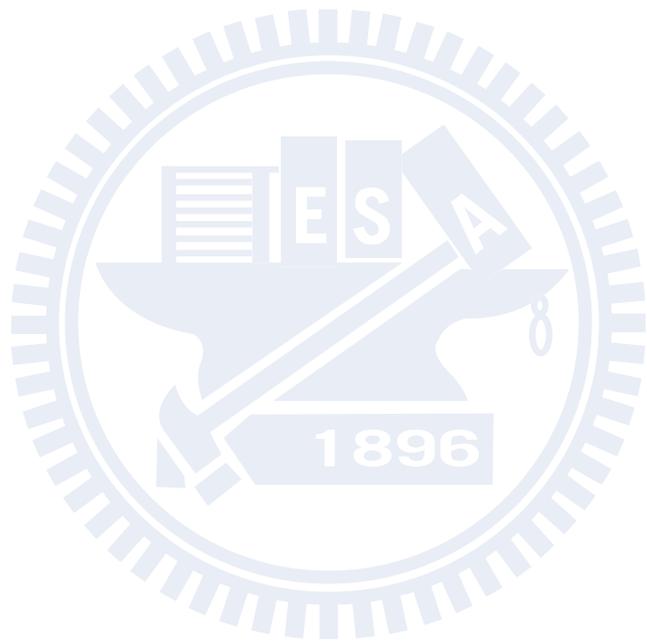


躍見旅行



SEEKING TRACE, FEELING, CATCHING AND GOING FORWARD

-----2005-2009 NCTU MArch1 Tsai Chia-Wen-----



身為交大第一屆學士後建築組成員之一，希望有別於一般論文，採取紀錄的方式呈現大學畢業後轉入建築的所見所聞，用一條自設的時間軸拉出四年的成果。「學步」在初始階段學習捕捉個人所見及如何表達之時期，「走進」是開始有所謂的基地將自己的想法帶入，「尋跡」則是實地觀摩各地文化或大師級的作品，「足印」真實的留下自己的痕跡，著手建構實體物品。

在建築的路上不斷的從生活周遭找尋設計的根基，從任何事件、過程、現象來做為發想的源頭，藉由日常所碰觸之事物創造不同的觀點，這可說是趟找尋痕跡的旅程，由每人所見之不同處著手執行，進而轉化為設計，故以「躅旅行」為名，詮釋在這建築旅行中我所見之躅。



FOREWORD

As a MArch1 student, I want to represent my thesis in the way of recording which is different from the others. All that I saw and heard will be filled into a self-definition timeline. BABY WALK is the beginning period to catch and express personal view by specific materials. WALK IN brings one's thinking into something so-called site. WALKING BY follows former design or theory to have further development. WALKED TRACE is making something into reality to leave our own mark.

On the route of architectural design, seek the groundwork from living continuously is necessary. Take daily things, events, process and phenomenon as the resource of thinking and create different point of view. This could be a traces-seeking journey. Therefore I took SEEKING TRACE, FEELING, CATCHING AND GOING FORWARD as the name of my portfolio to interpret what I saw in this architectural journey.



目錄

圖	舞	光	學步 換
量	茶	土	走進 車
作	譜	書	尋跡 理
	桌	椅	足印 板



CONTENTS

baby walk
drawing dance light exchange

walk in
quantity tea soil motorcycle

walking by
creation notation book theory

walked trace
table chair board

從打算轉考建築所到現在上完一個月的課，被問了無數次的"為什麼"，好像要做什麼總要有個理由，會這樣做一定有個來龍去脈的，被質疑，你不喜歡資料嗎？園區生活不好嗎？布瓜布瓜……

資料，怎麼會不喜歡，我們可以大聲喊出"我是資料94人"，引以為傲，以我們每學期都有而且大家踴躍參加的班遊為傲，以我們的默契為傲，我們有著自己的語言，以我們的團結為傲，以超過六十人的普吉畢旅為傲，有哪個校系的人可以像我們一樣。像家一樣的系計中，在裡面遊樂也辦公事，程式拖拉過的黑夜，走出計中的早晨，畢業典禮的煙火放起，資料自己亮起屬於我們的光芒，直到最後分別的班遊，沒有人有說出再見的勇氣，就這麼過去，憑著一股信念。暫且不論學的東西，我們屬於資料的一部份，這樣就夠了，我不算是個有自信的人，但對於我所屬的資料，它的好卻是給予大大的肯定，況且我不排斥它的所學，那，為什麼離開？

我想，天時地利人和真的是很重要的搭配，大三暑假五阿姨問我要不要去美國念研究所，一切幫我規劃的很順，很多人的夢想阿...但是當時的我只有錯愕，出國，沒想過，好像有那麼一點的突然，但是有人這樣關心還幫你鋪路，考慮一段時間，還是被我放掉，對於阿姨的長途電話只能心虛的回應，對於親戚們的建議應和後卻沒有認真去執行，這樣的環境我卻逃跑了。

當開始準備研究所，跟哈骨頭都想過轉行，覺得自己基礎打的不夠好，儘管之後有學的比較好，對於念研究所還是有點沒自信，但是講東講西，說說就過，還是念了起來，翻了四章的線性代數，上了atman為大家開的離散課，準備考試，稍稍認真，但是這樣規律正常的步調被一個機緣打斷，也讓我丟下哈骨頭自己去奮鬥，分道，忙了，開始跟系上人不同的生活，就像之前忙社團營隊，做下去就什麼都忽略了。

這個機緣是建築概論給的，一門通識，一向修通識比主科認真的我不小心就被拐走了，收到學士後建築這樣的消息，老實說，身為資訊人，我卻是個很少接收資訊的人，一直到上課才知道有這樣的東西，我想這是可以嘗試的東西，一切從頭開始，能夠學些很不一樣的東西，家人問問，同學聊聊，瞬間就決定轉考，有一股笨笨的氣息在，不知道該害怕，當別人佩服起自己的勇氣時會想有這麼厲害嗎？也許隨意點，小小的撒野，但是試這準備考試的半年，如果不被肯定也不至於太浪費，就轉囉。

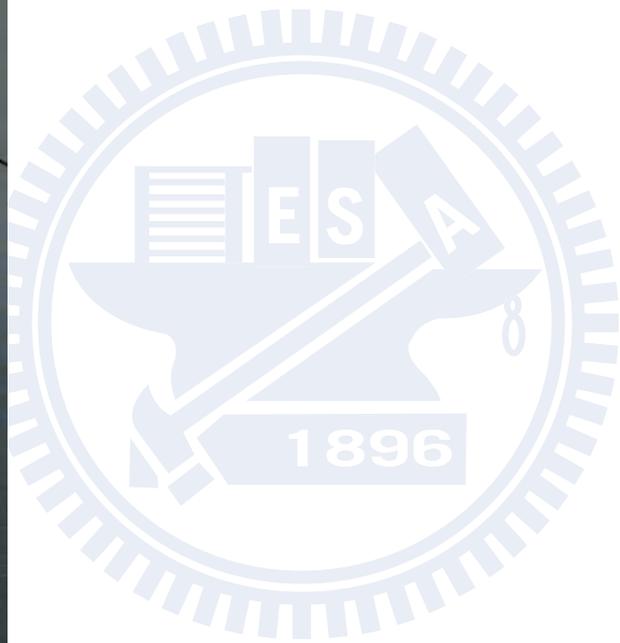
我算是個幸運兒，出生在這樣的家族就是一個好運，但是我沒有在出生的那一刻將我的運氣揮霍殆盡，學校辦了個交大哪裡哪裡的比賽，感謝趙士賢知道我的轉考找我一起參加，讓我認識了些土木人，在這期間也接觸很多從來不知道的東西，整個過程中我一直在學習著，也因此牽出更多的機會，寒假跟芳做花燈，因為轉考而有機會幫系上編冊舞真告誡有關於集集各種須知，還帶著我做作品跟拍照，再來上基本設計課，一種不一樣的上課方式，我們去做去感覺，一連串的東西加上平常的生活，很熱鬧的一段時間，很充實，吸收大量的東西，過得很滿足，我覺得就算沒考上這一段也值得了。

儘管已經滿足值得，但卻沒有因此而停頓，於是，我走進這裡。

轉考

圖冊舞真告誡有關於集集各種須知

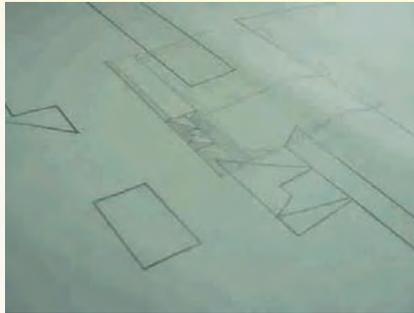
第一章





Richard Diebenkorn and Ocean Park

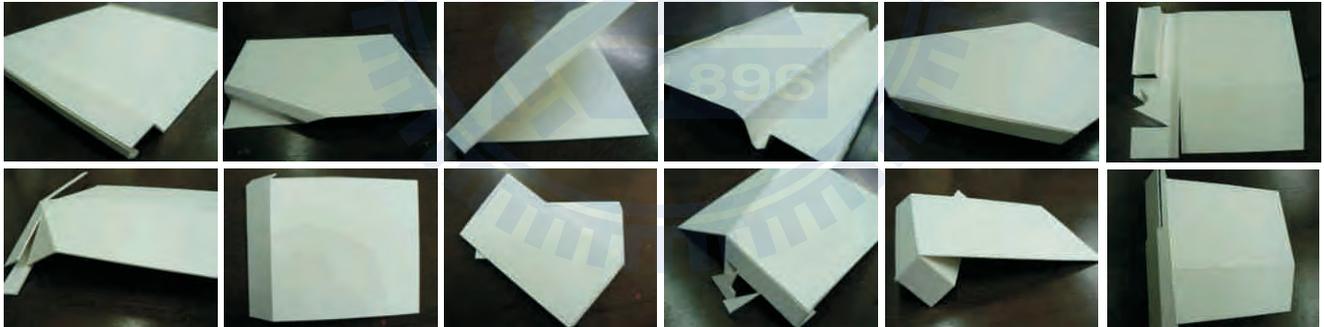
CARDBOARD



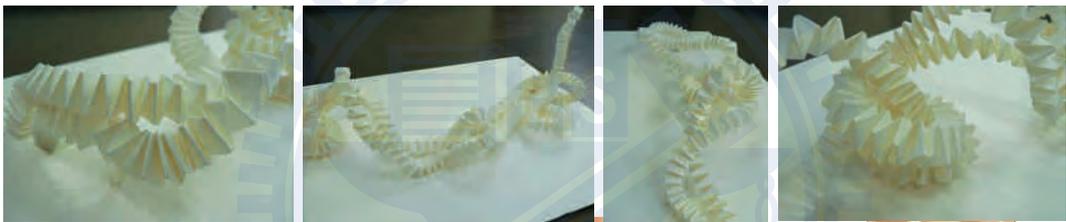
You don't need to know what does it means. Just look and translate in your way.

Use a 50cm*50cm- cardboard to interpret what did you see.

Use any method without glue that you can do to this cardboard to make a 2D model.

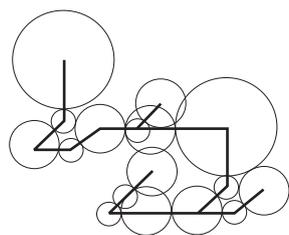
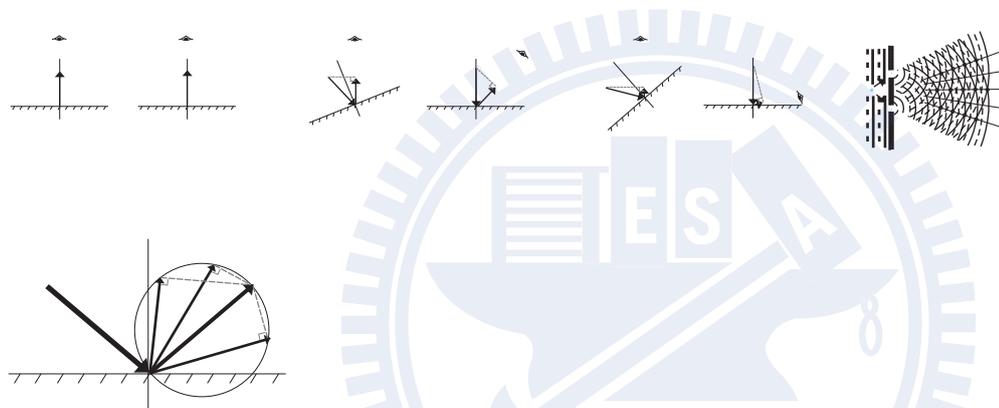
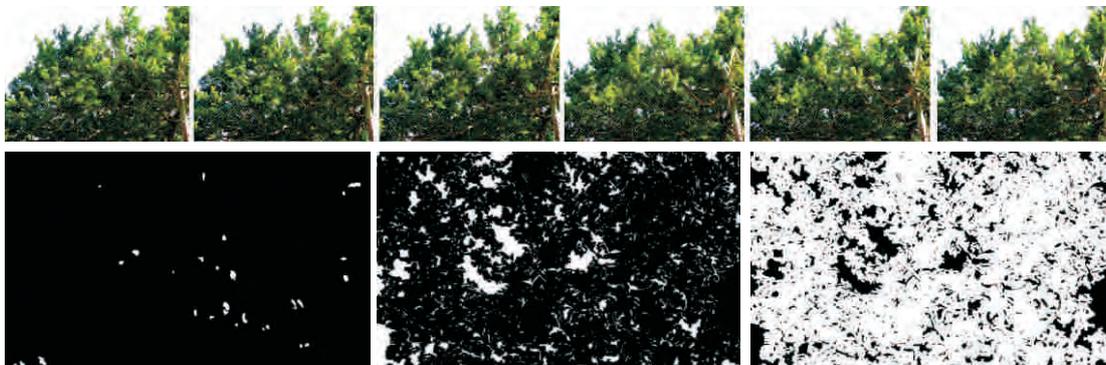


舞 Tango FOAMCORE



Catch the movement of the characters in the movie tango.
Use foamcore as your material to represent the tempo you got.

光 · Light · Leafiness · Angle · Reverberation WAX



Choose anything as a media that can observe sunlight.
Then use gesso, cement, wax or poly to make models for showing light.

The media I chose is leaf.

