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Architecture for Disparate Communities in Transitional China: Urban Housing Stitch for Chinese Migrant Workers and City Dwellers in Rapidly Urbanizing Cities

Jennifer Hoi Ling Ha

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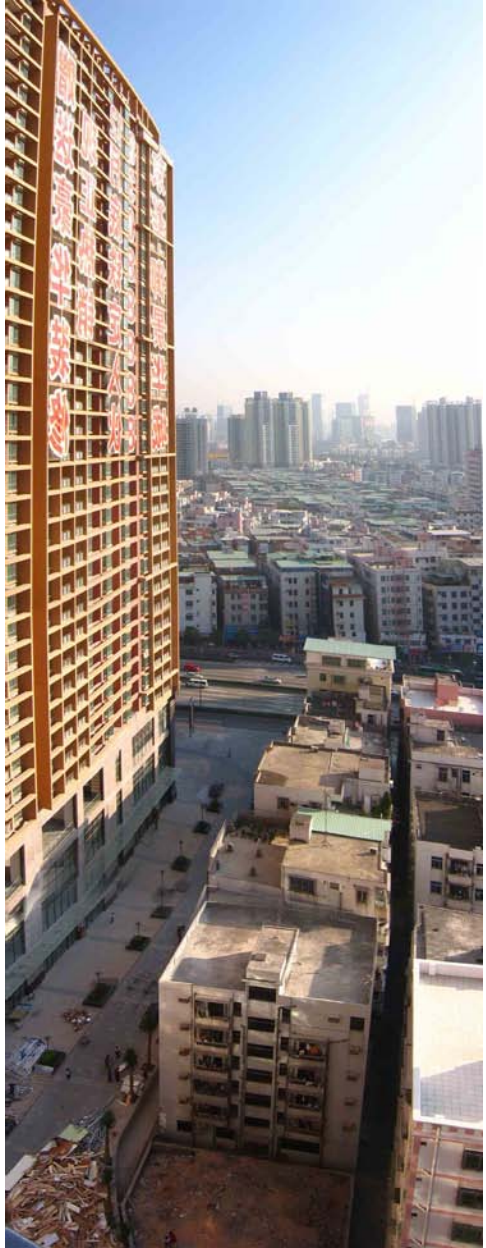

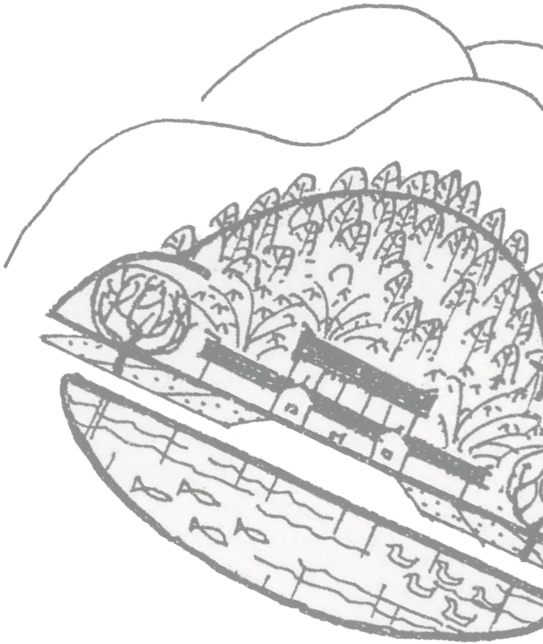

Migrant Housing District

Reinventing housing in the globalized urban realm for Chinese migrant workers

Jennifer Hoi Ling Ha

Arc 505 Thesis Prep
Undergraduate 2010

Primary | Richard Rosa
Secondary | Yutaka Sho

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Knapp and Spence. *Chinese Houses The Architectural Heritage Of A Nation.*

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2 Shanghai | 13,400 ppl / km²
3 Beijing | 11,500 ppl / km²
Tianjin | 10,500 ppl / km²
Shenyang | 9,250 ppl / km²
Dalian | 7,100 ppl / km²
Hong Kong | 6,076 ppl / km²
Shantou | 2,409 ppl / km²
Xiamen | 1,591 ppl / km²
Yangzhou | 1,165 ppl / km²
Nanjing | 1,123 ppl / km²
Guangzhou | 1,040 ppl / km²

|China's cities by density|

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THESIS

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Bronstein, Paula. Construction Continues As City Of Shenzhen Expands.

01 | THESIS
CONTENTION

"Houses takes shape over time, reflecting both internal and external dynamics" (Knapp 15).

THESIS

The challenge of high density housing is that it "remains an anonymous field because the future users are rarely known" (Schittich 10). "This is in contradiction to the thesis that the best results are achieved if the building is tailored to the individual needs of the inhabitants" (Schittich 10). Holding most of the world's population, China especially encountered this challenge as it "built more housing in the last twenty-five years than any nation in history" (Campanella 286). Over the past quarter century, globalization and rapid urbanization have fiercely overtaken and prematurely transformed China's domestic architecture, replacing much of it with new mass produced housing types. As Chinese cities rapidly urbanize in the new market economy, housing becomes more market oriented and consequently neither identify with the city context nor the individual inhabitant.

Picture page
Bronstein, Paula. Construction Continues As City Of Shenzhen Expands.

Much of the late 20th century housing, categorized as *marketecture* or new market oriented high rise real estate, is particularly felt by the ideology of rural migrant workers in the city. While *marketecture* is quickly becoming the sole dynamic infrastructural movement in the city fabric, the previous and more contextually vernacular typology of housing for the lower class migrants is outdated and thus strictly abolished, replaced and/or coldly renovated. Thus, *marketecture* is resonating tension as it spatially segregates the local migrant population with the urban fabric. “Under these conditions, it is very difficult to build a harmonious society,” notably, with the division between urban and rural areas, the increasing gap between the rich and the poor, and the clash between local and global identities (Song and Woo 93).

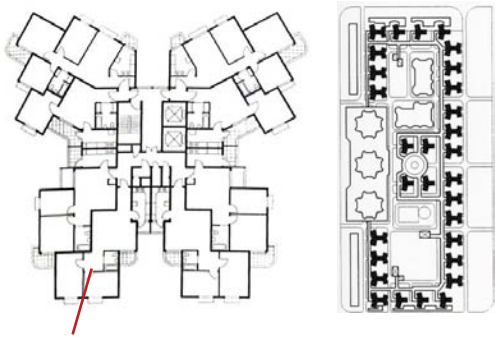
While the market housing typology does not address China’s current social conditions, the Chinese city is fragmented with socio-political disorder, discontent, and unrest. As 300 million Chinese people migrate from rural areas to urban cities in the coming decade, China will need to accommodate new housing for this extensive demographic class. There needs to be a more appropriate and aggressive housing concept to address China’s “changing contemporary social reality” so that a more contextual typology of housing can emerge within the market economy (Broto ii).

This thesis contends that architecture can reclaim individual and community expression within the globalized urban realm through the integration of unique programs in a live/work community environment.

Although urban villages in Shenzhen, China are the primary infrastructure that serve the migrant population, it has become an obstruction in the urban fabric by spatially segregating the migrants from the city people and structure. A new typology of migrant worker housing is able to seamlessly engage as well as integrate with the city’s diverse demographic population.

MARKETECTURE

A NEW STYLE OF ARCHITECTURE THAT HAD ONLY EMERGED WITHIN THE NEW CHINESE GLOBAL ECONOMY AND MARKET POLICY MOSTLY FOR THE GROWING MIDDLE CLASS. IT IS ARCHITECTURE THAT IS CONSTRUCTED IN A RAPID-NEVER-BEFORE-SEEN PACE THAT RESPONDS MOST EFFICIENTLY TO MARKET NEEDS. IT DOES NOT CATER TO SPECIFIC INHABITANTS NEEDS NOR DEFINE A SPECIFIC SENSE OF TIME, IDENTITY, REGION, OR CULTURE.



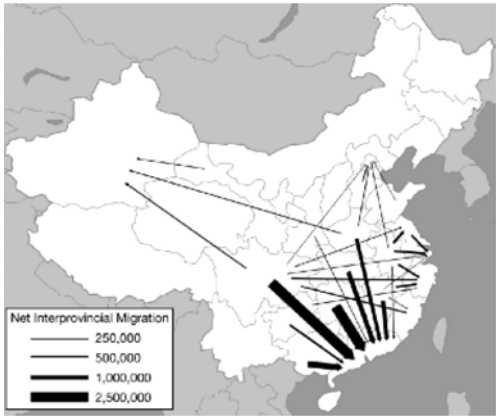
RAPID CONSTRUCTION	+	DENSIFICATION IN GATED COMMUNITIES	+	RAPID URBANIZATION	=	MARKETECTURE
Products are prefabricated Mass produced remotely Prototypes resused		Growing middle class in cities Rapid growth in population Great influx of rural migrants		100 years of urban growth compressed into a globalized decade		Global identity and style Lacks individual needs No culture or site context

02 | METHODOLOGY

INTERNAL MIGRANT ENCLAVES
GLOBAL MIGRANT ENCLAVES

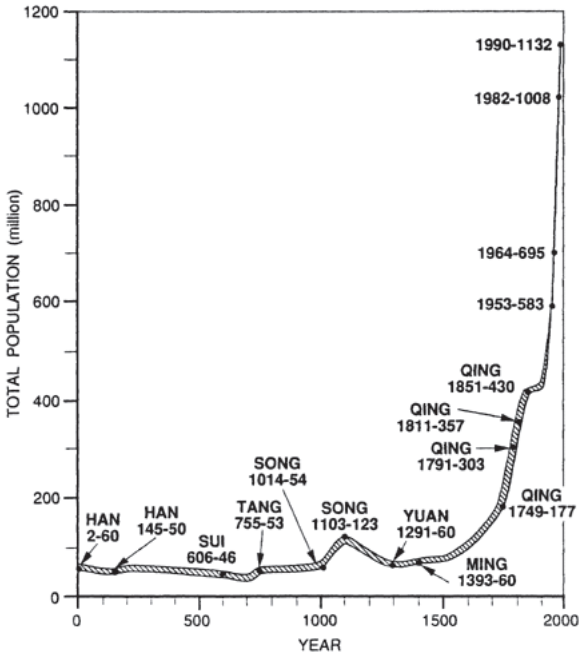
METHODOLOGY

Picture page



"The number of people who have migrated to China's cities in the last twenty-five years is greater than the entire population of the United States, and China's middle class alone could well be as big as the entire current population of Europe by 2020" (Campanella 286).

Methodology



As the population of China rapidly increase through the decades, the net interprovincial migration rate increases. Whether the Chinese migrate internally or globally, they would form migrant enclaves that distinguishes their community from the host city. "No group has had more visible impact than the 18 million Chinese who have left China since the economic reforms of the late 1970s - just over half of the approximate 35 million Chinese who live outside of China in What has become known as the Chinese diaspora" (Kwong "Chiense Migration Goes Global).

The Chinese rural peasants migrate to cities for mainly three reasons: survival, economic and social grounds. It is a decision not made by one individual but by the whole family; motivations of these peasants are more "for one's own sake," than "for the sake of one's family" (Campanella 291).

Within the urban lower class, Chinese migrant workers is a requires specific internally organized environments to its people, time, and place in the city infrastructural fabric. The problems of new urban development in Market Reform China becomes evident when the government fails to control the urban development for its population demographic.

With 1.33 billion people, 1/3 of them live in cities. This 500 million urban population is made up of Permanent Residents (people who have residential permits or Hukou in the city) and Temporary Residents (People who don't have permits and are working or traveling through the city). Particularly, Chinese housing policies are not recognizing the temporary population, even through this demographic is the backbone of China's economic success.

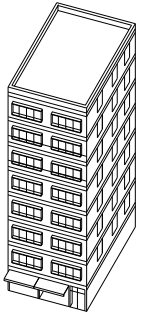
63.7 percent of the floating population (6.4 million out of 8 million) rent houses in urban villages. Urban villages are owned collectively by farmers. These villages itself are 400 - 500 years old but the buildings on it are newer. The process of obtaining and using land is diffferent from the village farmer and the urban citizen.

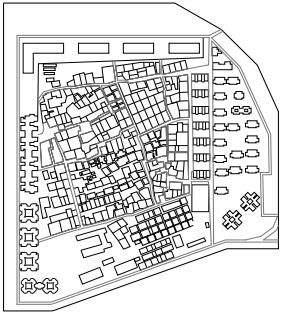
.

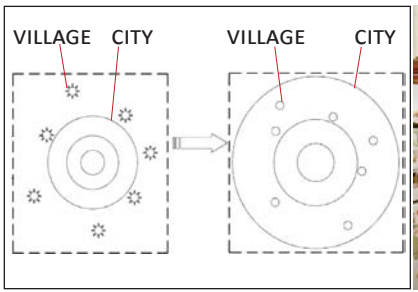
Many new affordable housing units are needed to serve China's under-represented migrant workers from rural China.

Urban Village

A neighborhood or district construction of migrant workers and businesses which "retains some cultural distinction" from a larger, surrounding context. Migrant Enclave is a concept that began when Chinese migrants with high aspirations migrate to less poor areas in search for economic opportunities. Discrimination is a persistent factor setting apart the migrant community and the city residents.







