

03

The Regeneration Of The Secondary Boundary in Shenzhen

Academic Work
Teamwork

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As the frontier of the Reform and Opening-up, Shenzhen is the experimental field for the transition from planned economy to market economy. In a sense, Shenzhen is a city of boundaries. Lines were drawn to demarcate the boundary between Hong Kong and Shenzhen, and the boundary of the Special Economic Zone.

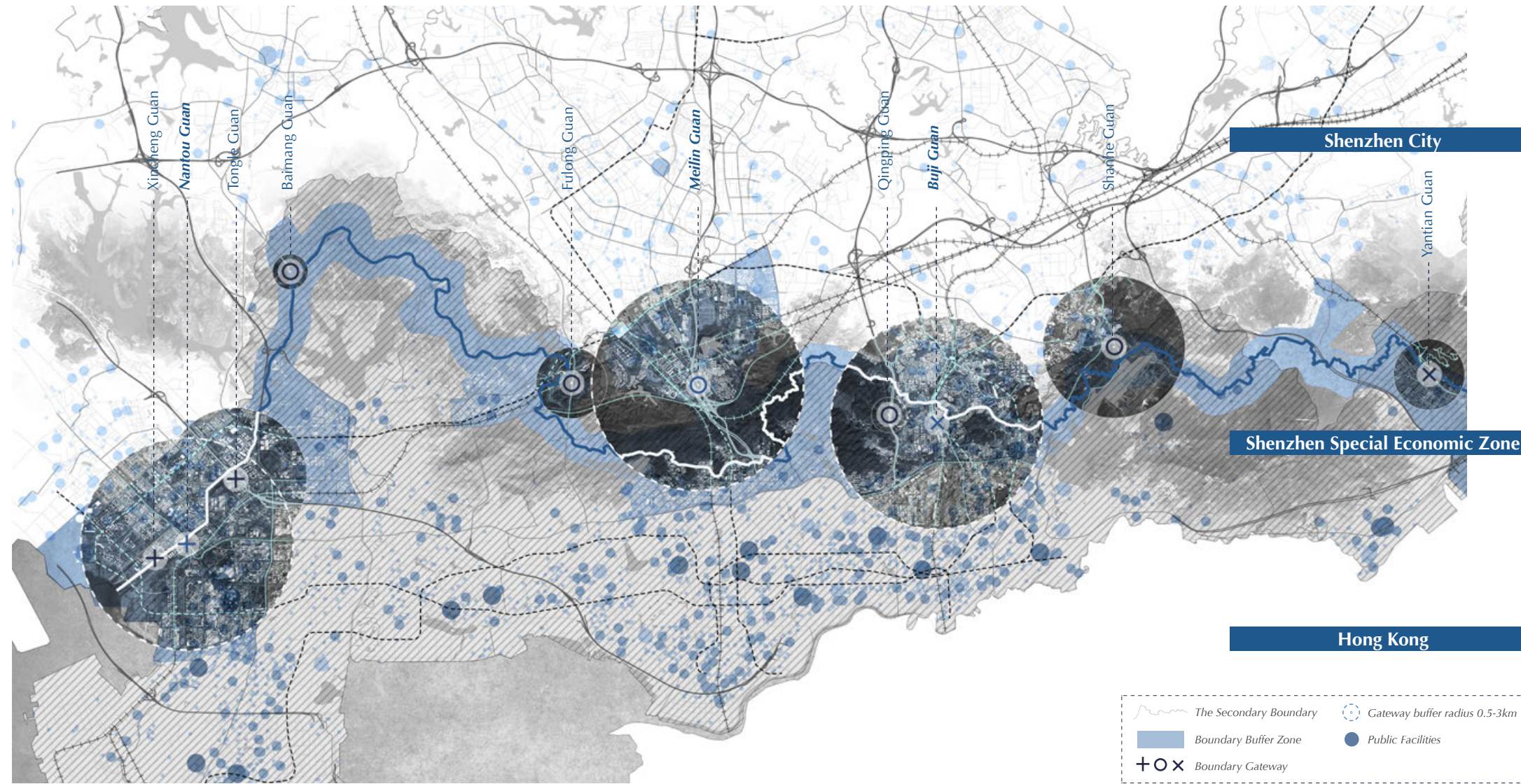
With the integration process of the Pearl River Delta, the boundaries are gradually dissolving. But what remains is the boundary in people's mind and the uneven distribution of public facilities. In 2011, the Secondary Boundary started the deconstruction project. This provided an opportunity to research on and try to solve the problems brought by the physical and mental boundaries.

Edges have no directions, but boundaries do. They are always blocking people from a certain side of the boundary. In the case of the Secondary Boundary, the unregistered immigrants are the ones who are blocked by this invisible barrier.

Urban form is the physical existence for activities to happen and social relations to establish. By giving form to the wounded land along the boundary, we wish to turn the boundary condition of separation to border condition of maximized diversity.

Edges have no directions, but boundaries do.

EDGES HAVE NO DIRECTIONS, BUT BOUNDARIES DO.



cutting through mountains and villages, enclosing the 327.5 square kilometers of the SEZ. Along the Secondary Boundary, eleven checkpoints were set up to be the only legal gateways to cross the boundary line. Only people with credentials would be allowed to enter the SEZ.

The Demolish of the Secondary Boundary

The Shenzhen Economic Zone developed in an astonishing speed. After twenty years of development, **the Secondary Boundary became a huge impediment of urban sprawl**. In 1997, Hong Kong returned to China and became a special administrative region. It was not necessary of the Secondary Boundary to serve as a political barrier. After almost ten years of discussion, the government finally decided to demolish the physical existence of the Secondary Boundary and enlarge the Special Economic Zone to the whole city of Shenzhen. The deconstruction started in 2015.

The eleven checkpoints used to be the only passage ways into the SEZ, which is now the city center of Shenzhen. Even though people do not need to go through the process of authentication, but the traffic congestion problem is severe due to the outdated design of checkpoint buildings. To solve this problem, the reconstruction project of the 11 checkpoints started in 2016, transformed the traffic condition and scenery to a better condition.

