



國立交通大學

建築研究所

碩士論文

小物建

MICRO TO MACRO

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中華民國 一百年一月



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# 序

在學習建築的過程裡，隨著從國外不同學校留學回來的老師的設計方法裡，了解在不同的角度下產生完全不同的設計思考方式。

偶爾在不同的方式下也會產生疑問。但是每個人對建築不同的理念，也許就如同對宗教信仰般的堅固。我還在探索與尋找自己的信仰，在建築設計的思考過程裡，那些不顯著的，隱匿的，或是太平常而被人遺忘的事或物，卻是我很感興趣的方向。

“小物建”的小，是指那些在我們已習慣的常態裡，不太理解的存在。從這樣的出發點去思考建築，往往最後所得到的結果都在預想外。在這樣並非安全控制下的設計過程裡，似乎能感受到出發點的小與完成的設計中，小與大的互動不是絕對的。





# Abstract

During the process of learning architecture, I find different design methods that different teachers brought from the world could lead us to completely varied unknown situation.

However, people insist some kind of designing approach is as strong as some people believe in religion. I still search my direction of design. Some things that are not obvious, hidden and too common to be remembered are so interesting for me.

From the micro of the usual to the macro of a building, there is still some linkage not so absolute for me.

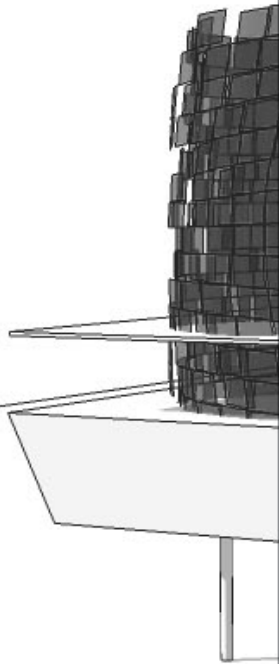


# chapter /

## fragment



The traditional temple in taiwan is characterized by its delicateddecoration. The colorful roof is like blossom in a city. Though thesereligious objects are fulfilled in our life space, we are still so easy to ignore these crafts. From the origin of the tradition, there could be anothe representation of the crafts we have been used to.



villa savoye



concept model



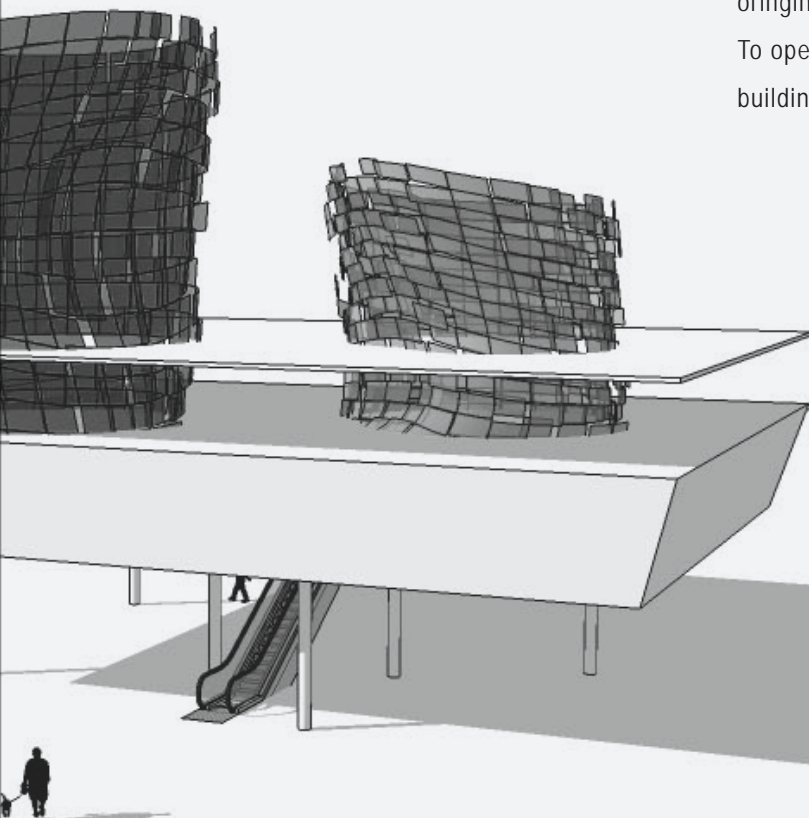
# THE PROJECT

fragment

is to design a 3C(computer, communication, and consumer electronic) shopping mall. The main idea to construct whole design is asked to start from our daily life's missing culture.



From the very beginning, the decoration in the roof for me is like a garden. The varied curved porcelains pasting in roof seem to be a vividness of grey city. The linkage between the original model and corbusier's villa savoye is quite straight. To open the lower floor as a public square and to make the building identified is the main concept.



Mozaic is a common crafts in the west. It is basically placed in a flat way. Opposite to that, traditional Taiwan's temples's "mozaic" on the roof are made in a 3-D's consideration.



# CONCEPT



1



2



3



4

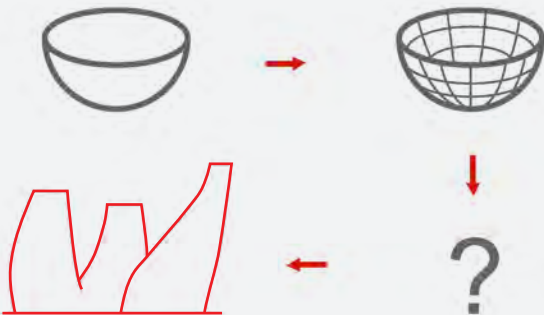


5



6

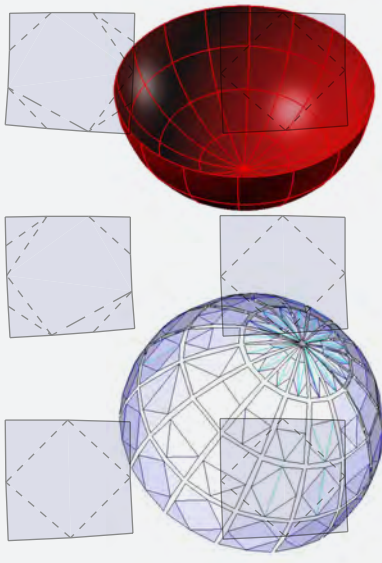
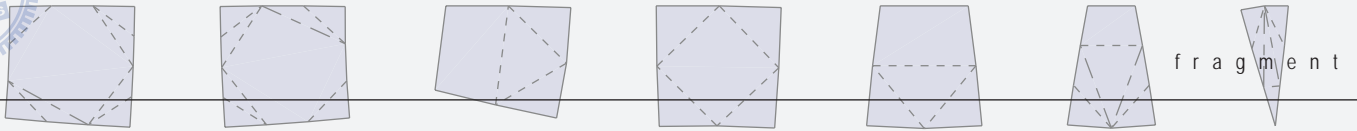
1. draw the rough sketch
2. make the basic wired form
3. mix concrete evenly
4. make the basic form
5. trim bowls
6. pasting fragments of bowls



