



A LETTER TO BEIRUT



DAMAGES

caused by explosions



ABOUT PEOPLE

2 million of the country's approximately 6 million people live here
300,000 people are homeless.



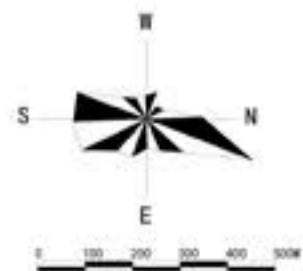
ABOUT FOOD

About 90 percent of Lebanon's wheat demand depends on imports, the vast majority of which passes through the destroyed port of Beirut. Before the explosion, 85 percent of Lebanon's grain reserves were in the port of Beirut, which destroyed wheat in the port's granaries and raised fears of a food crisis.



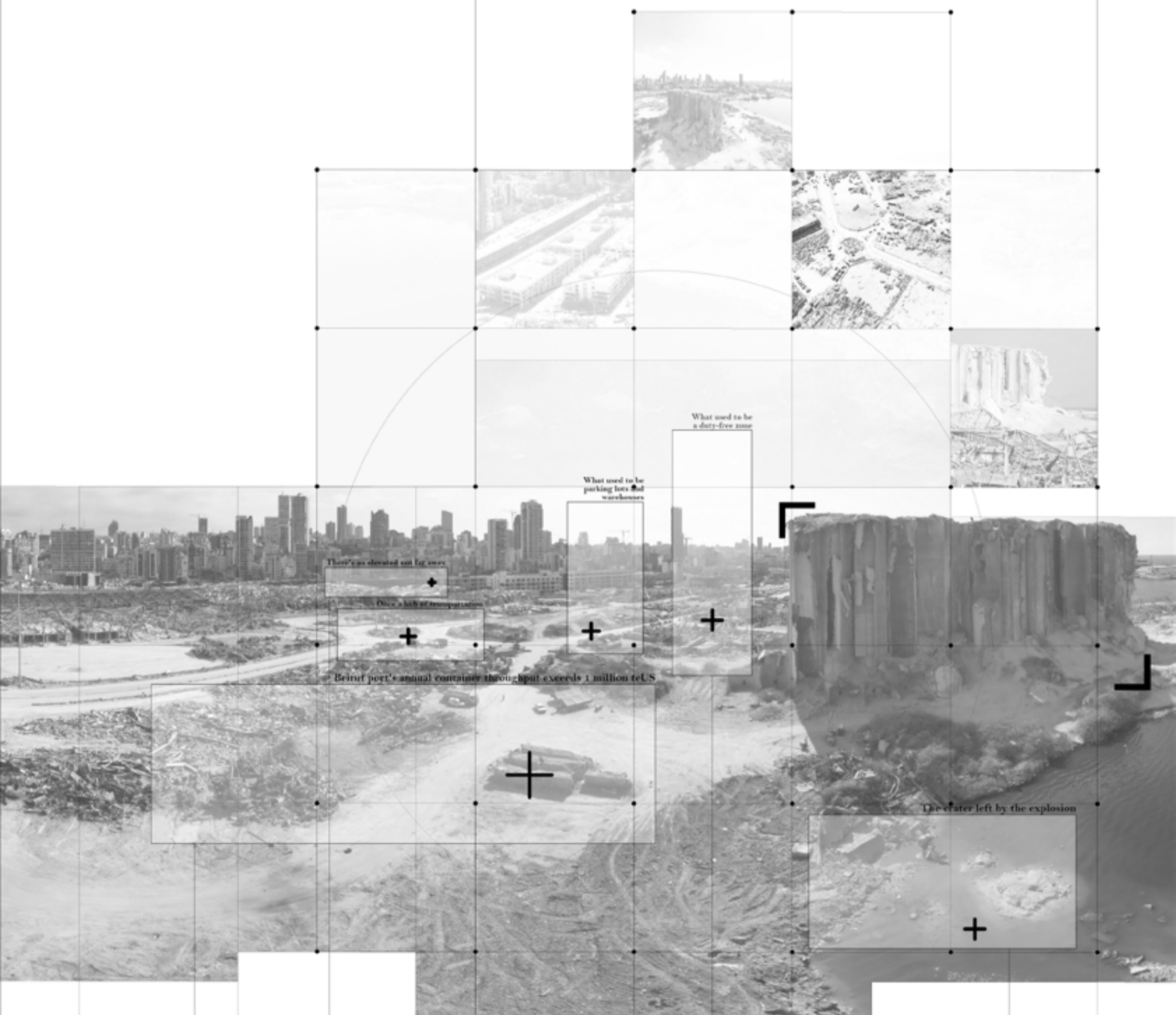
ABOUT FINANCE

The Lebanese pound has depreciated by about 70 percent since October last year, the country has been mired in a financial crisis, with unemployed more than 35 percent of the population and poor people soaring to more than 45 percent.



The Port Of Beirut

Beirut port is located in the middle of the Mediterranean coast of Lebanon, which is not only the largest fine port city in the eastern coast of the Mediterranean, but also the important gateway and cargo distribution center of the Lebanese Republic. It is the commercial, transportation, financial and cultural center of the Middle East, the link between East and West, and the gateway to the Middle East.



The 1960s and 1970s

The port of Beirut is famous for its free port and the largest cargo hub in the Middle East.

The 1980s

The ongoing civil war in Lebanon has seriously affected port operations.

1983

In order to restore the prosperity of the country, economy and trade, since 1983, the Lebanese government has adjusted the reconstruction plan and implemented the "Greater Beirut Plan".