However, despite the physical boundary was demolished and site condition being advanced, **the social boundary between inner Shenzhen (the old SEZ) and outer Shenzhen remained**.

Secondary Boundary: The Economic And Politic Frontier

Shenzhen Special Economic Zone (SEZ) was a product of the policy of the Reform and Opening-up in 1978. It separated the southern part of Shenzhen, which is adjacent to Hong Kong, from the whole administrative area of the city. As the boundary line between Shenzhen and Hong Kong was being called the First Boundary, the boundary line of the SEZ is named the Secondary Boundary.

Since China was going through an economically and politically sensitive period, the Secondary Boundary did not only demarcate the boundary of certain economic activities, but also took the responsibility of preventing people fleeing from mainland China to Hong Kong. Therefore, an **80 kilometers long barbed fence** was constructed, brutally



above: sentry boxes and fences of the boundary in 1980s
left: officers checking credential

Fig.1 Historical photo of sentry box and fences²

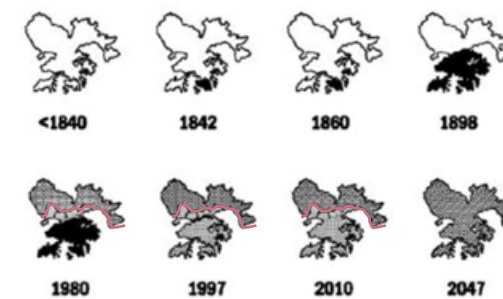


Fig.2 Dissolution of boundaries in Pearl River Delta⁴

1 cover image edited from photos taken by Weimao and Fengma
2 Image source: nndaily.com
3 Data source: 2010 Shenzhen Census
4 Joshua Bolchover, Peter Hasdell, *Border Ecologies. Hong Kong's Mainland Frontier*, Birkhäuser, 2016
5 Lefebvre H 2003[1970], Translated by Robert Bononno, *The Urban Revolution*, University of Minnesota Press, Minneapolis MN.

Physical Wall Torn down, Social Wall Remains

The essential aspect of the urban phenomenon is its centrality. ...But centrality would also produce hierarchy and therefore inequality.⁵

The old SEZ has become the center of Shenzhen, filled with people who established successful careers and benefited from the development of this one and only special economic zone. Besides the uneven distribution of public facilities due to different level of development, the biggest barrier constructed by the Secondary Boundary lies in people's mind: who live inside the boundary are better than those live outside. Though the barbed fences were torn down, the prejudice of the differences of the two parts of the same city remains.

BOUNDARY - FROM PHYSICAL TO SOCIAL

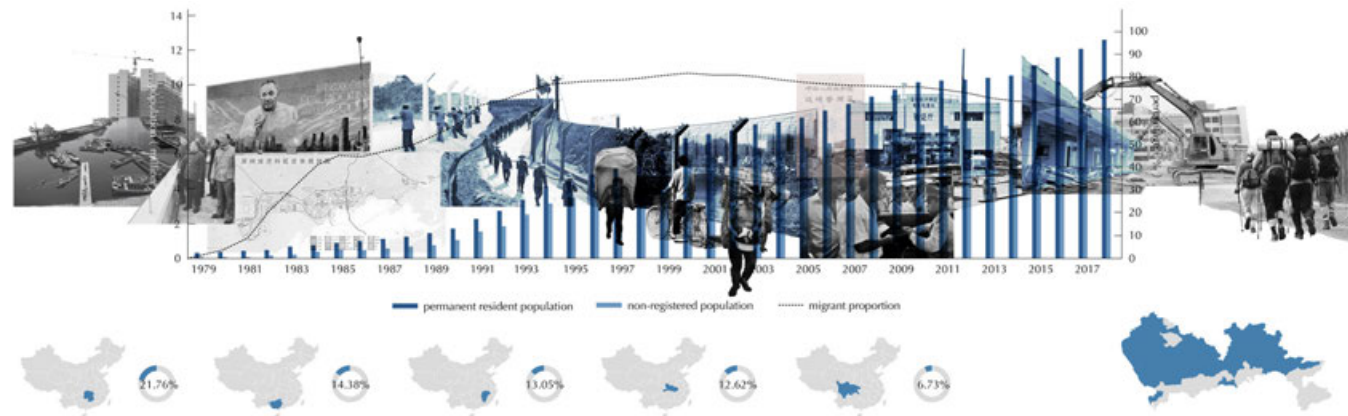


Fig.3 The history of unregistered workers' immigration to Shenzhen (1979-2019)

Fig.4 The top 5 provinces from which the unregistered workers come from

Non-Registered Workers: Life History Outside The Boundary

Now, as there is no fences preventing people without credentials, who are the people blocked by the secondary boundary from entering inner Shenzhen? The unregistered immigrant workers.

Back in the 1980s, labor-intensive factories were constructed outside the SEZ to support the business inside. Uneducated immigrants came to Shenzhen, worked and lived outside the Secondary Boundary. But they were not considered as real Shenzhen citizens, since they could not satisfy the requirements to be registered permanent residence.

Shenzhen always identify itself as a city welcoming everyone who wants to pursue a better life, but actually, only elites can enjoy the welfare provided. Since the immigrant workers are not registered as permanent residence, they cannot buy apartments here, and their children cannot attend public schools. They were once temporary residence living in outer Shenzhen, and always temporary residence blocked by the invisible barriers.

From Boundary to Border: Strategies Towards an Open City

The deconstruction of the checkpoints and fences provided the opportunity and space to create a more coherent border condition. Richard Sennett defined two types of edge conditions: boundary and border. In boundary zones, activities decreased to minimal; in border zones, different groups encounter and diversity increased to maximum. Therefore, we would like to propose new urban forms to transform this urban boundary to border.