City Expansion Around Village + **Influx of Rural Migrants** + **Socio-economic Community** = **Urban Village**

1) Special Economic Zones Globalize and Urbanize in a Rapid Pace

1) Special Economic Zones create economic opportunity and political freedom
2) High density intergenerational living

Family or Cultural Network Community business

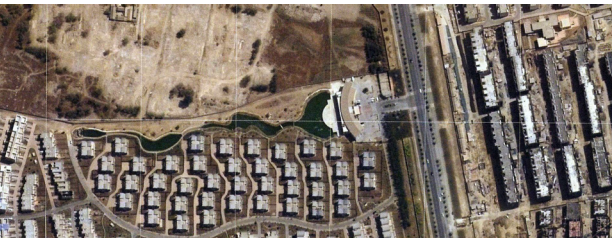
Established cultural region that caters to local migrant needs

Housing for China's workers has changed its typology dramatically throughout China's socio-political and economic history. The stories of these houses represent the change of the workers lifestyles and conditions. Some changes which had occurred architecturally are 1. The shift from single unit housing to mass housing 2. Urban planning development. Some problems created by this is 1. Lack of diversification of housing types 2. Transforms peoples pattern of living 3. Standardization of housing construction in a massive scale.

China's urban transition in housing could be mapped through its evolving socio-political history. In the early years, Chinese housing units begin with its vernacular architectural heritage with specific social traditions and rituals. Its housing typologies then evolve through a series of transitional events. Societal and cultural values along with economic and political policies have influenced the changes of housing types dramatically from 1) Early Modern China (1840-1911) to 2) Semi colonial China (1912-1949) to 3) Socialist China (1950-1978) to 3) Market Reform China (1979-present).

The city becomes fragmented as independent housing communities disregard its relationship with the city. At the same time, housing units become less individual and unique. The individual then begins to lack an identity and a clear relationship with the city. The future of China needs a new typology of housing that would relate the individual housing unit to the city as a whole.
Need New Model of Residential Cohabitation for Migrant Workers that considers:

(1) The public/private space of the individual in relation to his unit and block
(2) The personal scale and sequece of these living spaces in relation to one another and within the urban context
(3) The hierarchal organization of space and sequence from the city in relation to his unit and block

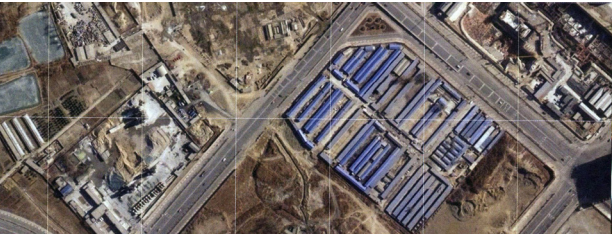


Stacked Villa
57M²
14,250 ppl / km²

Suburb
27M²
21,000 ppl / km²

Urban Village
13M²
29,000 ppl / km²

Danwei
15M²
12,000 ppl / km²



Floating Village
3M²
110,000 ppl / km²

Permanent High Class

Permanent Middle Class

Urban Villager

Migrant Work Class

Permanent Population

41% of China's population is urban
*2003

Floating Population

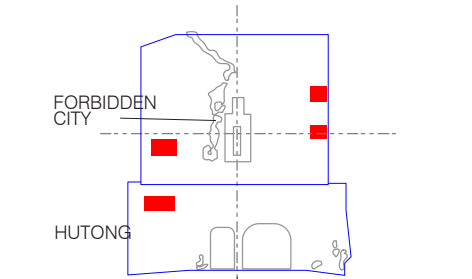
17% live in construction sites
30% Live in company dormitories
40% live in rented quarters
*1997

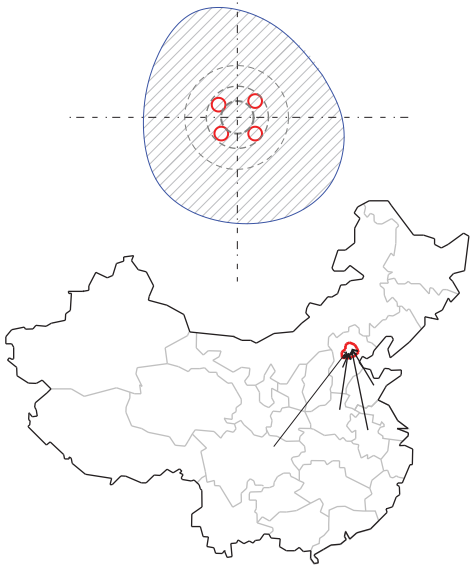
40% -> unregistered in villages
*2002

CITY STRUCTURE

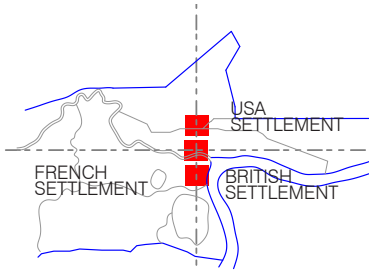
URBAN FABRIC

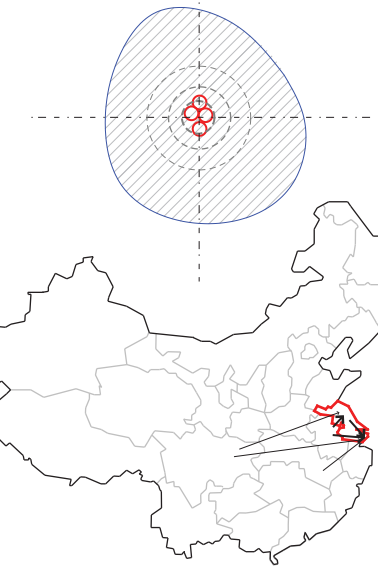
MIGRATION TREND





BEIJING





SHANGHAI

TIMELINE

1840 EARLY MODERN

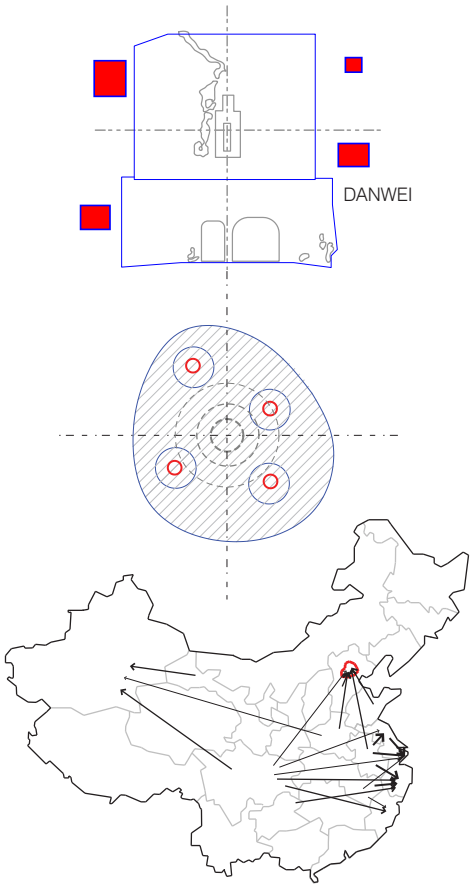
LATE IMPERIAL ERA

Migrant housing quartered the imperial structure of Beijing. It is planned and ruled by this hierarchal spatial order. Housing is peacefully embedded in its relationship with the city.

1911 SEMI-COLONIAL

QING DYNASTY END REPUBLIC OF CHINA

Since industries move into the city center, migrant housing is also central to the urban infrastructure to provide factory and industrial labor. It is privately invested and administered with help of factories.



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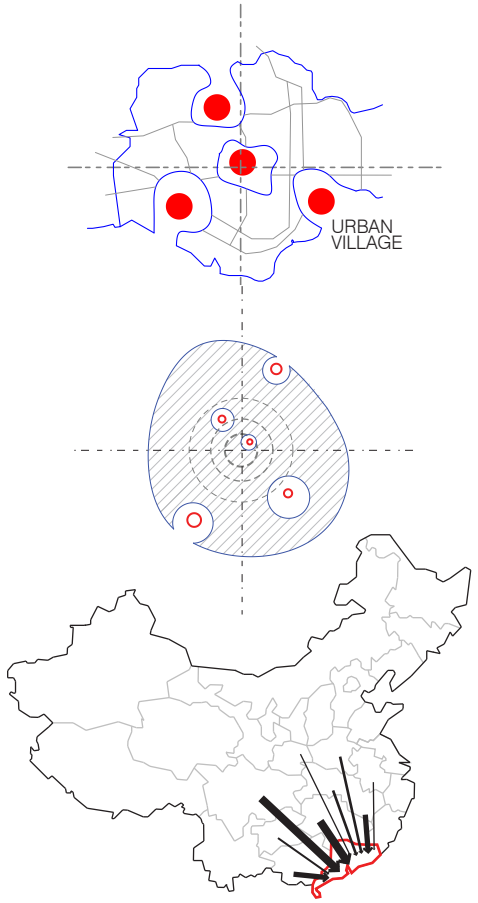


SHENZHEN

?

ROLE OF HOUSING IN CITY STRUCTURE

1949 SOCIALIST
PEOPLE'S REPUBLIC OF CHINA
SOVIET UNION
CLOSED ECONOMY
1960- HUKOU SYSTEM

Uniformly self-sufficient urban cells are compartmented into live/work communities outside the city structure. These autonomous dorm-like blocks encourage urban sprawl.

1978 MARKET REFORM
DENG XIAO PING
GREAT LEAP FORWARD
MARKET REFORM

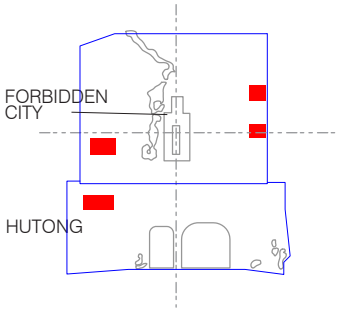
Migrant enclaves is dispersed in the city and fragments the city structure. Enclaves are culturally and spatially segregated in urban fabric. They will be demolished if it continues to disrupt the the city's global initiative.

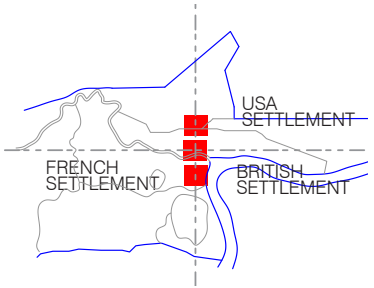
2010 PRESENT FUTURE

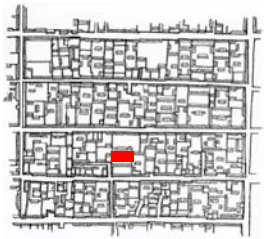
CITY STRUCTURE

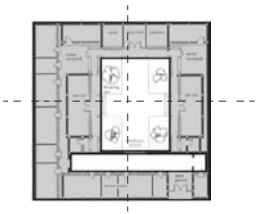
BLOCK PLAN

UNIT ORGANIZATION









HUTONG

SHIKUMEN

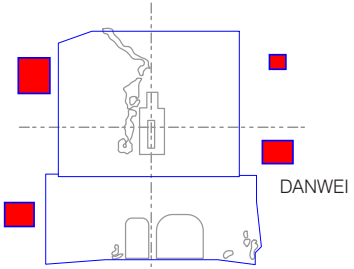
TIMELINE

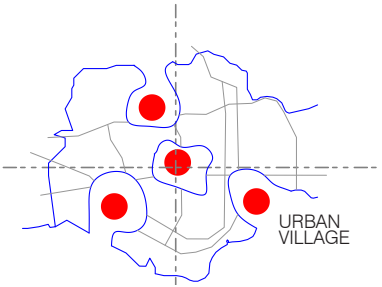
1840 EARLY MODERN
1894- SHEYUAN HUTONG BLOCK

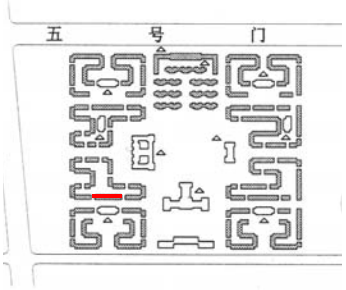
Hutongs are internally organized around a courtyard space. Its block is also embedded within the urban streets.

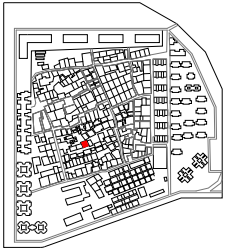
1911 SEMI-COLONIAL
1912 - SHIKUMEN LINONG BLOCK

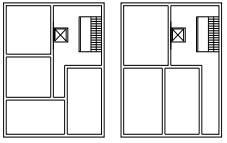
Shikumen are internally organized around two narrow courts for light and air. Its linong block is embedded in the city fabric.











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HOUSING TYPOLOGY

DANWEI

URBAN VILLAGE

1949 SOCIALIST

1957- DANWEI DORM BLOCK

Danweis are uniform living compartments organized around shared circulatory halls and stairways. The dorm block structure is disconnected from the city block and organized around shared functional space and programs.

