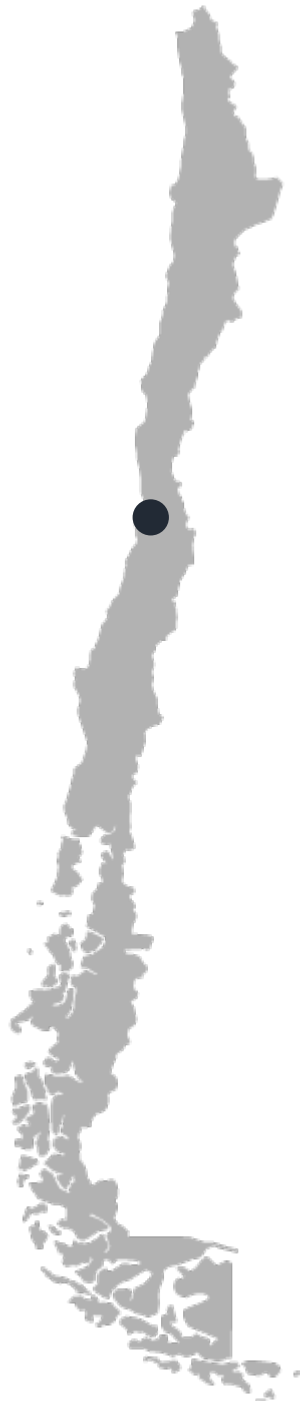


Reassemble the co-existence

Design of the cultural community on the cliff



Methods and Analysis: Positions in Practice
TUD



Nature background

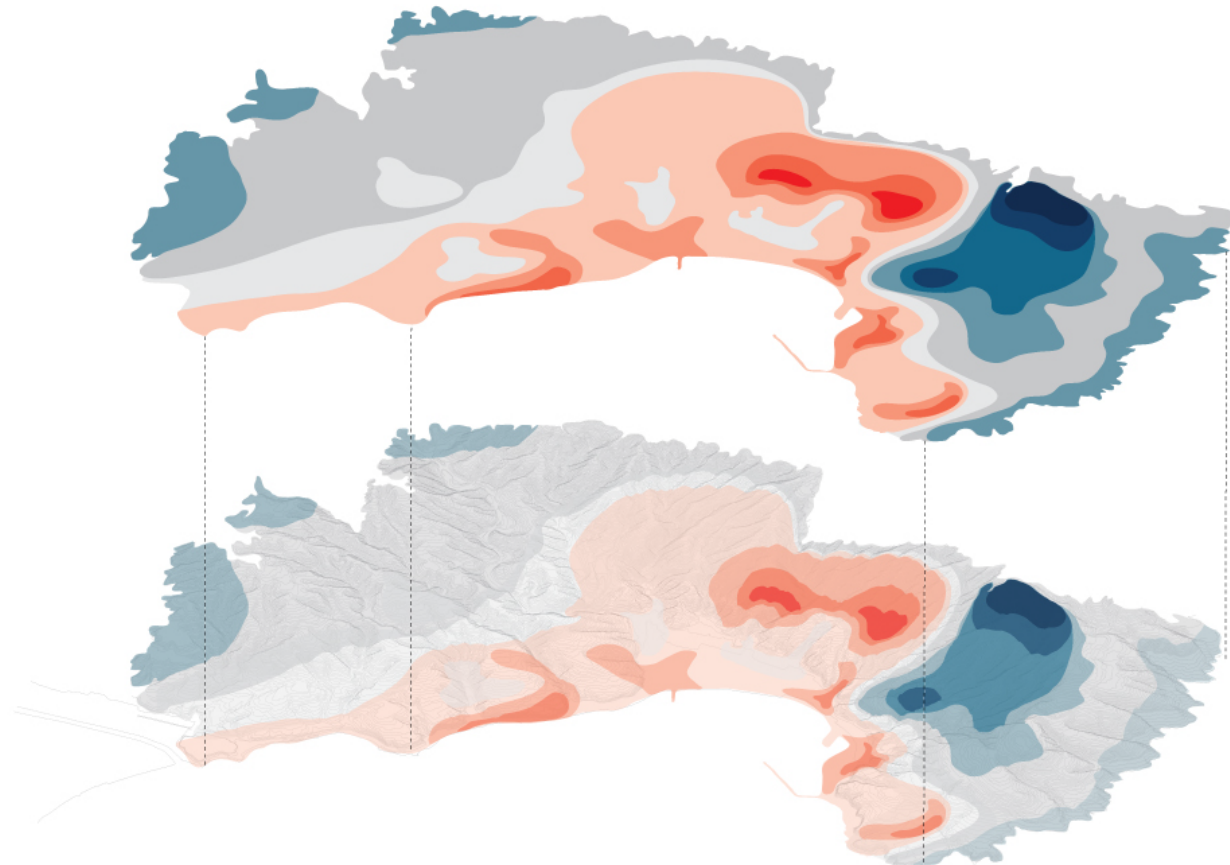
Valparaiso, a city located in the central Chile, also in the middle of the South America Continent coastline, 120 km to the north west of the capital Santiago. It is Also close to Argentina.

At the age of marine trade, it is the important trading gateway between the Central part of South America with the whole overseas world.

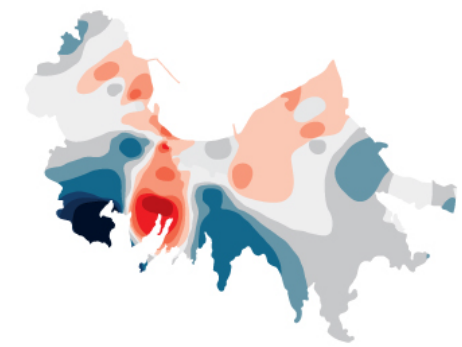
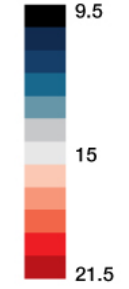
While facing the Pacific ocean, it is also surrounded by the Andes Mountains. The special location makes it a city with the sea, the mountain and the big height differences.

Also, like the most of Chile, it is vulnerable to earthquakes. The vegetation is abundant so the traditional buildings are almost made of wood.



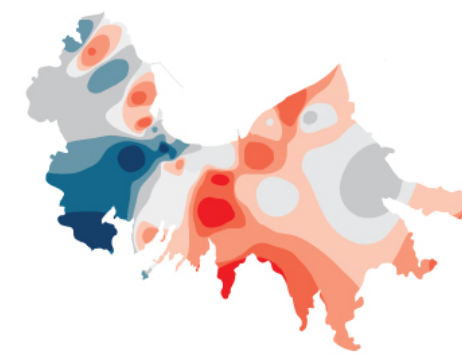
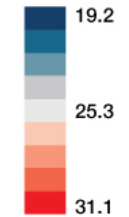


JANUARY MICROCLIMATES (°C)



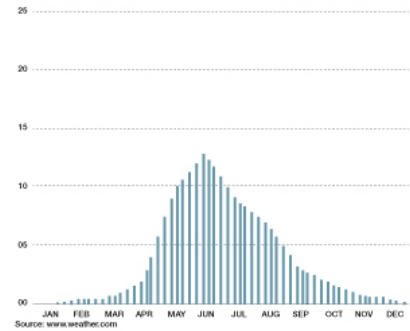
Source: El clima urbano del Puerto de Valparaíso
Laboratorio de Medio Ambiente y Territorio, Departamento de Geografía, Universidad de Chile, Santiago de Chile

JULY MICROCLIMATES (°C)

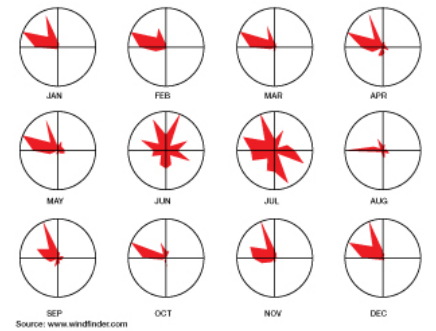


Source: El clima urbano del Puerto de Valparaíso
Laboratorio de Medio Ambiente y Territorio, Departamento de Geografía, Universidad de Chile, Santiago de Chile

AVG MONTHLY RAINFALL (cm)



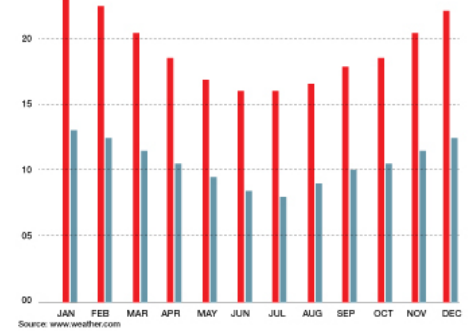
AVG MONTHLY WIND PATTERNS



Valparaíso has a Mediterranean climate, similar to San Francisco. It experiences fog from the Humboldt current, steady humidity, torrential rainfall in the winter months, and mild summers.

Microclimates in Valparaíso result from high building densities, sheltered amphitheatre formation, and proximity to sea breezes and waters. Urban canyon effects have been observed in the hills and terraces, where buildings are most dense. The urban heat island effect is noticeable in the winter evenings, prevented from covering the whole city by the natural rivers and streams that flow downward and the cold NW winds from the sea.

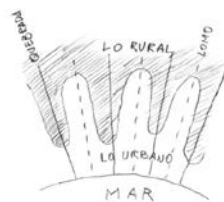
AVG MONTHLY TEMPERATURE (°C)



Cerro and Quebrada

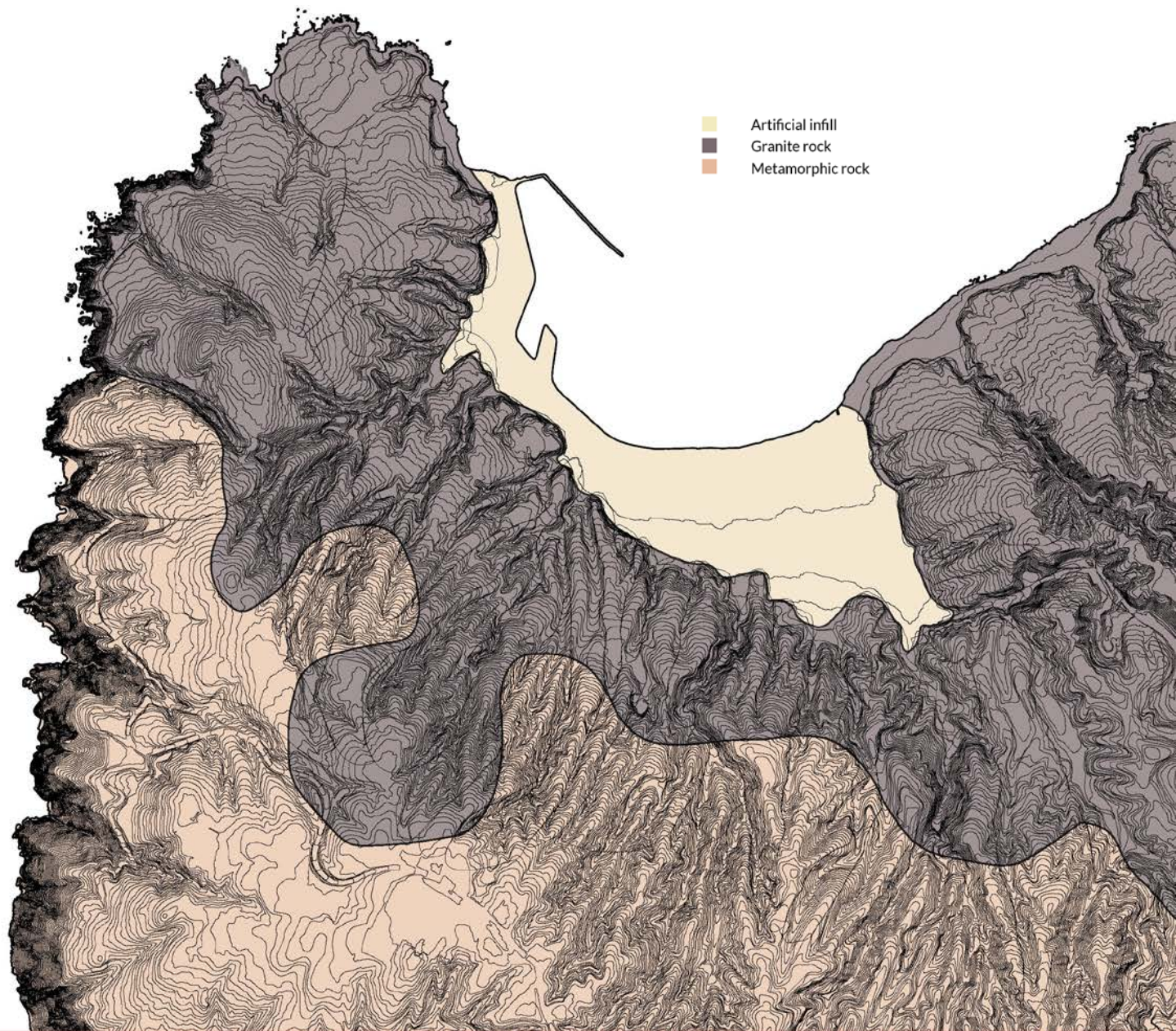


02 Dibujo topográfico de Valparaíso. Creación del autor



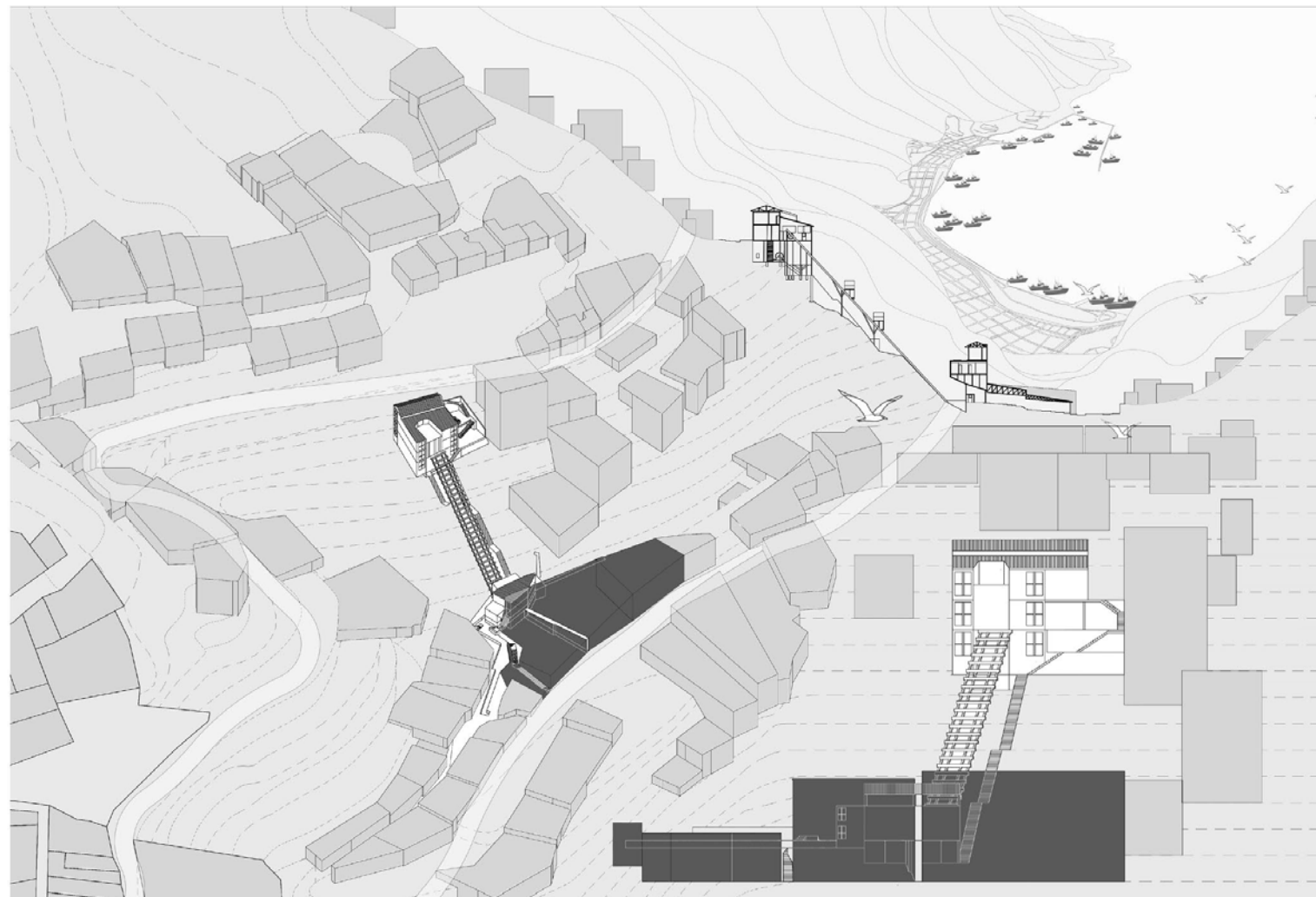
From the plain which lays along the coastline to the waving hills, the geography looks like several fingers. The hills are called cerro in Spanish, the valley between the hills, also the gap between fingers are called quebrada in Spanish. The cerros and quebradas are arranged in radical pattern surrounding the plain. This special terrain impacts the city's water system formation, the vegetation distribution and the whole urban structure, the transportation and the human's activity, as well as the developing history of city.

For ex. The main public space are concentrated on the plain and the port, people usually gathering here from hills in all directions. When the city expands, more roads are climbing upward following the radical pattern, which makes every cerro a relative independent area. But between different cerros, because of the existing of quebrada, the transportation are not easy, which created many identified urban scenes, such as a large amount of stairs, the usage of ascensors, the passage way at the half hill, as well as the special buildings on the cliff.



Ascensor

At some steep area, people need more convenient alternative to walking by foot to adapt to the landscape, which gave birth to the ascensor. Firstly it was used mainly for the carrying cargo, later for people's transportation. From the first ascensor, which was in the beginning of 20th century, to now, there are closely 30 ascensors in whole Valparaiso. Some are already abandoned, some are remain for the local people's transportation, and some are fixed and reused for the tourists at the attraction areas. Those ascensors are usually sitting on the cliff, which are really steep, but this typical mechanical intervention regards to the landscape are excellent to provide the diversity of space accessibility, a good moving view point for the ocean and the hills, and also an important connection element for urban space, which can be redefined as a sort of common resource.



Vertical moving and accessibility

So from the Ascensor, I defined a series of common resource.

Common resource should show strong property of being in place, which means tightly connected to the identity of the city. So in Valparaíso, the key common resources are those accessing elements.

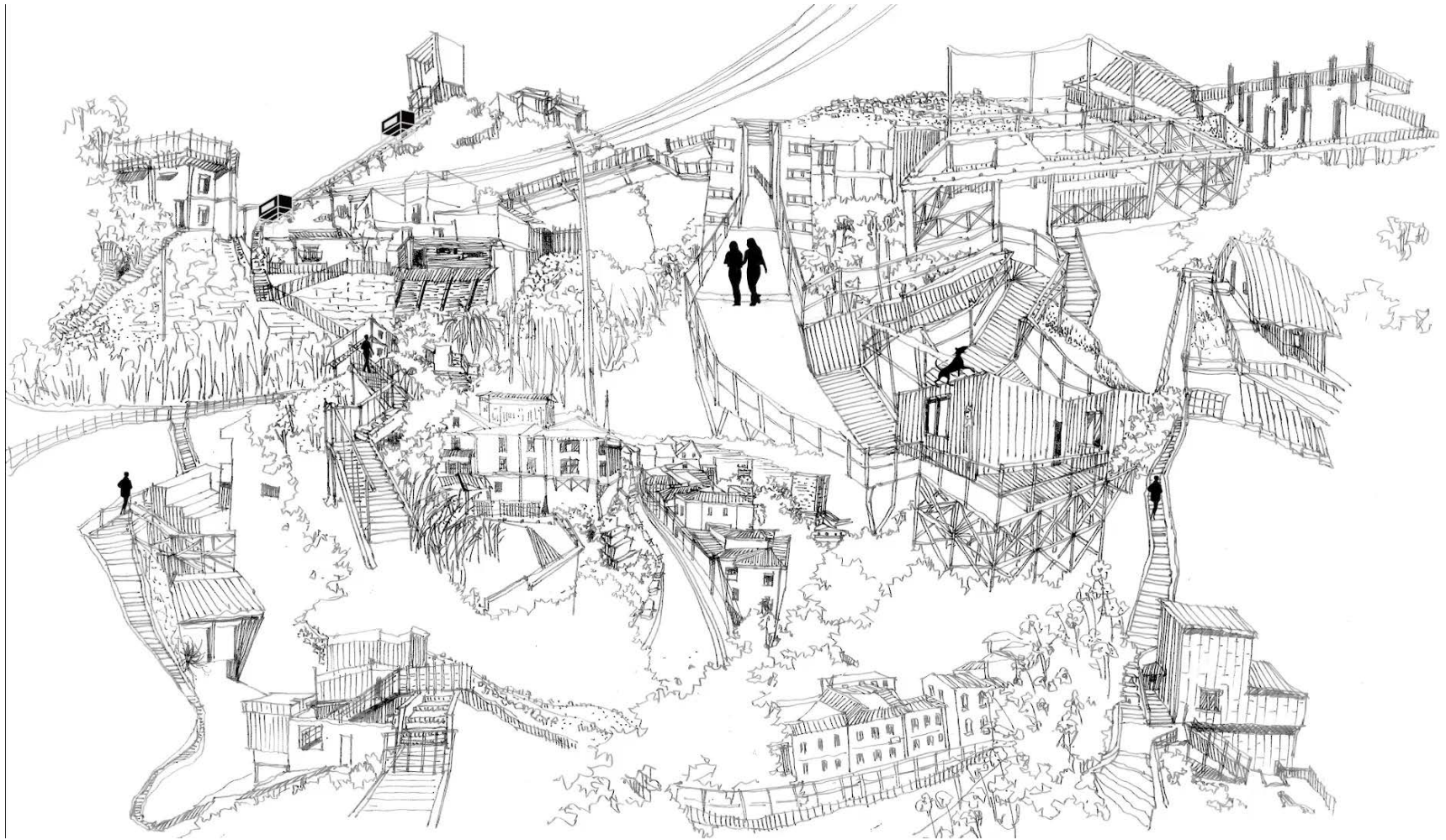
These accessing elements include the stairs, the handrail, the bridges, the ascensors, the balconies, courtyards and etc.

They are showing a strong vitality when responding to the terrain. They follow the landscape while shaping the landscape, they are made by human beings while expanding and limiting human's space at the same time. They have sort of collective, compound and complex property.

The space shaped by them becomes diversified, the view field, speed, the direction, closure, the distance are all different.

Also, when you walk along this accessing element, you can feel people's life and ideas about how to deal with the terrains.

And from this topic, I gradually established my position in practice, which is closely associated with Valparaíso's common resources like these.



Human's intervention

Because of the nature condition, because the inconvenient of the terrains, people are triggered the ability of changing the space by hand.

The light , colorful containers are shipped up to the hill, in the convenience of making the prefabricated buildings.

As a result of the single, uniformed building formation, and a lacking of decoration, the local people started to use containers in different color and paint on the containers as a decoration. From that, they are more and more talented to painting graffities, creating artworks. Valparaiso are also the centre for education, culture and art.

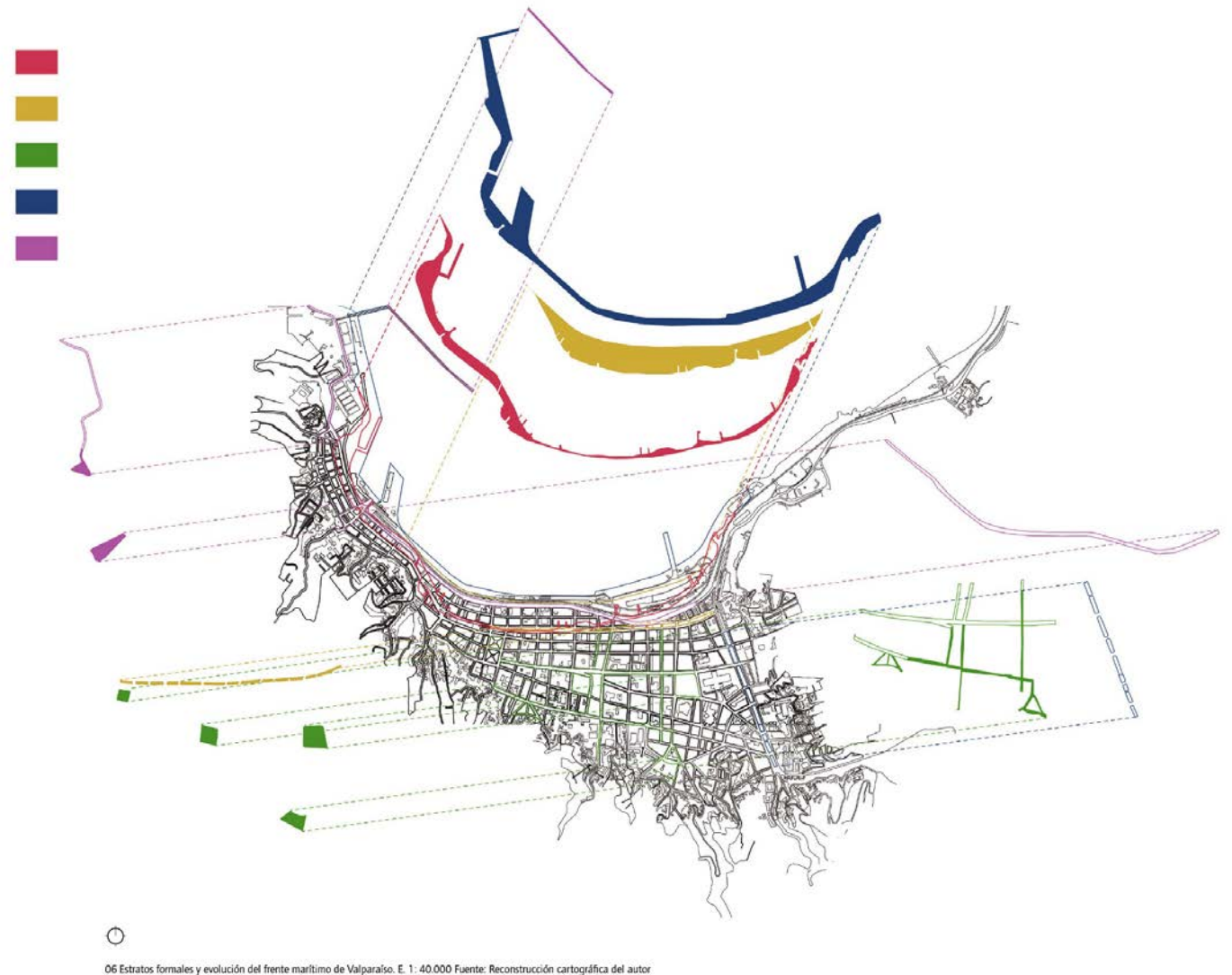


City from port

So where does the container come from? We should start from the port.