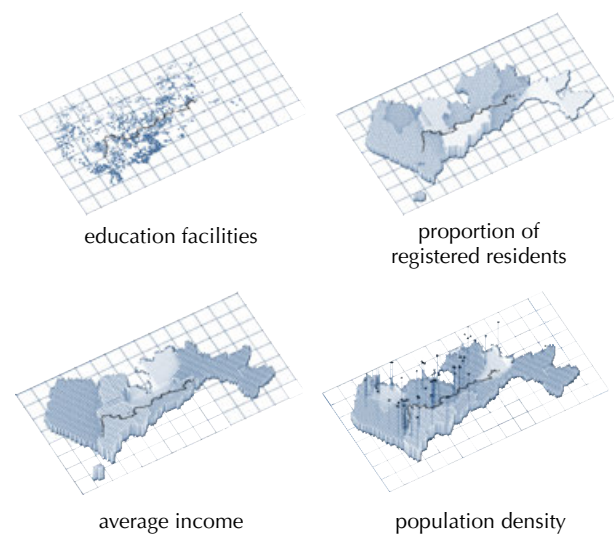


Fig.5 The uneven distribution of population and resources in Shenzhen

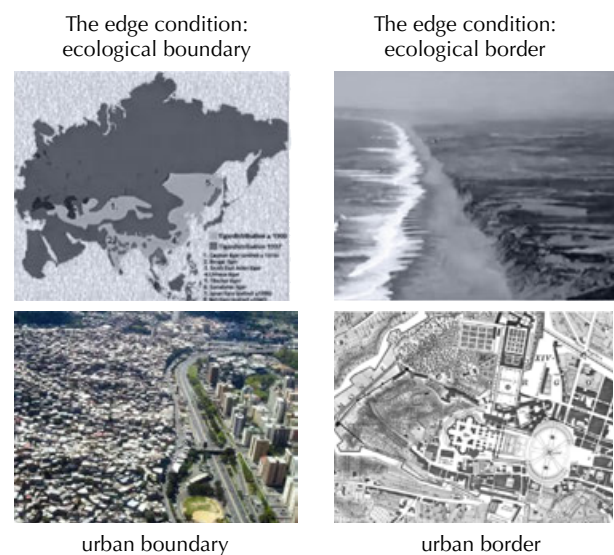


Fig.6 Border condition vs. boundary condition⁸

ISSUE:

How can we upgrade the boundary condition to a border zone of diversity?

Due to its hilly topography, the urban development of Shenzhen has a polycentric tendency. As the only routes connecting the two parts of the city, the 11 checkpoints and surrounded vacant land have the potential to be developed into new sub centers for residence of both side. Functions inserted and new urban form bridging the gaps are proposed as two parallel strategies to increase the diversity and vitality of the border zone.

1 Integrate Social Boundary: Non-Registered Immigrants

Social strategies for the integration of the boundary is to provide space for events and practices that can benefit different parties. (see fig.8) The public and private sector, including government, NGOs and enterprises will cooperate to build up the platform for people, information and goods to circulate. All stakeholders will have the opportunity benefit in this positive loop of feedbacks.

2 Vitalize Physical Boundary: Marginalization, Separation and Over-concentration

The current condition of the 11 checkpoints can be classified into three categories: marginalization, separation and over-concentration. Far from the center of the old SEZ, around checkpoints such as Nantou were marginalized and undeveloped, but high rise residential buildings are invading but confined by the boundary. Some checkpoints situated on mountains, the only connector of the two sides of the mountain is an expressway cutting through the valley. As the only ways into the old SEZ, mega-infrastructures like the railway goes through checkpoints like Buji, the over-concentration of flow of goods and people created a scar on the continuous urban fabric.



Fig.7 Survey among the unregistered workers

Lacking basic services and facilities which should be provided by the government, the unregistered workers are not able to cross the boundary line and obtain better opportunities

6 data source: open data platform of Shenzhen Municipal Government.
7 Liu Baohui, *Research on the development trend of boundary management line of Shenzhen Special Economic Zone - Review and Prospect of boundary management line of Shenzhen Special Economic Zone* [D]. Shanghai: Fudan University, 2006.
8 Richard Sennett, *The Open City*, Berlin, Urban Age, November 2006
9 Ricahrd Sennett, *Building and Dwelling: Ethics for the City*, Penguin, April 2019

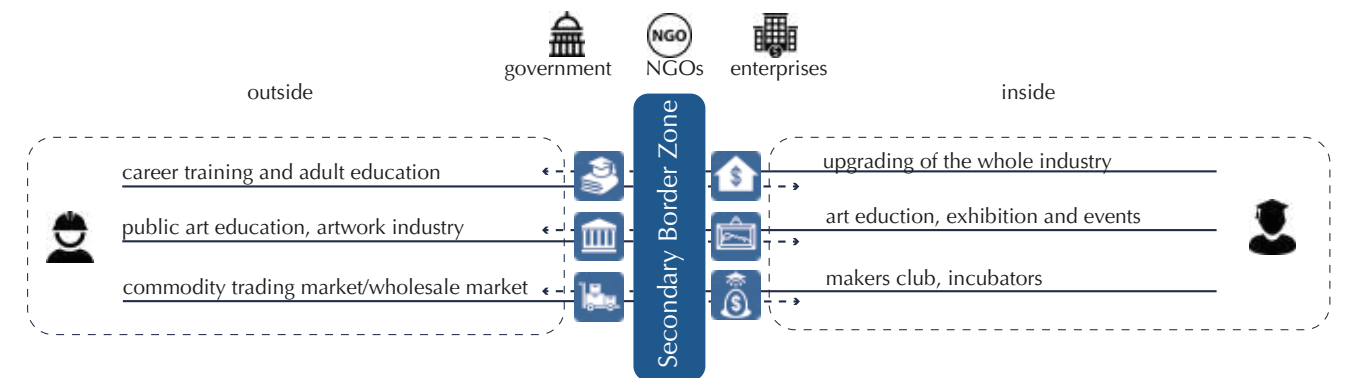
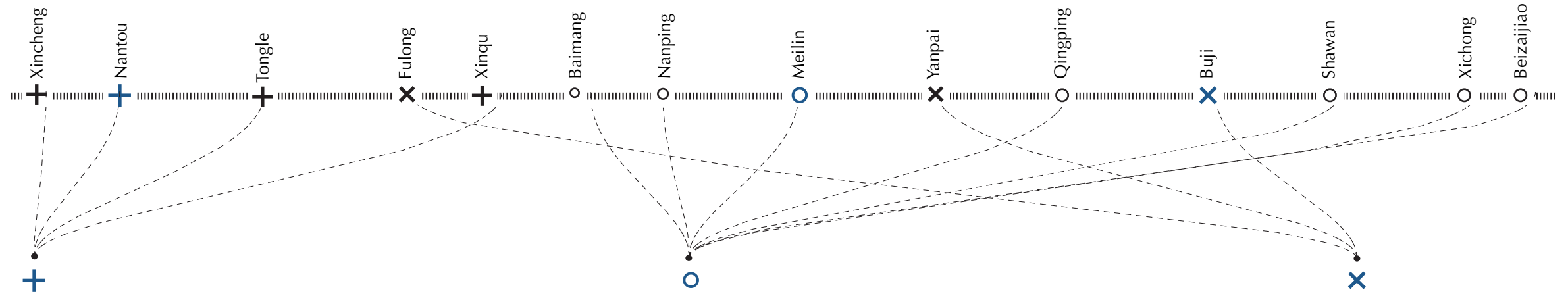


