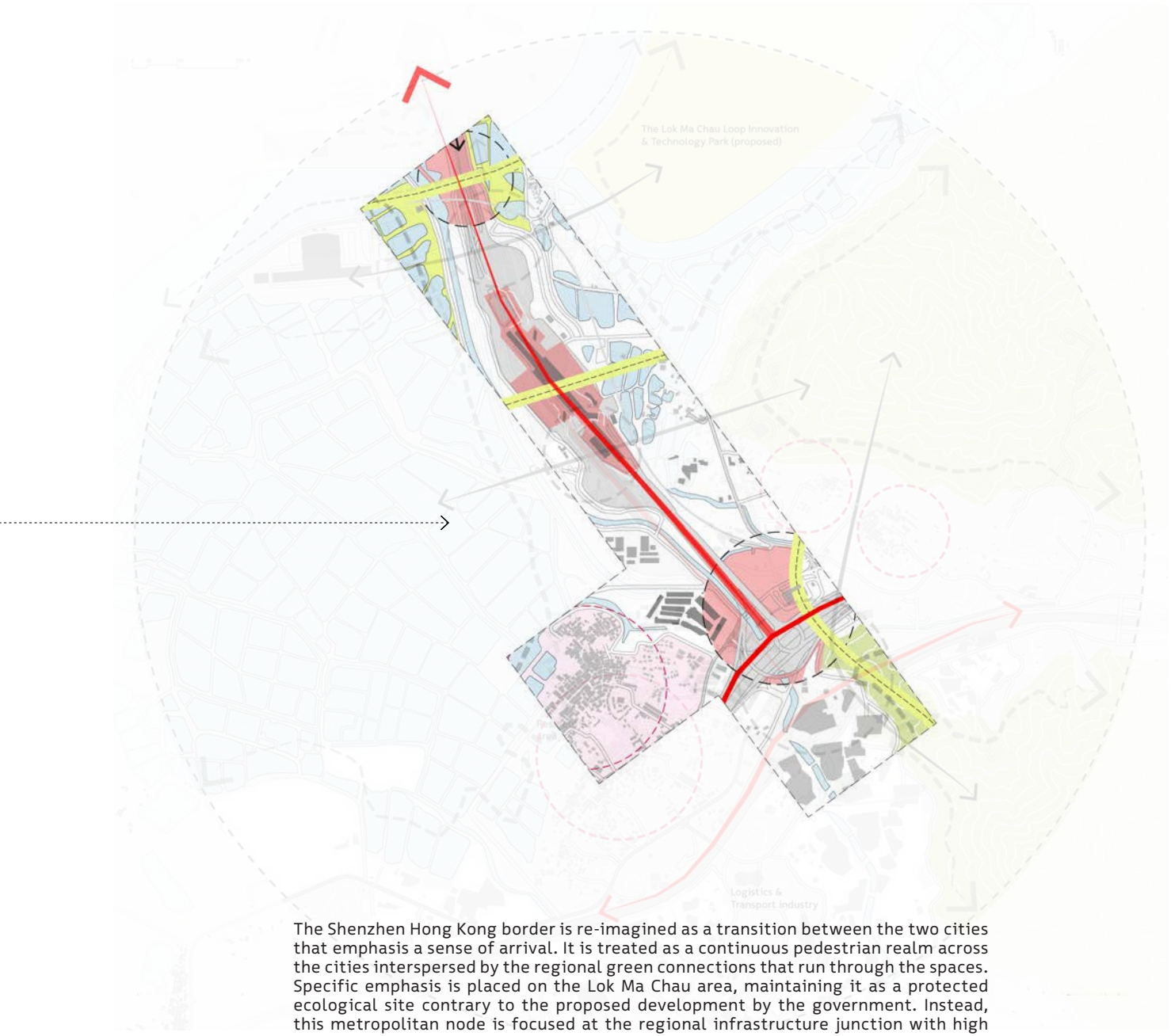


Figure 5.18 Vision map



The Shenzhen Hong Kong border is re-imagined as a transition between the two cities that emphasis a sense of arrival. It is treated as a continuous pedestrian realm across the cities interspersed by the regional green connections that run through the spaces. Specific emphasis is placed on the Lok Ma Chau area, maintaining it as a protected ecological site contrary to the proposed development by the government. Instead, this metropolitan node is focused at the regional infrastructure junction with high accessibility.

Figure 5.19 Vision map

MEGABLOCK STRUCTURE

We chose to analyse and define the portion of the megablock depicted below as we consider this axis to be the defining intervention of this area, facilitating a transitional space between the two cities, stitching them together and defining a point of contrast, simultaneously.

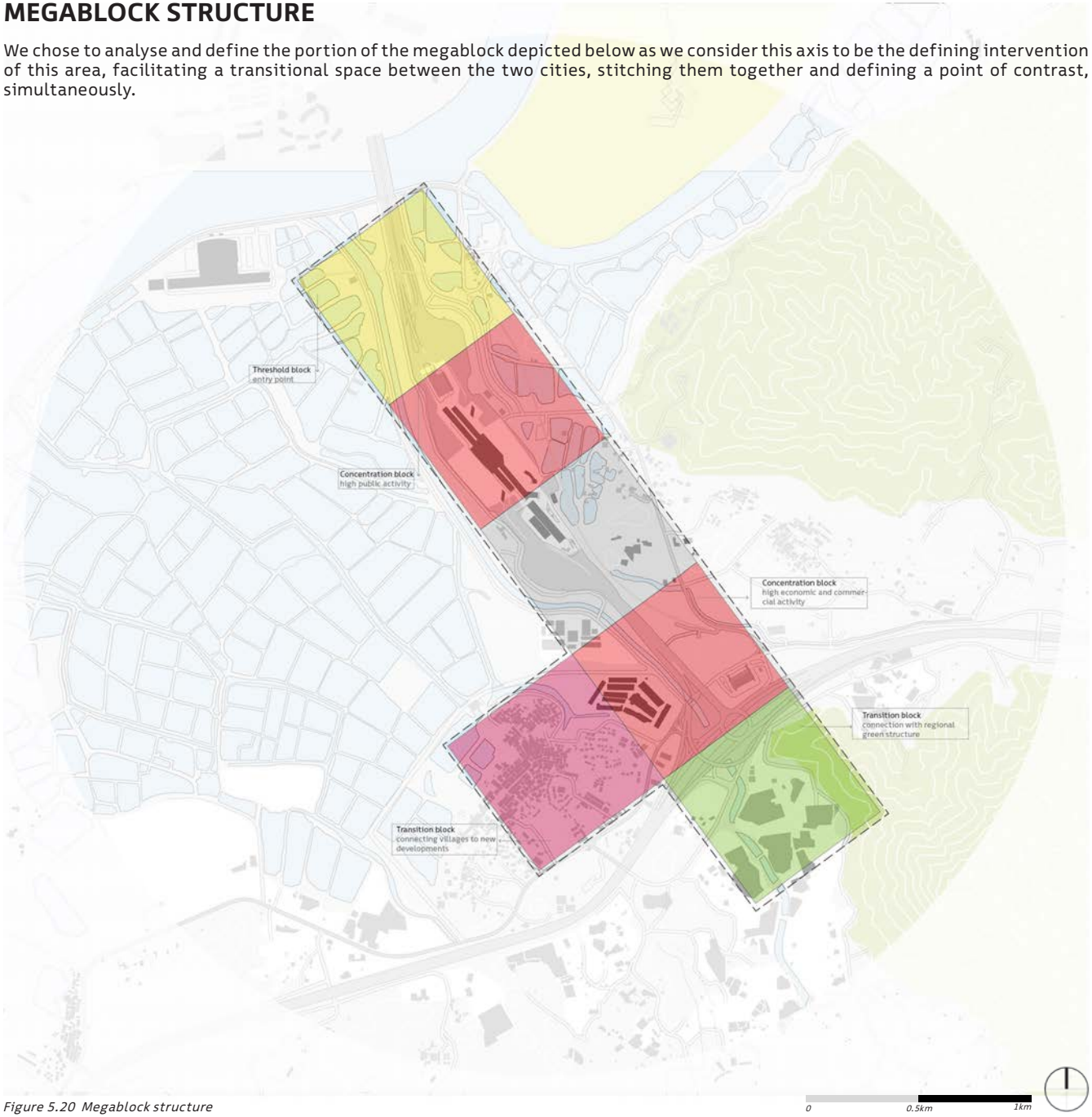
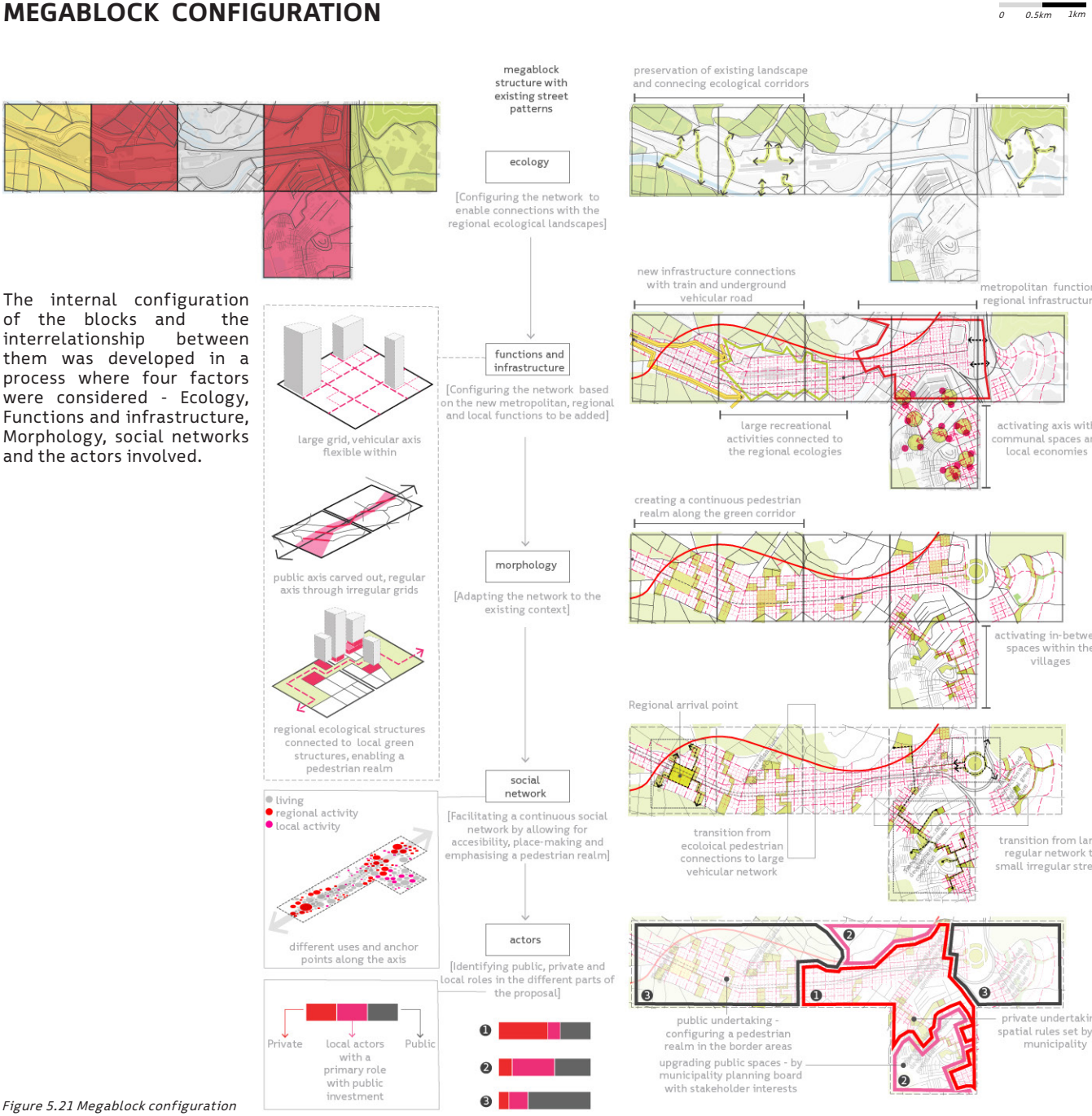


Figure 5.20 Megablock structure

MEGABLOCK CONFIGURATION



The internal configuration of the blocks and the interrelationship between them was developed in a process where four factors were considered - Ecology, Functions and infrastructure, Morphology, social networks and the actors involved.

Figure 5.21 Megablock configuration

DESIGN EVALUATION OF EXISTING CONDITION - SPACE SYNTAX

BEFORE

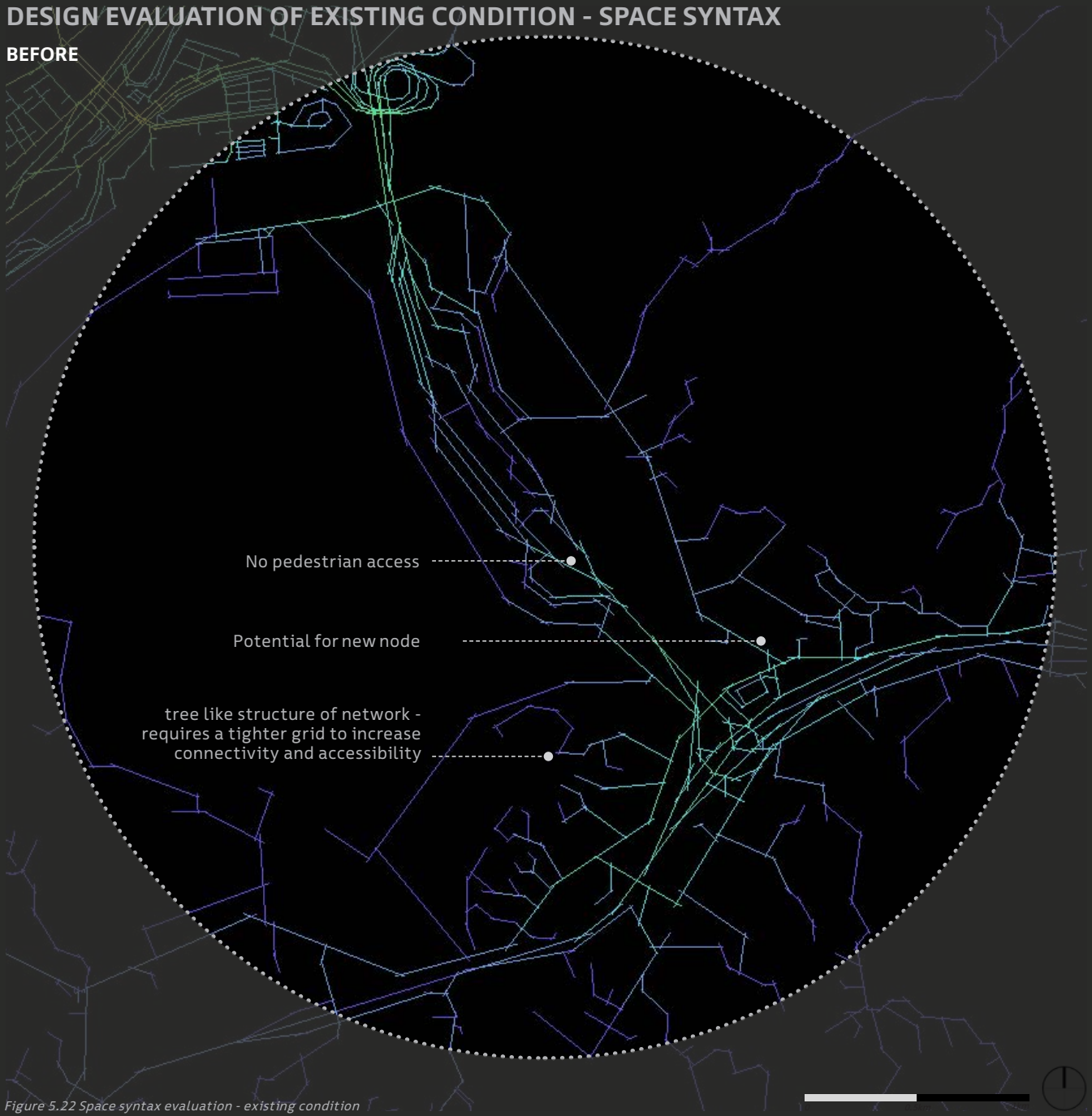


Figure 5.22 Space syntax evaluation - existing condition

DESIGN EVALUATION OF PROPOSED INTERVENTIONS - SPACE SYNTAX

AFTER - LOCAL INTEGRATION

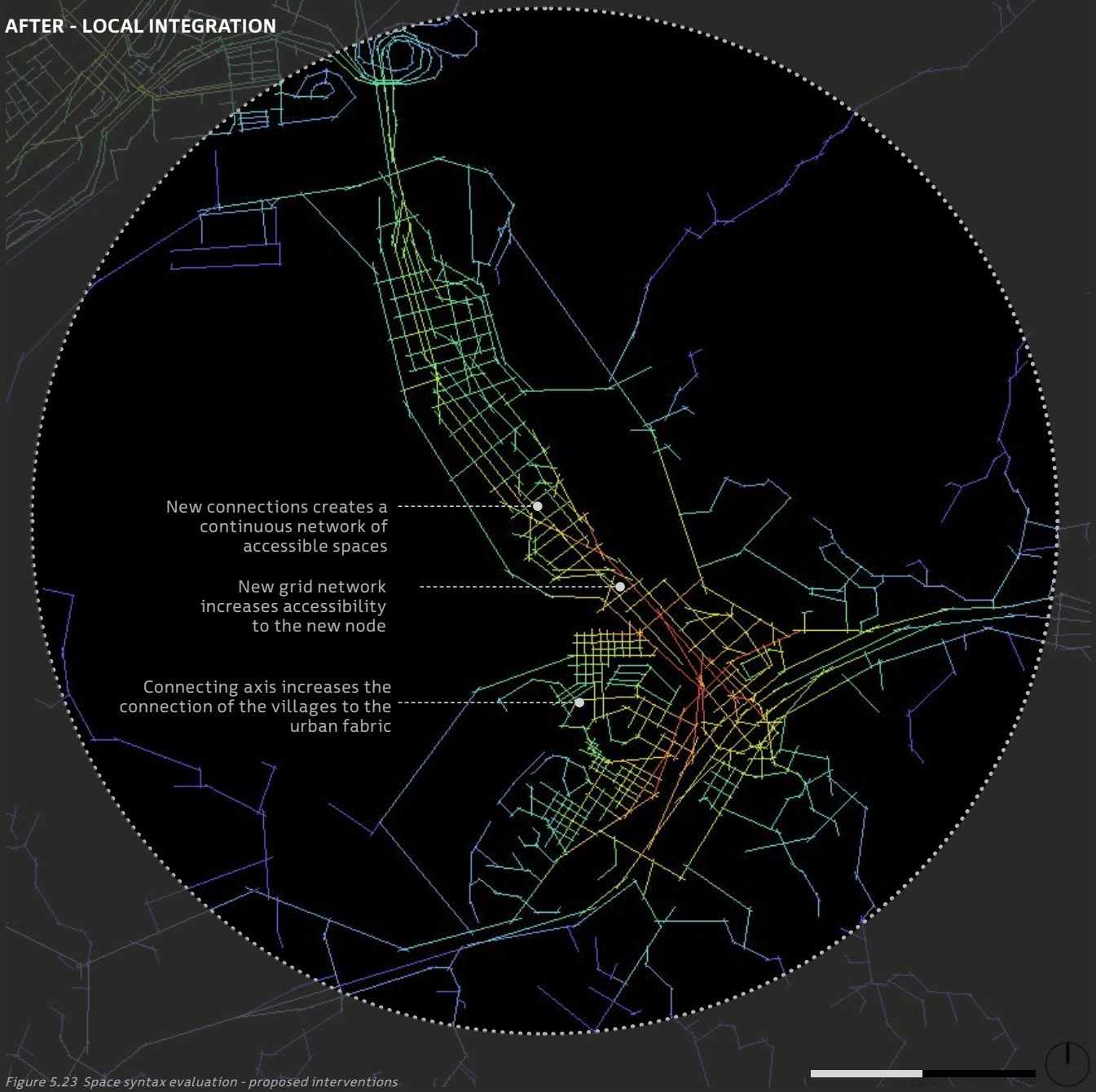


Figure 5.23 Space syntax evaluation - proposed interventions

RECONFIGURED MEGABLOCK

The reconfigured networks of public space, activated by new social and economic functions, creates a new social realm and activates these spaces.

