CREATED IN CHINA
We started our project with a strong obligation to look out the market as much more than just a place for exchange. We wanted to consider how this site can address the practical and philosophical challenges facing Beijing and greater China. And truly these are more than just challenges, their impact and urgency come together as full on crisis facing China.

As recently as last week, we saw news about Beijing’s air pollution reaching record levels that were so high that they caused the govt to shut down schools and ask people to stay inside. Unfortunately, this is a trend. 2 out every 3 days in Beijing air levels are harmful to breathe. The pollution is contributed in part by the country’s heavy reliance on coal (70% of energy) as well as a very recent shift from bicycles being a main mode of transportation to car use and ownership.

Toxicity unfortunately carries into more than just the air. While China has to feed more than 20 percent of the world’s population on less than 7 percent of the world’s farmland. And 1/5 of China’s farmland has been recorded as unsuitable for growing due to its toxicity. Farmer tending crops butted up next to a lead factory so no surprises.

As much as agriculture suffers from environmental damage, its also currently a big contributor. Water is also scarce and the food production demands continue to grow. Just irrigation accounts for 20 percent of China’s greenhouse gas emissions. 80 percent of untreated factory farmland waste is dumped into water sources. You can imagine why there’s a large and growing distrust of home-grown food among the Chinese.

Many of the issues mentioned are directly and indirectly related to China’s hyper-westernized development over the last twenty years.

The failure of the modern city is in part due to its one dimensional nature. In the case of much of the western world, economy is king. As a result the exploitation of people and nature has given rise to our current status quo. We need to approach urbanism more intelligently - integrated and pluralistic. The future of cities is looking at energy, water, food, and mobility as integrated systems and applying them as such.

China has been implementing western economic ideals at warp speed on a massive scale and quite honestly probably better than we have ourselves.

But this has come at a great loss not only to the environment but to Chinese culture and identity. Public spaces such as pedestrian streets are disappearing as more space is given to cars and the spaces that are left act as a symbol of government control such as Tienamen Square.

Chinese art, food and even cities have fallen into that hands of mass production which has diminished thousands of years of culture encapsulated in the phrase Made in China.

So why Beijing and why PanJiaYuan and how do we move forward?

Beijing as the capital of China is hugely significant. What happens in Beijing sets the precedent for the rest of China. Panjiayuan is an internationally recognized market. What the government chooses to do at Panjiayuan has to potential to impact the trajectory of greater China. And let’s be honest, addressing challenges facing China, an economic powerhouse with 20 percent of the world’s population, can have huge impacts across the world.

Western ideals and development implanted in China have failed the country and will continue to fail them. Furthermore, Chinese history and culture is incredibly rich and holds all the solutions to these present day challenges. Now is the crucial time for the country to look inward at embedded Chinese values.

Panjiayuan can be a symbol of China’s values to its citizens and the global community.

These values include living and developing ecologically, sharing and nurturing local knowledge and production, and celebrating the rituals of public life. These challenges and values shape our redevelopment of PanJiaYuan which reflect a shift away from the phrase “Made in China” to more deserving and honorable “Created in China.”
CREATED IN CHINA

CHALLENGES

TOXICITY

2 OF OUT 3 DAYS AIR IN BEIJING IS HAZARDOUS

70 PERCENT OF POWER IS GENERATED BY COAL

CAR OWNERSHIP

640%

CAR USE

388%
CHALLENGES

FOOD SECURITY

20 PERCENT OF AGRICULTURAL LAND IS TOXIC

IRRIGATION IS RESPONSIBLE FOR 20 PERCENT OF CHINA’S GREENHOUSE GAS EMISSIONS

80 PERCENT OF FACTORY FARM WASTE IS RELEASED UNTREATED INTO WATER SOURCES

DISTRUST OF CHINESE-GROWN FOOD PRODUCTS
IDENTITY CRISIS

HYPER WESTERNIZED
DEVELOPMENT IS RESOURCE INTENSIVE & ENVIRONMENTALLY DAMAGING

LOSS OF PUBLIC SPACE DUE TO AUTO-CENTRIC GROWTH & GOV’T CONTROL

MASS PRODUCTION OF CULTURE
“Study the past, if you would divine the future”

-Confucius
CREATED IN CHINA

EMBEDDED TRADITIONAL VALUES

1. ECOLOGICAL INFRASTRUCTURE

2. KNOWLEDGE TRANSFER

3. THE RITUALS OF PUBLIC LIFE
“Great acts are made up of small deeds

- Lao Tzu
Panjiayuan road potentially connects a series of important sites including the Temple of heaven and Beijing university.

