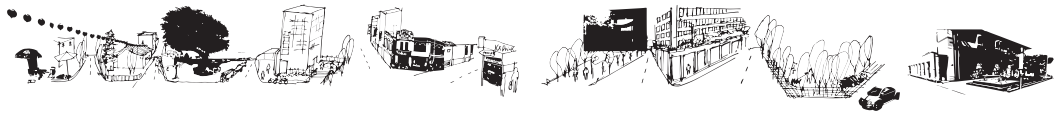
## A Taichung Game

# Beyond Urban Expansion - The Toy of the Taichung City Memory

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# Main Design Project

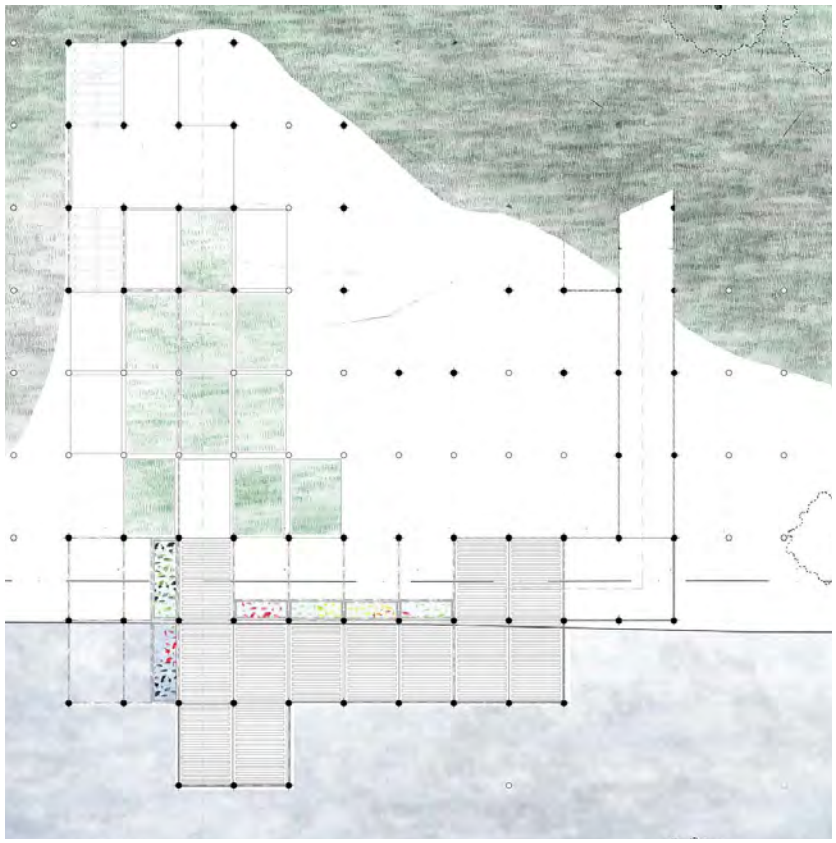
# THESIS DESIGN

## A taichung Game

## Beyond Urban Expansion - The Toy of the Taichung City Memory

TUTOR:PROF. Rohan Shivkumar/PROF. Simon Shu

# 01



在都市擴張之外_台中城市的記憶玩具

BEYOND URBAN EXPANSION - THE TOY OF THE TAICHUNG CITY MEMORY

空間是屬於誰的?對於各族群在都市裡重疊記憶紋理的再定義

WHO OWNS THE SPACE? REDEFINE THE OVERLAPPING MEMORIES OF DIFFERENT GROUPS.

# A Taichung Game

Cities are more than the collection of their streets and their buildings- whether they are the homes of the ordinary or the monuments of the very rich. They are more than the places where people live, play, work, earn and die. Cities are also stories, mythologies, and narratives. They are journeys, encounters, conflicts, and resolutions. They tell stories of the relationship between people and other people, between civilization and nature, between the real and the unreal, between the known and the unknown. All cities tell these stories through their spaces and people- through their patterns, textures, surfaces, and spaces. Architecture is bound in all of these. It tells the story of the city and often these stories bridge across time and space.

This semester we shall try and explore spatial themes through the act of story telling. In these stories we will try and span what might seem to be insurmountable differences. In them we might find what binds us together as people- in spite of our cultural peculiarities.

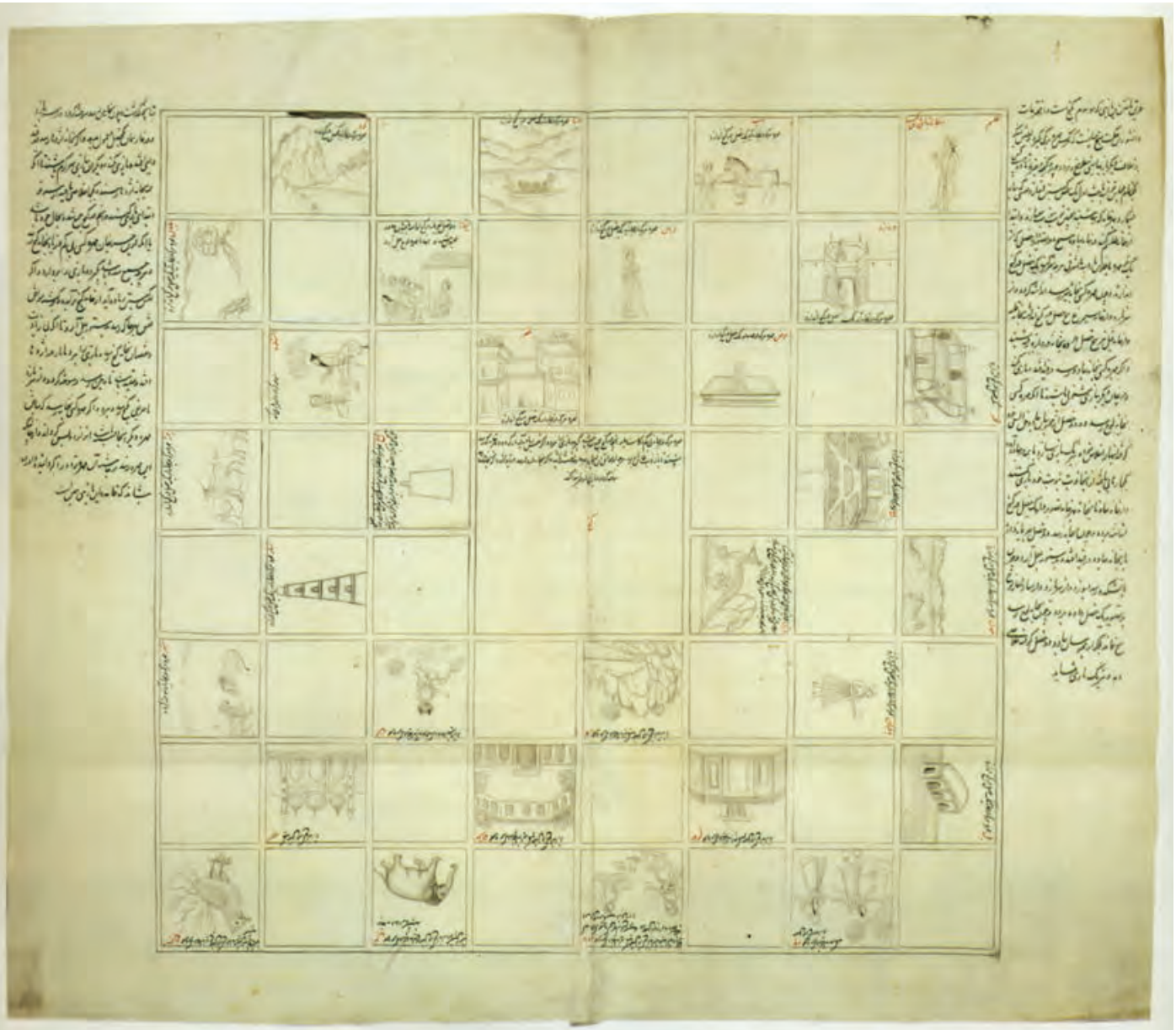
During the Mughal empire (1526 to 1757) in the North of India a game used to be played: 'Ganj'. This game, like so many others including modern day video games, was a tale of a journey of the encounters of a traveler. As the dice rolled the traveler went through many different landscapes, meeting strange people and animals- some real and many unreal. The traveler finds many strange objects on the way to the 'treasure' in the center. And this 'treasure' was the experiences he or she had gathered along the way. To each of the travelers who undertake the journey the treasure would be different; to each of them they would have in their minds their own version of the journey.

The eye of the traveler is one of a detached but interested person. A traveler in an unfamiliar land is aware of all the details around. Every single thing takes on multiple meanings. What we often see as ordinary becomes extraordinary in the eyes of someone traveling through. How often it is that we are able to find beauty of the unexpected in the everyday? What we take for granted can often take on a new light when seen through the distanced eye of a traveler.

In Italo Calvino's famous book about travel and the city 'Invisible Cities', Marco Polo tells Genghis Khan details of the various cities under his realm. Each of these cities is fantastic in its own way- some are mirrors, some lenses, some perpetually rising- the list is long and fascinating. Gradually we get to realize that all these cities could be any city- or it could be the very city that we are in.

By playing the game of Ganj in the city we are hoping uncover new cities within Taichung. The project explores a notion of a journey as a way of gaining knowledge about the city. It attempts to uncover the stories and landscapes of the city we have often forgotten or taken for granted.

The game board attached is played anti-clockwise from the top right to the center. With every roll of the dice you move forward towards the middle collecting ideas from the board and Taichung for your interpretation and the city you will build.



The five elements of the game: Tiger/Moat/Bridge/Sauna/Garden

# TIGER

The feline family is a starting point for the discussion, members of the family: Tiger / Leopard / Cats, each of them have different tones and characters.
Tiger – the typical case of Taichung urban sprawl – seventh district. The investors and the government, in order to pursue personal benefits and to create new economic value, ignored the base of the original culture. The principle is the pursuit of money. The group represents "NEW".
Leopard – the group of middle class trying to survive in tight corners of the city. The group represents "IN BETWEEN".
Cats –the group of young people focused on pursuing themselves more (the attitude of LOHAS). Like the galleries and cafes in Taichung city, they are the typical cases of the old house renovation. The group represents "OLD".

家為核心。
Family is the core concept.

關於族群:
About the groups:

Through the spaces (sites)
New--->7th district
In Between--->Huì zh ō ng Road
Old-->Nantun

Through the generations (people)
New -->Old
12 years old/25 years old/50 years old/75 years old

# MOAT

---->族群記憶的斷層與隔閡1.時代性的2.地域性的

The memories of different groups lack connections. The Gap becomes larger and larger through the rapid development of the city.

1. the generations (people)

12 years old/25 years old/50 years old/75 years old

2. the spaces (sites)

7th District-Nantun

"My family moved to the 7 district when I was three years old. I go to the local elementary school and I also go to the cram school every day, my parents force me even though I don't like it ! All the houses and the shops in this district are very new ! I like to go with my parents to restaurants near our house !

0 12 YEARS OLD

"I just graduated from college in Taipei, and moved back to our family house in the 7 district that my dad bought 10 years ago. On weekends, I enjoy going to the shopping mall and having afternoon tea in the department store. I also enjoy shopping and hanging out with friends in the area's parks and coffeeshops. I did not know much about this area 10 years ago, but I quite enjoy the city life here. It is not so different from my favourite commercial area in Taipei, it is such a happening place !"

0 25 YEARS OLD

"I have already lived in this disrict for 40 years ; my family moved to what is today known as the 7 district when I was a kid. Back then, there was nothing in the area. It was very different to what it is today. When I had to take the bus to the train station to meet my girlfriend, there was only one bus per hour. The land back then was very cheap. My family owned a few parcels of land that we finally sold recently as the property development agency offered a lot for it ; they even proposed us to give us an apartment once the construction will be completed."

0 50 YEARS OLD

"Before moving to the 7 district, I was living in Nantun as a farmer. Back when I was younger, the land in 7 district was very affordable, so I bought a few parcels, that I sold back to a property development company a few years later. At that time, I was still living in Nantun as the new 7 district development just started. However, a few years later, the area became very popular and my son moved there. He convinced me to move there as well. The area is very happening, there are many things going on, but I am nostalgic of the past ; the true spirit of that area has disappeared."

0 75 YEARS OLD

# FAMILY PEOPLE/NAN TUN/OLD

"I like to buy some traditional desserts after school finishes, and then wait for my parents to pick me up in the plaza or the temple. I will sometimes go to the temple with my grandfather to watch traditional Chinese dramas."

0 12 YEARS OLD

"I live in Nantun but work in the city centre. I usually eat outside Nantun as the choice of nice restaurants in that district is limited. I rather go eat near my office as there are many nice restaurants as well as many cool and trendy cafes where I can hang out with my friends. However, a coffeeshop renewed from an old historical building just opened in the Nantun old street. I now often go there; the atmosphere is really nice, and it is also more convenient for me as it is closer to where I live."

0 25 YEARS OLD

"I am the owner of a store selling rice in the Nantun district. There used to be many farms around the area. In my free time, I enjoy walking to the farm and the river with my family. The town has changed a lot from when I was young. It was back then more populated and vibrant. I sent my kids to school in another area as there are no more good schools in Nantun."

0 50 YEARS OLD

"I have lived in Nantun since I was born. However, all my family members have already moved to the 7 district or to other areas. My family tries to convince me to move out of Nantun, but I don't want to move out, as this area has been forever my home. Leaving it would make me heartbroken. Like my family, many people, especially youngsters, have already moved out, as they don't find the area very happening. I like to go to the temple, the plaza, the market, and to chat with my neighbours and my friends. Just like me, they do not want to move out."