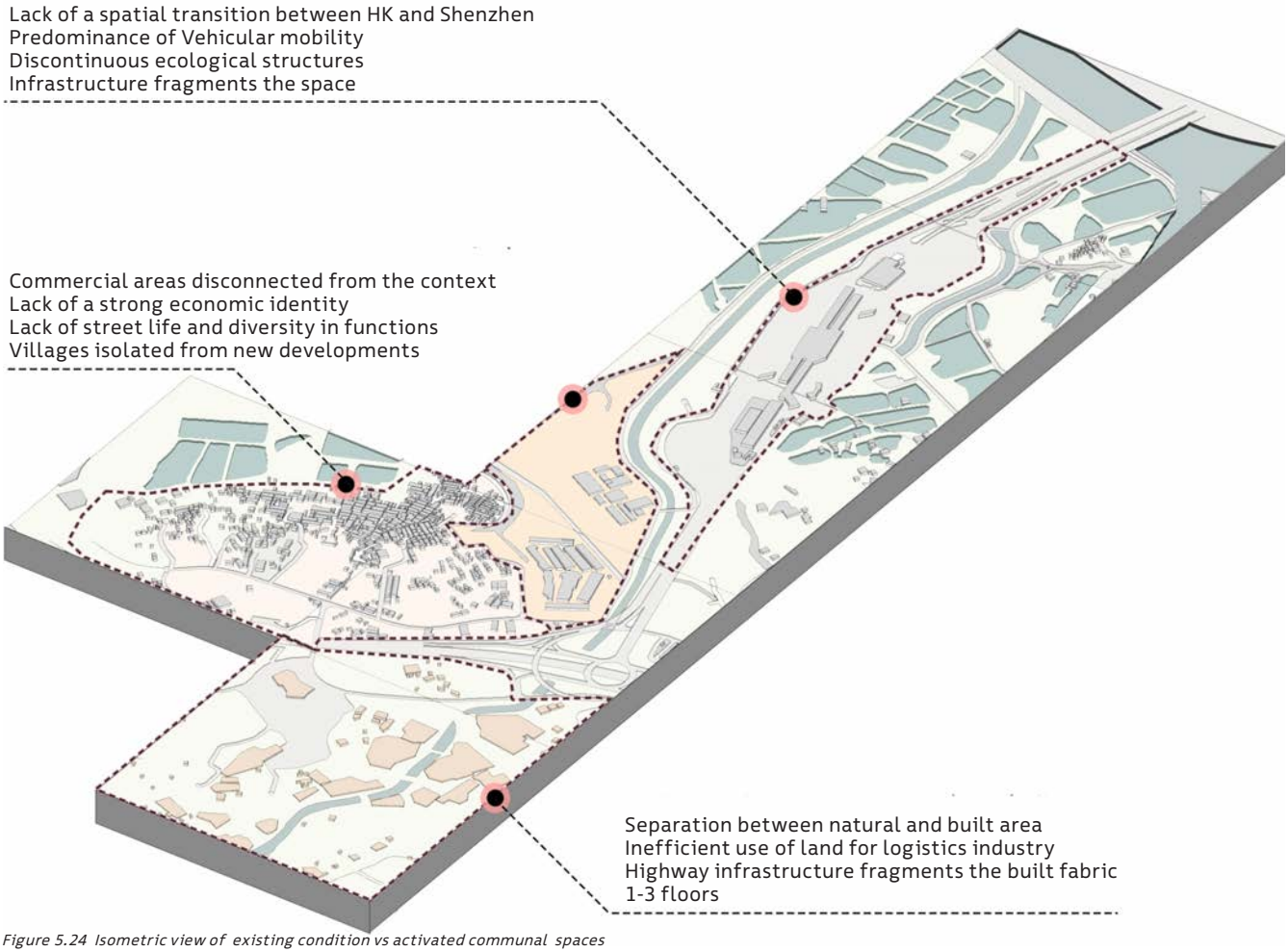
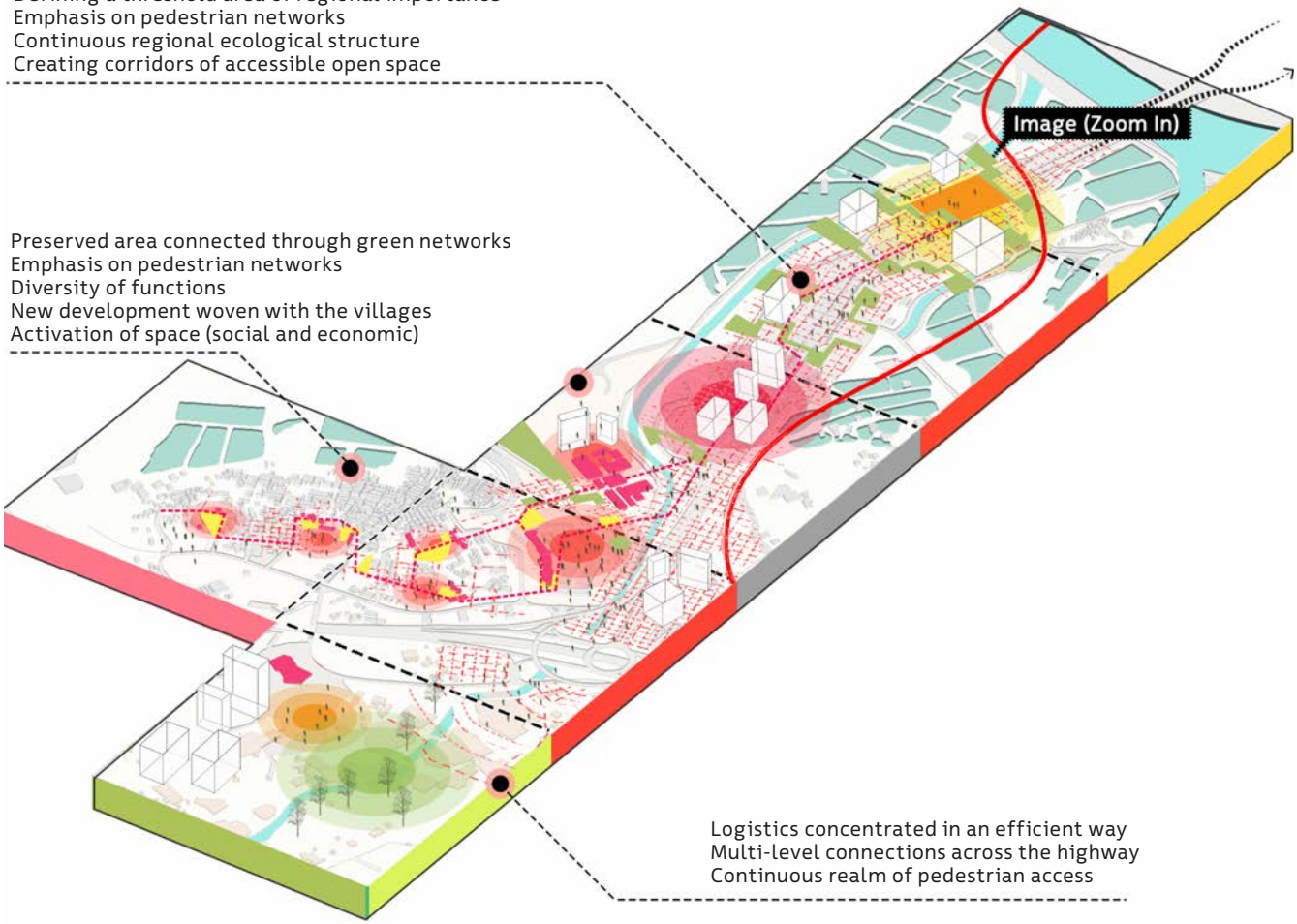


Figure 5.24 Isometric view of existing condition vs activated communal spaces

Tourists
Locals
Migrants
Workers

Defining a threshold area of regional importance
Emphasis on pedestrian networks
Continuous regional ecological structure
Creating corridors of accessible open space

Preserved area connected through green networks
Emphasis on pedestrian networks
Diversity of functions
New development woven with the villages
Activation of space (social and economic)



Logistics concentrated in an efficient way
Multi-level connections across the highway
Continuous realm of pedestrian access

HONG KONG SHENZHEN BORDER - VIEW

Figure 5.25 View of the Shenzhen - Hong Kong border area


KITCHEN 62
Van Cleef & Arpels

Figure 5.26 View of Tin Shui Wai , Source : Tin Shui Wai town. From" Wikipedia ", by Sasalove, 2006

TIN SHUI WAI

Tin Shui Wai, and the adjacent new development area, Hung Shui Kui are located at the regional entry point between Shenzhen and Hong Kong. This gives the region a potential to develop into a concentration of social and commercial activity. This raises a question of the relationship between the new developments, the existing Tin Shui Wai, and the several indigenous villages scattered in this area.

CONTEXT ANALYSIS

Tin Shui Wai is a New Town territory in Hong Kong. Built in the 80's, it was the eighth New Town to be built, overall. Tin Shui Wai was built on completely reclaimed land that was previously a Gei Wai pond, used for fishing and agriculture. This allowed the New Town to be built on a clean slate, with no morphological pattern to build on.

As with the other New Towns, Tin Shui Wai was built as a result of the housing land shortage in the region. This manifests itself in the way the functions have been planned, with it being a predominantly residential complex.

The mono-functionality of the town has resulted in the lack of street life and vibrancy. Further, Tin Shui Wai is often criticised for its high concentration of lower income groups, high mortality rates and poor living conditions.

A New Development Area (NDA), Hung Shui Kiu, has been proposed as an extension of the New Town. It reinforces the new economic corridor proposed in the north western region of Hong Kong, while also providing multi-functional mixed use spaces to the residents both in the New town and New Development area.

With its location as one of the entry points from Shenzhen, both the NT and NDA will play an important role in creating a gateway to Hong Kong from China and in strengthening the regional identity the GBA.

Tin Shui Wai is surrounded by three regional landscape structures - the Pearl river, the wetlands and the mountain ranges. It is in close proximity to several logistics industries and indigenous villages and three other New Towns.

The zoning plans for the area show the mono-functional nature of Tin Shui Wai and the shift to more multifunctional spaces in Hung Shui Kui. Important economic nodes are created. The villages are preserved and built around.

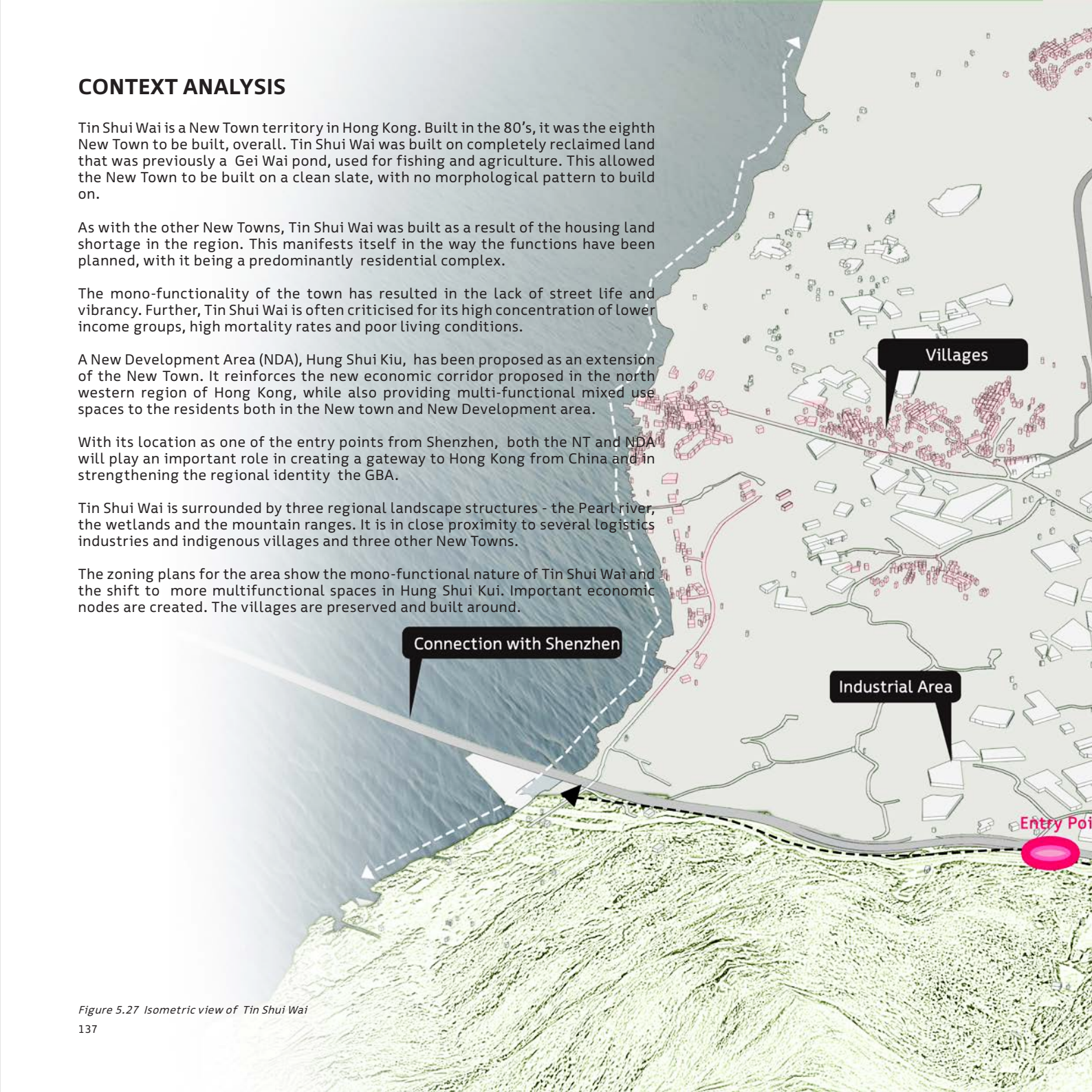
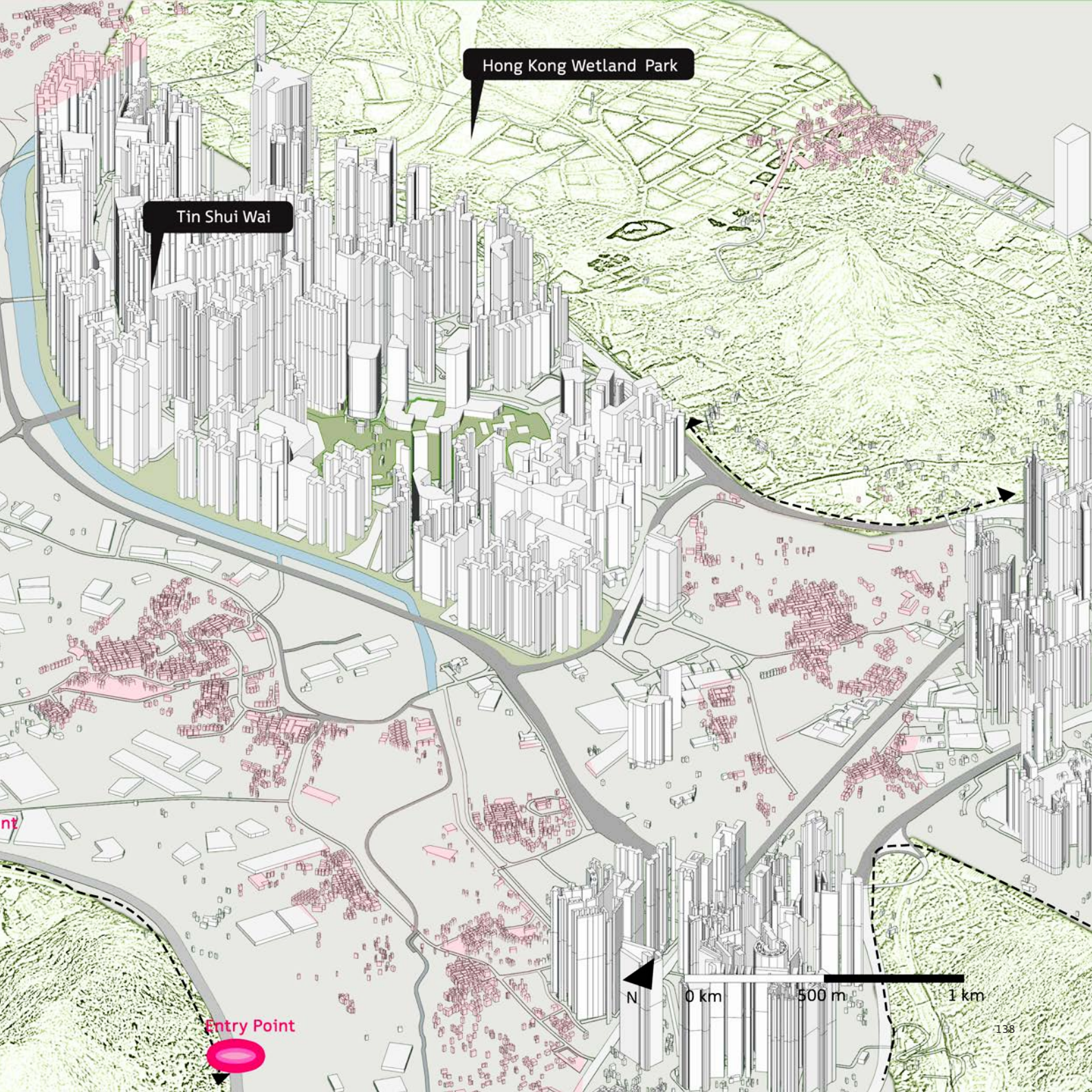
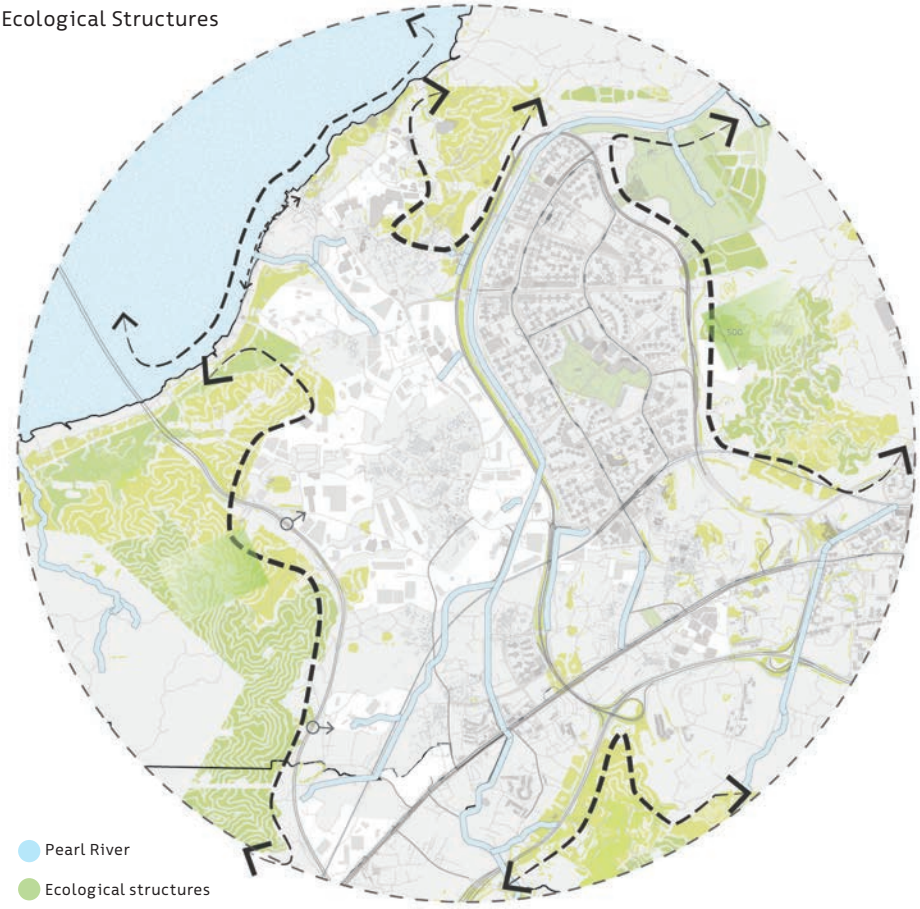