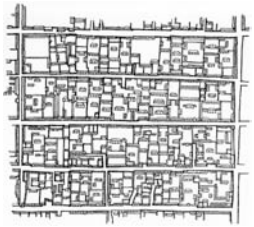
1978 MARKET REFORM

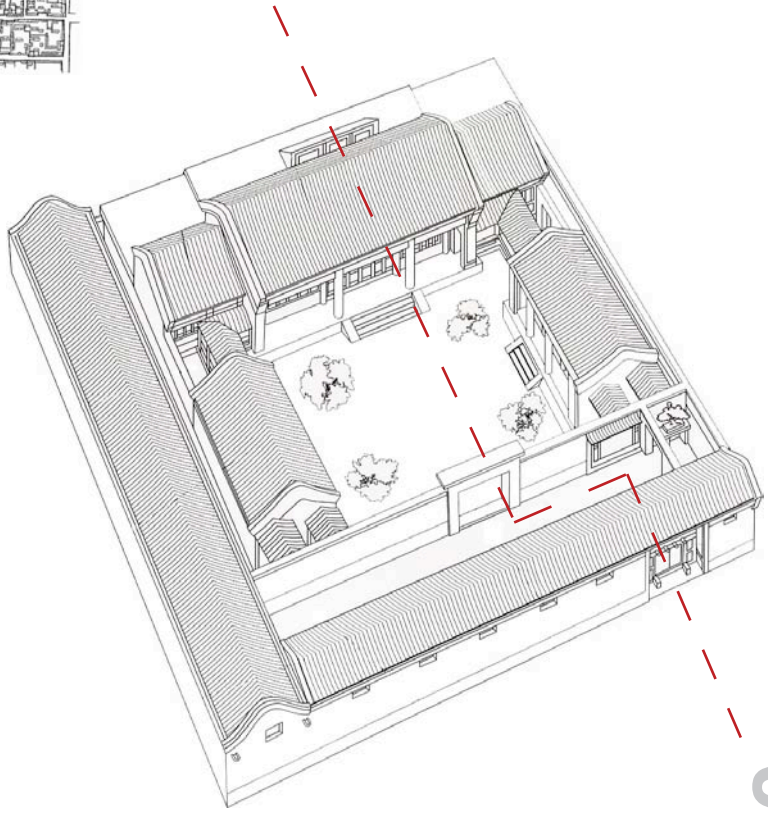
LIVING CELL UNIT
URBAN VILLAGE

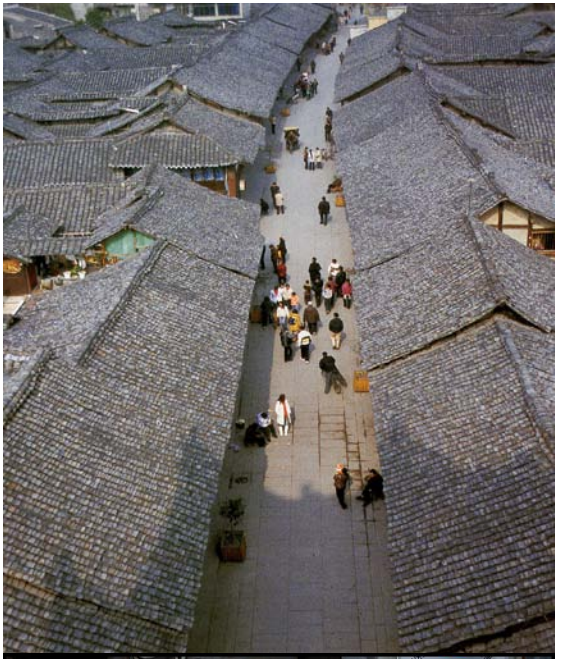
Village buildings are

2010 PRESENT FUTURE

HUTONG







1840
EARLY MODERN

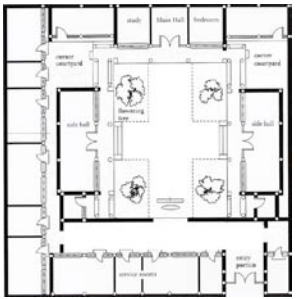
COURTYARD AS FAMILY SOCIAL UNIT

Hutong Housing in Beiijing in the 20th century is designed with cultural rituals, spatial sequence, spatial hierarchy, symmetry and balance. It is a one story housing typology designed originally for one intergenerational family; its spacious interior is then infilled with more families. Elements that dictate the architecture including formal walled compounds, open courtyards and skywells emphasizes the symmetriical axis and the hierarchal organization of space and program.

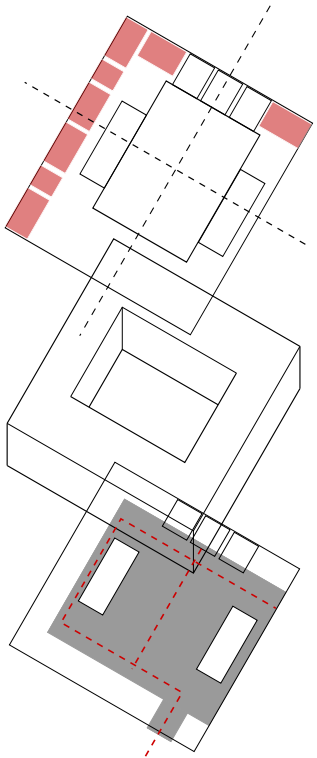
“Whether compact or spread out, many Chinese houses exhibit a clear spatial hierarchy that mirrors the relationships among the family living within it and their interaction with visitors, Adjacent open and closed spaces help define this spatial hierarchy, aided in fundamental ways by the purposeful use of gates, screen walls, and steps” Knapp 26-27).

“Houses as social templates- The interior layout of the house and its ornamentation serve important social dimensions for the family living within the walls. Hierarchies of generation, age, and gender are usually most clearly reflected in how interior space is divided and how it is used. After all, it is in the home, rather in any religious or other secular structure, that Chinese life-cycle rituals—birth, maturation, marriage, and death—are carried out, sometimes in great halls but more often in open spaces temporarily great halls but more often in open spaces temporarily converted to meet necessary ritual needs.” (Knapp 68).

“Open spaces offer abundant advantages in terms of providing enhanced ventilation and sunlight, a place to gather and work, and privacy and safety. Buildings are typically arranged symmetrically, facing each other around courtyards, with the principal building, usually where the main ceremonial halls is located, orientated towards the south or southeast (referred as northern building or upper building indicating superior position). Side halls then can easily be designated “east hall” and “west hall” tied to cardinal directions and hierarchy (Knapp 27).



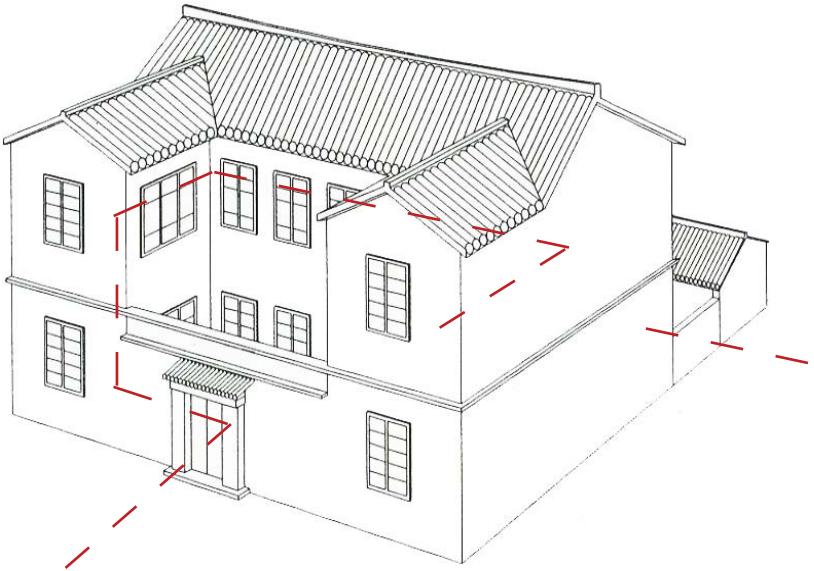
9M^2
29,000 PPL / KM^2
4-6 FAMILIES



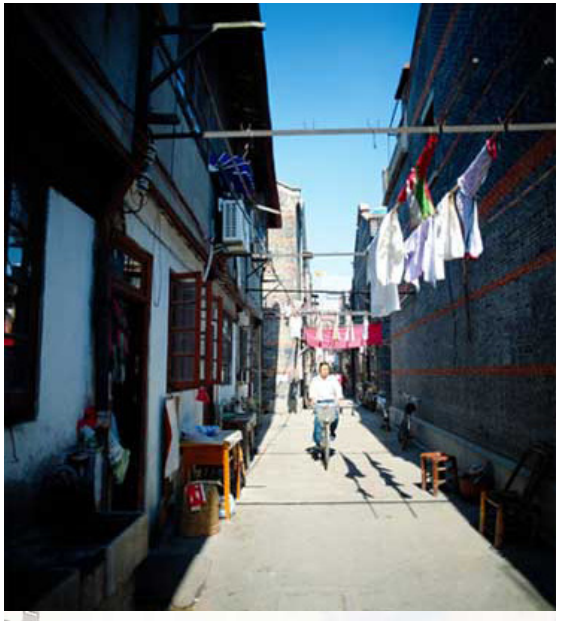
HIERARCHY
MAIN HALL
PRIVATE BEDROOMS

PUBLIC/PRIVATE
COURTYARD IS 40%
OPEN SPACE FOR 1
FAMILY DWELLING

SEQUENCE
CIRCULATION AROUND
OR THROUGH
COURTYARD



SHIKUMEN



1911
SEMICOLONIAL

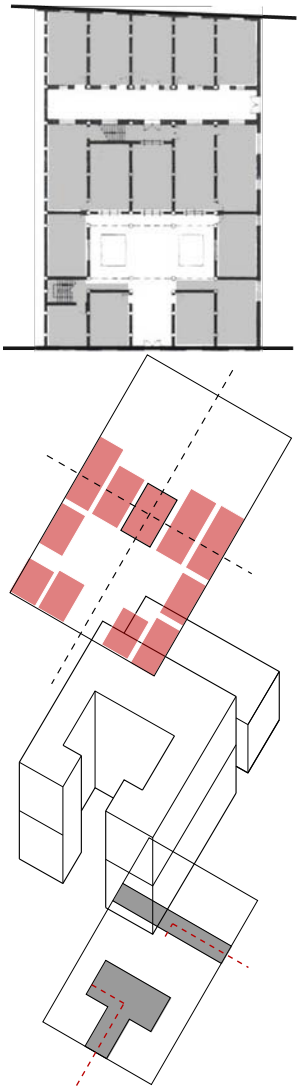
COURTYARD FOR LIGHT AND AIR

“Single storied compound occupied by one family to diversified forms of housing, dominated by clustered multistory residential buildings, and took place initially in the trading cities before spreading gradually to other centers” (Junhua 14). Linong housing originally designed for single household.

City governments played a larger role in housing construction including developing appropriate laws and regulations, as well as making direct investments in housing projects. Also other enterprises like factories and minds and railways provided housing for their staff and workers” (Junhua 48).Since industries move into the city center, migrant housing is also central to the urban infrastructure to provide factory and industrial labor. It is privately invested and administered with help of factories. Informal housing settlements and colonies divide city structure into concessions.

“One major source of the rising population was the migration of young laborers from rural areas, as well as immigration by impoverished peasants and refugees. The proportion of industrial workers and other poor people in the total population rose steadily... in 1920, according to the analysis and calculations made by Zhu Maocheng in his article, Shanghai’s labor force was about 1.125 million, constituting fully 70 percent of the city’s total population” (Junhua 50).”The old-style shikumen houses, built up in the central part of Shanghai in the early days, had big rooms but primitive facilities. The basic facilities, like water supply and toilets, were shared by jointly rented by several poor families. Some of the families received no sunshine throughout the year, and some lived in rooms without windows. The figures from a report shows that a majority of houses (22,700) were shared by four families, some houses (14,000) shared by 6 families, some houses (1,300) shared by nine families, and even houses shared by 15 families.

“Most of the houses were two-storey, post-and panel structures, with an horizontal courtyard in both front and back. The entrance of the house was a typical shikumen gate. Clustered shikumen houses were often named li, while the regular corridors between the rows of housing blocks were called nong meaning alley” (Junhua 41).

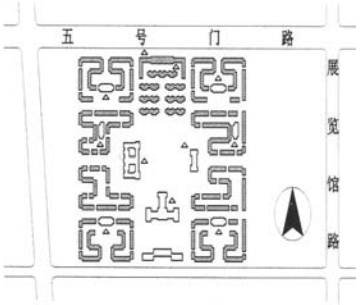


15M^2
12,000 PPL / KM^2
4-6 FAMILIES

HIERARCHY
GUEST HALL, PRIVATE BEDROOMS, ACCESSORY ROOMS

PUBLIC/PRIVATE
20% OPEN SPACE
SHARED BASIC FACILITIES

SEQUENCE
2 ENTRANCES
MAIN SHIKUMEN GATE



DANWEI

1949
SOCIALIST

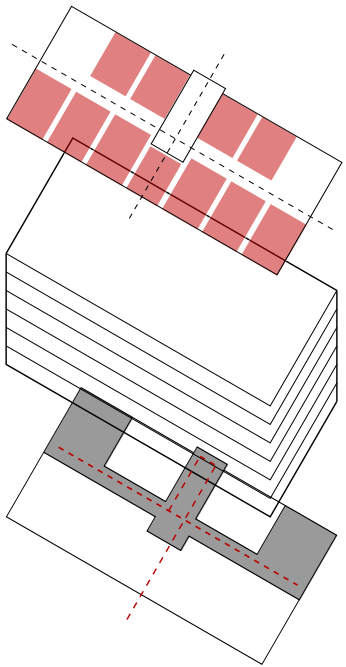
SHARED COMMUNAL SPACE AS CENTRAL SOCIAL UNIT

"Standardized multi-floor residential buildings sprang up in large, medium-sized and small cities even in the residential districts of mining areas" (Junhua 14). "the change of the political system and particularly the transfer of housing to public ownership was the reason directly accounting for this transformation of housing type" (Junhua 15). "The state gave priority to solving housing problem of workers and constructed "worker's new villages in Shanghai" (Junhua 15). "Housing was designed and constructed in line with a standard model and according to state standards and rules. Aided by this standardization, housing construction unfolded on a massive scale. Industrialization seemed to be the best way to solve the problem of housing shortage" (Junhua 16).