2014

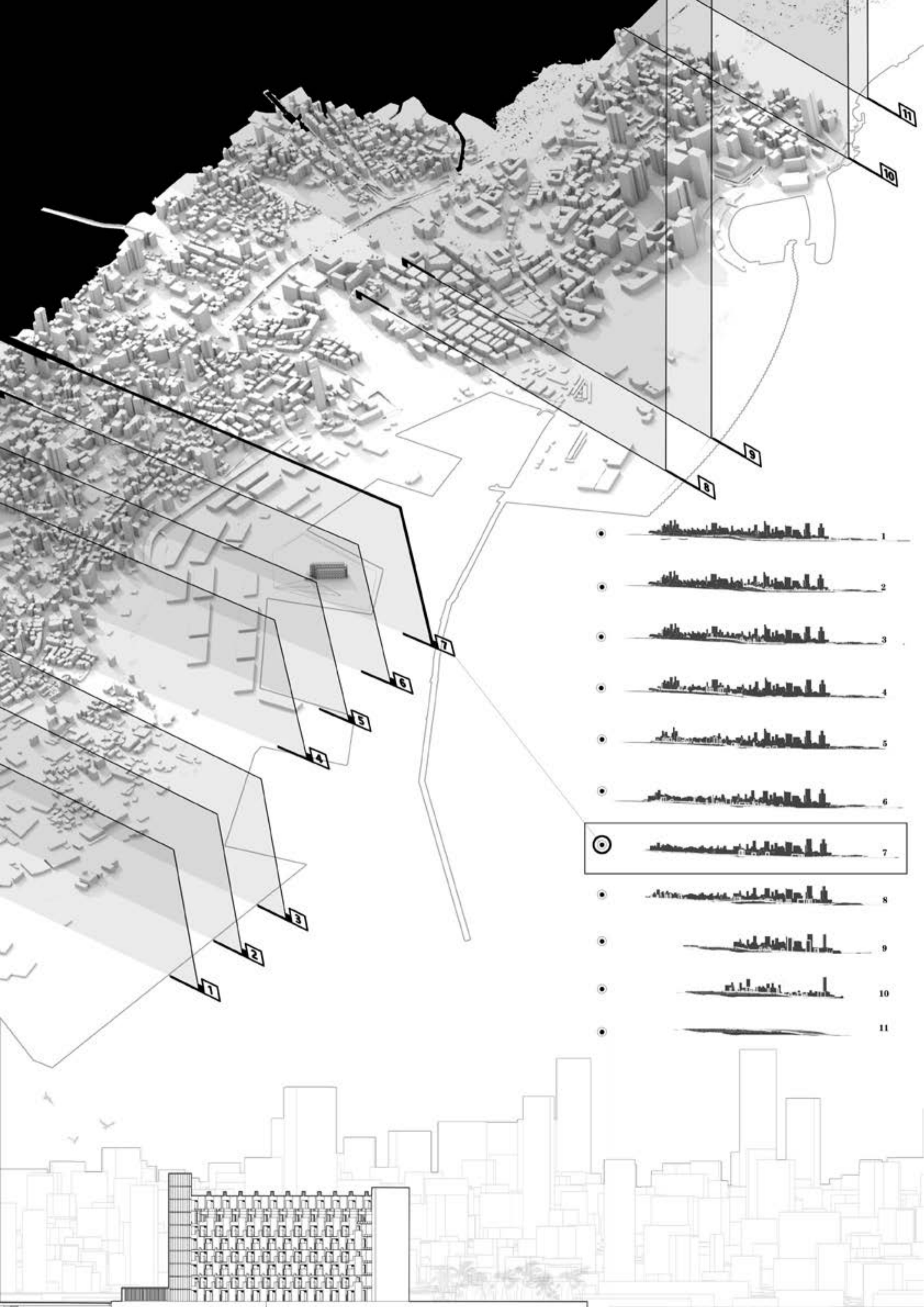
About 2,750 tons of ammonium nitrate cargo had been sitting in the warehouse for six years without taking pre-cautions.

2020
8/4
18:08:18

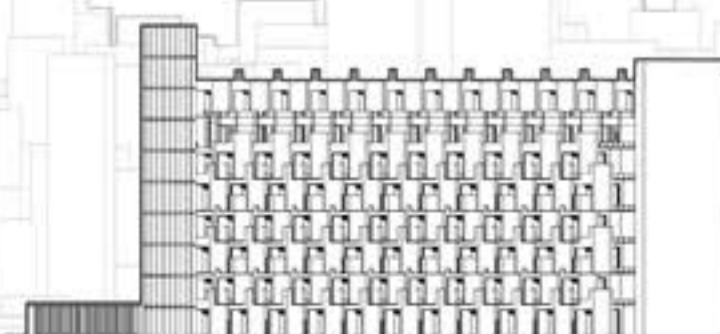
One of the biggest non-nuclear explosions of the history with the force of a 3.5 magnitude earthquake happened.

2020/8/28

With the help of the international community, the cleaning up of Beirut's port, which was badly damaged by a massive explosion on August 4, is almost complete.



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Here is the formula for this monumental architecture:

Blind spot

+ Wound

+ Knit Structure =

Circle of life

Cause

Result

Solution

on the eve of the disaster

when the disaster occurs

after the disaster

Blind spot :

One of the structures of the eye
A blind spot is something that is present and can be seen, but cannot be seen because the eye is at a special Angle.(A)

The underlying cause of the Beirut port explosion was the presence of flammable and explosive materials that had been in the harbor for six years since 2014 -- a huge mental and physical blind spot.(B)

How do I incorporate it into my design?

Therefore, the evolution of the single memorial chamber module refers to the formation principle of blind spots in the eyeball.(C)

Wound :

Cutting-An act that causes pain.(D)
The Beirut port explosion has brought so many sudden deaths, so many sudden disruptions to industries, so many disrupted lives, so much pain, so much fear, so many tears, so much new dust and garbage.(E)

How do I incorporate it into my design?

