FALL 2021
URBAN DESIGN
ASOS STUDIO
MONING THE CITY
Patterns of Commoning Cards @midterm review
COMMONING THE CITY
REVIEW 12/9
MMH303_School of Architecture
Carnegie Mellon University

Morning session

9:00 Welcome
9:10-9:55 Introduction
10:00-11:30 Thesis proposal reviews in two break-out groups

**Group 1: Circular Economies and Self-build**
Students: Kashmala Imtiaz, Paul Greenway, Lan Qin
Reviewers: Laura Garofalo, Sarosh Anklesaria, Stefan Gruber, Chun Zheng

**Group 2: Capitalism and Care**
Students: Mohammed Rahman, Xinye Wang, Luciana Ma
Reviewers: Mary-Lou Arscott, Valentina Varvasis, Tommy Yang, Jonathan Kline

11:30-12:00 General discussion

12:00-1:00 Light lunch provided

Afternoon session

1:00-1:10 Welcome
1:10-1:55 Introduction
2:00-3:30 Thesis proposal reviews in two break-out groups

**Group 3: Co-operative Infrastructure for Pittsburgh: Power, Water, Mobility**
Students: Schuyler McAuliffe, Carly Sacco, Jenny Zheng
Reviewers: Omar Kahn, Nida Rehman, Nina Baird, Stefan Gruber

**Group 4: Neighborhood Transitions**
Students: Takumi Davis, Siqing Ge, Sam Losi
Reviewers: Akhil Badjatia, Bruce Chen, Stefani Danes, Sarah Rafson, Jonathan Kline

3:30-4:00 General discussion
Lost in modernity

The traditional architecture in Kashmir is no more. A Kashmiri, much like many others, was more suited to daily subsistence conditions. In the past, people built houses and residences for practical reasons and not for great grandeur.

Cold Homes

As Kashmiris gave up their traditional architecture, they turned to modern ways for heating. Many houses and apartments in the city lack proper insulation. Mufti Ghulam Nabi, a resident of Pulwama, moved to a relative's place this winter.

Chilling change: As Kashmiri's taste in architecture changed, its homes became colder

As the winter sets in, people in Kashmir spend longer hours indoors. Cotton blankets and heat lamps are more common. However, the recent escalation of colder weather may force people to rely on wood and coal stoves more frequently.

Tracing Kashmir's lost era of golden architecture

The capital city of Jammu and Kashmir, Srinagar, is famous for its rich architectural heritage. However, modernization has left its impact. The city needs to hold on to some of its architectural treasures.
MATERIAL TRANSITIONS AND ITS SOCIO-CULTURAL IMPACT - THE CASE OF AZAD KASHMIR
Kashmala Imtiaz

The project is centered around the region of Azad Kashmir, which is the northern self-governing state of Pakistan. It is a part of Jammu and Kashmir which is a disputed territory between India and Pakistan and has a long history of political and social resilience. Despite the struggles and risks the region has been exposed to for years, the local people have developed a strong cultural identity over time which is exhibited through their indigenous practices, spaces, and everyday objects.

Azad Kashmir is known for its distinctive vernacular architecture. Earth, stone, and wood construction practices are not only environmentally friendly, but also exhibit the cultural landscape prevalent in the region. For a very long time, the valley remained away from the pressures of rapid urbanization. However, after the earthquake of 2005, when several national and international organizations infiltrated the region for rescue and relief, it was exposed to growing prosperity and economic convergence. In an unplanned bid to modernize, the construction methodologies departed from earth and stone to steel and concrete frame construction. This led to severe environmental deterioration and created peculiar sense of placelessness within Kashmir.

The idea of this thesis project is to understand the interlinkage between tangible and intangible assets of a hyperlocal setting and understand how the current models of growth in Azad Kashmir are bringing extreme social and gender inequality, environmental problems, and physical and cultural desertification. It is based on the idea that material transition not only impacts the region ecologically, but it also affects it socially and culturally. It also questions the dichotomy between “local” and “global” material use where local is regarded as outdated, primitive, conservative, and not adaptive to change. The project puts forward a framework to advocate for the use of vernacular construction methods and material as part of a circular economy. Applying a triple-bottom-line analysis to material passports, the project expands criteria for benefit-cost analysis to include social, communal, and environmental wellbeing.

