

AQUA OSAKA : underwater city

Image: Sense of Wonder and Excitement: this first Underwater City reflects Japan as a monsoon country with plenty of water-resources. The climax of that feeling is experienced during the raining season.

生命の水路

笑いの海

愛の水路

Architecture: The *Lake of Laughter* contains an Underwater-City with a complex maze of shops and restaurants and playgrounds, centering on a huge circular *Yoyo Dome*, *Dome of Joy* as a symbol of Osaka's unique Sense of Humor, appearing to float like a *kurago* on the Lake.

Taking the Naniwasuji Line from Kansai International Airport one arrives at AQUA OSAKA on the bottom floor of the huge *Dome of Joy*, rising 100 m into the Osaka sky, the biggest dome built so far.

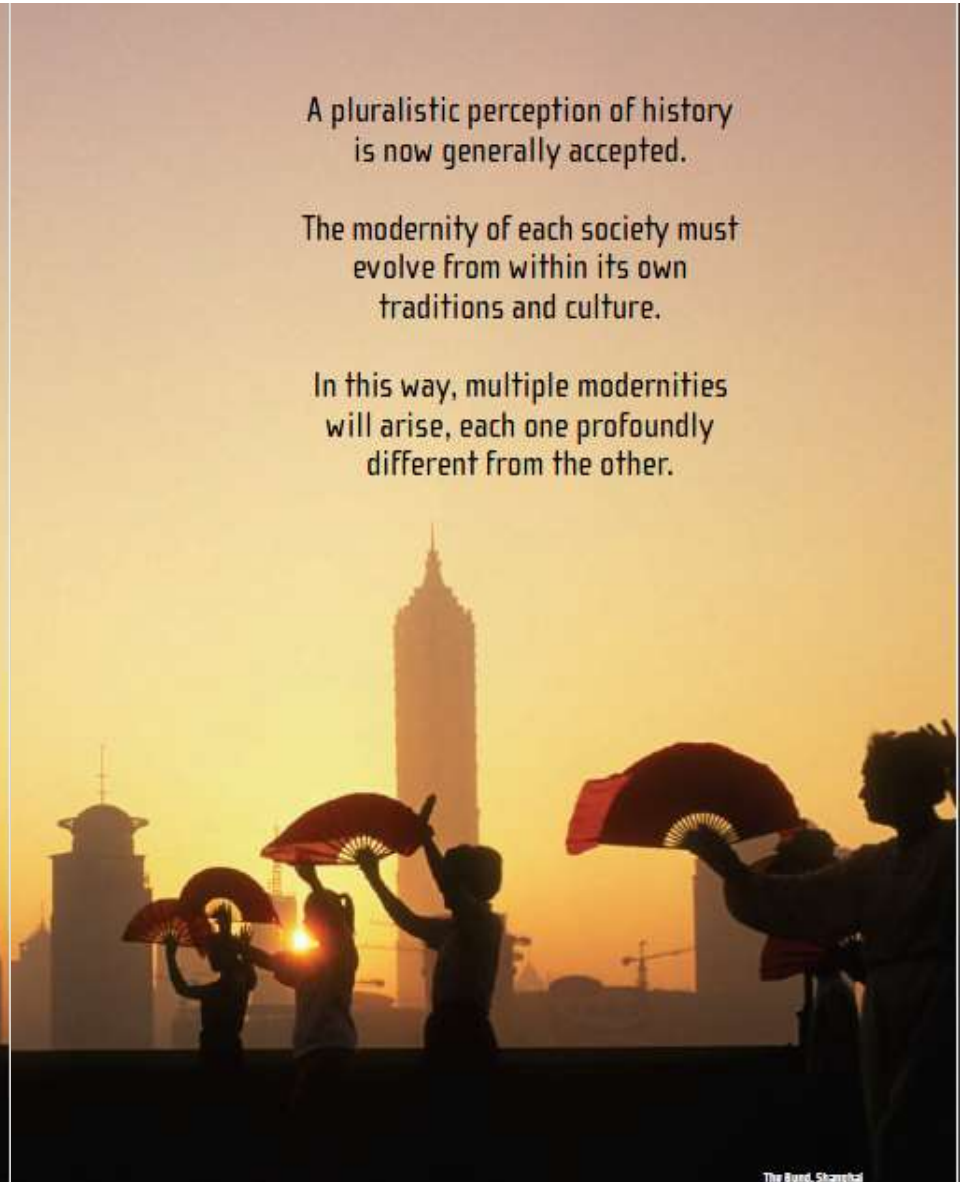
All arcades and bazaars have a ceiling of glass which allows sunlight to enter during the day, and emit artificial light through the water during the night.



Spaceship Earth as hosting entity (nature) is actually limitless. What limit it has is its ability to support living condition for its occupants (humankind). Living condition that is essential to all human regardless to their race, gender, nationality, religion, social status... Hence in the breach of ecological collapse; this condition can only be achieved through a state of common sovereignty and prosperity, a state where all human shall be –equally aware and able- to make radical change (Political premise).



William Lim, Asian Alterity



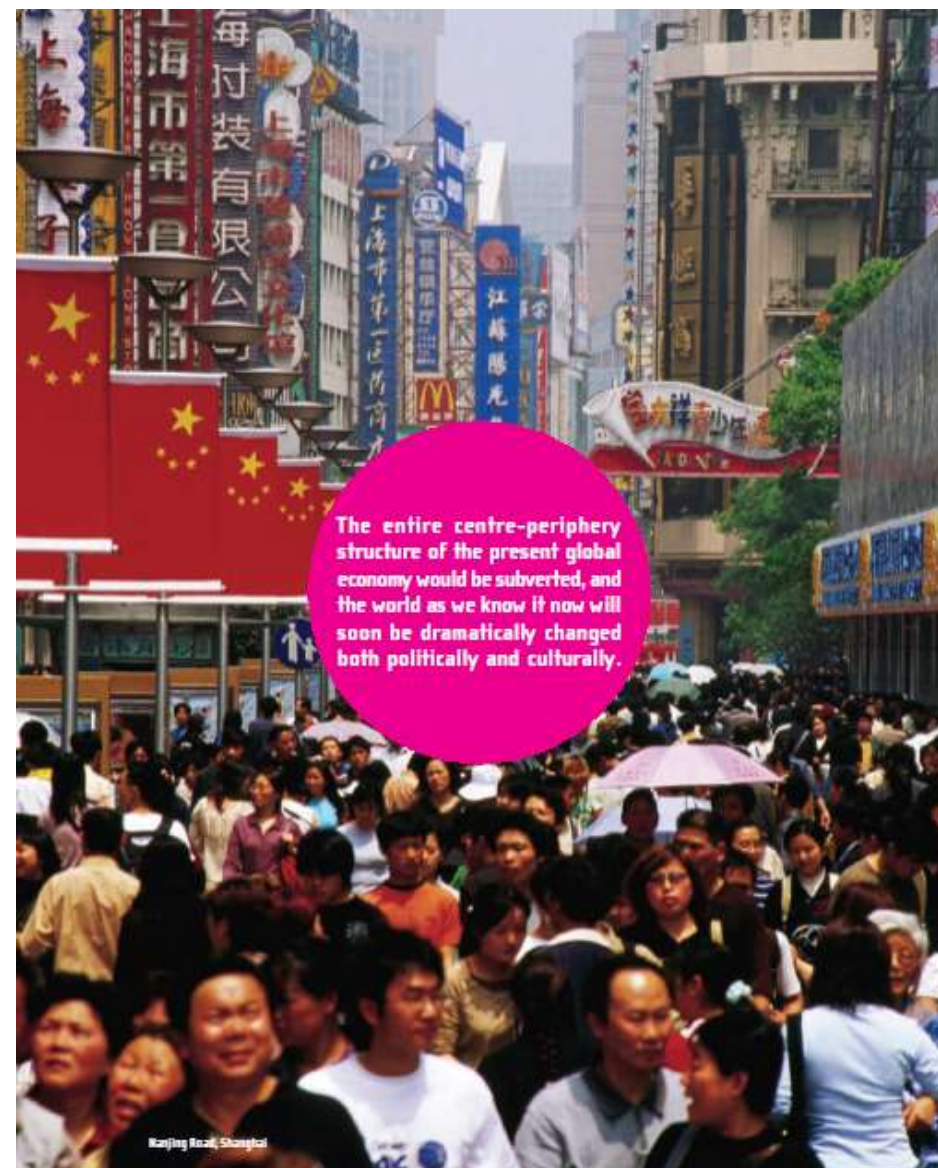
A pluralistic perception of history
is now generally accepted.

The modernity of each society must
evolve from within its own
traditions and culture.

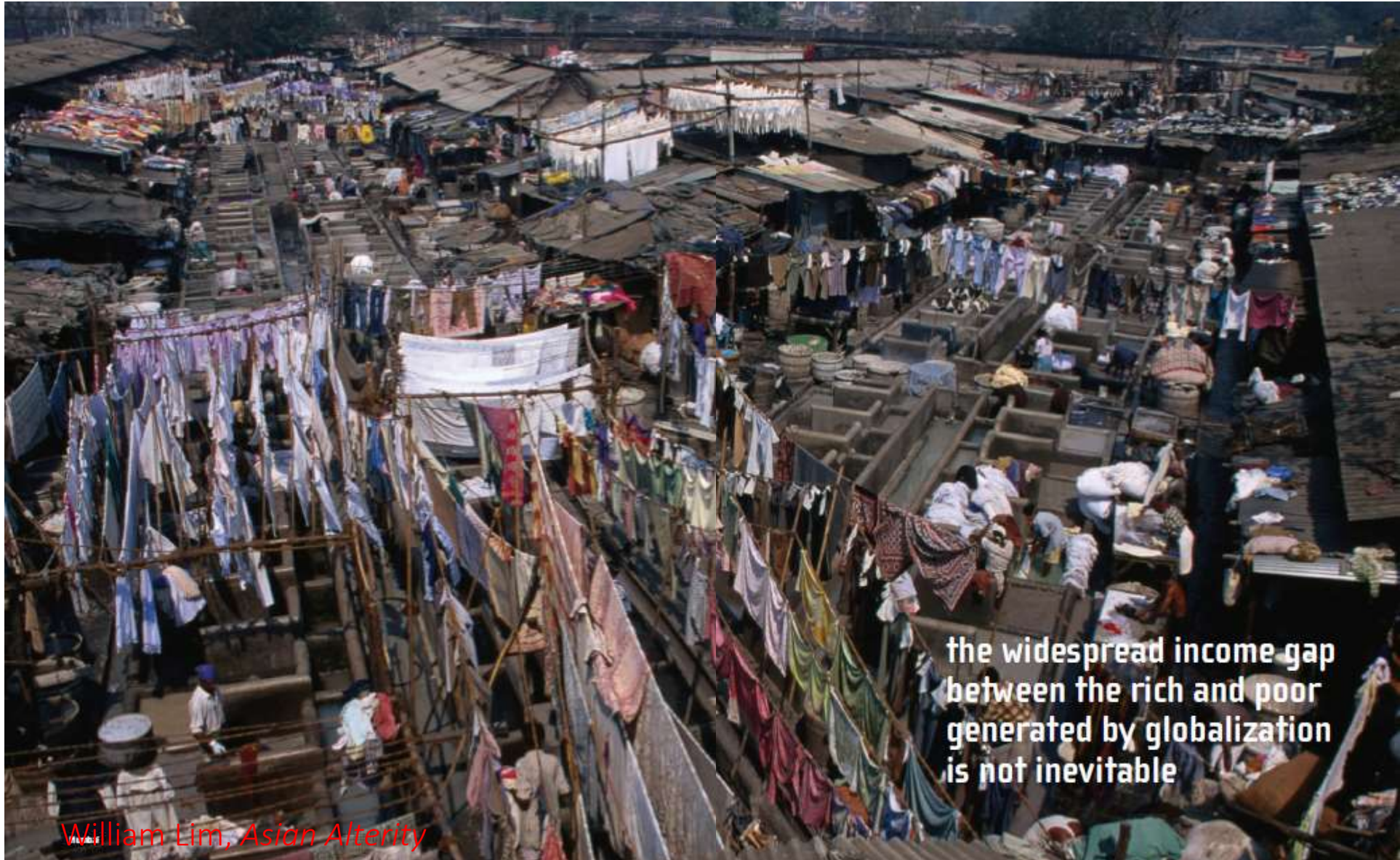
In this way, multiple modernities
will arise, each one profoundly
different from the other.

