Middle Space
Live Work Incubators in Shenzhen

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Middle Space:
Live Work Incubators in Shenzhen

by

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A THESIS SUBMITTED
IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARCHITECTURE

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Houston, Texas,
May 2015
The unprecedented speed and scale of China’s urbanization calls for a new model of large-scale development that responds to these extraordinary circumstance while also accommodating the new and diverse “subject positions” that it produces. As one of the Special Economic Zones, Shenzhen’s development from a small fishing village to a megalopolis of over 13 million in 30 years reflects China’s economic success and its concomitant urbanization.

Middle Space is a 1.3 million square meter complex which features four start-up “incubators” located in Shenzhen Hi-tech Industrial Park. Middle Space responds, not only to the fracturing of live and work, but also accommodates the diverse programs and individuals that operate within it. By negotiating the relation between urbanism and architecture as well as between collective and individual occupation, Middle Space projects an alternative model for not only Shenzhen, but for the new urban China.
The unprecedented speed and scale of China’s recent city building calls for a new model of development that responds to these extraordinary circumstance while also accommodating the new and diverse “subject positions” that it produces. As one of the Special Economic Zones, Shenzhen's development from a small fishing village to a megalopolis of over 13 million in 30 years reflects China’s economic success and its concomitant urbanization. Because of its remarkable scale and speed, Shenzhen has become a fertile site for innovation and entrepreneurship. Being the site of many successful hi-tech companies, it’s also the base for numerous startups comprised of young and entrepreneurial workers.

Middle Space is a 1.3 million square meter complex which features four start-up “incubators” located in Shenzhen Hi-tech Industrial Park. This project introduces an alternative to the sprawl of segregated residential and office buildings (mostly slabs and towers) that are now being built in the city. This arbitrary division of living and working is strangling the startup culture upon which any high tech economy depends. Middle Space responds, not only to the fracturing of this vital culture, but also accommodates the diverse programs and individuals that operate within it. While Middle Space forms a single complex, the whole gives way to its four distinctive parts, each of which supports the others. The incubators constitute four experimental sites in which specific live-work models are reinvented to accommodate the various needs for individual live spaces and collective work areas. By negotiating the
relation between urbanism and architecture as well as between
collective and individual occupation, Middle Space projects an
alternative model for not only Shenzhen, but for the new urban
China.
This project is attributed to my experiences in the previous two years and to countless people who have helped me.

I would first thank Albert Pope, my advisor, who patiently incubated me during the thesis semester. There were so many thrilling moments when your words pierced the puzzles and exposed my interests. Thank you for sharing your knowledge and wisdom, along with your encouragement and support.

Thank you to Scott Colman for your continuous help from seminars to prethesis to thesis. Thank you to Sarah Whiting for your Cullinan Seminar, it is in the readings, discussions and conversations that I gradually found my interests.

Thank you for all the thesis kids. We are a fantastic group and the encouragement from each of you was tremendously helpful and supportive.

The accomplishment of the thesis requires legions of helpers. Thank you De Peter Yi, for all your helps from the very beginning. Also to Joey Liang, Wenqi Chen, Pak Wa Lim and Sidian Tu for all your works to render my drawings lively.

Thank you Mom for your seemingly effortless support and your trust. This project is a start. Thank you for your generosity which makes my journey on architecture possible.
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Deng Xiaoping’s economic reform tremendously changed China. The development of economy and its concomitant urbanization, which started in the 1980s and is still ongoing, is one of the most important achievements in human history. As one of the Special Economic Zones decreed by Deng Xiaoping, Shenzhen transformed from a sleeping fishing village into a metropolis with 13 million in 30 years. Shenzhen’s development could stay on record in China’s history for some time. Actually, its growth has been recorded in textbooks. Because of the legions of foreign investments, the application of liberal economic policy, endless young labors from inland China, and its proximity with Hong Kong, Shenzhen’s economy rocketed at an average annual growth rate of 25% from 1980 to 2011. Shenzhen now has the fourth largest economy among all Chinese cities. Its liberal economy policy, efficient government and entrepreneurial spirit make it fertile land for business. “Made in China” to some extent equals “Made in Shenzhen”. It is home to manufacturing companies like Foxconn. It is also a fertile land for technology companies, either for giants like Tencent, Huawei, or many small startups.