Therefore, the architecture uses a clean cut to cut apart the silo structure, a cut that implies injuries and wounds that are difficult to fully heal.(F)

Knit Structure :

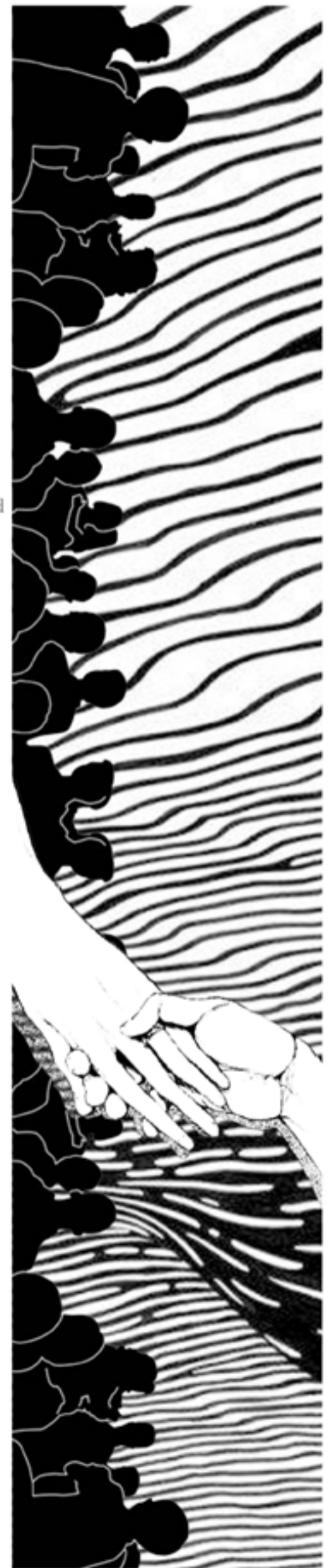
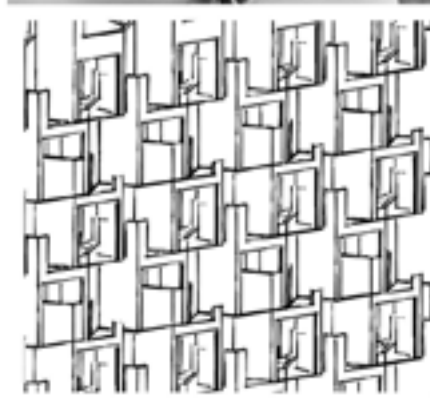
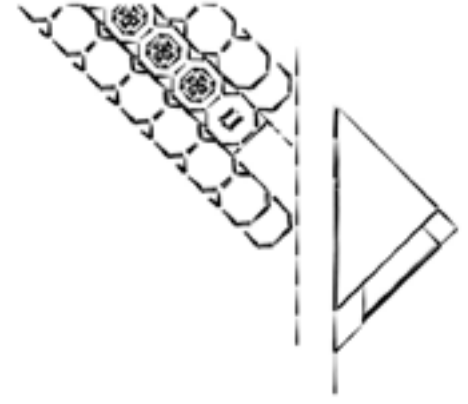
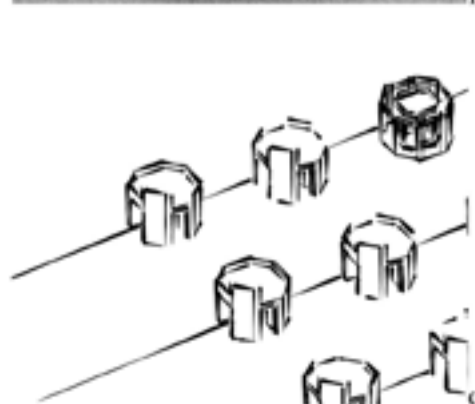
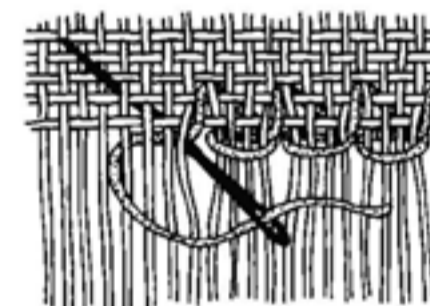
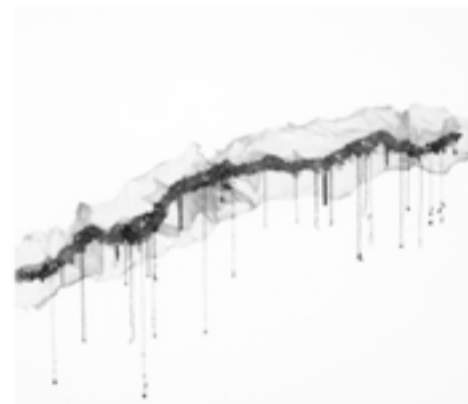
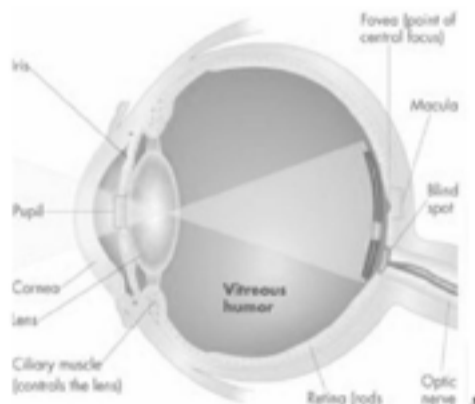
The knitting structure.(G)
As much as the bombing of Beirut harbor was traumatic for Lebanon, we also saw something very precious. I remember in the news after the explosion there was a wife who was having her wedding at the time of the explosion. Her wedding was destroyed by the explosion and her wedding dress was dirty and torn. A reporter wrote: *"After the tragedy, the couple had to rediscover each other and rethink the meaning of life, but they still chose to stay together."*

Like them, countless shops were destroyed and people's lives plunged into darkness for a time.

But beyond the grief, we can see the supreme virtue of the Lebanese people to heal each other, to face each other, to work together to rebuild their lives.
The dress is torn and can be mended with a needle and thread. The tragedy of the bombing in Beirut harbor can also be made up.(H)

How do I incorporate it into my design?