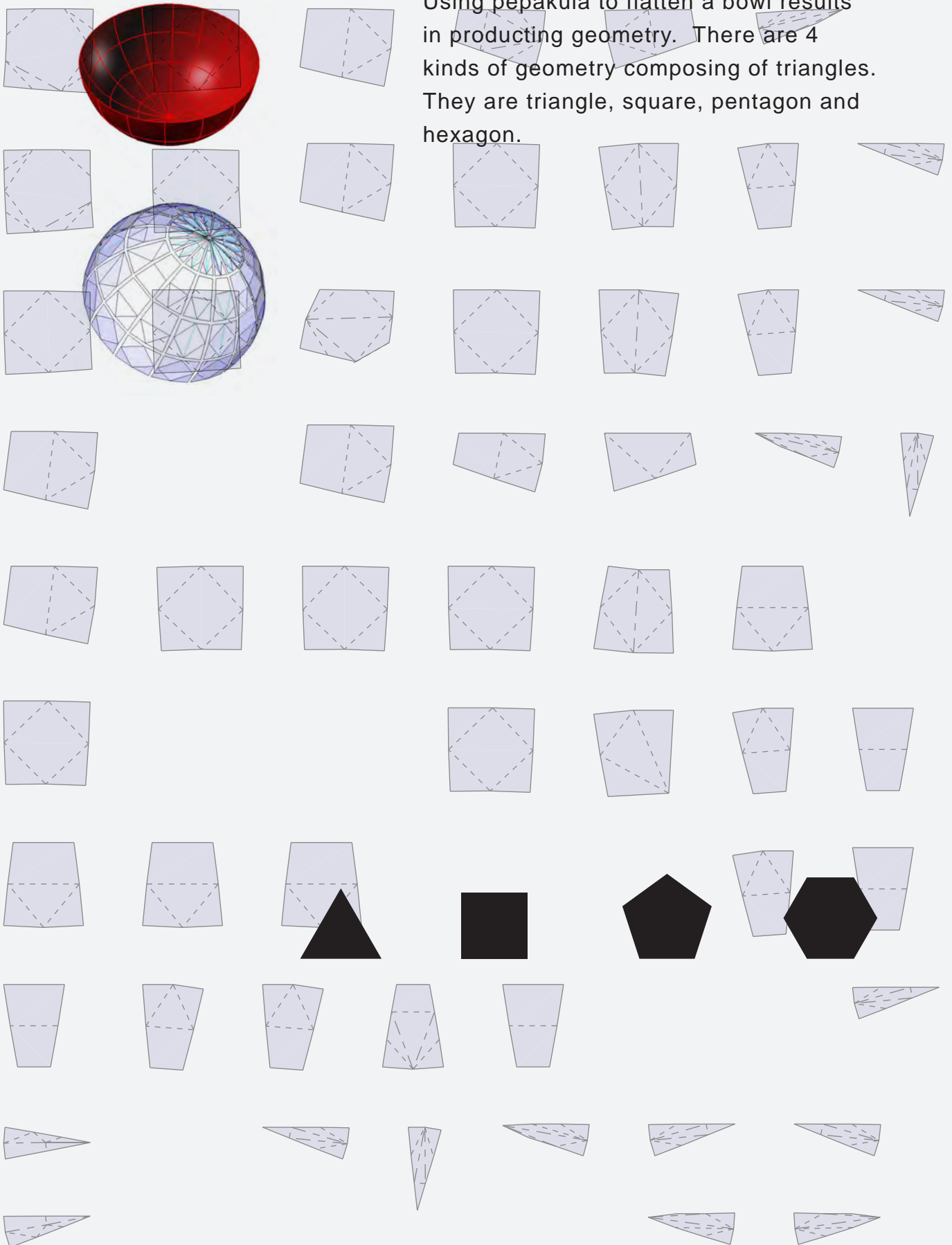
The “trim & past” is a kind of traditional crafts that mainly symbolize religious or culture value. And the art displays like a 3-D story board on temples’ roof. This art consists of fragments of bowls. So, the 3-C shopping mall’s design concept departs from “fragments of bowls”.







Using pepakula to flatten a bowl results in producing geometry. There are 4 kinds of geometry composing of triangles. They are triangle, square, pentagon and hexagon.

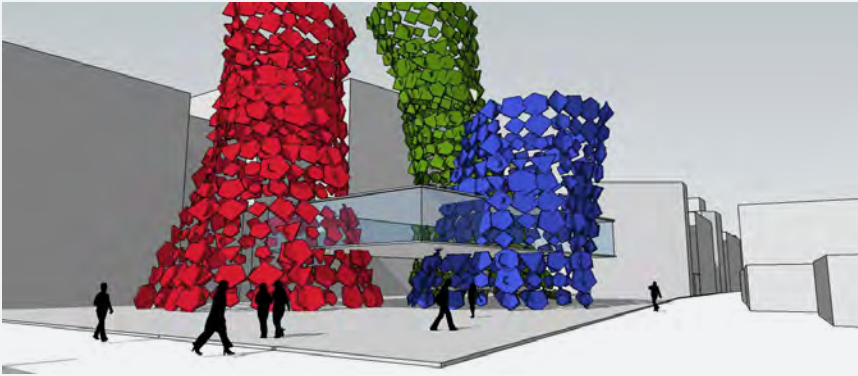




## SKIN 1

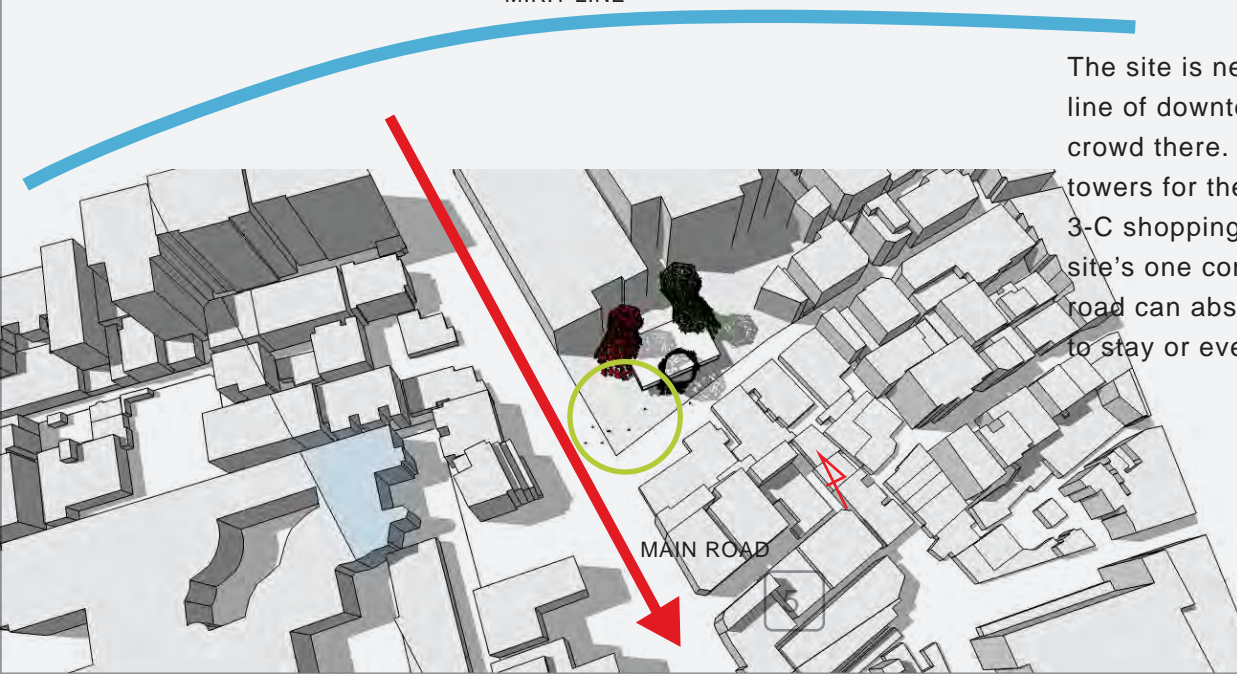


The character of “trim & paste” is the composition of fragments of bowls. To deal with transformation of skin set the first step to arrange the fragments randomly around the 3 towers.



