

# Meng Gao

## Portfolio



**Meng Gao**  
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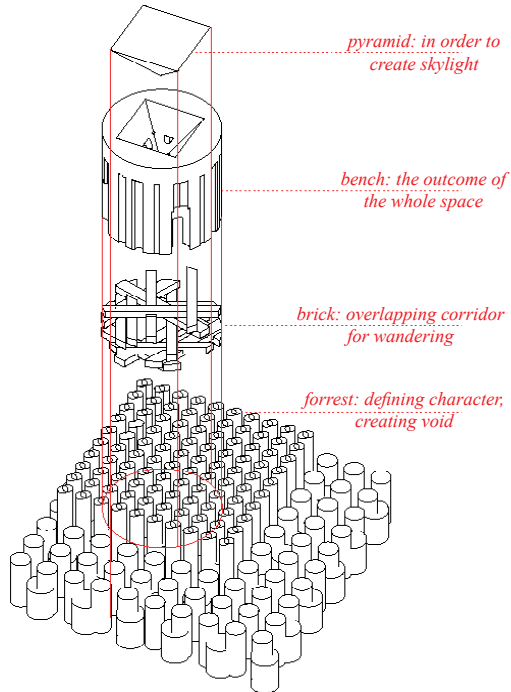
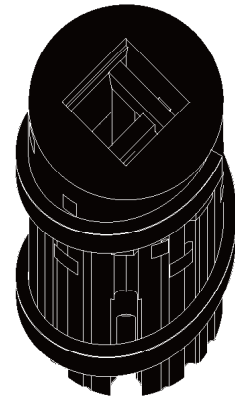
# 1. Utopia Museum

Type: Academic Studio/Individual

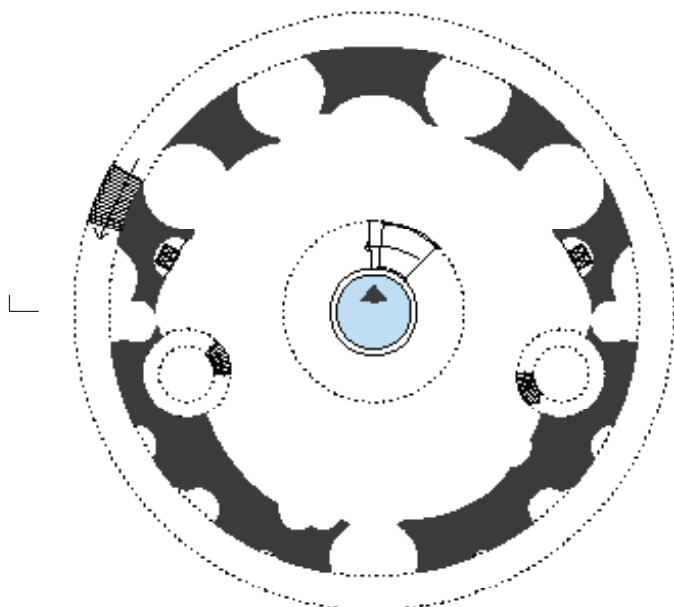
Time: 2016

Building Type: Public Architecture

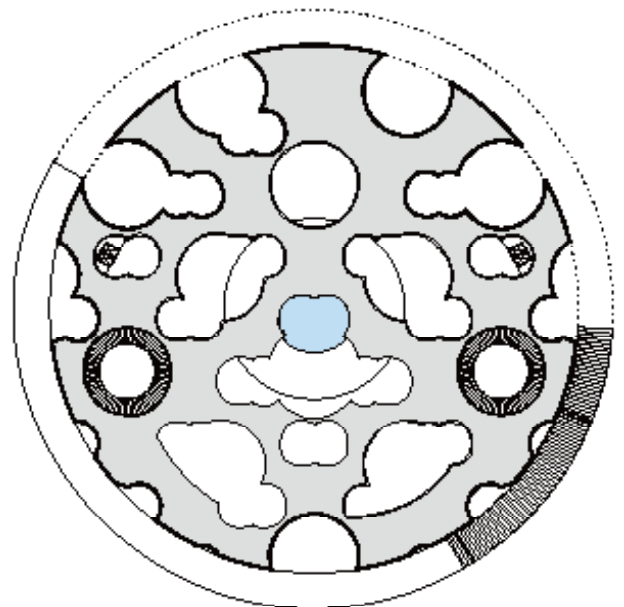
Keywords: Ritual; Form; Time and Space



The basic form is a cylinder subtracted by a series of arrayed cylinders. Then I inserted corridors. The sole material is concrete. It is clean, and easy to understand. I want to create a museum that exhibiting the passing time.



Ground Floor Plan



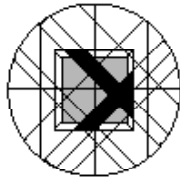
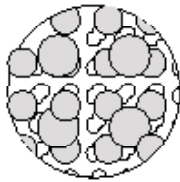
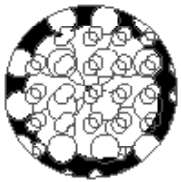
5th Floor Plan





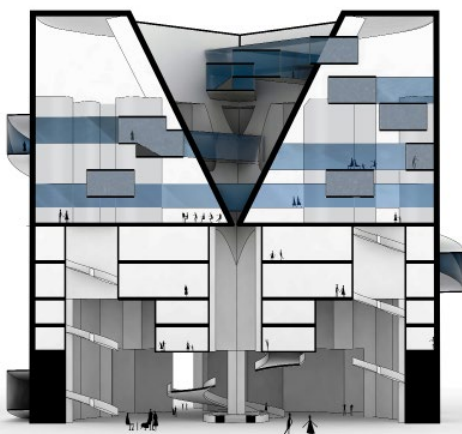
In the museum, every exhibit is hanged in the hall and the holes. People observe the exhibit from the “inside” glass boxes. It is opposite to the traditional museum that exhibits are in the boxes.

