

CONNECTION: AN ARCHITECTURE OF SUPPORT

by

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## Abstract

“We need a base to set down our Being and realize our possibilities (potential). A here from which to discover the world and a there to which we can return to.” (Relph, Edward. *Geographical Experiences, Dwelling, Place and Environment*, p27)

In China, architecture is currently employed with a focus towards rapid urbanization in the midst of globalization carried out to satisfy abstract economic goals rather than improving livelihood. This thesis asserts that architecture can serve as a support for rural migrants to aid their transition to urban life. The dynamics of urbanization is embodied in the journey of rural migrant workers who travel to cities and struggle with the disparity between rural and urban living. The lack of availability of services for migrant workers hinders them from reaching their potential. Architecture can transcend its role as merely a device for economic gain and stimulate social change. Architecture can serve as catalyst to create this here and there.

Keywords: *Base, Being, Possibilities (potential), here, there*

## Author's Prelude

Lao Tzu, an ancient Chinese philosopher once said "a journey of a thousand miles begins with a single step." For every act, every journey, every transformation, action sets an activity into motion. My journey began thousands of miles away from where I stand today. At the age of six, together with my family, I left Hong Kong for Toronto. There are many different reasons why people move, and there are often multiple processes behind the decision to migrate. As a small child, at that time in my life, I had no clear understanding of where we were going or why we were leaving to another place, nor the sacrifices my parents had made. The following transitional phases were difficult and I could not have done it without the support of family and friends. During the course of my education, I changed schools numerous times and our family changed place of residence multiple times. For as long as I can remember my life has been full of transitions from one place to another, bridging from one place to another, origin to destination, one condition to another. I am a hybrid, born as Chinese and educated in Western society - encapsulation of the union of Chinese and Western thoughts and ideas which flow through me. I have developed through active cultural exchange just as nations continuously influence each other through active processes of exchange. It was only years later I come to realize the reasons behind the move. When I asked my mother why we moved to Canada, she gently replied, "To be in a place where I can provide a good foundation for my children to grow". The impetus behind each transition was to provide a better livelihood for the family, favourable conditions for existence and upholding of our values. The place that serves as foundation to support growth is critical to the lives we wish to nurture. For thousands of years people have migrated from one place to another, and similarly developed mentally from one condition to another. We travel to discover the world and at the same time ourselves. It is a human condition to embark on a journey to explore, to discover, to learn and evolve

## 1.0 Introduction

"The role of the architect is to create meaningful places"- Christian Norberg-Schulz (Norberg-Schulz, 1980).

What is architecture? Architecture is beyond shelter. Architecture is the creation of meaningful places. Meaning as the concretization of human intent. Architecture seeks to describe, it is the descriptor of human civilization. It becomes the embodiment of human existence defining the relationship people have with the environment. It is the physical manifestation of material and invisible flows which reflect and reinforce cultural values of our civilization; the relationships from person to person, and present to past and future (Day, 2002). I believe that the key value of architecture is its social value. Rooted deeply in our culture, architecture cannot be defined as architecture without consideration of human intent. Therefore architecture should be created in the service of human beings. Integral to human existence, the social component of architecture acknowledges the human condition. We are spatial and temporal creatures. Our lives are journeys from place to place and one condition to another; continuously transitioning. I believe architecture has a role to nurture the potential and dreams of people.

Since the economic reforms of 1978 in China, millions of rural migrant workers continue to travel to urban areas in search of a better livelihood for their families. However China, as a rapidly developing country, has currently paid more attention to economic construction than the development of its people. Its political policies continue to demonstrate this view. China, also known as the Peoples' Republic of China (PRC) is currently selective and favours 'urban people' over 'rural people' under the implementation of the Hukou Household Registration System. The categorization of people is divided unjustly and

consequently, this system has spawned the largest social issue in the development of China, rural-urban disparity. While the Hukou household registration system is supporting the development agenda of the nation, it is at the same time contradicting to the needs of its citizens classified as rural. The nation continues to develop on the sacrifices of rural migrants who are without support and, consequently, struggle to provide better livelihoods for their families. I believe in the potential of people to change their circumstances. However, without a proper environment, without proper support, it is difficult for them to realize their potential. "It is essential for a city to offer opportunities for nurturing dreams. Dreams give meaning to our very existence in the city." (Maki, 2008). For the millions of rural migrant workers in China striving to realize their dreams by harnessing their potential, support is absolutely necessary.

Cities have been selected by rural migrants as places of opportunities for harnessing their potential and nurturing their 'Chinese dream'. This may be possible with the harnessing of the right environment, resources and information to form a basis for self-actualization and realization of their dreams. The core principle of life in Chinese society is rooted in Confucianism and seeks harmony between earth, people and the heavens; harmony at all levels. This principle applies for all people, inclusive of migrant workers. Therefore in order to satisfy the needs of a truly harmonious society for all its people, rural migrants should receive support to realize their dreams.

China's urbanization rate surpassed 50% (52.6%) in 2012 and continues to grow (National Bureau of Statistics, 2012). The relentless desire to grow, bigger, faster, taller, a need for validation, seems to have the wrong priorities. As the urbanization of China continues at an unprecedented rate, urbanization is brought to rural China. Farmland is continuously bought by government for expansion of cities while citizens are forced to move into apartment blocks

(Johnson, I., 2013). This "shoe boxing people into empty concrete shells" is unresponsive to a cultural tradition of Chinese rural living. Furthermore the government's attempt to bring urbanization to the countryside failed to consider the generation of jobs(Johnson, I., 2013). These rural Chinese are compelled to join the millions of migrant workers who have travelled to cities in search of better opportunities for their family's livelihood once they moved to the city, or other urban areas, rural migrants are marginalized. Villages within Cities (VIC) or urban villages, pockets of informal settlements are often the only feasible housing option (Gransow, 2010). often finding restricted housing, few employment choices and commonly exploited by employers, rural migrants who once belong to the integral family units of Chinese society, become isolated, invisible and disconnected. The large scale transition of the nation from rural to urban does not align with the transition of support for its people. I believe architecture can serve to assist through developing places of nourishment for the body and soul to support the journey of rural migrant workers.

## 1.1 Problem Statement

"We need a base to set down our Being and realize our possibilities (potential). A here from which to discover the world and a there to which we can return to." (Relph, Edward. Geographical Experiences, Dwelling, Place and Environment, p27)

In China, architecture is currently employed with a focus towards rapid urbanization in the midst of globalization carried out to satisfy abstract economic goals rather than improving the livelihood of inhabitants. This thesis asserts that architecture can serve as a support for rural migrants to aid their transition to urban life. The dynamics of urbanization is embodied in the journey of rural migrant workers who travel to cities and struggle with the disparity

between rural and urban living. The lack of availability of services for migrant workers hinders them from reaching their potential. Architecture can transcend its role as merely a device for economic gain and stimulate social change. Architecture can serve as catalyst to create this here and there.

Keywords: *Base, Being, Possibilities (potential), here, there*

### **Interpretation of quote by Edward Relph**

*Architecture is employed with a focus to satisfy abstract economic goals and neglect the value of improving livelihood. This thesis asserts that architecture can serve as a form of support through the reinterpretation of tradition to aid transition to urban life.*

### **What is this...?**

- Base
- Being
- Possibilities (potential)
- here, there

### **Definitions (Oxford Dictionary)**

**Base:** (noun)

1. A conceptual structure or entity on which something draws or depends:

- Foundation or starting point,
- supports or provides grounding

2. A place used as centre of operations
3. Main element or ingredient to which other things are added

**Grammar:** The word or part of a word which prefixes or suffixes are attached

**Origin:** Middle English: Old French, from Latin *basis base, pedestal*, from Greek

**Being:** (noun)

1. Existence, being alive, living
2. Nature or essence of a person
3. Real or imaginary living creature or entity

**Potential-** (noun)

1. The latent qualities or abilities that may be developed and lead to future success or usefulness.

Origin: Potentialis from potentia 'power', from potent, 'Being able

**Here** (adverb)

1. in, at, or to this place or position
2. used when indicating a time, point, or situation that has arrived or is happening

**There** (adverb)

1. used to indicate the fact or existence of something:

2. used in attracting someone's attention or calling attention to someone or something

### **How can Edward Relph's quote and thesis statement inform design?**

Through an analysis of the definition of keywords within Edward Relph's quote a greater understanding is grasped. According to Edward Relph, there is a close relationship between existence and the human condition. Humans need to be rooted and have a place which they can identify with (Seamon, D., Mugerauer, R., 1985). A place or a base is needed to act as a foundation and support for human growth to support the realization of our potentials. The changing of location is to still with an intent to look for a place. It also implies there is an origin and destination, although that location may not be a permanent location, we nevertheless need a place to serve as the focus of meaning, one we can identify with and perform our activities and explorations. From the perspective of literature, the grammatical usage of the word *base*, it is the main word in which prefixes and suffixes are connected to. The word, *base*, then suggests a connection from one state to another, a bridging of things. I believe this interpretation also carries a temporal meaning, as a link between, past, present, and future state. From Edward Relph's quote the key idea is that in every type of successful transition, a base, foundation, a framework of support is needed to realize our possibilities.

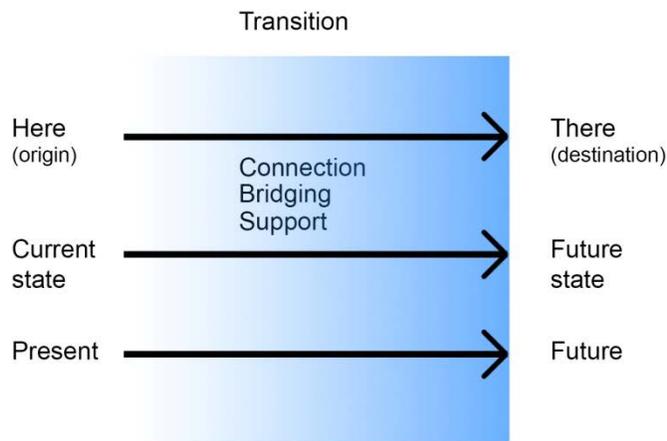


Figure 1: Diagram of connection between temporal, physical, and development of potential. (Author, 2014)

In the same manner, I believe, 'here' and 'there' in the quote implies a place which gives measurement for our existence. It is a place or built-form which we can measure spatially in reference to physical location or as a point in time, a node in our existence in which we can identify as we transition through our lives. This 'place' is one which supports our transition by aiding our potential and realizing our possibilities. Without such a place, we are denied our potential, our being, our existence.

*Being* refers to existence. I believe existence is composed of two essential parts, the body and the soul. Working together, the former enables us to concretize our thoughts and make an impact on the physical realm while the latter gives guidance and grows with our interactions in the physical realm. There is an inner journey and an outer journey for every individual who seek to realize their potential and 'place' (Liotta, E., 2009).

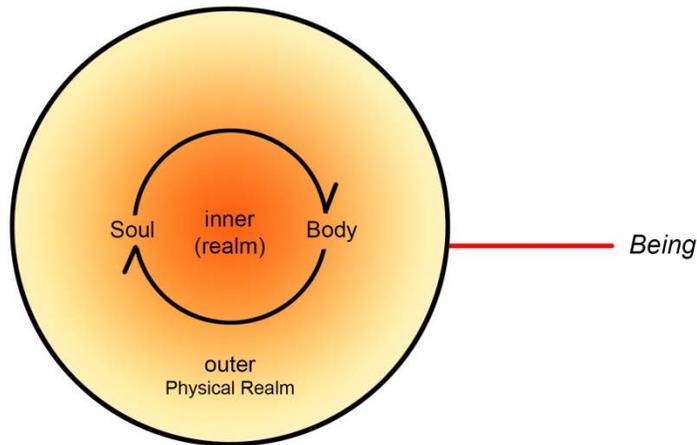


Figure 2: Interpretation of *being*: Being as comprised of body and soul. (Author, 2014)

The body and the soul share a cyclical and intimate relationship, constantly communicating and influencing one another. As humans, we learn through application of a thought or an idea in the real world. Our observations and mental capacity enable us to learn from our actions. The body's interaction in physical space translates to interior space, a subjective space for the soul evoked by sensations, experience and emotions. In turn, space only becomes a place when it carries meaning and value for people. This understanding of space reflects our two part existence composed of the body and soul for a space cannot become a place without the experiences and meaning (our inner self) it carries for people.

In the context of China's migrant workers who have embarked on a *journey* to provide better livelihood for their families back home by leaving their rural homes and venturing into cities for greater opportunities, they are in search of a *place*, an opportunity which would bring their dreams to realization. Migrant workers have embarked on a *hero's journey* when they have taken the first step, (action) into the unknown towards the realization of their potential

(goal) (Campbell, 1968). However migrant workers are faced with social problems created in part as a result of the Hukou household registration system which perpetuates rural-urban disparities and without the support to transition and realize their potential. The struggle is the realization of their potential and their dreams while situated in the reality of the household registration system. This household registration system has a long history in China and while reforms are likely in the near future, much work is needed toward the abolishment of this system . What remains important is to address what can be done at present to support migrant workers to secure a foothold towards a better future for themselves and their families; to give them places where they can connect with people and acquire knowledge towards securing better opportunities by supporting their learning towards self-actualization.

While architecture cannot be the solution to a social problem, I believe architecture can support change by serving the role of the helper for the *hero* in his or her *journey*. People have an intimate relationship with their surroundings in relation to their existence. This relation is present in the social dimension of space proposed by Henri Lefebvre (. I believe there should be places which support the building of people's potential by bridging (connecting) their action to their goals. Places which support through the nourishment of the body and soul. An architecture for nurturing transition.

"We shape our buildings, and afterwards our buildings shape us."- Winston Churchill, 1941.

The well known quote from Winston Churchill reminds us of the power of place and architecture. Buildings or the built environment is constructed in the image of our values and aspirations. In turn these values are reinforced and carried on by the way we have designed our surroundings. I believe the environment is

physical representation of our mental projection. Just as the saying goes, that one can tell the sort of person one is just by looking at their personal room, describes the relationship between people and space. A messy room reveals that a person may be lazy, unorganized, lacks discipline, etc. Our inner self 'spills' into the physical realm. Conversely the way in which we form our physical environment also have an impact on the way we live. As people, we live through our connected two part existence as body and soul that provide reciprocal feedback transitioning simultaneously to one another. In this manner, architecture, the design of spaces towards the creation of meaningful places can support the values and aspirations we seek to achieve, to reach our potential and realization of our dreams.

## 2.0 Background Information and Context

### 2.1 The Human Journey

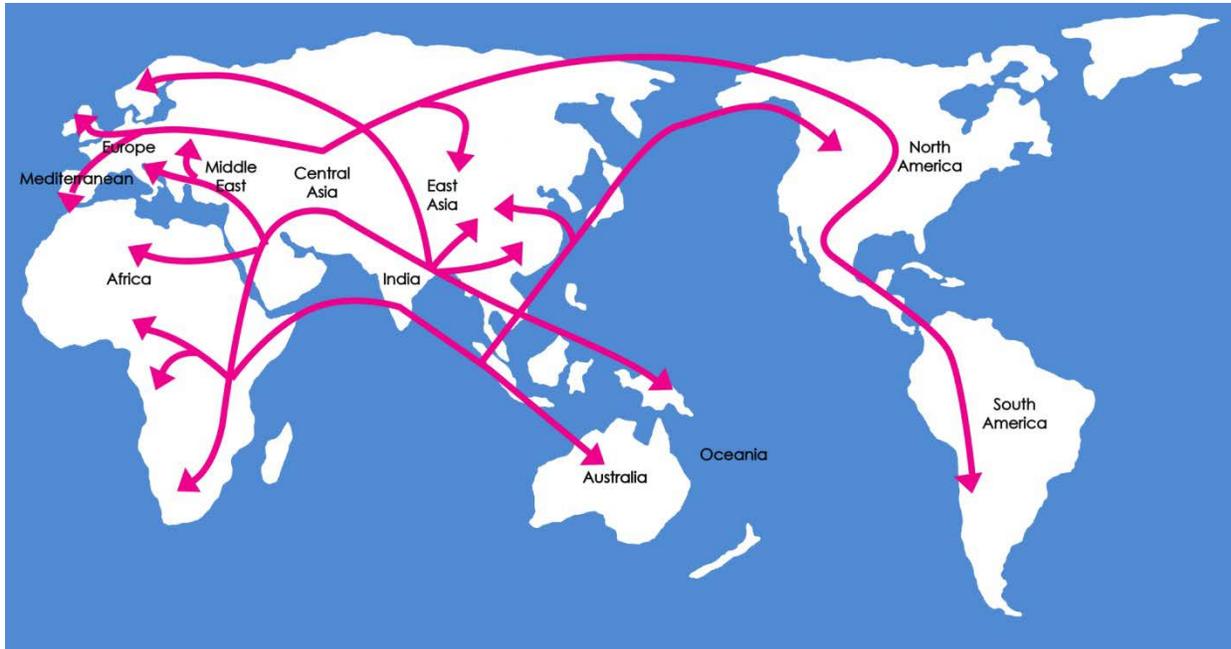


Figure 3: Migration routes in the journey of the human species. Author, based on: (National Geographic,2014)

The birth of every human being marks the beginning of a journey. However this journey is not simply from a start to finish, for there are many layers of complex processes which are interconnected that perpetually support one another. Similarly these processes support one individual (one life), to a collective, to the human species as a whole. As human beings our hands and feet allow us to interact with the physical environment while our brains' cognitive functions enable us to think, grow and evolve. According Carl Jung, our physical actions are intimately connected to our mental processes and our human existence is continuously a process between the 'inner' and the 'outer' journey (Liotta, E. 2009, p22).Accordingly, Heidegger also stated the path of life is to orientate himself or herself in the unknown environment(Schulz, C. 1980, p20).

Therefore physical journeys from a 'here' to a 'there', from one place to another, is also a sequence of changes or experiences from one condition to another that allow us to grow and satisfy the psychological goal of realization.

According to genetic analysis, the human species originated in East Africa approximately 200,000 years ago. It was 70,000 years ago that our ancestors left Africa and initiated the journey of human migration. This movement represents leaving home in search of greater possibilities. While we can only speculate what forces drove humans to cross the threshold into the unknown, climate change, physical landmass changes, or simply the desire to explore their greater environment. Recently, technological innovation has been presented as an alternate reasoning. Scientists argue that it was only with the technological innovations approximately 70,000 years ago which set humans in motion to travel across the globe (Jones, C. 2008, Oct 30). Humans embarked on a journey equipped with tools which enabled greater survival chances, confidence and the desire to explore the unknown.

I believe in humans' ability to learn and adapt, as creative beings, innovation is what advances our civilization. However what is innovation? If innovation is a transitional process that advances something, then it is also a form of support. Innovation means to find better ways of doing something. To innovate is to have some sort of goal we wish to achieve by using what we currently have. This translates to bringing out the potential of something and making it better. Often this means using tools and or resources (forms of support) in order to innovate. Similarly people require forms of support to 'upgrade' themselves, to bring out their potential towards self-actualization.

Migration has always been an integral part of the legacy of the human species. The human species have traveled great lengths from its origins to all the

way around the globe. As a species we struggled and overcame adversities, and with every transition we adapted and evolved. Not only have we changed physically, but our mental capacity grew with every new input. We acquired and exchanged knowledge with each other throughout history which supported our development as a species. Once only a node of human inhabitants, we have come a long way, building civilizations and inhabiting the world as networks. From ancient trade networks to the digital networks of current day have supported the exchange and dissemination of knowledge.

Migration is a process of transition, bridging of one condition to another. Our existence is intimately related to the environment. Humans are dwellers, designed to move and to interact with the environment. Heidegger once said, "to dwell is to build." (Heidegger, 1971). Human existence share an intimate relationship with innovation and continue to support our transitions. The right tools form the right support for the right task. Tools and knowledge serve as support for realizing human potential.

We are not alone in realizing our individual unique self. In reference to Maslow's hierarchy of needs, certain needs must be satisfied before other needs can be supported into realization (Maslow, 1954). Our being is a multi-dimensional human existence in time and space. As a species, each generation has supported the next in our human evolution. From mothers and fathers who have taught their child how to survive in the world as an individual to intergeneration genetic human evolution through the realization of greater human potential as species, it is without doubt that on multiple levels that support is essential to actualization.

## 2.2 China and Urbanization



Figure 4: Two sides of China's rapid urbanization: rural migrant scavenge materials from demolition site. (Jin, J, 2013)

China is one of the oldest and recognized cradles of civilization in the world. Historically it has experienced drastic changes with advancement of technology, a diverse culture with numerous dialectic sub-groups, separation through wars and unity under rule of different dynasties. With its rapid urbanization in the past several decades, China's importance is recognized not only in Eastern civilization but globally as well. In the past several decades beginning with economic reforms put forward by political leader of China Deng Xiao Peng, in 1978, the country has embarked on a journey towards ascension of its global role (Fan, 2008). This "return to greatness," as current president of China Xi Jin Ping calls the "Chinese Dream", is a call to collective improvement of life in china (Economist, May, 2013).

The sheer scale of rapid urbanization in its current rise to power is not without its series of social economic problems. China's current population (end of 2013) is 1.354 billion, of which 269 million, or 19.9% are internal migrants. Within the next two decades this number will surpass 310 million (UNDP, 2013). China's rate of urbanization is of particular importance because of its speed and scale. The country accomplished urbanization expansion of 10 percent to 50 percent in only six decades, the same process of urbanization in Europe took 150 years and 210 years in Latin America (UNDP, 2013). Although rapid urbanization has brought improvements to rejuvenation of the nation, its benefits are not shared equally among its citizens. The Hukou Household Registration System continues to enforce a duality between rural and urban citizens. The millions of rural migrant workers in search of their dreams in urban China is without proper support. They lack an environment within a well maintained support system to aid their transition towards realization of their true potential to achieve their dreams.

According To Christian Norberg Schulz, architecture is applied to different situations requiring different solutions to satisfy people's physical and physic needs (Norberg-Schulz, 1980).

## 2.3 World's largest internal migration



Figure 5: Group of migrants transitioning to Chinese cities and urban areas. (Yong, S. 2009).

### Facts

**Total Population: 1,354,040,00**

**Rural to Urban Migrants: 269,000,000 (19.9% of total population)**

**Largest internal migration in the world**

Since the economic reforms of 1978 by Deng Xiao Peng, following a developmental state agenda, China has been on the road of rapid urbanization and transformation. Following the death of former leader Mao Zedong and ascension of his successor Deng Xiao Peng, China had realized the need for economic growth in comparison to its neighbouring countries, most notably the New Industrializing Economies such as Singapore, South Korea and Hong Kong (Fan, 2008). In the decades following these reforms China officially surpassed the urbanization rate 50% (52.6%) in 2012 and is projected to achieve an urbanization rate of 70% by 2015 (National Bureau of Statistics China, 2012). According to the National Bureau of statistics in China, the 2013 annual report

indicated there are 269 million migrant workers in China. This accounts for 19.9% of the total Chinese population of 1.35 billion and the number of migrant workers from rural communities to urban areas is increasing every day. China's quest for rapid urbanization from the former socialist model into a socialist market economy affected all levels of organization in the country, from the state to the household (Fan, 2008). Through the desire to reinvent itself, China's previous emphasis on agriculture during pre-reform era was replaced construction, manufacturing, and service industries which served to push to modernization. The shift in emphasis also meant a relocation of resources, in particular human resources. Coupled with the opening of China's borders to export, open-door policies, and increasing production and trade of goods, was the dependence of workers, the majority being rural migrants, to work on factory floors, construction sites, and within the expanding service industries. This contrasted the anti-urbanization policies previously enforced by Mao Zedong during the pre-reform era (Gransow, 2010). China's previously collectivized agricultural industry transformed into de-collectivization with the implementation of the Household Responsibility System (HRS) during early 1980s meant that production of agricultural goods beyond the given collective quotas could be freely sold on the market (Meng, 2004). However, with the government's freeing control also meant detachment from rural agriculture. This is reflected in the decrease in allocation of land per capita that decreased over time and contributed to labour surplus (Fan, 2008). Although HRS created far greater production incentives and thus led to a rural labour surplus, increase of fees and taxes from local government make the already poor rural peasants' lives difficult with barely enough to survive (Meng, 2004; Fan, 2008). Therefore as a result rural workers looked in a different direction, with their eyes on the opportunities available within the developing cities and urban areas of the rapidly urbanizing China.

Driven by the desire to change their circumstances and secure a better future for their families, rural migrants have embarked on a journey into many Chinese cities in search of better employment, better life experience, and to realize their dreams.

## 2.4 Hukou Household Registration System



Figure 6: Hukou Household Register Certificate: official classification as rural or urban citizen. (Zuo, M., 2014)

The Hukou (household registration) system in China established since the founding of the People's Republic of China has continued to segregate rural and urban population. The system in China was formally established on January 9, 1958 during Maoist, pre-reform period (Fan, 2008, p40). Following the Stalinist growth model of rapid industrialisation, the nation focused on heavy industries in cities and extraction of agricultural surplus from rural peasants (Chan K.W., 2010, p358). Originally it was implemented as a means of controlling the movement of population and a means of fuelling industrialization through binding rural migrants to the countryside, the system created rural-urban divide, essentially creating a dualistic socioeconomic structure in China. This system effectively is an instrument for central command to control population mobility.

Two critical components are essential in understanding the impact of the household registration system. First of all the system required all Chinese citizens to be registered under one place (only) of residence (Fan, 2008, p41). The place

of residence usually being the place of birth. Secondly, under the Hukou registration system citizens are classified as either "agricultural" (rural) or 'non-agricultural' (urban) (Fan, 2008, p41). Changing a hukou classification from rural to urban is tightly regulated and can only occur when certain criteria are met. Citizens classified as Urban dwellers are preferred by the state and receive state benefits such as social welfare, and subsidies while rural 'agricultural' dwellers receive little support in comparison. This distinction between urban and rural dwellers under the Hukou household registration continue to be a significant barrier in Chinese society.

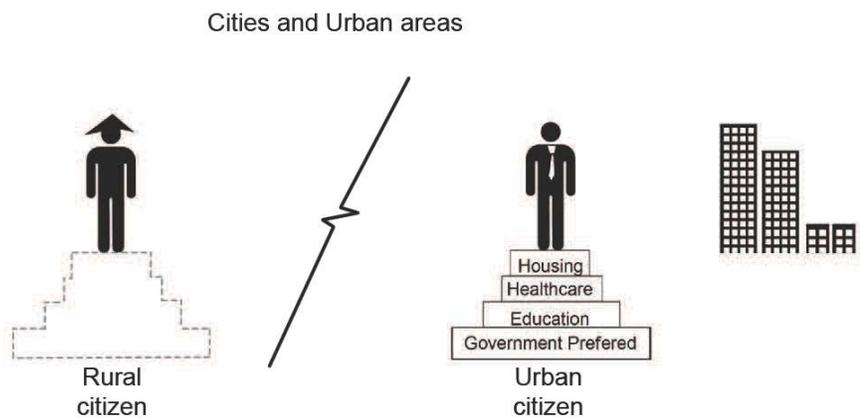


Figure 7: Rural and urban disparity: Preference for citizens classified as urban citizens. when rural migrants leave their registered place of residence their access to housing, education, healthcare is limited.

Although a series of reforms took place since its inception, the household registration system continues to be a tool used by the governing body to realize its agenda for national development. Prior to the pre-reform era, during the Maoist era, internal migration was strictly regulated (Chan K.W., 2010, p359). Since the economic reforms in 1978 with China's focus on economic development, the household registration system policies were relaxed. Economic opportunities in cities attracted millions to leave their rural residence in search of their dreams. Although rural migrants have found jobs and new lives

transitioning into cities, the Hukou household registration system continues to play an important role in reinforcing the divide between rural and urban China. In the past decade heated debates have arisen to the abolishment of the system. Without reform to the system China would remain in a dualist structure in which peasant migrants have inferior statuses and treatment compared to their urban counterparts. In recent developments under the new political leadership of president Xi Jin Ping, the government has pledged to gradually reform the Household Registration System and support more rural migrant workers.

Recently in March, 2014, China released its new national urbanization plan (2014-2020) which outlined a new mandate and shift towards a 'human centred' and quality urbanization, among its sustainable economic goals, it seeks to address social inequality. China's pledge for human centred urbanization touches upon its goal to implement a series of reform to gradually remove hukou restrictions to allow more migrant workers to become integrated in cities (Xinhua, Dec 15, 2013). With the urbanization rate in China is expected to reach 60% by 2020 and the anticipation of an additional 8% of the country's population (10.8 million people) entering cities, the Chinese government has pledged its support to provide training for 10 million migrant workers annually (Xinhua Mar 17, 2013). Politically, recent developments in China provides legitimate support for the construction of a supporting framework to aid migrant workers' transition into cities.

## 2.5 The Chinese Dream



Figure 8: The Chinese Dream: Workers lay the foundation to China's future (Li, A., 2014).

China is one of the world's great civilizations with a rich historical background. The rise and fall of different dynasties, separation and unity is what shaped the nation as it stands today. It is generally accepted that during the 19th century, the latter half of Qing dynasty, with the invasion of European powers, World War II until the founding of New China, the country was left in a relatively weak state (Economist, May 4, 2013). China currently continues to be defined by transition in all aspects of the Chinese society, from the redefinition of its physical landscape to social structures. With the past several decades of economic growth and urbanization since the 1980s, China and its people have found new optimism to aspire for a better future. This optimism is captured by the 'Chinese dream'.

Originally the term, 'Chinese dream', was coined by Peggy Liu, Joint US-China Collaboration on Clean Energy (JUCCCE) who described the Chinese dream as sustainable development and it was popularized by an article in the New York Times titled "China Needs its Own Dream" by journalist Thomas Friedman (Friedman, T. October 2, 2012). While Liu argued that China needs to have its own dream that is not about following the "American dream of owning

a house, family of four, and two cars which have escalated to conspicuous consumption" it is more importantly about both collective and individual aspirations described in president Xi Jin Ping's adaptation of the 'Chinese dream'.



Figure 9: Chinese President Xi Jin Ping puts forward the slogan "The Chinese Dream" (Reuters, 2013).

Following, in 2013, the Chinese president brought forward this term for the first time as a slogan to put forward the ideals of Chinese socialist thought in the People's Republic of China. Outlined by official theoretical journal of China's political leadership, QiuShi, the People's Forum (2013), the Chinese dream is Chinese prosperity, collective effort towards well-being, socialism, and national glory (Shi, Y., 2013, May 3).

*"By the Chinese dream, we seek to have economic prosperity, national renewal and people's well-being. The Chinese dream is about cooperation, development, peace and win-win, and it is connected to the American dream and the beautiful dreams people in other countries may have."*-Chinese President Xi Jin Ping (Kuhn, R., 2013, Jul 19).

There is a desire for the nation to rejuvenate, to 'return to greatness'. Overall it is a plan to seek improvement of people's livelihoods and the construction of a better society. President Xi Jin Ping makes a connection to the

American dream and that of other nations, stressing the importance of entrepreneurial spirit to achieve both individual and the nation's goals. Beyond being the dream of every Chinese as individuals, it is the dream of the nation. It is a dream of the Chinese collective consciousness.

Particular importance is placed on the individual in relationship to collective effort to achieve the 'Chinese dream'. This fundamental relationship between the individual and collective is essential to understanding effective methods which could successfully achieve the 'Chinese dream'. I believe it suggests a combination of bottom-up and top-down methods which could mutually support people in realizing their 'Chinese dream'. President Xi Jin Ping urged every Chinese citizen to play their part in making the Chinese dream come true and encouraged the young generation to dare to dream and work diligently to achieve them. "Young people should be optimistic when faced with adversities, to work at the grassroots and the front line to hone their skills and improve themselves" according to President Xi in a Xinhua net news report (2013). While Chinese premier Li Keqiang also stated that the new model of urbanization will be human centred to ensure prosperity of the people and promote quality urbanization (UNDP, 2013). This new model of urbanization includes plans to gradually allow rural migrants to gain urbanite status to gain equal access to welfare and other benefits provided by the government. Furthermore, the government has pledged to train 10 million migrants per year to improve the skills of individuals and aid their transition (Dan, H. 2014, Feb 21). The belief of Xi Jin Ping's Chinese dream that through the refinement of skills and embracing innovation towards the building of strong individuals as the basis to form a strong nation demonstrates congruency to the collective nature of Chinese culture.

The emergence of the concept of the 'Chinese dream' has in general evoked a sense of optimism and positive psychology. Indeed China's dream should differ from merely an import of the American dream which has escalated to conspicuous consumption. Following the traditional cultural values of Chinese society, I believe the basis of the 'Chinese dream', as a collective endeavour according to president Xi Jin Ping, is valid and is the only sustainable approach. There is a traditional Chinese saying "strong families build a strong nation", families form the basic unit of a community and the nation as a whole. I believe the political agenda and personal aspirations of the Chinese people can be developed hand-in-hand. Emphasis on collective effort implies mutual support towards the realization of everyone's dreams. As advocated by political leadership for its citizens to pursue their Chinese dream through entrepreneurial spirit and development of personal skills, this support can occur at different scales through collaboration from different sources. Support should be provided to the millions of rural migrant workers who have travelled to cities in search of the Chinese dream. Nurturing transition of the nation and its people should be synonymous through mutual support.

President Xi Jin Ping has pledged to aid migrant workers and address their needs: "contributions made by migrant workers have aid China's efforts to build a moderately prosperous society". -Xi Jin Ping

## 2.6 The Marginalized



Figure 10: Rural Migrants: Without a base, migrants without support to begin their new lives as they cross the threshold into the unknown. (n.d. 2013)

Definition: From Oxford Dictionary

Marginalization (Verb)

1. Treat a person, group or concept as insignificant or peripheral
2. Margin- (noun) Edge or border of something
3. Margins of a book allow for flexibility, input, feedback
4. Furthest limits of possibility, success, etc

Origin: Latin, Margo meaning edge

269 million rural migrant workers served the backbone of China's economic growth. However, even as major central contributors who have supported the country's growth, they stand at the periphery of society, without a base, a foundation, to stand upon to transition their lives to a better future. The inferior rural status of migrant workers perpetuated by the Hukou household

registration system force them to become marginalized in urban China. The marginalization of rural migrants occur on several dimensions, they are economically, socially, and spatially segregated from permanent city dwellers (Lin, Y, de Meulder, B, Wang, S., 2011, p3586). Majority of rural migrant workers find themselves living in Village in Cities (ViC) also known as urban villages where rent remains low (see chapter on urban villages for more details). These urban villages are much unlike the surrounding 'urbanized China' and are sites of informality. I believe urban villages contrasts the 'urban' Chinese fabric and are representations of the tension between rural and urban transition. As second class citizens rural migrants face discrimination within urban areas, and are often regarded as 'outsiders' and perceived as peripheral (Zhuang, 2013, Mar 3). Furthermore, rural migrants are often poorly treated and engaged in the "Three Ds", dangerous, dirty and difficult jobs (Friedman, J. 2005, p66). In general, although rural migrants are not illiterate, they are less educated and less skilled than their urban counterparts. Recent publications have made clear that rural migrants lack the knowledge for higher skilled jobs, detailing the need for better access to training and information (Xin, Z. 2014, Mar 13). There is a necessity for migrants to be able to access channels of information and training is critical in order to satisfy their personal dreams and the 'Chinese dream' on a national level. Therefore greater access information, training and other supportive mechanisms as platforms to realization allow the marginalized to become included and share the benefits of urbanization as equals.

### 2.6.1. Employment Barrier

Rural migrants' employment prospects are generally limited due to their lower educational background and skills to compete in job markets when they first enter job markets in urban China. Migrants are generally employed in three streams of work, construction, factory jobs and entrepreneurial (often informally)(Chang, L.,2008). Furthermore, labour within China is highly gender segregated. Men often work in the construction industry and other jobs which are more physically demanding while women are often employed in factories (Fan, C. 2008, p5). Men are desired for their strength for construction while women are wanted for their attention to detail in factory jobs. Rural migrants are often exploited by employers who take advantage of their informal status. They work long hours often (10-12hours per day, in some cases 14hours) and have few days off per month (Chang, L.,2008). Factory companies typically employ (often illegal) practices to trap and entice workers to stay in their jobs by withholding their first one to two months of pay until their last day of employment. Similarly in some cases worker's identity documents are withheld until they have served the duration of their contract (Friedman, J. 2008, p67). In other cases some migrant workers are routinely denied regular wages for their work or mistreated to take on dangerous tasks (Ngo, J., 2013). Voices of workers' dissatisfaction are being heard and publicized in media and the Chinese government has recognized the rural-urban inequality , however not enough action has been taken to address the needs of migrant workers.

Migrant workers are the force behind China's urbanization and its success is built upon the efforts of the millions of rural migrants who have chosen cities as places to realize their own potential and their dreams. Their individual aspirations have in turn contributed to the greater dream of the nation. Dissatisfaction among migrant workers risks potential social and political unrest and economic

instability. Therefore improving chances of being employed in desired employment positions with responsible employers can be achieved with the help of first of all improving their circumstances by providing an environment to help them gain better access to knowledge and skills training. Secondly, providing authentic channels of employment to avoid exploitation and supporting their human needs on different levels can greatly improve their well-being.

### **2.6.2. Education Barrier**

The current generation of rural migrant workers are typically more educated than the older generation of migrant workers. However their education level still remains lower than the overall population average (Du, H., Li, S. 2010). Typically most rural migrants have a junior high to high school education. Rural migrants who have ventured with their young children to cities have limited choices in providing formal education for their children. Although the Compulsory Education Law states that all children from ages 6-15 are entitled access to education, for migrant children this is not guaranteed due to many barriers (China Labour Bulletin, 2013, Jun 23). Due to Hukou household registration system, rural migrants cannot receive public schooling without residence and work permits, certificate from place of origin, and other criteria must be met in order for worker's children to receive education. In addition some schools charge additional fees for migrant children and other miscellaneous fees (China Labour Bulletin, 2013, Jun 23). Although Hukou reforms and pilot projects are being carried out, currently migrant's children are typically home-schooled, enrolled in community volunteered schools or privately organized schools. Lack of proper access to education is a barrier for many rural migrant families and as a result families choose to leave their children behind in their rural homes while a single parent or both parents venture to cities.

Ultimately, it has caused a fracturing of the family unit, the cellular unit which forms the basis of a nation. The reality is that family members live apart in isolation from each other, without proper emotional support. Parents of families or single migrant workers find themselves isolated in cities and disconnected from their surroundings.

While political reform of Hukou household registration policies is central to ease access to better education, support to aid transition of migrant workers into cities can be achieved. Migrant workers require skills training and authentic channels of information to aid their survival in cities. Informal means of acquiring knowledge through social networks, remain a crucial aspect to survival in cities. Therefore it is important to create an environment which can they can form new connections with others, satisfying their emotional needs and increasing their knowledge to improve their circumstances.

### **2.6.3. Housing Barrier**

Limited by their rural Hukou, migrants have limited housing options in urban China. Without an urban Hukou migrants cannot access low-cost public housing (Lin, Y., & De Meulder, B., Wang, S., 2011, Dec). As a result many migrants find themselves either searching for employment which includes housing or living in private rental housing units in one of numerous urban villages in cities is often their only alternative. This housing situation for migrant workers however does appear to be ongoing a series of reforms in accordance to China's new-type urbanization plan 2014-2020. Recent test projects in different Chinese cities such as Guangdong which have begun to draft detailed plans to dedicate a portion of public rental housing to migrants while other Chinese cities have eased conditions for the purchase of homes for migrant workers (China Daily, Mar 21). While this develop is certainly in favour of migrant workers

who have ventured to cities in search of a better life, It will still take time until migrants are able to save enough for the purchase of a home in cities. In other words more readily available housing options are needed as a stepping stone towards better solutions for them in the future.

The Hukou household registration system is therefore still the backbone to rural and urban disparity, segregating migrants from successful transition. Housing barrier for rural migrants also contribute to the denial of a place to settle and call home and creates a poor sense of identity with their surroundings, thereby creating a low sense of place attachment in cities.

The concept of a home is important for any individual, especially for the Chinese who are more collective orientated. While rural migrants embark on a journey to cities, they often do so leaving their family behind. Therefore the process of moving to cities for rural migrants leaving their rural origins is also the loss of a home. Having lost reference points to their surroundings, migrant workers have difficulty identifying with their surroundings when they initially move to cities. Without an in-between platform, a step between origin and destination, it is difficult to support migrants' transition from short term to long term living in cities.

Rural peasants' migration from rural to urban areas is a form of displacement. Being neither in the comfort of their rural home nor integrated in urban areas, migrants exist in an interstitial state of displacement (Morley, 2000). Rural migrants' transience state risk having no sense of belonging. However having said that, their decision and hence the beginning of their journey to cities and urban areas is about finding their place in the world. It is about seeking to realize their own potential to achieve their aspirations. Therefore rural migrants'

journeys is actually a process of securing a foothold or 'finding their place' within the world. I argue supporting migrant workers' transition to cities

I believe transitional housing for rural migrants can support their initial transition into cities. Isolation and disconnect with surroundings can be mitigated by providing them with a place to connect with others and share their experiences, information, and company emotionally. Forming connections with others can also form a basis for informal economic activities based on social networks and mutual support towards realization of individual and collective aspirations.

Informal economic activities based on social networks is critical for survival for migrants in cities. Without a reliable source in which they can trust, these social networks are their only lifeline in cities. Self-organization of housing, education and employment become necessary with currently little support from formal government sources.

## **2.7 Living conditions of migrant population in Urban China**

China's rapid urbanization is characterized by high internal migration to cities and other urban areas. Coupled with the economic reforms of the early 1980s were housing reforms through privatization and market driven processes. These housing reforms however only improved urban citizens' living conditions and did not account for the incoming rural migrant population(Jiang, 2006). Rural migrants are excluded from social benefits, and have limited housing options(Bronner, Reikersdorfer, 2012, p7). While rural migrants are allowed to purchase commercial housing in cities which also grants special hukou status that provides access to partial social welfare in cities, this option is simply too expensive (Gransow, 2010). Migrant workers are often employed at wages

below national average wages (China Labour Bulletin, 2013). Furthermore, low cost public housing is unavailable for migrants due to their rural status associated with the Hukou household registration system (Jiang, 2006). Therefore migrants, especially those who chose to migrate their entire family, resort to private rental housing within urban villages as the primary housing option. Urban villages as migrant enclaves absorb the majority of migrant workers. As demand for more private housing have increased over the years, so have the number of newly constructed accommodations (Gransow, 2010). As a result the population density of urban villages have continuously increased. Floors of buildings are cantilevered over narrow streets resulting in restricted lighting and decrease of privacy and ventilation. Being in unfamiliar places and renting tiny rooms, migrant workers develop a sense of emotional isolation and disconnect with their surroundings. Buildings rented out by urban villagers host accommodations on floors above the ground floor. These buildings' design however are economically driven to maximize the number of migrants it can accommodate. Therefore these buildings' layouts is designed to purely satisfy its functional purpose. Within these 'houses' or tiny rental buildings, the lack of shared spaces reinforce a sense of isolation.