"Part three spans for the first thirty years after the founding of the People's Republic of China (New China), a period when publicly owned housing prevailed under a socialist planned economy. It encompasses the influence of the former Soviet Union, the Great Leap Forward and the Cultural Revolution. During this period, housing policy kept changing with the political turbulence and economic fluctuations. On the one hand, the state shouldered the heavy burden of providing housing that was distributed as part of social welfare, and on the other, it was helpless in checking the deteriorating living conditions of urban residents" (Junhua 14).

"As for the city proper (city limits), its basic building block became the danwei or work unit, which turned away from the street as a public space. With its walled compounds that brought together workers' residences with their places of work, the danwei recalled the regimented order of ancient Chang'an" (Friedmann xviii). "Large-scale industries, along with other state-operated institutions, such as universities, were organized as work units (danwei), which in some ways were like miniature walled cities structured around production" (Friedmann 11)."By the 1960s, some 90 percent of China's urban population belonged to a danwei. It became the basic unit of social and economic life in urban China—"the site through which the state provided welfare, housing, education, healthcare and other social benefits" (Campanella 191).

15M^2
12,000 PPL / KM^2

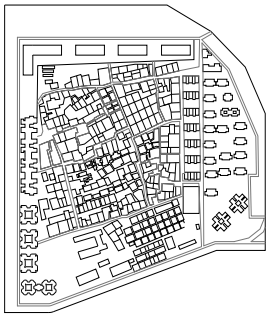


HIERARCHY
CENTRAL STAIR
LIVING UNITS

PUBLIC/PRIVATE
SHARED KITCHEN AND SERVICE SPACES

SEQUENCE
ONE ENTRANCE WITH INTERIOR CORRIDORS

Urban Village Housing



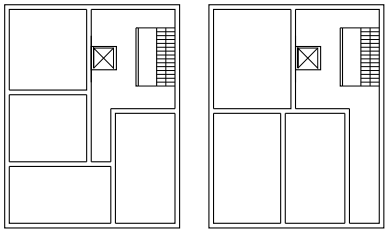
1978
Transitional

Economy of privately owned space to maximize profit

"A village's social and economic life is usually supported by a special network based on family or blood relations... Though living in the city proper and leading a modern life, the "villagers" maintain a social netowrk based on family and blood relations. Therefore, the "urban villages" or "village communities" are completely different from the neighborhood communities and unit-based communities in cities" (Li "The End of Chinese Villages").
"Among the poorly constructed and crowded buildings stand three spacious and elegantly-built buildings. They are ancestral temples, primary schools and kindergartens, and the center for senior citizens. This shows a commonly accepted value amont the "villagers" to pay respect to the aged and take care of children. Dominating an "urban village" are usually three-five large families. Each family has its own ancestral temple. The largest and most powerful family usually made its temple most luxuriously built. The phenomenon of patriarchal clan remains common in southern China. This may hark back to centuries ago when many northern clans moved to the southern provinces due to war or natural disasters. By now these family clans still pay much attention to their history, or their "roots" as they always say" (Li "The End of Chinese Villages").

"Surveys show at least 20 households in a village share consanguinity (kinship/ common ancestry). Some villages even see 50 – 100 households to have the blood relationships. Group of villagers who are consanguinity = company. Groups of villagers who have blood relations = subsidiaries. Social network = foundation of village economic life.

There cannot be an end of Village life, non-agricultural process and industrialization cannot simply being to an end to the village society deeply rooted in a social netowrk weaved by blood ties, family relations, cultural traditions and shared values and rules existing for a long time.



13M²
6,000 PPL / KM²

HIERARCHY
GROUND FLOOR
STOREFRONT

PUBLIC/PRIVATE
SHARED ROOF AND
CIRCULATION AREAS

SEQUENCE
ONE ENTRANCE WITH
INTERIOR CORRIDORS

China has a long rich history of exploration and migration within its borders and around the world.

“Chinatown is a success story... it is a bustling, entrepreneurial enclave providing employment opportunities which do not threaten other New Yorkers’ positions, and which also allows budding Chinese entrepreneurs to accumulate business skills and savings prior to launching their own business” (Birrell 303).

The reasons for rural migrants to move interprovincially or internationally are

1. economic opportunity
2. political change
3. social community

These criteria usually leads migrants to China’s Special Economic Zones, United States, Canada, any many other countries.

Chinatown

A neighborhood or district construction of migrant workers and businesses which "retains some cultural distinction" from a larger, surrounding context. Migrant Enclave is a concept that began when Chinese migrants with high aspirations migrate to less poor areas in search for economic opportunities. Discrimination is a persistent factor setting apart the migrant community and the city residents.

Claim existing City Fabric

District Development within the fabric of the host city

+

Influx of Chinese Immigrants

1) Economic opportunity and political freedom
2) High density intergenerational living

+

socio-economic Community

Family or Cultural Network Community business

=

Chinatown

Established cultural region that caters to local migrant needs

CHINATOWN

2010

PRESENT FUTURE

Picture page
"China's 'Urban Villages'"

Issues

1. Lack of diversification of housing types
2. Standardization of housing construction in a massive scale
3. 70% of population live in urban villages= construction not recognized by government
4. need more commercial space/ amenities
5. need more affordable housing not less!
6. need sanitation, hygene, good public image
7. Rural migrant enclaves swallowed by city
8. Need rural identity
9. Spatial segregation between urban and rural population
10. Fragmentation of city scape
11. all alleys/ Dangerous maze of crime
12. no legal light and air
13. cramped space
14. Unhealthy High density
15. Poor pipe lines and drainage system
16. no public space
17. Government ignoring population and erasing housing
18. Lack of relation of unit individual to city, no identity

Problems with Chinese marketecture are also due to issues with satisfying different population needs, programming needs, and other legal/social issues.

Population is of two extremes: intellectuals with a high level of education and migrant workers with poor education. These modern villages might not only provide affordable housing but they are also the sites of sweatshops, businesses, elderly centers and other services as well.

There needs to be a new typology of village housing to satisfy these personal issues as well as the general issues that come with desigining in Market Reform China.

"Each house is a home for a family that exists in both time and space, a dynamic entity that manifests not only the family within it in its varying evolving forms, but as well is a constituent part of the place in which it is located (Knapp 15).

"Sheltering is only one of the factors contributing to house form, there is also broader environmental context like climate or application of fengshui or the ongoing life rituals of the family " (Knapp 16)

Goals

1. Create relationship of individual unit to city as a whole
2. Uphold and represent migrant community identity
3. satisfy market needs
4. satisfy villager needs, farmer needs, and city needs
5. Provide alternative ways of living in city
6. Provide quality living conditions and sanitation

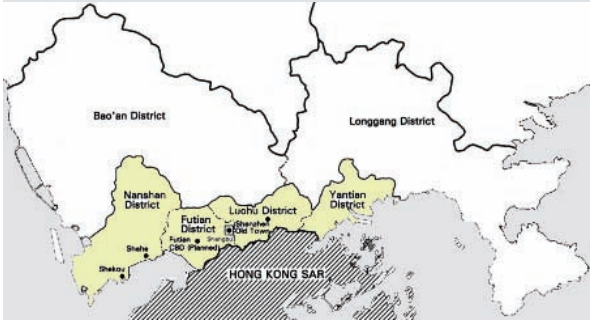
SITE

Picture page

Leong, *The Frontier: Southwestern Shenzhen under construction.*

Pictures page

Ng, “City Profile Shenzhen.”



"All through the 1980s and 1990s, Chinese cities strained to meet or beat "Shenzhen tempo"—a pace set by workers on the International Foreign Trade Center and defined as a finished building floor every three days. Appropriately enough, that mark was shattered a decade later by workers on another Shenzhen tower, who knocked a full half-day off the previous record" (Campanella 281).

Site

Situated in the forefront of the Pearl River Delta, Shenzhen serves as an important transport hub in South China, and the only Chinese city accessible by land, sea and air.

Without previous architectural history, Shenzhen was a fishing village with large rice patty fields adjacent to the economic capital, Hong Kong.

As the city quickly urbanized into a major capitalist hub for migrant workers and industrial investment. As Shenzhen was named by Deng Xiao Ping to be China's first Special Economic Zone in 1980, its free market economy developed ferociously along with its architecture and city infrastructure. It soon became the model for other Special Economic Zones and other market cities.

"Shenzhen was to be a showcase city and an experiment in market-driven urbanization" (Friedmann)p 29

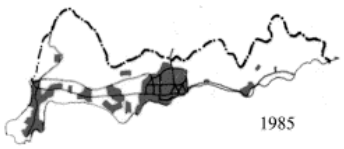
Rapid Construction + Densification in Gated Communities + Rapid Urbanization = Marketecture

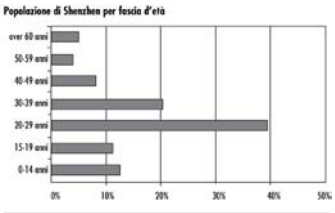
Products are prefabricated
Mass produced remotely
Prototypes resused

Growing middle class in cities
Rapid growth in population
Great influx of rural migrants

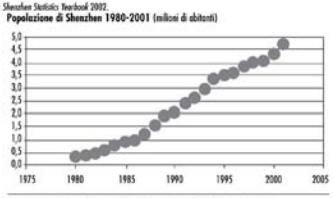
100 years of urban growth compressed into a globalized decade

Global identity and style
Lacks individual needs
No culture or site context

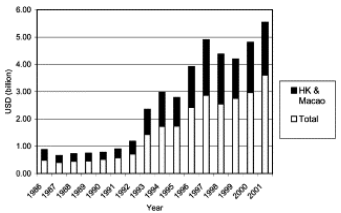


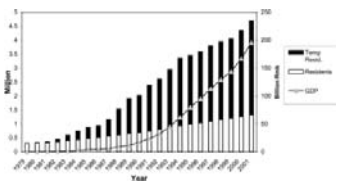


Source: Shenzhen Statistics Yearbook 2002.



Source: Shenzhen Statistics Yearbook 2002, published by the Chinese Institute of Statistics.





100,000 factories, offices, public edifices, and houses in 5 years.

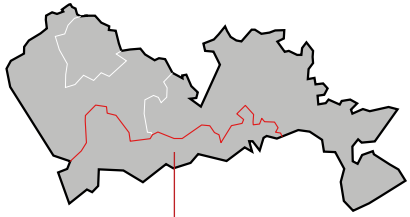
Population increase of 30,000 people to 8 million people

Shenzhen GDP raised 1000% from 1978-2000, risen annually by 33% since 1980 (Hasmath and Hsu p67).

Migrants account for 83% of the total population

Shenzhen, cn

Shenzhen Land area_2,050 sqkm
Shenzhen Population_12 million people
SSEZ Land area _395.81 sqkm
SSEZ population_8 million people



Special Economic Zone

Industrial structure transform
1. from tradition industry to hi-tech industry
2. from small scale scatter operations to large scale group-based companies
3.from assembling and processing to independent manufacturing.

Urban villages exist in the cavities of the city infrastructure and host the majority of the cities population with its affordable yet densely unsanitary "handshake apartments." Although urban villages occupy 1/10th of Shenzhen, they provide for 70% of shenzhen's population.

In Oct 31, 2004, Shenzhen became a villageless city, and transformed all previously rural land to urban areas. By doing so, it prepares to demolish and rebuild these villages to fit more into the urban fabric. Most likely they would not program as affordable housing for migrant workers after.

Picture page
"Urban Villages -." *MIT Vanke Wiki.*

Because hundreds of cities are rapidly urbanizing to China's new market plans and policies, cities are developing as pure industrial machines, logistical service centers, and technological parks. Shenzhen is designated as the first and still the most successful of China's Special Economic Zones.

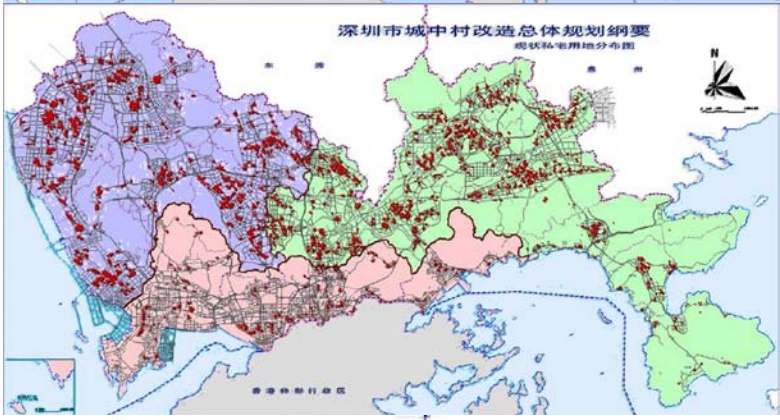
"Roughly twenty years after China adopted its reform and open-door policies, this was a period featuring economic growth and deepening housing reform focused on an emerging market orientation, during which housing development in Chinese cities was strongly promoted. In the 1990s, as the state promulgated the slogan of making housing a new consumption good and component of economic growth, modernization of the housing industry was put on the national agenda. With changes in the social economic structure, as well as corresponding stratification of urban dwellers and a diversification of demands, housing began to change its unvarying existing form as a ration article, and became geared to meet market demands" (Junhua 14).