The hall is connected to the exterior, making the building like a cave, or a tree that closely connected to nature. Maybe hundreds years later, when the glass decays, the concrete part stay. There will be moss, bushes and trees. Eventually, this museum will become a forest and people can visit the forest from every floor and every angle. After heading to the ceiling, people will feel a sense of escape: back to the open area of nature and light from the dark and damp forests of trees and concrete. It will always bring out our thoughtful insights.



Different plan styles.

Section





## 2. Leisure Boxes

Type: Academic project

Time: Summer 2017

Role: Team member of a group of 2

Contribution: Concept Design, Form Generation, Diagram



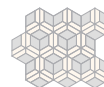
video center  
combination: 6



original unit  
single



kiosk  
combination: 3

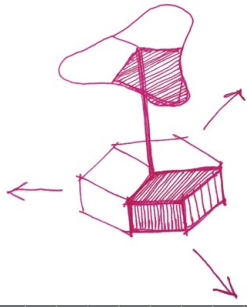


stage  
combination: n

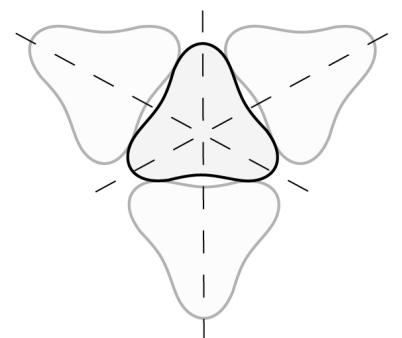
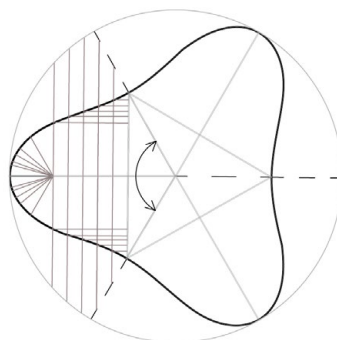
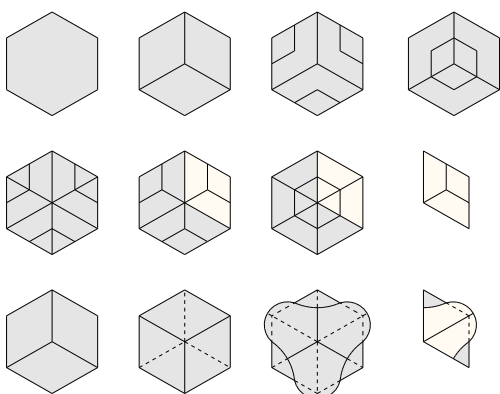
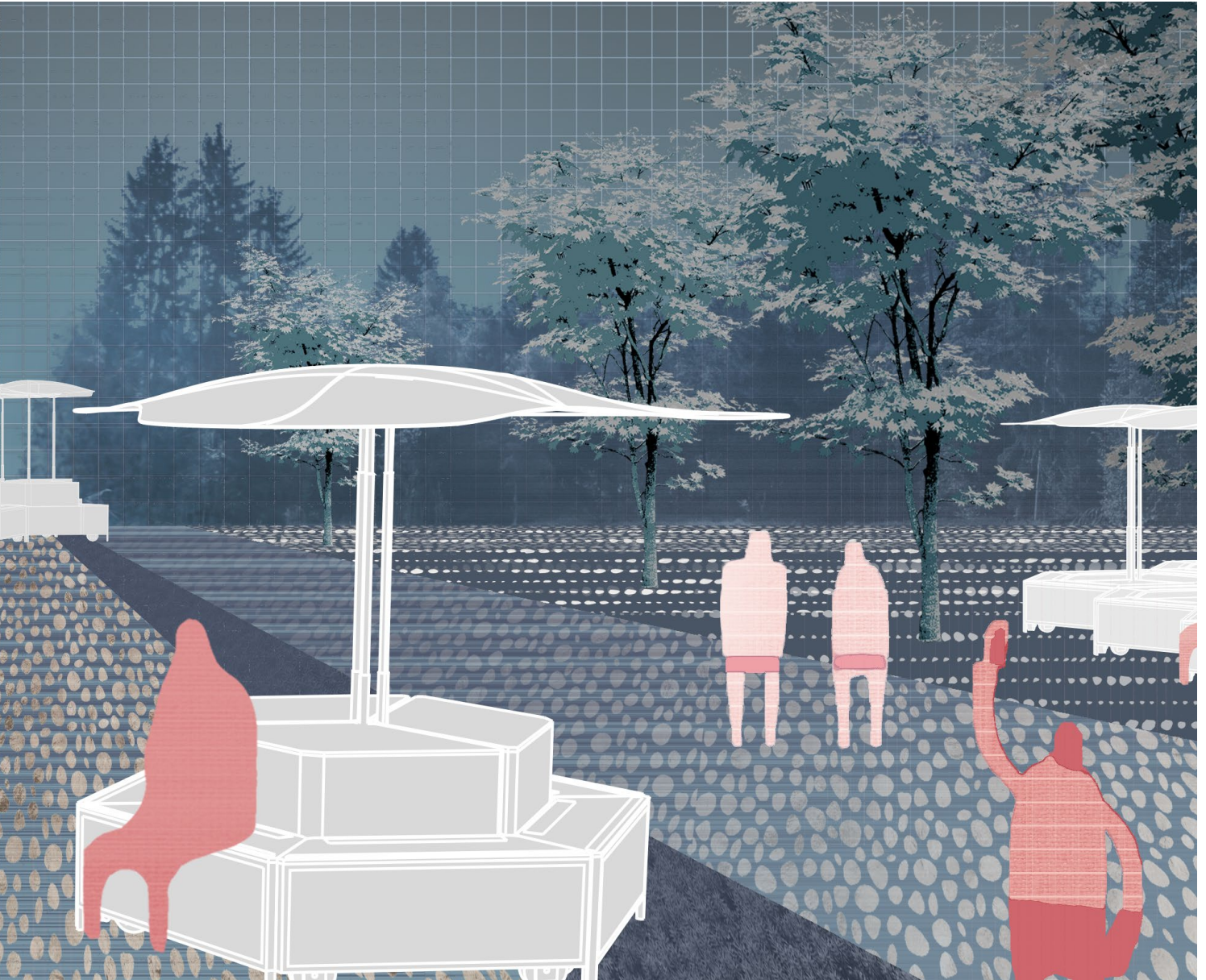