Examining how evolution of indigenous practices shaped social structures, the scope of the project features two broader fields: evolution in participation across community and participation across gender. As a site of intervention, the project examines an all-women market in the town of Rawalakot, Azad Kashmir. Recognizing, how unlike the traditional times, the current models lack resources and mediums for women to work in this region, social worker Nusrat Yousaf along with members of the neighborhood established an all-women market center in the outskirts of Rawalakot. She understood how the role of women have shifted from being the primary members of the household and community majorly by the influx of “global” resources. This center aims to empower women by giving them an opportunity to learn and work at the same time and revive their roles in the society. As a collaborative venture with this team, the thesis project involves an extension of this center to act as an educational prototype of old practices and techniques socially, communally, and architecturally and demonstrate how these are mutually intertwined.
The Founding of Larimer Solar Commons

Anchor Institution: CMU

CMU/LSC contract represents a stream of revenue that can be used to leverage bank loans.

- **Larimer Solar Commons Contract**
- **Duquesne Light Energy portfolio**
- **Cheap renewable power to energy burdened Larimer**

### New table

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<th>Source</th>
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<td>CMU RECs Contract</td>
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Total: $221,778

3 sources of revenue provides local jobs and a small trust fund that continually grows based on solar power.

Efficient heat pumps replace old FF equipment.

An example of one of the homes that received substantial rehab treatment to update the envelope and invest in new efficient heating and cooling equipment.
The Larimer Solar Commons (LSC) is the comprehensive coop organization and framework that sets out to plot a path for the neighborhood to achieve resilience and self-sufficiency. The LSC starts with addressing the energy burden in the neighborhood, since Larimer has some of the highest burden per census tract in the city. A community solar project will be used as the kickstarter to establish the LSC and begin the journey toward self-sufficiency. Following the path of the Evergreen Cooperatives and the Cleveland Model, using the many anchor institutions in Pittsburgh to invest wealth back into Larimer is how the community solar will begin its funding. For example, Carnegie Mellon University currently buys 105% of its electrical use from RECs (1 MWh of energy generated with renewables) to offset the institution’s carbon footprint. Currently all of these RECs are purchased out of state, the LSC would contract with Carnegie Mellon University to buy RECs from the community solar project. Similar to the stock market, RECs are subject to price volatility and the more organizations and institutions around the country make net-zero plans the more RECs will be in demand driving up the price. The relationship between LSC and Carnegie Mellon University is mutually beneficial since there can be fixed pricing negotiated into the contract. The LSC benefits because this contract represents a fixed stream of revenue it can use to leverage a loan from the bank to install the community solar. The members of the solar coop benefit from a lowered energy cost beginning the reduction of energy burden in the Larimer. This scenario can be repeated many times over in Larimer producing multiple community solar installations in the neighborhood.

Similar to the Evergreen Cooperatives in Cleveland, the LSC represents the heart of a constellation of cooperatives for equitable labor, motility, housing, etc. For each solar project there is the opportunity to invest in local labor, a solar installer could be the first workers’ coop as part of LSC. Not only would the works install and maintain the community solar in Larimer, as solar becomes more widely adopted across the city and region, the LSC solar installers could be a viable contractor bringing lasting wealth to Larimer.

Similar to the Tenement Syndikat LLC case study in Germany, there is a surplus logic built into the LSC model that allows the cooperatives to expand quickly over time. Not only will the surplus revenue allow the LSC to invest in more solar installations, but it can begin to invest in projects that will bring Larimer closer to the goals of the 2,000-Watt Society. These projects range from home energy improvements (weatherization/insulation/heat pumps), to cooperative mobility sharing service (LSC Car Share), and building development projects to invest in vacant buildings in the commercial corridors of Larimer.
Braddock, PA has a legacy of steel production that resulted in its current state of decline, but also with the potential for proactive self-efficiency. With the opening of Andrew Carnegie's Edgar Thomson Plant in 1874, Braddock was a center of material extraction and production with lingering effects of air pollution that affects its majority Black population today. Though Braddockers suffer from more cases of asthma, emphysema, and other respiratory illnesses as a result, they have acted together when external forces made it necessary. Though their protests to prevent the 2010 closure of their only health facility, UPMC Braddock, feel through, they succeeded in a near-decade long campaign to prevent hydraulic fracturing (fracking) at Edgar Thomson. This demonstrates their potential to utilize their own social structures to reactively assemble and defend their shrinking community.