Fig.8. Social strategy for the integration along the Secondary Border Zone

The physical separation caused by the former boundary can be categorized into three types.

The three selected checkpoints, Nantou, Meilin and Buji are representatives of the three boundary conditions. Also, owing to their critical locations, they have the largest influence on surrounding areas. The urban forms proposed will be universal and adaptable to specific site conditions.

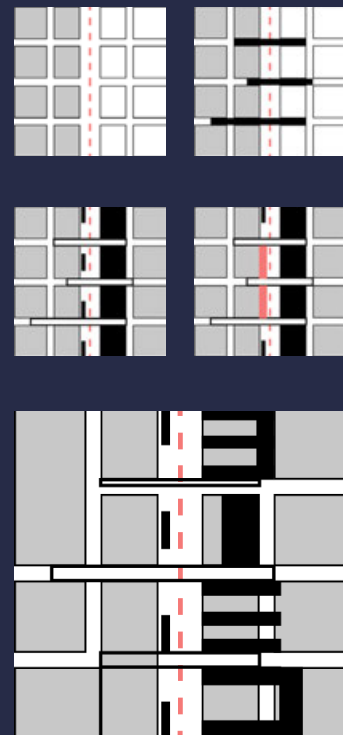


Marginization

The boundary is defined by a river. The vacant land on the inner side of the boundary provide public space for the residents from the high density residential blocks. Urban furniture will be placed, bridges will be built to increase physical connection. Public facilities will locate on the vacant land.



- 1 set boundaries
- 2 physical connection
- 3 social connection through program
- 4 maintain site memory
- 5 customize to certain site

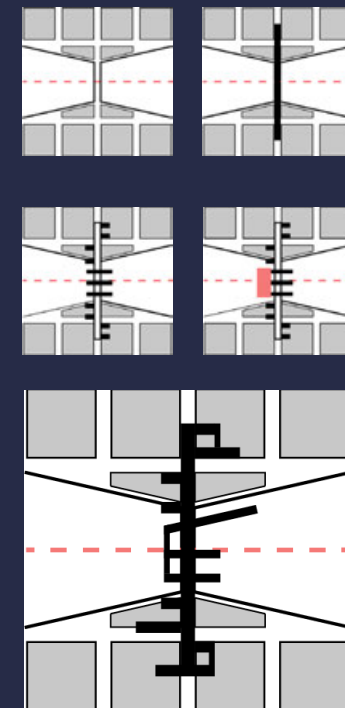


Seperation

The expressway cut through the mountain brutally, with no interaction with the environment. A new multi-functional bicycle route will be built above the expressway as an alternative and more interactive way to pass through the boundary.