Shenzhen’s development is unprecedented in history. Rather than built around a historical city center, Shenzhen emerged at the intersection of politics and capital. Its expansion generates chaos, uncertainty, transience, which makes it simultaneously notorious and exciting. The fever on speed and scale furthermore accelerated Shenzhen’s transformation into a factory. It is this craziness
on expansion and speed and its success on both development and urbanization that makes Shenzhen powerfully influential. Its success and experience has been further disseminated and studied by other Chinese cities, which makes it one of the best samples of Chinese cities to study.
Shenzhen, one of the Special Economic Regions, is established in the late 1970s as one of the experimental sites of Deng Xiaoping’s economic reform policies. In 2011, Shenzhen’s GDP is almost the same with Portugal’s, making it the fourth biggest city in China.

1

Comparisson of Shenzhen and Portugal's Gross Domestic Product.

Shenzhen, one of the Special Economic Regions, is established in the late 1970s as one of the experimental sites of Deng Xiaoping’s economic reform policies. In 2011, Shenzhen’s GDP is almost the same with Portugal’s, making it the fourth biggest city in China.
Map of China and its major cities.
Shenzhen grows from a fishing village with 30,000 into a 13 million metropolis in 30 years. Shenzhen is a migration city. With 60% of its total population as migrants from other parts of China, it is the only city in Guangdong Province in which Cantonese is not widely spoken. It has a young and polarized population. The average age of Shenzhen is below the provincial and national level. Beyond its huge number of migrant workers, it is estimated that 20% of
2. Population migration from Inland China to Shenzhen

China's PhD have worked in Shenzhen.
Shenzhen’s growth was greatly accelerated after Deng Xiaoping’s visit in 1992. Its built area grows from 3 sq.mi in 1979 to 200 sq.mi by 2006. The expansion of the city has reached much bigger area than its early establishment. Nowadays, the majority areas of the Shenzhen Special Economic Zone have been urbanized.

Shenzhen’s change has been reflected on Shennan Avenue, which is the first and the
most important artery in Shenzhen. In 30 years it transformed from a muddy broken road to a 10 lanes modern avenue with skyscrapers flanking on both sides.
Shenzhen SEZ is originally established with four districts, which are Luohu, Futian, Nanshan and Yantian. After 30 years development, each of them have developed their own distinct characters. Luohu is where Shenzhen first started. Its more traditional urban fabric is home to Huaqiang Bei, the first and one of the best known electronic streets in China. Futian is planned as Shenzhen's new CBD area. Nanshan is planned as industrial area, where

Middle Space:
the Shenzhen hi-tech industrial park is located and home to many tech-companies. With the fourth busiest port in the world, Yantian is a garden city near the sea.
Shenzhen's rapid growth from a city into a poly-centric metropolis over the last three decades has been reflected on the shifts of the city centers. Due to its proximity with Hong Kong, Luohu was conveniently chosen as the city center in the 1980s. As Shenzhen quickly expanded along the Shennan Avenue, Futian was subsequently planned as the new CBD area. This shift continues when city keeps expanding outwards and was officially confirmed when...
Qianhai is selected as Shenzhen’s future center. Accordingly, transportation model has upgraded from small scale public transportation to private automobiles to current MTR system.
The craziness of Shenzhen’s growth has reflected on the change of urban fabric as well. Urban villages, which are rural villages consumed by the fast urbanization, are where Shenzhen started. Shenzhen’s attempt to build modern city then started with avenues and linear development along the corridor. Then this model evolved into superblock, in which land with big area is regularly divided. It is often seen that within a superblock, multiple...
building types coexist. Nowadays, however, it is more often to see a single large scale project developed within a superblock with a short term.
This typological study also reflects Shenzhen’s growth in architecture scale. In terms of living space, the drive for density and scale, and the pursuit of higher return of investment pushes Shenzhen from the buildings of low-rise urban villages to middle-rise slabs to high-rise high-density towers. In terms of work space, Shenzhen started with live-work factory compounds in the 1980s. Then tech-company campuses appears when Shenzhen began to
Shenzhen