Those living in urban villages are often employed in informal work or employed within the service industry in restaurants. In addition, urban villages have become attractive places for migrants since they offer informal access to schools and small clinics and health centres as alternatives to their restricted access to more public streams of access (Gransow, 2010). Furthermore urban villages have also become fertile ground for entrepreneurs to form business either informally on the streets or setup small shops within the collective fabric.

In other more extreme cases, means of housing include shipping containers which have been converted to housing. Those who are less fortunate

may also live in makeshift homes comprised of scavenged material on the periphery of urban areas. Those employed as factories are often provided accommodations. However living conditions within these dormitories varies greatly from different employers. Some factories partnered with NGOs such as world bank or government would maintain a good level of housing quality for its workers. In other cases factory workers could be housed in crowded bunk bed rooms with more than ten persons (Pulitzer Center, 2011). Construction workers often live in un-insulated and substandard prefabricated dormitories on site. Their living conditions are harsh as well, living in tiny rooms with as many as six persons to a unit (Bronner, Reikersdorfer, 2012). This way of living for migrant workers lacks privacy and a decent physical environment. I believe they can only be considered as shelters rather than a home. For however long people stay in any type of housing, their living conditions should never be compromised to substandard.



Figure 11: Shipping container housing: A case of migrant workers' poor housing accommodation (Washington Post, 2013 Mar 4).



Figure 12: Migrant construction workers: dining together in dorm room. (Song, A, 2013).

The living conditions of migrant workers varies associated with the type of employment they are engaged in. Although the majority of rural migrants have increasingly found urban villages as places of housing for themselves or along with their families, I believe this is not their final destination to realize their dreams. Furthermore the capacity of urban villages to absorb new residents will reach a limit. Eventually migrants would look for better opportunities, for living. Therefore in order to truly improve migrant's living conditions in the long run, it requires supporting their transition. A framework to truly support migrant's ambitions looks at urban villages as places and moments to provide aid within the bigger picture of aiding transition to city life. Without the support mechanism to realize their potential and bring their dreams to fruition, their long journeys are no longer meaningful.

## 2.8 Perspectives on Migrant Experiences

The subject of rural to urban migration in China has received massive attention over the years. Literature has often placed emphasis on a global perspective on China's internal migration and rarely expressed the personal perspective of migrant workers. I believe understanding the experiences and perspective of migrant workers can shed light as to how support can be effectively provided. In general, migrant workers in China feel invisible, isolated and disconnected. Migrant workers in China often work long hour for a fraction of the pay elsewhere.



Figure 13: Migrant workers: Invisibility, disconnect and isolation are felt by all migrant workers regardless of their occupation.

In the book published by Leslie T. Chang, *Factory Girls* and her TED talk, *The Voices of China's Workers*, provided some insight of migrant workers who have embarked on the journey of seeking their dreams in cities. The following

are several points of views *The Voices of China's Workers* from Leslie T. Chang's TED Talk, *The Voices of China's Workers*.

"Money is necessary for survival in the reality of modern society."

"Education to learn is most important for migrant workers."

"just to make a lot of money doesn't give enough meaning in life."

"I study English because in the future our customers won't be just Chinese speaking."

These are the voices of China's migrant workers, their dreams and aspirations. Many of these quotes suggest migrants seek quality transformation in their lives and the Chinese society that hosts them. The future they seek, in the process of the country's urbanization, is an environment to support and nurture their dreams by unleashing their potential.

### **Case Study: Zhang Liyong Migrant Worker journey to Chinese Hero**

According to an article in the South China Morning post by Jane Cai on 2013, Oct 27th:

Zhang Liyong was born into a poor family in a rural village in Ganzhou, Jianxi province. His childhood was filled with memories of struggling in poverty. Every year his parents would desperately knock on their neighbour's doors to borrow money for their children's tuition. Zhang dropped out of school at age of 17 and ventured to the city of Guangzhou to work on construction sites. However he maintained the strong belief that education and knowledge held the key to better life prospects. Every day he studied hard during times off the

construction site while his co-workers were drinking, he was studying English. His journey to the city led him to discover not only urban China, but something about himself as well.

He believed in his potential in life and asserted that education and skills would allow him to transition to a better life. Through networking he was able to switch jobs several times until he worked as a cook at Beijing University. Still every day he educated himself on English through school textbooks. Surrounded by other university students who were about the same age as him who studied comfortably while he labored made him feel ashamed, but he did not give up on his dream. His perseverance and effort was rewarded when he proved himself in TOEFL examination, scoring 632 out of possible 670. Following this accomplishment he became the attention of the media. Zhang became a hero of inspiration, he now gives free lectures and hopes to support other migrant workers to realize that their future is not set in stone and support their potential.

The success of Zhang Liyong is an example of an individual's perseverance and reaching for support to achieve self-actualization. Through his journey he had learned about himself and took action, persevered and reached his goal. What is critical about the story of Zhang is that he had grasped the potential that is inherent. Through networking, he was able to gain support and secure greater opportunities. Through education (training himself) he gained the knowledge to secure a better future. Evidently having the right forms of support and self-motivation is key to reaching one's goals.

## **2.9 Government and NGO action**

### **Compassion for Migrant Worker Children (CMC)**

Compassion for Migrant Worker Children (CMC) is an organization in China comprised of organizations, individuals, and companies who engage in collaborative dialogue to support children of migrant workers, whom they believe is the most disadvantaged group. The existence of CMC is an indicator of non-traditional forms of structuring effort in the resolution of issues. The CMC organization is centrally located in Beijing and partners with non-government organizations, community leaders and government to leverage resources (CMC, 2011). This organization is a precedence to structuring support for the migrant worker community. It recognizes the migrant community in China in need of support and diverse opportunities for collaboration in its realization.

CMC serve as a broker to collaboration with various partners to provide migrant workers access to the city. CMC has adopted the approach of support through physical means, with construction of community centres strategically located in various migrant communities where the need is recognized. The built community centres seek to provide education and vocational skills training and social services for migrants.

### **Government Involvement in Support of Migrant Workers**

Although in China the Chinese government has yet to abolish the hukou household registration system, a series of reforms continue to be implemented. It is unlikely the system would be decommissioned in its totality anytime in the near future however the government recognizes the problematic issues that have

arisen under the household registration system and the need to take steps to support migrant workers.

World Bank projects partnered with factories to provide better living conditions and development for its workers. This organization provides support by connecting migrants with housing and employment services. The Guangdong Social Security Integration and Rural Worker Training Project of China also seeks to improve the social condition of rural migrant workers through skills training program and to address skills gap in Guangdong province. It seeks a partnership approach with schools and industry to enhance market relevance of training. The project proposal was recently approved on June 20, 2013. This project is a recent development and suggests a form of willingness for government to become involved in improving migrant worker prospects in urban China.

## 2.10 Guangzhou, Guangdong, China

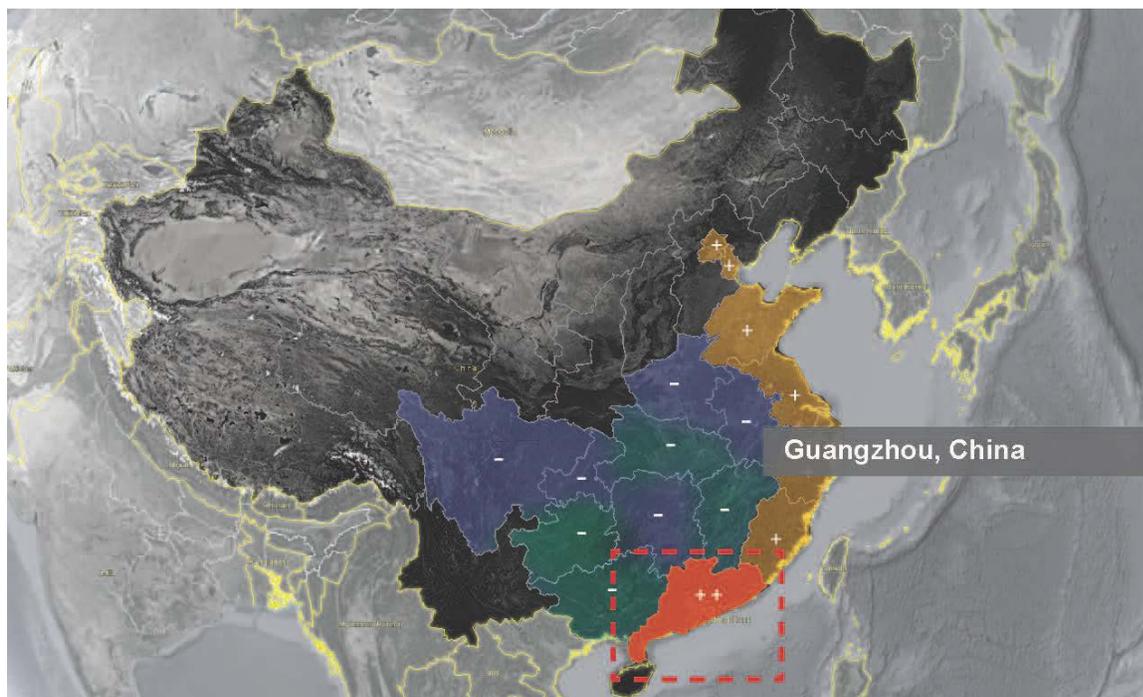


Figure 14: Guangzhou, China: Migratory flows across provinces. (Author, 2014)

Guangzhou is the capital of Guangdong Province and the largest city in Southern China and third largest in the nation. It is also one of the most popular destinations for migrant workers. Physically located on the Pearl river and in close proximity to Shenzhen, Hong Kong and Macau it holds a vital position in trade. Historically Guangzhou is an important national trading hub. Its geographic location at the mouth of the Pearl River made it an advantageous position within the trade network. Guangzhou was also one of the first cities to be open to foreign trade since the Opium Wars. Guangzhou is the main manufacturing hub of the Pearl River Delta, it can also be referred to as the "country's factory floor". In the near future Guangzhou may no longer be recognized centrally as manufacturing hub but as national knowledge and technological innovation centre as it transitions under the transformation of its master plan.

## Guangzhou Transition into the Future

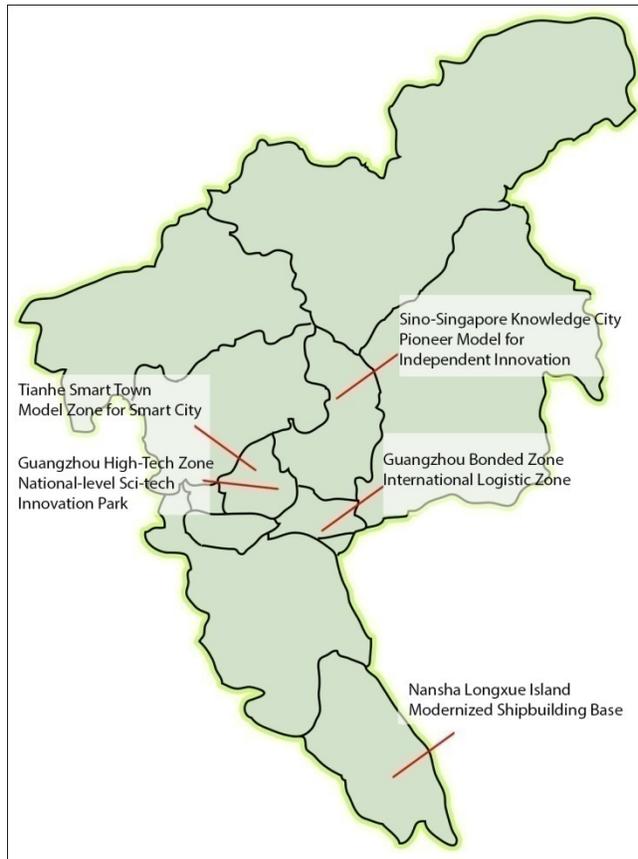


Figure 15: Guangzhou master plan for building national innovation city (2011-2015).

Author, Map based on source from *Guangzhou Master plan for building national innovation city (2011-2015)*

According to the *Guangzhou Master plan for building national innovation city (2011-2015)*, Guangzhou seeks to become the science and technology and knowledge innovation centre in South China. The plan has laid out eight major projects towards the development of its goal to become a model of innovative development. As the city continues to redefine itself it presents opportunities for migrants to transition into the new context as well. As outlined within Guangzhou's master plan to carry out changes several points are potentially useful to develop migrant workers.

## *-2. Information-Driven Guangzhou*

*"Build the Tianhe Smart Town, Nansha Smart Isle and model zones on like Zhujiang New Town, Sino-Singapore Knowledge City and New Guangzhou."*

This goal strives to transform Guangzhou into an information driven city. To address this goal in conjunction to rural to urban migration, I believe urban villages as congregations of rural migrants who desperately need authentic sources of information, are best sites to implement this goal. Providing rural migrants with information in regards to job employment and housing prospects, legalities of the city, can be a means of support to orientating themselves into the urban environment. Not only will this better satisfy rural migrants' transition but Furthermore this would work in conjunction with China's National Urbanization Plan 2014-2020 which has vowed to be people centred (CCTV, 2013). Therefore providing outlets of information within the network of urban villages situated in many of China's cities is a framework which supports the goals of its people at a local, regional and national level.

## *- 7. Social Development Benefiting the People*

*"Give support for colleges and universities in Guangzhou so that they can apply to be innovative training model experimental area and the national education team."*

Indeed providing support to educational institutions can prove to have positive results. China's ambitious newtype urbanization plan 2014-2020 is focused on human development of its people and once again the city's goal aligns with the national development. "Social development benefiting the people" should be inclusive of migrant workers since they play a vital role in the

development of the nation. In fact, China has recently pledged to train 10 million migrant workers per year (Dan, 2014). Therefore educational and training programs should be extended to migrant workers. The best place to realize social benefit for the people should be at places where migrants reside, that being urban villages. Support frameworks should be located in urban villages to accumulate social benefit for the people.

- 8. *Innovation and Cultural Environment*

*"Build a number of the landmark cultural facilities with Guangzhou features and innovative elements. In this way the new landscape can be shaped with the city's innovation culture."*

This goal speaks of creating innovative and cultural landmarks within the city. My interpretation of this goal is that innovation, meaning taking something existing and doing it in a new way, applies to changing the circumstances of rural migrants. This can be achieved through a supportive framework for migrant workers. A series of nodes supporting migrants' needs within urban villages locally as part of a greater network regionally and nationally. In this manner it adds to the cities' landscape bringing an innovative supportive culture to the Chinese social fabric.

Therefore, the transition and development of migrant workers can be aligned with the transformation and development of the city. Aligned with goal number two, seven and eight, information driven, social development, and to build cultural facilities with innovative elements. I believe the city could be truly innovative and leading model if it addressed the needs of migrants; to provide opportunities for migrants to develop themselves through training, access information regarding employment and housing prospects, and connect with

others. This is an architectural opportunity to create meaningful places for migrant workers.

These key points provide an outlet for potential action which could be worked in conjunction with the needs of migrants.

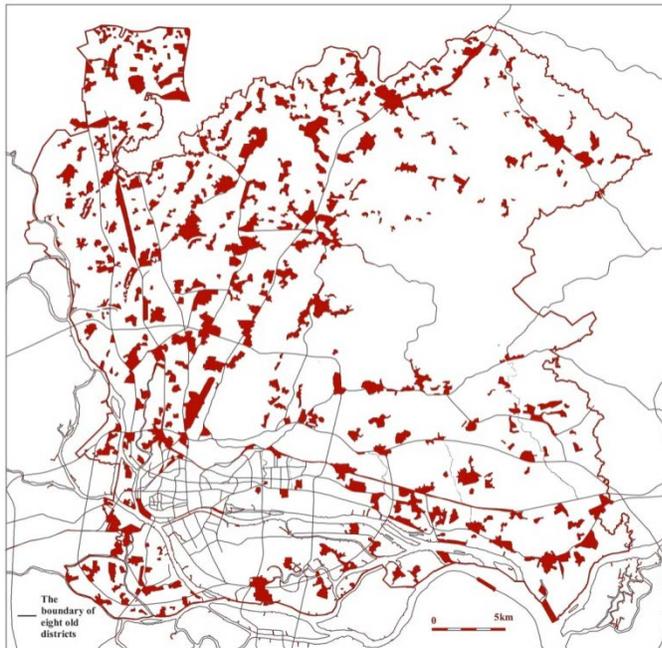


Figure 16: 138 Urban villages /Village in Cities (ViCs) within eight districts of Guangzhou.  
Image based on: Lin, Y., & De Meulder, B., Wang, S. (2011, Dec).

As one of the first cities opened to foreign trade, Guangzhou is experiencing rapid urbanization, as it continues to expand engulfing of rural settlements continues. These pockets of "rural" settlements, also known as *Village in the City* or *urban villages*. These are often the only places for rural migrants to find affordable housing.

## 2.11 Urban Villages (Chengzhongcun) "Village in Cities" ViC



Figure 17: Overlooking a urban village in Guangzhou: Shipai Village. (Author, 2014)  
base image: Schwarz, A. (2014, Jul 22).

The definition of 'Village in Cities' or urban villages in China is unique and differs from that of Western urban villages which is synonymous with mid-rise mixed-use development. While urban villages in China may share mixed use ideology, the physical characteristics of Chinese urban villages differs. Compared with the surrounding formal development, urban villages are highly dense congregation of small scale built form following a historically more organic plan.

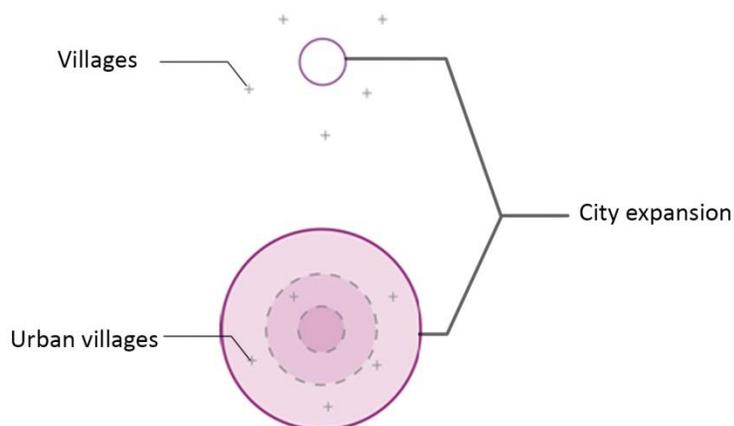


Figure 18, (Right): Rapid urbanization and city expansion: Villages becoming urban villages.

The phenomenon of 'Village in the City' (VIC) also known as urban villages or *chengzhongcun* in Chinese is a form of urban development in China (Lin, Meulder, Wang, 2011) . This form of development originated in cities along the Pearl river delta region and is most prominent in rapidly urbanized cities which were among the coastal development strategy of the 1980s initiated by Deng Xiao Peng. Urban villages were once agricultural villages at the fringes of cities. With the rapid pace of urbanization in China during the past several decades, urban development eventually expanded and encompassed urban villages . Farmland of the urban villages were acquired by the government and developed for urban city living while the village settlement themselves are often left untouched until land value surrounding villages has matured and become, for the government, too attractive not to develop (Gransow, 2010). The existence of urban villages in China is representative of the dual system between rural and urban development. Just as urbanization is embodied in the journey of millions of migrant workers, urban villages are spatial manifestations of tension of rural-urban divide. Researchers have described urban villages in China as "a mixture of rural and urban society" (Du, Li, 2010, p2). With rapid urbanization and mass internal migratory flows from rural to urban China, Urban villages have become an attractive, and often the only affordable, choice for millions of rural migrants to live in cities.

Large scale tabula-rasa development proposals are often the fate of urban villages. Sites of existing urban villages become assimilated into 'formal' development. Yet we can question whether this form of development is sustainable. It begs the question whether this urban fabric deserves to be preserved. These villages have a long history dating back several dynasties in China's rich history. While urban villages have been nicknamed as "tumours, cancerous, urban scars" (Yan, 2008), the vitality of the small scale and

undeniable and essential supportive function they serve not only to most evidently the local human needs but also the economy at all scales. I hold a firm belief that there is value within this physical form in which the standard generic "stick city" of endless high-rises and aimless large scale "people's squares" in which the current 'modern China' cannot offer. The unfortunate failure to recognize the fine scale fabric of urban villages as part of modern China is just as unfortunate as the neglect to recognize rural migrant workers who have driven and continue to drive the country's urbanization.

## **2.12 Rural Migrants and Social Networks**

Migrants continue to choose urban villages within cities, often the only place of affordable housing, as place of residence for themselves and sometimes their families as well. According to surveys conducted in Guangzhou, rural peasants often rely on social networks in order to inform their decisions regarding job prospects (Gransow, 2010). Networking is of crucial importance for migrants as informational channels for knowledge. Networks provide a form of safety for rural migrants, navigating risks and knowing there are those who they can turn to for support. Furthermore, with technological development and decreasing cost of communication devices, particularly mobile phones and internet service, these provide a form of social cohesion and act as information hubs (Qiu, J.L., 2010).

This form of cohesion enable migrants to greater channels of information to support their transition to cities and urban areas. There is a strong relation between social networks and living prospects associated with employment. The type of job also determines housing type for migrants in cities (Gransow, 2010, p6). In general construction workers live in prefabricated temporary buildings on site, factory workers typically live in dormitory provided by companies and

household workers live with families for whom they care for. This brings into question the housing accommodations for migrant workers employed in service industry, entrepreneurs, and those whom brought their family along. The commonality between all rural migrants rests upon their transition from rural to urban in which uncertainty and insecurity in regards to shelter, with reference to *Maslow's hierarchy of needs*, is one of the most basic human needs which must be satisfied prior to the undertaking of other aspects in life towards realizing our potential towards self-actualization. Most migrants dominantly rely on word of mouth in the distribution of knowledge from family and friends (76.8%) and from people of the same place of origin (77.5%) (Du, Li, 2010, p10). I believe beyond these methods of obtaining information, connection to other channels would offer greater perspective on housing and employment opportunities, especially for migrants' transition to cities.

Although the decreasing cost of mobile communication devices has allowed greater access for migrants to a larger network, many still do not know how to use these information outlets to their full potential. According to Jack linchaun Qiu, associate professor at the Chinese University of Hong Kong, migrants use internet mainly for entertainment without ever knowing how to use a search engine or setup an email (Qiu, J.L., 2010). It is evident that migrants would require greater support as to how to navigate and expand networks. Maximizing connections between people is a form of network at a local level. Having the means to access and navigation of digital sources of information expands on migrant workers' networks to a global level. The presence of a support framework would provide an expansion and interplay between different sources of information within a migrant's social network.

## 2.13 Concept of 'Jia' (Family) and its significance in Chinese Culture

The word family in Chinese, *jia* is used interchangeably with the meaning of home and house, and they are in fact the same word. A study of the Chinese character can reveal insight into the structuring of the family as the basic unit of society. The Chinese character for family is composed of two parts, the top half represent roof, suggestive of a shelter or a house, while the bottom portion of the word on its own is the word for pig, combined together it implies that family members live together under one roof, produce and consume as a unit (Knapp, 2005. p223). Chinese society being family orientated, function in a collective manner. In Chinese culture family members pool together and share resources towards the betterment of the unit as a whole. This remains true in contemporary China, especially in the case of rural migrants who must support their families back home through remittances.

The Chinese saying "When the family is orderly, then the nation is at peace", reveals the key connection between family and nation. The Chinese Character 國家, for country is composed of the word "國", 'nation' and '家, family'. The coming together of these two words form 'country' (Hu, 2008, p335). There is a direct connection between family and the nation from the firm belief that a strong family unit composed of individuals who uphold good values and practices would form the basis of a strong country. This concept of family as the basic unit of society is expressed architecturally through a set of principles inherent in all built construction. The courtyard typology which utilizes the principles of symmetry, balance is replicated at all scales from individual building to planning of cities.

## Chinese Collective Unit

Chinese culture has a strong emphasis on the collective. While Western culture emphasize the "I" or individual freedom, Chinese culture values the "we" or collective well-being. This is the main difference between Chinese and Western culture. Rather than placing a focus on the individual, the notion of relationships or '*guanxi*', the relations or connections between people, the mutual respected obligation towards each other is viewed as a critical element of Chinese values (Li, 2006). This collective nature of Chinese culture is manifested socially, politically and has a strong emphasis spatially. This '*guanxi*' or special bond between people thereby forms a network in all aspects of Chinese daily life. For example, the collective nature of Chinese society is embodied in the design of courtyard houses which reflected social hierarchy through the arrangement of rooms around courtyards ordered according to rank within the family. In this manner, courtyards can be viewed as shared spaces or spaces of collective activity. Furthermore, socialist Danwei units constructed during China's early socialist era which strived for social equality were spatially designed to serve political beliefs however still followed same principles of the courtyard house. (Wang, 2012). Therefore the courtyard house is a spatial archetype that represents and reproduce social relationships spatially (Wang, 2012). As a result the collective is reflected throughout the different scales which make up the society, often at the most basic level is the family unit which makes up the community, the city, the province, the nation.

In this light, we can view Chinese society from a biological perspective to be similar to a multi-cellular organism in which not only consists of different cells, but cells which share a relationship with other cells within a network, mutually influencing each other, and designed to work together to satisfy the needs of

the greater organism as a whole. I believe that the notion of collective unit in which Chinese society functions, demonstrates the importance of connections and establishing the common ground between different people. Similarly, like a rope which consists of multiple strings that share the same forces and serve the same purpose combine to form a stronger entity, being a collective means a sharing of spaces, of activities, of a common goal or desire. Therefore I can conclude the notion of the collective translates to the sharing of spaces and activities emphasized by the relations between them in a network.

## 2.14 Changing Family Relations

The restructuring of China through the economic reforms which began in 1978 also brought social change in terms of family relations. Income derived from agriculture is barely enough to survive ever since reform. They have little access to state support and must rely on labour contract land. With rural-urban disparity rural residents are subjected to perpetual poverty.

Rural families commonly became 'split' households as individuals became migrant workers in cities and became physically separated from their families back home. The restructuring of the household, usually it is the male in families or both parents of children who become engaged in migrant work (Fan, C. 2008, p7-8). It is common for the men in families to work *outside* while women took care of the family back home. The old saying "men till, women weave" sometimes does not apply in contemporary Chinese society as increasing number of females join the migrant workforce. The contemporary model of the Chinese family do not always conform to the traditional model. Young children are often left at the care of elderly grandparents, a solution which is not sustainable as issues with emotional development and proper care of children is lacking (China Labour Bulletin, 2013). Parents of these children travel home once

every year during the Chinese New Year, joining millions of other migrant workers in a frenzy to acquire train tickets to return home. This ritual is depicted in the movie *"The Last Train Home"*, a documentary film focusing on the lives of migrant workers. Many are not able to obtain transportation back home due to sheer demand. Migrant workers form a long distance relationship with their families back home and communication through telephone and internet become critical means of addressing this divide. Traditionally a family unit is one that lives together in the same house and same locality easily reinforcing the bond between family members, however in the case of migrant workers who live away from their families, dispersed across the span of the nation in Chinese cities, the bridging of people within webs of connections become crucial. The definition of a family unit is no longer in the traditional sense and must be addressed and reinterpreted to form a network of stable platforms which support migrant workers.

## **2.15 Chinese and Western Architecture**

As one of the oldest civilizations in the world, China has a long history of philosophical thought. This body of knowledge and theoretical accumulation continues to be shaped by the active interweaving processes of social, economic and political factors. Architecture, as a concretization of these processes continue to define and be refined through an iterative process of understanding. Chinese architecture is often perceived as different from Western school of thought, however upon closer examination some similarities exist between Chinese and Western architecture. Traditional Chinese and Western classical architecture are both concerned with proportion, symmetry, repetition, etc. In the continuously globalized world of our contemporary society defined by networks, and collaboration, Eastern and Western philosophy perpetually influence each other and shaping our cultural values.

### 2.15.1 Building with less

Chinese and Western architecture share some key points behind the philosophy of architecture. Principles of modernist school of thought can also be related to the philosophy behind Chinese architecture. The traditional Chinese thinking that nature should be preserved and build with least amount of land possible is a direct relation to the notion of 'shrinkage', minimalism and sustainability (Rosenfield, K, 2011). This is illustrated in Wang Shu's *Geometry and the Narrative of Natural Form* lecture, at the Harvard Graduate School of Architecture, where he discuss about Hangzhou, his home town. "Hangzhou is comprised of 70% mountain, 20% water and 10% built environment, yet it was once the capital of China and still remain a diverse cultural city." (Rosenfield, K, 2011). Wang Shu points out that Chinese architecture can exude its importance and serve its function This tradition of building with minimal land is echoed by Rem Koolhaas' work philosophy of building, 'least restrictive, most enabling' exemplified by the *culture of congestion* in his seminal works. This concept echoes the notion of 'less is more'.

### 2.15.2 Form, Standardization, Repetition

Standardization was employed in early history of Chinese architecture. Design and construction of timber frame structure based on modular system became codified as early as Tang dynasty. The 'Yingzao Fashi' compiled by Minister of works Li Jie in 960-1127 AD during the Song dynasty contained detailed descriptions of materials, dimensions, colours and methods of assembly (Guo, Q. 2005, p93).

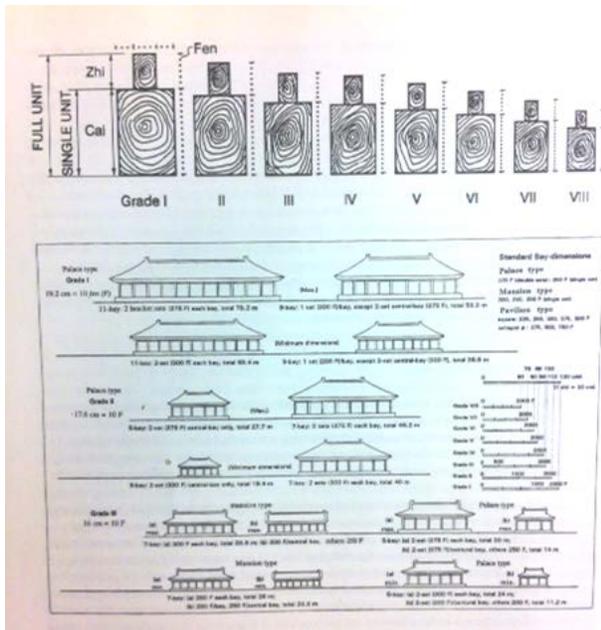


Figure 19: 'Yingzao Fashi': Standardization in Chinese architecture. (960-1127 AD)

Source: Guo, Q. 2005. Chinese Architecture and Planning Ideas, Methods, Techniques

Standardization is employed in all traditional Chinese buildings. Just as families are the basic building blocks of Chinese social order, the *jian* is the spatial building block of Chinese architecture and planning. The fundamental unit of space is distinguished by the *jian* or bay, the interval between four columns (Knapp, 1989, p33). In its meaning *jian* is described as the space in between and is the representation of a "room " (Knapp, 1989, p33). The *jian* plays a key role in both plan and three-dimensional proportion of all buildings. In plan, repetition of this fundamental unit of space adjoined with the same basic units, a geometric layout is created. When coupled with the principle of symmetry and superstitious notions of odd numbers considered as a good luck, buildings are designed to be 1,3,5,7, etc, *jians* in dimension (Knapp, Lo, 2005, p44). Furthermore the *jian* is used as a unit of measurement in building ratios. Standardization employed in traditional Chinese architecture signify symmetry, order, balance and proportion in accordance in Confucius thought, a reflection and representation of societal beliefs and values (Wang, 2012). Standardization and repetition of architectural elements demonstrates not only efficiency and

sustainability of materials and spatial arrangement but more importantly also represents the interplay of different scales. It illustrates the relationship between the unit and the whole. To put it into biological terms, this is similar to that of a multi-cell organism, in which each of its cells, although each have a unique function, are coded with the same D.N.A. sequence.

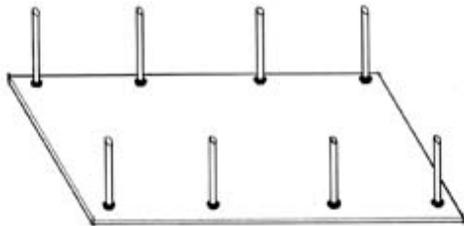


Figure 20: Jian. the basic structural bay in Chinese architecture. (Knapp, R. G. ,1989). China's Vernacular Architecture



Figure 21: Traditional 3 bay Chinese house (Knapp, R.G., 1987)

The opening of China's borders to trade since the country's economic reforms which began in 1978 was not the first time it was exposed to outside influences. China had lived through periods of self-isolation as well as active cultural exchange. In the past the Silk Road, an ancient trade network from the Chinese capital of Xian to the edges of the Roman empire was in use for nearly two thousand years. It served not only as trade network but also of knowledge and cultural exchange. During the Tang, Song and Yuan dynasties there was a profound level of exchange with European countries, the Middle East and India (Dubrau, 2010, p34).

Perhaps the most similar aspect of traditional Chinese and Western school of thought is the connection between people and the environment (cosmos), the quest for order, and orientation of oneself in the universe. In Western thought, order is also expressed as orientation to the cosmos. The labyrinth is often used as a metaphor for structuring order from chaos in an attempt to structure and create an environment in which the individual can orientate and identify with.

### **2.15.3 Chinese Spatial Order and Form**

The Chinese definition of cosmology is organized in two principle elements, three-dimensional space and infinite time. Symbolically this is represented archetypically as the square earth and the circle heaven from the most fundamental tools of the compass and the carpenter's square (Lung, 1978, p23). These temporal and spatial concepts expressed on the basis of the square and the circle are closely related to everyday Chinese life. In Chinese tradition, these two geometric forms are repeated in various aspects of society from the design of the Chinese coin, the basis unit of currency and exchange, to the physical manifestation of the built environment. A house, palace, temple and the city all share the same cosmic order, a representation of the universe in microcosm, across all levels within society. (Lu, Ruzica, 2004). Therefore the structuring of a house, a temple or a city is conceived in the same manner and these patterns representing the structure of society is replicated at all scales. Each part is at the same time both an individual entity and within a network of the greater whole.

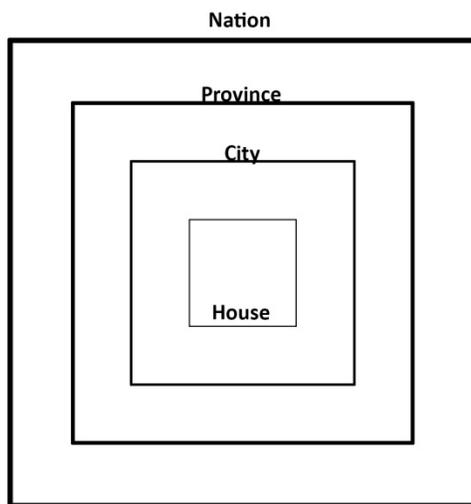


Figure 22: Reflection of spatial order across scales. (Author, 2014).

Another emphasis placed on traditional Chinese houses is the courtyard. Its importance can be explained on several levels. Firstly, it is a shared space for collective living. Courtyards are crucial elements in the spatial composition of houses illustrating social relationships. The 'void' space is not seen as left over space but an integral part of the house. I believe it can be interpreted as a 'place of potential' since it is a space that supports a multitude of activities. Secondly, symbolically, the courtyard is seen as a place of connection between people the earth and the heavens (Lung, 1978). This significance can be explained with Norberg-Schulz's orientation to the unknown, finding one's place in the world and to truly  *dwell* in the world (Norberg-Schulz, 1979) . Furthermore courtyard houses, as walled houses, in a sense echoes Western labyrinths which also is a device to structure order from chaos. Thirdly, the placement of courtyard(s) further reinforces Chinese philosophical notions of symmetry and axially, maintaining a sense of balance throughout. Here balance is related to Chinese philosophy of the *ying yang* and *qi*. Qi, in Chinese culture is loosely defined as inner potential or the basis of all things in existence which provides

nourishment to the body and soul. Indeed the potential of the courtyard is its power to connect people.

Therefore I believe the most crucial element to take away from Chinese houses is that it illustrates an in-between condition, seeking harmony between two or more elements rather than a dichotomy between two things. This in-between condition is associated with the words support and transition. It is a shared and collective social space which has the potential to bring stability to peoples' lives through supporting connections it creates with other people and the surrounding environment.

### **Conclusion: Chinese, Modern and Western Architecture**

Various concepts can be related to Chinese philosophy. It is evident that there are many concepts which exist in sync with modern and Western architecture. This is not to say that Chinese architecture should be same as Western architecture, but to address that the input of an '*outsider*' can be valid, given the individual shares or understands the various cultural sensitivities which form the Chinese identity. The 'local' architect is never really just local, his or her architectural education whether overseas or not is a body of global knowledge. The architect must possess global knowledge imbued with local sensitivity. Working within the context of China and Chinese architecture requires a blend of understanding architectural knowledge and a Chinese cultural sensitivity.

### **2.16 Supporting Migrant Workers and Economic Incentives**

Without support, the transition for rural migrant workers to urban Chinese cities is a difficult endeavour. Migrant workers leave their homes in rural China

and embark on a journey in search of better lives for both themselves and their families and also discovery of their true potential. From a human centered perspective supporting migrant workers is certainly a positive endeavour. However does supporting rural migrant workers in their transition to cities have economic incentive? The answer to this question is a resounding yes. There are several significant reasons which enable supporting transition of rural migrant workers e economically sensible on different levels as part of China's plans for continual urbanization. At the most fundamental level, supporting rural migrant workers through training, housing, recreation, etc. is necessary for the growing influx of people into cities. On a moral level the development of a nation is owed to the efforts of its people, most of which are rural migrants who have endured tremendous hardships yet rewarded with very little. From an economic perspective rural migrants are key to China's urbanization. The domestic labour force in China represent the second largest economy, currently at 269 million migrants (National Bureau of Statistics of People's Republic of China, 2013). According to the National Population and Family Planning Commission's annual report 2012, if this working migrant population is given equal access to services towards permanent settlement in cities, migrants can greatly stimulate growth in consumption. According to a report conducted by the Chinese government, on average migrant workers staying in cities for five years or longer is likely to spend 32.6% more each year (Reuters, 2012).

Currently the new generation of rural migrant workers unlike that of the older generation desire more than merely economic gain. They are in pursuit of the city dream, a desire to fulfill spiritual needs beyond monetary compensation. However in order to reach this dream, basic needs must be satisfied. In Chinese culture the notion of the collective is regarded highly. However I believe the individual and the collective have a symbiotic

relationship. The collective in the case of the country of the nation is a result of individual efforts of sub-groups within society. In order for the nation to advance as a collective or a whole, its individual 'cells' must be upgraded. Although rural migrants are eager to enter urban Chinese cities they are often restricted to low-skilled jobs. Despite rising wages, low-skilled migrants cannot fill higher skilled jobs. Without further upgrading of skills for migrant workers, jobs will be even harder to acquire. According to Yan Zhiming, vice-minister of human resources and social security of China, many migrant workers are kept out of modern industries due to the lack of skills (He, 2014). The lack of skilled workers to fill positions which require greater competence has led to a 'labour shortage' (Wang, Zheng., 2013, p258). Without the necessary workers to carry out workload, industries could not operate at full capacity. This lack of skills has grabbed the attention of the Chinese government to increase effort in supporting rural migrant workers. As outlined in the National New-type Urbanization Plan (2014-2020), the Chinese government plans to provide training to 10 million workers annually. The Chinese government is estimated to invest 60 billion Yuan (10.5 billion CAD) each year in the training program towards economic restructuring (He, 2014).

Furthermore China is currently shifting its economy from an industrial base to service economy, a shift from "made in China" to "created in China" according to Yang Zhiming- vice minister of HR and social security of China. An increase in migrant worker wages is evidently beneficial to those who seek a better livelihood, however without proper training to enable migrants to reach these positions, survival in cities is a difficult task.

## 3.0 Theory and Literature Review

### 3.1 The Role of Architecture

Architecture has tremendous influence on people. While it must satisfy people's physiological needs, architecture is beyond shelter. Architecture is a framework for supporting humanity. Architectural theoretician Christian Norberg-Schulz once said, "the role of architecture is to represent life situations through concretization of these situations in order to satisfy man's physical and psychic needs." (Norberg-Schulz, C, 1979). It shares an intimate relationship with human existence. Humans exist in space, and it provides the basis of human interaction. The act of living could not be separate from space for our existence is immersed within it. Even before the moment we are born into the world, we exist physically in our mother's wombs. Our primal interaction with space is through the architecture of the womb, our first and archetypical recognition of dwelling. It provides the basis of human needs, safety, security, nourishment for the body and the soul through its shared relationship with the mother. Our initial interaction with space satisfied more than our physiological needs. It is an environment which nourishes and support our development.

Therefore humanity shares a reciprocal relationship with space beyond mere physiological needs. We shape our environment with our values and beliefs and in return it influences us. We create meaningful places which supports our humanity. Architecture has the power to imbue meaning and purpose towards supporting our aspirations and unleashing our potential.

### 3.2 Context

Too often in the midst of globalization and rapid urbanization, an emphasis is placed on values other than human needs. The costs are high in China, a nation which desperately strives to achieve the image of modernization through rapid urbanization. With little critical thinking, thousands of modern residential towers are being built over existing close knit fabric of villages, demolishing existing temples, and public spaces, the places of encounter where connections between people are formed. Ultimately this destroys the value of the what I believe to be authentic Chinese fabric. An environment to practice cultural values is lost and replaced with an incompatible environment for inhabitants to continue their lifestyle. Inhabitants feel disconnected to their surroundings and with other people due to altered spatial layouts, contributing to a sense of isolation. The speed of development and economic factors outweigh the true purpose of architecture, to create meaningful places which support our well-being. However, I believe architecture has the obligation to create environments which supports a greater sense of well-being.