The Road, Shanghai

Asian Ethical Urbanism: a Radical Postmodern Perspective
William Lim



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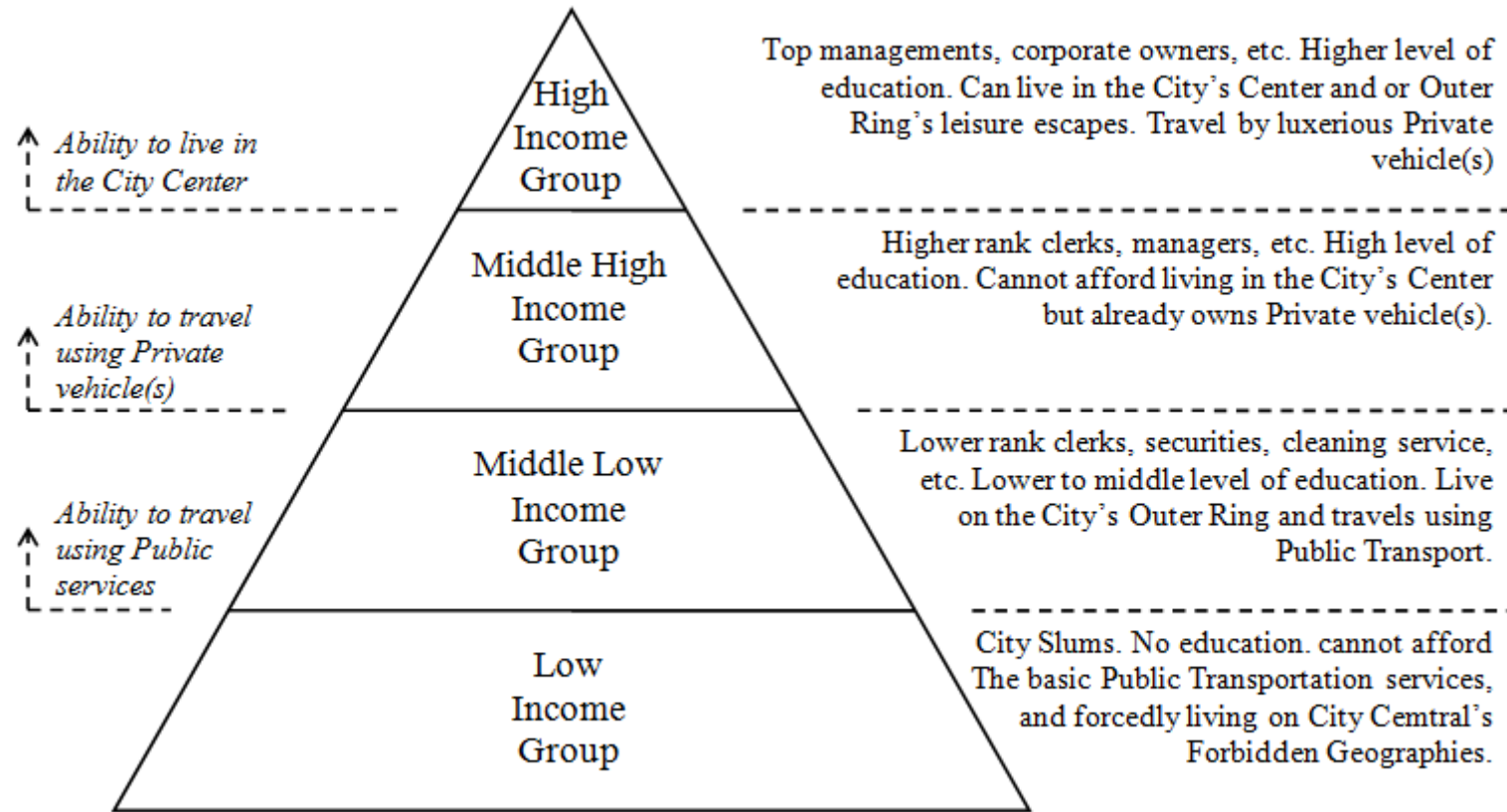


**the widespread income gap
between the rich and poor
generated by globalization
is not inevitable**

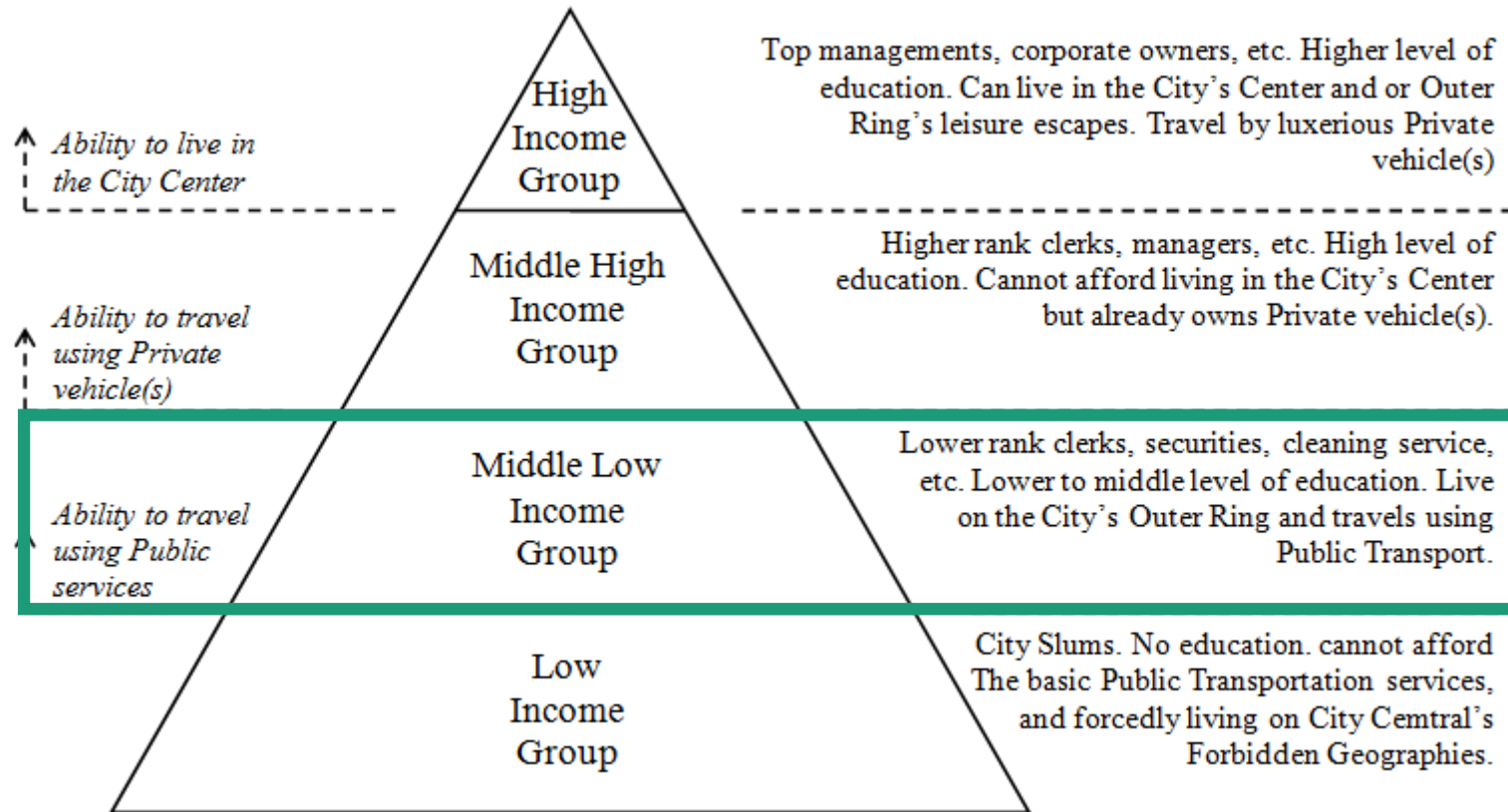
William Lim, Asian Alterity

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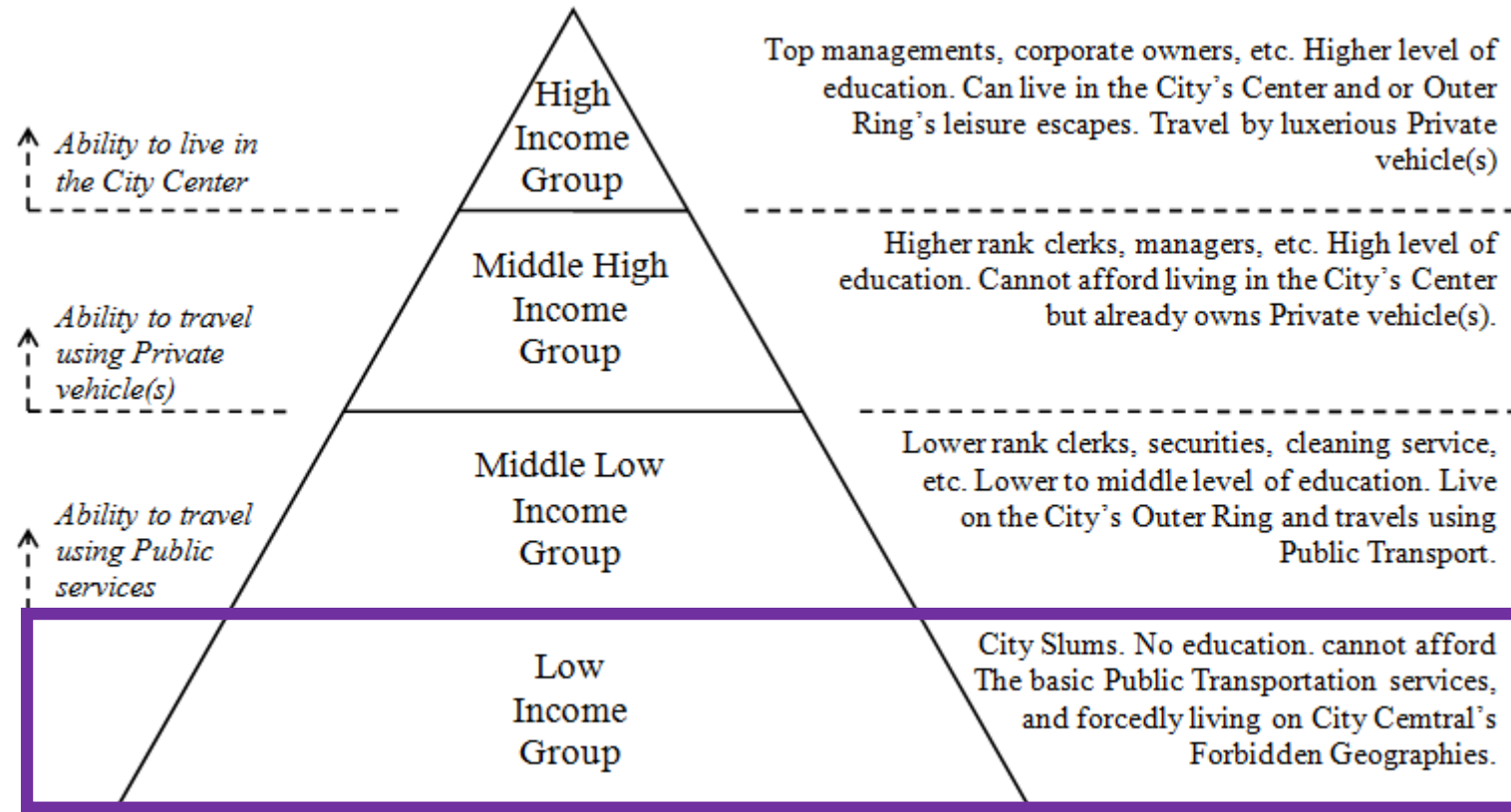
Densitification, Case Study: Jakarta



Densitification, Case Study: Jakarta

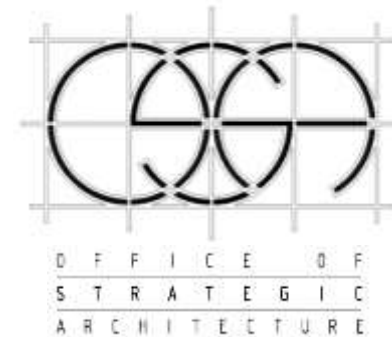


Densitification, Case Study: Jakarta



THE MYTH

Metabolism 1960, The Tokyo Plan

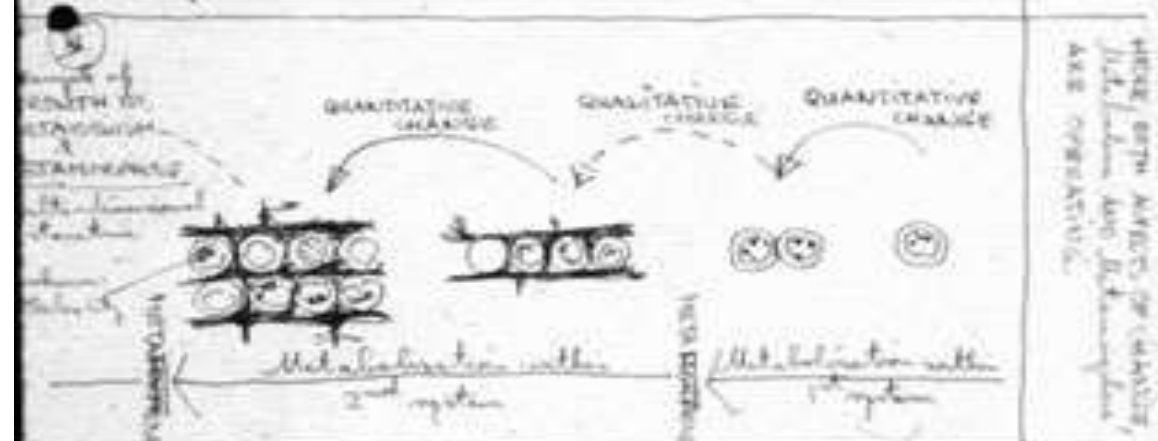
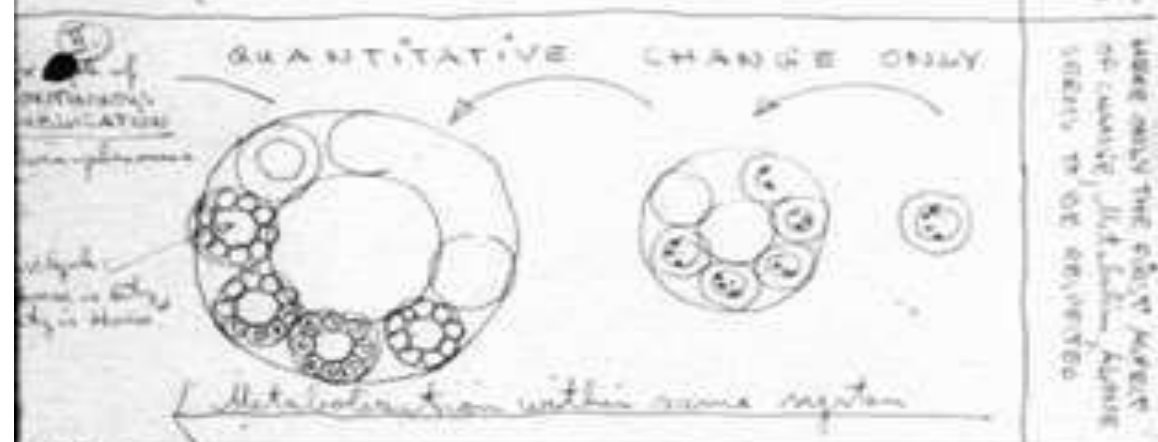
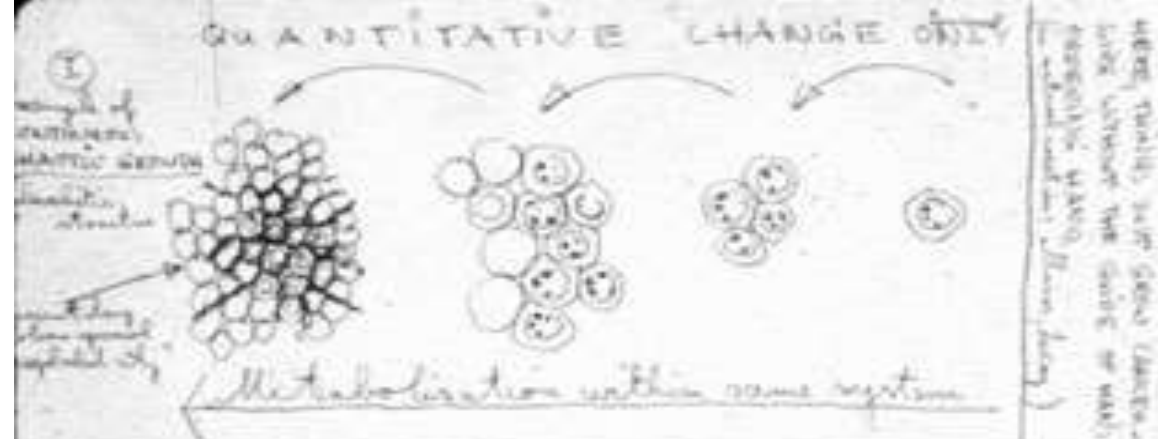