Hence, existing staple institutions in Braddock provide aspects of overall well-being. Braddock Farms addresses and provides food cultivation and nutritional awareness. Braddock Carnegie Library provides outlets of art and knowledge sharing; the many churches including the Living Water Ministry provide spiritual sustenance; and business incubators such as the Hollander Project and General Sisters act as financial support centers, with what could be created is a Health Core, a facility that borrows the health aspects of these existing institutions in tandem with services once provided by Braddock Hospital such as emergency care, dental provisions, and drug therapy. Braddock is rich in non-monetary wealth, and it can be utilized to develop it as a settlement as self-driven as its people.

BUILDING A BREATHING BRADDOCK

BRADDOCK, PA | Takumi Davis

Olivia M.

Olivia is a 9-year-old Black girl who lives with her single mom, who has struggled with non-compliance issues since birth. Olivia's mom has taken Olivia's medications. Meanwhile, Olivia copes through making art and the Hollander Building, or congregating with her friends at the Braddock Carnegie Library.

Lou D.

Lou D. is a 29-year-old Black woman who lives with her partner and who was born into the working class. Lou D. works in the steel industry and has also worked in the hospitality industry. Lou D. has struggled with drug addiction and has had several brushes with the law.

Bertha T.

Bertha T. is a 6-year-old Black girl who lives with her single mother. Bertha T. has a history of non-compliance issues and has been involved in several foster care placements. Bertha T. has struggled with drug addiction and has had several brushes with the law.

Physical/Nutritional Wellness: Braddock Farms and Streets

Braddock Farms provides an environment to promote fitness, art and education, and community health. Braddock Farms offers a variety of crops year-round, and Braddockers can access farm stands and community gardens to grow their own food. Additionally, Braddock Farms provides outlets of art and knowledge sharing, the many churches including the Living Water Ministry provide spiritual sustenance, and business incubators such as the Hollander Project and General Sisters act as financial support centers.

The Health Core

To recover functionally, Braddock Hospital's demolition, a central space or community should be able to reflect the needs of the community and its neighboring communities. This initiative is a call for action to generate a space that reflects the aspirations of the community and the needs of the people.

Financial Wellness:

Braddock Carnegie Library

General Sisters & Hollander

Based on the stories of 3 Braddockers
BUILDING A BREATHING BRADDOCK
Takumi Jordan Davis

Braddock, PA has a legacy of steel production that resulted in its current state of decline, but also with the potential for proactive self-efficacy. There is an intrinsic intersection between Braddock's socio-ecological conflicts and its development of mutual aid systems. That intersection is a potential answer for how the people of Braddock can use their own agency to proactively create buildings promoting social and ecological sustainability unimpeded by unwanted external forces.

With the opening of the Edgar Thomson Plant in 1874, Braddock was a center of material extraction and production and lingering air pollution that affects its majority Black population today. Since its peak in the 1920s, Braddock has lost 90% of its population through White flight for a population traditionally privileged to migrate away from centers of pollution. As a result, Braddockers suffer from more cases of asthma, emphysema, and other respiratory illnesses and live in poverty exacerbated by outdated and decaying houses and roads. In 2010, this was exacerbated through the sudden closure and demolition of the Braddock Hospital, which was first established in 1906 and purchased by UPMC in 1996. This loss of a facility that provided emergency care, drug therapy, and permanent dental materials is a burden felt by many residents in Braddock today. Though their protests to save their only health facility fell through, Braddockers succeeded in a near-decade long campaign to prevent hydraulic fracturing at Edgar Thomson in 2021.

This demonstrates their potential to utilize their own social structures to reactively assemble and defend their shrinking community. Ultimately, this series of events hints at the possibility of Braddockers using their currently existing communal and social wealth to proactively address respiratory issues and infrastructural decay. Despite lacking major financial support, Braddockers demonstrated the power of self-efficacy beyond monetary value. As written in J.K. Gibson Graham's Take Back the Economy, a community should be able to thrive through means of well-being beyond money. This emphasizes the value of each person's occupational, physical, social, and community well-being. Additionally, Arturo Escobar's Designs of the Pluralverse that untrained individuals, or "diffuse designers," can work in tandem with expert designers to create spaces that truly advocate their objectives. These ideas could help communities like Braddock to transition from the present to a future of social agency and less physical degradation.