## SITE

M.R.T LINE



The site is nearby the M.R.T line of downtown, and people crowd there. Besides putting 3 towers for the identification of 3-C shopping mall, to open the site's one corner near main road can absorb more crowd to stay or even go ininside.



## SKIN 2

fragment

identification



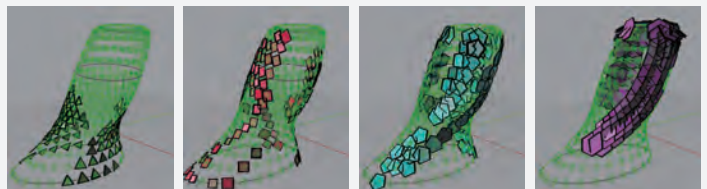
unit of fragments

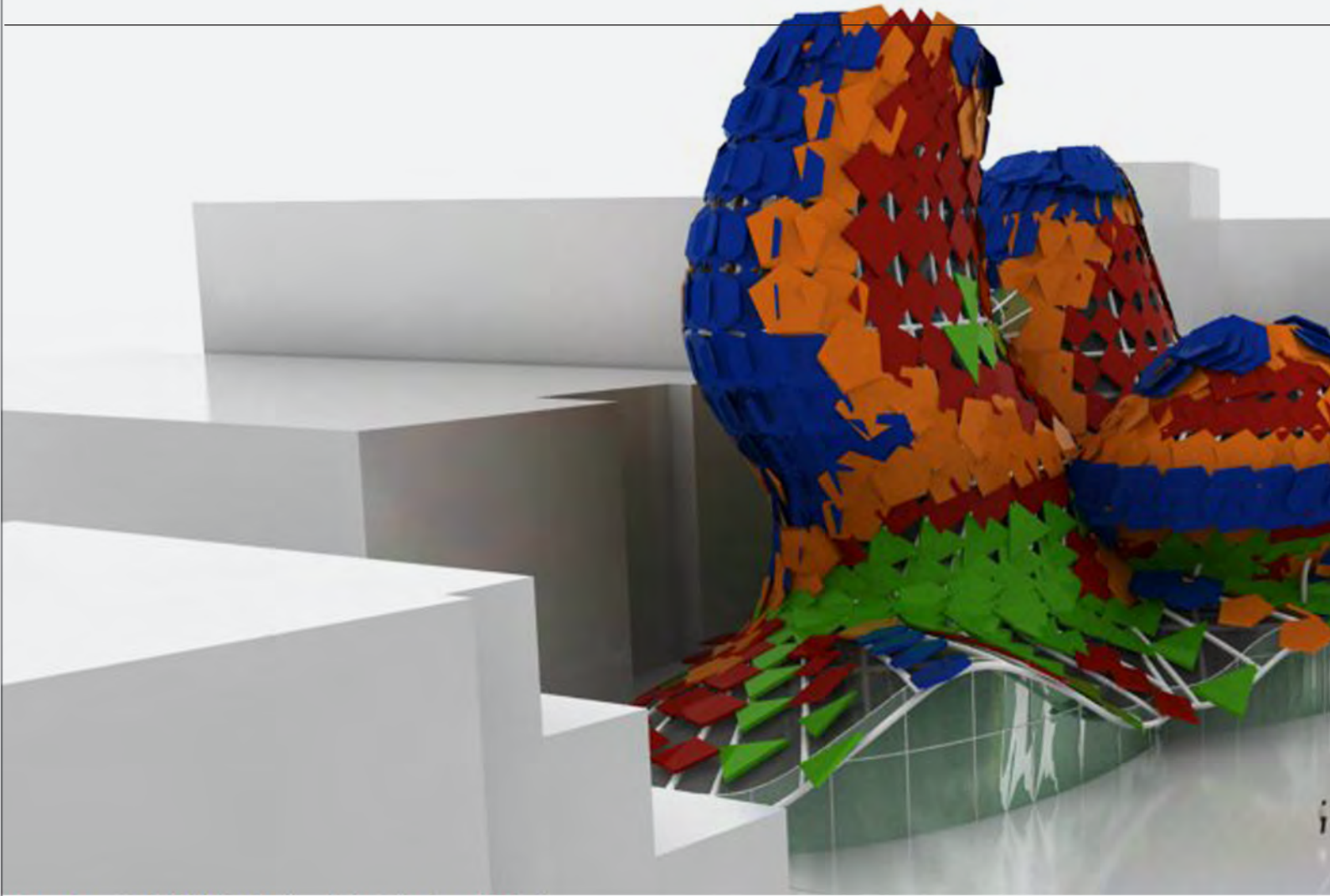


curvature



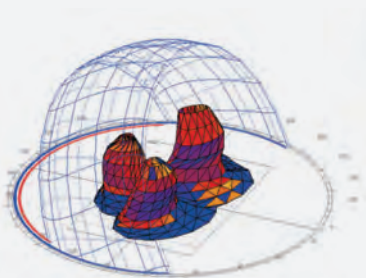
From the observation of “trim & paste”, the larger fragments will be pasted on the side of larger curvature. According to that, I used the soft of grasshopper to arrange fragments by 4 kinds of curvature.



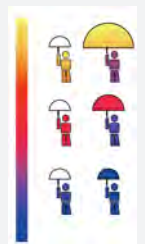
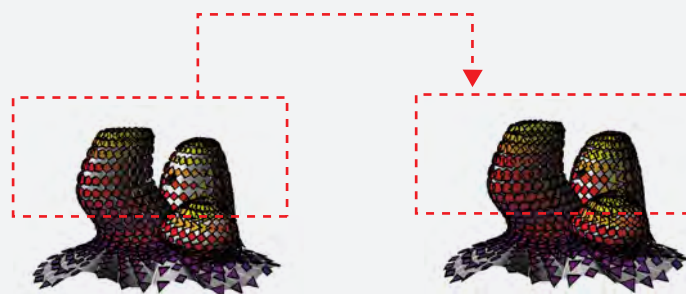