10 ARCHITECTURAL DESIGN

October 1984

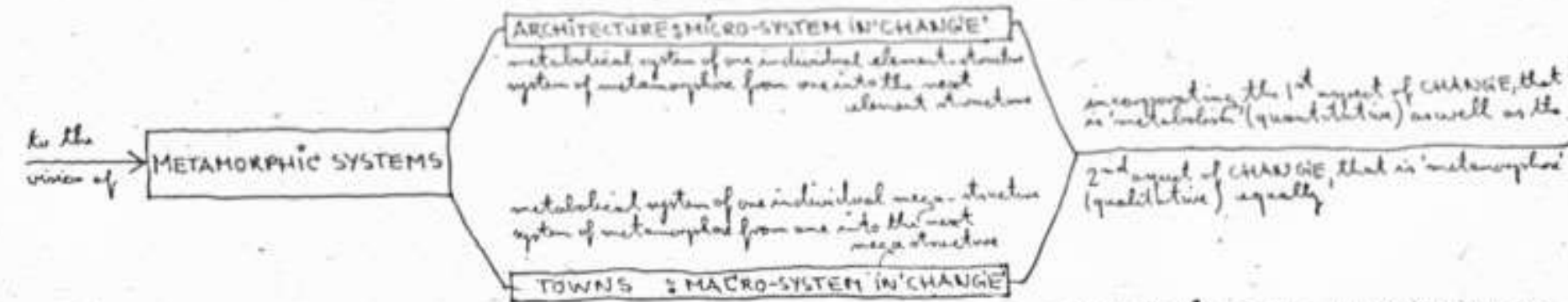
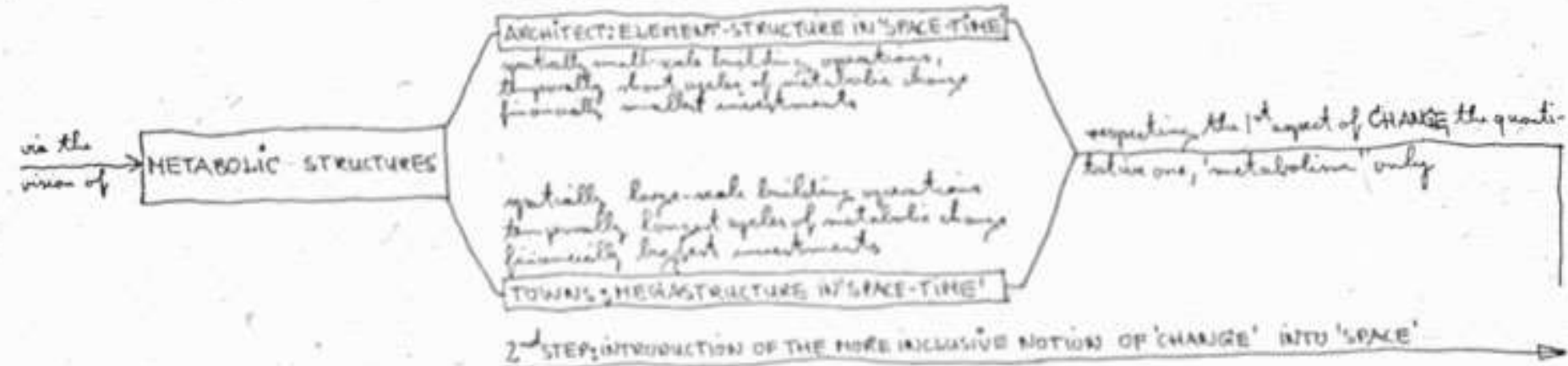
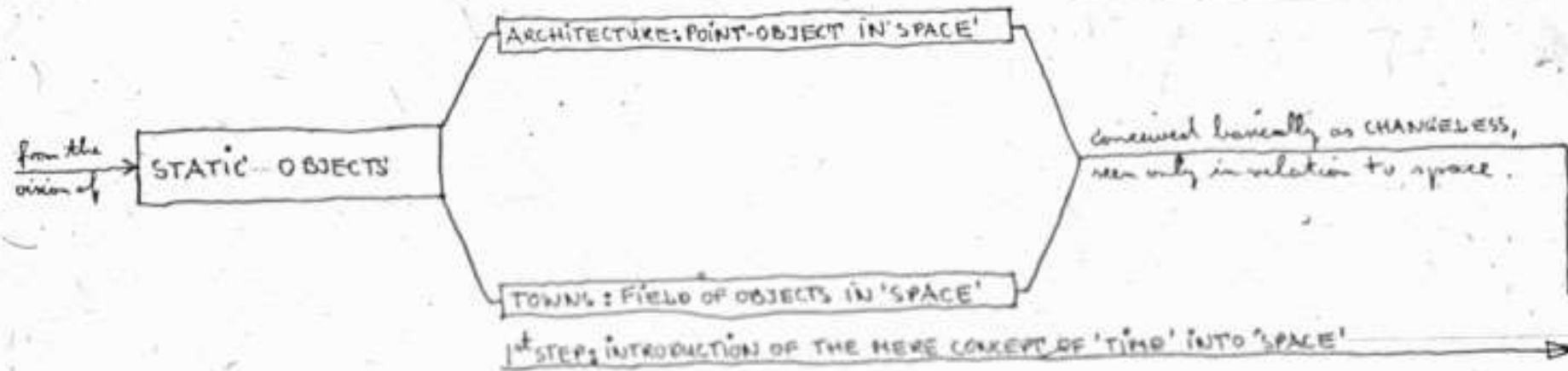
Price 45-





METABOLISM: quantitative change, change within same individual system.
 METAMORPHOSIS: qualitative change, change from one individual system to another.
 CALANCIER THE CHANGING OF THE SYSTEM

ALL IS CHANGELESS

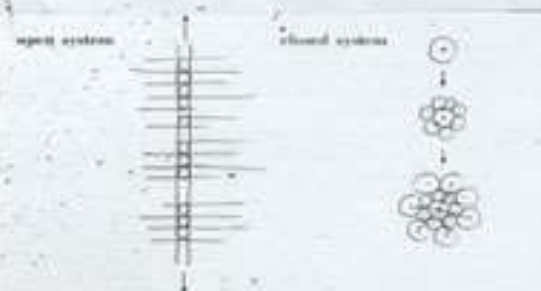


CHANGE IS THE CHANGELESS

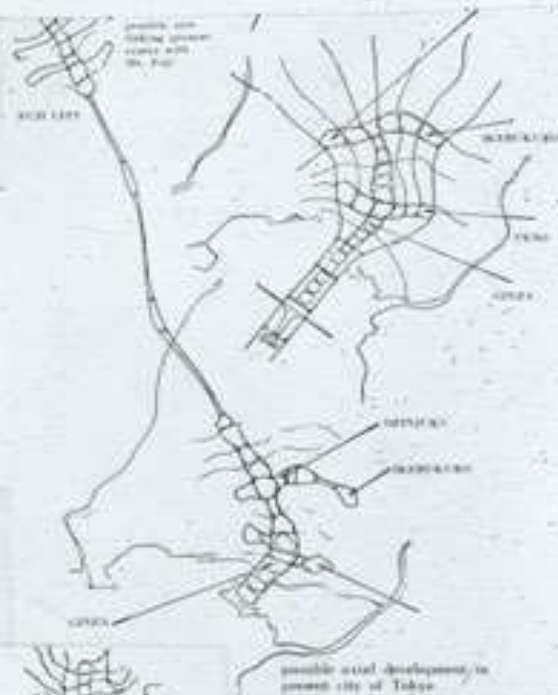
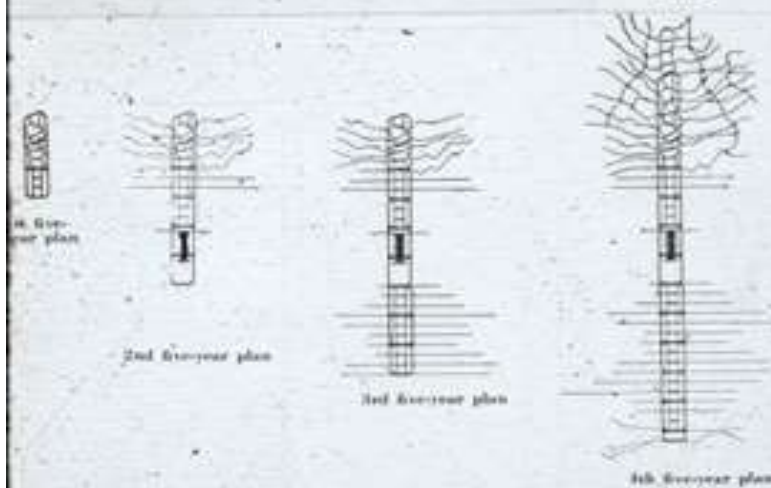


Fig. 2. Growth of Tokyo

METABOLISM (quantitative change)