Hence, existing staple institutions in Braddock provide aspects of overall well-being. Braddock Farms addresses and provides food cultivation and nutritional awareness, Braddock Carnegie Library provides outlets of art and knowledge sharing; the many churches including the Living Water Ministry provide spiritual sustenance; and business incubators such the Hollander Project and General Sisters act as financial support centers. Ergo, what could be created is a Health Core, a facility that borrows the health aspects of these existing institutions in tandem with services once provided by Braddock Hospital such as emergency care, dental provisions, and drug therapy. Braddock is rich in non-monetary wealth, and it can be utilized to develop it as a settlement as self-driven as its people.
Beijing Historical District Rebirth and Decentralization

The community classroom now welcome all residents and visitors to exchange knowledge and our community have more people coming in to join the activities. We now have more job opportunities with higher life quality. Our membership get the funding that we need.

I would like to play here and now I have more friends in the community because of the program. I volunteer with them in sharing and managing the space to return.

As a parent, I am willing to join in the program to save more time for commuting for my children to get more resources. I provide lectures on arts time to time in return.

I am having more fun with my friends and have more space to run.
Siheyuan is an ancient architectural style developed in Beijing historical district. However, due to the improper preservation of the district, their residents suffer from the uneven distribution of basic services and resources in the community, high density of population and low quality of living. The traditional architectural style of Siheyuan, which is a courtyard shared by one family but now can be shared by more than 8 families. The conflicts between private, common and public domain are becoming more and more urgent question for the people living in Siheyuan. The government tries hard to find the new strategy that pulls the district out of this dilemma but at the same time, is trapped in another dilemma of the extremely high value of the property. Now, the government decides to tear down the buildings and send the residents away to replace those districts with new development.

Thus the goal of this project is to discover a new method that prevent gentrification and displacement of the community, using the existing condition, building up a bottom-up soft urban renewal of Beijing historical district focusing on the reimagining between private, common and public spheres, developing a new method that will give a rebirth to the district and thrive the life there. This devises a strategy of community engagement that brings residents together in shaping their neighborhood, transforming densely-populated spaces into decentralized community spaces and community classrooms with different scenarios, and preparing them to resist gentrification and displacement.
Integrating Care and Mobility Infrastructure
Pittsburgh, PA

A Mobility & Care Network

Martin Luther King Jr. East Busway
Homewood Playground
Carnegie Library of Homewood
Afro American Music Institute
Homewood Station Senior Apartment
Proposed Prototype Site

A Typical Day of Single Mother

8:00-4:00
Work 8h
11:30-6:00
Sleep 6.5h
8:00-4:00
Commute to Work 1h
Cook Dinner Housework Take Care of Children

Commute Home 0.5h
Commute to Daycare 0.5h

Free Time

Joining the Shared Mobility Cooperative saves me a lot on transportation. I can spend those on daycare and job training programs.

At the Care Cooperative, parents volunteer to be the caregiver for kids and elders.

I no longer feel lonely when reading books with kids at the Care Cooperative.

Care Cooperative
Shared Mobility Cooperative
Transitional Housing
Community Kitchen
Co-working Space
Repair Cafe

Clawson St
N Homewood Avenue
11:30-6:00
Sleep 6.5h
11:30-6:00
Sleep 6.5h
11:30-6:00
Sleep 6.5h
11:30-6:00
Sleep 6.5h
11:30-6:00
Sleep 6.5h
Transportation infrastructure is an integral part of Pittsburgh's iconic image. The 1,200 miles of city streets, 130 miles bike (+) network, 446 bridges, 800 sets of public steps, 102 regional bus routes, 3 light rails, and 2 inclines tell stories of this charming post-industrial city.

The Port Authority of Allegheny County, the largest transit agency in southwestern Pennsylvania, provides transportation services for more than 64 million riders each year. Apart from public transit, some other services and transportation technologies are also deployed in the City of Pittsburgh, such as ridesourcing service, Healthy Ride Bike Share System, and Spin e-scooters.

Access to transportation is key to employment opportunities and economic mobility. However, a major barrier to transportation access is affordability. Accordingly, transportation is the second-highest household expenditure after spending on housing. Some households spend 38% of total pretax income on transportation.

In the United States, 55% of transit riders are women. They make more trips to care for others and conduct household errands, but their travel needs are not met. Accommodating the needs for care work is often less prioritized in the current transit systems, facilities, and vehicles. Lack of access to affordable, reliable, and convenient mobility options has a huge impact on the lives of single mothers and their families in Pittsburgh. Some of the barriers they face include poor transportation access to service centers, incompatibility of service hours with work schedules, and unaffordable child care.