## OUTSIDE THE SKIN

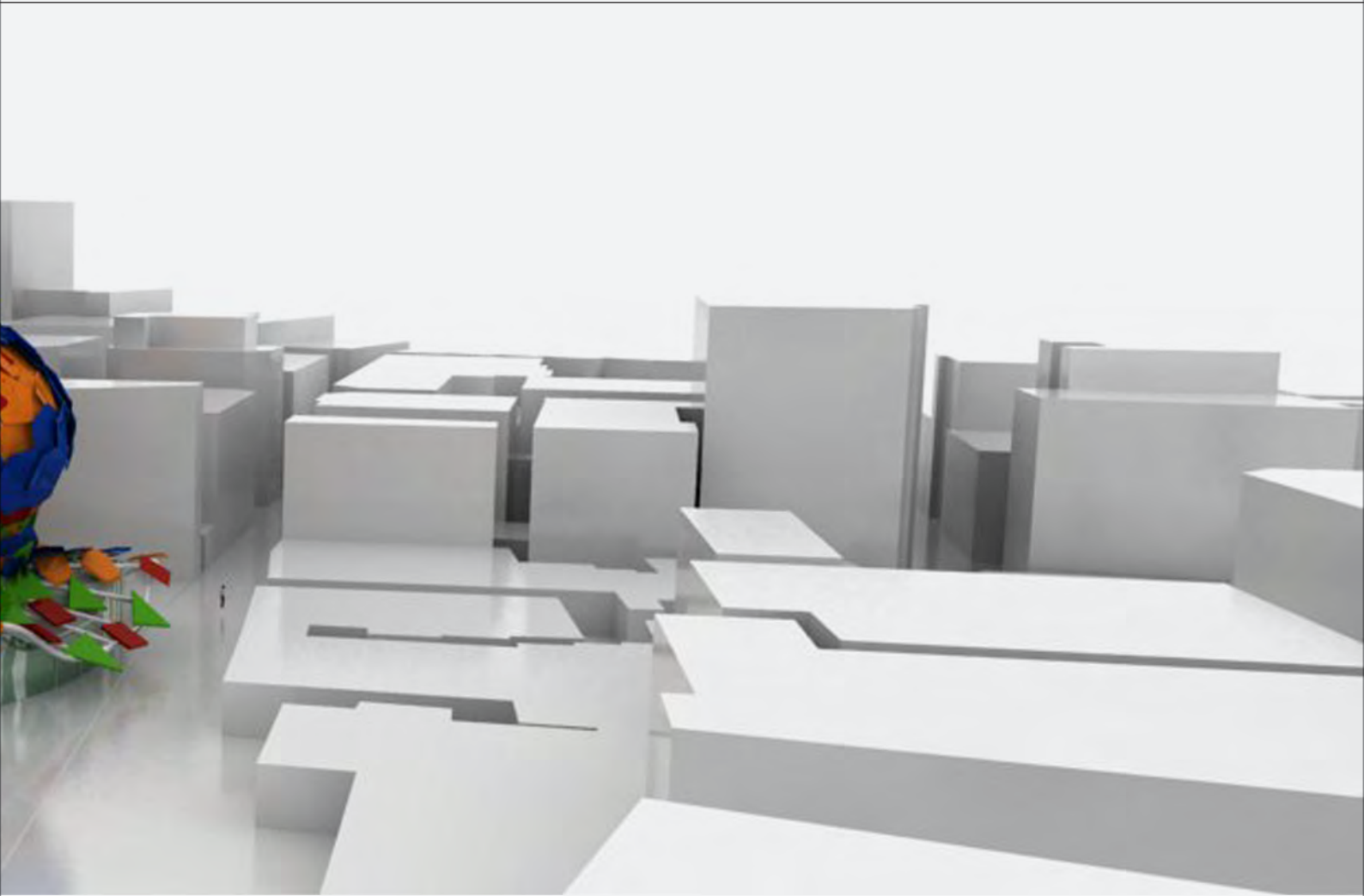
Besides curvature, skin can be a media to reflect the same attribute during different time.



ANNUAL SOLAR RADIANT

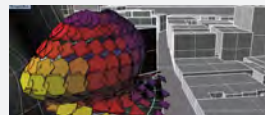
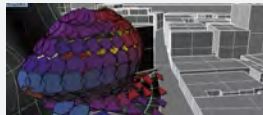
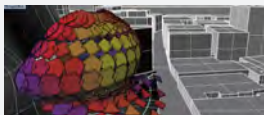
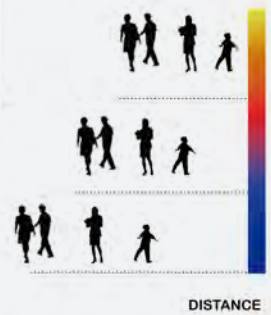
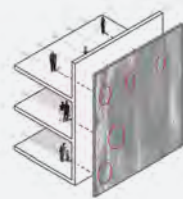
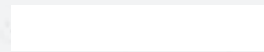