Combinations



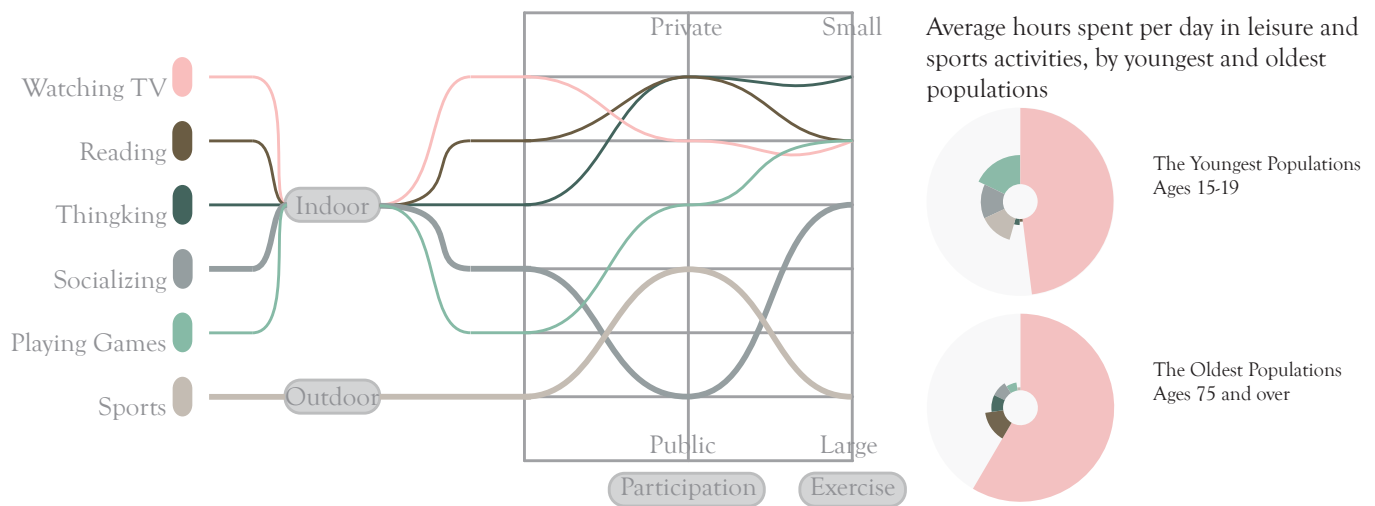
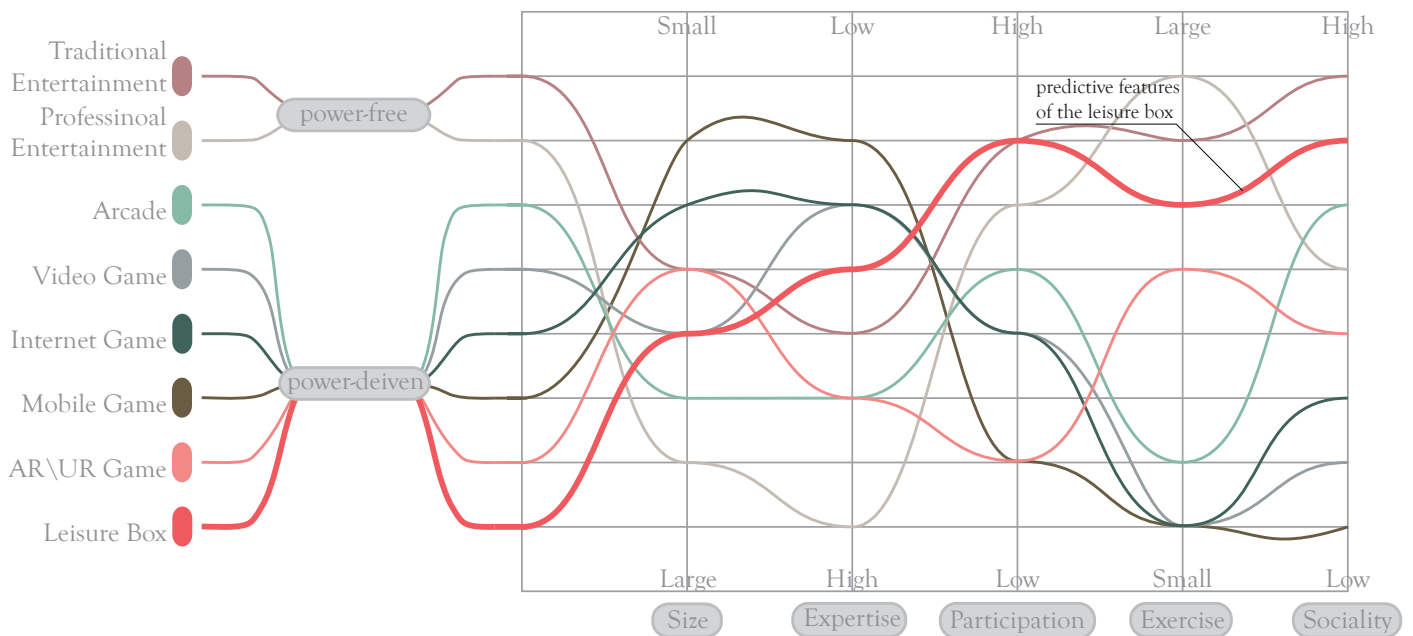