### 3.3 Needs and Self-Actualization

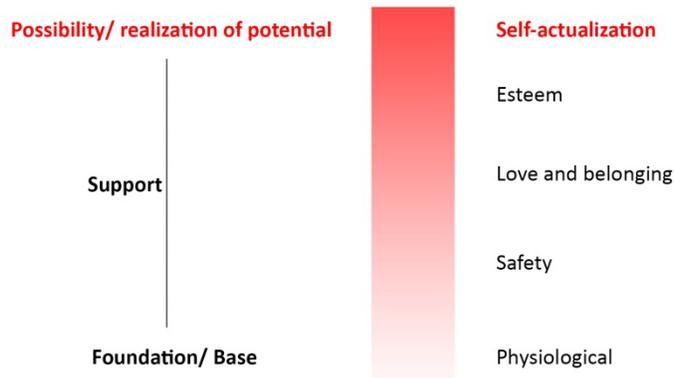


Figure 23. Maslow's Hierarchy of needs: Foundation , Support and realization of potential (Author, 2014).

People often ask themselves what is the meaning of life. No one can tell you the perfect answer. However, rather than answering this question with a straightforward answer, one thing we can be certain is that as humans, we seek to do more with our lives than simply eating and sleeping. If there is more to life, then how can we tap into our potential and reach our goals? How can we fulfill our inner potential? In 1943, American psychologist Abraham Maslow proposed a hierarchy of needs, a theory which states that humans need to satisfy different needs in priority to reach self-actualization. Abraham Maslow describes these needs as innate to humans, and needed to be satisfied to reach the ultimate goal of self-actualization. With his theory he tried to explain the human motivations and resulting behaviour. Evidently Maslow saw a connection between personal growth and satisfying needs accordingly. Maslow suggests when the most basic needs, physiological needs, which include food, water, oxygen to breath, shelter and bodily functions are satisfied individuals will have greater desire to satisfy secondary and tertiary needs in succession. From more fundamental needs to more psychological needs, the needs of safety, love and belonging, builds upon physiological needs. Once these are satisfied, esteem

needs, including the value placed on ourselves and by others, along with the previously mentioned needs form the support to reach self actualization.

Maslow's hierarchy of needs also echoes the work of psychologist Carl Jung's the process of individualization, which states that "human existence is a journey and a sequence of changes which lead to an ultimate goal" (Liotta, 2009,p22). Carl Jung also stated that the life journey is at the same time a physical and inner journey. Furthermore this relates to Jung's work of archetypes The mind, and the physical environment, and the people within it share an integral relationship with each other.

I personally believe that humans as individuals we all strive to achieve the best we can. Maslow's hierarchy of needs is a framework that illustrates not only the needs that must be satisfied in order to reach self-actualization but also inform us that we cannot reach our goals if we only focus on a certain need and neglect another. A holistic solution would have to address the multiple needs that people require through different levels of interaction in an effort to realize our potential. Furthermore parallels drawn between Abraham Maslow's hierarchy of needs and Carl Jung's process of individualization and archetypes reinforce the notion that support must be provided between the sequence of changes towards a goal. Given the concurrent relationship between the mind, the body and the physical environment I believe this translates to 3 key aspects which form support to people's lives. Meaning in order for people to grow, support must come at the right moments when we desire to change. Secondly, It must also be provided at places in the physical environment when we find ourselves in need of transition to a goal. Thirdly, connections to the right people who would provide support. Together these elements form the best support for people to reach their goals.

### 3.4 Social Space as places of Encounter

Human's relationship to space exists on multiple levels. As dwellers, all of our activities take place within space. Whether political, cultural, economic or social, people practice within the space we live in. According to architectural theoretician Christian Norberg-Schulz, dwelling is related to much more than shelter, rather it includes the social, political and economic processes. He defines the concept of dwelling as three parts, together forming a total environment, (1) collective dwelling as places of connection and exchange, (2) places of public dwelling for social purposes and (3) a place of private dwelling for personal needs (Norberg-Schulz, 1993). While the private dwelling is a place of personal growth and public place are places of agreement with others and for the sharing of common values, the value of collective dwelling is that it provides opportunity for people to meet despite their differences; they are inclusive spaces of connection. Norberg-Schulz refers to this opportunity which allows for a range of possibilities as a *milieu of possibilities* (Norberg-Schulz, 1971, p114). Each aspect of dwelling, collective, public, and private are different levels of interaction with the environment, satisfying different needs in order for people to become 'settled'. This concept echoes the work of Maslow's Hierarchy of Needs, by giving spatial definition to our human needs.

Similarly, according to Henri Lefebvre, space is not just a material object, nor is it a pure idea. It is also a societal process of production". (Leach, 1997). Lefebvre argues that there is a social dimension to space, and defines lived space is an extension of the body, encompassing all of our activities. We need places of live, work and play, "the use produces the space" (Lefebvre, 1991). Lefebvre further explains, the right to the city is comprised of two parts. This includes, firstly, the right to participate in the production of space and secondly

the right to appropriate space (Sadri, H, Sadri, S. 2012). The right to appropriating space is a collective and inclusive endeavour.

Therefore, denying people's access to space translates to their exclusion and marginalization. In order to be inclusive of all people including the underprivileged and to support their transition towards actualization, architecture cannot be looked at as merely a material object. Instead, architecture should be a system of support for dwelling defined as existential sense of the word and addressing the different levels of interaction needed to satisfy our human needs.

### 3.5 The Rhizome

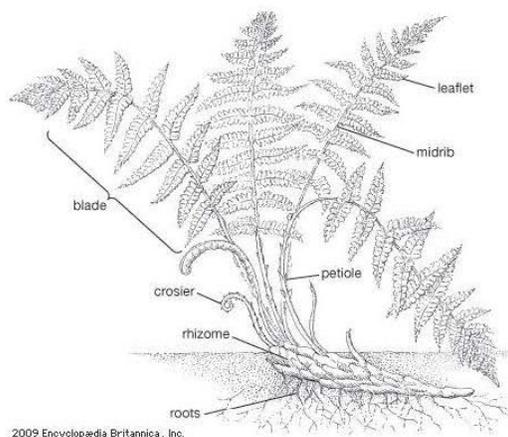


Figure 24: Rhizome: botanical definition (Pahl, M. 2009)

In botanical terms, rhizome is defined by Oxford dictionary as the continuous network of lateral underground stem of a plant from which lateral offshoots are grown. The rhizome is located at the base of plant supports the plant seen aboveground. It is also the part of the plant which holds and receives nourishment from the surrounding soil. In reference this botanical definition, the rhizome is an analogy to people's potential, described as something which is latent, inherent within but concealed from the naked eye.

In philosophical terms using Deleuze and Guattari's definition, rhizome can be described as a network. Deleuze and Guattari outlined several principles of the rhizome. Firstly, "any point of a rhizome can be connected to anything other, and must be" (Deleuze and Guattari, 1987). Second of all, there is no beginning or end, the rhizome ceaselessly seeks to create connections" (Deleuze and Guattari, 1987). Thirdly, "There are no points or positions in a rhizome- there are only lines" (Deleuze and Guattari, 1987). The definition of the rhizome proposed by Deleuze and Guattari is an entity which has neither beginning or end, always between things, the middle and ceaselessly to create connections, evokes an in-between character, a bridging of things. Similarly the rhizome can be thought of as the dissemination of information which deals with the collective. The positions or lines Deleuze and Guattari refers to in the definition of the rhizome can be used to illustrate the positions in people's lives; people's lives which should be seeking to create connections with others. It may depict the relationship between the individual journeys which connect and support each other. Together, these individual journeys form the collective.

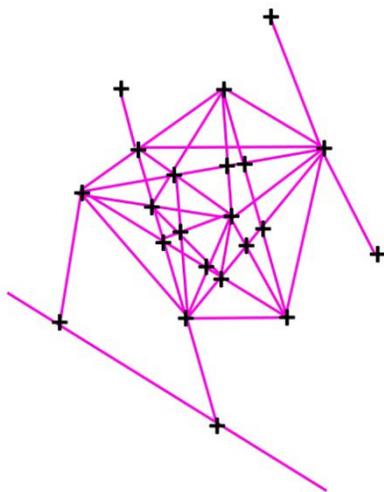


Figure 25: Philosophical interpretation of Rhizome. (Author, 2014). "any point of a rhizome can be connected to anything other, and must be" (Deleuze and Guattari, 1987). "It ceaselessly seeks to create connections" (Deleuze and Guattari, 1987). Each line forms an intersection with another line and thereby creating connection points. The intersection of points or people's lives and the activity they partake in can be spatially interpreted as common overlapping or shared space.

If we were to translate the concept of the rhizome in spatial terms, this would be places of intersections where connections are formed. I believe these are places of encounter which hosts space for common interests, values, and activities which support the development of people's lives. These places allow for people to appropriate for different shared activities.

### 3.6 Place, Dwelling and Existence

Definition of place:

1. A particular position, point or area in space; a location.
2. A portion of space designated or available for or being used by someone.

Origin: Alteration of Latin *platea* 'open space', from Greek *plateia*

"We do not dwell because we have built, but we build and have built because we dwell, that is because we are dwellers", - Martin Heidegger

Martin Heidegger uses language to illustrate the relationship between building and dwelling. *Bauen*, the verb, "to build", in High German comes from the word *Buan* meaning "to stay", "to dwell". *Bauen* is connected to *being* itself derived from the same root word as the verb, *bin*. (*Ich*) *bin* meaning "(I) am" and *du bist*, "(you) are", can also literally mean, "I dwell" and, "you dwell". To build and to dwell are interconnected and to build already implies to dwell (Pavlos, 2009, p18). Heidegger argues that to dwell has a fundamental relationship to

human existence and not merely an activity performed alongside other activities. To be human beings means to be on earth as living beings, in the same manner I am and you are, *dwelling* on earth. The German word *Barren* meaning to cherish, to protect, to preserve and care for, to nurture, cultivating is a form of building. This cultivating, from Latin *colere*, meaning to inhabit, suggests also to dwell is to build. Furthermore, the word *edifice*, from Latin *aedificare* comprised *aedis*, 'dwelling', *facere*, 'to make' (Oxford dictionary, 2013.) By caring for nature, an intimate act with the earth, and through the act of making things we gain an understanding of the world, therefore it is our interactions and involvement in things which result in dwelling. Cultivating and construction is building. Culture is rooted in the word "cultivate" and therefore to identify with places is tied to culture as a cultivation of our existence.

According to Heidegger, man dwells in 'places' and not 'spaces'. Dwelling is the condition of man's being in the world, fundamental to our existence. Dwelling cannot be talked in isolation of place since it involves things and interactions that are inseparable from space, it must be experienced in its totality. The essence of place is revealed through dwelling. Dwelling is beyond merely shelter, it can be defined as the gathering, or concretization of the fourfold, the four components of people's world, - earth, sky, mortals and divinities (Lefas, 2009, p16). In order for humans to dwell in full sense of the word, human beings must exist integrated with the fourfold, and the human world.

"The real plight of dwelling lies in this: that mortals ever search anew for the essence of dwelling, that they must ever learn to dwell." Martin Heidegger (from *Dwelling and Architecture*, Lefas, 2009, p16)

For Heidegger, to dwell is to be at peace, free from danger and safeguarded in its nature (Heidegger, 1971, p2). Similarly in Maslow's hierarchy of needs, dwelling is the basis and support for development towards self-

actualization. The journey towards self-actualization requires satisfying the fundamental and basic needs of human existence.

Christian Norberg-Schulz, an architectural theorist influenced by Heidegger's works studied architecture through the lens of phenomenology. In light of this definition, orientation and identification offers a sense of security for human beings.

*Genius loci* is an ancient Roman concept which can be translated as the spirit or life of place. *Genius*, the spirit which gives life to people and places, is determinate of character and essence (Norberg-Schulz, 1980, p18). The 'spirit' refers to identity while *loci* references locality where life takes place. Schulz adds, existential space in which man dwells consists of space and character. Man dwells when he is able to gain an existential foothold on the world, able to orientate and identify with his environment (Norberg-Schulz, 1980 p19).

"It is meaningless to imagine any happening without reference to locality. Place is an integral part of existence. Place is more than an abstract concept. Place is the totality of concrete things having material, substance, shape, texture and colour. Together these things determine an 'environmental character', which is the essence of place. A place is characterized qualitatively which must be experienced in its totality" (Norberg-Schulz, 1980 p19). Christian Norberg-Schulz's understanding of place extends beyond location.

"We need a base to set down our *Being* and realize our possibilities (potential). A here from which to discover the world and a there to which we can return to." (Relph, Edward. Geographical Experiences, dwelling, place and environment, p27).

Place has great significance for human beings and their existence. In *Place and Placelessness*, Edward Relph asserts that there is an intimate relationship between place and existence. The unique quality of place is that it has the power to structure human intentions, experiences and actions spatially (Seamon, D. & Sowers, J. 2008). Relph's in depth study of place provides a breadth of knowledge on the importance of place to human existence. The identity of place is referred to as the "persistent sameness and unity which allows that place to be differentiated from others" (Relph, 1976, p45). He believes this identity of place is comprised of the place's physical setting, activities and situations, and the individual's an collective meaning created through experiences and intentions with that place. According to Relph, Identity with a place is determined by the concept of *insideness* and *outsideness*.

Insideness is achieved when an individual has a degree of attachment, involvement or concern for a particular place, while outsideness is the condition in which a person feels disconnected or alienated from a place (Seamon, D. & Sowers, J. 2008). Furthermore Relph asserts that the strongest connection to place for people is in the essence of the place to establish spatial relationships which are integral to human experiences of existence.

According to Yi-Fu Tuan, the *home* is our first culturally construction of place and a representation of the individual and self (Castello, L. 2010, p45). The home is a place familiar to us and place with most clarity, Tuan therefore suggests that the familiar can be achieved with well defined architectural space which gives a heightened sense of self (Castello, p45). Tuan's view aligns with Carl Jung's view as expressed by, "human by nature is not insensitive to place and environment in which he dwells" (Liotta, 2009, p20).

## Conclusion: Place and Existence

Place has an intimate relationship with human existence. Place is given meaning when it can be related to people. It extends beyond the mere function of spaces. Place is formed when it can be identified with. Christian Norberg-Schulz describes existential space as composed of two aspects, space and character. In his explanation, he references Martin Heidegger who defines the relation of existence, the meaning of building and dwelling. According to Heidegger, the path of one's life is the process of orientating himself in the unknown environment through man's persistence and endurance through his efforts to create, to visualize his or her desire. "By letting things be exposed to the light of their Being, Man himself relates to them and allows insight into what *he is*" (Lefas, 2009, p22) Buildings are reflection of ourselves and represent human beings. Architecture, derived from Latin, *architectura*, is composed of *art* and *technology*. As works of art, architecture is not only the aspirations of the creator but represent the community as well. Tatlin's tower made for the Russian Constructivism represent the aspirations of the movement, allowing individuals to identify with it. It is the concretization of intent and its physical manifestation enable people to identify with it. Therefore architecture can produce a sense of belonging and allowing people to identify with it. According to Edward Casey, "...the power of place, which, by its very nature, gathers worlds and organize hem spatially and environmentally, marking them as centres of human action, intention and meaning that in turn help make place." - (Casey, 1993., Malpas, 1999). Therefore place is an extension of people as a physical manifestation of human intent.

### 3.7 Orientation and Identity

Christian Norberg-Schulz stated, existential space in which man dwells consists of space and character. Man dwells when he is able to gain an existential foothold on the world, able to orientate and identify with his environment (Norberg-Schulz, 1980 p19). According to Heidegger, the path of one's life is the process of orientating himself in the unknown environment through man's persistence and endurance through his efforts to create, to visualize his desire (Norberg-Schulz, 1980 p20). Furthermore, the work of Kevin Lynch, image of the city, which set out to define the structure of cities seek to illustrate the relationship between man and cities. Concepts such as node, edge, path, and districts by Lynch define the spatial structure as basis of orientation. In particular the concept of a node, can be illustrated by the similar concept of an *axis mundi*.

The concept of an *axis mundi* according to Mircea Eliade in The Myth of Eternal Return, *axis mundi* is a sacred pole, a connection, symbolically connecting the heaven, earth and hell. Typically *axis mundi* are conceived as large vertical form visually recognizable from afar. Its exaggerated form creates a distinct centre from which the population can orientate and navigate themselves in the sea of sameness (Smith, Smith, 1999). However other interpretations of *axis mundi* is also depicted in military banners carried by soldiers which symbolize the group and the individual's affiliation to an identity and firm belief centred to a cause and intent. In turn, it contributes to a sense of belonging. Another example of symbolic centre is the emperor's seat in the throne room of the forbidden palace serves as the *axis mundi*, the centre of governance, to the orthogonal layout of the chamber, representing a microcosm of the cosmos, illustrating the centre of the four corners of the king's empire. Similarly in Western architectural tradition the Egyptian spire in St. Peter

square of the Vatican functions as a centre, and compass, from which measurement could be taken from. The spire surrounded by 16 wind rose markers which denote not only direction of the winds but also a directional connection point to other sacred churches within the network such as the Hagia Sophia. Symbolically it represents the centre from which knowledge of the church spreads throughout the world.

There are commonalities in philosophical concepts in Western culture and Chinese civilization, and in fact across all cultures in the concept of *axis mundi*. From the Kaaba of Mecca in Islamic tradition, ziggurats of Ur, the hill of Golgotha in Christian religion, Mount Fuji in Japan, to the Eiffel Tower in Paris, are all *axis mundi*, the centre of the world, the symbolic meeting point of heaven, earth and hell. As seen in church spires of the West which serve, symbolically the centre of the world. the cosmic pivot point which connected the people through communication with the heavens, in Chinese philosophy the triad of earth, human and heaven serve to illustrate the same concept. In traditional Chinese architecture, the tower form of pagodas, which originally housed relics and sacred writings of Buddhist religion, also served as the connection of people to enlightenment (Guo, Q. 2005, p46-89). Many Buddhist monks travel on pilgrimages to seek out these sacred writings, the knowledge to enlightenment, the basis and foundation to realise inner spiritual being and purpose. It is arguably on a programmatic level, to resemble libraries and a museum of sorts which provide the resource to educate and realize inner potential.

### **Conclusion: Orientation and identity**

Rural migrants from the countryside to urban centres transition from a place of familiarity and into the sea of the unknown. All too often rural migrants rush into jobs without giving critical thought or have much knowledge of city

regulations and become vulnerable to exploitation. Without a 'mentor figure' and support to facilitate transition, migrants become 'lost', unable to feel a sense of belonging and to orientate themselves within host cities (Fan, C, Wang, W. W. 2012, p743). They become 'invisible' and isolated. Perpetuating this motion, losing connections to newly formed contacts make it hard to maintain social networks (Chang, L. 2012). At the margins of urban China, can there be a focal point, a centre, which support and bridge the transition of rural migrants? I believe this node which exist in both time and place can be manifested through architecture. In the physical realm architecture provides articulation to our spaces, it structures our lives; a ritual of our everyday lives. Creating recognizable buildings or places would allow migrants to easily identify them from their surroundings. This ease of identification also translates to easier access to services that would have remained hidden in typical buildings and therefore essentially becoming out of reach. Having said that, this does not mean architecture seeks to be foreign but rather It should be an innovative expression that would allow people to not only notice but identify with it. I believe architecture should always be built upon site conditions and cultural sensitivities, which works together with the intent of a design. Therefore the role of the axis mundi can be fulfilled in ways other than size. I believe the creation of an axis mundi is the creation of a significant place or places that brings meaning to people.

### **3.8 The Journey Towards Self-actualization**

According to Christian Norberg-Schulz, humans needs symbols to represent life situations (Norberg-Schulz, 1980). Scholar, writer and philosopher Joseph Campbell believes myths are clues to the spiritual potentialities of human life. (Campbell, Moyers, 1991, p5)

" These bits of information from ancient times, which have to do with themes that supported human life, built civilizations, and informed religions for millennia have to do with inner problems, inner mysteries, inner thresholds of passage..."(Moyers, 1991, p3)

Symbols and myths help human beings come to terms with different life situations. They act as guides serving as support in our lives. The power of myths and symbols is that they gives our lives perspective. I believe they can enrich and broaden our understanding of the world. According to Campbell, in his book *Hero with a Thousand Faces*, myths are images of god as masks of eternity, symbols of eternal truth. Myths are stories of the search for truth, meaning and significance the experience of being alive(Campbell, Moyers, 1991).

The work of Joseph Campbell on mythology offers a profound body of knowledge on this subject and has influenced directors such as George Lucas's Star Wars Saga, movies which depict archetypical characters, especially the myth of *the hero's journey*. The goal of the hero's journey can be summed up as "In leaving one's condition to finding a source of life to bring fourth into a richer or mature condition." (Moyers, 1991, p152). The story of the hero begins with someone from a lesser position, feeling there is something lacking in life. The hero sets off on a journey in order to better him/herself and gives selflessly for others. Throughout the journey, the hero experiences struggles and hardships in order to grow through a series of transitions. Although the effort to undergo transitions is dominantly carried out by the hero's own strength, the existence of mentor and helper figures also serve to lend them strength and support. In this light, the mother and father are archetypical hero figures. In fact, each of us is on a hero's journey, the life's journey, through a series of transitions towards our goals in life. Each transition in life is a rebirth of ourselves towards a different state.

"Furthermore, we have not even to risk the adventure alone, for the heroes of all time have gone before us. The labyrinth is thoroughly known. We have only to follow the thread of the hero path, and where we had thought to find an abomination, we shall find a god. And where we had thought to slay another, we shall slay ourselves. Where we had thought to travel outward, we will come to the center of our own existence. And where we had thought to be alone, we will be with all the world."

(Campbell, J. 1991, p151)

This quote from Joseph Campbell reinforces the cyclical nature of the *hero's journey*. I believe Joseph Campbell is trying to say that each person's journey to fulfill their potential can be supported by experienced individuals such as mothers, fathers, teachers, friends who can act as mentors or helpers to show them the way. This is a form of support. The journey is twofold, the physical journey leaving from origin to destination will align with the journey towards discovery about oneself, the potential and position in which we stand in our existence.

Another individual who has extensively researched this subject is Swiss Psychiatrist and psychotherapist Carl Jung. His work of *the individual and the collective unconsciousness*, was also influential to Joseph Campbell. Carl Jung's theory of *The process of individualization* is closely related to Campbell's work on *the hero's journey*. Carl Jung explains this process as a sequence of changes that leads to somewhere; it is human existence as a journey. Jung notes that the life journey is comprised of a physical (outer) and psychological (inner) journey (Liotta, 2009, p22).

"Existence is seen as a perpetual migration, earth as provision dwelling and soul as mutilated desiring of reintegration" (Liotta, 2009, p22).

"For the rebirth of a new place, the void is found in the moments of waiting, listening, reception. Without the void there is no birth but only dispersion. One must go beyond places of the mind and towards concrete places in which arrival takes place." (Liotta, 2009, p60). I believe this quote serves as a reminder that there is a need for physical places to 'settle' both the body and the mind. In reference to China's migrant workers, this justifies the need for people to be physically . Place needed in order for individuals to transition successfully to a point of arrival, both as a physical location and metaphorically as a goal. The value of place lies in its ability to aid in the 'rebirth' of the individual to a higher state.

The Ideas exemplified by Campbell and Jung can be related to Chinese philosophy. Myths, for Joseph Campbell are stories of the search of truth, images of gods as masks of eternity. *God* and *truth* is interpreted by Campbell as the life force of all living beings (Campbell, Moyers, 1991). In Chinese philosophy this life force, the basis of all things, the foundations of life, is expressed in the concept of 'qi', 氣 or flow of energy (life-force) that pervades all things (Zhang & Rose, 2001). The word 'qi' literally means "air" or "breath" but also refers to the concept of inner energy. I believe this inner energy can be translated to "potential". The concept of 'qi' 氣 is of central importance to Taoism and used in the expression of harmony of that life force through the symbol of ying and yang. The word 'qi' 氣, is comprised of two parts, 气, meaning movement of air, flows and 米, meaning "rice" which is related to nourishment. Together the two radicals form the word 'qi' as the "essential nutritive substance" (Zhang & Rose, 2001, p5). For myself, qi is the basis of all things, it is also the material in which with human intent can build upon. It is the foundation of all things which seeks to nurture our dreams. Through these similarities between Chinese and Western concepts, I am convinced that all things must have a basis. To grow (upon), implies something

to stand upon. A base or a platform, a place from which we hope to channel our *qi* or potential as intended towards our goals.

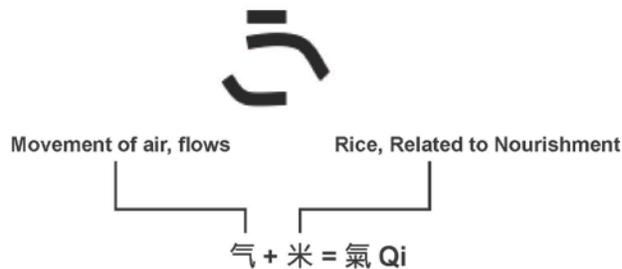


Figure 26: Analysis of the Chinese word 'Qi' (Author, 2014).

### 3.9 Conclusion: Can architecture serve as a helper?

"...the power of place, which, by its very nature, gathers worlds and organize them spatially and environmentally, **marking them as centres of human action, intention and meaning** that in turn help make place." (Edward Casey, 1993, Malpas, 1999)

If the role of architecture is in the creation of meaningful places which realize human intent and that intent is to support migrants' transition to urban areas.

Then, yes architecture can serve as a helper!

I believe the significance of *the hero's journey*, is that it has revealed the eternal truth of every person's existential journey in life. *The hero's journey* can serve as an analogy to depict the situation of the millions of internal migrants in China who have journeyed from rural to urban cities in search of better livelihoods for their families. In every hero's journey there is always a helper or mentor who aid the hero through struggles during his or her transition phase. From these ideas I have arrived at a profound question. Can architecture serve as a helper to support our transitions? I argue that architecture can indeed

serve this role to provide support in our lives. We do not live our lives in isolation, our very being in this world is dependent on mothers who have laboured and brought forward our existence as dwellers in the living realm. Mothers who have provided shelter, a place of nourishment for the body and soul, and aid our transition into this world and continue to give us support throughout our lives. Similarly every transition from leaving one condition and arriving at another is a rebirth of the being. If the role of architecture is, to put into the words of Heidegger, "a concretization of the existential dimension", a gathering of human intention, that intent being the nurturing of transitions, then architecture can indeed act as a support in the realization of our potential. Places of nourishment for the body and the soul can be created through architecture. Cities are where rural migrants have found opportunities for harnessing their potential and nurturing their dreams. How to make this possible rests with harnessing the right environment, resources and information to form a basis for self actualization and realization of their dreams.

## 4.0 Precedents

### 4.1 Grotao Community Centre, Urban Think-Tank



Figure 27: Grotao Community Centre: site context (Designboom, 2012)

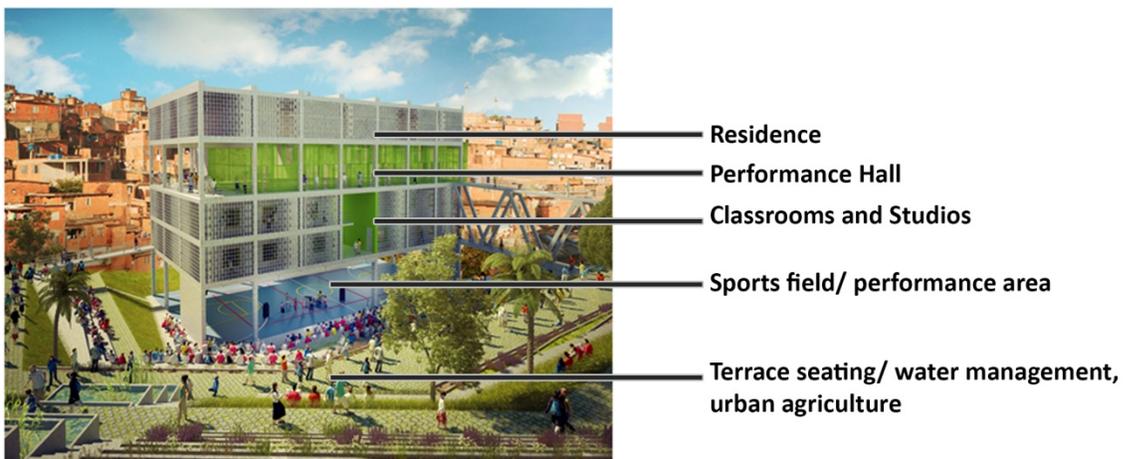


Figure 28: Grotao Community Centre. Programmatic layout (Author, 2014) Base image: (designboom, 2012).

Grotao Community Center in Sao Paulo by Urban Think-Tank is an architectural intervention which is part of the firm's research and development approach with an emphasis on social oriented architecture. The proposal is located in the heart of the Paraisopolis favela of Sao Paulo, Brazil. It is situated on a site which was previously destroyed by landslide. The intent of the project seeks to become a civic hub and infrastructure serving the informal community. It aims to translate the fundamental right for all residents equal access to housing, education, employment, public space and sports and services, into a spatial solution. This proposal of this takes on the typology of the vertical gymnasium, an architectural typology Urban Think-Tank has become well known for. The vertical gymnasium typology seeks an effective use of open space by stacking programs which require a large open area.

Open space are few in favela communities where informal housing form the bulk of the fabric. Thus Urban Think-Tank's use of the vertical gymnasium typology is a sensible response. It maximizes the potential of the site and the program it can accommodate by building vertically. This gesture would also effectively affect the scale of the building and create a taller building than the surrounding context. The result is that the architecture becomes an axis mundi, a clear and visible marker for the community. I believe this formal gesture is key to supporting the success of the community center. Over time through the favela residents' interaction with the community center the space becomes a special place that people can identify with. Although the scale of the building is large , making it to a degree foreign to the surrounding context, its central location within the community allow it to become defined within a community. Furthermore I find that the scale of the building and its massing is a powerful formal gesture symbolizing the rebirth of the community from the void left by the landslide's destruction. This is similar to how churches in Western culture or

pagodas of Asian societies have used scale to make its presence known to the community. Coupled with its programming which seeks to serve the community by bringing people together, the community center is a place of gathering.

At the lower floors contain public transportation and sports facilities, a performance hall along with classrooms and rehearsal studios catered to the importance of local music culture. The upper floors contains housing units for residents who were displaced from the landslide which destroyed the existing fabric of where the community centre currently stands. This mix of program creates a multipurpose hub, forming various connections between people. I believe one of the aspects to the success of this project is that it addresses the ground plane effectively on several dimensions. Firstly by providing commercial space and sport activity areas at the ground floor it supports peoples' daily lives and encourages people to gather and interact. Thus it becomes a social platform and forming a network with the favela's inhabitants. Furthermore its circulation is designed to be integrated with sustainability in mind. The edge of the steep site resulted from the landslide is transformed in to a terrace system which serves multiple functions including, pedestrian circulation, seating, and space for planting food, sewage system. Once again I believe this project is a force for positive change. While the design of the building is simple and efficient serving its range of functions, the landscape design is integral to reinforce the connections between people that partake in a range of activities. The connection bridges from the site to the building allows spaces on all floors to be accessible. The stepped terrace/ ramp system is also reminiscent of Greek amphitheatres with seating directed inward towards the sheltered multipurpose sports activities and performance area at the building's ground floor. Therefore I believe this proposal is a successful example of a design which seeks to translate social problems to spatial solutions.

## 4.2 Inner-City Arts, Michael Maltzan Architect

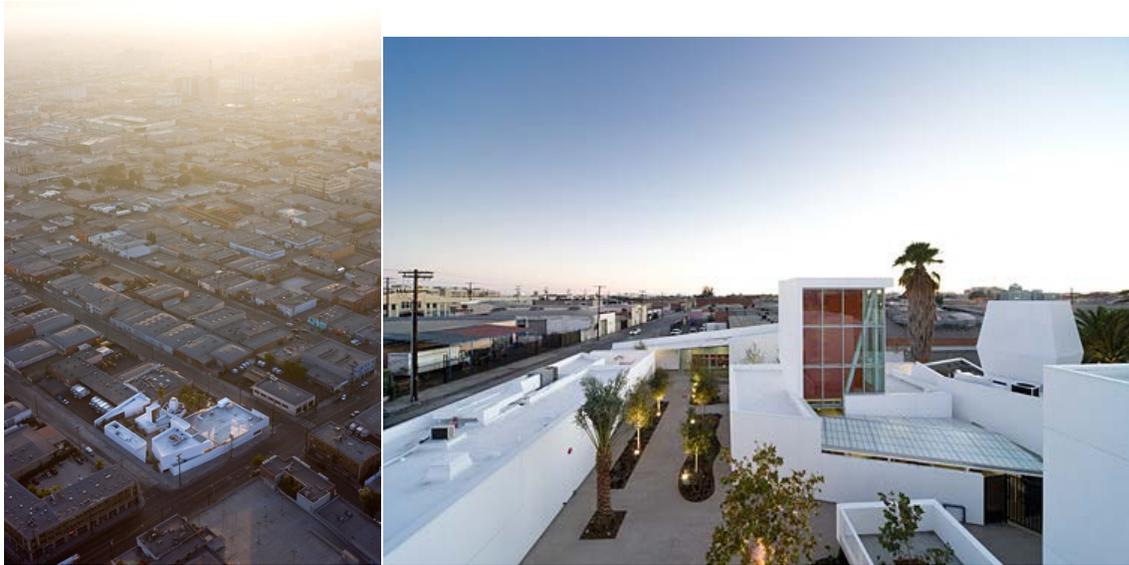


Figure 29 (left): Inner-City Arts: Aerial view, context. (Baan, I. 2009).

Figure 30 (right): Inner-City Arts: Overlooking courtyard spaces. (Baan, I. 2009).

Inner-City Arts is an arts education centre which provides facilities and workshops for 30,000 at risk youth in California annually. The built form of the arts centre is a combination of indoor and outdoor spaces for youth, children and their families to use. The classrooms and workshops are programmed to open onto a network of courtyard spaces forming a connection between activity areas while the distinction between interior and exterior is blurred. The project is conceptualized as a village model, or as "a city within a building". Interplay between physical form and places between them demonstrates the relationship between the individual and the collective. In essence this project has spatially articulated spaces for social interaction.

The project is developed in three phases over fifteen years encompassing several built structures stitched together by open spaces, thereby creating a network of programmed spaces. Makes use of a street layout with a collection

of small buildings within a perimeter. Internally, the village like design of the proposal creates intersections between youth who may be using the library, the ceramics studio or performance hall. It creates a dynamic between individual learning and collective activities within the courtyard spaces. Furthermore the mixture of indoor and outdoor spaces in the Californian climate is appropriate and creates a fun environment. In a sense the different elements of the campus like design communicate to each other. I believe this in-between space, consisting of plazas and courtyards, as a network of spaces forms a sense of cohesion between different users. These learning spaces embrace the growth of individuals and nurtures their success.



Figure 31 (left) : Inner-City Arts: Phase plan. (Maltzan, M, n.d.)

Figure 32 (right) : Inner-City Arts: Plan, Courtyard and plazas as in-between spaces. (yellow= shared courtyard space) base image: (Maltzan, M, n.d.)

In terms of its formal expression the project is well scaled to its surrounding context and thus creating a sense of continuity between the city and the project. This project's village-like approach utilized several well scaled buildings focused around a taller ceramics workshop tower which forms the heart of the campus and serves as a beacon for the campus, the community and the greater global community. As a whole the project strives to address itself as beacon at different levels of the community and its commitment to supporting youths. In contrast to the approach of Urban Think-Tank's Grotao community centre, Michael Maltzan's Inner City Arts building is a quieter expression. Yet its success is similarly lies in the effective creation of multipurpose spaces which fosters a sense of community for its users.



Figure 33 : Inner-city Arts. Courtyard and in-between spaces (Baan, I. 2009).

The Inner-City Arts education centre takes on the typology of a courtyard building and thus is very inwardly focused. At the street level the education centre is surrounded by white walls punctured at moments along the street contrasting from its grey surrounding context. Furthermore its use of angular massing along the perimeter reinforce entrances and creates a sense of discovery. This 'gem' in the city of Los Angeles provides a safe environment for youth to learn and aspire to grow beyond their potential.

### 4.3 Star Apartments

Michael Maltzan Architect



Figure 34: Star Apartments: iconic transitional housing (Maltzan, M. 2013).



Figure 35 : Star Apartments: layers of programmatic space (Author, 2014).

Base image: (Maltzan, M. 2013).

The Star Apartments by Michael Maltzan architect, is a mixed use complex developed for the Skid Row Housing Trust which offers 102 apartment units for formerly homeless individuals to transition their lives. Built upon an existing one storey building through the addition of new community spaces and residential levels above, it is a model of intensifying use of space. Programmatically it integrates retail, shared public space and residences. In contrast to other transitional housing buildings where the communal space is manifested in the form of an internal central atrium, this project provides shared spaces horizontally at each level. The second floor above existing buildings is entirely dedicated to community programming including a jogging trail, informal play space, garden, games room, social services, meeting rooms, shared kitchen and other social spaces. I believe this podium of shared social spaces is key to the success of the project. This gesture was also to work in conjunction with local crime deterrent by-law to prevent groups gathering at street level. While these activities are not at street level it continues to add to the vibrancy of the street. These protected community spaces overlook onto the street maintaining a sense of connection. Furthermore this also allow the ground floor to maintain the continuity of retail at street level and generate income to support the operations of the transitional housing.

Above the second floor, where the residential units are situated, a sense of community is fostered in the spaces between units. With intent the mass of prefabricated units rest upon each other and peels away forming a series of overlooking balconies and creating an intimate social space. In addition, the hallway becomes a network of spaces. The front door and kitchens inside each unit face onto the 'street' and thereby encouraging social interaction between passerby and resident. Altogether, the arrangement of program evokes a sense of "city within building".

This project utilizes prefabrication as a means for efficiency and sustainability. In its formal expression the small prefabricated rectangular units are lifted onto a bold structure above the existing single storey building. This generates the interesting imagery of a community supported by the city. It thereby creates a unique iconic building which makes its presence known. Although the residential units are made of a wood frame construction and standard dimension of windows, simple offset of windows and its minimal form stimulate visual interest.

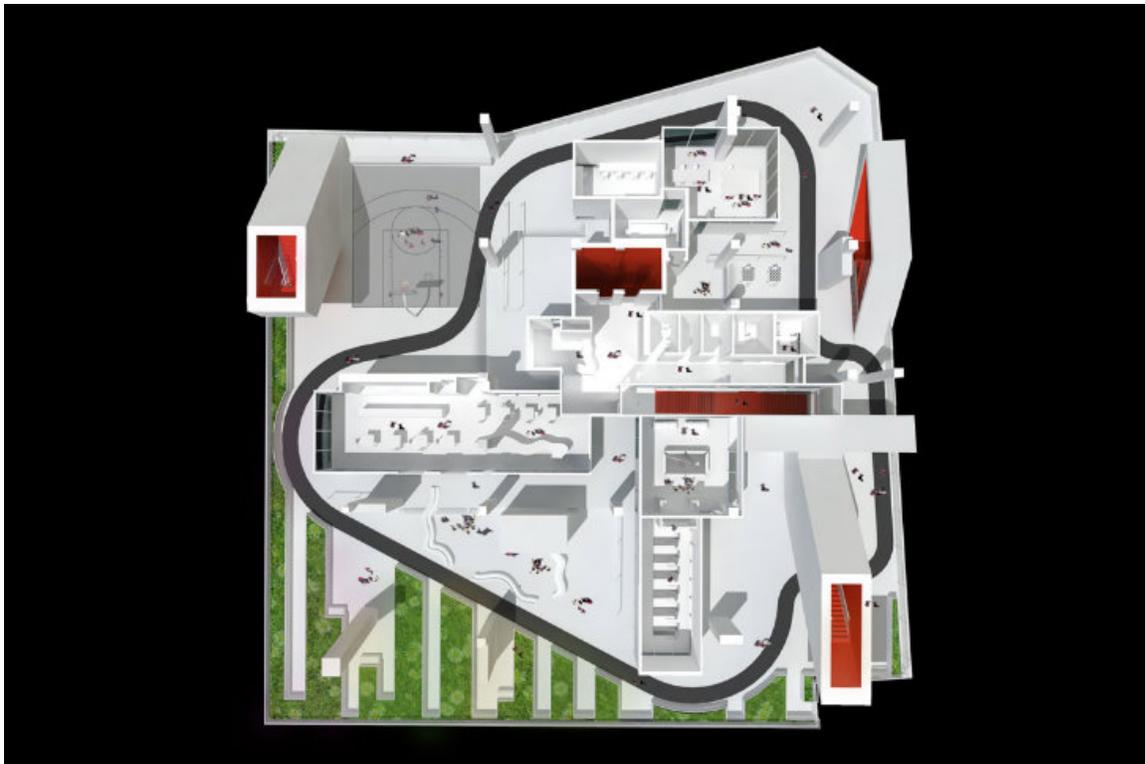


Figure 36: Second floor community space. Shared spaces woven together with jogging track. (Maltzan, M. 2013).



Figure 37: Star Apartments: Diagram of shared space on second floor and in between residential units. (Author, 2014). Base image: (Maltzan, M, 2013).