Figure 5.27 Isometric view of Tin Shui Wai

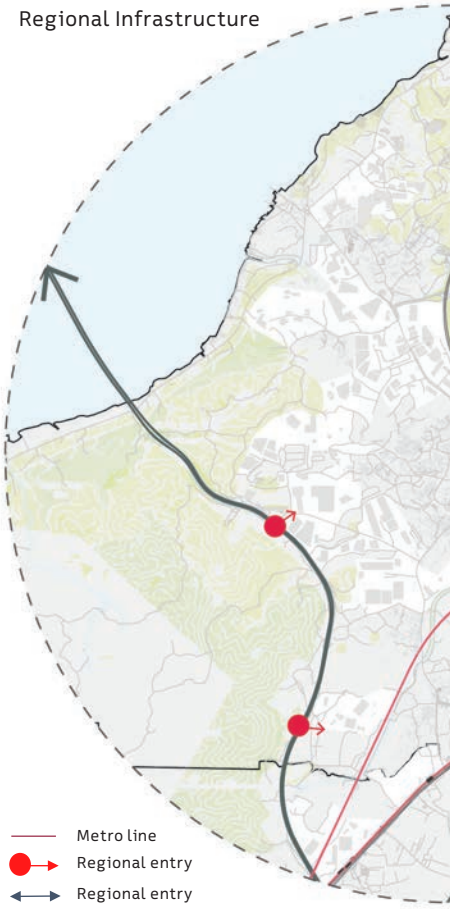

Hong Kong Wetland Park
Tin Shui Wai
Entry Point
N
0 km
500 m
1 km

CONTEXT ANALYSIS

Ecological Structures



Regional Infrastructure

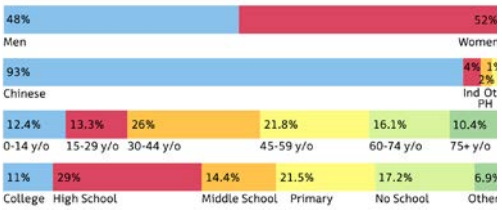


families and couples
many immigrants

Figure 5.28 Context diagrams - Tin Shui Wai

Demographics:

Ha Tsuen is an area within the Yuen Long district that is mainly composed of villages. The average household size within it is 2.8 people per household. Most of these are couples with unmarried children(28.3%) and one person households (22.9%), followed closely by households with only couples (16.5%).This more rural area is composed of a majority of long-term residents (73%), with 7.2% of residents who moved in from outside Hong Kong in the last 5 years. 57.5% of residents are active in the labour force, occupying mainly the service and sales industry (21%) and working as associate professionals. (District profiles, 2019)



Data source : (District profiles, 2019)

PROPOSED DESIGN - HUNG SHUI KIU

The proposal for Hung Shui Kiu focuses on creating multifunctional, diverse and vibrant spaces that reactivate the street life. A few nodes of economic activity are planned, with Hung Shui Kiu being treated as the new economic centre for the proposed north-western economic corridor. (The new development area, 2019)

The proposal also indicates green corridors that are intended to connect different parts of the area with green spaces. The villages are surrounded by green spaces that isolate them from the new developments around them.

However, these proposals raise several questions that help us further define the challenges in these areas. Firstly, the green corridors proposed do not connect to the larger regional landscape. This is an opportunity to strengthen the identity of the regional landscapes within the urbanised areas.

Secondly, the presence of low income groups, villages, new housing and economic investment raises the question of the definition of vibrancy and its accessibility.

Lastly, the spatial and social dialogue between the villages, Tin Shui Wai and the new developments needs to be understood and must inform the planning of these areas.

Figure 5.29 View of proposed plan ; Source : (The new development area, 2019)

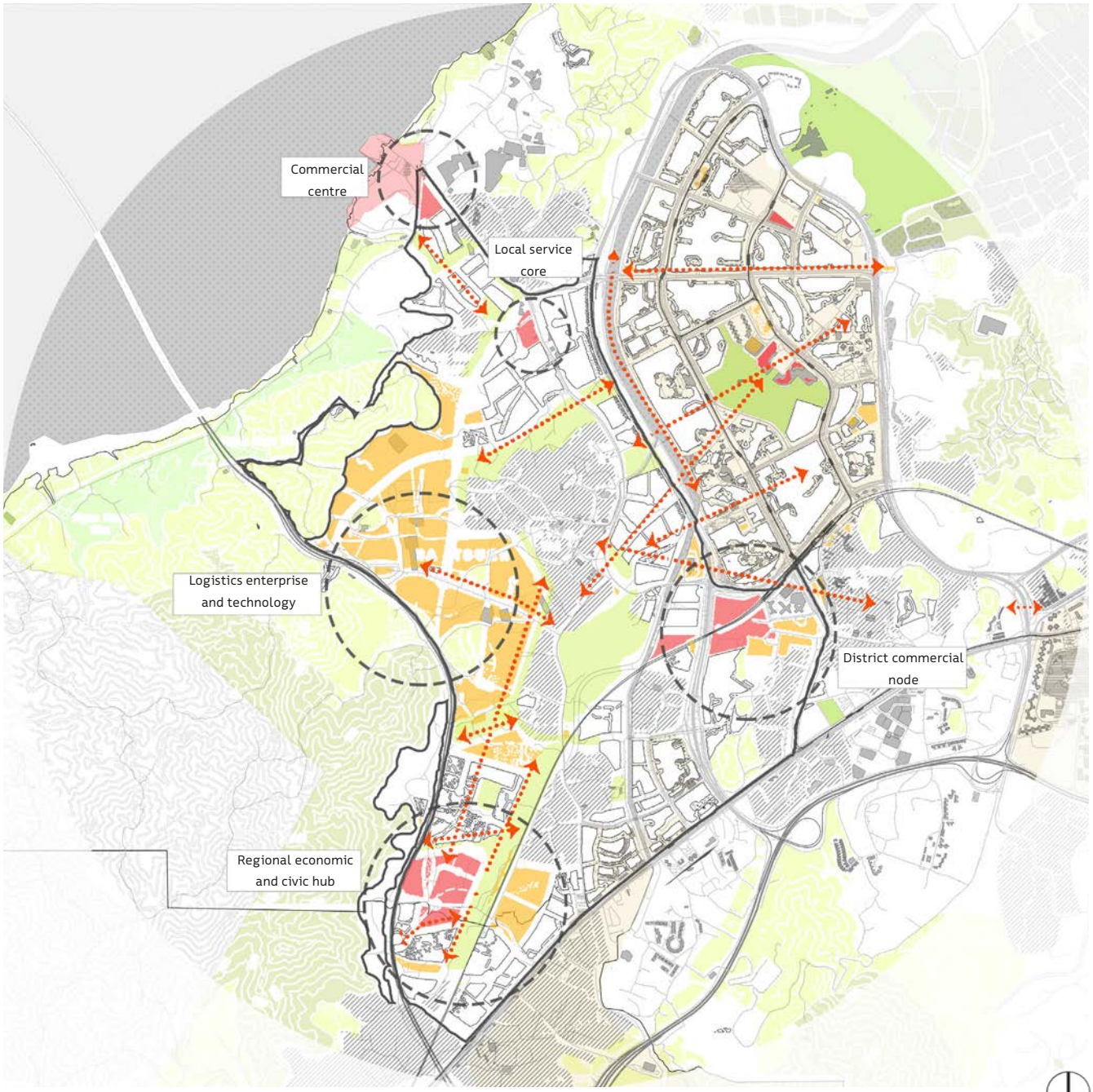


Figure 5.30 Proposed development of Hung Shui Kiu ; Data source : (The new development area, 2019)

MEGABLOCK STRUCTURE

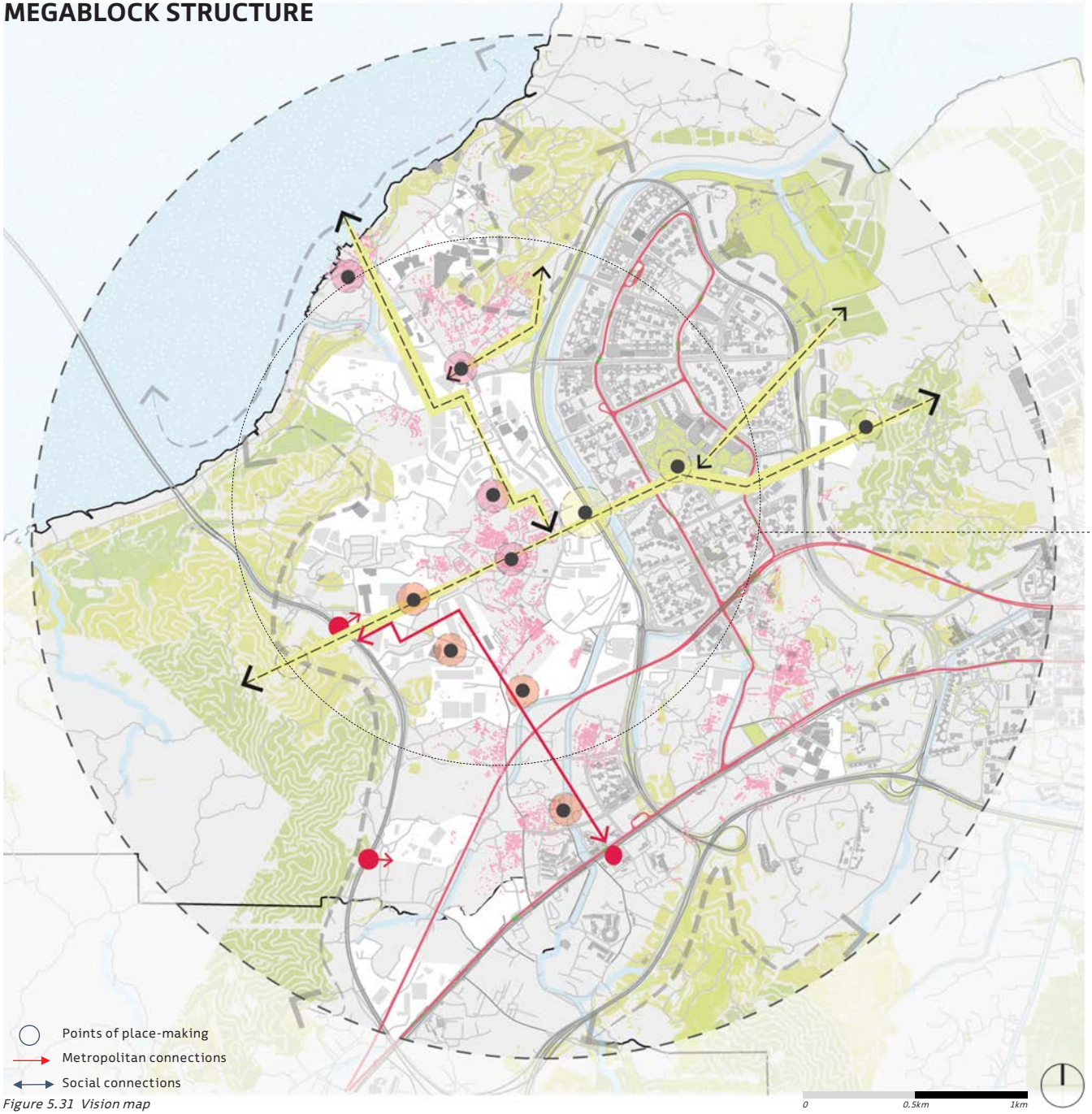
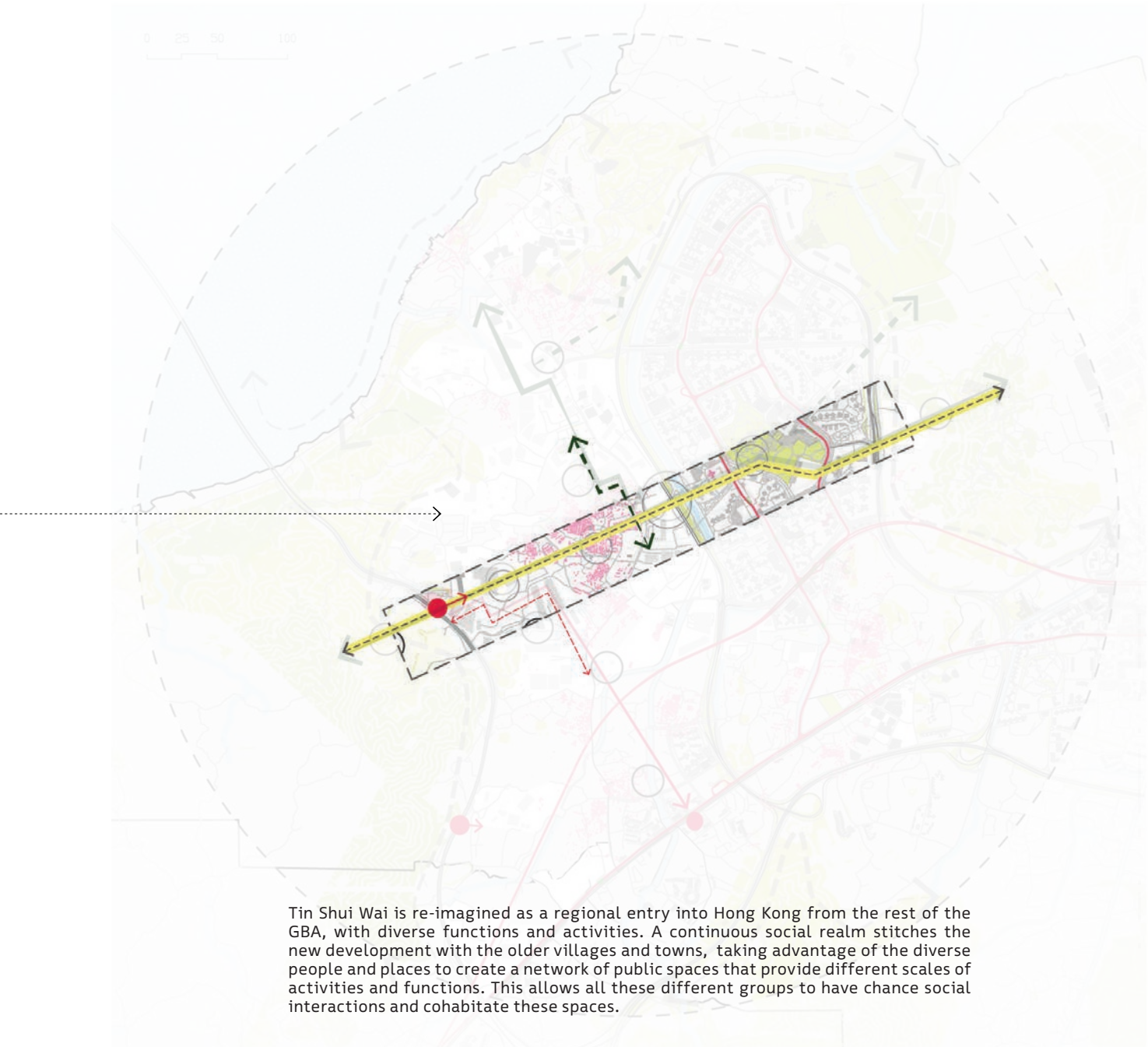


Figure 5.31 Vision map



Tin Shui Wai is re-imagined as a regional entry into Hong Kong from the rest of the GBA, with diverse functions and activities. A continuous social realm stitches the new development with the older villages and towns, taking advantage of the diverse people and places to create a network of public spaces that provide different scales of activities and functions. This allows all these different groups to have chance social interactions and cohabitate these spaces.

Figure 5.32 Vision map

MEGABLOCK STRUCTURE

0 25 50 100

We chose to analyse and define the portion of the megablock depicted below as we consider this social axis to be the defining intervention of this area, facilitating a continuous social network that will stitch the various fragments together.