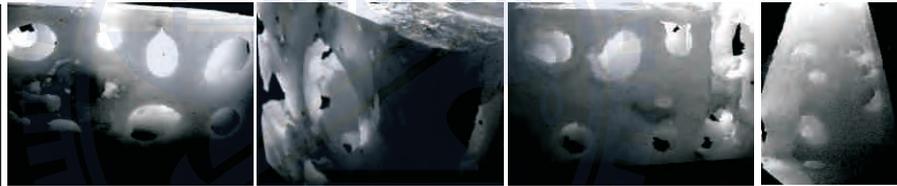
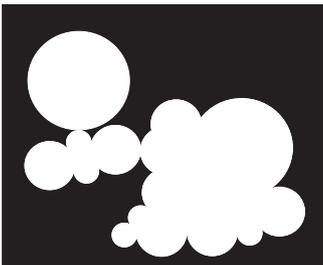
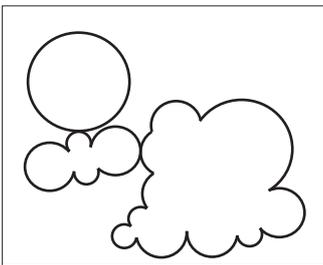
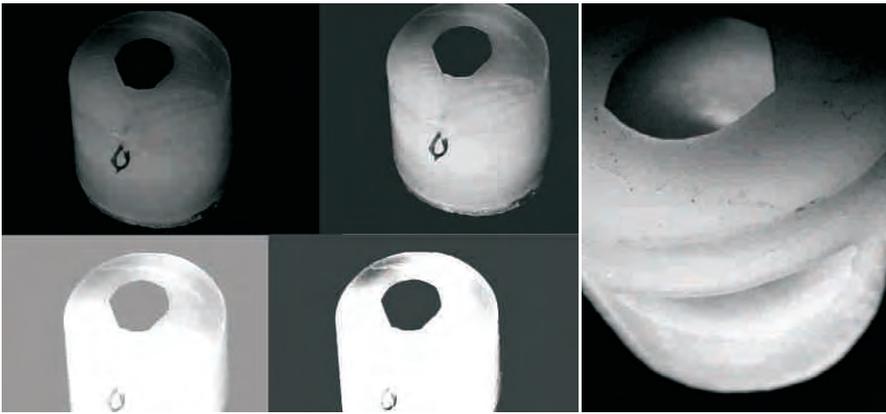
Through the reflection of leaves I can see light sparkling.

As the leaves moving, light become strong or feeble.

From the reflection theory, the strength of light changes by angle.

The strength was different from different direction to see it.

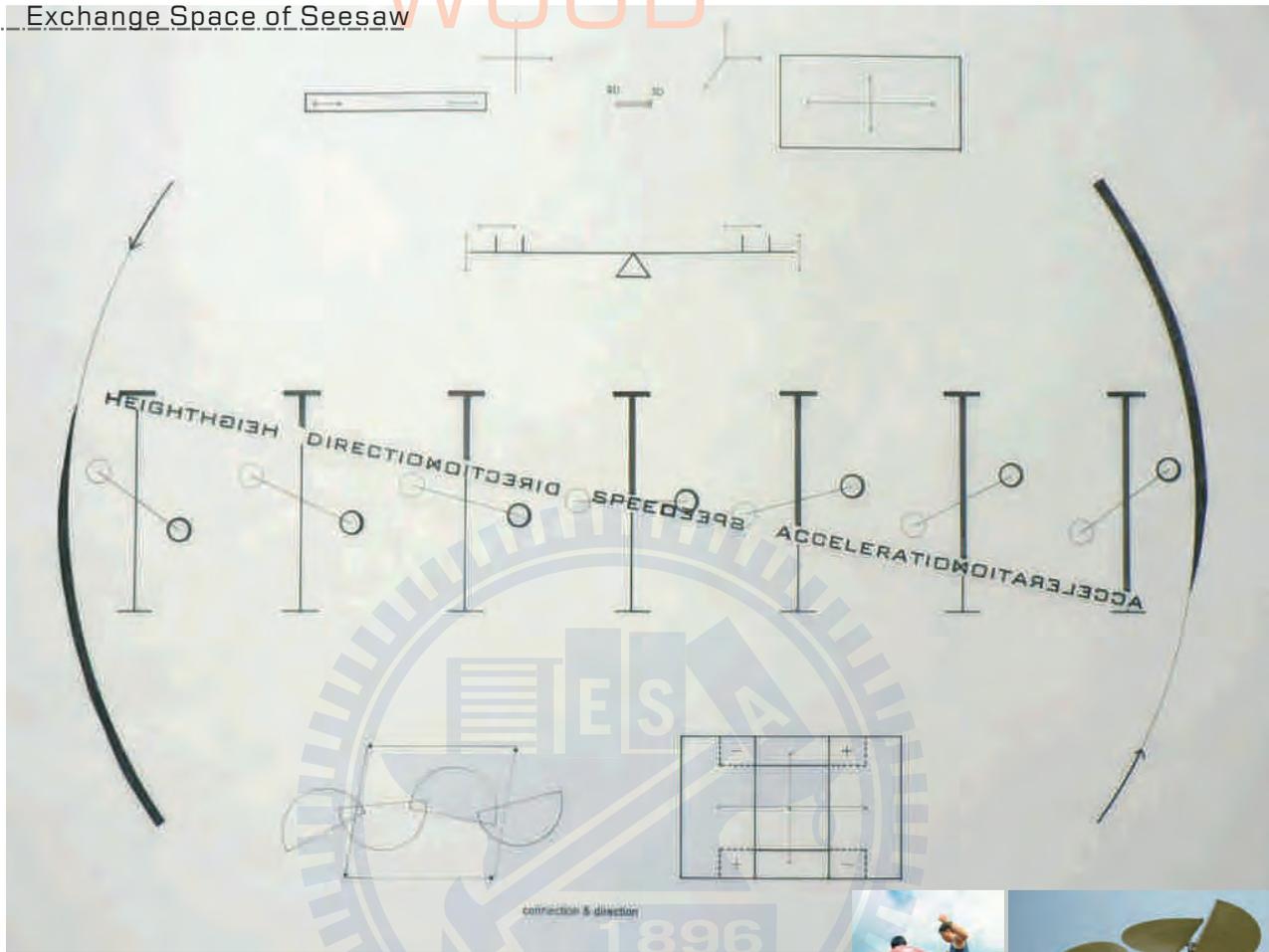
Therefore I try to create some bubbles to imitate light.



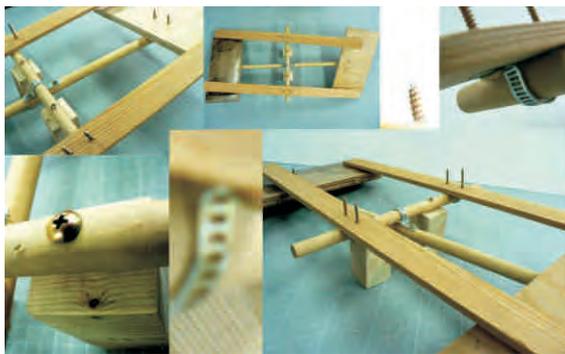
換

Exchange Space of Seesaw

WOOD



The last material that we have to be familiar with is wood.
 Hence we need to get into the factory.
 Theme of this practice is "Space Of Exchange."
 What I chose is seesaw.
 People get up and down in a line.
 Can we have some more direction?



Do you still remember Ocean Park?
The first work we did.
After the 3-dimensional seesaw was created.
We must connect our design to the drawing we got.
As the result of this extension,
the seesaw-sea was born.



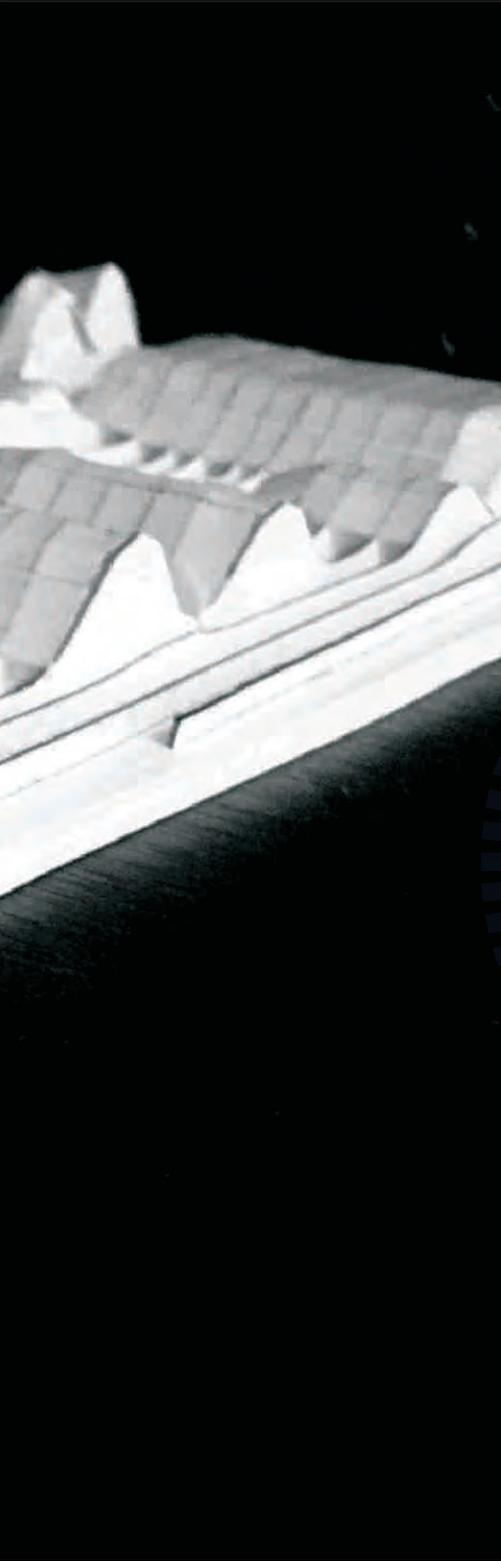
大毛說 你要知道你的存在有多重要
 MArch1代表了多麼重要的一件事
 你有很大的使命 你必須證明很多事 你很重要而且能做到
 要分清是主從 建築是很重要的一件事
 他每天都在想著會被多少人超越 必須一直逼自己前進
 他說 被卡住的痛苦 不像數學物理是可以反芻理解的
 而是一種內心的孤獨絕望 那是沒有人能夠幫你的
 所以像是沈到南北極的深海中 刺骨的痛不斷深入
 這種苦是由內心發出的 好沈重...

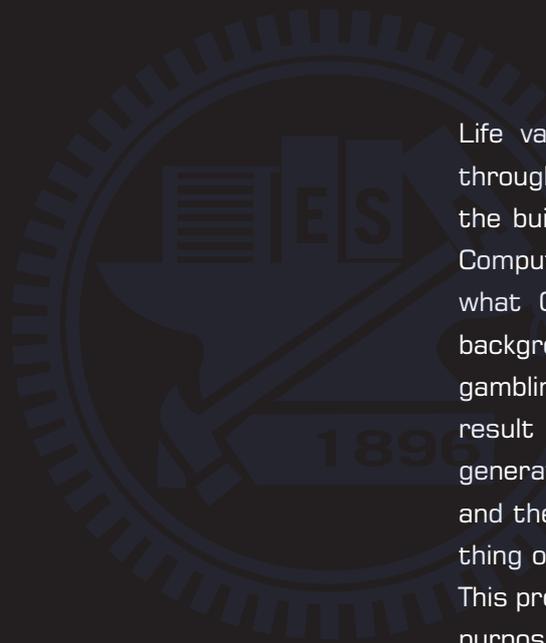
內疚 許美嫻
 我不斷的摸索自己 企圖改變一些壞思想
 我知道你對我的好 是將來眼光的抵禦
 你今日無助的詞句 都帶著明日的訊息
 我知道你對我的心意 而我就是 有心無力
 我還有什麼可以給你 我不斷的問自己
 我不停的想 不斷的在找尋
 我知道你一直都辛苦 為我默默的付出
 就算流淚也不唱給你聽 我是身在福中不知福
 所以我用盡我的全部 來告訴你我沒有認輸
 還有什麼可以給你 我的爹娘 我的父母
 還有什麼可以給你 我的爹娘 我的父母

上禮拜金門週 門王回來的那天我問同學有沒有人要一起去晃晃
 結果還被叫不要去
 回來之後語重心長的跟我說 你現在既然要幫人做事又有課業
 相對的就必須減少這些活動的存在
 這麼嚴重嗎 那我寧可減少我的睡眠不想失去我的生活
 還會被說 我有很多意外 有很多難得 一直都有人在生日
 因為我總是說 難得有人來 難得誰找我 難得講個話

在這過程中我一直要說服自己相信自己 相信別人
 告訴自己 我是菜頭所以我能辦到
 告訴自己 我是菜頭所以是開朗堅強的
 因為我是菜頭 很多人說我是重要的
 量 菜頭 被人踩在腳下 受得出來的人
 不斷提醒自己別忘了菜頭是什麼樣的人 因為這名字讓我一直撐著
 有時又忍不住會懷疑 真的是這樣嗎
 忍不住會想 為什麼要這樣
 我覺得我在調適跟認識自己 希望我一直都是我

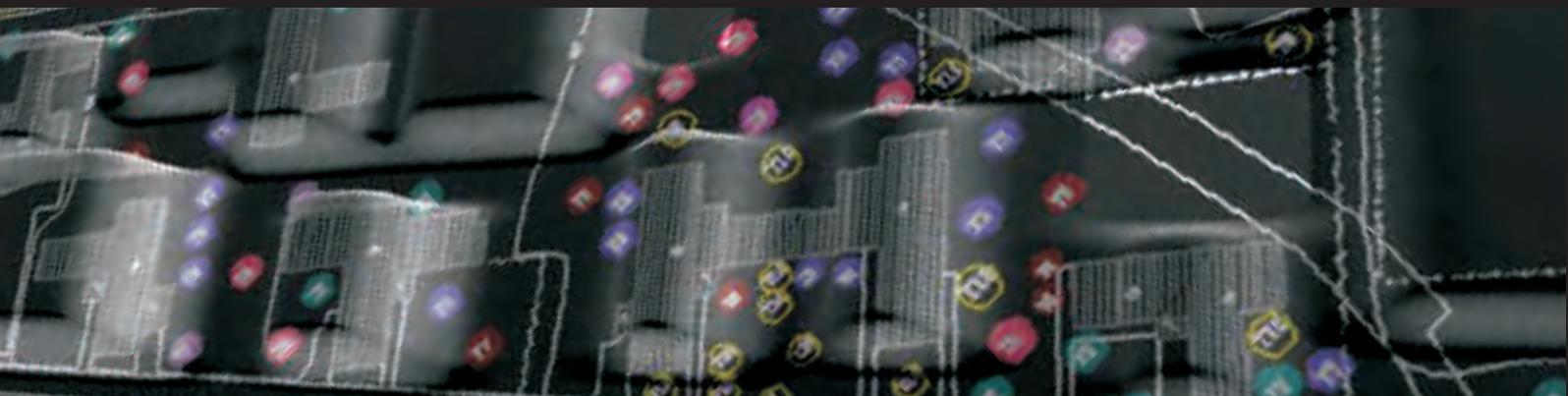
第二章





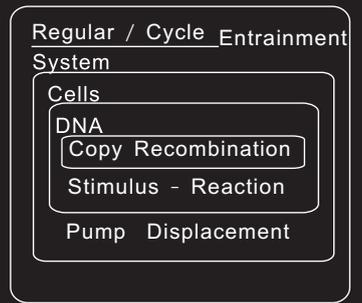
Life varies along with the disturbance around, through observed data to affect the formation of the building as well as assisting the evolution by Computer Aided Architectural Design. This is what Genetic Architecture stands for. By the background of the Theory of Evolution, my gambling space is set. Evolution is not a inevitable result but a casual effect. The new space generated from the basic setting with old plants and the allocation of the buildings. Is that a good thing or not? Is that a revolution or degradation? This process is not on purpose, but in line with the purpose while the new apartment complex is a form of life continuing to growth.