From the 19th century, Valparaiso began its development benefiting from the global shipping trade. Its organization of the city, industry and culture grew as a result of the port, which was one of the most important gates on South America coast facing the Pacific Ocean. But with the opening of Panama Canal in 1914, the shipping channels changed, and new means of transportation peeled Valparaiso off from the rapidly changing world. Therefore, the urban space and scene were kept with small changes. And this unique outcome of specific time, economy and nature makes Valparaiso an excellent world heritage and tourist destination under a new round of globalization. The old city faded, while bring the opportunity of the new city. The new city was born from the old, while fighting with the old one.

Now the port area is a UNESCO area which attracts tourists from all over the world, while the hill area are keep the old lives and waiting to get involved.

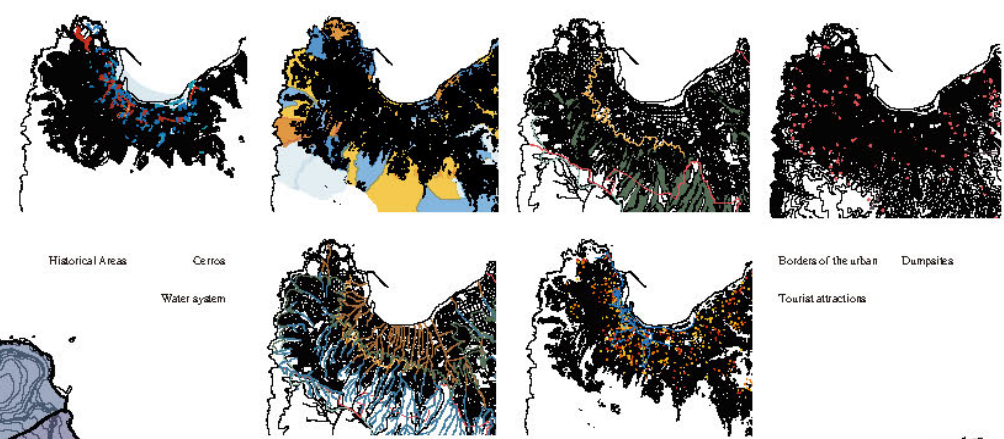




Common resources

RESEARCH
THEME
COMMON RESOURCES

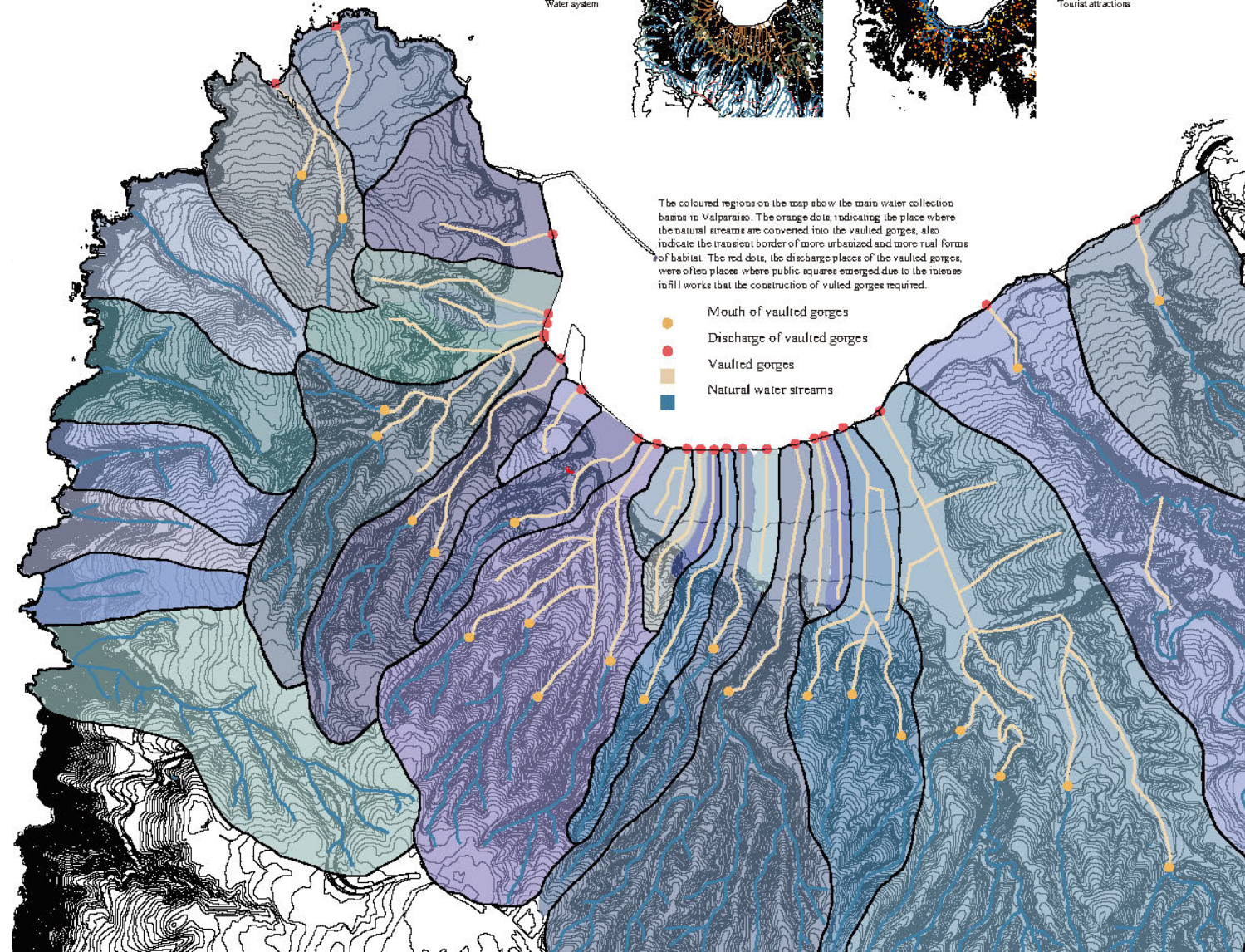
The theme of resources through the lens of the commons draws into field an alternative understanding that sees resources as being simultaneously material as well as a cultural. The topic is thus focused on specific circumstances—rather the particular and unique than the general and normative—of place/s. In understanding what this may mean in Valparaíso, the city of focus, an initial study of issues, history, systems and typologies draws forward four areas of focus under the topic of common resources—namely: Environmental, Material, Spatial and Social resources of Valparaíso. The four topics of focus enable the elaboration of the material cultural flow of resources in the region. A key insight being that there are notable overlaps throughout the topics that reiterate the presence of commoning.



Common Resources are defined as all the material, space, culture core that affects different groups of people, social issues and relationships. For example the historical area, cerros, water system, borders of urban, dumpsite, attractions.

The dismatching of the abundant common resources and the conflicts make me rethink the possibility of reassembling: How shall the city deal with the role of the port when the need of the city changed? How shall the city balance the relationship between tourism and local people? How shall the government and designers solve the unbalanced development of the plain and the hill? How can the local community and traditional workers keep up with the pace of new demand?

By putting forward this, I'm try to figure out what the common resources can do and should do in the urban context.





In my most original opinion, the common resources will fix the segregation in the city. The segregations are obvious in the relationship of plains and hills, the tourists and locals, the old lifestyle and the new one, the outcoming culture and the domestic one.



Segregations

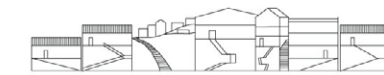
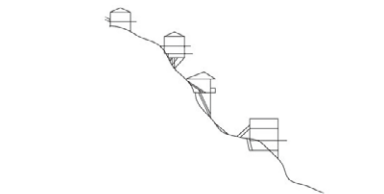




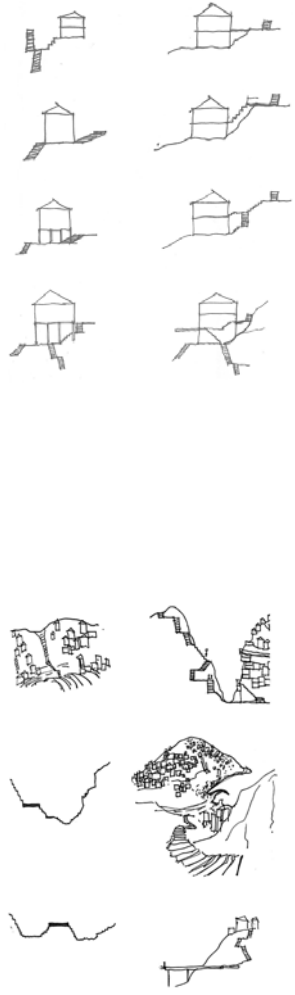
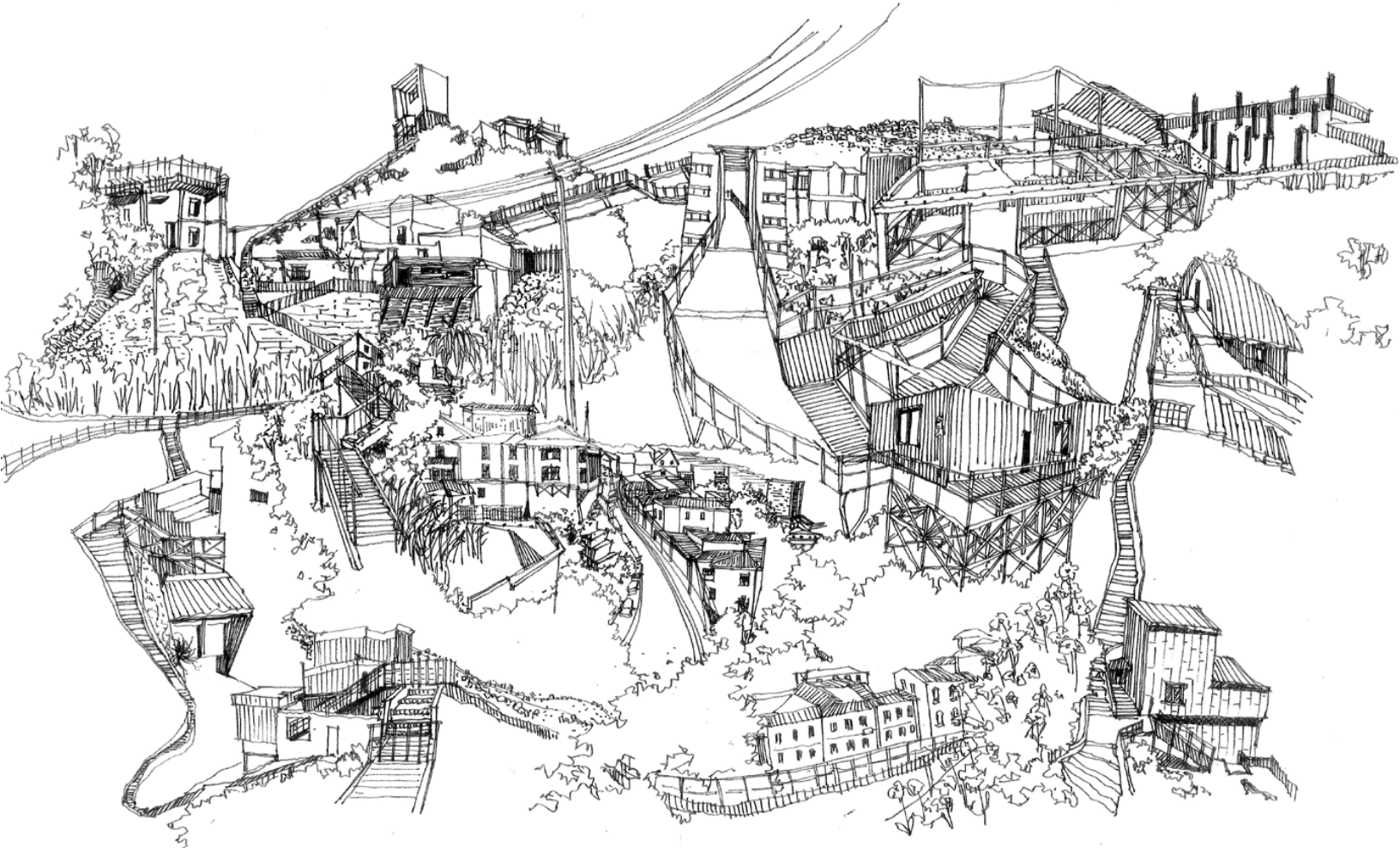
1 RESEARCH



OBSERVE: conflict and common resources



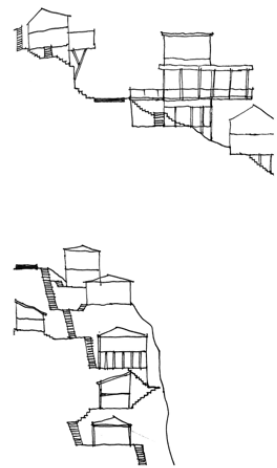
How does the CLIFF redefine the COMMON RESOURCE?



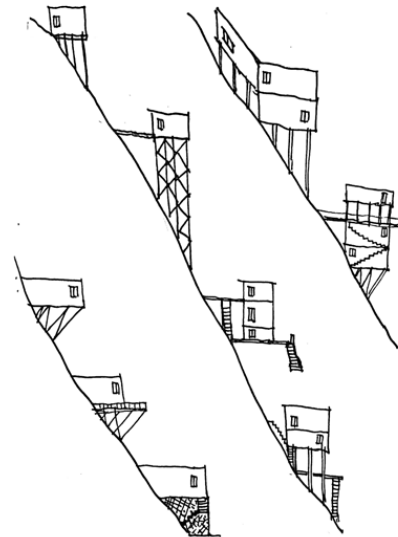


How does the CLIFF redefine the MATERIAL?

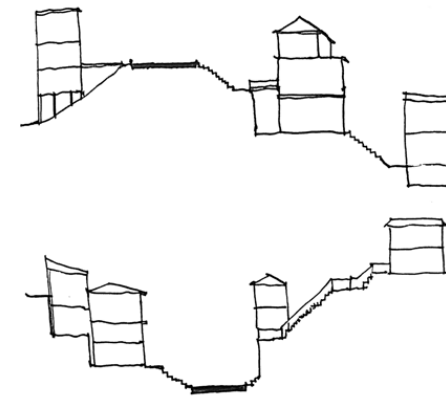
Spontaneously built house



Prefabricated material



Add to boxes





RESEARCH: conflict OR co-existence?

- Tourist & locals
- People & nature-collage
- Stay & move
- Abandon & reuse
- Occupy & left over

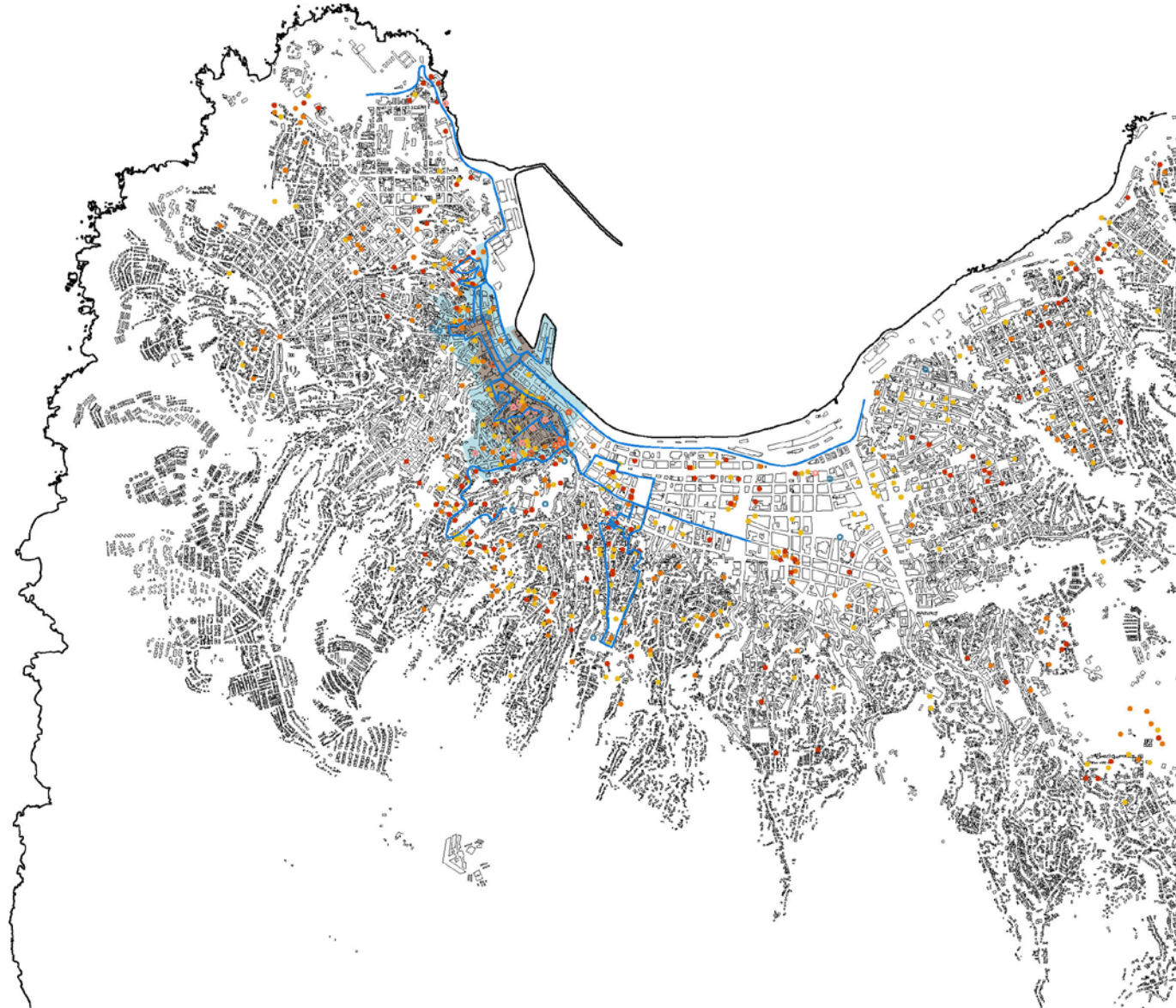




2 METHOD & POSITION

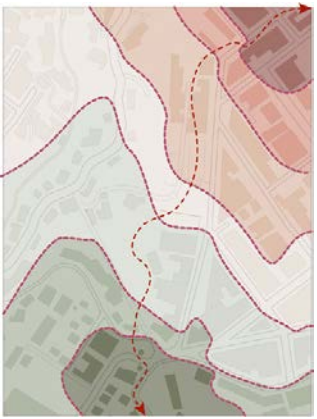
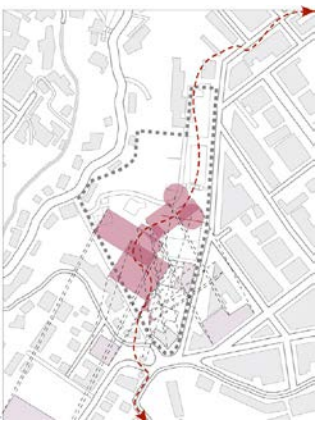
ANALYSE: the co-existence of Tourist & Locals

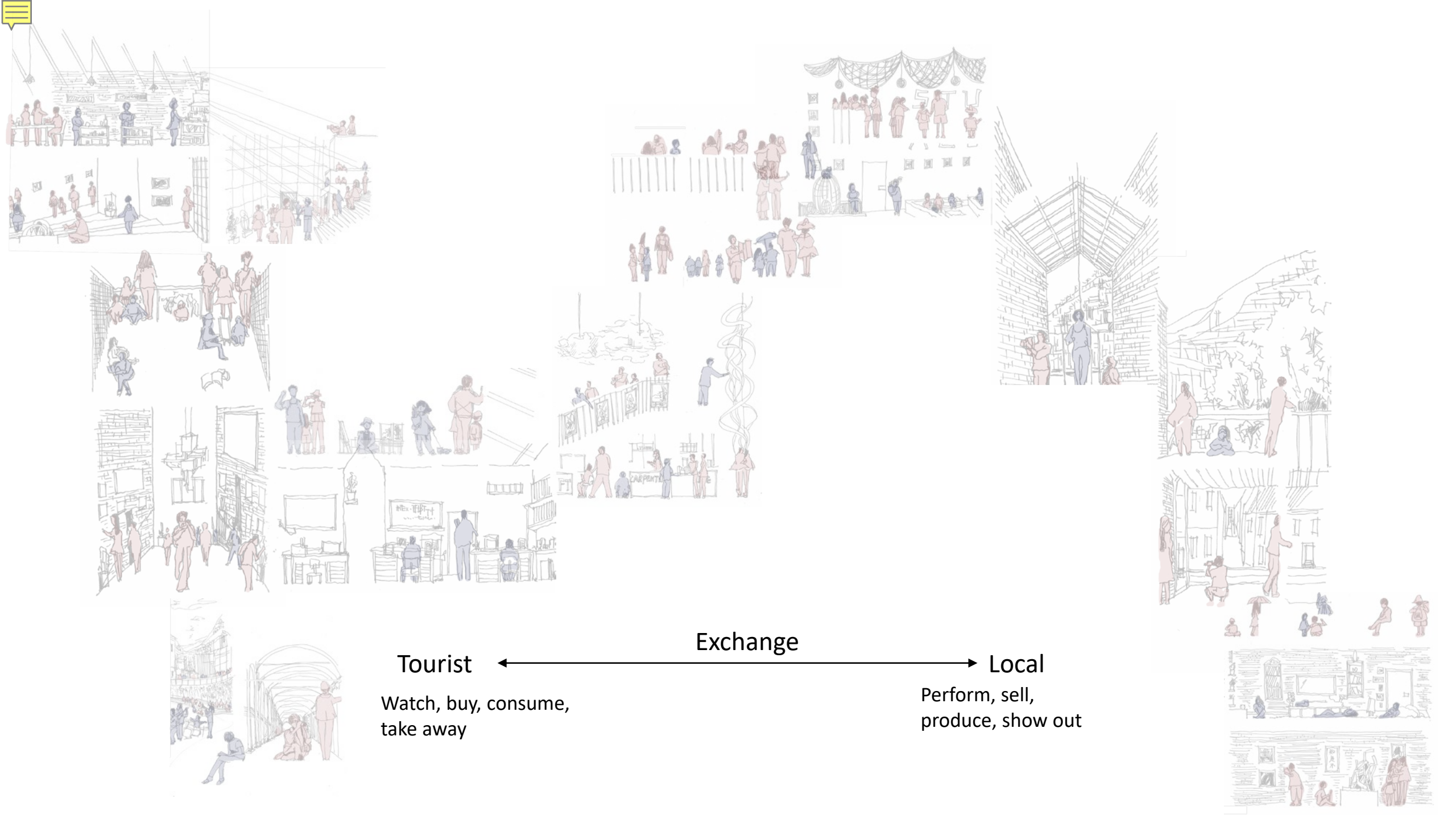
- Public space for Tourist
- Public space for Local





The commons space near the site:
2 bus stations, a primary school, a church, a theater, a college, 2 laborotries





Exchange

Tourist

Local

Watch, buy, consume,
take away

Perform, sell,
produce, show out

ANALYSE: the co-existence of Publicity & Privacy

A stairs	a1	continue		
	a2	split		
	a3	turn		
	a4	disperse		
B bridges	b1	open		
	b2	semi-open		
	b3	closed		
C junctions	c1	flat		
	c2	inclined		
D balconies	d1	roof		
	d2	half-roof		
	d3	linear		
	d4	suspending		

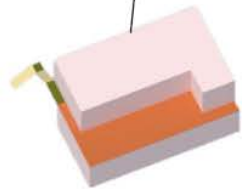
E buildings	e1	level		
	e2	inclined		
F courtyard	f1	open		
	f2	semi-open		
	f3	closed		
	f4	underbuilding		
G passage	g1	open		
	g2	semi-open		
	g3	closed		

ANALYSE: the co-existence of Publicity & Privacy

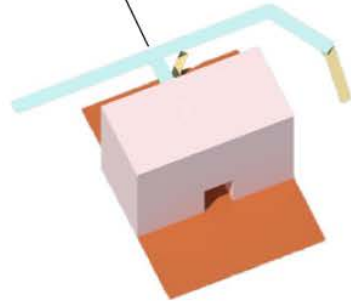


ANALYSE: the co-existence of Publicity & Privacy

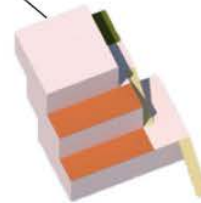
Different combination of those accessing elements makes different communities and pattern of commons.