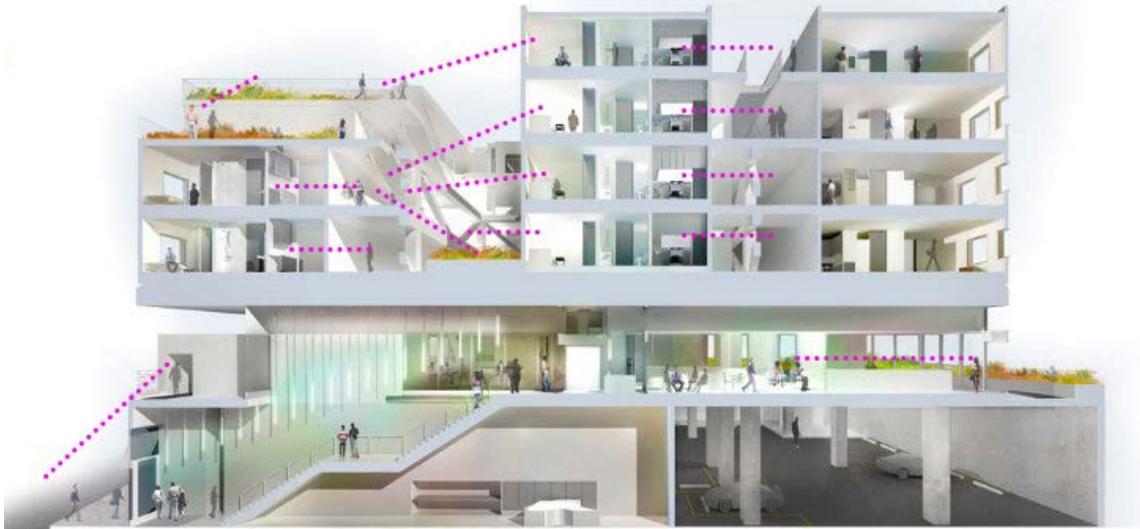


Figure 38: Star Apartments: sectional diagram of spaces and their relationship.  
Base image: (Maltzan, M. 2013).



Figure 39: Star Apartments: Prefabricated residential units lifted into position. (Maltzan, M. 2013).

#### 4.4 Urban Tulou, Guangzhou, URBANUS Architects



Figure 40: Urban Tulou: Massing is sliced to allow massing to become more porous and create opportunities for connections (Baan, I. 2009).

Urban Tulou by Urbanus Architects is a collective housing based on a reinterpretation of the traditional Hakka dwelling type in Chinese architecture. Its goal was to create an alternative housing typology to the typical massive high rise housing typology which do not respond well to people's established cultural way of living. The building is a mixed use 220 apartment housing complex for low-income resident in Guangzhou. In addition to the primary housing component the program also include a hotel, retail space at ground floor, a gym and library. In plan the building resembles a circle encompassing a square. This well defined form is rooted in geometric forms rooted in Chinese culture; the circle being heaven and the square being earth. Programmatically, residential

apartment units are located in the outer circular and inner rectangular block while communal spaces and retail are located on ground floor.

In form, the building is very similar to traditional Hakka Tulou, however the architects did not merely copy but experimented various ways in which the project could be integrated into the city fabric. In contrast to traditional Hakka Tulou housing typology which the project is based on, its circular form is sliced along the perimeter, thus breaking its fortress like characteristic and allowing the building to become more porous and connected to the surrounding context. I believe the success of the urban tulou is that it has addressed the social aspect of living that many high rise housing projects have neglected. By mixing the lifestyle needs of city and the countryside this project is no longer merely a single entity but a hybrid prototype which tries to harmonize the best of rural and urban life and seeks to foster opportunities for interaction among its users. The project consists of public spaces which encourage inhabitants to engage in social interactions, an element of living which is crucial to the established way of Chinese living. This approach to low-income housing, often whose potential residents are rural migrants, is an excellent example of modern architectural interpretation of collective housing which responds to rural-urban tension and sensitivity to traditional Chinese architectural principles. Feng shui, symmetry and social value become integral to this project as an expression supporting community spirit.

Details: The use of concrete and wooden screens along its perimeter bring shade and privacy the balconies of each residential unit and thereby creating a semi-outdoor living space. Screening is a technique which has a long history in traditional Chinese architecture. It seeks to create a sense of enclosure, and privacy while allowing the structure to become porous by filtering light and allowing ventilation. I believe concrete, wood and steel are appropriate

material choices for this project as well. In China and many other Asian countries concrete is a readily available material. The use of this material as both structure and its porous exterior is reminiscent of the texture of the texture of traditional brick houses. Thus the choice of materials also reinforce the sense of a home. Housing based on the traditional Tulou housing typology. Perimeter residential units while central core is employed for a diverse range of programs.



Figure 41 (left): Residential unit: Efficient and space saving design allows for maximizing storage space while maintaining smaller room sizes. (Yang, C., Meng, Y. 2011).

Figure 42 (right): Social spaces: Residents dining and socializing together. (Yang, C., Meng, Y. 2011).

## 4.5 Traditional Chinese Housing Type: Hakka Tulou



Figure 43: Hakka Tulou. (Unesco, 2014)

Hakka Tulou dwelling type is a traditional Chinese housing typology built between 13th and 20th century (Fujian Tulou, UNESCO). Circular or square in floor plan with a central courtyard. The form was built for defensive purposes with only one entrance and windows outside above first floor. Socially, an entire clan would dwell in this housing typology with different families occupying each floor. This form of building and its layout allow its members to easily identify with it. The Tulou is also known as "little kingdom for the family". This typology can be seen as a variant of courtyard housing typology, geared towards communal living and employing the same principles to achieve harmony with the environment while reflecting traditional Chinese philosophy connecting people and universe and as places for social interaction among its users.

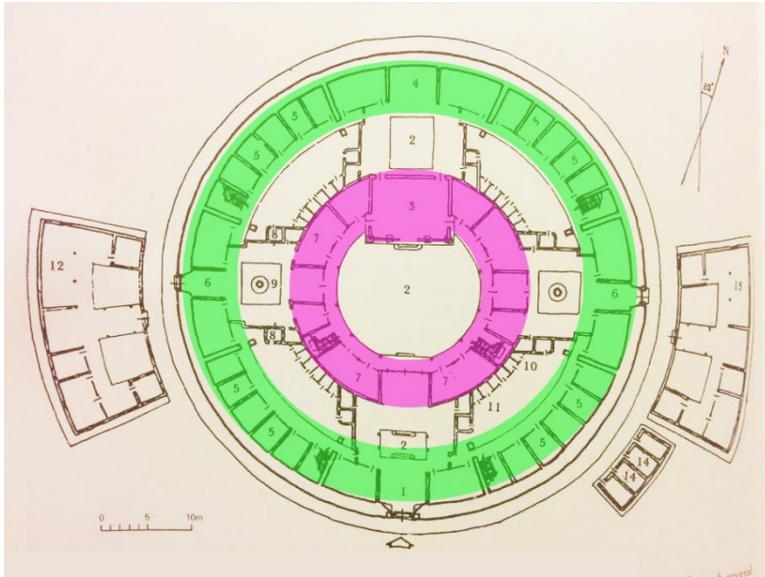


Figure 44: Tulou floor plan: Residential units (green). Shared facilities (pink). (Author, 2014).  
Base image: Chen, C, (2008).

The Hakka Tulou is another housing typology which has articulated social interaction through a spatial solution. Without a doubt I believe the circular form of the Tulou creates a sense of community for people living within it. However I would argue this housing form is also much too insular for contemporary living. If applied directly without modifications to the contemporary social fabric of Chinese cities, it would become disconnected with its surroundings and even risk creating a ghetto. I believe connection to people both within the Tulou and the greater community at large is absolutely necessary. However having said that, internally, the tulou fosters a sense of community for its inhabitants. Each residential household has their front door facing the hallway space or as I would prefer to refer to it as a 'street'. Residents often enjoy resting and socialising outside the front door of their household. The hallway or 'street' is thereby a shared social space. The appropriation of space has been integral to Chinese living and other cultures as well. It exercises the fundamental spatial right for people to occupy space and make it their own. As argued by Henri Lefebvre, having the power to modify the way in which space is used through

appropriation, is allowing people to be inclusive rather than marginalized (Sadri, Sadri, 2012). I believe this element of the project is most successful.

#### 4.6 Traditional Chinese Housing Type: Courtyard Housing typology



Figure 45(left) : Chinese courtyard typology.

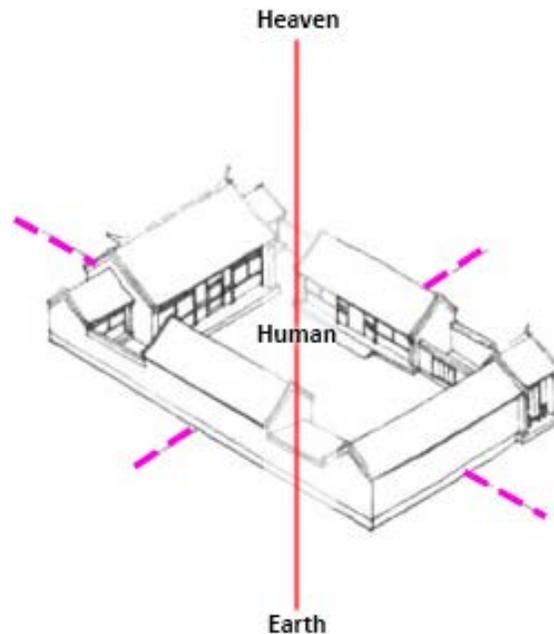


Figure 46(right) : Courtyard as symbolic connection between heaven, human and earth. (Author, 2014). Base image: Liu, D, (1984).

The courtyard house is one of the most recognizable traditional Chinese housing typology. Commonly known as *siheyuan* in Beijing it is a dominant housing typology in Northern China (Knapp, Lo, 2005). Although not all traditional Chinese vernacular housing typology are identical, they all share the same base principles based on traditional Chinese philosophy of man's relation to the environment and social hierarchy.

While courtyards serve as the symbolic vertical connection between earth, humans and the heavens, it also carries social and political function. The design

of the courtyard house is programmed to represent and reproduce clearly defined social relationships in regards to the Confucian moral order (Wang, Y. 2012, p2). Social hierarchy in spatial formation is established based on the physical location of one's room within the house. Furthermore courtyards serve as places for common interaction within the family, where affairs could be monitored by the head of the house. Its spatial arrangement also demonstrates a progression of spaces from least to increasingly importance. Inhabitants of multiple courtyard houses are not allowed to enter succeeding courtyards without authorization of seniors within the family. As such, the size and quantity of courtyards within a housing unit is also an indicator of wealth and power within society (Wang, Y. 2012).

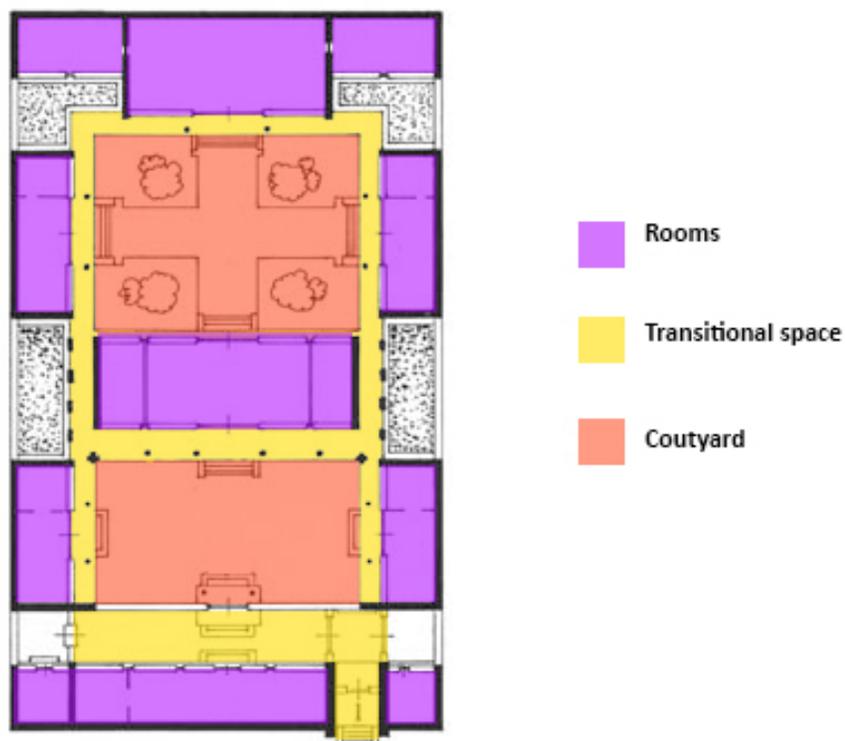


Figure 47: Courtyard house: courtyards as shared space (Author, 2014).

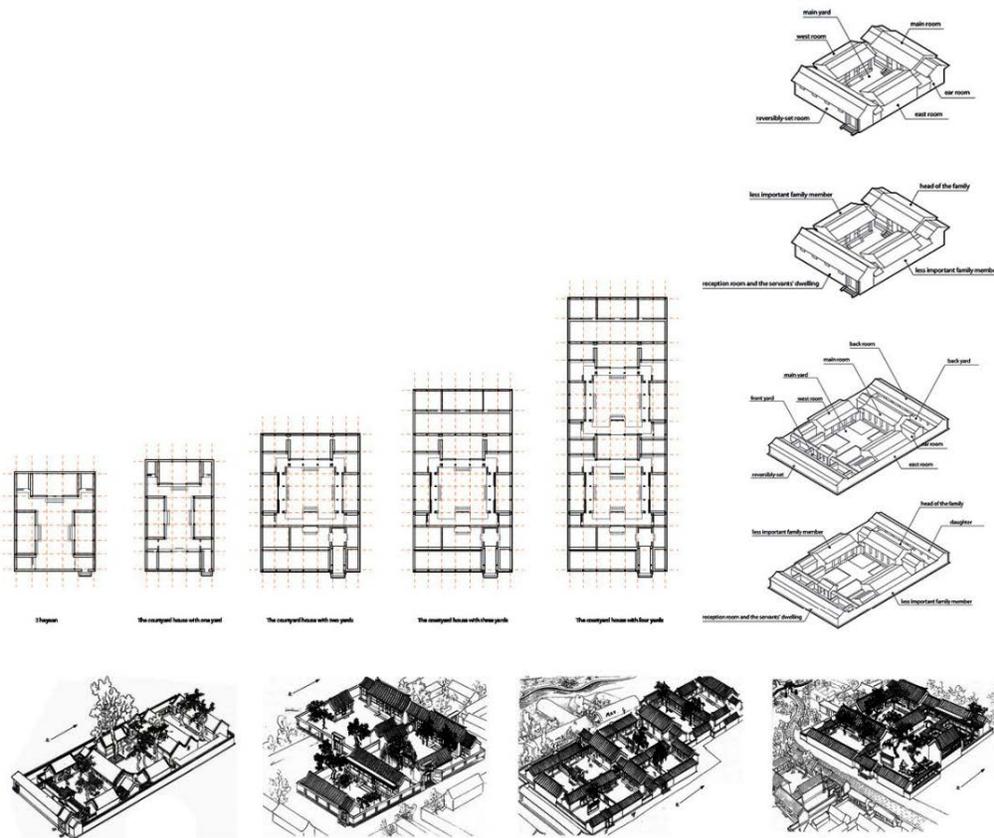


Figure 48 : Expansion of Courtyard housing. (Wang, Y. 2012)

#### 4.7 Socialist Danwei Work Unit

This standardization of spatial form of danwei was designed with the direct involvement of Chinese authorities who valued efficiency and central coordination. During the 1950s and 1960s in communist China under socialist ideals, the Danwei (work unit), compounds of combined residential complexes and factories and workshops, were once considered to be the forefront of modern living. The Danwei provided employment, housing, education, and recreational opportunities. They were much more than urban form dictated by industrialization but building blocks of a new utopian form of collectivized urban life (Ai, S. 2012, p6). Its enclosed form and self-contained nature did not allow integration with the streets outside. Although this unit was replicated throughout

China, however despite its well intended intentions, the result of a standardized and universal urban form did not create an integrated society and instead banal and generic landscape.

Buildings and walls within the danwei marked the realm of the socialist workspace(Wang, Y. 2012, p4). Housing was based on Soviet Union socialist design which were either of dormitory or apartment style complexes. Communal facilities and common spaces seek to reinforce social ties and were arranged at different scales through the sharing of toilets and kitchen, between few buildings bicycle sheds and laundry rooms were shared while within the compound.

Despite the danwei as a failure of urban form the employment of standardization, efficiency means of building and intent of creating social spaces is something which could be combined to form a hybrid towards a new urban prototype which responds to contemporary real-world social needs. Migrant workers have the potential and dire need for transformation.

#### **4.8 Analysis: Market Economy and Urban Form**

Since the economic reforms of China in 1978, the nation's urban form changed drastically. Conventional economic planning measures were gradually abandoned. Under the new market economy of China, the City Planning Act of 1989 was passed to provide a means of control over land speculation Wang, Y. 2012, p7). However, under this act, little is said to regulate spatial development, rapid growth of population and accelerated urban growth. In the past where collectivism under socialist ideal was the driving force of urban form, privatization became the new driving force of urban form in China. Live and work circumstances have changed and resulted the transformation of urban form. Housing became a commodity through

consumerism in urban China and respectively emerged spatially as containers rather than cohesive units. Construction of residences is now profit driven and lacks critical consideration to social relations between people. I believe architecture which seeks to give spatial definition to peoples' lives has the power and responsibility to address the social structure of society.

## 5.0 Project Proposal

### 5.1 Problem Analysis

Information and skills building become invaluable for rural migrant workers in cities. Migrant workers who enter cities are vulnerable to exploitation, and lack of knowledge and skills allow them to easily become marginalized. Without proper knowledge of city regulations or information about potential employers they run a high risk of running into problems and obstacles in their integration into urban areas. Furthermore in urban China, housing prospects are often linked with jobs and therefore it becomes crucial for rural workers to find out enough information about potential workplace and housing conditions.

The sentiment that rural migrant workers feel they do not belong is in part due to the lack of contact with urban dwellers. Providing programming which could address the desires of both groups has the potential of fostering social interaction amongst them and foster a greater understanding.

The government has shown signs of promoting greater integration of migrant workers through its pilot programs. Also NGO presence is available to form potential partnerships towards the development of a form of support.

## 5.2 Project Context

### 5.2.1 Urban Villages in Guangzhou

Guangzhou city is one of the most prominent Chinese cities with this form of urban development. Due to its unique location as provincial capital of Guangdong province and as one of Deng Xiao Peng's first open coastal cities during the economic reform of the 1980s, Guangzhou is among Chinese cities with the highest concentration of urban villages (Lin, Meulder, Wang. 2011, p 1). In Guangzhou, the capital of Guangdong province there are a total of 138 urban villages that form 20 percent of the population and provide housing of 70 percent of the migrant population which form 40 percent of Guangzhou's population (Lin, De Meulder, and Wang, 2014).

### 5.2.2 Shipai Village Background

The history of Shipai urban village dates back several hundred years to Song Dynasty and received its name during the Ming Dynasty. Shipai Village is located 1.5 Kilometres within the central business district of Guangzhou and surrounded at the perimeter by a concentration of IT complexes, making it the regional IT hub in Southern China. Prior to 1994 the village was still in the traditional sense an agricultural based village. Since then Shipai village farmland was acquired by the government and compensation was received by villagers and invested into expansion of their existing houses to make room to rent rooms to migrant workers ( Xu, Yeh, Yu. 2006. p293). Since 1999 the surrounding area of Shipai village had been developed and little room remained for further expansion. Therefore, as a result villagers continued to add additional floors to their buildings and build to the largest footprint possible, creating increasingly dense and deteriorating living conditions (Lin, De Meulder, and Wang. 2014).

Shipai Village is currently the densest urban village in Guangzhou (Lin, De Meulder, Wang, 2012, P335).

### 5.2.3 Physical Characteristics of Shipai Village

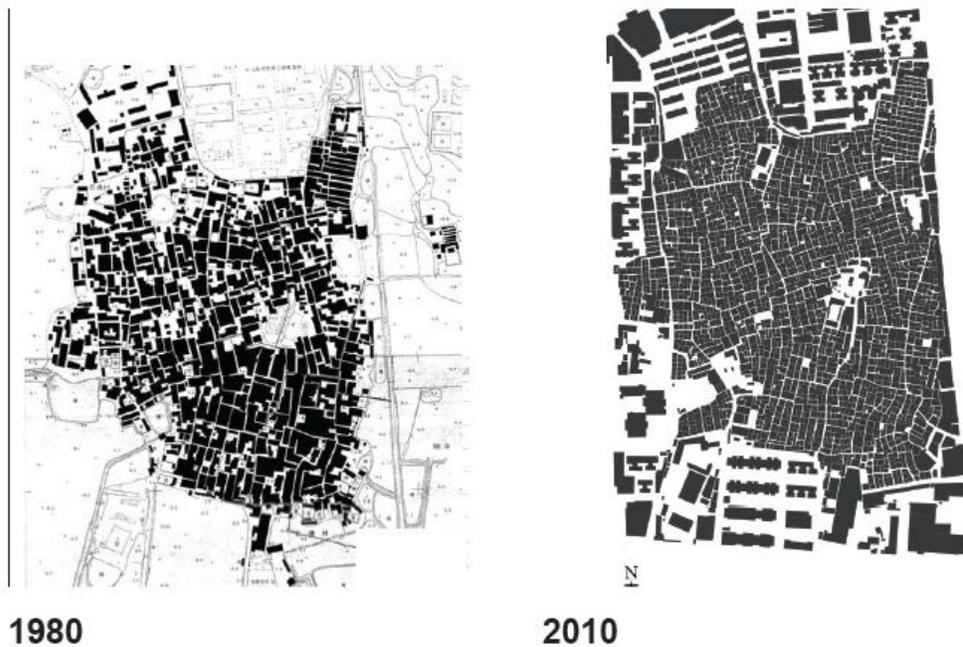


Figure 49: Growth of Shipai urban village. (1980-2010).

Source: Zheng, Y. Transforming the Urban Village in Guangzhou into and Urban Park, p76

The current street layout of Shipai village, and that of urban villages in general, are different than that of the surrounding urban context defined by clear linear streets. Shipai's street layout predates the beginning of the Qing Dynasty in 1644 and is modelled after rural agricultural planning which originally provided efficient access to village agricultural fields (Hu, Le Huang, Zacharias, 2013, p5). The physical dimension of urban village streets remain narrow with widths varying from less than 0.6m to approximately 2m. As a result trolleys and non-motorized vehicles replace cars in urban villages as a transport tool for goods and people. In an effort to maximize monthly income and meet housing demands of incoming migrant population, villagers as property owners, build

onto existing buildings by extrusion, add additional floors and commonly cantilevering to maximize floor area. The resulting dense fabric is characterised by buildings where facing balconies are typically only 50 cm apart and thus dubbed "handshake buildings" or "kissing buildings" (Lin, de Meulder, Wang. 2010, p3587). Buildings are typically 5 storeys tall, while some are 7 storeys in height.

Shipai Village density:

- F.A.R.= 4.97
- Dwelling units = 459.68 per hectare
- POP= 2040 per hectare
- Mean building height = 5 storey

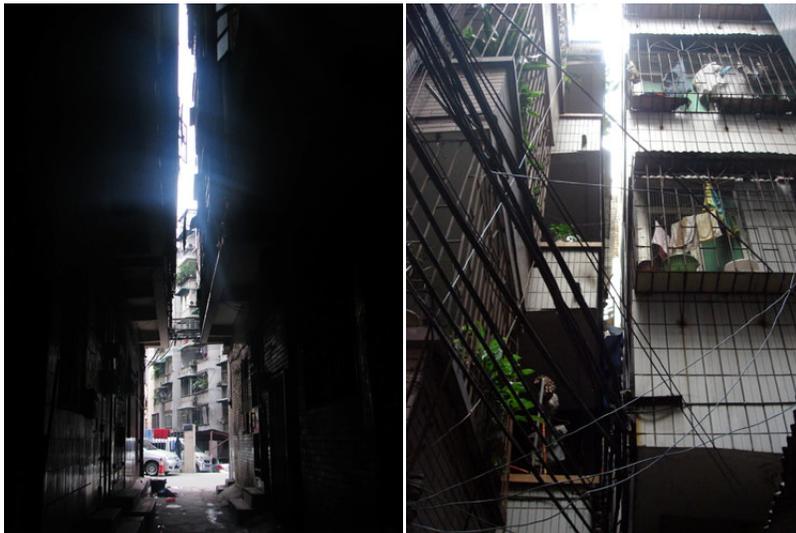


Figure 50: "handshake buildings, Kissing Buildings" (McGetrick, B. 2009).

## 5.2.4 Demographics

According to the latest statistics (Webster, Wu, Zhang, 2014) Shipai Village provides residence for approximately 70-80,000 rural migrants and an estimate of 10,000 original villagers. Besides rural migrants, a significant number of university students and recent graduates have selected Shipai as their home due to affordable rentals. Shipai village with a total area of only 0.7km squared is host to 3,656 buildings and a floor area ratio (FAR) of 4.97 in the year 2000 (Hu,Le Huang, Zacharias, 2013, p5). However from 2000 to 2013 the rural migrant population of Shipai village increased from 41,919 persons to 70-80,000 persons reflecting density increase from 50,000 persons per km<sup>2</sup> in 2000 to 100,000 persons per km<sup>2</sup> in 2012 (Lin, De Meulder, Wang, 2010, 2012). This suggests the perpetuation of future overcrowding housing conditions in the urban village. Shipai and urban villages in general are dominated by male migrant workers (69.5%)and aged 15-30 years old. (Du, H. Li, S., 2010, p7-9)

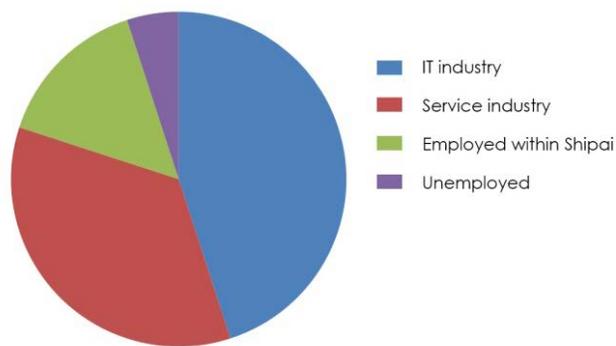


Figure 51: Employment Streams of residents in Shipai Village

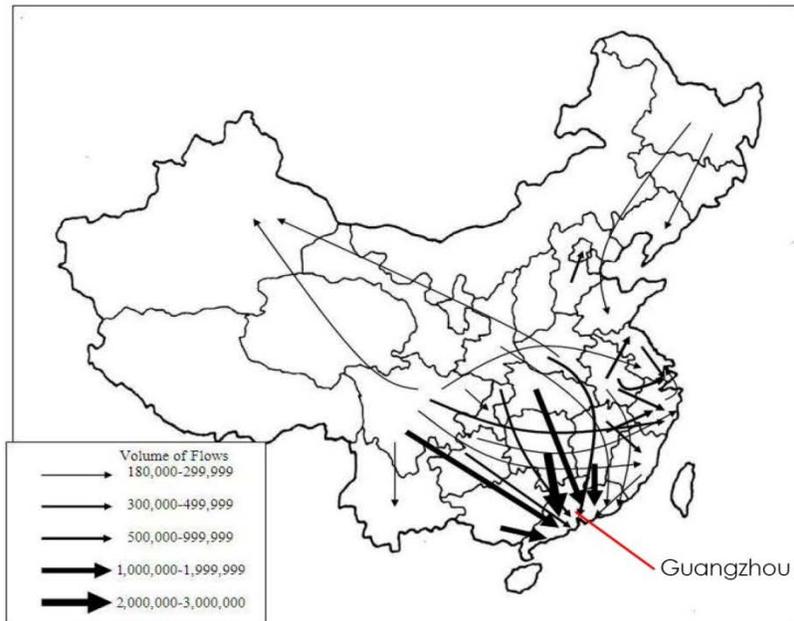
Source: Author, based on statistics from (Lin, de Meulder, Wang, 2012).

Shipai Village alone is home to 8% of the district workforce in Guangzhou (Hu,Le Huang, Zacharias, 2013, p5). 45% of residents living within Shipai village are employed in the IT industry. The proximity of Shipai village to Guangzhou's new central business district and readily accessible transportation networks have made it the largest IT hub in southern China. Major concentration of IT related

stores are concentrated on the west border (Shipai Western Road.) and northern border of the urban village. The remainder, 35% are employed in the service industry in the surrounding urban areas while 15% are employed within the Shipai urban village (Webster, Wu, Zhang. 2014). As outlined by the Guangzhou Master Plan for Building National Innovation City 2011-2015, the vision of Tianhe district, in which Shipai village is situated, is to become a smart high-tech zone. The concentration of rural migrant workers engaged in the service industry is an indicator that, first of all, not all migrants desire to work in labour intensive jobs and secondly in conjunction with the desires of the future of the development of the nation and Guangzhou in particular, there is a movement away from conventional industrial related economy towards a high-tech and service orientated economy.

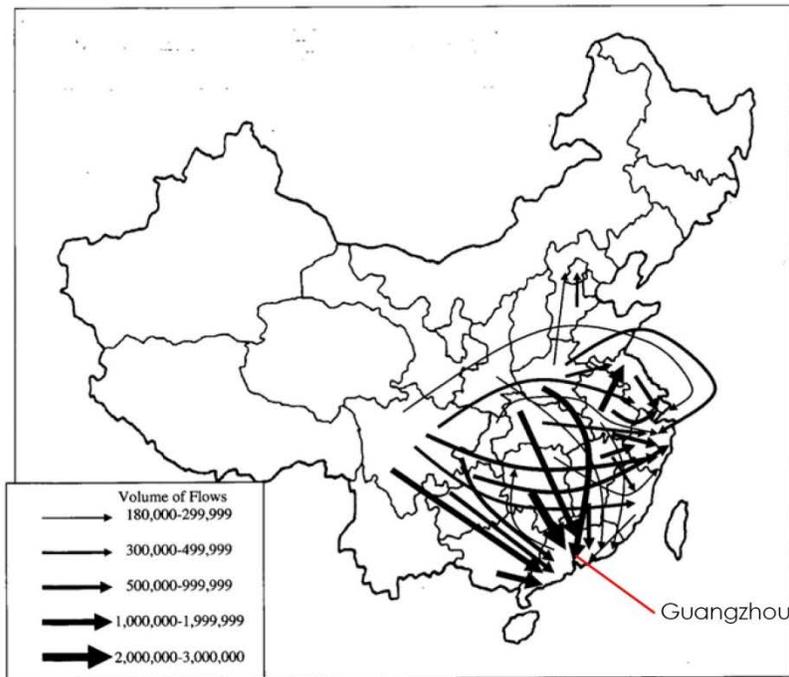
Rural migrant workers residing in Shipai Village come from all over the country but as with the general trend of rural population movement to urban areas, they typically originate from neighbouring provinces. Hunan, Hubei and Sichuan provinces are adjacent or neighbouring provinces where majority of migrants originate from (Gransow, B. 2010, p10-11). According to figures from the National Bureau of Statistics China 2012, one of the most evident dominant inter-provincial movement is from Hunan to Guangzhou. This can be verified through an analysis of type of restaurants, which often cater to the tastes of different provincial origins of Chinese, within and surrounding Shipai village. It is observed that numerous restaurants in Shipai village cater to spicy food, the common characteristic of Hunan and Sichuan food. It is safe to assume a substantial group of rural migrants originated from these provinces.

**Figure 2. The 30 largest inter-provincial migration flows, 1995-2000**



Source: State Council and National Bureau of Statistics (2002).

**Figure 3. The 30 largest inter-provincial migration flows, 2000-2005**



Source: State Council and National Bureau of Statistics (2007)

Figure 52: Internal Migration Flows - China's Internal Migration (Chan, K. W, forthcoming).

### 5.2.5 Transportation

Shipai village's advantageous location, close to the central business district and neighbouring computer and tech focused industries dubbed 'Computer city', research institutions and Jinan university contribute to one of the highest concentration in movement of people within Guangzhou. Its strategic location close to neighbouring tech industries has attracted companies to rent spaces in Shipai as warehouses. Neighbouring research institutions and universities have also seen the value of the urban village's location and proximity to transportation services. This is evident from the presence of university dormitories and hospitals. Furthermore, Shipai is readily accessible to transportation networks. The Gangding Bus Rapid Transit (BRT) station to the northern entrance of Shipai Village is Guangzhou's busiest station in the city accounting for 53,924 passengers daily (Hu,Le Huang, Zacharias, 2013). This BRT station is the destination for 45% of all passengers using metro transit, of which 42% of all passengers proceed directly to Shipai village (Hu,Le Huang, Zacharias, 2013, p5). Internally, within Shipai village the network of streets form the heaviest pedestrian flows in Tianhe district, peaking at 3,000 persons per hour(Hu,Le Huang, Zacharias, 2013, p6).

The central location of Shipai village in close proximity to Guangzhou's new central business district and affordable prices for housing makes it an attractive place for a unique concentration of people including migrants. The readily available transportation network presents opportunities for partnerships and connect migrants to greater networks of information. Furthermore, it also reinforces focal points within the network of the urban village. Through a study of the urban village's entrances, its street network and transportation outlets we can begin to point out potential sites for intervention. These are sites that have the potential of becoming places in service of rural migrants. Furthermore by studying circulation patterns, locations within the street network which would

have the most impact within a built fabric that generally consists of the same built structures.

### **5.2.6 Shipai Village and Information Communication Technology (ICT)**

Connection to online communication systems is invaluable for residents of urban villages because it extends the social network to a much broader scale of the city and globally. The social construction of places of connection which foster communication is a human necessity (Qiu, 2009, p169). Digital communication devices is typically targeted at higher-class who have monetary power to afford their usage, However as the cost of technology is decreasing, they become much more accessible to the lower-class of migrant workers. The proliferation of second hand cellular communication devices and digital communication outlets such as internet cafes have enabled migrants to have another channel to stay connected.

In the case of Shipai village, Guangzhou's largest urban village is situated adjacent to the largest concentration of Information technology malls hosting the sale of new and used computers, maintenance and related businesses. It is significant to recognize the importance of the urban village's role of the information technology market since it supports an IT hub that is comparable to Beijing's IT hub, Zhongguancun (Qiu, 2009, p170). The urban village hosts much of the affordable housing for workers who are employed both within and nearby Shipai. Furthermore, due to affordability, the urban village is also host to dozens of units serving as warehouses for various IT companies. However despite of its proximity to ICT related industry, Shipai village is lacking some essential services. Within the entire urban village, only one post office is found and no print publish or broadcasting media services are available (Qiu, 2009). Having a postal office provides an outlet for migrants to communicate with their families

back home through letters while print and publishing services could potentially support migrant businesses what rely on print media. Therefore I believe including these facilities within a framework would allow migrant workers greater access to services needed to help them integrate with urban society. Furthermore, as seen in the number of phone bars spread throughout the village there is a great emphasis on the sale of prepaid phone cards. From this observation it is evident that communication with others, especially family and friends back home, is greatly valued among migrants.

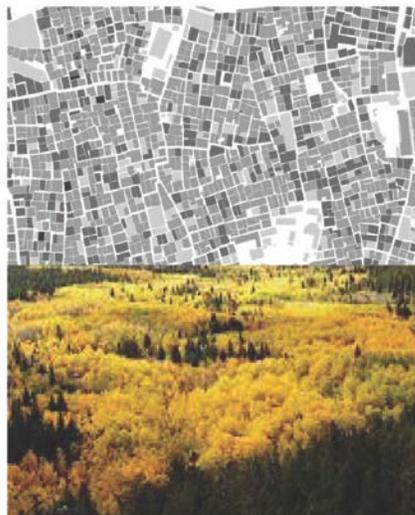


Figure 53 : Spatial Distribution of Communication Outlets in Shipai Village, Guangzhou  
 Source: Author, 2014. Based on: Qiu, J. 2009. Working Class Network Society. Spatial distribution maps in Shipai Village, Guangzhou

## 5.2.7 Value of the Urban Village

There is much to learn from urban villages. This new form of social amalgamation developed as a result of the political, economic forces which have driven China's rapid urbanization. Urban villages are collectively managed by a shareholding company formed by urban villagers. Its profits from rents are shared among its shareholders (urban villagers). In this manner all buildings within the urban village is not merely a singular entity, rather each is an integral part of the whole 'organism'. All buildings can be thought of as part of one giant building comprised of individual parts. This characteristic of the urban village draws similarities to the trembling Giant Aspen Tree which is a forest of trees which share the same genetic makeup and is connected at its roots; essentially one large living organism. The urban village can then be thought of as a rhizome or a network, a place with 'rich soil' to provide nourishment for the creation of offshoots as nodes which support people's lives.

Shipai Urban Village



The Quaking Aspen  
'Trembling Giant'

Figure 54: Comparison of urban village and the quaking aspen: Urban village as an organism

While the upper floors of buildings within the urban village are dedicated to housing, the streets of urban villages are places of connection. They are hosts to a variety of informal activities through the appropriation of space. In this

manner the street is the place of encounter or the rhizome which hold the activities that supports and nurtures people's lives. It is the bond which holds together the urban village.

The human scaled spaces also form a more intimate relationship between its inhabitants. Although its street networks are narrow, it is also for this reason people are more likely to connect with others and engage in social interactions. The dimensions of the streets also means pedestrian circulation is the only form of transportation within the urban village.

Value of Urban Village: Street as a place of Connection

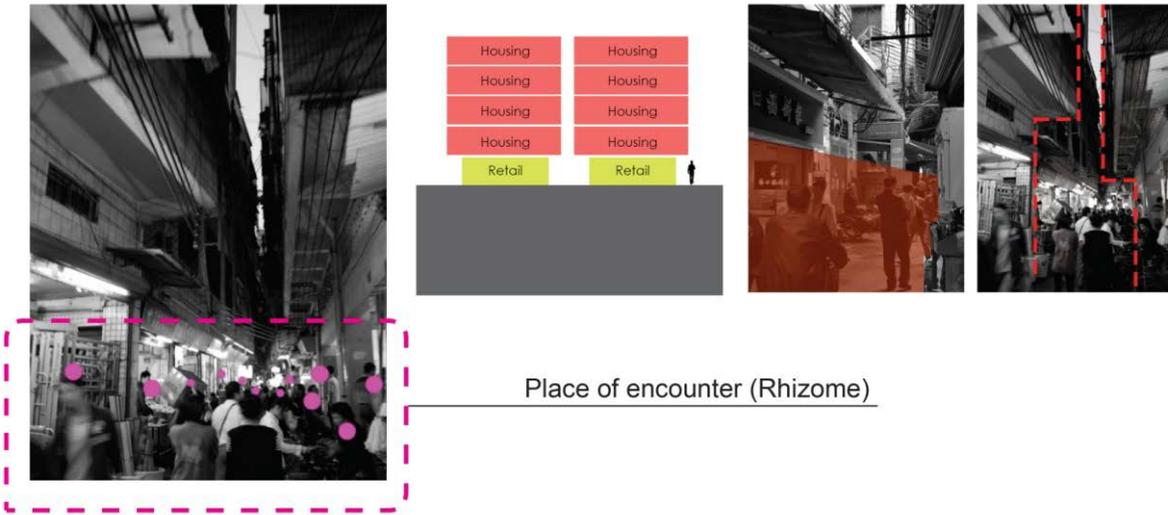


Figure 55: Urban village streets : Rhizome as places of encounter in urban villages



Figure 56: Appropriation of space: Informal activities in streets of urban villages. (transportphoto.net, 2008).

### 5.3 Site Analysis



Figure 57 : Site Context map, Shipai Village, Guangzhou. Shipai Village in relation to surrounding context. (Author, 2014).

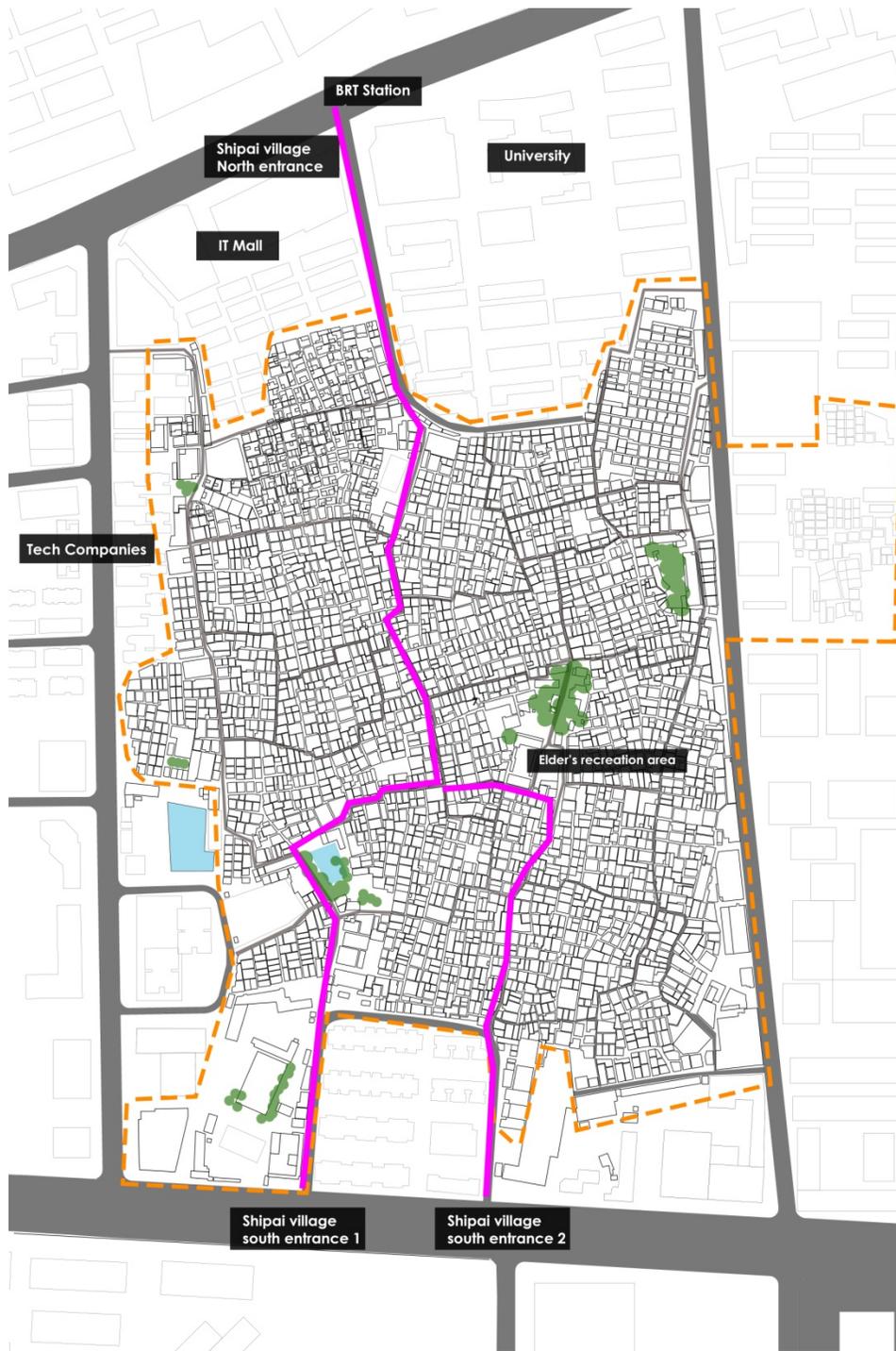


Figure 58: Shipai Village Assets, Shipai Village, Guangzhou (Author, 2014).