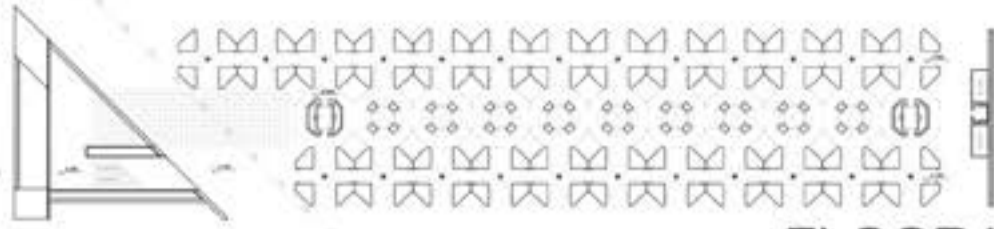
Therefore, the architecture uses a Occlusal structure and dislocation splicing.
After stitching, wind, light and plants can walk in the building like a needle and thread.(I)



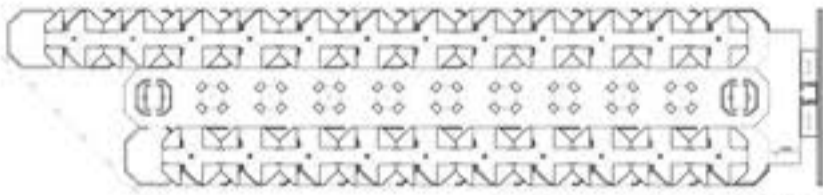
FLOORPLANS & SECTION



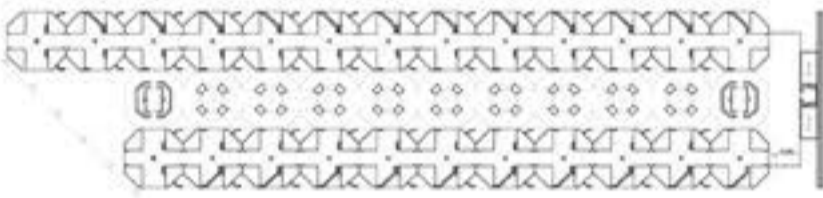
UNDERGROUND-1



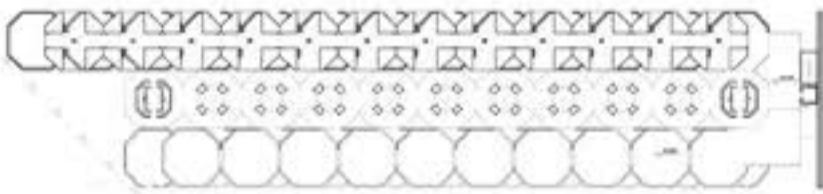
FLOOR 1



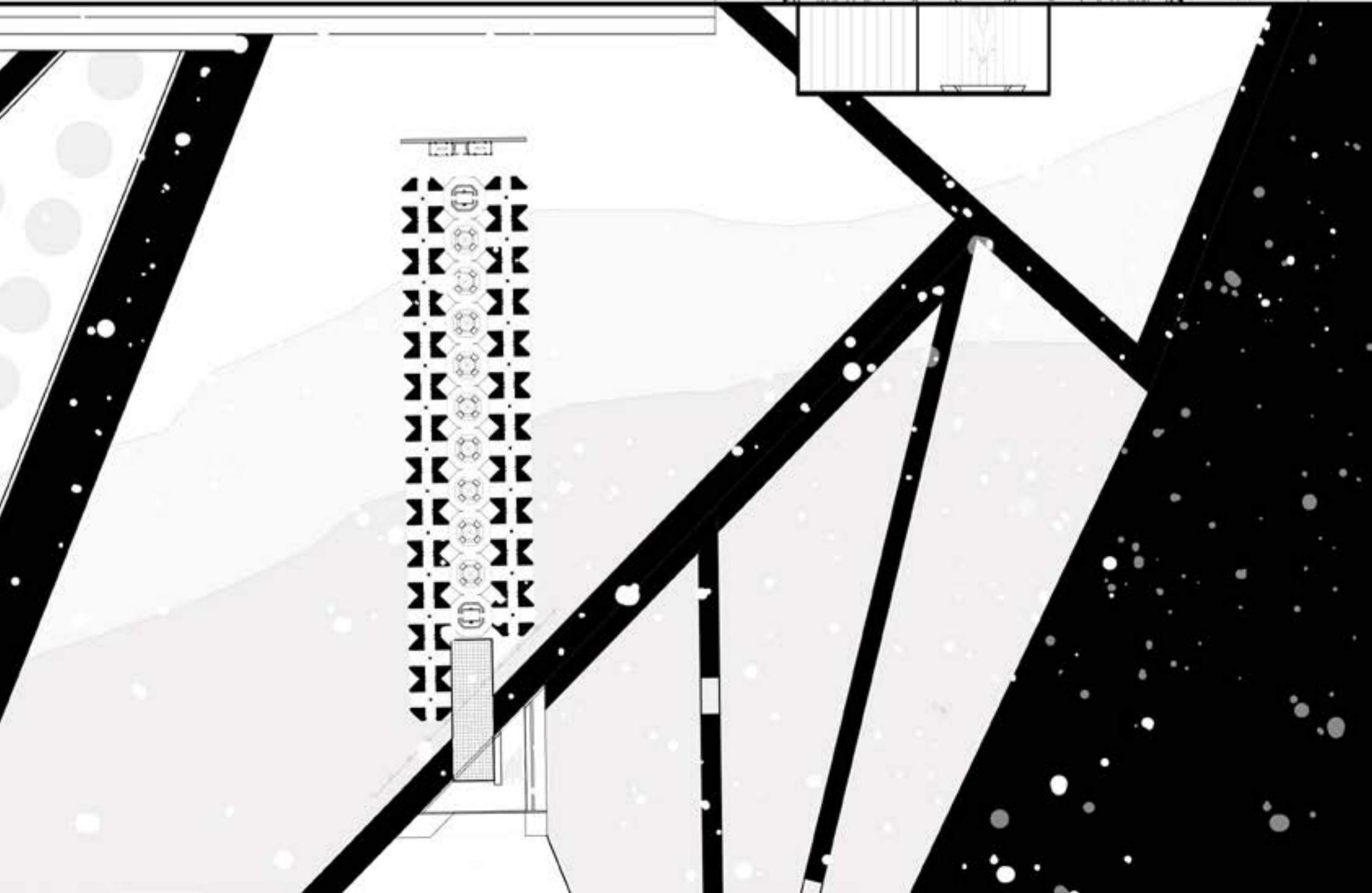
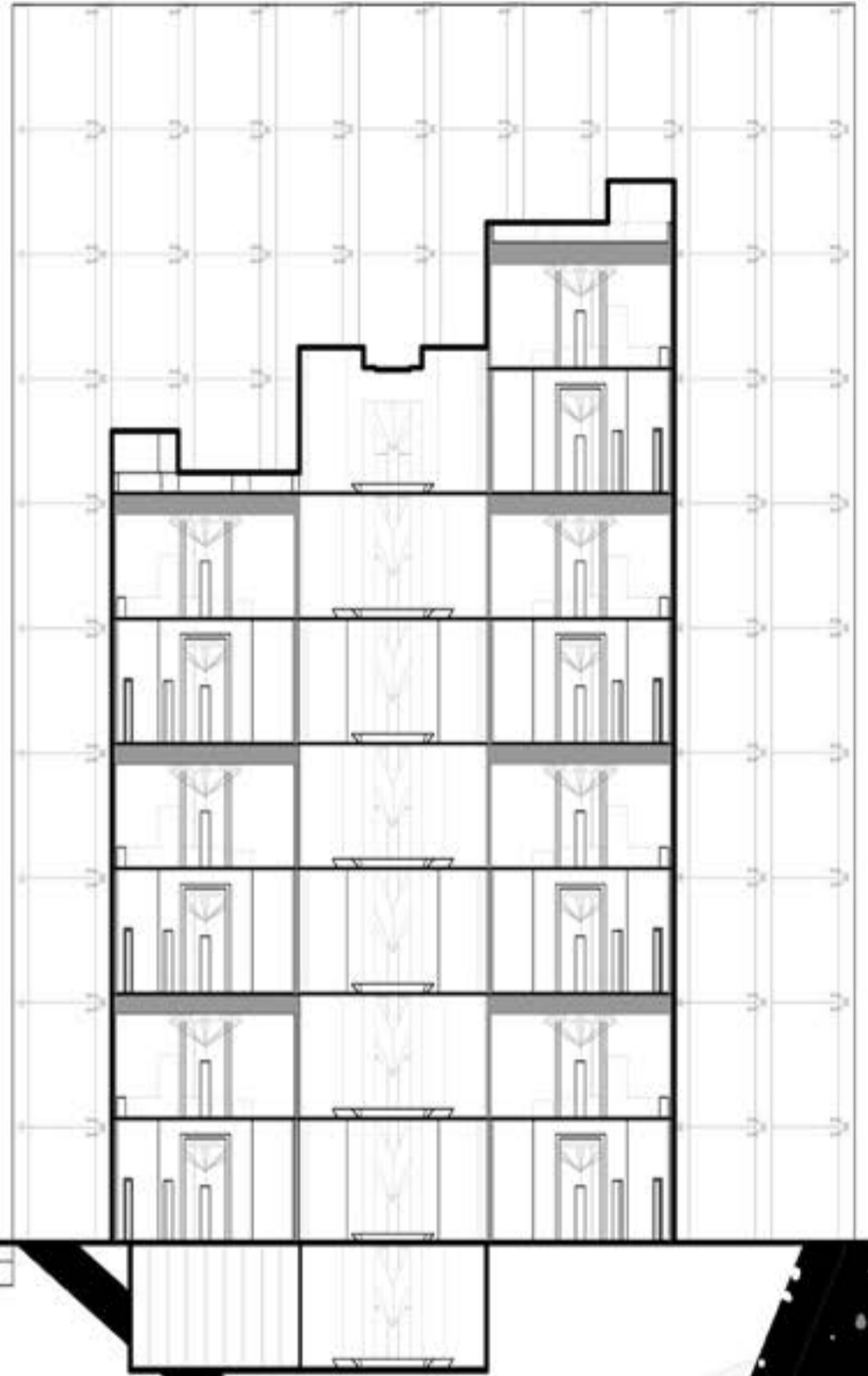
FLOOR-2/4/6