This thesis project explores the possibility of community-led approaches for establishing a network and facilities (Mobility and Care Hubs) of mutual support, collective care, and mobility. The pilot facility, Homewood Mobility and Care Hub, is envisioned to be first operated on a neighborhood scale. Residents of Homewood can have direct access to multiple services in one stop within this hub, spending less commuting time and fares to travel to the nearest service locations.

The Shared Mobility Cooperative and Multigenerational Care Cooperative within this pilot hub are models to study the potential of creating intersected cooperatives through commoning practices. The cooperative structure will support single-mother families and other families of Homewood through shared responsibilities and joint decision-making processes, which would alleviate the time and financial pressures of transportation services and care work. With cross-sector partnerships, this community-led commoning practice has the potential to be expanded throughout the neighborhoods in the City of Pittsburgh and form a strong cooperative network.
Why a board game and not an urban intervention? In my opinion, the ideals of a static spatial implication located in the suburbs won't reach the intended target audience clearly. The widespread and pervasive qualities of suburbia mean that a single structural intervention has little chance of reaching a widespread suburban audience. There is much existing theory about its transition, but any seemingly-productive discussion of it quickly polarizes those involved. Reframing the issue as an abstracted game will serve to generate thought and discussion in those that would otherwise shut the ideas out. A subversive & affirmative game involves participation, action, decision, and (hopefully) reflection.

I’m trying to challenge notions of actors and their relation to space over different scales of time through the emulated suburban retrofit. My project will attempt to encourage negotiation of players to solve issues caused by their actions during gameplay. Players will find collaborative issues to emergent problems. I intend to design for the target audience of myself 5-8 years ago — [white, american] people whose worlds are the size of their suburb. Transforming a mindset in the span of a single game is impossible, but providing a platform to get individual and collective thoughts rolling is the intent. Again, it’s imperative to note that a direct critique of a way of life is not a productive way forward. Rather, the subversion of players’ perceptions will, hopefully, cause them to realize that they have the agency to change the drastic financial, social, ecological impacts of their ways of life. Thus, abstraction of suburbia is required to maintain players’ open-minds.

Throughout gameplay, the players become the commoners and the catalyzing of board-state change will introduce twists to the game. Teamwork? Inclusion and exclusion is defined by the actors as they play. Turn-based? Decision making powers will be distributed to players based on what role they play. The players will examine if the appeals/benefits of suburbia can be sifted out of the resulting negatives. Most importantly, the target audience will have a chance to come to conclusions on their own and from a number of variety perspectives and timescales. Transformed board-states may be evaluated on a number of things including a walkscore, energy consumption, density and organization, inequality, local business, etc.

The shared resources of the game are currently difficult to fully define. Critiques of the suburbs aim to shift to a lens that land, space, structure, infrastructure and more as shared resources. It is important to consider that the impact of shared resources in a place so vast is not limited to humanity, and involves other species of plant & animal, land, trees, and more. The sharing of resources becomes a version of Actor Network Theory (ANT). If the game itself is emblematic of ANT, and the players become the actors, then surely the players would be the resources. And if commoning shares resources, then the actors would need to lend themselves to different issues during play. It’s pretty strange, but I think unwinding this idea will lead to a very intriguing concept of gameplay.
AGITATING THE BOUNDARIES OF THE DOMESTIC AND PUBLIC SPHERES
In our current society, reproductive labor is often ignored in favor of productive labor. Cities are often focused on prioritizing economic growth and accumulating capital which results in neglecting the mental and social wellbeing of people. In The Care Manifesto: The Politics of Interdependence, the Care Collective examines this issue at a number of scales and proposes a world where care, rather than capital, is placed at the center of life. It also raises the question as to how we can better design our cities in order to better care for its residents. One example of this lies in the peak urbanization of Manhattan, which has led to an influx of people searching for more affordable costs of living into the surrounding boroughs of New York City. Brooklyn, specifically, has experienced the greatest concentration of unchecked urban development as a result of the gentrification of its northernmost neighborhoods.