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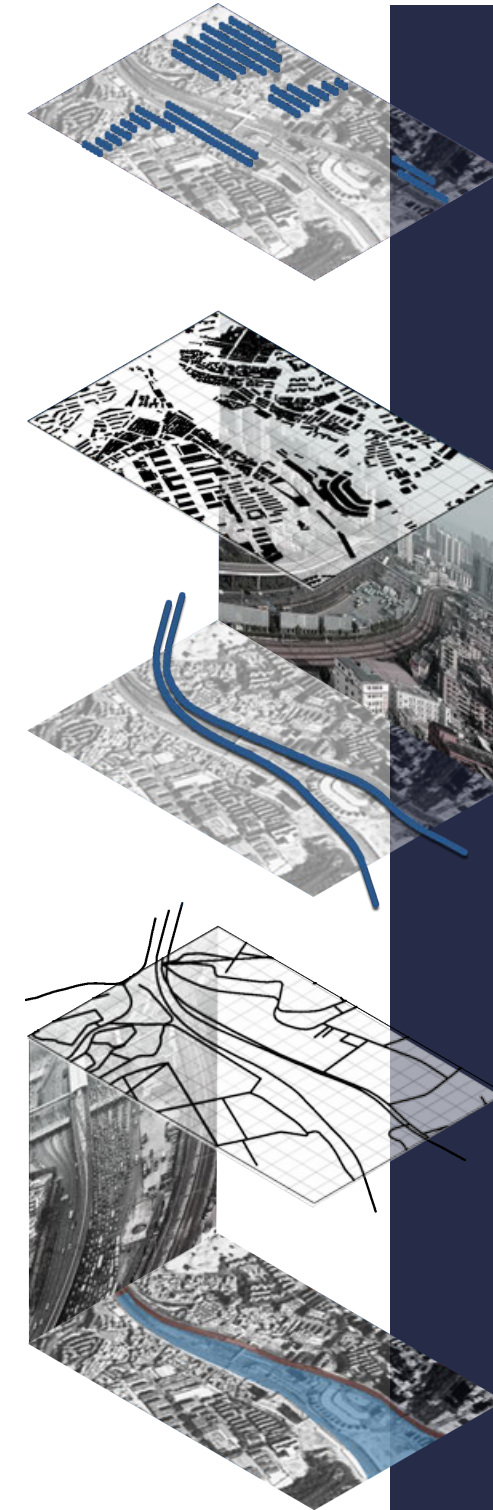
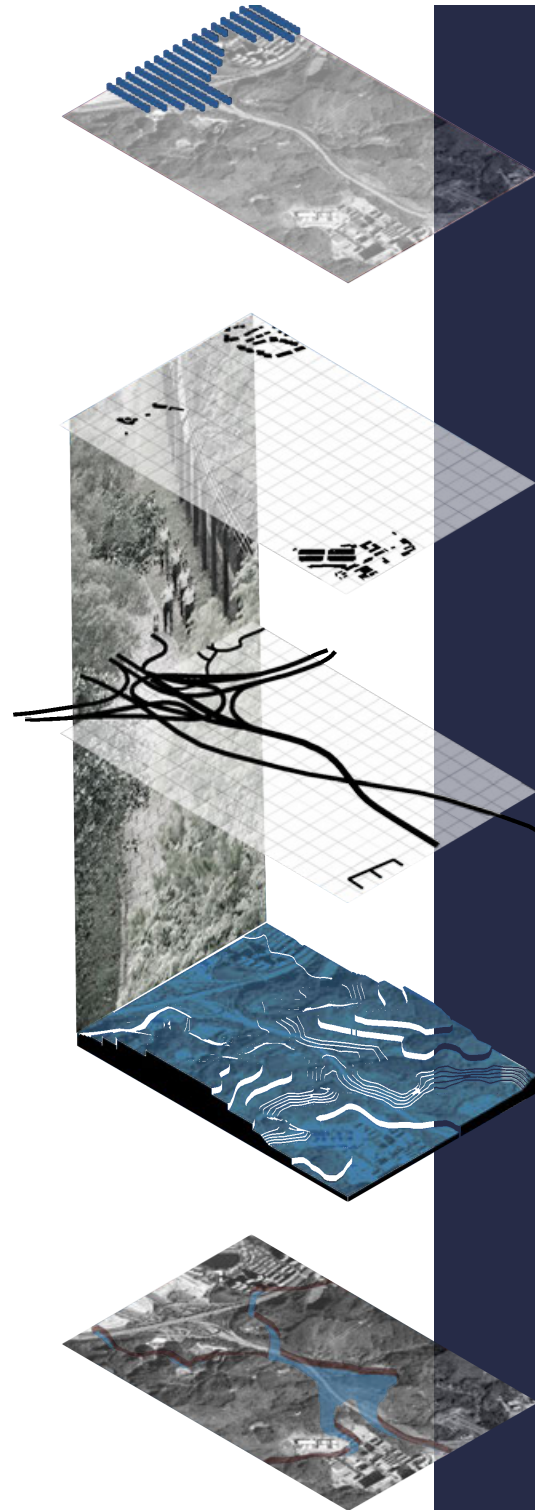
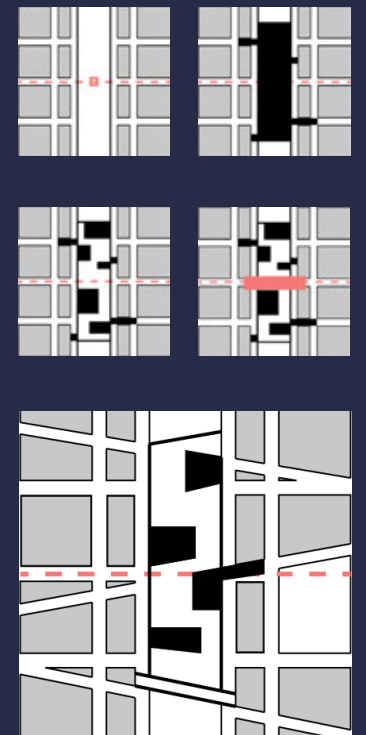


Over-concentration

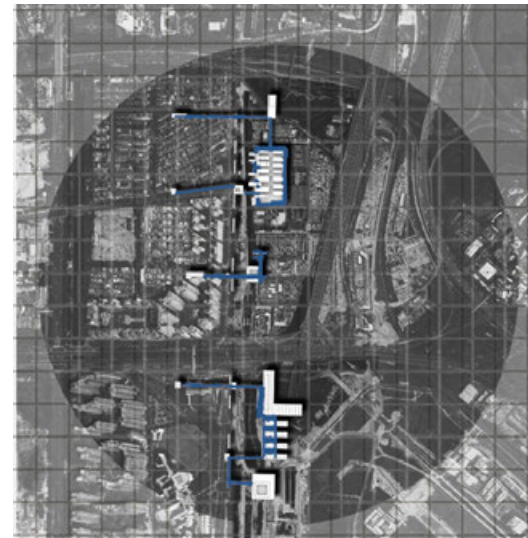
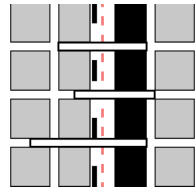
The huge gap produced by the railway became a huge wound on the continuous urban fabric. A platform will be built to connect both side and host events and activities. The function of transportation centre will also be integrated into the new complex.