FLOOR-3/5/7



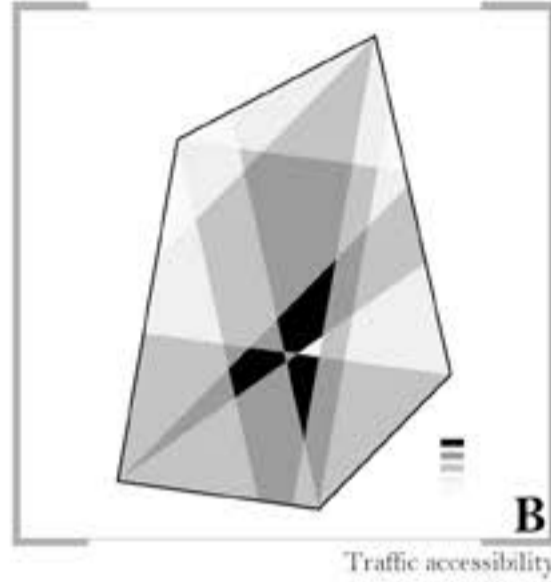
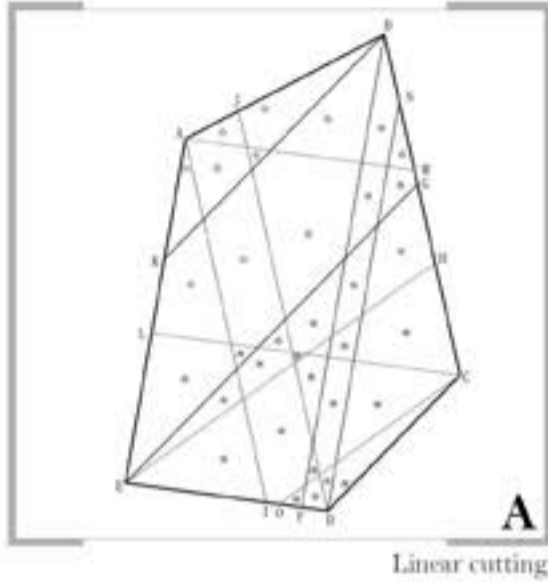
FLOOR 8