restructure its industry makeup. While under the influence of real-estate mania, the most recent constructions is dominated by tower + podium model.

**Factory Compounds**
Manufacturing factories such as Foxconn

**Tech company campus**
High-tech company incubators invested mostly by government

**Tower + Podium**
Developer invested complexes targeting for retail and office
Scale Shift in Housing Estate

Shenzhen housing estate’s shift in scale and density could reflect Shenzhen’s change as well. As diagrams above shown, housing estate projects grow not only bigger, but also denser. This is not merely resulted from the population growth, it is also a result of the real estate mania. This specific social-economic condition frames a challenge but also opportunity to mass housing project.
Vanke Four Season Flower City  
万科四季花城  
1999  
23 ha

Huarun Waterfront  
华润纯水岸  
2001  
33 ha
This project is located in Shenzhen Hi-tech Industrial Park. Before this project, the site used to be one of Shenzhen’s largest urban villages, which was demolished for the construction of a mass housing project. This project begins with the given programs. **1.3 million square meter** total area would be built once and become homes to 30,000 residents, along with office, retail, and public facility spaces.

This project takes this problematic conditions, seeking a way to transform the dominance of capital and the accompanied generic space into an experience of density and difference. Beyond this, different needs from diverse subjects have been taken in account, which further defines this project.

This project starts with the tower + podium model. Instead of succumbing to the infinite repetition, both horizontally and vertically, the idea of **incubator** is introduced. Each incubator is a distinctive social experimental site by itself. They are made of four objects, which are four distinct work spaces with specific organizations, along with living spaces which are parented by objects. Each **incubator** defines distinct live work relationships, targeting at different individuals and groups, with whom various needs for work space are satisfied. It thus transforms repetition into diversity, both horizontally and vertically.

In terms of organization, four incubators function independently
on the ground. By separating one single development into four incubators and emphasizing the difference between each of them, four incubators are independent entities, but are parts of an interdependent system at the same time. On the subterranean level, objects and living spaces are connected by a tunnel system. This underground infrastructure provides users more than an access to the MTR station, it also facilitates and coordinates the movement, activity and exchange between incubators.
The site is adjacent to Shennan Avenue. MTR Luobao Line has a stop next to the site. It is close to Shenzhen University, along with many tech-companies headquarters and factory compounds. The size of the project is almost the same as Shenzhen Civic Center, which makes it one of the many ongoing large-scale development projects in Shenzhen. This project starts by addressing this very specific issue and also tries to respond to the underlying so-

Middle Space:
Shenzhen Civic Center
Shenzhen University
Site
Shennan Ave.
Luobao Line
Luohu
Nanshan
cial-economic conditions in Shenzhen.
The total area of the site is 33 ha, about the size of 17 Barcelona blocks. Once occupied by one of Shenzhen’s biggest urban villages, the site now is cleaned for the construction of a mass housing project. As seen from the simplified structure drawing, the site is in the middle of tech-companies’ headquarters and campuses. Some residential projects are in-between them. Beyond that, its surrounding areas has very low resolution. Compare with historical