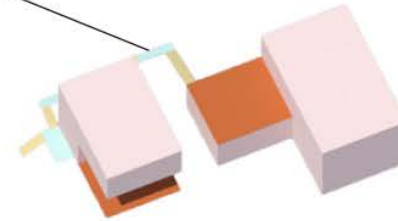
COMBINATION 1 (C1)
 $a_3+b_1+d_2+e_2+g_2$



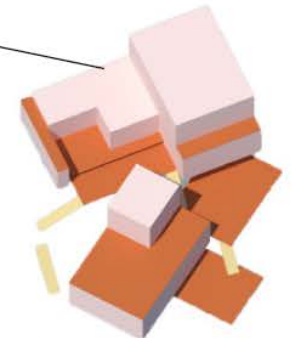
COMBINATION 2 (C2)
 $a_4+b_1+c_1+d_3+e_1+f_1+g_2$



COMBINATION 3 (C3)
 $a_1+b_2+d_3+e_2$



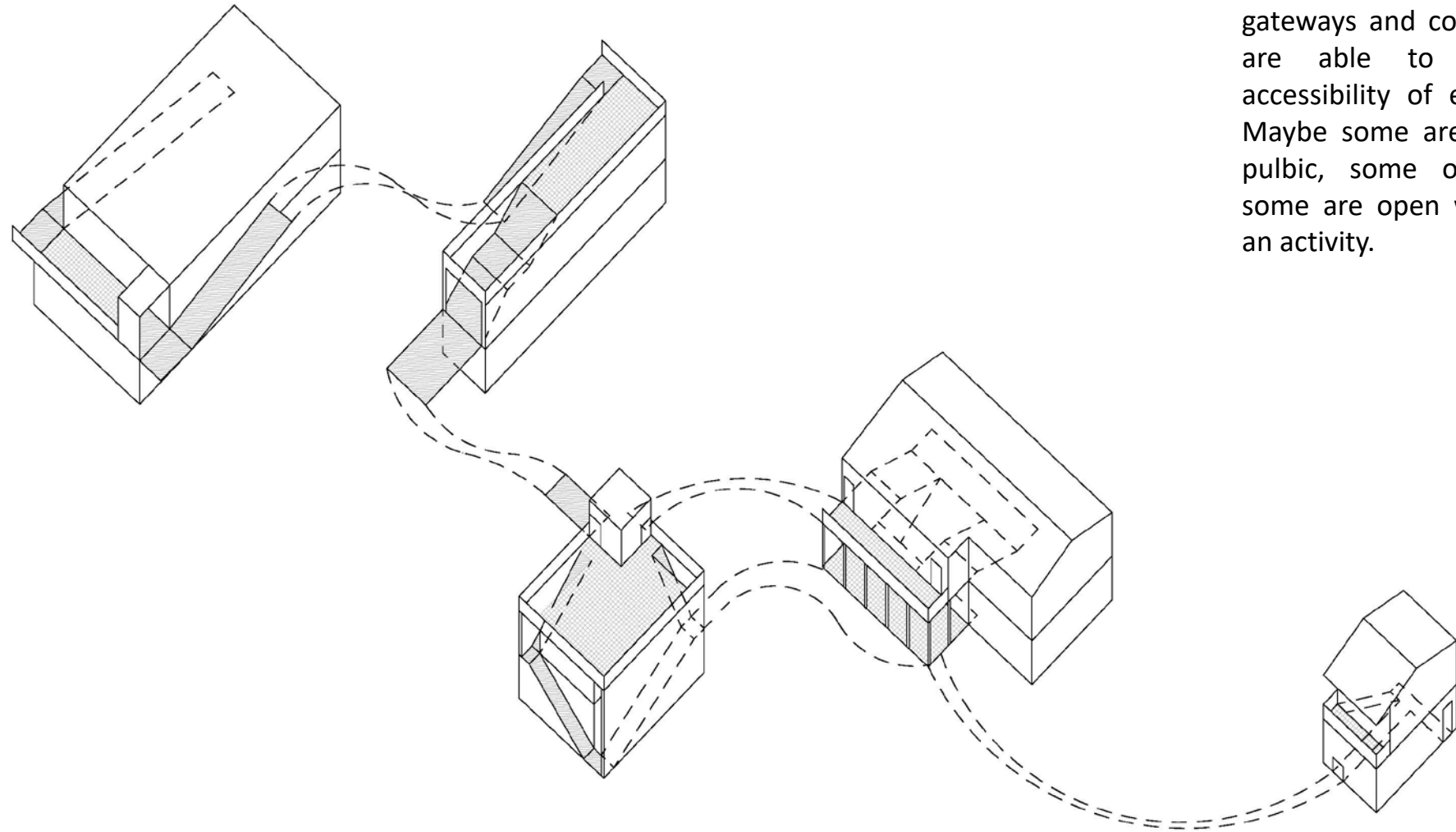
COMBINATION 4 (C4)
 $a_1+c_2+d_2+e_1+f_4+g_2+g_3$



COMBINATION 5 (C5)
 $a_1+a_3+c_2+d_1+d_2+d_3+c_2+e_1+f_2$

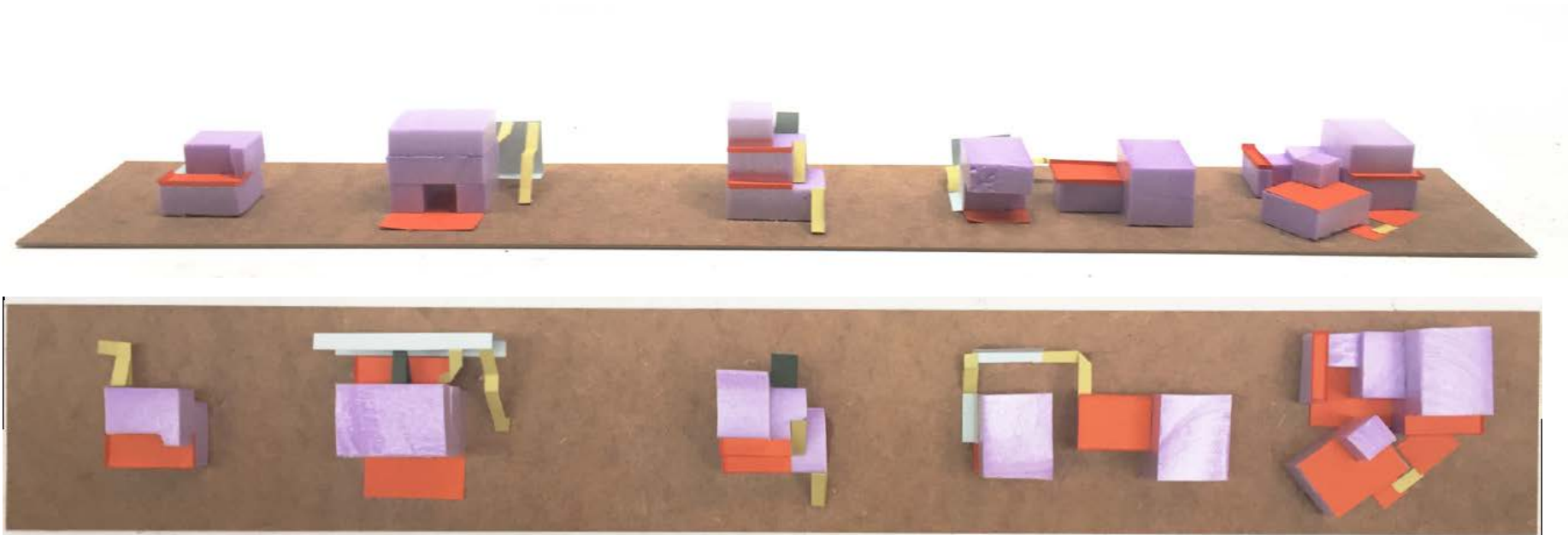


ANALYSE: the co-existence of Publicity & Privacy



This is a trying of reorganize the balconies, by providing the gateways and connections, we are able to control the accessibility of every balcony. Maybe some are open to the public, some only to local, some are open when there is an activity.

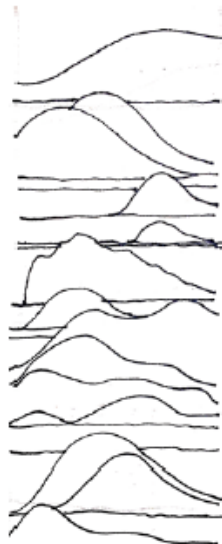
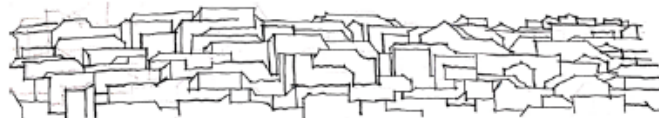
ANALYSE: the co-existence of Publicity & Privacy













Publicity ← Commons → Privacy

ANALYSE: the co-existence of Human & Nature

the boxes
the lines and dots
the layering | the offsetting fragments

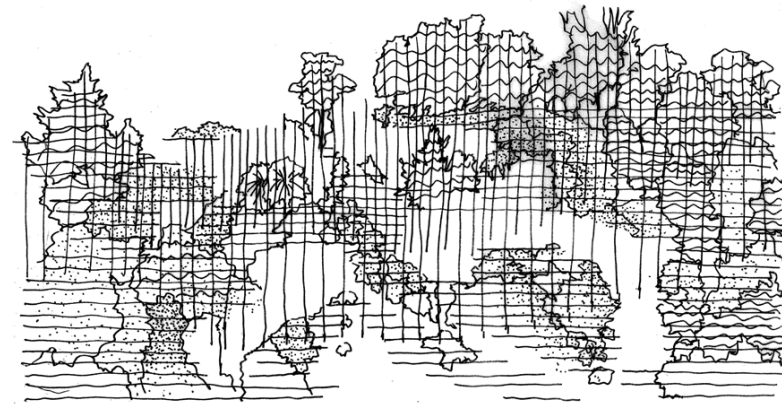
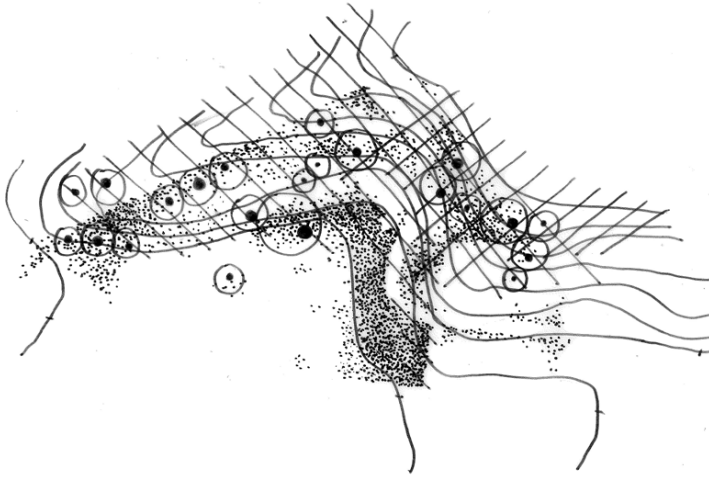


- sunlight  house 
- tree  contour 
- contour  sunlight 
- vegetation  vegetation 
- vegetation  trees 



ANALYSE: the co-existence of Human & Nature

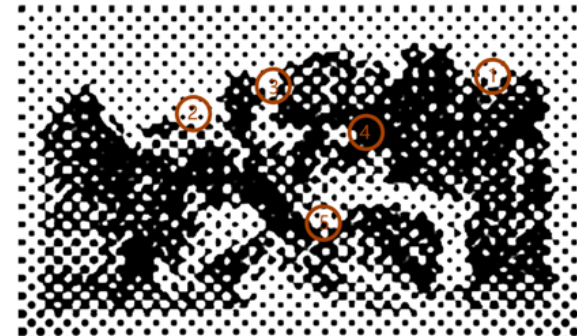
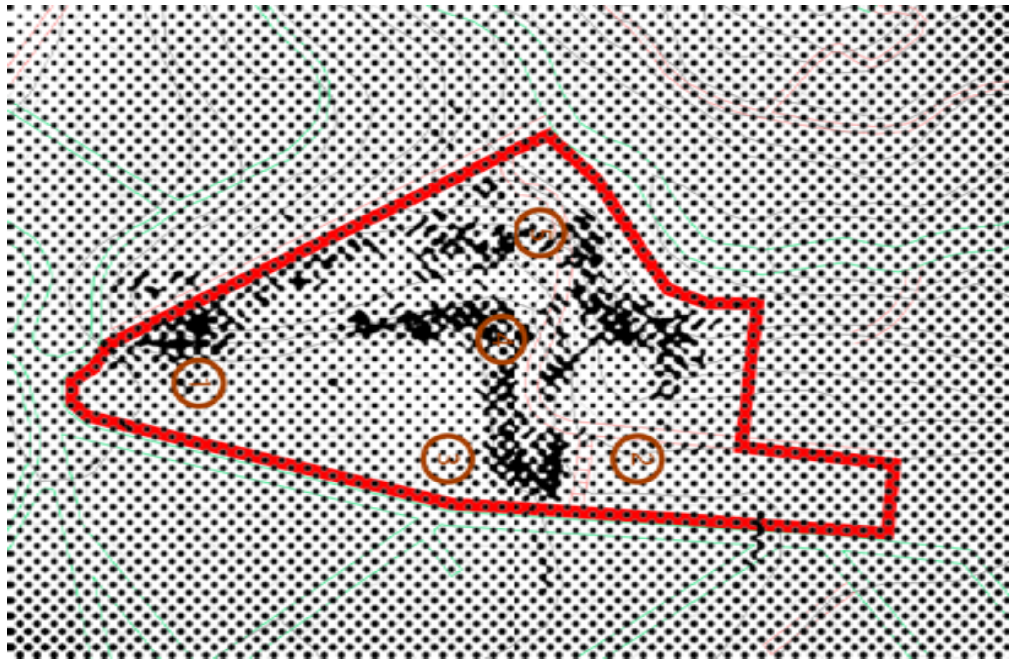
- sunlight
- tree
- contour
- vegetation



- house
- contour
- sunlight
- vegetation
- trees

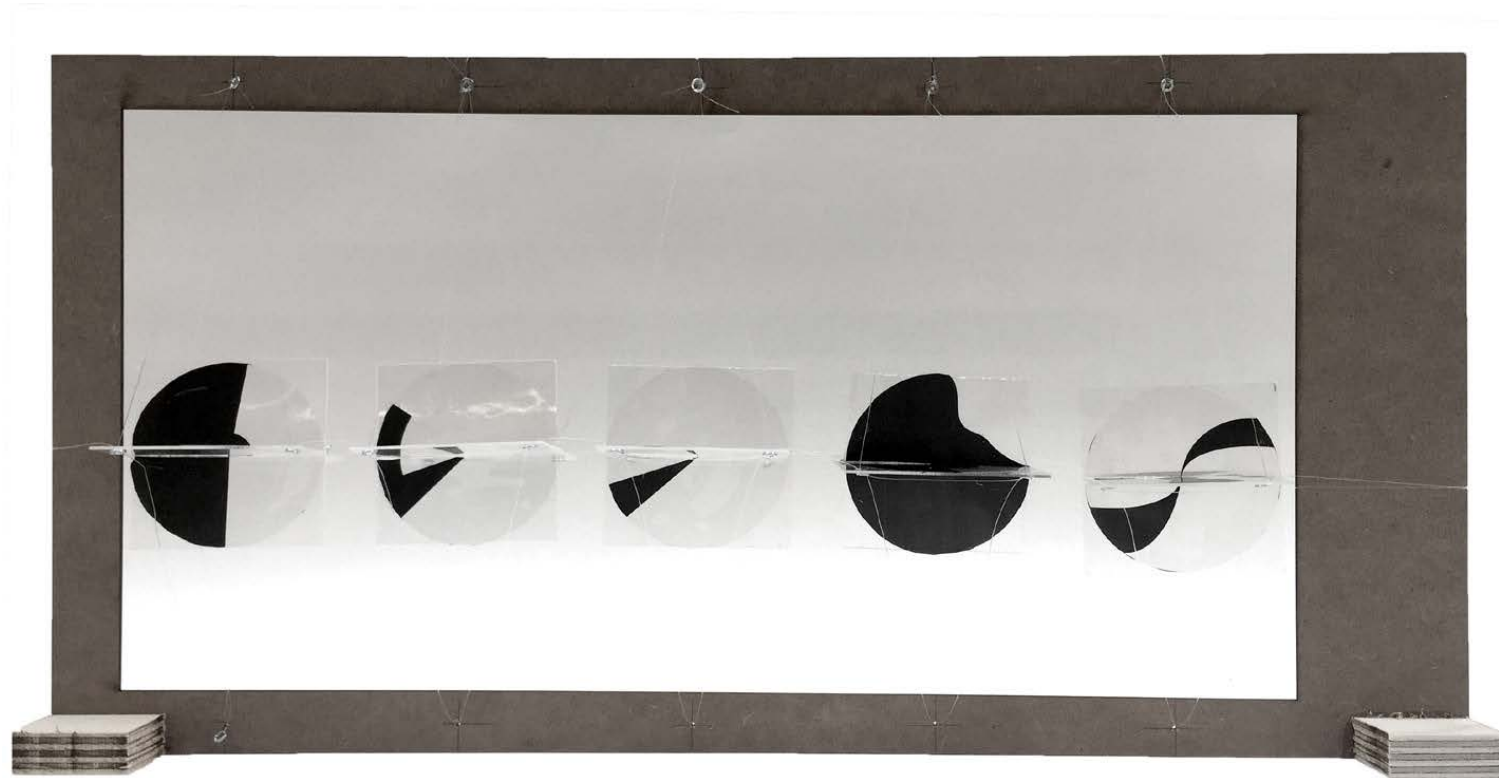
The darker place shows the more nature forces, the lighter place shows the more human forces.



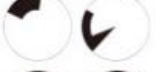


ANALYSE: the co-existence of Human & Nature



I chosed 5 points on the site, and locate them from horizontal plan and vertical views in the dark and light maps.

ANALYSE: the co-existence of Human & Nature

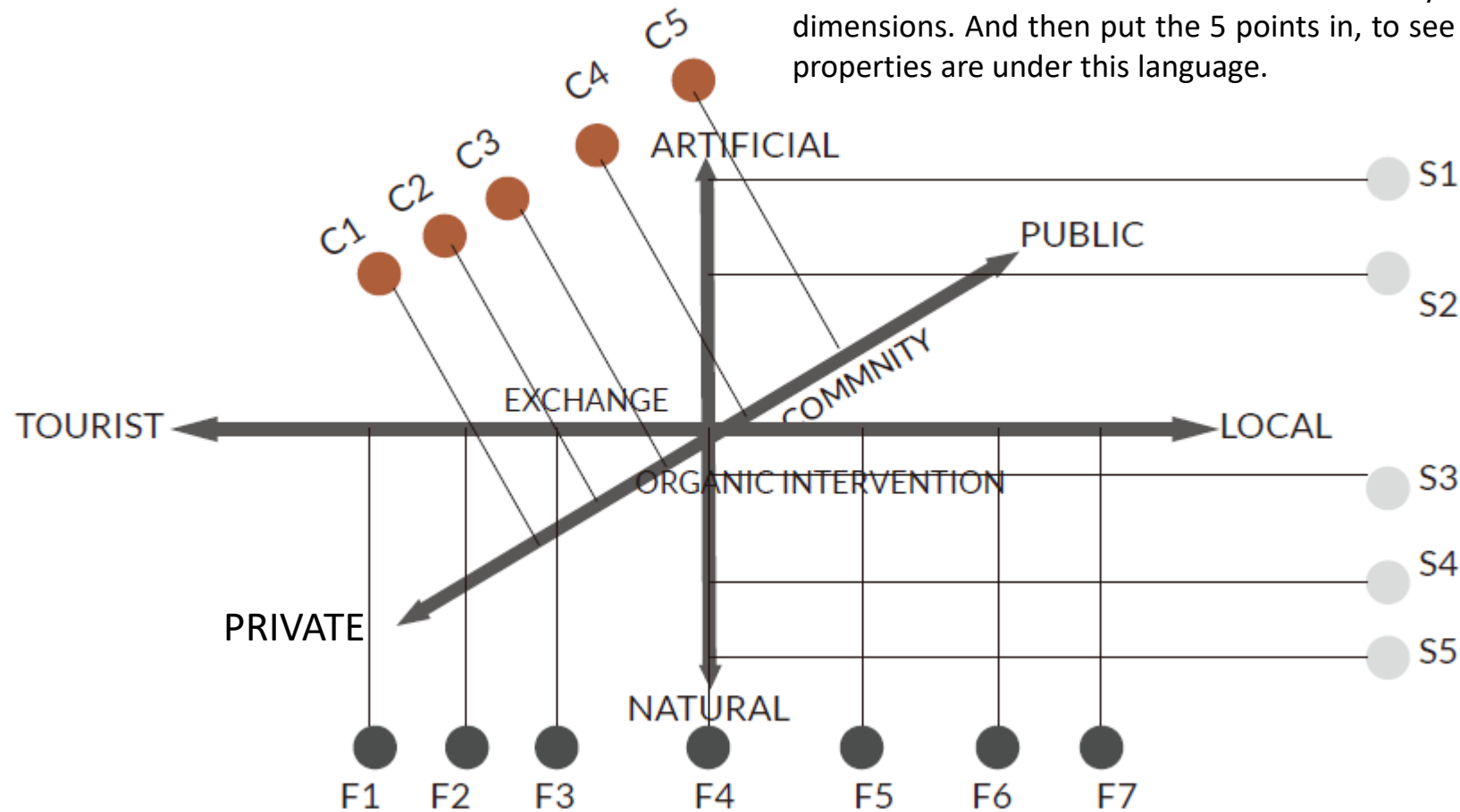


- 1  transition
- 2  expansive
- 3  dispatching
- 4  interlaced
- 5  surrounding

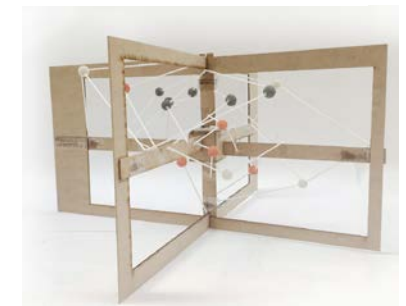
Artificial ← Organic → Natural

In between condition

Having all these two sided conditions, I defined the in-between condition as: Exchange community and organic. Those in between condition represents a compounded, collective and commons position which are accessible from both sides. And I established a coordinates by using the 3 dimensions. And then put the 5 points in, to see what their properties are under this language.



1 public tourist artificial F1, F2,	2 public tourist nature S3,
F4	
3 public local artificial C5, F5, S1	4 public local nature C4
F3	
5 private tourist artificial S2	6 private tourist nature C1, S5
7 private local artificial C2, F6, F7	8 private local nature C3, S4

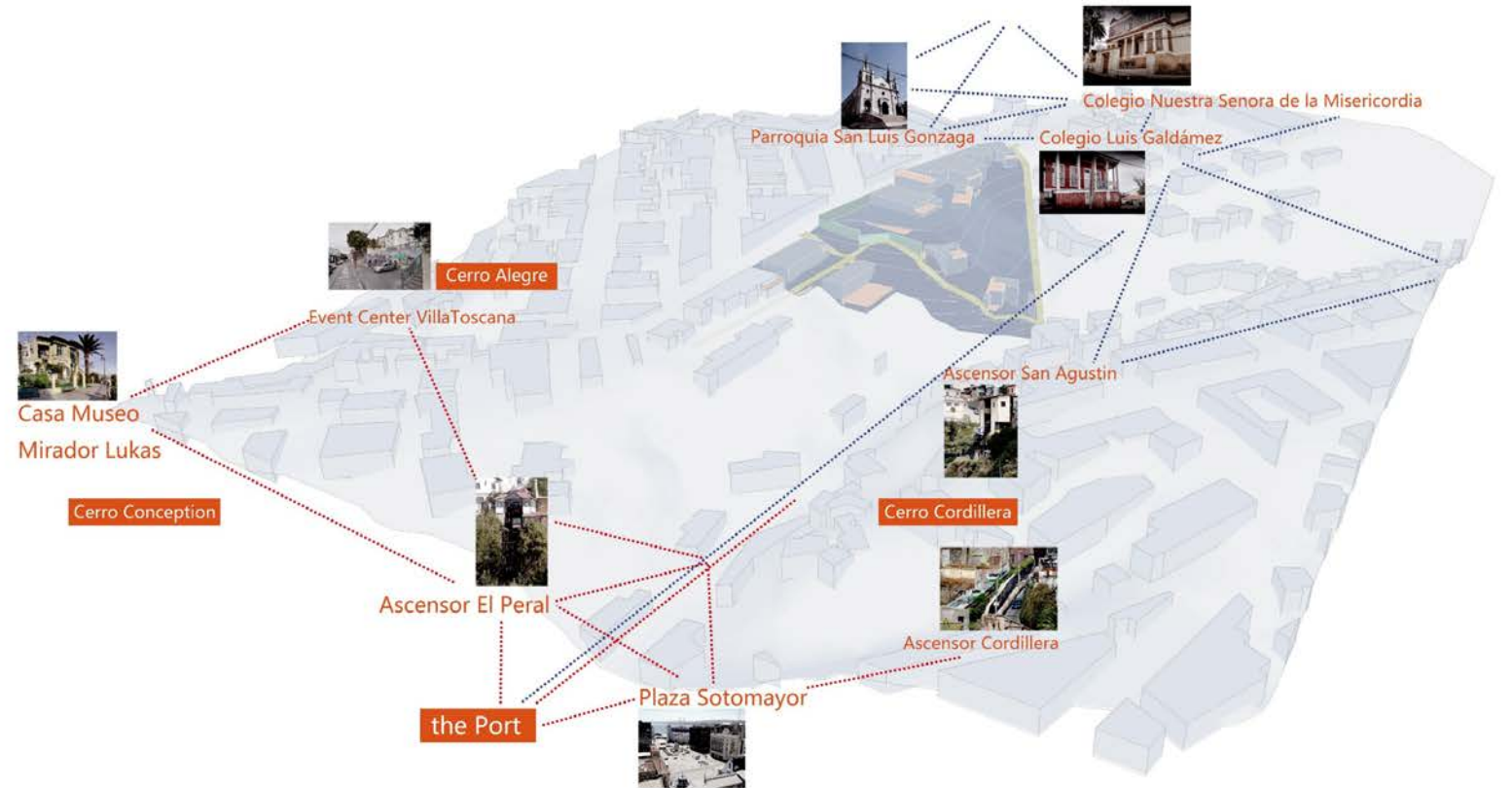
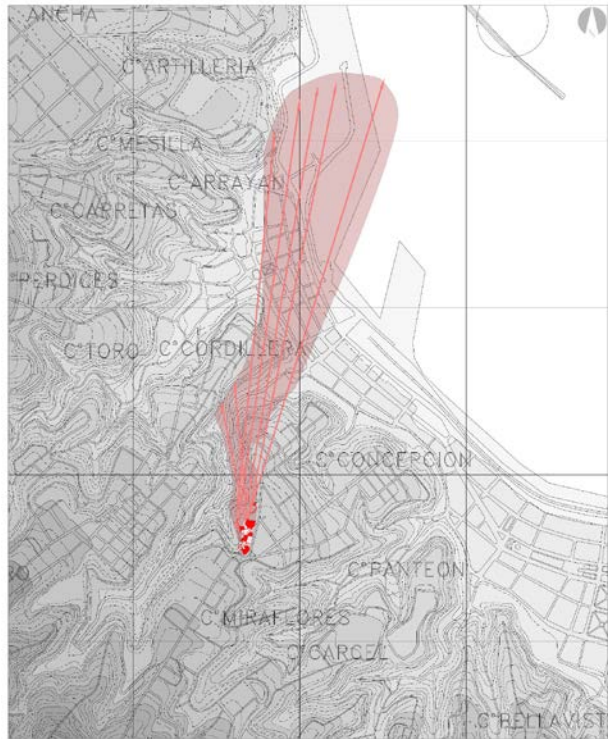




3 PROGRAM

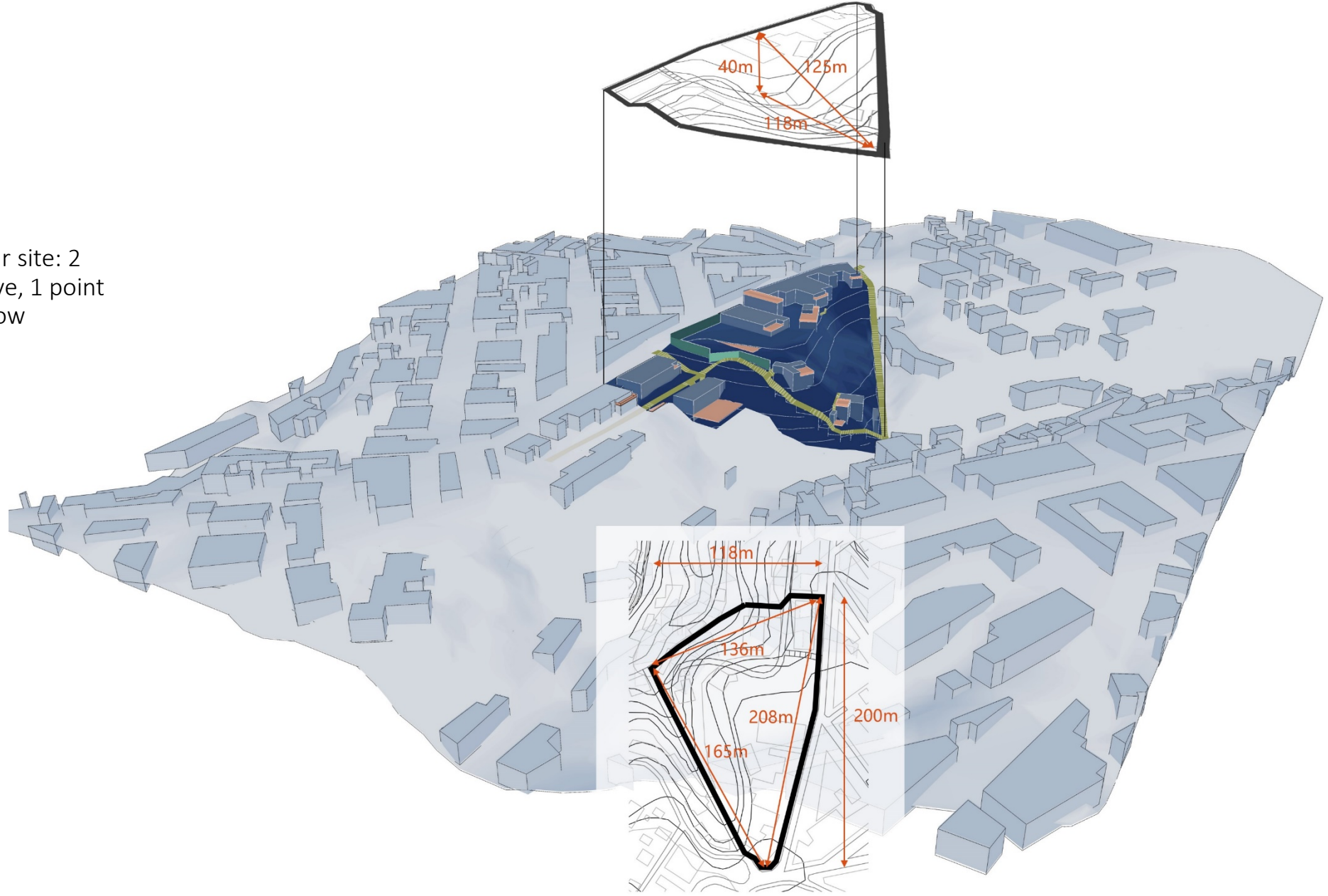


My site must be a place which show the 3 co-existence distinctly. SO I chose a cliff on Cerro Alegre, where the tourist and locals can meet.



