From Pedagogy to Agency Learning to Act in Rural China

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A thesis presented to the University Of Waterloo in fulfillment of the thesis requirement for the degree of Master of Architecture

Waterloo, Ontario, Canada, 2017 © Puzhen Zhou 2017

Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

From Pedagogy to Agency confronts the imbalances found between rural and urban society in China, exploring the role education plays in their everchanging relationship.

The thesis posits that schools, classrooms, and education can play a vital role as places of mediation within our society. Places where differences are not only tolerated but are made critical components of a shared world. While education is now defined by the answers we receive rather than the questions we ask. This thesis proposes space of learning where we learn to ask questions again, creating a dialogue between students and teachers alike that promotes practices of negotiation and cooperation.

Grounded in field research in China, this project first explores how China's built urban environment, villages, as well as the spaces in-between, reveal a culture fraught with tension between its past and future. Looking more specifically at a site between the two northeastern cities of Beijing and Tianjin, the thesis proposes the reconstruction and expansion of the Mangdian Village Elementary School on the outskirts of Langfang. The craft of building is recognized as an important act of mediation, with their making a reflection of a society's values. From Pedagogy to Agency envisions how agency that can be cultivated in a space of learning, where a community workshop could be both the catalyst for the rebuilding of the school, as well as a source of long term empowerment of local craft. This intervention allows for a renewed understanding of the relationship with material ecologies around the site. As the school begins to embed these activities within its spaces, their dialogue redefines an education where a child learns to become a part of the world.

While this process is filled with risks, moments of uncertainty, and will be endlessly challenging. The thesis ultimately posits this as the role education must play, for us to learn to be with each other, and for a shared future to be possible.

Acknowledgments

Many great teachers in my life made this work possible. I am indebted to my supervisor, Dr. Anne Bordeleau. It is impossible to imagine this thesis process without your guidance and you were a constant source of inspiration and support throughout these last two years. I am fortunately as well to have shared this process with my committee members, Adrian Blackwell and Jane Hutton. Adrian, for your knowledge, critique and continued optimism, I am forever grateful. Jane, the clarity and perspective you brought was critical in the final few months of the thesis.

My visit back to China was sponsored through the Mitacs Globalink Program. I thank for Dr. Bordeleau for her time and patience during its application. I thank Professor Yuan (袁逸倩) of Tianjin University as my host supervisor during my time in China and for organizing an opportunity to present and exchange ideas with your faculty and students. During my travels in China, countless family members and friends supported me in every way they could, I will never forget that, but I also look back on those months thankful for the time with my aunt, my uncle, and my grandparents.

To my friends in the school and elsewhere, you were an ever-present source of encouragement and optimism that I counted on in more ways than you know. To the girl I met during Frosh week, eight years ago, you never cease to amaze me and I am glad we have gotten to share this journey.

To my parents, for all we have gone through since when we got on a plane sixteen years ago, you were there for me in every moment and made all of this possible.

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Source: Photo by Author

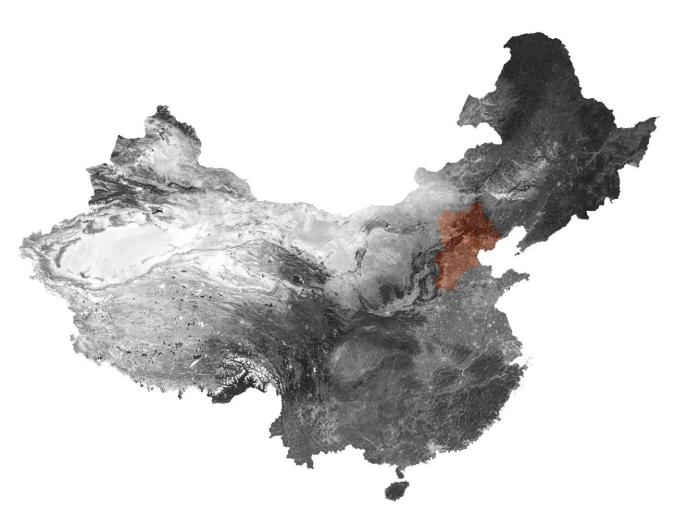


Fig 0.1. Map of China with the provinces of Beijing, Tianjin and Hebei highlighted.

Introduction

Pedagogy to Agency begins by questioning the nature of China's contemporary education. How was it shaped and how has it changed? What are its relations to politics, economics, and society? How can schools and their spaces be observed as a critical reflection of these dynamics? And how to imagine spaces as a teacher, an authority in guiding children to question and engage with the world?

Education is an act of mediation. It has the potential to bridge; between children and adults, between those with authority and those who without, between the old and the new to continually redefine tradition, and between us and the world that we learn to be a part of. Can schools and classroom be places where differences are made not only possible but critical to our world? As homogeneity is observed in the spaces all around us, differences are rejected. Education is now defined by the answers we receive instead of the questions we ask. Education then has to learn to ask questions again, questions that require us to negotiate and cooperate with one another, in order to reveal ways to move forward.

On the surface, the issues facing education are a symptom of the deep economic and political divide between rural and urban China. But beyond a resistance of capitalism and communist politics, this thesis questions the role contemporary schools have played in this shaping this state of difference and divide. Contemporary pedagogy in China reveals a culture that has been silenced with education used as a tool of oppression. This thesis envisions the creation of agency and cooperation for those without the privilege to be in a culture that recognizes its importance and necessity. It seeks to answer how education, beyond a method of competition and marginalization, can become a process to both reinforce tradition and create agency. The built environment of Chinese cities, villages, and spaces in between, serve as

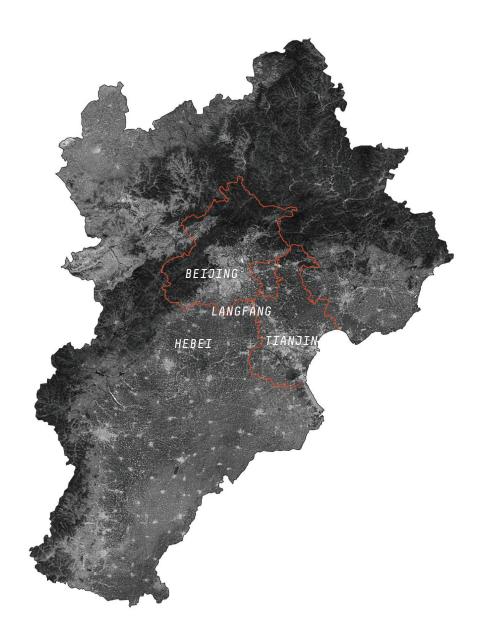


Fig 0.2. Map of the provinces of Beijing, Tianjin and Hebei. The city of Langfang, belonging to Hebei is also labeled.

an ever-changing record of the paroxysm experienced by Chinese culture. Current construction practices are not only unsustainable in its ecology, but also reflects a globalized industry that favors scale, standardization, and economy over a connection with localities and particularities. Therefore, an education and construction that seeks critical awareness in its place become the starting point in building communities that can enact their new agency. Making and pedagogy, as public acts looking to affect change, offers the potential to bring people together, to realize their ability to intervene in the world and to participate in a shared world.

The desires for a shared world though, are rarely reflected in the way our society operates. Too often we look for ways to compare, to separate, and to divide. This is nowhere more evident when looking at education. It has never been easier to measure how educated someone is and the methods couldn't be simpler; your test scores determine your value and too often your place in society. It is easy to see the appeal of this system; it makes the very messy job of evaluating people manageable and we have all agreed to make access to education a right for every person on this planet.

Those who are successful perpetuate this cycle and those less fortunate bear the burden of their failure on their own. The pressures become the root of a society where people put competition above cooperation and the individual above the community. Architecture is imagined as a vehicle for an agency of change, the architect as mediator acts to reveal, negotiate and reform the situation while learning and working with the community. It requires a didactic awareness of the particularities of a site and its location along with the totality of the structure that links people across distance and difference. Programming a school that involves communal needs and local opportunities is the first step in defining an education that is more than a means to an end and an active process to strengthen communities and gives children a chance to mature as a connected member of the world. In addition, the craft of construction reveals the importance of tradition that education must reinforce and a critical awareness of material and construction processes embraces the constant change in the world that we must respond to and take part in.



Pedagogy

EDUCATION AS CAPITAL

The beginnings of an institutionalized education in contemporary China can be traced back to the establishment of schools during the Western Zhou Dynasty (1046-771 BCE). Philosopher Confucius (551-479 BCE) and his disciples developed a system of ethical-socio political teachings that slowly gained traction among both scholars and politicians in ancient China. However, its effect on the pedagogy and the politics of China was changed when Confucian scholar Zhu Xi (1130 - 1200) of the Song dynasty (960-1279) made readings from Confucius the main curriculum for the civil service examinations to determine candidates for state bureaucracy.¹ The power given to state officials elevated their status but a literature based examination stifled scientific innovations and officials were raised on a culture of obedience towards authority. Contemporary China continues national testing, with Gaokao or the National Higher Education Entrance Exam required for admittance into universities. This exam plays an outsized role in the life of a modern Chinese; it results can determine their livelihood and there is no end to what the parents and their children are willing to risk for a chance for success at the Gaokao. The logics behind this hyper-competitive structure are understandable: in a place as populated and unevenly developed as China, there simply aren't enough resources in place to have the social safety nets that are possible in other developed countries. Nevertheless, it is important to consider what an education system based on competition alienates in terms of the core values it

^{1 &}quot;China Online Museum," The Song Dynasty Confucian Scholar - Zhu Xi, , accessed January 05, 2017, http://www.chinaonlinemuseum.com/blog/the-song-dynasty-confucian-scholar-zhu-xi.

teaches and the culture it promotes of the people participating.

Education can be defined as an exchange between people that allows for our shared progress as a culture. However, contemporary knowledge has been commodified. When considering the inequality that a modern education presents, it is now necessary to see it through capitalist market principles. William Davies' book The Limits of Neoliberalism theorized on the promise and the paradox of competition, offering a critical analysis of the role of competition in a neoliberal market. Neoliberal policies have exacerbated growing inequalities among key social dynamics of modern life; the gap in education is one such example, though inequalities come in multiple forms.² Political theorist Michael Walzer distinguishes between an inequality of 'monopoly', when a single system develops its own metrics for measuring competition that produces inequality (ex. Education), and an inequality of 'dominance', in which one system (ex. Economic) begins to influence and dictate in another (ex. Political/Cultural).3 The problematic nature of competition in practice is reflected in today's society, while economists may see values of competition to drive efficiency and a continually progressive market. The reality is that competition at its core it is about participants being "formally equal at the outset, and empirically unequal at the conclusion" 4 At the end of competition it must produce clearly distinguishable 'winners' and 'losers' 5 To favor competition is therefore to favor rules and authority. The game itself has two "rules"; one that "competitors remain constrained by some norms of equality... the other is to ensure that they resist these normal at all cost in search of inequality."6

The theories of competition are not utopic, in the sense that they do not disguise reality, and we must recognize that they do succeed in constituting a framework in which different perspectives and various actors can interact with one another. Though competition brings about the possibilities of a shared world, we must also understand that by being a participant in the competition we acknowledge inequality. These norms of competition can be seen in the



Fig 1.1. Confucian Teachings The imperial examinations as way to determine social order through education. (Tang Dynasty 618-907)

²² Davies, William. "The Promise and Paradox of Competition." In The Limits of Neoliberalism: Authority, Sovereignty and the Logic of Competition. SAGE Publications, 2014. 34

³ Ibid, 36

⁴ Ibid, 41

⁵ Ibid, 57

⁶ Ibid, 58

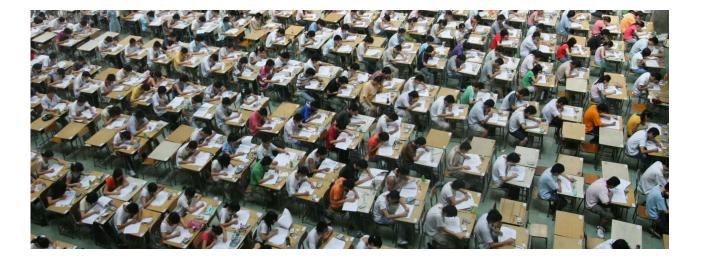
education environment today. Children are rewarded or punished based on their performance according to a shared testing that allows competition to exist. At the same time, the only guarantee at the end of the competition is inequality. This is mirrored in the state of rural and urban China. Education is a part of the framework that has resulted in the current state of Chinese society.

At the current moment, it is fair to say that the dominant mode of power shaping what counts as knowledge takes its cue from what can be called neoliberalism or what can be called unfettered free market capitalism. Market fundamentalism that not only trivializes democratic values and public concerns, but also enshrines a rabid individualism, an all embracing quest for profits, and a social Darwinism in which misfortune is seen as a weakness and a Hobbesian "war of all against all" replaces any vestige of shared responsibilities or compassion for others.⁷

My understanding of Chinese education begins in the city of Tianjin, where the spaces of the school are the physical manifestations of this framework that produces and necessitates inequality. My conversations with local students from migrant families reveal the role education has played in their world view and future.

Fig 1.2. The typical scene for a Gaokao (Highschool exam). Critical for an entrance into universities.

⁷ Barroso Tristán, Jose. "A critical interview with Henry Giroux." Global Education Magazine. November 21, 2014. Accessed March 6, 2017. http://www.globaleducationmagazine.com/critical-interview-henry-giroux/.



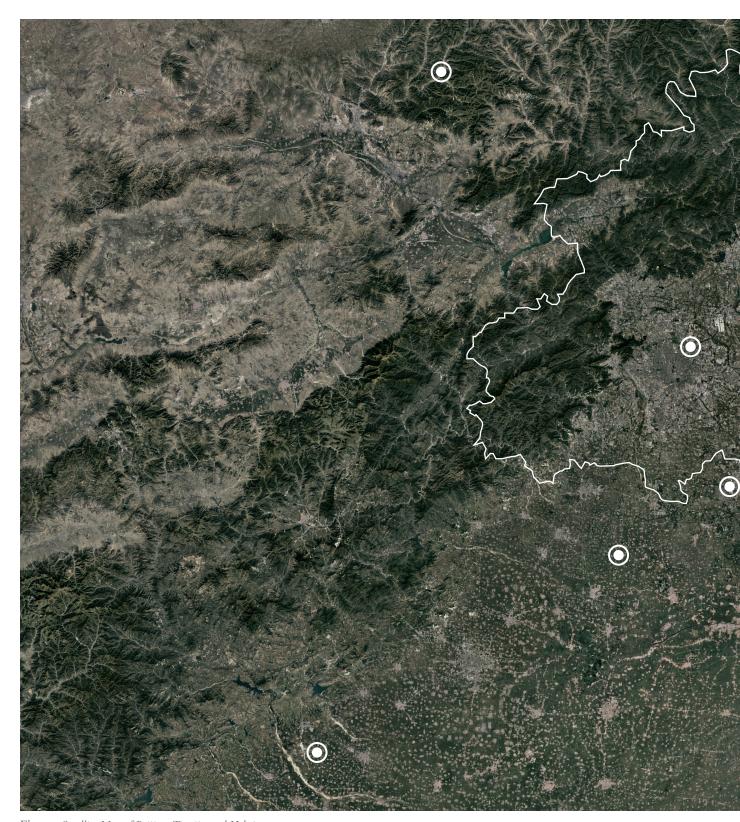


Fig 1.3. Satellite Map of Beijing, Tianjin and Hebei.

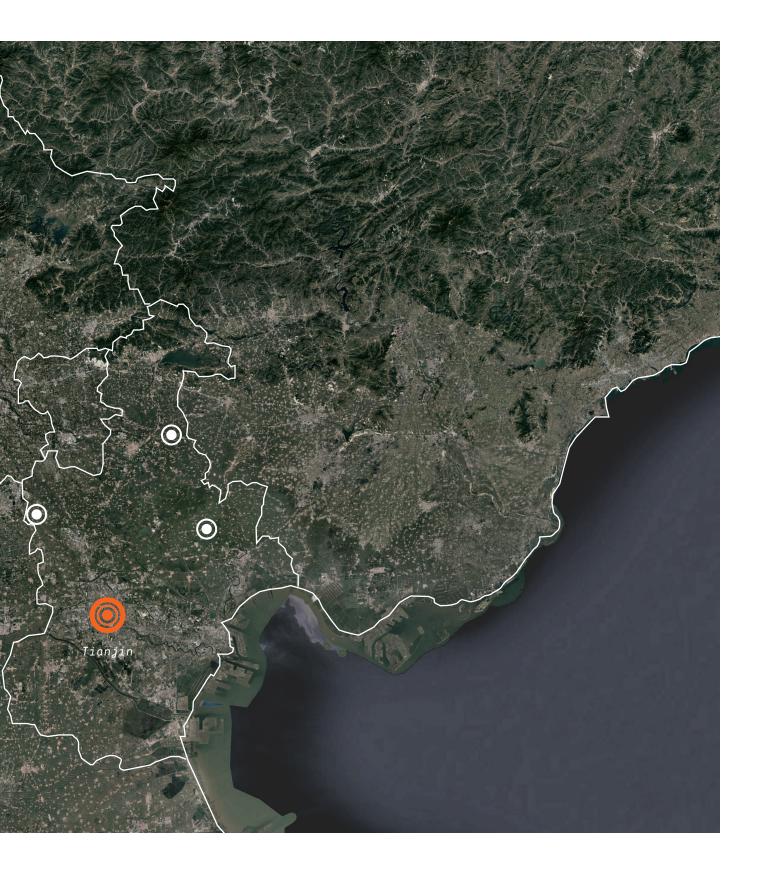




Fig 1.4. (Opposite) Downtown Tianjin Satellite Image.
Elementary schools highlighted in orange with three circled and numbered for further description.

Hamidiao Elementary School

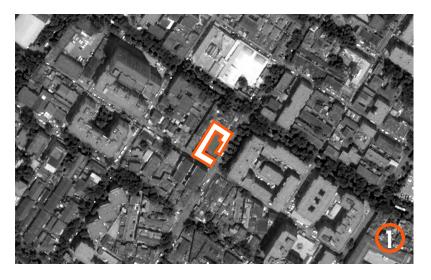
Hamidao Elementary schools serve one of the busiest commercial areas of Tianjin, the two-kilometer shopping street that is the retail heart of the city. Four blocks to the west the school serves 340 kids from Grades One to Six. The sparsity of space in the area is reflected in the fact the school's L-shaped block surrounds its only outdoor space that measures 30 x 10 meters. The school itself recognizes the difficult job it has in having a student population where more than 60% come from another province. The commercial opportunities mean this area is a frequent destination for migrant workers or those with their own small business. Many deals with trading antiques or profitable small goods for eager tourists and the newly affluent middle class in Chinese cities. They come from rural villages and consider themselves fortunate to have a stable situation in a large city like Tianjin. Still, they hope their kids will not have the same struggles growing up and can climb the social ladder and find a job in the government or large companies. Those are the expectations that these kids carry into their school life. I got a chance to speak to six students who just finished their 3rd year. We discussed their view towards education and



Fig 1.5. School Area, 2000



Fig 1.6. School Area, 2015





Grades 1-6

Lot Area: 957 SqM

Building Gross Floor Area: 1502 SqM

of Teachers:

of Students: 340



Anshan Road Elementary School

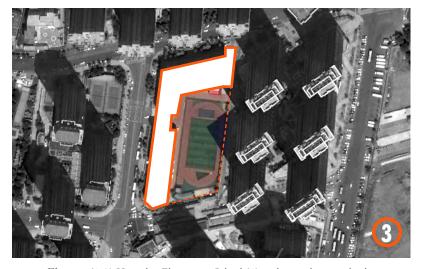
Grade 1-6

Lot Area: 4072 SqM

Building Gross Floor Area: 7168 SqM

> # of Teachers: N/A

of Students: 2400



Wanquan Elementary School

Preschool - Grades 1-6

Lot Area: 10754 SqM

Building Gross Floor Area: 17156 SqM

> # of Teachers: 148

> # of Students: 2387

Fig 1.7. (1-3) Hamidao Elementary School (1) and two adjacent schools.



Fig 1.8. Hamidao Schoo. Layout Plan.



Fig 1.10. Anshan School Picture. Serving a dense residential area, with more than four times the lot size and seven times the enrollment.



Fig 1.11. Wanquan School Rendering. New school for a highrise development. Built to more than 10 times in lot and floor area.



Fig 1.9. Hamidao School.

their future. All but one were from Tianjin and the rest were from southern provinces like Anhui or Shangdong. They spoke of the heavy workload they have; a typical school day from 8 am to 5 pm that continues with another three to four hours of homework time every night on their own. They spoke of there being little social interactions beyond their time in school, since those with parents running a business frequently must tend to their shops all day and night. Although they have now been conditioned of particularly a regimented and ruthlessly competitive education, they are still hopeful of success. All the kids from a migrant background aspire to move to an even bigger city like Beijing, Shanghai or abroad, should they get the opportunity. Such is the reality for this generation of rural Chinese. The link to their land as their livelihood has been severed in one generation. These kids visit their hometowns during Chinese New Year. They spoke of enjoying seeing their family, but also of an unfamiliarity with rural life and its lack of material comforts. So they embrace the possibility that they can go anywhere their hard work can take them to. Speaking in a moment of candor, a teacher in the school who had been there for 15 years told me of the difficulty these kids unknowingly face in their education. The parents all understand the importance of going to school but none have personally experienced it themselves. All those who came from a rural background would have been unlikely to have received an

education beyond the nine years required in China. As a result, they lack an understanding the ways to guide their children in such a competitive system. Unfortunately, even if they did, few would have the time and resources to spare given the instability of their own business. In China's current state of competition when it comes to education, after school classes, tutors, and anything to give their kid an advantage to succeed makes a difference. While Gaokao is the all-important final hurdle, the path towards a successful career is, in fact, a process, many years in the making before that. When it comes to admission rates of first tier universities, there are certain limits in students they take from different provinces and it is an open secret that they accept more from urban provinces than rural ones. The very same goes for every phase of their earlier education as high schools, middle schools and elementary



Fig 1.12. Hamidao School. Typical Single Loaded Corridors.



Math.



Mandarin



Recess.



English.



History.

Fig 1.17. Morning Schedule of Third Grade Class.



Fig 1.13. Science Classroom



Fig 1.14. E-Classroom. Equiped with Camera and projector for distance learning.



Fig 1.15. Classroom Typical setup with projector and computer for digital lessons.



Fig 1.16. Visual Art Classroom.



schools organized in tiers and those on the top are more likely to accept from other top tiered schools. Therefore, a child unable to get into a first-tier middle school will have a harder time being able to go to a first tier high school and so forth. For the migrant kids of Hamidao Elementary school, the teachers praise their hardworking attitude, willing to put forth much more effort and rarely complain as opposed to their city counterparts. But with a realization of the reality of their situation, their future is much more limited than any third grader should ever be. But even those aware of the situation, and having the resources to clear the hurdles in order for their child to earn a worthwhile university degree simply become willing participants of an flawed system.

When the economist Michael Walzer spoke of inequality in terms of a monopoly, where a single system chooses its own metric for evaluation that develops inequality, he used education as the primary example. His second type of inequality is one of domination. Where an unequal system can begin to influence another, his used the economy's influence on politics as his example. However, in China education can also be seen in this way. The rural and urban division is driven further and leveraged by education. Since schools accept urban and rural citizens at an uneven rate, developers in cities realize this advantage and use it to drive local developments where there would otherwise be no demand. When I traveled to the rural province of Hebei, a relative of mine explained why they bought a condo for their son in a development on the periphery of Tianjin. The sole purpose was so he could attend a high school under Tianjin jurisdiction and be rewarded with a better odd of acceptance







Fig 1.18. Classroom Panorama.

Fig 1.19. (Opposite) Security in Schools. A new concern for Chinese schools. There were a series of attacks in southern provinces as schools became a target to express personal resentment towards Chinese politics. In all the schools I visited, especially in cities, there were armed security guards and all school grounds were off limits to the public.

Fig 1.20. (Right) Homework Check. The typical classes observed are divided devoted to checking previous assigned work before introducing new topics.

into a university. Education, as an extension of neoliberal principles, can begin to shape the structures of a society in many different ways.

The students of Hamidao provided insight into the difficult position for a migrant worker's kids to climb China's social ladder through the education system. Thus the system operates such that students know full well the odds are against them, leaving them increasingly alienated from their culture and often, as that of an outsider without roots to their home.



"BANKING" EDUCATION AND CULTURAL CONQUEST

Education then, in its current form, seems to propagate and enforce the competitive unevenness of a neoliberal society. It has changed to become an objective tool of evaluation and division between people. In order to imagine a kind of education and spaces of learning that instead brings people together, to liberate them from constraints, we have to understand ask how education oppress and alienates.

Pedagogy of the Oppressed was written in the climate of an authoritarian Brazil of the 1960's that saw social inequalities reach a breaking point. This was the home of Paulo Freire and his writing is based on his personal experiences of trying to help people move beyond their oppressive situation. Freire frames pedagogy and education as the key to having a critical awareness of the situation and then an agency to act.

The second chapter of Pedagogy of the Oppressed dissects the model of education that has become so prevalent, which Freire coined: "Banking" Education. He describes it as education that "becomes an act of depositing."8 The teacher - student relationship becomes a one direction deposit of information from one to the other. The teacher speaks of reality as if it were static and the student receives knowledge without questioning its meaning. The cycle perpetuates itself and the "more completely she fills the receptacles, the better a teacher she is. The more merely the receptacles permit themselves to be filled, the better student they are." My trip revealed other cycles in danger of perpetuating, according to the schools' way of operation; for example, the relation between school location and teacher investment. In the case of Hamidao in Tianjin, because the school is known as a migrant school, teachers recently finishing school are less likely to pick this school their first choices. Then, the process of assigning new teachers leads to an imbalanced number of qualified and motivated teachers arriving at this particular school. This cycle is just one of many that help completes a self-fulfilling prophecy of rural children unable to advance in society through the education system. It is sobering to remember that Freire wrote on behalf of a Brazil on the edge of crisis 50 years ago. Today, his critique of education is more commonplace and drives a social divide in developed and developing countries alike. As we gain

8 Paulo Freire, Pedagogy of the oppressed (New York: Continuum, 2000). 122. 9 Ibid, 72.

Fig I.2I. Classroom in Tianjin



a critical awareness of the nature of contemporary education, questions are revealed surrounding the structure of our society and how education may at times perpetuate the domination of one culture over another.

Paulo Freire's book was founded in his analysis of education but its ambitions were to change the very structure of a society that seemed to operate on the division between people. Therefore, it was paramount that he theorized on the nature of this culture. A section dedicated to the idea of cultural invasion appears later on in his book and exposes the process in which one culture comes to dominate another. At times physical and other times camouflaged, this domination is successful when "those invaded become convinced of their intrinsic inferiority" and begin to emulate the values of their invaders above their own. This alienation of one's own culture happens easily from a society that is already divided, which Freire specifically outlines as a key tactic in the arsenal of the oppressors as "divide and rule." Rural China has never been more divided, as a mass migration and rapid urbanization has pulled at the social fabric of a culture.

Fig 1.22. Classroom in Langfang

10 Ibid, 153.



Cultural conquest leads to the cultural inauthenticity of those who are invaded; they begin to respond to the values, the standards, and the goals of the invaders... In cultural invasion it is essential that those who are invaded come to see their reality with the outlook of the invaders rather than their own; for the more they mimic the invaders, the more stable the position of the latter becomes... The values of the latter thereby become the pattern for the former. The more invasion is accentuated and those invaded are alienated from the spirit of their own culture and from themselves, the more the latter want to be like the invaders: to walk like them, dress like them, talk like them."

It is easy to see those in rural China as the primary victims of this cultural domination. It is easy to see this simplified as an issue of rural vs urban, but those in cities are not liberated from this domination either and find themselves enveloped in this situation as tightly as those in the rural. Freire warns against this type of division and isolation between people, and the creation of deep rifts among them. The theories of his writing draw on his own experience as an educator working with disenfranchised Brazilians. To those trying to bridge this divide, Freire warns against a tendency for a "focalized view of problems rather than seeing them as dimensions of a totality."12 He suggests that breaking up problems into their own local communities without an understanding of these communities, as "totalities in themselves" and connected to larger areas and regions, intensifies the alienation. For Freire, agency is possible when people realize their problems, whether social or political, may seem to manifest locally and differ from each other. When in fact, they are the effects of larger structures at work. Structures that tie everything in this world together and each of us to each other. This awareness is a kind liberation because it begins to reveal that to act in the world, is to act as a part of the world. That we both have the power to act, and a responsibility to act, for each other. This is the root for an agency that allows people to change their situation, to bridge across differences.