This project scrutinizes gentrification in Brooklyn and the displacement of people, arts, and businesses by envisioning an alternate proposal for a site in Bedford-Stuyvesant that is currently in development. This new proposal seeks to include the surrounding community in its progress through participatory design practices and a bottom-up approach rather than excluding community members and causing the displacement of local residents. By incorporating concepts of collective care, outlined by The Care Manifesto, this project challenges the dichotomy between productive and reproductive labor in order to weave new networks of mutual support and solidarity across diverse demographics.
The project examines homelessness in Seattle and seeks to transform tent cities through strategic interventions that promise to enable a culture of self-care. By combining basic facilities with broader community programs, the project aims at revising the stigma that comes with homelessness and respond to the NIMBYism (not in my back yard) of neighborhood residents. The project begins with identifying the facilitated experience design and the users (unhoused people, staff, passerbys, volunteers, residents of the surrounding areas) at the center of a design concept. Starting from examining the met and unmet needs in the Seattle Union's shelter, one of Seattle's biggest homeless shelter. The premise of the project lies in creating an interactive edge within an education district/neighborhood through design intervention. The project creates an active interface between the exterior and interior, driven through the experience of the infrastructure for the homeless people as self-driven, personalized, and a space of self actualization. The strategy and elements re-imagine the spatial manifestation of an edge as an active interface creating a smooth transition between the exterior (public) and private institution, creating networks and suggesting programmatic elements to enable collaboration and interaction. The project also considers transitional institution for homeless people as a building typology to establish inside-outside relationship as a means to create/identify spaces that meet higher-level needs like autonomy, social support, and feeling respected, which are still important despite the fact that lower-level needs were not being fulfilled.
needs
permanent housing
temporary housing
shared spaces
event spaces
office space
material storage
library space
community kitchen
community gardens

resources
dilapidated buildings
unused materials
community assets
construction knowledge
craftsmanship
local vernacular
information - books

human actors
local community
evicted residents
neighboring population
immigrants
working professionals
unemployed people
local government
banks

housing

preservation of
knowledge + culture

cooperative
ownership

material reuse
The background for this proposal is the Spanish housing crisis of the past two decades tied to the collapse of the speculative bubble driven by ever increasing value of property and unrealistic home loans. While this market driven exponential increase and eventual collapse played out resulting in mass eviction and accumulation of personal debt, a grassroots municipalist movement steadily emerged in Barcelona. 2015, with the election of Ada Colau as mayor of Barcelona, marked the arrival of a new municipalist government in the city and the promise of bottom up transformation of much of the cities social structures. This thesis proposal is situated in the aftermath of the housing crisis but looks to the potential of government supported, grassroots organization to provide an alternative vision for people's relationship with housing in an urban context. In terms of precedents, the proposal looks to historic examples of cooperative ownership models and participatory design and construction such as FUCVAM in Uruguay and UHAB in New York. In parallel with this, Cedric Price's Fun Palace provided inspiration for the alterable programming of space through scenario planning and cybernetic principles. The site of the proposed intervention is the abandoned ENMASA factory complex, located in the Bon Pastor neighborhood of Barcelona. It is a post-industrial neighborhood located on the urban periphery with a high working class immigrant population deeply rooted to the historic significance of industry in this area of the city. The operations of the factory are inextricably linked to the population of the neighborhood and the organization of the surrounding urban fabric and now with the recent purchase of the complex by private developers, the gentrification of the site and consequential displacement of the local population looms in the future. To provide an alternative to this timeline, this thesis proposes an adaptive reuse project to transform the ENMASA complex into a cooperatively owned center for education, sharing of culture and most pressingly the construction and renovation of housing. The project looks to provide a space for the local community to come together to share and preserve knowledge and ultimately address the issue of unattainable market driven housing costs. Through a combination of mutual aid construction, professional support, and government backing, the space will begin to provide an alternate method for producing housing for a local community rather than the traditional cycle of capitalist ownership that would traditionally gentrify and displace. The core programmatic space, a large open plan warehouse, will provide a flexible space for deconstruction, material recycling and cataloging, storage, construction and renovation of new housing for the local community. The massing surrounding this modular construction space will be more fixed providing space for programs such as a community library, dining space, kitchen, gardens, office space for professionals, and temporary and permanent housing. While this balance of fixed and flexible space within the complex is important, ideally the community will be able to change and adapt the space to serve its most urgent needs.
After 2003

Social and cultural context

The phenomenon of left-behind children.