Within Shipai urban village there are a number of assets which make this community habitable.



Figure 59: Pedestrian movement intensity, Shipai Village, Guangzhou based on: Zacharias, J., Hu, Y., Le Huang, Q. (2012).

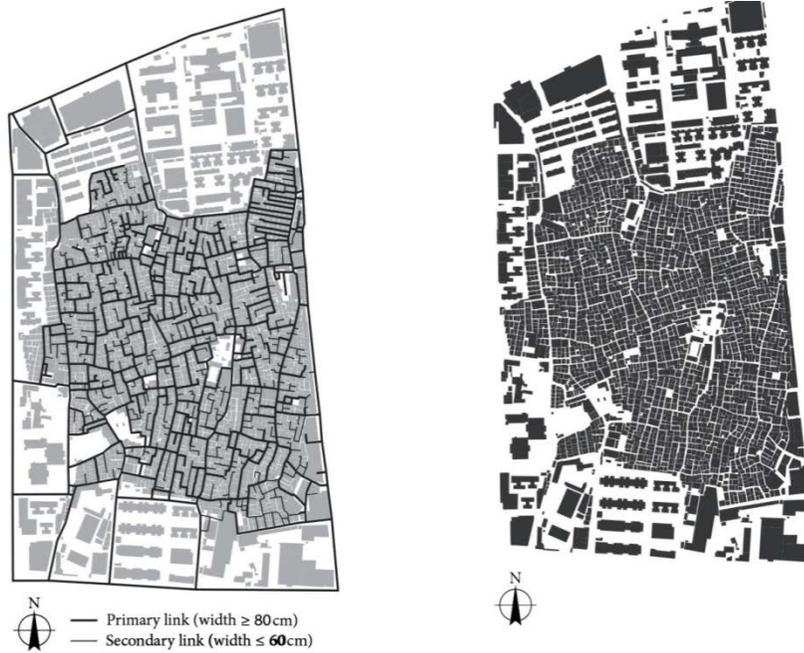


Figure 60 (Left): Internal street network of Shipai Village, Guangzhou. Zacharias, J., Hu, Y., Le Huang, Q. 2012).

Figure 61(Right): Solid Void & Scale Comparison, Shipai Village, Guangzhou (Zacharias, J., Hu, Y., Le Huang, Q. 2012).



Figure 62: Left: building heights, Shipai Village, Guangzhou. (Zacharias, J., Hu, Y., Le Huang, Q. 2012).

Figure 63 :Right: Ground Floor shops and amenities, Shipai Village, Guangzhou (Zacharias, J., Hu, Y., Le Huang, Q. 2012).

### 5.3 Design Approach- connection to theory and background research

Research on both background to the subject of migrant workers in China and its supporting theories have informed the proposed design solution. Architecture is often perceived as an individual entity serving a specific function, each having a stand-alone relationship to its surroundings. As countries such as China which undergo rapid urbanization fall to the temptation of creating a globalized environment by creating singular monumental poorly-scaled towers whether for commercial or residential purposes in place of traditionally carefully planned urban fabric, they fail to address the local conditions and provide cultural relevance. In context of Chinese urban villages which are collectively owned, operated and managed, they very much function like a large organism. In this manner buildings within an urban village could be thought of not as singular

buildings but as cells which are part of the organism of the urban village. In many ways the urban villages resemble the Trembling Aspen, a recognized single living rhizomatic organism which consists of a forest of trees with identical gene makeup connected in its root system. I believe, rather than seeing itself as an individual entity, the proposed architectural intervention should see itself as a system which inserts itself in to the organism of the urban village. It becomes a part of the urban village which supports rather than competing with or work against it.

Furthermore as informed by Maslow's hierarchy of needs, people have more than one level of need which must be satisfied in order to reach self-actualization. Carl Jung informs us that people have an intimate relation to their surroundings. It is as if the physical environment is an extension of the body. This perspective could be linked to Edward Casey's "People need a place to settle down their *being*." In order to do so they must have an environment which supports their intent in life. Having a place or places which are needed to settle down our being would also provide us with orientation and identity with. From the most basic need of shelter and its associated social engagement and sense of belonging, to acquiring knowledge towards greater self-confidence and personal growth and wellbeing of the body and soul, these are all interrelated supports towards self-actualization. In the case of rural migrant workers who are transitioning to cities and other urban areas, they often feel invisible, disconnected and isolated. Many of the migrant workers often have poor living conditions, a barrier that impedes their path to realizing their full potential. Furthermore rural migrants' reliance on kinship alone as support is limited. Having little to rely on migrant workers find it difficult to survive in cities, and commonly falling victim to deceit or abuse. Migrant workers is in dire need of authentic channels of information to help them navigate life in cities. Connection to greater sources of information allows migrants to expand their networks and

gaining greater support. It is evident rural migrants are in need of support for their well-being in order to ease their transition to cities.

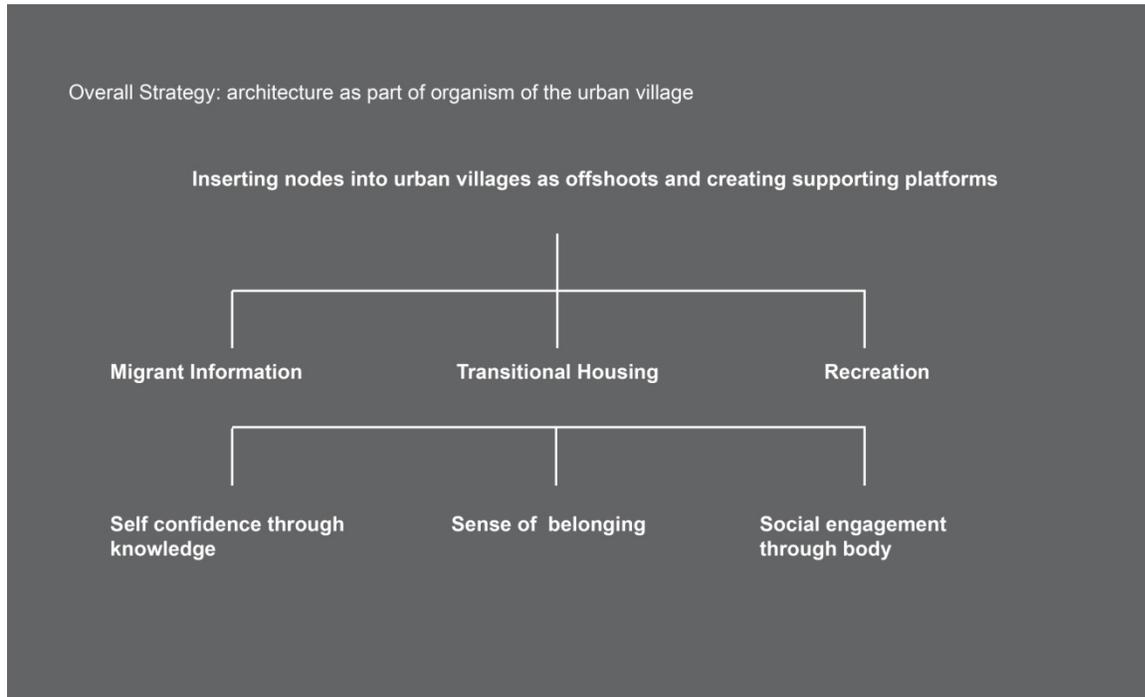


Figure 64: Design Approach: overall strategy. Architecture as part of the organism of the urban village. (The insertion of nodes as a network of supporting platforms)

This then translates to helping migrants form connections to support and services. In the context of the urban village, a human scaled form of living environment, it is wise to draw upon characteristics which make it a successful form of inhabitation. I believe the value of the urban village rests in its rhizomic character and the network of streets which supports the daily activities and social interaction amongst its residents. Furthermore the exercise of spatial rights through the appropriation of space as seen in the streets of urban villages reinforces the vitality of the streets. Therefore in order to maximize connections migrants can form with others, I believe the design approach should tap into the power of the street network. This can be accomplished by separating the programming into different levels of needs which could be accordingly spatially facilitated through different levels of social interaction. This translates to

creating a network of buildings rather than a singular entity which would neglect the potential of the streets as places of encounter (rhizome).

Three nodes addressing needs of housing, access to information and training, and social connection respectively forms a network of supporting platforms at the local level. As a prototype if each urban village in cities were to establish its own network of nodes as supporting platforms to aid migrant workers' transition to urban areas, these nodes would become part of a greater network on a regional and national level. Furthermore these nodes would also become a part of the global network through access to online networks which serve to provide greater perspective on issues such as employment rights, housing prospective, and advice concerning migrants. This effectively expands rural Chinese migrants' networks which have traditionally relied on kinship for support. The overall approach seeks to maximize migrants' connection to people and services to support their transition to urban areas.

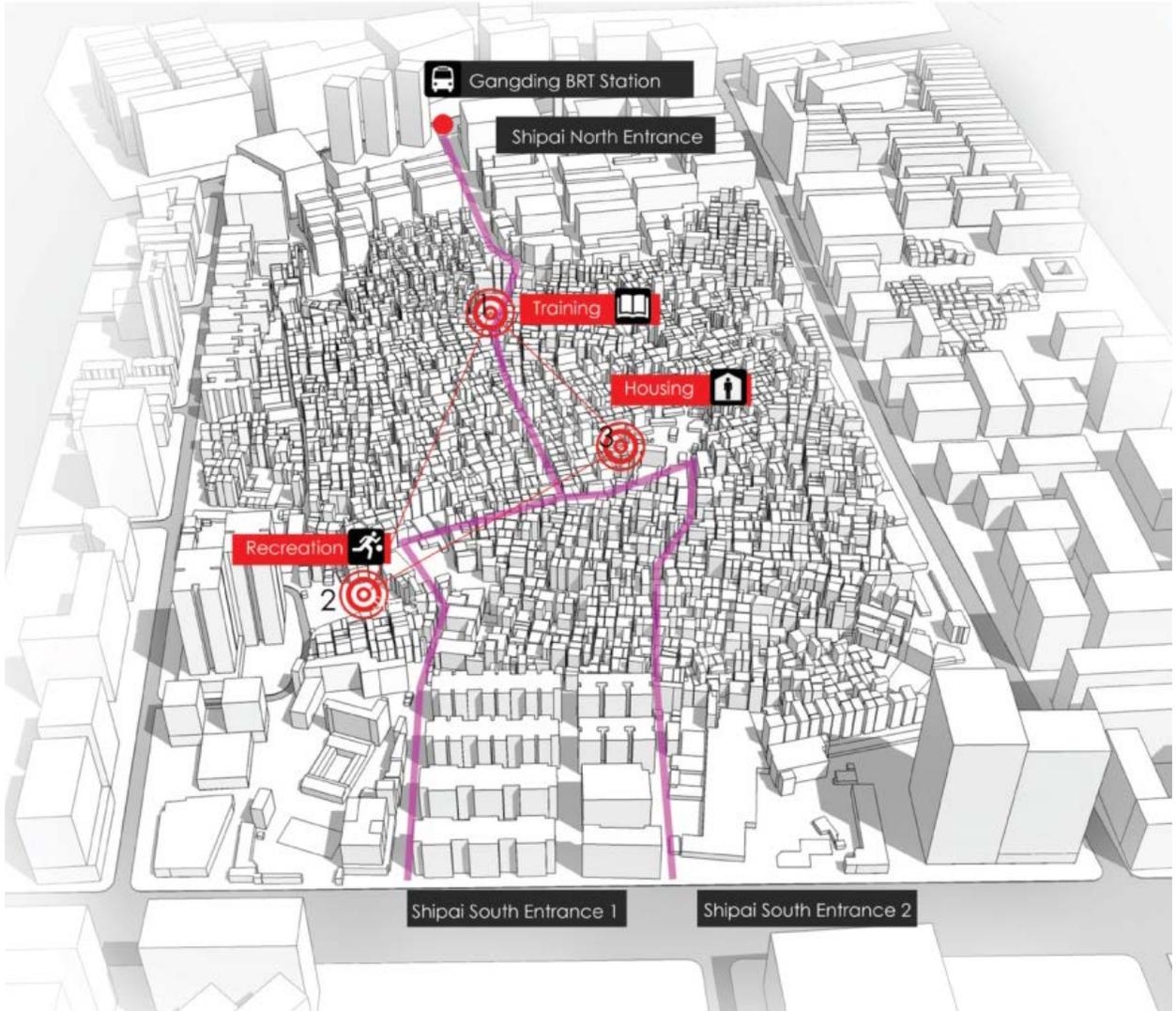


Figure 65: Design strategy: infill and network. Rather than proposing an architectural intervention as a singular object, the proposal sees itself as part of the organism of the urban village. I propose the insertion of a series of nodes as offshoots of the urban village rhizome and creating supporting platforms.

## 5.4 Programming



Figure 66: Earth, Human, Heaven. Translation into 3 key aspects which provides support to self-actualization. (Author, 2013).

In Chinese philosophy, the connection between earth, humans and heavens is seen as a order. When these elements are aligned harmony is achieved with the cosmos. I believe these three elements could be translated to three aspects respectively which would form the basis to fulfil peoples potential. For me, earth translates to knowledge as a key cornerstone to greater achievement. Humans, being the connection which 'communicate' between earth and heaven can be thought of as the social aspect. Finally, heaven translates to a higher, spiritual level associated with wellbeing. Therefore this final element has to do with the body and the soul. In reference to Maslow's hierarchy of needs, the program should support different levels of needs in order to aid rural migrants to reach their potential towards self-actualization. Therefore the program is, as previously in section 5.3 Design approach, divided into three components, transitional housing, knowledge and training, and recreation. Programming of each node addresses different needs and facilitates social interaction on different levels. Each node would further place an emphasis to dedicating different services respectively.



### Information node

Hukou Advice Office  
Entrepreneur Business Advice Office  
Information commons  
Job posting board  
Resource centre/library  
Workshops/classrooms  
Radio broadcast studio  
publication office

Small Bussinesses/ Market

Multipurpose space  
Network/Event Space  
Meeting Rooms

Informal study areas  
outdoor gardens  
Public roof terrace

Information desk  
Administration Offices  
Washrooms  
Mechanical Room  
Electrical Room  
Storage



### Transitional housing node

1 person bedrooms  
3 person - family bedrooms

Shared kitchens  
Shared dining areas  
Shared bathrooms  
Roof terrace

Reception  
Housing bulleting board  
Clinic  
Reading room  
Daycare / community room



### Recreation node

Basketball court  
Badminton courts  
Ping pong tables  
Informal play spaces

Market

Hard surface plaza  
Vegetated plaza  
Seating areas  
Walkways  
Administration/security  
Change rooms  
Washrooms

Figure 67: Programming of proposed nodes within urban villages

Source: Author, (2014).

## 5.5 Selected Sites

Within Shipai Village three sites have been chosen for architectural intervention. This works with the idea that the architectural intervention should not see itself as a another singular building but instead as part of the organism of the urban village. The collective nature of the urban village is similar to a multi-cellular organism with buildings and spaces being cells within the whole. The value of the urban village lies in its characteristic rhizomic street network which supports social interaction and the activities of its inhabitants. Rather than proposing an architectural intervention as a singular object, the proposal sees itself as part of the organism of the urban village. I propose the insertion of a series of nodes as offshoots of the urban village rhizome and creating supporting platforms. Each site would be in service of a need and facilitate different levels of interaction for migrant workers.



Figure 68: Site Selection, Analysis, setting criteria for each node

Source: Author, (2014).

### 5.5.1. Site 1:



Figure 69: Site 1, Context (Chan Y, 2009).

This site is not centrally located in the urban village, however it is located just south of the BRT Gangding bus stop, the busiest stop in Guangzhou. Therefore this site also has the greatest exposure to migrant workers living within the urban village. The site, being located along the main path to the north entrance of Shipai village would be visible to residents everyday on their way to and from the village. Inherently, the site offers the opportunity to create a recognizable node within the community. Furthermore its existing use for community activities such as informal play and basketball makes it familiar, recognizable and has the potential to intensify uses to serve the community. I believe this site has the potential to serve as an information node to connect migrant workers to authentic and reliable sources of information which would help them navigate and survive in the city. Moreover being located along a main street this site also has the potential to support migrants' livelihoods

through connect with the existing retail streets by creating space for entrepreneurs to start up their businesses. The site is promising to host a variety of functions and therefore should appropriately be mixed use. Finally as one of few open spaces within the urban village I believe the same space should serve multiple functions. Therefore the site should grasp onto the cultural use of space and host space for appropriation. The challenge of the site rests with is physical dimension, being the size just larger than the size of a high school basketball court. Rather than seeing this as a restriction the site actually offers the potential to create a series of human scaled spaces. In addition the culture of appropriating spaces in China tells us that the same site could host a mix of different functions and be an acceptable gesture. Therefore less space on the site does not translate to less output of functional programming. Rather less space actually translates to greater potential use of the site.

### **5.5.2 Site 2:**

Located at the heart of the community, this site is physically located in a good position for an architectural intervention which would be central to the community. The site is located adjacent to an open space which hosts the elder's recreation area. This location has a long history with the development of the Shipai Village and can be considered as the old heart of the urban village. In addition, it is also one of the few places remaining in which greenery still preserved. Ancient trees adjacent to the site form mental image of the natural environment and provide a peaceful and relaxing atmosphere. Exposure to natural elements is a commonly desirable element and therefore an element that could be beneficial to people's wellbeing. Furthermore, being a site frequent by urban villagers who are play the role as hosts for migrants, the site has the potential to reinforce connections between both groups. This site is suitable for more intimate social interactions and particularly for migrants to

have greater exposure to the original village community which still resides there. It is hoped that through greater exposure to the existing community rather than isolation would promote greater integration for migrants. Therefore I believe this site is appropriate to construct housing for migrant workers.

### **5.5.3 Site 3:**

Site 3 is located at the margins of the formal urban area of urban Guangzhou and the informal of Shipai Village. This space is left over from development and currently serves as surface parking. I argue its current use as surface parking is inappropriately addresses the full potential of the site. The urban village and surrounding urban community have little use for parking with the presence of a well established public transportation network. Furthermore none of the inhabitants of the urban village are automobile owners, further making its current use redundant. Maintaining its current use would only be beneficial to visitors of the high rises adjacent to the site. However the site being in close proximity to the central business district would not address the proper value of the land to serve as a parking lot. The site is moreover is a transitional site between the rural and the informal. It is therefore a site of connection that can support the needs of migrant workers to become better connected with its host community.

Several aspects make this site unique. Firstly, being adjacent to a set of modern residential high-rises and next to the small scale urban village housing, it is an interesting opportunity to produce an architecture which responds to the two scales of built form. Secondly, the site also sits in between two manmade ponds. This presents an opportunity to create an unique experience travelling through the site as if it were rural landscape. Thirdly there is also potential to connect the elements of the commercial street into the site to create a dynamic interplay of different uses. In physical dimension, this site is the only

open space large enough to incorporate recreational programming. Therefore this site is chosen to encompass the recreational component of the architectural intervention.

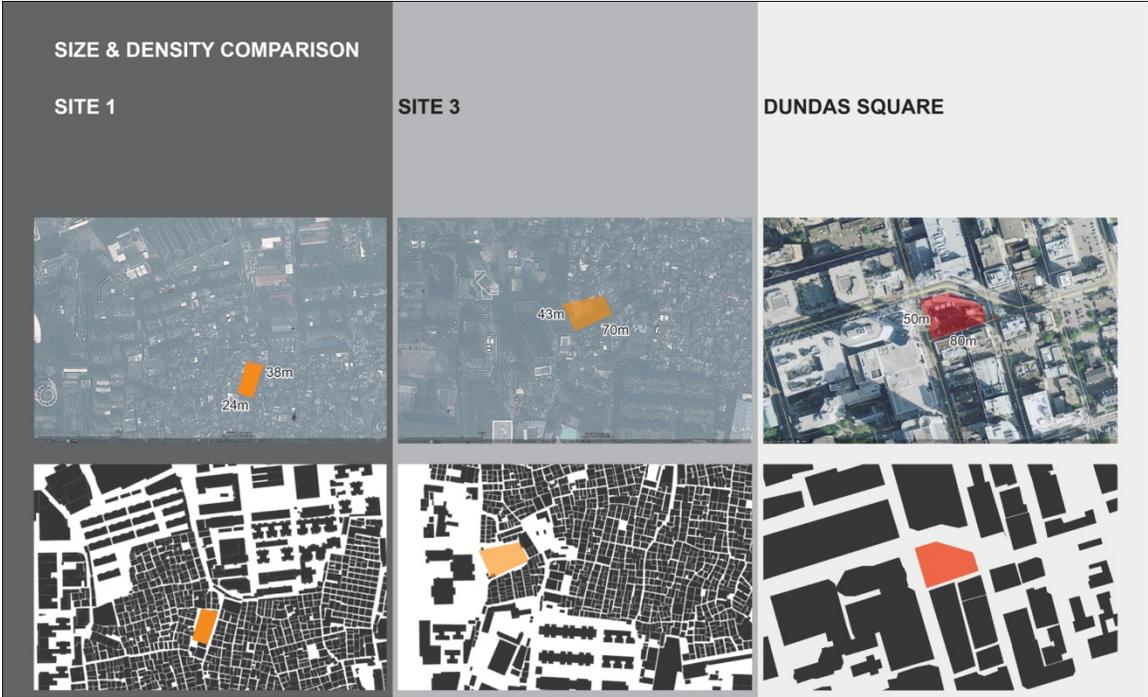


Figure 70 : Size and density Comparison (Author, 2014).

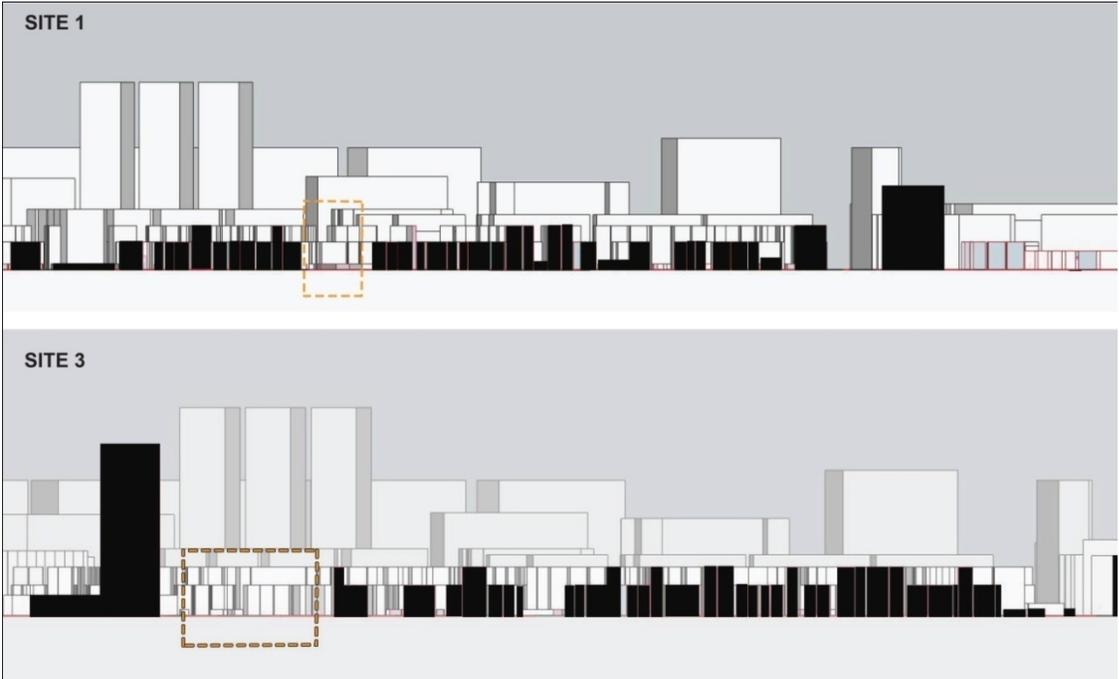


Figure 71: Site Sections (Author, 2014).

## 5.6 Migrant Information node



## 5.6 Migrant Information node



Figure 72: Location of information node within Shipai village. (Author, 2014).

### Concept

The concept of the information node is to create a series of connected platforms which serve as common shared spaces. This concept is influenced by the design of courtyard houses, the basis of all traditional Chinese architecture, and the street as the rhizome (place of encounter). Together these concepts reinforce each other forming a hybrid which seeks to create connections by embracing the concept of shared spaces and vitality of the street. To assist with the design and layout of programmatic elements a grid system was employed. Its dimensions of 7.6m x 7.6m are based on the average width of buildings within the urban village. Then utilizing the nine square grid principle used in the

traditional planning of Chinese architecture, the site building footprint is conceived as 2 overlapping nine square grids. Next coupled with the understanding of courtyard houses as a sequence of shared spaces, the centre of each of the overlapping square grid is reserved as a central space or used as vertical circulation. Following the grid is divided into a series of platforms by dividing the grid into strips. These strips are then literally integrated into the vertical circulation as large landings or platforms. Thereby creating a series of shared spaces and places of encounter throughout the building. This gesture is intended to simulate the street network of the urban village.

## Program

Programmatically, the ground floor contains the entrance social space, space for a market, and space for appropriation. The second floor hosts the reception area, computer information commons, entrepreneur and business advice office. The following third floor contains the exhibition area, crafts studio space, and performance area. Above, the fourth floor is more academically orientated. It contains the library, classrooms and staff admin area. Finally the last floor above contain the library's reading space and an exterior public roof terrace. The integration of shared spaces with the circulation seek to create intersections within the building for people to



### Information node

- Hukou Advice Office
- Entrepreneur Business Advice Office
- Information commons
- Job posting board
- Resource centre/library
- Workshops/classrooms
- Radio broadcast studio
- publication office
  
- Small Businesses/ Market
  
- Multipurpose space
- Network/Event Space
- Meeting Rooms
  
- Informal study areas
- outdoor gardens
- Public roof terrace
  
- Information desk
- Administration Offices
- Washrooms
- Mechanical Room
- Electrical Room
- Storage

Figure 73: Information node program

expand their networks to people and information. Together, the arrangement of these spaces is linked by an internal 'street' defined by the circulation.

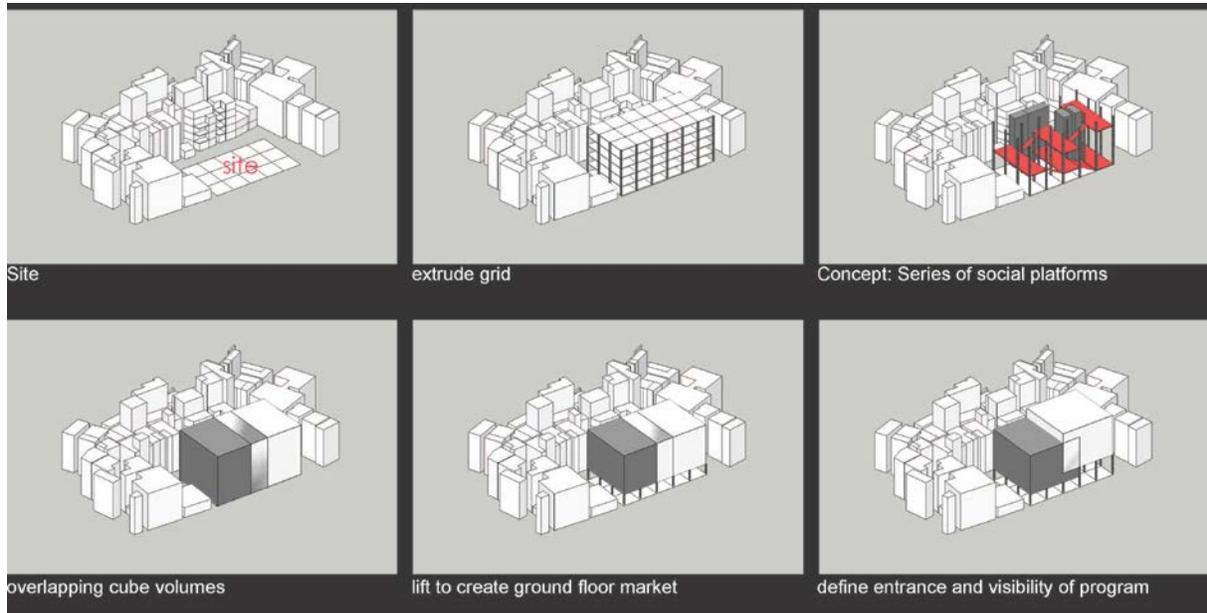


Figure 74: Migrant information node: design process (Author, 2014).

## Details and Materiality

In terms of its massing the entrance of the migrant information node is made prominent through the grand social staircase. The building mass peels away at the second floor accordingly forming the underside of the floor's performance space. Together, these elements create a different experience within the urban village.

Due to the narrow streets of the urban village it is not possible to be in view of the entire building at ground level. As residents move through the streets the building begins to reveal itself as moments. Also due to this reason the texture of the building becomes important as people are always in close range. Ground pavement is used at spaces outside the ground floor to reinforce the experience of entering a new space.

Furthermore the building works with a rural and urban palette of materials at its facade symbolising the harmony of both rural and urban development. Bamboo louvres in combination with perforated metal mesh are used as facade treatment to provide shade and privacy for users inside while at the same time maintaining a degree of porosity and its connection to the outside. Bamboo was selected as a screening material for several reasons. Firstly, bamboo is a sustainable material which is rapidly renewable. Secondly, bamboo, as a plant with rhizome qualities, takes on the analogy of the rhizome forming connections. Thirdly, bamboo is a material used throughout China as a scaffolding, a framework of support. Therefore imbued within the material of bamboo are the memorable qualities associated with the traditional Chinese home in the rural environment and the meaning of support, connections. Together these qualities enable the building to become recognizable, and identifiable with for rural migrants.

Perforated metal mesh screening is utilized as screening for the upper section of the building where the resource centre is located on the fourth and fifth floors. This metal mesh screening provides privacy for those studying within the building from the people living in residential units just across the narrow street. Furthermore this metal mesh provides definition to the building as a different material from bamboo but serving similar function of screening. The simplicity of metal mesh in contrast to bamboo louvres provides contrast. At night the building glows similar to a lantern becoming a beacon for the local community. Thereby the material palette defines the building by distinguishing it from the surroundings but also at the same time being recognizable and identifiable for the rural migrants.

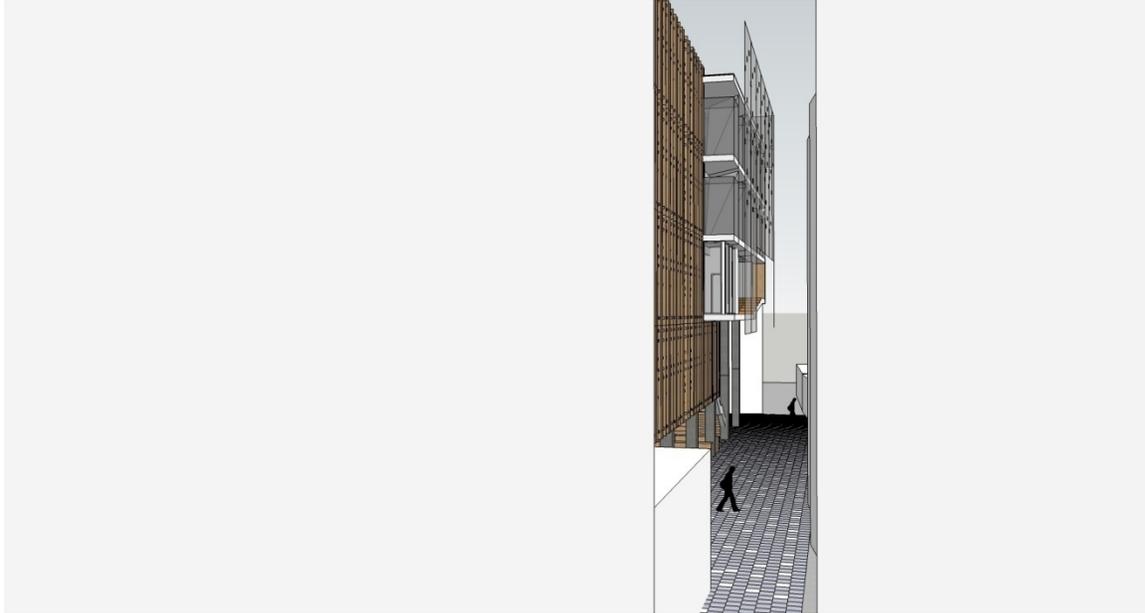


Figure 75 : View of migrant information node from housing unit within Shipai village. (moments of viewing the architecture) (Author, 2014).



Figure 76 : Migrant information node: view from neighbouring buildings towards entrance. (moments of viewing the architecture) (Author, 2014).



Figure 77: Migrant information node from rooftop of residential buildings in Shipai village. (Author, 2014).



Figure 78. Migrant information node : Entrance view, (rendering) (Author, 2014). Program inside the building is exposed to the street level. Thereby creating inside-outside spaces and forming connection with the street.

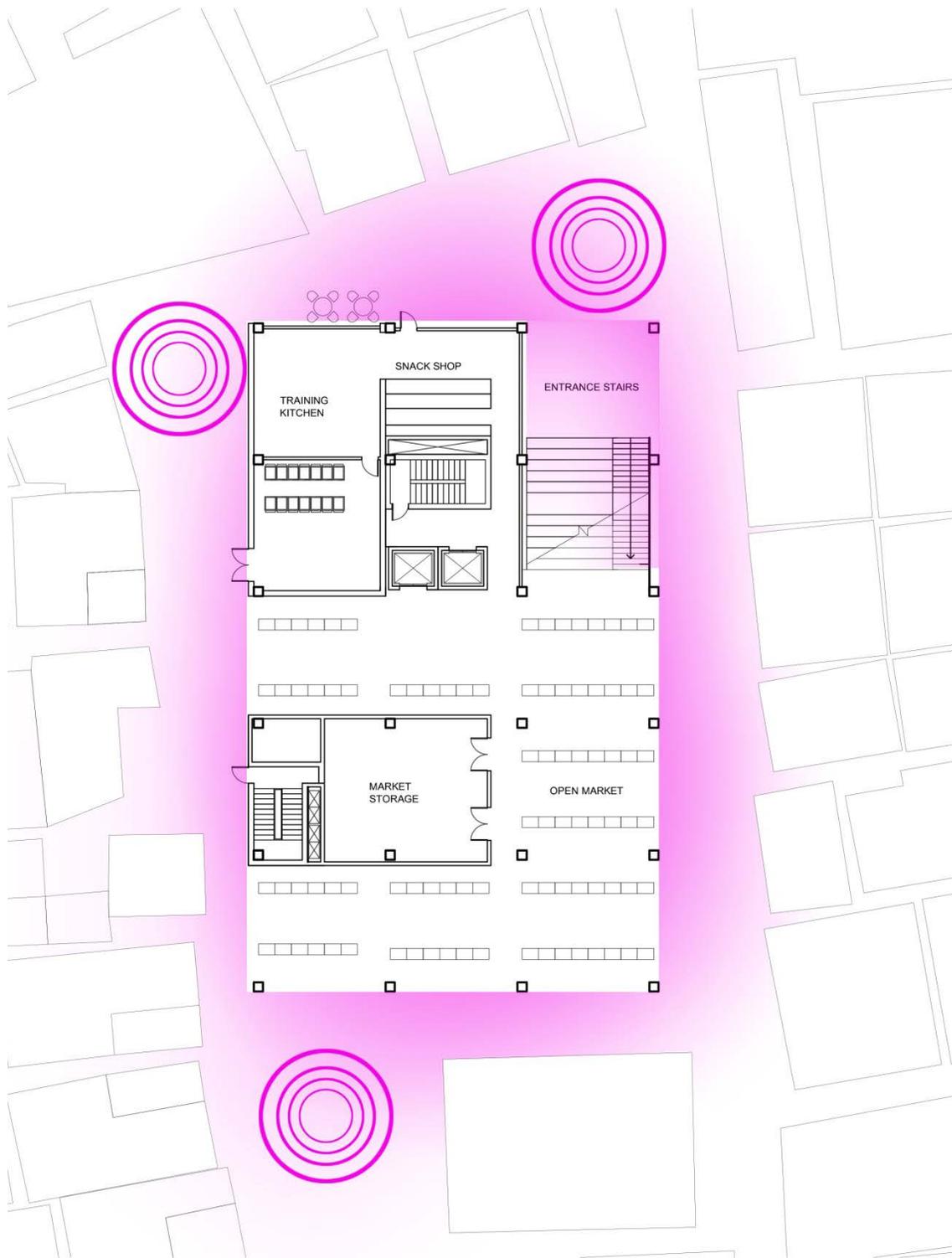


Figure 79 : Migrant information node: space for appropriation. (Author, 2014).

The building is purposely not entirely aligned with the surrounding buildings in order to create 'breathing' space to accommodate space to be appropriated.