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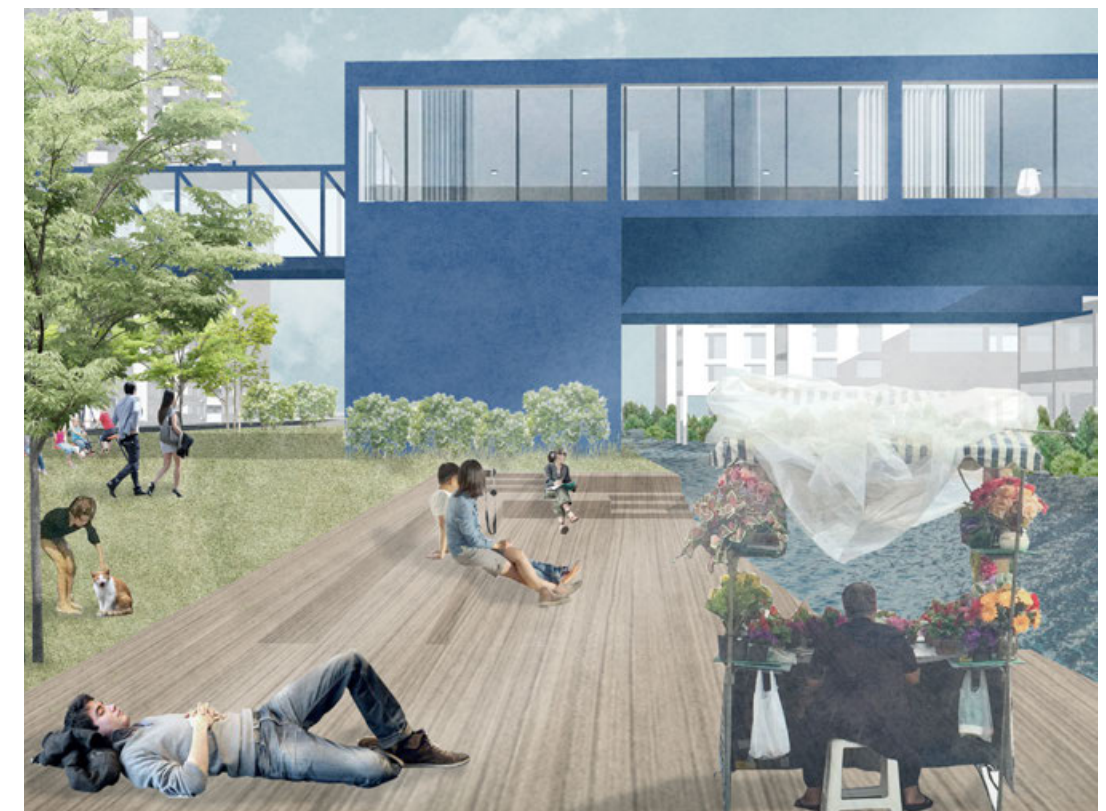
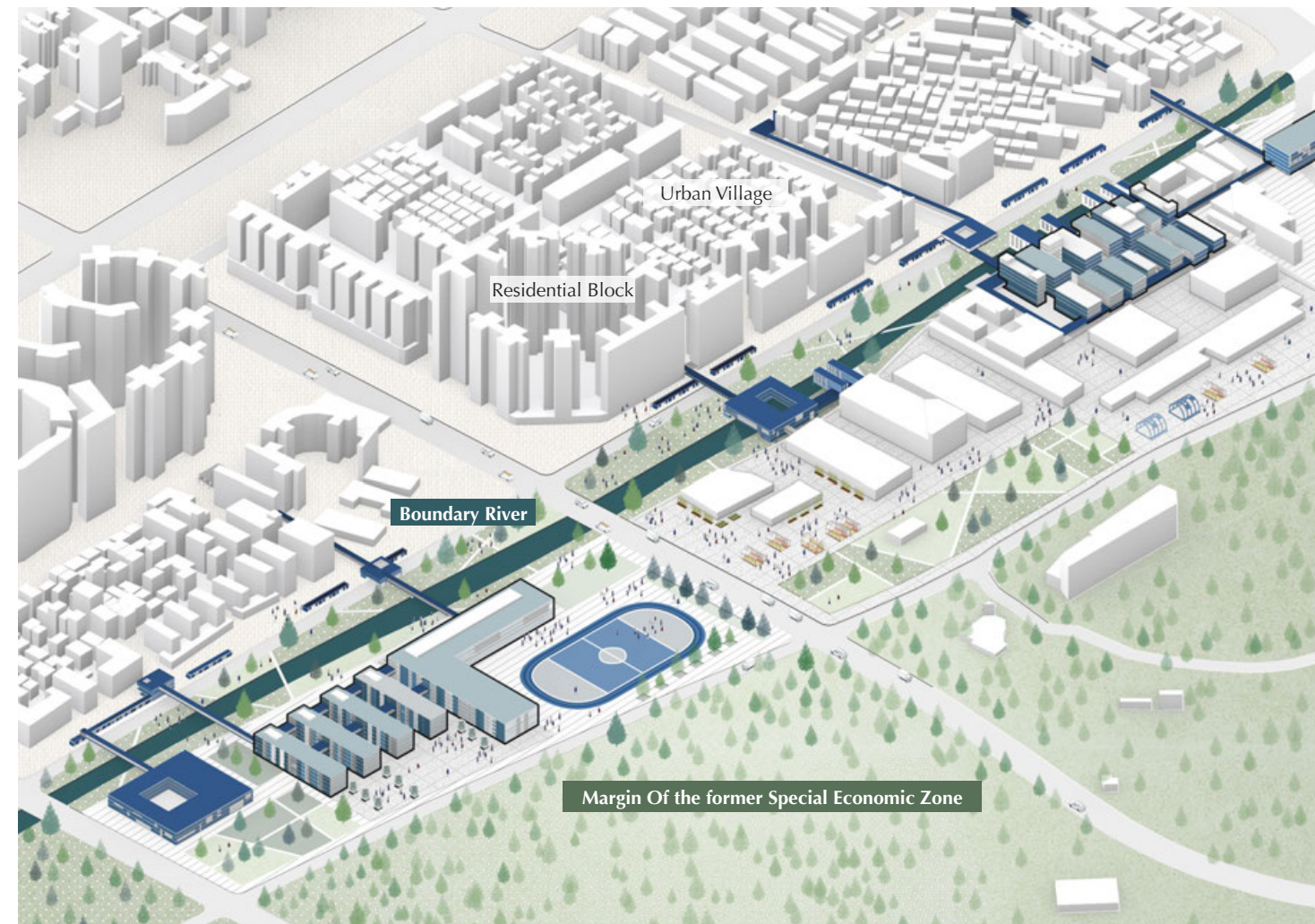
Nantou Checkpoint
Type 1 : Marginization



Distant from the centre of the former Special Economic Zone, this area is relatively vacant and undeveloped. The outer side of the boundary was originally occupied by unregistered workers, resulting in urban villages. Sequentially, the urban villages were demolished and replaced by enclosed residential buildings. Immigrant living in the urban villages were forced to move elsewhere.