## INTSIDE THE SKIN

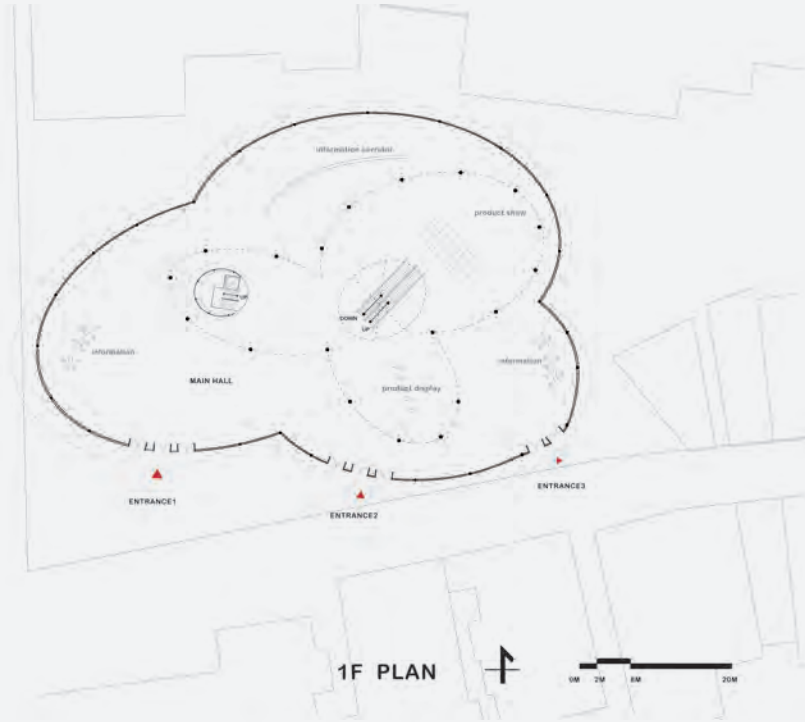
INSIDE RADIANT SHOWS ON SKIN



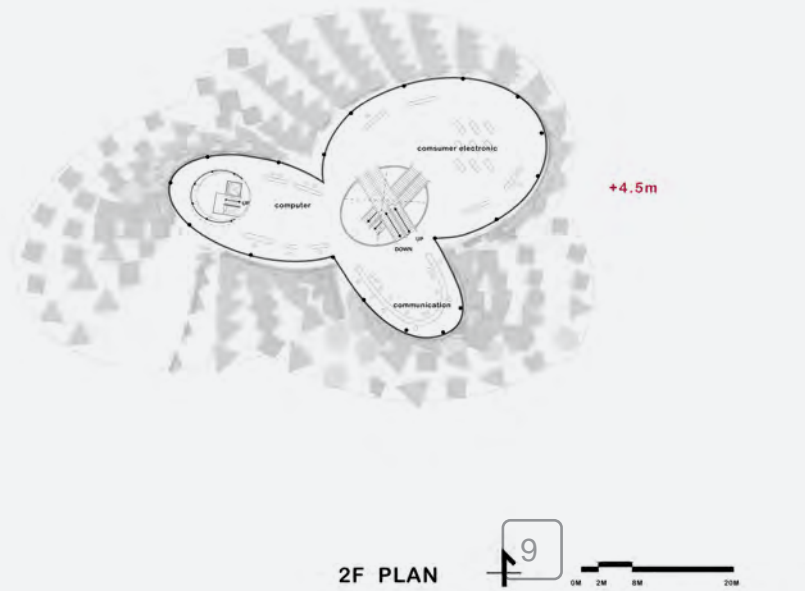
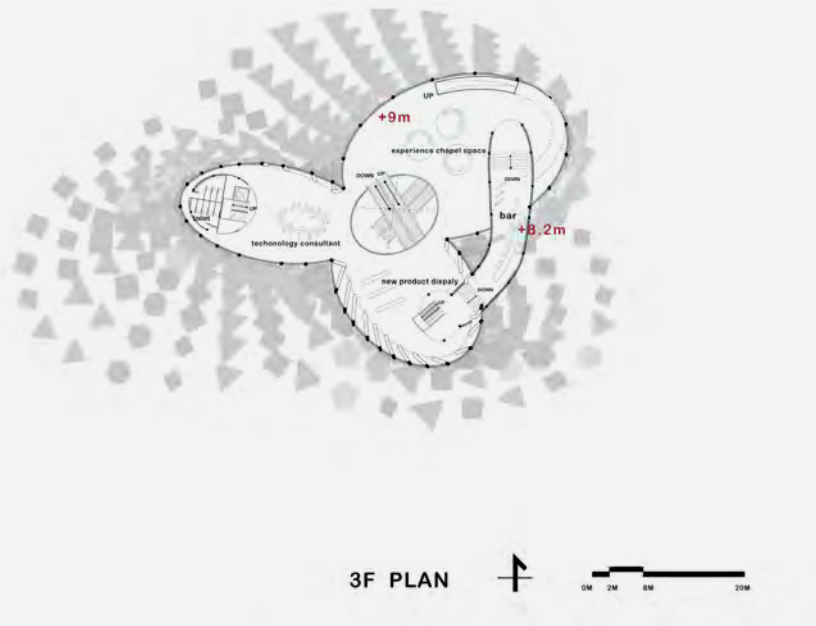
NIGHT VIEW



# PLAN

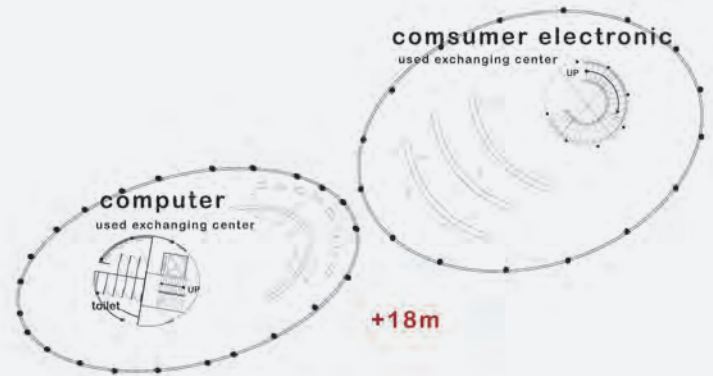


ENTRANCE'S VIEW





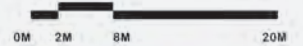
4F PLAN

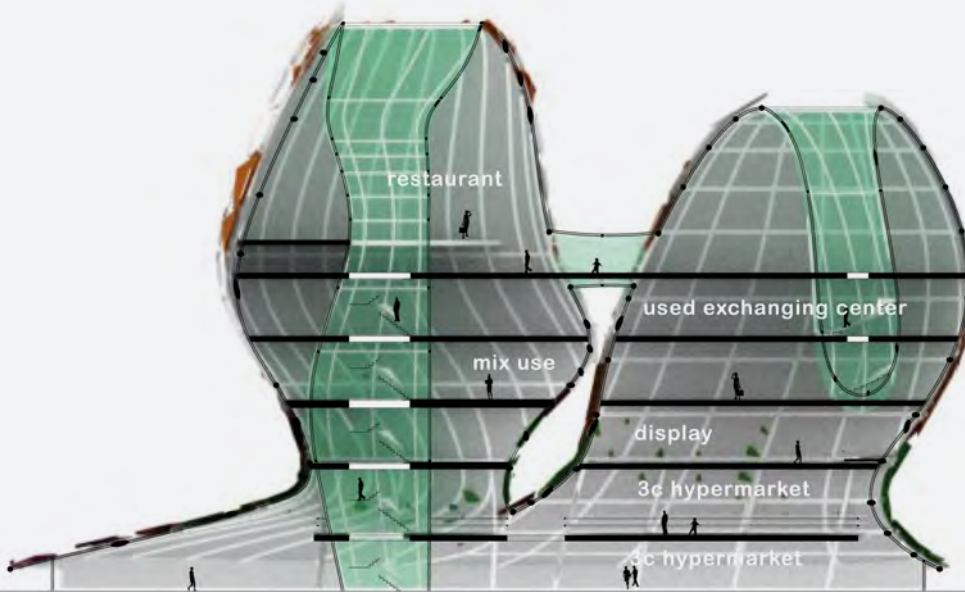


5F PLAN

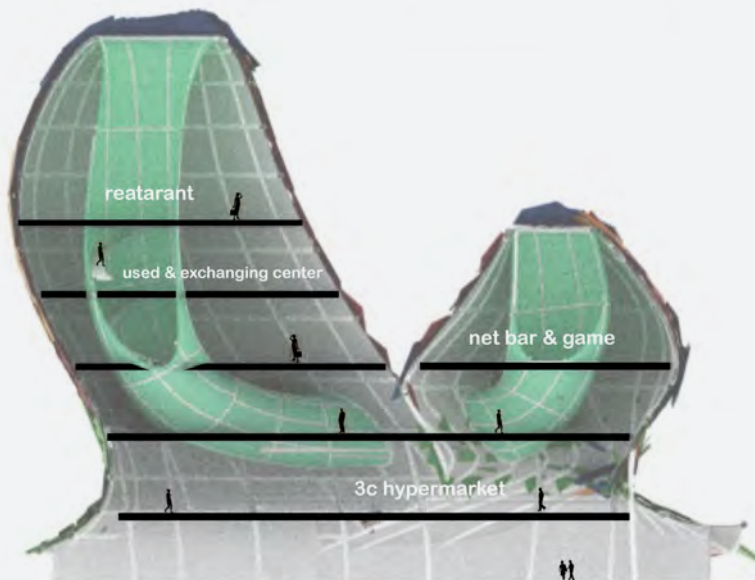
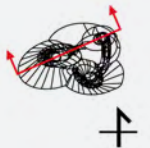
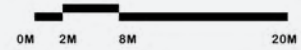