With minimal intervention to the environment to enhance the vitality of the space, this project aims to make the space into a place to attract users to leisure through the different combinations of the leisure units which can be free to join, and, to a certain extent, to change the modern entertainment style which mainly relies on mobile phones. The combination between the variable multifunctional units can form a variable-scale space, and the user can freely combine the leisure units for a variety of purposes.



## Form Generating

The form of the main body is taken from the hexagon - because of its features of easy stitching, flexibility, and unlimited extension. The form of the roof is also taken from the regular hexagon to obtain a combination of lively form and larger shielding area.



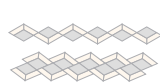
Through the comparison of a variety of entertainment methods, the one with the following characteristics may be comprehensively a better method to choose: equipment in smaller size, less expertise, higher participation, more exercise, and higher sociality.



pavilion  
combination: 6



bench  
combination: 6

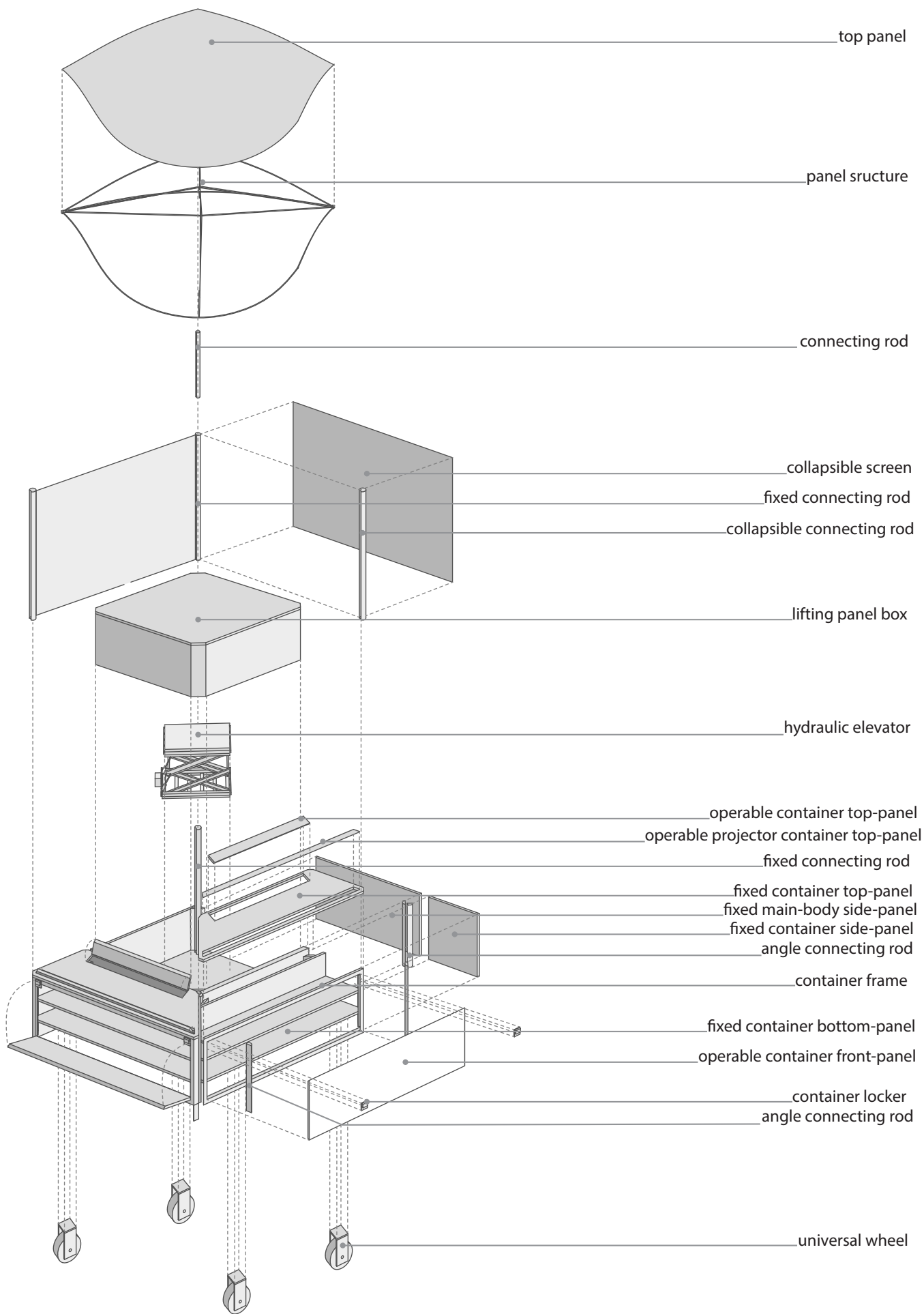


bench  
combination: n



Combinations

# Explosion Diagram



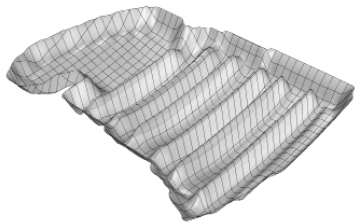
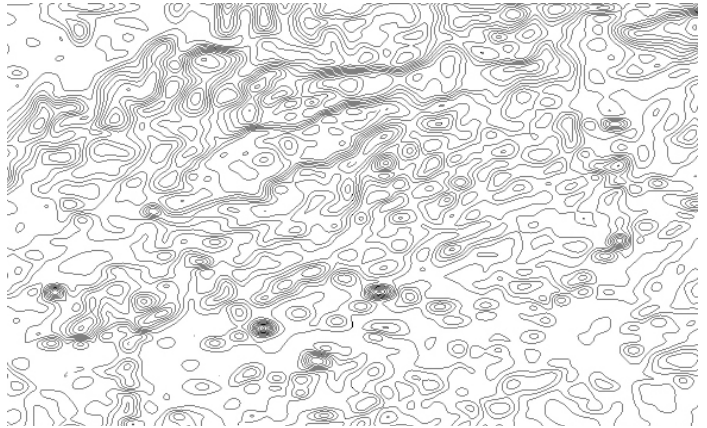
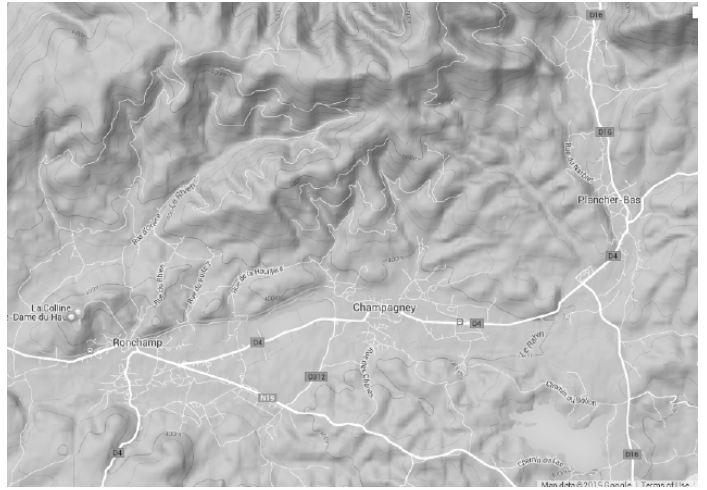


### 3. Rethink the Ronchamp

Type: Academic project/Individual

Time: Spring 2015

Keywords: Analytical; Parametric; Prototyping

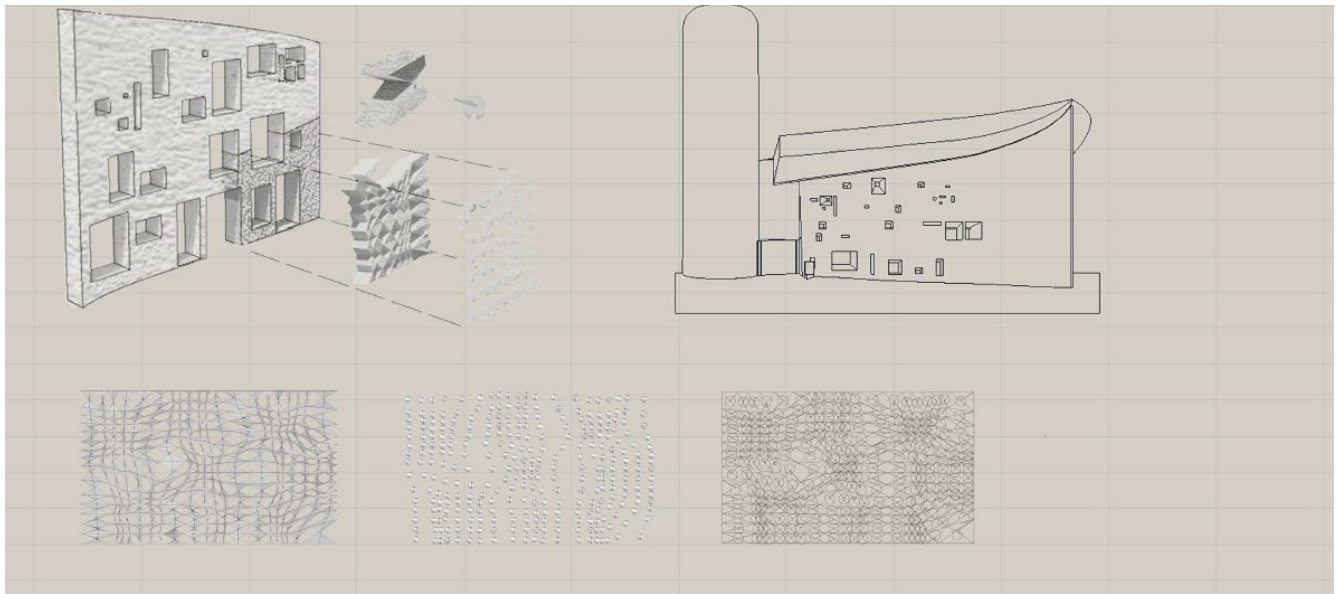


As I combine the image sampler and contour order, I can convert 2D photographs of maps into 3D site surfaces. Then, I can model the site of Ronchamp Chapel and the roof in this way.



Night Render,  
New Ronchamp  
Chapel





I use the existing windows as the "attractors" and influential factors to create the new south wall. Then, I decorate each centre of the quadrilaterals with glass globes. Then, attaching the new wall on the old wall. Then, we have a contemporary style facade. From the interior render we can see the rainbow light, reflected from the south, through every glass globes.



## 4. Sanxue Historic District

Traditional residential building refurbishment design in Xi'an.