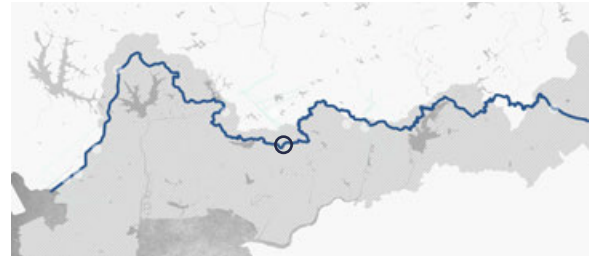
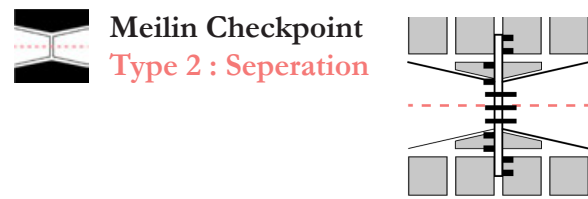
Social strategies here aim to break the visible and invisible walls between the urban villages and the enclosed residential blocks. The boundary region will be transformed into a zone of encountering space for the communities.

- 1 **Connect** both side by pedestrian bridges
- 2 **Regenerate** abandoned industrial buildings to public facilities
- 3 **Penetrate** different communities to ensure equal accessibility
- 4 **Input** urban furniture for street activities



Public Space for Every Community

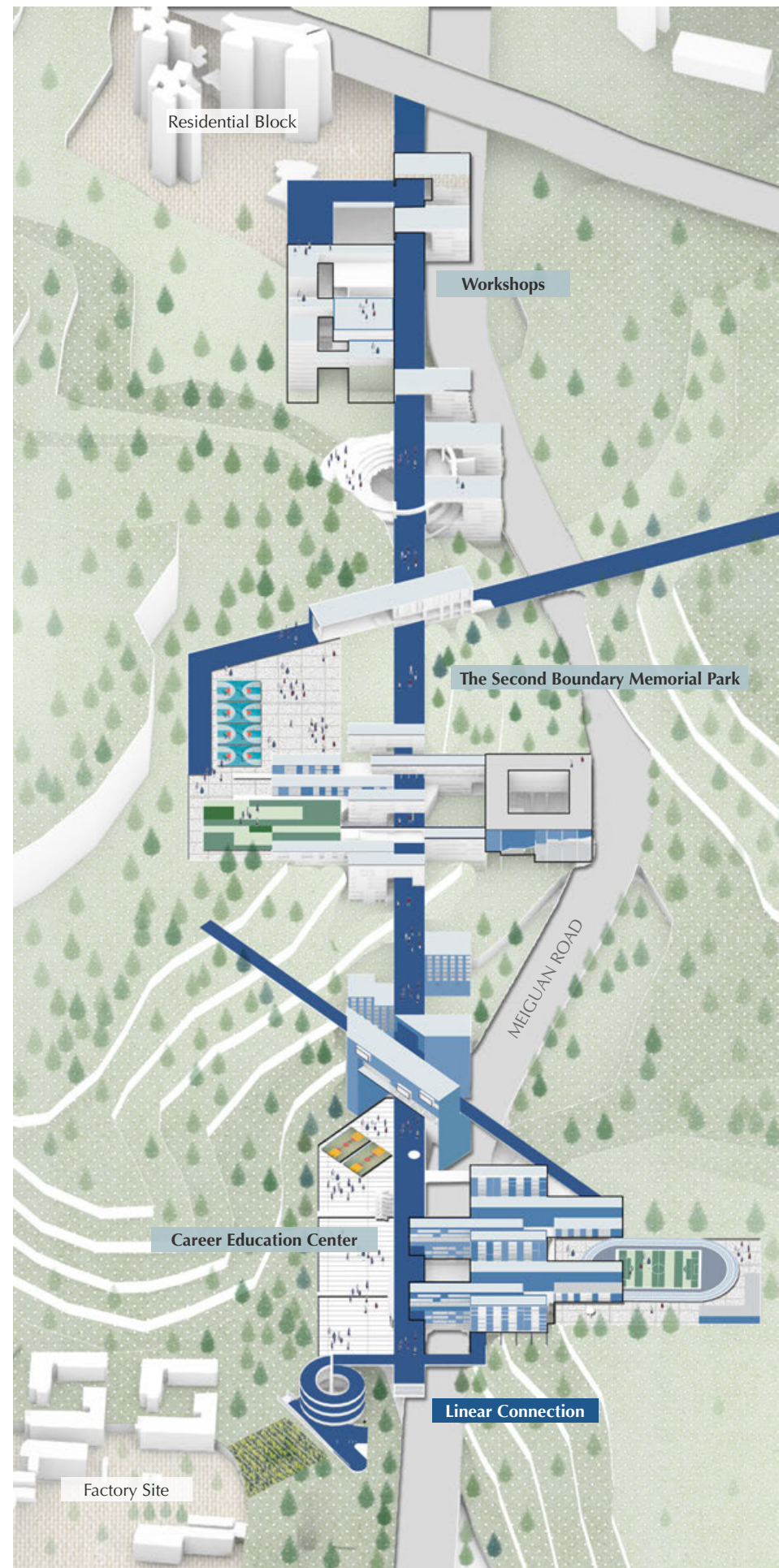
Urban furniture will be input to satisfy everyday activities. Large public facilities will serve as social infrastructure, hosting activities and events in a larger urban range.