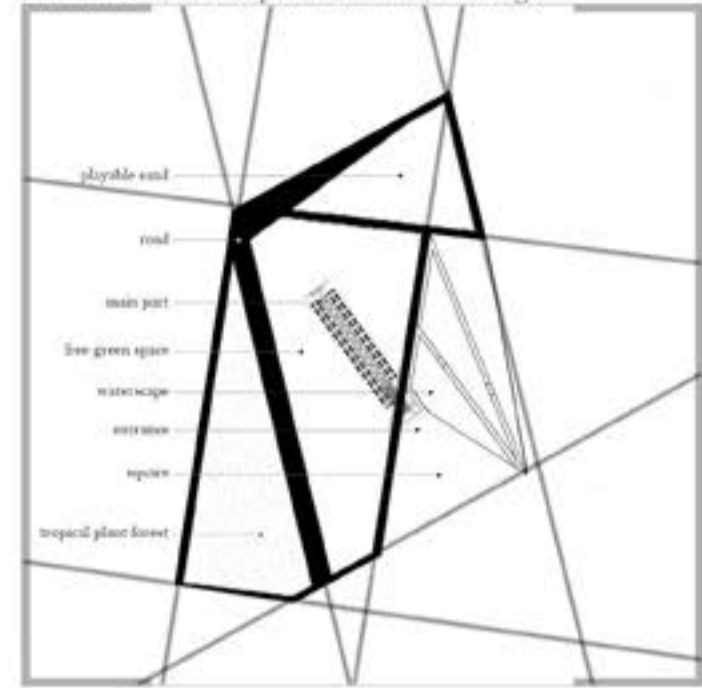
ANALYSIS

PART 1: Linear programming of plane

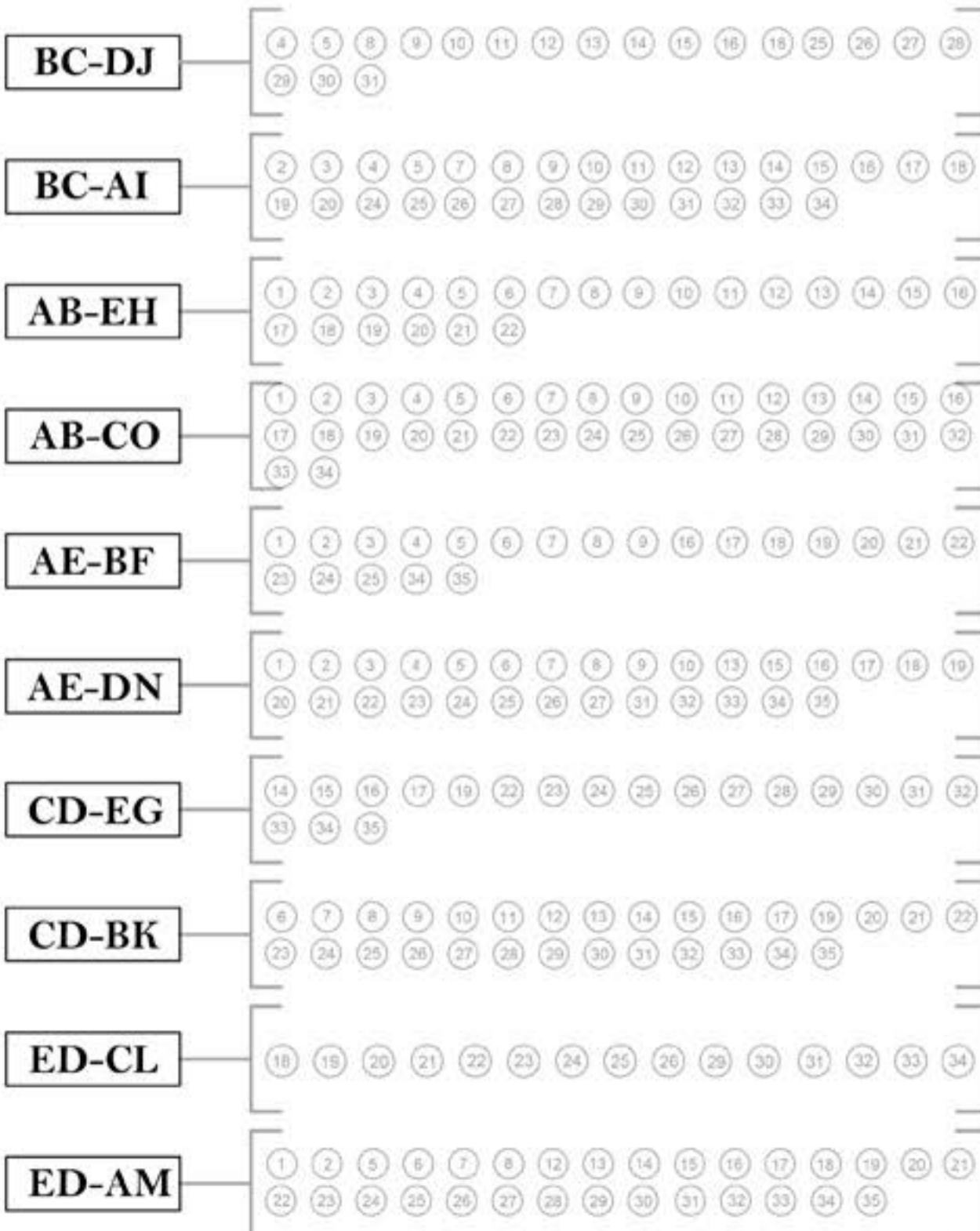
The first step is to organize the moving line.
I need to know where is the most suitable entrance to the cemetery.
At the same time, I need to know where is the traffic dead corner,
so as to develop strengths and avoid weaknesses in the design.



The final effect of the plane after linear cutting



Block Data Collations:



What's in picture A?

First, I drew parallel lines for each of the five edges of the outer contour corresponding to the corner points, so that each edge would get two parallel lines. By doing this for all five edges, we end up with 10 new intersections and 10 sets of parallel lines.

What's in picture B?

Then, we calculate the intersection of them, and we can draw the following conclusion: if the land is an open space, and people can walk freely in the open space, the most likely area he passes through in these labeled areas is the black block in the figure, that is, the traffic in this area is the most developed. As shown in the figure, the color decreases from dark to light, representing the decrease of traffic accessibility.