So far in the thesis, education's alienation comes from its new role as a form of capital. The terms of analysis, therefore, has been through capitalism and its neoliberal tendencies. Identifying the unevenness and inequalities of education's present nature helps us attempt to address its shortcomings. However, as the thesis will subsequently explore, the choice that comes with

¹¹ Ibid.

¹² Ibid, 108.

determining what education should be and how we build concern politics and the human condition in ways that go beyond questions of economy.

FOR EQUALITY OR JUSTICE?

Architect Lebbeus Woods described architecture as political acts by nature. He condensed the essence of the building as having to do "with the relationships between people and how they decide to change their conditions of living. And architecture is a prime instrument of making that change – because it has to do with building the environment they live in, and the relationships that exist in that environment." Education possesses a similar potential to be an agency of change.

The role of contemporary architecture within society has also gone through commodification. Like the changing ways in which we see education in our society, the value of why we build seems to be primarily quantified by its monetary value. This becomes the main driving force behind why we build today. Density-driven urbanization, leading to a concentration of resources, begin to exemplify the uneven social topography theorized by David Harvey, allowing cities to create value by appropriating their uneven surroundings. The various urban schools in Tianjin show how urban development and education go hand in hand. New residential areas are anchored by modern new schools that promise a quality education to attract migrants and locals alike. The result is an education that becomes part of the market economy and in lieu of any responsibility, it has to society, culture, and community.

The thesis pinpoints inequality across China as the root of its tensions and it would be a natural conclusion to address inequality in hopes of building stronger communities. But as the thesis continues it is critical to go beyond between the ideas of equality and imagine different approaches when conceiving of social change. Urbanist Edward Soja continued works of other political geographers in his writings on spatial justice. He proposed that while "equality assumes the possibility of being completely equal, whereas 'justice' asks: what level of inequality is intolerable?" ¹⁴ This is not to define

¹³ Geoff Manaugh, "Without Walls: An Interview with Lebbeus Woods," BLDGBLOG, December 28, 2015, , accessed December 10, 2016, http://www.bldgblog.com/2007/10/without-walls-an-interview-with-lebbeus-woods/.

¹⁴ Kush Patel, "Equality and Justice," Who speaks and acts?, May 11, 2016, , accessed March 03, 2017, https://whospeaksandacts.wordpress.com/2012/04/14/equality-justice/.

justice as tied to only addressing issues of equality. Rather, it is to reveal the limitations when addressing only equality. The strive for evenness is utopian in the sense of a disconnection from reality. It is limiting because it asks us to imagine a world where differences do not exist, when everything we see tells us otherwise. Children see the contradictions between what they are taught and what they see in the world around them, and they will have to learn to confront that. On the other hand, justice can be understood as an attempt to engage in and with differences that offer design potential for those interested in its spatial effects. This is a critical dimension to consider as the thesis explores the topic of difference, strangeness and how they should be re-conceived as vital components for our communities. These have important spatial implications as well. for Soja: "... spatial justice as such is not a substitute or alternative to social, economic, or other forms of justice but rather a way of looking at justice from a critical spatial perspective. From this viewpoint, there is always a relevant spatial dimension to justice while at the same time all geographies have expressions of justice and injustice built into them."15 A new model for places of learning then should look beyond providing an education to achieve a certain standard. Instead, it becomes a space that tries to understand the inequalities and injustices around it. To engage with this difference, and instead of neutralizing them, to accept them and affect them as a place to start its engagement.

The spatial qualities of schools can then be recognized for their complicit role in reflecting and enforcing existing political, social, cultural and economic relations within society. "Schools can never be understood as neutral sites, removed from the conflicts of society." In the city, like the Hamidao elementary school of Tianjin, the schools and its daily operation come to reflect the society around it. By virtue of the school being at the edge of a large commercial area, it is an actor in the larger economy at work. Tianjin is one of the largest cities in China and businesses of all different shapes and sizes come to gather in this area. As China looks to move beyond a manufacturing economy, the service sector has been designated to inherit its large labor force. This area offers no shortage of shops, restaurants and other places of commerce in need of labor. But the wages of an average retail worker is not sufficient to

¹⁵ Edward W. Soja, "The City and Spatial Justice," Justice et injustices spatiales, September 2009, 2, accessed April 23, 2017.

¹⁶ Gert Biesta, Beyond learning: Democratic Education for a Human Future (London: Routledge, 2016), 120.



Fig 1.23. Local Antique Shop

live in this area. So while many people hold day jobs in the neighborhood, this particular school receives very little enrollment from this local demographic. Instead, most of the kids in the schools come from migrant families with small personal businesses. In particular, businesses well suited to the many tourists and the newly rich middle class of urban China. Objects like fine furniture, antiques, and jewelry dominate the storefront on streets at the edge of the central shopping centers. (Fig.1.23) For these families, they have no choice but to live where they work or very close by. Small pockets of leftover spaces are therefore filled with makeshift housing to accommodate this migrant population. (Fig.1.24) The informal nature of these residential areas echoes the transitory reality for these migrant families, that of being outsiders looking in.

The school itself comes to depict the marginalized nature of the



Fig 1.24. Migrant housing Transformed from less desirable houses on back streets of the urban core, they are commonly shared and self maintained.

community it is serving when compared to its neighbors; nearby schools on the outside of this migrant-business driven area serve a much more stable and permanent population. And it is apparent when you see that they tend to be better maintained, with more and larger facilities for the children. The very recent history of urban China and the standardization of education means a lot of schools were built according to a similar blueprint, that of a three to four story block building in I or L shapes to enclose an open yard. The qualities of construction are all very basic and limited, with concrete block being the most common material. They were designed and built with two things in mind: speed of construction and repeatability. Regional differences in climate and seasonal comfort are of secondary concern so for these buildings in the north, where both heating and cool is required, they have no choice but to install window mounted air conditioning and heating units. This limits an already small amount of natural light penetrating the rooms. The issue of blocking adequate light is compounded with existing security measures. A cage structure has also been installed outside windows in schools, to prevent unwanted access from the outside and potential accidents from the inside. (Fig.1.25) These elements further the spatial quality of classrooms more akin to a detention cell, completely disconnected with the outside world, spatially and reflected in its teachings.

When it comes to the spatial arrangement within of the classrooms themselves, it is that of a teacher as the highest of authority, standing at the front of the class, often on a raised platform with a state slogan above the blackboard. The kids are all seated in parallel rows, only able to face their teacher and the board. This enforces a relationship of depositing knowledge and that of a "banking" education that Freire describes. For the students and teachers of Hamidao elementary school and many others that I will visit in this thesis, a centralized authoritarian state, a disregard of local conditions and specificities and educational values that are based on free-market capitalism shapes the type of knowledge, the kind of values, and the way relationships manifest in the space of the school. So what could be values that come to define a new kind of education? What should guide an education that is outward and connective, as opposed to inward and isolating? How would its spatial qualities support this new role for a space of learning?



Fig 1.25. Window Guards in an Elementary School

CRITICAL PEDAGOGY

The spaces of the classrooms reveal a static and oppressive relationship between teacher and student, between the curriculum and society, and therefore between students and the world around them. The thoughts and struggles that Paulo Freire attempted to navigate through in Pedagogy of the Oppressed have continued in under the school of thought of critical pedagogy. Henry Giroux is one of many educators that continues this ongoing project and Giroux first clarifies that critical pedagogy differs from contemporary education in that it is not a method. Not a "set of strategies and skills to use in order to teach prespecified subject matter," but rather that "as a political project, critical pedagogy illuminates the relationships among knowledge, authority, and power. It draws attention to questions concerning who has control over the conditions for the production of knowledge, values, and skills, and it illuminates how knowledge, identities, and authority are constructed within particular sets of social relations." This is the role that critical pedagogy can play in our society today as many of these questions go unanswered and unasked.

Critical pedagogy acts to reveal to these relationships surrounding the production knowledge in our society and for Giroux, "Pedagogy is always political because it is connected to the acquisition of agency." Aware that "the production of knowledge at the heart of this market-driven regime is a form of instrumental rationality that quantifies all forms of meaning, privatizes social relations, de-historicizes memory, and substitutes training for education while reducing the obligations of citizenship to the act of consuming." For Giroux, critical pedagogy asks that we "situate school knowledge, practices and modes of governance within wider historical, social, cultural economic and political contexts." And the beginnings of that is with a person being aware of his responsibility to society. This runs counter to the egotistical culture that neoliberal societies natural shape. So Freire emphasizes the importance of a dialogical practice. Dialogue is predicated on an exchange with someone, not yourself as an essential element since it re-introduces the social relationship we have with each other. That "I engage in dialogue not necessarily because I like



Fig 1.26. School slogans preaching obedience and uniformity.

¹⁷ Jose Barroso Tristán, "A critical interview with Henry Giroux," Global Education Magazine, November 21, 2014, , accessed March 6, 2017, http://www.globaleducationmagazine.com/critical-interview-henry-giroux/.

¹⁸ Ibid

¹⁹ Ibid

the other person. I engage in dialogue because I recognize the social and not merely the individualistic character of the process of knowing. In this sense, dialogue presents itself as an indispensable component of the process of both learning and knowing." Dialogue acknowledges people as equals and allows them to cooperate in order to act. And that agency must be critically tested in the world again and again if it hopes to shape and change their reality. Freire points to praxis as a process in which combine both action and reflection as a part of the educative process. ²¹

From Freire's perspective, there is no final act of knowing. Knowledge has historicity; it is always in the process of being. If absolute knowledge could be attained, the possibility of knowing would disappear for there would no longer be any questions to ask or problems to solve. Praxis, therefore, starts with an abstract idea (theory) or an experience, and incorporates reflection upon that idea or experience and then translates it into purposeful action. Praxis is reflective, active, creative, contextual, purposeful, and socially constructed.²²

In this sense, it is crucial for pedagogy to engage with specificities of everyday life and become a part of the people it helps to change. In *The Practice of Everyday Life*, Michel de Certeau notices that people have a tendency of subverting the existing power dynamics in any given situation so that the weak become strong.²³ They improvise and devise tactics that confront the structures around them. "Empowerment sometimes emerges in conditions that theoretically ought to thwart it. Knowledge is often generated at the edges or the gaps of ignorance. Participation is simply a tactic of complicit curiosity scaled to the space you're currently in."²⁴ Space records and enables these moments of subversion. Throughout my visits to various places, rural and urban, people invariably demonstrated an active agency in shaping the spaces they inhabited. Whether it was shared garden space in the courtyard

Fig 1.27. Community Garden
One of many community garden spaces in
my grandparent's apartment complex, with
responsibility shared between tenants, it
demonstrates a desire for people to cultivate
and find moments of ownership in the spaces
around them.

²⁰ Freire, 17.

²¹ Mary Breunig, "Turning Experiential Education and Critical Pedagogy Theory into Praxis," Journal of Experiential Education 28, no. 2 (2005): 108, accessed April 19, 2017.

²² Ibid, 111.

²³ Michel De Certeau, The Practice of Everyday Life (Berkeley, Calif.: Univ. of California Press, 2013), 23.

²⁴ Markus Miessen, Did Someone Say Participate: An Atlas of Spatial Practice (Cambridge, Mass.: MIT Press, 2006).

of an apartment compound (Fig.1.27), or the renovations of a rural village courtyard, these interventions could be seen at every level of Chinese society. A certain attitude for self-reliance is evident, but in the schools that I visited, they often remain devoid of any evidence of any connection to local rituals or community. The spaces of the schools were representative of a state authority and surveillance that left little room for local specificities. "in authoritarian societies the logic of routine, conformity and standardization eliminate the need for critical thinking historical analyses and critical memory work." What it always possessed were links to the central state and messages of homogeneity. The spaces around the schools were plastered with slogans or signage that denoted national values. (Fig.1.26) These revealed the intentions behind the schools, echoing Freire "banking" education and a conditioning of its citizens designed by the state. Spaces in sense are ones that oppress, through uniformity in its spatial quality and a denial of any links to local life. An understanding of the ways that spaces can oppress offers us hints at how it can critically liberate.



Spaces come to offer its users a chance at agency, and subversion against the things that come to constrain their position within society. The potential for these actions is important because of their public dimension. Space and space making is a mediator between the private wills of the individual and a potential for them to act with each other to affect change. So if we understand the importance of dialogue for its ability to connect us, how do we begin this dialogue in the space of the school?

SPACES OF LEARNING: A DIALOGUE

Spaces and the way they are used inherit the charterers of particular power structures, observations of the typical Chinese elementary school reveal a classroom that dictates a hierarchy that structured by state ideologies resulting in the teachers being asked to represent the absolute power of the state and disseminating knowledge without any participation from the students. Freire's offers a new beginning by allowing the two side to enter into a "dialogue." An exchange where the two are on equal terms and both critically engage with nature of education in their situation. Giroux offers some important but openended questions for students and teachers to discuss:

- (a) What counts as knowledge?
- (b) How is knowledge produced and legitimized?
- (c) Whose interests does this knowledge serve?
- (d) Who has access to knowledge?
- (e) How is this knowledge distributed within the classroom?
- (f) What kinds of social relationships within the classroom serve to parallel and reproduce the social relations of production in the wider society?
- (g) How do the prevailing methods of evaluation serve to legitimize existing forms of knowledge?
- (h) What are the contradictions that exist between the ideology embodied in existing forms of knowledge and the objective social reality?²⁵

These give a chance for both students and teachers to come together to redefine their relationship with each other and nature of the education that they are partaking in. It is important to realize that these are very demanding questions for children and teachers alike, both of whom may be unfamiliar or unaware

²⁵ Henry A. Giroux, Ideology, culture, and the process of schooling (London: Falmer Press, 1981), 59.

of their passivity and unsure of how to act in this new relationship. There is a tremendous amount of risk involved, as an open forum for discussion still needs to be structured by some sense of authority and difference between individuals.

Montessori is a school of thought that values an education respecting the natural physiology of a child. Here children are given freedom of play and interaction with their peers and teachers, at the same time, while "lessons and classroom structure is influenced greatly by the needs and capacities of the child, the environment still provides a structured space with rules and boundaries."26 The way the child physically interacts with the classroom, therefore, becomes a point of the design. The room allows for freedom of movement with pockets of spaces for group work or individual interactions. Common spaces are present for communal learning and reflection. Connections between the indoor and outdoor raise an awareness of their surroundings. This also influences design at a smaller scale, where furniture of all different sizes and shapes allow unique interactions to take place. "At a fundamental level, to be critically conscious, a child must be a freethinker able to perceive and analyze the world around them as well as any arising contradictions. This, in turn, leads to the development of social consciousness." ²⁷ Spaces play a role in shaping the way the children interact with their peers and adults and by extension their society. The openness of a Montessori or critical pedagogy should not be confused by a

Fig 1.28. Polygoon School in Almere by Herman Hertzberger Spaces of the school slowly appropriated by students and staff over a the years.

27 Ibid



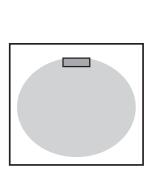


²⁶ Jessica Tawn, "Critical Pedagogies: Are the Benefits of Alternative Schooling Being Overlooked?," BERA. British Educational Research Association, April 18, 2017, accessed April 23, 2017, https://www.bera.ac.uk/blog/critical-pedagogies-are-the-benefits-of-alternative-schooling-being-overlooked.

lack of structure. It will be difficult as the children and teacher alike partake in discussion around the nature of education. And such moments shouldn't devolve into "further oppression or silencing." ²⁸ So again, a spatial organization can be used to structure dialogue.

Herman Hertzberger is a Dutch architect known for his school projects, many under a Montessori curriculum. In his book *Space and Learning*, he begins to integrate alternative pedagogies with the spaces that they inhabit. The classroom is the building block of the school and it is often an unarticulated rectangular plan that "lends itself best to instruction," ²⁹ The teacher is the focus of the room, which makes supervision easier. An articulated classroom, on the other hand, might not offer teachers a way to monitor

²⁹ Herman Hertzberger, Space and Learning (Rotterdam: 010 Publishers, 2008), 24.



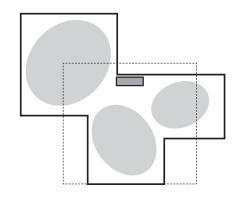


Fig 1.29. Diagram of Central vs Decentralized Classroom space.

Fig 1.30. Apollo School, Amersterdam and Preskihaven School, Arnhem.





²⁸ Freire, 138.

every student at once, but it allows them to have a degree of independence and self-organization while still sharing the same space. Different activities can take place without disturbing each other, and a decentralized space offers differentiated types of learning to take place.

The risks and difficulties that naturally occur with an open critical dialogue could also be better mediated through spatial relationships. As Giroux lists the questions that would be asked to reinterpret education, he is aware it cannot devolve into a completely open forum where opinions are thrown out without structure, and a consequent risk of further dividing the participants. Here, certain practices have been developed to guide these discussions. One reflective activity is known as fishbowling. Four to six students and teachers alike are seated in a tight circle, and present/discuss a certain topic while the rest of the group sit around a larger circle to the outside. Those on the inside are asked to prepare and think through their answer while those on the outside are asked to only listen for the duration of their discussion. This allows those on the inside an equal opportunity to discuss a topic with depth and those on the outside an "opportunity to authentically listen to one another when trying to work through some of these differences."30 (Fig. 1.31) Here, a further articulation of spatial relationships is helpful in creating order and structure within an open dialogue.

³⁰ Mary Breunig, "Turning Experiential Education and Critical Pedagogy Theory into Praxis," Journal of Experiential Education 28, no. 2 (2005): 120, accessed April 19, 2017.

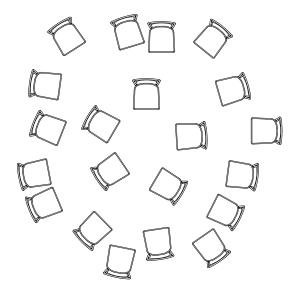


Fig 1.31. Fishbowling

The diagram drawn shows them seated on a nondescript chair, but Hertzberger's design has integrated moments when interior objects are designed with multiple uses in mind. They are somewhere between furniture and playground and challenges notions that objects are designed with a single use in mind. The sitting-hollow is a series of identical drawer/stool objects that fit into a pit in the ground. When used, it sits flush against the floor. Due to its modularity, it presents the children with many different ways of engagement. (Fig.1.33) Here too lies the potential for spaces; through its organization and physical use, these spaces will encourage both children and adults to renegotiate their relationship dynamic. The design seriously considers the relationship between how we learn, and how we act as individual and social agents; that is, it is concerned with teaching students how not only to think but to come to grips with a sense of individual and social responsibility. This also addresses what it means to be responsible for one's actions as part of a broader attempt to be an engaged citizen who can expand and deepen the possibilities of a democratic public life.

Finally, it has to be acknowledged that critical pedagogy is not simply about methods that can be applied regardless of context. It is the outcome of working through particular struggles and is always related to the specificities of contexts. The spaces and the new relationships within them can help students and teachers alike communicate, to have a chance to navigate through their differences. In these more dynamic spaces, students will also have to learn through moments of cooperation and interaction with each other. Conflicts will inevitably take place, and teachers will always be a necessary authority in resolving them, but here space becomes a teacher as well, while students learn to navigate through everyday life and learn to be with each other.

There may be lessons on nonviolence and justice in textbooks, but the child sees the opposite around her in the larger world. Unless she understands the dichotomy on her own terms, how will she cope with the contradictions and conflicts she encounters in real life, the differences and diversities she sees around her? ³¹

The focus of this chapter has been to try to reveal the characteristics of contemporary education. To reveal the ways in which it operates, in order





Fig 1.32. Sitting-Hollow. Montessori School, Delft.

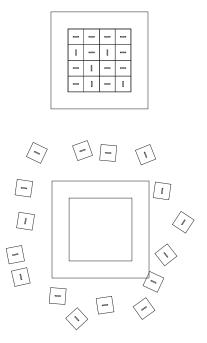


Fig 1.33. Furniture Drawing

³¹ Jaya Shrivastava, "Ankur: Society for Alternatives in Education," Spatial Agency, accessed April 15, 2017, http://www.spatialagency.net/database/ankur.society.for. alternatives.in.education.

to enforce and perpetuate existing power structures. Space is implicated in the ways the schools are built, operates and lived in to reflect these imbalances. A critical pedagogy begins to ask students when they first come to interact with society in a meaningful way, to begin questioning the very nature of education and begin building habits and world-views that foster collaboration and action. The spaces of learning themselves become teachers as it creates and fosters these delicate relationships. These are critical ways in which schools foster new relationships for their students within its own space. But looking beyond, a new model for spaces of learning also lies in their willingness engage with their society at large. So if education is to look beyond its own walls to the contradictions and conflicts that happen around it, what will it find in contemporary China? What will be the communities, large and small, that will be inhabiting these spaces and what is driving them apart?

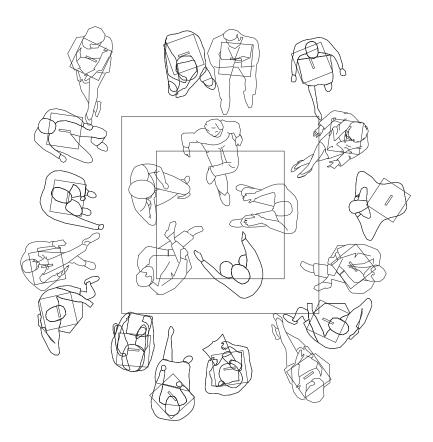


Fig 1.34. Fishbowling

THE COMMUNITY OF THOSE WHO HAVE NOTHING IN COMMON

In the 1994 book The Community of Those Who Have Nothing in Common, Alphonso Linguis explores two notions community. First is the rational community, conceived by those with something in common and based on commonalities, and the second is the namesake of the book and a community of strangers. For the bulk of his book, he explores this notion and its importance in contemporary society. The rational community is one we can all relate, it is the creation and maintenance of culture, of shared ways of doing things between people that establishes order and tradition. Schools in this sense play an important role, as a place where the elements of the culture are distilled and passed on. Educator Biesta, in referencing Linguis's work notes the rational community's conception of learning as acquisition, "the acquisition of something external, such as knowledge, values, and skills; something that existed before the act of learning and that becomes the possession of the learner as a result of his or her learning." This echoes the banking model of education cautioned against by Paulo Freire. Both create a kind of learning that is passive and has commodified learning in capitalist society today. Biesta then notes a different kind of learning:

Learning as responding, as a response to a question. If we look at learning in this way, we can say that someone has learned something not when that person is able to copy and reproduce what already existed, but when someone responds to what is unfamiliar, what is different, what challenges, irritates, or even disturbs. Here, learning is an invention or creation, it is a process of bringing something new into the world, namely, one's own, unique response, one's own voice.³²

This is one that must be dealt with in Linguis' community of strangers. And a realization that strangers are a product of creating rational communities, where common values cannot possibly accommodate every person. Uniqueness is therefore dealt with in two manners: either by assimilation, characterized as anthropophagic (literally means man-eating), a devouring of strangers and by extension their uniqueness so that they can be processed to become indistinguishable from those of the community. The second is exclusion, characterized as anthropoemic, a vomiting of strangers that signifies an

³² Gert Biesta, Beyond learning: Democratic Education for a Human Future (London: Routledge, 2016), 28.



Fig 1.35. Hamidao School During Recess.

expulsion of their uniqueness and barring them of an interaction with those in the community. Both acts can be observed through the lens of education and society, in China and abroad. Schools become a place of assimilation, where what is considered knowledge is determined by a single entity, be it the state or a ministry, and that knowledge and its standardized way of testing become the default way to measure each child passing through the system. It leaves two option for those who are unique. In my thesis, it is the rural, who do not share the urban and globalized culture that seeks to define their knowledge and worth. In practice, they are forced to assimilate or be expelled. In the case of the Tianjin Urban school, it is clear to see assimilation does not come by simply moving to the city. Policies and society have deemed them different, and their future is down a path intent on exploiting their labor and skills. In the villages across China that are separated off from urban opportunities



Fig 1.36. Village in Langfang Demolished.

by geography and means of access, some are left behind. It becomes a place for the elderly, the young and those deemed unfit to the urban enterprise of capital creation and exchange. These differences come in dramatic swings (like the mountain trapped villages when compared to a bustling metropolis), but each sees the other. The mountain village has cell phone reception or cable that allows them to see the society they have been left out of. In the cities, urbanites are forced to confront with everyone from business owners, to the street sweepers that come from a different place and have been categorically ostracized. What they both lack are ways to bridge across this difference. This thesis seeks to acknowledge this co-existence. Through the potential in learning to respond to existing conditions with understanding and outreach, to confront differences, and to re-define our own perspectives in the process. Biesta points out when we are speaking within a rational community, with those that are the same, we do not take responsibility for our own actions since we merely come to regurgitate what we share. However, when we have to confront a stranger, only then is it possible for us to find our own voice because the voice of the rational community will be a different language and meaningless to that of the stranger. We then learn what it means to respond, what our responses truly represents, and finally to take responsibility for them.

"We should neither forget nor deny that we live in a world of rational communities, that these communities are important for specific purposes, and that the main reason why we have schools, at least from a historical point of view, is in order to reproduce the world of rational communities. But we also should not forget that this is not all that matters in life - and that it is perhaps even the case that what ultimately matters is not the reproduction of rational communities but the possibility for the other community to come into and stay in existence. If the other community would no longer be possible, then we could say that the world has come to an end, since if the world would only be a rational community, then it would no longer matter who would live in that world and who would not. We would, after all, all be interchangeable." 33

The question is then in understanding how schools become the place of learning while being capable of this response. Biesta is aware that "the problem with the other community, however, is that it cannot be brought into existence in any deliberate or technical way. The other community is not the result of

Fig 1.37. Place Based Education

the world
regions
communities
schools
classrooms
ourselves

³³ Gert Biesta, "The community of those who have nothing in common: Education and the language of responsibility," Interchange 35, no. 3 (2004): 308.

work, it does not come into existence through the application of a technique or technology."³⁴ It cannot be planned, taught and forced as a new educational program. "The only thing we can do is to make sure that there are at least opportunities within education to meet and encounter what is different, strange, and other; and also, that there are opportunities for our students to really respond, to find their own voice, their own way of speaking."³⁵ This then becomes the role that teachers and educators must play, as an intermediary that is aware of the necessities of both learning as acquisition, which allows for a rational, shared community to exist, but also learning as responding, when the students must confront with something new and different. The teacher then allows, and indeed facilitates these interruptions, to allow students to discover

³⁵ Ibid.



Fig 1.38. School Courtyard, Hebei.

³⁴ Ibid, 310.

what their own perspective is in the world. The school and its architecture here plays the role of the intermediary. The spaces of the school should work like, and with the teacher. In its making and use, the spaces will then be a source of structure for the students, while being aware of the moments, when it relinquishes control and allows interactions it cannot possibly plan for to take place.

Indeed, Biesta's writings continue to address the similarity in mediating relationships that both architecture and educators provide. The neglected aspect of education, and by extension school's architecture, are vital components of the unforeseen encounters that allow students to come into being as individuals. Where "neither the subject nor the space are taken as predetermined or pre-existing; both come about through interaction and transgression." ³⁶ He uses the term 'disjunctive space' when referencing the works of Bernard Tschumi and the architect's interest in allowing events to occur within spaces.

"Event is the unpredictable, it is the thing that you cannot write in the program. It is the surprises! In many ways what I will try to do in a building is to put the program in such a way that it triggers unsuspected and unpredicted interactions. That is what I call event. The event is not what architects prepare. That's why I also say that the architect is not designing the event but is designing the conditions that may or may not trigger events." 37

While the ideas behind Tschumi's work resonated with Biesta, he was critical of instances of Tschumi's built work. On the Columbia Campus in New York, Tschumi was responsible for the Lerner Hall Student Center. This work of architecture tectonically provided moments of unique interaction between its visitors, but is protected behind the high security of the campus, and is only accessible to the students. In its everyday use, the building did not allow the "plurality and alterity that is so important to the educational encounter because (Tschumi) neglects to pay adequate attention to the social and worldly context of his projects." 38

Thus far, this thesis has shown that the given values by a specific

Fig 1.39. Lerner Hall. Bernard Tschumi.

³⁶ Derek R. Ford, "Toward a theory of the educational encounter: Gert Biesta's educational theory and the right to the city," Critical Studies in Education 54, no. 3 (2013): , accessed May 09, 2017.

³⁷ Ibid.

³⁸ Ibid.