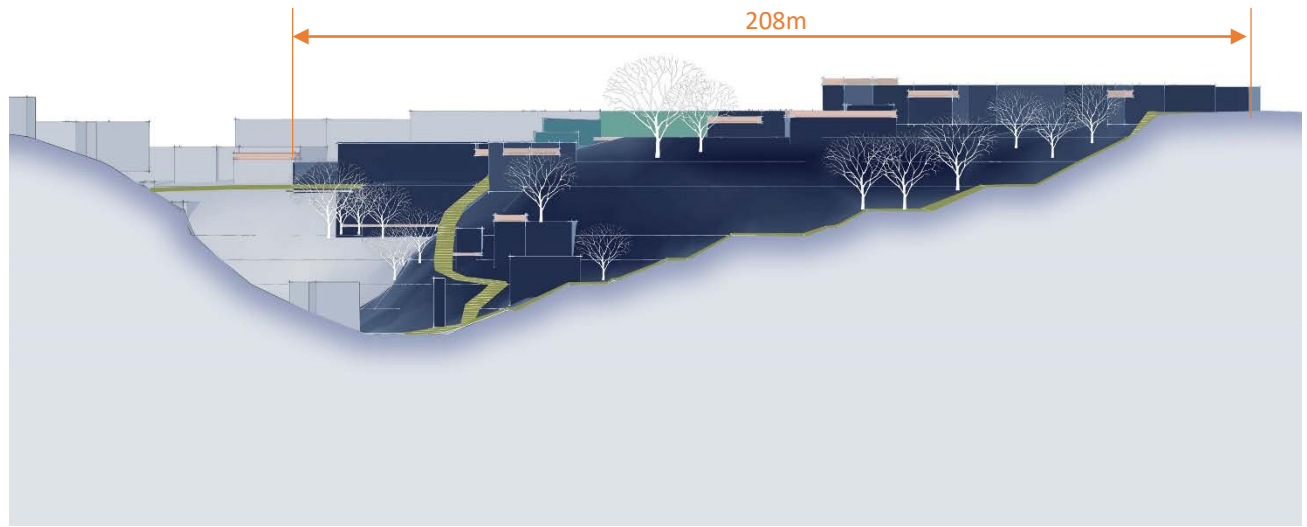


Triangular site: 2
points above, 1 point
below

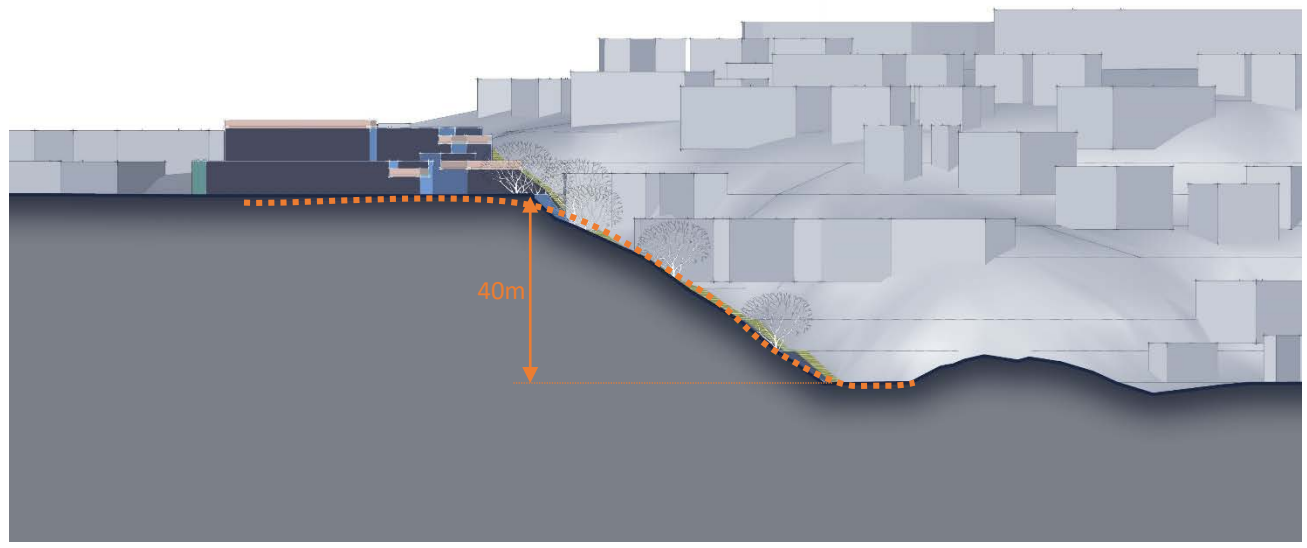




Triangular site: 2 points above, 1 point below



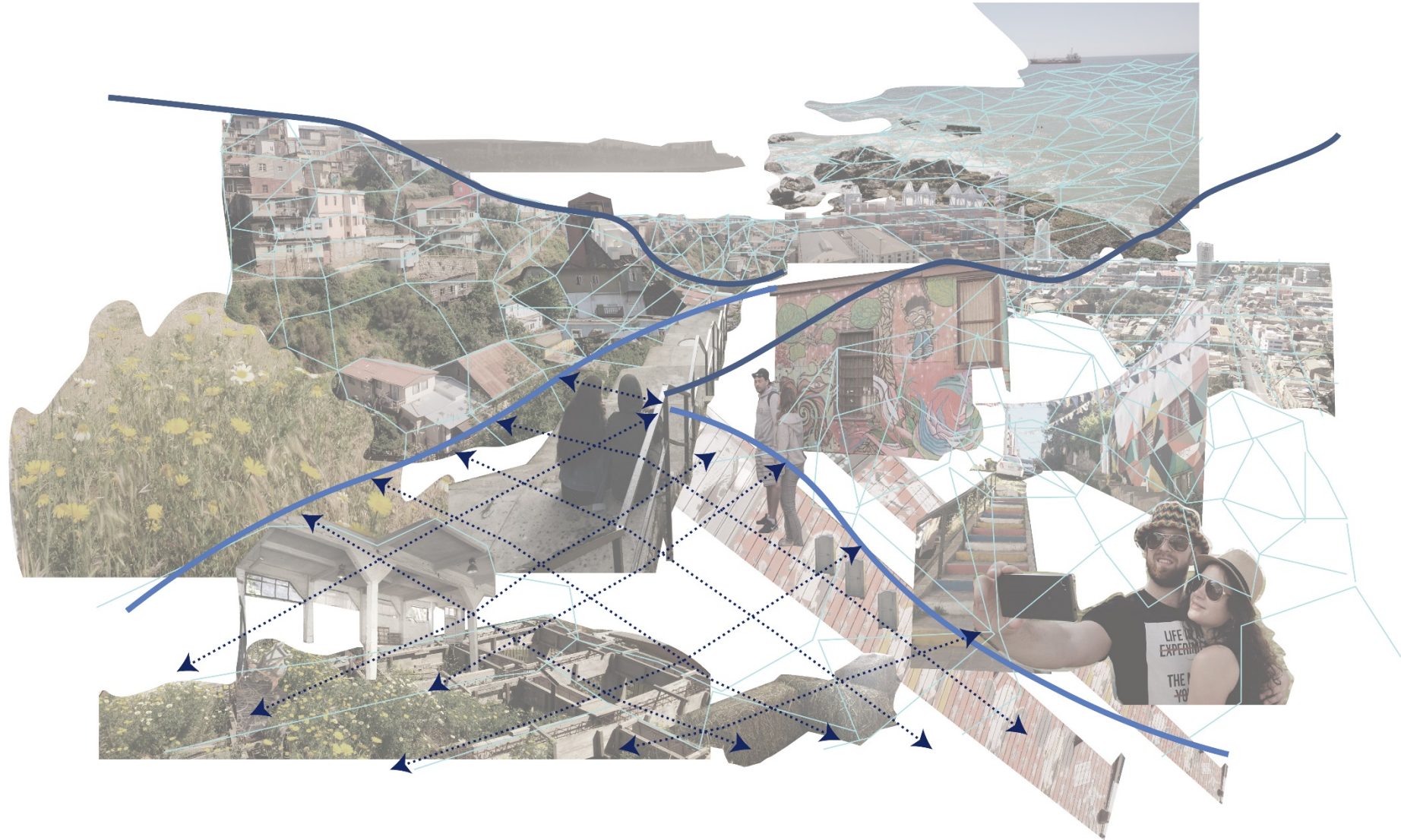
Flat & steep



The site: the collision, the co-existence, the geographical structure and the movement



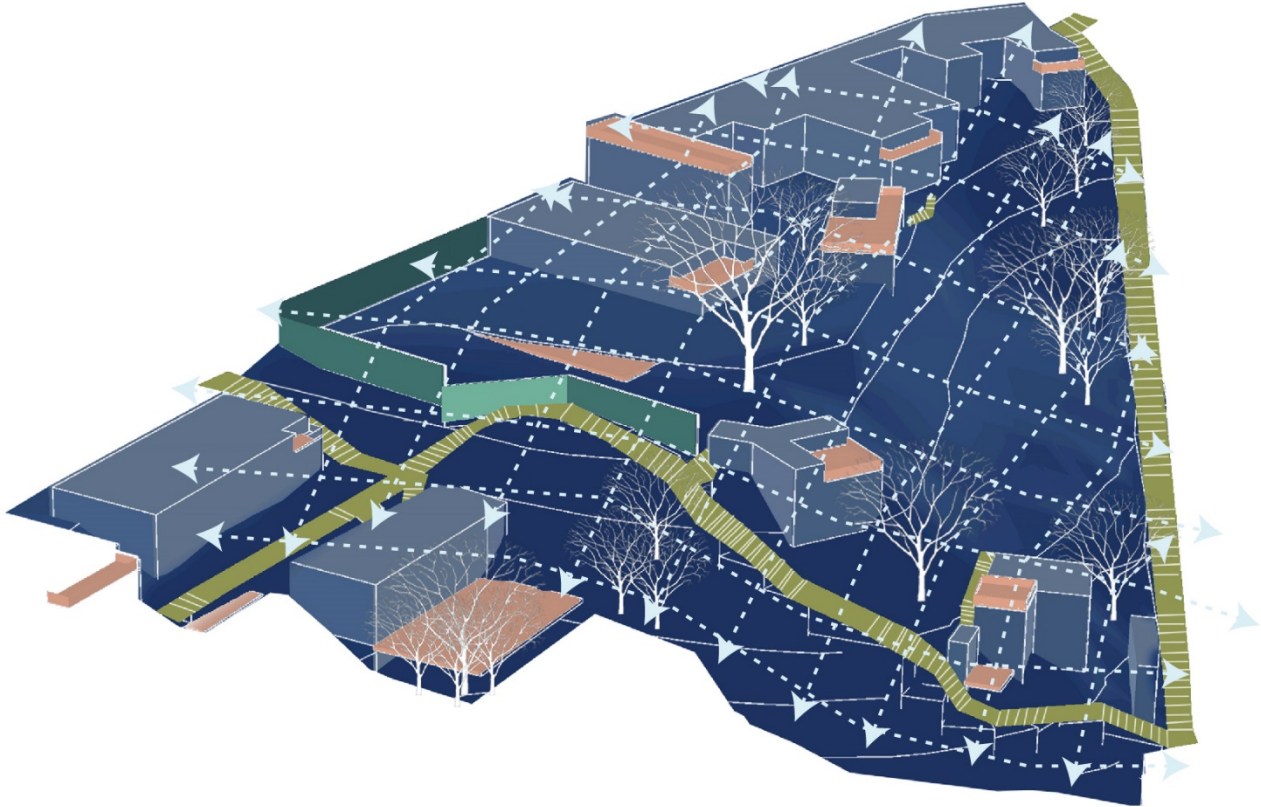
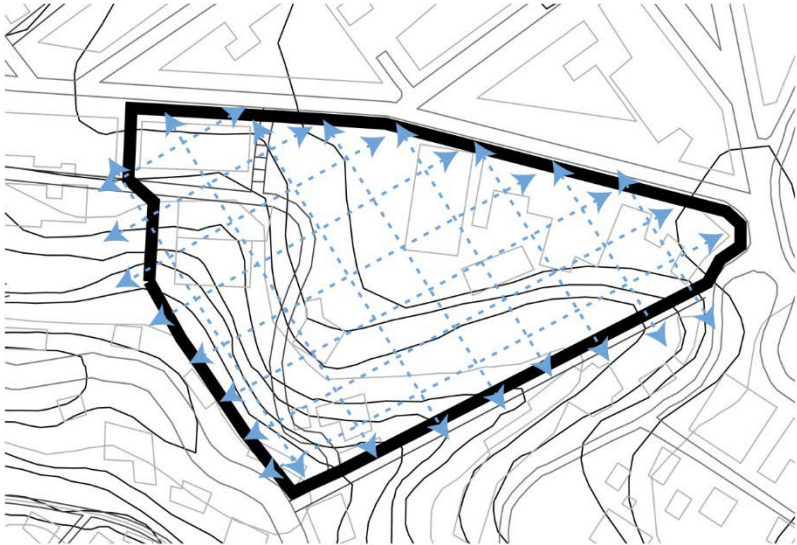
The geographical dynamism: the movement of hills, the framing of the ocean





The axes of geographical dynamism

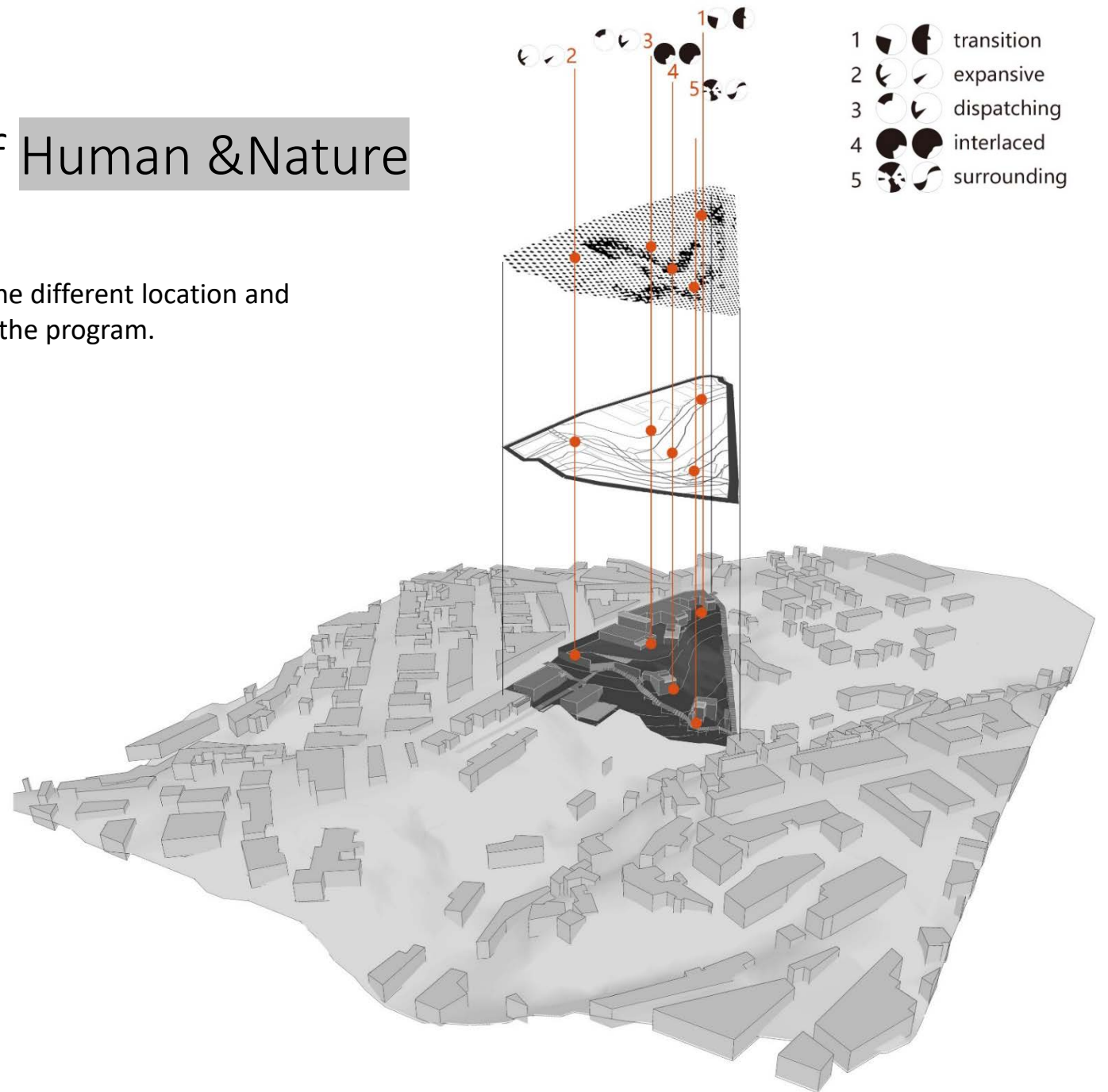
Put the axis on the plan, because there is Topographic ups and downs, so the axis is also up and down on the cliff, which makes a Dynamic mesh.

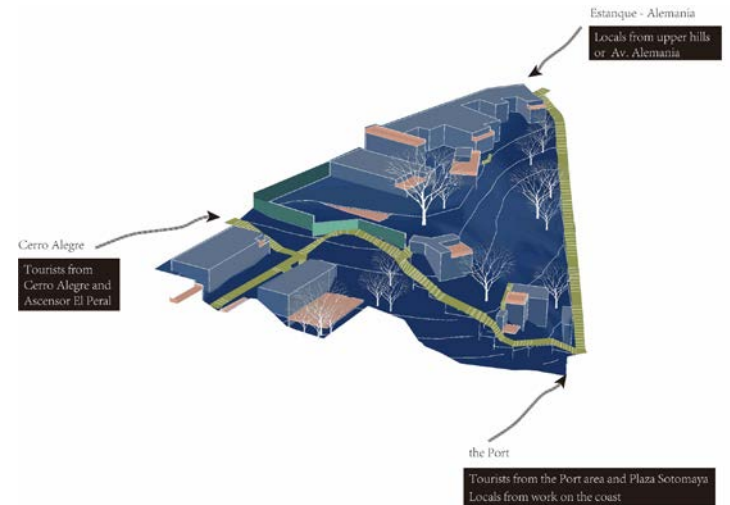
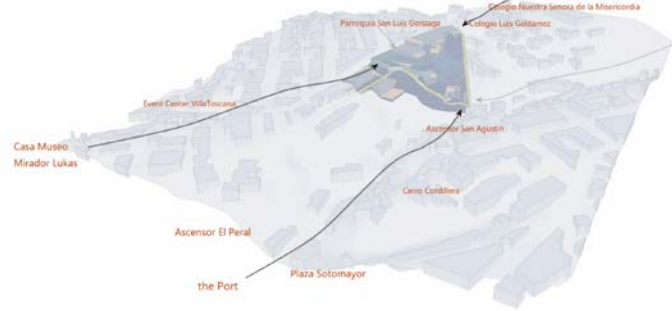




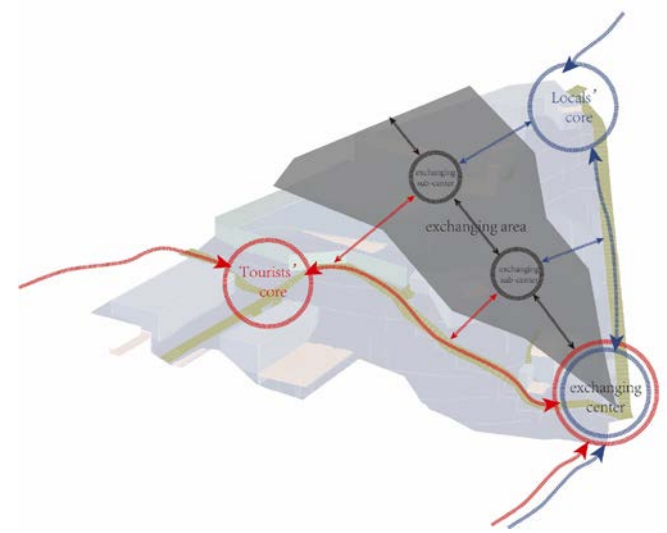
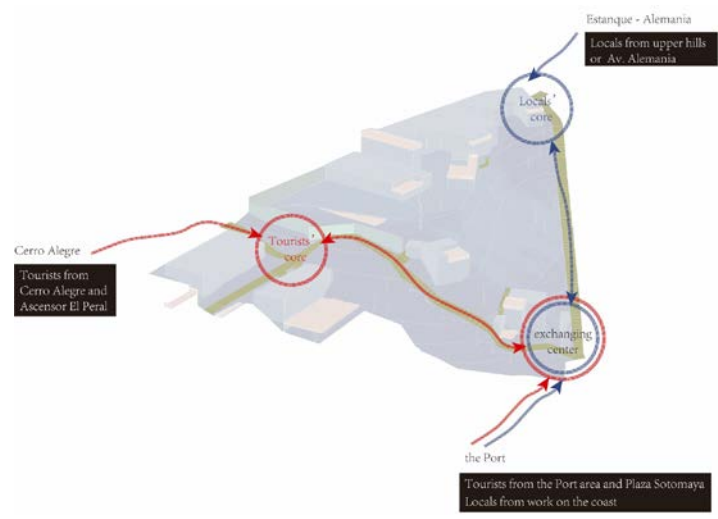
ANALYSE: the co-existence of Human & Nature

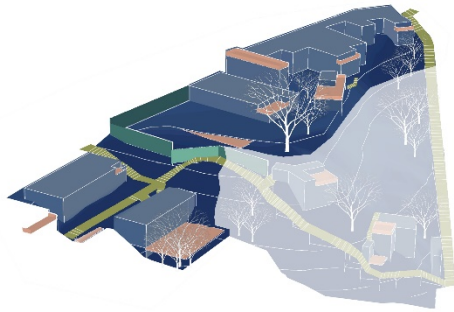
Now we put the 5 points in the site again, we can see the different location and properties, which means bearing different functions in the program.





Tourist comes from the down hill while the local comes from the up hill.
 They also meet at the bottom of cliff.
 So there is 1 tourist center, 1 local center, and 1 merging center for their exchange.
 Along the circulations, there are in between blank areas, which can also be the exchanging sub centers.