Gambling Space



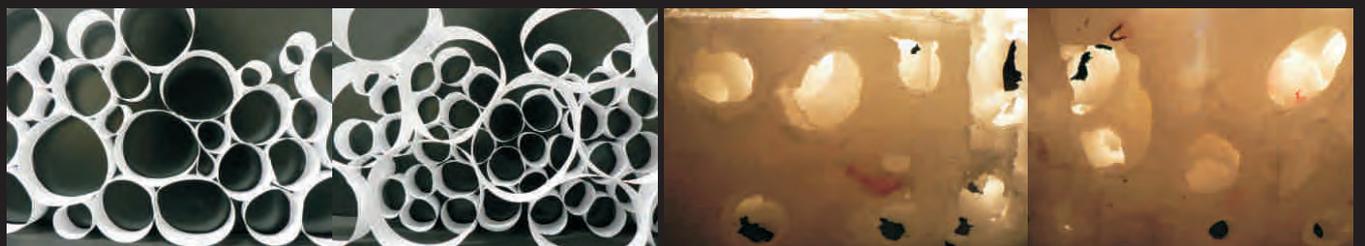
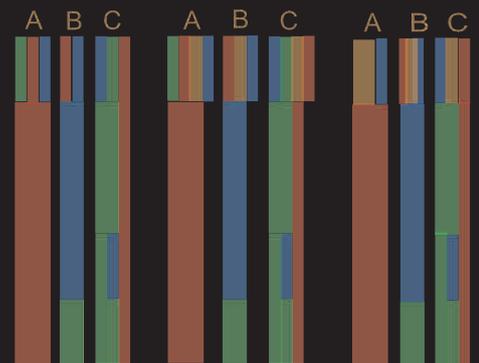
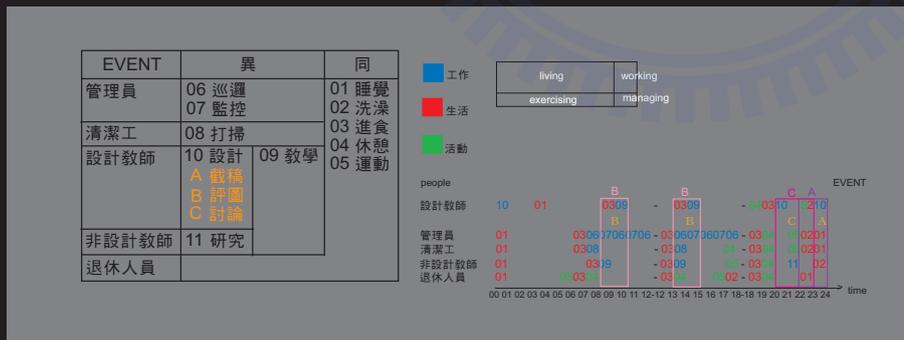
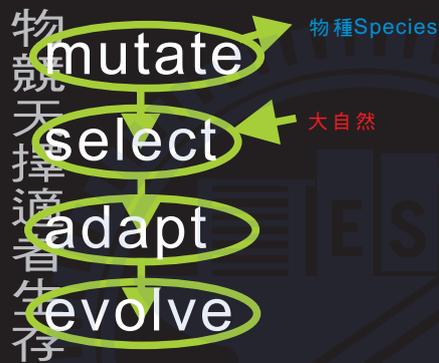
生物律動

規律中的變化 週期內的擾動
 生物中有著一種共同規律，稱為生物律動
 由一些反應時間的行為，產生約日節律，以一天為週期振盪著
 除外界的資訊促成此種現象發生
 在生物體內各有一個時鐘，生成自走節律
 不同物種的自走節律有不同週期，但接近一天
 因此在體內外正負趨力抗結下，取得24小時的平衡



Darwin's Theory

- mutate
- select
- adapt
- evolve
- prove
- accelerate
- suggest
- support
- generalize
- confirm
- extend

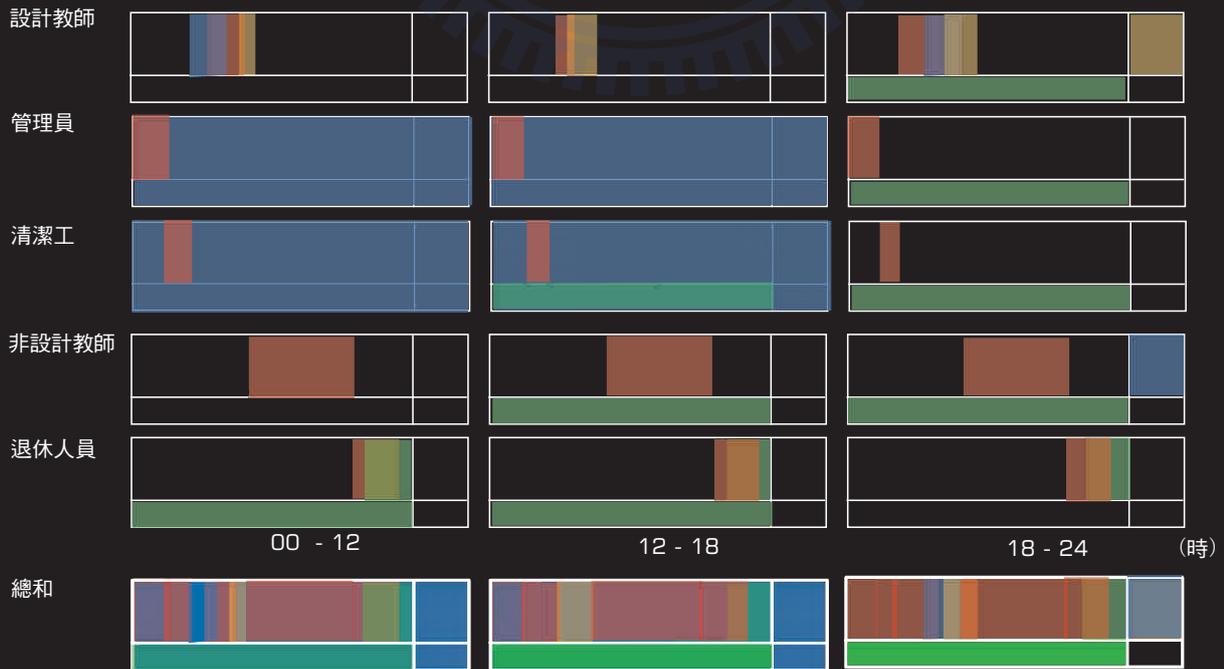




Base excision repair,
Nucleotide excision repair
-> to avoid dealing with emergency

Mismatch match repair
-> combine emergency with ordinary

Single strand break repair
-> rearrange schedule



從最細部的DNA、RNA看起
 是所謂的分子時鐘
 一小群細胞聚集的SCN
 是生物體內的主要振盪器
 還有許多周邊振盪器與之串連
 成一系統，建起複雜的網路
 這些體內產生的自走形成自我節律
 加入外界影響，反饋迴路的產生
 生物律動就此發生

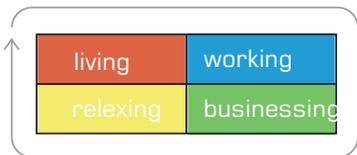
基因建築

有許多人在做著這樣的一件事 - 一個隨機的開始、訂下規則然後改進規則。在電腦科技的協助下，一種自然的生長方式正在發生著。沒有任何方式去評斷這些規則是好是壞，我們只能賭！參照"Game of Life"及基因演算法，我也根據基地現況的觀察來設立起我的規則。因為在MAYA中沒有合適的功能讓我套用，因此捨棄手中舊有的函式而寫了個簡單的程式來取得一些隨機的數據。越來越多的規則將被加入這個遊戲，來決定這個空間的變化。經由不斷的調整，將會趨於最佳化的狀態，這只是個過程，而非結果。



wake up breakfast class prepare teach lunch rest rest
 class prepare teach teach

gene -> event mutate -> hazard rearrange -> transform new phenotype -> new space



living 飲食。睡眠
 working 上課。會議
 businesssing 洽公。研討
 relexing 運動。休息

1234

1	2
4	3

4123

4	1
3	2

切除 remove infill

3412

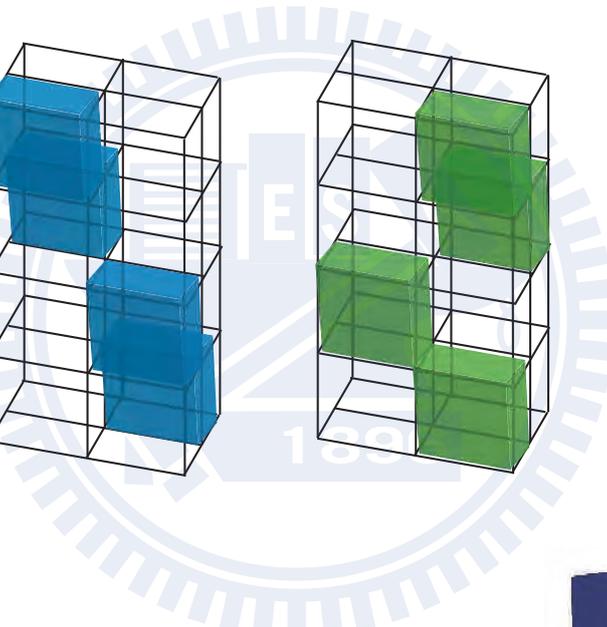
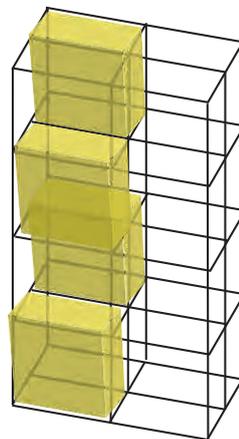
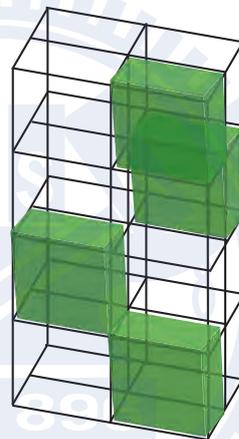
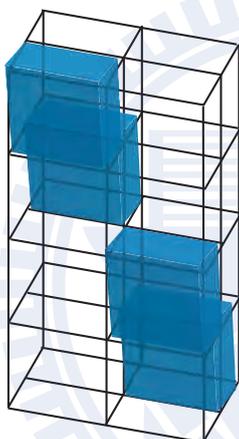
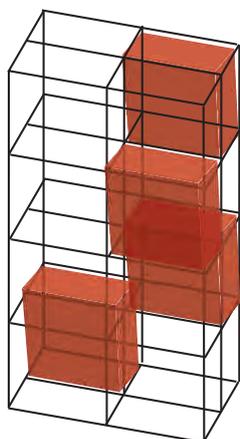
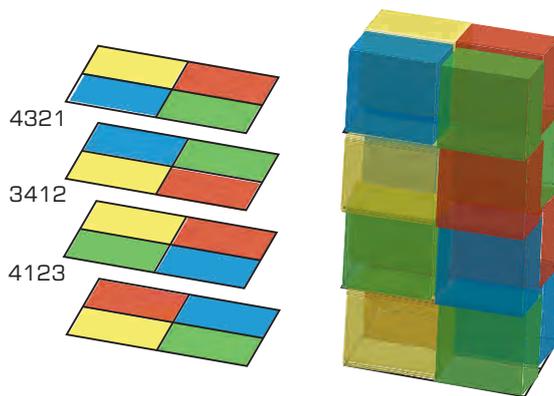
3	4
2	1