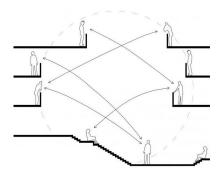


Fig 1.40. Atrium Diagram





Fig 1.41. Montessori College. Herman Hertzberger.

rational community with strict hierarchies, does not permit strangers or strangeness. Thus it comes as no surprise that information incapable of detection, namely something impossible to quantify (such as the potential in encounters of disjunctive space), must necessarily be avoided. In contrast to Tschumi's Student Center, Biesta references the Montessori College Oost in Amsterdam by Herman Hertzberger. This building's exterior is non-distinct compared to most institutional works of architecture, however, it is its interior atrium that draws attention; it is so that "everyone crosses everyone else's path." These moments of discovery are further reflected by objects in the building that are non-descriptive, and which require the user so interact with them in unique and challenging ways. According to Hertzberger: "... a thing, exclusively made for one purpose, suppresses the individual because it tells him exactly how it is to be used. If the object provokes a person to determine in what way he wants to use it, it will strengthen his self-identity." ⁴⁰ The

39 Ibid.



Fig 1.42. Montessori College. Herman Hertzberger.

atrium is filled with elements somewhere between staircases, tiered seating and open classrooms. Each of these places may serve functions beyond their typical use. Perhaps all could be inhabited for a large meeting beyond the capacity of any one room, or maybe during the rush between classes when there is high pedestrian traffic, wooden tiered seating would be a perfectly adequate alternative to the jammed packed staircases.

Beyond the physical nature of the space, the way the building has adapted in use is also a sign of its principles. Serving 1200 students from 50 countries, the school was open to accepting students from a wide variety of backgrounds. Students were quick to adopt the school as their second home, and it reciprocated in kind; when the school administrators realized the unstable situations that many of these students came from, it was addressed with an adjustment to the school program. Summer school programs were added, and the school became open year round, thus remaining accessible to students throughout the year. The value of "place-ness" associated with schools was recognized and drove a change to the way the school operated. The public spaces within the school, and the way they are accessed and used, also become models in informing the ways people came to interact with each other.

As we identify the ways in which differences are produced and enforced within our communities, schools are identified as a key place of resistance, compliance, or some combination of both. Spaces of learning then, are the grounds on which we need to reconsider how we become individuals and how we see each other in today's world. A new kind of the community may be fostered that welcomes difference, the school in its design then must reflect a space meant to foster interactions. Interactions that go beyond the imagination of any architect but critical to the process of a child becoming an adult. So how have these differences come about within China and what is driving this increasing divide?



Fig 1.43. School Courtyard, Hebei.

Difference

UNEVEN DEVELOPMENT: RURAL VS URBAN

The city and the village can be observed as dichotomies within the Chinese culture. Between and within each, a state of difference and divide has become a given condition. In order for education and schools to critically mediate these boundaries, we have to observe the root of their causes, their implications and the ways in which they manifest spatially.

From June to September of 2016, I traveled back to the northeastern region of China. I had roots in two of the largest cities in the region, having been born in Tianjin and with close relatives in Beijing. The two cities are separated by 130kms with a combined population of 37 million. The region is nicknamed the Jing-Jin-Ji. Representing the developed provinces of Beijing and Tianjin and surrounded by the province of Hebei, where industry and agriculture dominated. My trip's goal was to get an intimate understanding of the changes experienced by the rural population of the region, with a focus on the state of rural education. I discovered the totality of rural life in China to be one of confounding contrasts and states of seemingly irreconcilable difference with urban China. My travel included trips several villages around the Jing-Jin-Ji, where I saw firsthand the changes in rural education as schools that used to be a part of every village were replaced by newly built schools that served a much larger area. The villages themselves were also distinct and in various states of economic and social well-being; some villages could not resist the pull of all

¹ Rainy Yao, "Jing-Jin-Ji: The Biggest City in China You've Probably Never Heard Of," China Briefing, July 10, 2014, , accessed March 03, 2016, http://www.china-briefing.com/news/2014/07/11/jing-jin-ji-biggest-city-china-youve-probably-never-heard.html.

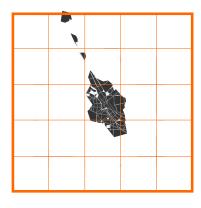
the wealth that had accumulated in urban China and as a result, entire middle generations had moved on in search of work that offered a better future than their farming tradition. Meanwhile, some capitalized on the good fortune of unique local opportunities and those villages would have "overnight boom" households busy investing their new wealth on renovations and enlarging their home. At the same time, it was perfectly normal to see a neighbor's house abandoned, as some decided they were better off cashing in their opportunity and moving into the city. Rural education had also experienced a change in the last decade. With the growing economies of Beijing and Tianjin, the education ministries initiated large-scale efforts to change rural education. This was achieved through a process of building centralized rural schools, and efforts to standardize the curriculum and testing between rural and urban schools.

However, unevenness seems an unavoidable tendency in our globalized neoliberal economy. Its spatial implications have been theorized by Marxist geographer David Harvey and his former student Neil Smith. Together, their writings focus on spatial tendencies as market goals of finding surplus value, centralization along with the creation of borders and the discovery of new frontiers to exploit becomes primary ways to leverage unevenness. A pattern of developing the underdeveloped emerges that leverages disparities for unequal exchange. Harvey argues for a dialectical model of thinking to form a 'unified field theory' of uneven development under four ideas.² First, that processes of capitalism have been ingrained with daily life. This has transformed the world and the circulation and accumulation of capital can be seen as an ecological infrastructure, as necessary to us as the movement of air, water, and energy. Second, the understanding that capital accumulation is not only made through production; appropriation, devaluation, and oppression are tools which leverage surpluses and uneven development can be observed as a result of these processes. Third, as a geographer, Harvey notes capital accumulation happens in space and time. Certain spatial phenomena, such as geographical divisions of labor, monopolistic competition, physical infrastructures for production and consumption. and the coercive laws of spatial competition, can all intensify uneven geographical development. Lastly, social struggles manifesting spatially, such as struggles over access to resources, power through accumulation, and struggles of regionality create and are created by uneven geographical development. Harvey's writings provided the connection for



BEIJING 1990

50KM



50KM TIANJIN 1990

² Harvey, David. "Notes Towards a Theory of Uneven Geographical Development." Spaces of Global Capitalism. London: Verso, 2006. 55-89.



Fig 2.I. Growth of Beijing and Tianjin: 1990 - 2004 - 2010.

how China can accumulate its wealth with a growing gap within its society. This, combined with Davies' insight on competition, helps us understand the operational logic of present day China.

Inequality is evident as a designed condition when you trace the changes experienced by rural China in the last 50 years. China did not experience the change of the European countryside after the Industrial Revolution shifted the nature of human labor. Before the Japanese invasion, China remained a largely agrarian culture, with the widespread organization of village clusters centered on small market towns, that linked them to the wider economy and society. The relationship and cooperation between the villagers were key as a large labor force was necessary for this agrarian culture. Villages themselves were socially isolated as the farming culture meant the people were tied to their land.

China's industrial underdevelopment was exposed during the Japanese Invasion of WWII and became the priority of Mao Zedong in the years after. During the Great Leap Forward campaign of 1958 to 1961, China's leaders attempted to accelerate development and dramatically increased the pace of industrial production throughout the country, particularly in rural areas, by centralizing industries. The Great Leap Forward became a major economic disaster with peasants often abandoning farming to produce steel or work in other industrial factories. The unrealistic expectations of the central government were exacerbated by false reporting from local municipalities and the three years between 1959 and 1962 were known as the "Three Bitter Years", where widespread famine caused an estimated death of between 20 to 40 million people.³ This also changed the fundamental organization of villages. A centralized village structure was imposed, that put the state and its ideology into direct contact with the villages. It swept aside the historic practice of local interpretation and negotiation when it comes to central policies and national values for villagers. Links between villages and villagers were severed in favor of a political and ideological centralization.

The hukou (household registration) system was developed as the rural/urban divided under Mao. Hukou separates every citizen of China into two categories: rural or urban. This status, determined at birth, was implemented by Mao Zedong in the 1950's, to prevent a mass exodus to the cities. As the rural hukou residences were collectivized into village communal units, their



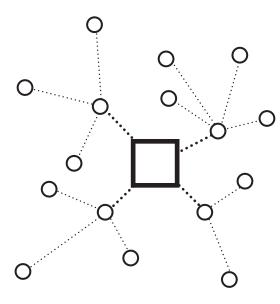


Fig 2.2. Village Relationships: PRE 1950's Clusters of villages centered on small market towns that linked them to the wider economy and society.

³ Leonard, Thomas M. "People's Republic of China." In Encyclopedia of the Developing World, 327. New York: Routledge, 2006.



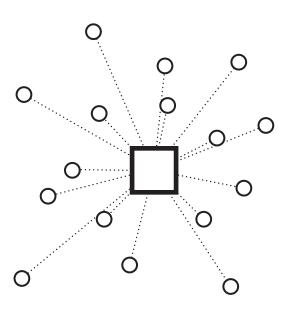


Fig 2.3. Village Relationships: 1950 to 1978 A centralized village structure was imposed that put the state and its ideology into direct contact with the villages. It swept aside the historic practice of local interpretation and negotiation when it comes to central policies and national values for villagers.

agricultural and industrial outputs were the only source of production for the entire nation. At the time, rural citizens outnumbered those urban by six to one, and urban citizens were fed on food rations from the collected output. The essence of the hukou system is still in place today and heavily disadvantages rural migrants in cities as you only receive most social benefits if you are residing in your birthplace. While rural citizen does enjoy certain benefits those in cities do not, the biggest being able to own land, it is clear that hukou creates an uneven system, and one that has tipped in favor of those in cities as China has focused development there in its process of engaging the global economy.

Under Deng Xiaoping, Township and Village Enterprises (TVEs) took on an expanded role in the industries of China with new policies that shifted the approach from collective industries to a decentralization model that gave more power to local governments.⁴ In the late 1970s, provincial administrators in regions of low yields and consequent low standards of living began experimenting with new forms of tenure and production. In most cases, these took on the form of breaking up the collective production team, contracting individual households to work assigned portions of collective land, and establishing enterprises that were flexible in nature to maximize production. A hybrid condition of centralized policy combined with decentralized industries reemerged in this period.

As internal demands stabilized, Deng Xiaoping saw the potential of several regions of China to attract and sustain foreign investment. Internal debates of centralized vs decentralized development ended with the former winning. The theory was that by focusing resources on a few regions, namely the Pearl River delta, the Shanghai Delta and the Jing Jin Ji. It would be possible to rapidly urbanize and make China globally competitive. Those urbanized cities would then serve as models for the rest of China and drive development elsewhere. From years that followed up until today, this model of trickle-down economics has driven the change in China. The result is a constant balancing act between urbanization and rural reconstruction.

⁴ Bolchover, Joshua, John Lin, and Christiane Lange. Homecoming: Contextualizing, Materializing and Practicing the Rural in China. Berlin: Gestalten, 2013.44

HUKOU: FROM DIVISION TO NEGOTIATION

The Hukou system is a component of the balancing act between the urban and the rural. Hukou's harmful effects of dividing the country can still be seen today, despite being implemented as a definitive act by Mao Zedong more than a half-century ago. Over time though, hukou has also come to reveal a very specific character of Chinese society; that of a relation-based one as opposed to a rule-based one.⁵ This can be considered a fundamental difference between western and eastern societies. Historic rural China has known nothing but negotiations between the state and local administrators. The imperial examinations awarded autocratic jobs, and most of the time those rewarded with positions of power would spend work in their home region, acting on the behalf of state demands but with an intimate local knowledge that allowed them to negotiate accordingly. Emperors realized they could not carry out state demands all the way down to the many villages effectively and relied on local administrators to change agendas as they saw fit. Therefore, when you consider how education became a tool for determining the social order, (in this case playing a direct role in governance), its' impact necessarily goes far beyond a simple passing of knowledge.

The legacy of Hukou may be an antiquated and unfair system that helped deepen the rift between rural and urban. But, as the rural has developed in the shadow of the urban, Hukou is now a source of leverage and negotiation for both sides. The large-scale developments around city peripheries that have become so common in China don't always succeed, but sometimes they stack the odds in their favor with local municipalities allowing rural citizens to buy property and receive an urban hukou in the new development. Likewise, those in rural areas with a fortunate geographic location have realized the value they have in their land ownership and have used it to leverage large payouts from developers looking to build on their land. It is important to realize the equation is far from even as those rural areas lucky to have a rocketing land value are vastly outnumbered by the scale of urbanization and wealth that drain rural migrants from the countryside.

Later on in this chapter I visit the village of Baodi in Hebei. A particularlLy pure and workable marble was abundant in the area and a created



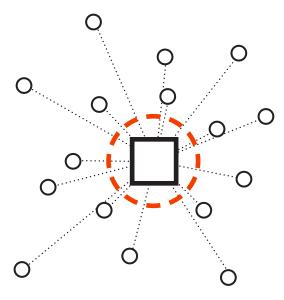


Fig 2.4. Hukou Collectivization further drove a divide between rural and urban China. To prevent a mass exodus to the cities, the hukou system separates every citizen of China into two categories at birth: rural or urban. The hukou ties most social benefits to the place of birth and was used to control migration.

⁵ Xiaotong Fei, From the soil: the foundations of Chinese society: a translation of Fei Xiaotong's Xiangtu Zhongguo (Berkeley, Calif.: University of California press, 2001)1 35.



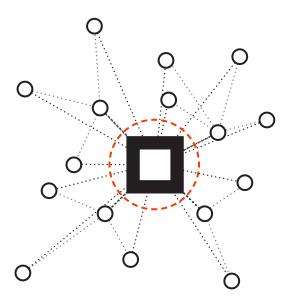


Fig 2.5. Rural / Urban Relationship -1978 China opened its economy and a boom of urbanization followed in its cities. But present condition is of a continued uneven existence between the rural and urban. Village relationships to the cities and between themselves now takes on a mix of market economy exchange and political collectivization.

unique local industry of stone craft. China's recent construction boom has seen the newly wealthy middle class' demand skyrocket for architectural ornaments or interior décor and this area has industrialized to take advantage of the need. The in-demand industry allowed for many households to own small business but those willing cooperate were able to informally organize between each other and find opportunities otherwise unfathomable. Due to the labor-heavy nature of the work, there are migrant workers in need of housing in the area, so in the village I visited, a handful of families had bought out a row of land at the edge of the village and were in the process of constructing a mid-rise apartment building. This runs in contrast to the practice of large-scale developments that have swallowed up entire villages, where every villager is bought out of their home, the entire village razed and awaiting a multi-building high-rise development. The spirit of local negotiations and collaborations between villagers to change their situation is a much-needed practice.

It is clear how political and economic reforms have played a major role in China's changing society. So how have schools been affected? Are they a mere bystander and neutral sites being acted upon or do they actively enforce the the will of the state? Spatially, policies affect the built space and in many different ways. Economic reforms have altered the nature of factories within China, especially in southern coastal cities. The large scale, rural to urban migration was largely driven by these changes in primary places of labor. But contemporary China is more than the sum of its economic reforms, it has also experienced a change in culture. The nature of people's understanding of their relationship with authority, as individuals and as a collective have all been altered. So what role has schools played to the cultural changes of China?

THE "STATES" IN VILLAGES

The beginning of the 1900s saw a China that had stagnated in terms of scientific and social progress. Newly established relationships with the Western world and Japan saw an influx of different opinions about the progress of Chinese society. Adult literacy in the 1900's was well below 30% ⁶ but traveling scholars had become a staple in disseminating Confucius teachings and thoughts at countless villages throughout the country. Informal courtyard

⁶ Mathew White, "World Literacy," Map - World Literacy 1900s, December 1997, accessed April 03, 2017, http://users.erols.com/mwhite28/literacy.htm.

schools welcomed these traveling scholars and outside performers alike, providing the villages with a connection to the culture at large. Culture and values were spread through plays and poetry alike. In general, the improvement was deemed necessary and by the 1920s the Rural Reconstruction Movement (RRM) was born with the goal of progressing the lives of rural peasants.⁷ Leaders of the Reconstruction movement sought to convert these informal spaces and implemented a more organized educational agenda Their first target was to improve literacy.

Literacy was seen as a key social barrier separating city dwellers and village peasants. Like education today, literacy was used as a standard that separated and prejudiced against the rural, limiting their participation in shaping their politics. Unfortunately, by the 1930s, the reconstruction movement was broken up by the Japanese invasion.⁸

The years of war and social instability lasted to the end of the Great Leap Forward in 1962. Just as schools and formal education had returned to become are a regular part of society, Mao's political comeback, and the Cultural Revolution in 1968 upended this newfound stability. Mao rallied support around the growing rural and urban inequalities that were exacerbated by the Great Leap Forward and he pinpointed the new urban privileged elite as the source of the problem. Intellectuals were viewed as potential threats to the stability and integrity of the country and both were sent to rural labor camps en masse. Students, workers, and people of all walks of life rebelled under Mao's campaign. Education came to a complete stop as teenagers were the main target of Mao's revolutionary spirit and schools were closed down. Literature, plays or paintings depicting ways of life before the Japanese invasion were targeted and destroyed.

When schools did open it was limited to a primary education now augmented with Maoist thoughts. Mao's ideologies looked to replace Confucius teachings, criticized for creating and maintaining the previous social order. In particular, they were criticized for valuing tradition above revolution and was to blame for the historical oppression experienced by rural China. Mao sought an education through labor that emphasized practice over theory and which would send millions of city dwellers "down to the land" to learn from



Fig 2.6. Cultural Revolution Large gatherings to burn and replace pre-Mao literature with his manifesto.

⁷ Ning Ou, "The Bishan Project: Restarting the Rural Reconstruction Movement," ed. Gerfried Stocker, Post City: Habitats for the 21st Century, 2015.

⁸ Ibid.

their rural village counterparts about peasant hardships and farming. ⁹ It was on the grounds of education that the battle to change Chinese culture was fought. However, as one uncovers the results of the Cultural Revolution, the contradictions arising from any attempts at constructive changes to Chinese culture are revealed.

On the surface, the values of Mao would be echoed by those of Paulo Freire many years later. Freire thought to change education to liberate the underprivileged. Meanwhile, the Cultural Revolution as envisioned by Mao was centered around making education accessible to the underprivileged and to abolish examinations systems that rewarded the privileged. Confucian educational ideas about absolute authority in the teacher and memorization of book knowledge were also turned over in favor of an education based on practice and experience. And lastly, the governance of schools was taken out of the hands of "the bourgeois intellectuals to committees made up of local workers, soldiers, peasants and 'politically correct' students and teachers." ¹⁰

A total rejection of the "old" meant people failed to distinguish between the necessary authority and tradition, and a tabula rasa revolution. Rebelliousness was encouraged in the general society and when translated to a school environment, it meant there was no respect between for the teacher, nor for the value of an education. Individuals gained fame and admiration for acts of rebellion against teachers and against a formal education.

Mao's education through labor and attempts to make higher education more accessible created a system where entrance into universities was based on recommendations by worker communes and factories, and where political correctness reflective of Mao's dictum was deemed the most important values for an individual. In practice, this was a highly subjective and arbitrary way of evaluating children that invariably led to favoring the families of party officials and perpetuating existing personal relationships. While there was no doubt the authoritarian regime of Mao loomed over the lives of every Chinese citizen at the time, it also thereby had to reject and seek to destroy any other sources of authority and ties to tradition, in order to stay in power. In this case, class struggle of the uneducated was exploited for social change, but an oppressive political environment was created.

⁹ Gilbert King, "The Silence that Preceded China's Great Leap into Famine," Smithsonian.com, September 26, 2012, , accessed February 16, 2017, http://www.smithsonianmag.com/history/the-silence-that-preceded-chinas-great-leap-into-famine-51898077/.

¹⁰ Martin Singer, "Educated Youth and the Cultural Revolution in China," Michigan Papers in Chinese Studies 10 (1971).

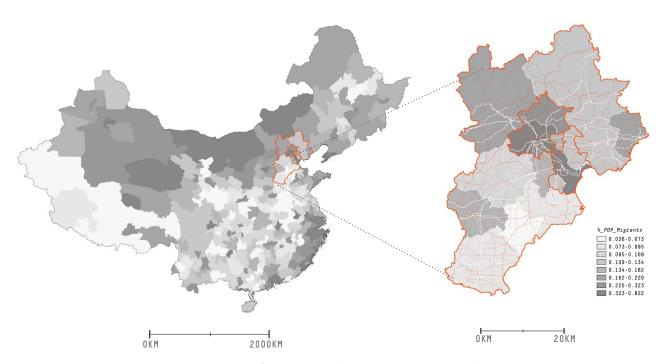


Fig 2.7. % Population Migrants (Darker = Higher %)

Today, the schools remain a prevalent method of statecraft in disseminating the ideals of the Party. We have witnessed its impact on the urban class with its competition driven inequalities, but it extends far beyond the city and into every level of the population. In Shulei Li's The "States" in Villages, he writes about his experience at an rural school in Hebei, bordering on its northern edge with inner Mongolia. In remote and isolated rural parts of China, the schools regains its place in the community as its window into the world outside." But instead of the traveling Confucius scholars of Imperial times, it is now replaced by state-directed schools with a standardized curriculum that means little to local life in those areas. In the case of Shulei's observed school, it was the only physical presence of the state in the village. His central thesis revolved around the extent of the state influence down to these rural reaches of China, and education and schools were observe as a critical instrument in achieving this. Through centralization and standardization they continue to reinforce the a system that homogenizes and exploit the local differences that are inevitable but disadvantage many in the face of a detached education system.

 $^{11\} Shulei$ Li, The "States" in Villages A Look at Schools in Rural China (Singapore: Springer Singapore, 2016), 8.

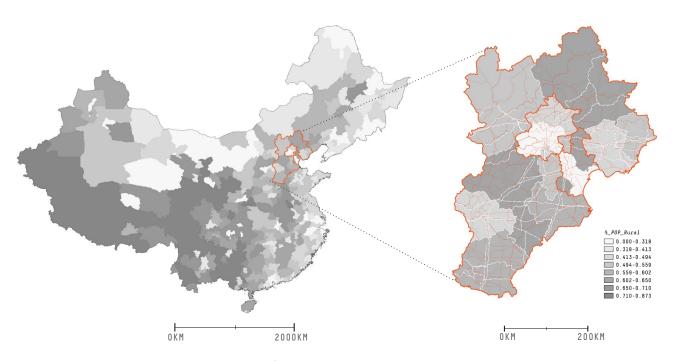


Fig 2.8. % Population Rural (Darker = Higher %)

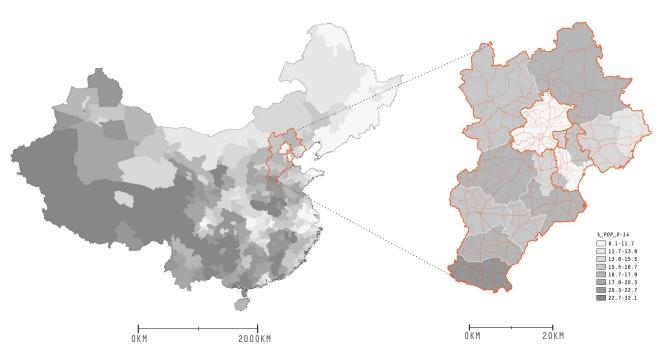


Fig 2.9. % Population between 0-14 (Darker = Higher %)

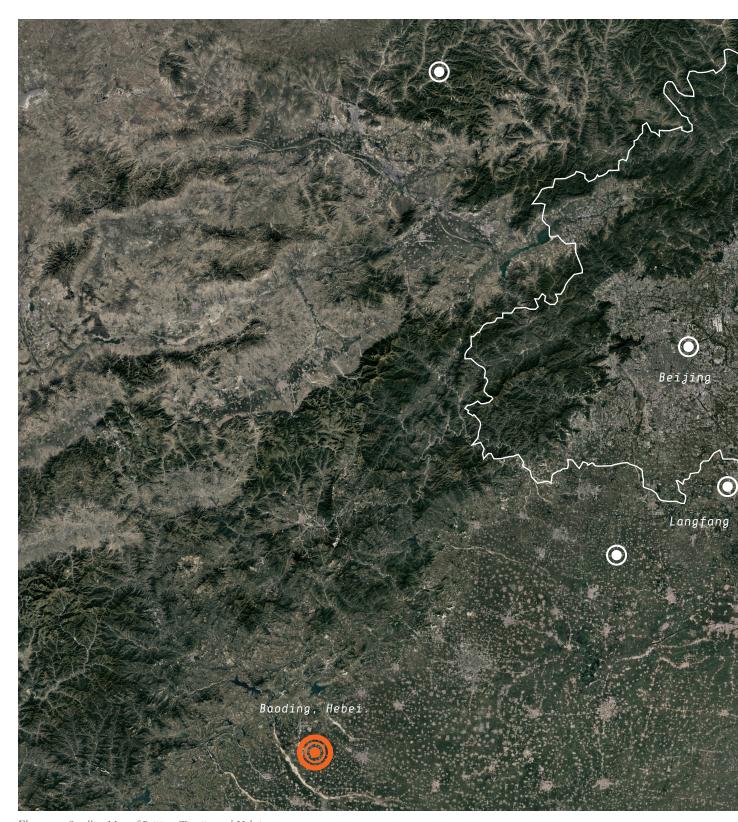
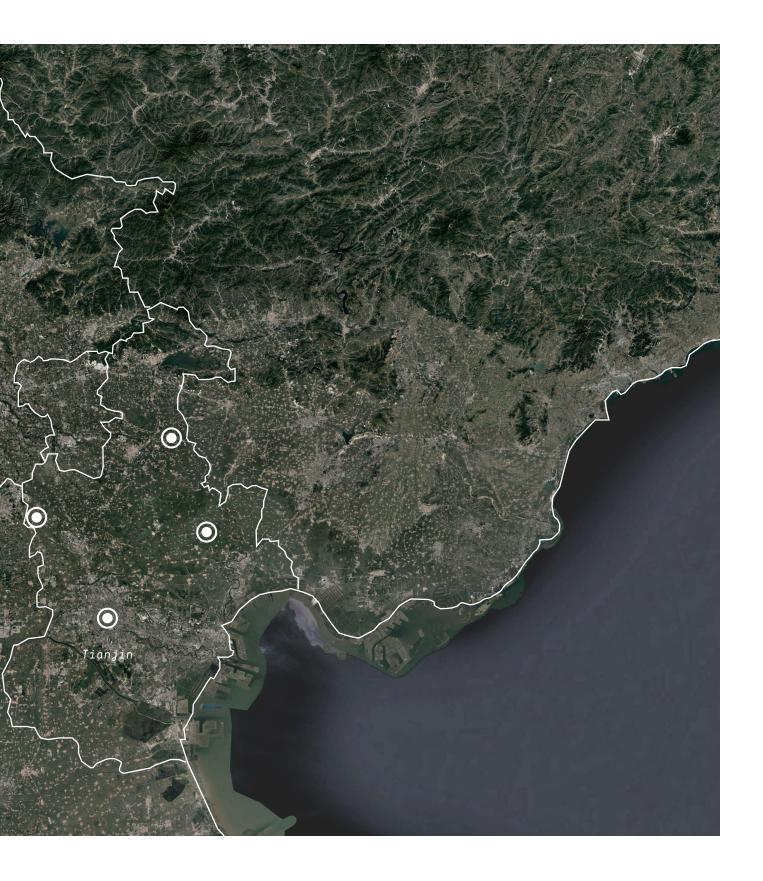


Fig 2.10. Satellite Map of Beijing, Tianjin and Hebei.



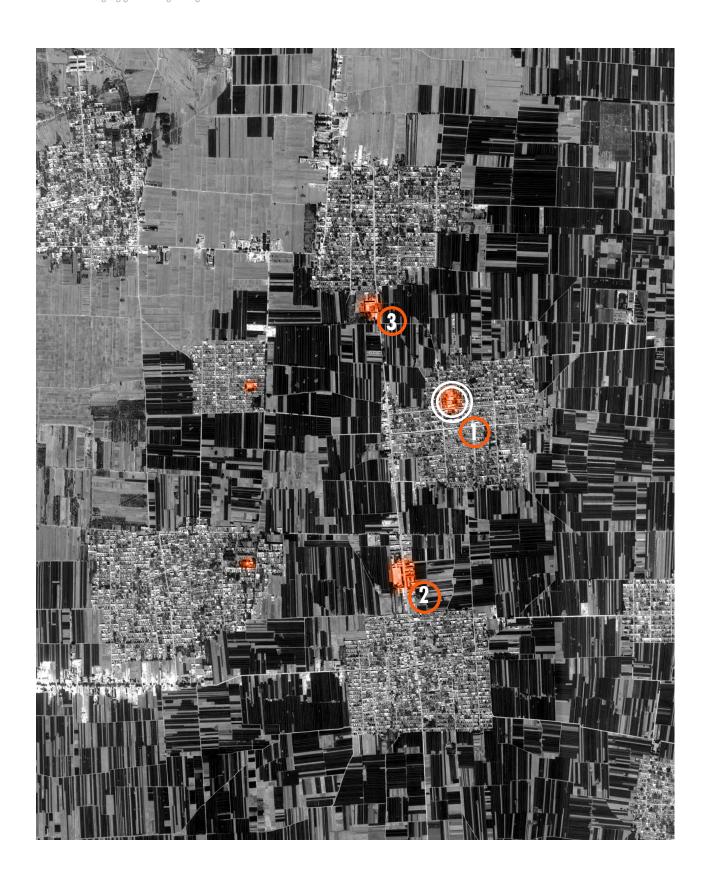


Fig 2.11. (Opposite) Baodi, Hebei Elementary schools highlighted in orange with three circled and numbered for further description.