Middle Space:
centers, where layers of information have been preserved through its urban fabric, this site is a typical example of superblock in China’s fast urbanization.
This project begins with an alternative approach to mix live and work, which responds to the economically and environmentally unsustainable commuting between live and work and to the isolation generated by high-rise towers.
Two mixuse projects have been studied. In OMA's Penang Tropical City, a united formal language is employed, while differences are intentionally created in order to facilitate the connection and exchange between different parts. In OMA's proposal for Shenzhen Prince Bay, three formally and programaticly distinct objects are inserted into genetic grid, introducing public spaces.
Middle Space begins with the problematic Tower + Podium model, which creates repetition and sameness, but on the other hand is an efficient agency to respond to Shenzhen’s gigantic scale. Instead of taking it as a problem, this project takes advantage of the scale and transforms the negativity of generic space into rich urban experiences. First, podium is transformed into four objects, each creates different collectivity. Diversity has been intro-
duced vertically as well, in order to meet different individuality. This operation results in four incubators, within which four independent live work relationships are defined.

2

Program Chart
Incubators Inventory

Middle Space:
More specifically, four values are introduced to explain the relationships between incubators and individuals. **Individual** and **Collective** characterize different professionals’ preference for work patterns, for instance, do they like to work alone or with others. **Closed** and **Open** address different groups’ relationship with other groups.
Overview of Middle Space, with four incubators noted
Nomad Hotel is right above the entrance of MTR, open to the city, serving individuals with high mobility. 3.0 Factory offers factory-like open work space, encouraging exchange and communication between groups. Forest Monastery is surrounded by forest, creating quite private working space for individuals and small groups. Solo Towers is a contemplation pool surrounded by live work towers, both for individuals who seek or intend to be isolated.
On the ground level, each incubator works as independent entities. Objects are like magnet, each define and create a specific collectivity, attracting and serving living units. Different living spaces are introduced for different individuality. Various live work spaces mix and gener-

Four Incubators on the Ground

Middle Space:
ate differences and diversity, which connect to multiple subjects. At the same time, a united circular formal language connects difference as a whole, responding to this very specific case of large scale development.
An subterranean tunnel system connects four incubators. It provides every users access to the MTR station. More importantly, by forming a network, this underground infrastructure encourages movement and exchange between incubators. It thus connects each parts and

Middle Space:
makes them into an interdependent system, with each part maintain their independence.
Each incubator has its own landscape, which differentiates them from others.
Middle Space:
Normad Hotel

Middle Space:

Kevin
27

Business
Kevin is a Hong Konger, international businessman, working at different cities. He chooses Shenzhen because the real estate price is affordable.

Josh
30

Returnee
Josh just came back from United States, he's planning of his own technology firm.

Zheng
24

Salesman
Zheng works for a tech company across the street. He's life is like moving from hotels to hotels, home is another hotel.

Hotel and Office
Outside oriented hotel and office towers. Relatively independent of the incubator.

Nomads Slab
Hotel like live space. High mobility.

WORK J
Extroverted Open to the city.
Nomad Hotel

Nomad Hotel is directly connected to the MTR station. It’s open to the city, serving individuals with high mobility.

Work J offers commercial spaces for small business. Access to MTR, open sunken plaza, small business booths, along with commercial areas all make it a serving base for its individual users.

In terms of living space, migrant slabs offer living space for people with high mobility. Besides that, hotel and standard office spaces are mixed, which further strengthen Nomad Hotel’s connection with the city.

**Fact Sheet:**
- Incubator 1 Retail: 105,000 m²
- Migrant Slabs: 55,000 m² 1000 Units
- Office and Hotel: 240,000 m²
- Underground: 50,000 m²
- Total: 450,000 m²
This axon drawing shows the relationship of Work J, migrant slabs, MTR station, hotel and office tower. A sunken plaza opens to all the visitors and users from the MTR station. Migrant slabs are sitting upon a lifted platform, which provides both privacy and greens.
Besides its connection with MTR station, Work J also offers underground parking spaces, both serve its users and visitors. On the upper floors, commercial spaces enrich residents life and also provides services for them.
A section of Work J is designed into small business booths. Along with normal size commercial areas, Work J provides rooms for its users’ business dream.
2