錯配 connect modify

4321

4	3
1	2

斷裂 break recombine



teach dinner rest meeting sport bath sleep

RULES SET UP

Tree - height

Old Building

Housing - high priority

Not Housing - mid priority

Free space - low priority



No. 1-8 lower than 15m

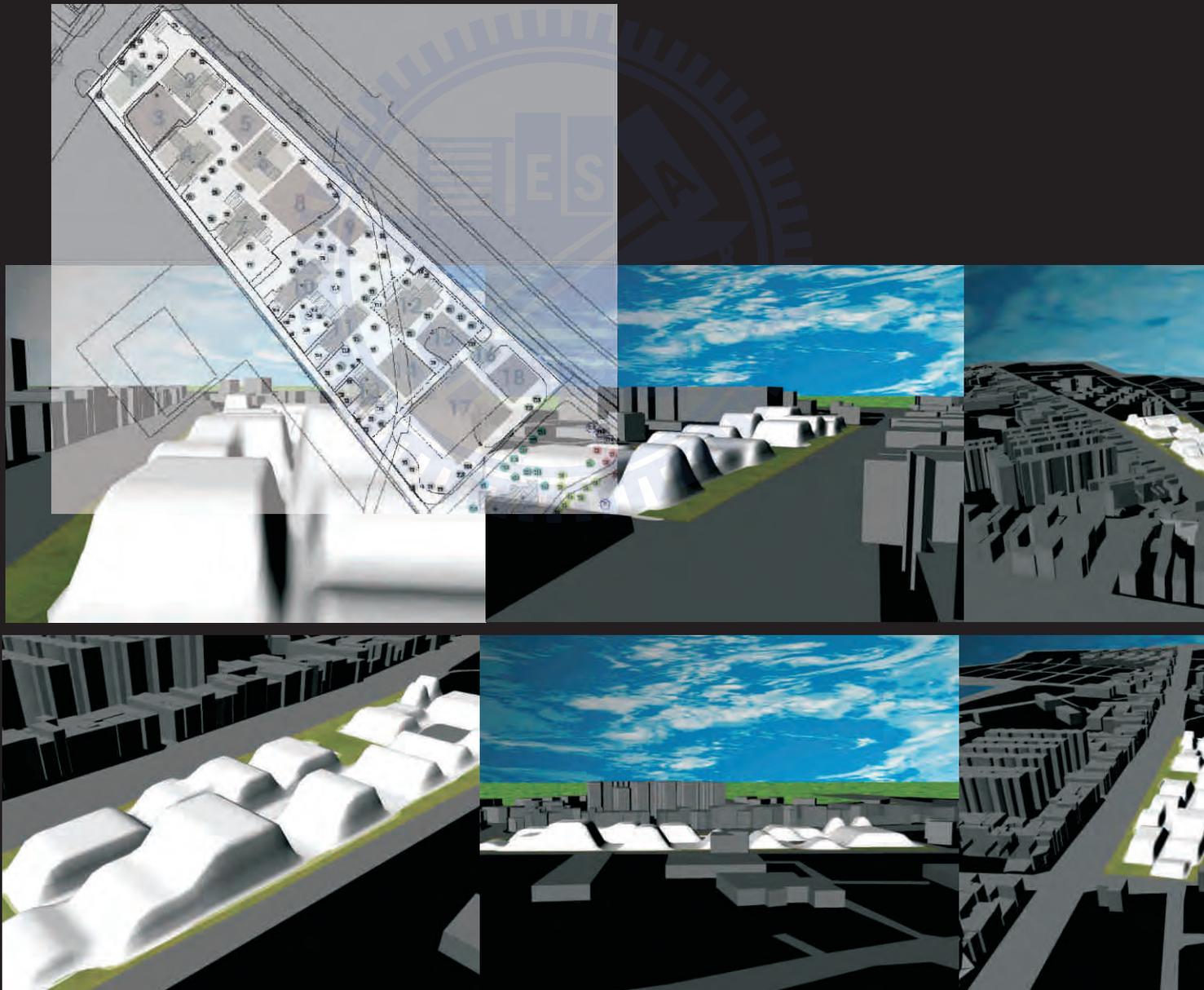
No. 9-15 lower than 10m

No.16-18 lower than 20m

No. 1, 16 do not have to change

No. 2, 4, 6, 7, 10, 11, 12, 13 have opportunity to increase 1/5 max height

No. 3, 5, 8, 9, 14, 15, 17, 18 have opportunity to decrease 1/5 min height



```

#include <iostream>
#include <ctime>
#include <cstdlib>
using namespace std;

void num(int p){
int *b,q;
b=new int[p];
for (q=0;q<=p;q++)
b[q]=rand()%17;
for (q=0;q<=p;q++)
cout<<b[q]<<" ";
cout<<endl;
}

void main0{

time_t t;
srand ((unsigned) time (&t));

int a[16]={0,1,0,1,0,1,1,0,1,1,1,0,0,0,0};

for (int n=0;n<16;n++)
cout<<a[n]<<" ";
cout<<endl<<endl;

int c;
int x=0,y=0,z=0;
for (int m=0;m<16;m++)
x=x+a[m];

while (x!=21 || y!=1){

for (int i=1;i<=10;i++) {
c=rand()%16;
if (c==2||c==4||c==6||c==7||c==9||c==10||c==11||c==12)
a[c-1]=a[c-1]+2;
else
a[c-1]++;
}
cout<<endl;
for (int j=0;j<16;j++)
cout<<a[j]<<" ";
cout<<endl;

x=0;
y=0;
z=0;
for (m=0;m<16;m++){
x=x+a[m];
if (a[m]==0)
z++;
if (z==5)
y++;
}
for (int k=0;k<16;k++){
if (k==1||k==3||k==5||k==6||k==8||k==9||k==10||k==11)
a[k]=1;
else
a[k]=0;
}
cout<<"This is the result for LIVING!"<<endl;
}
}

```

CODE

RESULT

```

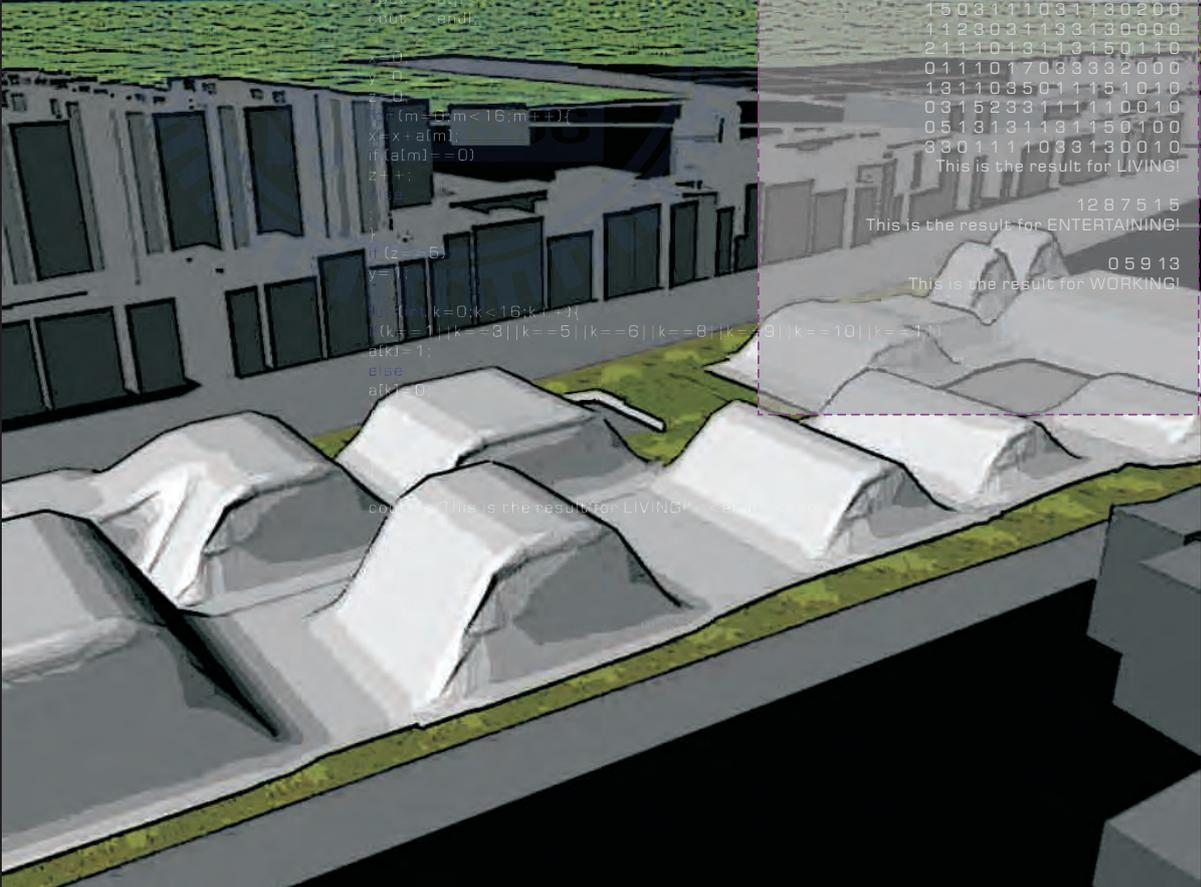
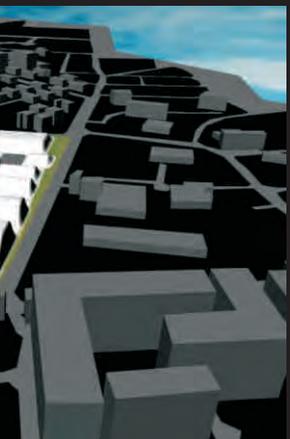
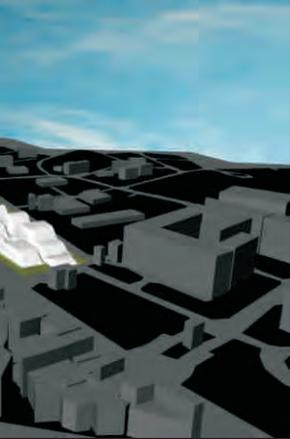
0 1 0 1 0 1 1 0 1 1 1 1 0 0 0 0

1 3 1 3 0 1 1 1 1 1 5 1 1 1 1 0
1 1 0 1 0 1 1 1 2 5 3 1 3 1 0 1 0
0 1 0 5 1 3 1 1 1 3 1 3 3 1 1 0 0
0 3 2 1 1 3 3 1 1 1 3 1 1 0 1 0
0 1 2 1 0 1 3 1 5 1 3 3 1 1 0 0
0 7 1 3 0 1 5 0 3 1 1 1 0 2 0 0
0 3 1 1 3 5 1 2 1 1 1 1 0 0 1 0
0 1 1 3 0 1 1 1 1 1 5 5 1 2 0 0
0 1 0 3 0 3 1 0 3 3 1 1 1 0 1 0
0 3 0 1 0 5 1 0 5 1 1 1 3 1 2 1 0
0 3 0 5 0 1 1 1 5 1 1 3 0 2 0 0
2 1 2 1 0 3 3 0 1 3 1 3 0 0 0 0
0 1 0 1 0 1 3 1 1 3 1 1 1 2 1 0
0 5 0 1 0 3 1 3 1 1 3 3 1 0 0 0
0 1 0 1 0 9 3 0 3 1 3 1 0 3 0 0
0 7 0 1 0 1 1 2 1 3 3 1 1 0 2 0
1 3 0 3 0 1 1 1 1 3 5 3 0 1 0 0
1 7 0 1 0 1 3 1 3 1 1 1 0 1 2 0
1 3 0 1 2 3 1 1 1 1 5 1 0 0 1 0
0 1 3 1 0 1 3 0 1 3 1 5 1 0 0 0
1 7 0 5 1 1 1 0 1 1 3 1 0 1 0 0
1 3 0 1 0 5 1 1 3 1 1 1 1 1 1 0
1 5 0 3 1 1 1 0 3 1 1 3 0 2 0 0
1 1 2 3 0 3 1 1 3 3 1 3 0 0 0 0
2 1 1 1 0 1 3 1 1 3 1 5 0 1 1 0
0 1 1 1 0 1 7 0 3 3 3 3 2 0 0 0
1 3 1 1 0 3 5 0 1 1 1 5 1 0 1 0
0 3 1 5 2 3 3 1 1 1 1 1 0 0 1 0
0 5 1 3 1 3 1 1 3 1 1 5 0 1 0 0
3 3 0 1 1 1 1 0 3 3 1 3 0 0 1 0
This is the result for LIVING!

1 2 8 7 5 1 5
This is the result for ENTERTAINING!

0 5 9 1 3
This is the result for WORKING!

```





We always hear about virtual reality. Try to make some scene much more factual and set some experiment to simulate in it to have some experience and do research. But we never think about create something that are not really exist or turn invisible become tangible. This design is from the process of tea manufacturing. Unfold, decompose, filter, fire, cool, and stay. Six steps give six different feeling. Imagine all the visitors are tea leaves and go through the manufacturing process while visiting the exhibition.