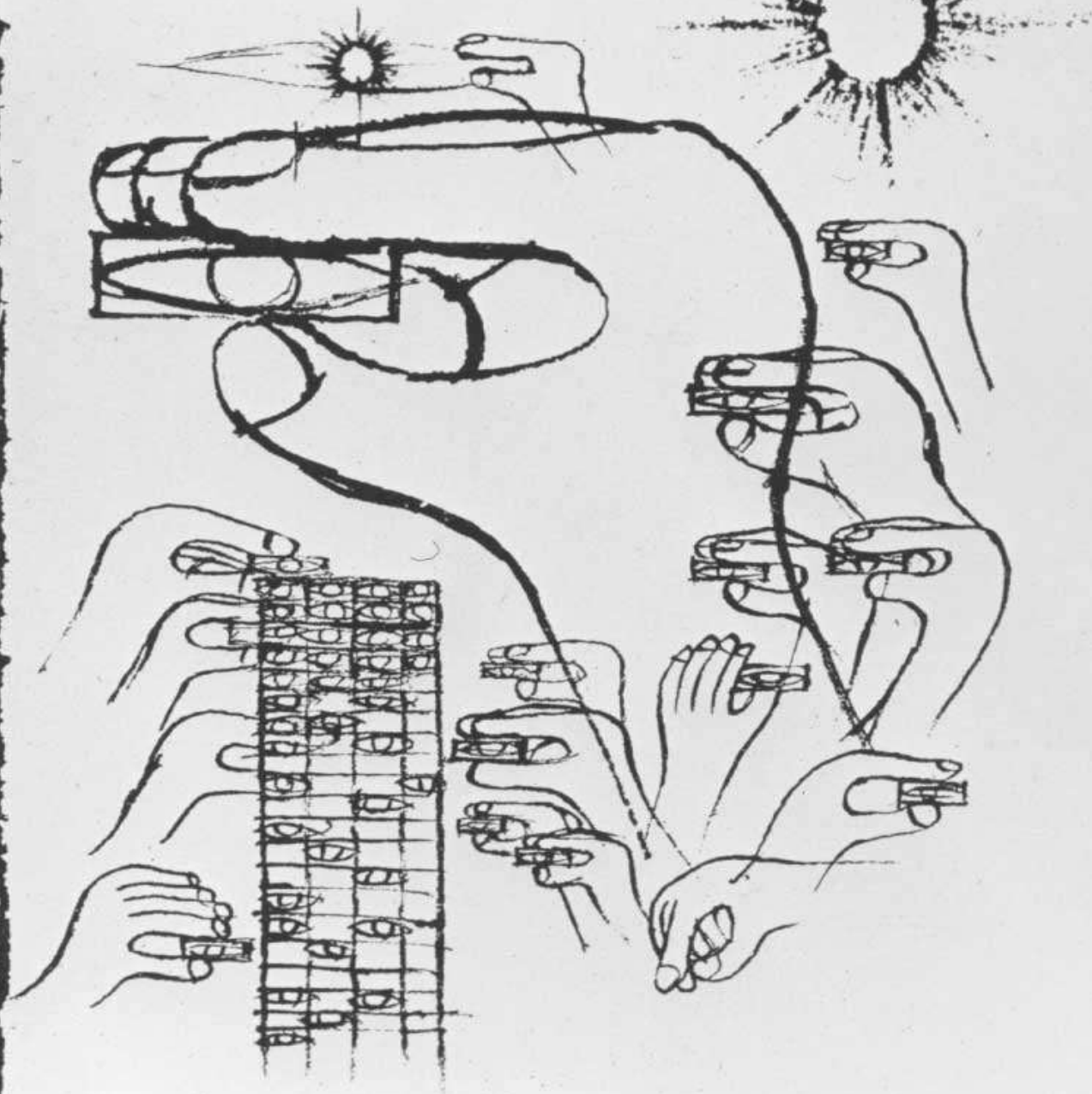


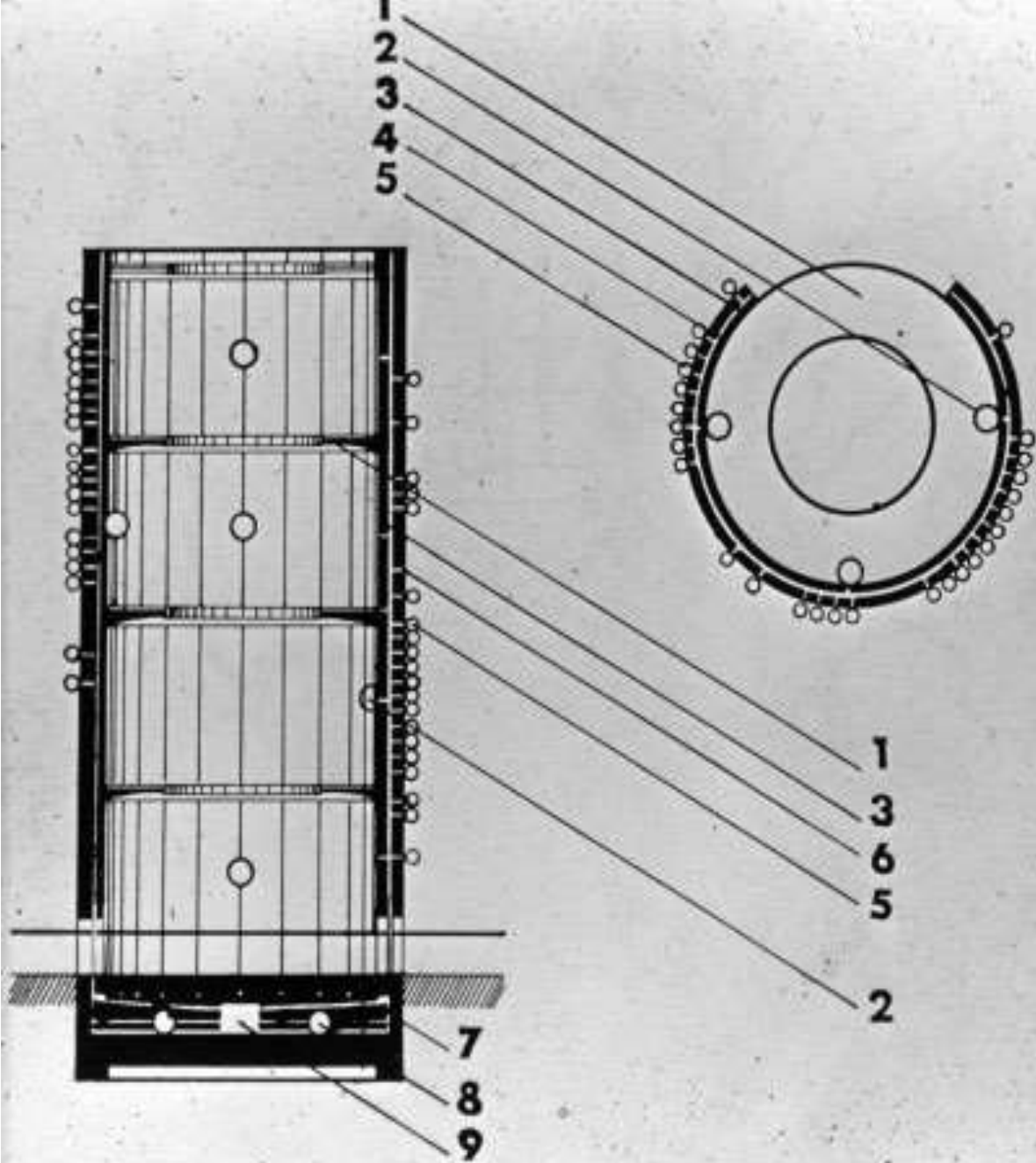
METAMORPHISM (qualitative change)