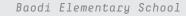
Baodi Elementary School

Baodi's recent growth has had little to do with its investment in local schools. This particular area of Hebei has been fortunate in recent years to attach itself to the large construction industry of China. Residential construction has accounted for as much as 20% of the Chinese GDP in recent years. As urban centers like Beijing and Tianjin expand further outward, they have also created a flux of capital into second tier cities like Langfang. The economy of China has relied heavily on construction to provide employment opportunities and growth. The effects of a large construction industry, along with the recent



Fig 2.12. Baodi Village Industries





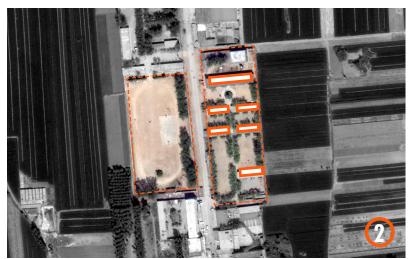
Grade 1-6

Lot Area: 4500 SqM

Building Gross Floor Area: 2100 SqM

> # of Teachers: N/A

> # of Students: 600



Dongguo Elementary School

Grade 1-6

Lot Area: 11000 SqM

Building Gross Floor Area: 3500 SqM

of Teachers:
 N/A
of Students:
 N/A



Zhongxin Elementary School

Preschool - Grade 1-6

Lot Area: 10500 SqM

Building Gross Floor Area: 5100 SqM

of Teachers:
 N/A
of Students:
 N/A

Fig 2.13. (1-3) Baodi Elementary School (1) and two adjacent schools.



Fig 2.14. Village Industry



Fig 2.15. Adandoned House

practice of a decentralized Township Village Enterprises presents rural China with many local opportunities to participate in the larger regional economy. This area, in particular, has leveraged natural resources readily available to serve the rapidly growing middle class looking to invest in real estate. A full service from extraction, refinement, and production are seen as you drive across the outskirt of villages. Makeshift factories and warehouses litter the sides of roads and are responsible for a wave of migration as well for those rejected from opportunities in and near cities. Just how fast the area has been injected with new activity is apparent when you visit its villages. New cars and renovated houses are frequently seen, signs of unanticipated overnight success. However, you will also find just as many abandoned homes, disintegrating among the new growth. They are a reminder of those who either moved away with the first wave of wealth or that left they could anticipate such a growth. The recent poverty of the area is seen when you see older homes, made of cob and with a wooden framed roof that has survived for almost a hundred years. So it should come as no surprise that the first wave of the economy led some people to abandon their home for cities. Leaving in fear of a return to their past conditions that can come as quickly as the wealth.

The state of a village school and local education mirrors the rapid change in the area. A courtyard school here does double duty as both the elementary and kindergarten of the village, a village that is looking to capitalize on a rush of migrant works with families organizing small-scale construction



Fig 2.16. House Under Construction

projects to rent to workers. The Baodi school is one that now stretched beyond capacity at 600 kids coming into a facility meant for 300 students. Constructions are therefore well on their way as new schools were seen to be built to accommodate the growth. (School #2, Dongguo Elementary School)

Within these villages of Hebei, it is possible to see the jarring state of change and difference across rural China. Economic opportunities can drive dramatic local developments at the village level, but it only takes a closer look at the architecture to reveal the recent past of an area squandering in poverty and the many people that abandoned their home in the rural that had been casualties of China's recent growth. Unfortunately, this seems to be the more common story as villages move further away from their agrarian past, as a previous generation with a culture strongly rooted in their land disappears against the new mobile workforce, led by nothing more than the economy.



Fig 2.17. Existing School



Fig 2.18. Kindergarten in School Complex

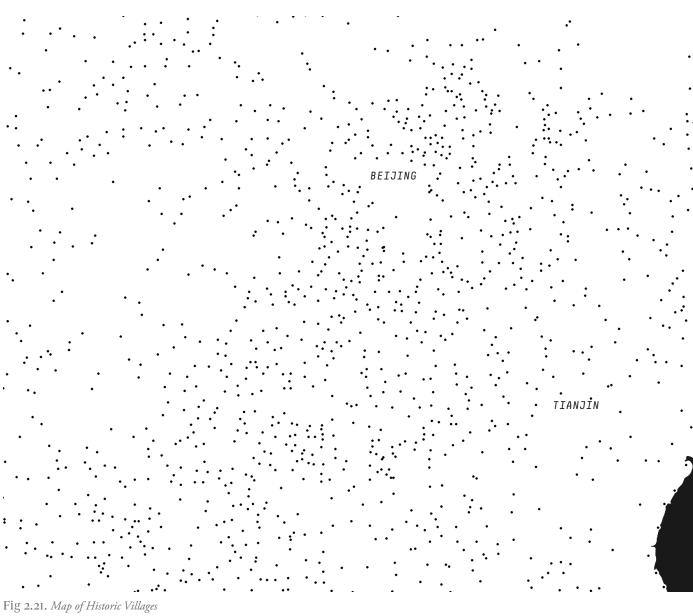


Fig 2.19. Existing School Panorama

To act within China and in rural China, in particular, requires an understanding of its unique and polarizing conditions. Baodi exemplifies a kind of middle ground between a clearly distinguished rural and urban. An improved physical and virtual infrastructure create a region, built on the foundation of a rural culture, changed by the omnipresent structure of a neoliberal economy. The development of this village and area serve as examples to the outcome when local opportunities are capitalized.



Fig 2.20. New School Under construction



A CRITICAL PEDAGOGY OF PLACE

A compression of space and time characterizes the modern relationship we have with our society as technological advances and a global market connects disparate places, and establishes a new network of relationships. The result is an increasingly temporary and uncertain relationship we have with the spaces we inhabit. In this sense, the structure and ties to tradition offered by the kind of education of Arendt imagines are critical missing links between us and a sense of local community. There "the complexity and uncertainty wrought by globalization have produced a search for meaning and affiliation in locally defined identities."12 Placed-based education, and by extension placebased architecture, become the means in which to engage both education and architecture within localities. It is an attempt to subvert the standardized nature of education and construction today. It offers people a chance to critically engage with their surroundings, and to learn through challenging existing conditions in their everyday lives. What constitutes as 'local' and 'place' today must be questioned. The very nature of a globalized economy and society means the local is now "tightly interconnected with the regional, national and global."13 The nature of place expands beyond the physical to include the biophysical, social, political, economic and cultural. Freire's writing warns against a focalized view of problems to their localities, which limits peoples' understanding of the totality of the problem. It limits them from establishing a relationship with people far and near that are also enveloped within the same structures of oppression. When it comes to defining a place, educator David Gruenewald articulates a critical construction of place that "focuses attention on how economic and political decisions impact particular places."14 Combining the approaches of critical pedagogy with place-based education allows abstract ideas to be grounded through practical experience and an awareness of the place.

When it comes to practices of understanding and intervening in the local, the constant flux of our contemporary society makes those tasks

Village Locations

1911

¹² Robert B. Stevenson, "A critical pedagogy of place and the critical place(s) of pedagogy," Environmental Education Research 14, no. 3 (2008): 354, accessed April 26, 2017.

¹³ Ibid.

¹⁴ D. A. Gruenewald, "The Best of Both Worlds: A Critical Pedagogy of Place," Educational Researcher 32, no. 4 (May 0 2003): 3, accessed June 5, 2017.

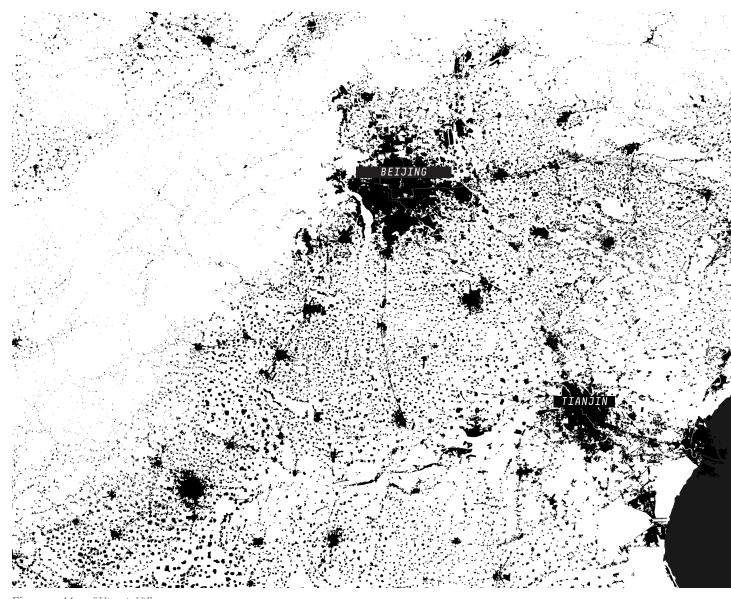


Fig 2.22. Map of Historic Villages

Built Surfaces 2010 increasingly difficult. Educator C.A.Bowers expands upon the term 'thick description', referenced from anthropologist Clifford Geertz to exam "the history of prior relationships, issues of gender and class, personal biography', and other cultural patterns. He (Bowers) advocates that students be engaged in creating thick descriptions of the cultural traditions and practices associated with how local people inhabit place, a relationship which may reveal patterns of environmental abuse as well as 'aspects of the local cultural commons that have been carried on for generations, and that represent alternatives to the consumer/industrial culture that is being globalized'." Thick descriptions in this sense develop an understanding of local intergenerational knowledge and practices at the center of place-based education.

The difficulties of Bowers' assumption is in a stability of intergeneration relationships that cannot be guaranteed in today's society. The difference in culture between the urban and rural has led to an increasingly fragmented culture, where large-scale rural migrations have further uprooted individuals and communities from their historical place. Therefore, "the conserving and strengthening of local traditions of intergenerational knowledge advocated by Bowers is also made difficult and complex by the constant global flows of information, ideas, and values that have created dynamic, irregular and uncertain cultural conditions and relations. It is a matter not simply of identifying what parts of the cultural commons should be conserved (or transformed) as if it was static, but of recognizing that the commons – and the people who inhabit it – are in a continual state of flux or transformation." ¹⁶ This understanding should be used to make the practice of thick descriptions more responsive to the world today. Instead of a need to seek out static practices as the only indication of the local or a place, a willingness to engage with the contradictions and flux of modern society allows for placed-based intervention to better engage with the modern notion of 'place'.

The essence of place-based practices is their rootedness in place, not necessarily a need to seek out roots. As I visited places of varying degrees of "ruralness" across China, from closed off villages in the mountain areas of Chongli to those surrounded by farmland, I was always struck by the presence of what could be considered connections to the urban or the global. Whether it was foreign imported cars, posters for TV dramas on CCTV (China Central

¹⁵ J. K. Gibson-Graham, "Rethinking the Economy with Thick Description and Weak Theory," Current Anthropology 55, no. S9 (2014):.

¹⁶ Ibid.

Television) or simply the fact that wherever I happened to be, I never lost a cell phone signal, nor access to data. It became clear the degree in which capitalism and globalization had alternated the ways people live and interact in every corner of Chinese society. While communication technology and a material culture have overtaken certain existing relationships, there were also moments of observed cultural customs and taboos that come from a time far beyond the memory of capitalistic influence. At one village in Tianjin, I was visiting a family friend whose parents still lived in the village. When I walked into their home there were four other women in their 50s or 60s that were seated in the living room, sewing a piece of bedsheet that was spread out on the floor. I found out that her daughter was getting married that fall, and a local custom was for the bride's family, among other things, to make three sets of winter bedsheets. They acknowledged that with people being so busy with work these days, those that still followed the custom often bought the bedsheets. However, they were still living in the village and had time on their hands. Like most people today in the villages, their farmland and labor were leased out to companies that tended to them and gave them a percentage of the profit. The lack of the middle generation in villages means labor-intensive work like agriculture were all but mechanized and taken over by private corporations with enough scale to make them a profitable business. The elderly in the villages were often there because they had nowhere else to go; these soon to be grandparents had tried to live in the city with their children but found the change in lifestyle too jarring and isolating. So, they moved back to their village and on days like today took part in customs that are rapidly shifting, or phasing out altogether.

The people I interviewed took pride in their work and skills; they were quick to point out that by virtues of being farmers, they grew the cotton for the bedsheets themselves, and they were of a much higher quality than those you would buy in stores. The three other women were also there by custom, and not by coincidence. A part of the local tradition is that any woman in the village who has a husband and is a mother, a "whole woman" as I was told, was to take part helping the bride's mother with this task. There are many other customs to the wedding, like the procession for the bride starting at 11 am on the day of the wedding, among other local knowledge that creates a sense of community. Such practices may seem to present superficial value, values not easily quantified by our current market. But these practices, with a certain "thickness" as Bowers might describe them, reveal layers of relationships within a place. The reveal the values people have toward each other, kins and



Fig 2.23. Bedsheets made for newlyweds.

outsiders alike, it also demonstrates an attitude towards being self resillient, taking pride in their physical labor and understanding of the natural world around them.

If these practices are marginalized in our current economy, then perhaps it needs to be re-definted. Economist geographers J.K. Gibson-Graham advocates for the "use of the term (that) is much broader. The "eco" in economy comes from the Greek root oikos, meaning "home" or "habitat"— in other words, that which sustains life. The "nomy" comes from nomos, meaning management. We view economy as referring to all of the practices that allow us to survive and care for each other and the earth. Economy, in this understanding, is not separate from ecology, but refers to the ongoing management—and therefore negotiation—of human and nonhuman ecological relations of particular logic or rationality ... they are diverse, complex, and contextually situated, animated by multiple motivations and relational dynamics." ¹⁷ This re-defining of such an omni-present concept is liberating. It presents an alternative to the economies that have come to define so much of societal practices and how local practices give way to global power.

Fig 2.24. Courtyard



Fig 2.25. Abandoned Courtyard Converted to Garden

¹⁷ J.K Gibson-Graham, "Cultivating Community Economies," TheNextSystem.org, February 27, 2017, accessed June 28, 2017, https://thenextsystem.org/cultivating-community-economies.



COMMUNITY ECONOMY

As a global market economy has come to dominate all aspects of society and culture, it has become harder to avoid, and less common to imagine alternative ways for us to interact with each other and the world around us. The way its logic is now incorporated into law, politics and everyday life, renders any resistance seemingly futile. However, perhaps the values presented by a place-based education have the potential to introduce and augment a different kind of economy. The first step is to recognize the relationship between globalism and localities.

"Globalism is synonymous with abstract space, the frictionless movement of money and commodities, the expansiveness and inventiveness of capitalism and the market. But its Other, localism, is coded as a place, community, defensiveness, bounded identity, in situ labor, non-capitalism, the traditional."18 In Beyond Global vs. Local: Economic Politics Outside the Binary Frame, economist geographers J.K. Gibson-Graham introduces their argument by questioning the notion of a global that is all encompassing and acting-upon, and a local that is particular and acted-on. They raise the point that the dichotomy between global and local, space and place are currently posited as uneven binaries Eric Swyngedouw, Neil Smith, and David Harvey are all geographers who have depicted a recent upscaling (globalization) of capital and a downscaling (localization) of labor. The result is "one in which the global is appropriating more power." This is observed in "oppositional groups, whether organized around working-class, gender, environmental or other politics, are usually much better and empowering in their strategies to organize in place, but often dis-empowered and fragmented when it comes to building alliances and organizing collaboration over space." The effectiveness of local groups organized around common struggles are observable in many different places, but Swyngedouw points to the domination of power focused on the capital, that limits these resistances in-place from gaining a more sizable impact. Michael Hardt and Antonio Negri acknowledge this limitation, and so imagines that by "challenging and resisting Empire (their name for emerging forms of global power) and its world market, it is necessary to pose

¹⁸ J.K. Gibson-Graham, "Beyond Global vs. Local: Economic Politics Outside the Binary Frame," in Geographies of power: placing scale, by Andrew Herod and Melissa W. Wright (Malden, MA: Blackwell Pub., 2002), 26.

¹⁹ Ibid, 30.

any alternative at an equally global level." Gibson-Graham notes, in this case, a deep rooted, philosophical preference for "abstraction to concreteness and a (readiness) to give more power to general and extensive processes than to specific and intensive ones." This critical analysis of the global-local definitions, is the first of their "deconstruction" of constraining thoughts on present day politics which engage the very same language of global vs. local. Critical to their deconstruction, are attempts to see global and local as two of the same and intrinsically linked phenomena as opposed to working in opposition. J.K. Gibson-Graham challenges us to think of how the global is local, "... scratch



Fig 2.26. Diagram of Capitalism Production vs "Community Economy"

anything 'global' and you find locality—grounded practices in factories, stock exchanges, retail outlets, and communities."20 Similarly, they challenge us to re-frame the local as global. Concerning the role of place-making within this re-conceptualization of primary definitions they write: "... the place is a 'particular moment' in spatialized networks of social relations. The uniqueness of place is not defined only by what is 'included within that place itself' but 'includes relations which stretch beyond."21 This helps us to understand that the global and local should be understood as processes. Therefore, not as locations and spaces but produced as hybrids of both. For Gibson-Graham, these attempts at deconstructing the way we understand the global - local dichotomy, are the beginnings of imagining a different type of economy, one that they are quick to note does not imply a replacement of the global market economy, but rather challenges, subverts, augments, and takes advantage of existing structures to its own benefit. This is their definition of a "community economy" that they continue to research and elaborate on to this day. The foundations of a community economy come from identifying exchanges and labor that happen outside the existing model of capitalist economies. They include those within families and households, like raising a child, and chores in the home, or interactions in a co-operative community that assign activities centered around shared spaces. They can also include alternative markets, and currencies developed for marginalized and nefarious activates, or the cultural customs and exchanges that center around birth, death or marriage. Gibson-Graham is not immune to the critique their ideas have received, and acknowledge the seeming inadequacy of fragmented local initiatives against the singular machine of capitalism. They are aware of modern political thought that would see "oppositional strength gained through convening the masses -breaking down spatial barriers, overcoming single-issue fragmentation, creating identification with one liberatory cause, meeting might with might."22 In response, a community economy revels in diversity, and "with the constitutive power of small and local processes that are found the world over... an immensely variegated non-capitalist economic landscape which is no less global in extent than is capitalism. Its conduits of global power are many different markets and non-market exchanges, forms of enterprise, and





²⁰ Ibid, 32.

²¹ Ibid.

²² Ibid, 50.

livelihoods. But this global power is not consolidated, concentrated, distilled, mobilized, and conflictual; it is diffuse, partial, constitutive, and sustaining."²³ This diversity is at the heart of Gibson-Graham's imagined notion of community.

Place-based movements have been criticized for their traditionalism and regressive tendencies. While it is possible to imagine a digression of community principles to center around sameness and lack in openness to those that may be different, they point to it as but one of many models for the community. Indeed, they find the notion of a community of difference an

23 Ibid, 51.



Fig 2.27. Tile Workshop in Beijing



Fig 2.28. Marble Workshops in Baodi

"unfamiliar and fresh form of politics, rather than a recourse to parochialism and small-scale manageability."²⁴ In the face of globalization and the simultaneous mass displacement of people and culture, it is perhaps most appropriate that communities be: "...constituted around difference, across places, with openness to otherness as a central ethic." 25 So perhaps schools can serve as the connection point between the new pedagogies and alternative economies. Pedagogies that questions the world and enables participation and action from a young age, and an economy that is draws on the particularities of place instead of an ever present desire to globalize. The Qinmo Primary School & Community Centre Market project by Rural Urban Framework is located in southern China, in Guangdong, and consists of a new school that is underneath a large winding staircase to serve as seating for large communal events. It also renovated the existing school to be re-established as a community center in the heart of the village. With the mass urbanization of China, 300 villages disappear every day.²⁶ As the development continues in this manner, many particular traditions and identities of the Chinese countryside are being lost. This project aims to rejuvenate a village, by proposing a school that offers exchange between itself and nearby secondary and post-secondary institutions. This exchange is meant to help rural children connect with what their future might be. It is also for the higher level instructions to reconnect with the realities and skills at the local level. The project envisions the school as a learning center, providing rural farmers with a window into the market of modern China. The ambitions of this project is to establish a new flow of knowledge for its workers, as well as a new process of education for its children.

The thesis so far has been mostly focused on revealing the problems and imbalances that have affected education and Chinese society. It has focused on the ends of the knots of problems that entangles those in the rural and the urban. We come to see the rural and urban as dichotomies, existing in two ends of a spectrum, but in a place as densely populated as China, a middle area, something in-between, has developed. It is affected by the plight of both, but perhaps it also offers potential ways to move forward for China as a whole.



²⁴ Ibid,52

²⁵ Ibid.

²⁶ Ian Johnson, "In China, 'Once the Villages Are Gone, the Culture Is Gone'," February 01, 2014, , accessed November 27, 2016, https://www.nytimes.com/2014/02/02/world/asia/once-the-villages-are-gone-the-culture-is-gone.html



Fig 2.29. Qinmo Primary School & Community Centre Market

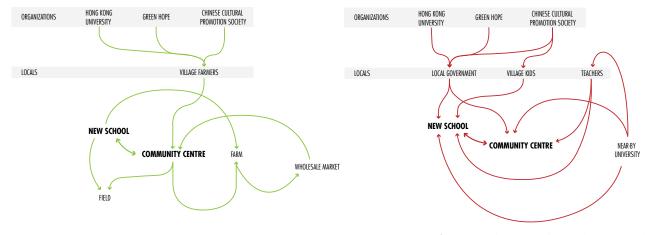


Fig 2.30. Education and Agricultural Networks

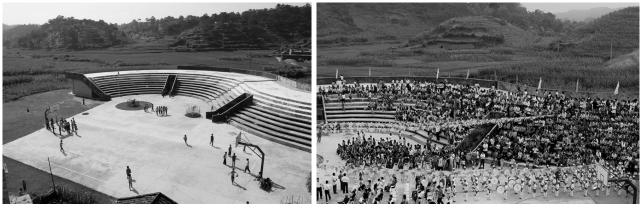


Fig 2.31. School Yard in Use.



Between

"In a short time, cultural differences between Chinese urban and rural areas increased substantially...Even if educated young people wished to return to their hometowns, they would find that what they had learned in modern schools had nothing to do with rural life."

Fei Xiaotong

The last 50 years have seen China's population double to more than 1.3 billion and its GDP multiply twelvefold. However, beneath the surface of rapid urbanization and overnight prosperity, is a lack of understanding of contemporary China's cultural foundation, along with its alienation from its own past. From the Soil: The Foundations of Chinese Society was published in 1948 by Fei Xiaotong (b.1910) and considered a foundation in the fields of modern sociology and anthropology in China. Fei himself was among the first students to graduate from the (then new) Institute of Sociology of Anthropology at Tsinghua University in Beijing. From the Soil was Fei's attempt to form a nonwestern theoretical foundation for a sociology of Chinese society. It begins with a declaration that "Chinese society is fundamentally rural." He elaborates on this perspective for the rest of the book. Fei's observations are widespread and range from morality, patrilineages, rituals, governance, laws, and regionalism, in order to develop a basic principle for Chinese society. The importance of this book comes from his identification of a different way in which the Chinese viewed how they related to their society; this can be contrasted to their western counterparts. It was Fei's attempt to apply the methods he learned from his western, theory-based education to his native land.

While the texts have been published close to 60 years ago, they remain relevant by providing a key insider perspective in which to view China's shift in societal dynamics; thus one can arrive at a more profound understanding of its presence and its changes. Cultural discrimination against rural peasants dates back in history, and rhetoric of a peasant's narrow mindedness, as well

¹ Xiaotong Fei, From the soil: the foundations of Chinese society: a translation of Fei Xiaotong's Xiangtu Zhongguo (Berkeley, Calif.: University of California press, 2001), vii.

as them being "backwards and sedentary" are used as excuses for their recent struggles in what is now a market driven economy of ever increasing speed. Fei warned of a danger in the rural being left behind in the cultural progress of contemporary China. A unique understanding that the rural basic social unit started at the organizational unit of the village as opposed to the family, gives context to how society was organized and how established rituals served to reinforce this relationship. Due to the labor intensive work required in rural China, villages became the smallest unit to be able to efficiently farm the land. This meant an entire village had to cooperate effectively to meet state demands. Today, an egocentric society exacerbated by neoliberal values has transformed a rural society that was once based on close communal relationships. More than half a century ago, Fei's documentary effort analyzed the traits of Chinese rural society and it foretold an alienated rural population in China's path towards growth. To appropriately navigate this complex condition, an understanding

2 Ibid, 10.



of China's continually changing relationship between its rural and urban halves are key in understanding how they have historically negotiated their difference, and where intervention could take place to bridge the divide.

DESAKOTA: A THICKENED EDGE

While systems like the Hukou designate two distinct social types within China, the spatial manifestations of these dichotomies reveal a more complex and interwoven set of relationships. Terry McGee is a Canadian Geographer with a focus on Asian studies and his coining of the word Deskota regions (from the Indonesian word of desa for village, and kota for city)³ in 1990 has seen continued relevance in the study of relationships between major Asian cities and their surrounding regions. McGee identified a variance in the model of development of Asian urban activities surrounding city cores; rather than the concentric growth of western cities, he identified the network nature of many coastal Asian regions. McGee contributed to the accessibility of cheap intermediate transportation methods, combined with the seasonally labor intensive agricultural process of Asian countries (eg. Wet Rice fields). This created regions of a high-density rural population, with the mobility to transition between agricultural production and industrial manufacturing.⁴ In understanding the Desakota spatial economy, McGee traced defining characteristics that included: an intensive mixture of agricultural and nonagricultural land use, a well-developed infrastructure to allow movement of people and commodities, a central government whose role would be to allow global economic forces into its large labor reserve, and the zones themselves as "grey" areas in terms of established legislations. Given their rapid growth, they would allow informal sectors and small scale operations.⁵ For me, these readings establish a theoretical framework for the explosive growth of China which could be observed by the 90s. The theory of the Desakota also describes the many ways in which industries and labor have become intrinsic to driving activities in this thickened rural/urban edge. The legacy of the township village

I was interested in finding non twodimensional ways of representing the site. I thought a physical model could better represent the complexities of the site and the expose a design strategy which attempts to respond to and synthesize many different layers of vectors that inform the political/ economic/cultural makeup of the site. Eight layers made up this model: A hatch region denoting between city and natural land, major roads, secondary roads, places of primary education, secondary education, universities, markets and factories. All points of interests in this map were done as etched point cloud. The visual experience for the viewer was not completely predicted but very interesting. If the viewer close and right in front of the plates, it is possible to focus your eye on it one plate at a time and the rest becomes a blur, the viewer is able to independently move through each plate and get a sense of how the rest might relate. (for example focusing on the plate of major roads and getting a sense of the point cloud educational buildings that communicate the accessibility of education for the region)

Fig 3.1. Arylic Jing-Jin-Ji Map

³Terry G. McGee, "The Emergence of Desakota Regions in Asia: Expanding a Hypothesis," in The Extended Metropolis: Settlement Transition in Asia (Honolulu: University of Hawaii Press, 1991), 121.

⁴Ibid,124.

⁵Ibid, 127.

enterprise is still observable in many parts of China. The lack of reinforcement on industrial legislatures allow industries of all types and sizes to exist in opportune places.

Other than Baodi, I chanced across many of these areas during my visit. Another example is the network of villages to the east of Tianjin in Ning He county. The developed irrigation channels of this particular area allowed for it to thrive in the less common and water-intensive industries of lotus farming and fisheries. The villages in this area seemed to be more inhabited; as well as being better maintained, many were newly renovated. These local opportunities provide an alternative to the dominant migrant-focused economies based around the service sector of the urban areas, or else based upon large scale export-based manufacturing production. The phenomena of the Desakota speaks to a unique condition of large areas somewhere between urban and rural, mobile and dense in population. This region is a remnant of Asia's agrarian past, but can be viewed as the foundation for a more symbiotic relationship between the rural and urban.