Intersection Operation

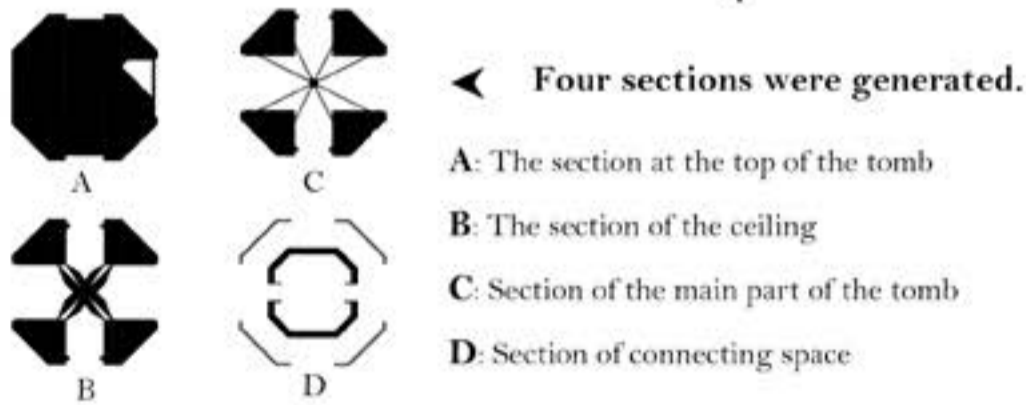
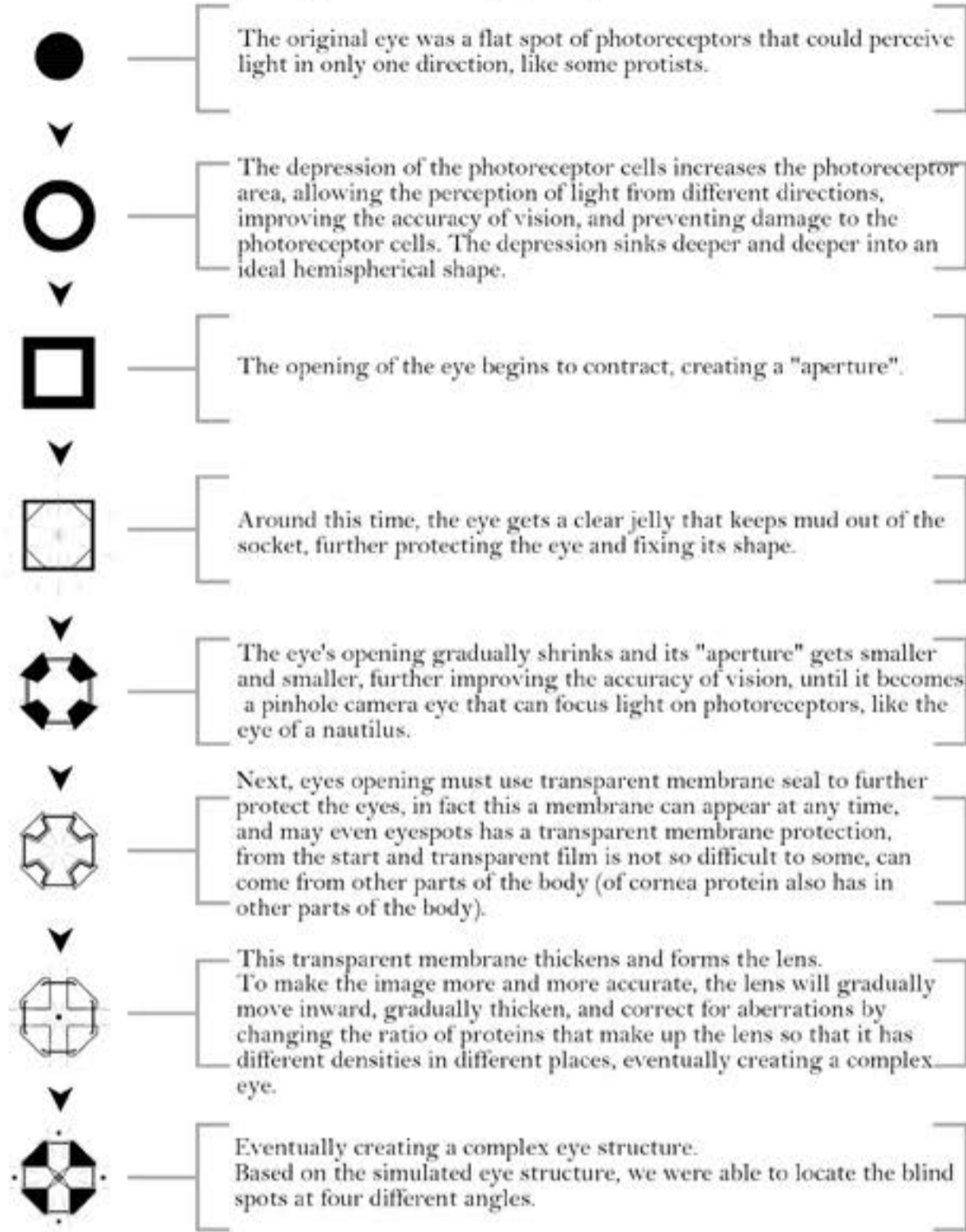
1	V	11	V	21	VII	31	VIII
2	VI	12	VI	22	VIII	32	VII
3	V	13	VII	23	VII	33	VII
4	VI	14	VII	24	VIII	34	VIII
5	VII	15	VIII	25	IX	35	V
6	VI	16	IX	26	VII		
7	VII	17	VIII	27	VII		
8	VIII	18	VIII	28	VI		
9	VII	19	IX	29	VII		
10	VI	20	VIII	30	VII		