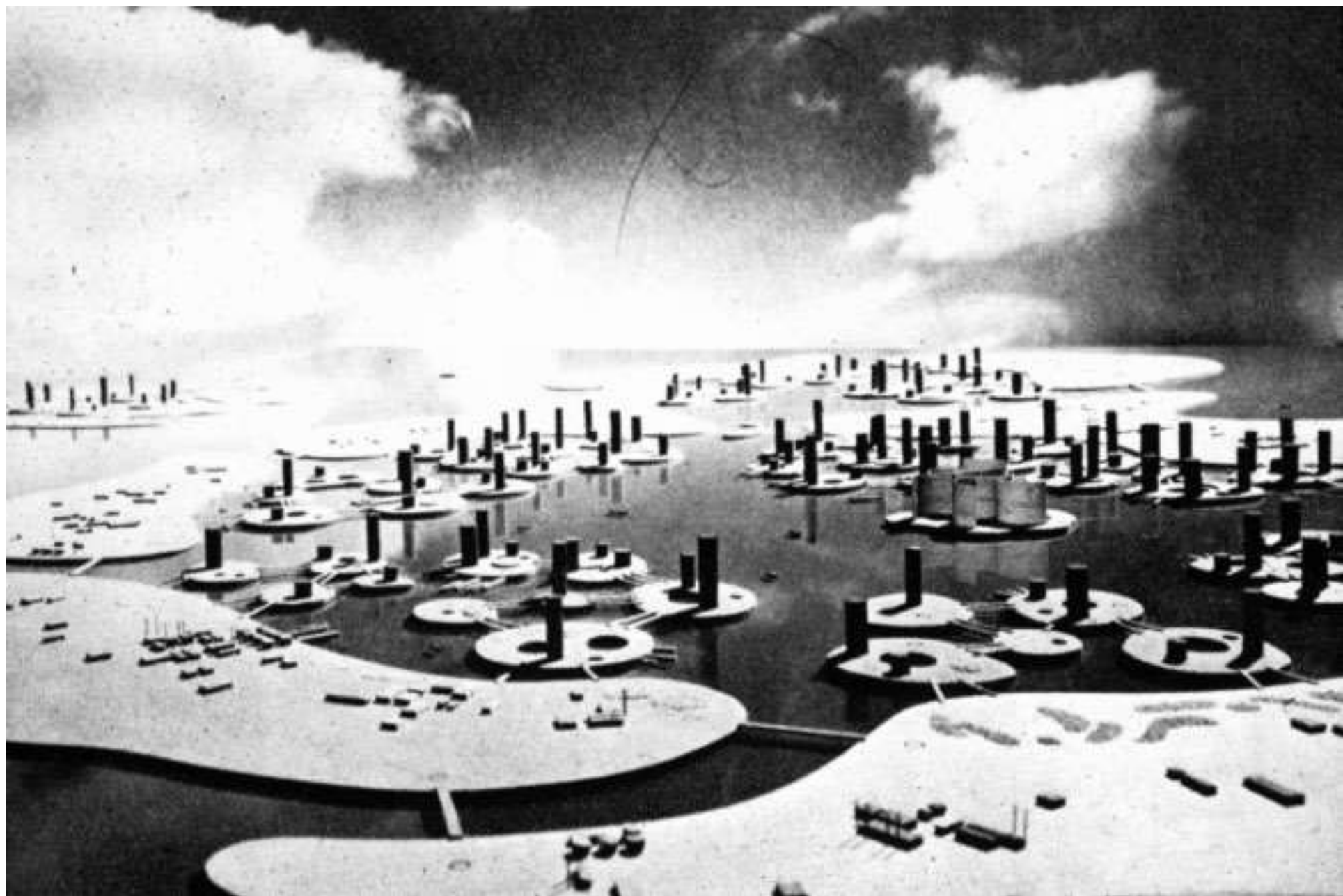


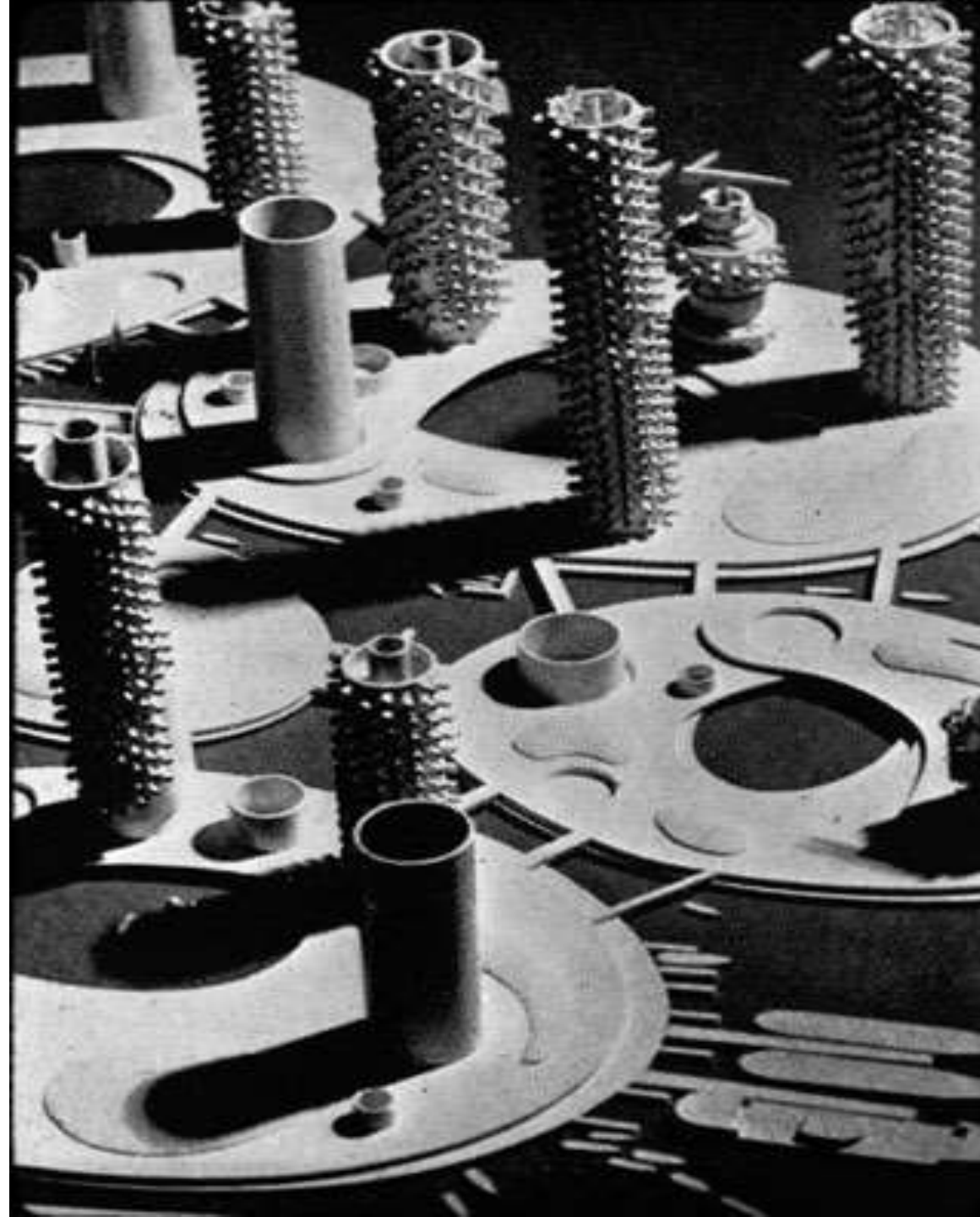
again
METABOLISM

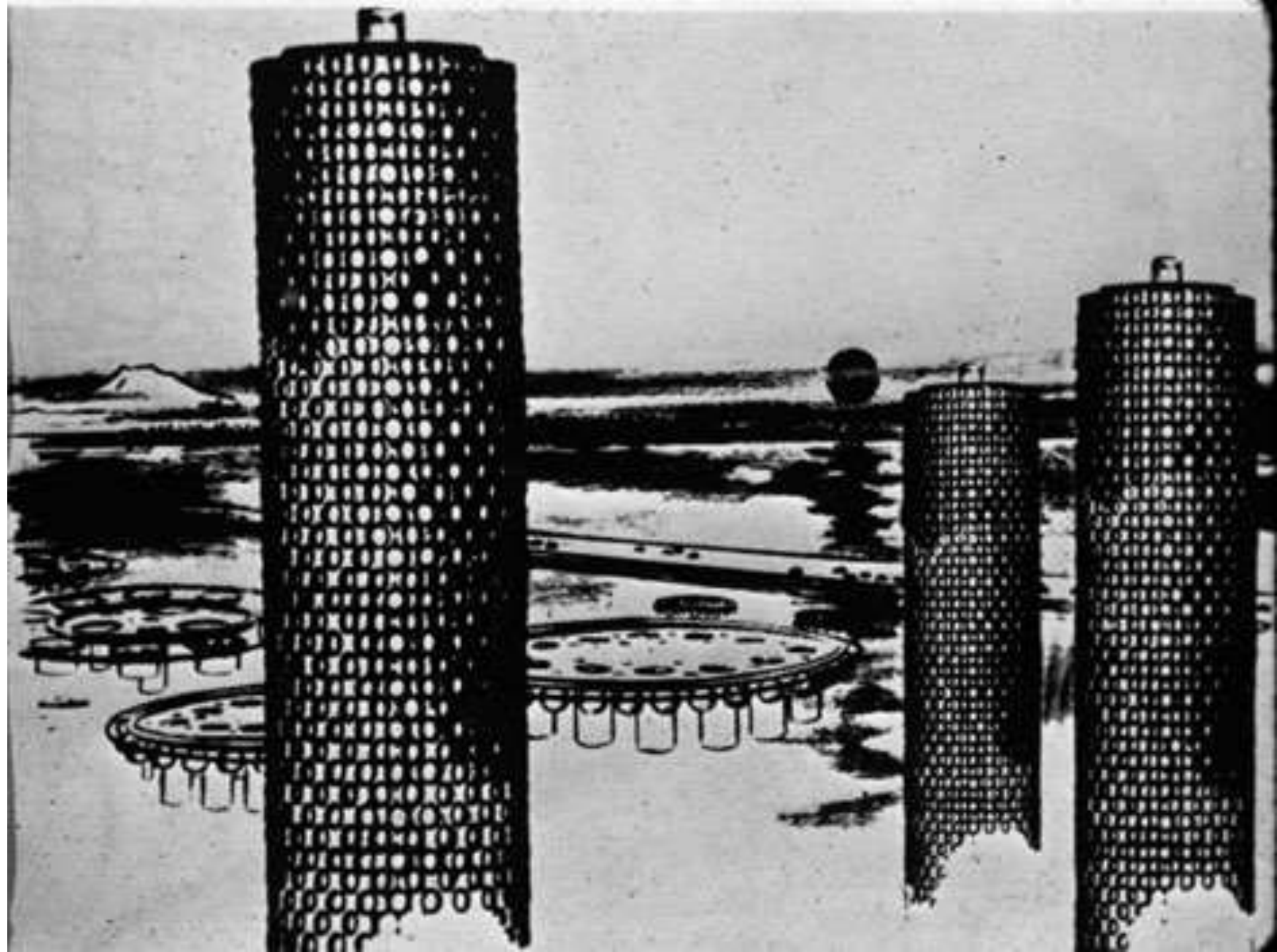
CHANGE

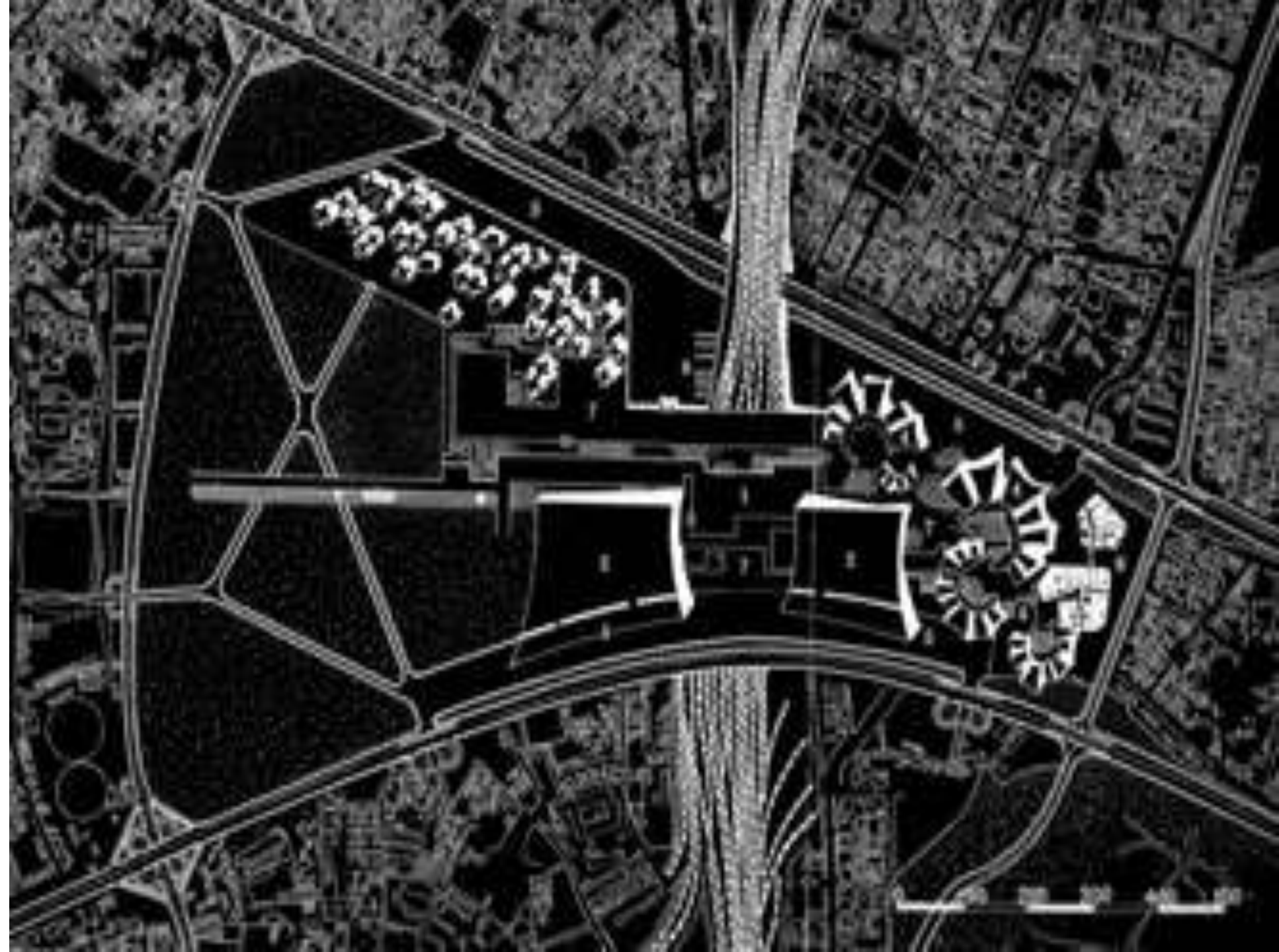


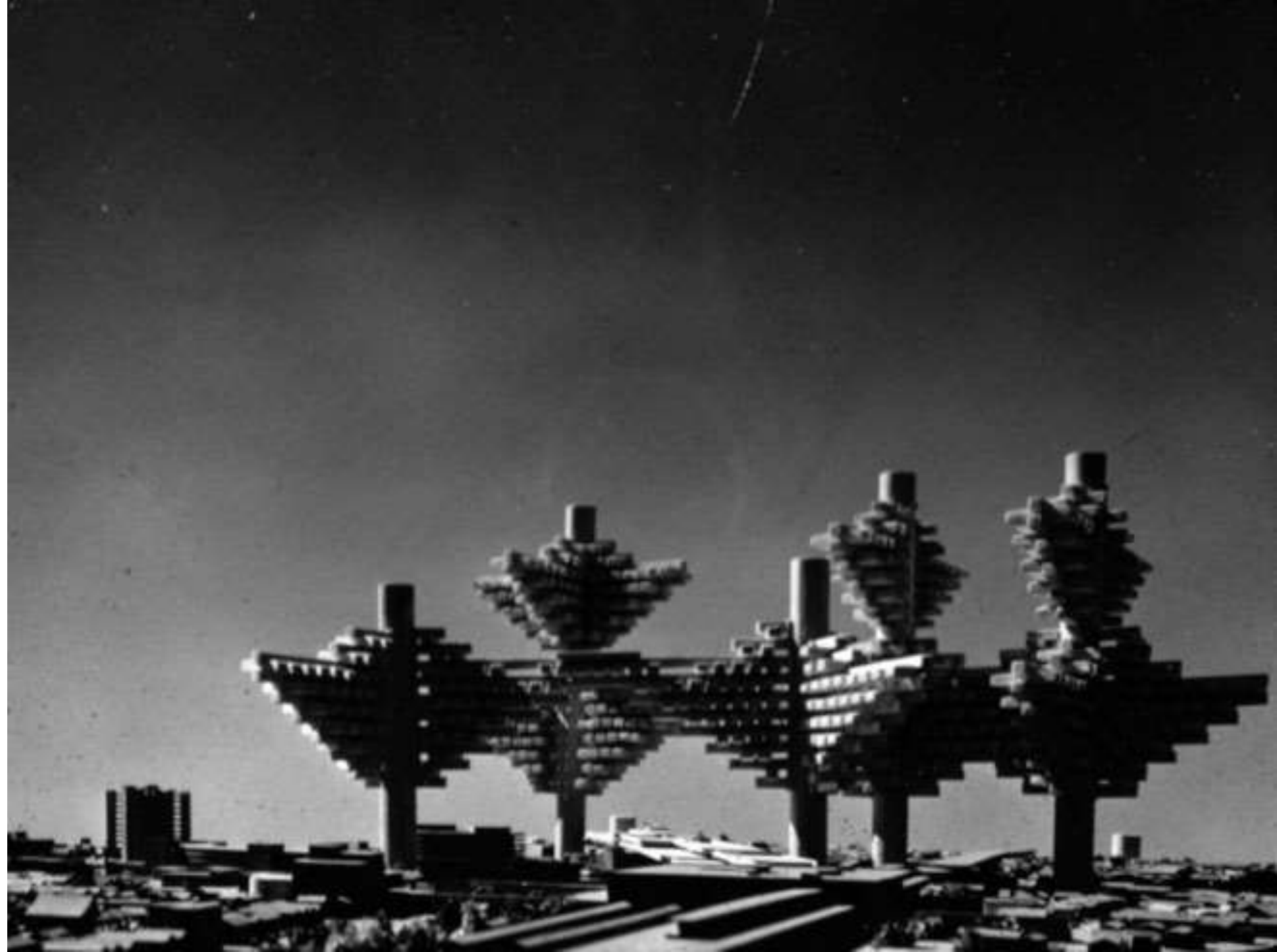


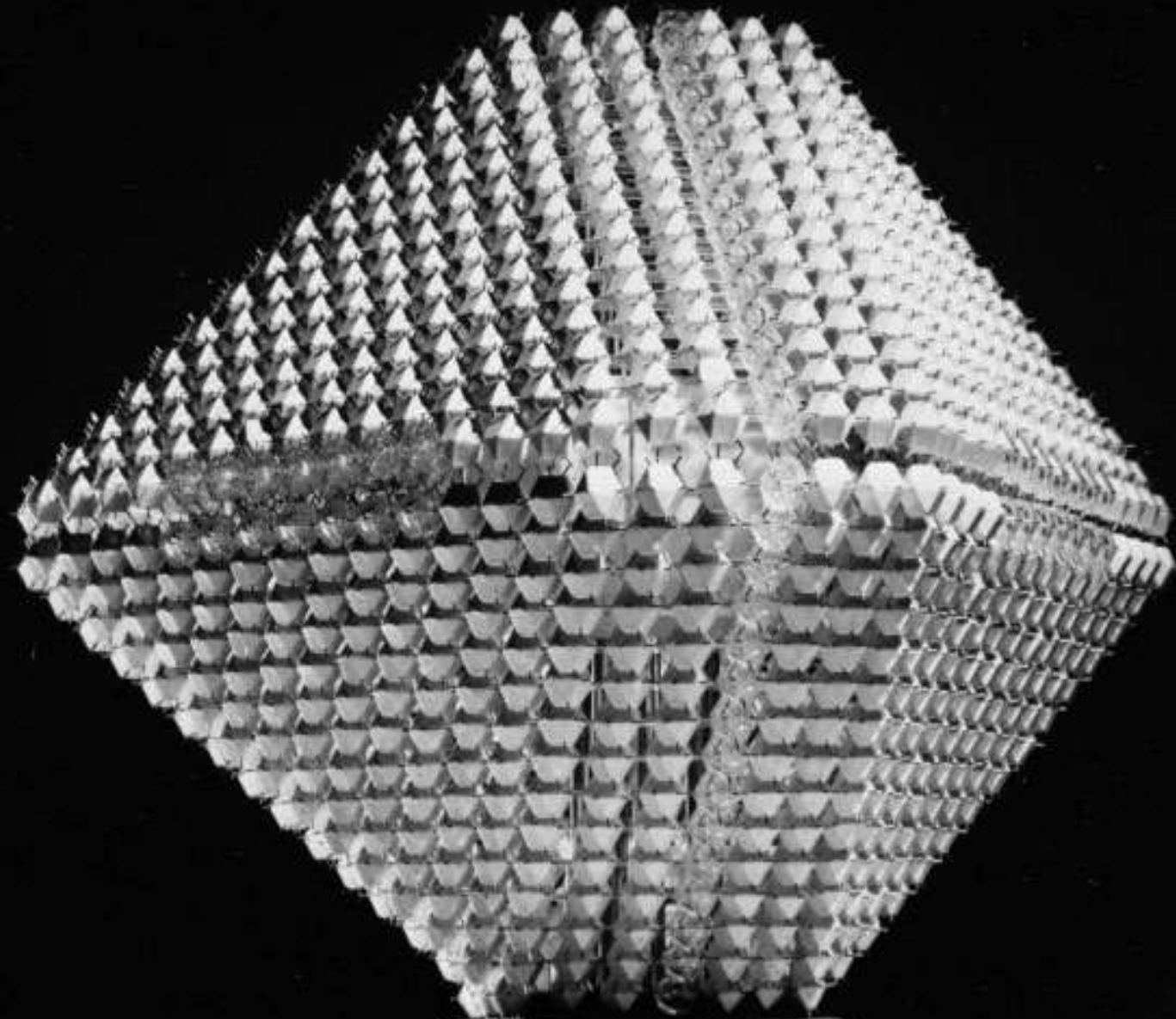


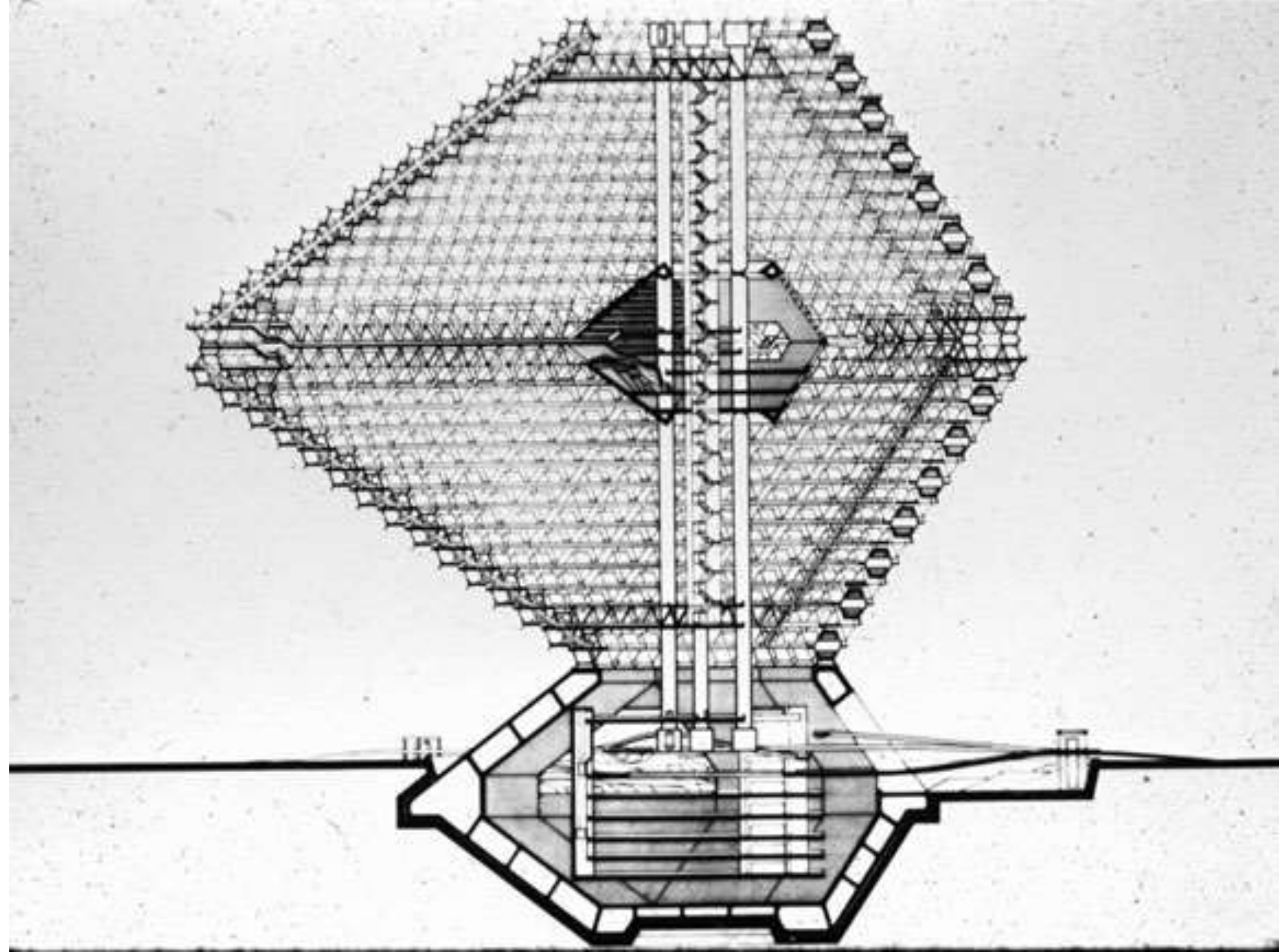


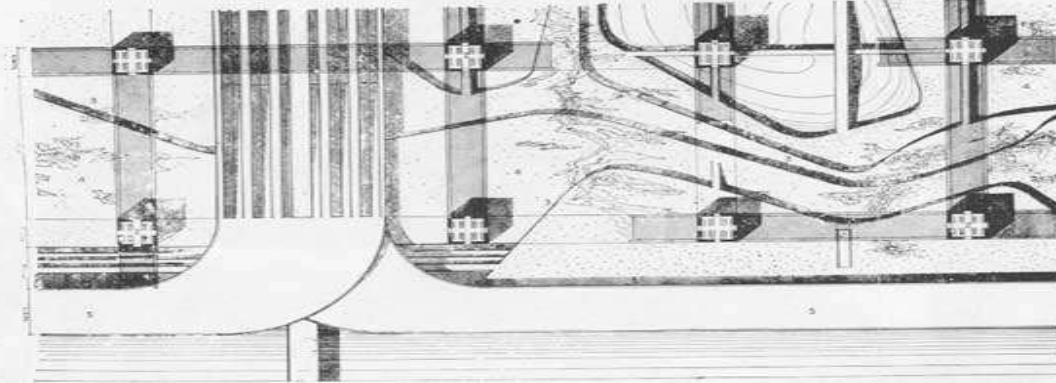
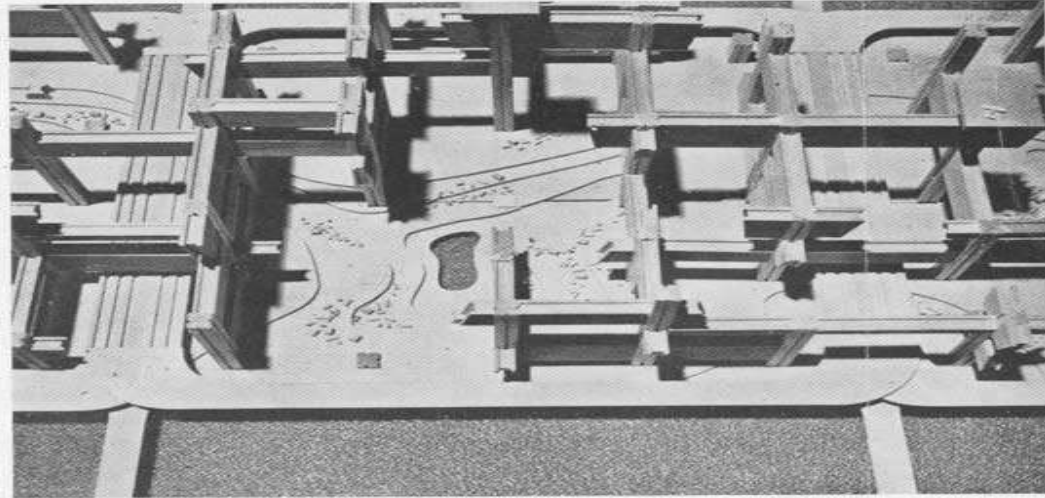
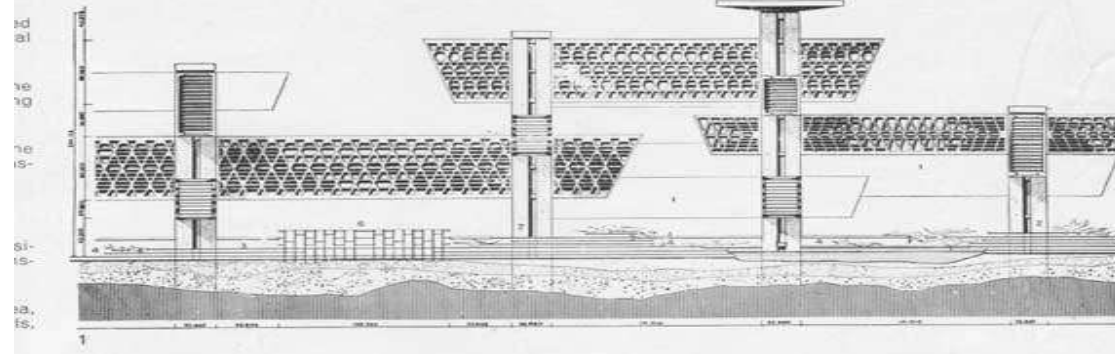










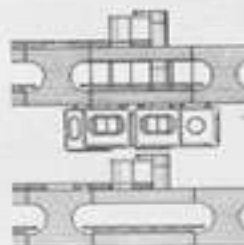


as long as the actual buildings get heavier, harder, more and more monstrous in scale, as long as architecture is taken as a means of expression of power, be it of oneself or of any kind of vulgar