0 75 YEARS OLD

# FAMILY PEOPLE/OUTSIDER/IN BETWEEN

0

12 YEARS OLD

"Mom will take us to the temple in Nantun and to the department store in 7 district after school. Sometimes we go to the park to do some exercise or watch some concert."

0

25 YEARS OLD

"I am a photographer, I live in ..... area. I usually came here to buy some flowers for my girlfriend at the old flower market, but it suddenly disappeared ! Apparently an IKEA will open. Sometimes I go to the shopping mall around the 7 district with my girlfriend, she will force me to accompany her...

0

"I am working in the new government building that just opened in the 7 district. I commute every day from..... by car. I know that the 7 district is a newly developed area, but I don't really know what it was like before. I considered moving here as it would be more convenient to live closer to my workplace, but the property prices are too expensive for me. After work and before coming back home, I enjoy going to the Nantun old street to eat dinner at a famous traditional noodle restaurant and to buy the desserts I liked since I was a teenager."

50 YEARS OLD

0

"I now live in ..... area, but I still want to go back to Nantun sometimes. I usually go to the temple to pray to the gods so that good luck comes to our family. There are many old shops that I used to go to ; I ask my daughter to buy the food there from the traditional market."

75 YEARS OLD

# BRIDGE

---->記憶的理解以及延續。
The connection and the realization of the memories in different groups

John Locke:
人類理解論
人所經歷過的感覺和空間經驗才是形塑思想的主要來源。
每個人對於外在認知的來源重點，是由記憶而來。
The Lockean Memory Theory of Personal Identity: Definition, Objection, Response

A person is a thinking, conscious being at a moment in time. To be the same person over time is to extend one's consciousness over time, such that one is conscious of past experiences much as one is conscious of present experiences. Personal identity is thus distinct from either the identity of an animal body or the identity of any substance, whether material or immaterial. This is what Locke most wanted to show: the independence of personal identity from the identity of substances.

The feeling and the space experiences of the people are the main sources of the ideas of the people.

Maurice Halbwachs:
Les Cadres sociaux de la mémoire (1925):
Halbwachs was the first to argue that individual memory develops in interaction with that of social networks and the larger community. As the product of social change, moreover, memory was itself a process, an ever changing representation of the past.
Halbwachs是第一個主張個人記憶發展讓社會網絡有更大的社區互動。記憶作為社會變革的產物，而且記憶本身就是一個過程，不斷地表示過去的變化。

# SAUNA

---->傳播的媒介-城市蒸氣浴，透過固定的空間模矩量體內置不同活動，讓人們形塑不同記憶。

SAUNA源自芬蘭，原意是指“無窗戶的木屋”。有一人使用與多人使用的模矩，透過環境的冷熱收縮，交互刺激達到保健功效。此活動在家庭生活當中是不可或缺的一部分。

Communication media – It is the sauna of the city. The various activities happen in fixed modules; they let the people inspire different memories.

“Sauna” is from Finland, originally meant ''the wooden house without the windows”. The modules are used for one person to multi-users. It is one of the core activities for a family.

# GARDEN

------>分散的破碎記憶片段，不同族群擁有各自的花園。不連續而片段的敘事手法。
解構⊠重複⊠散置⊠建構

Scattered memory fragments, different groups have their own gardens. The stories are made by a discontinuing narrative technique.

deconstruct/repeat/intersperse/construct

The movie <Memento>記憶碎片
結構方式：重複式和不連續。重複式:每一個情節的出現，都會在之後幾分鐘內的畫面中重複出現，並試圖解釋前面故事發生的原因；不連續，每個被插入的段落，在臨近的片段中得不到相應的回復出現，會在之後或者影片最後出現，讓觀眾覺得到最後才能豁然開朗。

The movie <Memento>
The structure of the movie is repetitive and discontinuous. REPEAT: Each episode appears within a few minutes and tries to explain the reason of the previous stories; DISCONTINUITIES: each inserted paragraph will appear at the end of the film or after, let the audiences feel the clear story after watching the complete film.

## ARGUMENT 反思

空間是屬於誰的?台中市族群記憶是有斷層與隔閡的，分為時代性的與地域性的。

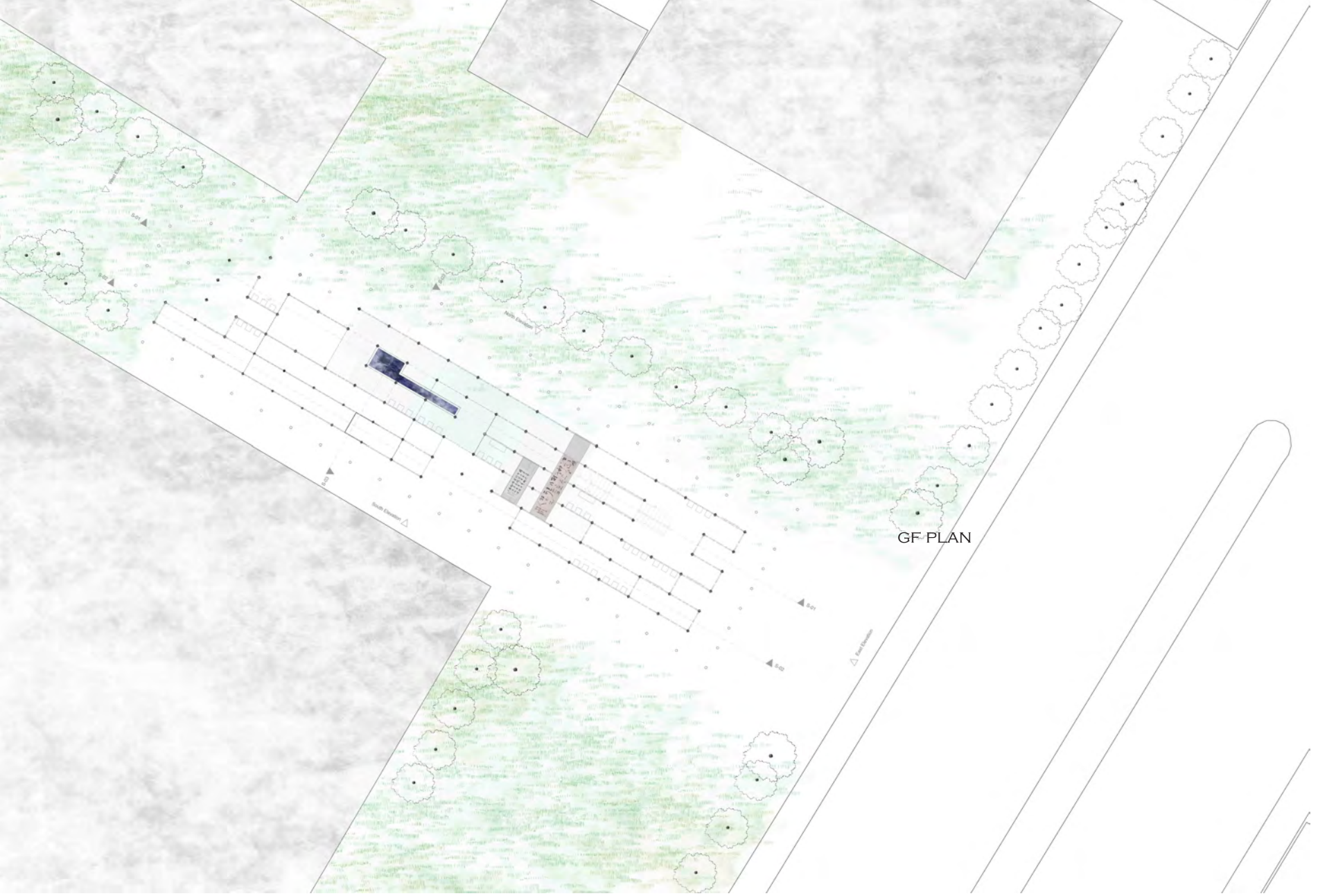
Who owns the space? The memories of different groups lack connections. The Gap becomes larger and larger through the rapid development of the city.

1. the generations (people)
12 years old/25 years old/50 years old/75 years old
2. the spaces (sites)
7th District-Nantun

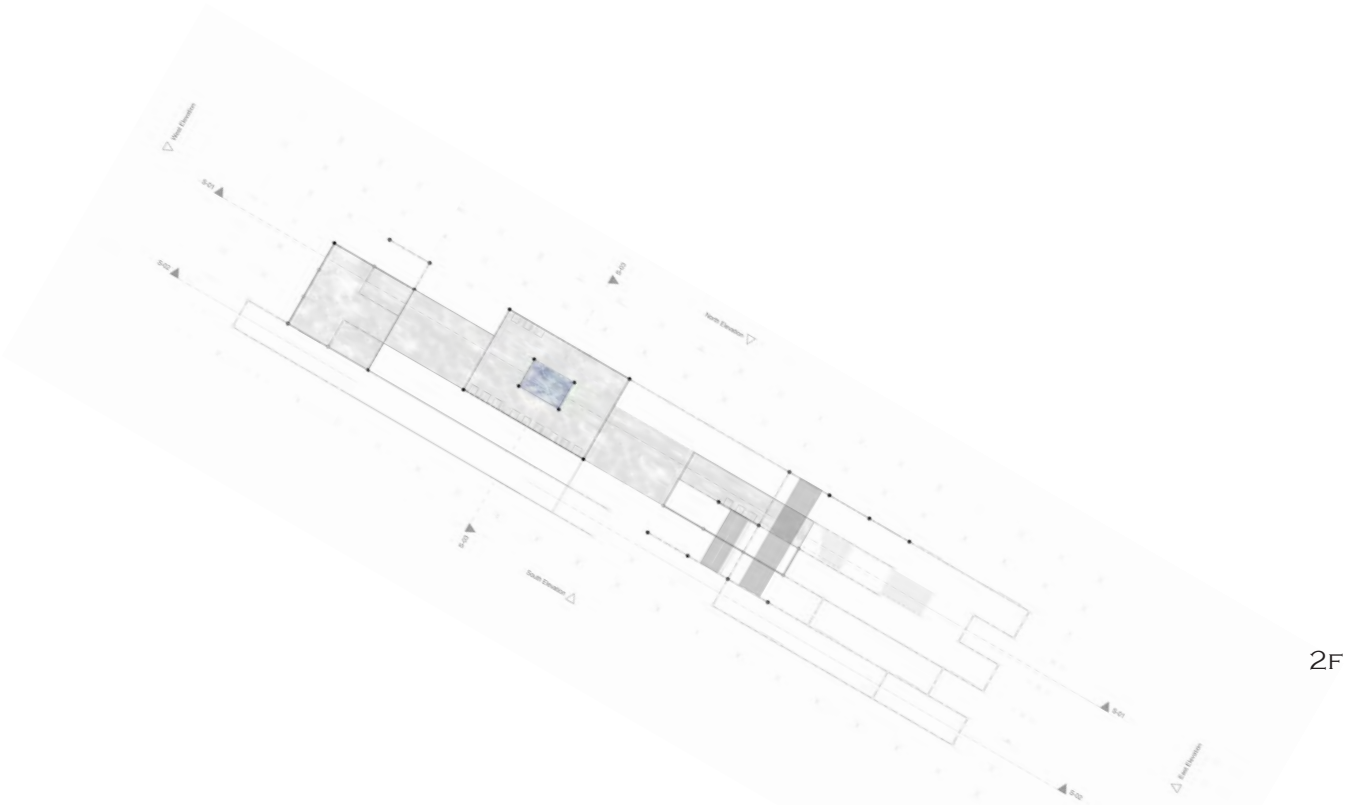
## STATEMENT 立場

家為核心。
Family is the core concept.

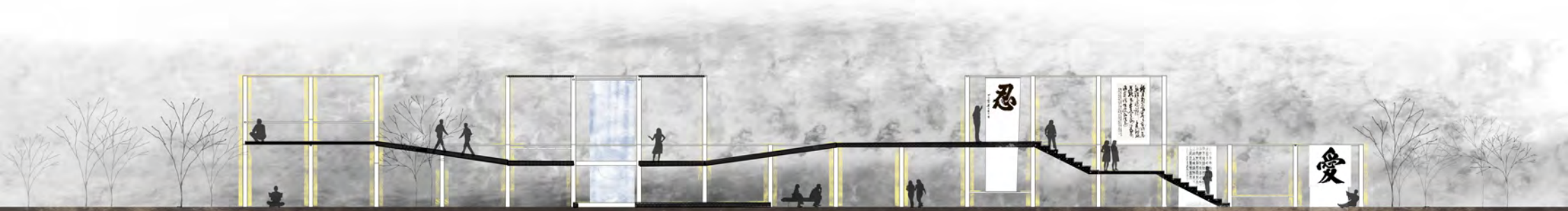
記憶是可以被理解與延續，藉由不同族群(12/25/50/75/Nantun/Outsiders/7th district)的記憶經驗以及其所創造出的空間意象與活動，重新建構台中人的家鄉印象與價值。
The connection and the realization of the memories in different groups (12/25/50/75/Nantun/Outsiders/7th district)construct the Taichung people's value and the image of their hometown through the different stories of the 4 generations from the 3 areas.