"With China implementing the '400 Cities before 2020' program, through which the government intends to populate each city with up to 1 million inhabitants, the removal/renovation of urban villages are the first step towards this national plan. It will not only affect the areas around the Pearl River Delta, but throughout other provinces in China" (Uehara 478).

INDUSTRIAL ZONES INCLUDE: PLASTIC TOYS, UNDERWEAR AND WATCHES, SERVICE, FURNITURE AND BIKES ETC. SHENZHEN KNOWN FOR ITS TELECOMMUNICATIONS EQUIPMENT, COMPUTER AND RELATED PRODUCTS

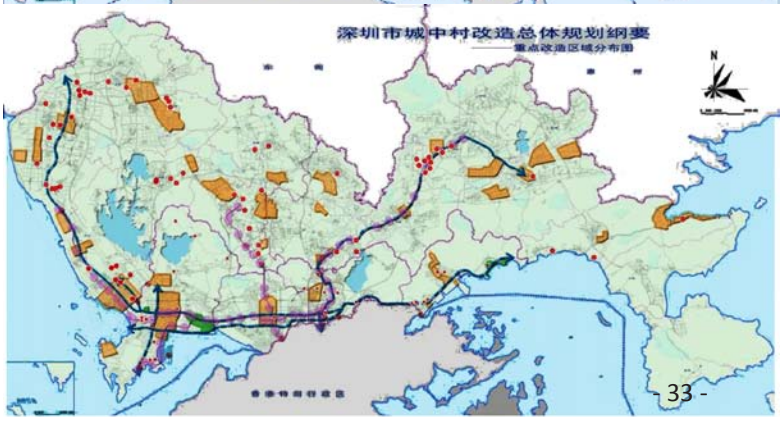
2,000_ VILLAGES IN SHENZHEN
241_ VILLAGES IN SEZ

TOTAL LAND AREA OF VILLAGES IN SHENZHEN 43.9 SQ KM - 2.2% OF TOTAL URBAN AREA



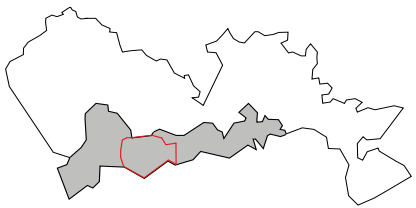
YELLOW PATCH- TARGETED URBAN VILLAGE REGIONS TO BE DESTROYED/RENOVATED

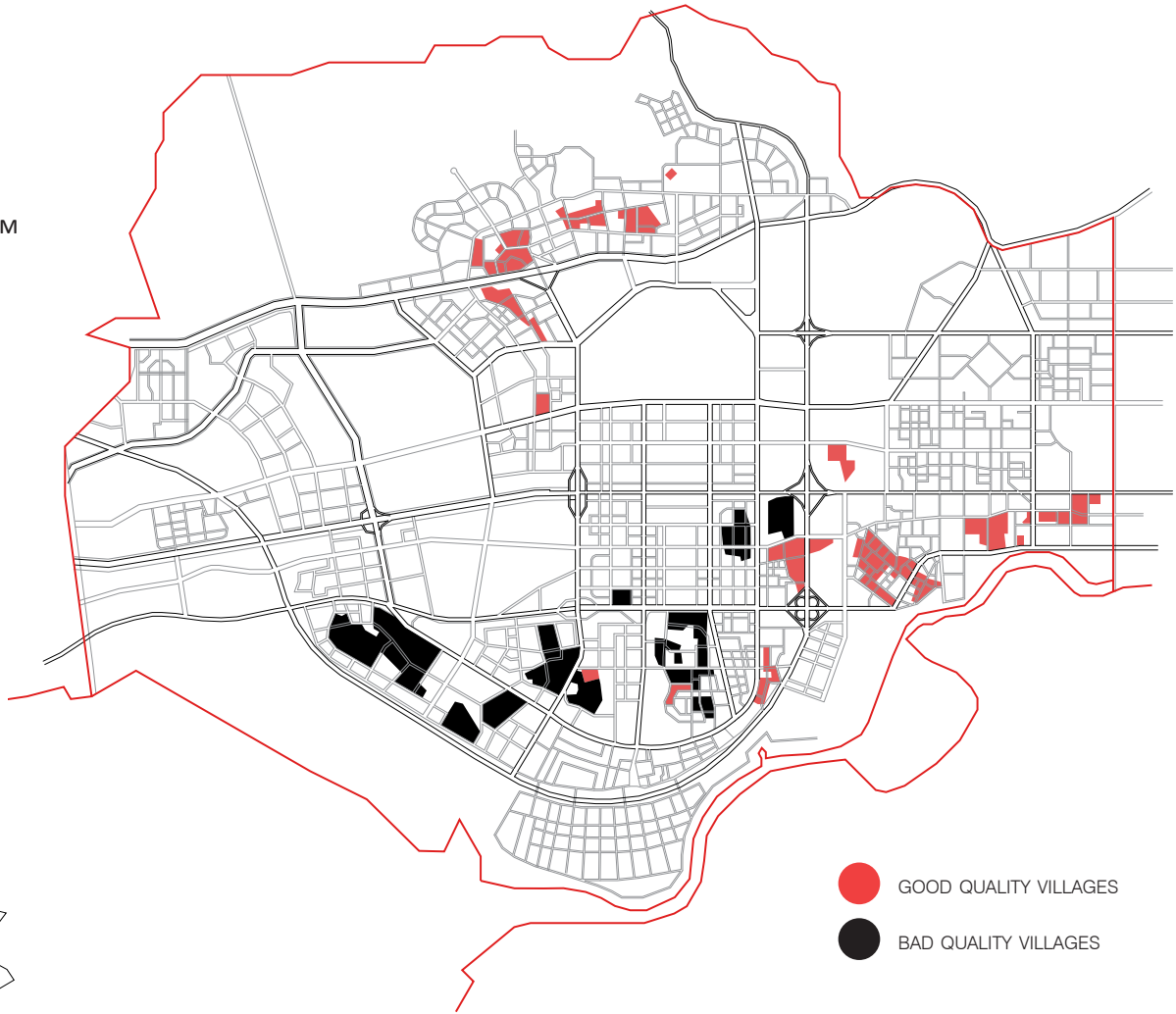
BLUE LINE- DIRECTION TO GO ABOUT TARGETED VILLAGE.



Luohu- 54,100,000 sqm of built villages, 22% of built district area
Futian- 57,100,000 sqm of built villages, 15% of built district area
Nanshan- 44,600,000 sqm of build villages, 22% of built district area
Yantian- 164,300,000 sqm of build villages, 30% of built district area

1,182,200 people in futian, 79 sq km
67 villages are in Luo hu, Futian, and Nanshan District
Total Land area is 10 sq km - 6% of total urban constructed areas (168 sq km)

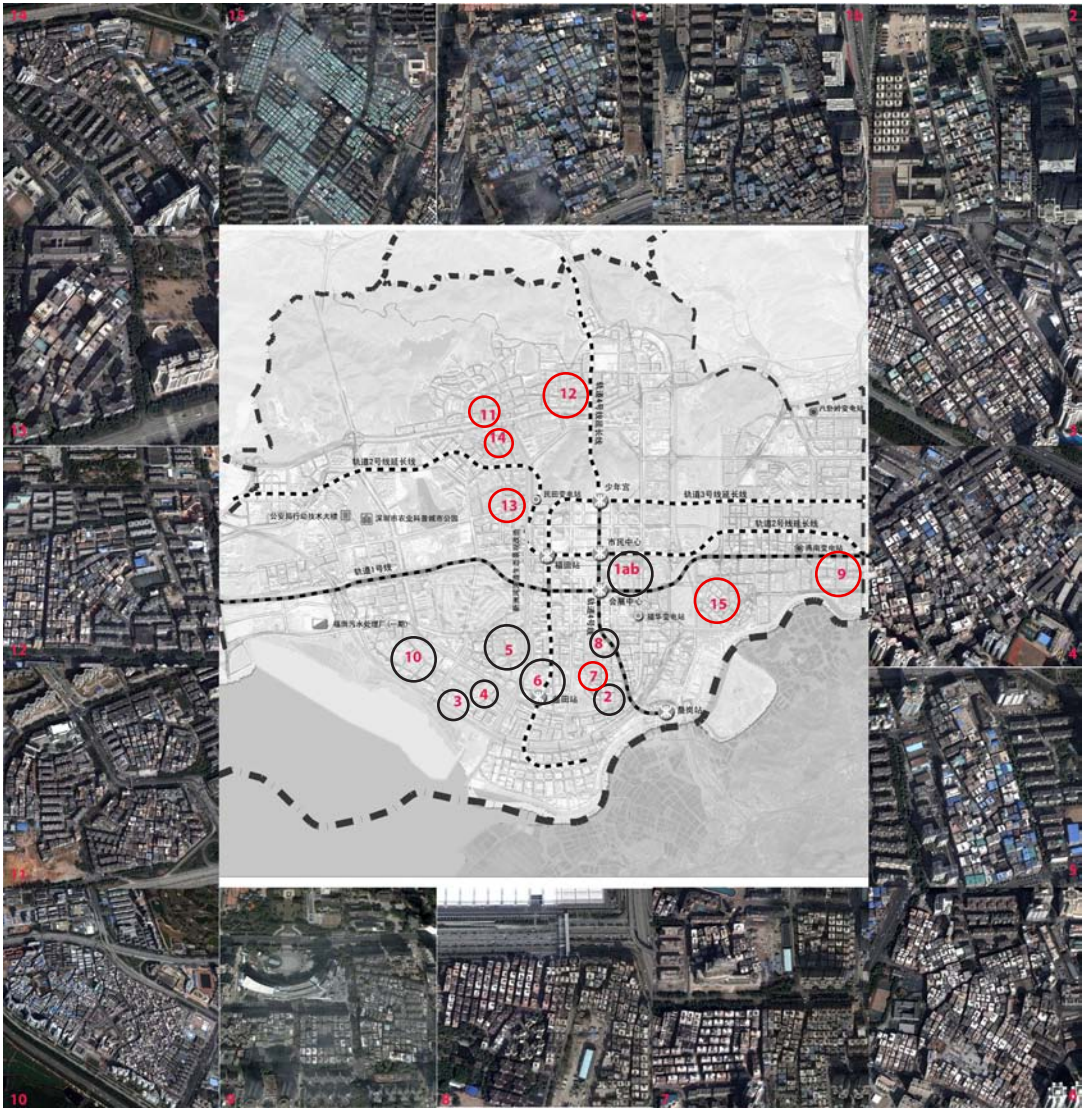


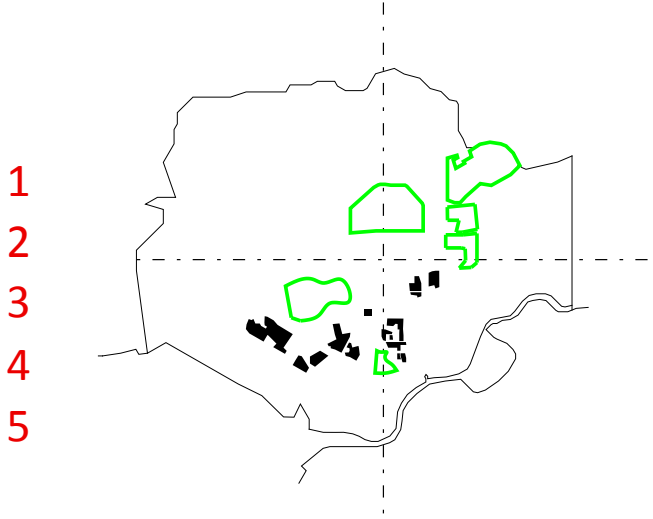


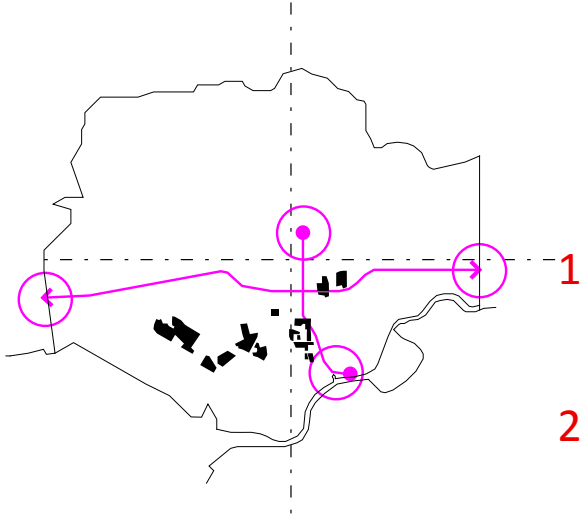
"This hastily built city gave birth to the first urban village. The exceedingly expanding city of Shenzhen is swallowing the fate of tiny villages dispersed in its periphery. Its city landscape is fragmented and programmatically divided for its different populations. Urban villages exist in the cavities of the city infrastructure and host the majority of the city's population with its affordable yet densely unsanitary "handshake apartments". Developers are trying to erase these urban villages and renovate it within the city's new globalized ideal" (Uehara 478)

Futian District is the downtown of SSEZ and the checkpoint between Hong Kong and Shenzhen. It has a very large urban book store, civic center, concert hall, etc as its central hub. It also sites some of China's tallest skyscrapers and its largest urban parks. With about 20 or so urban villages, or migrant enclaves, the urban juxtaposition of the villages in the city fabric is very apparent in this district.