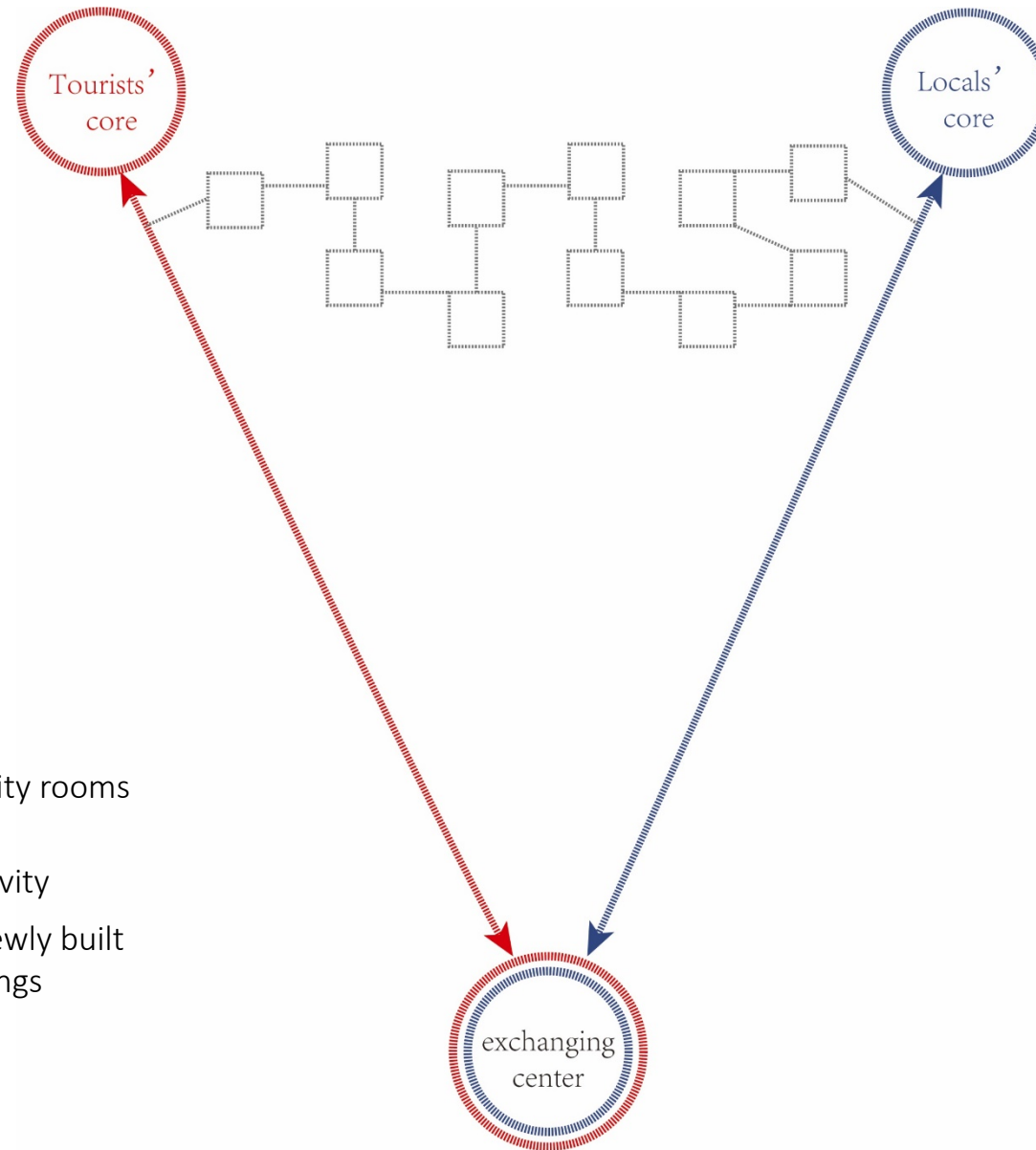


Exchanging pattern 1: exchange **material**
Indirectly, sinuous

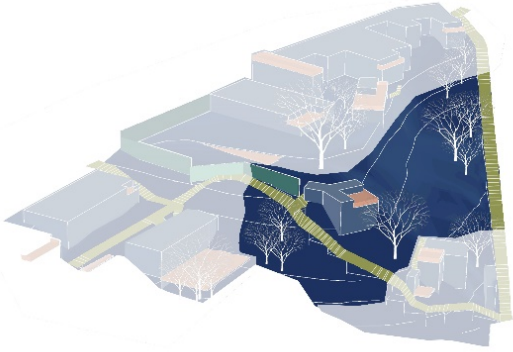
Function: retail store, family market, art studios, community rooms

Behavior: consumption, wandering, community activity

Space composition: open and half open courtyards, newly built infrastructures with part of remaining old buildings



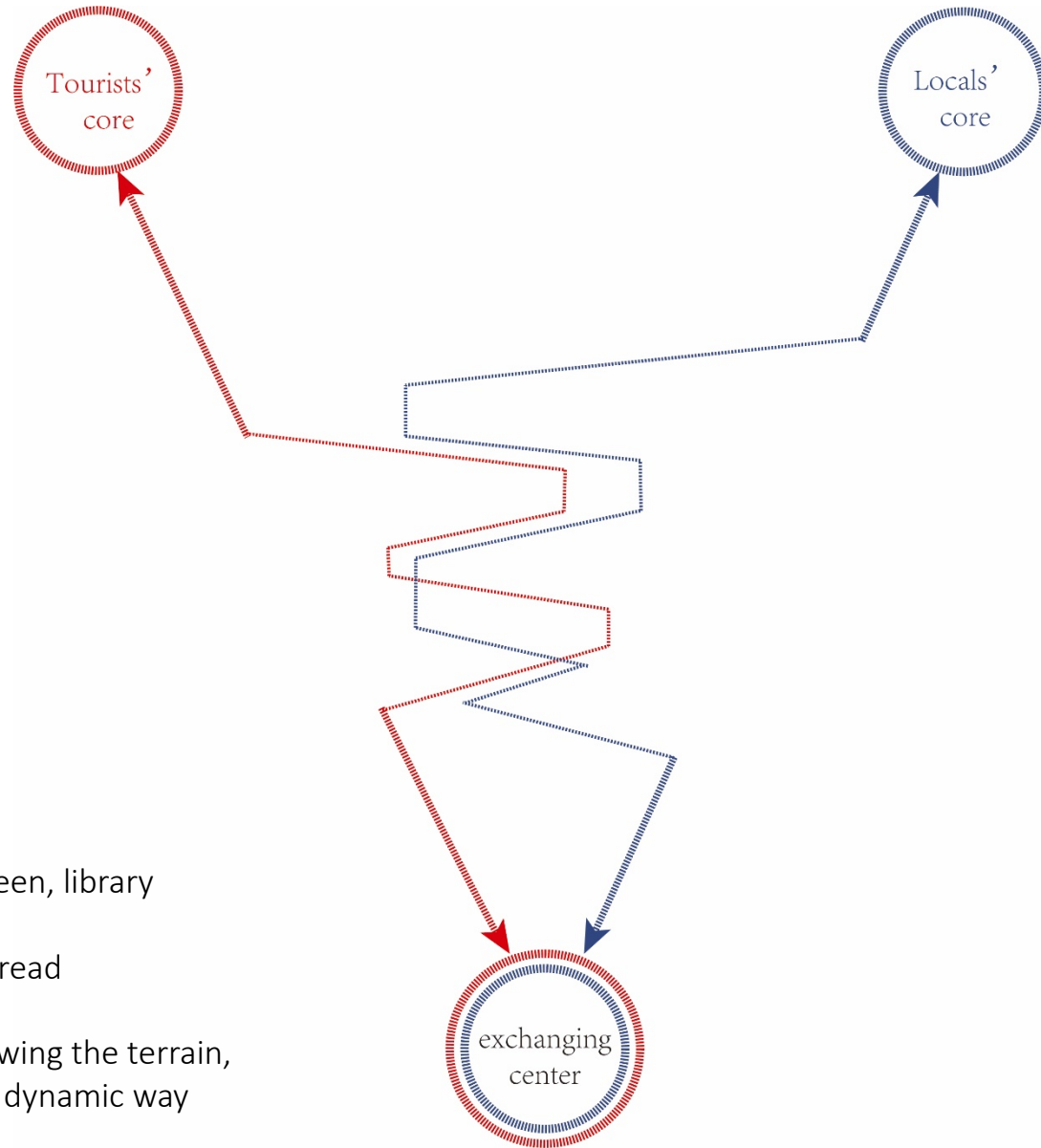
Exchanging pattern 2: exchange **thoughts**
Parallel & interlace



Function: Museum complex with occupiable green, library

Behavior: walk along the slope, observe, read

Space composition: Semi-underground building following the terrain,
continuous occupiable roof, architecture in zigzag dynamic way

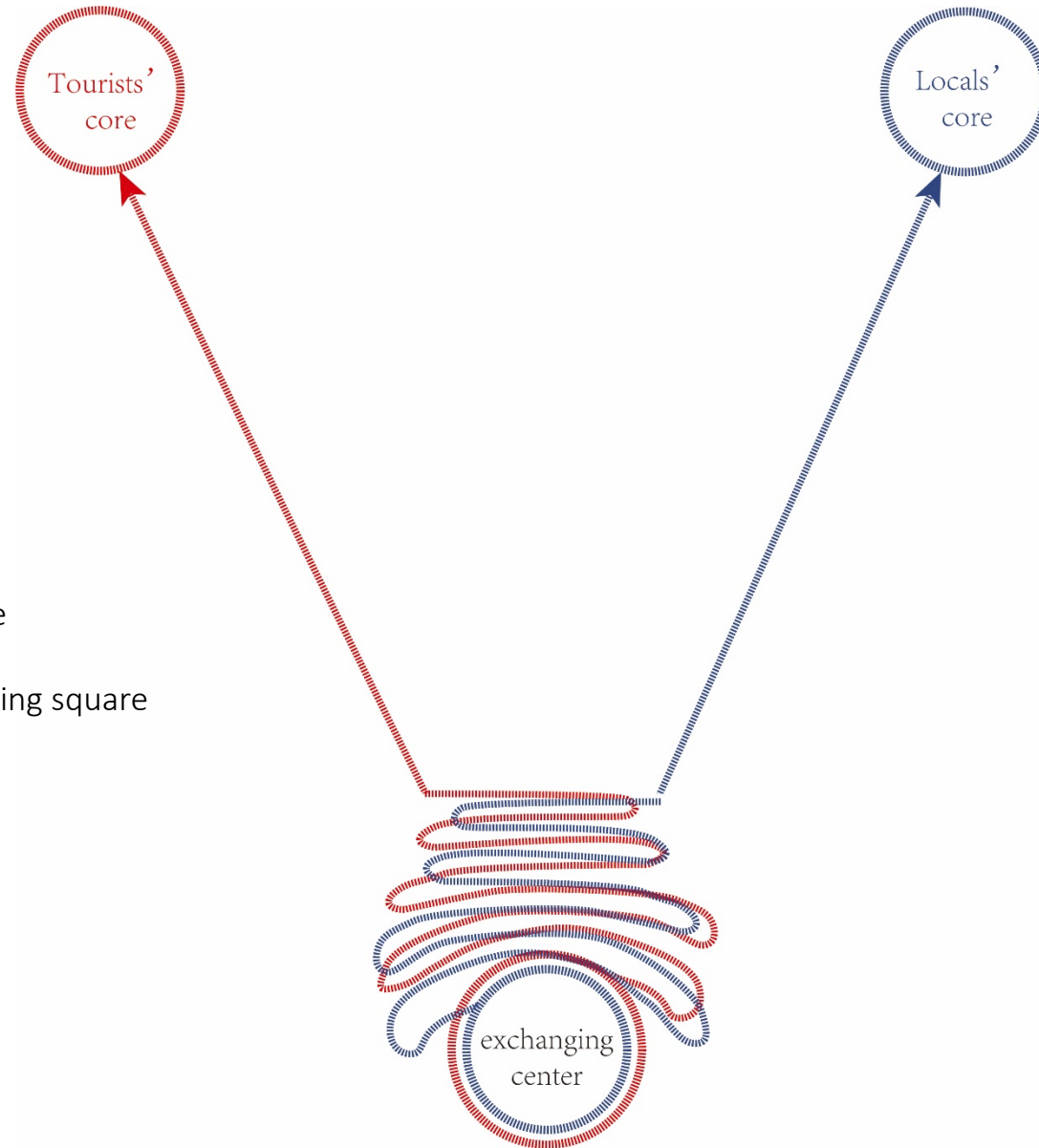
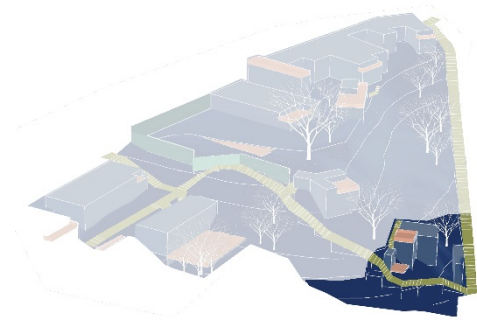


Exchanging pattern 3: exchange **spirit**
Merging & sharing

Function: amphitheater

Behavior: walk, sit, watch, communicate, share

Space composition: roof based amphitheater with a sinking square



Proposal on the whole cliff

Exchange of material

Function: retail store, family market, recreation room and recycling organization

Behavior: consumption, wandering, community activity

Space composition: open and half open courtyards, newly built infrastructures with part of remaining old buildings

Exchange of Taste

Function: Museum complex with occupiable green, library

Behavior: walk along the slope, observe, read

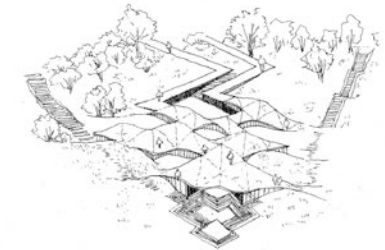
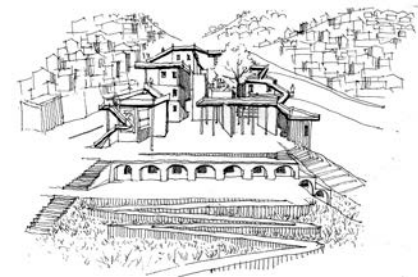
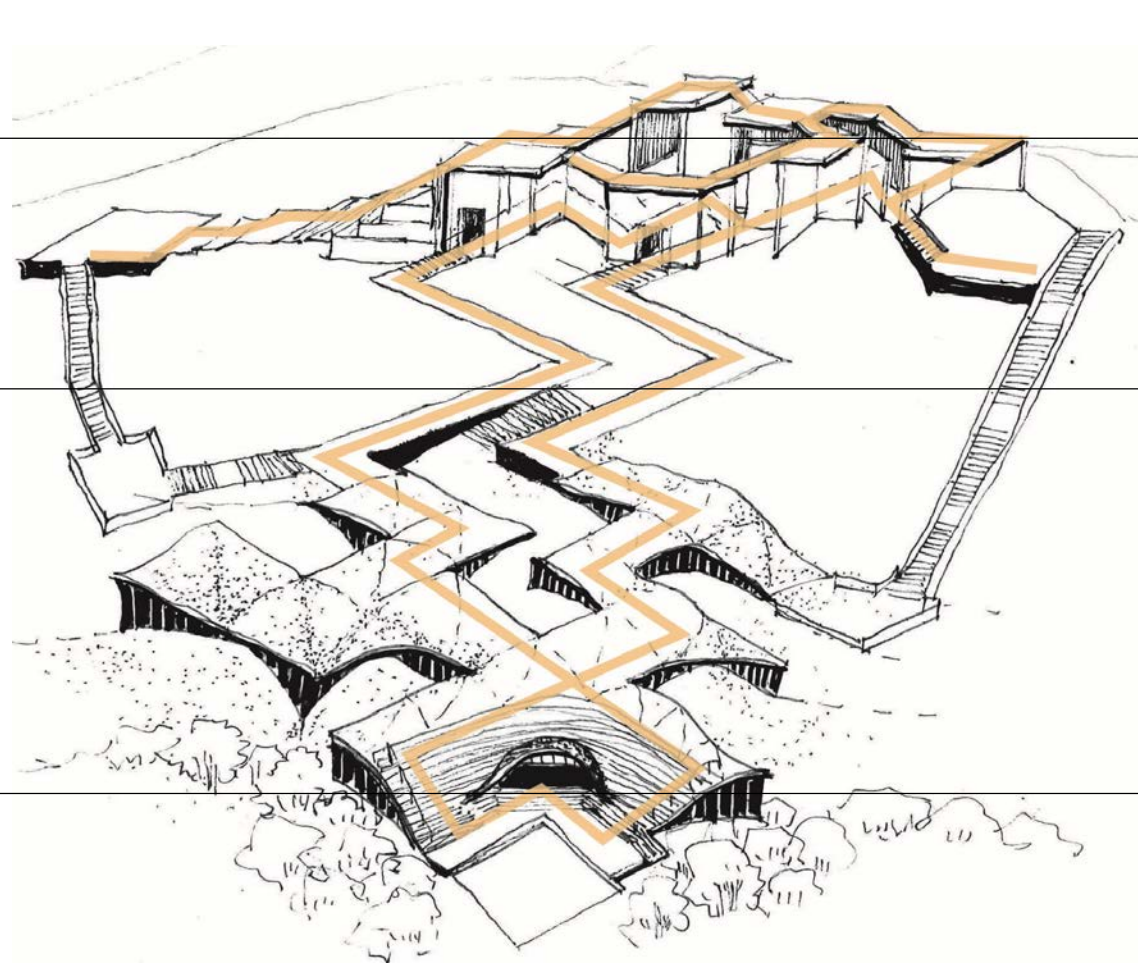
Space composition: Semi-underground building following the terrain, continuous occupiable roof, architecture in zigzag dynamic way

Function: amphitheater

Behavior: walk, sit, watch, communicate, share

Space composition: roof based amphitheater with a sinking square

Exchange of Spirit





Focus: the top part

Tourist core

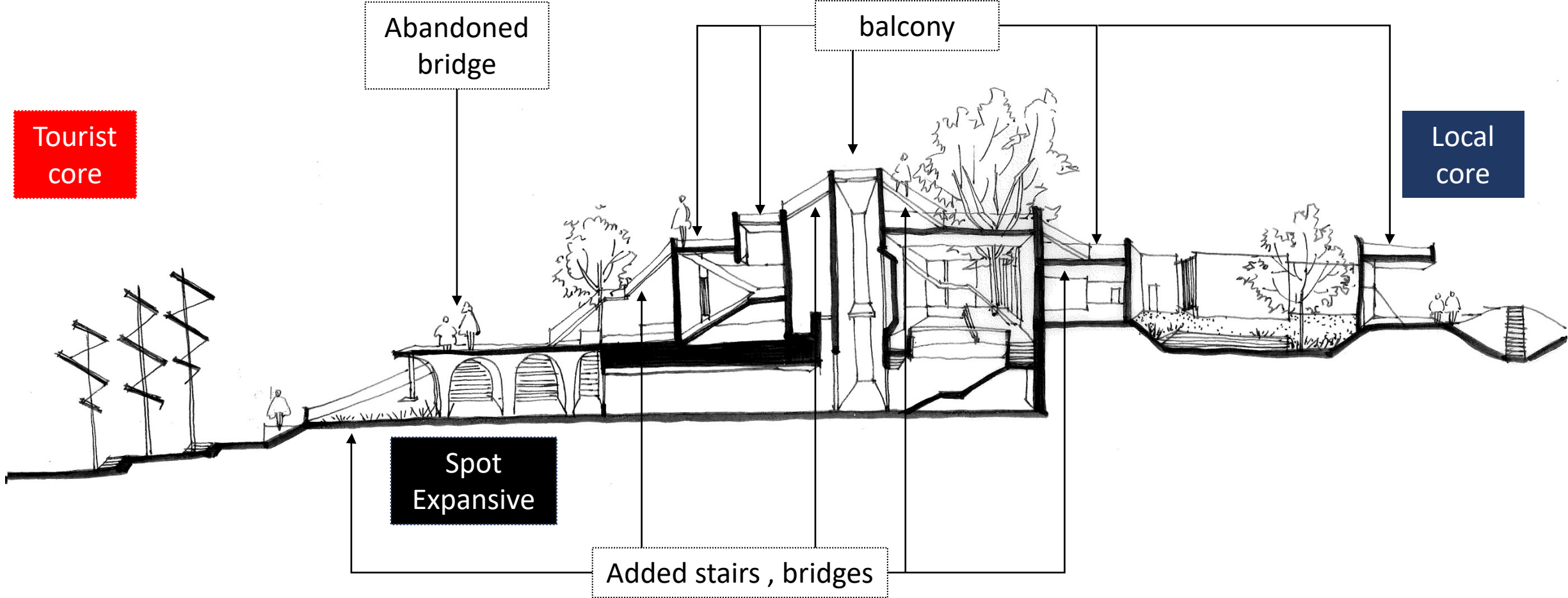
Abandoned bridge

balcony

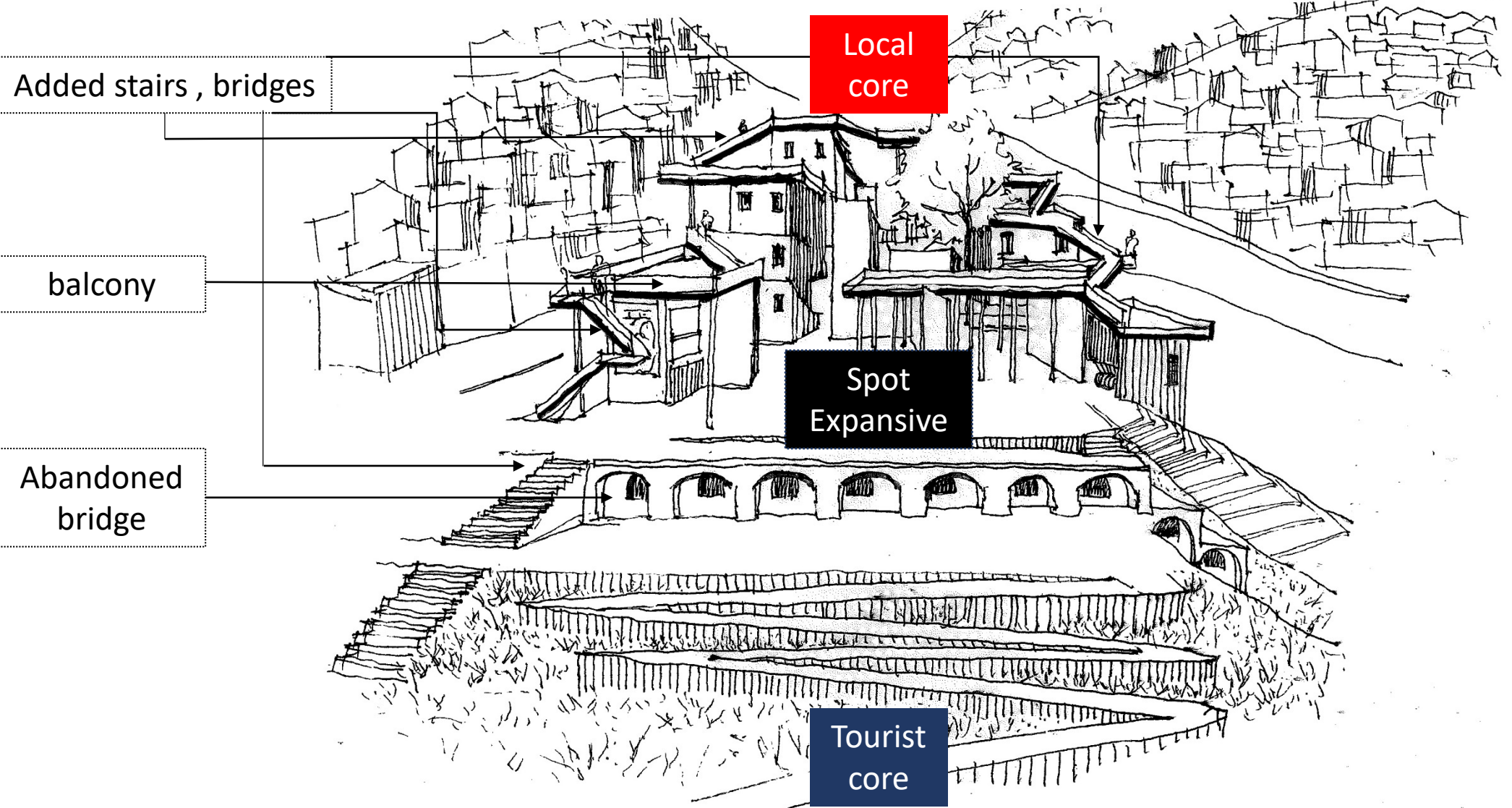
Local core

Spot Expansive

Added stairs, bridges

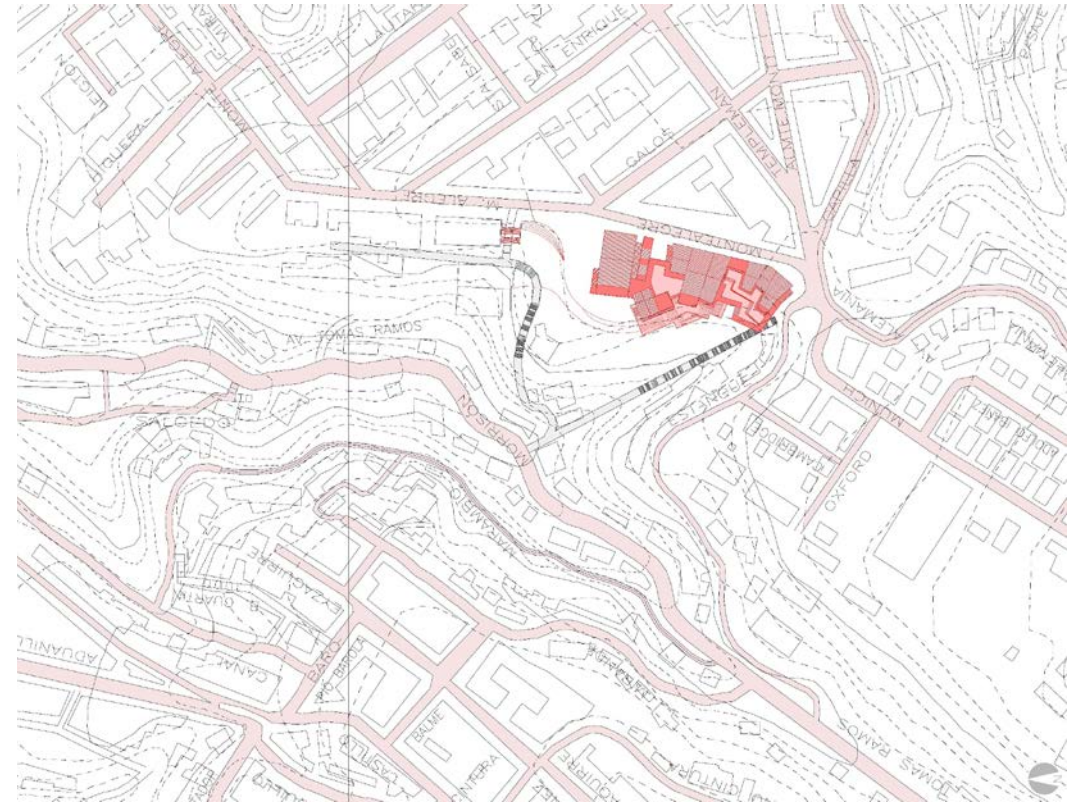
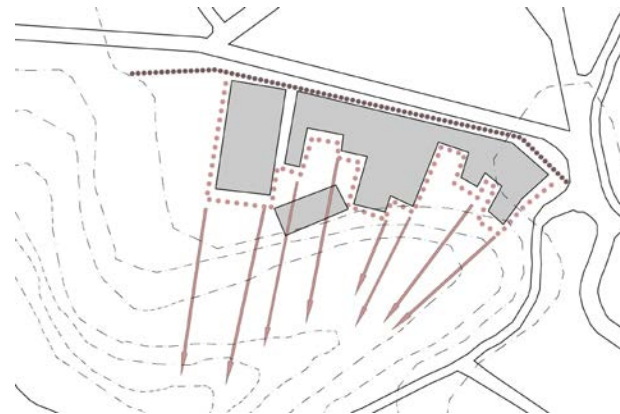


Focus: the top part



Focus: the top part

The original 10 houses are in the same level, 1 is in a lower level. Facing the cliff, the bridge is on the left and the bus stop and Avenue Aleminia are on the right. Facing the city, the façade is uniformed, determined by the street planning. But facing the valley, the façades are more alive, having more human spontaneity, and connection with nature. So the first idea is to keep this trapezoid outline.