Terry McGee's analysis of the desakota as a zone between traditional notions of the rural and urban provided a unique background to Richard Sennett's notion of "Borders versus Boundaries". In his book Together: The Rituals, Pleasures and Politics of Cooperation, Sennett main argument is centered on the idea of cooperation as a key social component practiced throughout history. He is critical of a contemporary culture that alienates based on the difference between people, and in one of his studies he traces the practice of cooperation in moments of history; from medieval workshops to modern carpenters. He considers the act of cooperation to be a skill that must be perfected with an awareness; as an urbanist, he also considers how spaces can be to practice this craft of cooperation, and he asks if contemporary politics enforce special relationships detrimental to the cooperative spirit. The creation of "the bound(aries) (where interaction is diminished) dominates over the border(s)(where exchange intensifies), forbidding the creation of spaces where complex cooperation can be learned."6 David Harvey's analysis of uneven development reveals a need to create boundaries to intensify and leverage this unevenness. But Sennett advocates for a border that encourages a productive exchange of economy, skills, and culture, one centered around an attention back on the craft of cooperation between people.

6 Mohsen Mostafavi, Instigations engaging architecture, landscape and the city: GSD 075 Harvard University Graduate School of Design (Baden: Lars Müller, 2012), 232.

"The physical foundation for a social architecture is a certain experience of the edge where both porosity and resistance are enabled. The problem with today is that the boundary (where interaction is diminished) dominates over the border (where exchange intensifies), forbidding the creation of spaces where complex cooperation can be learned. We are creating order at the expense of giving people the life-skills to negotiate ambiguous terrains that require interaction and that, it seems to me, is the great political challenge that the edge raises for us. "6

Richard Sennett

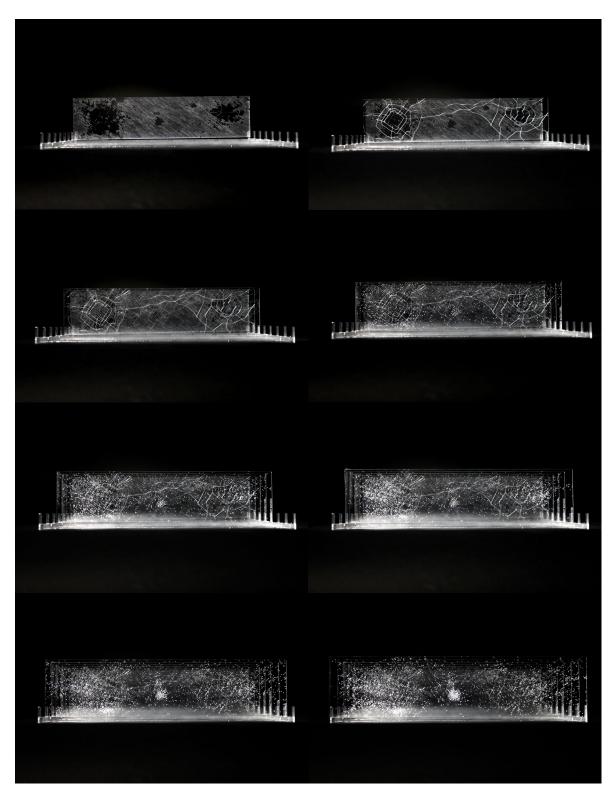
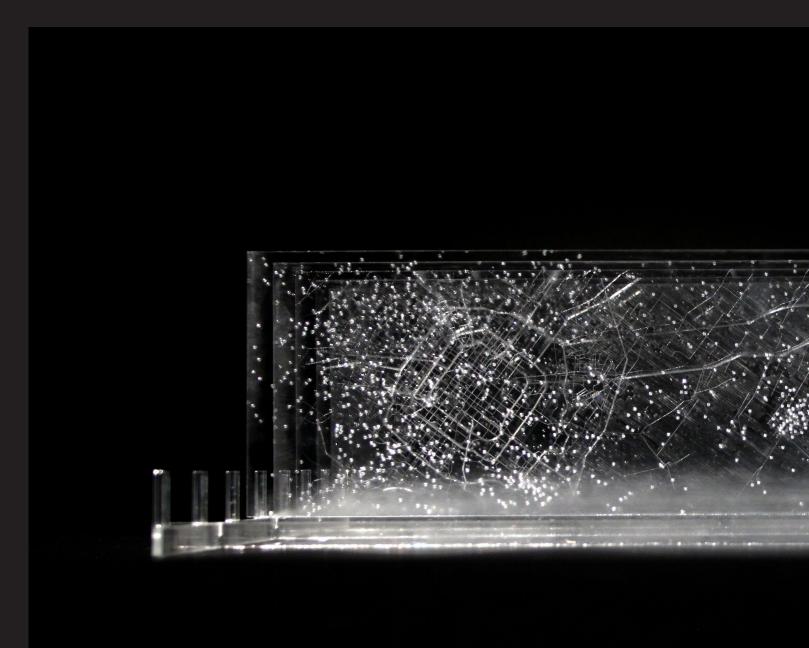
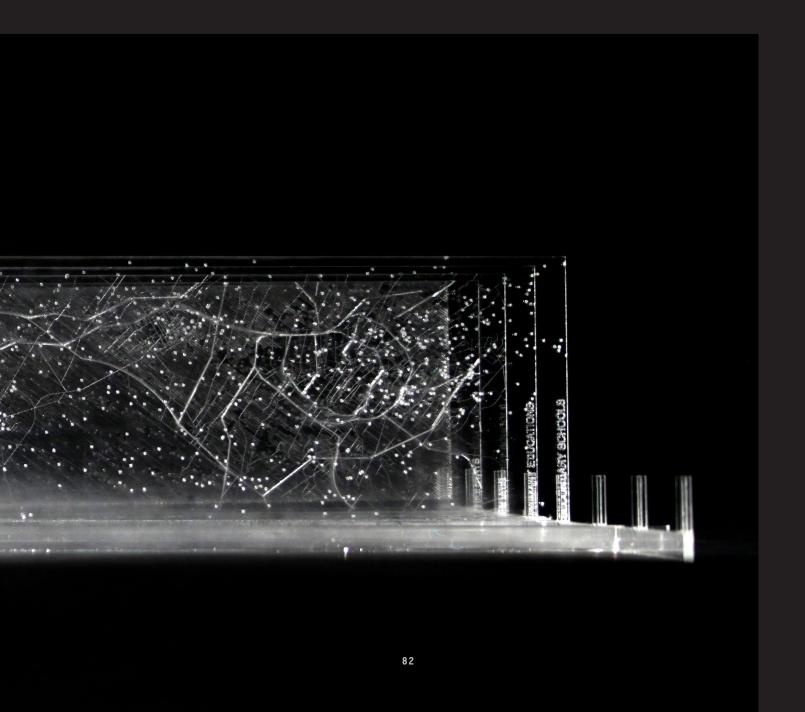


Fig 3.2. Layers of Arylic Jing-Jin-Ji Map





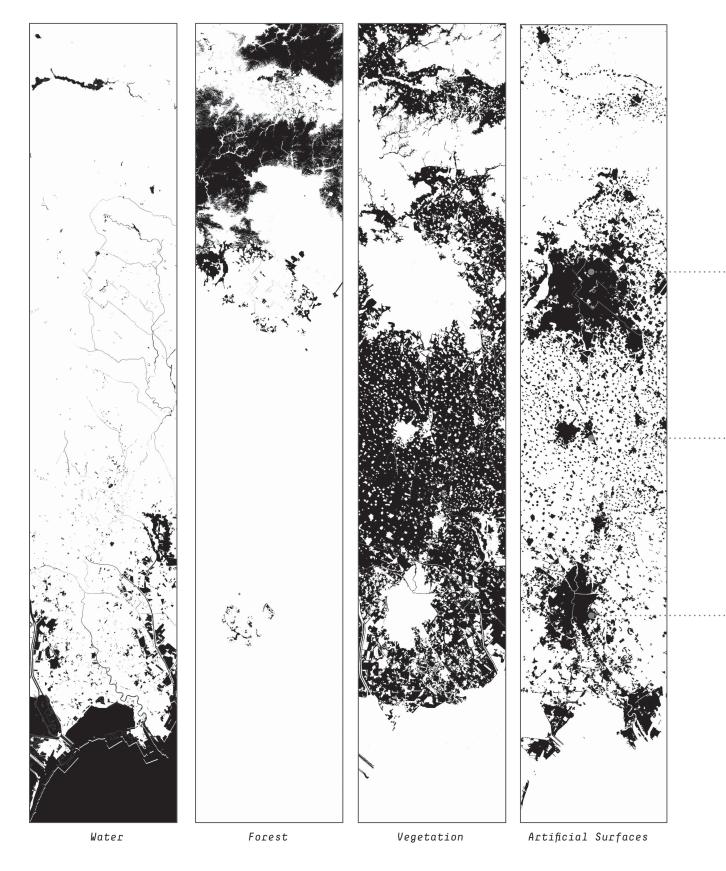


Fig 3.4. (Previous) Arylic Jing-Jin-Ji Map

BEIJING

LANGFANG

TIANJIN

Fig 3.3. Jing-Jing-Ji Map - Layers Detached

Hukou as a social boundary reveals a structure that stands to challenge any potential for cooperation between the cities and villages of China. In cultivating the craft of cooperation, Sennett and Paulo Freire both advocate for the importance of dialogue. Sennett was quick to point how something as seemingly minor as the difference in subjunctive grammar (stating possibilities), versus declarative grammar (stating facts), affects the possibilities for dialogue to be an open process of exchange as opposed to a closed off command. Freire's emphasis on dialogue comes from his personal experience talking to the disenfranchised in Brazil. He speaks of moments of realization as these farmers "discover that they are creators of culture, and that all their work can be creative. 'I work, and in working, I transform the world.' And as those who have been completely marginalized are so radically transformed, they are no longer willing to be mere objects, responding to changes occurring around them; they are more likely to decide to take upon themselves the struggle to change the structures of society, which until now have served to oppress them."7 The awareness came from acts of education centered on critical dialogue to gain awareness their surroundings, and their own world. By necessity, it is this type of dialogue that precedes any action.

Fei Xiaotong's From the Soil described the traditional rural society that was fundamental to Chinse culture, he foresaw the contradictions it would have with a contemporary China based on capitalist principles. The desakota sees the densely populated rural areas of Asia and understands its growth as a unique condition of a thickened rural/urban zone, different from a western understanding of dichotomy between city and countryside. The desakota presents a structure for a network economy and society.

Fei concludes that the fundamental social unit for rural China is the village and not the individual. The traditional strength of communities proved critical of Chinese culture. Combined with the concept of the desakota, it points towards a way for rural and urban china China to redefine its relationship. To do so, Richard Sennett proposes cooperation as a craft in an increasingly alienating society. So what happens when local opportunities occur in desperate communities, ones that provide an alternative at the urbanization that is at the root of China's disappearing villages? In what ways are they liberating from the existing economy? Or do they simply reinforce its relationships further? What kind of resilience and strength does it reveal in rural China?

⁷ Paulo Freire, Pedagogy of the oppressed (New York: Continuum, 2000), 33.





Fig 3.5. Jing-Jing-Ji Corridor This corridor of the JJJ connects nearly 70 million rural and urban inhabitants.

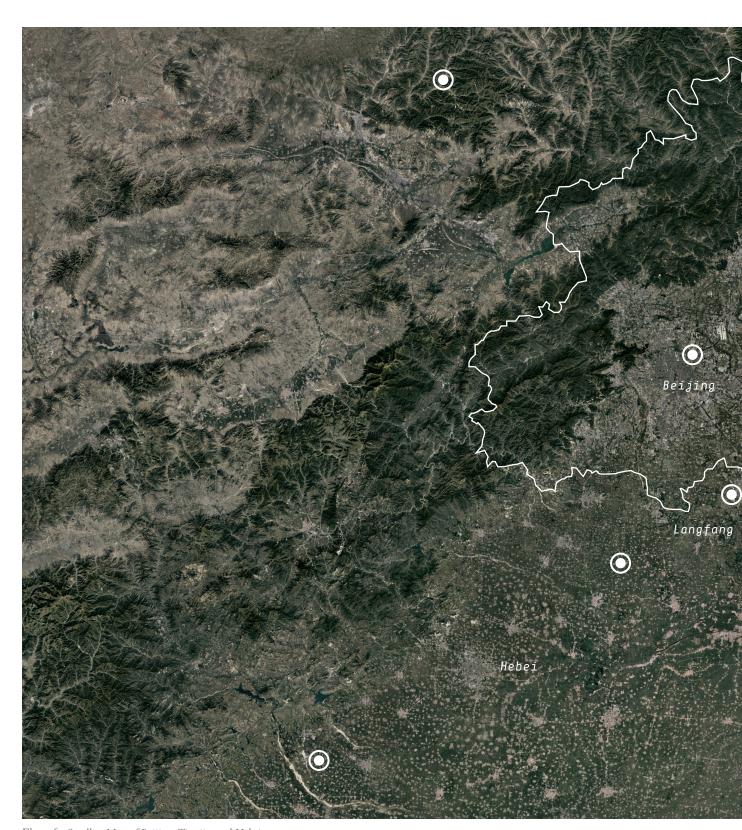


Fig 3.6. Satellite Map of Beijing, Tianjin and Hebei.

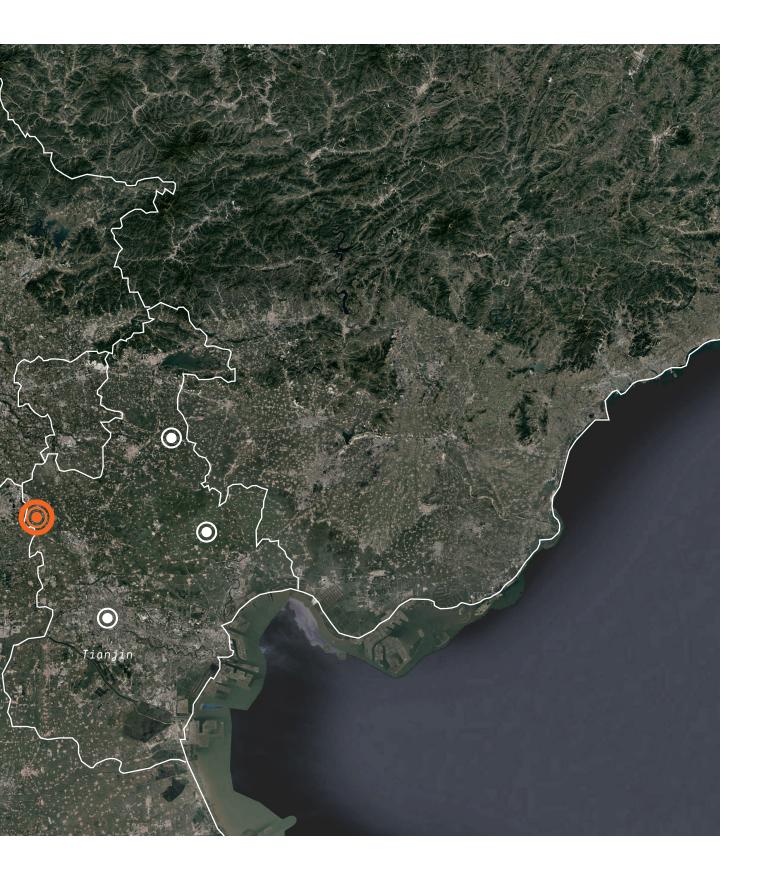




Fig 3.7. (Opposite) East Langfang Elementary schools highlighted in orange with three circled and numbered for further description.

Yuanxin Elementary School

While a state of difference between the rural and urban is seen across China, local conditions also influence how that difference manifests. The condition of local schools become good indicators of the extent of local governance and development. Langfang is centered around three provinces: the rural, industrial province of Hebei and the more developed provinces of Beijing and Tianjin. Visits to villages on either side of the spectrum around Langfang revealed how central policy can play out in a variety of ways at the local level. The changes experienced by these villages also becomes apparent, highlighted by the difference in their situations in terms of everyday life and matters specific to education.

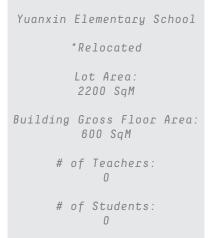
My first visit to the Langfang area was to a village to the southeast, in the province of Tianjin. The elementary school of Yuanxin (#1, Fig 3.6) was found online and a satellite aerial helped confirm a courtyard compound, larger than a residential plot and consistent with a traditional village school type.

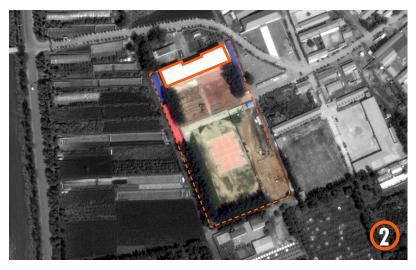
The courtyard school (or its remnants) was located in the center of this village; upon my arrival, I was told by a local resident that this school had moved away 12 years ago, and the building is now a branch for local offices. He told us the location of the new school, Dataoyuan Central School(#2, fig 3.6 that had been built to replace village schools in the area. The new school was a short drive to the east, located on the periphery of a village. It was much larger and appeared much more developed. A sign marked the threshold for the village and there was a large forecourt with exercise equipment and a parking area in front of the school entrance. From the outside, the school resembled a gated urban school in type, but with the luxury of space, had a large running track and soccer field as a part of its enclosed compound. As we approached the entrance of the school, we were met with a security guard that asked of the



Fig 3.8. Village Main Road







Dataoyuan Central School

Grade 1-6

Lot Area:
18180 SqM

Building Gross Floor Area:
3240 SqM

of Teachers:
44

of Students:
600



Fig 3.9. (1-3) Yuanxin Elementary School (1) and two adjacent schools.

Mingde Elementary School

Grade 1-6

Lot Area:
10400 SqM

Building Gross Floor Area:
2240 SqM

of Teachers:
18

of Students:
240

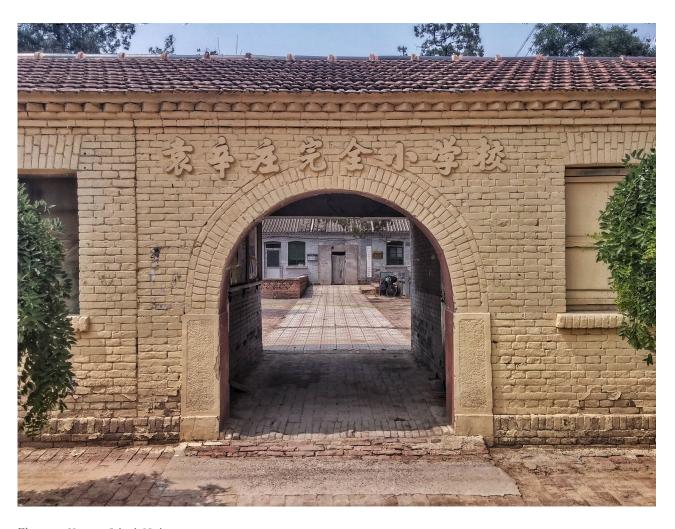
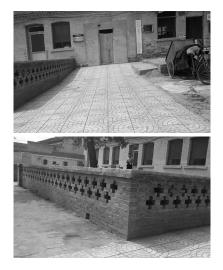


Fig 3.10. Yuanxin School. No longer in use.



reason of our visit. I could only show him a reference letter from a professor at Tianjin University that I had been working with. It declared the intent of my research into rural education and architecture and asking for permission to visit the school. It was clearly a strange request for the security guard and he called on the vice principle to handle my visit. When the vice principal came down, he made it very apparent that he would not allow entrance into the school and informed that he would only allow visitors after speaking with the Tianjin Ministry of Education. I was asked to leave and my later calls to the ministry ended in futility as they made it clear they have never granted visited on behalf of research projects like mine in the past and did not intend to now.

The state of rural education has become a very sensitive issue in China. The clear social inequalities between the rural and urban have led



to the negative press concerning the quality and access of rural education. The effects of the one-child policy have swung the importance of any matter relating to children. Having one child as the norm in a society also means matters of their education take on a disproportionately large amount of focus. The after effects of isolated attacks on school children from a few years ago resulted in a national outrage and is seen today with the presence of armed security at every school, like the one we met at Daotaoyuan. This attention towards education mirrored in the rural as the government has assured it is now a focus of rural redevelopment and highlights model rural schools that approach or even surpass urban schools in terms of resource. Rural schools are now implementing national scale curriculum, proclaiming that it will solve the unequal quality of education that results in low attendance beyond the mandatory nine-year education. From a separate conversation, I was told that rural teachers were now being paid close or equal to urban teachers in an effort to make it a more attractive option. So now teachers in rural areas can become

Fig 3.II. Route from Yuanxin School (Left) to Daotaoyuan School. (Right)

Fig 3.12. Security Guard at School



some of the highest earners in the area as their salaries become regulated at the national scale. These centralized schools were built at the start of the 2000's and can serve anywhere from five to fifteen villages. Infrastructure beyond the schools themselves are rarely found and kids will have to walk up to 45 minutes throughout out the year to reach their schools. This only serves to represents a top-down focus on a standardized formal education as a large presence and part of life in the countryside. Tianjin and Beijing receives a large share of government funding and attention, it also has some of the highest earning per capita in the country and the availability of resources have trickled down to its rural half. These villages were among the most developed, with houses in good conditions, with renovations and new constructions going on and the villages seemingly full occupied. But like the rest of China, stark contrasts its society are clear and frequent. A twenty-minute drive west, back through Langfang and at the other edge of its city, another reality for rural China is seen.



Fig 3.13. Dataoyuan School Entrance



Fig 3.14. Dataoyuan Central School (Image from School Website)

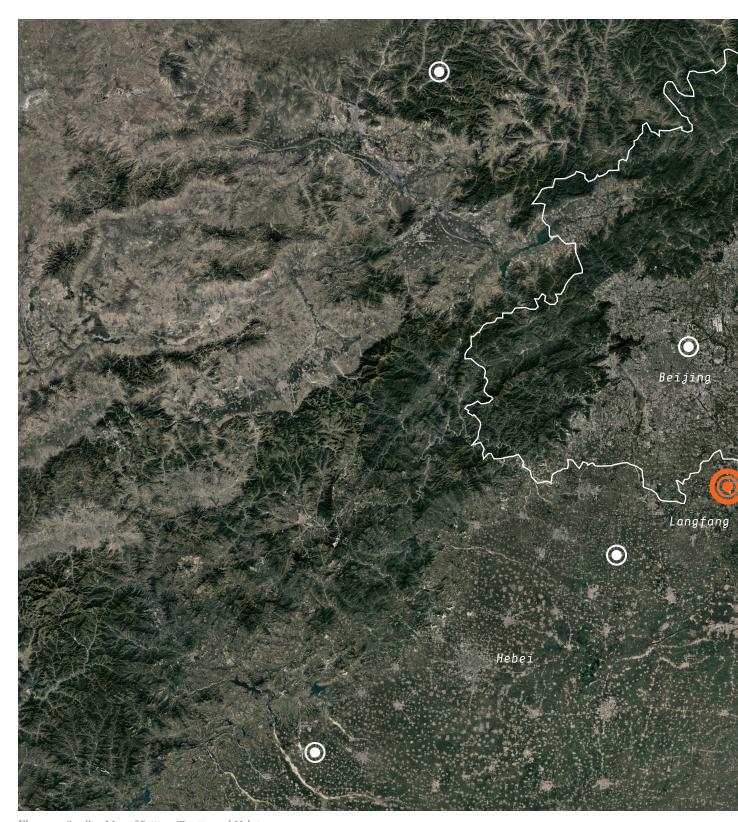


Fig 3.15. Satellite Map of Beijing, Tianjin and Hebei.

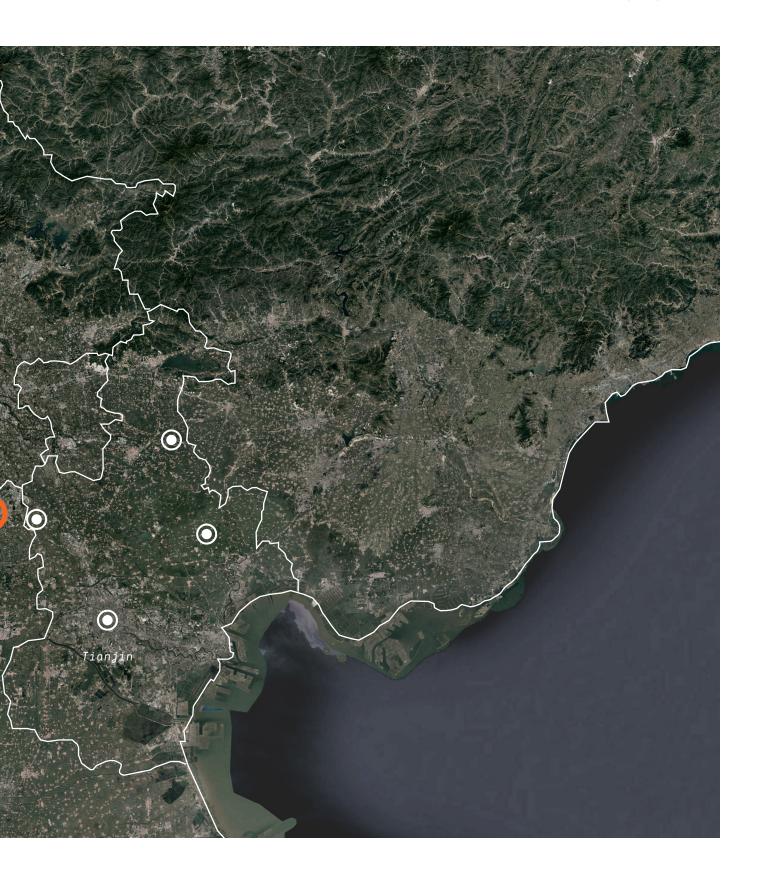




Fig 3.16. (Opposite) West Langfang Elementary schools highlighted in orange with three circled and numbered for further description.

Mangdian Elementary School

Mangdian Elementary School (#1, Fig.3.15) belongs to a village on the west side of a canal that marks the edge of urban Langfang. As I arrived at the school, I found it empty except for the sound of TV playing from the security guard office's open door. Rules about visitors here were clearly less defined and he seemed pleasantly surprised at my company and curiosity in the school. He let me into the courtyard school and did not have any objections to me taking pictures. He told me that the school served more than 300 kids. There has been an influx of migrants in the area in recent years as Langfang as grown in size and the school is much needed of an upgrade. Being under the jurisdiction of the Hebei Ministry of Education, these schools do not receive nearly the same amount of resources as their Tianjin counterparts. The security guard said the teachers were anxiously waiting for a pay raise promised long ago with some already leaving for better-paid opportunities. The families of most kids in the

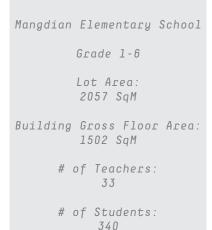


Fig 3.17. School Guard



Fig 3.18. Mangdian School Entrance







Zhongxin Elementary School

Grade 1-6

Lot Area:
6072 SqM

Building Gross Floor Area:
2168 SqM

of Teachers:
N/A

of Students:
N/A



Fig 3.19. (1-3) Mangdian Elementary School (1) and two adjacent schools.

21st Elementary School

Preschool - Grade 1-6

Lot Area:
76000 SqM

Building Gross Floor Area:
1200 SqM

of Teachers:
N/A

of Students:
N/A



Fig 3.20. School Courtyard

area are tied to the economy of Langfang, with either job opportunities or businesses in the area. Langfang itself has grown rapidly in the last 15 years. Villages have been swallowed up by residential and industrial developments. The result is a village where half the current inhabitants are those from the outside. The unfamiliarity between the villagers undermines the public life of the village. As questions loom amid speculation that this village will soon be bought out and converted into Langfang next development. The villagers themselves must also battle a corrupt local village leader pocketing taxes and village funds for his own. The result is that the village as a collective is in debt, and unable to support any renovations or constructions within the public sphere of the village.

I would find later after my trip that this school is now in the process being demolished and rebuilt. As Beijing and Tianjin have swelled to a bursting point in recent years, Langfang has been tapped as an alternative site of their considerable resources and hunger for growth. It is convenient as a commuter town for urban workers, and belonging to a much more rural and industrially



Fig 3.21. Rarely Forecourt with Exercise Equipments.

driven province of Hebei, local governance is eager for to accept an injection of new money and people. The rebuilding of this school is consistent with a nationwide effort to centralize and standardize education starting in urban centers almost twenty years ago. It has led to the demolition of hundreds of thousands of local village schools in favor of a standardized school compound design that is located in the periphery of villages and draws its students from several nearby schools.