ANALYSIS

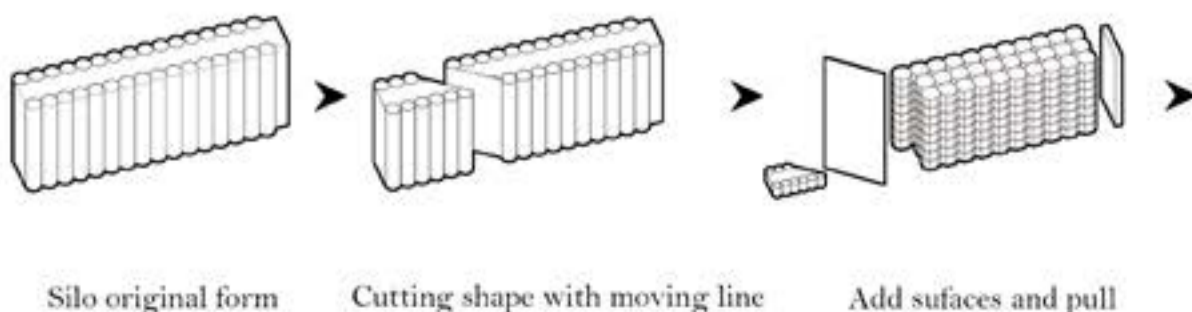
PART 2: Block generated

Plane evolution

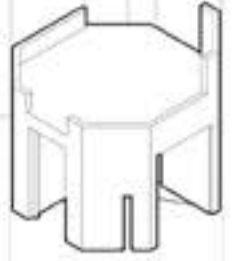
As Darwin did in *The Origin of Species*:
If we list the various eyes of existing animals from simple to complex, we can deduce how complex eyes evolved step by step.



Module Cutting

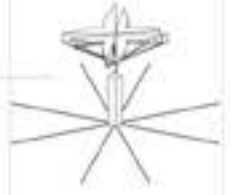


Single tomb



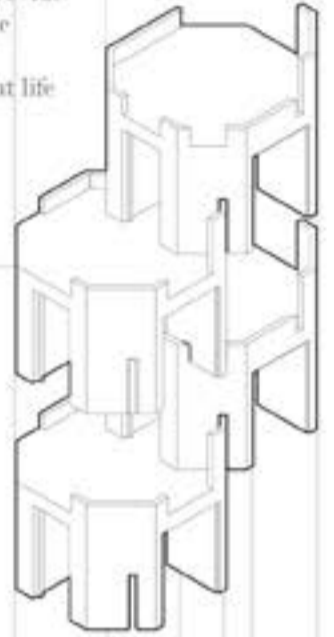
Tombstone

The center of the tombstone is connected with small pipes, which connect all the tombstones. Wait for the water vapor to condense and form water droplets. The water flows along the pipeline in the building. These water provide water for the vine plants growing in the building space. At the same time, it also symbolizes that life lasts too easily, just like water.

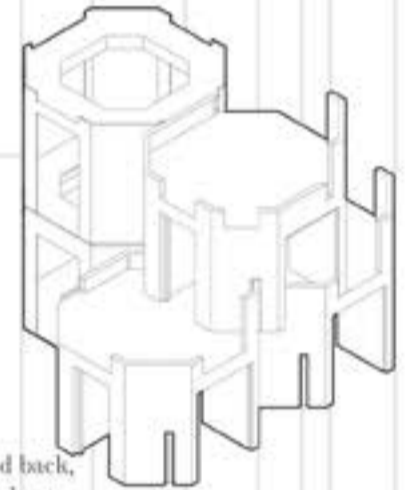


Block splicing

Overlapping like building blocks.

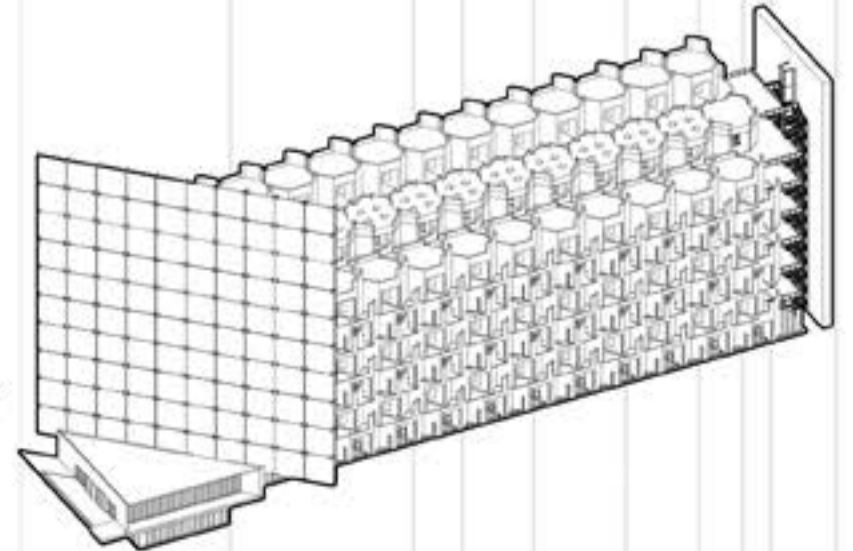
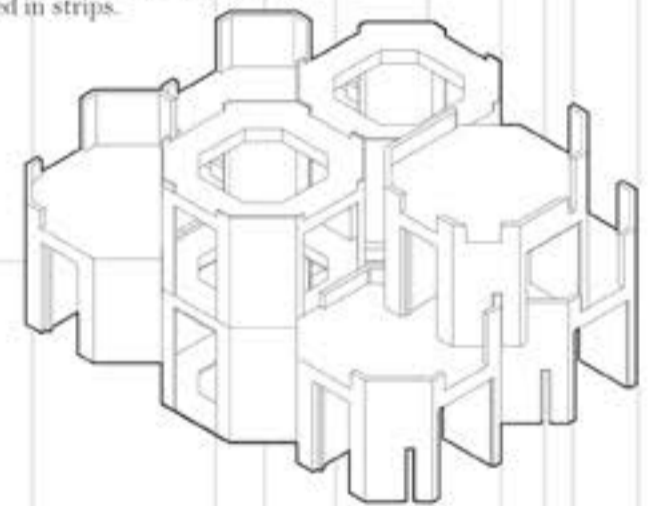


The central channel



Combination

There are tombs in the front and back, and channels in the middle, which are distributed in strips.



The final form