Real Virtuality



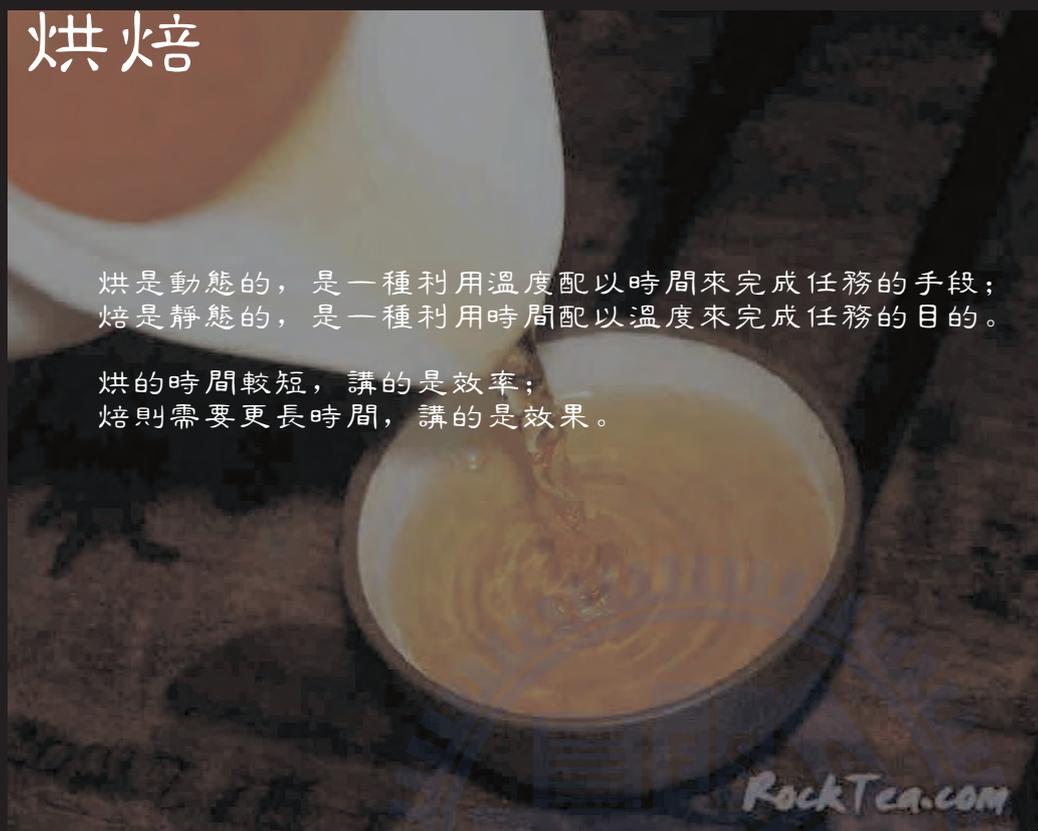
Virtual Reality
Real Virtuality



烘焙

烘是動態的，是一種利用溫度配以時間來完成任務的手段；
焙是靜態的，是一種利用時間配以溫度來完成任務的目的。

烘的時間較短，講的是效率；
焙則需要更長時間，講的是效果。



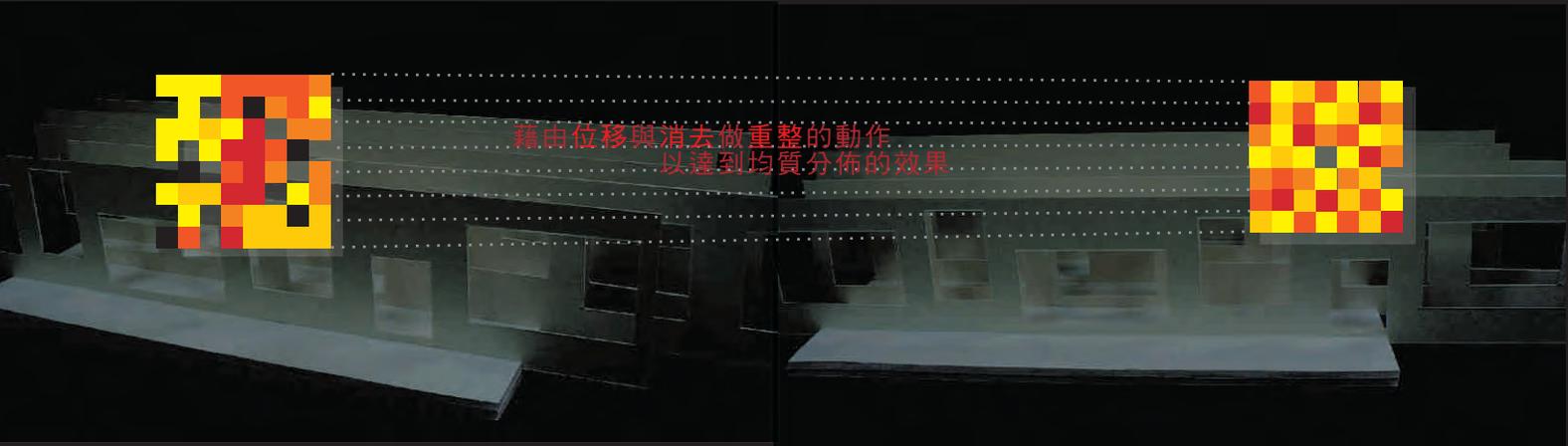
色澤來源主要來自葉綠素，因烘焙過程因溫度而改變。
由翠綠—黃褐—紅褐—黑褐



在溫度的刺激下迅速的解構並排出雜物

在時間的催化下緩慢的重組並穩定架構

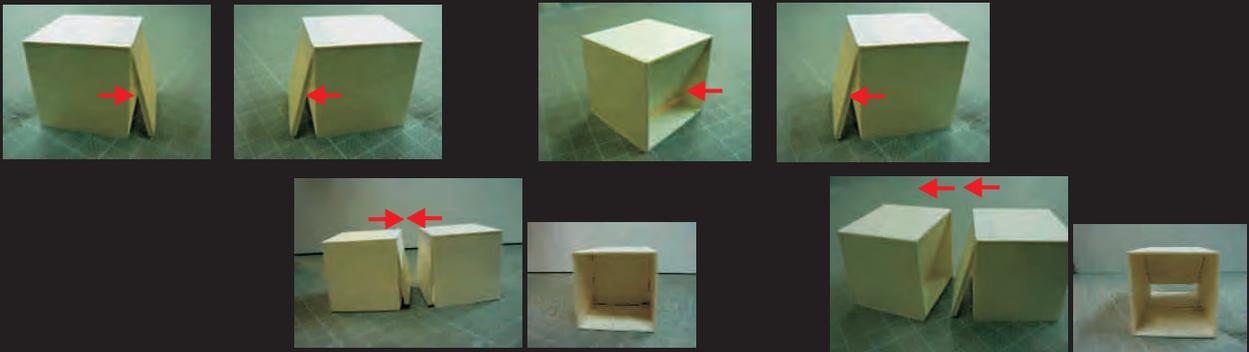




藉由位移與消去做重整的動作...
以達到均質分佈的效果



固定單元在特殊條件成立下產生反應

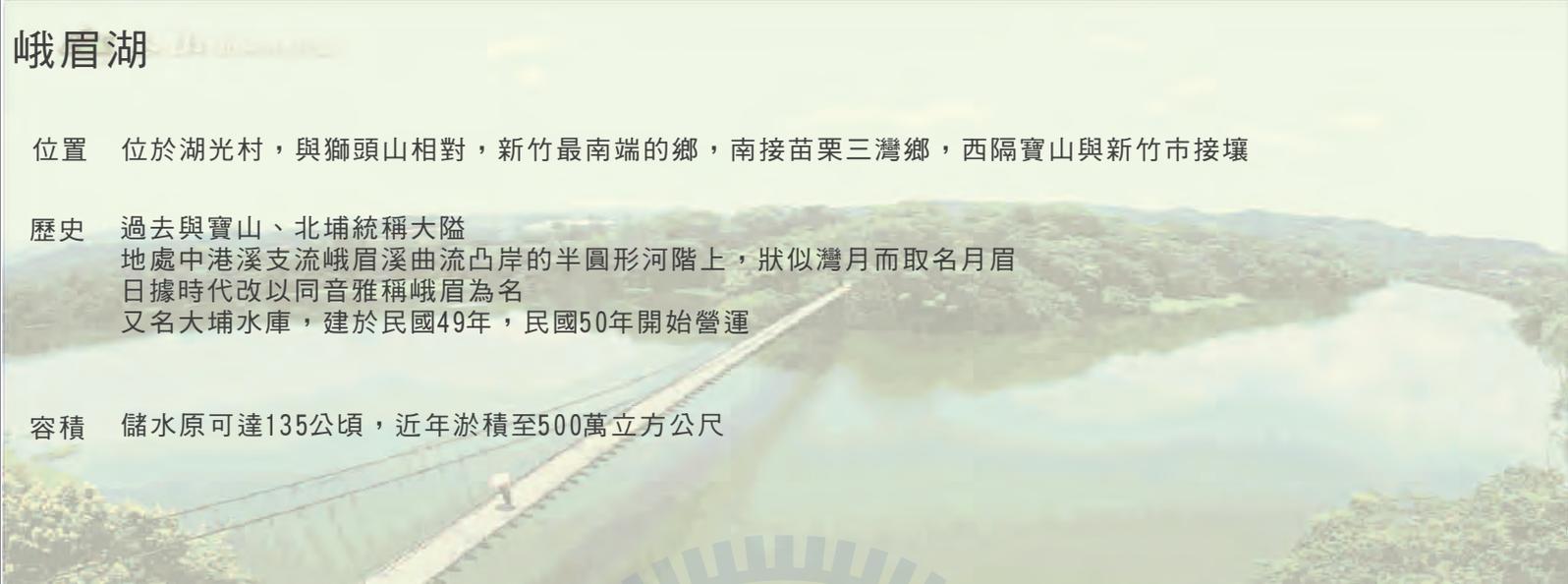


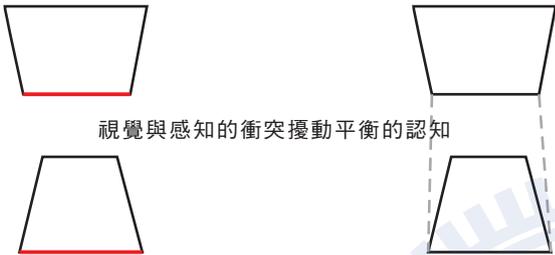
峨眉湖

位置 位於湖光村，與獅頭山相對，新竹最南端的鄉，南接苗栗三灣鄉，西隔寶山與新竹市接壤

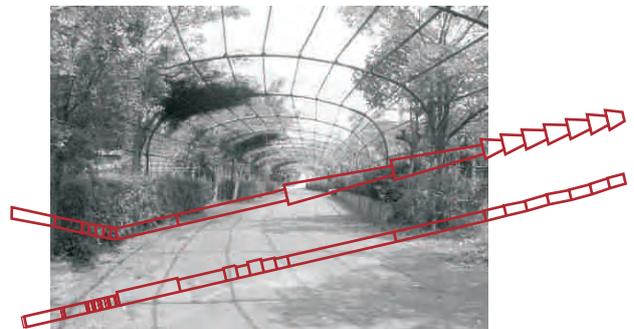
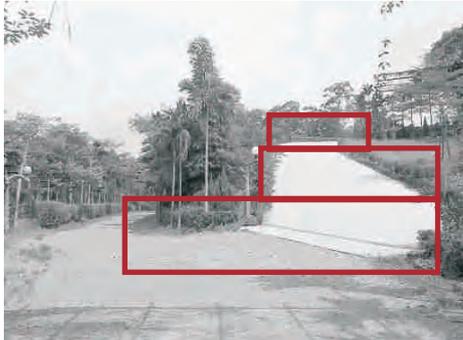
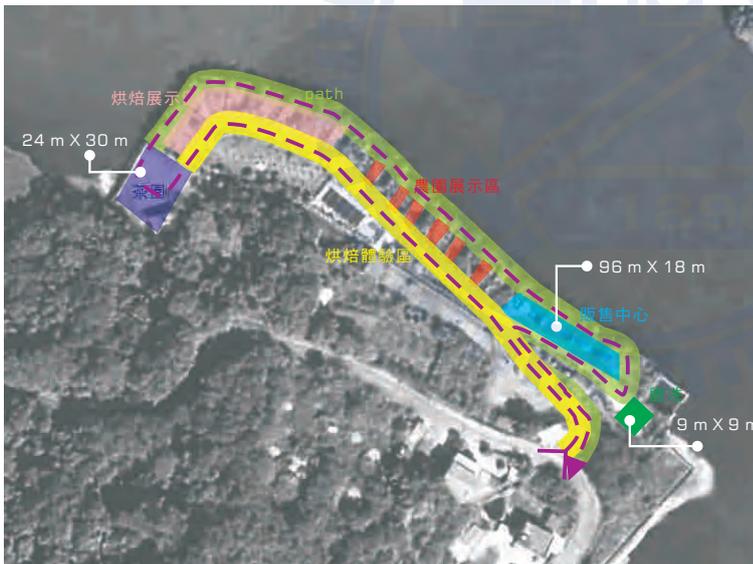
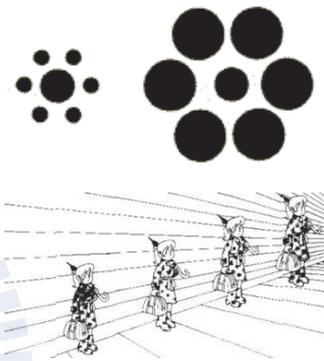
歷史 過去與寶山、北埔統稱大隘
地處中港溪支流峨眉溪曲流凸岸的半圓形河階上，狀似灣月而取名月眉
日據時代改以同音雅稱峨眉為名
又名大埔水庫，建於民國49年，民國50年開始營運

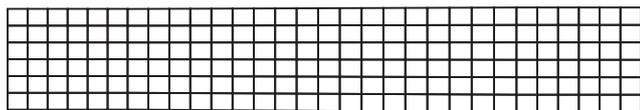
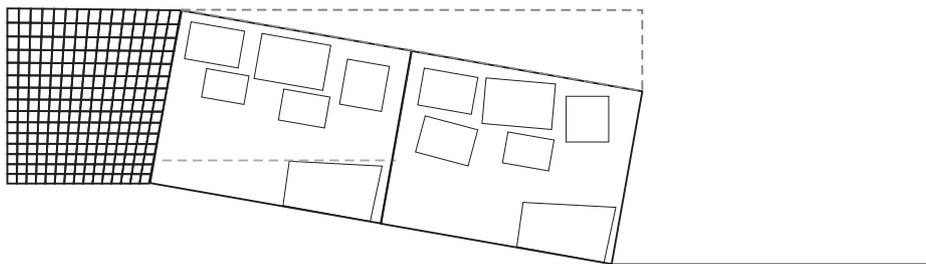
容積 儲水原可達135公頃，近年淤積至500萬立方公尺





視覺與感知的衝突擾動平衡的認知

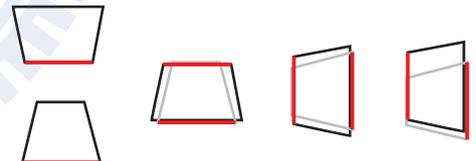




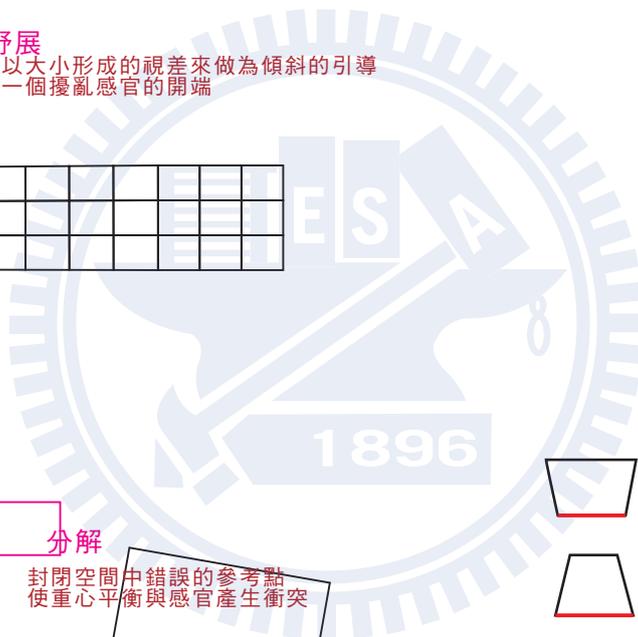
舒展
以大小形成的視差來做為傾斜的引導
一個擾亂感官的開端

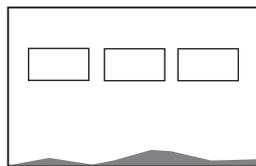
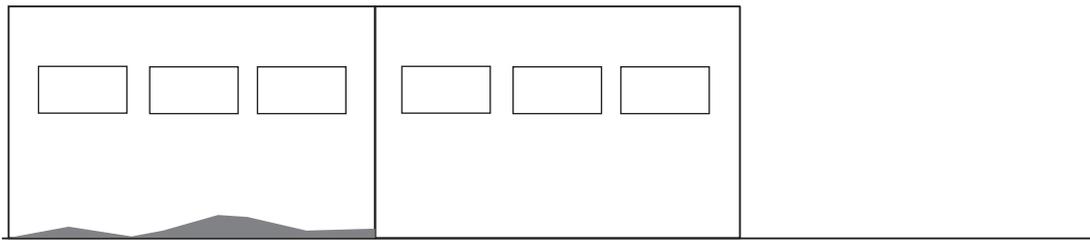


分解
封閉空間中錯誤的參考點
使重心平衡與感官產生衝突

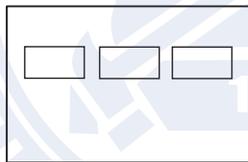


排清
擾動參考點使依據迷失
逐漸找回重心的感覺

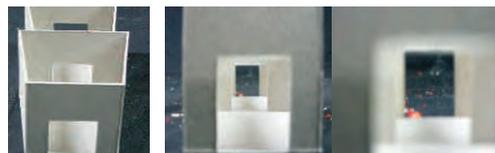
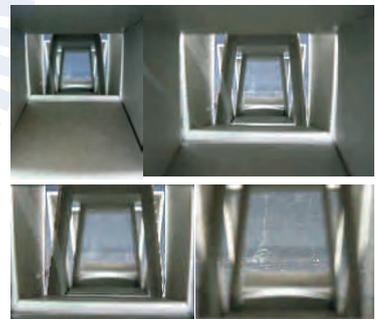