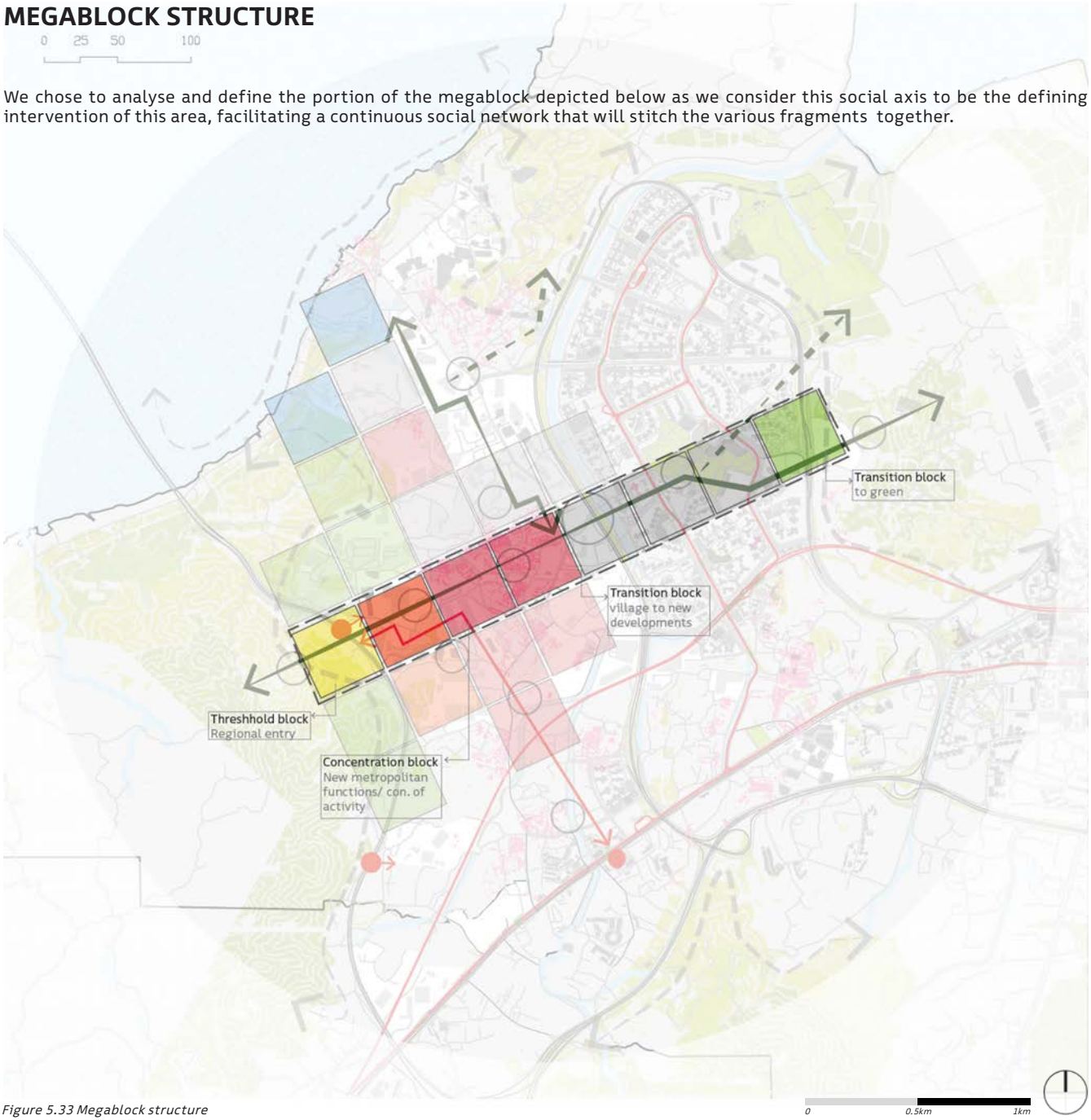


Figure 5.33 Megablock structure

MEGABLOCK CONFIGURATION

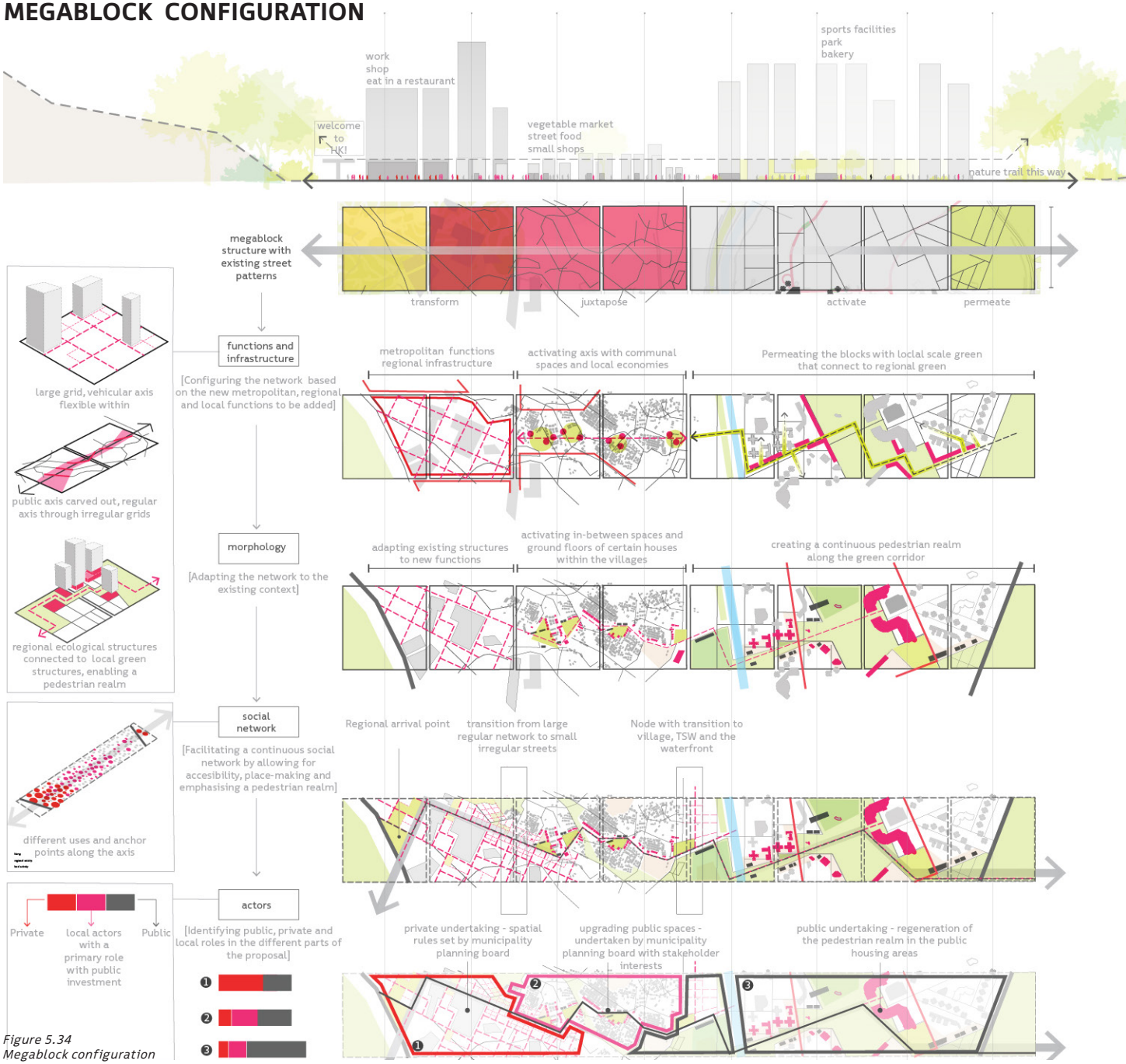


Figure 5.34
Megablock configuration

DESIGN EVALUATION - SPACE SYNTAX

BEFORE

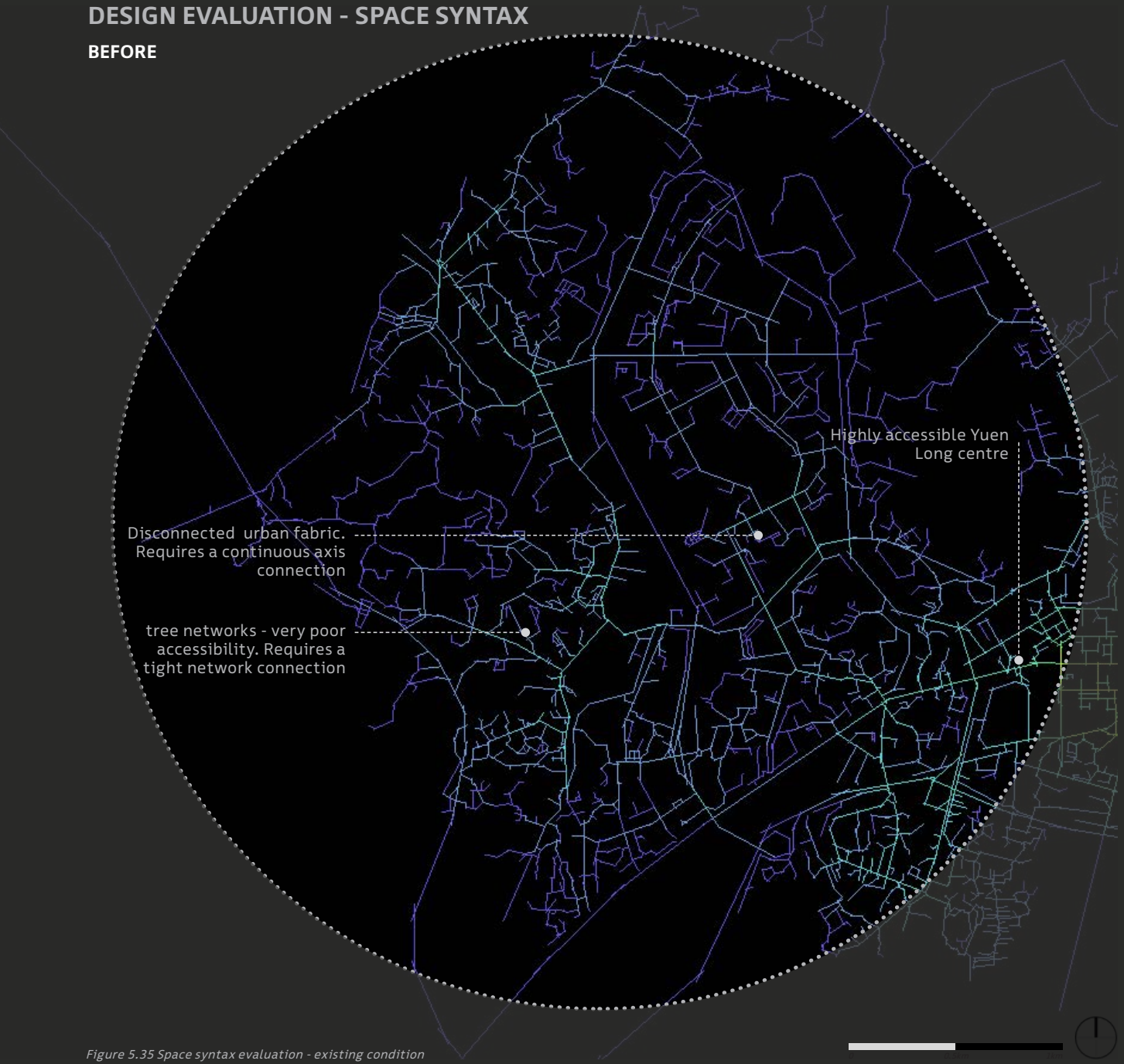


Figure 5.35 Space syntax evaluation - existing condition

DESIGN EVALUATION - SPACE SYNTAX

AFTER - LOCAL INTEGRATION

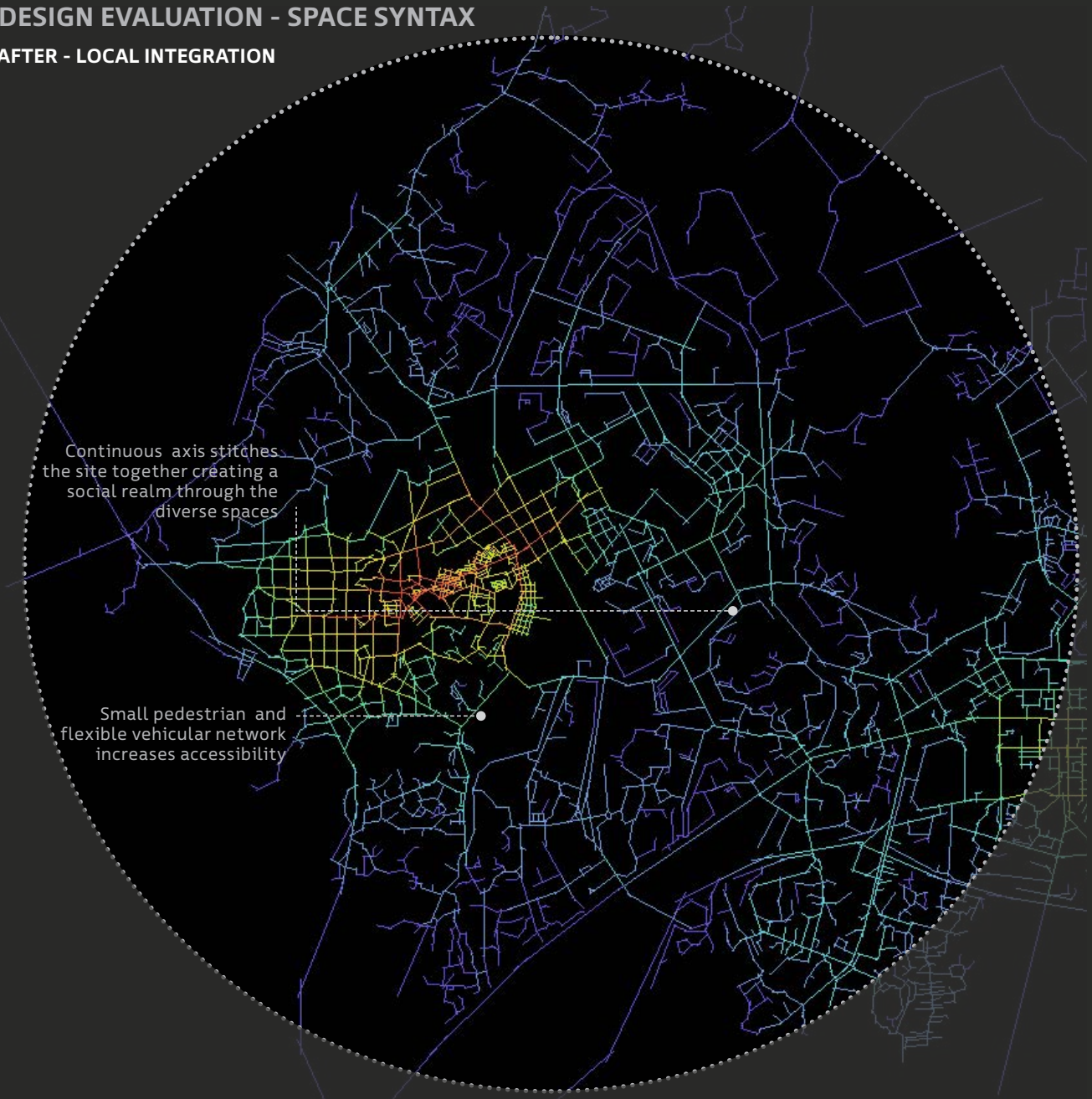


Figure 5.36 Space syntax evaluation - proposed interventions

RECONFIGURED MEGABLOCK

The reconfigured networks of public space, activated by new social and economic functions, creates a new social realm and activates these spaces.

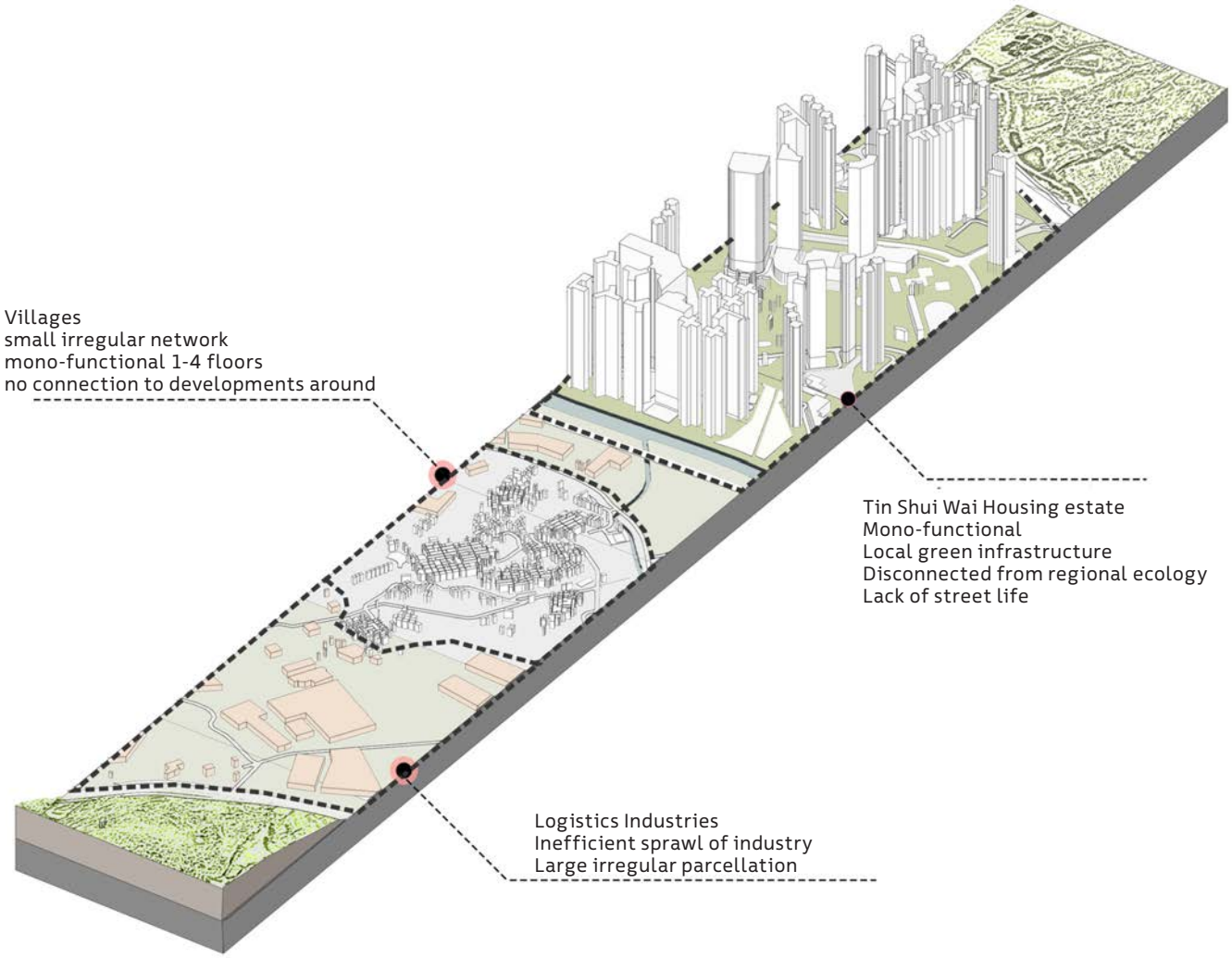
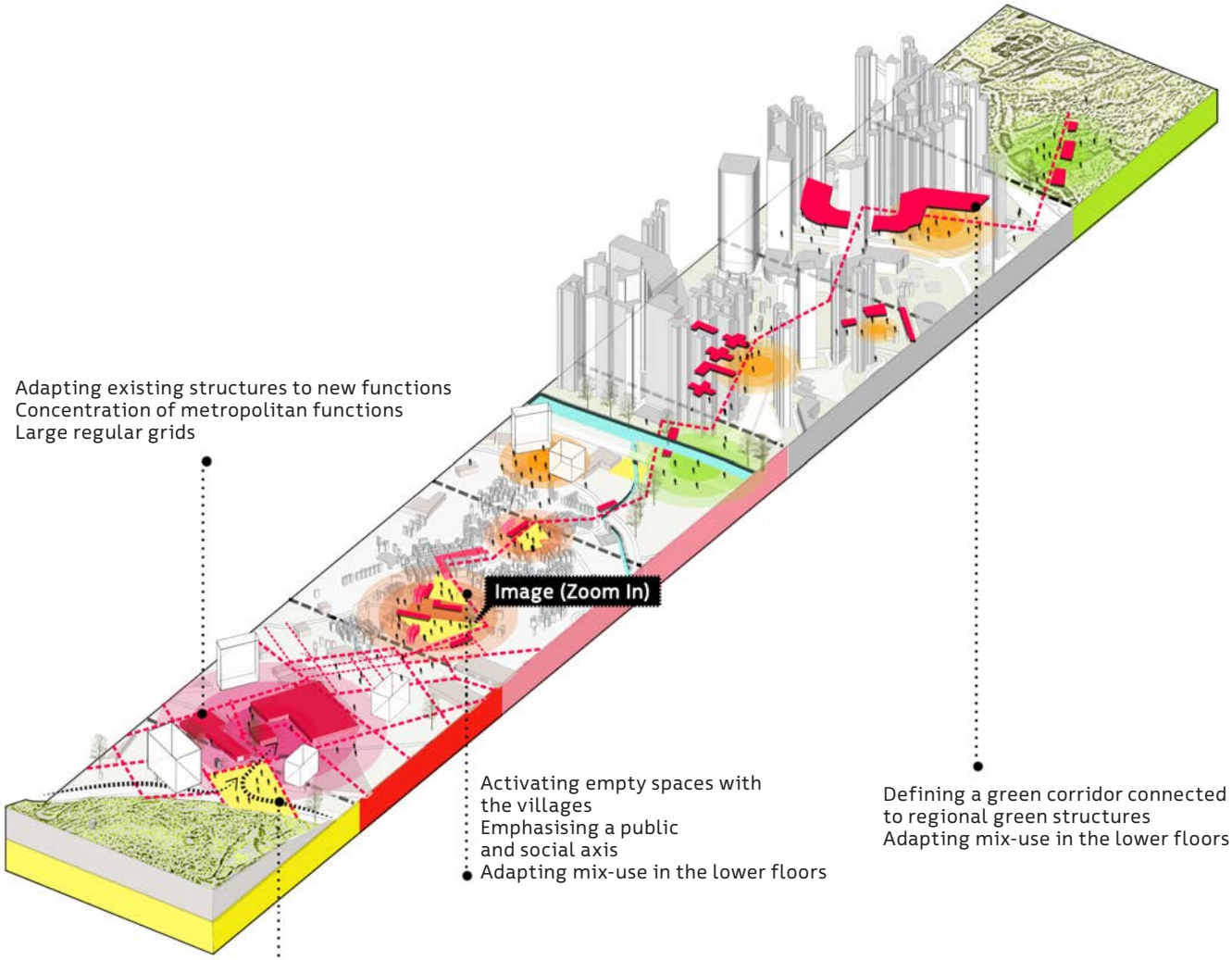


Figure 5.37 Isometric view of existing condition vs activated communal spaces

Tourists
Locals
Migrants
High skilled workers
Logistics workers



TIN SHUI WAI - NEW PUBLIC SPACES FOR COHABITATION - VIEW

Interpreting the spatial conditions required for cohabitation, it is first ensured that there is high connectivity and accessibility to the space, as a part of the larger network. This public space stitches together the villages and the new development, with a strong social axis that connects it to the new core and Tin Shui Wai centre.