GROUND FLOOR 1:500

WAYS OF INTERACT:

PUBLIC: always open to tourist

COMMONS: partially, sometimes open to tourist,
partially occupied by locals

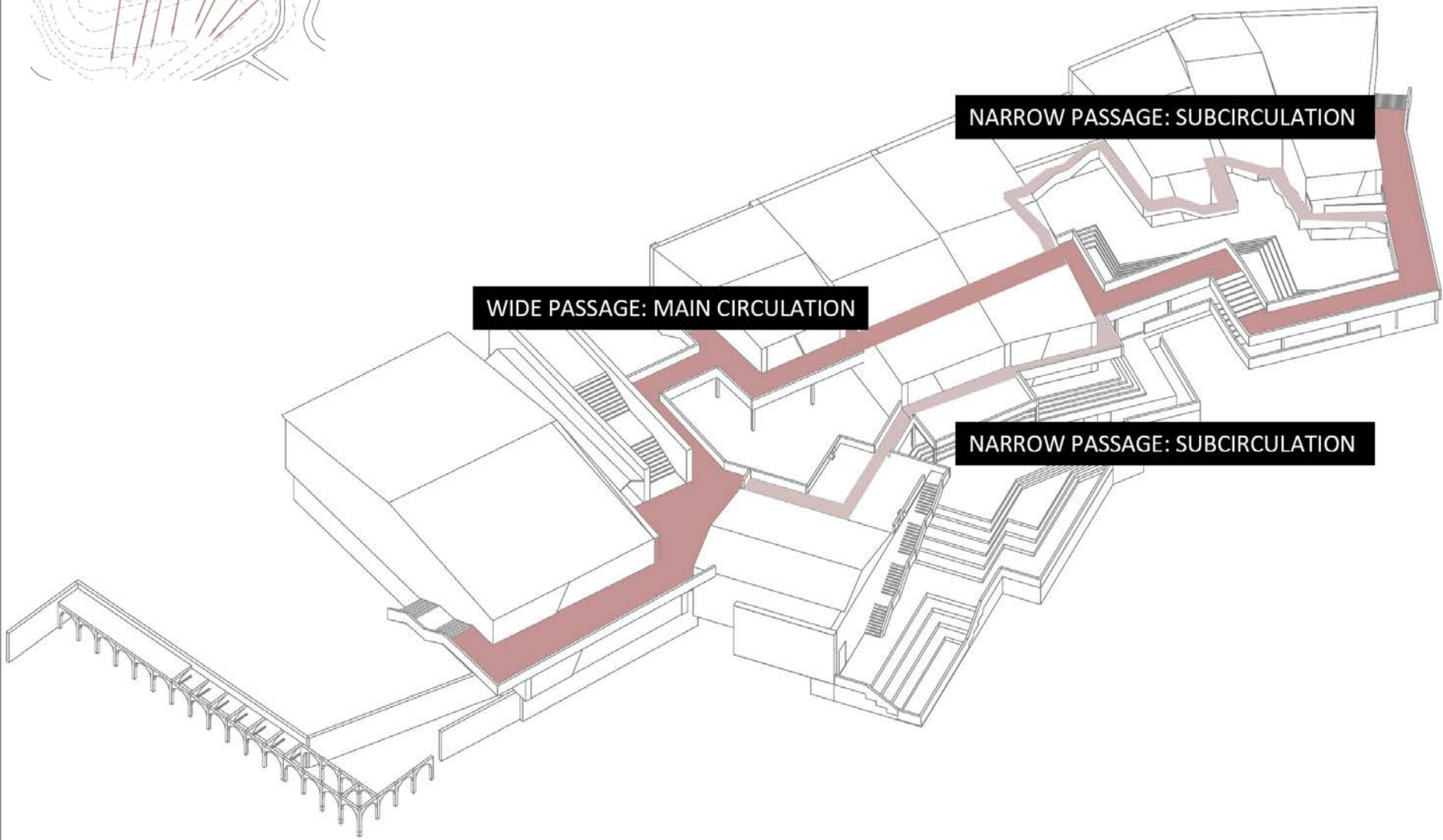
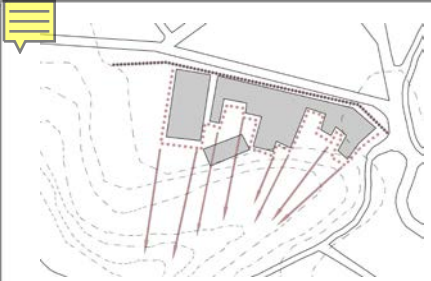
PRIVATE: totally occupied by locals

WAYS OF EXCHANGE:

PUBLIC: co-working studio, exhibition gallery

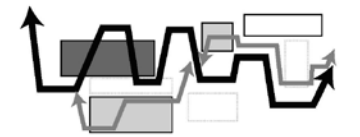
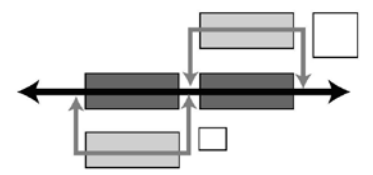
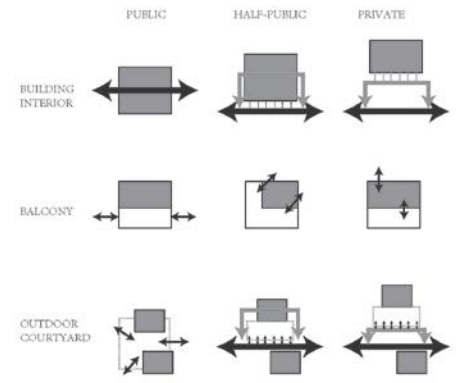
COMMONS: restaurant in family, half-open art
studio

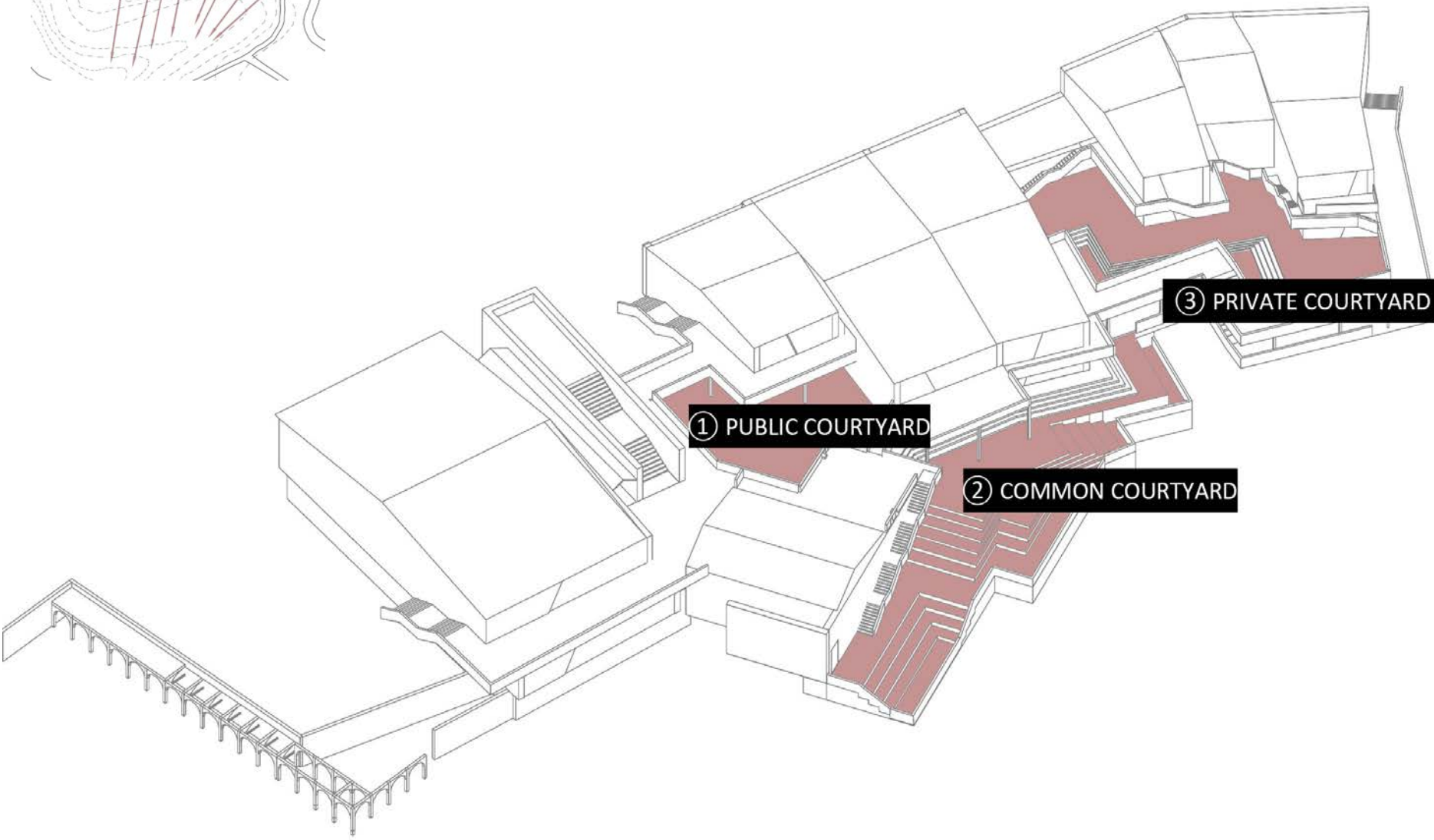
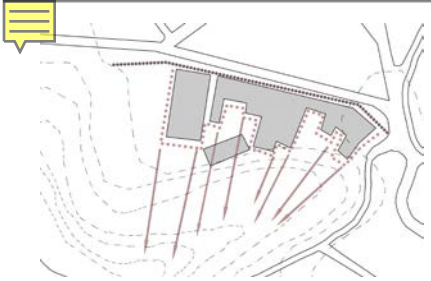
PRIVATE: residential houses



VARIOUS DEGREE OF PUBLICITY AND PRIVACY

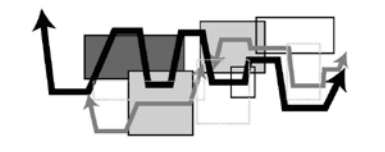
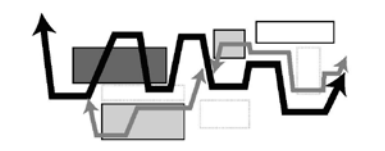
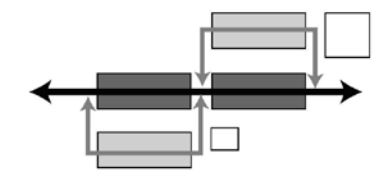
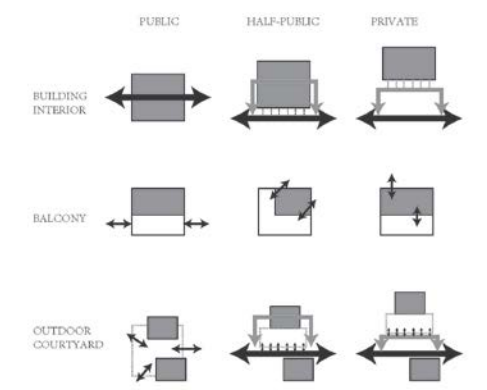
BUILDING BALCONY COURTYARD MAIN CIRCULATION SUB CIRCULATION

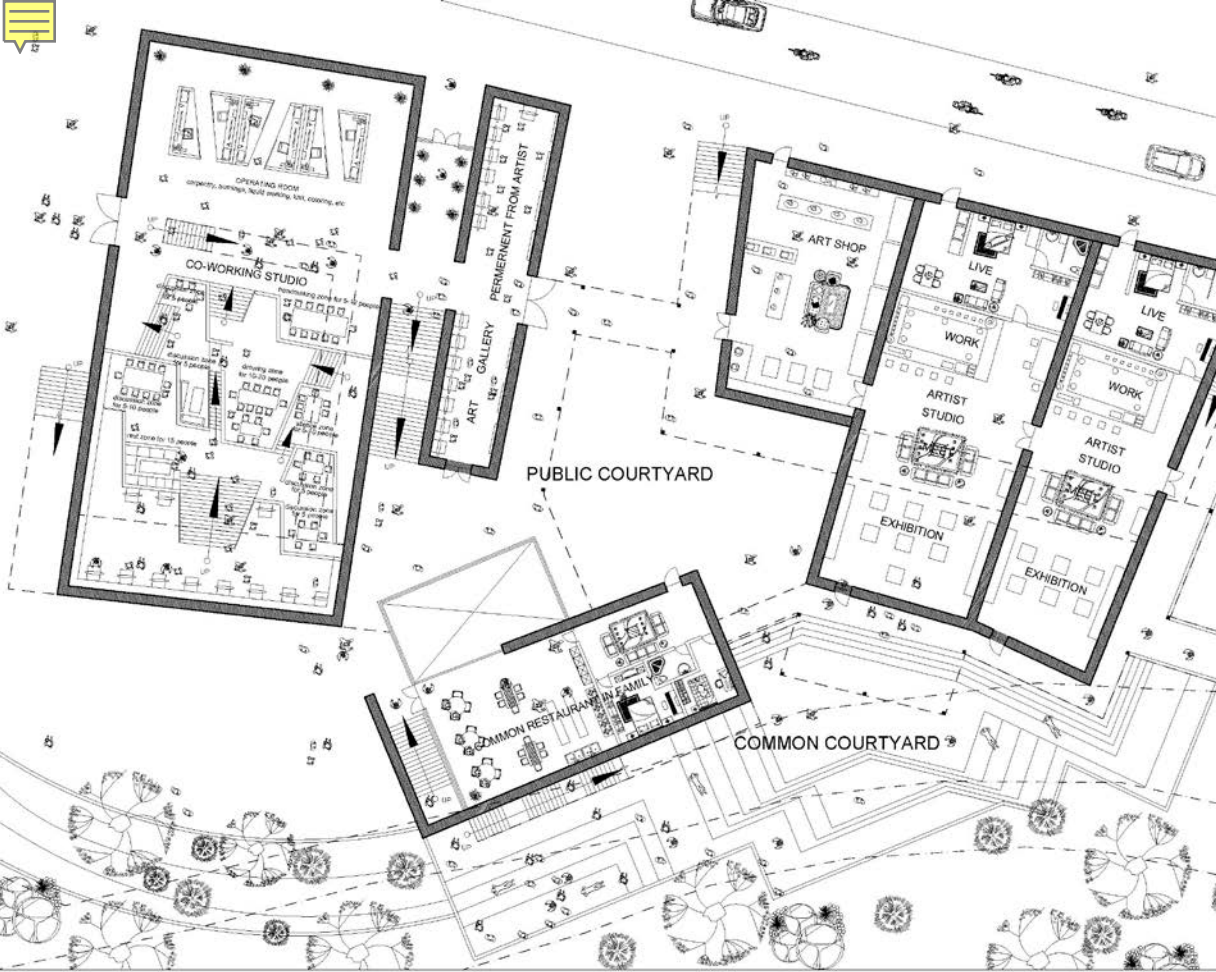




VARIOUS DEGREE OF PUBLICITY AND PRIVACY

BUILDING ■ BALCONY □ COURTYARD □ MAIN CIRCULATION ↔ SIZE CIRCULATION ↔





Ground floor (public and common area)

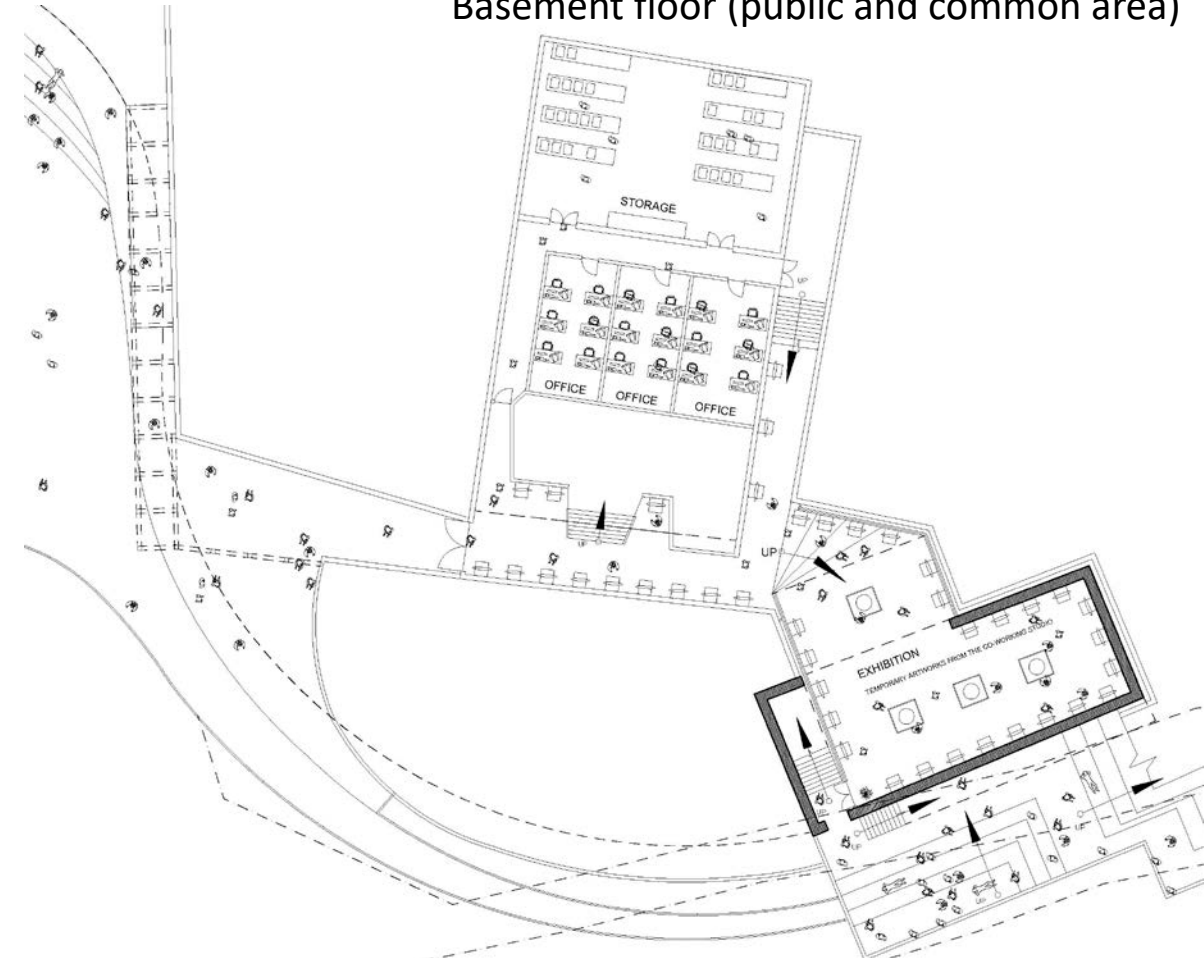
Look at the public zone and common zone.

The co-working studio includes different free working zones, which are on several interior terraces and in a really tall hall. The terraces are facing the beautiful view of the valley. Tourists in the co-working studio can discuss in group, draw the sketches, buy the materials and make artworks by hand or by machines, they will also get assistance from some local volunteers.

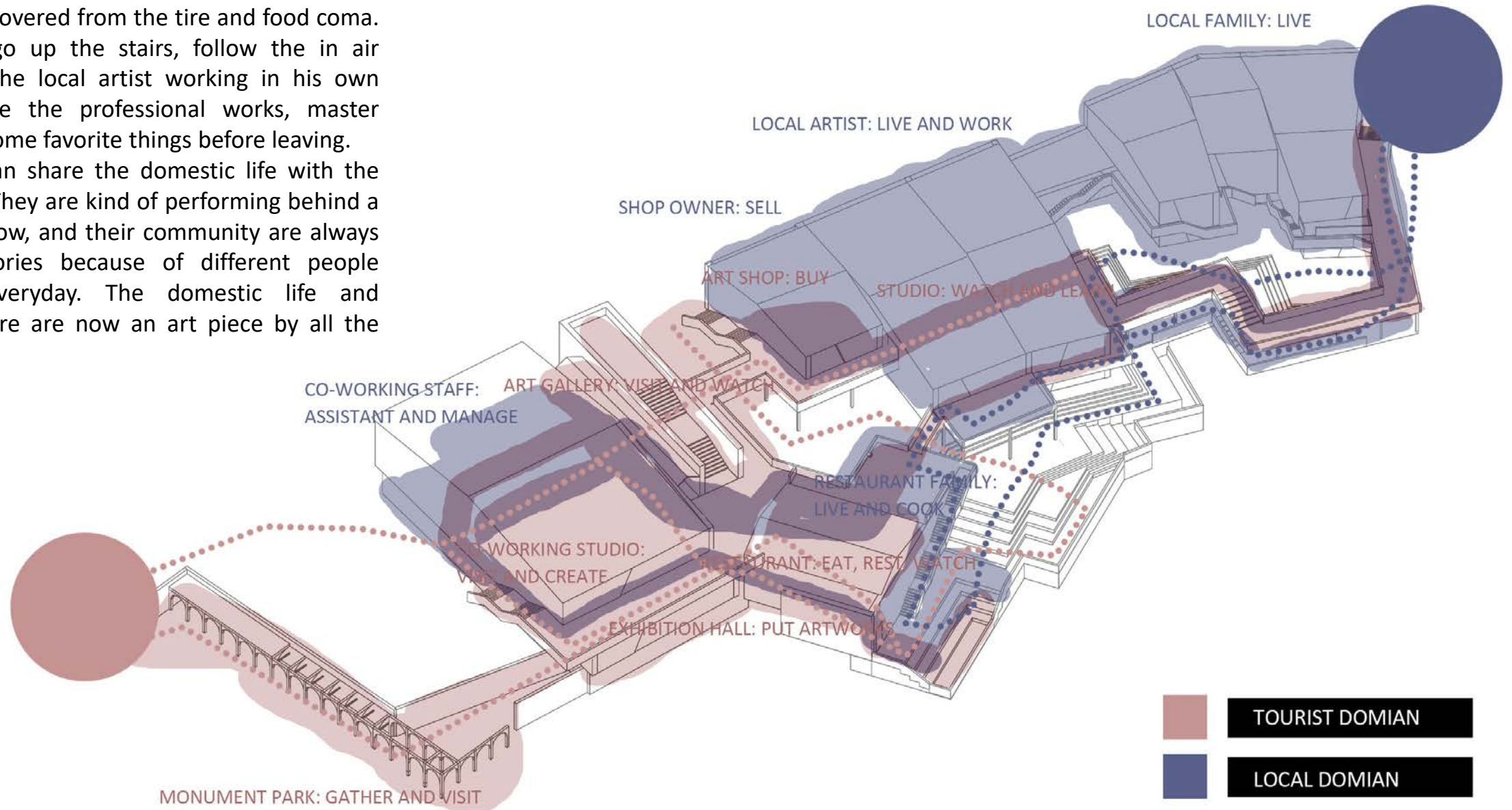
There are a lot of local artists in Valparaiso, they can train young men and pass the skills to the next generation, and even spread it to overseas tourists. In this way, tourists would get a new kind of impression of traveling, not only buying souvenirs, but also practicing some skills, some thoughts, some current emotion which are embedded in their own artworks.

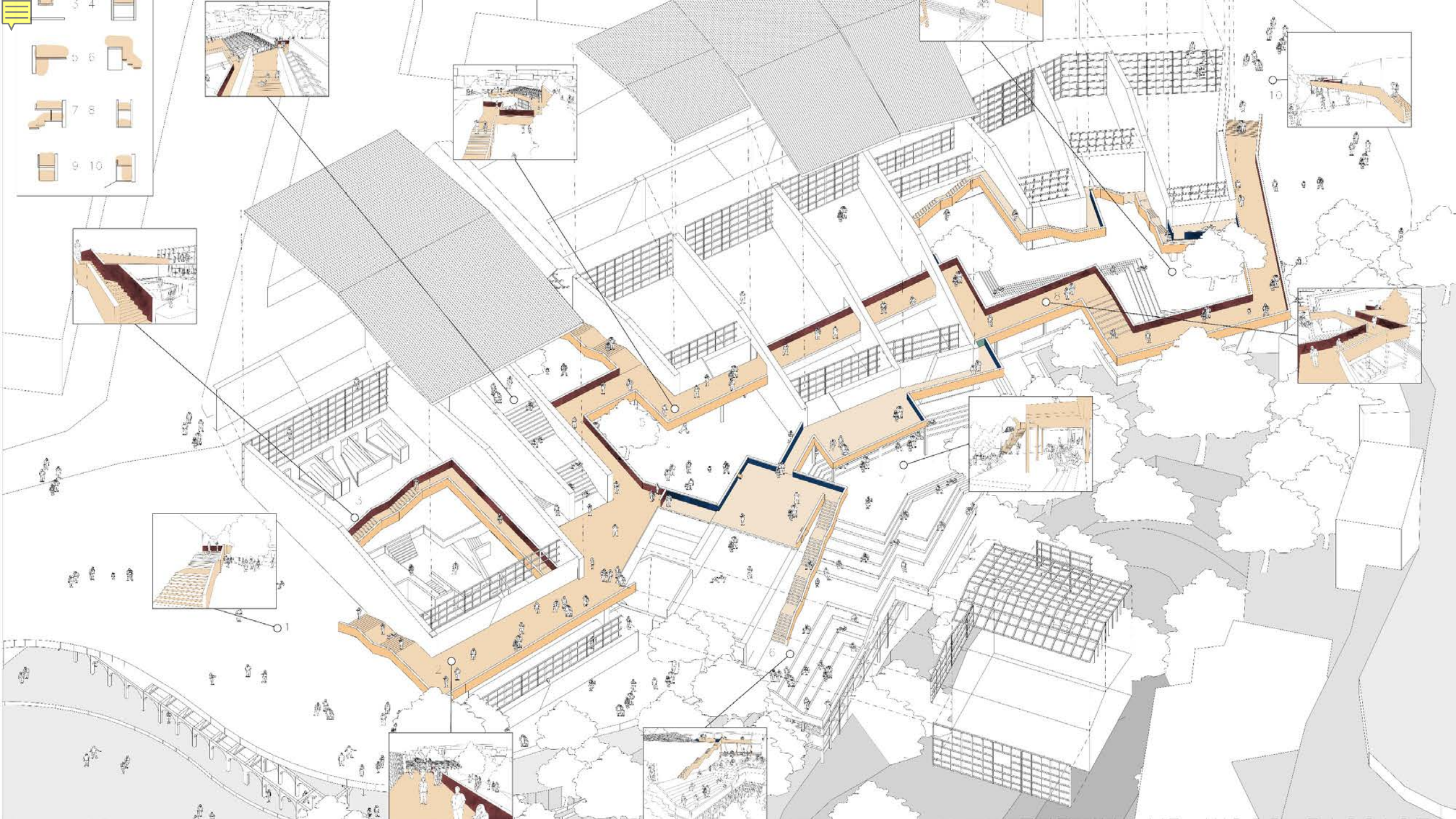
After the creation, they can put the works in the exhibition hall which is on the basement. Some works are left here as a gift, some are exchanged among people, or even sold. The exhibition hall are under a glass roof, which is the central of the public area and common area. From the family restaurant you can also see the exhibition.