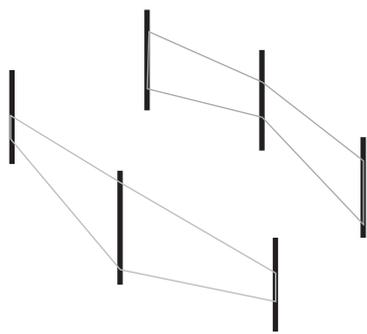
開始取得外界的參考點
 但改變地平讓人去抓不斷改變的平衡重心



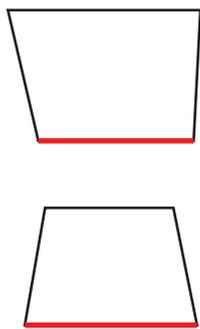
逐漸回到穩定狀態
 正常的地平與外界參考點



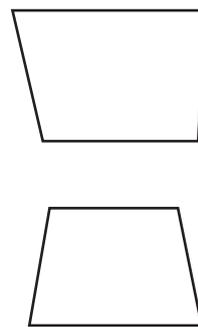
靜置回到完全開放的空間



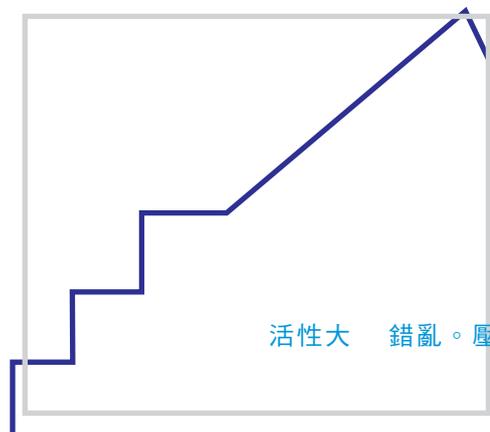
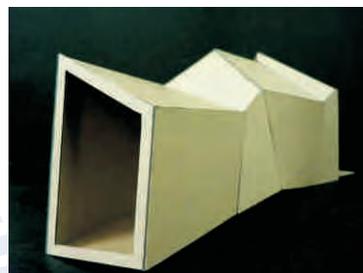
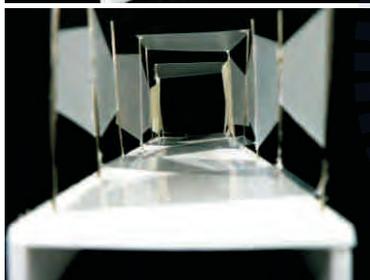
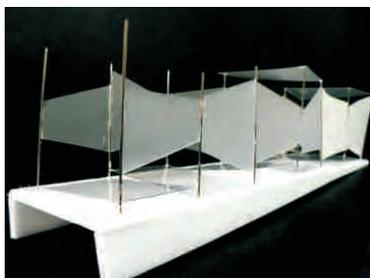
舒展 15m



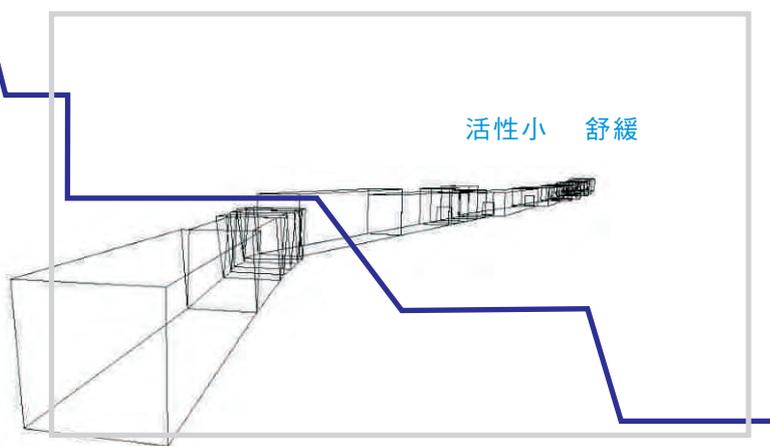
分解 49m



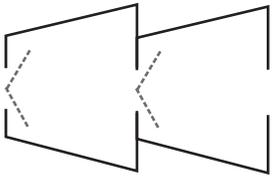
排清 9m



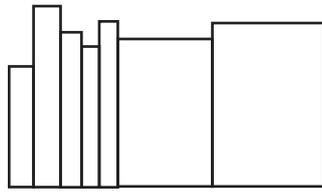
活性大 錯亂。壓迫



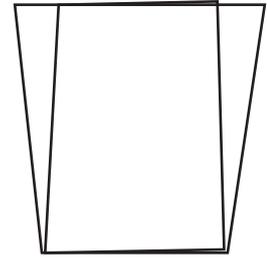
活性小 舒緩



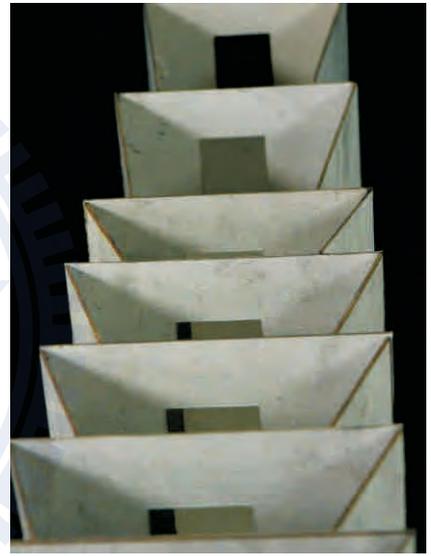
烘焙 96m

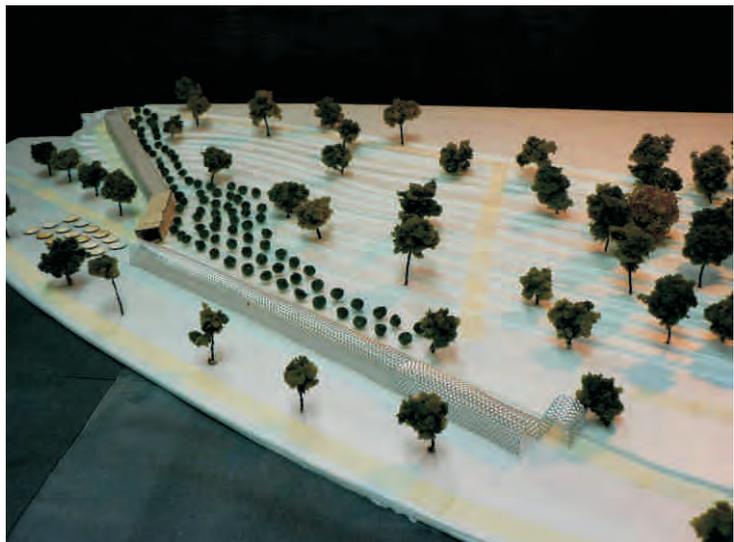


冷卻 48m



靜置 30m



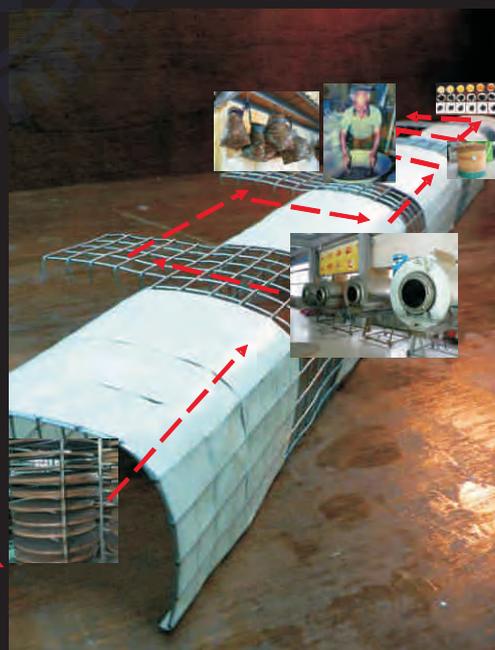


舒展。茶園

分解。體驗



烘焙。製茶流程展示

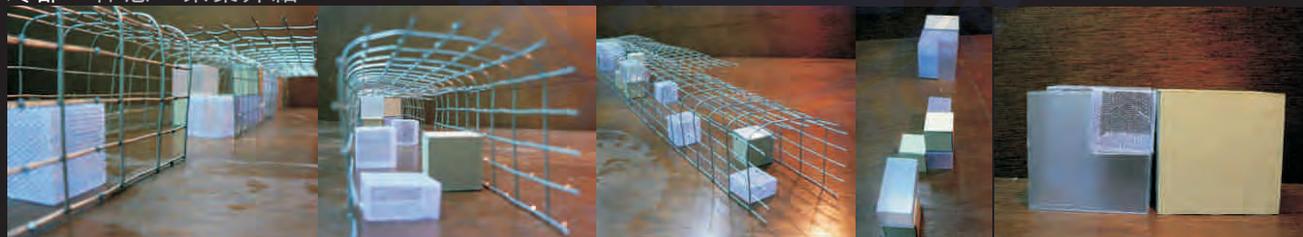




排清。茶葉產季介紹



冷卻。休憩、茶葉介紹



靜置。前往停車場



It's a place has variant layers of soil. The land can describe history by itself. There are abundant natural resources. But there are also ecological problems. The lake before was full of grass now. In the past it is a famous scenic spot. A luxury hotel was build nearby and a night market was formed. The landscape changed a lot and started to lose visitors. The function of reservoir is decreasing. Problems are appearing gradually. Therefore I try to make a walking path that can observe the layers of soil easily to remind people the past of this land and connect from lake to the hotel. Bring some functions like street vendors in night market in to the path. Use the theory from endless circle to form the path. Wish people can remember how it was and watch out for the environmental problems.