Site A_Calligraphy market/Calligraphy tutorial/the waiting place of the bus station@TC City Hall
Age: 12/~~25/50~~/75



2F PLAN

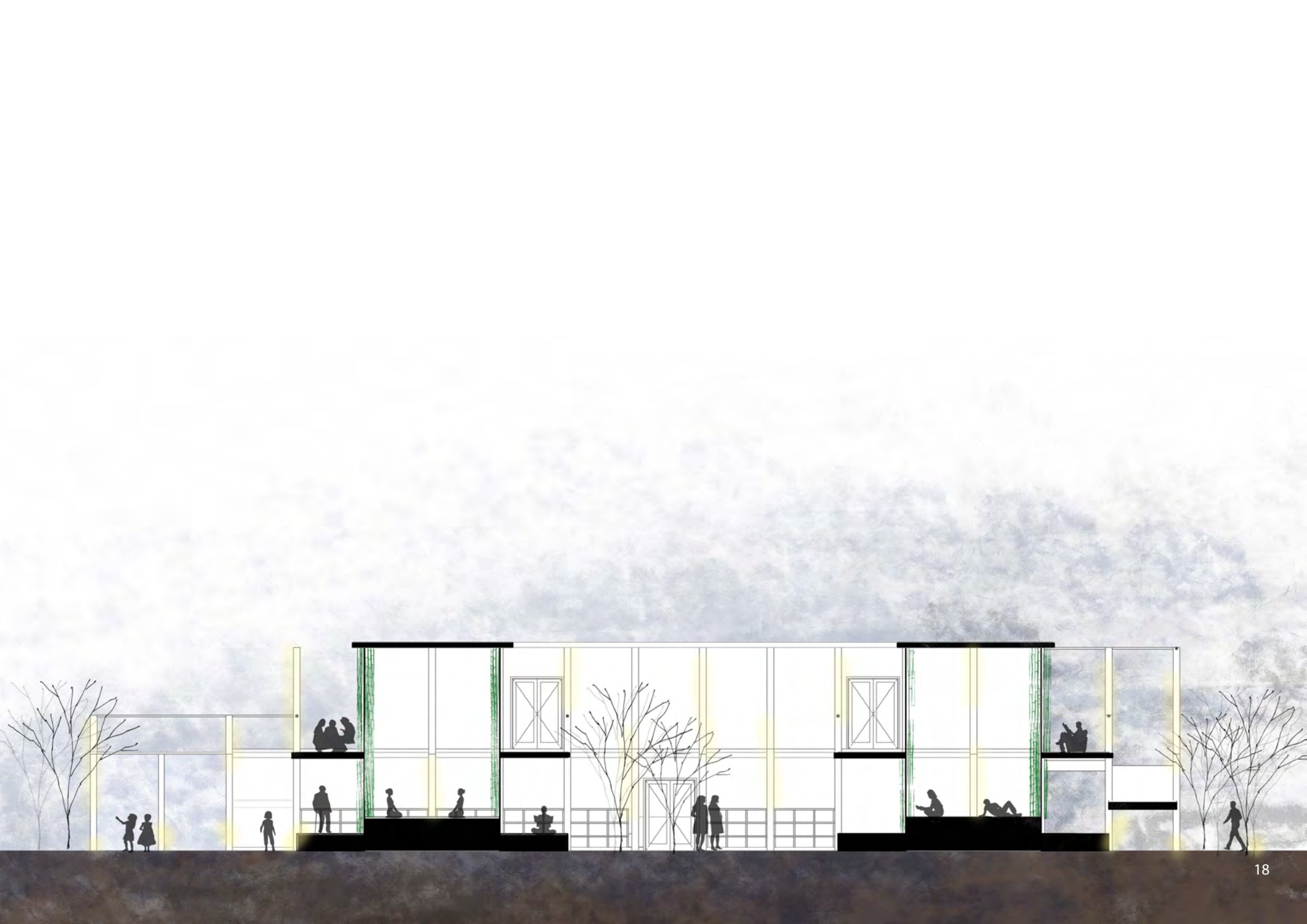


GF PLAN



2F PLAN

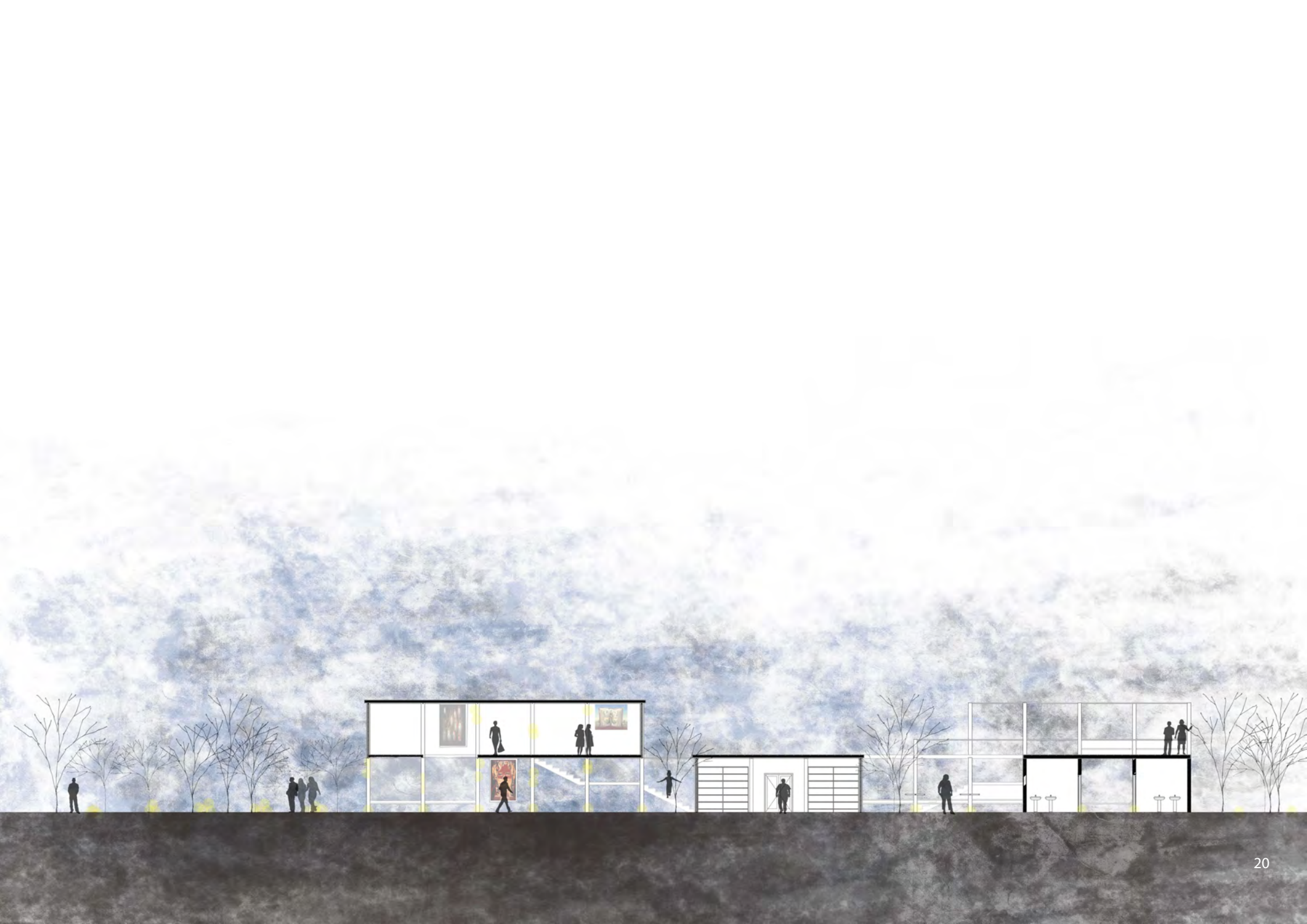
SITE B_BICYCLE PARKING STATION/AFTERNOON TEA(TRENDY ONE)/TEA TUTORIAL (TRADITIONAL ONE)/PICNIC PLACE@NEW GREEN BELT
AGE: 12/25/50/~~75~~