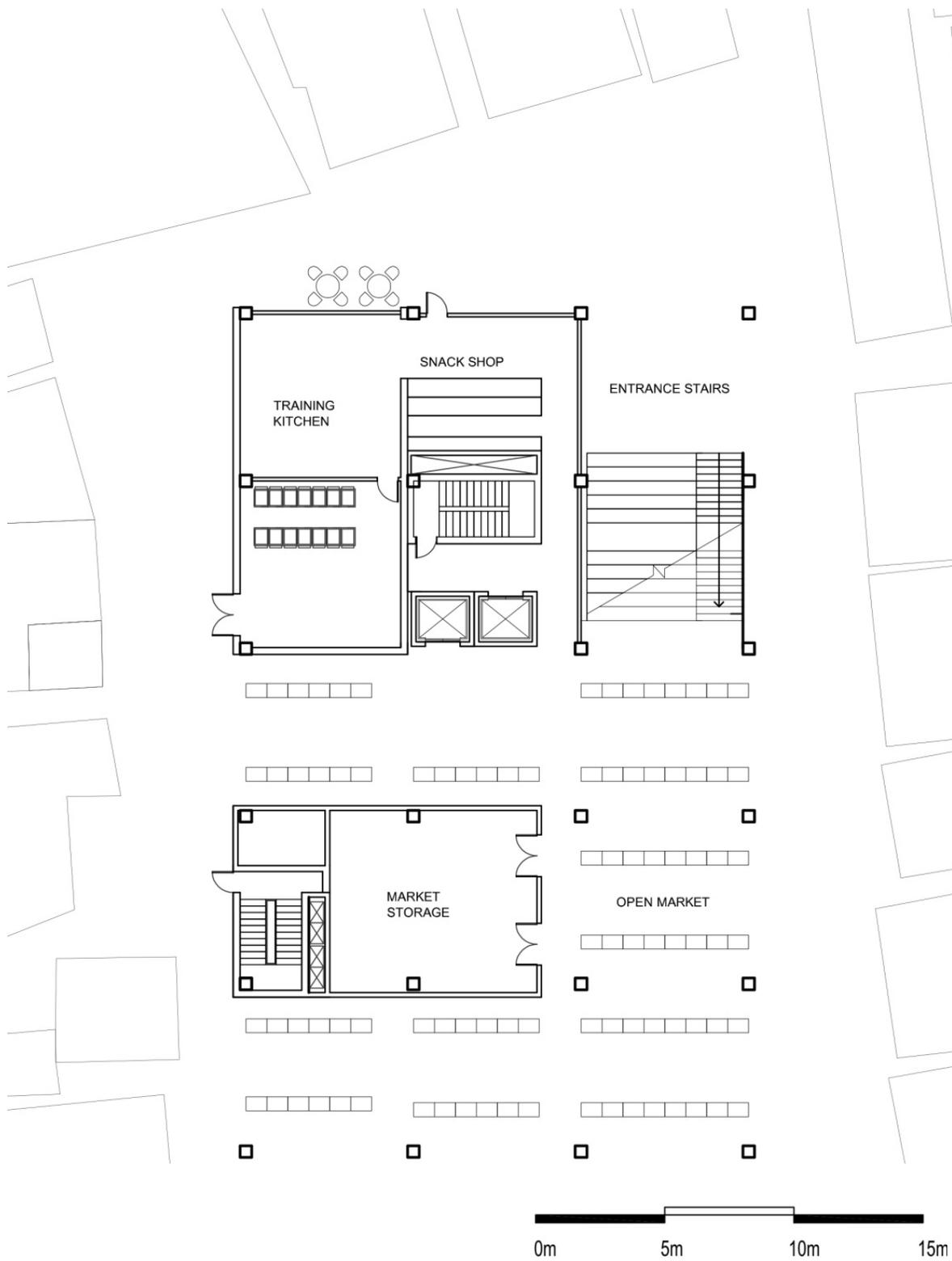


Figure 80 : Migrant information node: Ground floor plan

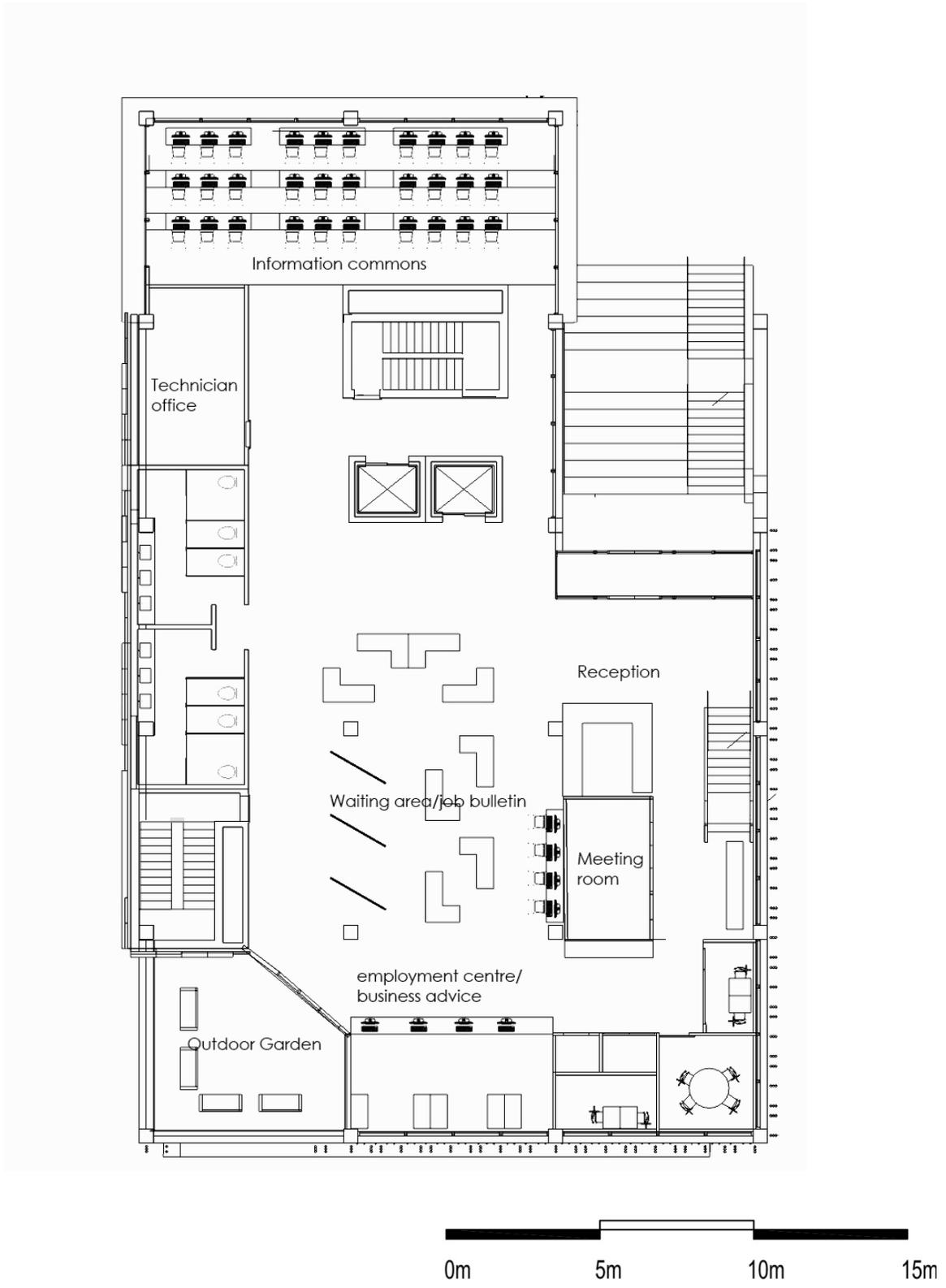


Figure 81: Migrant information node: Second floor plan

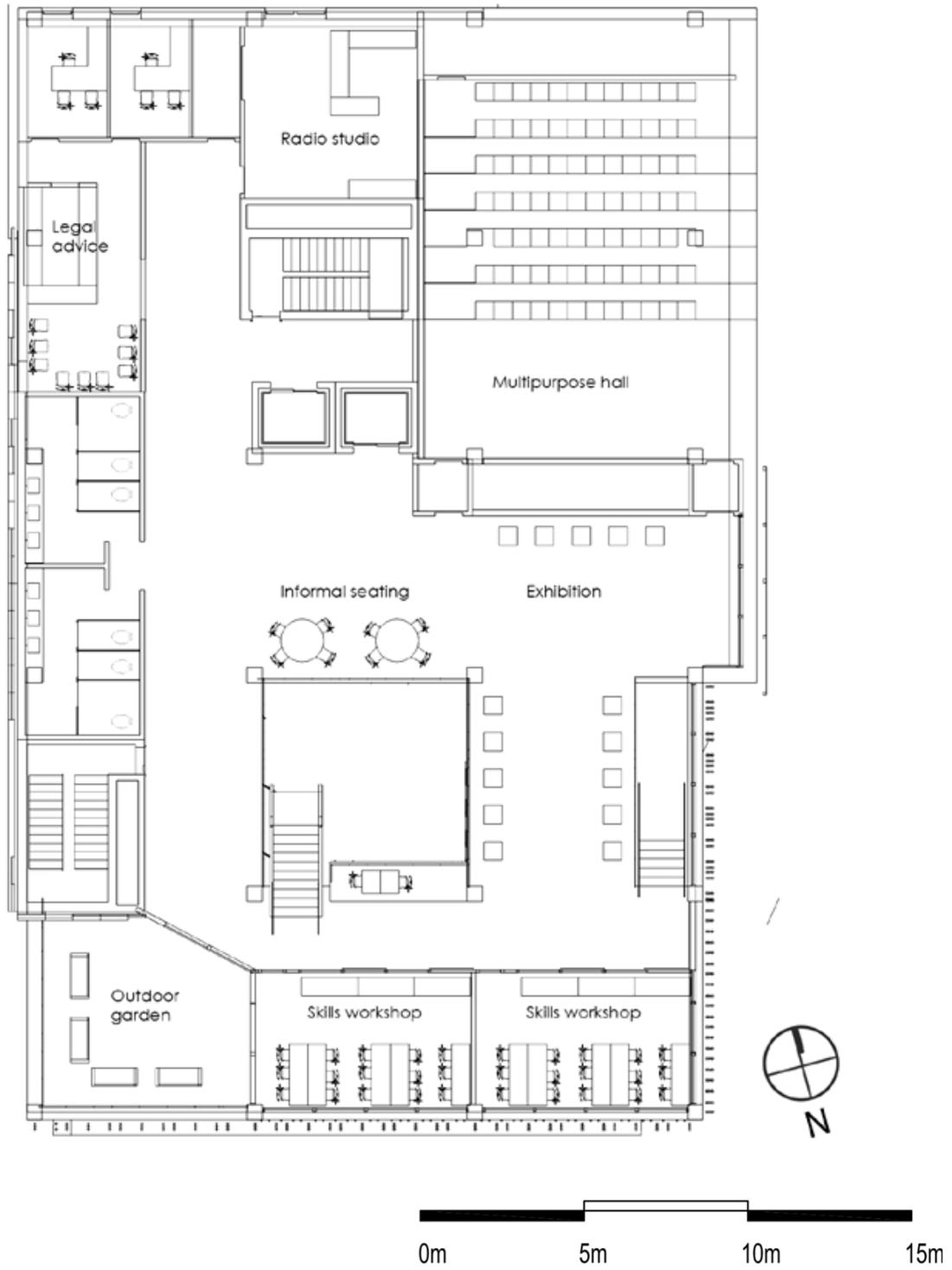


Figure 82 : Migrant information node: Third floor plan

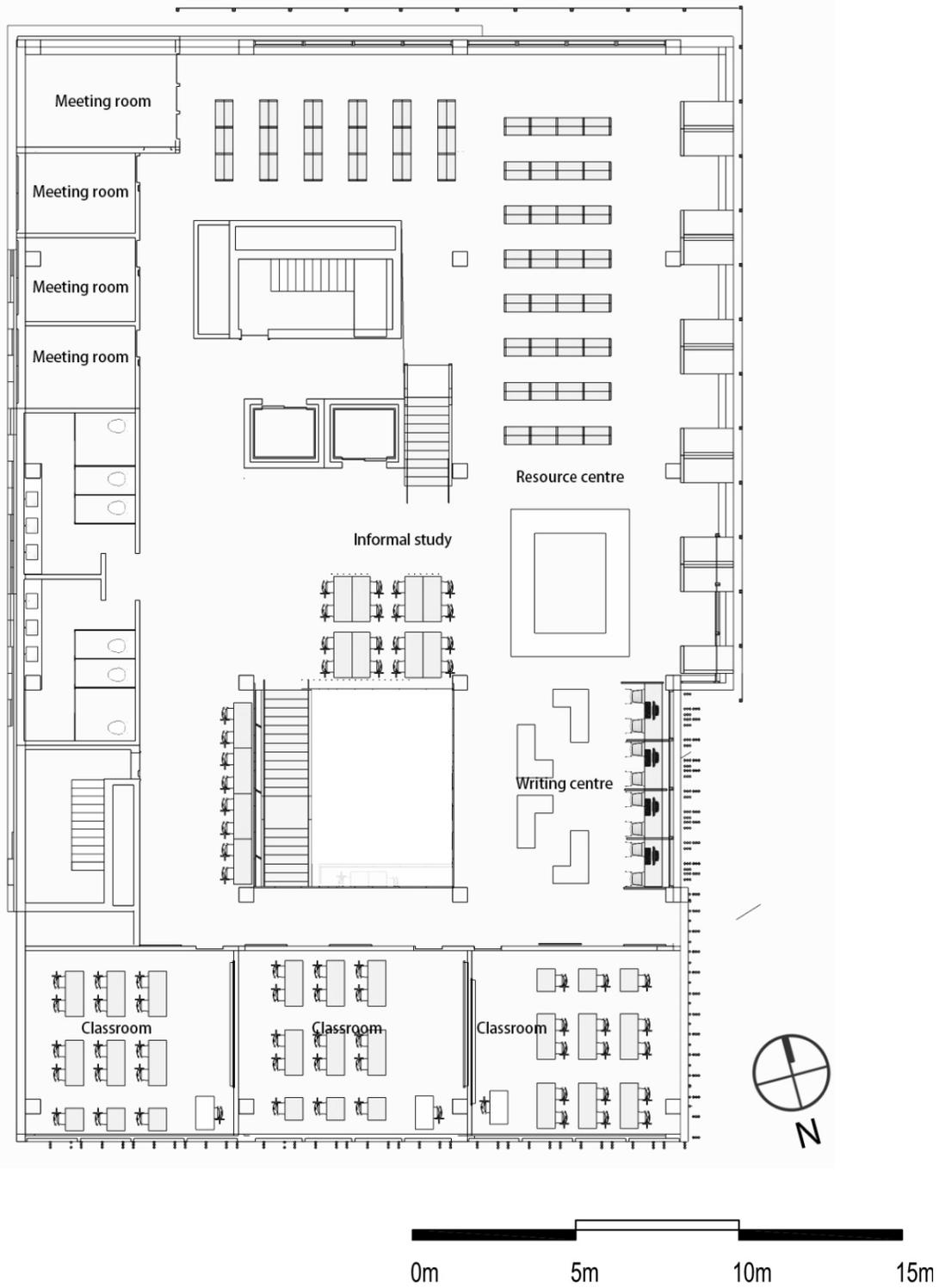


Figure 83 : Migrant information node: Fourth floor plan

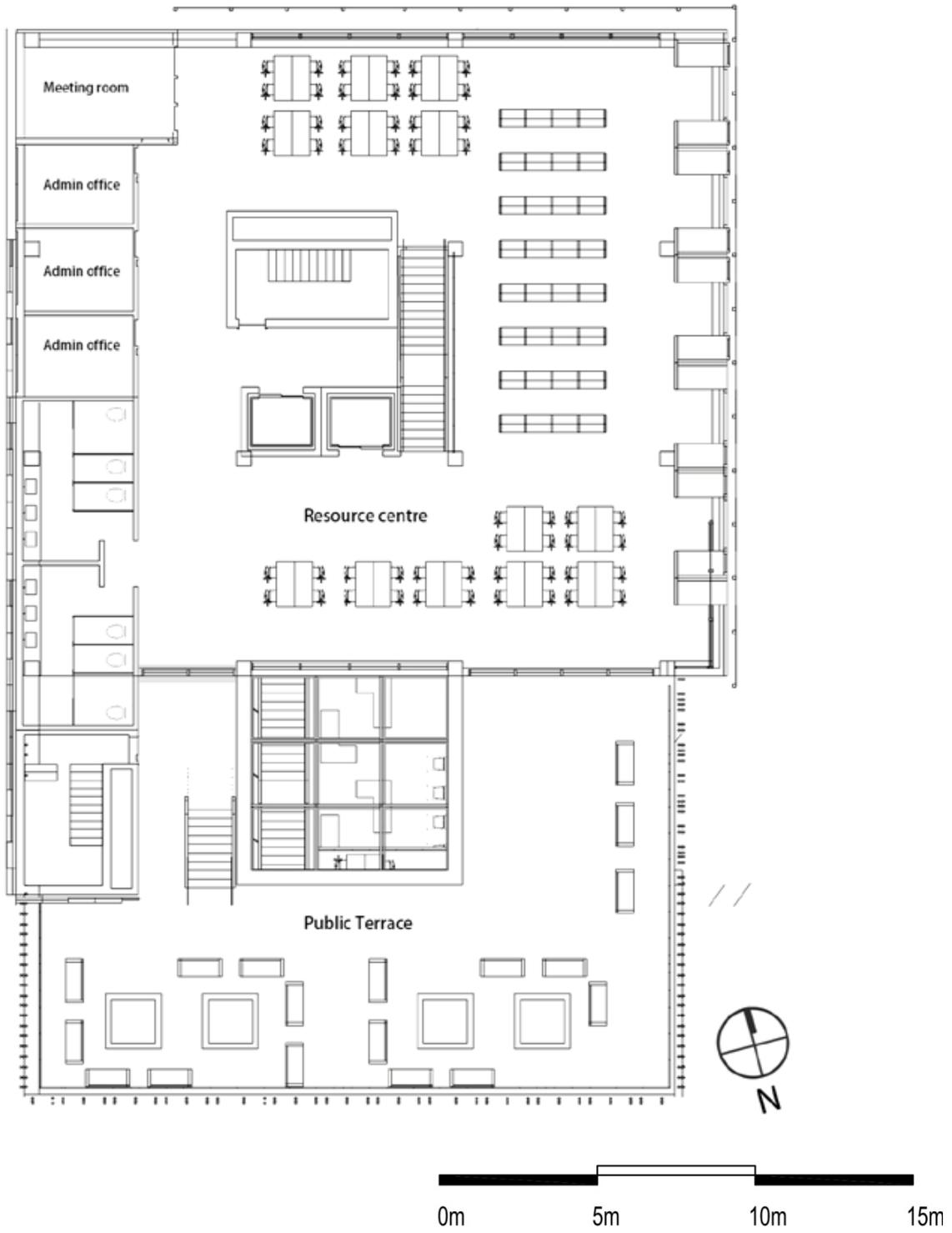


Figure 84 : Migrant information node: Fifth floor plan

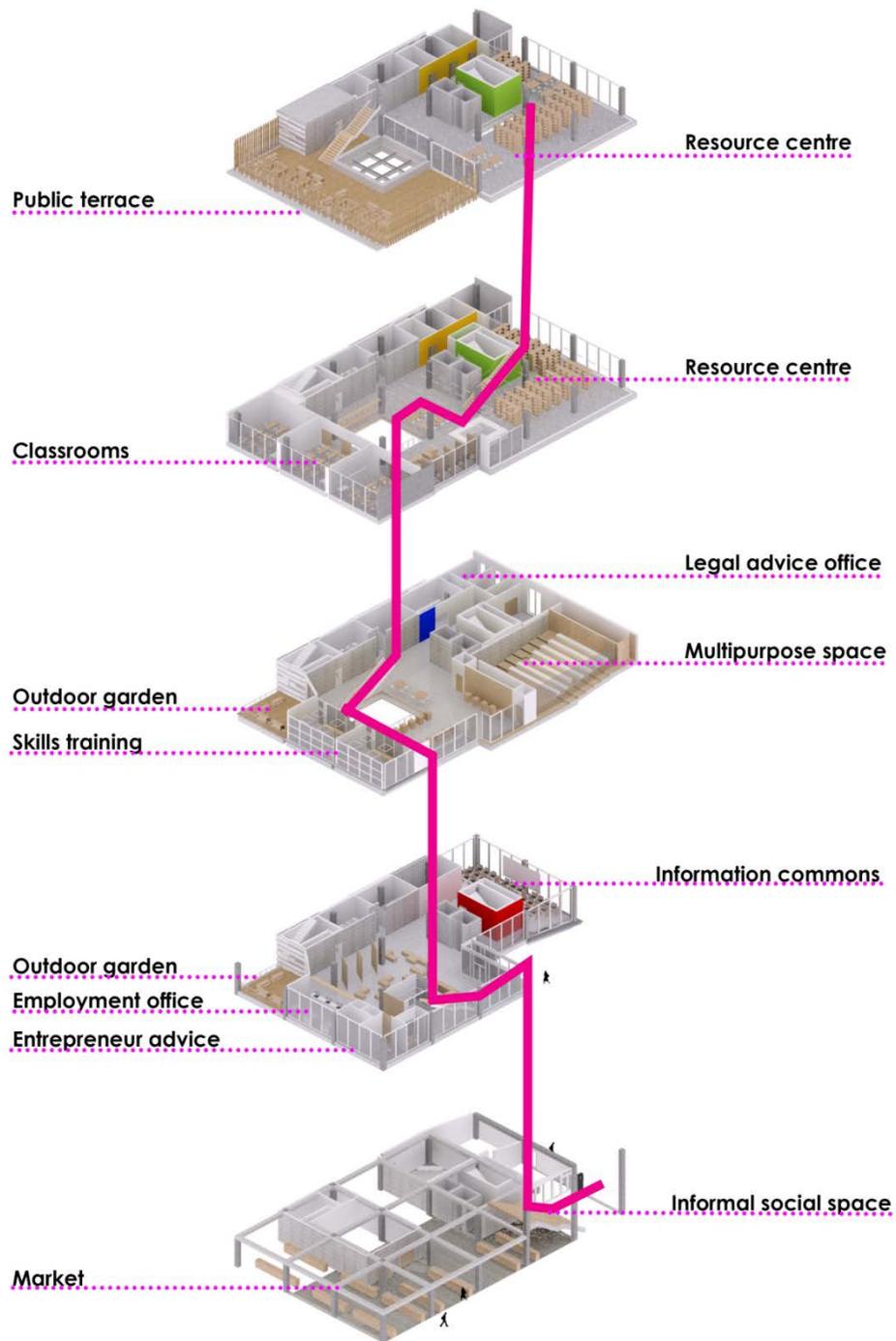


Figure 85: Migrant information node: exploded axonometric. (continuity of street to public terrace)

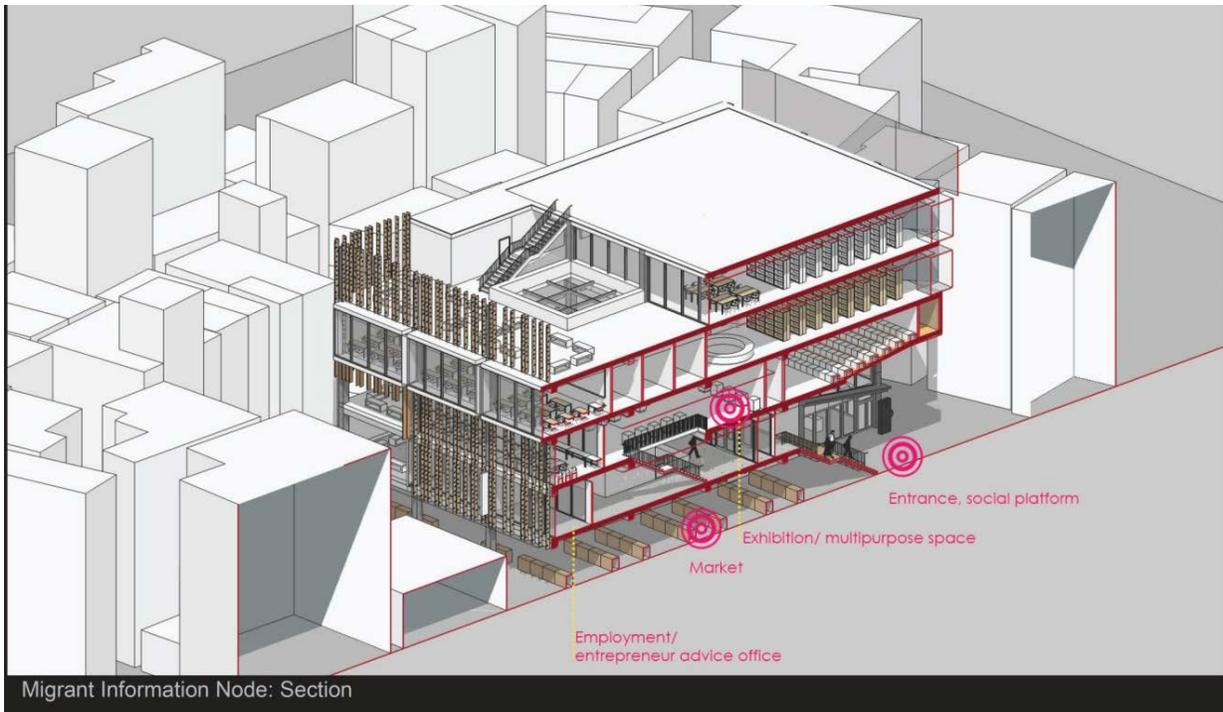


Figure 86: Migrant information node: section (looking West)



Figure 87: Migrant information node: section 2 (looking West)

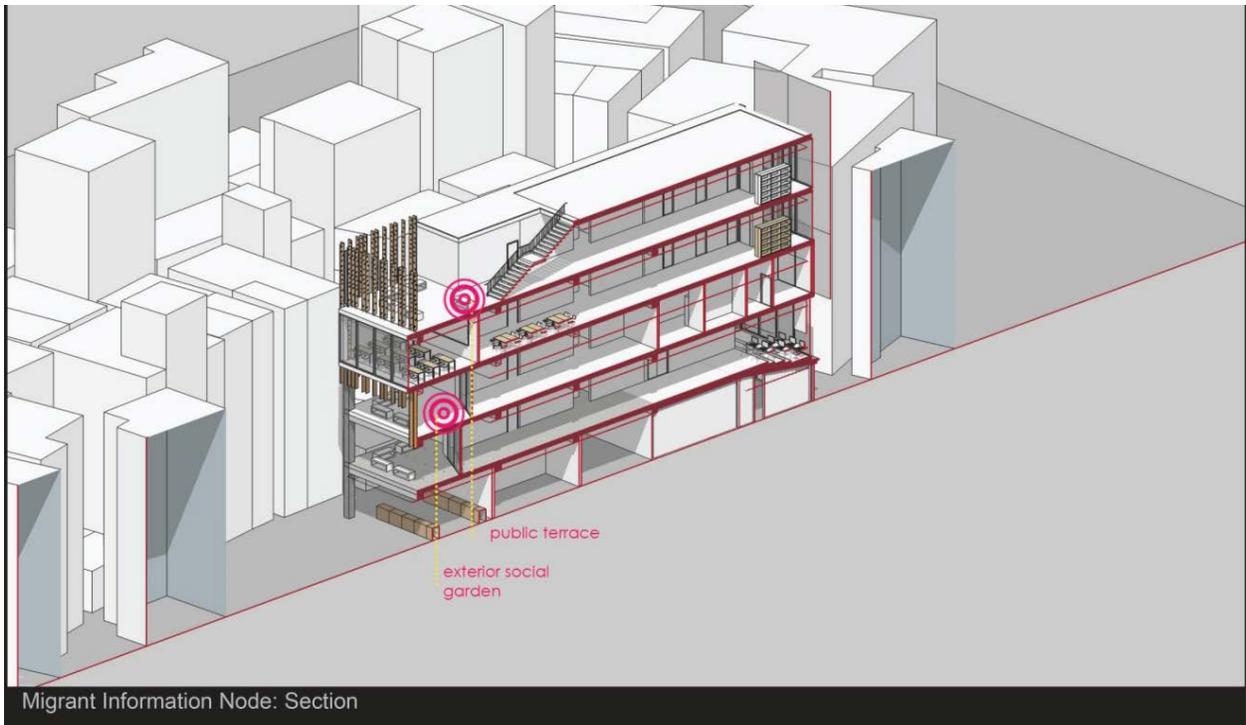


Figure 88: Migrant information node: section 3 (looking West)



Figure 89 : Migrant information node: Market View, (rendering).



Figure 90 : Migrant information node: Second floor, employment centre/ job posting bulletin with waiting area for informal discussion area, (rendering).



Figure 91 : Migrant information node: Third floor circulation space and informal discussion space. Looking into skills training classrooms, (rendering).



Figure 92 : Migrant information node: Forth floor informal group discussion area between two flights of stairs. (rendering).



Figure 93 : Migrant information node: Public roof terrace. (rendering).

## 5.7 Transitional housing node



## 5.7 Transitional housing node



Figure 94: Transitional housing node: location within Shipai Village



Figure 95: Transitional housing node: Design iteration (exterior entrance view).

The transitional housing node is located adjacent to the designated elders recreation area of Shipai urban village, an important gathering area for the host community. This translates to increased opportunities for the host community and incoming migrants to engage in interaction with each other, fostering understanding, and trust. Most importantly enabling the migrant community to have a sense of belonging at the first location in cities in which they can call home.

## Concept

The concept of the transitional housing node seeks to mitigate migrant workers' sense of isolation, disconnect, and invisibility (3 most common aspects which affect migrant's sense of belonging). Since the family unit is the basis of Chinese society and the house is the basic spatial manifestation of philosophical principles reflected across all scales of Chinese built society, the parti of the transitional housing node is a reflection of these principles. The fact that

collective Chinese fabric is based on principles reflected in spatial order across all scales, from Jian(room), to house (composed of jians), to palaces composed of houses (composed of rooms), this translates to rooms, to house of rooms, to a village of house of rooms. The notion of collective living is reflected in all scales, an important bond which maintains the Chinese social fabric. Spaces such as kitchens, dining and living are share spaces Once again this transitional housing node strives to reinforce that rather than it becoming a single building, it sees itself as part of the organism of the urban village.

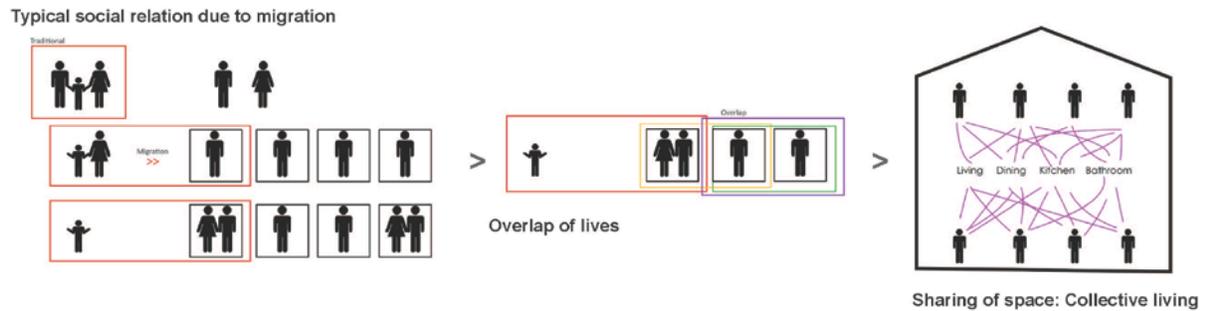


Figure 96: Transitional housing node: Creating an overlap of lives through the sharing of spaces.

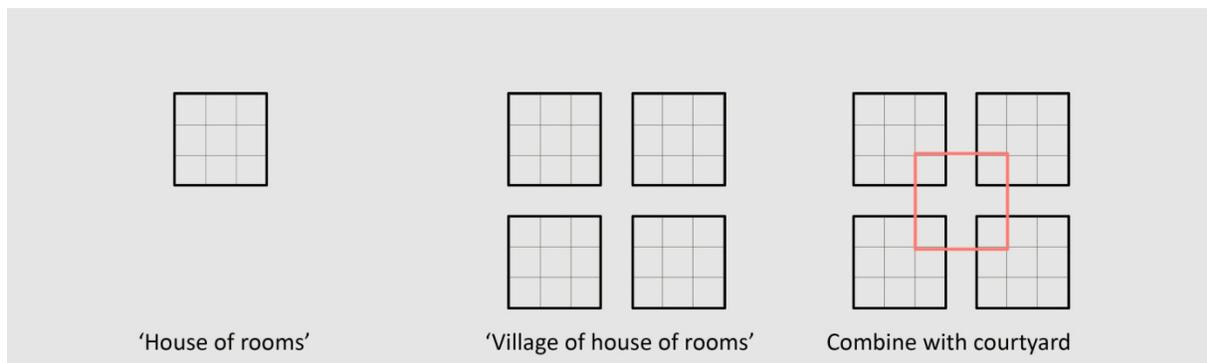


Figure 97 : Transitional housing node: Application of concept. *Village of house of rooms*

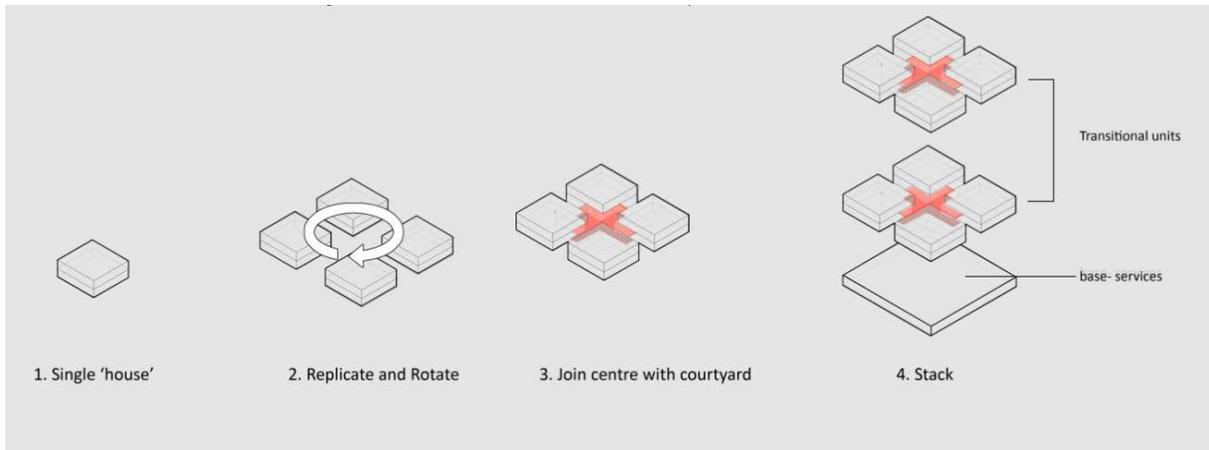


Figure 98 : Transitional housing node: Conceptual diagram.

## Program

The Transitional housing node consists of a base which hosts supporting program such as administration, clinic room, housing bulletin board, a reading room and daycare room/community room. While above the base, consists of eight 'houses' total, arranged in a four quadrants and two stacked 'houses' in each corner overlapped together in the centre with a courtyard. In order to maximize the number of rural migrants to be supported by the transitional housing and maximize their exposure to their peers, reinforce connections and combat isolation, each 'house' within the complex is

conceived as a shared house. As opposed to the current common practice of migrants renting rooms with individual but substandard washrooms and kitchen facilities within urban villages, common facilities such as kitchen, dining area and bathrooms are shared among occupants. Through the sharing of space, overlap of activities, the kitchen and dining areas regain its traditional



Figure 99: Transitional housing program

importance as a social space. Rural migrants are encouraged to interact with one another through the placement of the kitchen and dining areas. Each of these areas face the central courtyard and its adjacent 'house' thereby encouraging interaction among not only occupants within each unit but those within the other three quadrants of the housing complex. In this manner the central courtyard is a shared space for appropriation and collective living. On every other floor the central courtyard is dedicated for children's play area, complementing the family housing units on the same floors. Inside each 'house' within the housing complex is consists of 80% single occupancy rooms and 20% are rooms to accommodate families with single child (the percentage of rooms of each type is determined by rural migrant statistics).

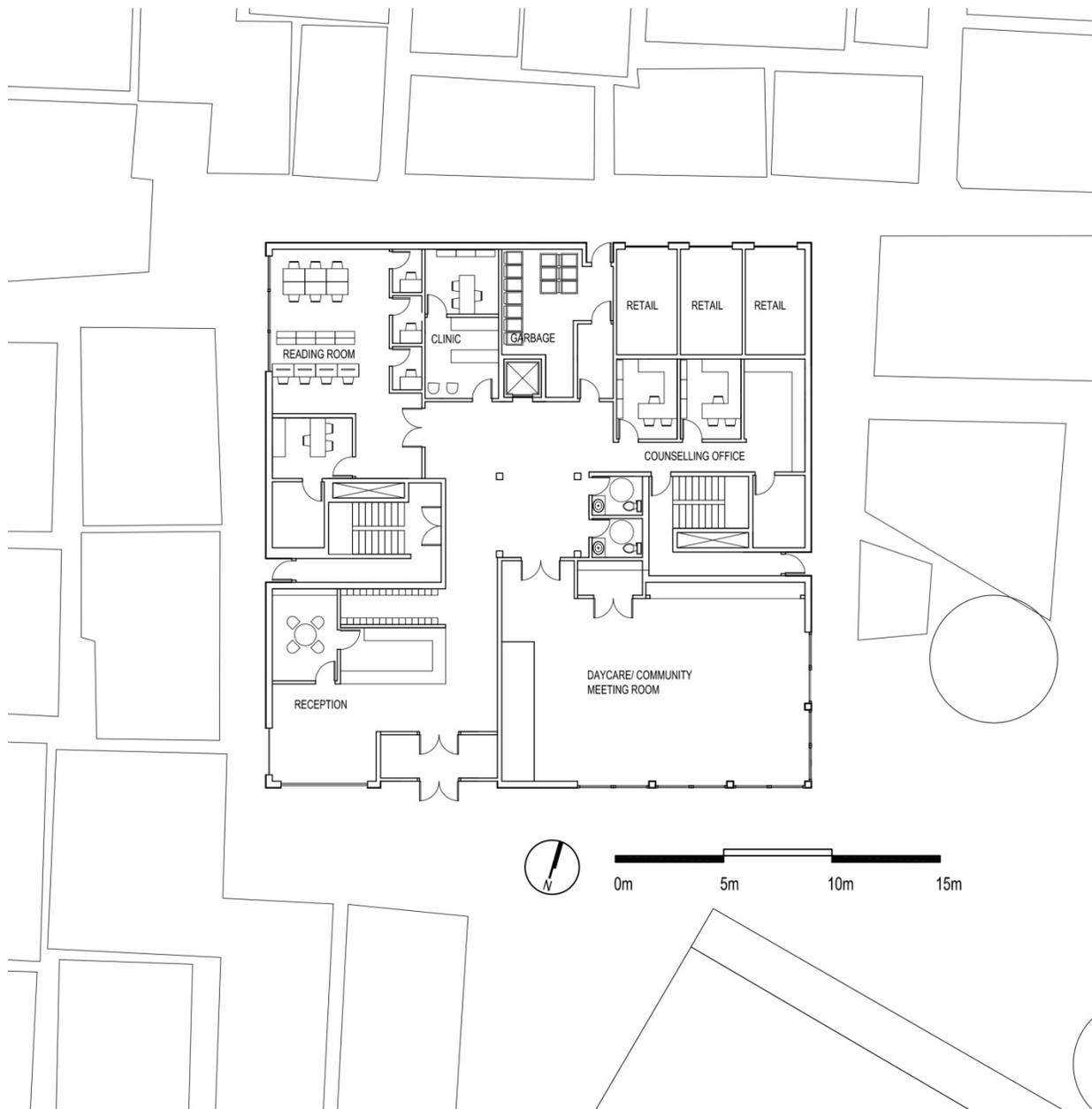


Figure 100: Transitional housing node: Ground floor plan.

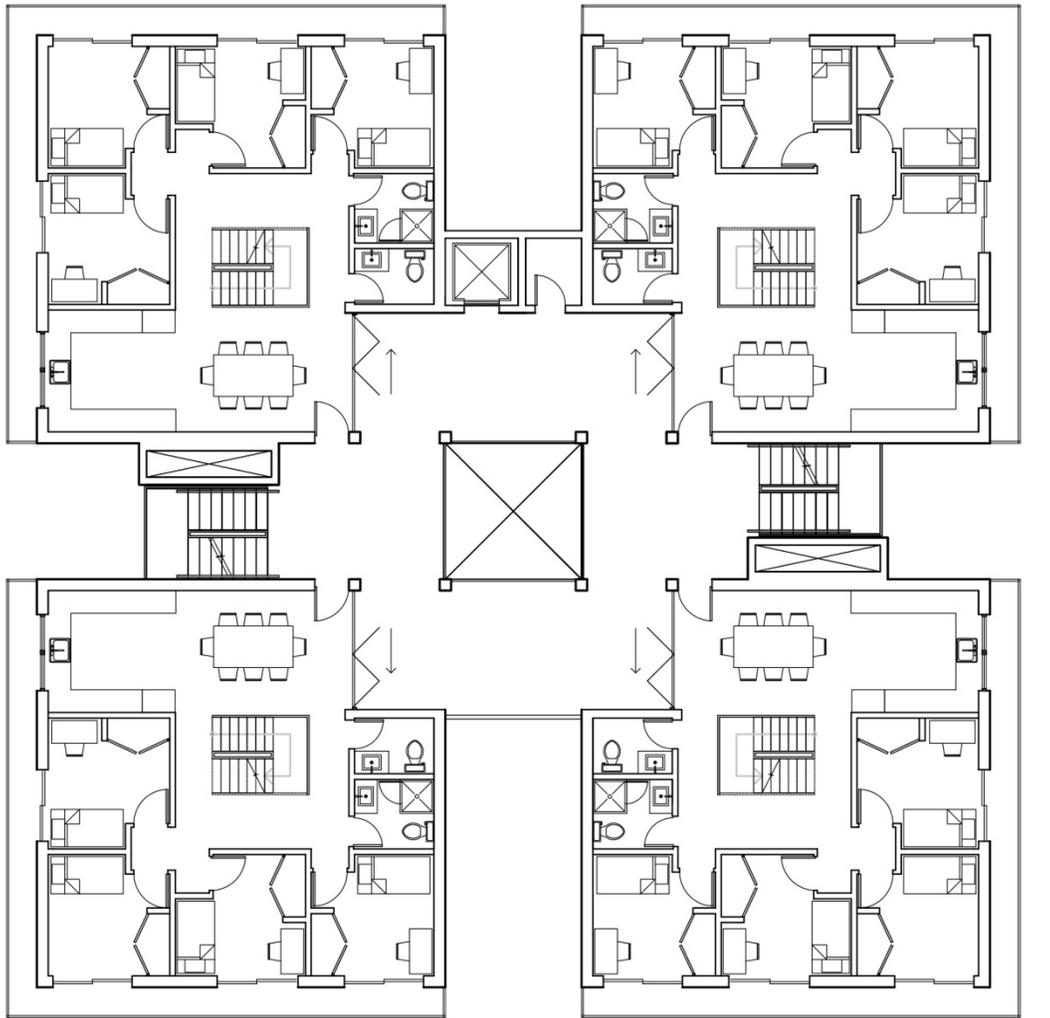


Figure 101: Transitional housing node: Typical floor plan (Second and fourth floor plan)

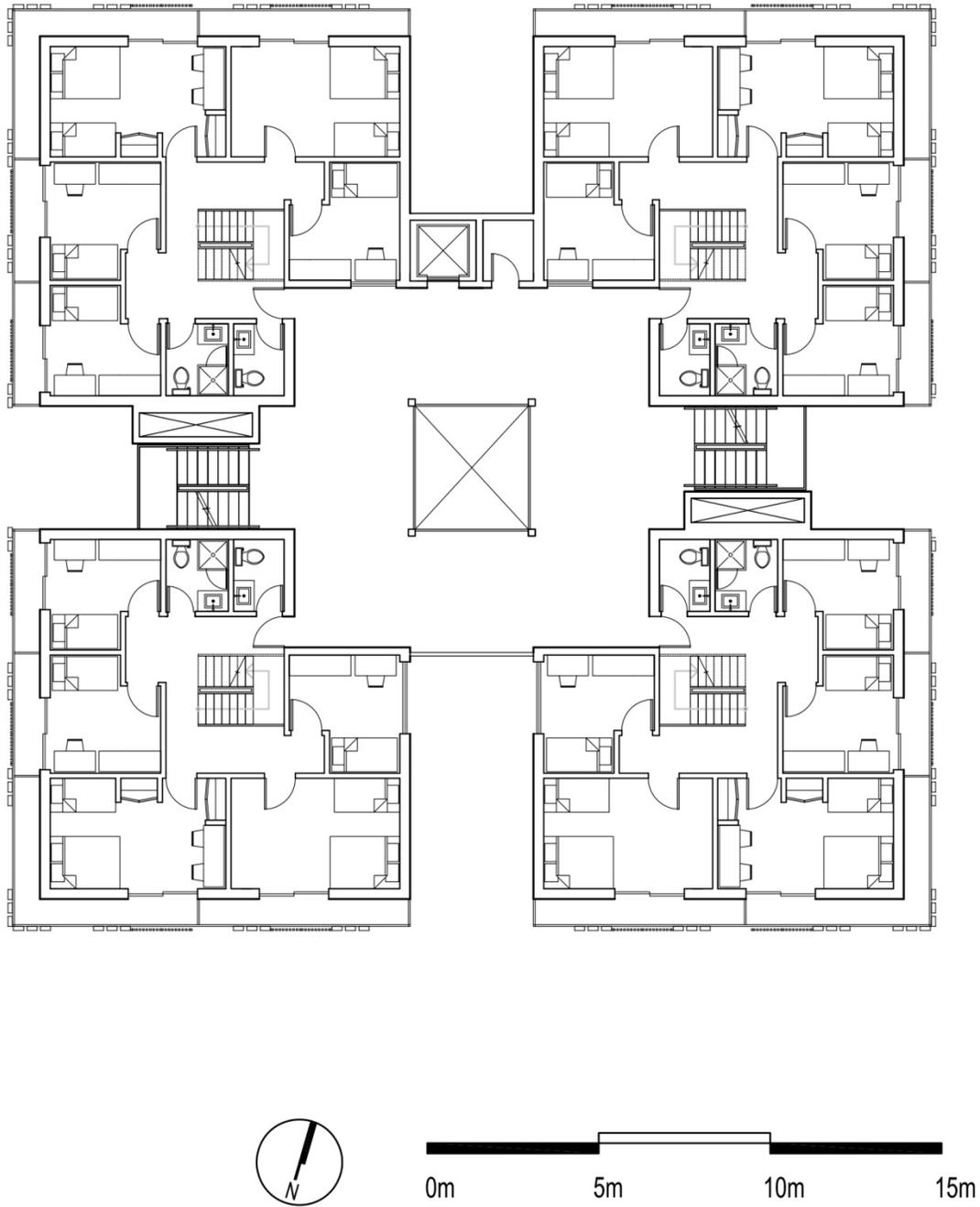
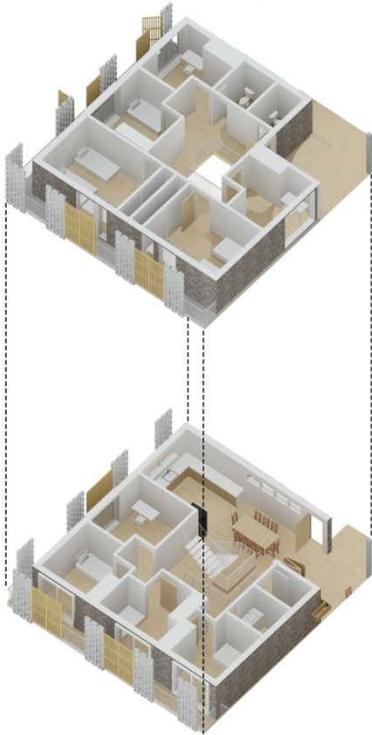


Figure 102: Transitional housing node: Typical floor plan. (Third and fifth floor plan).