6F PLAN

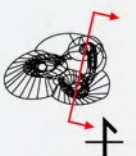




section



section







# chapter 2

## fish eye



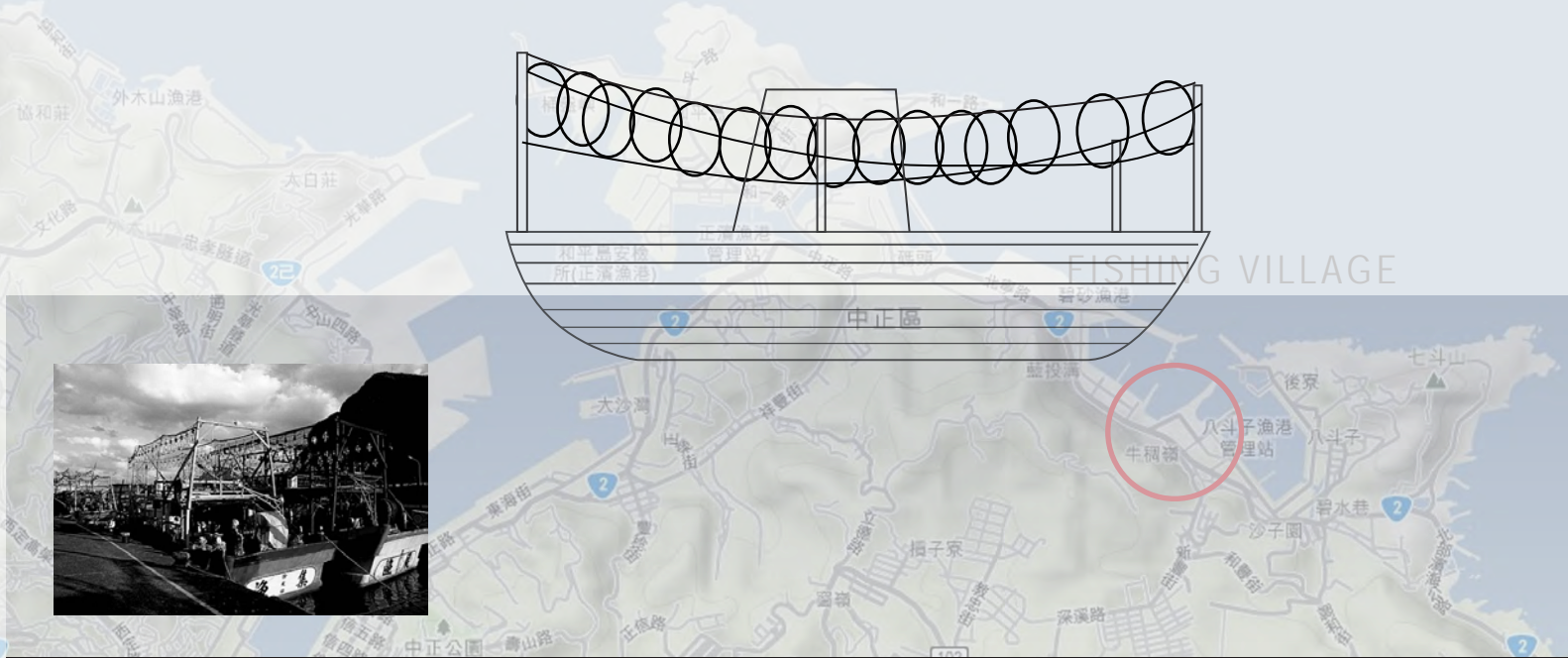
An unpredicted journey led me to a unknown place I have never been before. Finding the existence of another kind of daily life unleash a different view point of what I am used to.



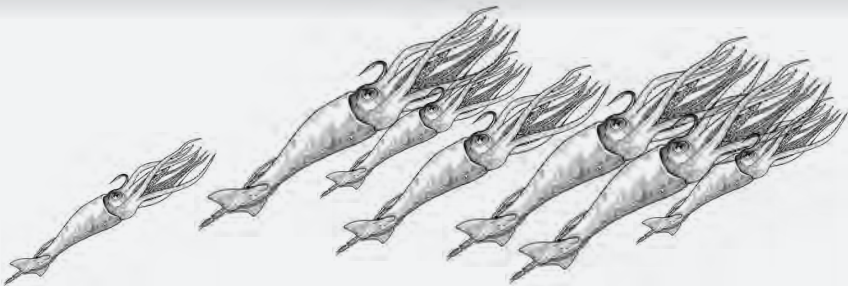
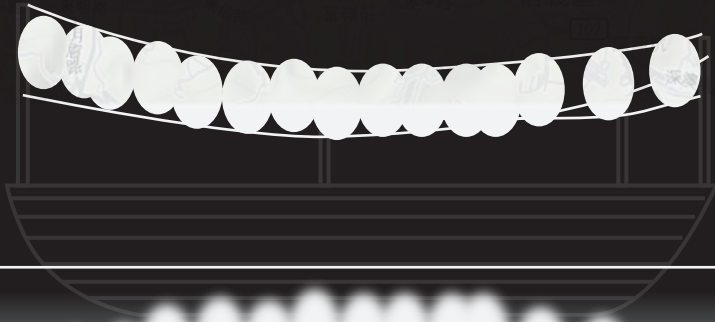


# JOURNEY

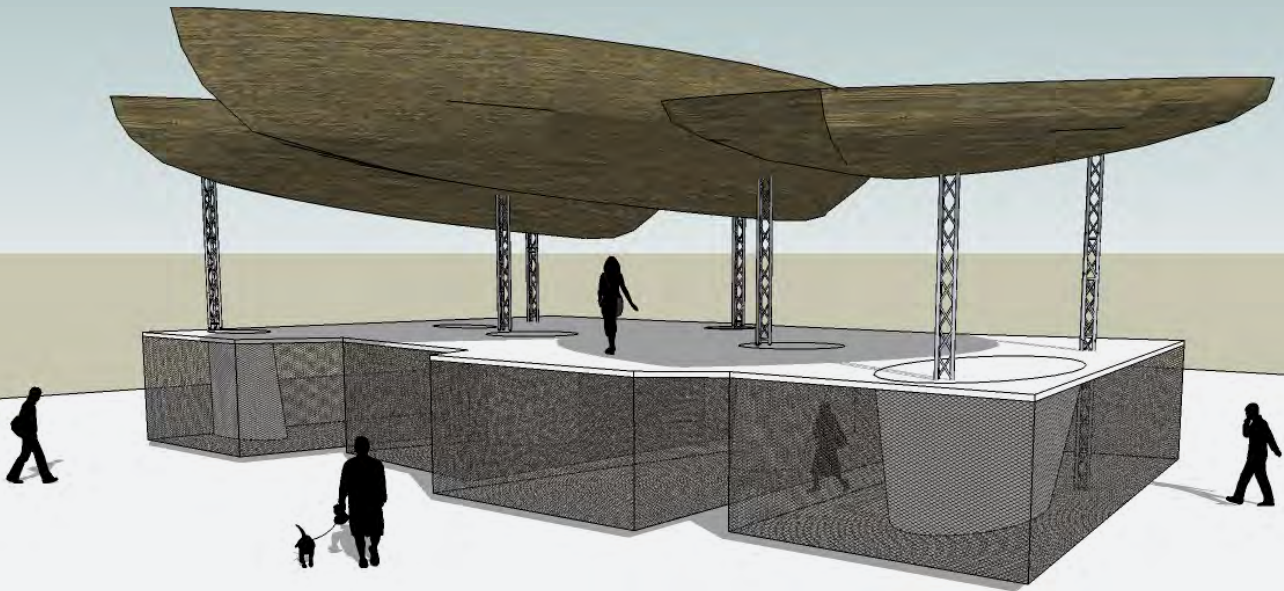
Before the design, an unpredicted journey was assigned. I found an unknown fishing village in the end of my journey in north-east in Taiwan.



These fishing boats' main task is to fish squids. Squid will go for food at night, so these boats start thier work from night. And usually they will hang a lot of lamps to attract squids.