"Farmers in China are frequently considered as second-class citizens in comparison to their urban counterparts due to lower living standards, life chances, and quality of life" (Hasmath and Hsu 90.)







GREEN PARKS

1. Bijiashan Park
146 hectares, more than 10 small speaks, give shape of penholder, bird's-eye view of shenzhen. 600,000 sqm lawn, two artificial lakes, lawn bowl green, fishing and bbq. Large mountain-climbing competition and lawn bowl matches.

2. Central Park

3. Lotus Mountain Park
166 hectares, largest public green, superb view, artificial lake, kite square, wooded meadow, coconut forest and teahouses

4. Golf Club

5. Shuang Yong Park

SUBWAY CONNECTIONS

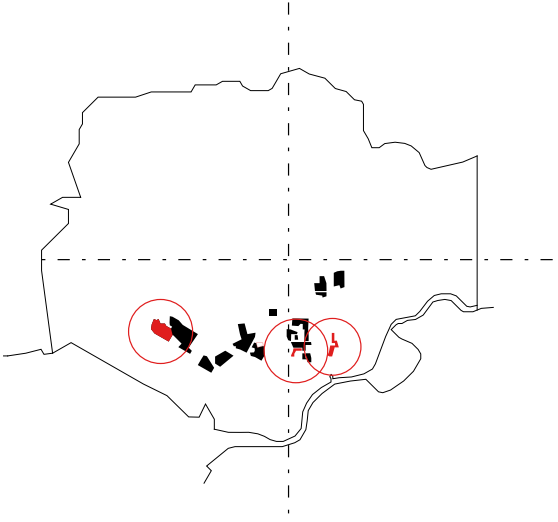
Line 1
Luohu district to Bao'an district

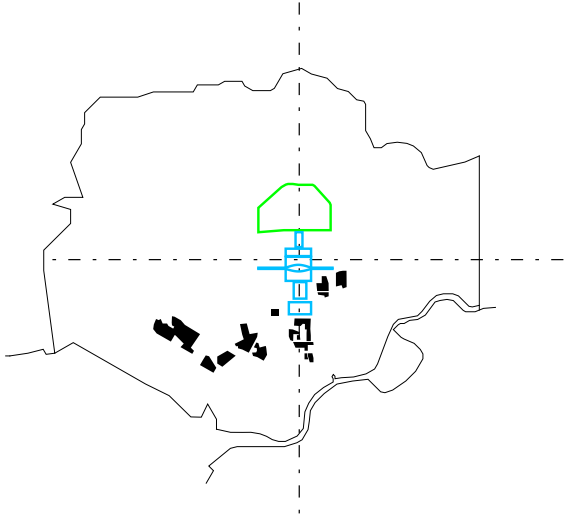
Line 2
Huanggang Port (Hong Kong Shenzhen Border) to Shenzhen City Hall

1

2

3





VILLAGE TOURIST ATTRACTIONS

1. Xiasha Village
With profound folk customs and culture, as well as beautiful business, tourism and living environment, Xiasha is recognized as a model for village progress in Shenzhen.

2. Huangang Village
“Huanggang Village has been recognized as a province-level and municipal civilization village [a cultural and ethical progress]” (“Major Tourist Attractions”).

3. Shuiwei Village
With a cultural square that covers a great area with multifunctional use, Shuiwei is considered one of the city’s first seven rural tourist destinations.

CENTRAL BUSINESS DISTRIC - CBD

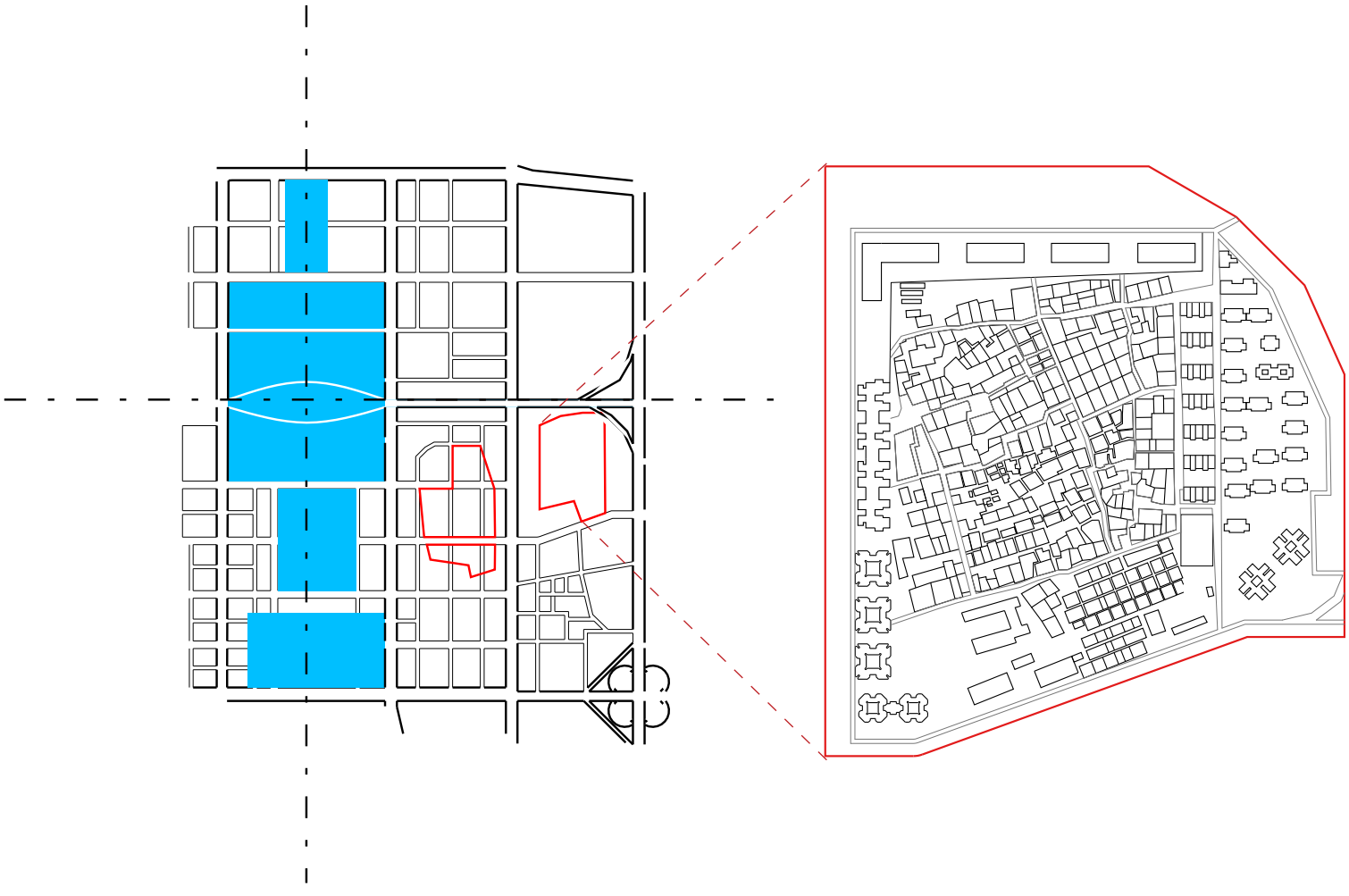
“The central area of Shenzhen, in the core of Futian District, occupies an area of 6.07sqkm with a planned total construction area of 7.5mil sqm, surrounded by Binhe Avenue, Hongli Road, Caitian Road and Xinzhou Road. The central area, consisting of the CBD, administrative center, cultural center, exhibition centers, shopping malls and open urban parks and other functional areas, is a modernized international downtown center integrating administration, culture, information, international exhibition, business and finance” (“Major Tourist Attractions”).

International Convention & Exhibition Center
Shenzhen City Hall

Central Business District- CBD

"The central area of Shenzhen, in the core of Futian District, occupies an area of 6.07sqkm with a planned total construction area of 7.5mil sqm, surrounded by Binhe Avenue, Hongli Road, Caitian Road and Xinzhou Road. The central area, consisting of the CBD, administrative center, cultural center, exhibition centers, shopping malls and open urban parks and other functional areas, is a modernized international downtown center integrating administration, culture, information, international exhibition, business and finance" ("Major Tourist Attractions").

"The CBD, at the core of Shenzhen's central area, has highly integrated business functions boasting a planned business area of more than 3 million sqm with about 30 high-level business buildings. China's first large underground traffic hub will be built beneath the CBD with the connection of various lines. Shenzhen Subway Line 4 will be directly linked to Hong Kong's Mass Transit Railway through the Futian Port"("Major Tourist Attractions").



PROGRAM

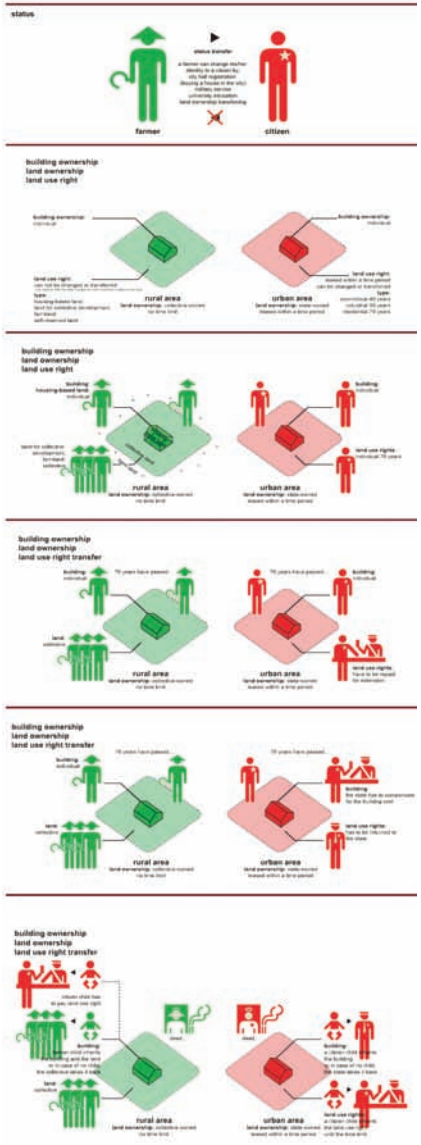
04 | PROGRAM

BLOCK ANALYSIS
BLOCK PROPOSAL

"Houses takes shape over time, reflecting both internal and external dynamics" (Knapp 15).

Program

The challenge of high density housing is that it "remains an anonymous field because the future users are rarely known" (Schittich 10). "This is in contradiction to the thesis that the best results are achieved if the building is tailored to the individual needs of the inhabitants" (Schittich 10). Holding most of the world's population, China especially encountered this challenge as it "built more housing in the last twenty-five years than any nation in history" (Campanella 286). Over the past quarter century, globalization and rapid urbanization have fiercely overtaken and prematurely transformed China's domestic architecture, replacing much of it with new mass produced housing types. As Chinese cities rapidly urbanize in the new market economy, housing becomes more market oriented and consequently neither identify with the city context nor the individual inhabitant.



Change in the City diagrams showing the actors involved in ViC creation and the land-use rights mechanism.

Individuality | a Sense of Private Space
Operable devices/controls
More Space per capita
Personal way of entrance
Every inhabitant gets a window
Every four units get a balcony

Scale | Detail Design and Urban Plan
Design entrances/
windows/floor markers

Speed | Rhythm of Leisure, fast vs slow
escalator/stairs/
narrow vs wide corridors/
elevators

Collective Unit | Sense of Community
Housing Block
Shared Spaces/Public Program
Park, School, Grocery Store,
Community Center, Elderly Center

Amenities
Legal Light and Air
Affordable
Plumbing
Electrical
Mechanical

"In terms of the performance of migrants in the urban labour market, existing studies highlight discrimination against migrants who are employed predominantly in low-income and 'three-Ds' (dirty, dangerous and demeaning) jobs, with longer working hours and much lower earnings than their urban counterparts" (Song and Woo 115). Individuals rather be self-employed than employed by others.

"Most Migrants do not have health insurances and they experience deteriorating health conditions. The majority lives in crowded conditions and they have no private sanitation facilites. Their residential clusters are often based on common origins, which effectively segregate them from the local urban population. Additionally, there is prejudice and discontent between the local urban population and the population of migrants" (Song and Woo 116).

	Situation	Needs
22.8% 270, 000 Local Villager	There before reform, owns housing on rural land. Plays mahjong all day, sends kids to foreign schools. The government recently transformed their status to urban dwellers in 2004.	Need housing ownership for steady source of income.
63.7% 753, 060 Rural Migrant	Came during the reform in search of better life opportunities. Blue collar worker.	Need affordable short term housing with more amenities and social services to serve migrant needs.
13.5% 159, 600 Urban Resident	Came during the reform to work and/or study in the city for a short while.	Need affordable temporary housing.