On the other side of the canal is a large high rise residential district. The 21st Elementary School is part of a large compound that also has a local middle and high school. Located minutes away from each other, a comparison of the two schools reveal the disparity at the edge of the rural and urban fabrics.

As I established the desakota as the site of my intervention. Mangdian Elementary School reveals the imbalances Chinese education and its rural - urban difference. It is at the center of the changes experienced by a traditional and modern China. In the final design section, I return to Mangdian Elementary School and imagines the ways in which it can come to demonstrate the a new space for learning. As place that engages its community and the most important lesson in the classroom is discovered, asked and encourages a child to participate in making the world around them.



Fig 3.22. 21st Central School





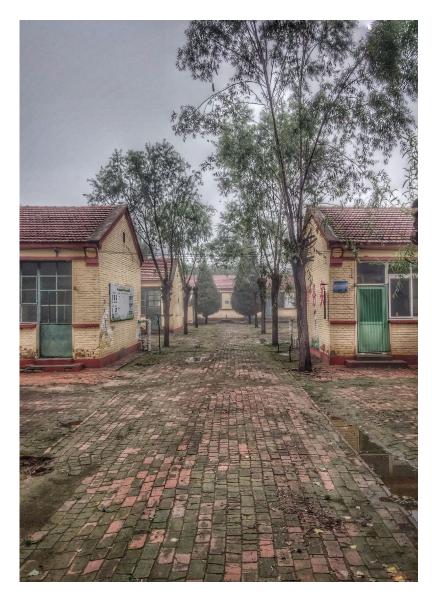




Fig 3.23. School Spaces

THE THIRD REALM

In The Human Condition, Hannah Arendt reveals human action as a political act that must be reintroduced in terms of its value to society and culture. She categorizes human activities as either labor, work or action, each defined by their different contribution to human existence, progress, and history.

Labor is defined as natural, necessary practices for the "maintenance of life itself." It is defined in its never-ending character, creating all things within impermanence. Arendt's critique of contemporary politics comes from an economy that prioritizes labor and which consumes all human effort in a perpetual labor. This takes away from possibilities of political agency and higher values that should be the concern of public life.

Work is contradicting labor in "the activity which corresponds to the unnaturalness of human existence, which is not embedded in, and whose mortality is not compensated by, the species' ever-recurring life-cycle."9 The creation of things of semi-permanence that are specific to a human society and reflect its values falls under this category. Humanity in this mode of its activity Arendt names "homo faber; he/she is the builder of walls (both physical and cultural) which divide the human realm from that of nature and provide a stable context (a "common world") of spaces and institutions within which human life can unfold."10 These acts are against demands of nature and a specifically human activity. What also distinguishes work from labor is whereas labor satisfies an individual's need as a private act, work is public and aims to create a distinct, common world to be shared between humans. Arendt's critique lies in the emphasis within contemporary society on the results of labor over work. "... All the values characteristic of the world of fabrication permanence, stability, durability ... are sacrificed in favor of the values of life, productivity, and abundance."11

Action for Arendt is concerned with the act of freedom. She is clear to argue that work is not indicative of human freedom in the sense that it

⁸ Hannah Arendt, The Human Condition (Chicago: University of Chicago Press, 2012), 79.

⁹ Ibid. 7.

¹⁰ Ibid. 91.

¹¹ Ibid, 150

is "dictated by and subordinated to ends and goals outside itself"¹² and still bound to serve a purpose (be it the construction of a building or the making of a law). Freedom defines the action of Arendt's classification, and she is quick to correct an understanding of freedom as an inner or private act, coming to full importance from the fact that it is public and worldly.

To act, in its most general sense, means to take initiative, to begin (as the Greek word archein, 'to begin,' 'to lead,' and eventually 'to rule' indicates), to set something in motion. Because they are initium, newcomers, and beginners by virtue of birth, men take initiative, are prompted into action. Essential to the human activity of action is the introduction of the truly new, the unexpected, unforeseen and unpredictable into our world. In the public dimension, action leads to its meaning coming from an interaction with others. "Action of this character requires a public space in which it can be realized, a context in which individuals can encounter one another as members of a community."¹³

The Desakota offers a departure point for a new perspective on the kind of intermediary spaces between traditional dichotomies of rural and urban. This intermediate region is where most Chinese now find themselves and also where the changes are at their most dramatic. Political and economic forces that made China's rapid development possible has also inexplicably tangled the relationship between the urban and rural. Both are dependent on the other but everything points to a continued friction and hegemony between them. For the demographic that has left behind their rural life, the desakota is their catch-all net when an integration and acceptance into the urban is unrealized. The desakota presents endless opportunities for labor and land to be appropriated in the never-ending growth of cities. Meanwhile, the people of the city find themselves attracted there as a reprieve from the relentless pace of contemporary life. In light of this situation, this thesis asks: how might the region be how might this region be re-conceptualized to mediate and negotiate different values, ways of living, alternative economies and political desires? What are the historical and contemporary conditions that offer insight on its potential to accommodate the kind of difference that at present seems unbridgeable?

The works of Philip C.C Huang are based on re-interpreting western

¹² Majid Yar, "Hannah Arendt," Internet Encyclopedia of Philosophy, , accessed March $27,\,2017,\,http://www.iep.utm.edu/arendt/.$

¹³ Ibid.

notions of the public sphere through China. The concept of the public sphere was first introduced by Hannah Arendt, which saw it as a separate space between the society and the state. Its public nature allowed for discussion of societal concerns, and would influence political action. This idea was expanded upon by Jurgen Habermas as he gave a historical account of the emergence of the public sphere when the new bourgeoisie class in Europe created open venues to exchange news and matter of common interest without being subjected to the powers and discourse of the ruling class. ¹⁴

After the June 4th demonstration at Tiananmen Square in 1989, China's own struggles with democracy and freedom led academics to examine its society through Habermas' public sphere. It appeared on the surface that the tension between society and state would lead to the emergence of a public realm similar to that described by Habermas. However, Huang noted that while the notions of the public space presuppose a "dichotomous opposition between state and society,"15 thereby necessitating a space for society to resist state hegemony, this has not been, and is not today, the relationship found in China. Huang proposes the consideration of a "third realm", somewhere between state and society, and historically existing as a place to mediate differences rather than form opposition. He argues it has existed in Chinese socio-political life historically. When looking at the Qing dynasty's justice system, Huang notes that it is comprised of three parts: "the formal legal system, with its codified laws and official courts, the informal justice system, with its well-established customary practices for dispute resolution by kin/ community mediation, and the third realm in between." ¹⁶ This was deducted as he tracked 628 civil cases at the court level, with only 221 actually needing to be resolved in court.¹⁷ Informal mediators appeared in the form of village heads, local magistrates, and all those in between the systems. In order to resolve conflicts here, compromises and changes were involved on all levels. This "involved both the formal and informal justice systems in a kind of negotiatory relationship."18 Huang would note this tendency of negotiation as opposed to opposition observed "in between gentry and merchant public

¹⁴ Philip C.c. Huang, ""Public Sphere "/"Civil Society" in China?" Modern China 19, no. 2 (1993): 217, accessed June 08, 2017.

¹⁵ Ibid, 216.

¹⁶ Ibid,226.

¹⁷ Ibid.

¹⁸ Ibid, 227.

activities in republican China and up to the auto-organizations in post-Mao China"¹⁹ resulting in a collaboration of the two sides rather than "either growing societal autonomy or increasing bureaucratic control."²⁰

Since the formation of the communist party under Mao Zedong, the ensuing changes to Chinese society have seen the growth in power of the state (or party), and the shrinking of the third realm. As Mao sought to reform land and labor, "both the rural collective entities (people's communes) and the urban state units functioned indirectly or directly under orders of the state and conformed to the state's system. Politically, cadres, secretaries and branch committees of the Party were designated within or sent to all the production units and entities, for the sake of supervising collective members' labor and even ideology." Here the powers of state were fused with and subsequently dissolve society, and by extension any public life that was not regulated by party ideology.

Only through the monopolization of truth and morality in the public sphere could the Communist elites have 'persuaded' citizens to endorse voluntarily their projects and policies and to involve themselves actively in the party's political agenda. It was the monopolistic public sphere that enabled the ruling class to confine potentially

²¹Ibid



Fig 3.24. Villagers Playing Majong



Fig 3.25. Villagers Gathered at Street Side Resturant

¹⁹ Haiqing Yu, Media and cultural transformation in China (London: Routledge, 2011), 35.

²⁰ Yanshuang Zhang, "Public Sphere in China: A Literature Review," SSRN Electronic Journal, 2014, 11, accessed June 15, 2017.

critical thoughts and critical questioning to a private realm, to keep the experience of the 'unofficial China' from public view, to have 'legitimate reasons' for freeing its power from moral and legal restraints, and to impose immense sacrifice on citizens in the name of citizens' own interests.²²

This monopolization persisted for the decades after the formation of the party, but with Mao's passing, the 1989 protests and China's rapid social change as it opened its doors to the market economy, the very same political structure has been revealing its limitations. The speed of exchanges possible through a globalized economy exposes the relative inability of any party, even under a single-party regime, to keep up with changes. For every move made by the state, millions have been affected, and while the economic growth of the country is undeniable, the divided society it has left in its wake cannot be ignored either. As a result, the state has made moves in recent years to address certain issues like hukou and rural education. However, what we have witnessed is that perhaps "China cannot sustain and proceed with a full-speed economic development along an outmoded political trajectory."23 As it's tried, there are instances at every level of development in which people, rural and urban have learned to negotiate these new relationships between state and market. It is in these moments that the "'re-emerging'... of a stronger civil society, or a more dynamic public sphere"24 can be observed and imagined. Schools then, may play an important role in bringing a "third realm" back into the spaces of the public. To engage and allow negotiations and dialogue back into communities.

EDUCATION AS BRIDGING

The Crisis of Education was written by Hannah Arendt in the 1950s, and questions the role of contemporary education in society. In the essay, she defined the most significant role of education as a process of mediation between a child and the world. A kind of conservation that protects "something of the child against the world, the world against the child, the new against the old, the old against the old.²⁵ The teacher does more than to simply pass on

²⁵ Hannah Arendt, "The Crisis of Education," in In Between past and Future; Eight Exercises in Political Thought (New York: Viking Press, 1968), 196.



²² Ibid, 22.

²³ Ibid, 14.

²⁴ Ibid.



Fig 3.26. Abandoned Construction in Baodi, Hebei.

knowledge to the child and must act as an authority and as a representative of the world to that child. This poses a difficulty as Arendt observed a crisis of authority in society, a lack of authority that teaches the child what is, rather than what should be or what will be. This authority acts to protect tradition from the newness of the child but at the same time gives the child freedom to find their place in the world when the time is right. Authority is needed as the child discovers the world for what it is, which can be a painful experience filled with doubt but is necessary before they can mature into a person willing to take responsibility for the world. In contemporary China we can see a generation of children well "learned", the question is of their willingness or unwillingness to take responsibility for their world. Authority is resisted at every turn in our contemporary culture. In fact, the prevalence of the market economy preys on people's distrust of authority. However, the kind of authority Arendt pinpoints as lacking is not one intent on oppression, actively taking away awareness and freedom; rather, an authority willing to take responsibility to guide a child into becoming a part of the world.

This position of the mediator is the difficult one an educator an educator must act in, from the position of an old world in need of change, and a new born in danger of destroying all that came before it without an awareness of tradition. Like the crisis of authority in our culture, we also stand opposed to tradition in the way we constantly seek the new and the different. But Arendt acknowledges the fact that tradition cannot be our guiding principle: "....that wherever the crisis has occurred in the modern world, one cannot simply go on nor yet simply turn back." Here Arendt and Freire share an emphasis on the importance of a critical awareness of the structures at work and "not forget that it lies within the power of human thought and action to interrupt and arrest such processes." This awareness will be crucial to navigating the paradoxical condition of contemporary education.

Culture at its root comes from shared values between people, it can be cultivated in many ways but they all attribute to a strong sense of identity and relationship that can establish a bond between the child and its society. Architecture embodies the design of spaces where these necessary experiences take place. With an awareness of the process at work, it can be an active facilitator in the change of people who inhabit the space. The Bridge

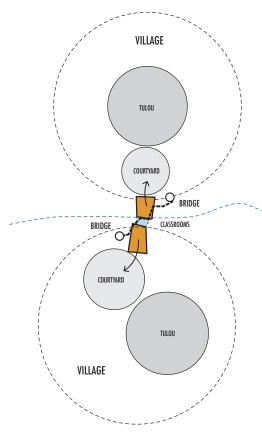


Fig 3.27. Diagram of Bridge School connecting two villages

²⁶ Ibid, 194.

²⁷ Ibid, 195.

school by Li Xiaodong is a physical and social bridge between two traditional Tulou villages in Southern China. These villages were separated by a valley and historically belonged to two clans in constant conflict. According to the architect, the Bridge School offers an acupunctural method of architecture where minimal physical impact is able to lead to maximum social impact between two villages in China. While the analogy should only be taken at face value, it does show the potential of embracing the cultural values around your project, and the benefit drawing from traditions in order to communicate the goals of a design. This school became a relevant reference by offering both a physical and metaphorical bridge between two villages that historically, opposed one another. It uses a space of learning as a meeting point between people in society. In addition, it is a school that is completely engaged in its context, resolving issues of transportation and access beyond the schools I visited. The school is also a key contributor to a new public space on both sides. It acts as a new gathering spot that connects and mediates the connection between the two villages. In this thesis, the difference between the urban and the rural are rooted in culture and enforced by pedagogy, but here we see the potential architecture offers a potential bridge across the divide.

PLACE-BASED ARCHITECTURE: CRAFTING MEDIATION

The previous chapters advocated for a place-based education that engages with the standardized, competition driven nature of contemporary education. It is





Fig 3.28. Bridge School by Li Xiaodong



Fig 3.29. Bridge School by Li Xiaodong

in dialogue with a sense of place that is no longer static but is constantly in flux, driven by global power and economy instead. A place-based architecture, therefore, confronts the same situation. Critical regionalism was one of the first attempts to "discuss the connection of architecture to place and culture on an abstract level."28 The term was developed by Alexander Tzonis, Liane Lefaivre and Kenneth Frampton in the 1980s and sought to resolve the tension between globalization and loss of individuality by addressing the specificity of site, place, and power of architecture to embody a sense of cultural identity. Frampton believed that: "Modern building is now so universally conditioned by optimized technology that the possibility of creating significant urban form has become extremely limited" and that it illustrated a "victory of universal civilization over locally inflected culture."29 It is this dissolution of culture that comes from the mass construction of architecture in the years of the 20th century heavily influenced by war, destruction, and rebuilding that Frampton addresses. Critical regionalism negotiates a universal civilization through an engagement with the peculiarities of the context. "This is the paradox: how to become modern and to return to sources."30

Through the lens of regionalism, it is jarring to see the state of difference between rural and urban China. State power is demonstrated in the construction of the urban and reconstruction of the rural. China is quickly becoming modern, but it risks losing its traditional ties and values, as it approaches the rebuilding of its society with a tabula rasa approach.

Arendt's writing on education concerns a discontinuous society, unable to bridge the new and the old. These same questions are asked through critical regionalism concerning the built environment's role in a neoliberal economy and a globalized world. Paulo Freire advocated for an education centered around praxis to enforce critical awareness and social action, but praxis is also missing in the acts of making and building in today's world. Praxis is to learn through doing, to have each feedback affect one another. The standardized schools that I visited in China are all designed according to predetermined codes and guidelines; they are procured by a ministry employed

²⁸ Kenneth Frampton, "Towards a Critical Regionalism: Six Points for an Architecture of Resistance," in The Anti-Aesthetic. Essays on Postmodern Culture, ed. Hal Foster (Seattle: Bay Press, 1983), 16.

²⁹ Ibid, 18.

³⁰ Paul Ricoeur, "Civilization and National Cultures," in History and Truth (Evanston: Northwest University, 1985), 277.

architect, whose only role is to ensure that those standards are met. Most times, especially in rural areas where open spaces are abundant, the design becomes so standardized that there is no need for a site visit. A formula of economic efficiency and expedience soon became evident as I visited rural schools across provinces; here I found the same walled-in compounds of large track fields, with a single or series of identical three to four story concrete buildings, all of which were neatly divided into classrooms organized along a linear single or double corridor. The buildings lack any connections to the nature of the 'place' that they are inhabiting, nor was there a sense of craft in how they were constructed.

Defining craft comes at a critical time; the current nature of machine production and mass production have given us unprecedented material wealth while also creating an urge for objects that are unique and one of a kind. Craft invokes the ideals of a handmade object, perfected through a time-consuming process to imbue its subjects with a sense of permanence and an elevation into art. These values oppose that of most things we see today; things make cheaply, quickly, and at times designed to expire in a set time. Perhaps in today's society, craft can be found in both approaches. It is critical to consider the elevation of craft or craft culture to something measured through their monetary value. In such a case, we can imagine that the creation of one of a kind pieces fulfills a capitalist need to exchange new things. In this sense, craft would need to be critically re-defined. Not as a means to an end, but rather a way to think and to learn. Craft is demonstrated through a person's mastery over their work. In whichever medium he/she works, that mastery comes with time, repetition and results in an intimate understanding of the many details around the medium. It is akin to the 'thick' description of place, mentioned earlier, where time and properties beyond the physical need to be understood and told. In this sense, the critique of standardized schools are not for their lack of expensive or high tech materials. Rather it is to reject their process, absent of any community making through an engagement with place or a craft approach. There is just as much potential in using synthetic materials like plastic as there are would be in mud bricks that have been used for centuries. In fact, Arendt's emphasis on a necessary bridging between new and old would suggest a hybridization between materials.

This dialogue between the contradictions of our world then cannot be ignored Paul Ricoeur's writings in the 1960's that heavily influenced Kenneth Frampton's essay. Ricouer observed the clash of cultures through imperialism,

and he called for "a level of authentic dialogue ... by means other than conquest and domination."31 Frampton describes an aesthetic of "synthetic contradiction"32 When we must reconcile between our traditions and rapidly changing conditions. As Frampton looks to move regionalism beyond begin simply a form of resistance that is limiting, contradiction is presented as another form of dialogue. This synthetic contradiction will only have impact when we "regard regional culture not as something given and relatively immutable but rather as something which has ... to be self-consciously cultivated." ³³ Architecture therefore presents a way to juxtapose the contradictions in our world, to bring their tensions to the surface and evoke dialogue among those willing. That historic practices have something to offer to new materials and vice versa. It is thus that the built world offers to be that bridging between the new and old. Craft provides value as a social practice in ways separate from its objects. The apprenticeship model experienced by many craftsmen indicates a culture where tradition and techniques are passed between one and another. This interaction between people is able to navigate through differences in the name of the work itself. There is a cooperation that is learned and practiced as people share the process of making together.

Building establishes a collaborative capacity between people. It also acts to mediate between us and the material world. Just community economy looks to change the dynamic between the material and its current ties to capital. Architecture then has the potential to mediate all these relationships, between the individual and the collective, and between the human and the non-human. Spaces of learning as a mediation then look to connect across the social divide between the urban and the rural, within a community filled with strangers, and with a built environment capable of creating a dialogue.



Ibid, 283. 32 Frampton, 21.

³³ Ibid.



Fig 3.30. Buddha Statue in Locus Farm. Ninghe, Tianjin



Fig 3.31. Rarely Used Public Space in Mangdian, Langfang.





Agency

"The fact that man is capable of action means that the unexpected can be expected from him, that he is able to perform what is infinitely improbable."

Hannah Arendt

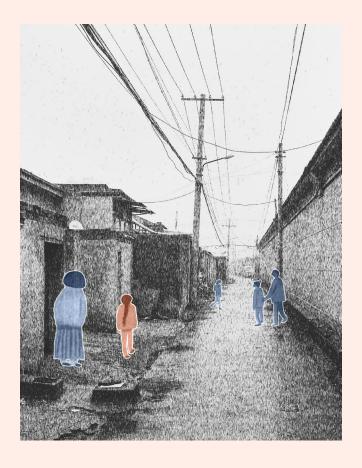
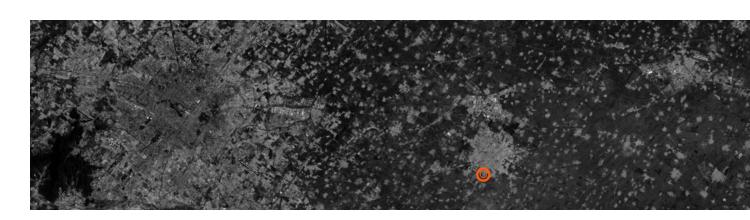


Fig 4.1. A New Home

And it begins with a family, like many before and many to come, coming from a distant rural village to the edge of a growing city. Searching for opportunities to better their life, they find themselves experiencing the alienation and divide that are seen, nowhere more clear, than at this place, a place of in-between, but unable to connect to either side.

Shi-Shi is the only child of a family that has moved from the village of Baodi to Mangdian Village in Langfang. They came here looking to expand their construction business. A local marble in Baodi has enabled a whole region to a unique opportunity they have capitalized on. Shi-Shi's family came to Langfang in the footsteps of a family member, describing the growth that Langfang has witnessed in recent years and its demand for construction materials of all kinds. Their business is run out of a small workshop on the edge of their village. They hire locals and migrants alike to cut the stones into fenestrations, statues or ornamentations and they decided to move out to Langfang in an attempt to capitalize on its growth. It was also decided that Shi-Shi would come with them, just after her third year in elementary school and in hopes that a school closer to larger city would offer a offer her a better education. Langfang's growth is evident in the changes experienced by its urban areas, but its inequalities were also shown as they moved to Mangdian. A village on the edge of the city, facing the challenges and uncertainties that has come in the face of such rapid growth.



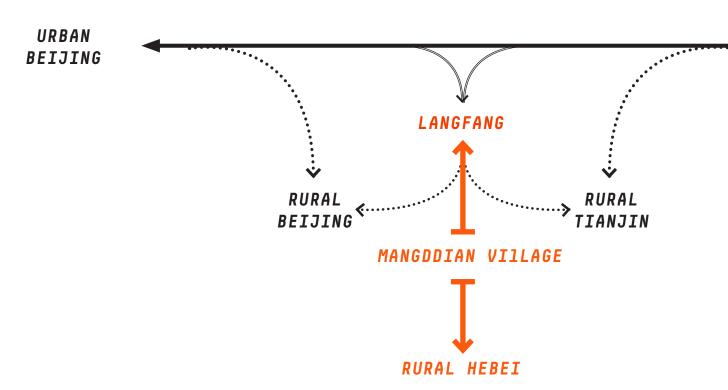
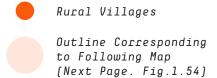


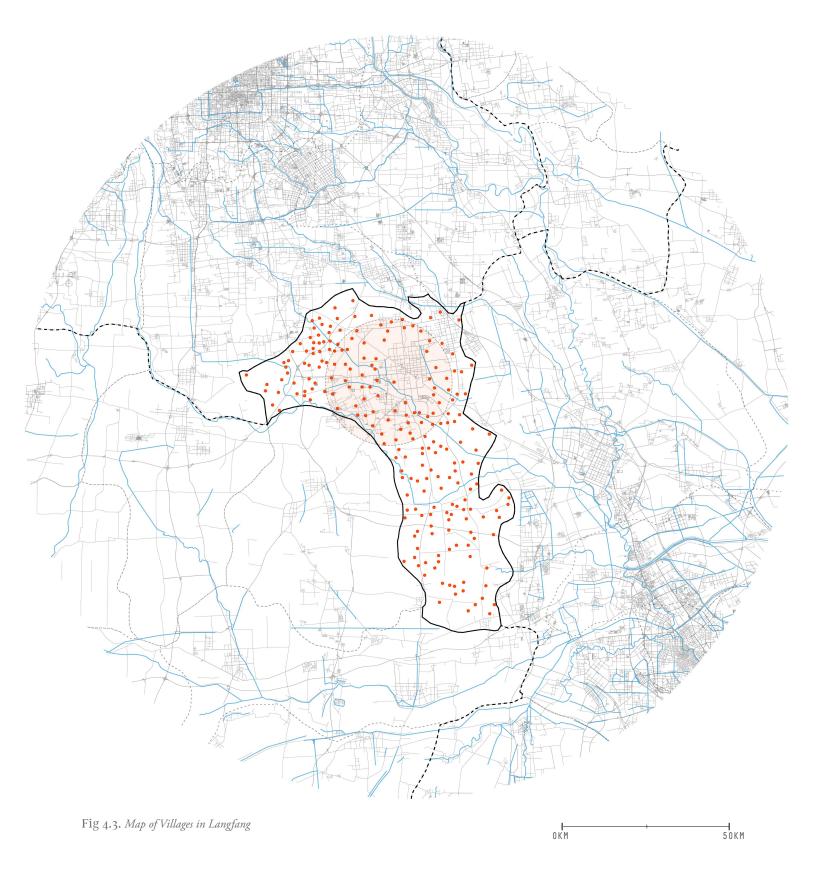




Fig 4.2. Mangdian Spatial Relationships

Langfang lies in a key geographic location, bordered by the rural areas of Beijing, Tianjin and Hebei, while also intersection key roads and railways connecting the urban areas of Beijing and Tianjin. So what is the built fabric of the city and region? How has it urbanized in recent years? And how has the construction industry in the region been affected by this change?





The village of Mangdian sits on the other side of a river that currently defines the western edge of the Northern city of Langfang. Langfang, as a place that lies directly between the two metropolis of Beijing and Tianjin, has experienced dramatic growth and is in the middle of large scale urbanization. Construction and redevelopments take place all over the city, villages that have since been swallowed up by the growth are emptied and built over. However, the construction industry has been diverted from the urban growth. As pollution has become a headline problem for the industrial province of Hebei, local officials have ordered for the stoppage and relocation of many of its worst offenders. Brickyard being one of them, it has led to their closures in the area.

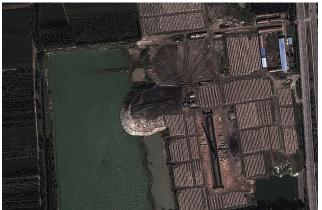
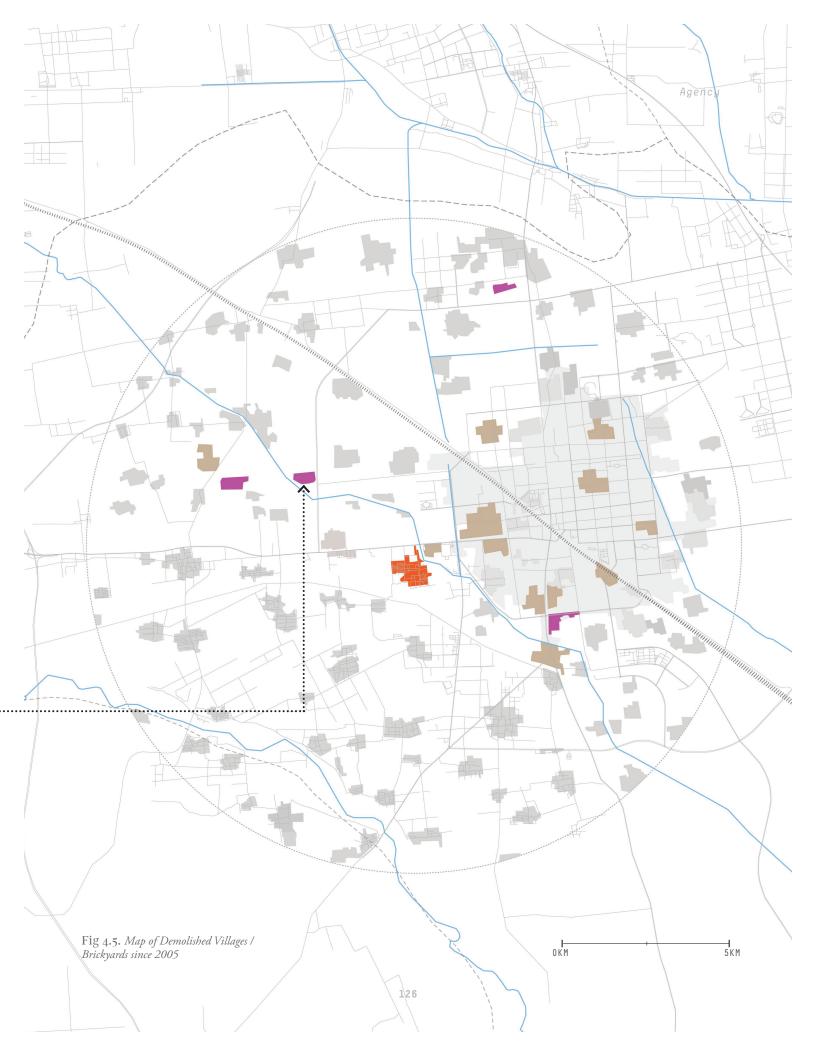




Fig 4.4. Brickyard Last Operational During 2012 (left) - Currently Used as a Landfill (right).