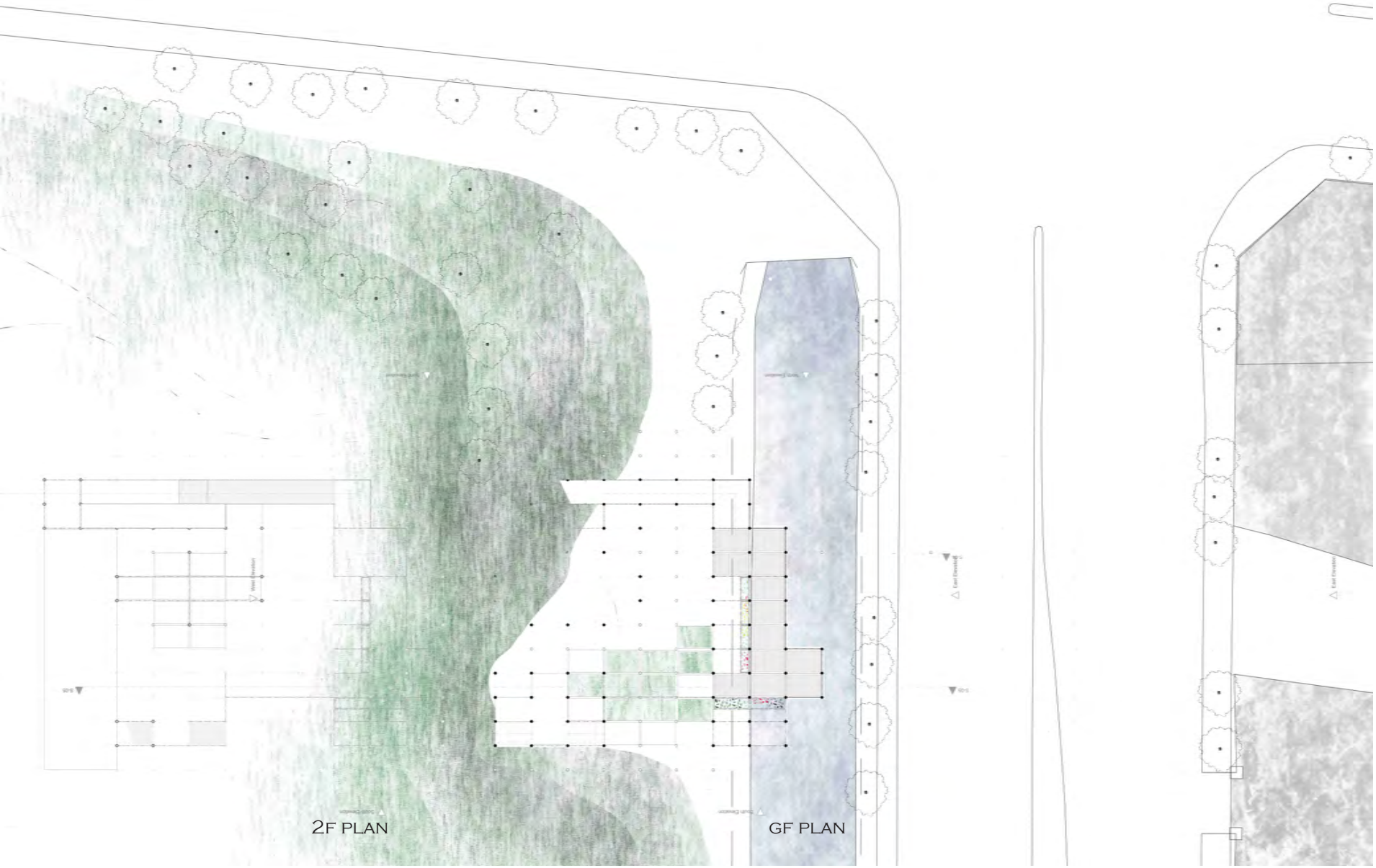


Site C_Library/Exchange dairy/Student's Gallery/Art Café@ School

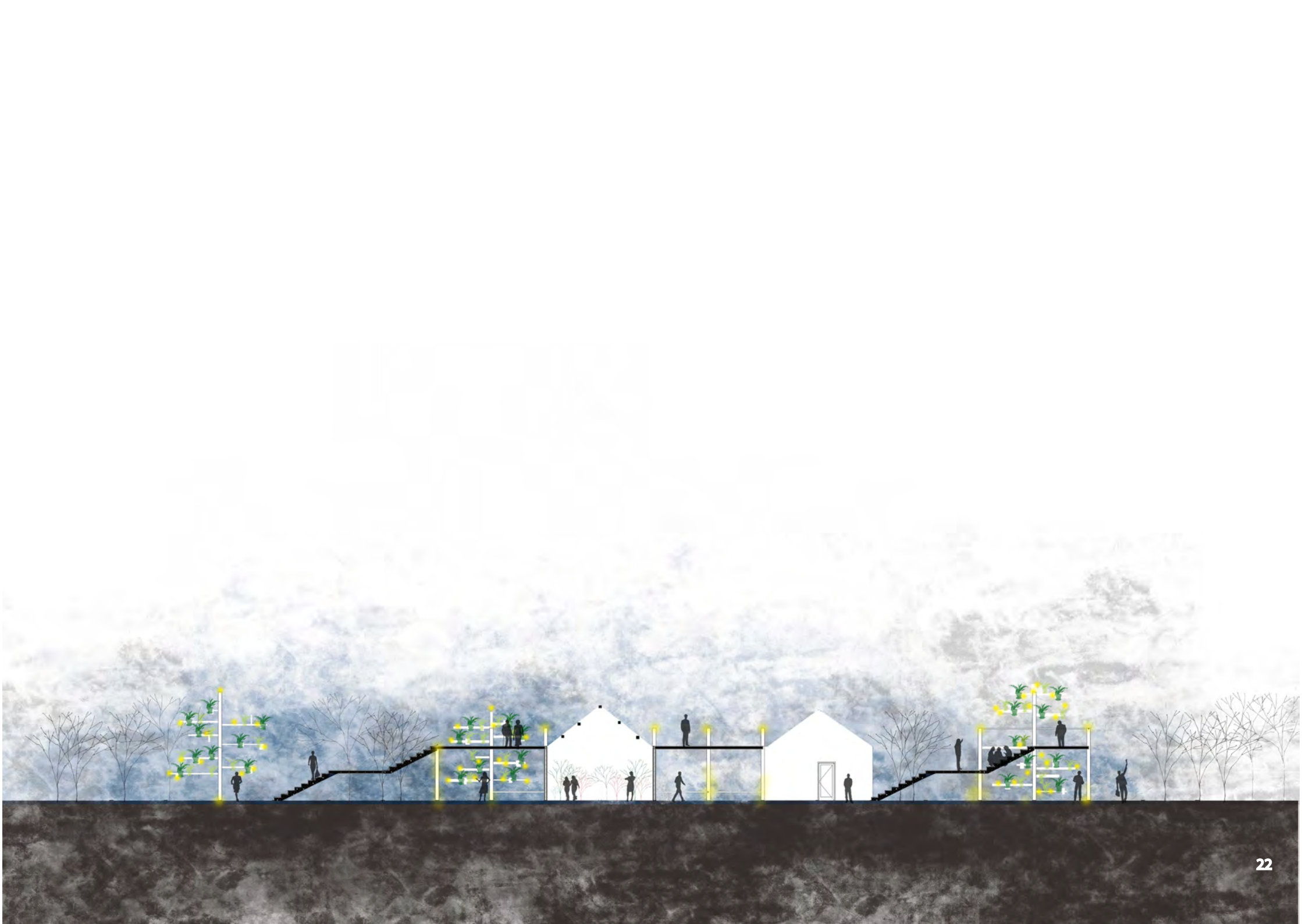


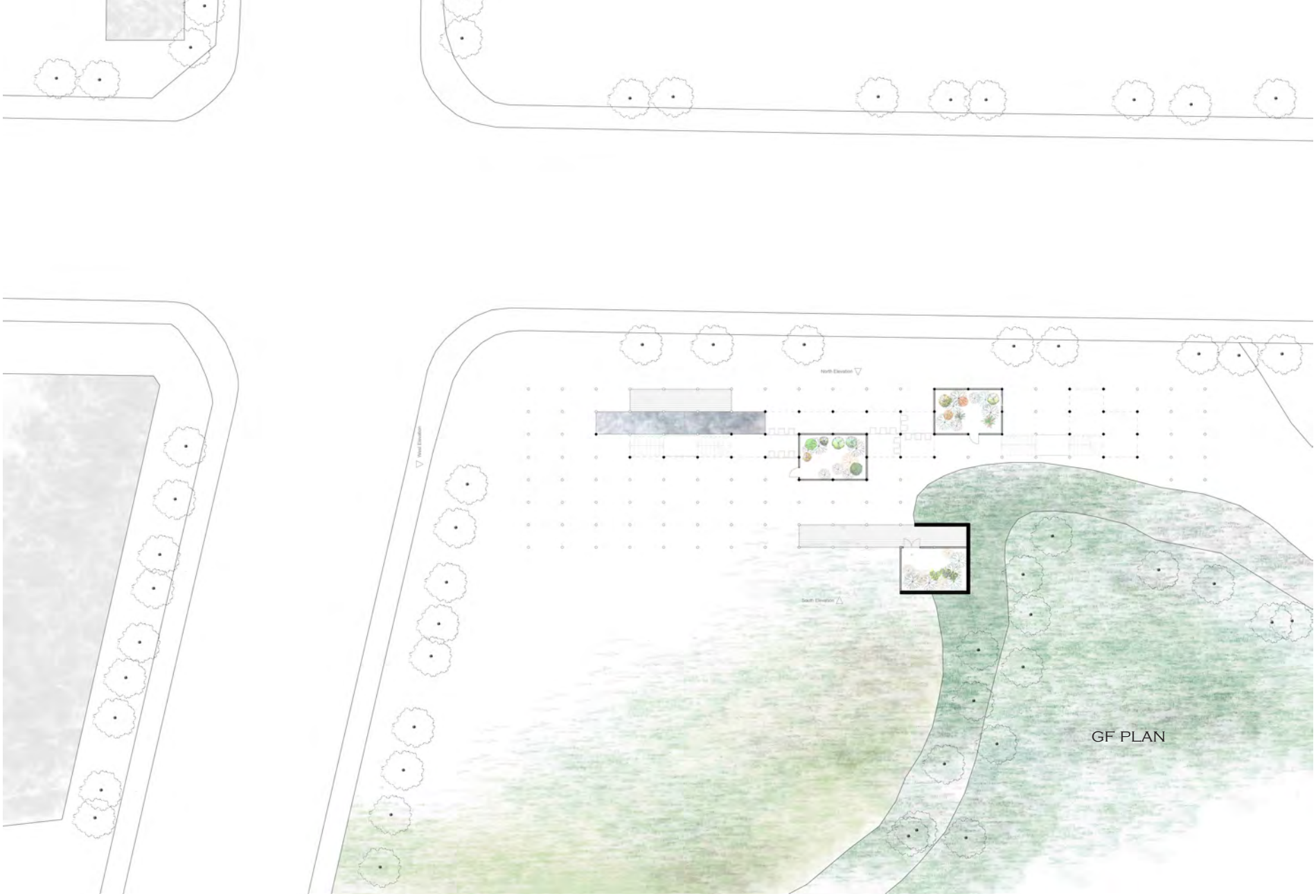
Age:~~12~~/~~25~~/50/~~75~~



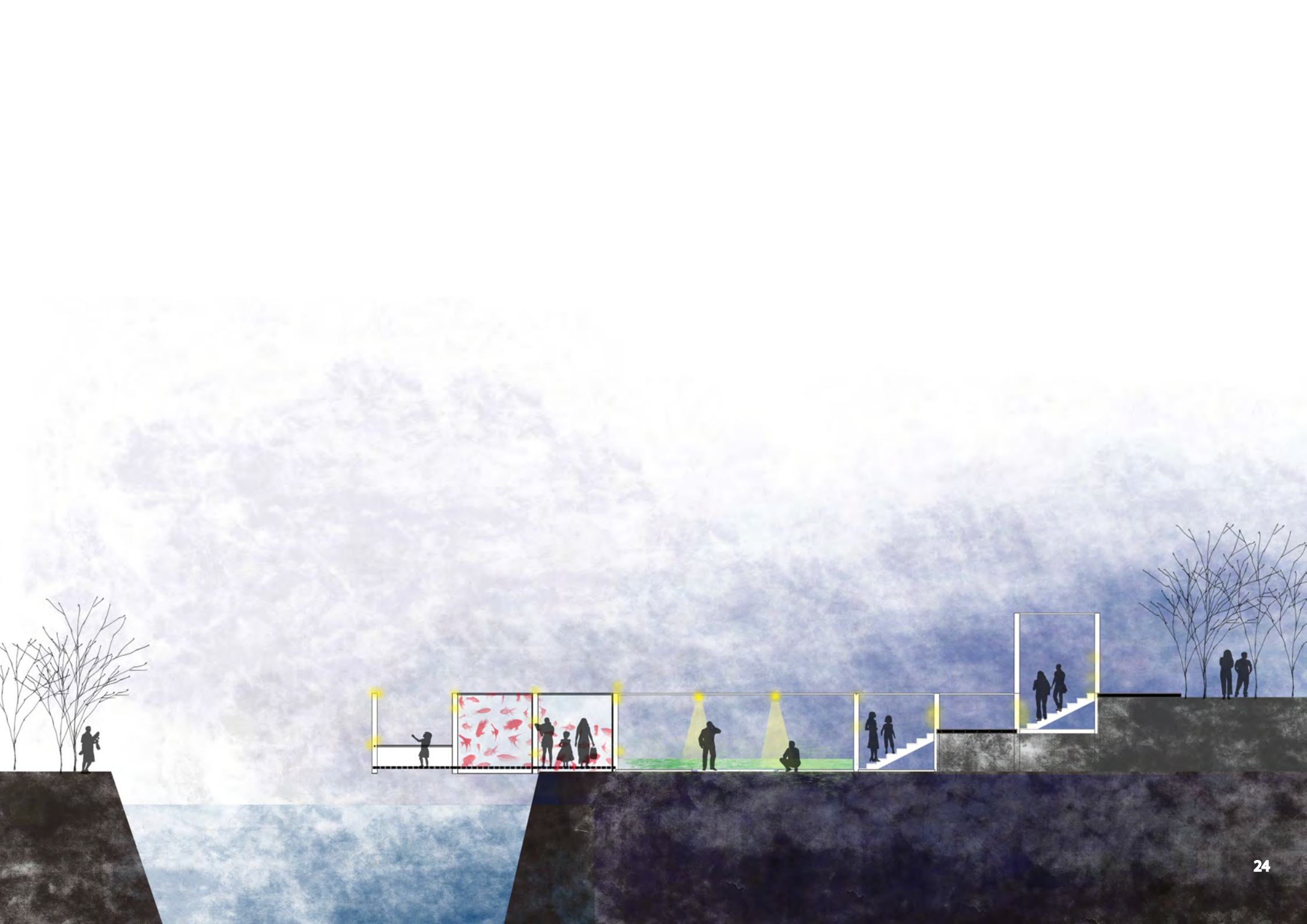



SITE D_FLOWER MARKET/PLANTING/FARMING@THE PARK NEAR THE OLD FLOWER MARKET
AGE:~~12~~/~~25~~/50/~~75~~





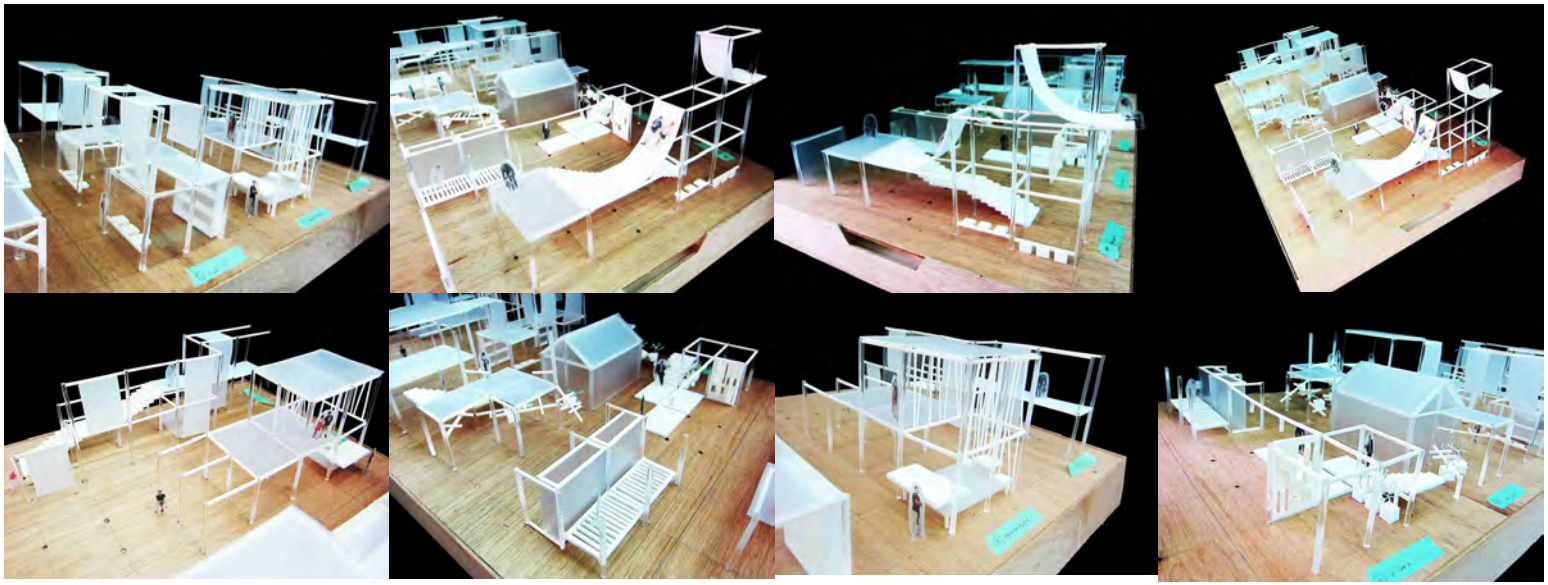

Site E_Fishing/Farming/Fountain/Playground@ The river
Age:~~12~~/25/50/~~75~~



Site F_Plaza/Performance/Stage/Star Gazing@ The temple
Age:~~12/25/50/75~~

透過固定的空間模矩量體內置不同活動，讓人們形塑不同記憶，自己的故事，別人的故事，大家的故事。
一個或數個模矩乘載一段或數段記憶，藉由散置的型態，讓人群在游走於都市間隙時，重新建構過去與現在，連結年輕的世代與成熟的世代，消弭記憶、地域與時空的斷層。

Filling the different activities in several fixed modules, through the space, people start to create their memory from their own stories, others' stories, and the stories belonging to everyone.
One or a few modules contain one or several memories. With the pattern of scattered type, people roam around the gaps of the city and reconstruct the past and present. Connect the young generations and the old generations; diminish the gap of the memories, the areas and time.