Unit: house

3 person rooms (family)  
1 person rooms



shared kitchen/dining  
1 person rooms

Unit: 4 'houses' joined with stacked courtyard

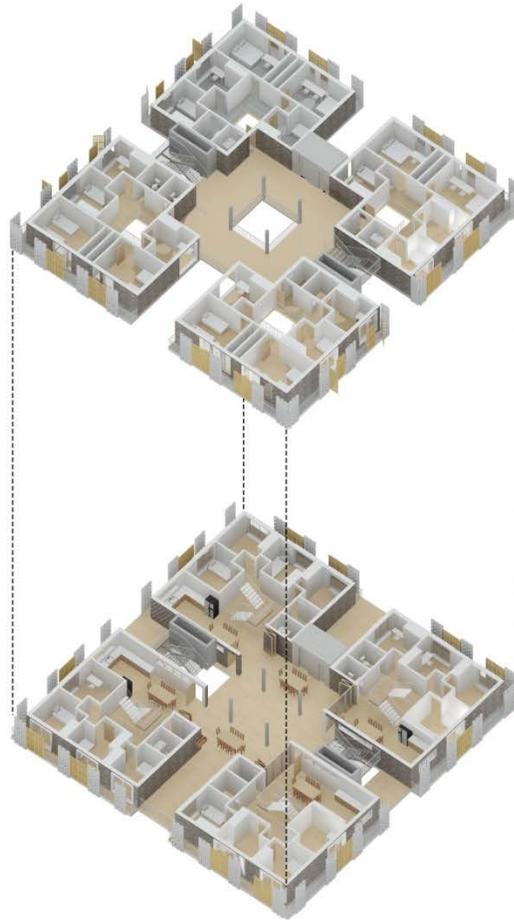


Figure 103: Transitional housing node: exploded axonometric. (programming)

Unit: Multi-level stacked houses with shared courtyard

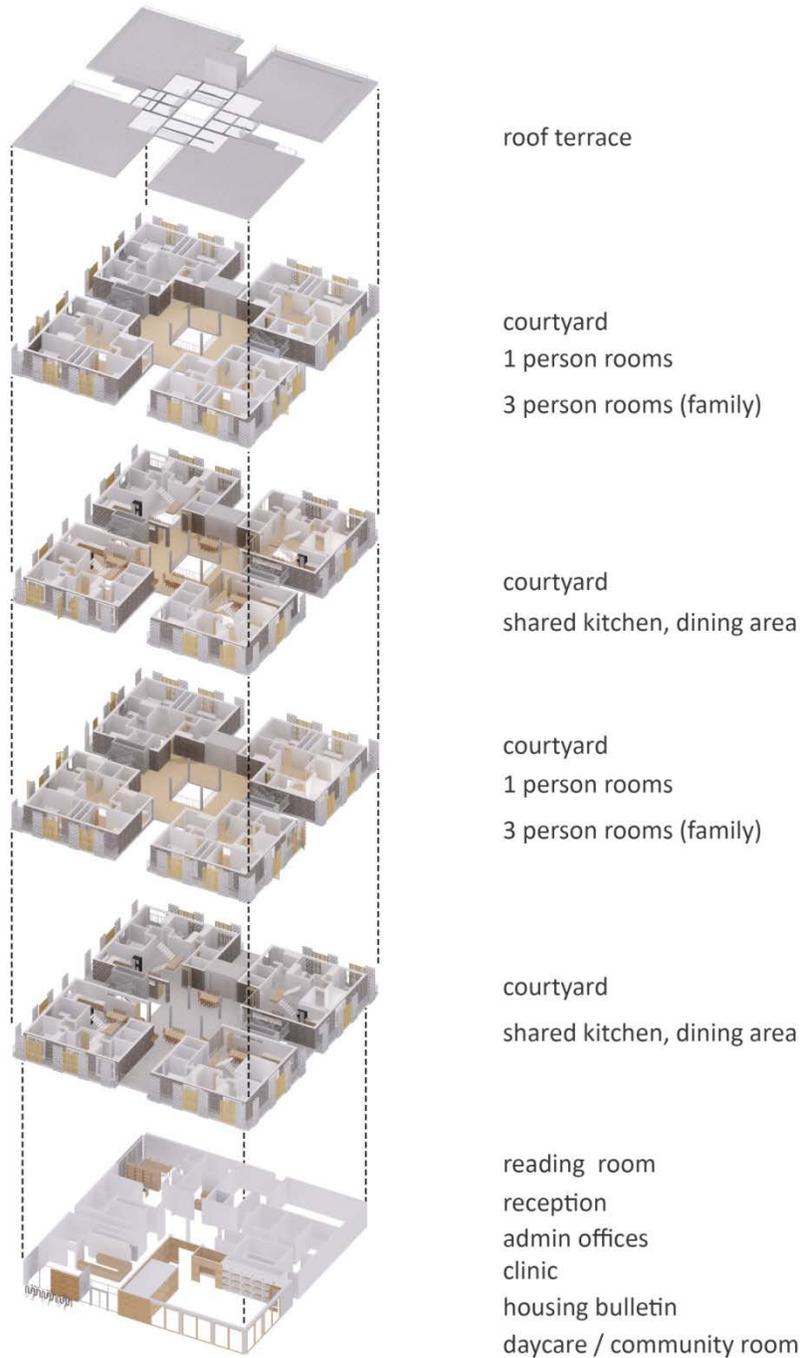


Figure 104: Transitional housing node: exploded axonometric. (programming)



Figure 105: Transitional housing node: location within Shipai Village



Figure 106 : Transitional housing node: Street level view (conceptual rendering)



Figure 107: Transitional housing node: Internal courtyard view. Dining spaces for all housing units face central courtyard to stimulate social interaction.

## Detail and Materiality

The exterior facade is conceived as a porous surface rather than a solid wall. Exterior balconies enable migrants to appropriate for different uses while maintaining a level of relationship to the street level. Inspired by Chinese screens, *Ping feng*, the technique of screening is utilized to maintain a degree of privacy for the residents of the transitional housing with residents living in buildings across the narrow streets.

Originally, ceramics was chosen as the exterior facade treatment due to its deep relationship with Chinese society. However for greater durability and lower maintenance glass reinforced concrete (GRC) was selected in place of ceramics. Glass reinforced concrete also have the flexibility of being moulded in any shape or pattern. As a result the exterior facade employs the use of GRC precast panels in the pattern of interlocking squares, a design derived from the

marriage between design parti and reinterpretation of Chinese screens. The concept of the architecture is to create connections for people to other people, activities and knowledge. Through an understanding of theoretical concepts such as the production of space and the right to the city, the Chinese family unit as the basic unit of society, which provided insight as to how to create connections, translated to the notion of sharing of space for a multitude of different uses, and thus an 'overlapping of lives'. The exterior facade is expressed as a series of interconnected squares, similar the image of the 'endless knot' an auspicious symbol in Chinese culture.

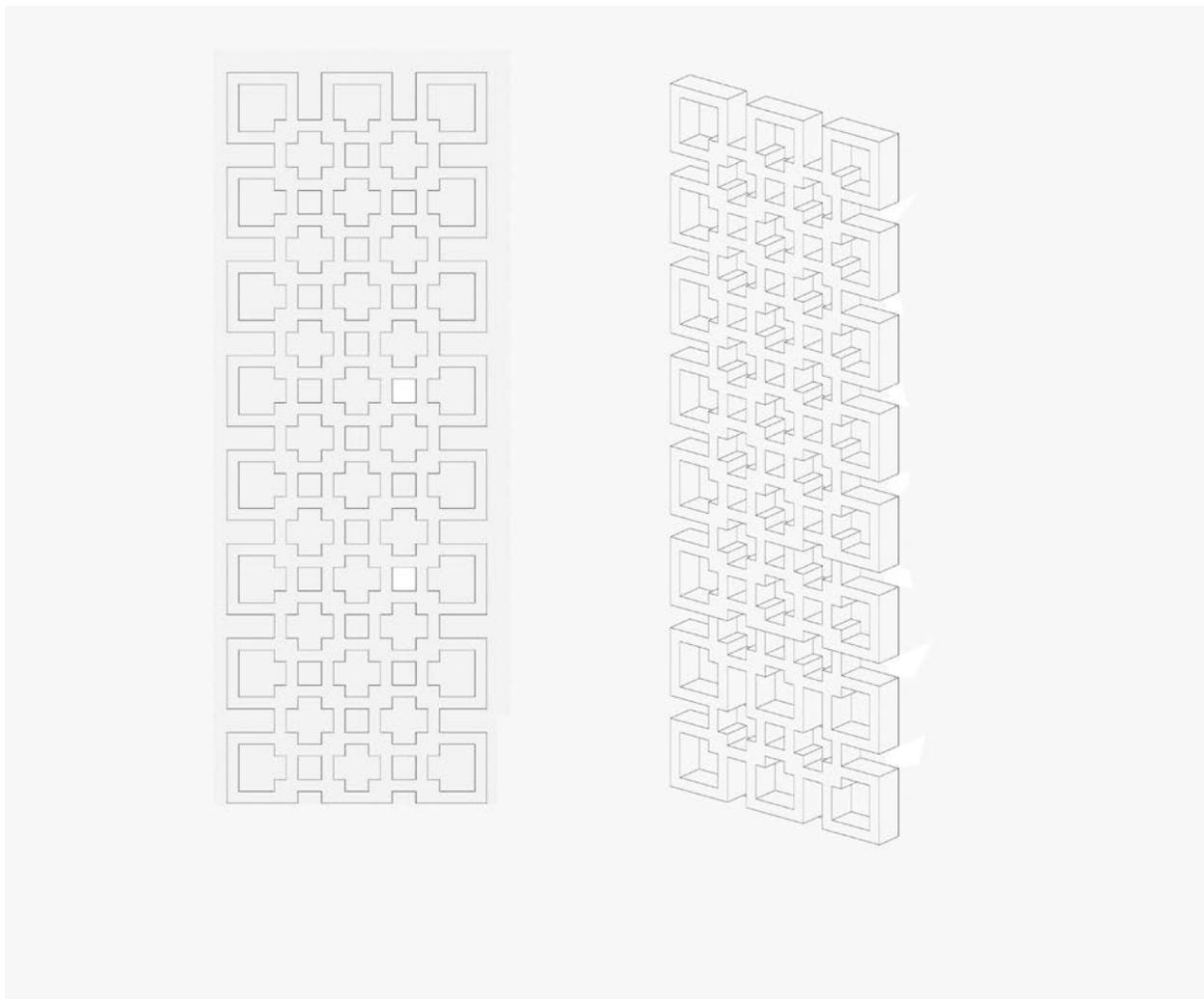


Figure 108: precast GRC panels -overlapping square lattice (Author, 2014).

Furthermore, bamboo is used once again for reasons discussed earlier, creating a continuity between material palette of migrant information node and transitional housing node. The wall cladding makes use of wood rain screen which is reminiscent of overlapping terracotta roof tiles of traditional rural Chinese architecture. Together with the architecture these materials create a recognizable place which differs from its surroundings but also at the same time provide a sense of familiarity to its residents.

## 5.8 Recreation node



## 5.8 Recreation node



Figure 109: Recreation Node: Site location within urban village (Author, 2014).

## Concept

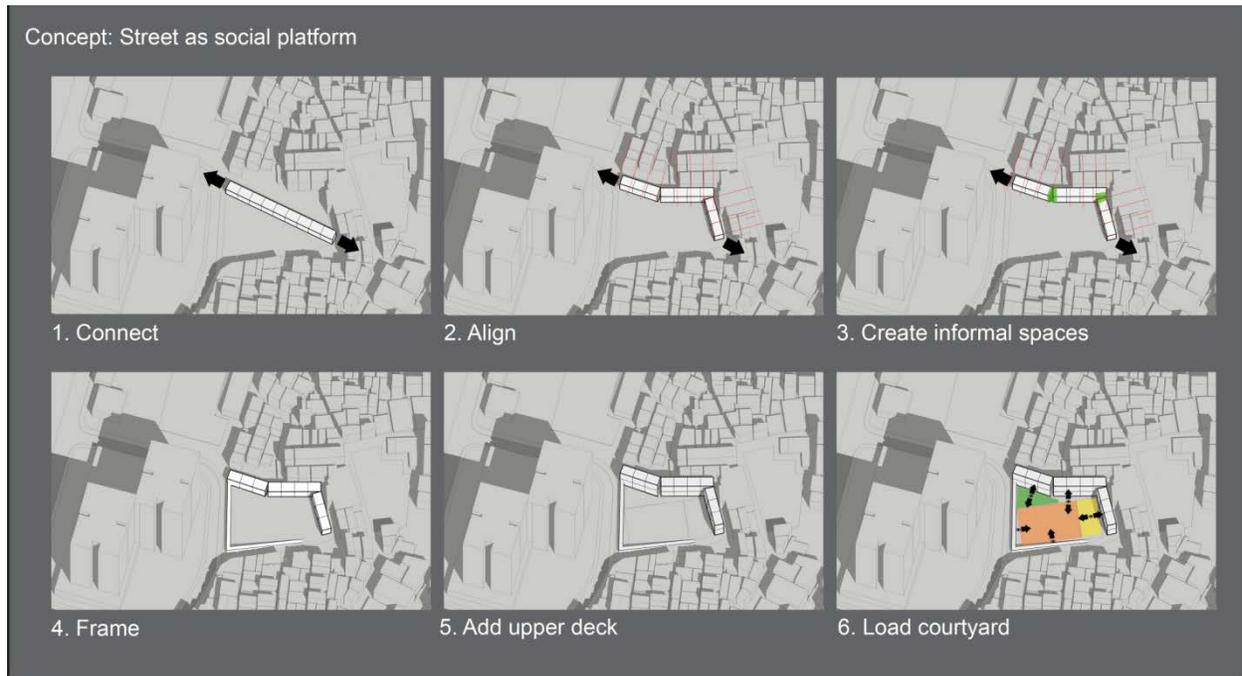


Figure 110: Recreation Node: Design process. (Author, 2014).

The concept of the recreation node is based on the vitality of the street as places of encounter, the rhizome of the urban villages. The uniqueness of this site lies in its position in-between two retail clusters and two manmade ponds on the East and West sides. It is also at the edge of the urban village and the 'urban' Chinese fabric. It is a site of transition, an in-between condition, a place of connection. These site qualities have the potential to create a spatial experience through the site. Firstly the design once again utilize the grid system to aid in the process of design, arrangement of programmatic elements. However this time, rather than following a regular grid orientated in one direction, a series of grids which follow that of the surrounding context is utilized instead. The ambition is to create a street-like space, twisting and turning along the different grids. The program is then arranged similar to a string of beads, forming a street which runs through the site and connecting to existing adjacent retail clusters. At the intersection points of different grids informal play spaces are

created to stimulate encounter. This approach echoes the layout of buildings within the fabric of the urban villages, organic growth yet ordered to some extent.

## Program

At the ground level of the proposed spine or 'street' consists of support spaces for recreational programming, a street market and space for appropriation. An accessible ramp also serving as a viewing platform outlines the south and western edge of the site. This platform enables participants on site to always in visual contact with the spaces of activities. Next the basketball court, a main space, of physical activity demonstrating teamwork, co-operation, bonding and fair play, is placed in the 'courtyard' or centre of the site. Along with

the basketball court are the vegetated plaza and hard surface plaza, each with different characteristics provides space for Three tennis court pavilions overlooking the basketball court are distributed along the upper deck of the created street. Between each tennis court pavilion, are space for appropriation, shared spaces which allow for spontaneous activities to arise. All activity spaces are formulated to have a visual and social relation to each other, thus reinforcing a sense of belonging and the becoming of a space into a place. Programmatically this node consists of two main elements, recreational space for team sports, an informal market and spaces for people to appropriate.



### Recreation node

- Basketball court
- Badminton courts
- Ping pong tables
- Informal play spaces

### Market

- Hard surface plaza
- Vegetated plaza
- Seating areas
- Walkways
- Administration/security
- Change rooms
- Washrooms

Figure 111: Recreation node program

## Detail and Materiality

The tennis court pavilions are constructed with a metal mesh screen. Inspired by Chinese landscape paintings, the backside of the tennis court is composed of perforated metal screens with a pattern reminiscent of rural Chinese mountain landscapes. This chosen natural imagery is selected as a backdrop, commonality in which people can relate to, for social interaction among rural migrants, urban villagers, and 'urban' Chinese dwellers from the surrounding neighbourhood. Whereas patterned screen facades are constructed with ceramic or wood, perforated metal was selected for its durability, lightness and transparency qualities related to its recreational programming. Wood and bamboo in used in the construction of the upper deck seek to reinforce senses to a natural environment.

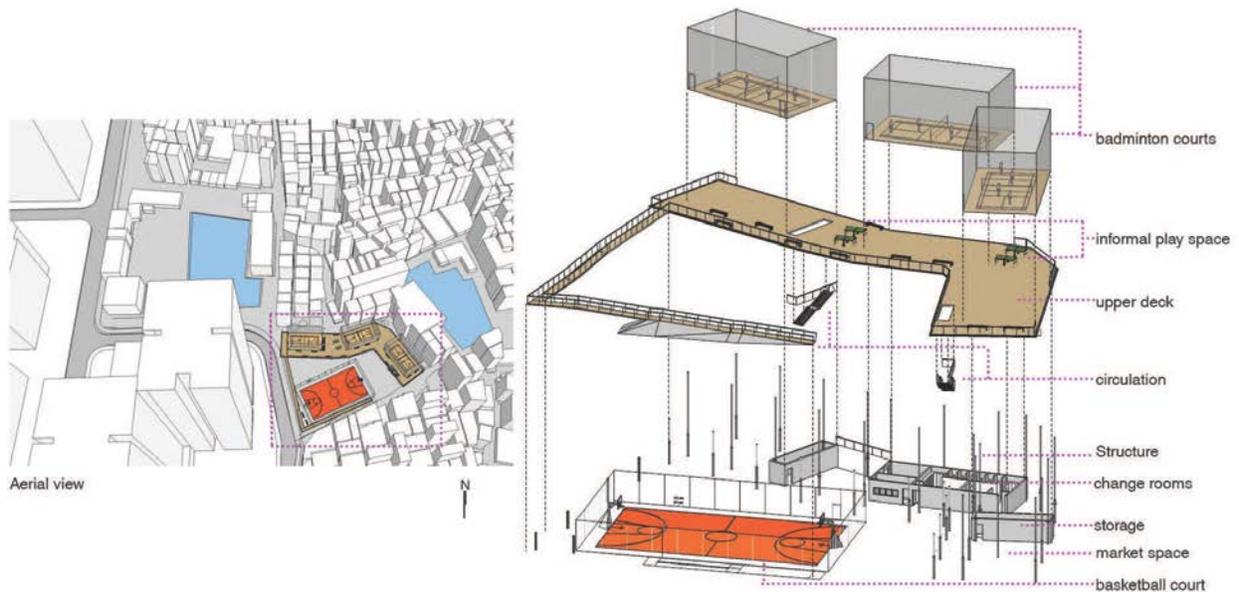


Figure 112: Recreation Node: Exploded axonometric. (programming). (Author, 2014).

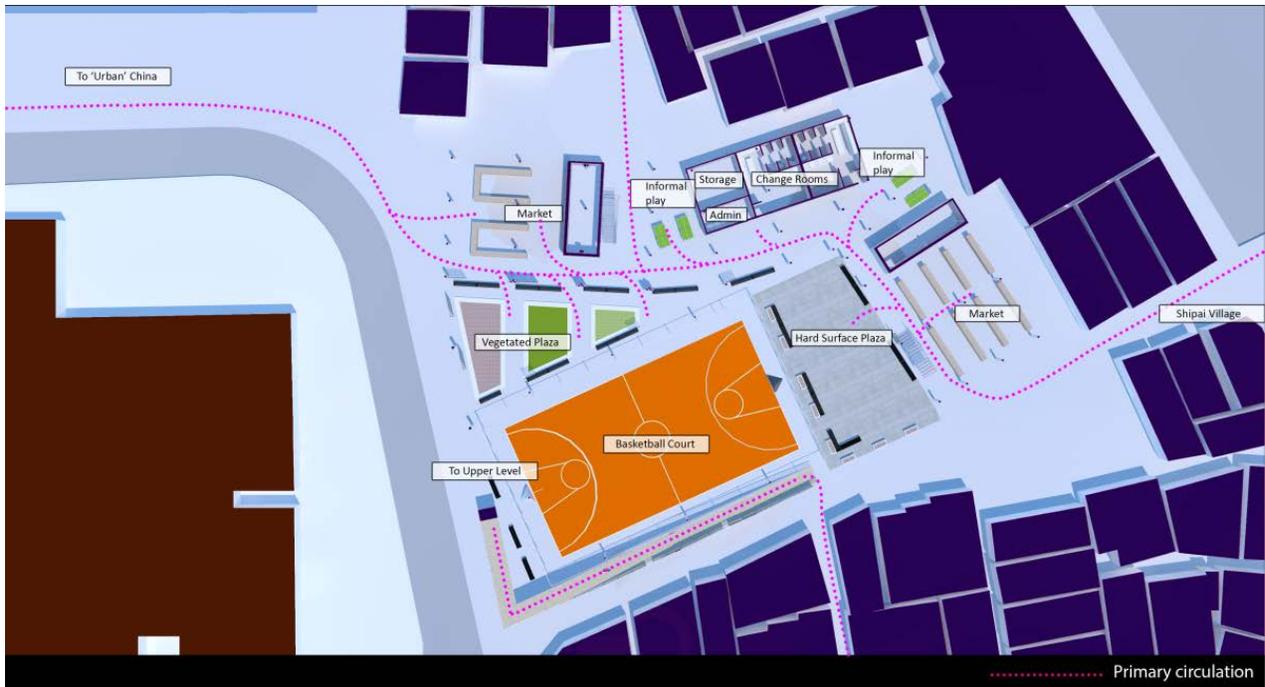


Figure 113: Recreation Node: Ground floor - primary circulation (Author, 2014).



Figure 114: Recreation Node: Upper deck - primary circulation (Author, 2014).

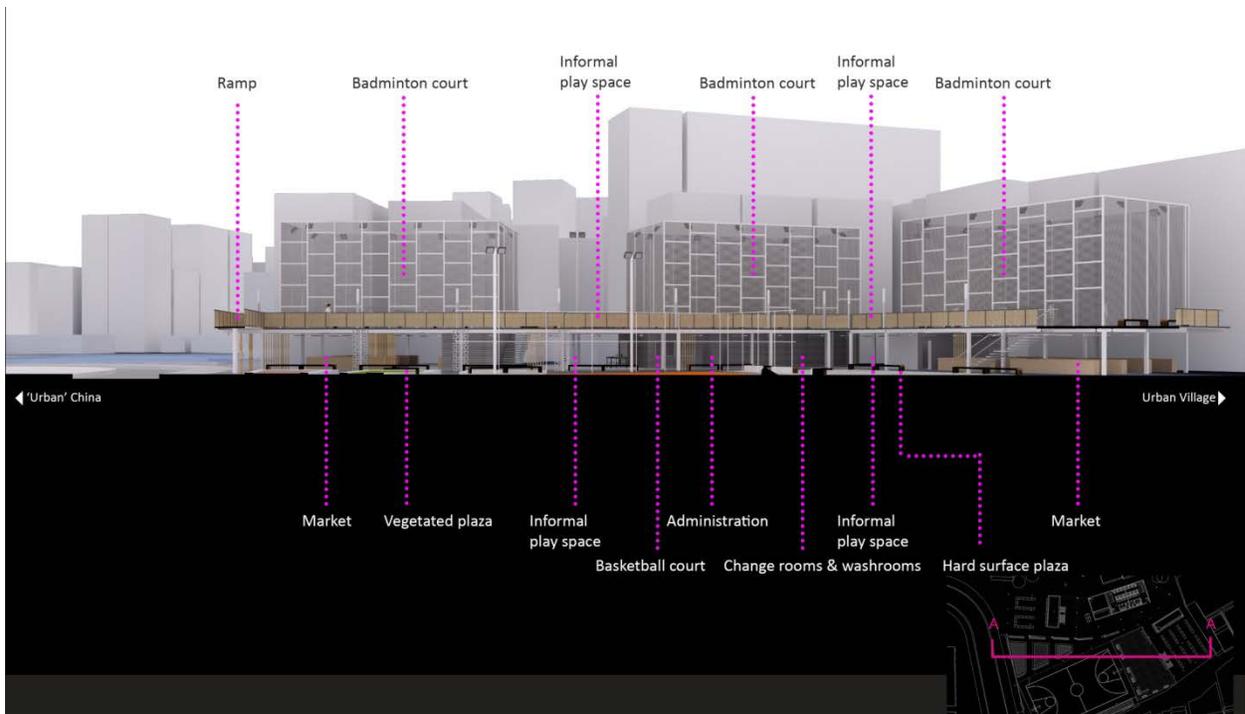


Figure 115: Recreation Node: Section A-A (Author, 2014).

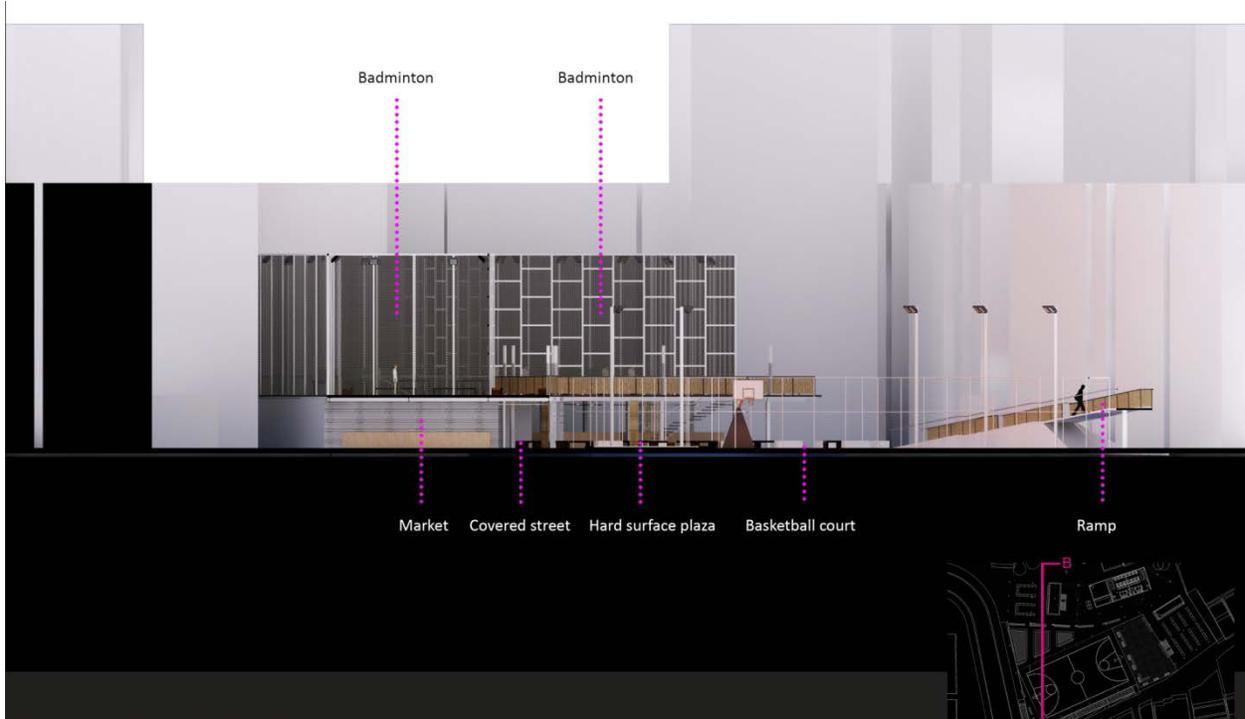


Figure 116: Recreation Node: Section B-B (Author, 2014).



Figure 117: Recreation Node: Ground level street market and appropriated spaces. (rendering). (Author, 2014).



Figure 118: Recreation node: Vegetated garden framed by surrounding activities. Relationship between players and spectators (rendering). (Author, 2014).



Figure 119: Recreation Node: Hard surface plaza. Appropriated space for shared activities (rendering). (Author, 2014).



Figure 120: Recreation Node: Night time view onto site(rendering). (Author, 2014).  
At night the recreation node is lit up. The badminton courts become a series of lanterns.

## 5.9 Expression of nodes

The expression of the lantern is common throughout the three supporting nodes. This takes on the analogy of 'lighting the way' for rural migrants, a form of guidance and support as they journey to cities in search of both a better place and at the same time discovery about themselves to reach their potential. It is hoped that through this framework of support it can serve as a helper for rural migrants to form connections to services and other people to aid their transition to cities.



Figure 121: Proposed network of supporting platforms within urban village: Expression as lanterns 'lighting the way' for migrants (rendering) (Author, 2014).

## 6.1 Suggestions for China

China's speed of development is unprecedented, lifting millions from poverty and creating an increasingly middle class. However, in the process of rapid urbanization with a focus on economic priorities, the human value is often neglected. In every journey, successful transition towards a set of goals require support, a framework to form the connection and bridge between present and future, who we are and what we hope to achieve into who we wish to become and what we want accomplished. At its core, Chinese culture has a strong emphasis on collective living and mutual support. I believe building on these core values can support not only the creation of a strong nation but the development of individual aspirations as well. As a centrally governed nation, the country needs to have support platforms across all scales to form a comprehensive networked framework to aid migrant workers. Present within the urban villages across China are not only ancient neighbourhoods which have thrived for centuries but also the human value of rural migrants who await to fulfill their potential. In this manner, urban villages are diamonds in the rough, their latent potential is present but requires support to reveal their true shine. By creating a series of support platforms in urban villages, this not only provides support locally but regionally and nationally as well. Implemented across different urban villages within different cities in the nation, this framework of support forms a network, allowing information and resources to be shared. Overall this strategy sees itself as an integral part of the society just as the family unit is the basic unit of society. Migrant worker's dreams could only be achieved with the proper support. This support would most likely be assisted financially by the Chinese government as the newtype urbanization plan (2014-2020) pledges support to migrant workers. In addition, including partnerships with local employers as a part of this strategy provides quality workforce trained to meet the needs of industries while providing skills training to migrants to increase their

self-confidence and competitiveness. Clearly, successful transition for rural migrant workers require support from these three sources: the individual, government, and employers.

While we have yet to see the results of the new urbanization plan, I believe the political leadership's shift towards human centred and quality urbanization is a step in the correct path. Rather than striving for rapid urbanization to prove itself as an equal to developed nations, China should focus on creating quality environment which support the well being of its inhabitants. Only then would we have truly realized the collective *Chinese dream*.

## 6.2 Reflections

Architecture excites us, fascinates us, supports us, and nurtures our dreams and aspirations. I believe architecture has the power and responsibility of creating meaningful environments for its inhabitants. Architecture, the design of the physical environment comes into intersections with many different aspects from social, economic to political. It is also because of this that space can be interpreted in many different directions. Architecture is the physical manifestation of human intent. Therefore, the built environment is an extension of people. As Henri Lefebvre stated, space is beyond the physical dimension. Space is never just space in the physical sense, nor should it ever be. Humans are sensitive to place and environment. The social aspect of architecture cannot be neglected for our existence is intimately tied to *dwelling*, and our surrounding environment. Architecture supports human relationship. Without consideration for the human factor, its intent and values, architecture would not exist and design would be reduced to creating mere boxes as shelter. Through my journey of this thesis project I have come to the realization that I am

concerned with creating architecture which addresses the social aspect between people and to support their desires. In this age, saturated with media, the digital and an emphasis on the visual, it is easy to lose sight of what is truly important. However, I believe we can return to addressing people's needs on the basis of our existence towards actualization. Using architecture as the medium, we can support the greatest capacity to potentially change to our lives. Therefore, I am interested in a sort of architecture which brings meaning to people's lives, rather than merely the creation of extravagant visually pleasing shells. Good architecture should be evaluated on the basis of its value to the people it is in service of. It is my wish that in the coming years, through experience and learning to acquire greater knowledge that I would be able to unleash my potential at full capacity in the service of creating meaningful places.

## A1. Bibliography

Block, P. (2009). *Community: The structure of belonging* (1st ed. ed.). San Francisco: Berrett-Koehler Publishers.

Benson, J., Webber, M., Zhu, Y. (2010). *The Everyday Impact of Economic Reform in China: Management change, enterprise performance and daily life*. New York: Routledge

Bronner, U., Reikersdorfer, C. (2012, May 14-16). Urban Nomads. Building Shanghai: Migrant workers and the construction process. In P., Elisei, P., Popovich, V., Schrenk, M., Zeile, P. *Re-mixing the city: Towards sustainability and resilience?*. Paper presented at Real Corp 2012, 17th international conference on urban planning, regional development and information society. Multiversum Schwechat, Austria. p997-1004. Schwechat: CORP.

Cai, J. (2013, Oct, 27). Zhang Liyong, The Migrant Worker who Studied Hard to Become a Chinese Star. *South China Morning Post*. Retrieved from: <http://www.scmp.com/news/china/article/1340797/zhang-liyong-migrant-worker-who-studied-hard-become-chinese-star>

Campbell, J. (1968). *The hero with a thousand faces* (2nd ed. ed.). Princeton, N.J.: Princeton University Press.

Campbell, J. (1991). In Moyers B. D., Flowers B. S. (Eds.), *The power of myth* (1st Anchor Books ed. ed.). New York: Anchor Books.

Castello, L. (2010). *Rethinking the Meaning of Place: Conceiving Place in Architecture-Urbanism*. Farnham: Ashgate.

Chan, K. W. (2010). The Household registration System and Migrant Labour in China: Notes on a Debate. *Population and Development Review*, 36(2), p357-364.

Chang, L. T. (2008). *Factory girls: From village to city in a changing china* (1st ed. ed.). New York: Spiegel & Grau.

Chang, L.T. (2012, June). *The Voices of China's Workers*. TED Talk. Retrieved from [http://www.ted.com/talks/leslie\\_t\\_chang\\_the\\_voices\\_of\\_china\\_s\\_workers](http://www.ted.com/talks/leslie_t_chang_the_voices_of_china_s_workers)

China Labour Bulletin, (2013, Jun 27). Migrant workers and their children. Retrieved from <http://www.clb.org.hk/en/content/migrant-workers-and-their-children>

China Daily. (2014, Mar 21). Migrant workers to share public housing. China Daily. Retrieved from [http://www.chinadaily.com.cn/china/2014npcandcppcc/2014-03/11/content\\_17340058.htm](http://www.chinadaily.com.cn/china/2014npcandcppcc/2014-03/11/content_17340058.htm)

Connelly, R., Roberts, K., & Zheng, Z. (2011). The settlement of rural migrants in urban china – some of china's migrants are not 'floating' anymore. *Journal of Chinese Economic and Business Studies*, 9(3), 283-300. doi:10.1080/14765284.2011.592356

China's Information and Communications Technology Revolution: Social changes and state responses. (2009). Zhang, X., Zheng, Y. (Eds). New York: Routledge.

de Certeau. (1984). *The Practice of Everyday Life*. Berkley: University of California Press.

Dan, H. (2014, Feb 21). 10m Migrants to be Trained each Year. China Daily. Retrieved from: [http://usa.chinadaily.com.cn/china/2014-02/21/content\\_17295581.htm](http://usa.chinadaily.com.cn/china/2014-02/21/content_17295581.htm)

Day, Christopher. (2002). *Spirit & Place*. Oxford: Architectural Press

Drifting: Architecture and migrancy (2004). In Cairns S. (Ed.), . New York: Routledge.

Du, H., Li, S. (2010). Migrants, Urban villages and community sentiments: a case of Guangzhou, China. *Asian Geographer* 27(1-2)

Dubrau, C. (2010). In Schmid A. S. (Ed.), *Contemporary architecture in china: Buildings and projects 2000-2020* (1st. ed. ed.). Berlin: DOM publishers.

Dwelling, place and environment: Towards a phenomenology of person and world (1985). In Mugerauer R., Seamon D. (Eds.), . Boston: M. Nijhoff Publishers ; | aDordrecht Netherlands.

Encyclopaedia of Vernacular Architecture of the World. Vol 2. (1997). Oliver, P (ed). New York: Cambridge University Press.

*Factory Towns of South China: An Illustrated Guidebook*,(2012). Ai, Stefan (Ed.). Hong Kong: Hong Kong University Press.

Fan, C. C. (2008). *China on the move: Migration, the state, and the household*. New York: Routledge.

Fan, C., Wang, W. W. (2013, May 15). Migrant Workers Integration in Urban China: Experiences in Employment, Social Adaptation, and Self-identity. In *Eurasian Geography and Economics*. (53: 6). Retrieved from <https://www.chinadialogue.net/article/show/single/en/6426-Chinese-migrants-struggle-to-find-urban-dream>

Findley, L. (2005). *Building Change: Architecture, Politics and Cultural Agency*. New York: Routledge.

Freedman, M. (1979). In Skinner G. W. (Ed.), *The study of Chinese society: Essays*. Stanford, Calif.: Stanford University Press.

Friedman, J. (2005). *China's Urban Transition*. Minneapolis: University of Minnesota Press.

Friedman, T. (2012, Oct 12). *China Needs its Own Dream*. The New York Times. Retrieved from <http://www.nytimes.com/2012/10/03/opinion/friedman-china-needs-its-own-dream.html>

Giedion, S. (1971). *Architecture and the phenomena of transition: The three space conceptions in architecture*. Cambridge, Mass.: Harvard University Press.

Giulietti, C., Ning, G., & Zimmermann, K. F. (2012). Self-employment of rural-to-urban migrants in china. *International Journal of Manpower*, 33(1), 96-117. doi:10.1108/01437721211212547

Gransow, B. (2010, Nov 5). *Slum Formation or Urban Innovation? Migrant Communities and Social Change in Chinese Megacities*. Retrieved from [http://www.ourcommonfuture.de/fileadmin/user\\_upload/dateien/Reden/gransow\\_paper.pdf](http://www.ourcommonfuture.de/fileadmin/user_upload/dateien/Reden/gransow_paper.pdf)

Gui, Y., Berry, J. W., & Zheng, Y. (2012). Migrant worker acculturation in china Elsevier.  
doi:10.1016/j.ijintrel.2011.11.007

Habitus: A sense of place (2002). In Hillier J., Rooksby E. (Eds.), . Burlington, VT: Ashgate.

House, home, family: Living and being Chinese (2005). In Knapp R. G., Lo K. and China Institute in America. (Eds.), . Honolulu: University of Hawaii Press ; New York : China Institute in America.

Heidegger, M. (1971) Building Dwelling Thinking. In Heidegger, M., Poetry, Language, Thought. New York: Harper Colophon Books.

Hu, Xiao. (2008). Boundaries and openings: spatial strategies in the Chinese dwelling. *J Hous and the Built environment*. 23:353-366

Johnson, I. (2013, Jun 15). China's Great Uprooting: Moving 250 Million into Cities. *New York Times*. Retrieved from [http://www.nytimes.com/2013/06/16/world/asia/chinas-great-uprooting-moving-250-million-into-cities.html?pagewanted=all&\\_r=0](http://www.nytimes.com/2013/06/16/world/asia/chinas-great-uprooting-moving-250-million-into-cities.html?pagewanted=all&_r=0)

Jones, C. (2008, Oct 30). Technological innovation may have driven first migration Retrieved from <http://www.nature.com/news/2008/081030/full/news.2008.1196.html>

Jung, C. G. (1964 (1979 printing)). *Man and his symbols*. London: Aldus Books.

Knapp, R.G., (1989). *China's vernacular architecture: house, form and culture*. Honolulu: University of Hawaii Press.

Lefas, P. (2009). *Dwelling and architecture: From Heidegger to Koolhaas*. Berlin: JovisVerlagGmbH.

Li, Weisen. (2006). *Chinese Culture Customs* [RTF document]. Fudan University. Retrieved from: [people.wku.edu/haiwang.yuan/China/docs/chinesecultureandcustoms.rtf](http://people.wku.edu/haiwang.yuan/China/docs/chinesecultureandcustoms.rtf)

Lin, L. (2013, Oct 18). *Chinese migrants struggle to find urban dream*. Retrieved from <https://www.chinadialogue.net/article/show/single/en/6426-Chinese-migrants-struggle-to-find-urban-dream>

Lin, Y., & De Meulder, B., Wang, S. (2011, Dec). Understanding the 'Village in the City' in Guangzhou: Economic Integration and Development Issue and their Implications for the Urban Migrant. *Urban Studies*, 48(16), 3583-3598.

Lin, Y., & De Meulder, B. (2011). The role of key stakeholders in the bottom-up planning processes of Guangzhou, china. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*, 4(2), 175-190. doi:10.1080/17549175.2011.596267

Lin, Y., De Meulder, B., & Wang, S. (2012). The interplay of state, market and society in the socio-spatial transformation of "villages in the city" in Guangzhou. *Environment & Urbanization*, 24(1), 325-343.

Lin, Y. (1935). *My Country and my People*. New York: The Halcyon House.