Due to the adequate access to the area via major routes, our first strategy is connect these green spaces with a bike route and transform 2.7km of panjiayuan into a pilot project that incorporates integrated a bicycle and bus rapid transportation and generates clean energy using power tiles embedded in the new street. This type of energy production does not rely on the sun so for a place like Beijing which is bustling day and night and with the current levels of smog, this technology would be highly appropriate for the city.

1 bicycle would power 1 street light for 70 hours
We would exceed the energy necessary for basic infrastructure and in addition, we are increasing the safety and sociability of the street but as well as bringing back a classic Chinese tradition which gave Beijing its name ‘the bicycle kingdom’
ACCESS + MOBILITY

Pedestrian:
• Underutilized feeder roads from the 3rd ring removed, creating safer access for pedestrians using the subway.
• North south link connecting 2 exits of the subway
• Main entry point for pedestrians and cyclists via a ramp which connects different parts of the site

Bicycle + Tricycle:
• Bike lanes and parking on-site
• cars/service vehicles enter via rear shared street
• informal street connects subway square across the site, inviting informal vendors and public activities and informal access into the market

FOOD
• north south orientation is best for agricultural production
• maximise area for growth - growing on top of shops - greenhouses for all year round production
• localised composting within greenhouses
• vertical shafts at NW and SE points
• supplying local restaurants
• food market on ramp
• An average yield on site produces 124,731kg of food or 348,378 meals

WATER
• increase pervious surfaces
• water collection on roofs for re-use
• water filtration using bioswales and lotus pond
• water storage in central cistern under ramp
LOCAL KNOWLEDGE AND PRODUCTION

This value speaks directly to the Chinese identity crisis and loss of culture. Culture is generally made up of people, food and art. A market is exactly where all these things can be found.

In our redevelopment, we wanted to celebrate and nurture craftsmanship, production and the exchange of this knowledge.

This is why we’ve included Chinese craft workshops and community facility space at the center of the plan.

We’ve also diversified the crafts sold in the shops and stalls which is a significant change from the previous site.

We also wanted to encourage local craftsmanship by training future artists in the workshops and incorporating artist in residency studios on site. The idea here is that eventually PanJiaYuan will host the exchange of primarily locally made goods.

This includes local produce! Produce grown in the greenhouses will be sold at our farmers market in the center of the site. We’ve also incorporated restaurants on site and space along the informal street for mobile food vendors to fully bring back my favorite part of Chinese culture, the delicious food.
solar panels
south facing roof

material re-use
brick

water filtration
native reeds

RESTAURANT

PANJIA YUAN ROAD

INFORMAL STREET
STREET VENDORS ARE WELCOME!

PLAY EAT SIT
CREATED IN CHINA

rainwater collection
roof catchment - drip irrigation to greenhouse
bioswales to central street

material re-use
brick wood for stalls
glass on greenhouses

flexible infrastructure
stall/bench

GREENHOUSES
NORTH-SOUTH ORIENTATION

SMALL SHOPS
10m² UNITS

EXCHANGE

GROW

LARGE SHOPS
2.5m² UNITS

SIMPLE STALL
1.5m² UNITS
SELF SUPPORTED INFRASTRUCTURE
GENERATING ENERGY FROM STREET ACTIVITY

ENERGY STORAGE CELL
ENVIRONMENTAL AWARENESS

RESTAURANTS
LOCALLY GROWN AND SUPPLIED

SUBWAY STATION

GALLERY SHOPS
‘GATEWAYS’ TO THE MARKET

POCKET PARKS
INTIMATE PUBLIC SPACES WITHIN MARKET

PAVEGEN SYSTEMS
CLEAN ENERGY PRODUCTION FROM FOOTFALL

PANJIAYUAN POWER STREET
BRT AND CYCLE ROUTE

INFORMAL STREET
DAY AND NIGHT

solar panels
south facing roofs

water filtration
native reeds

Increase pervious cover
GROW ALL YEAR
LOCAL FOOD + ECONOMY

REPURPOSE EXISTING MATERIALS
LOW IMPACT DEVELOPMENT

GREENHOUSES
REPURPOSED GLASS AND STEEL FROM CANOPY

LEARNING CENTER
FRESH FOOD MARKET

LARGE SHOPS
WORKSHOP

FRESH FOOD MARKET
ARTIST STUDIOS

LOCALIZED COMPOSTING
CENTRAL STREET
PRIMARY WATER COLLECTOR

BIOSWALE
NATIVE PLANTS CLEAN WATER
LOW MAINTENANCE BROWN ROOF USES REUSES SITE MATERIAL TO ENHANCE BIODIVERSITY

NEIGHBORHOOD STREET
EYES ON THE STREET
CREATED IN CHINA