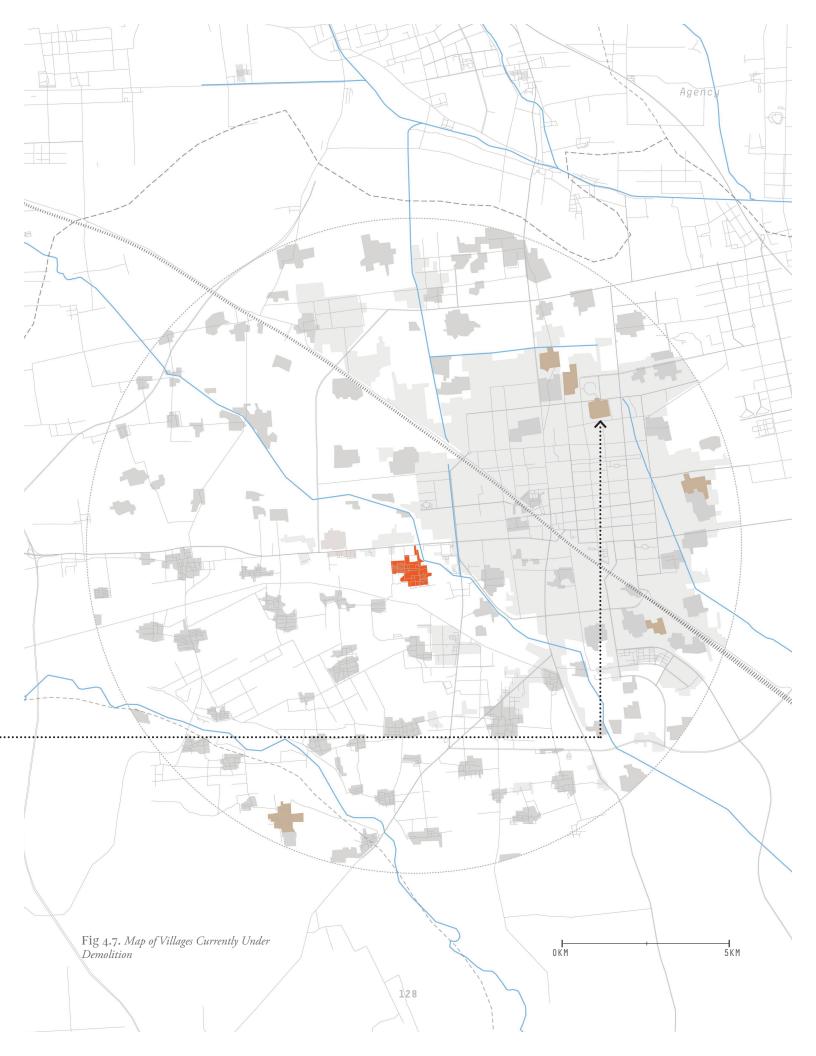
Mang Dian itself, sitting just outside of this changing city, has been no less affected by it. It has seen many of its villagers move out into the cities and many migrant workers move in as they find work in Langfang. The result is a village where half the current inhabitants are those from the outside. The unfamiliarity between the villagers undermine the public life of village. As questions loom amid speculation that this village will soon be bought out and converted into Langfang next development. The villagers themselves must also battle a corrupt local village leader pocketing taxes and village funds for his own. The result is that the village as a collective is in debt, and unable to support any renovations or constructions within the public sphere of the village.





Fig 4.6. Villages Currently Under Demolition





Schools in this area show both the urban and rural type. As growth has quickly enveloped the villages around the area, both are forced into stack contrast with each other.



Fig 4.8. Guxian Primary School -Reflective of a Village School Type With a Single-Story Courtyard Compound.



Fig 4.9. 21st Central Primary School -Reflective of a Urban School Type With a Mutli-Story Block Building.



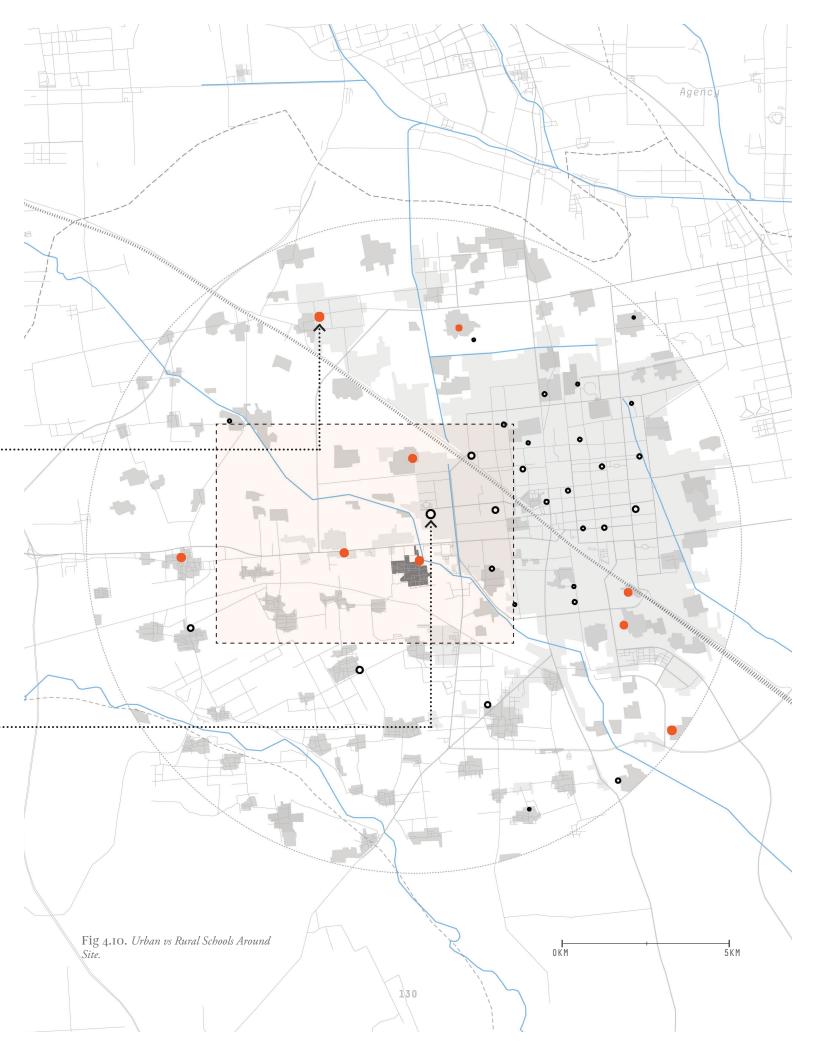
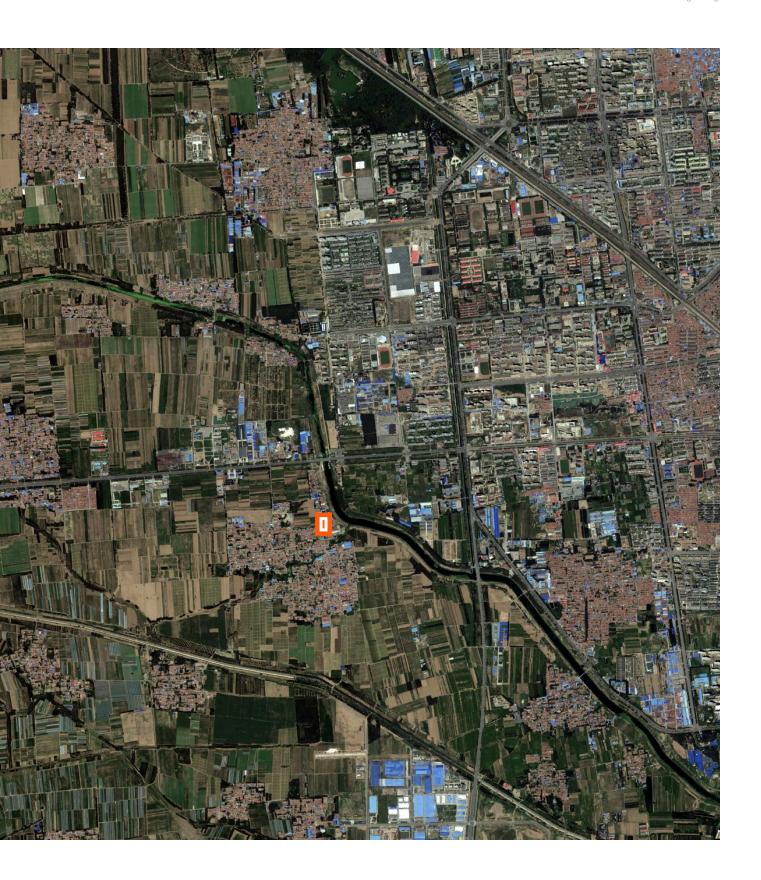




Fig 4.11. Western Edge of Langfang

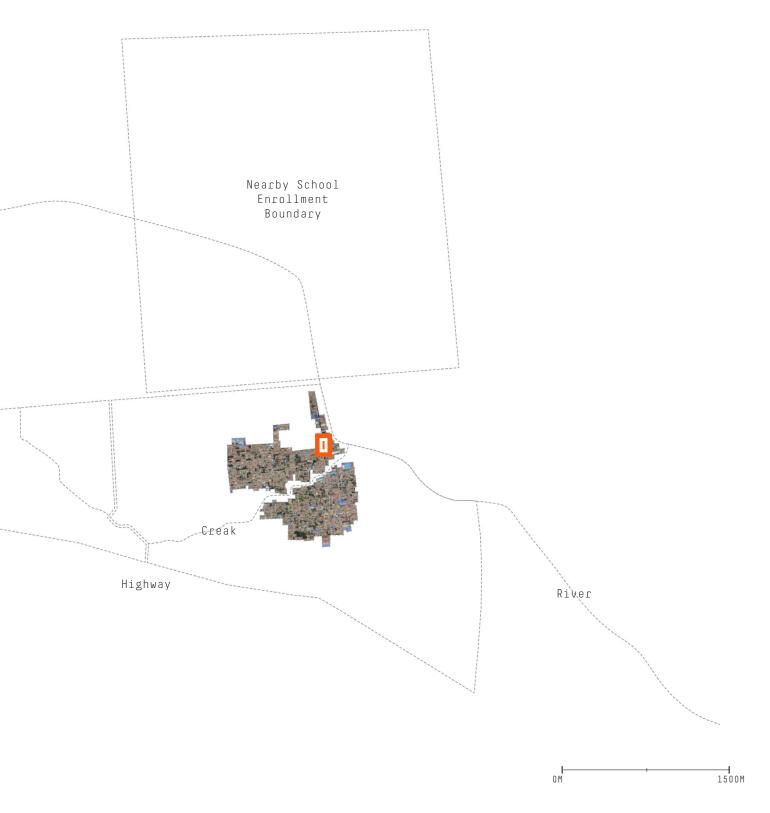
Mangdian Elementary School



While the village of Mangdian and its elementary school is right at the edge of the growing city of Langfang. The village and its inhabitants sits isolated and cut off from the city in many ways. For example, the school sits just outside the juristidction of a nearby urban school with much better equipmed facilities. Low on resources and ways to improve, the school location is a much of a cut-off border as a boundary for exchange.

Fig 4.12. Mangdian Village

Mangdian Elementary School



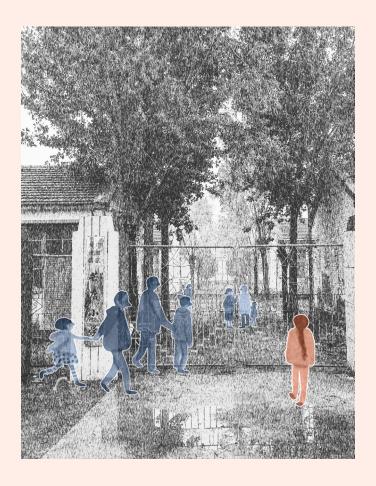


Fig 4.13. First Day of School

The first days at the school were a shock for Shi-Shi. The buildings were in poor condition, with mold in the corners of the baren courtyard, in fact, her old school in Baodi was better kept and had a large field for them to play in. Here in Mangdian, the proposed new school was now also in doubt. The influx of outsiders and declining involvement from locals meant the local village leader had been spending the budget of the village on himself and his family. His spending had gone unchecked to such an extent that the village was now in debt and there were talks about the school renovation budget being used elsewhere. Shi-Shi overheard these gossip as their parents began to get acquainted with their new neighbors. Some had stopped complaining a long time ago and began to place their hope on Langfang extending more and developers eventually buying out their village. Others vented their frustrations under anonymous names in internet forums, hearing echoes of similar situations from villages far and near.

Her parents business was doing well and the construction in Langfang seemed never ending. This caught the eye of some people within the village and one villager joked they should just renovate the school themselves with the help of her parents connections. Her parents had seen the amount of materials that went unused and thrown away as the city torn down its villages and expanded hastily. Over a few weeks, they managed to figure out some money the village had left and what everyone might be willing to contribute. It was soon apparent that many people did not have much money and was indeed waiting for a pay off from a local developer. Others with a steady income saw little potential in building a new school that could be torn down in a few years. People were in need of skills and ways to be self resilllient. Her parents argued that they could start with modest renovation to the school before buildings something larger. The renvations would take place over the summer and turn a section of the new school into a workshop as they prepared for the expansion.



Fig 4.14. School Site

- Proposed Site of New School By Ministry
- Mangdian Elementary School



Her parents business was part of the large development industry of Langfang. Apartments are sold, by default, unfinished and are renovated to each occupant's liking. This drove a large and informal network of migrant workers to keep up with demand. Most came from those in nearby villages, too far to commute for a stable job but able to take advantage of these opportunities. So her parents knew many small business owners, each in charge of a handful of renovations and having to frequently drive their workers into jobs that come up. These jobs usually last a few weeks at a time, and when they happen, the workers stay and live in the unfinished units, bringing along a small mat and bare essentials.

This informal labor force was the place to start for the renovations. The workers would be hired during their downtimes and villagers could get involved at their own choice. Many needed to be trained to be taught working methods beyond simple interior renovations, but these skills they learned would benefit them for the future.

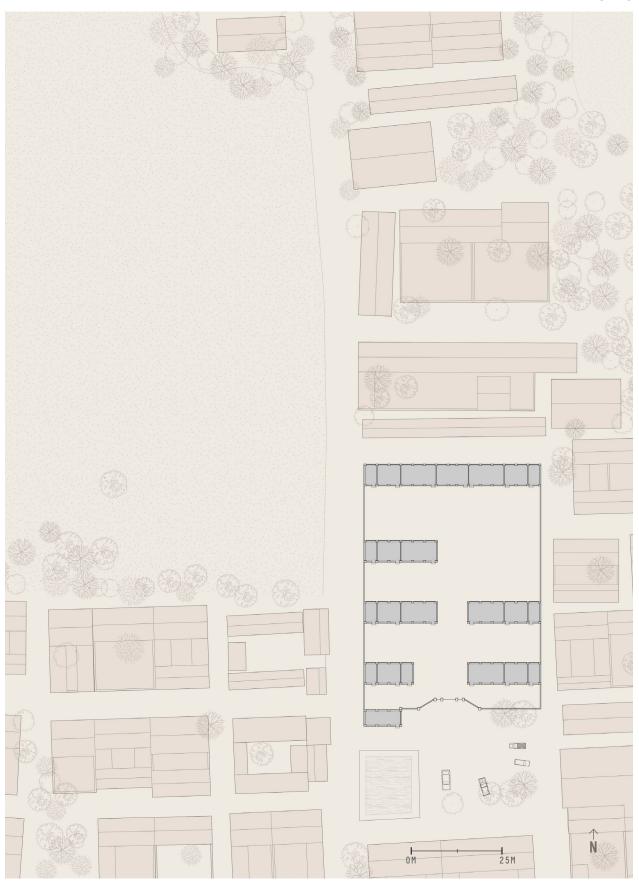




Fig 4.15. Current State of Mangdian Elementary School

Existing School

Fig 4.16. (Opposite) Existing School



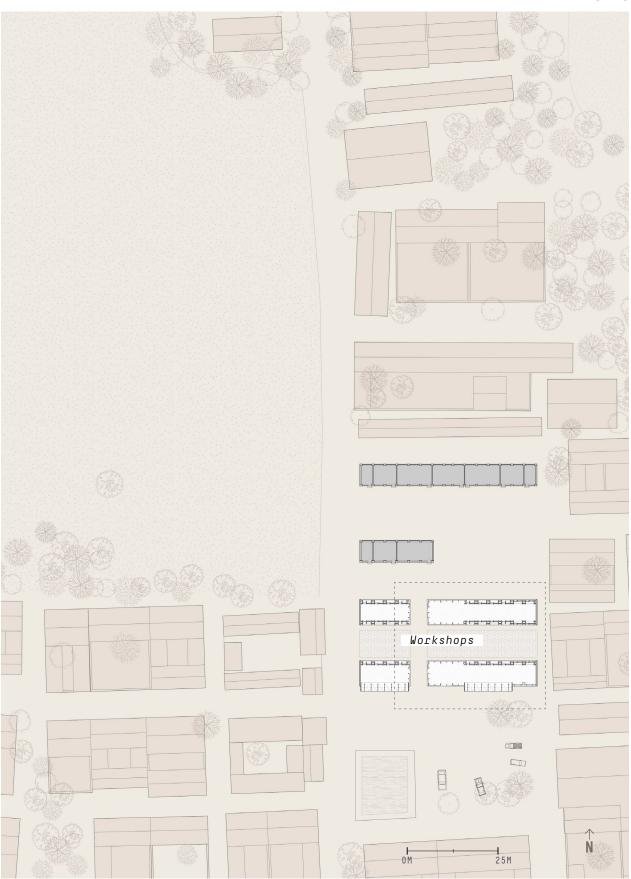
The south section of the existing school is the first phase of the project and will be established as the main village workshop space in the present and future. The existing structure is maintained as much as possible, with the roof frames exposed, the tile roof repaired, and a skylight added on northern sides and where additional light could benefit the working spaces below.

This renovation reflects the resourcefulness of informally building in the rural, augmented by a desire to learn new skills and to experiment with combining materials in different ways.



Existing School

Fig 4.17. (Opposite) Converted Workshop



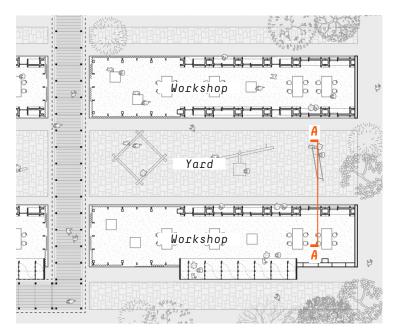


Fig 4.18. Workshop Area Plan

Beyond general improvements to the existing building, work benches are incorporated into the wall, both on the inside and outside. The interior will house machinery and necessary equipment, as well become space to teach and exchange the skills to be re-introduced to the village. The outdoor courtyard will be important working spaces for larger projects.

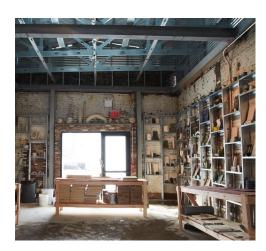


Fig 4.19. Workshop Reference



Fig 4.20. SectionPerspective-AA

A covered walkway was built to connect the renovated workshop and school. Two types walkways were built. Both are made of light wood framing with either a translucent corrugated polycarbonate or solid galvanized metal as roofing. Both are frequently found in the area and easy to handle.

The flat roof walkways used the galvanized metal, where the pitch roofed portions used the plastic to allow light through and illuminate the intricate framing that been done.

Fig 4.21. (Opposite) School Rebuilt

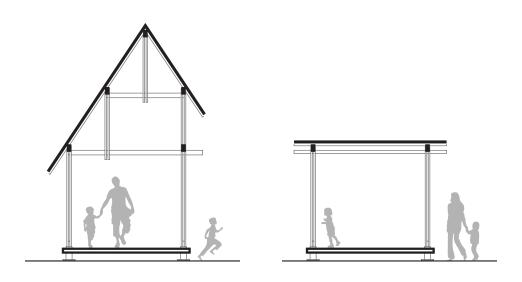
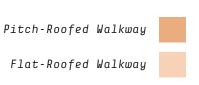
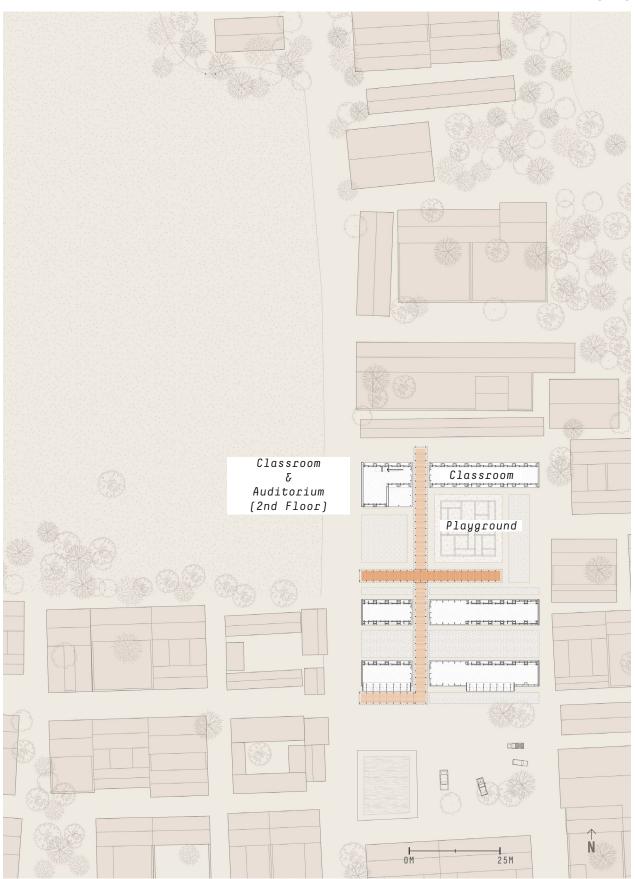


Fig 4.22. Covered Walkway Types









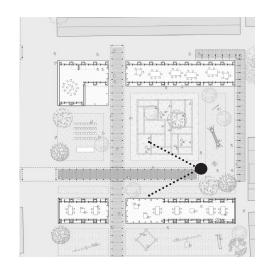


Fig 4.23. Map Showing Perspective for Render

Fig 4.24. (Opposite) Between Workshop and School

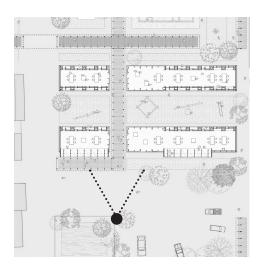


Fig 4.25. Map Showing Perspective for Render

Fig 4.26. (Opposite) Workshop Entrance & Exchange Space

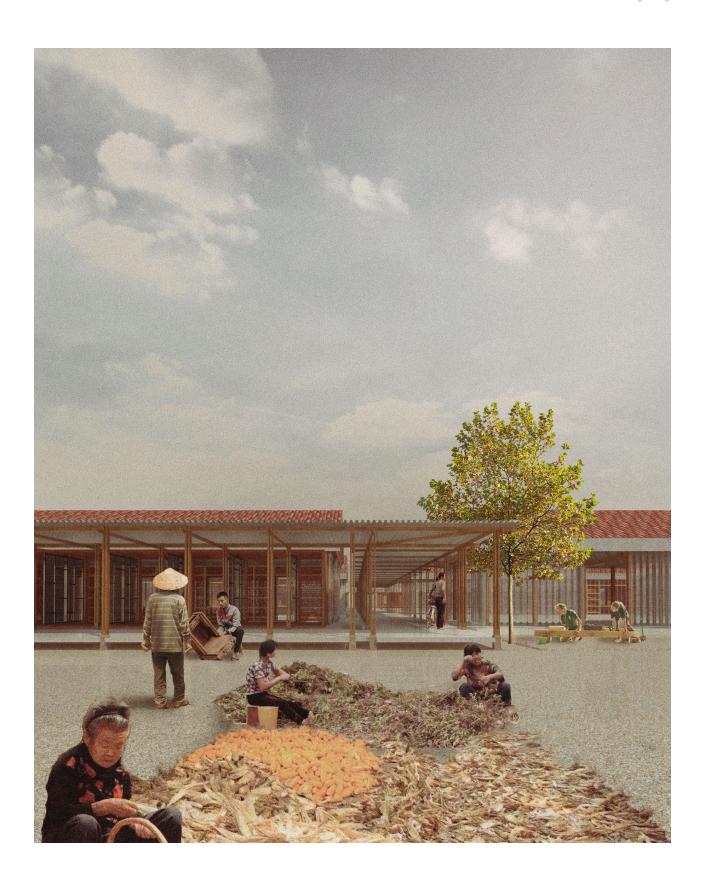






Fig 4.27. Disconnected Classrooms

The renovations cultivated a certain perspective on material and craft that had been there all along. It turns out people didn't need virgin materials or high tech methods to build. The villagers and workers took on the attitude they had fostered within their own homes. They look for materials that fit their needs, whether they were recycled or came from other uses did not matter. They also found ways to augment traditional ways of building, whether they be in carpentry for frames or masonry for hearths and find ways to use them again. This was a new foundation for how they choose to build.

For Shi-Shi and her classmates though, school life did not change as that much. The spaces were more open, light filled and the workshops never ceased to pique their interests, but their classes remained the same. They still sat in rows, lectured by teachers on primary subjects. If anything Shi-Shi found her marks slipping, she was often distracted by the new views of her classroom and found her teacher's lectures increasingly disconnected from what she saw around her. Shi-Shi parent's weren't the only ones to notice this change in their child, other parents found their kids asking more questions about things that were happening in the village and in Langfang. They asked what they were building in the workshops, where the materials came from, where the people came from.

Instead of denying a child of these instincts, the new school extends into the empty plot of land to the west of the school and continues to expand the activities of the school. Agency is created and fostered as individuals young and old are able to participate in the making of the school and the continually evolving ways it engages with its place. The classroom expands to include the community beyond its walls. The community of those with nothing in common but with a desire for a shared place.





A patch of field sits unused and overgrown to the west of the school. Adjacent to it are fields farmed for corn, but this patch of land was never leased out to a local farming company.

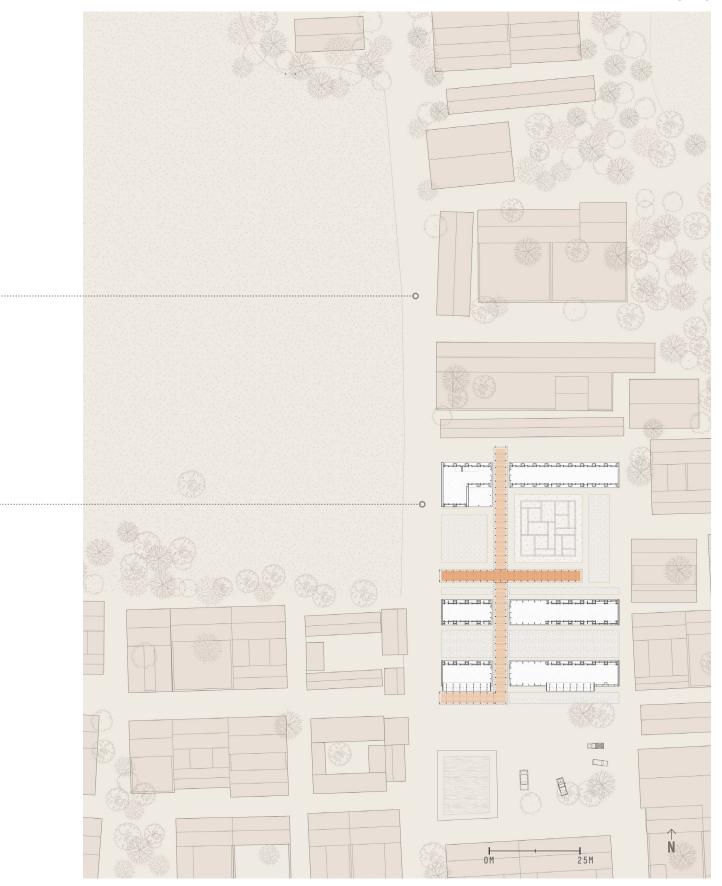
The covered walkways extend out into the new site and are derived from alignments with nearby alleyways that connects the new school to the existing fabric of the village.