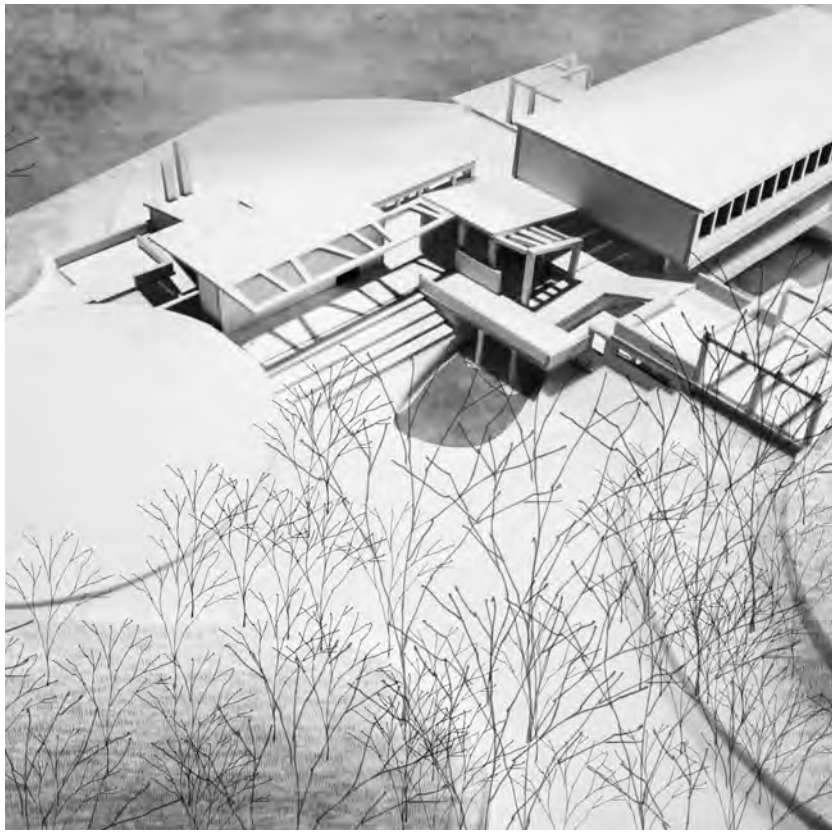
# Supplementary Design Projects

# Singapore project

## NATIONAL UNIVERSITY OF SINGAPORE EXCHANGE PROGRAM

TUTOR:PROF. CHEAH KOK MING

# 02



"We shape our buildings;therefore,they shape us"

Winston Churchill

"In fact,building and landscape reflect a hidden curriculum that powerfully influences the learning process"

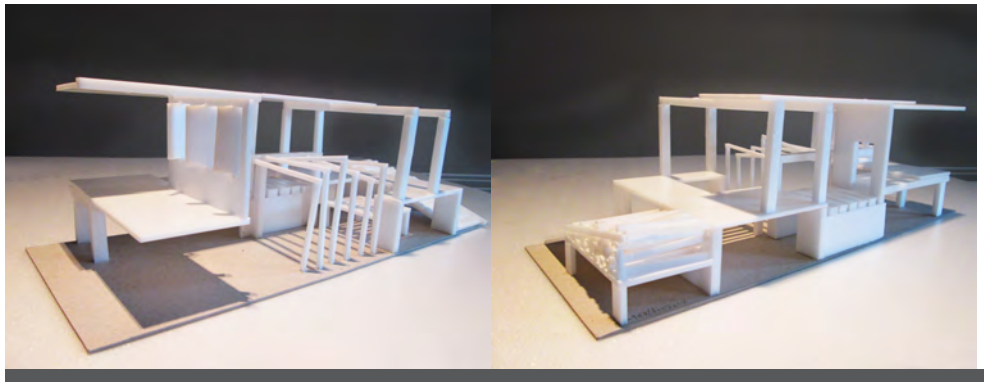
David Orr

# INTERGRATED LANDSCAPE
# X EATING PART
# X EDUCATION

A detail is beyond a mere joint design or an instrumental process in getting something constructed. Details are intimate and specific aspects of a building. They help to shape our experience of the architecture and mediate our engagement with the larger design. A detail can be as small as a door handle. A detail can be large to be an interfacing space between outside and inside. Good and relevant details enrich the overall architecture experiences, in which the whole is greater than the sum of its parts.

SINGAPORE

CONEY ISLAND

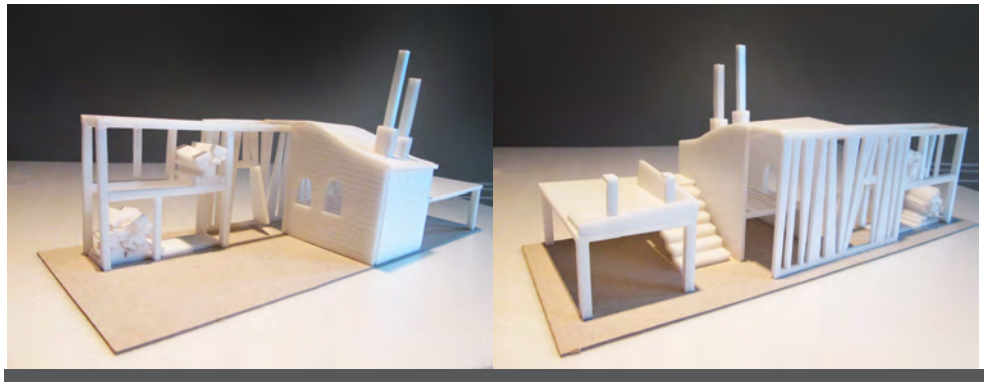


A

## The Special Kitchen 1_Fishing/Near the water

After doing the water activities(kayak....etc), the students follow the routines and the consequences. Cooking their own food step by step.

Landings / fishing / drying fish / bidet / cooking



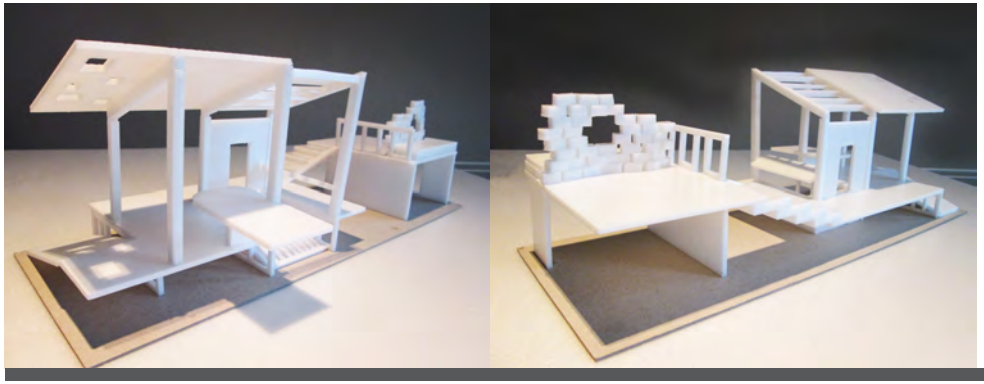
B

## The Special Kitchen 2_Grilling/Near the forest

Firewood / collection / barbecue / stove

“Building design ordinarily begins with the development of a concept. On this basis, the building's overall figure takes form, and as a natural extension of this labor, the designer progressively moves toward the finer aspects of the design. At the end of this process await the details. In my own approach to design, however, a detail may come to determine the overall figure of the building, or the treatment of a detail may sometimes result in a fundamental change in the building's appearance.Throughout the design process I continually shift my attention backand forth between building as a whole and its details.In many cases,the more often I shift back and forth,the more refined the building and its spaces will be.”

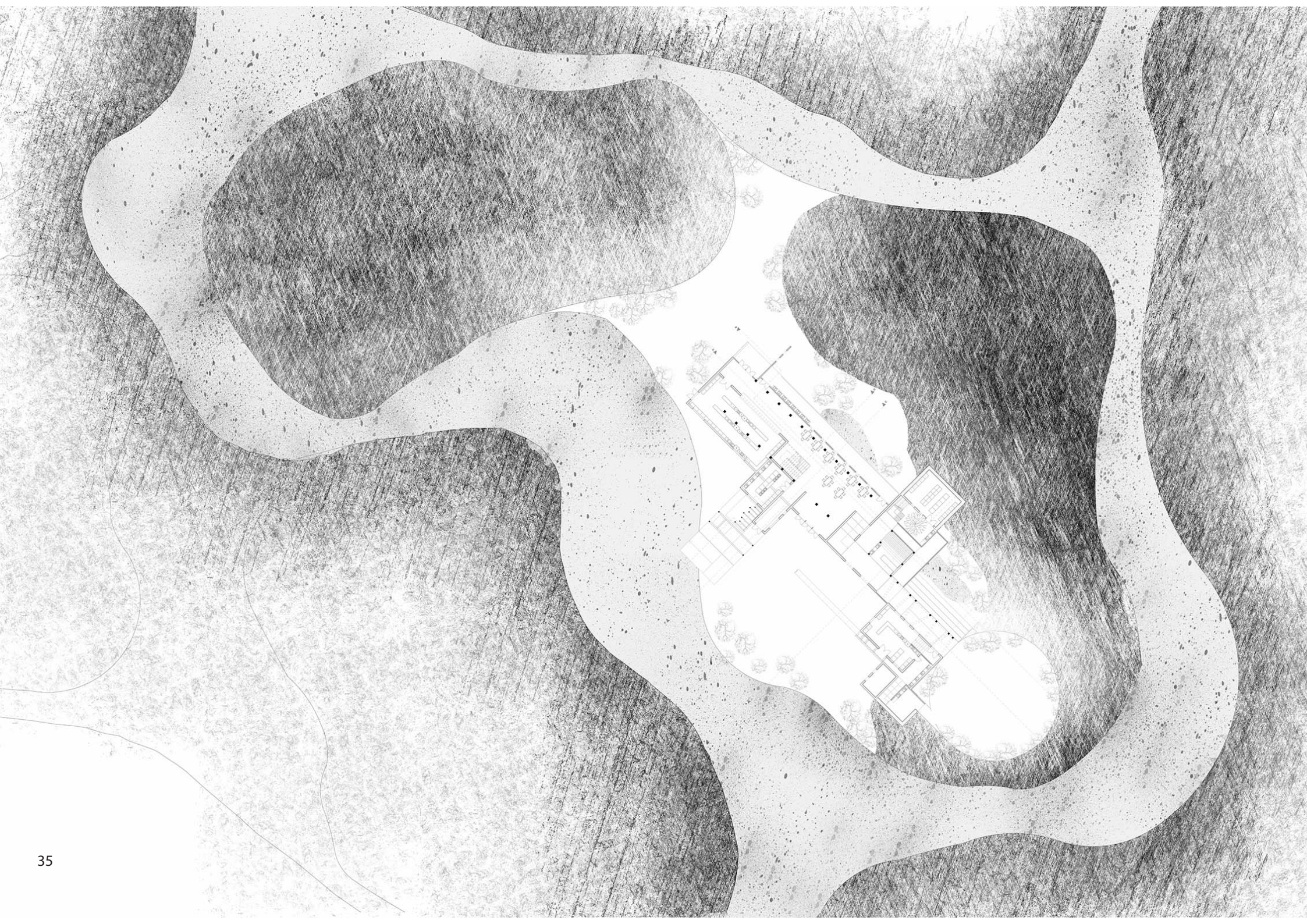
Hiroshi Naito/Inner space

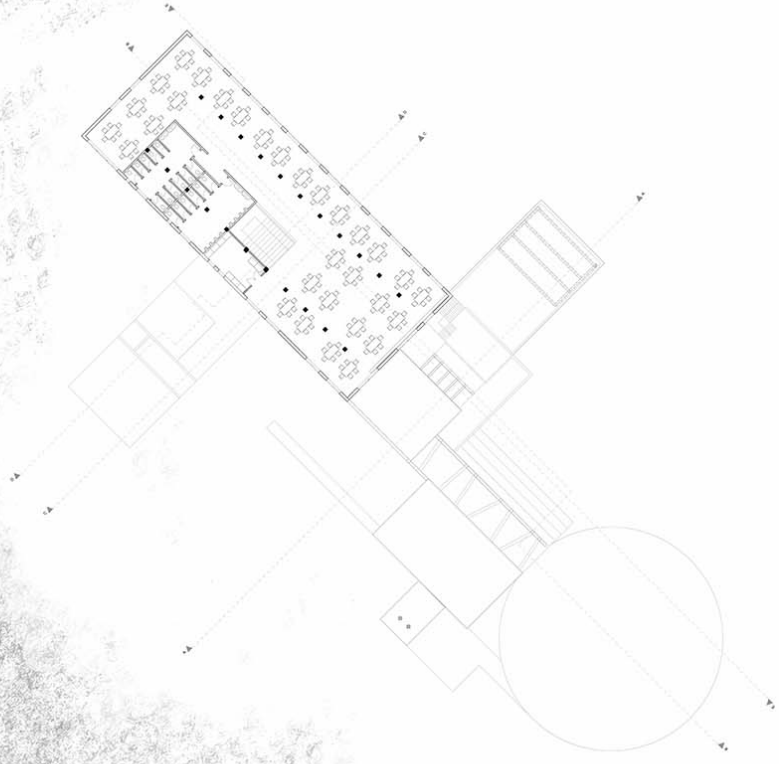


C

The Special Kitchen 1_Fishing/Near the water

Earth brick/earth oven/lighting a fire/farming

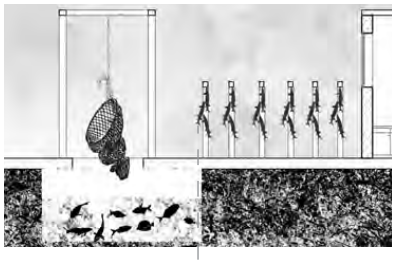




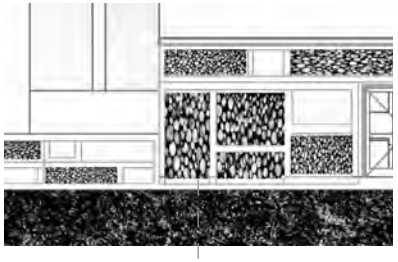
## Key features of AEC

- Rustic themed campsite
- Varied accommodation (e.g.tents, dormitories, 'kampong' -styled huts) interspersed along the coast
- Reflection huts along trails and outdoor learning classrooms
- Age and skill-based appropriate adventure facilities
- Nature Trails- e.g. QR code to gather more information about biodiversity
- AEC as a base camp
- Facilities that will aid groups in preparing for their journey- team-building, planning, skill-learning, etc