symbiosis-connection

從青草湖變青草湖

2R

2R

位於客雅溪中游，於民國45年興建為水庫，面積達30平方公里，為台灣光復後首座水庫。



1956

2004



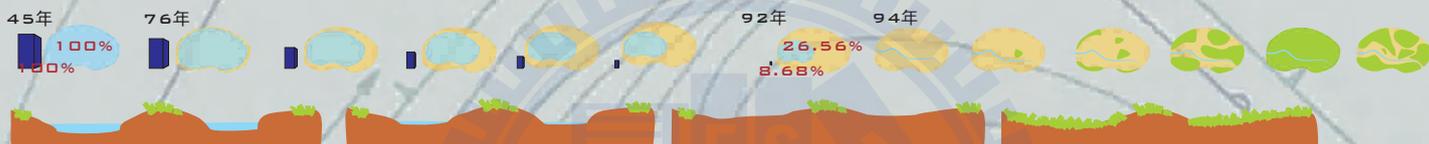
2004

2005



2006

2007



because of the changing environment some creature disappeared and some moved in

。溪。湖。

洋燕 家燕 翠鳥 灰鶺鴒

水生菱 香蒲 大萍 水萍

。湖。島。

小白鷺 蒼鷺

。ALL。

白頭翁 大捲尾 綠繡眼

。南北岸。

五色鳥 小彎嘴畫眉 鳳頭蒼鷹

灰頭紅尾伯勞 山紅頭

。溪。島。

大白鷺 灰頭鷓鴣 紅冠水雞

夜鷺

台灣蘆竹 紫荊 咸豐草 鋪地麥

扁穗莎草 香附子 異花莎草 毛軸莎草

風車草 五節草

林間活動區 生態保育區

5R

T

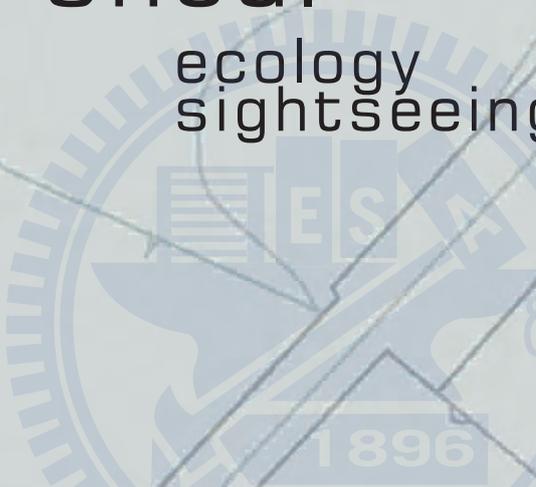
past water reservoir

flood preventing
irrigation
sightseeing



now land + plant shoal

ecology
sightseeing



鳳凰橋



觀鳥台



農田



煙波大飯店



香腸攤



卡拉OK



靈隱寺



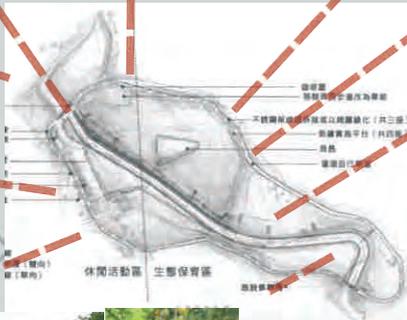
住家

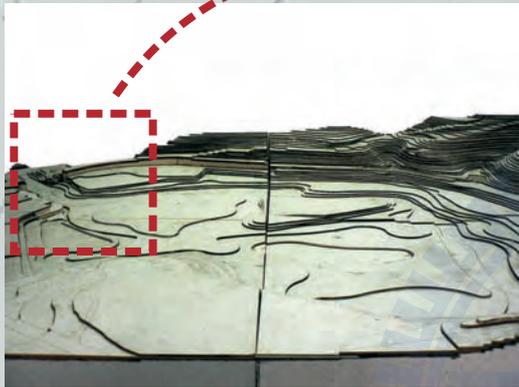


養蜂場



青草湖夜市





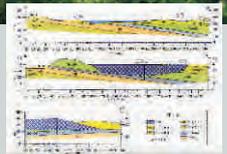
artificial
past

How tall was
the water before



topography
past

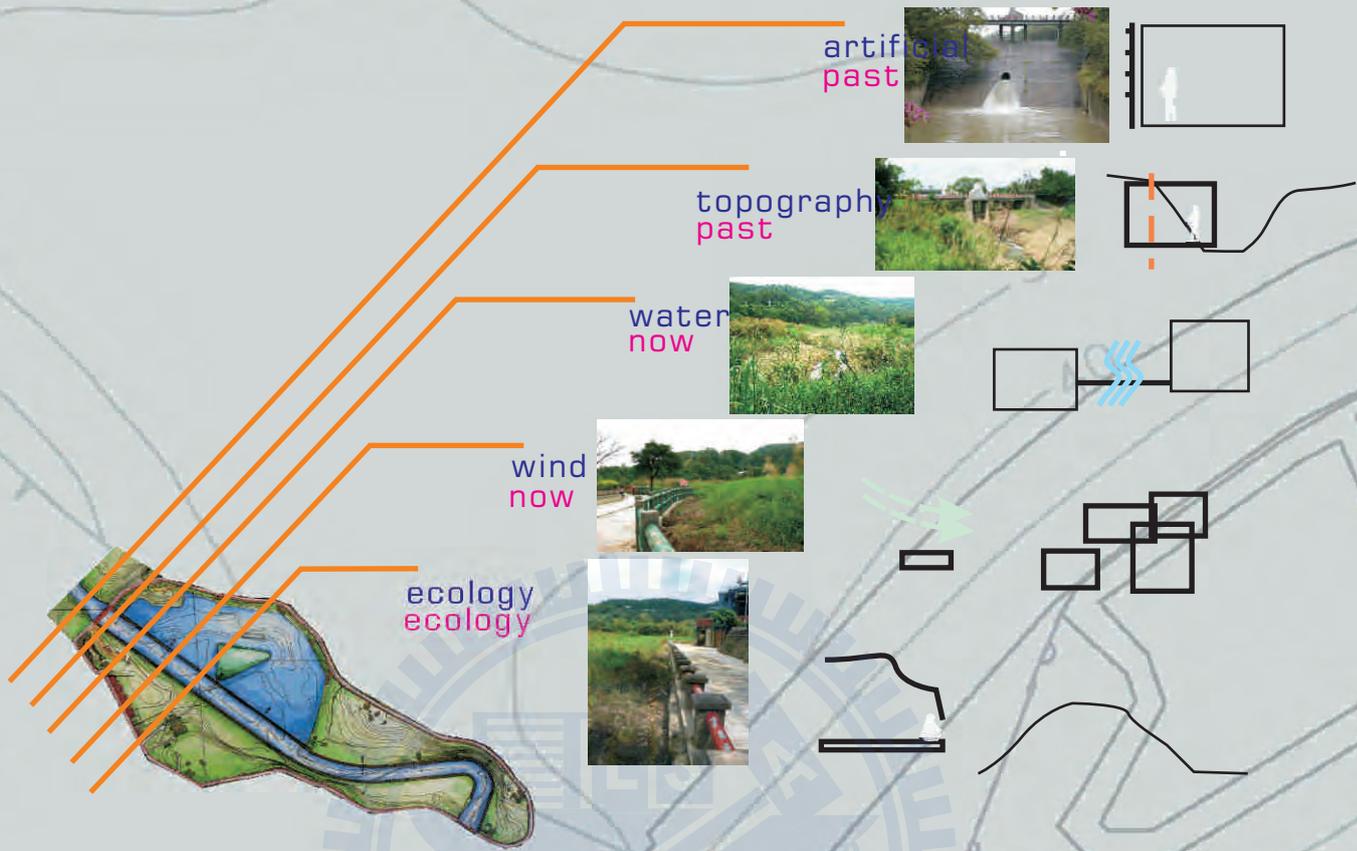
How did the ground changed



今夜燈光暗淡 難忘的鳳凰橋
像彼時冷寂寂 摧著既目屎滴
心愛的彼個人 因何放既做你去
啊..... 哀愁的橋頂罩著陰霧

月色朦朧又照著 難忘的鳳凰橋
陪伴既心空虛 徘徊著橋頸邊
來懷念彼當時 雙人情愛糖家甜
啊..... 哀愁的橋頂罩著陰霧

水流聲引心越 難忘的鳳凰橋
像替既來叫著 思戀的你名字
到底你到何特 才會返來既身邊
啊..... 哀愁的橋頂罩著陰霧



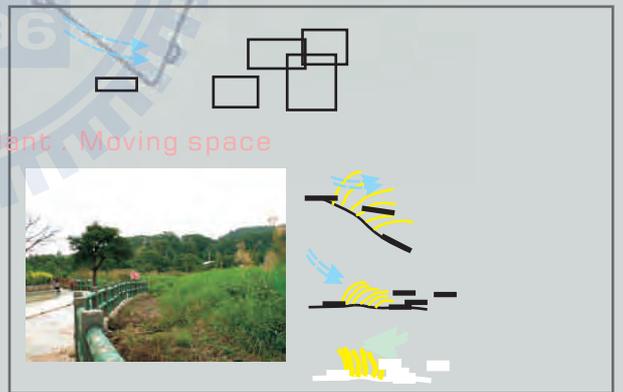
water
now

Short time . Huge difference



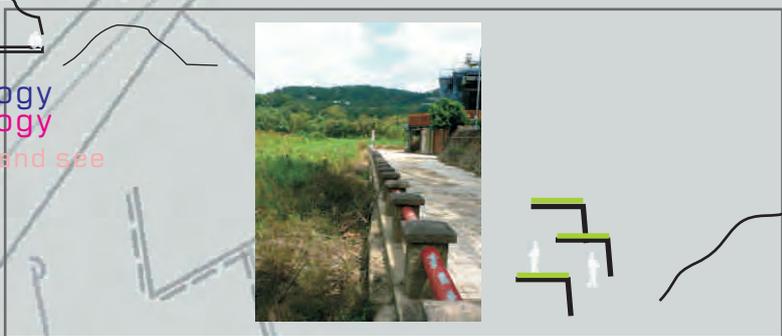
wind
now

Moving plant . Moving space



ecology
ecology

Hide and see



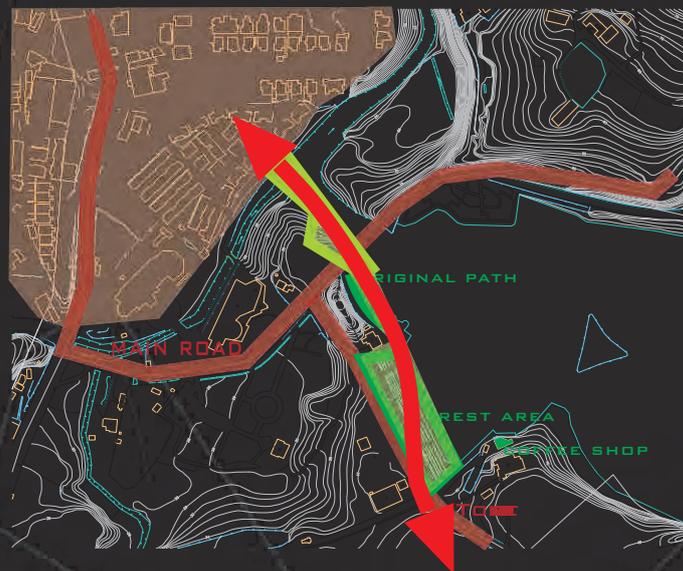
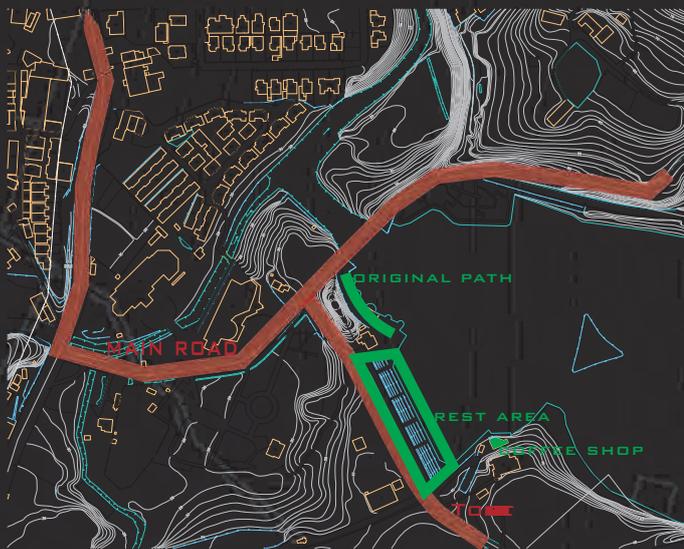
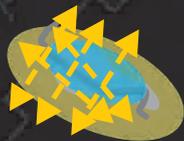
2R

2R

past

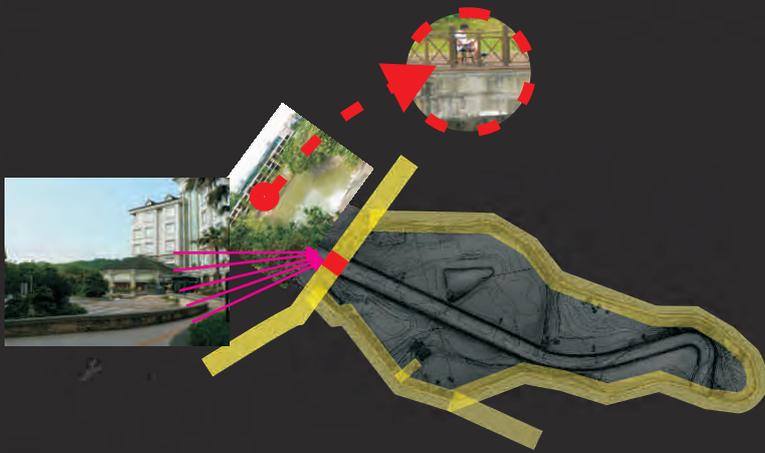
now

future?



5R

T

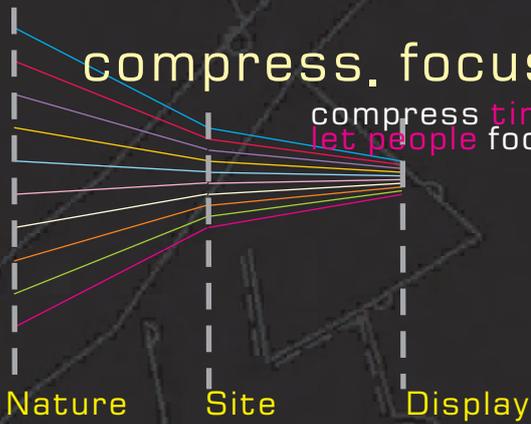


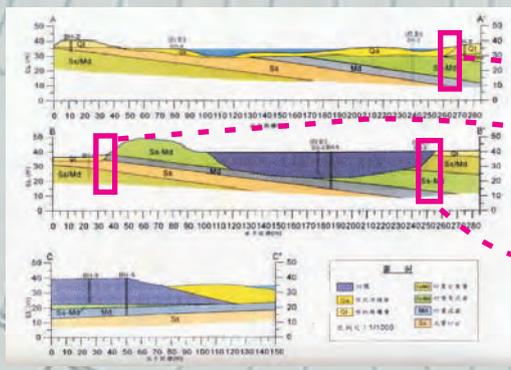
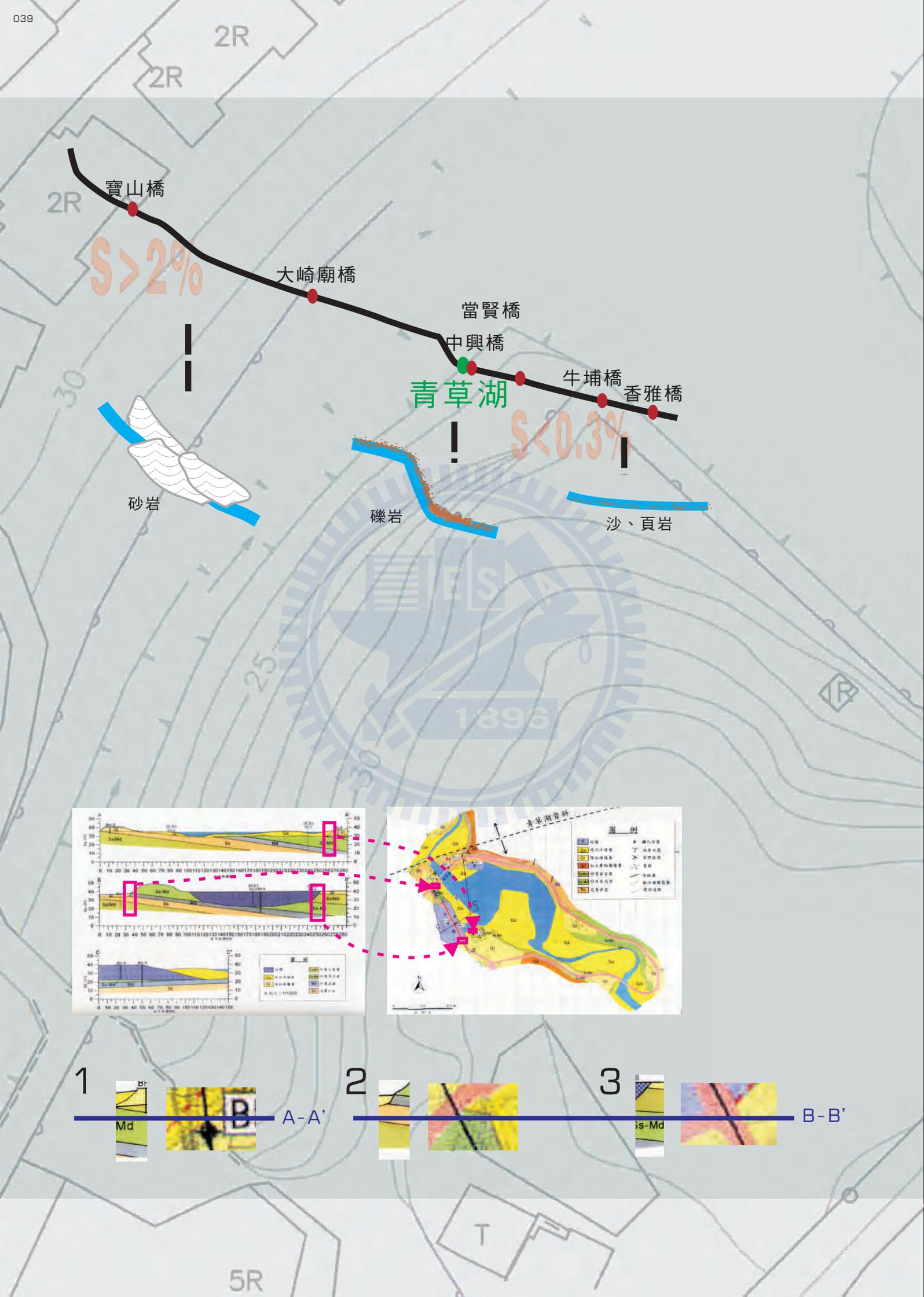
connect with the hotel



compress. focus

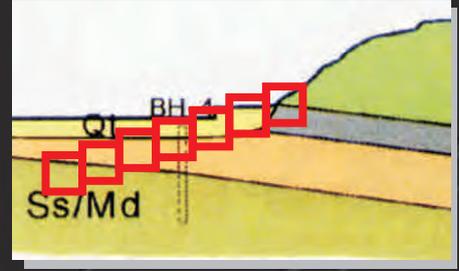
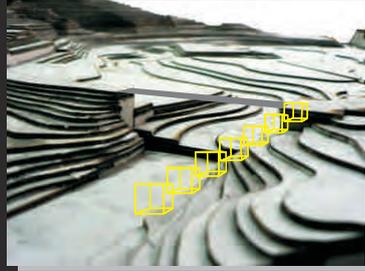
compress timeline from past to now into a line in the space
let people focus on how we changed the environment