Urban Village Population

Other Peopulation

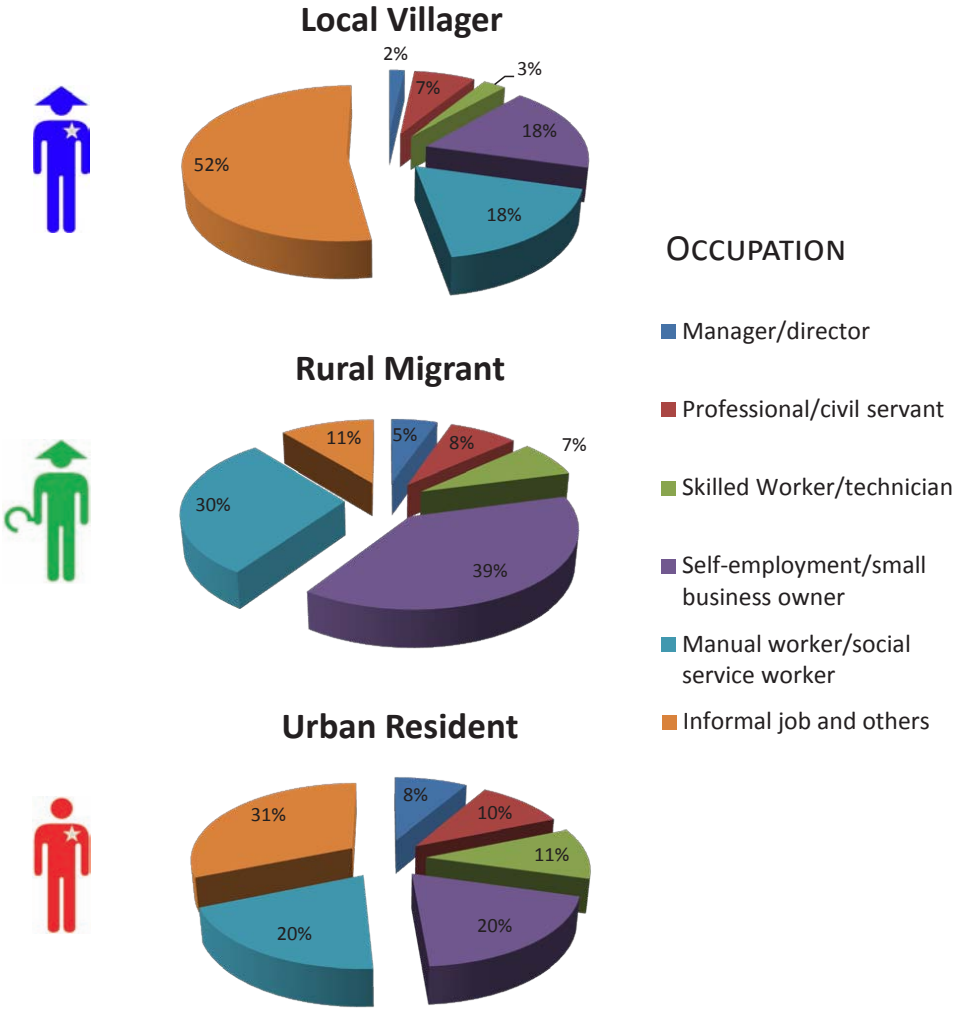
	Came during the reform to take first-hand advantage of the market reform. White collar worker.	Need a safe sanitized, hygenic city with good public image.

	Household Size	Income (Yuan)	Living Space per Capita	Rooms	Housing Index
Local Villager	3.82	1,868	43.58M^2	1.20	3.60
Rural Migrant	2.58	1,650	14.56M^2	0.62	1.98
Urban Resident	2.94	1,352	26.27M^2	0.84	3.07

"The floating population refers to people who go to the city for economic or other employment-related reasons instead of for cultural-educational reasons or social reasons. These people will not change their residency status. Simply speaking, it refers to those migrants who are conducting spontaneous social economic activities for the pupose of living and reaping benefits. (Hang and Iseman, 92).

"By 2003, Shenzhen's floating population increased to 6.4 million, making up 80% of the total urban population and transforming the villages of Shenzhen into immigrant settlements for the floating population" (Hang and Iseman, 92).

Minimal legal wage:
280 yuan = 40 usd



"Rural Labour migrants are not a uniform entity. Three main groups:

1.Construction Workers, Largest Group. Virtually all unskilled and semi-skilled construction is done by rural migrants, mostly young males, organized in teams along native place lines. Construction workers work long days, and usually eat and sleep at the construction site. Their daily lives are often highly regimented, with strict rules about leaving the site.

2.Industrial workers 2nd largest group (textiles, electronics) young migrant women predominate. Larger factories usually offer accommodation and food, and most industrial workers lead disciplined and isolated lives.

3.Self employed and those working in small enterprises and households. This includes peddlers, traders operating market stalls or counters in shops, garbage collectors and waitresses, as well as domestic workers and sub-contractors of agricultural land on the outskirts of the cities. In comparison to the first two groups these migrants are in much more frequent interaction with the local population, and many come into direct contact with the authorities" (Hang and Iseman, 92.)

VILLAGE TOURIST ATTRACTION

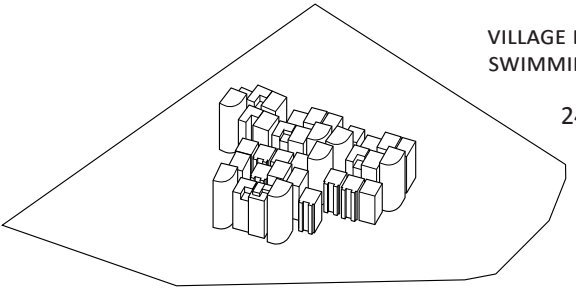
1. Xiasha Village
Home to Xiasha memorial arch, Huang Siming's ancestral temple, Chengyanghou Temple and figures of Buddha. it boasts a museum and recreation parks, Lantern Festival and grand pencai feast. Lion and Dragon Dances, Martial Arts performance and Cantonese opera. Flowers and trees flourish within the village, star-rated hotels, garment streets, cultural square, stadium, swimming pool, and shopping centers. With profound folk customs and culture, as well as beautiful business, tourism and living environment, Xiasha is recognized as a model for village progress in Shenzhen.

2. Huangang Village
"Home to China's first village-level museum with a collection of 140,000 books and where children can play in water and feed fish. Huanggang Village has been recognized as a province-level and municipal civilization village [a cultural and ethical progress]. Programs include cultural square, music fountains, stage performances, and a park with small bridges over a stream" ("Major Tourist Attractions").

3. Shuiwei Village
Shuiwei cultural square covers an area of more than 7,000 sqm and is equipped with lighting and accoustic equipment. Large stage and 2,500 sqm multifunctional building that includes a wonder stone collection room, library, dance hall and gymnasium. Considered one of the city's first seven rural tourist destinations.

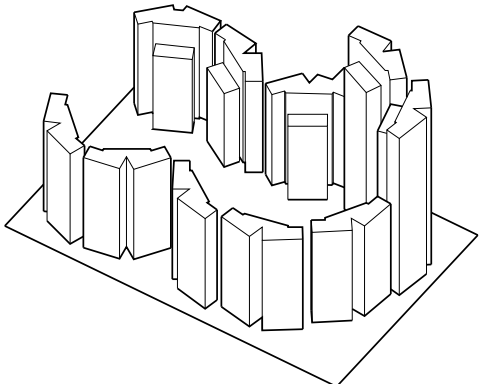
Urban Village

30 units per building
260 buildings
7,800 units
one bedr/ two bedr units
3.6 sq km
174,450 people/ sqkm
628,020 residents

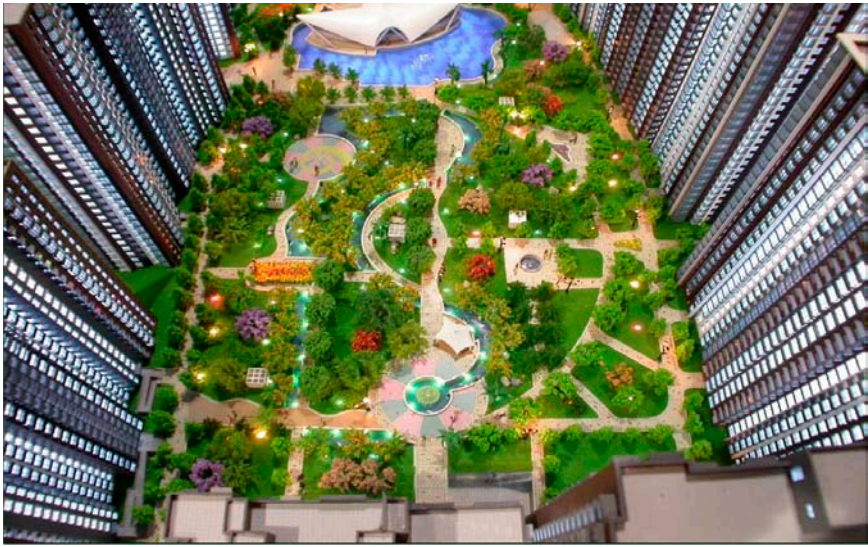


Chinese Gate Community

840 units per tower
10 towers
8,400 units
One bedr/ two bedr units
3 sq km
8,400 people/ sqkm
25,200 residents



ancestral temples
grocery stores
elderly clubs
healthcare
public security
environmental restoration
housing rental
small business
social services
village elderly clubs schools
swimming pool (out/indoor)
kindergarten
24 hour patrol service
supermarket
post office
beauty salon
car wash
laundry
gym
restaurant
cafe
foreign language training
greenhouse
vegetable plot
badminton court
table tennis room
tennis court
chinese pavilion
net bar
sculpture park
shopping mall
plaza
recreation center
fresh market
bank
shops
billiards room
elderly activity center
man made lake
playground
basement car park



Migrant Housing District
community of galleries, community services

Accomodation
apartments, condos, co-ops, private homes, townhouses
studios, live/work, tenement-style buildings

Shopping & amenities
mall, stores, retailers, shops, indoor/outdoor market place, flea market, gigantic open air market, upscale shops, vendor lines selling jewelry and perfumes and clothes and dvds
fruit, vegetable and vish markets

ntertainment & leisure
entire street closes to vehicular traffic
pedestrians free to stroll from one food vendor to another
sample food, listening to live music, and playing games for prizes
museums, cultural center, restaurants, basketball, mini golf, tango, fitness center

health
hospitals

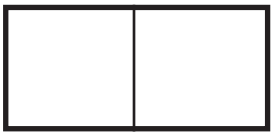
Education
private, elementary, middle, high, martial arts, fitness center, ymca

traffic & public transport
bus, subway line of downtown

21,600 RESIDENTS

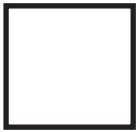
4,925

Local Villagers

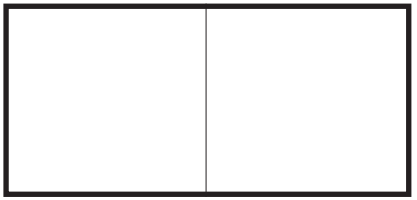


1 OR 2 BEDROOMS

OR



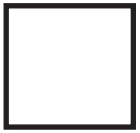
1.20



21,600 RESIDENTS

13,760

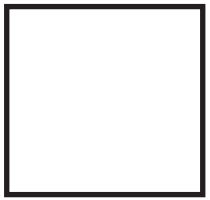
Urban Farmers



1 BEDROOM

8600

0.84

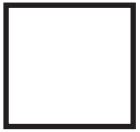


2,915

Urban residents

1 OR 2 BEDROOMS

OR



PRECEDENT

05 | PRECEDENT

ANALYSIS

PRECEDENT

Madrid Social Housing

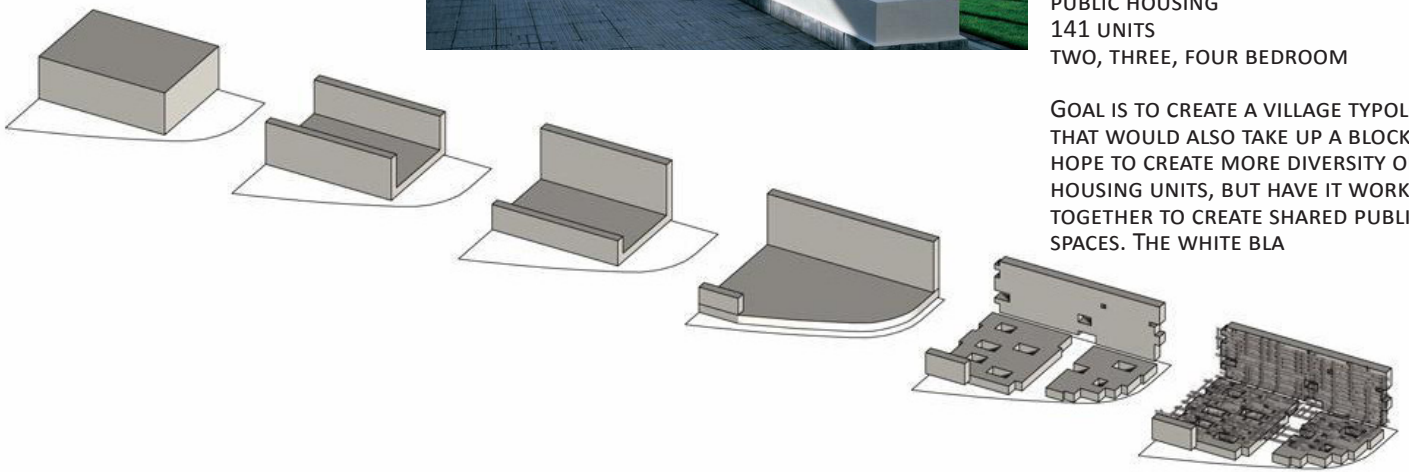
Morphosis
2006

Morphosos devised a typology of a suburban village neighborhood in Madrid. It used anonymous housing blocks with faceless units and integrated it with landscape and village typologies. This low-income housing project was able to achirve loggias, green space, and larger domestic living scale.