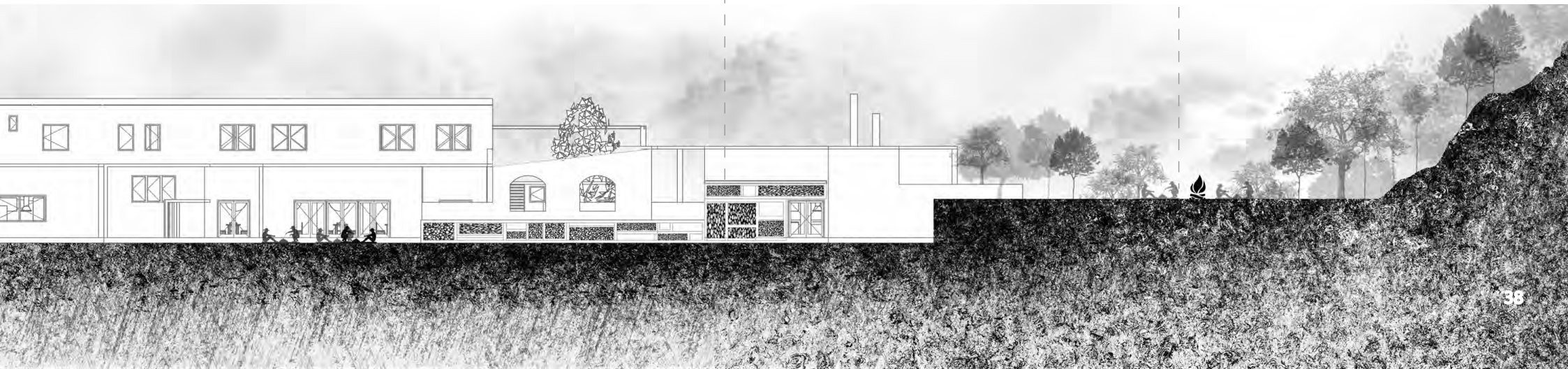
FISHING / DRYING FISH

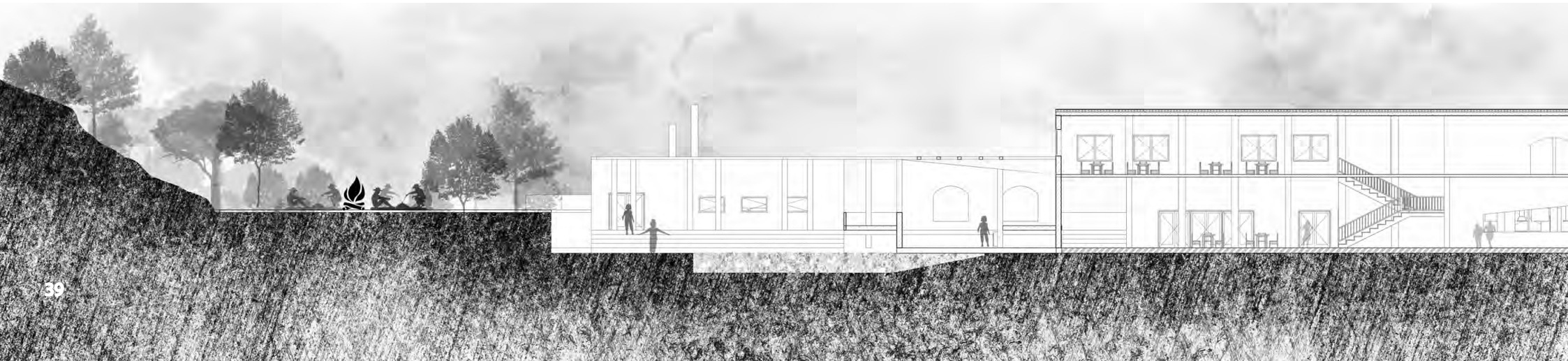


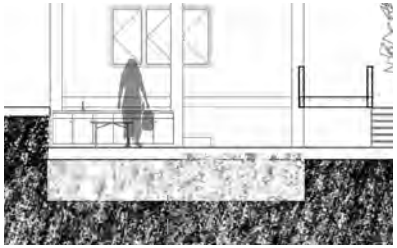
WOOD STORAGE/BBQ

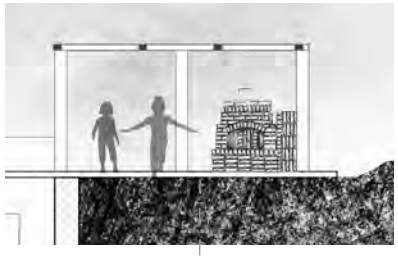


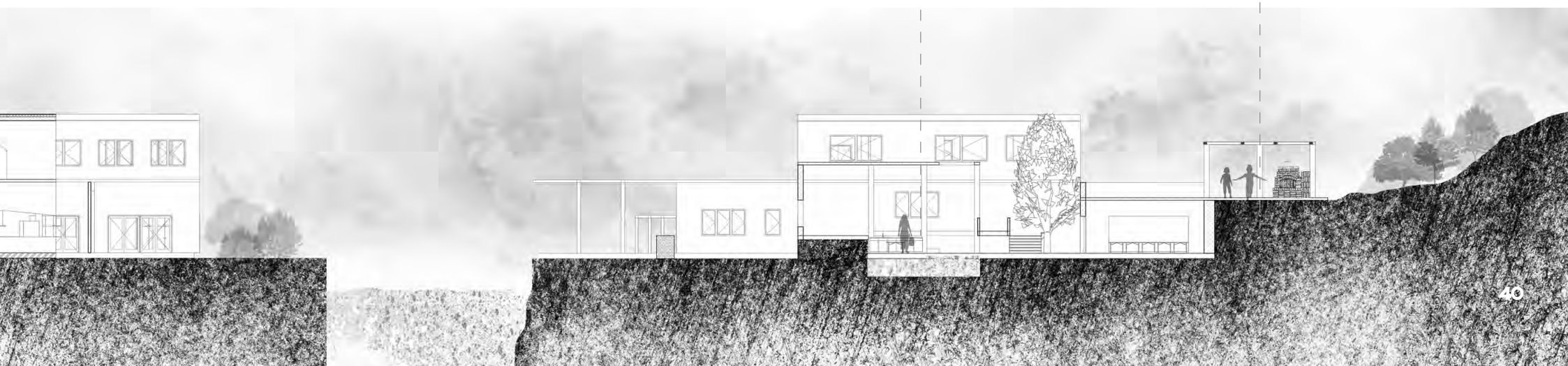
CAMPFIRE











# 2013 KRVIA+THUA Urban Study Workshop in Mumbai

TUTOR:PROF. Rohan Shivkumar/PROF. Simon Shu

# 03

## Urban Parametric Diagnosis and Acupunctural Microscope Intervention (UPDAMI)

## TRANSIT NODE ANDHERI


STUDENTS:

CHIU YU HSUAN ,ALLY YEN ,ANDREW ,YEH,TANUSHREE,AVANTIKA,NISHA,MAYA ,NAYANISH

The aim of this space syntax workshop is to equip postgraduate and/or senior undergraduate students with a well integrated analytical and planning design methodology to first deal with a complicated urban/rural system to diagnose and to tease out existing urban/rural development issues and secondly to work out a well defined planning and design proposal for future development of those areas under discussion. Furthermore, this workshop focuses on two major subjects:

1. The first question is to explore the possible strategies and design alternatives for future development on spaces left over after planning (SLOAP) areas or spaces left unused, i.e., redundant areas, etc., in the contexts of Asian cities.
2. The second issue is related to the so-called "Urban Parametric Diagnosis and Acupunctural Microscope Intervention (UPDAMI)" process, which will be explained in the following four steps:

1. Defining social-spatial issues through BiA

The first step of UPDAMI is to find a designer's or planner's design problems out of existing critical social-spatial issues which need to be dealt with through body in architecture (BiA) observation on environmental phenomena, from which one finds problems of density pressure, way finding and inefficiency in vertical compact urban systems, anti-social behavior in urban spaces, fear of crime in urban systems, urban spaces decline and left unused, urban conservation and redevelopment, etc., that affect local dwellers and other visitors. Data of space use distribution patterns and phenomena should be conveyed onto layers of maps on site.

2. Diagnosing spatial problems through SSA

In order to tease out spatial impact on environmental phenomena, figure ground analysis will be used to find background information of the study areas, such as zoning layout structure and density differentiation. Then, spatial configuration properties of accessibility, choice and visibility, etc., of the study areas through Space Syntax Analysis (SSA) will be deployed to mapping with space use distribution patterns and social phenomena information to sort out the correlations between spatial configuration and social outcome mentioned above.

3. Prioritizing strategies for redevelopment through AMI

Proper Space Syntax parameters of accessibility and/or choice should be teased out for microscope intervention on the study areas based on the previous diagnosis result. The proposed prioritizing strategies need to deal with problems related to the global level of whole area development, but also have to consider the local needs of inhabitants. Similar to the Chinese Acupuncture, it is believed that microscope intervention through space syntax parametric testing on the existing layout structure can contribute to discover some intriguing butterfly chain effects, which eventually have important influence on development of the whole area. Thus, this Acupunctural Microscope Intervention (AMI) process takes into consideration of both global and local needs for later development of the study area under concern.

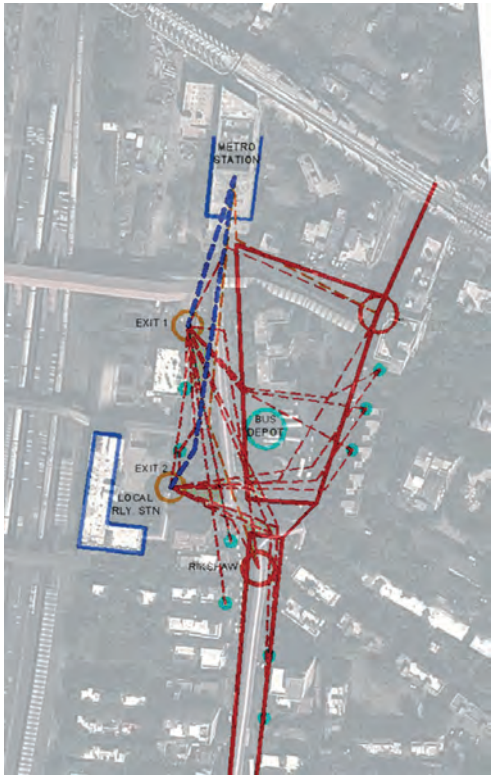
4. Designing alternatives under AVF

Based on the prioritized re-development strategies, several conceptual design alternatives can be generated and they will be re-assessed through SSA parameters of visibility in order to verify the appropriation and feasibility for future intervention purpose. It is exactly this Assessment of Visual Field (AVF) procedure which makes these alternative design proposals exhibit strong discourses and statements on designing solutions and ensures that the final design alternative would be a reliable one for later intervention in the study areas.

FAST MEDIUM SLOW

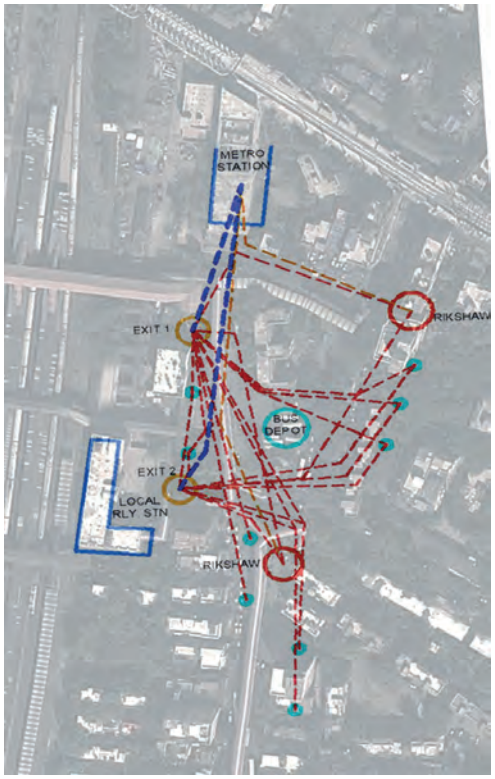
6.00 A.M

6.00 P.M



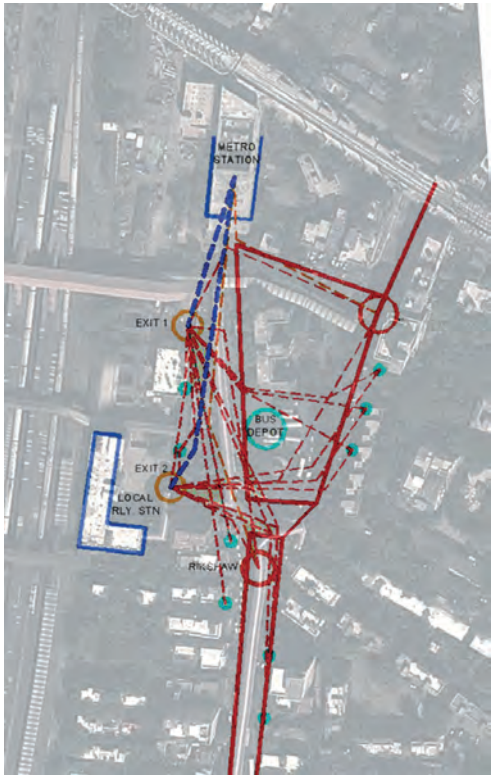

PEDESTRIAN MOVEMENT

FROM LOCAL STATION TO RICKSHAWS, BUS STOPS




PEDESTRIAN MOVEMENT

FROM MRT TO RICKSHAWS, BUS STOPS, LOCAL STATION




PEDESTRIAN MOVEMENT

FROM LOCAL STATION, MRT,TO RICKSHAWS, BUS STOPS

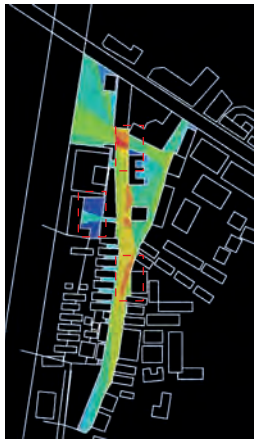
VEHICULAR MOVEMENT

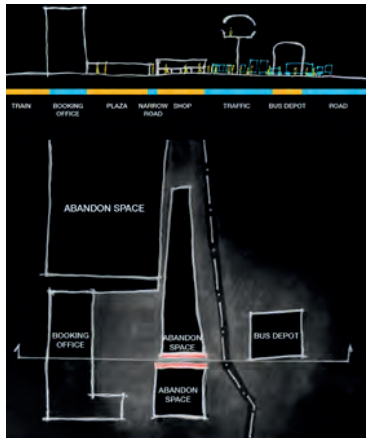
# ISSUES

- Heavy Commuter traffic
- Long queues for buses and autos

Very narrow aisles leading to the main new booking office
Lack of visibility of the main building