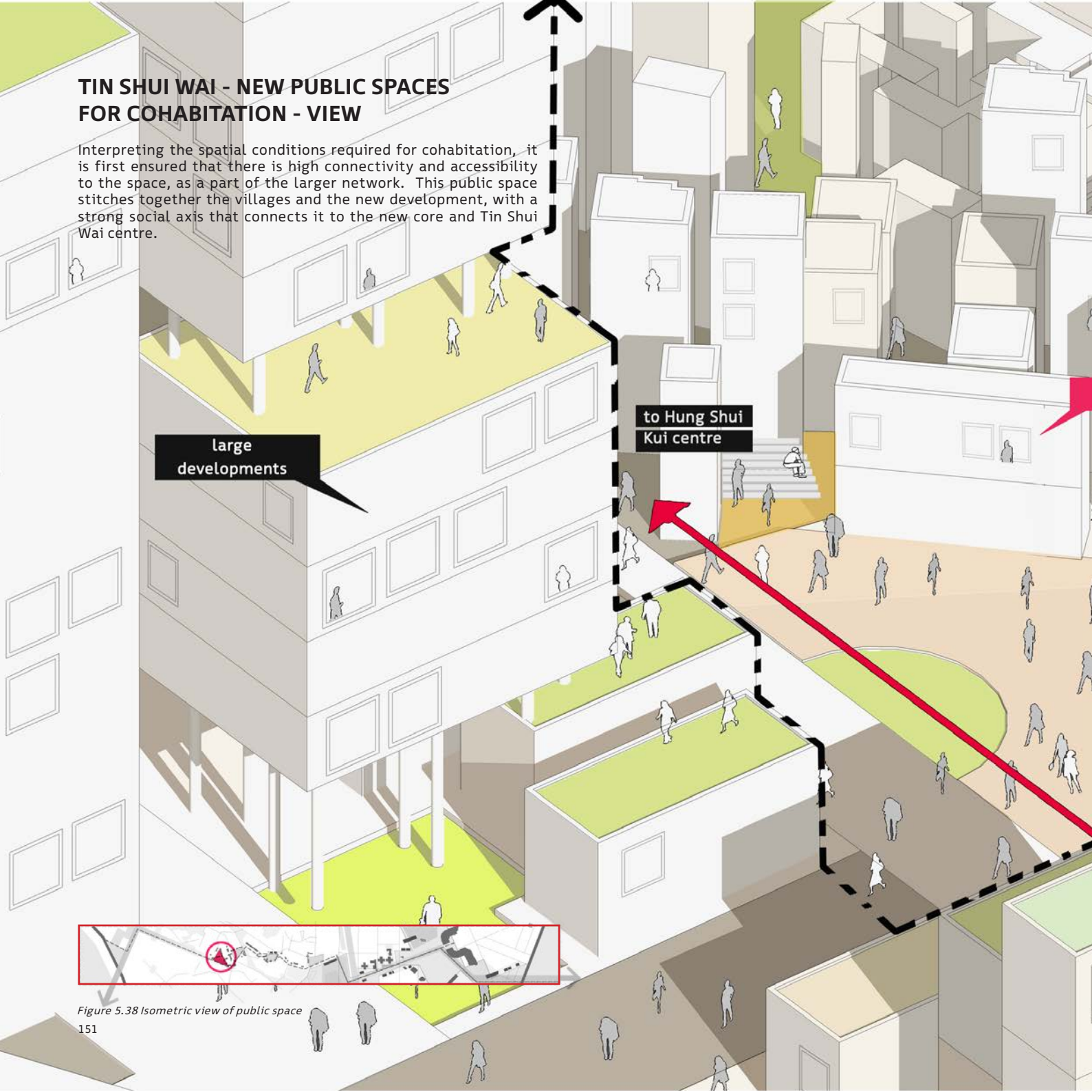
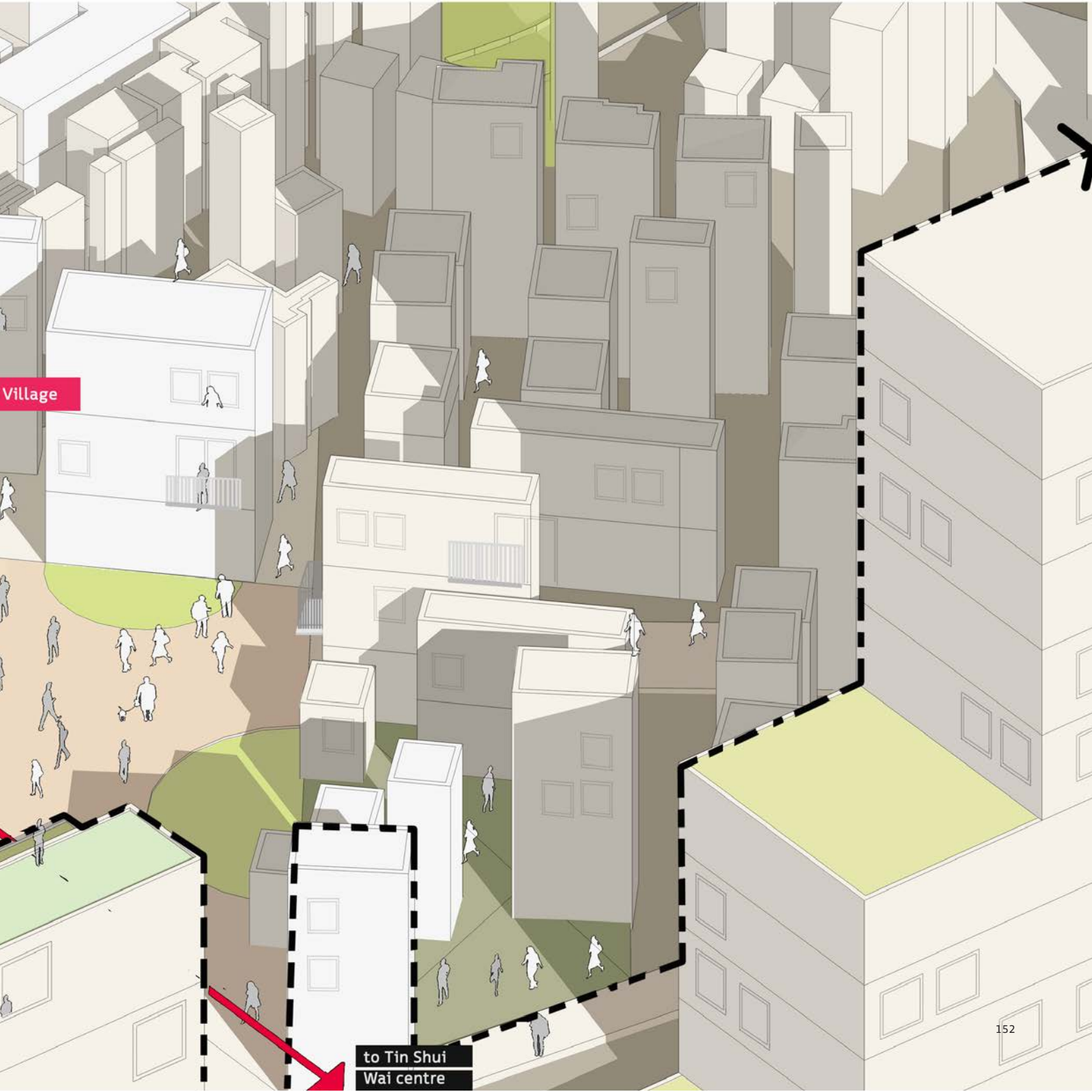


Figure 5.38 Isometric view of public space


Village
to Tin Shui
Wai centre

TIN SHUI WAI - NEW PUBLIC SPACES FOR COHABITATION - VIEW

A public space that draws diverse people and connect different destinations offers its users many choices in terms of scales of economies and activities. This creates a unique blend of cultural and traditional activities with metropolitan functions and large scale recreation, a characteristic often found n Hong Kong central. Further, these different choices lead to the attraction of more people to these spaces, increase chance social encounters and spark spontaneous social activities.

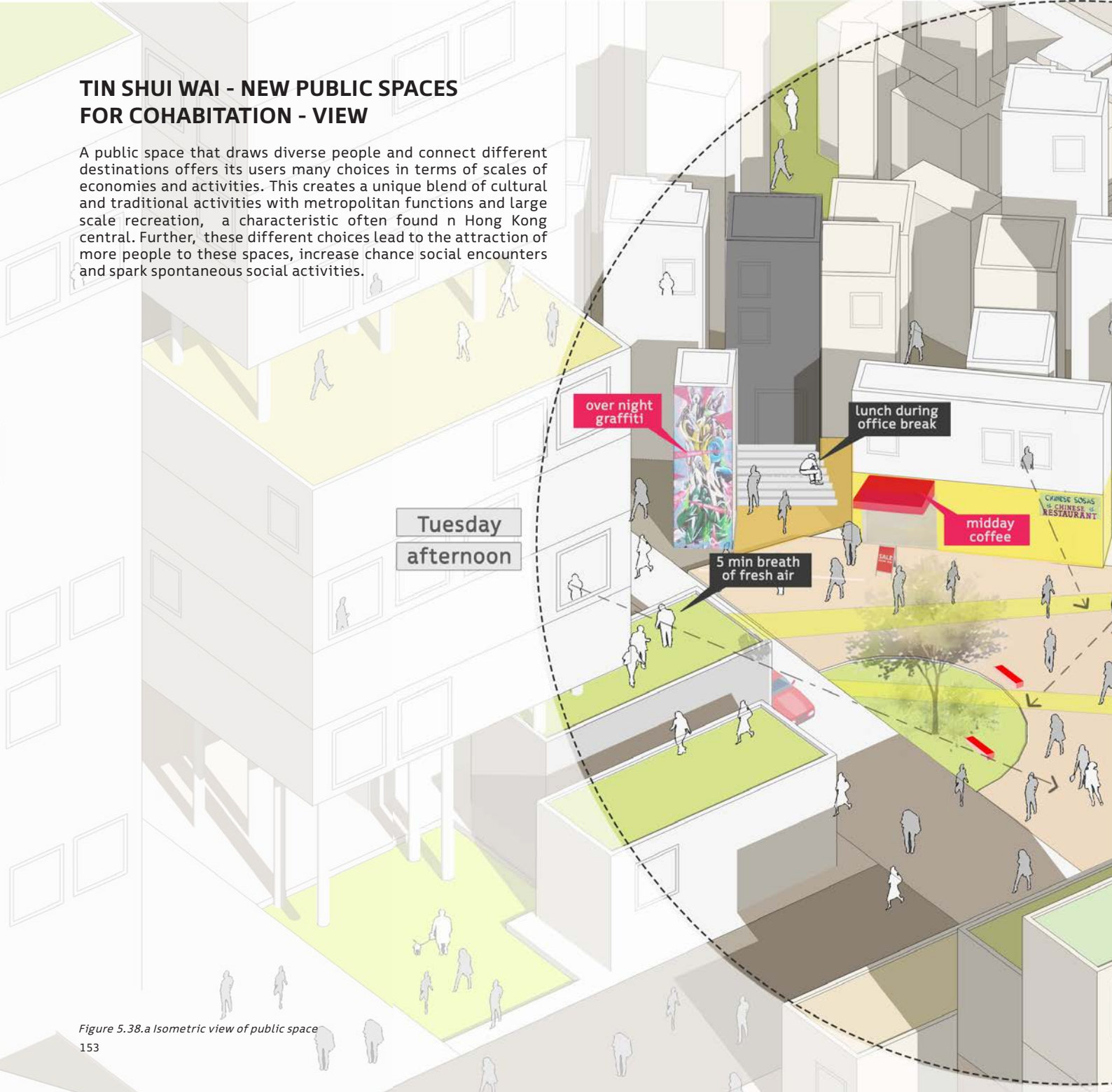


Figure 5.38.a Isometric view of public space


eyes on the street
hot dumplings for snack time

TIN SHUI WAI - NEW PUBLIC SPACES FOR COHABITATION - VIEW

A public space that draws diverse people and connect different destinations offers its users many choices in terms of scales of economies and activities. This creates a unique blend of cultural and traditional activities with metropolitan functions and large scale recreation, a characteristic often found n Hong Kong central. Further, these different choices lead to the attraction of more people to these spaces, increase chance social encounters and spark spontaneous social activities.

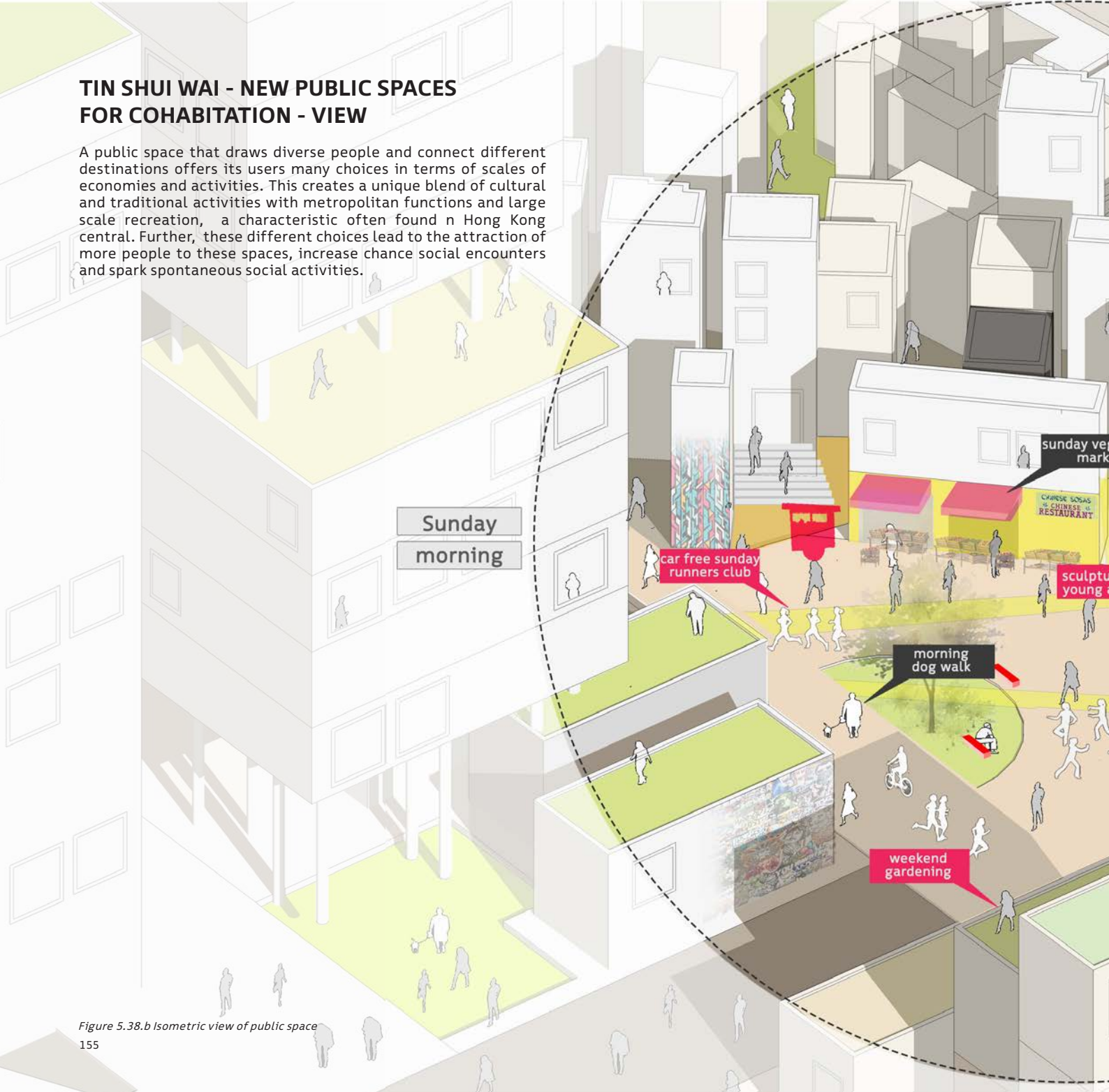


Figure 5.38.b Isometric view of public space


getable
et
re by
artist
womens
Tai chi club

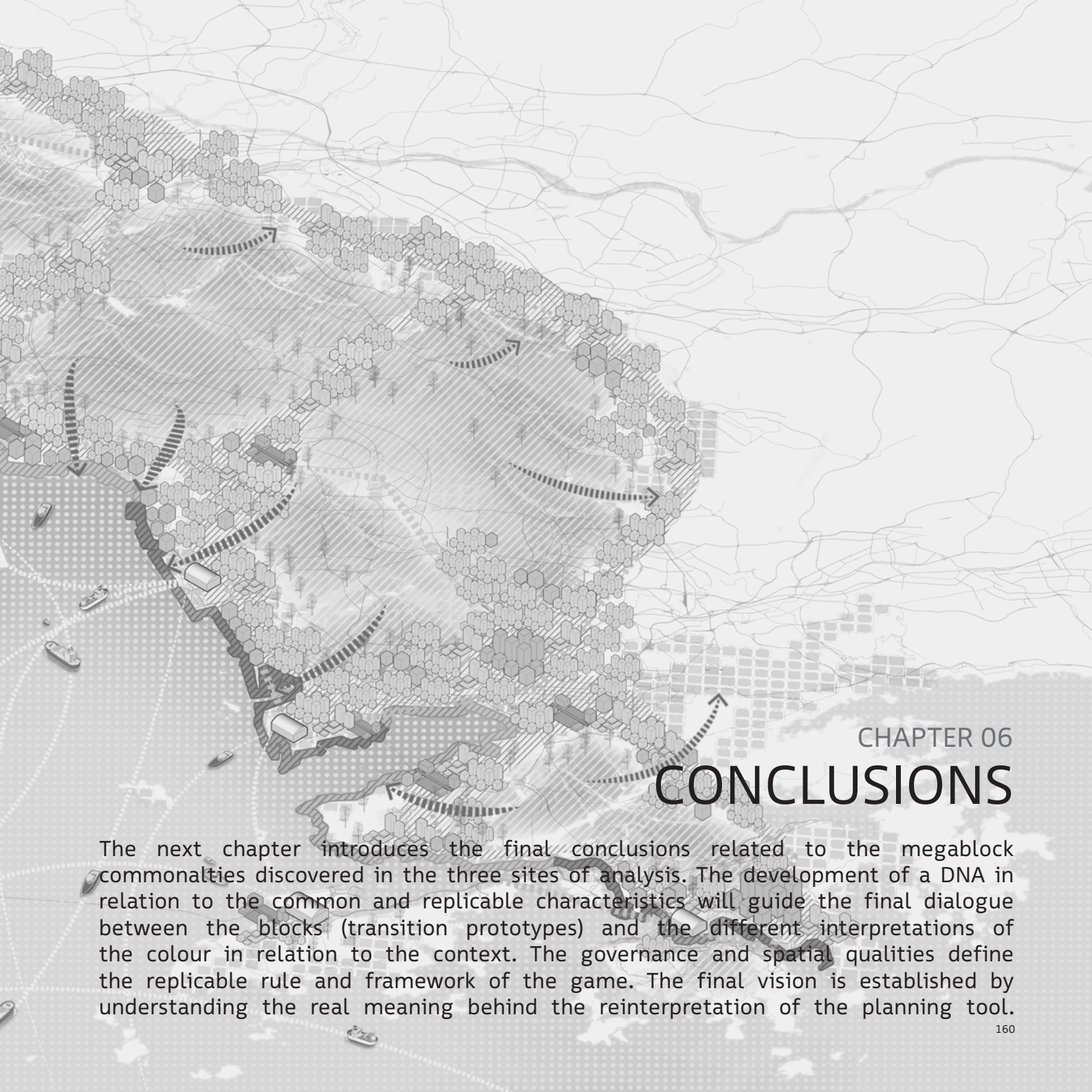
TIN SHUI WAI - NEW PUBLIC SPACES FOR COHABITATION - VIEW

A public space that draws diverse people and connect different destinations offers its users many choices in terms of scales of economies and activities. This creates a unique blend of cultural and traditional activities with metropolitan functions and large scale recreation, a characteristic often found n Hong Kong central. Further, these different choices lead to the attraction of more people to these spaces, increase chance social encounters and spark spontaneous social activities.