Not enough schools in cities to accommodate all the children.
The expenses of learning in schools in cities is unaffordable.
The literacy level of grandparents of these children are very low.
The elders are of the age that should be taken care of, without enough strength to take care of others.
Children receive poor education.
Children lack interaction with parents.
The safety of children under much higher risk.
Children cannot receive proper discipline.
Traumatic childhood.
Negative loop of poverty.

60 million left-behind children and 36 million migrant minors. One third of the minor population.

What can we do to prevent the predictable tragedies of more left-behind children in the future?

A Home for Left-Behind Children
Shenzhen, China

Site of intervention

Electronic part factory where left-behind children's parents work
Facilities like sports fields, swimming pools, libraries
Factory dormitories and rented house in urban villages

Spatial context

Mainly work in construction industry
Mainly work in manufacture industry, especially electronic devices and parts.

13 migrant workers in one factory committed suicide.

Still dense, lack of privacy, lack of places to raise children.
Walking into the Chinese countryside today, you often see this scene: a wrinkled hand holding a small hand walking slowly. You may also notice groups of kids playing together, but chances are very slim that you can find their parents that should accompany them. These kids are called left-behind children, who have to stay in their hometown or board with relatives in rural areas because one or both of their parents have gone away to work in cities and towns, in which case they have to live separately from their parents.

There are reasons for this unique scene of left-behind elders acting as parent guardianship and raising left-behind children. When the system of custody and repatriation was abolished in 2003, which previously dictated limitations on people without local residency. The advantages of employment and income, along with the improvements in public security and order caused the phenomenon of large numbers of migrant workers moving to cities. Many of migrant workers were born in the 1970s and 1980s, which means they were very likely to have gotten married and already had child at that time. But at the beginning of the 21st century, there were not enough schools in cities to accommodate all the children of migrant workers. Additionally, the expenses of learning in available schools in cities is unaffordable for these migrant families, so they had to leave children in villages and towns and let grandparents take care of their children. This is the origin of the phenomenon of left-behind children.

Due to the poor literacy level of left-behind children's grandparents, and they are actually of the age that should be taken care of instead of taking care of others, the safety of left-behind children is under much higher risk, and they often do not receive proper discipline. They are also very likely to experience a traumatic childhood since they can only see their parents few times a year. All these factors make them fragile and lack of ability to break the negative loop of poverty.

But the story does not end here. Until now, almost 20 years has passed, the first several generations of left-behind children have grown up. Most of them become migrant workers just like their parents, and they are at the age to get married and have their own children. Though seemingly depressing, opportunities are emerging where we can help them. Along with the development of economy and urbanization, the living conditions and social-cultural environment has become much better in comparison with those at the beginning of the 21st century. The facilities in cities and their workplaces were improved a lot, and they can live in rented rooms or dormitories instead of temporary and dirty sheds. The long-term interaction of migrant workers and the surrounding urban area also forms an inclusive and comprehensive urban milieu. Under these circumstances, if migrant workers are united in some way, in addition to the advantages taken from the urban milieu, we can make some change to the predictable continuous phenomenon of left-behind children.
As our cities keep growing, there is an emphasis on our gray space and green space with our blue space constantly being displaced. Water infrastructure is usually hidden or restrained, which instigates a disconnect between us and this valuable resource. The lack of care between us and water is only contributing to the pollution, overuse, and misuse of the limited natural resource.

Our issues of water are only going to increase with the future we are heading towards. Influx of water from melting ice caps, continued pollution by humans, decrease of biodiversity, and lack of access are only a few aspects in which people and water interact. In Pittsburgh especially, a city surrounded and carved out by water, the failing infrastructure results in more issues for people to be able to positively engage with the resource.

This project speculates how we can come together as communities to be able to reframe and reimagine the ways in which we interact with water, changing how we view it and how we engage with it for the ultimate goal of valuing and protecting this resource.
The project envisions a self-build community network and the adaptive reuse of Beijing’s high-rise estate from co-living communities. The project will transform the formal residential neighborhood, the building, and the dwelling units into a different scale of sharing center. The development of the different scales of sharing nodes will give the residents a different level of ownership of space and empower them to co-design, self-building, and self-operated the dwelling and common spaces.

Objectives

1. Improve the living quality in those residential neighborhoods that can help adaptive reuse the existing structure with a cost-effective approach.
2. Discover and Experiment with a new living model that can rebuild modern social networks, encouraging communication, mutual support, collective care, and reproduction process.
3. Long-term autonomous model that can constantly operate the program, governance the common spaces, gain profit and contribute to the community