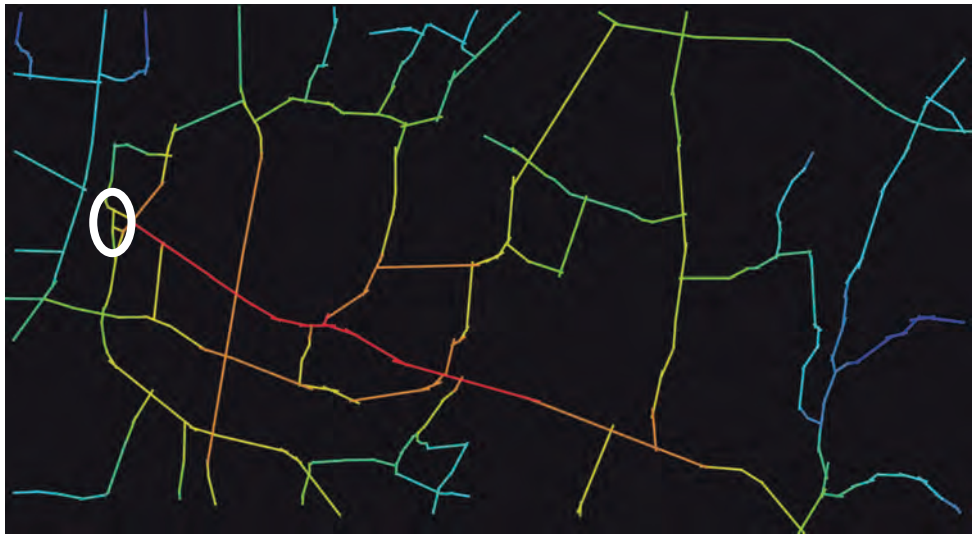
Maximum pedestrian as well as vehicular traffic at ground level





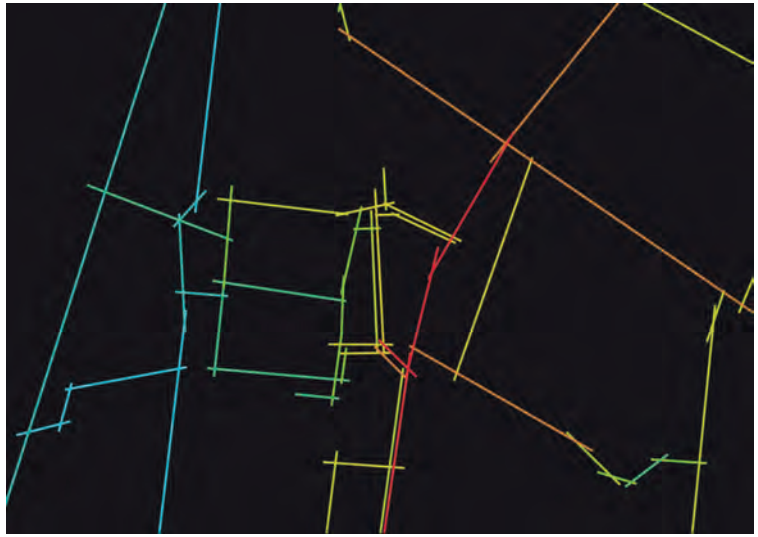
AXIAL ANALYSIS-(INTEGRATION) ROAD NETWORK

RICKSHAWS, PRIVATE VEHICLES



BUSES

PEDESTRIAN NETWORK



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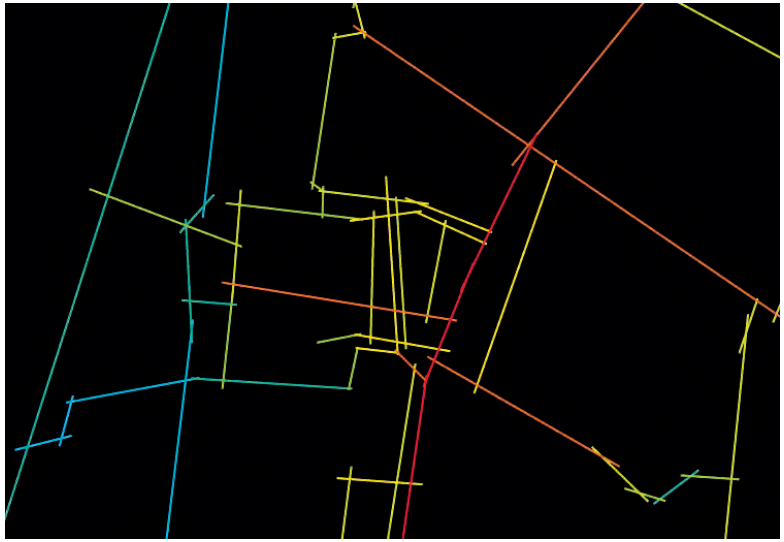
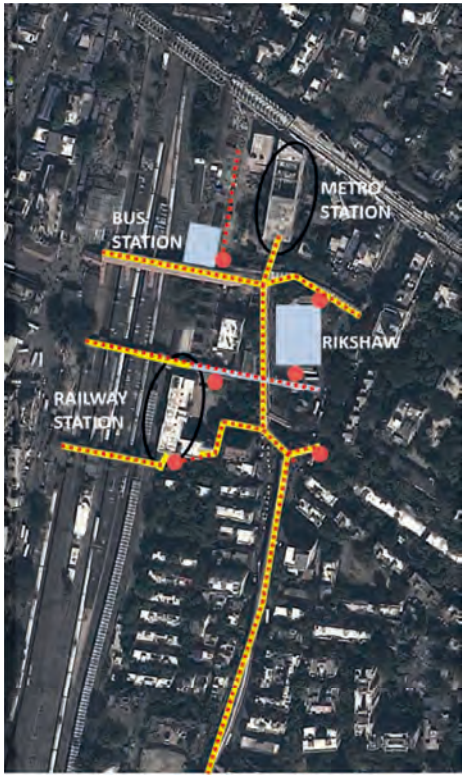


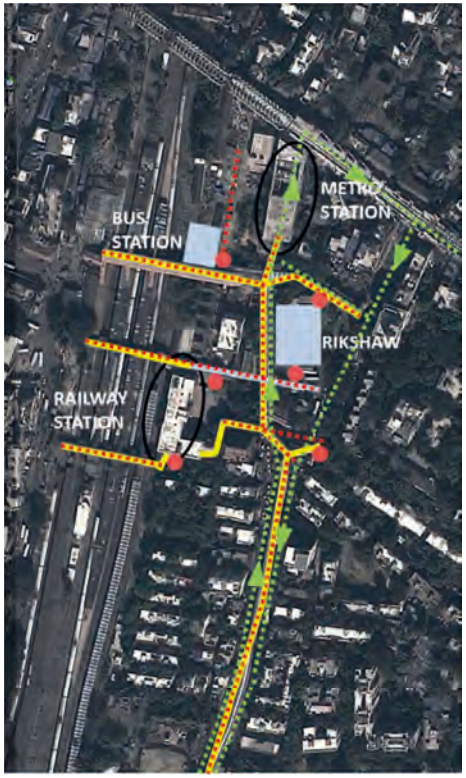
**PROPOSAL**

**PROPOSAL**



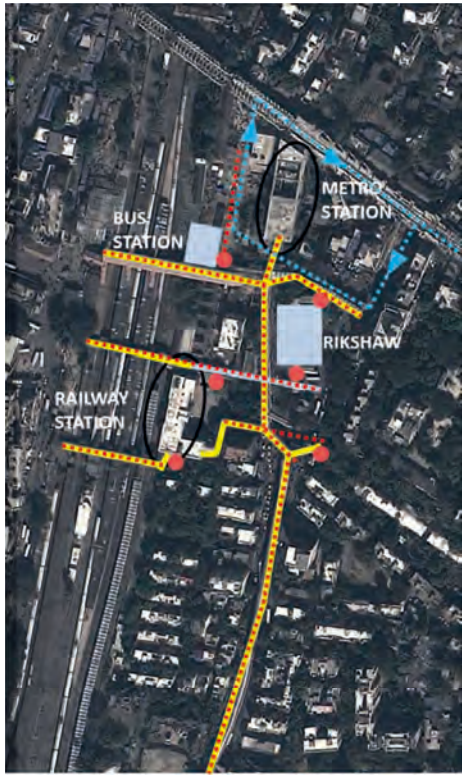

PEDESTRIAN MOVEMENT

FROM LOCAL RAILWAY STATION & MRT TO RICKSHAWS, BUS STOPS.



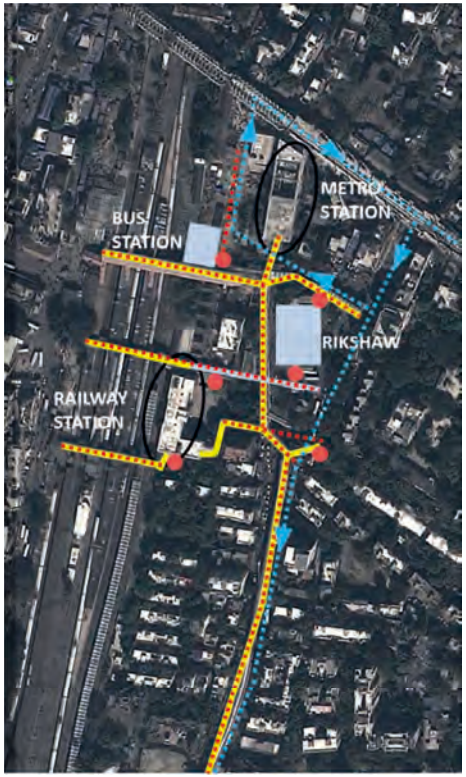

VEHICULAR MOVEMENT

FOR PRIVATE VEHICLES



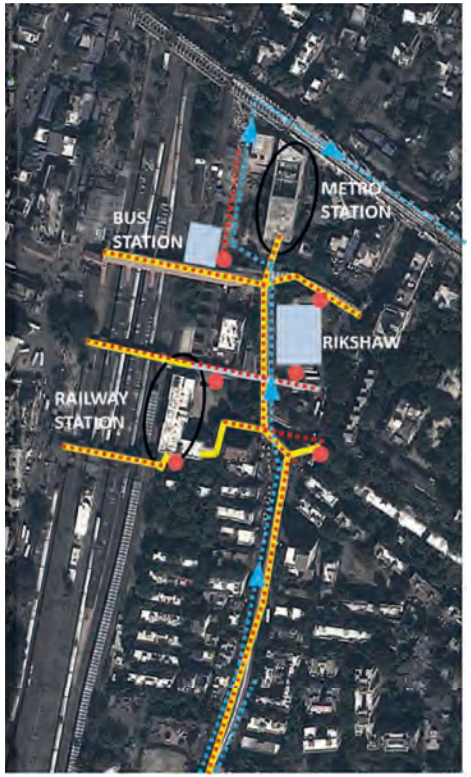

VEHICULAR MOVEMENT

FOR BUSES_1



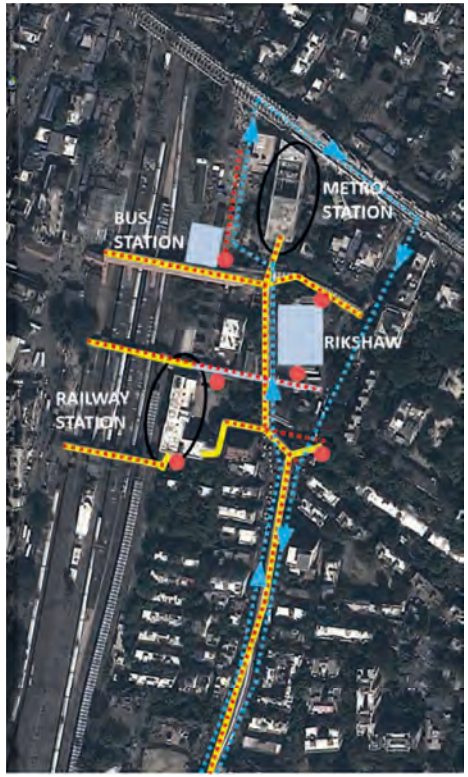

VEHICULAR MOVEMENT

FOR BUSES_2




VEHICULAR MOVEMENT

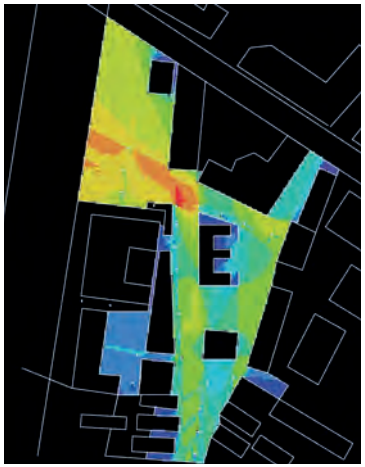
FOR BUSES_3




VEHICULAR MOVEMENT

FOR BUSES_4

VISIBILITY GRAPH ANALYSIS- CONNECTIVITY
(BEING SEEN)