Figure 5.38.c Isometric view of public space


night time shopping
sea food stall
meeting point

Figure 6.1 Vision GBA



CHAPTER 06

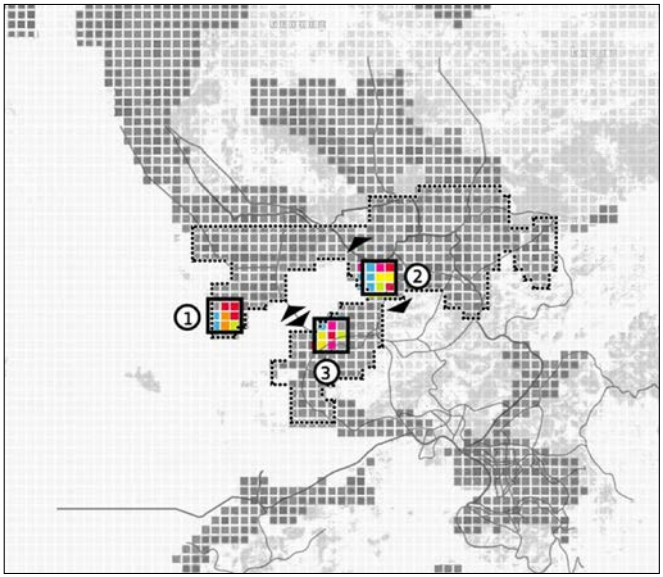
CONCLUSIONS

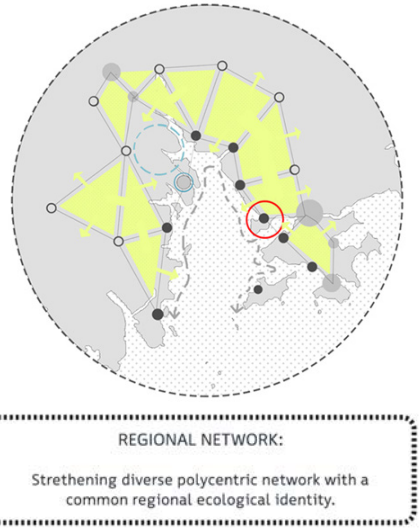
The next chapter introduces the final conclusions related to the megablock commonalties discovered in the three sites of analysis. The development of a DNA in relation to the common and replicable characteristics will guide the final dialogue between the blocks (transition prototypes) and the different interpretations of the colour in relation to the context. The governance and spatial qualities define the replicable rule and framework of the game. The final vision is established by understanding the real meaning behind the reinterpretation of the planning tool.

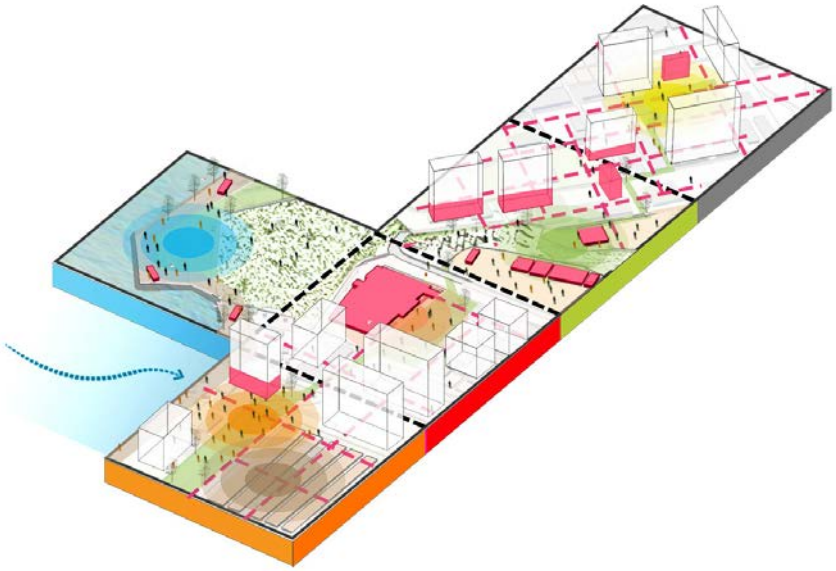
EXTRAPOLATING PROTOTYPES FROM BLOCK CONFIGURATIONS

The three sites look into challenges posed in the three different scales of analysis. While the Chiwan port proposal addresses the need for a common identity in relation to the water edge, the Shenzhen-Hong Kong proposal explores the nature of transition between two cities within the GBA and the Tin Shui Wai proposal seeks to understand the dialogue between the old and the new.

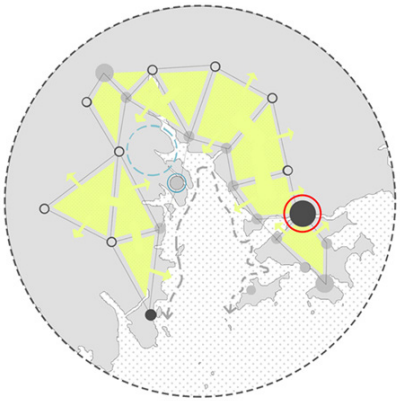
Having zoomed into three sites, there are different configurations that are defined for the various types of blocks. The next step is to identify the commonalities between these configurations and establish a replicable prototype throughtout the GBA region.







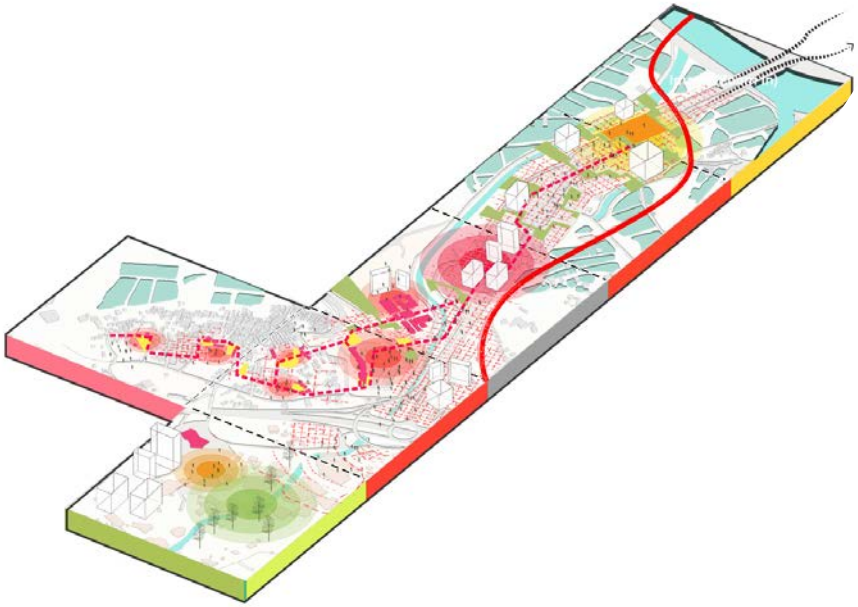
01. Chiwan port, Shezhen

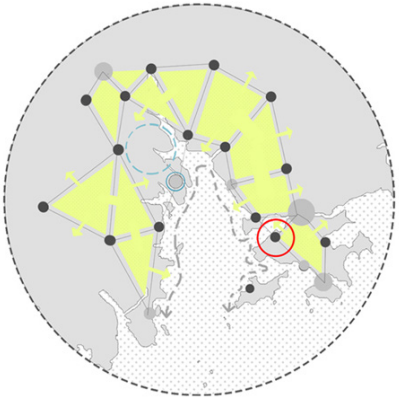


URBAN STRUCTURE:

Reinterpretation of the Megablock structure as a spatial frame that enables diversity and fosters spatial and social integration.

02. Shenzhen-Hong Kong border

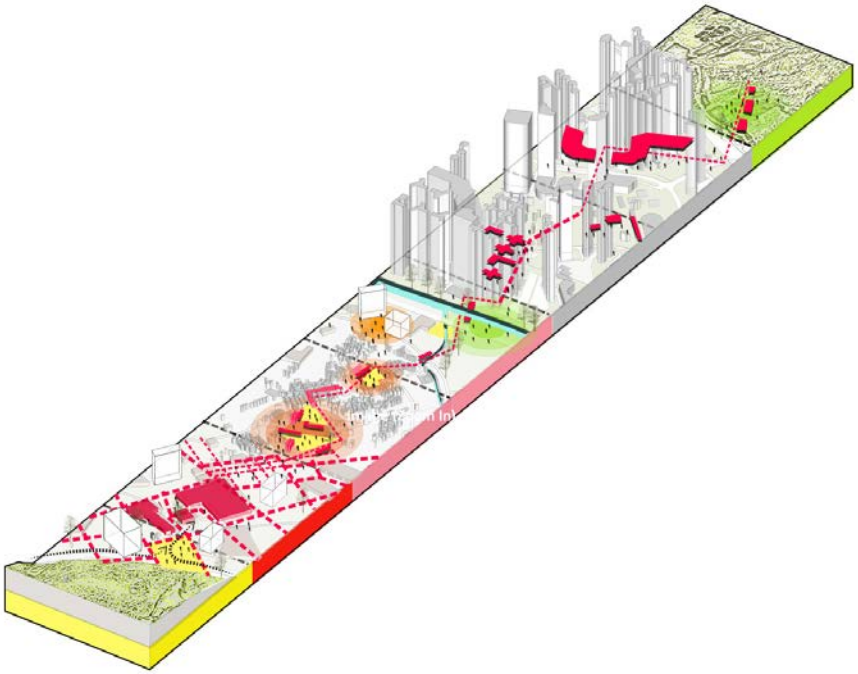




URBAN STRUCTURE:

Reinterpretation of the Megablock structure as a spatial frame that enables diversity and fosters spatial and social integration.

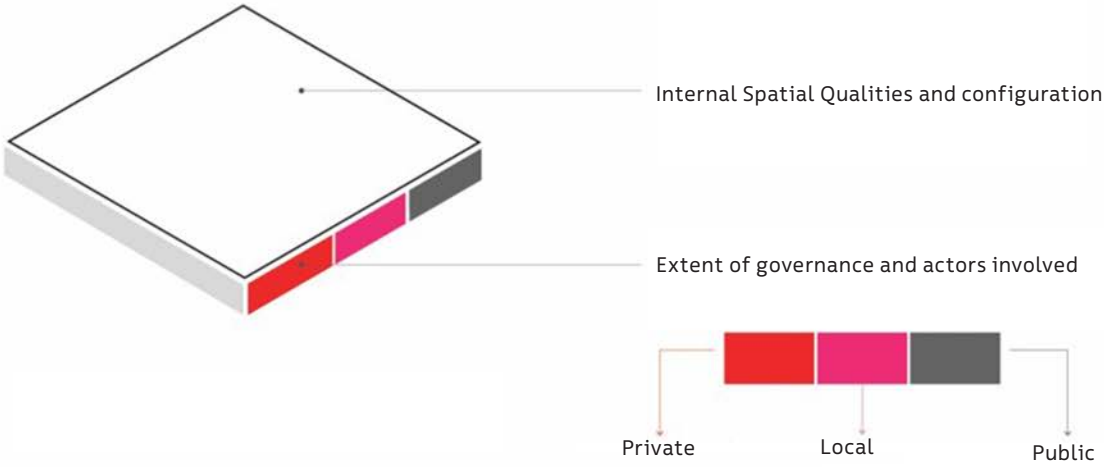
03. Tin Shui Wai



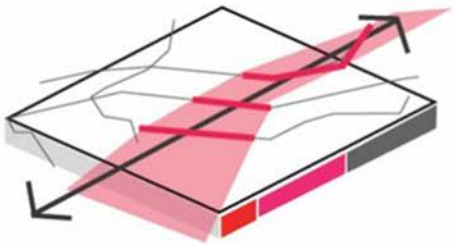
DNA OF THE MEGABLOCK

DNA DEFINITION

After analysing the three different sites, and recognising the commonalities between the proposed blocks, a DNA is established for each one of the colour blocks in order to create a prototype that is replicable throughout the GBA Planning Structure. Therefore, there is one component of these blocks which is replicable and an other which adapts to the context of its location. This replicability of the rules aides in maintaining the fast paced development that exists, while allowing for spatial definitions that are not prioritised in the existing scenario.



PINK TRANSITION BLOCK

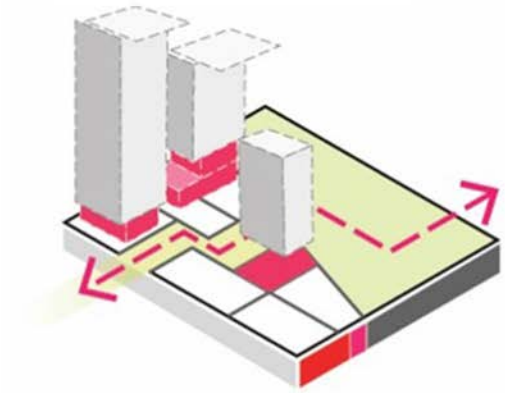


Internal Spatial Qualities and configuration: The DNA of the Pink transition block is defines by a public axis carved out as a regular axis through an existing irregular grid.

Extent of governance: Local actor have a primary role in collaboration with the public sector, which establishes specific rules to protect and activate the local heritage and environments.

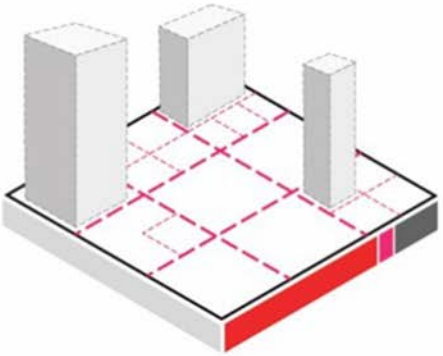
Figure 6.2 Block DNA

GREEN TRANSITION BLOCK



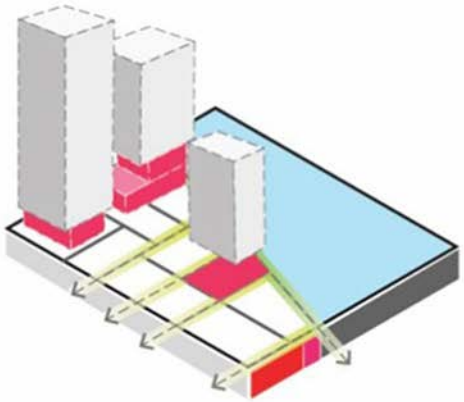
The DNA of the Green transition block is defined by the regional ecological structures connected to local green structures that will enable the activation of the pedestrian realm. Public actors have a primary role in collaboration with the private sector in establishing specific rules to protect the ecological structures, create recreational axes and enhance biodiversity.

CONCENTRATION BLOCK



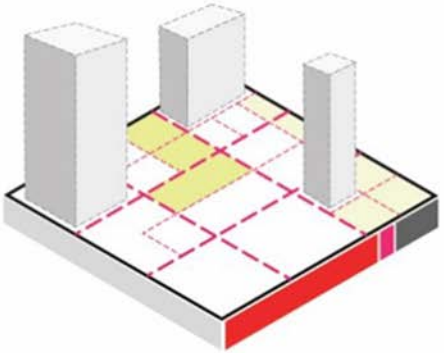
The DNA of the Concentration block is defined by a large grid with vehicular axis that enables the flexible design within it. The concentration is defined by diverse uses with a high concentration of economic or recreational uses. Private actors have a primary role with a smaller role for the public and local sectors, designing high diverse concentration centres to enhance a vibrant environment.

BLUE TRANSITION BLOCK



The DNA of the Blue transition block is defined by the public realm along the waterfront that also offers ecological protection to the edge, with high permeability into the city block. Public actors have a primary role in collaboration with the private sector in establishing specific rules for waterfront, create recreational axes and flooding strategies.

THRESHOLD BLOCK

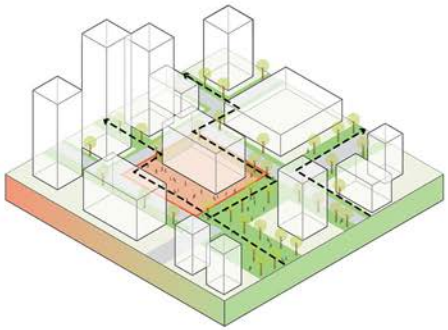


The DNA of the Threshold block is defined by the scale of functions and spaces in order to accommodate the flows of people defined by regional and global attraction points. Defined by a large grid with vehicular axis that enables the flexible design within it. Private actors have a primary role with a less collaboration with the public and local sectors.

DIALOGUE BETWEEN THE MEGABLOCKS

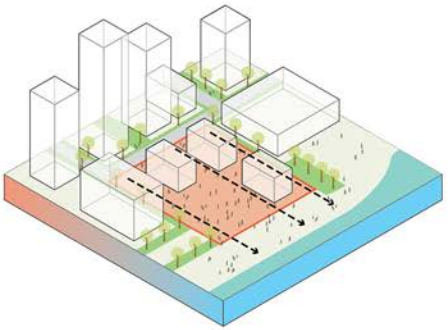
Having defined the commonalities in the internal configuration of the different blocks, they are further defined based on the blocks that are present adjacent to them. The spatial definitions based on these interrelations allows for a continuous social realm to flow through the blocks, stitching together the urban fabric.

RED GREEN TRANSITION



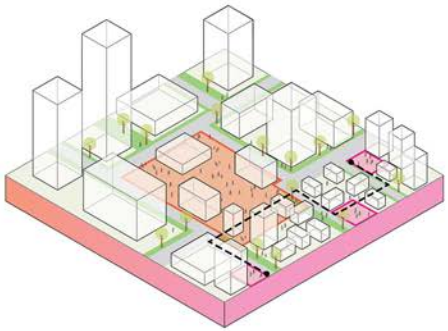
The permeability of green, scaled down into high concentration area. The scaling up and down of the grid in relation to high activity in the concentration block.

RED BLUE TRANSITION



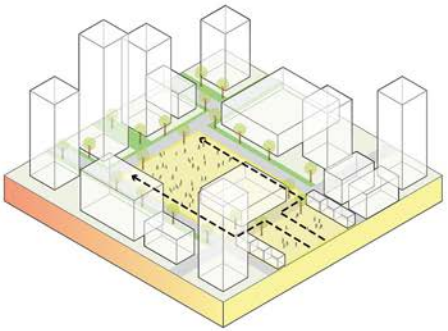
The transition of High concentration in relation to water needs recreational activities, high amount of public spaces and multiple accesses to the waterfront.

RED PINK TRANSITION



The grid is scaled down from an area of high concentration to an area of villages. The network of access between the two areas has shared public functions.

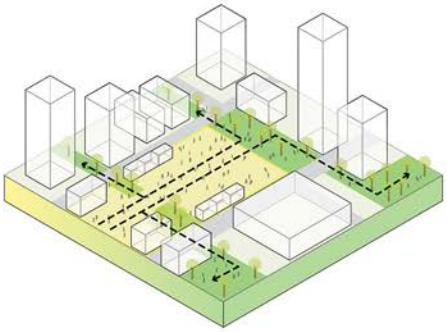
RED YELLOW TRANSITION



Large threshold space connected to high concentration of diverse functions emphasizing a highly active node of entry.

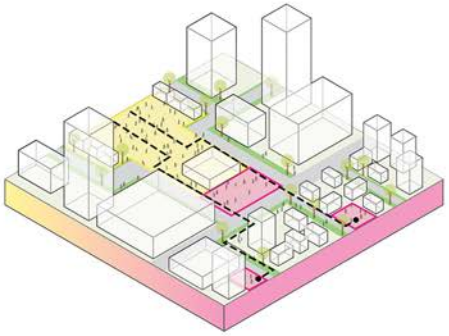
Figure 6.3 Block transitions

YELLOW GREEN TRANSITION



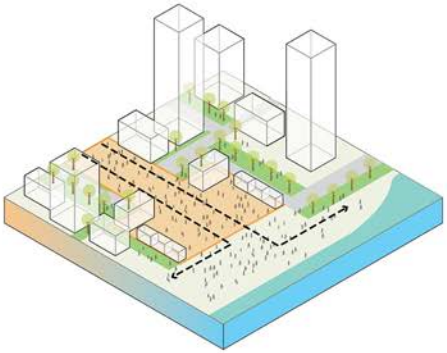
The transition defines a connection between a large regional ecological structure with a threshold space with green corridors and a high amount of public spaces connected to green and recreational functions.

YELLOW PINK TRANSITION



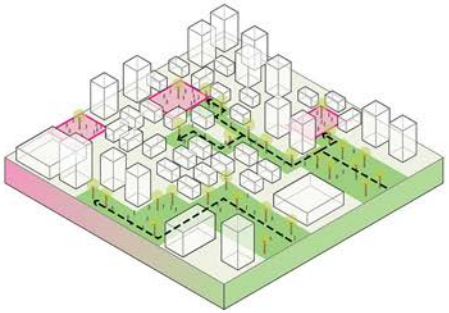
The transition defines a network of communal spaces and local economies between villages and new development scaled up to meet a large entry point.