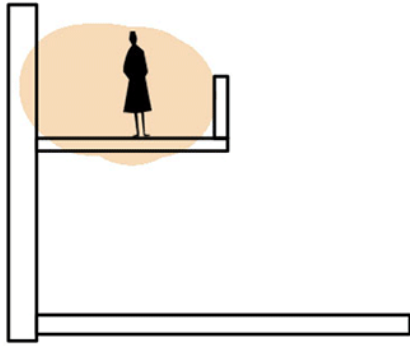
Basement floor (public and common area)



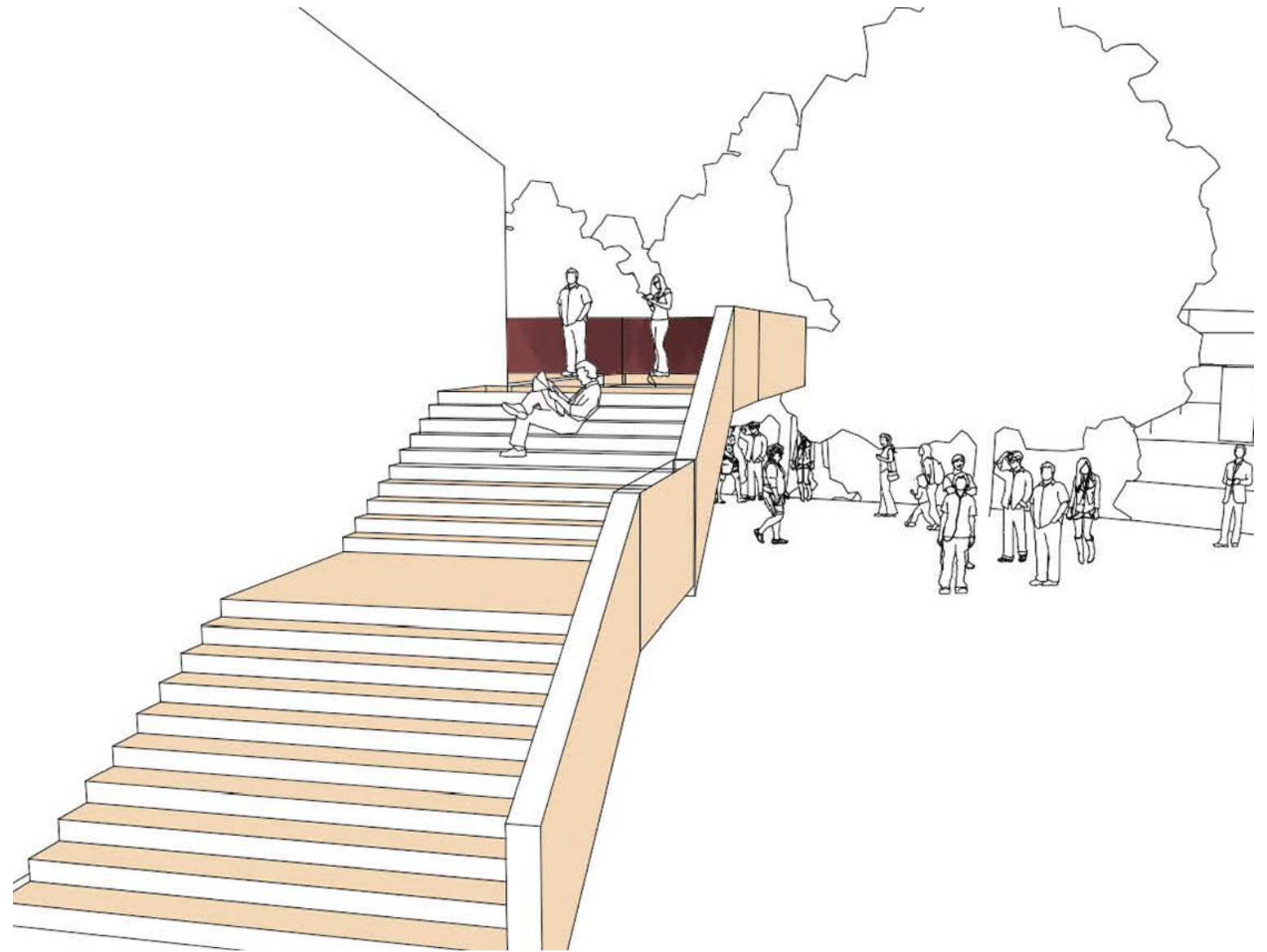
After enjoy the meal, tourists can go outdoor to enjoy the amazing valley view on the common yard. (maybe it's more suitable to call it a big balcony). In the sunshine, in the wind from the valley and the pacific ocean, People recovered from the tire and food coma. And then they go up the stairs, follow the in air passage, watch the local artist working in his own studio, appreciate the professional works, master pieces, and buy some favorite things before leaving. And the locals can share the domestic life with the curious tourists. They are kind of performing behind a transparent window, and their community are always alive, full of stories because of different people coming here everyday. The domestic life and Valparaiso's culture are now an art piece by all the locals.







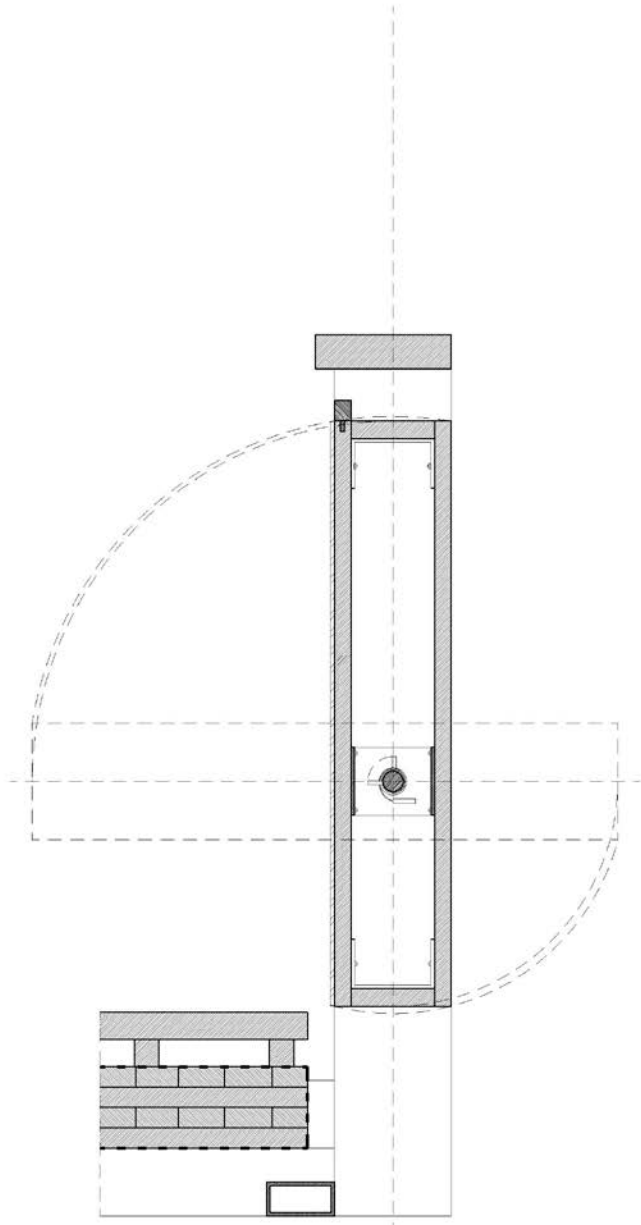
See the wood in air passage with the balconies. It Offers diversity of space, by going through the old brick walls, and connected to ground by stairs. The floor and side board are made of cross laminated timber, but the interior surface of the passage are painted different color. On the main circulation, it is painted red, on the sub circulation, blue., Which Indicates the different way that people are following. Because Valparaiso are a city full of colorful graffitis, tourist must want to create their own graffitis. The interior surface are a place where people are free to draw graffitis. They can get the painting from the co-working studio. But of course, there's a periodic cleaning, and covering by a new layer of red of blue painting.





The rotatable side board: seats

The rotatable side board offers people a sitting place if you don't want to sit on the stairs.
A special rotating spring and a stopper makes it possible to stay at 90 degree and go back automatically.



In air passage: Connect balcony

The in air passage itself is a space. But it also serves as a connecting element.

5 balconies reform it to gain new identity.

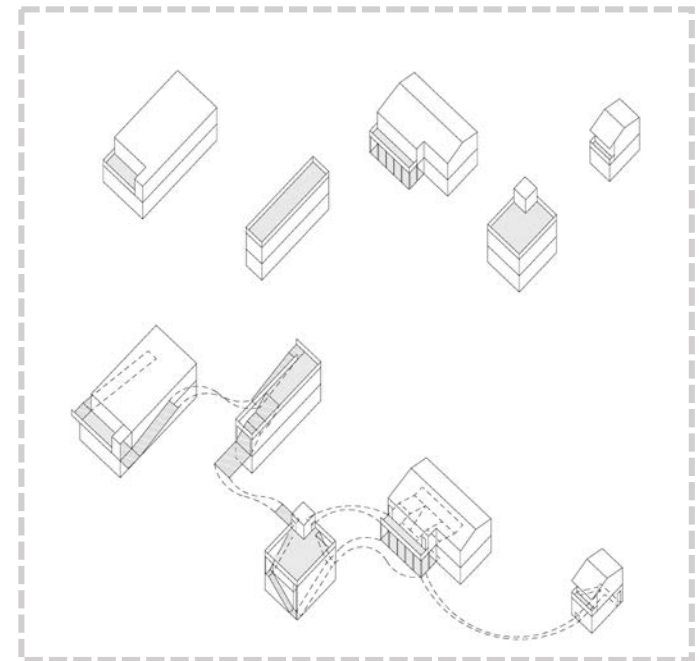
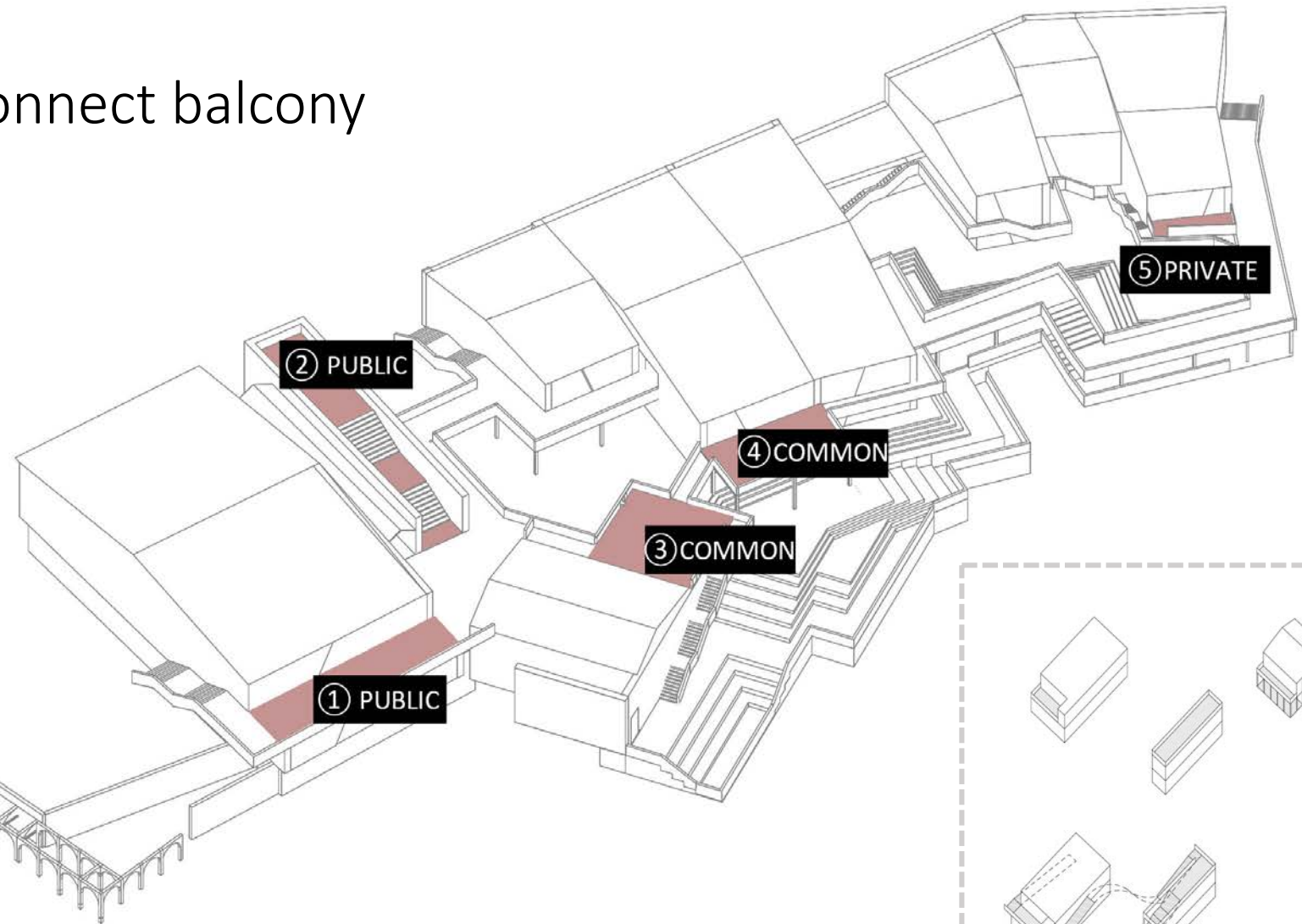
2 are public, 2 are common, and 1 is private.

Some are facing the indoor space, for people to look the indoor.

Some are facing the valley.

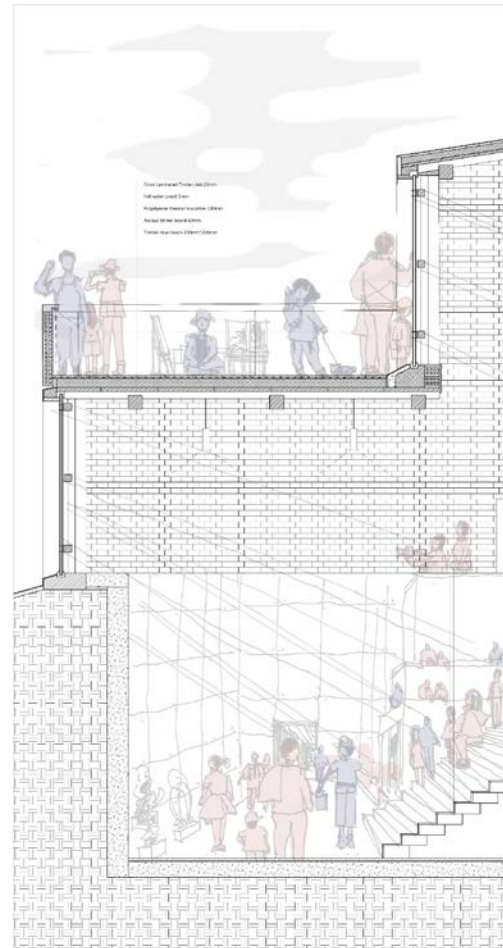
Some are flat, some are composed by stairs.

Some are a gathering place for different circulation, some are a staying place.



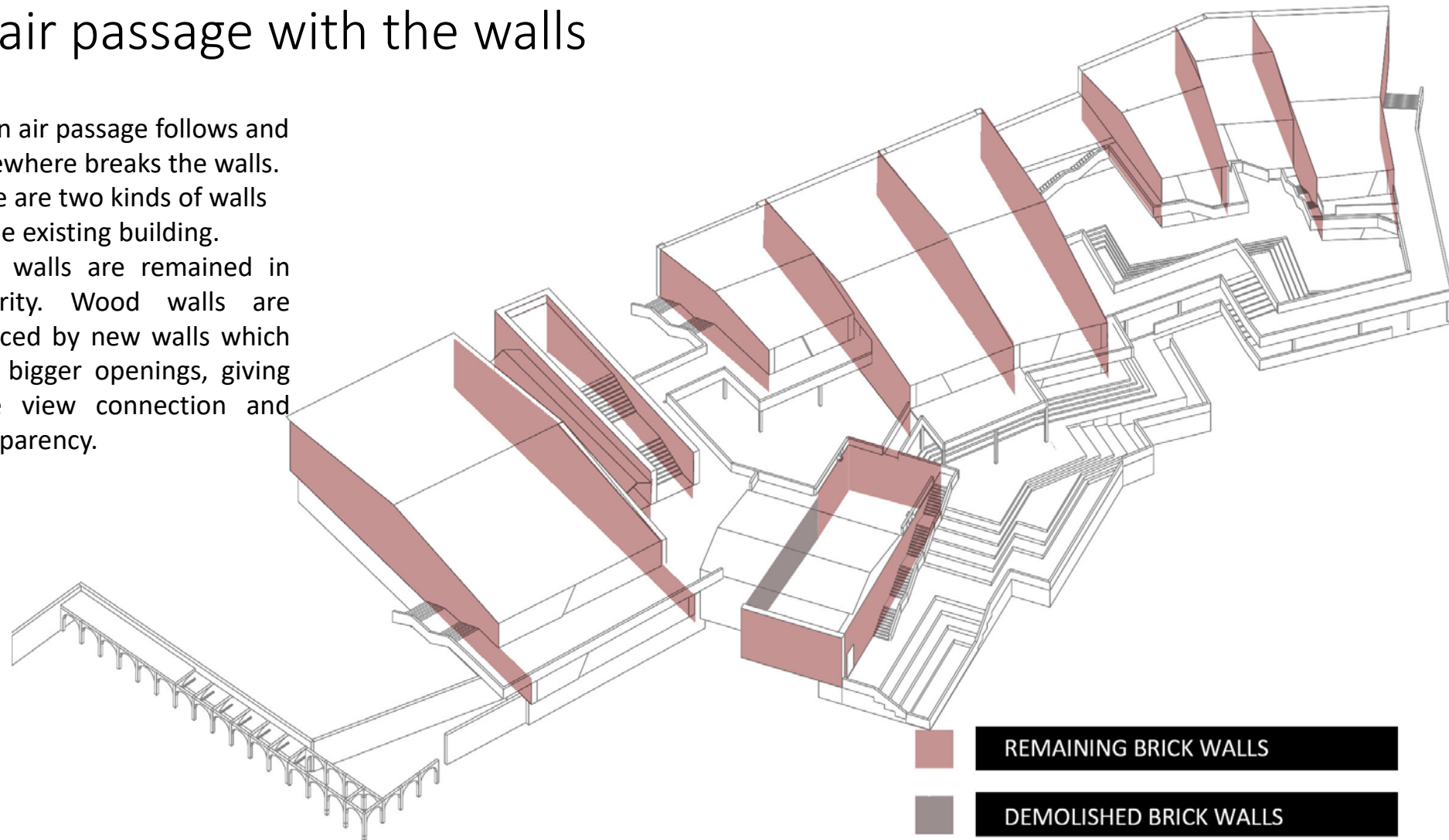
Balcony: connect in& out, valley& city

The balconies can extend from the interior to outside, enhance the connection of interior and exterior, the connect of the valley and the city.



In air passage with the walls

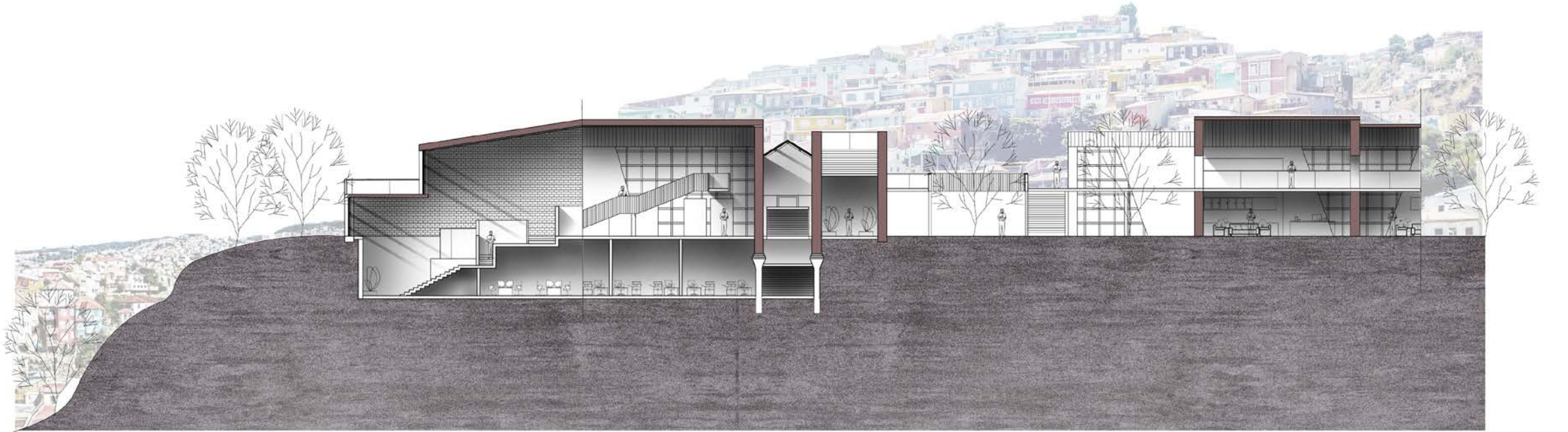
The in air passage follows and somewhere breaks the walls. There are two kinds of walls on the existing building. Brick walls are remained in majority. Wood walls are replaced by new walls which have bigger openings, giving more view connection and transparency.





- Brick walls in space: break, connect, in between

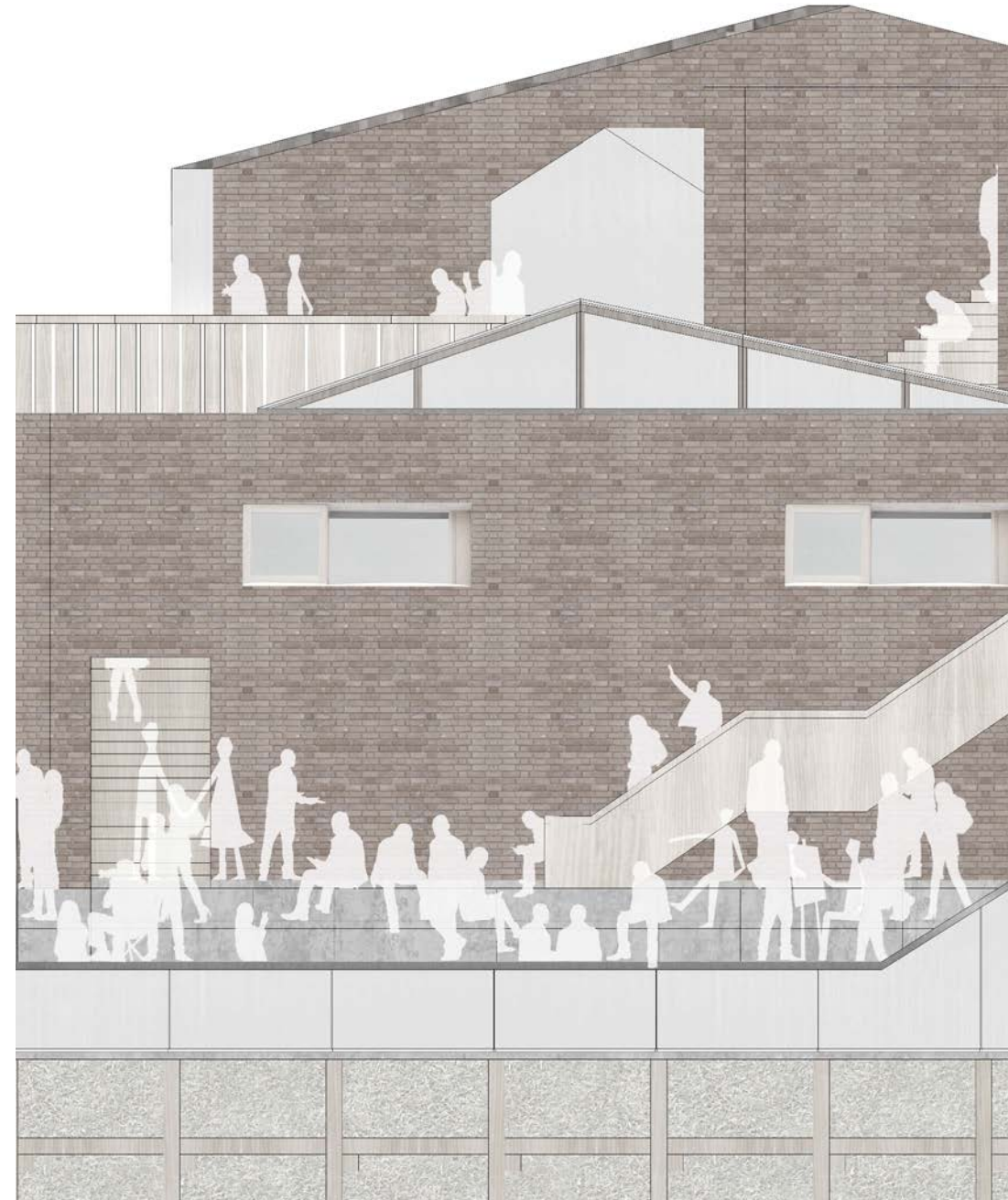
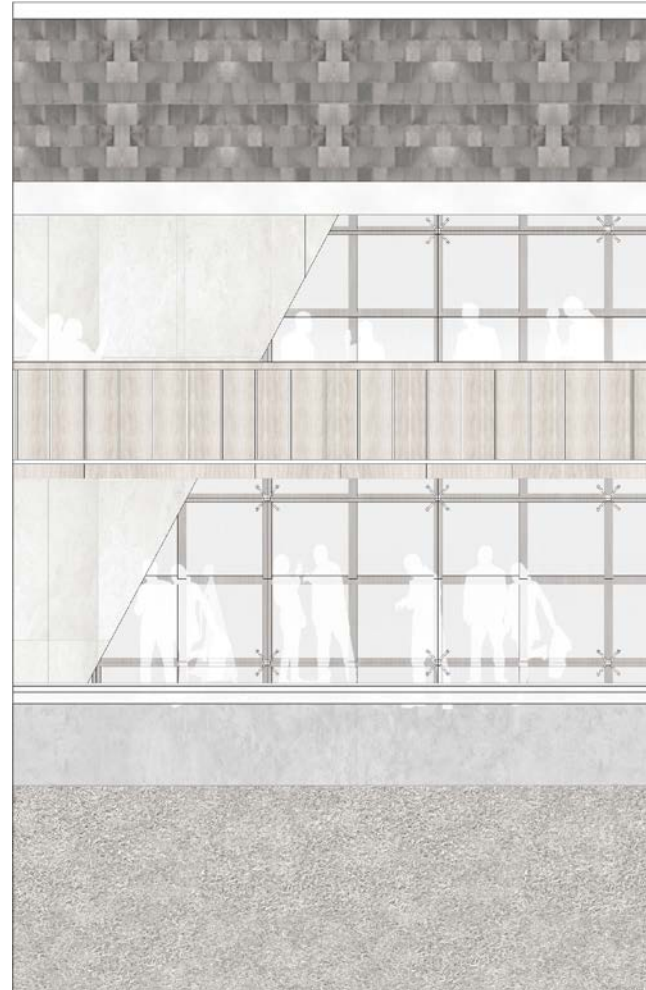
The passage breaks the walls on upper level while connecting the walls on different side of courtyard. Between the walls there are courtyards, openings, buildings, stairs, balconies, etc.





Wood walls: reform in the module

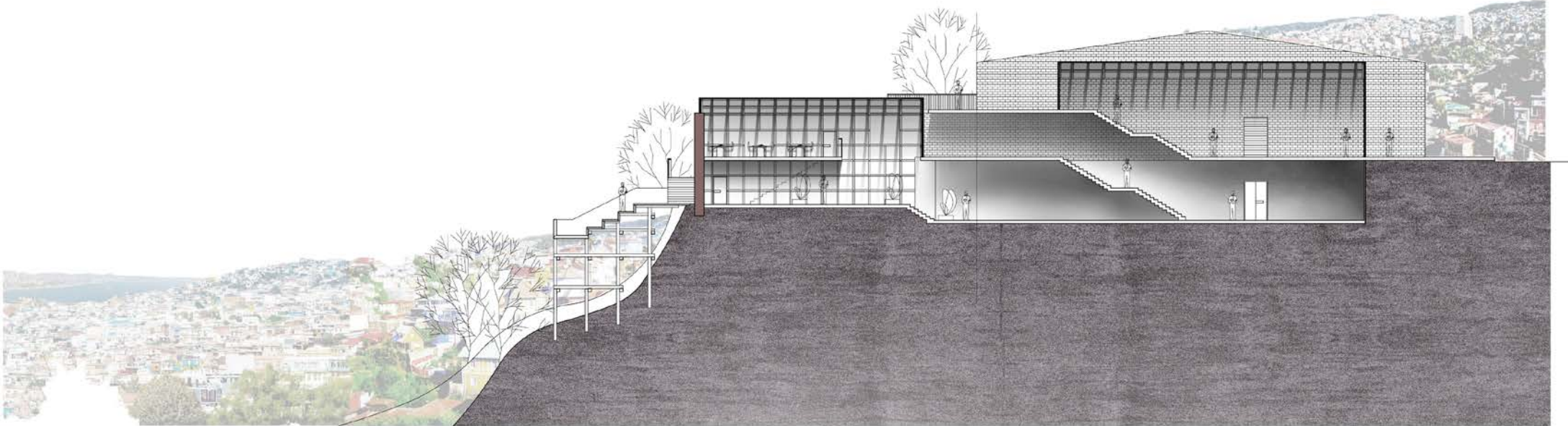
Keep the original wood structure in the walls while using the trapezoid language to divide the glass part and the closed part. The wood structure are also used on the glass roof and new glass façade.