Liotta, E. (2009). *On soul and earth: The psychic value of place*. New York: Routledge.

Lung, D. (1978). *Heaven Earth and Man: Concepts and Processes of Chinese Architecture and City and Planning*. Eugene, Oregon: University of Oregon.

Lu, Y., Ruzica, B.S. (2004, Nov). The Spatial concept of Chinese architecture. *Builtspaces. The cultural shaping of architectural and urban spaces*, 9,(1). Retrieved from [http://www.cloud-cuckoo.net/openarchive/wolke/eng/Subjects/041/Yi\\_Bozovic/yi\\_bozovic.htm#\\_ftnref13](http://www.cloud-cuckoo.net/openarchive/wolke/eng/Subjects/041/Yi_Bozovic/yi_bozovic.htm#_ftnref13)

Living in motion: Design and architecture for flexible dwelling (2002). In Schwartz-Clauss M., Vegesack A. v. and Vitra Design Museum. (Eds.), . Weil am Rhein: Vitra Design Museum.

Maki, F. (2008). *Nurturing Dreams: Collected essays on architecture and the city*. Cambridge: MIT Press.

Maltzan, M. (2005). *Michael Maltzan: Alternative Ground*. Pennsylvania: Carnegie Museum of Art.

Marginalization in urban china: Comparative perspectives (2010). In Wu F., Webster C. J. (Eds.), . New York: Palgrave Macmillan.

Maslow, A. (1954). Motivation and personality. New York, NY: Harper.

Meng, X. (2004). Labour market reform in China. Cambridge: Cambridge University Press.

Morley, D. (2000). Home Territories: Media, Mobility and Identity. New York: Routledge.

National Geographic. (2014). The Human Journey: Migration Routes.

Retrieved from: <https://genographic.nationalgeographic.com/human-journey/>

New Routes for Diaspora Studies. (2012). In Banerlee, S., McGuiness, A., McKay, S. C. (Eds), . Indianapolis: Indiana University Press.

Ngo, Jennifer. (2014, Mar 17). The Wages of Fear: How Mainland's Migrant Workers are Exploited. South China Morning Post. Retrieved from:

<http://www.scmp.com/news/china/article/1450123/construction-workers-pay-price-chinas-rush-development>

Norberg-Schulz, C. (1980). Genius loci: Towards a phenomenology of architecture. New York: Rizzoli.

Norberg-Schulz, C. (1971). Existence, Space and Architecture. London : Studio Vista.

Online society in China: Creating, celebrating, and instrumentalising the online carnival (2011). In Herold D. K., Marolt P. (Eds.), . New York: Routledge.

Pai, H. Scattered sand: The story of china's rural migrants (2nd edition. ed.)

Rapoport, A. (1969). House form and culture. Englewood Cliffs, N.J.: Prentice-Hall.

Ren, X. (2011). Building Globalization. Chicago: The University of Chicago Press.

Qiu, J. L. (2009). Working-class network society: communication technology, and the information have-less in urban China. Cambridge: MIT Press.

Rethinking architecture: A reader in cultural theory (1997). In Leach N. (Ed.), . New York: Routledge.

Rural Migrants in Urban China: Enclaves and Transient Urbanism. (2013). Wu. F., Zhang, F., Webster, C. (Eds). Routledge.

Sadri, H., Sadri, S. (2012 Oct 12). The Right to Appropriation: Spatial Rights and the use of space. Paper presented at [Re] Appropriation of the City: Architecture as a tool for the re-appropriation of the contemporary city. Tirana: Polis University

Sharr, A. (2007). Heidegger for architects. New York: Routledge.

Shi, Y. (2013, May 20). Seven Reasons Why the Chinese Dream is Different From the American Dream. Central Committee of the Communist Party of China. Retrieved from [http://www.qsttheory.cn/zz/zgtsshzyll/201305/t20130520\\_232259.htm](http://www.qsttheory.cn/zz/zgtsshzyll/201305/t20130520_232259.htm)

Stefko, K. (1970, Jan 23). Theology of the Earth, Smithsonian Institution, R. Dubos, Congressional Record- Senate, 942. Retrieved from: <http://abacus.bates.edu/Library/aboutladd/departments/special/ajcr/1970/Rene%20Dubos.shtml#942-70-T>

Transforming Diaspora: Communities beyond National Boundaries. (2011). Field, R. Kapadia, P. (Ed.), United Kingdom: Fairleigh Dickinson University Press.

Transportable environments: Theory, context, design, and technology : Papers from the international conference on portable architecture, London, may 1997 (1998). In Kronenburg R. (Ed.), . New York: E &FnSpon.

Uehara, Y. (2008). Unknown urbanity: Towards the village in the city. *Architectural Design*, 78(5), 52-55. doi:10.1002/ad.738

UNDP, China National Development Report 2013: Sustainable and Liveable Cities: Towards Ecological Civilization. Beijing: China Publishing Group Corporation.

Retrieved from: [http://www.cn.undp.org/content/dam/china/docs/Publications/UNDP-CH\\_2013%20NHDR\\_EN.pdf](http://www.cn.undp.org/content/dam/china/docs/Publications/UNDP-CH_2013%20NHDR_EN.pdf)

Urban china in transition (2008). In Logan J. R. (Ed.), . Oxford: Blackwell Pub. Ltd.

Wang, X. (2010). Comparison Analysis of Architectural Culture in China and Western Countries. *International Journal of Philosophy of Culture and Axiology*, vol VII, no 1,2010.

Weston, A. (2000). *A rulebook for arguments* (3rd ed. ed.). Indianapolis: Hackett Pub. Co.

Wu, F., Xu, J., & Gar-On Yeh, A. *Urban development in post-reform China*. Routledge.

Xin, Z. (2014, Mar 13). More skill training for migrant workers urged. *China Daily*. Retrieved from [http://www.chinadaily.com.cn/china/2014-03/13/content\\_17345696.htm](http://www.chinadaily.com.cn/china/2014-03/13/content_17345696.htm)

Zacharias, J., Hu, Y., Le Huang, Q. (2013). Morphology and Spatial Dynamics of Urban Villages in Guangzhou's CBD. retrieved October 8, 2013 from <http://www.hindawi.com/journals/usr/2013/958738/cta/>

Zhang, L., & Wang, G. (2010). Urban citizenship of rural migrants in reform-era china. *Citizenship Studies*, 14(2), 145-166. doi:10.1080/13621021003594809

Zhang, P. (2013, Mar 3). Migrant workers feel like outsiders in mainland cities, says survey. *South China Morning Post*. Retrieved from: <http://www.scmp.com/news/china/article/1170903/migrant-workers-feel-outsiders-mainland-cities-says-survey>

Zhang, Y. H., & Rose, K. (2001). *A Brief History of Qi*. Taos, NM: Paradigm Publications. 2010.

Zhu, J. (1999). *The transition of china's urban development: From plan- controlled to market-led*. Westport, Conn.: Praeger.

## References: Images

Figure 1:

National Geographic. (2014). The human journey migration routes. [online image]  
Retrieved February, 20, 2014 from <https://genographic.nationalgeographic.com/human-journey/>

Figure 4:

Jin, J., (2013). Li Rui scavenged his former village for building materials. [online image]  
Retrieved January 2, 2014 from: <http://www.nytimes.com/2013/06/16/world/asia/chinas-great-uprooting-moving-250-million-into-cities.html?pagewanted=all&r=0>

Figure 5:

Yong, S. (2009).

Figure 6: Hukou Household Register Certificate: official classification as rural or urban citizen.

Zuo, M., (2014). Hukou household registration system. [online image]  
Retrieved August 1, 2014 from <http://www.scmp.com/news/china/article/1563062/china-scrap-urban-rural-distinction-hukou-household-registration-system>

Figure 8: The Chinese Dream: Workers lay the foundation to China's future

Li, A., (2014). Beautiful Chinese Dream. [online image]  
Retrieved August 1, 2014 from <http://www.scmp.com/comment/blogs/article/1286903/using-simplified-chinese-sin?page=all>

Figure 9: Chinese President Xi Jin Ping puts forward the slogan "The Chinese Dream"

Bremmer, I, (2013, Mar 20). Xi Jin Ping Chinese Dream. [online image]  
Retrieved August 1, 2014 from <http://blogs.reuters.com/ian-bremmer/2013/03/20/xi-dreamed-a-dream-of-chinas-rise/>

Figure 10: Rural Migrants: Without a base, migrants without support to begin their new lives as they cross the threshold into the unknown.

(n.d. 2013) Migrant workers in Beijing. [online image] Retrieved August 1, 2014 from <http://www.china-mike.com/china-tourist-attractions/beijing/pics-photos2/>

Figure 11: Shipping container housing: A case of migrant workers' poor housing accommodation  
Washington Post, (2013, Mar 4). Shipping container homes. [online image]  
Retrieved January 3, 2014 from [http://www.washingtonpost.com/world/shipping-container-homes-in-shanghai/2013/03/05/dee3877e-85a5-11e2-9d71-f0feafdd1394\\_gallery.html](http://www.washingtonpost.com/world/shipping-container-homes-in-shanghai/2013/03/05/dee3877e-85a5-11e2-9d71-f0feafdd1394_gallery.html)

Figure 12: Migrant construction workers: dining together in dorm room.  
Song, A, (2013). The women of China's workforce. [online image].  
Retrieved January 3, 2014 from <http://blogs.reuters.com/photographers-blog/2013/09/16/the-women-of-chinas-workforce/>

Figure 13: Migrant workers: Invisibility, disconnect and isolation are felt by all migrant workers regardless of their occupation.  
Lohuizen, K. (2007). Migrant workers wait for buses to transport them to construction sites in Beijing. [online image]. Retrieved September 3, 2013 from  
<http://www.hrw.org/news/2009/01/23/china-economic-crisis-increases-risks-migrant-workers>

Mullin, K. (2013, Jun 10). Migrant worker. [online image]. Retrieved October 12, 2013 from  
[http://www.thestar.com/business/small\\_business/people/2013/06/10/brandnu--canadian-educated-small-business-owner-brings-social-en.html](http://www.thestar.com/business/small_business/people/2013/06/10/brandnu--canadian-educated-small-business-owner-brings-social-en.html)

Weisenthal, J. (2010, Jun 6) Foxconn Chinese factory workers. Retrieved January 3, 2014 from  
<http://www.businessinsider.com/foxconn-doubles-minimum-wage-2010-6>

Figure 15: Guangzhou master plan for building national innovation city (2011-2015).  
Author, Map based on source from *Guangzhou Master plan for building national innovation city (2011-2015)*

Guangzhou International. (2010). *Guangzhou Master plan for building national innovation city (2011-2015)*. [online image] Retrieved September 3, 2013 from  
<http://english.gz.gov.cn/publicfiles/business/htmlfiles/gzgovcn/s3711/201109/857506.html>

Figure 16: 138 Urban villages /Village in Cities (ViCs) within eight districts of Guangzhou.  
Lin, Y., & De Meulder, B., Wang, S. (2011, Dec). Understanding the 'Village in the City' in Guangzhou: Economic Integration and Development Issue and their Implications for the Urban Migrant. *Urban Studies*, 48(16), p3588

Figure 17: Overlooking a urban village in Guangzhou: Shipai Village.

Base image from: Schwarz, A. (2011, Jul 22). Guangzhou- Shipai Village. [ online image].

Retrieved October 12, 2013 from <http://www.panoramio.com/photo/56116975>

Figure 19: 'Yingzao Fashi': Standardization in Chinese architecture. (960-1127 AD)

Guo, Q. 2005. Chinese Architecture and Planning Ideas, Methods, Techniques. Stuttgart: Axel Menges.

Figure 20: Jian. the basic structural bay in Chinese architecture.

Knapp, R. G. (1989). China's Vernacular Architecture : house form and culture. Honolulu : University of Hawaii Press.

Figure 21: Traditional 3 bay Chinese house.

Knapp, R.G. (1987). A five-bay house in Zhejiang Province. [online image].

Retrieved April 2, 2014 from <http://depts.washington.edu/chinaciv/3intrhme.htm>

Figure 24: Rhizome: botanical definition

Pahl, M. (2009). Generalized fern sporophyte. [online image].

Retrieved March 11, 2014 from <http://www.britannica.com/EBchecked/topic/501483/rhizome>

Figure 27: Grotao Community Centre: site context

Designboom, (2012, Apr 4). Rendering of building onto existing site. [online image]. Retrieved Sept 12, 2013 from <http://www.designboom.com/architecture/urban-think-tank-grotao-fabrica-de-musica/>

Figure 28: Grotao Community Centre. Programmatic layout (Author, 2014)

Base image: Designboom. ( 2012, Apr 4). Urban think tank: grotao fabrica de musica. [online image]. Retrieved Sept 12, 2013 from <http://www.designboom.com/architecture/urban-think-tank-grotao-fabrica-de-musica/>

Figure 29 : Inner-City Arts: Aerial view, context.

Baan, I. (2009). Retrieved March 11, 2014 from

[http://www.bustler.net/index.php/article/michael\\_maltzans\\_inner-city\\_arts\\_campus\\_awarded\\_with\\_2009\\_rudy\\_bruner\\_award/](http://www.bustler.net/index.php/article/michael_maltzans_inner-city_arts_campus_awarded_with_2009_rudy_bruner_award/)

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Baan, I. (2009). [online image]. Retrieved March 11, 2014 from [http://www.bustler.net/index.php/article/michael\\_maltzans\\_inner-city\\_arts\\_campus\\_awarded\\_with\\_2009\\_rudy\\_bruner\\_award/](http://www.bustler.net/index.php/article/michael_maltzans_inner-city_arts_campus_awarded_with_2009_rudy_bruner_award/)

Figure 31: Inner-City Arts: Phase plan.

Maltzan, M. (n.d.). Phase plan. [online image]. Retrieved March 11, 2014 from [http://www.moma.org/interactives/exhibitions/2010/smallscalebigchange/projects/inner\\_city\\_arts](http://www.moma.org/interactives/exhibitions/2010/smallscalebigchange/projects/inner_city_arts)

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Maltzan, M. (n.d.). Phase plan. [online image]. Retrieved March 11, 2014 from [http://www.moma.org/interactives/exhibitions/2010/smallscalebigchange/projects/inner\\_city\\_arts](http://www.moma.org/interactives/exhibitions/2010/smallscalebigchange/projects/inner_city_arts)

Figure 33 : Inner-city Arts. Courtyard and in-between spaces

Baan, I. (2009). [online image]. Retrieved March 11, 2014 from [http://www.bustler.net/index.php/article/michael\\_maltzans\\_inner-city\\_arts\\_campus\\_awarded\\_with\\_2009\\_rudy\\_bruner\\_award/](http://www.bustler.net/index.php/article/michael_maltzans_inner-city_arts_campus_awarded_with_2009_rudy_bruner_award/)

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(Maltzan, M. 2013). Star Apartments. [online image]. Retrieved March 11, 2014 from <http://www.mmaltzan.com/projects/star-apartments/>

Figure 35 : Star Apartments: layers of programmatic space (Author, 2014).

Base image: (Maltzan, M. 2013). Star Apartments. [online image]. Retrieved March 11, 2014 from <http://www.mmaltzan.com/projects/star-apartments/>

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(Maltzan, M. 2013). Star Apartments. [online image]. Retrieved March 11, 2014 from <http://www.mmaltzan.com/projects/star-apartments/>

Figure 37: Star Apartments: Diagram of shared space on second floor and in between residential units. (Author, 2014).

Base image: Maltzan, M. (2013). Star Apartments. [online image]. Retrieved March 11, 2014 from [http://continuingeducation.construction.com/article\\_print.php?L=5&C=943](http://continuingeducation.construction.com/article_print.php?L=5&C=943)

Figure 38: Star Apartments: sectional diagram of spaces and their relationship.

Base image: Maltzan, M. (2013). Star Apartments. [online image]. Retrieved January 2, 2014 from <http://inhabitat.com/michael-maltzans-prefab-star-apartments-are-in-mid-construction-in-downtown-la/star-apartments-michael-maltzan-architects-11/?extend=1>

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Maltzan, M. (2013). Star Apartments. [online image]. Retrieved January 2, 2014 from <http://inhabitat.com/michael-maltzans-prefab-star-apartments-are-in-mid-construction-in-downtown-la/star-apartments-michael-maltzan-architects-11/?extend=1>

Figure 40: Urban Tulou: Massing is sliced to allow massing to become more porous and create opportunities for connections

Baan, I. (2009). Tulou housing- Urbanus Architects. [online image]. Retrieved January 2, 2014 from <http://www.archdaily.com/24210/tulou-housing-guangzhou-urbanus-architects-by-iwan-baan/>

Figure 41: Residential unit: Efficient and space saving design allows for maximizing storage space while maintaining smaller room sizes.

Yang, C., Meng, Y. 2011).Tulou pictures. [online image]. Retrieved January 2, 2014 from <http://movingcities.org/movingmemos/nai-china-background-april11/>

Figure 42: Social spaces: Residents dining and socializing together.

Yang, C., Meng, Y. 2011).Tulou pictures. [online image]. Retrieved January 2, 2014 from <http://movingcities.org/movingmemos/nai-china-background-april11/>

Figure 43: Hakka Tulou.

Unesco. ( 2014). Fujian Tulou. [online image].

Retrieved January 2, 2014 from <http://whc.unesco.org/en/list/1113>

Figure 44: Tulou floor plan: Residential units (green). Shared facilities (pink). (Author, 2014).  
Base image: Chen, C, (2008). Chinese Houses: A pictorial tour of China's traditional dwellings.  
Pleasantville, N.Y. : Reader's Digest Association.

Figure 45 : Chinese courtyard typology.  
(n.d.). Bird's eye view of courtyard house in Beijing. [online image]. Retrieved January 2, 2014  
from <http://depts.washington.edu/chinaciv/3intrhme.htm>

Figure 46 : Courtyard as symbolic connection between heaven, human and earth. (Author,  
2014). Base image: Liu, D, (1984). [online image]. Retrieved January 2, 2014 from  
<http://depts.washington.edu/chinaciv/3intrhme.htm>

Figure 47: Courtyard house: courtyards as shared space (Author, 2014).  
Base image: Yan, C. (1987). Courtyard house plan. [online image]. Retrieved January 2, 2014  
from <http://depts.washington.edu/chinaciv/3intrhme.htm>

Figure 48 : Expansion of Courtyard housing  
Wang, Y. (2012, Nov 13). The Chinese Unit: Persistence of the Collective Urban Model in Beijing.  
Courtyard house: spatial orders and power hierarchy. [online image].  
Retrieved January 2, 2014 from <http://projectivecities.aaschool.ac.uk/portfolio/yuwei-wang-beijing-collective/>

Figure 49: Growth of Shipai urban village. (1980-2010).  
Zheng, Y. Transforming the Urban Village in Guangzhou into and Urban Park, p76. Indiana: Ball  
State University.

Figure 50: "handshake buildings, Kissing Buildings"  
McGetrick, B. (2009). Shipai Urban Village. [online image]. Retrieved January 2, 2014 from  
<http://www.brendanmcgetrick.com/blog/2006/09/09/la-vida-china-shi-pai-urban-village/>

Figure 51: Employment Streams of residents in Shipai Village  
based on statistics from Lin, Y., De Meulder, B., & Wang, S. (2012). The interplay of state, market  
and society in the socio-spatial transformation of "villages in the city" in Guangzhou.  
Environment & Urbanization, 24(1), 325-343.

Figure 52: Internal Migration Flows - China's Internal Migration

Chan, K. W, (forthcoming). 30 largest inter-provincial migration flows.

Retrieved January 2, 2014 from <http://faculty.washington.edu/kwchan/Chan-migration.pdf>

Figure 53 : Spatial Distribution of Communication Outlets in Shipai Village, Guangzhou

Source: Author,2014. Based on: Qiu, J. L. (2009). Working-class network society: communication technology, and the information have-less in urban China. Cambridge: MIT Press.

Figure 54: Comparison of urban village and the quaking aspen: Urban village as an organism

Giant Quaking Aspen:

Grant, M. Mitton, J. (2010). September colours. [online image]. Retrieved January 2, 2014 from <http://www.nature.com/scitable/knowledge/library/case-study-the-glorious-golden-and-gigantic-13261308>

Figure 56: Appropriation of space: Informal activities in streets of urban villages.

Transportphoto.net.(2008). Guangzhou. [online image]. Retrieved January 2, 2014 from <http://www.transportphoto.net/dt.aspx?dtid=2302>

Figure 59: Pedestrian movement intensity, Shipai Village, Guangzhou

Zacharias, J., Hu, Y., Le Huang, Q. (2013). Morphology and Spatial Dynamics of Urban Villages in Guangzhou's CBD. retrieved October 8, 2013 from <http://www.hindawi.com/journals/usr/2013/958738/cta/>

Figure 60 (Left): Internal street network of Shipai Village, Guangzhou

Zacharias, J., Hu, Y., Le Huang, Q. (2013). Morphology and Spatial Dynamics of Urban Villages in Guangzhou's CBD. retrieved October 8, 2013 from <http://www.hindawi.com/journals/usr/2013/958738/cta/>

Figure 61(Right): Solid Void & Scale Comparison, Shipai Village, Guangzhou

Zacharias, J., Hu, Y., Le Huang, Q. (2013). Morphology and Spatial Dynamics of Urban Villages in Guangzhou's CBD. retrieved October 8, 2013 from <http://www.hindawi.com/journals/usr/2013/958738/cta/>

Figure 62: Left: building heights, Shipai Village, Guangzhou

Zacharias, J., Hu, Y., Le Huang, Q. (2013). Morphology and Spatial Dynamics of Urban Villages in Guangzhou's CBD. retrieved October 8, 2013 from <http://www.hindawi.com/journals/usr/2013/958738/cta/>

Figure 63 :Right: Ground Floor shops and amenities, Shipai Village, Guangzhou

Zacharias, J., Hu, Y., Le Huang, Q. (2013). Morphology and Spatial Dynamics of Urban Villages in Guangzhou's CBD. retrieved October 8, 2013 from <http://www.hindawi.com/journals/usr/2013/958738/cta/>

Figure 69: Site 1, Context

Chan Y. (2009). Guangzhou, Shipai, 2009. [online image]. retrieved Sept 20, 2013. from <http://www.yveschanyou.com/subject/%E5%B9%BF%E5%B7%9E%E7%9F%B3%E7%89%8C-guangzhou-shipai-dec-2009/>

Figure 131: Figure 131: "banners of safety, prosperity, and good luck" adorning doors to a Chinese home.

Knapp, R.G., (1989). China's vernacular architecture: house, form and culture. Honolulu: University of Hawaii Press.

Figure 133: Chinese wishing tree.

Warner, G. (2010, Feb, 2). Chinese wishing tree. [online image]. Retrieved October 22, 2013 from [http://10k blessingsfengshui.typepad.com/10000\\_blessings\\_feng\\_shui/2010/02/make-your-own-feng-shui-wishing-tree.html](http://10k blessingsfengshui.typepad.com/10000_blessings_feng_shui/2010/02/make-your-own-feng-shui-wishing-tree.html)

## A2. Appendix

### Song expressing migrant worker experiences

Singer: Wang Feng

Title Beijing Beijing

当我走在这里的每一条街道

*When I walk on each of these streets*

我的心似乎从来都不能平静

*My heart never seems to be at peace*

除了发动机的轰鸣和电气之音

*Apart from roaring of the engines and sounds of the electric*

我似乎听到了它烛骨般的心跳

*I seem to hear its candlewick heartbeat*

CHORUS:

我在这里欢笑

*Here I laughed*

我在这里哭泣

*Here I cried*

我在这里活着

*Here I've lived*

也在这里死去

*and here I'll die*

我在这里祈祷

*Here I prayed*

我在这里迷惘

*Here I've felt lost*

我在这里寻找

*Here I sought*

也在这里失去

*and here I've lost*

北京北京

*Beijing Beijing*

咖啡馆与广场有三个街区

*The coffee house is three blocks away from the square*

就像霓虹灯到月亮的距离

*just like the distance between the neon and the moon*

人们在挣扎中互相告慰和拥抱

*In the midst of their struggles, people comfort and hug each other*

寻找着追逐着奄奄一息的碎梦

*Searching and chasing, grasping at shattered dreams*

CHORUS

如果有一天我不得不离去

*If one day I have to leave*

我希望人们把我埋在这里

*I hope people will bury me here*

在这儿我能感觉到我的存在

*Here, I can feel my existence*

在这有太多让我眷恋的东西

*Here, there are too many things that I long for*

## Initial Project Ideas

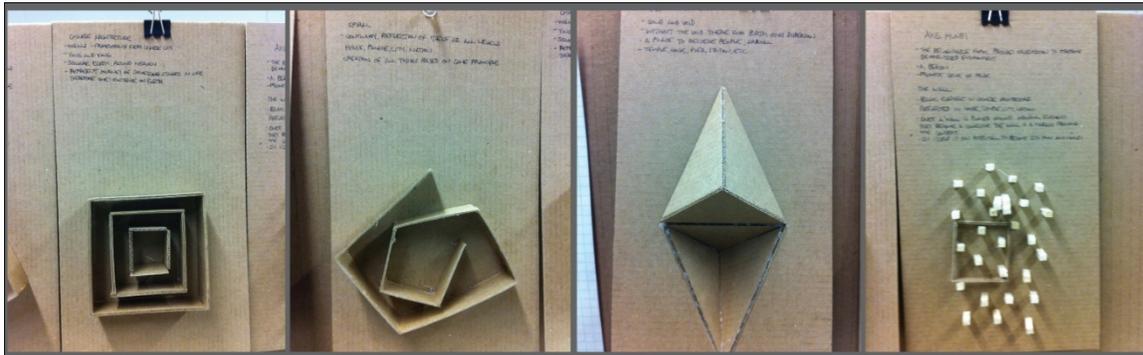


Figure 122: Principles. Author, (2014)

- Chinese Philosophy - Principles of harmony, Ying Yang (Cultural Sensitivity)
- Spiral - continuity, reflection of itself at all levels, the creation of all things based on the same principle.
- Axis Mundi - a place in which one can identify with and orientate themselves
- Solid and Void - Ying and Yang, Carl Jung`s rebirth of place

Initial massing Strategies



Figure 123: Initial massing strategies. Author, (2014)

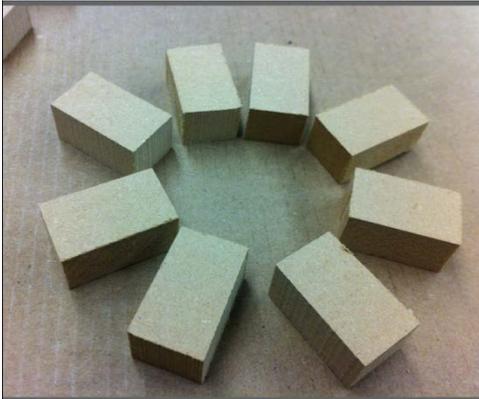
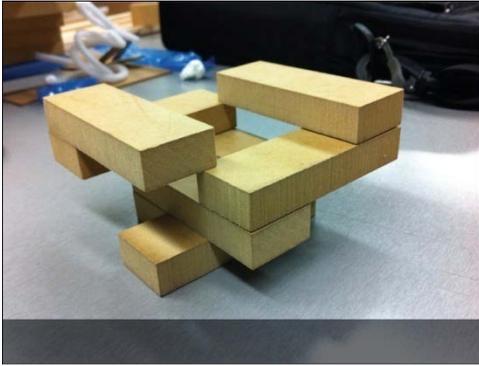


Figure 124: Initial massing strategies. ( Author, 2014)

### **Initial Proposed design**

The proposed design is a hybrid building which is both a community centre and housing. The building is imagined to be a physical manifestation of the building as a surface, a bulletin board for access and sharing of knowledge. The housing component is introduced as part of the programming because fresh rural migrants are most vulnerable to exploitation. and having housing support acts as support for people's basic needs as foundation so initially they do not need to worry about housing and can concentrate on ways to realizing their potential through education and training.

They are two parts of the program that reinforce each other to create a social environment aiding in transition.



Figure 125: Site model studies- Massing, height , relation to immediate context. (Author, 2014)

**Initial Design Scheme**

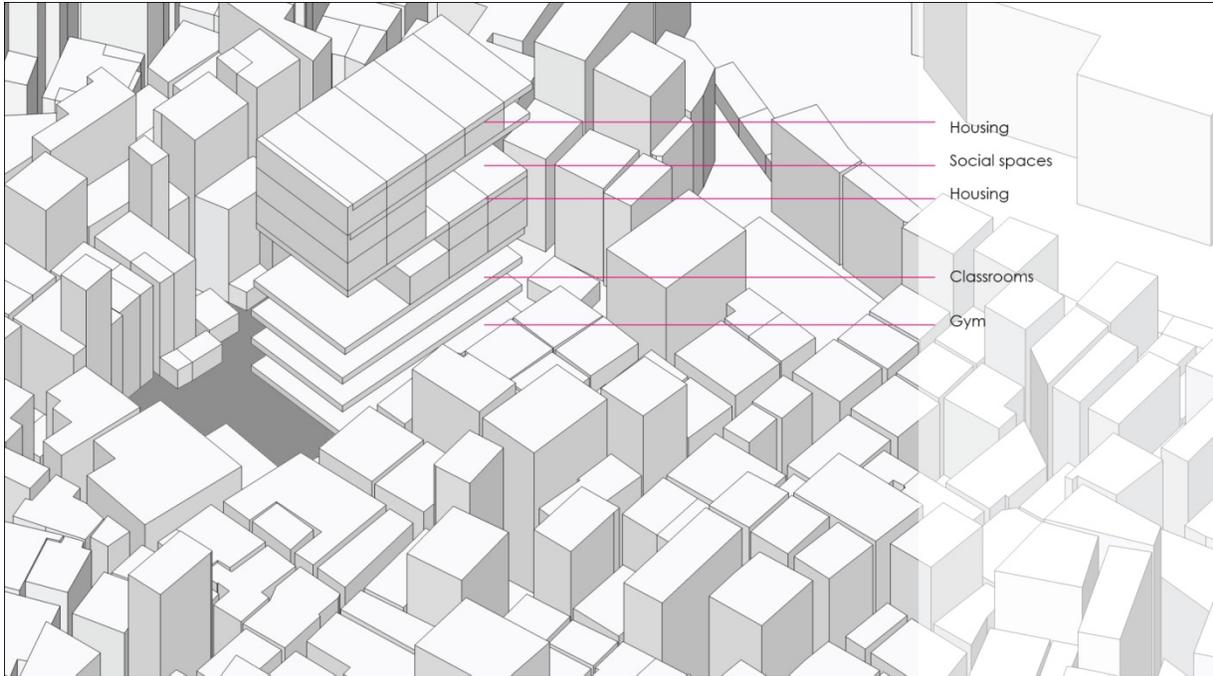


Figure 126: Initial design scheme- Single building approach. ( Author, 2014)

- Physical constraints of site require a vertical approach to articulation of programming
- Should not treat physical size of site as constraint but as potential. This is advantage to the creation of an *axis mundi*, a node which can be identified with and give measurement.

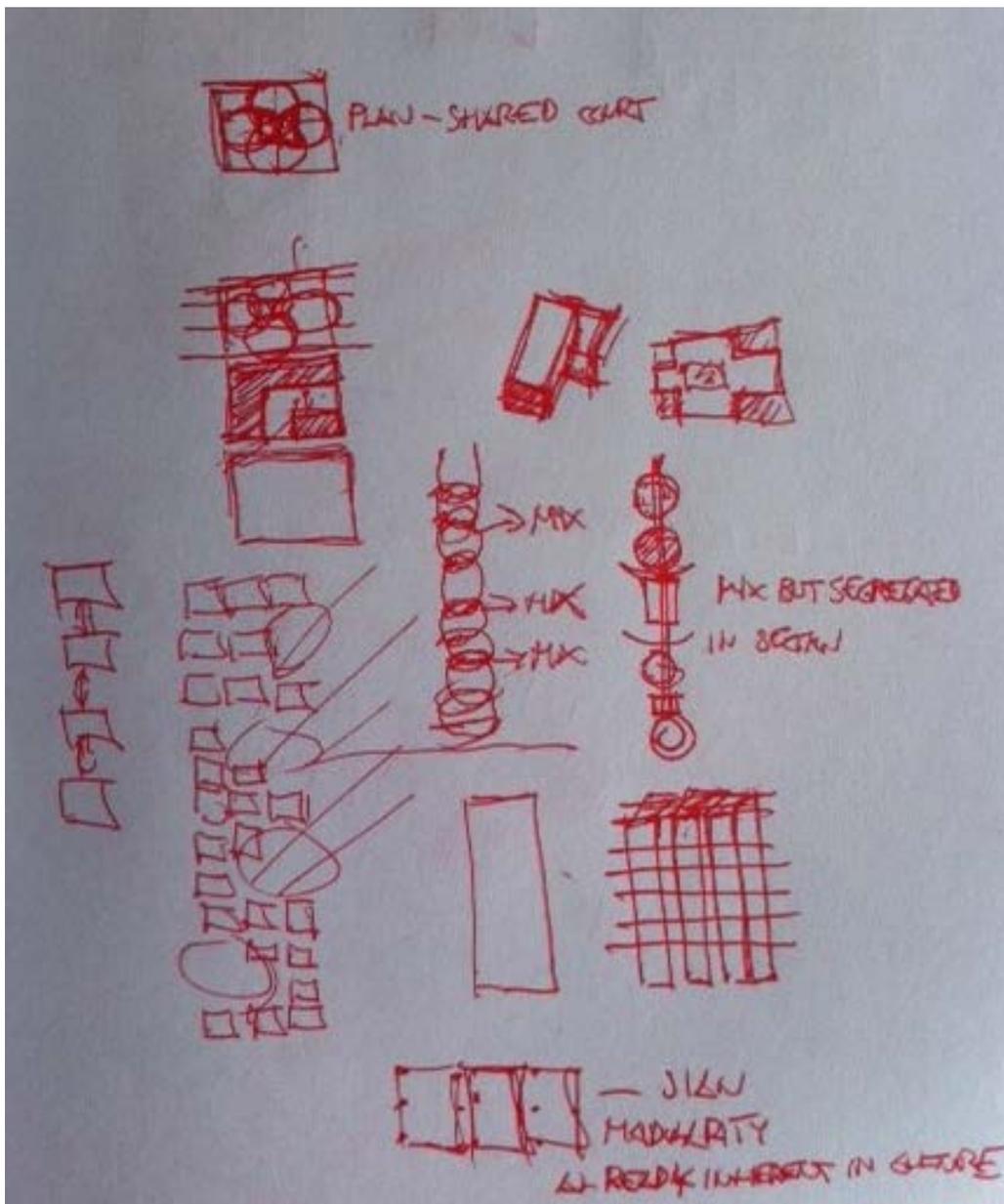


Figure 127: Sketch- Section Strategy - Mix program, exploration of modularity. ( Author, 2014)

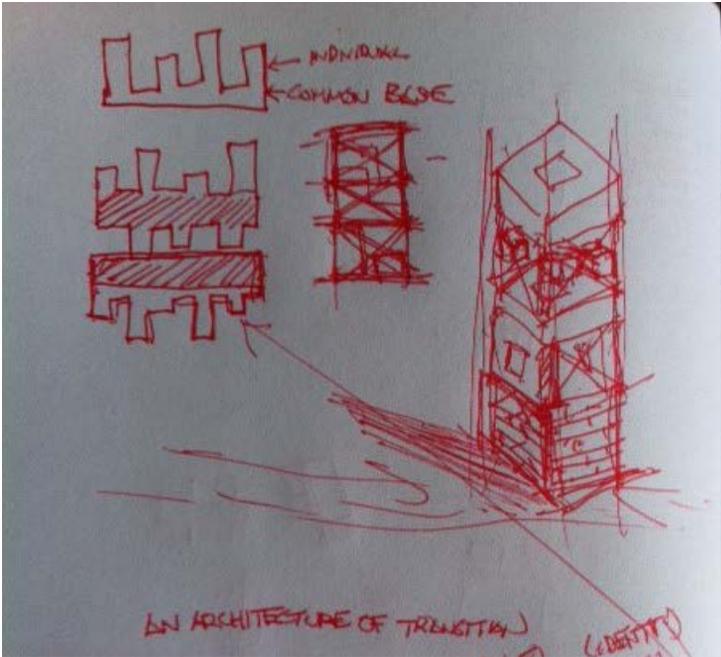
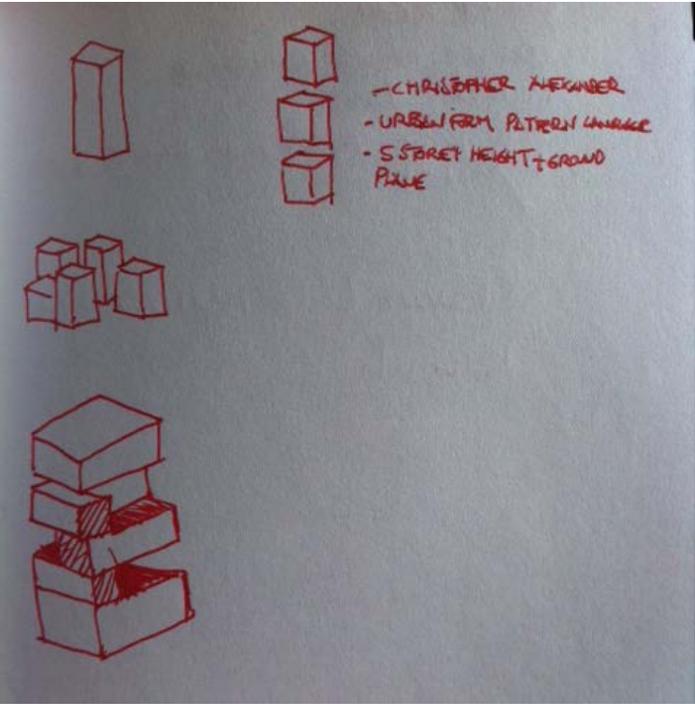


Figure 128: Sketch- exploration of potential program and form. (Author, 2014).



- Divide high-rise mass
- Create new ground planes
- Spiral circulation

Figure 129: Sketch- exploration of potential program and form. (Author, 2014).

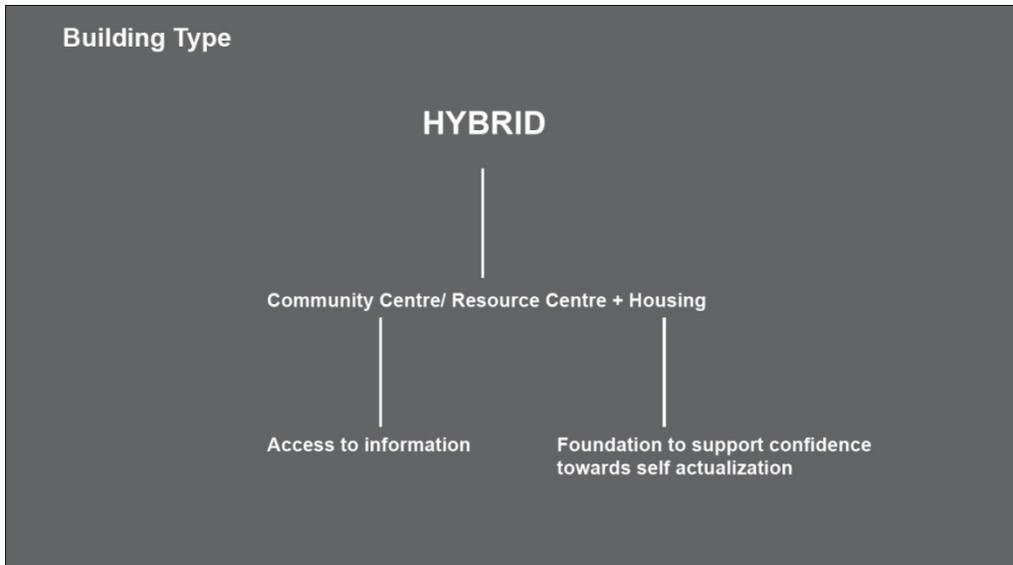


Figure 130: Hybrid building proposal- Community centre and housing. (Author, 2014).



Figure 131: "banners of safety, prosperity, and good luck" adorning doors to a Chinese home. (Knapp, R.G. 1989).

There is a strong usage of graphics in China which can be seen as a continuity with Chinese tradition such as the wishing tree. These are forms of making knowledge visible information which can potentially support and structure lives. Furthermore these forms of graphics are familiar to people and could be identified with. This is an opportunity and potential as a form of expression in the proposed design.

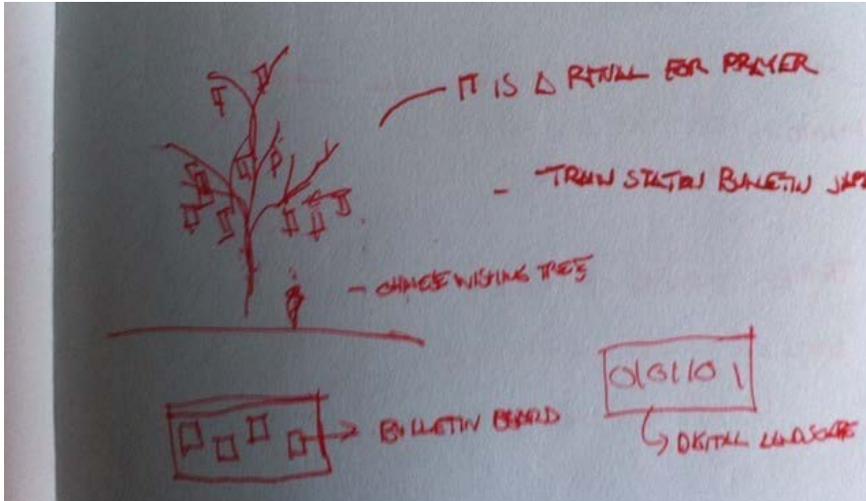


Figure 132: Chinese Wishing tree as ritual and prayer. (sketch) (Author, 2014).

## Other Design Influences

### Chinese Wishing Trees

The ritual of writing hopes on paper and attaching it to a string and tied to a fruit. Their 'hopes' are then thrown up and caught in branches of trees. The traditional belief tied to superstition is that the higher your 'hopes' attach itself to the tree, the higher chance it would come true.



Figure 133: Chinese Wishing tree. (Warner, G. 2010)