Fig 4.29. Adjacent Field

Pitch-Roofed Walkway

Flat-Roofed Walkway



As the school begins to build anew. The villagers take stock of what materials they have access to right now. Tiles, bricks, wood, metal and plastic sheets, as well cement mixes are found throughout the village and frequently used. This forms the basic palette for the new school.







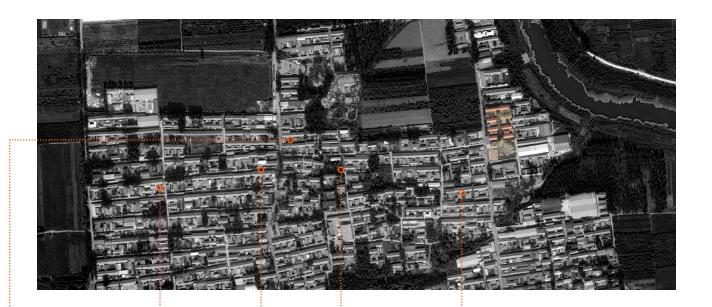






Fig 4.30. Materials Found within Mangdian

The first section of the expansion borrows from the existing school's courtyard typology. A extension of the old school's courtyard opens up into first section of the new school.

Fig 4.31. (Opposite) School Expansion

Pitch-Roofed Walkway

Flat-Roofed Walkway



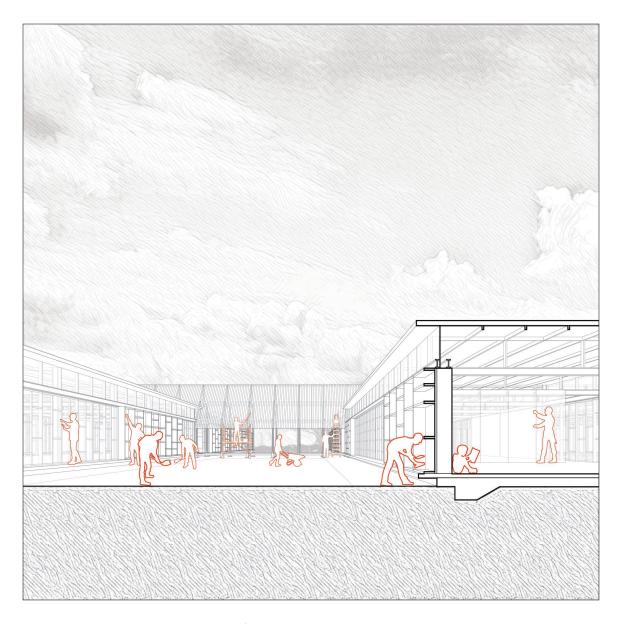


Fig 4.32. Section Perspective-BB

For both the construction of the school and the future operation of the village workshop, a section of the school is designed to handle all the potential materials collected. Courtyard spaces are used for drop-off and sorting. The envelope of this section of buildings are covered with shelf spaces for storing materials that can withstand weathering, and covered indoor spaces are used to store other materials.



Fig 4.33. Shelving Facade Reference

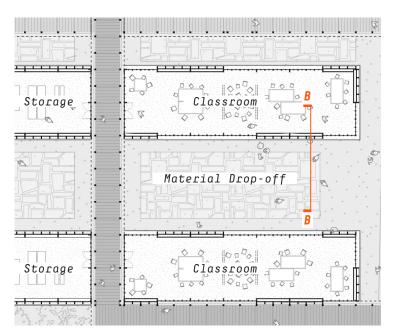


Fig 4.34. Salvage Area Plan

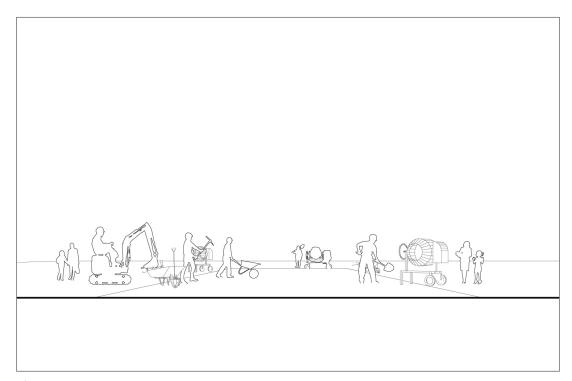


Fig 4.35. Material and Site Preparation



Fig 4.36. Materials Used as Pigment and Aggregate

Reclaim

The first component of the new school is the foundation and salvaged materials found on site can be used as aggregate for the concrete foundations of the new school. Masonry pieces like bricks or tiles can also be ground up into powder to act as a pigment for the cement mix. Other materials like glass are used as the surface is polished off in the end.

Foundation

The result is a varied palette of textures and colors depending on the materials you chose to use. Floors are left exposed in the finished building as a thermal mass and a visual reminding of the materials reused.

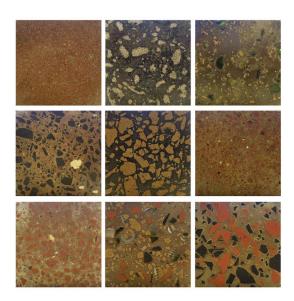


Fig 4.37. Concrete from Different Aggregate

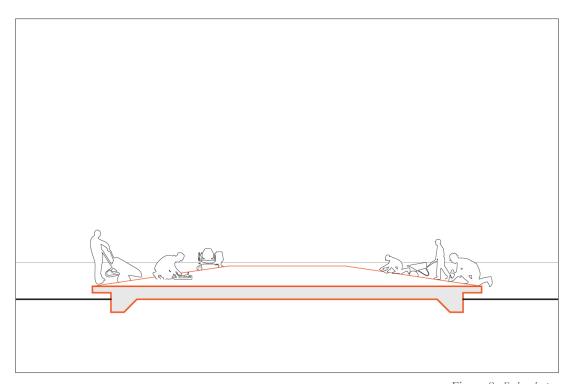


Fig 4.38. Fodundation

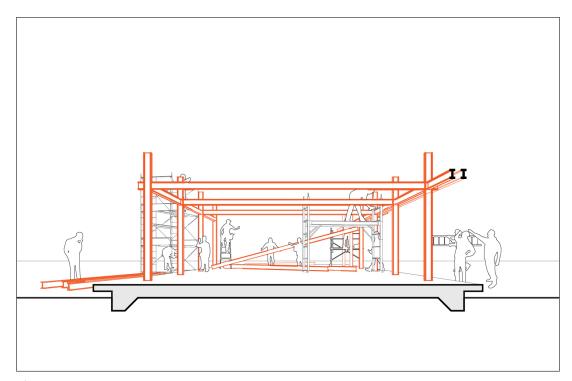


Fig 4.39. Strucutral Framing



Fig 4.40. Abandoned Brickyard and Salvaaged Beams

Metal Framing

As Langfang shifts away from some its heavy industries. (Fig. 4.40 shows a brick kiln I attempted to visit but found already closed and demolished) There industrial sized steel structures available to to be salvaged. Those found suitable will be treated and reused for the main frame of the new classroom.

Brick Laying

As the frame is completed, the exterior brick wall is laid. Brick is most abundantly available material found in rural villages and there is a wide variety of patterns and combinations that the bricks can be laid out in.

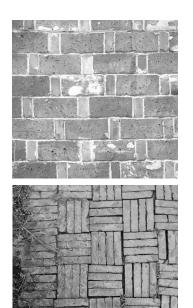


Fig 4.41. Brick Patterns

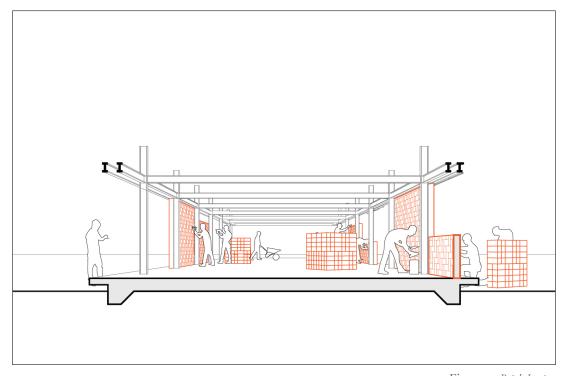


Fig 4.42. Brick Laying

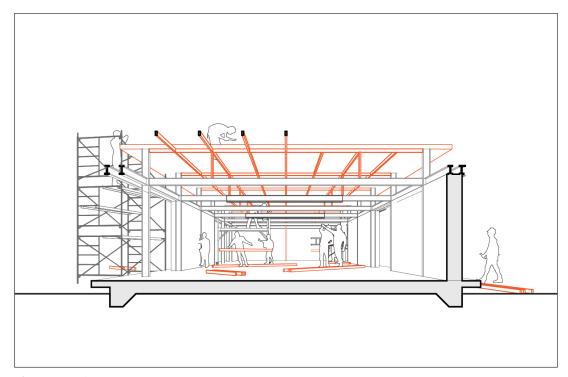


Fig 4.43. Roofing





Fig 4.44. Carpenters

Wood Framing

Unlike the abundance of brick still found, the wood frames of all traditional village houses are rarely seen anymore. Heavy timber are difficult to source in China but the skills and craft of carpentry still present a value to the villagers so this project imagines a composite system where the main structural components are steel but secondary structures like roof girders and mullions are made out of light timber still easily sourced.

Fenistration

One of the signature components of a traditional house are in its intricately-made patterned windows. They were made out of function since glass was not commonly available and paper was used a substitute that needed more reinforcements. For this school, it offers an opportunity to strength and reintroduce these wood-working skills back to the villagers.



Fig 4.45. Traditional Windows

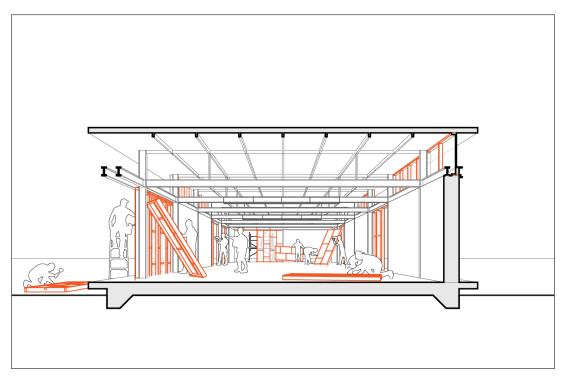


Fig 4.46. Windows and Clearstory

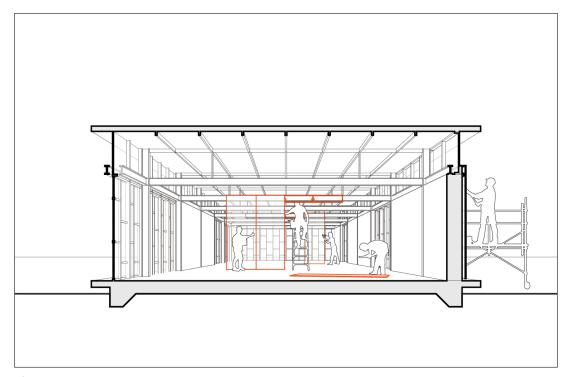


Fig 4.47. Straw Mat Partitions



Fig 4.48. Straw Mat Weaving

Weaving

Weaving (using straw) is commonly found in many different products of the village household. However it is rarely practiced as people move away from the practices that utilized these byproducts of farming. In the school, it is reintroduced as both an interior and exterior screen, used to shade from the summer sun and divide spaces as the classes desire.

Furniture

Furniture making is last of the skills reintroduced by the making of this school. Mass production has taken away from household knowledge in making simple items and local skills. Furniture can be made as required by the children and teacher and start to move beyond simple items like chairs and tables to ones more appropriate as their curriculum expands.

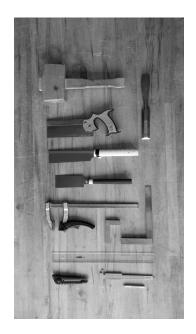


Fig 4.49. Woodworking Hand tools

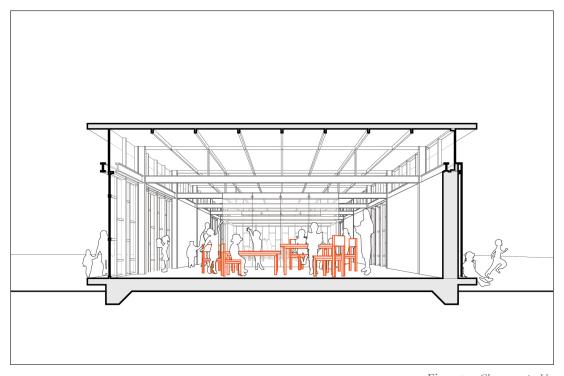


Fig 4.50. Classroom in Use

From Pedagogy To Agency

Fig 4.51. Program Diagram

This diagram shows how the school is integrated into other activities of the village.

Learn (Classrooms) are at moments embedded within Make (Workshops) and vice versa in certain moments to expose each to the other.

Grow (Planting) & Gather (Salvage) also become a integral part education in the school.

Exchange (Market Yard) reactivates the existing yard of the village and is bridge between the activities of the school and workshops with the village as whole and to those outside.

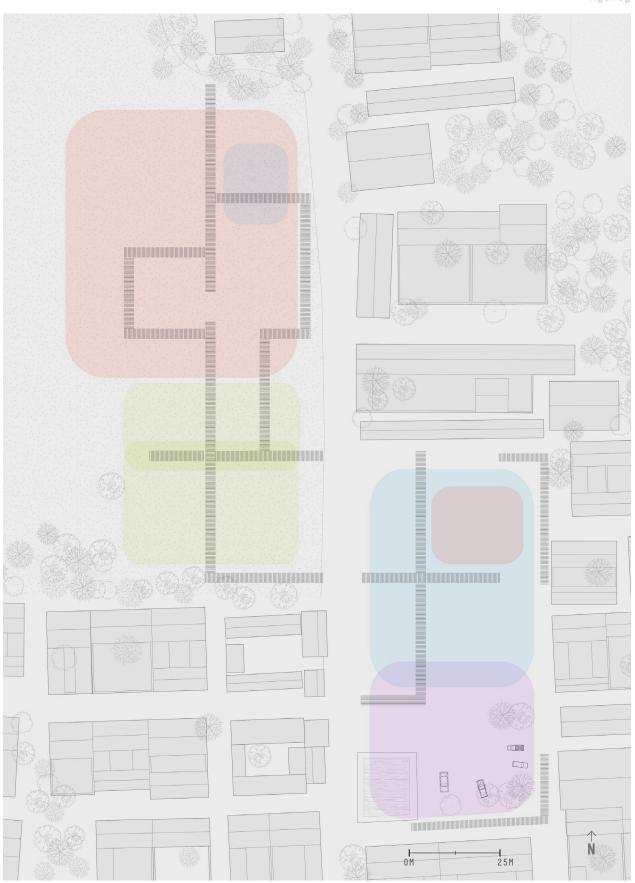
Lastly, the covered walkways are seen as the main element that both connect and delineate these areas.

Learn

Make

Grow & Gather

Exchange



The last section of the new school inverses the relationship the school has with its site as mediated through the covered walkway.

Instead of a courtyard that is interior focused, the these long classrooms extend out in the field. It strengths a commitment to extend the definition of learning beyond the standard curriculum and looks to its site for ways to engage the children.

The landscape also plays a role in engaging the children as seasons play out in front of their eyes in the classroom and offers a perspective towards the world that is long term and sustainable.

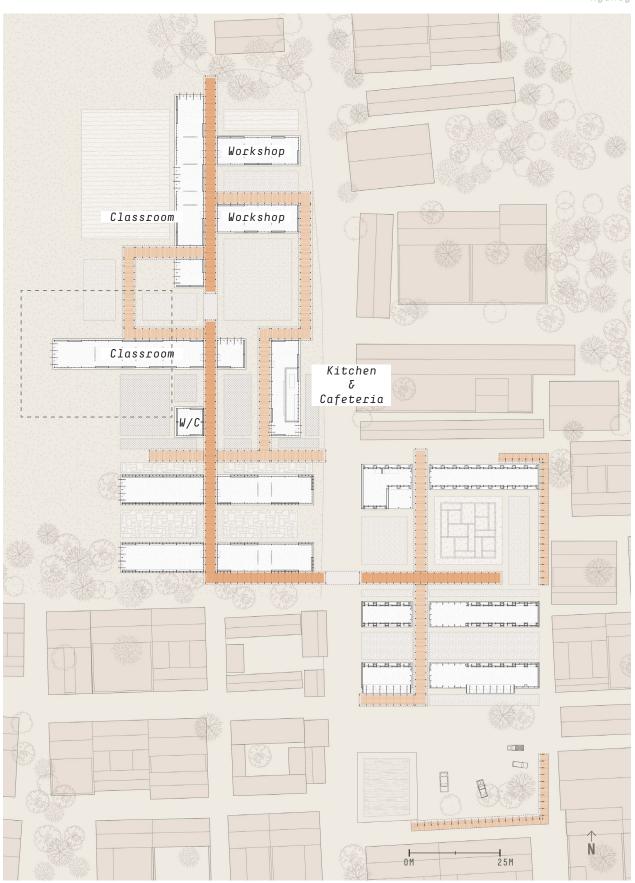
Fig 4.52. (Opposite) School Expansion

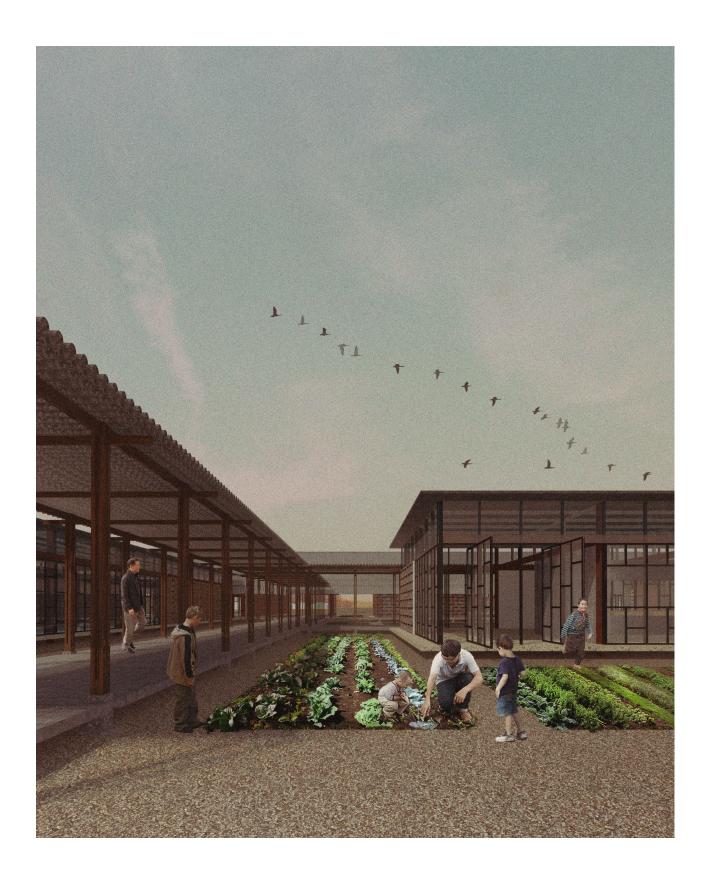


Fig 4.53. Visual Changes Through the Seasons

Pitch-Roofed Walkway

Flat-Roofed Walkway





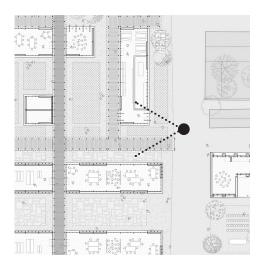


Fig 4.54. Map Showing Perspective for Render

Fig 4.55. (Opposite) Planting Bed and Kitchen

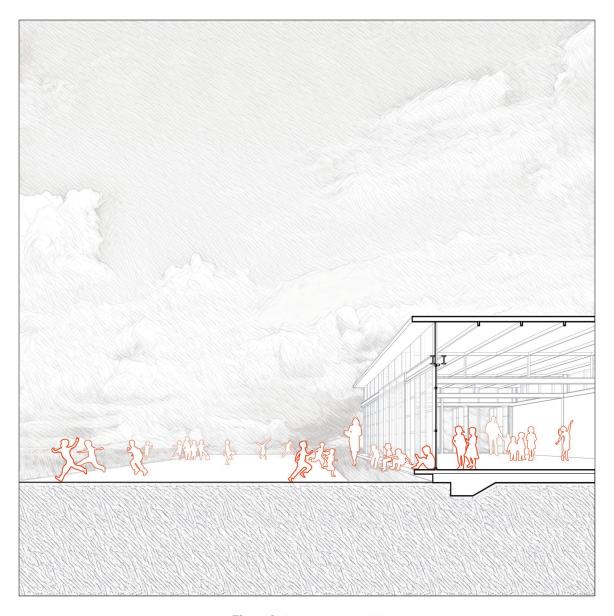


Fig 4.56. Section Perspective-CC

The last wing of the new school breaks from the row courtyard type and extends out and faces its site. This reflects a desire to break from a structured curriculum, to one that is discovered through an engagement with place. Lessons draw on the never ending changes and ways in which we interact with the physical world around us. Participation is crucial as the children learn that they can impact the world around starting with simple activities like planting. This sows the seeds for an awareness that their actions have impact both in the present and in the future.



Fig 4.57. Classrooms Engaged with Nature

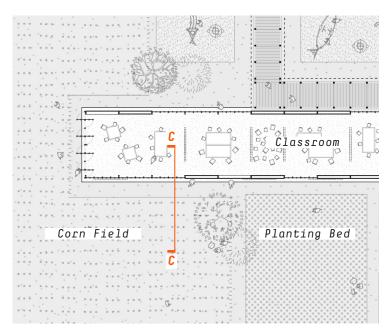


Fig 4.58. Classroom and Field Area Plan

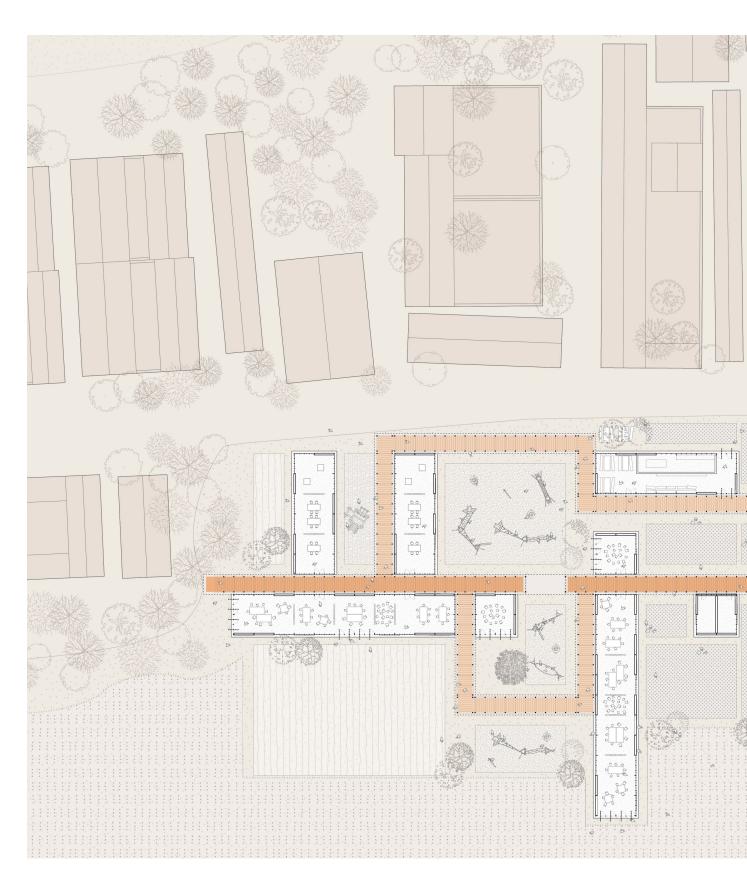
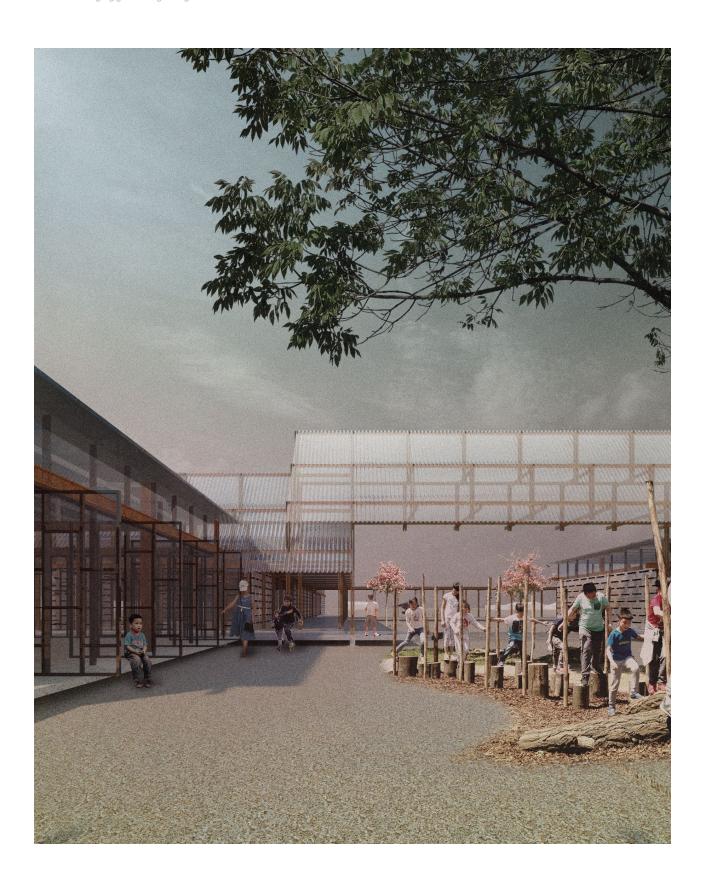




Fig 4.59. Furnished Plan



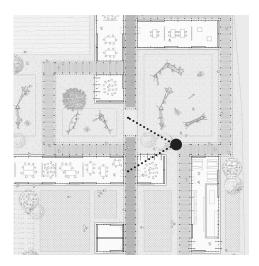


Fig 4.60. Map Showing Perspective for Render

Fig 4.61. (Opposite) Playground & School

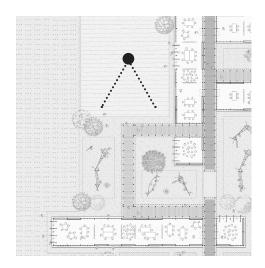


Fig 4.62. Map Showing Perspective for Render



The school is a contested space, and in this chapter it imagines a space that asks fundamental questions at the heart of life in rural China. How to reconcile the disparate identities hat now fragment a once deeply rooted and local life? What should be the values of a culture, once so grounded in tradition, as it is suddenly exposed to modern society? How has politics, economics and education played a role in its oppression? How to imagine a school that demonstrates resiliency and liberation? This chapter describes a school born out these questions and how a school can come to negotiate these questions and remain a place of agency and empowerment for all those affected.

This school is a tale of fiction at the moment, on the borders of utopia. The choices and actions taken by individuals imagined in this story, too often do not take place. Distrust, corruption and difference have wrecked havoc on people's ability to cooperation and act together. However, this story was also inspired by the society I observed, the places I visited and the people I talked to. Moments of interaction that gave me a sense of empathy and understanding. These moments came unexpectedly: conversations I had with rural kids dreaming big and small, facing an education system that seem prejudiced against them, or else meeting the families that had been scattered by far away opportunities, disconnected and losing touch with their traditions and culture. I also observed the local vernaculars and ways of building contrasted against the villages that have disappeared to the high-rises planted in their place, with generational knowledge and skills lost in a wave of blinding reconstruction. Taken as a whole, they demonstrate the extent which life has changed for rural China, but moments of everyday practices stands out and come to the foreground that starts hint at other ways people can be together. These range from the way people would informally renovate and add on to their village courtyards, or tend to their own gardens and plants even as their fields are now farmed by large companies. They demonstrate a kind of agency that is present, and that people are capable of. A certain understanding and knowledge of the place around them that are no longer nurtured but can become practices of resiliency. An agency fostered in a spaces of learning and gives every individual the will to act towards a shared future.



Fig 4.64. People I Met in China

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