Individual academic project. 2017



This site locates in downtown Xi'an, a cluster of minority and low income population. The plan is aimed to improve the community and residential environment quality of the district using Chinese traditional architecture forms.

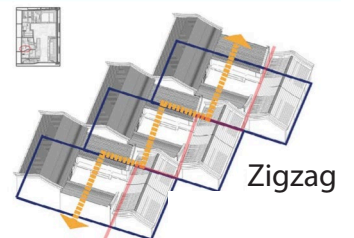
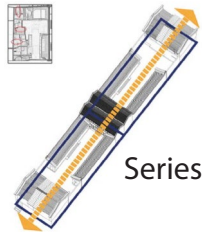
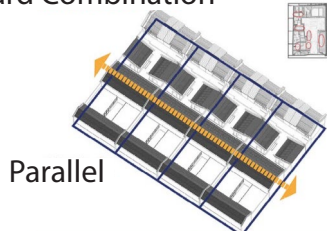


Master Plan

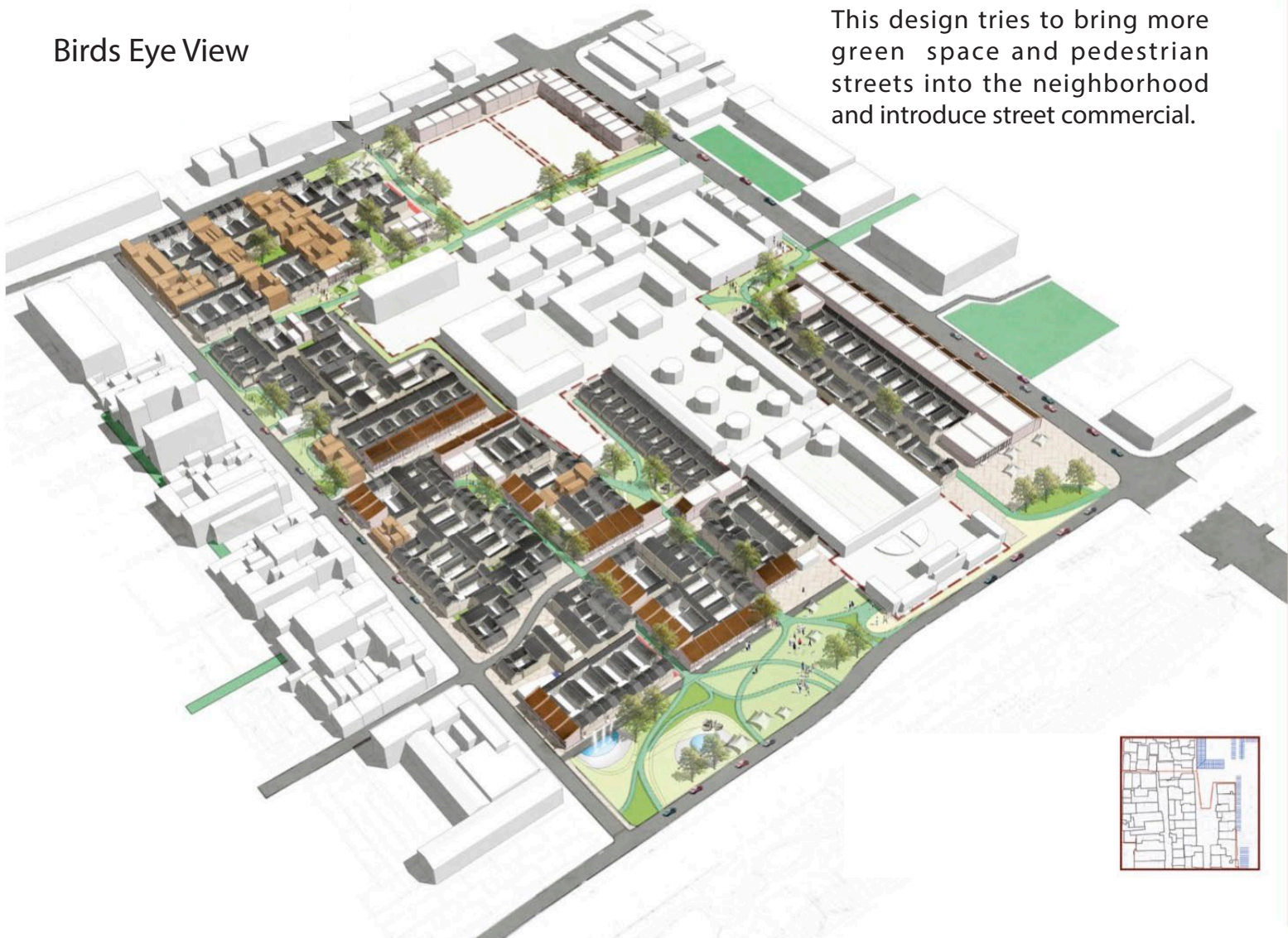




Courtyard Combination



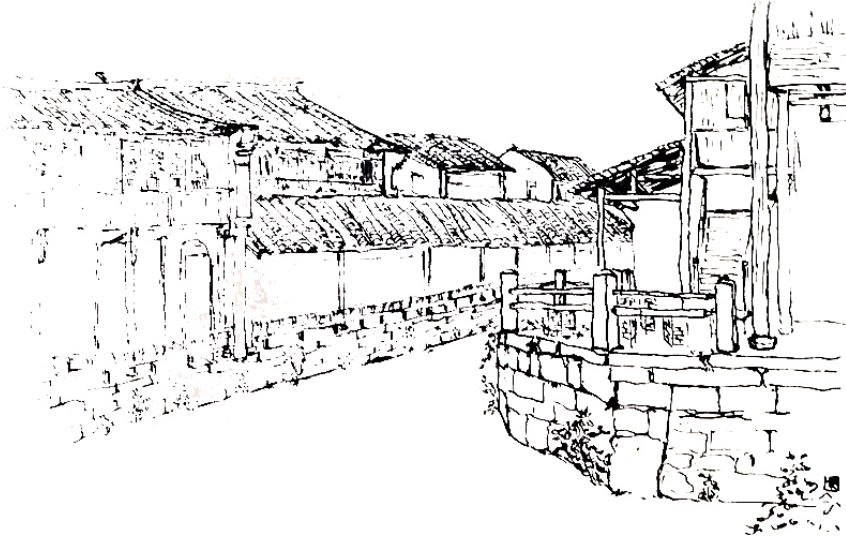
Birds Eye View



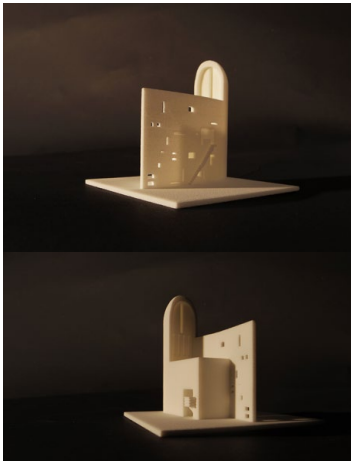
This design tries to bring more green space and pedestrian streets into the neighborhood and introduce street commercial.