## PROJECT

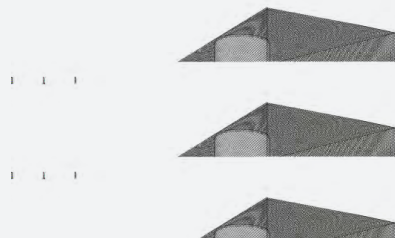
The project is a small stage in Danshuei. My fishing village's experience happens to fit this town of sea shore. The motive of design was from the squid's eyes to see the boats under the sea. The reflection of light will be seen at night.



daily view



night view



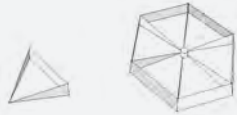
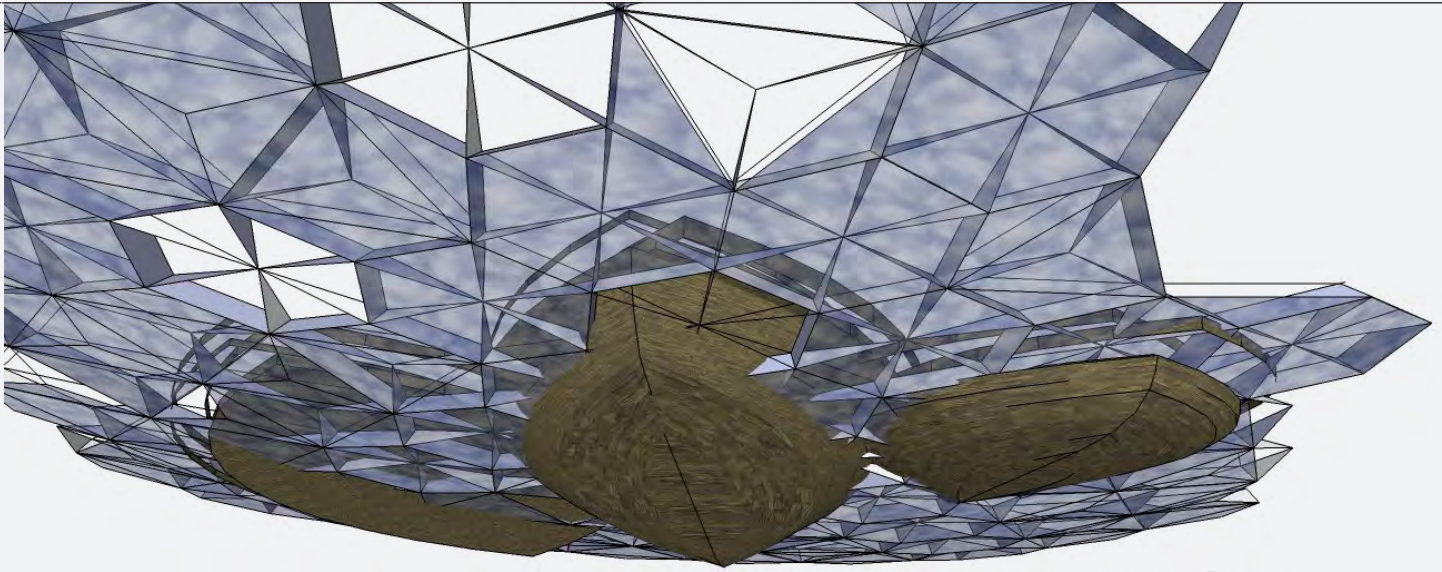


# FISH EYES

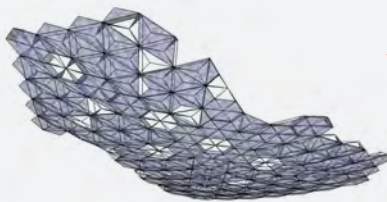
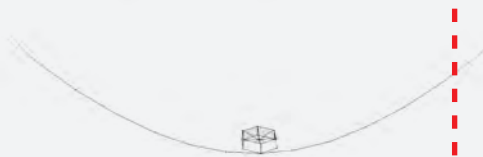
However, if people were like squids, we should see a surface of sea between a boat. Then, the next step is to make the boat-like stage "float" in the sea. Because of the sea floating, the upper scene through the surface would look like being teard into pieces.







UNIT OF SURFACE

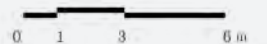
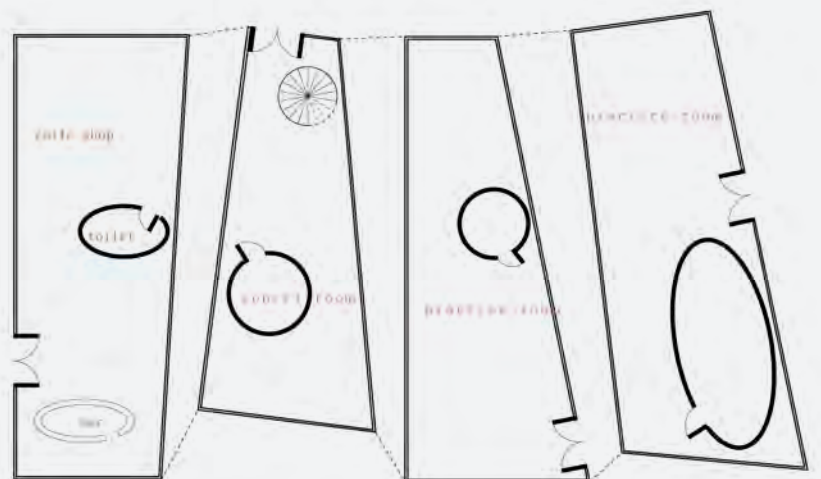
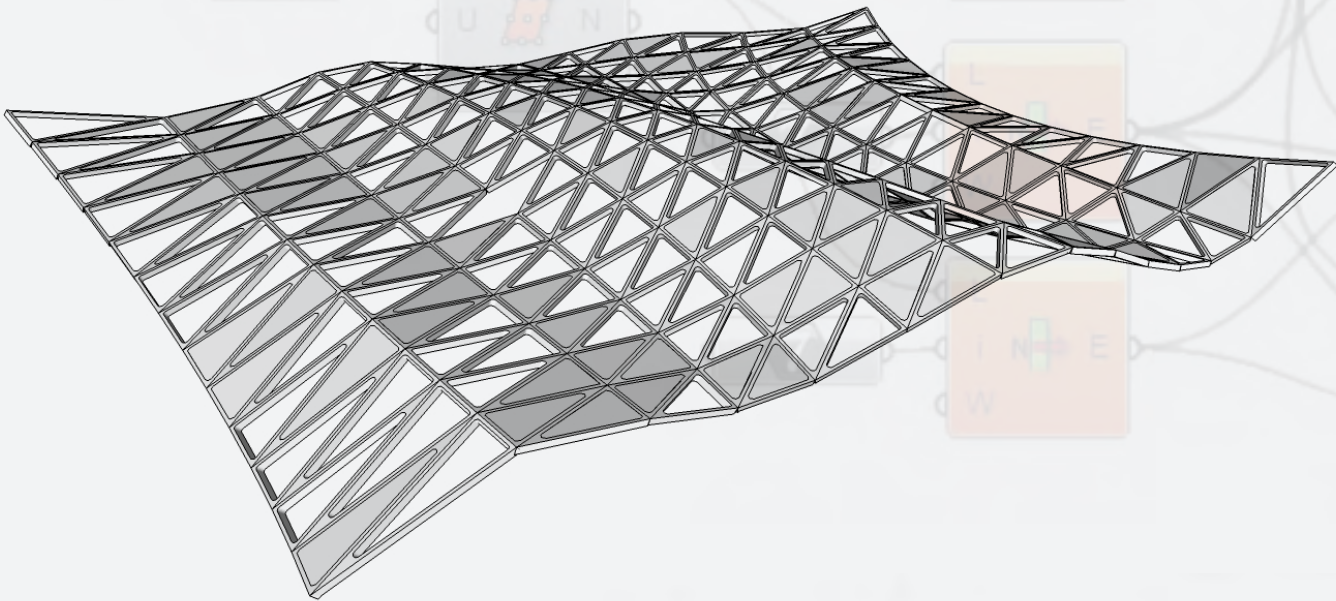