ORANGE BLUE TRANSITION



The transition defines the relation of a large threshold space connected to the water edge housing high recreational activities. The high flow of people demands a high amount of open space a diversity in functions.

PINK GREEN TRANSITION



The transition defines the relation of larger regional structures of landscape tricked down into villages, creating a network of accessible green areas.

NEW BLOCK CHARACTERISTICS

GREEN AND BLUE BLOCKS

The ecological blocks start becoming more specific, with multiple variations based on relation to other blocks. The blue block, depending on the transitions and relations with the context, the proximity to gateways, the relation with the sea or the relation with internal water systems could have different shades of blue defining a different type of internal configuration or planning structure. Similarly, the green blocks are classified in relation to protected ecological infrastructures or smaller scale green recreational urban corridors.

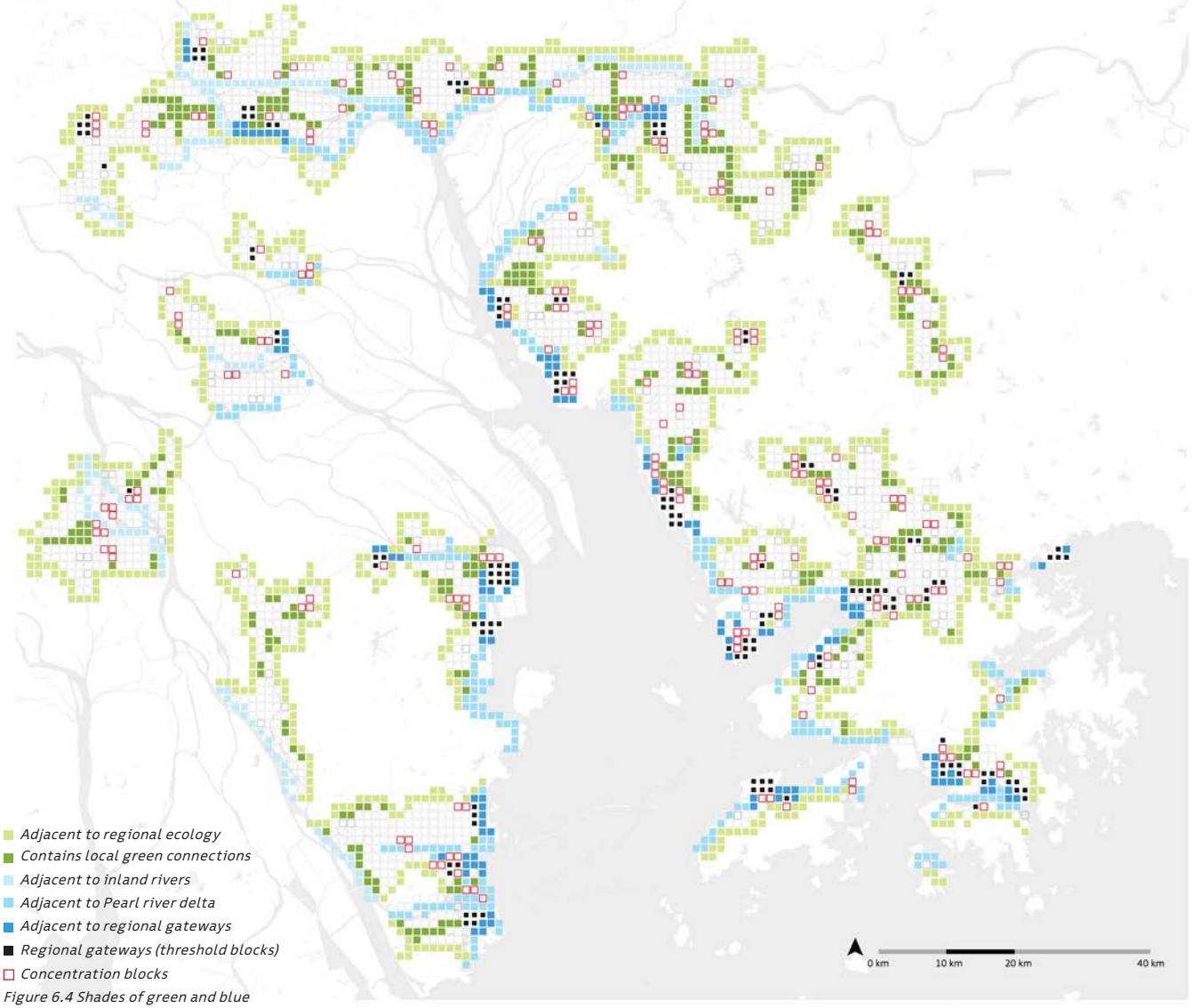


Figure 6.4 Shades of green and blue

NEW BLOCK CHARACTERISTICS

METROPOLITAN FUNCTIONS

The red blocks, can be further classified in shaded of red depending on the scale of functions and the flow of people. The concentration of activities in metropolitan cores can vary in functions also, having more economic driven or recreational driven blocks. The scale of the area, the relation with bigger infrastructures and the entrance and flow of people is determining the configuration and functions determined in each block.

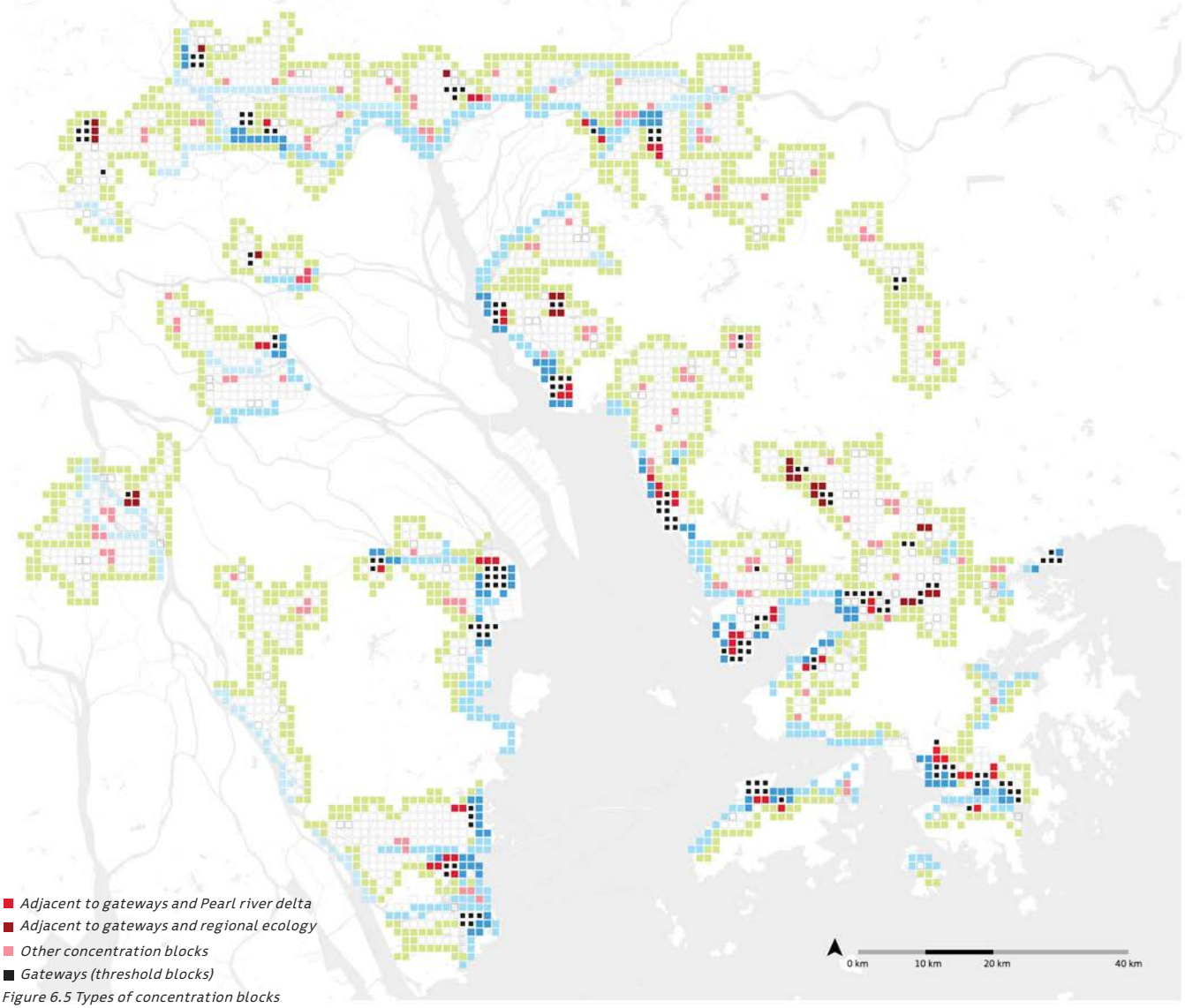
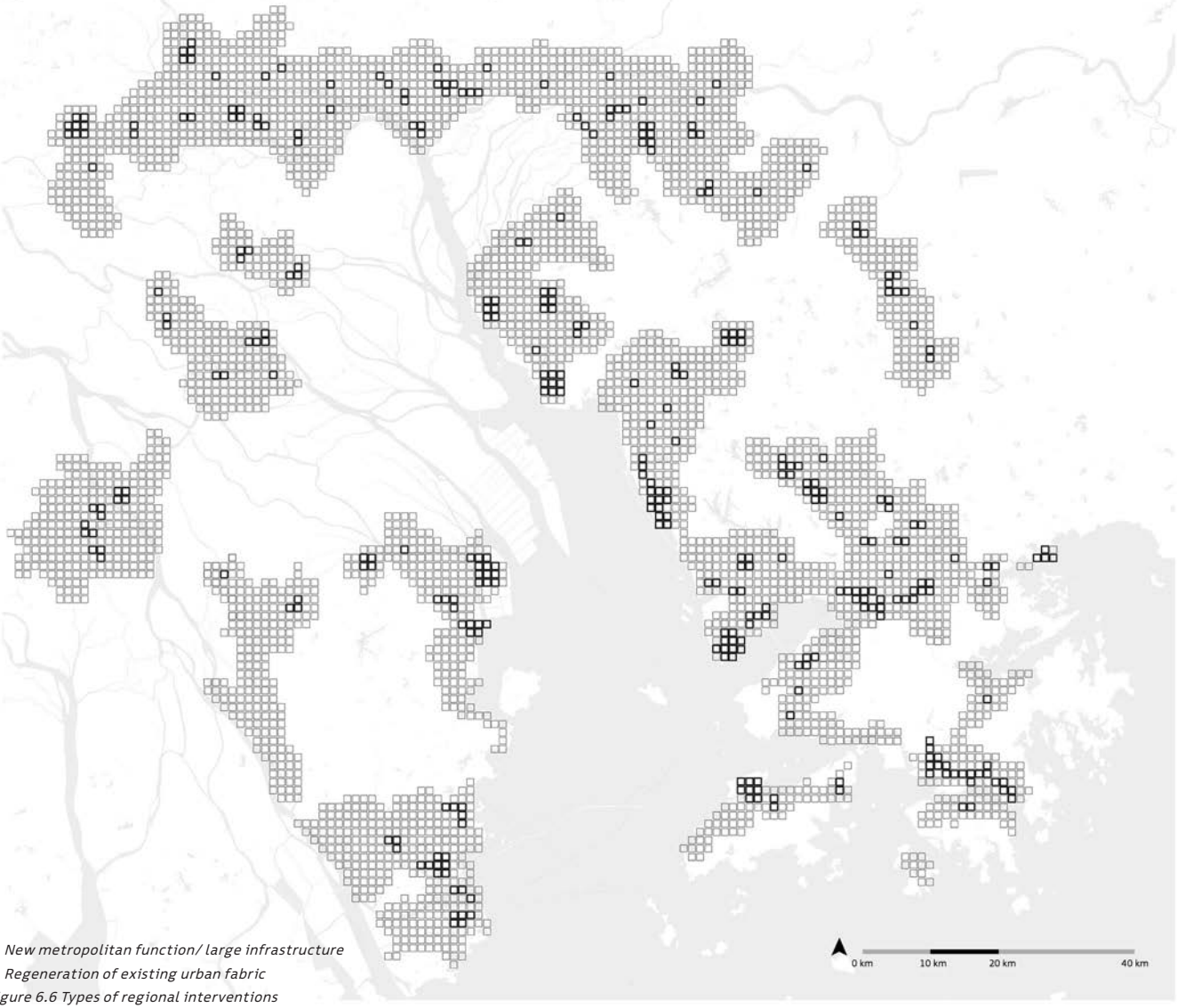


Figure 6.5 Types of concentration blocks

NEW BLOCK CHARACTERISTICS

GATEWAYS

The type of blocks not only could have variation in its colours, it also can find commonalities in terms of planning and governance. The black blocks define the requirement of additional functions and large infrastructure in relation to the metropolization process as opposed to regeneration of the existing urban fabric in the white blocks. The planning structure can have different interpretations depending on the focuses of development and the scale of projection.



■ *New metropolitan function/ large infrastructure*

□ *Regeneration of existing urban fabric*

Figure 6.6 Types of regional interventions

NEW BLOCK CHARACTERISTICS

GOVERNANCE

The commonalities grouped in this map are defined by the dominant planning actors. The black structure represents government dominant action in the planning process, oriented towards a long term strategy implementation and a more rigid rule implementation. The pink blocks, on the other hand, are related to local growth in relation to local heritage and existing context, in which a more flexible planning strategy is determined. The white blocks represent higher the private sector has more control, with basic regulations set by the government. These leads to a structure where the edge conditions of the urban structure are well defined, with the room for flexibility within and point of unplanned and sometimes unexpected growth within. This results in a well defined spatial structure, while allowing the people to impose their own identity to it, over time.

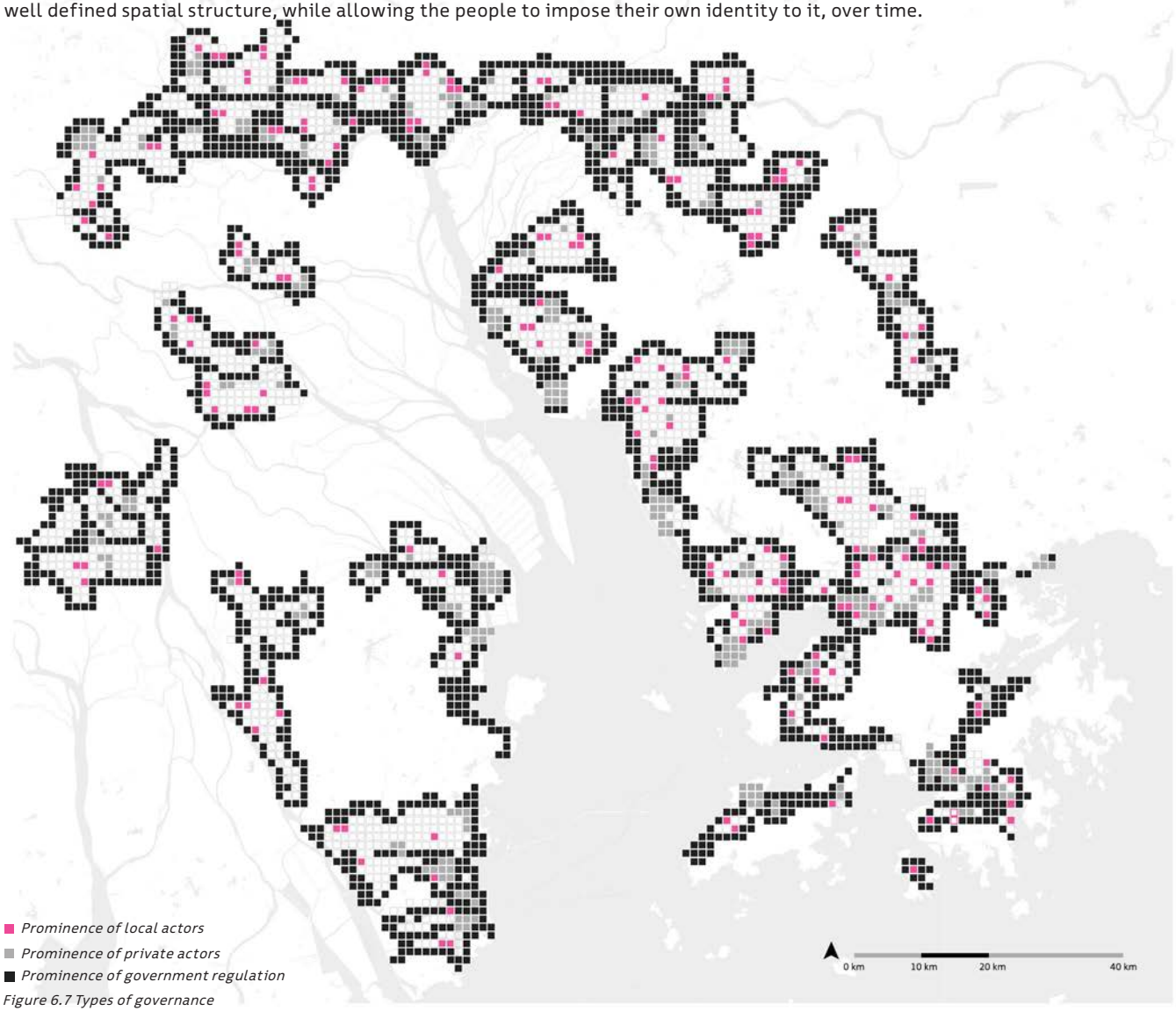
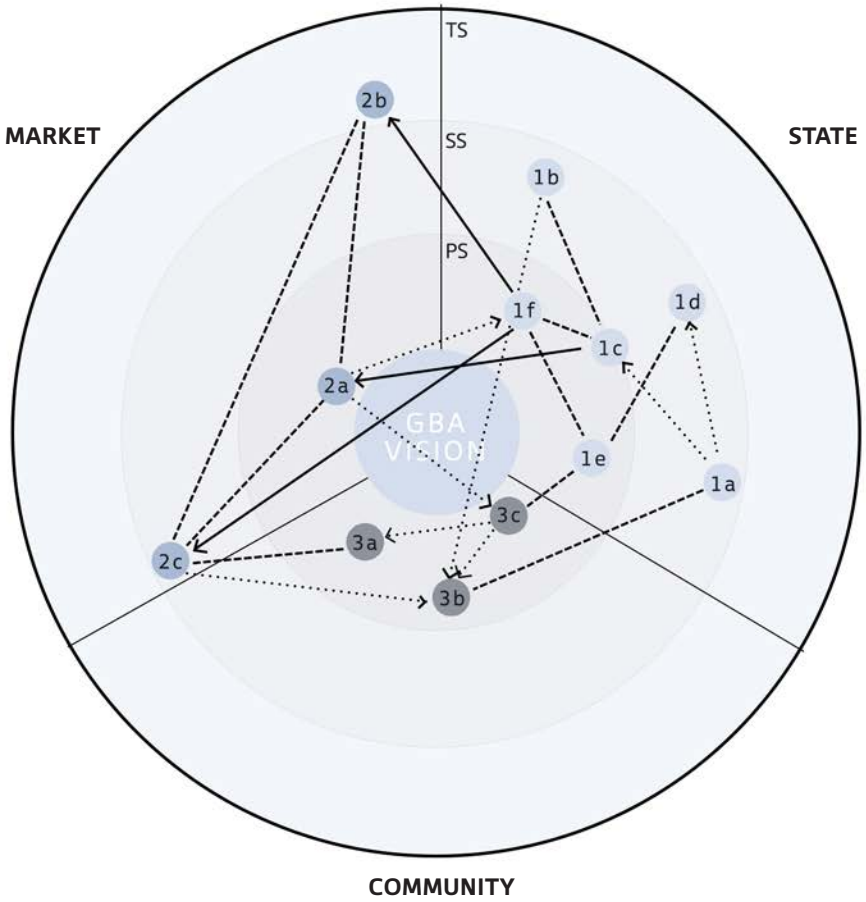


Figure 6.7 Types of governance

PLANNING FRAMEWORK

ONION ANALYSIS SCHEME

Having looked at the planning framework in terms of governance and actors in every block and as a result, the regional structure based on these factors, the relationship between these various actors, their importance in the process and their interests are analysed.