institution, which should be serving not ruling in society, the tale of greater flexibility and change-making structures is just fables. Comparing this structure with any one of the traditional Japanese structures or modern methods suggested by Bachmann, Fuller or Ekus in Japan, it must be considered a mere anachronism, a thousand years out of date, or to say the least, regression not advance of modern architecture in terms of theory and practice. G. Hatakeyama

The work is less prepossessing than the thought. Some of this is definitely going awry. No prizes are offered for knowing how to get the police or an ambulance.

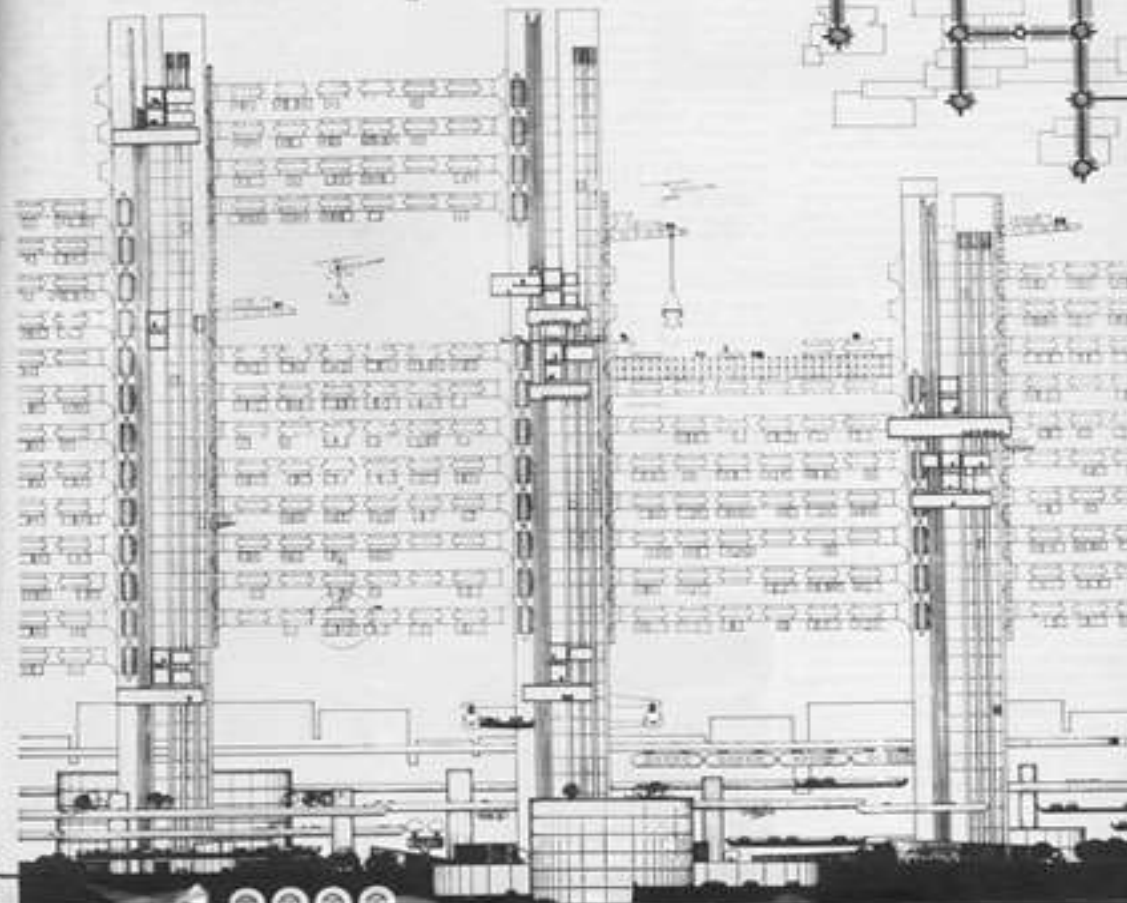
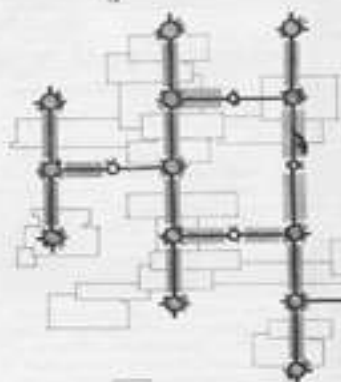