# SURFACE REDEFINE



UNIT OF SURFACE STRUCTURE



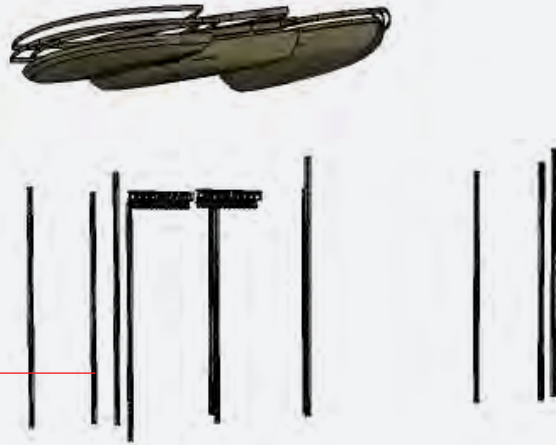
## PAVILION

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## PILLAR

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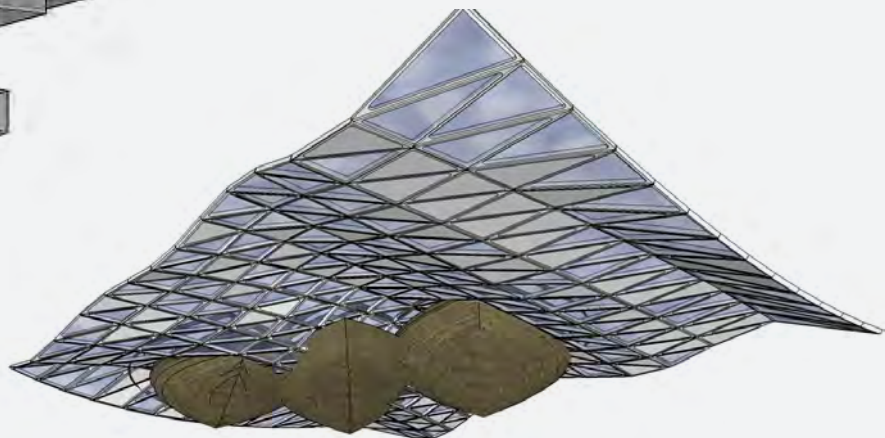
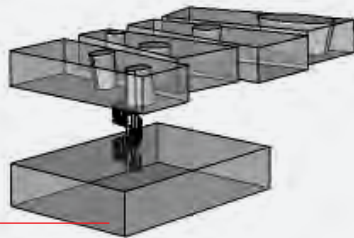
## STAGE

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## BASEMENT

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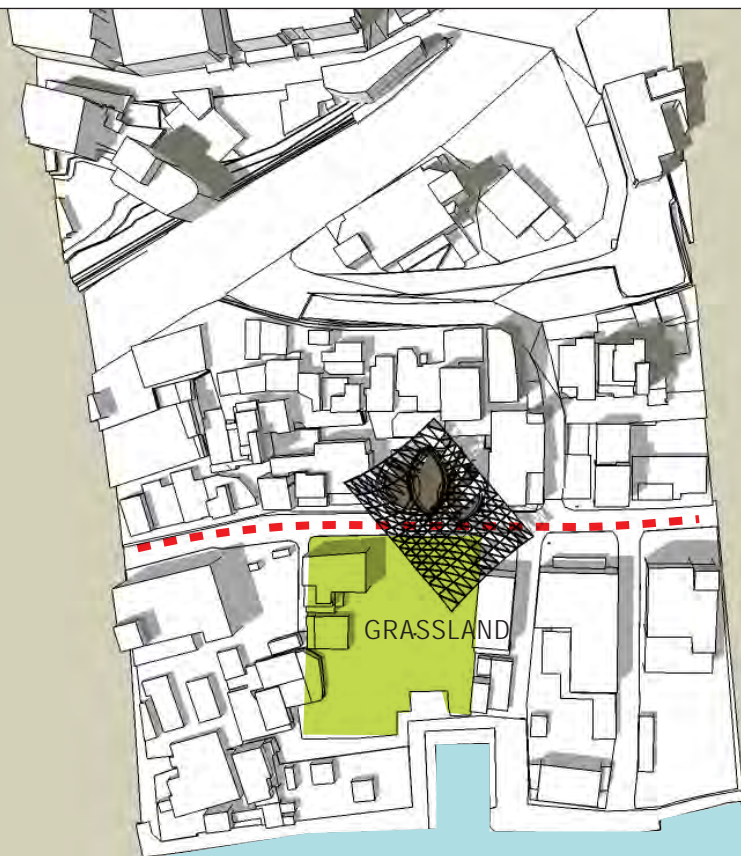


To simulate the floating of sea, I tried to make the pavilion surface more undulated, and some of the pavilion's units are transparent and some are not. That makes people walking under the pavilion feel like walking under the water.

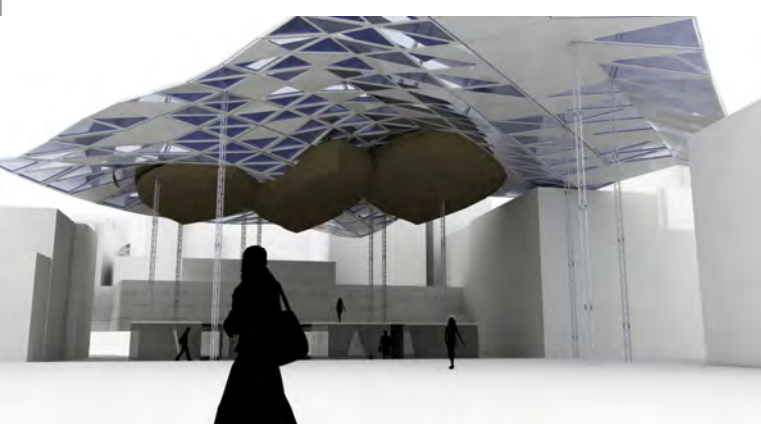




# SITE



The site faces a grassland across a main road and have a good view to the Danshuei river. The pavillion will stretch across the road to offer audience or pedestrians a shelter from rain or sun light.



- 1. FRONT VIEW
- 2. EAST SIDE VIEW
- 3. NIGHT VIEW



# chapter 3

## temporary



THERE IS ANOTHER LAYER ABOVE US  
IN TAIWAN.WE ARE SUROUNDED BY  
THESE THIN, ILLEGAL AND OCCUPIED  
TEMPORARY CONSTRUCTION.IT'S TOO  
NORMAL FOR US TO CAHANGE THE"THIN".