Work J detail view.
Migrant slab is designed for people with high mobility. As a migration city, Shenzhen has the largest migrant population in China. They are migrant workers who live in a low standard in urban villages, or daily commuters between Shenzhen and Hong Kong who live and work in different sites. For these people, whose transient and instable lifestyle makes home a middle point of their journey. In Migrant slab, 80 m2 units are divided by a wall in the middle,
which makes space on both sides interchangeable as living space or bedroom. Each unit thus could be used by one person or shared by two. In latter case, shared facilities such as bathroom and kitchen would give its residents opportunities to exchange information, ideas, and thoughts.

2

Migrant Slab Plan
Solo Towers

Middle Space:

C2C
Siyu
22
Siyu owns her Taobao on-line shop, specializing in Tibetan handcraft works.

Zhi
26
Artist
Zhi just moved to Shenzhen a few months ago, established his home and workshop in a small flat

Lei
27
Accounting
Lei works at an international accounting company, home is a place to sleep and he knows few friends except his workmates

Reflection Pool
Provides place for Contemplation

Live Work Tower
Live towers with private work spaces. Isolated self centered low level distraction

Closed

1
Solo Towers
Solo Towers

Solo Towers is for individuals who like to have an isolated work pattern. A reflection pool with a Zen style sand garden celebrates the essence of emptiness. For people who engage in their private work and look for the least interruption from outside, reflection pool offers them a space to collect themselves.

Live Work Towers are highly flexible for mix use. Individuals, such as artist, could easily transform their living space into a small studio. At the same time, new generation with digital connection, such as C2C on-line shop owners, could use it as their base for their on-line business.

**Fact Sheet:**
- Incubator 2 Void: 45,000 m²
- Live Work: 150,000 m² 800 units
- Underground: 20,000 m²
Solo Towers

1

Axon of Solo Towers

Middle Space
Solo Towers has a reflection pool and 5 live work towers. Reflection Pool is a void with circular path on the outskirt. It is sunken and surrounded by sand garden and trees. It’s a calm and quite space where individuals who look for isolation rather than cooperation could find their peace.

Live Work Towers are highly flexible space for individual such as artists, and on-line shop owners, who live and work in the same space.
Reflection Pool is below the ground level, sitting inside of a sunken space. It has a sunken path in the middle. The path goes down when it moves near the center, which creates changing heights between people and water when people walk through it. It is also circled by a walk path and a sand garden, along with trees on the ground level.
Solo Towers
Under the shallow water of reflection pool, lights are evenly buried. They lit up the pool at night. An outskirt path and a sunken path both offer people opportunity to engage with the water.
2

*Close view of reflection pool*
Live-work tower is an evenly divided flexible space, offering its users the maximum freedom to organize their live-work space. Each floor has 4 units, which are from the even division of a circle. Bathroom, kitchen and storage are all put into triangular spaces between live work space, which make live work space highly flexible. For individuals who need less interruption or even seek for isolation, such as artist, scientist and C2C on-line shop owners,
they can transform their live space into a small studio, base for on-line shop, small office etc.
Collective

Live Slab
Individual units interlocking, creating diverse combinations for users.

Live Tower
Homogeneous units stacked together for individuated subjects.

Work Ring
Compartmented.

Zhiqiang
35
Doctor
Zhiqiang is a dentist. He has his own clinic and stable client, with whom he established relationship when he was still working in the municipal hospital.

Lisa
25
Educator
Lisa teaches English at an education company. She travels deeply in west China during vacation. When she's not working, she enjoys close to school.

Jason
27
Editor
Jason works with friends in an independent small publishing agency. He's interested in new media and its changes for young generation.

Middle Space:

Forest Monastery
Forest Monastery

Forest Monastery is designed for small groups who need both isolation and interaction.

Work Ring is embraced by North Hill, which provides protection and green for it. In Work Ring, small, evenly divided private offices are designed for small groups, such as educational institution, clinic, and publisher. In the middle of the ring, a sunken agora defines the public domain.