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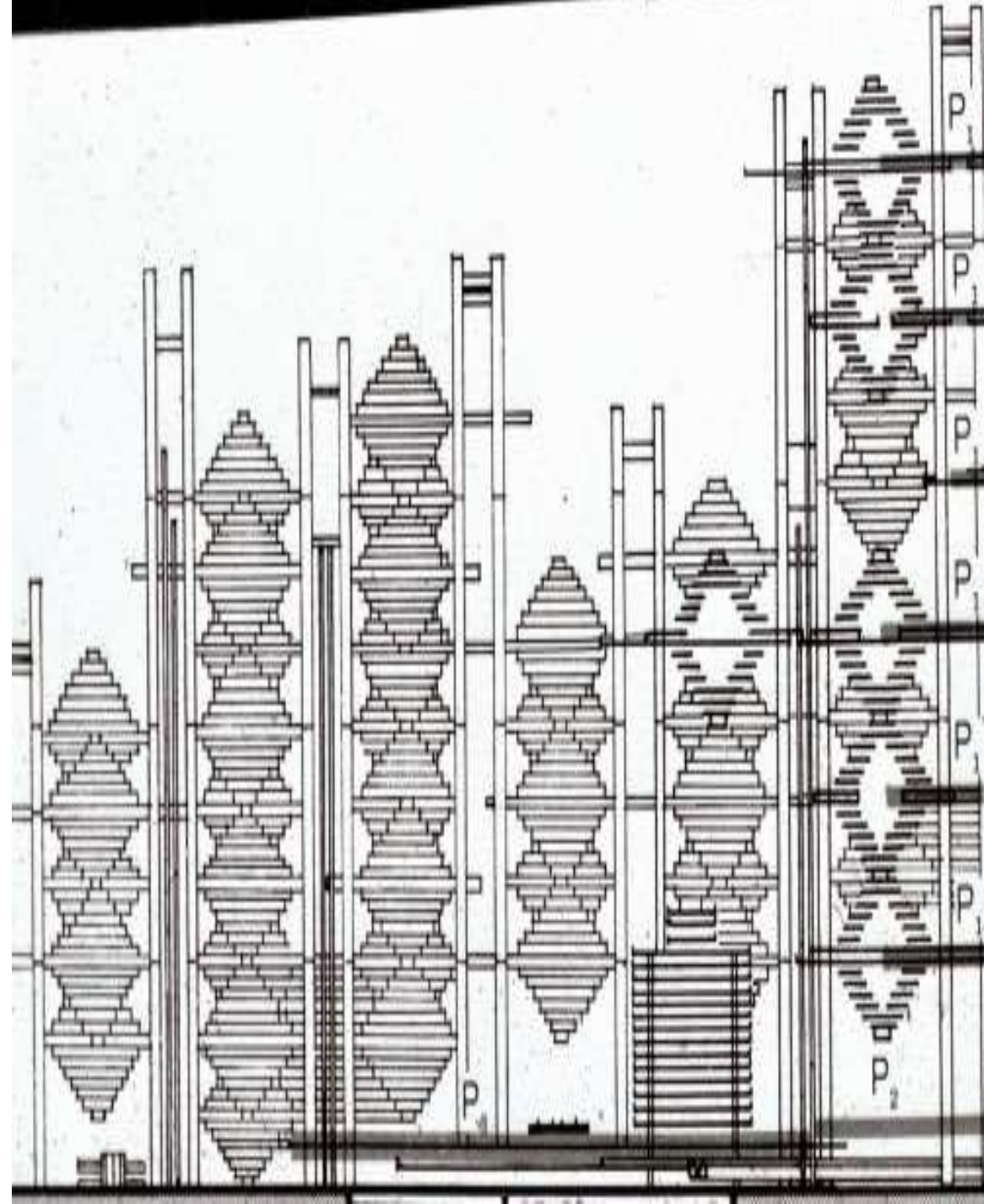
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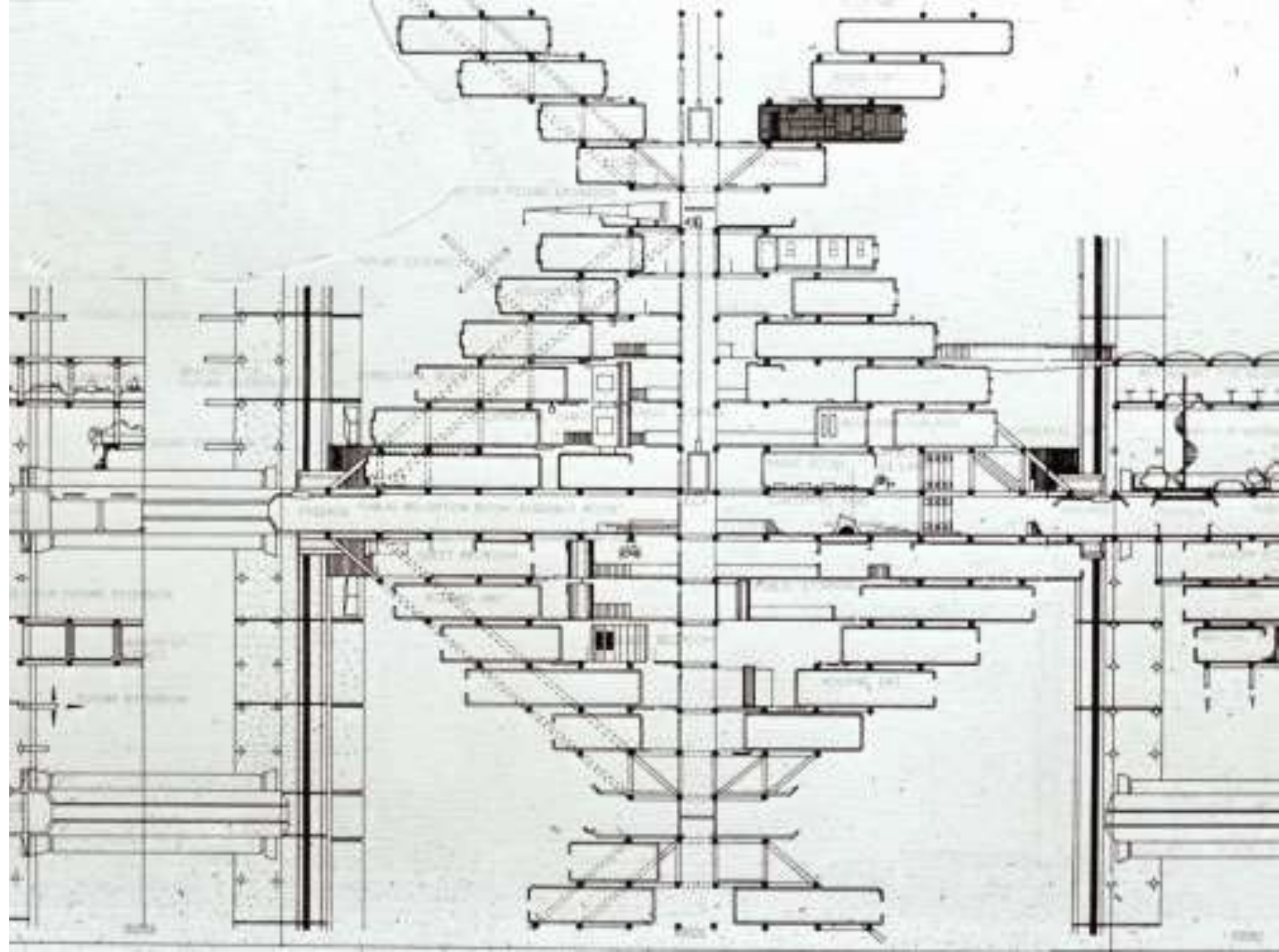
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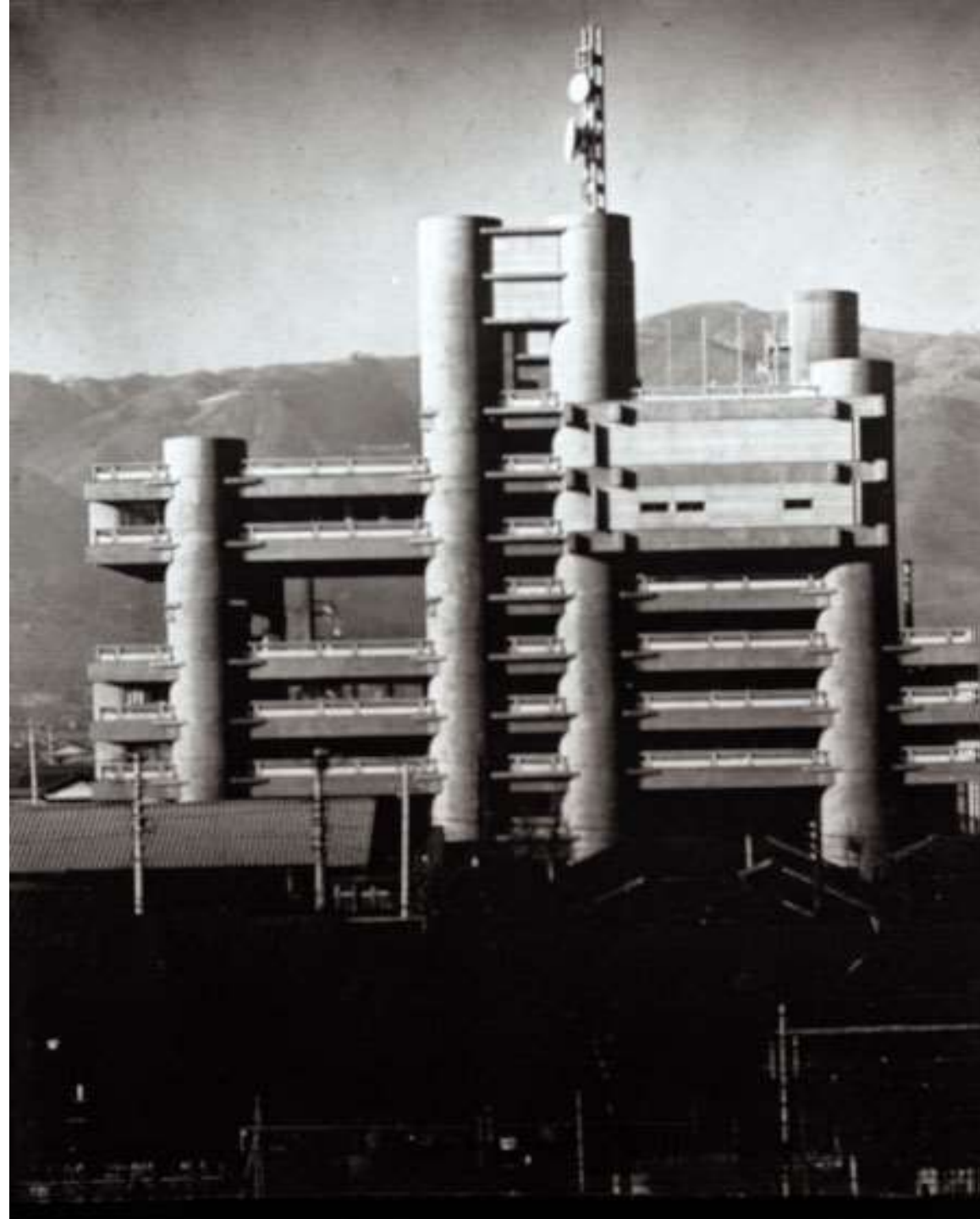








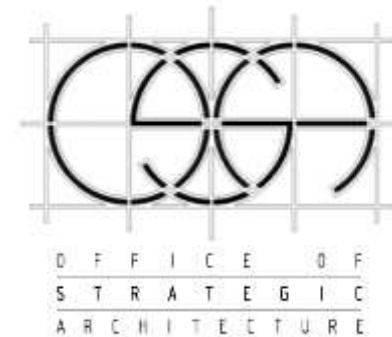




*Radical change is what required for humankind to survive, for **the question that our generation must answer today is definitely not exclusively ecological one nor, it is politically or economically secluded. It is about all the –ism- there is combined.** Despite of its name, Static City theory is not just another traditionally blind-folded urbanism talks. Through this paper the theory will jump from discussing macro economy performance and Political Economy remapping, to philosophically tackle urban disorders as attempt to solve problems right in the heart where three quarter of human lives.*

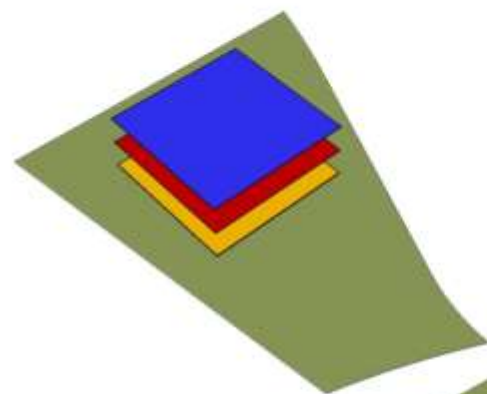
EXPERIMENT 1

Taichung



HARMONY OF SKY AND EARTH

天地的和諧



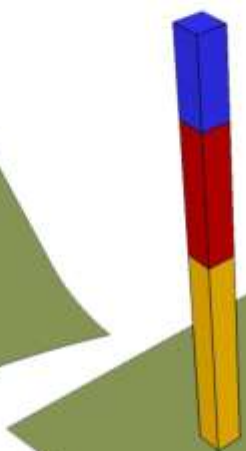
Site = 43,400 m²
Maximum Footprint = 10,000 m²
Minimum Height = 300 m²
PROGRAM:
TOWER = 2,445 m²
MUSEUM = 4,000 m²
OFFICE = 7,164 m²

在著手設計良好的「高塔」這類非常系統化的建築之前
我們先研究建築類型學上的兩種塔的極端：辦公塔和瞭望塔。

以第一種類型為例：辦公塔，紐約世貿中心口對是其中的典型代表，這類辦公塔多是強調良好的動線，假如依照此邏輯，加上兩個前提：本設計高約300公尺且總樓地板面積約14,000平方公尺，因此可以推算出每層樓的面積約為18公尺乘以18公尺的矩形。我們發現，在這樣的尺度中，塔中央的服務核將會變成一個非常低效率的垂直運輸系統，這是因為所有的人群只依賴地面層的單一出入口。為了改善移動效率，我們從將800平方公尺的面積移置300公尺高的頂層，這些空間是本設計中最重要的空間，包括貴賓休息室及瞭望台。

以第一種類型為例：瞭望塔，我們案例分析研究西雅圖塔發現瞭望塔多由垂直的觀景台與地面層的輔助建築組成。如果本設計依照同樣的邏輯設計，本設計的瞭望塔將由占地約132,000平方公尺地面的輔助建築及300公尺高處的觀景台所組成。這樣的缺點是一方面占去太多空間，另一方面造成視覺上的不平衡。我們的建議是解構單一的輔助建築量體並將其替換為一個個的大地花園，中央矗立天之塔，形成太陽和地球的和諧構圖：陽光提供能量，綠色的大地再轉化能量滋養我們。只有通過陰陽兩極之間的和諧，才能實現一個愉快和永續的生活—不僅僅是屬於人類，更是屬於大地上的所有生命。

OFFICE TOWER 辦公塔 Pragmatic Type 機能類型



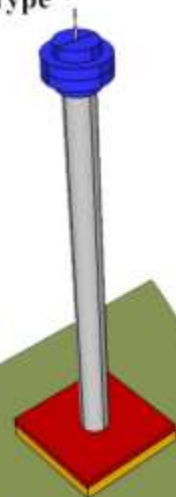
Our design of the Taiwan Tower started with a systematic investigation into the two extremes of structures in the basic shape of towers: the typical office tower and the typical observation tower.