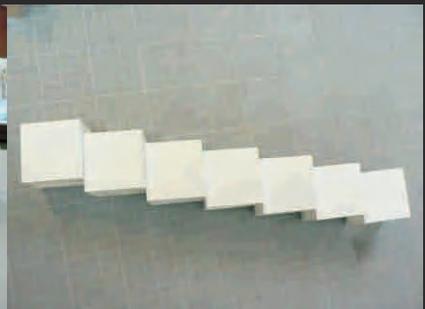


LAND

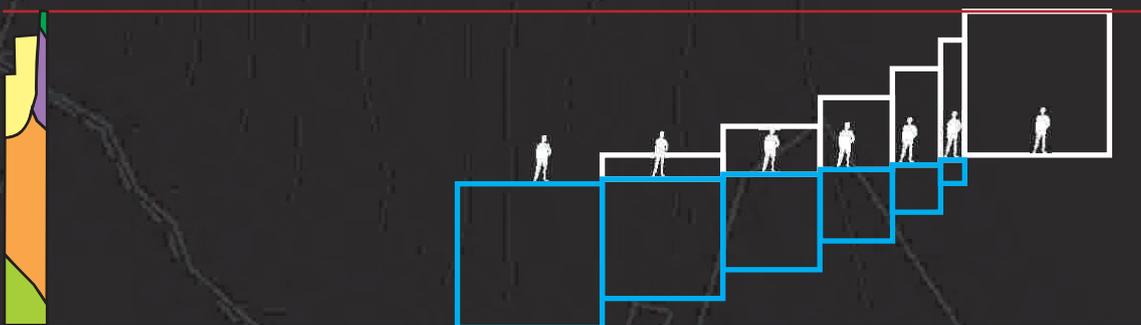
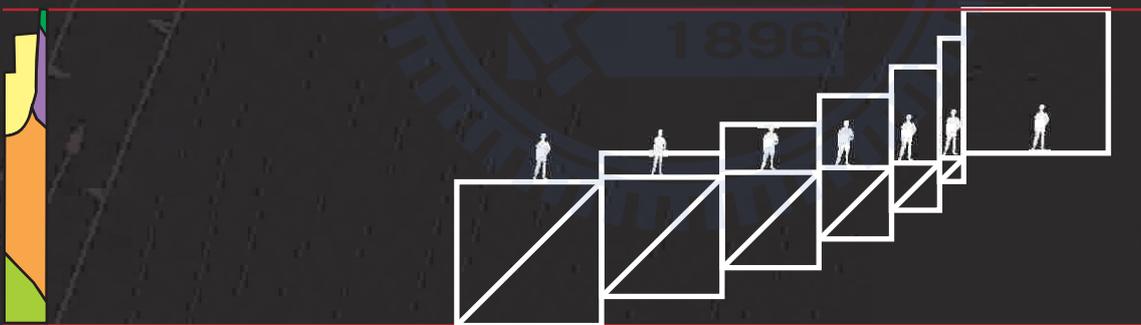
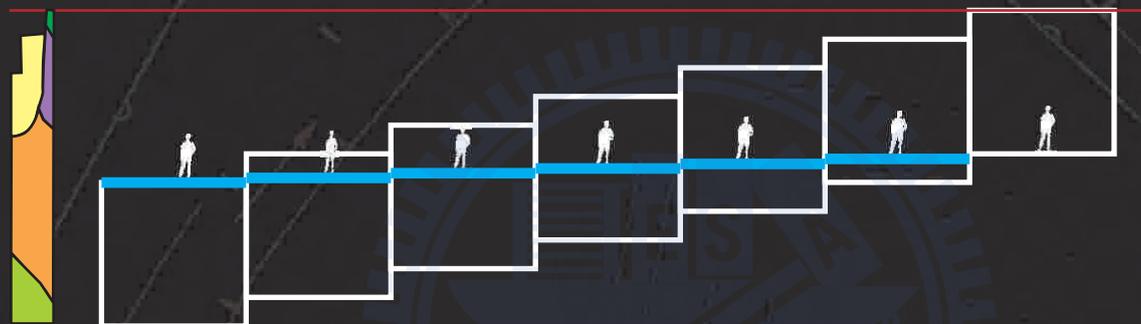
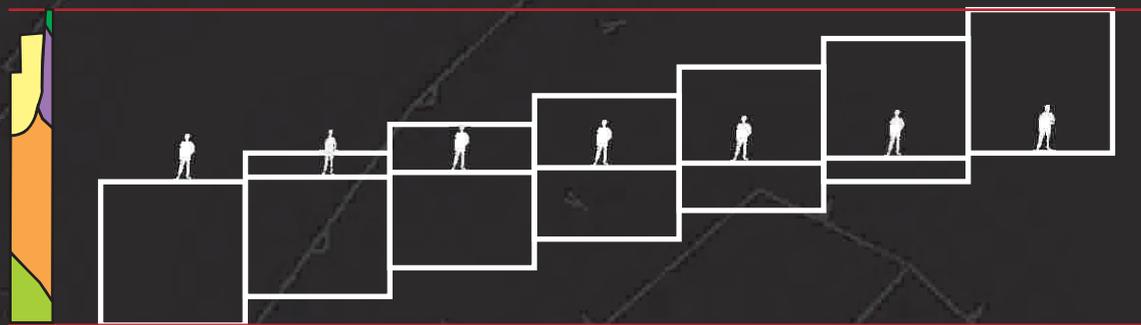
what is the trace talking about

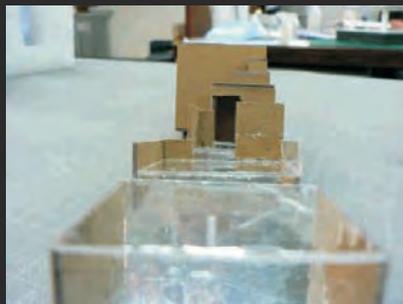
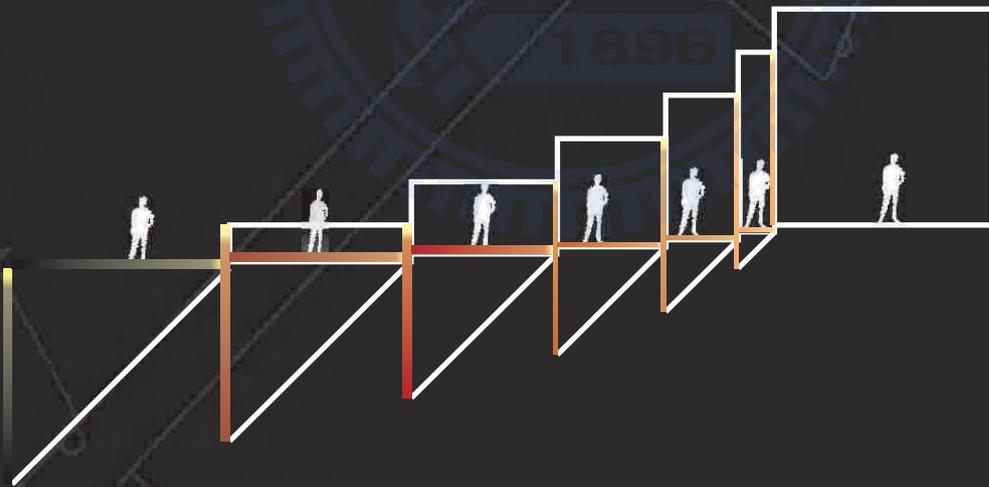


水庫前 水庫 淤積後

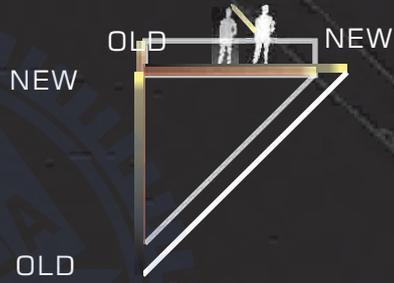
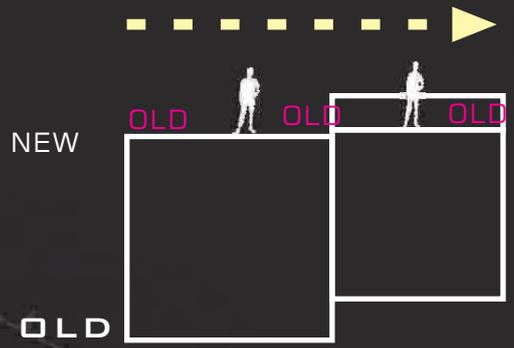
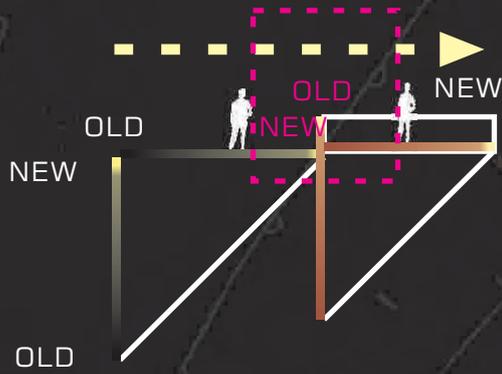


from outside to inside
from nature to artificial

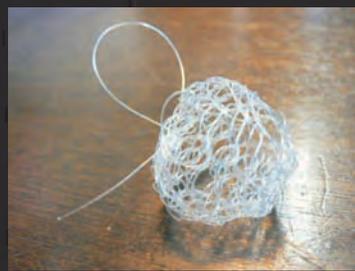
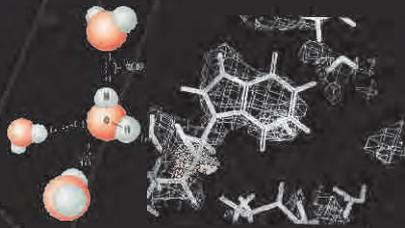


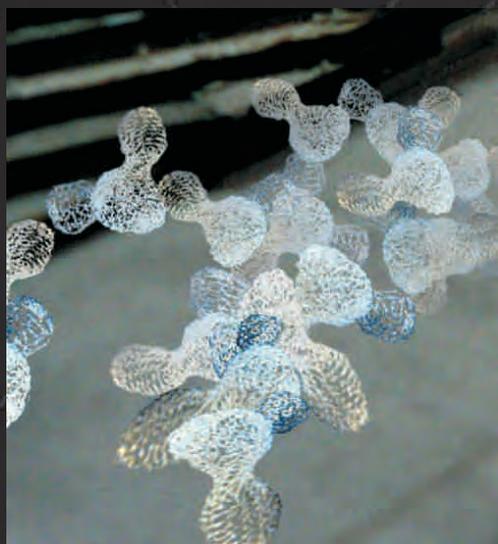
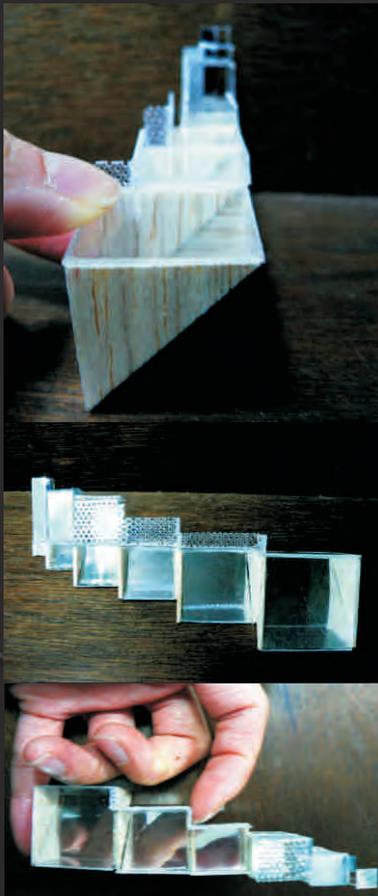


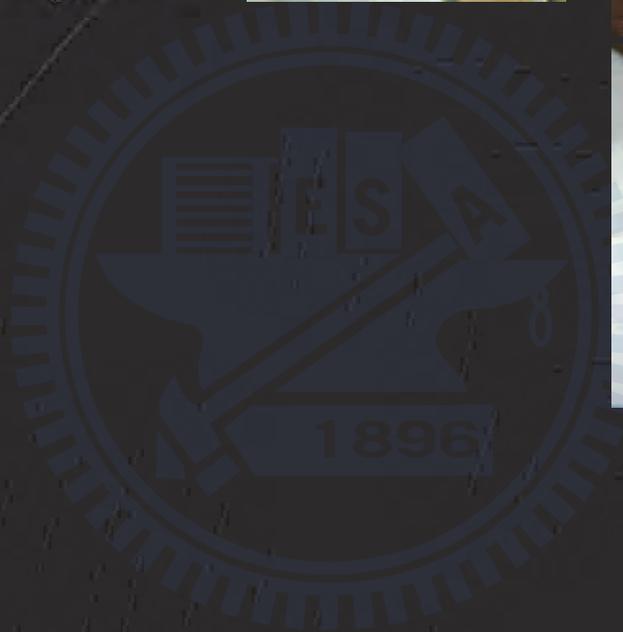
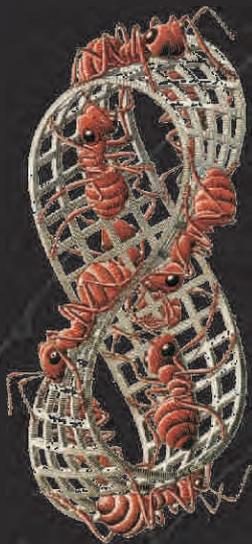
make it continuously

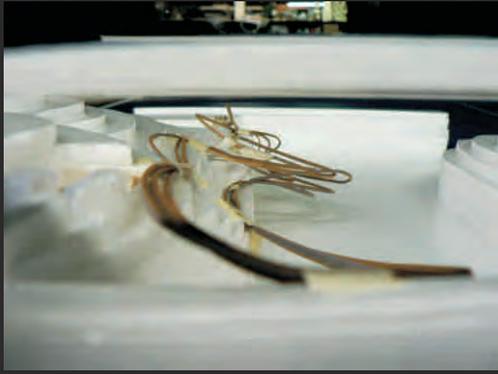
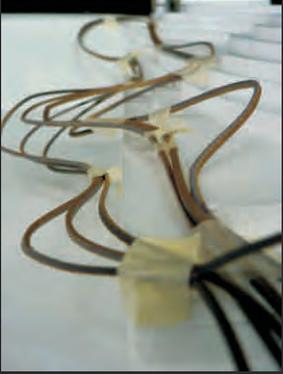


WATER









2R
2R



5R

T

1896

LL15A
39.012

PC

PC

5R

2R

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