Type of Stakeholder

TS Tertiary Stakeholder

SS Secondary Stakeholder

PS Primary Stakeholder

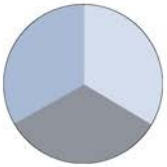
Type of Relations

Consultation

Collaboration

Regulation

Sectors Involved



Public Sector

Private Sector

Civil Society

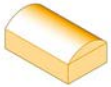
Figure 6.8 Actors and actions; Data source : (Romero, Daamen, & Ljubetic, 2017)

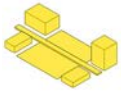
STAKEHOLDER SECTOR	INTEREST
1. State	
a. Housing and urban-rural development	Provides housing and regulates the state construction activities
b. Hong Kong and Macau affairs office	Promoting cooperation and coordination of political, economic and cultural ties between Mainland China and the Chinese Special Administrative Regions
c. National foresting and grassland administration	In charge of the national forestry affairs, promoting the protection of Ecological Infrastructures
d. Agriculture, fishing and conservation department	Responsible for agriculture and fisheries in Hong Kong, conservation projects and issues, and managing the country parks and special areas.
e. Urban Renewal authority	Responsible for promoting urban redevelopment, enhancing the cultural heritage and conservation of local heritage.
f. Planning department	Developing urban plans with an aim to ensuring the "health, safety, convenience and general welfare of the community through the process of guiding and controlling the development and use of land, and to bring about a better organised, efficient and desirable place to live and work."
2. Market	
a. Private Investors	Promotes efficient economic growth and development through job and income generation. Provides infrastructure and social services.
b. Construction Companies	Developing of infrastructure, social services, public spaces and living environment.
c. Architects and Urban Planners	Fulfilling the design and planning requirements of their clients, adhering to the regulations set by the city.
3. Community	
a. Community Associations	Takes into accounts the needs of the different individuals in a community and makes decisions with a broader perspective, for the good of the larger group
b. Local Residents (renters)	Benefits the most from improved quality of public spaces and regeneration of the urban fabric.
c. House Owners	Benefits from policies and development that increases the housing price and rental costs of their property. Interest might not always align with interventions for the benefit of the residents.

VISION FOR THE GBA

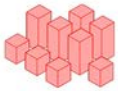
By 2030, the GBA will be a polycentric metropolitan region with diverse identities that finds a common ground through regional ecological structures. A restructured planning process will facilitate cohabitation of diverse people and identities by creating a resilient social network of collective spaces that will enrich the rapid development process of the region.

VILLAGE The villages interspersed through the city networks are opportunities for flexibility, adaptation and sometimes, the unexpected, enriching the urban fabric with vibrancy and culture.





REGIONAL ENTRY Regional points of entries to the different cities of the GBA allow for the spaces to display a common regional identity, while establishing clear points of differences between them by creating a sense of arrival.



LARGE AND SMALL CONCENTRATIONS A network of metropolitan functions that become an interconnected economic system that allows for polycentric growth of the region. This also results in every node acquiring different characteristics and functions within the larger system, fostering its own unique identity.

Urban accessible water edges

Green Corridors and regional connections

WATERFRONT. Opens up the city to common recreational and cultural spaces, facilitating the regional water structures to evolve into a common identity for the GBA.

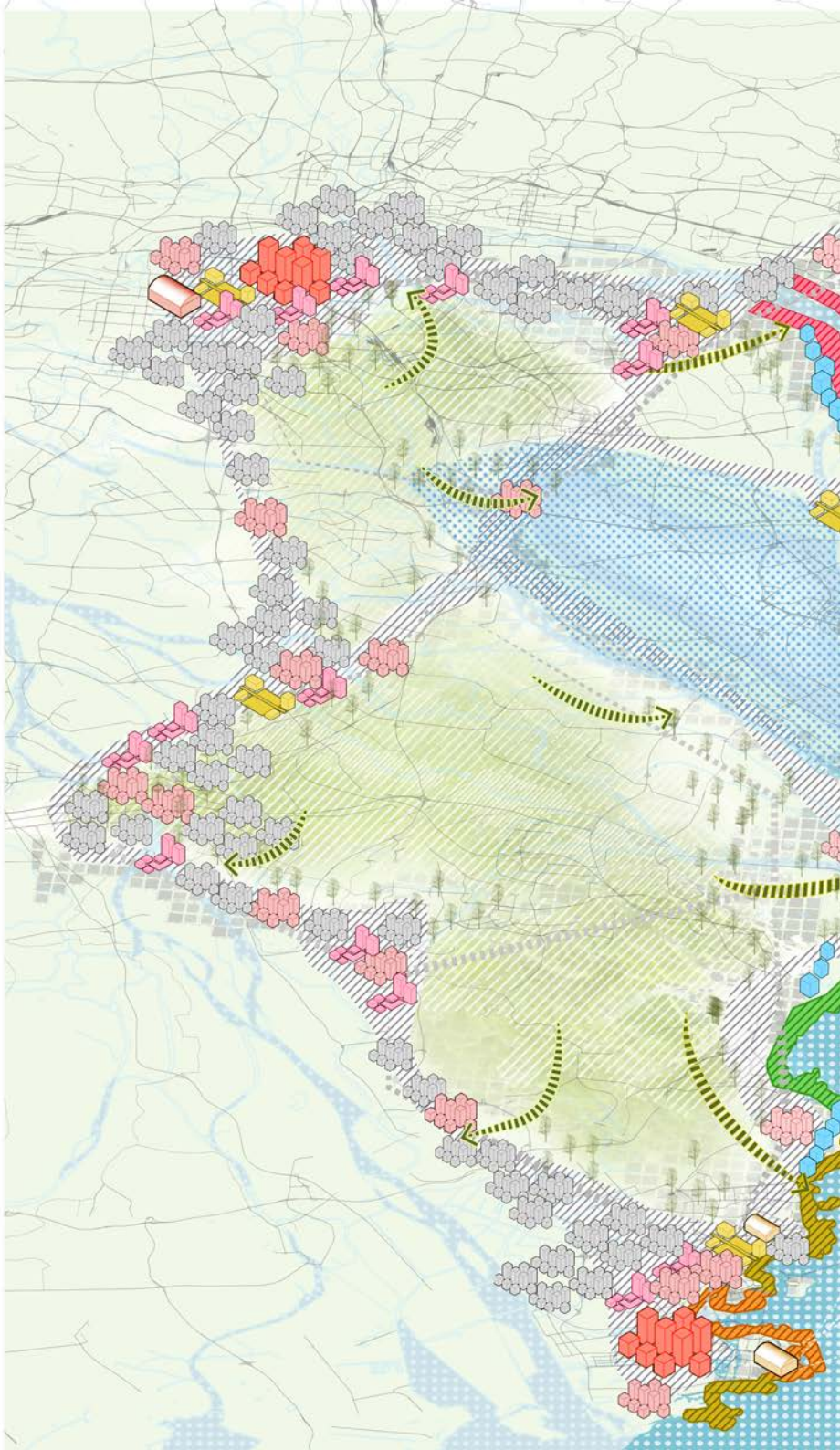
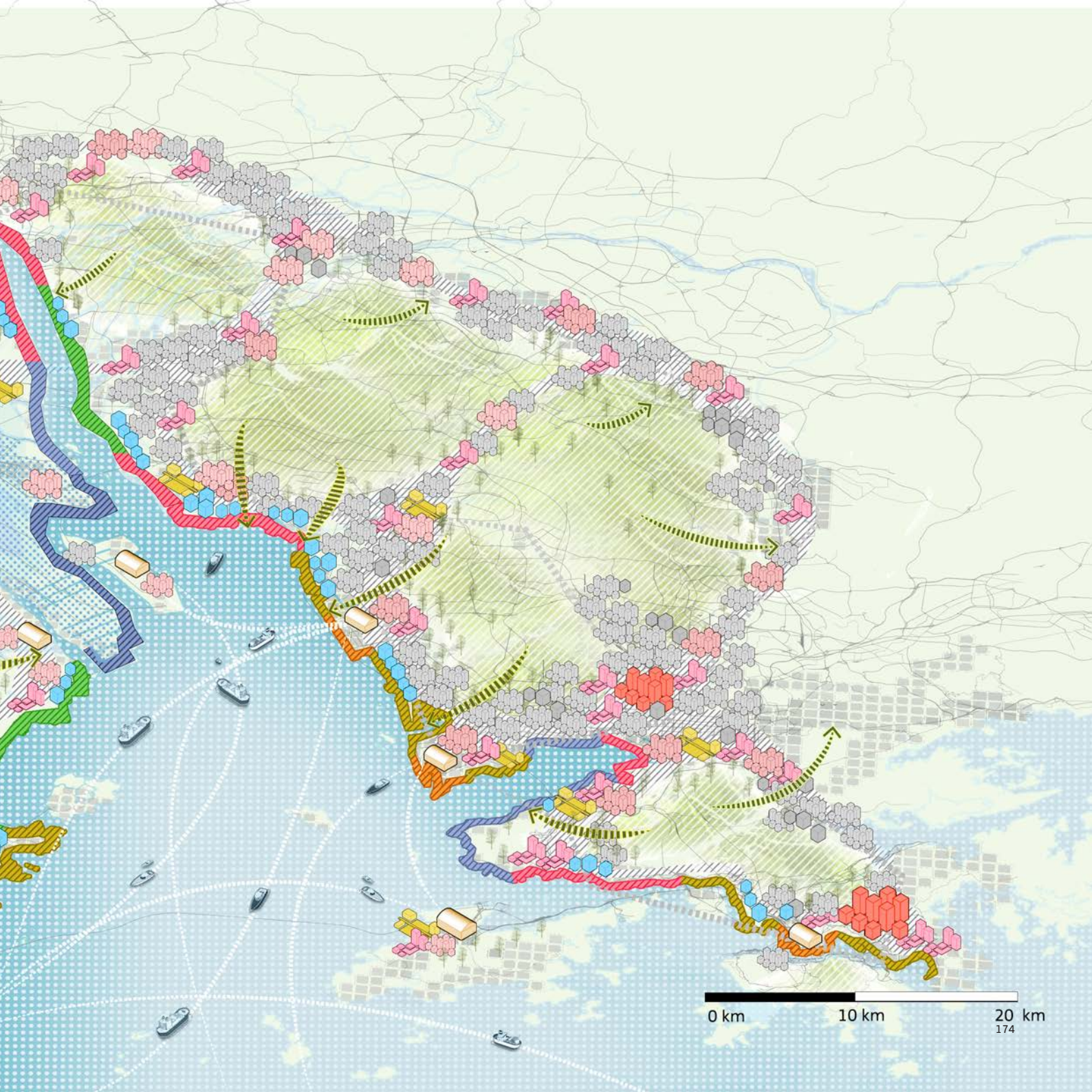


Figure 6.9 Vision GBA


0 km
10 km
20 km

CONCLUSIONS AND REFLECTIONS

Looking into the social and spatial implications of the metropolization process, there is a clear segregation between the actual planning system and the people that live in this type of region. In other words, the very phenomenon that draws these diverse people to such a region is structured to ignore them. Our proposal aims to emphasis the advantages of facilitating the cohabitation of these different people and identities and its role in the enrichment of the metropolization process. It aims to create resilient networks of social interaction by transforming the current structure of city planning defined by privatised megablocks into a planning tool that enables the spatial conditions and governance required for cohabitation. Further, It transforms the isolated islands of megablock structures by activating spaces in the existing context and stitching them with the new developments, redefining the flow of people through the city. The new approach will densify, transform and adapt existing structures, integrating different type of actors that are currently not included in the planning process and will emphasis on ecological infrastructure playing a defining role in the planning process.

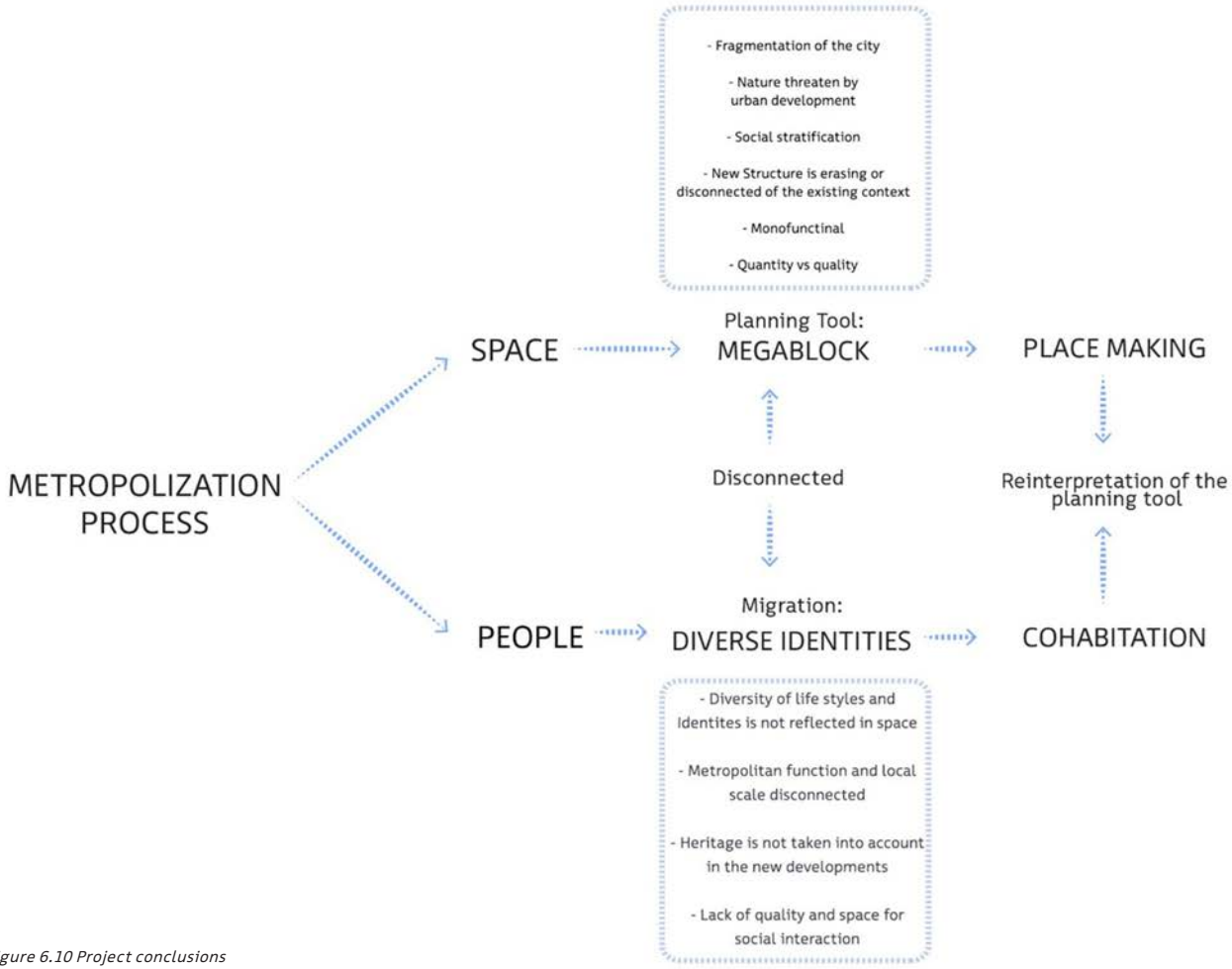
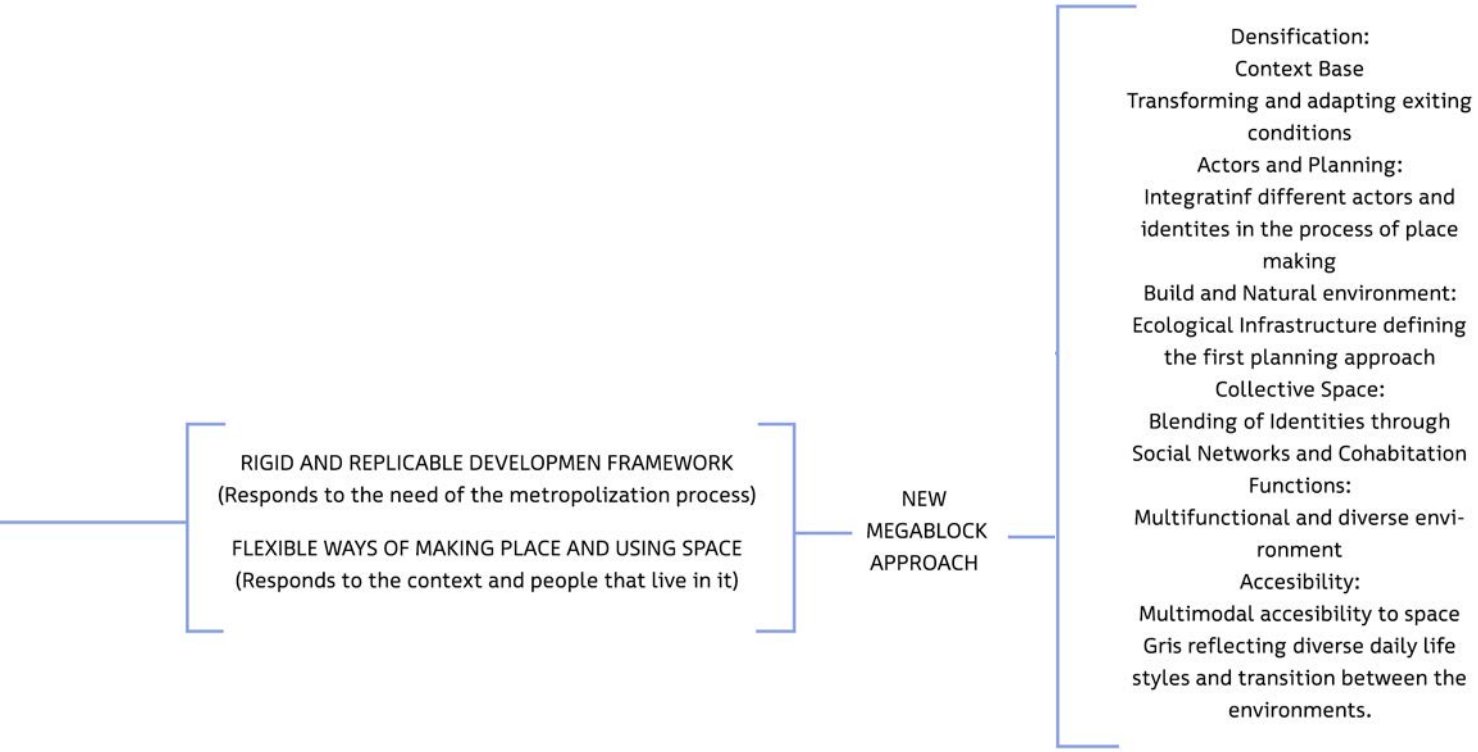


Figure 6.10 Project conclusions

The Megablock - rather than a rigid planning tool for fast urban development - should be the opportunity to re-establish a new spatial order and framework for the transitions and relations between diverse places and people. The fast development of our contemporary cities is demanding a reflection on how we plan and design places with meaning, for and by the people.

The Megablock becomes a sustainable prototype for future urbanisation and a morphological spatial structure that facilitates the evolution of both communal identities and individual ones in global conditions, based on the diversity of people. It creates an opportunity to test the consequences, the opportunities and potential of multi scalar urban models. The idea of an emerging urbanism that can be deployed in a multiplicity of urban contexts, recognising the value of a place by understanding the people that live in it and their social interactions, creates a balance between quantity and quality.



Currently in the proposal, the redefined megablocks are conceptually represented as a collection of square shaped blocks. However, this does not reflect the reality of a situation where the existing context and urban fabric is taken into account. With further analysis and study, the precise spatial form of the megablocks can be accurately determined using multiple factors that were defined in our proposal, such as the spatial rules for certain contexts, functions, densities and the governance methods of the various blocks.
Further, these rules of internal configuration of blocks and relationship between blocks have the potential to act as a basis to develop rules with further complexity, when taking into account the interplay between context, spatial definitions, actors and governance methods. This increased specificity will allow the blocks to be replicated through the region with more accuracy.

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