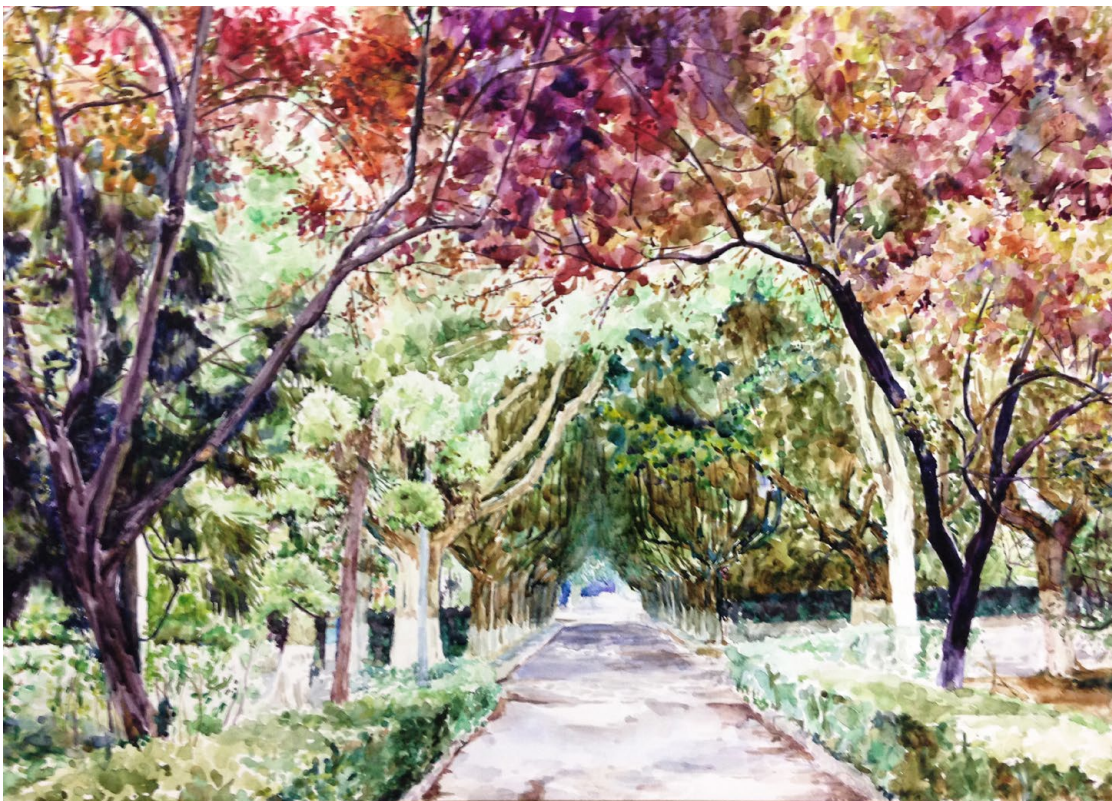
## 5. Other Works



Left and above:  
Sketches drawn in Wuzhen, China



Left:  
Prototyping 3D Printing  
Base size: 80mm \* 80mm  
May 2015

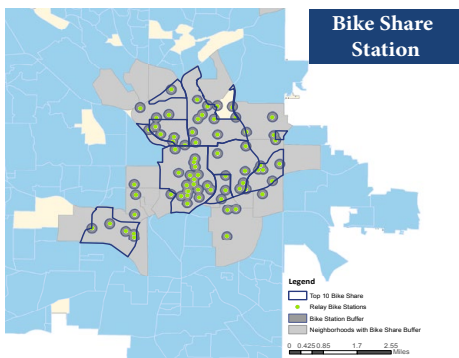
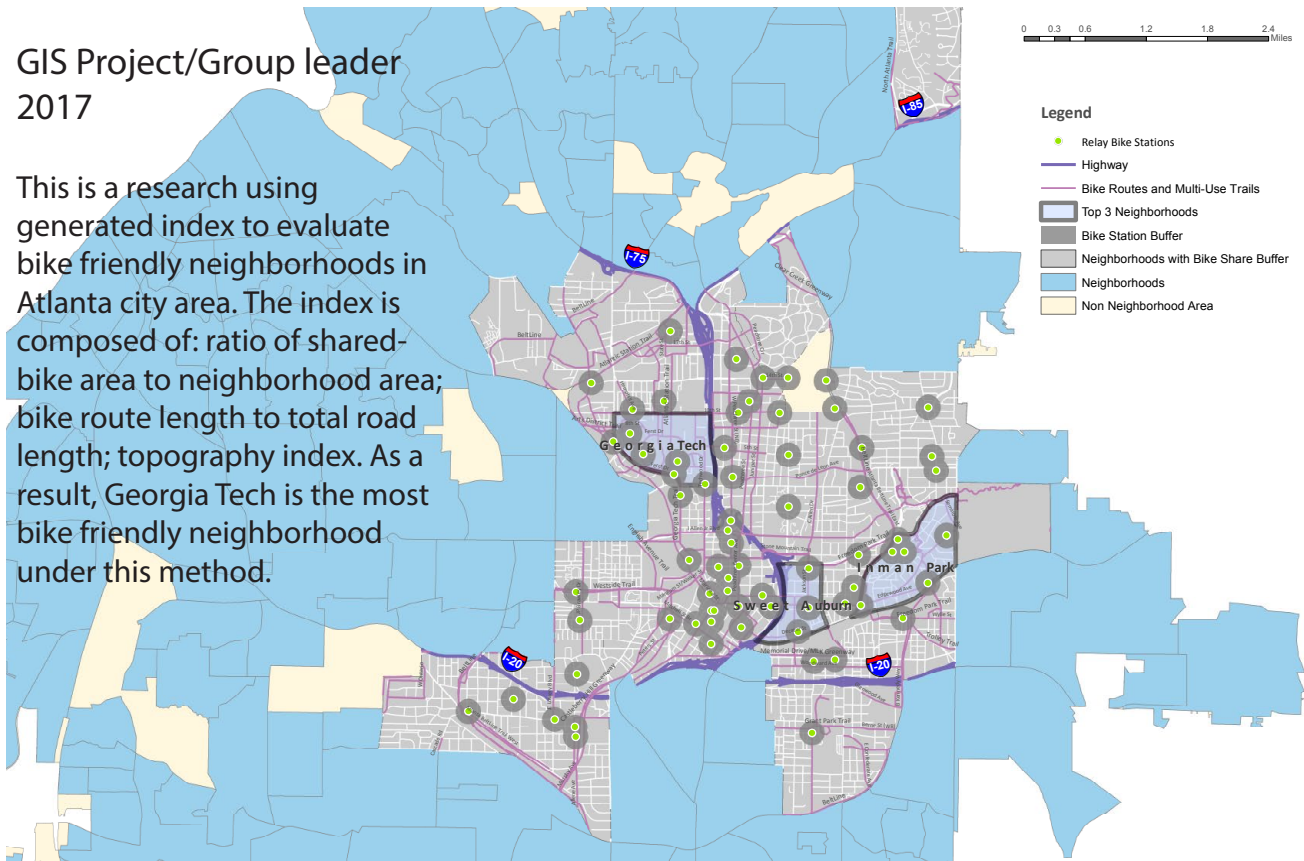


Left and above:  
Landscape  
watercolor in Xi'an  
Jiaotong University  
campus

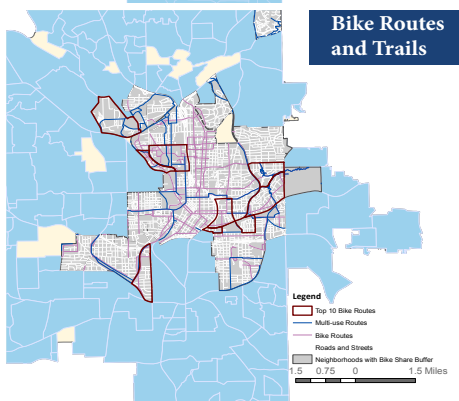
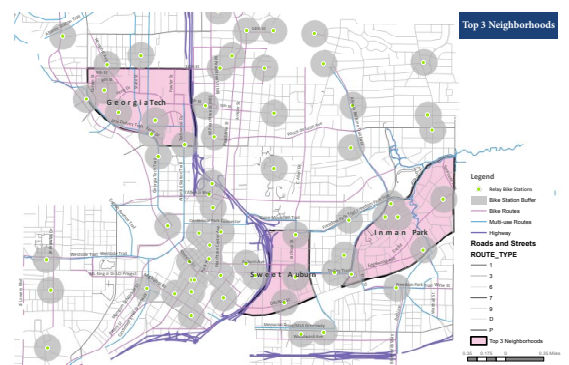


## GIS Project/Group leader 2017

This is a research using generated index to evaluate bike friendly neighborhoods in Atlanta city area. The index is composed of: ratio of shared-bike area to neighborhood area; bike route length to total road length; topography index. As a result, Georgia Tech is the most bike friendly neighborhood under this method.



Top Ten Bike Shares	Ratio
Sweet Auburn	0.389
Georgia Tech	0.375
Downtown	0.374
Atkins Park	0.342
Inman Park	0.302
Marietta Street Artery	0.276
Midtown	0.254
Old Fourth Ward	0.211
Atlantic Station	0.177
West End	0.176



Top Ten Bike Routes	Ratio
Cabbagetown	1.669
Oakland	1.416
Adair Park	1.372
Lenox	1.335
Marietta Street Artery	1.318
Blandtown	1.219
Poncey-Highland	1.108
Sweet Auburn	1.015
Georgia Tech	0.925
Inman Park	0.792



Above and Right:  
Workshop Practise of Gramophone Style CD Player,  
applying vacuum forming and other technologies.  
Workshop Project/Individual, 2015