Mountains and hills in Shenzhen naturally demarcate the inner and outer side of the Secondary Boundary. The expressway only served for the purpose of passing through, making this place boring and have no vitality. To solve the traffic congestion on the expressway and turn this beautiful place into an energetic one, following steps will be taken:

- 1 **Connect** both side multi-functional bicycle route
- 2 **Insert** functional complex
- 3 **Integrate** into the nature

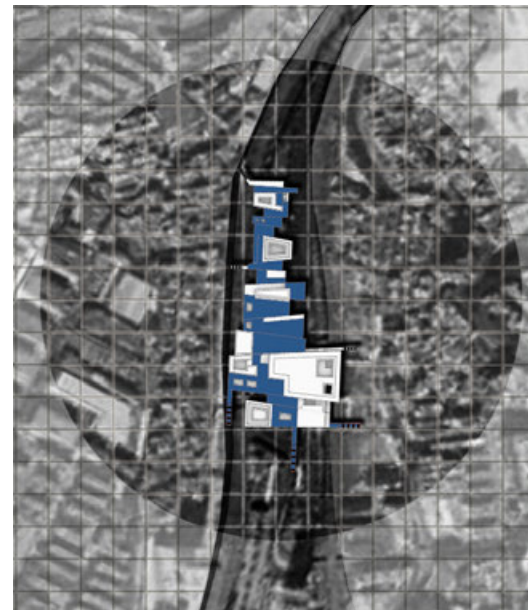
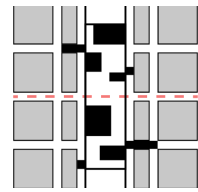
By turning the boundary from a place for passing through to a destination itself, it stands as an essential node of transportation thus have excellent accessibility for people with lower level of mobility. Education activities can happen here to upgrade the skill level of immigrant workers.



Multi-functional Bicycle Routes as a Destination

The bicycle route is also a linear gallery and culture centre, a place for people to obtain knowledge without distinctions. Certain functional complex will be inserted along the route, considering the needs of nearby communities.

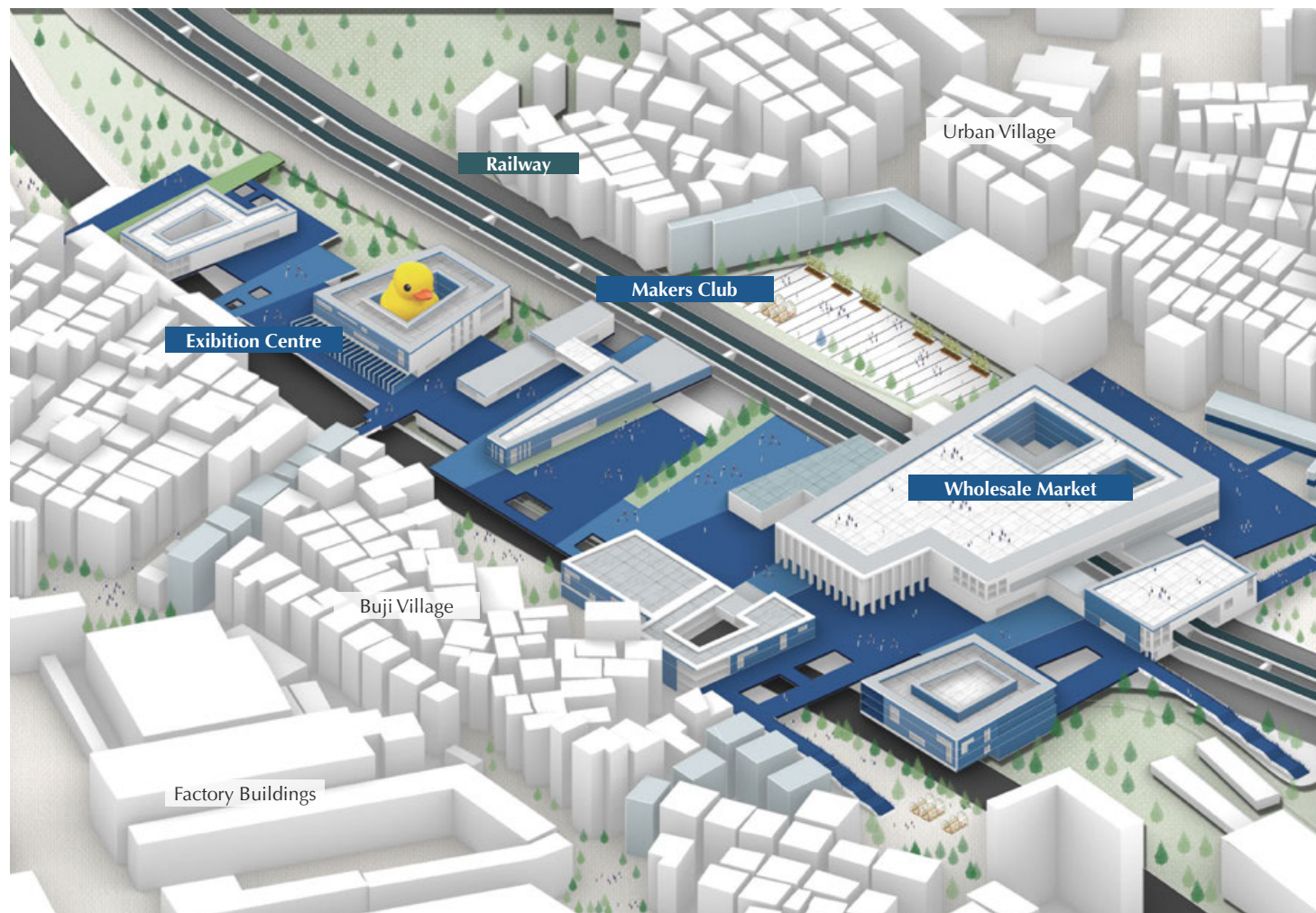
Buji Checkpoint
Type 3: Over-concentration



It is mainly wholesale vendors gathering around the railway station. They buy products from the wholesale market and distribute it to other parts of Shenzhen. This provide the opportunity for makers to be adjacent to full range of materials and products. As the land prize increased rapidly in the city centre, the platform complex built upon urban void has the potential to provide cheap rent for the vendors and also the makers.

- 1 **Construct** platform and buildings for activities
- 2 **Redevelop** surrounding public space
- 3 **Penetrate** into the urban villages, increase accessibility

With lower rent and comprehensive product, the vendors can earn a living more easily and learn from the makers here. The makers can benefit from the complete system providing daily necessities from the urban villages. To the city of Shenzhen, it will upgrade the industry of clothing wholesale to knowledge industry.



Platform for Agglomeration

The whole product line of start-up business will be agglomerated here, allowing start-up companies and the vendors who provide them with comprehensive and low price products.