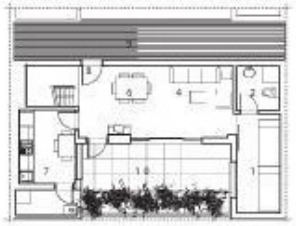
"This idyllic design brings open green space to a dense urban milieu. The idiosyncratic topology creates a community-orient social fabric and challenges the prevalant urban social order."

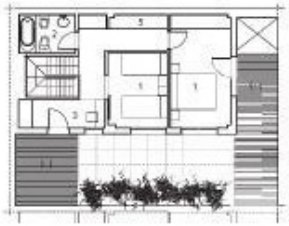
236,800 sqft/ 21,999 sqm
public housing
141 units
two, three, four bedroom

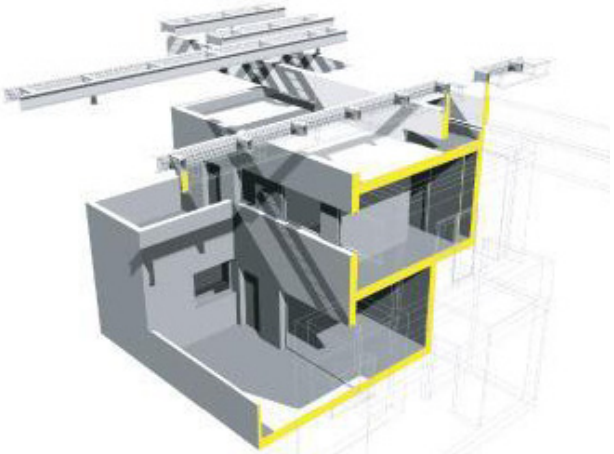
Goal is to create a village typology that would also take up a block. I hope to create more diversity of housing units, but have it work together to create shared public spaces. The white bla

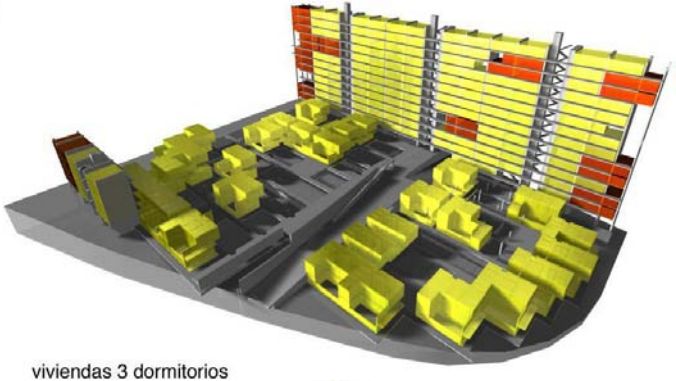


Picture page
"Madrid Housing | Morphopedia | Morphosis Architects."

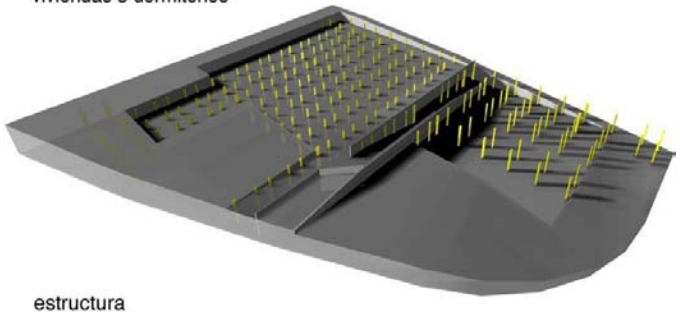








viviendas 3 dormitorios



estructura

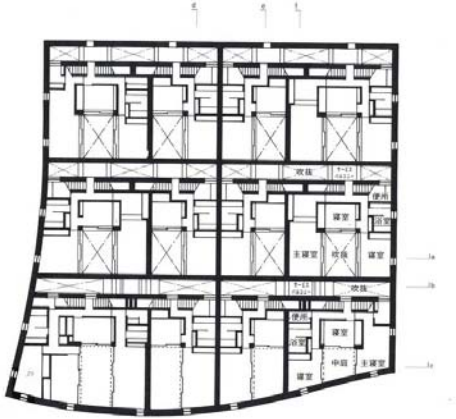
Nexus World Housing Fukuoka, Japan

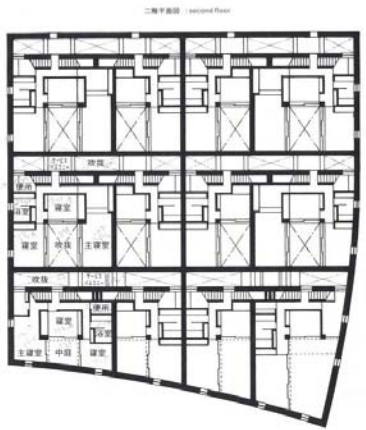
OMA/ Koolhaus
1991

O.M.A. designed "twenty-four individual houses, each three stories high and packed together to form two blocks." Each house has a private courtyard for light and outdoor space.

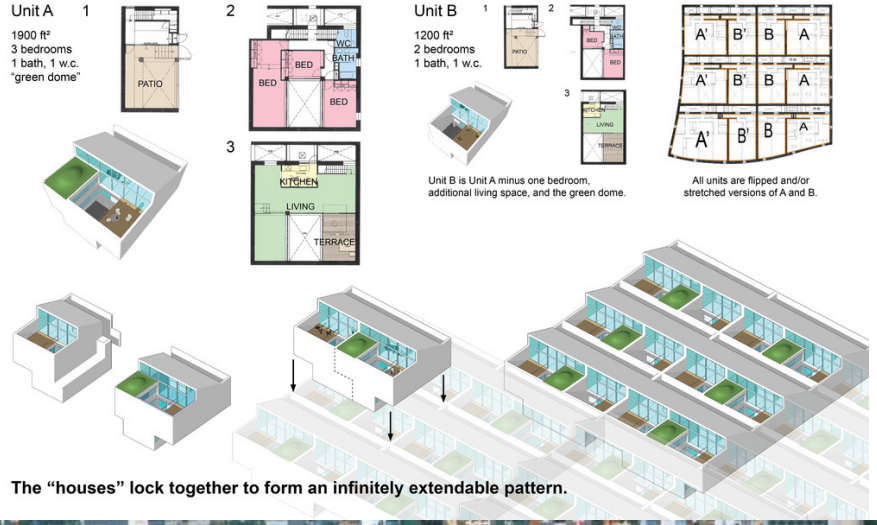
This is not a dense housing type, however, there is an idea of community from the wrapping a black concrete wall over two unit types.

24 apartments, 4 shops, parking
3,315 sqm and 3,144 sqm
reinforced concrete and steel





Unit Types Nexus World Housing, OMA/Rem Koolhaas



The "houses" lock together to form an infinitely extendable pattern.

Tulou Housing
Guangzhou, CN

Urbanus
2005-2008

Urbanus Used the TuLou dwelling type of Hakka people and readabpted its use in the urban context of Guangzhou. It was supposed to integrate the countryside with the city with living, storage, shopping, spiritual/ public entertainment.

Units are laid out along the perimeter like a dormitory to promote interaction.

12,000 sqm
278 apt units

Formally inserting an existing typology and readapting its identity into a modern urban context is a radical idea. Placing this urban form in an unfamiliar context with different regionally diverse people might have consequences.

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Relation of unit → block → city : norms of
↳ rhythm/pace of | people and events
↳ public/private
↳ scale/hierarchy

(1) Forbidden City
(2) Tian'anmen square
(3) Jingshan Park
(4) Temple of Heaven + Earth

(1) Emperor's private Legislation Administration
(2) Public events / Public Administration
(3) Public Park
(4) Spiritual Adder

(1) STREETS
Innovation.

(1) TRAFFIC / Gathering space street performance congestion of ppl + activity
STREET MARKETS

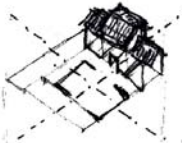
(1) STREET
(2) COURT

(1) Market Stands. Common Citizens. Beggers.
(2) FAMILY MEMB + VISITORS.

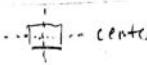
(1) Entrance Lobby
(2) Courtyard
(3) Stacked rooms corridors.

(1) Casual visitors
(2) FAMILY MEMBERS
(3) Privileged women

HUTONGS!

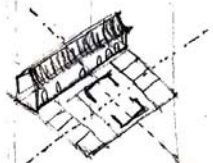


Hierarchy. = stepup sectional change
= symmetry + axis + center.
↳ Master Bedroom + Main Hall

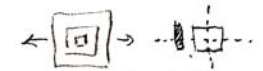


center

Stairs balanced. Center.

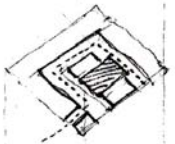


private. = off center, towards outside
↳ Secondary Bedrooms, Privileged women.



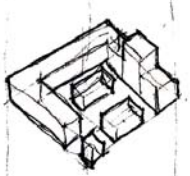
Stairs. + closed walls + sep. entr/corr.

more private, off center, inside → outside



Public = front, inside, center, open, unenclosed
↳ circulation around courtyard.

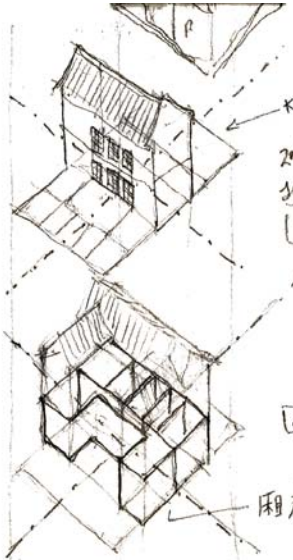
central court
snakes, treeplantsite, screens
Moon gates / open gates



40% open space for 1 family dwelling
→ takes place Chinese life cycle rituals - birth, maturation, marriage, and death

1840-1911 Hutongs 1 family dwelling
1912 → Present Multi family

12.11.09 Tuesday



Kitchens in the Back.

2nd floor - Guest level?

1st floor - Guest Hall / Secondary Rm / 稍間?

trifling Rm

Hierarchy - Bedrooms center + height + patio + 2 access.

(storage front, kitchen back)

- service
- served

① MAIN Rooms

② Accessory Rooms

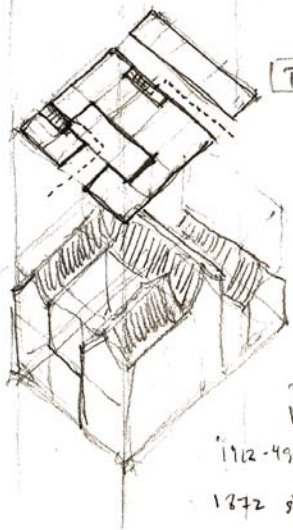
spacious + flexible internal arrangem.

private - No Real Private space?

comm. offices / entertainment services, newspapers, guild halls, hotels, clinics

Mingled w/ family life.

厢房 storage?



Public - 2 entrance access

shikumen gate

20% open space for

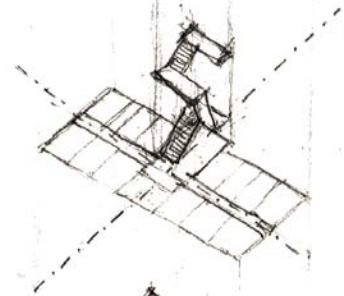
4-6 families

- open space

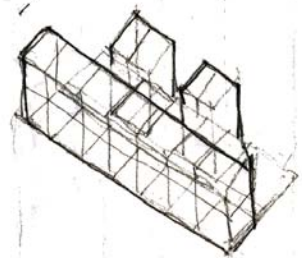
Dwelled by Real Estate Industry, invested by Gov't + industrial comm. proprietors, city + factories.

1912-49 shikumen 4-6 family Mixed use

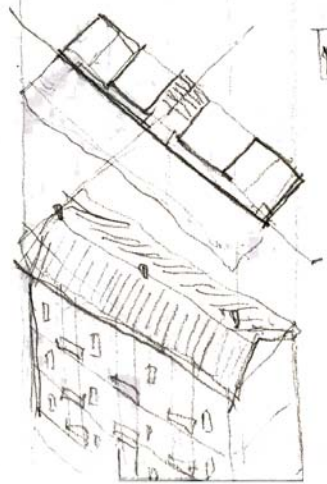
1872 shikumen 5 bed R orig. 1 fam



Hierarchy central stair.



No real Privacy shared dorms.



public shared

- kitchens
- services
- hall / corridor

balconies

Danwei 1950-78

Gov't funded + industry funded

free for workers + planned + built