Old and New material

The comparison of old material and new material create a drama space, which is the exhibition area. The in between climax of public area and common area.



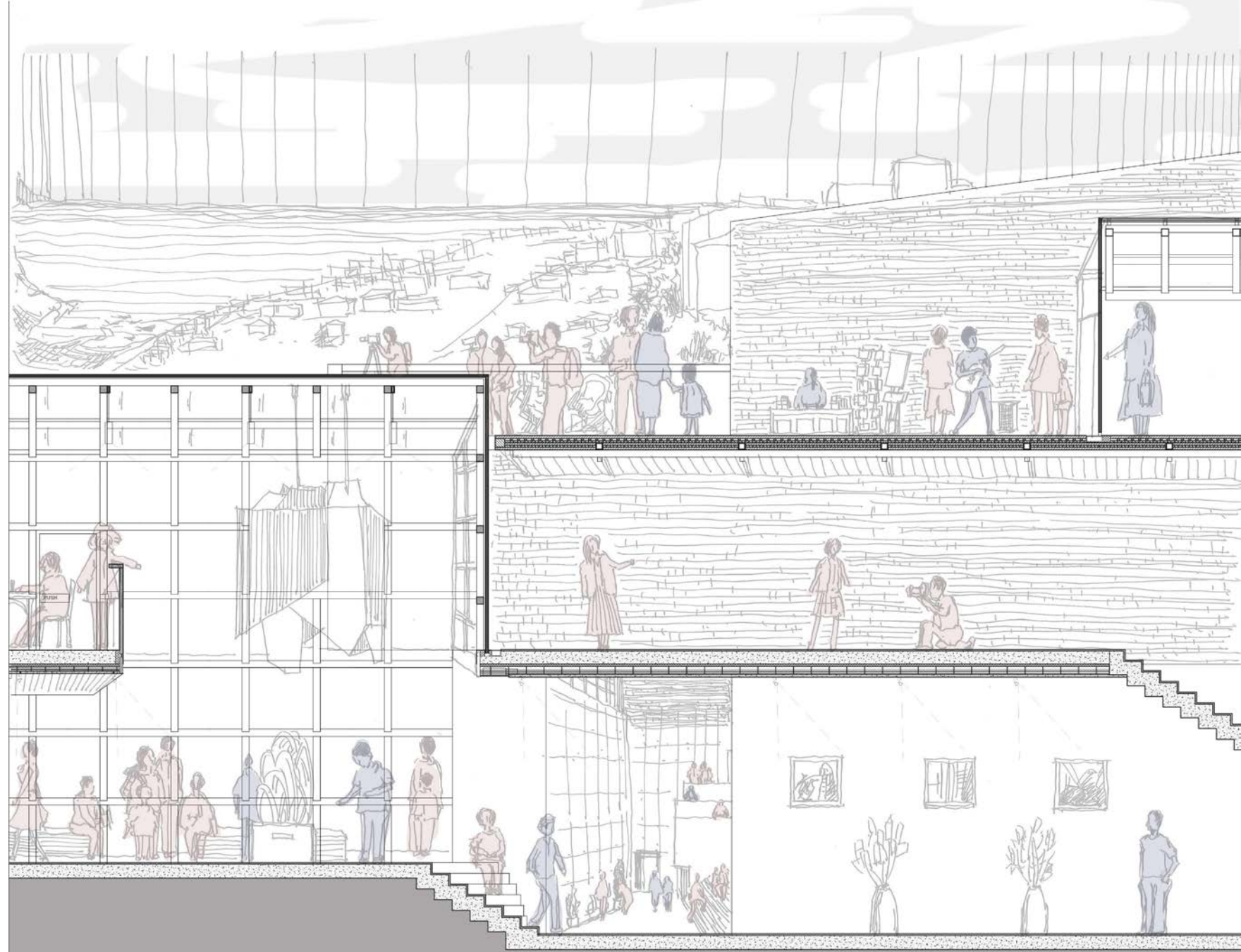
Climax: the exhibition hall

In the exhibition area, people can view the exhibition on different level:

Basement level---the floor of the exhibition hall. It's a concrete walls surrounding you

Ground floor level: in the public court yard, you can see from outside. You are beneath the wood passage and brick walls are just beside you. OR the restaurant in family, you can appreciate when you are having food.

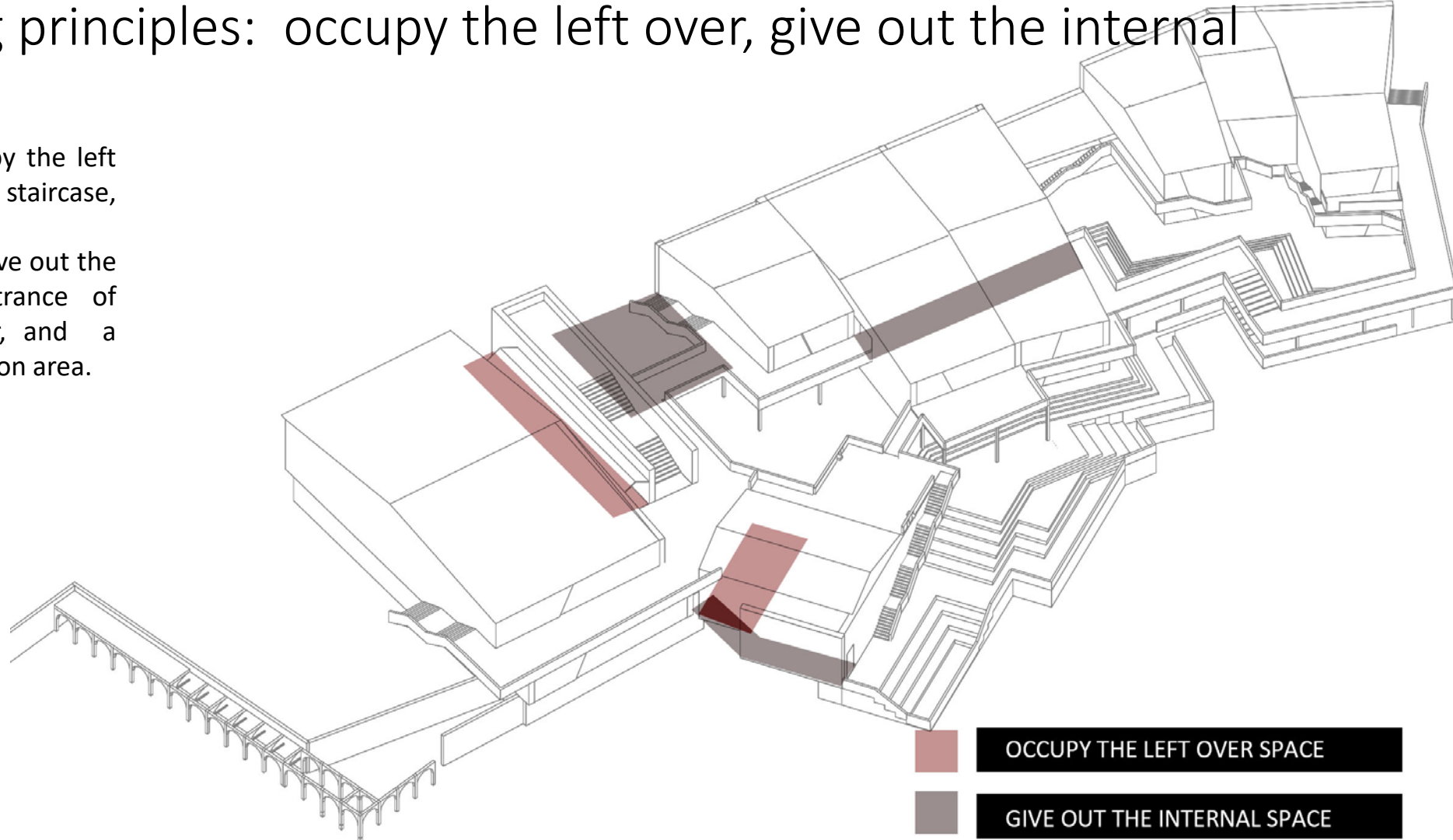
The first floor level: is the in air passage level. You can walk around on the wood passage and see the exhibition from all perspective, and also enjoy the view of valley.





Space reforming principles: occupy the left over, give out the internal

More diversity of space- occupy the left over space (glass roof) with staircase, exhibition hall, etc.
Give out the internal space (leave out the brick walls) to be the entrance of courtyard, passage in the air, and a connection of public and common area.



More possibility of space are achieved. The glass hall makes a kind of transparency. You walk through those walls one by one, the scene in front of your eyes are changing one by one. The big hall, the narrow gallery, the stairs, and the courtyard. Those composed a diversified showcase view in your experience.

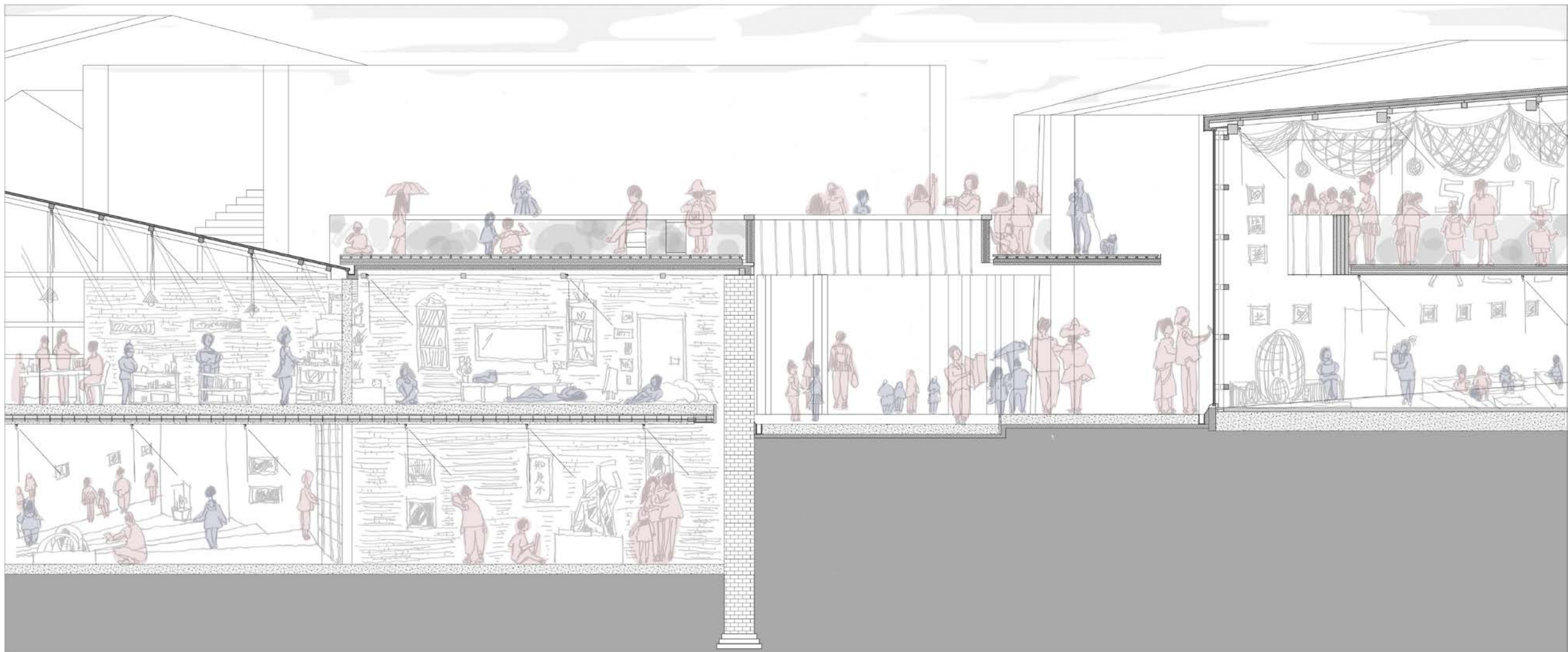


Showcase diversity



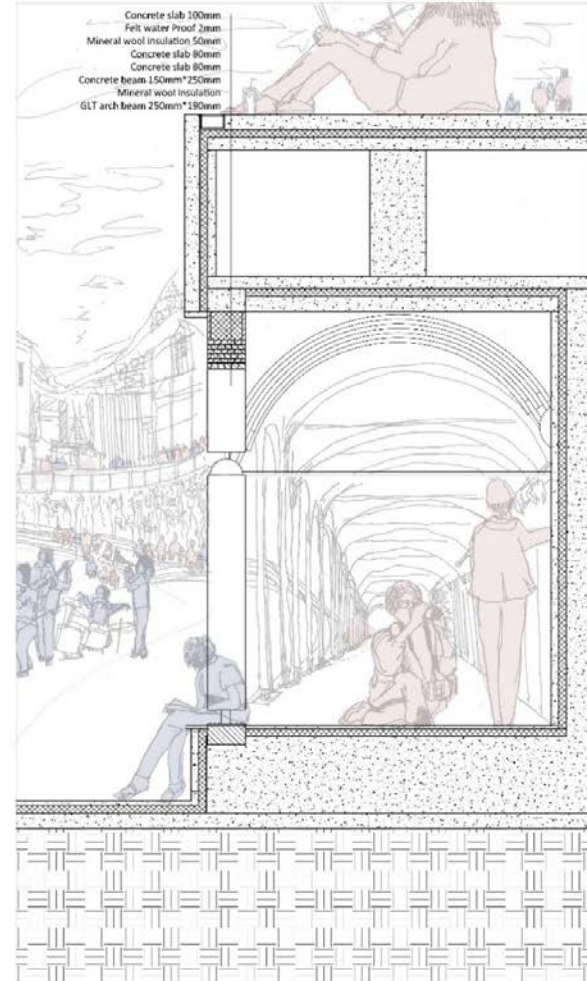
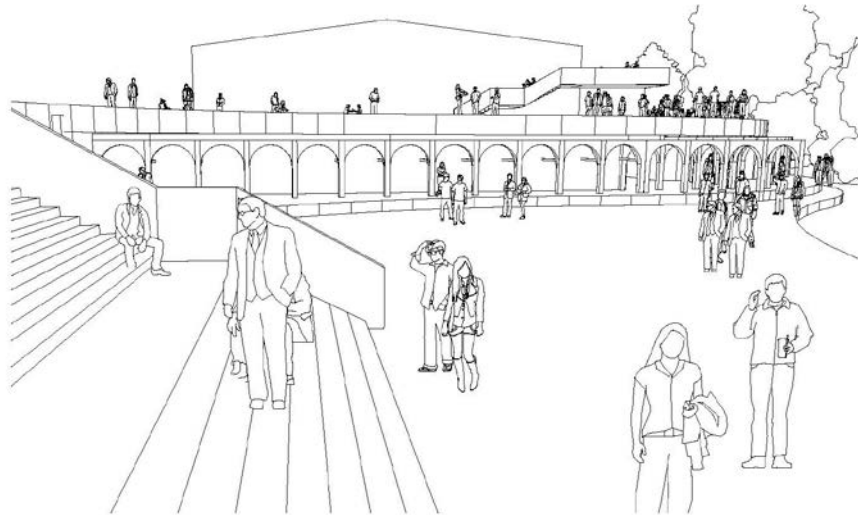
Co-existence of WATCHING and BEING WATCHED

This transparency would give a opportunity of watching and being watched. The people themselves are artist, and their movements, activities, communication are all performance. Here you are both an audience and an performer.



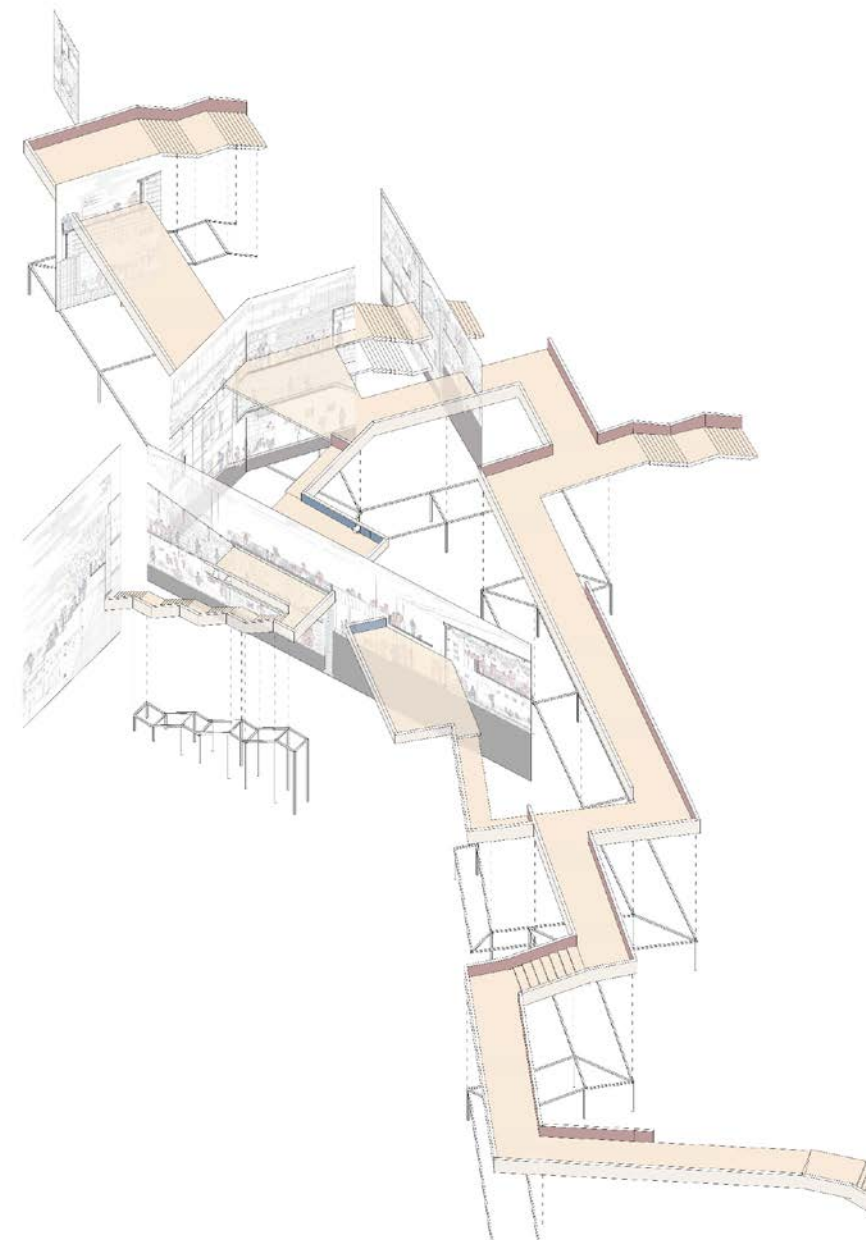
Monumental park: reuse the abandoned bridges

The abandoned bridge area are reformed to be a monumental park. By reusing the abandoned bridges, I make some copies of the arches by using a wood material. (Glued laminated timber structure). And that extend the arch gallery around the park, taking people forward to the valley and to the entrance of the exhibition area.



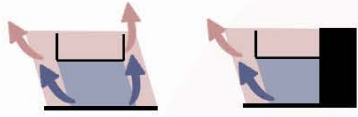


See the section and structures of the passage.
It takes people out to the valley and in to the city.
It takes people from the ground to the air ,and to the basement level.
It takes people from the thick brick walls to the light glass roof.
It makes people look at the community and the cultural activities in various point of view.





FROM UPHILL



THE IN AIR PASSAGE AFFECT THE OUTDOOR CLIMATE

CITY (HIGHER)

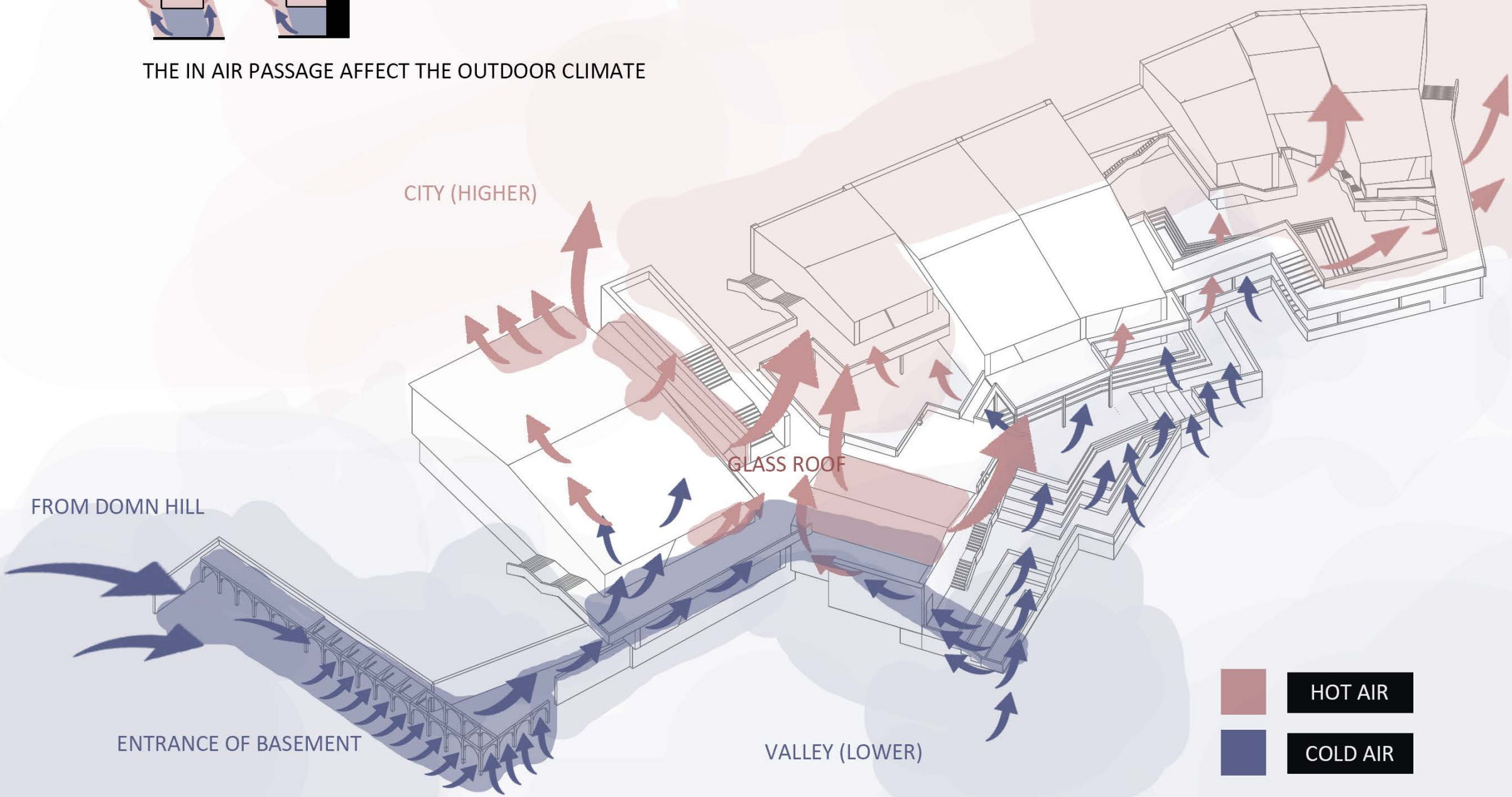
GLASS ROOF

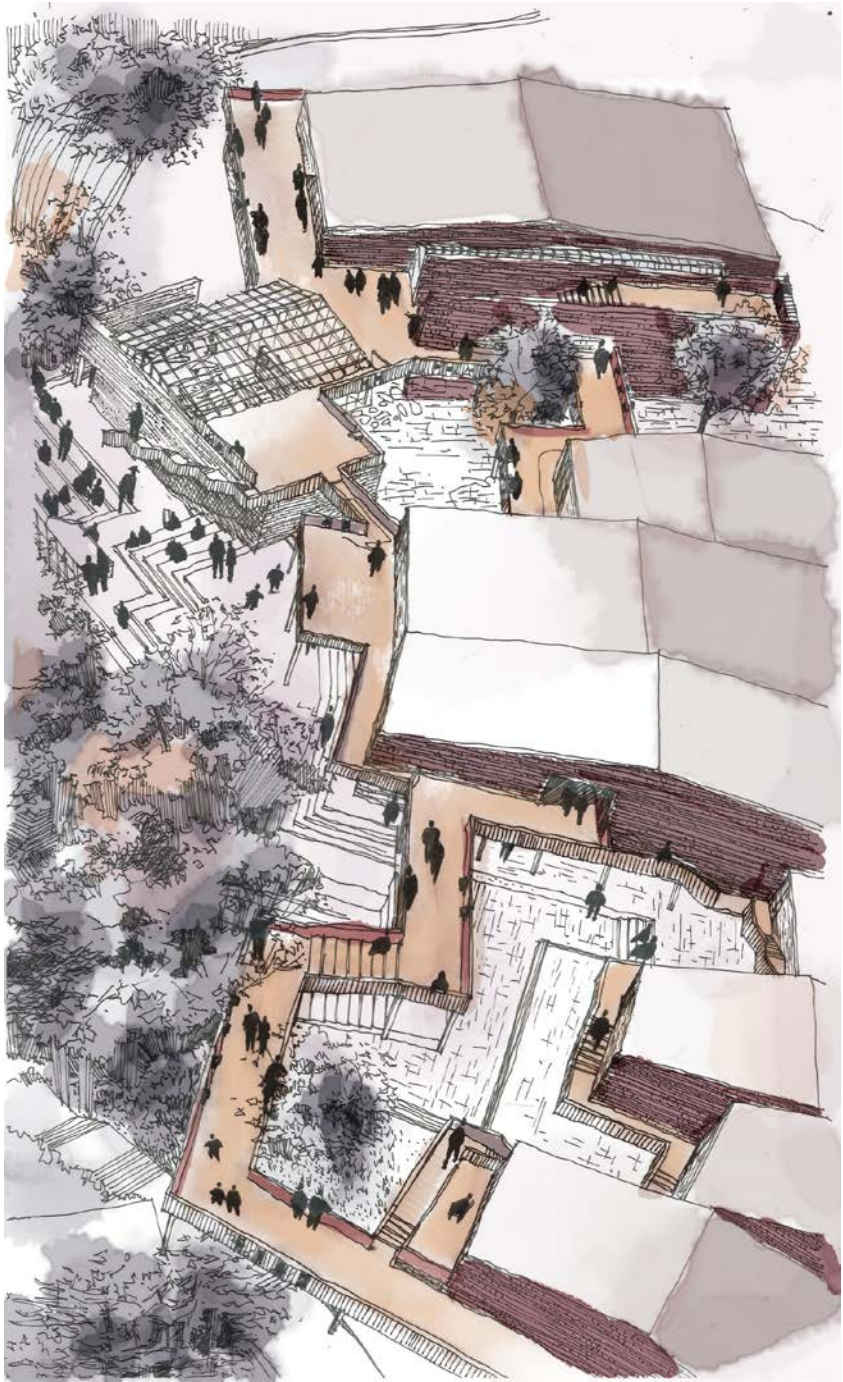
FROM DOWN HILL

ENTRANCE OF BASEMENT

VALLEY (LOWER)

	HOT AIR
	COLD AIR









THANK YOU!