Efficiency slabs and individual live towers are mixed. Efficiency slab is designed to meet people's basic need in their affordable level. While live towers offer a great variety for people with different needs of their individual space.

Fact Sheet:
Incubator 3 Private Office: 30,000 m²
Live: 210,000 m² 3000 units
Underground: 15,000 m²
Forest Monastery

Axon of Forest Monastery

Middle Space
Forest Monastery is embraced by a small forested hill. It is designed for individuals and small group of people who look for protection and interaction. This axon shows the Work Ring, the Central Agora, Live Towers, Efficiency Slabs, and the North Hill.
An agora is designed in the center of Work Ring, which provides opportunities for individuals and small groups of people working in private offices to meet and interact. North Hill sits in the back, protecting the incubator from the hustling and bustling of the city. It is also offers people a place to relax and to engage with nature.
All the small private offices are circling around. Following an evenly divided structure system, these rental spaces are flexible for different renters. They altogether define a collective space in the middle, which compensate and complement them.
2

Detail View of Work Ring
Efficiency Slab is designed to meet people’s basic living needs at an affordable level. A small unit with 45 m² (about 500 sq ft) offers kitchen, bathroom, living space and a balcony. At the same time, it offers a small portion of duplex units, which provides people an alternative option.
Efficiency Slab Plan
3.0 Factory

3.0 Factory is designed as open continuous space to encourage exchange among individuals and groups.

Work Pie is a big factory-like space with open floors and continuous halls. Both its transparent facade and continuous space encourage interaction and exchange. A dynamic recreation board is surrounding the Work Pie, which offers opportunity for physical activity.

Efficiency slabs and individual live towers are mixed. Efficiency slab is designed to meet people’s basic need in their affordable level. While live towers offer a great variety for people with different needs of their individual space.

Fact Sheet:
Incubator 4 Open Office: 60,000 m²
Live: 210,000 m² 3000 units
Office and Hotel: 240,000 m²
Underground: 20,000 m²
3.0 Factory

1

Axon of 3.0 Factory

Middle Space
3.0 Factory is a place for exchange and communication. Factory-like Work Pie is designed for both material and immaterial production. This axon shows the Work Pie, recreation board, live towers, and efficiency slab.
Three light wells, along with a void in the middle, connect different floors and activities. On the underground level, space is used for material production. The ground level is open to the city. With a big void in the center, many events could be held there and thus serve a bigger population. Upper levels could be organized by its users and a more private space is on the top level. Work Pie is designed to maximize interaction and exchange between indi-
viduals, groups, activities and ideas. Also, with a surrounding recreation chessboard, physical activities are encouraged.
Work Pie is designed as an open office, which offers users the maximum flexibility to use. Besides that, as indicated by the interior view, it encourages fun, interesting, and casual activities, which are necessary for the emergence of new ideas. On the exterior, a chessboard like recreation ground is surrounding it, which offers its users space for physical activities.
Detail view of Work Pie and playground
Live Tower

Live tower is designed to meet different groups' needs for individual living space. A full circle is inserted with two circulation cores, each serve half of the floor. There are 8 units in total on each floor, with areas range from 60 m², 75 m² to 120 m², which would meet the needs from single individual to families with 4 family members. Each unit has its own balcony, which gives the room enough sunlight, better air and great view of the city.

Middle Space
2
Plan of Live Tower
Middle Space
Shenzhen's rapid urbanization generates both great excitement and great difficulties. Large-scale development, which is dominated by politics and the economy, is one of the most pressing issues facing Chinese cities today. In response to this issue, Middle Space attempts to define volatile urban identities, both collective and individual, in China today. Given Shenzhen's powerful position in China—as the first successful SEZ—this attempt to define urban identity goes beyond its borders. As urbanization in China will explode in the coming decades, the search for appropriate forms for mass subjectivity will be crucial to the future of the country.