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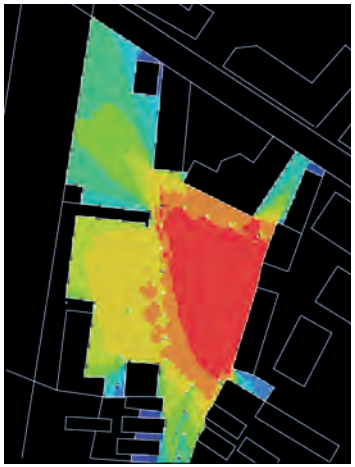
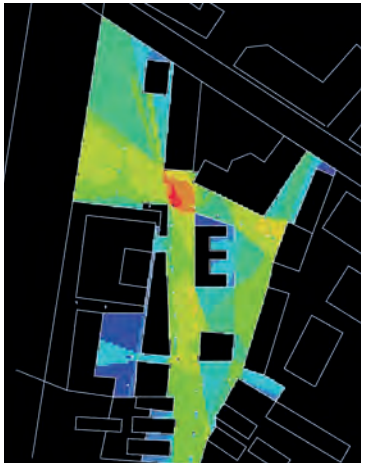


**PROPOSAL**

VISIBILITY GRAPH ANALYSIS- INTEGRATION
(SEEN- GLOBAL INTERVISIBILITY)



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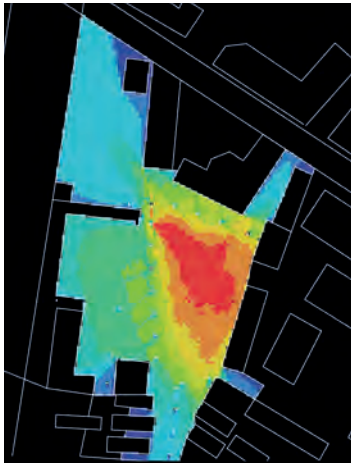
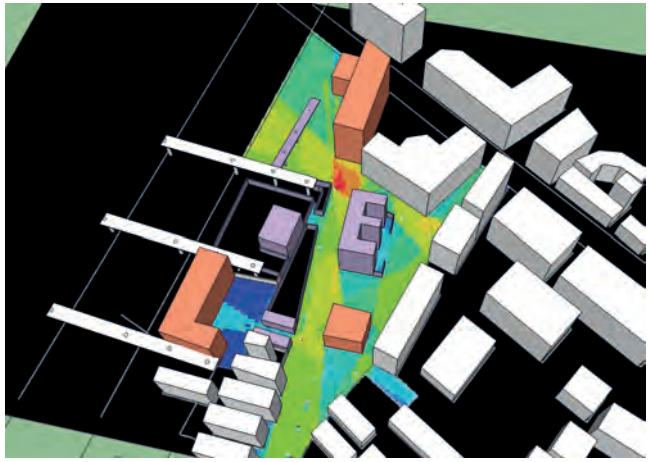


**PROPOSAL**



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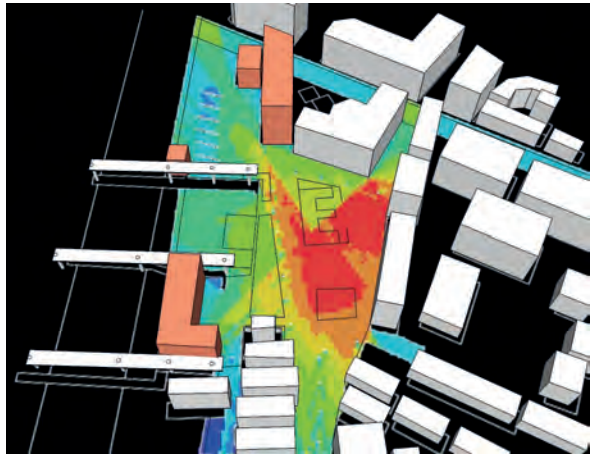
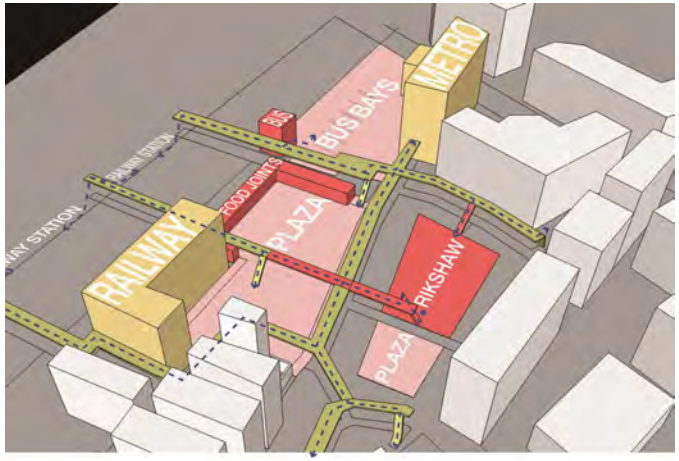





**PROPOSAL**

MUMBAI MRT

# 2013 ChulaA+KRVIA+SilpaA+THUA Urban Design Joint Workshop in Taichung

TUTOR:PROF. Rohan Shivkumar/PROF. Simon Shu/PROF. Komgrij/PROF. Api

# 04

## Imaginative Choreographic Urban Renaissance

STUDENTS:
BRUCE,CHIU YU HSUAN,LEE HUE MIN,YEH,MUSE,YUI

The aim of this urban design workshop is to invite all partnership students to look into possible linkages between urban regeneration and film script narratives to create an imaginative choreographic scheme for urban decline areas for future redevelopment reference. It is believed that borrowing the modes of conceptualizing image
footage of film making could be a valuable way to rethink the issues of urban regeneration. Hence, this approach is named Imaginative Choreographic Urban Renaissance (ICUR).

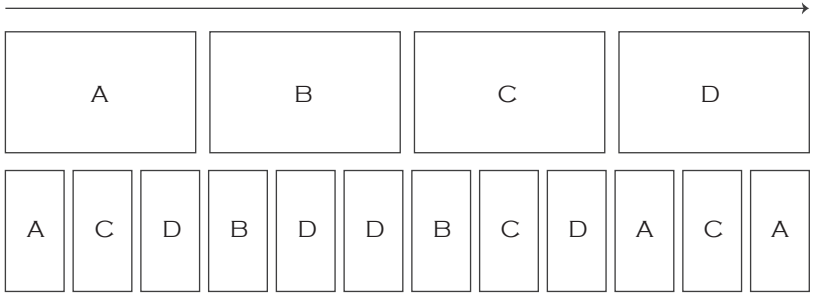
There are four stages in this ICUR urban design process:

1. Analysis on modes of storyboard for conceptualizing a film script .Each student should choose one of his or her favorite films and try to carry out in-depth analysis on how the major footage embedded in the film is constructed through narrative scripts, space atmosphere arrangement,background settings, music, images collage configuration, etc.

2. Seeking possible sites for imaginative intervention based on the major footage teased out previously .On site survey and environmental phenomena observation via camera snap shots will be carried out to choose the most suitable sites in the existing urban context, which fit best with the chosen film's major footage, for later regeneration purpose.

3. Working out a collective narrative script through matching of different film's major footage .Participating students are encouraged to work with 4~5 participants and to seek chances for working out one collective narrative script as each group's urban intervention scheme reference. Different characters constituting the whole story should reflect local inhabitants' living patterns combined with the dramatized characteristics defined from the first stage of film footage.

4. Creating the imaginative choreographic urban regeneration scheme .Based on the collective narrative script, each group should work together to produce an imaginative choreographic urban regeneration scheme through montage collage of animated film images, in which spatial design arrangement exhibits both sensational and rational features and displays proper background for events interpretation.

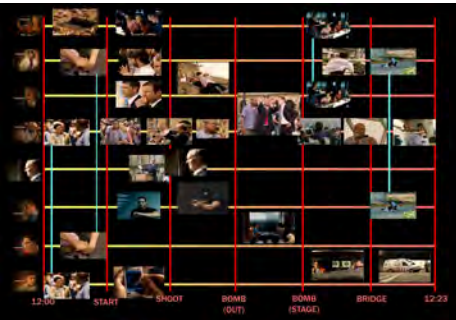


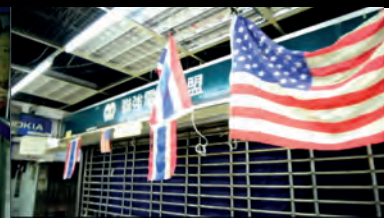

Analysis:

3 countries/ 5 perceptions/ 3 generations/ different roles/ different memories
Taiwanese-Chinese-Thai/ 20-30-40-years-old/the local people-the tourists

Techniques:

Fragments/ footage/blur timing





INTERNATIONAL COMPETITION

TUTOR:PRO. SIMON SHU

# 05

## Reconnect your space

Inspired by a common desire to reconnect people and spaces with nature.

The need to be connected to nature — and the benefits that answering this brings — are not new concepts. But for the first time, we are able to measurably understand the profound impact this has in a built environment. And then answer this innate desire by applying biophilic principles in the design of buildings and interiors.

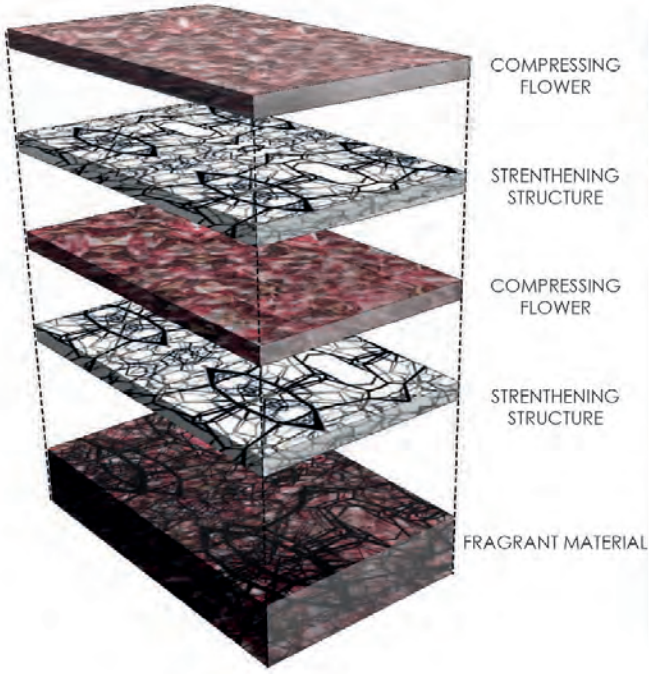
Biophilic design uses fresh air, daylight and water features. It creates visual and physical connections with nature. It incorporates natural materials, or those that mimic nature and natural forms. And then uses an understanding of human evolution to guide the design, finishes and furnishings — and bring out certain emotions in the dwellers. All because spaces that reflect familiar natural habitats, like open or sheltered spaces, are coded into our DNA.

It's incredible to think that such simple steps could have such a beneficial impact to a company's bottom line and the emotional well-being of its employees; on the way students learn, or how hospital patients heal. It inspires us to reconnect with nature — and change the human experience of interiors for the better.

## THE ART OF FRAGRANT SPACE
## THE CHOICE OF A FRAGRANCE FOR A LIVING SPACE

A new concept has been developed: the addition of desired "scent" to a space. This allows a new sensory experience for the user. Natural materials (i.e. leaves) are combined with conventional structural materials (i.e. steel framework). This allows a reconnection between the city-dweller and nature via the smell of plants associated with peaceful and serene natural landscapes.

Through this innovation, I try to promote the idea that smell can be part of the identity of a building. I also attempt to give urban spaces and structures an original, relaxing and innovative character. The manufacturing process is eco-friendly and all the smells come from natural sources and are non-chemical, and is thus user-safe.



BIBLIOGRAPHY

1.王府昌(2003):<當代台灣社會的族群想像>台北，群學出版社。
2.吳綱立<住宅價格與都市住宅空間分佈之實證研究-以台中市為例>1990
3.張文忠<台中市民購屋行為與建設公司行銷策略之研究-以七期重劃區周邊地區為例>1998
4.秦洪揚<台中新市政中心「豪宅」建構之演繹>2010
5.Erll, Astrid :<文化記憶理論讀本Materialbuch zur Gedachtnisforschung> ,2012
6.Locke John: <An Essay Concerning Human Understanding.> Perry, John. Personal Identity. Berkeley: University of California Press, 2008.
7.Roland Suso Richter:<The Inside>(2003)