If we were to follow the first category of the office tower which was best represented by the WTC Twin Towers in New York and stretched the required program of a total of 14 thousand square meters up to a height of 300 meters, the resulting area per floor would just be 18 x 18 meters. In this arrangement a single central core would cause a very inefficient vertical transport system with everyone focusing in onto one central basepoint. This undesirable arrangement made us subtract 800 square meter from the program of the Executive Lounge and the Observatories and use them as contents for the very top of the Observation Tower at 300 height.

If we were to follow the second category of an usual observation tower as visible in the Tower in Seattle we would arrive at a design of a solitary tower with the mentioned 800 square meters placed at the very top and the tower itself sitting on a massive horizontal podium structure that would contain the 13.2 thousand square meters of required programs. To our mind this would not result into an image of a harmonious composition.

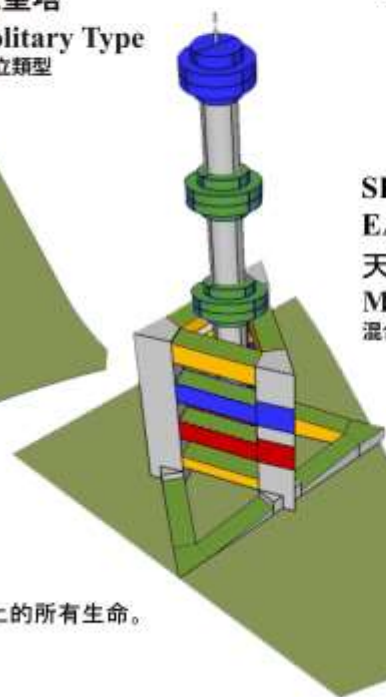
Our proposal is to dissolve the massive podium structure and replace it with a rising Hanging Gardens out of which arises a central Tower of the Sky: An image of harmony between the sky and the earth, where the sunlight providing all energy and the green of the earth transforming it for our nourishment.

OBSERVATION TOWER 瞭望塔 Solitary Type 獨立類型



Only through harmony between these two poles, between Yin and Yang can we achieve an enjoyable and sustainable life for all - not only human - but all living beings on earth.

SKY TOWER AND EARTH PLATFORM 天之塔和地之座 Mixed Type 混合類型

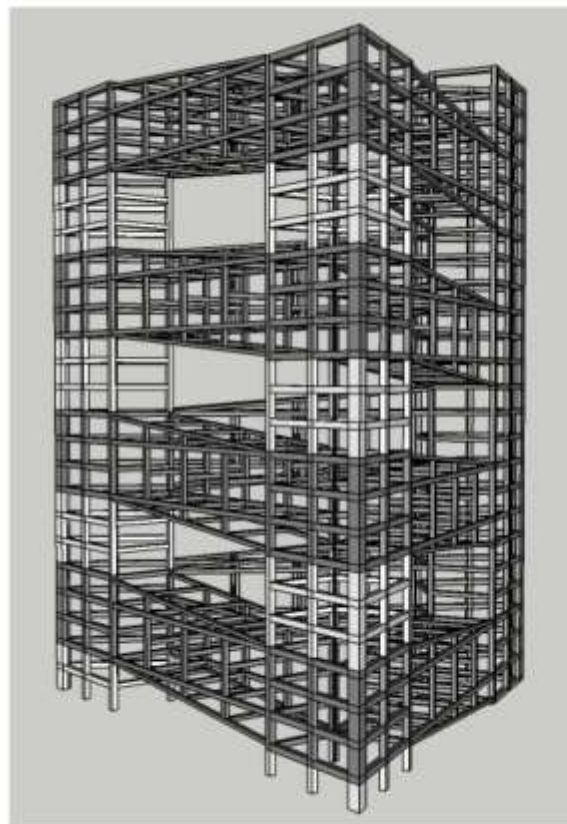
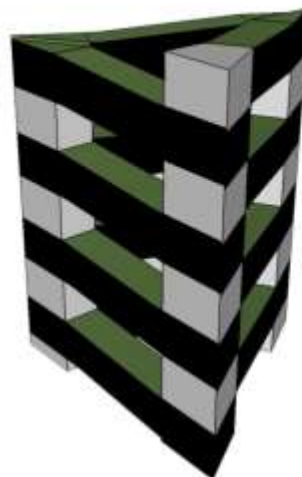
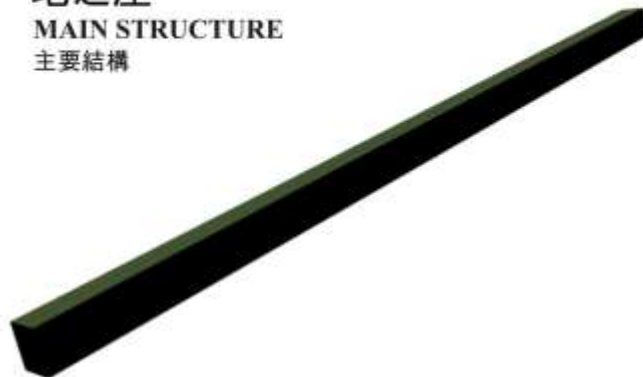


EARTH PLATFORM

地之座

MAIN STRUCTURE

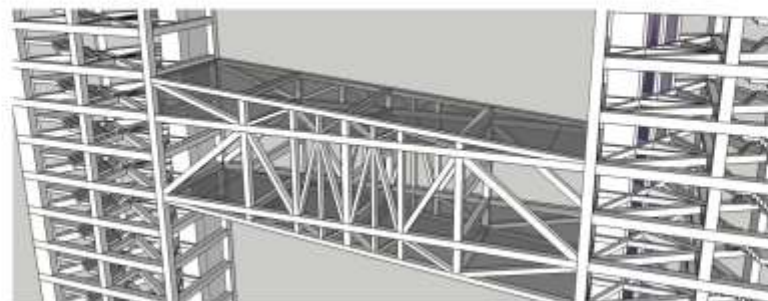
主要結構



Our vision for the Taiwan Tower is to create a New Age image of Sun Tower surrounded by spirally rising Hanging Gardens. We started by laying out up all the terraces' 13.2 thousands square meters of program into one linear form and then folded this -continuous slab with roof gardens on top of it- into a triangular spiral form to meet the site's area and shape. That pure form was then rearranged to produce a feasible building where the continuous spiral structure would be supported by three vertical cores, one each at each of the triangle's edges.

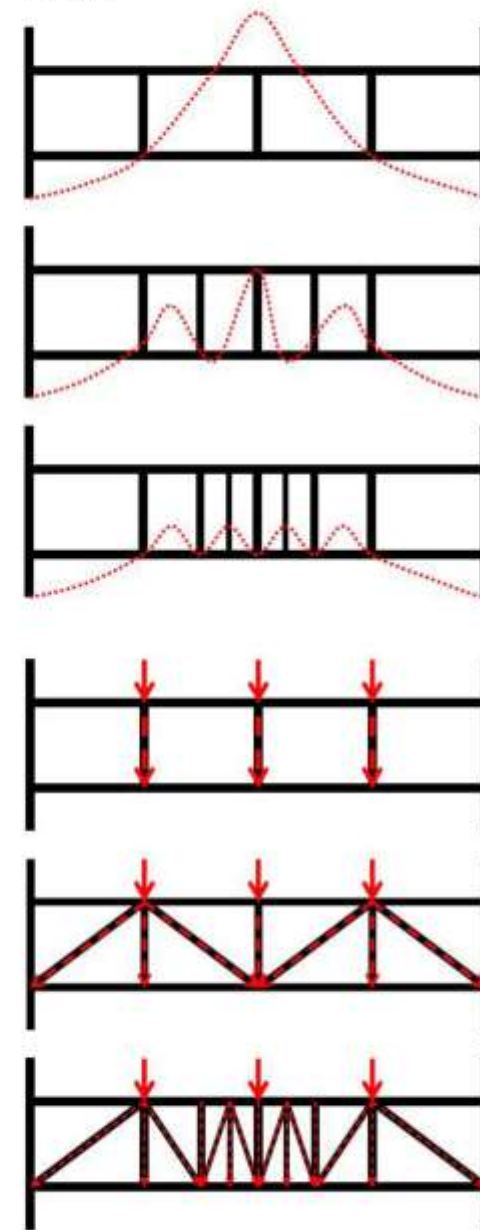
These three cores provide three highly convenient vertical transport systems where crowds can be divided into three different directions at ground floor. The required functional programs are accommodated inside the 'hanging bridges' between the cores, whereas gardens are planted on top of these bridges, transforming them practically into 'hanging gardens'. The hanging bridges' attached secondary structure is supported by secondary structural truss system.

台灣塔的前景是創造新時代的天之塔。天之塔周圍將配置螺旋狀的大地花園。先將頂樓以外的13,200平方尺樓地板面積以一條筆直線性的方式排列，而這條線性空間的屋頂即是經過設計的空中花園。然後，我們將這條線性的空間以三角螺旋的形式折疊，從基地一直延伸至空中。重新調整後的形式不但提供結構更多的可能性，同時我們也設計了三個支撐的垂直塔結構在三角形的三個邊上，讓結構更為合理。



SECONDARY STRUCTURE

次要結構

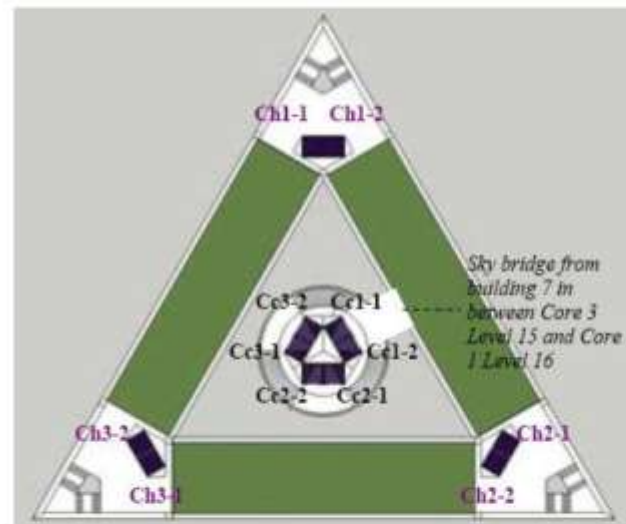


VERTICAL TRANSPORT SYSTEM

垂直運輸系統

KEY PLAN

主要平面圖



Vertical transport system in both (3) Earth Platform and (1) Sky Tower cores are each composed from 2 medium size elevators. The whole vertical transport design concept is about crowd separation achieve by dividing access into smaller systems to avoid the use of large size centralize elevators. As the result, each elevators hold smaller load which eventually possible to transport in faster rate.

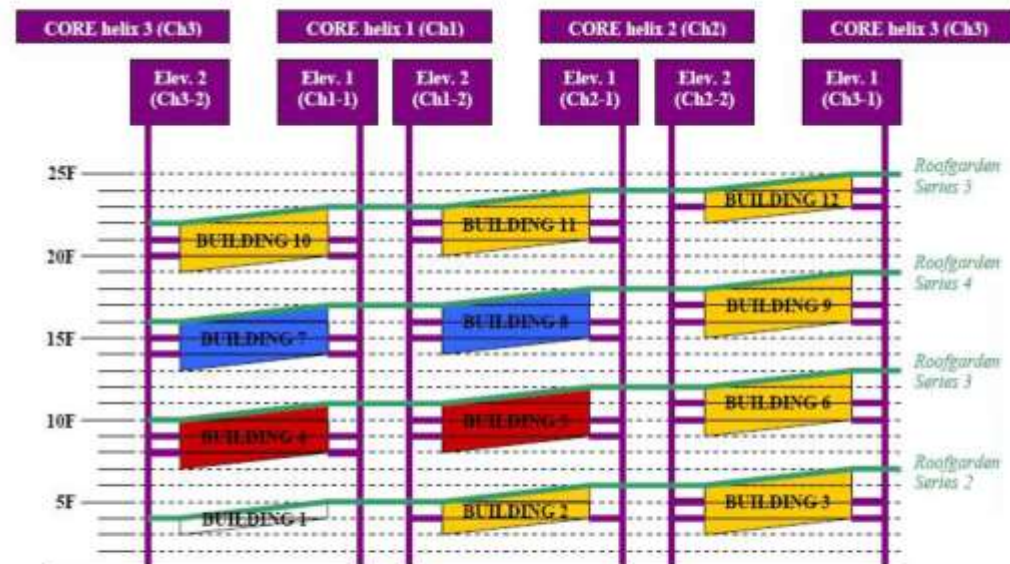
Regardless it's height, each of Earth Platform's elevators only serve maximum 11 floors. On the other hand, Sky Tower transport system also divided into 3 cluster systems, 1 for Ground to Observatories, 1 for Executive Lounge Express, and another 1 for Earth-to-Sky Tower(s) vertical transport interchange.

天之塔及地之座的垂直運輸系統核心是由兩個中等尺寸的電梯組成。整個垂直交通設計概念是藉由多個出入口達到分散人群的效果，並同時避免使用大尺度的電梯。這樣做的結果是每部電梯荷載較小，但可以達到運輸更快的速度的好處。

無論哪一個螺旋塔的電梯最多都只能服務十一層樓。而中央塔的運輸系統本身可以分為三組子系統：第一組是地面層直達瞭望台；第二組是專門服務貴賓休息室；最後一組是專門連結螺旋塔到中央塔大廳。

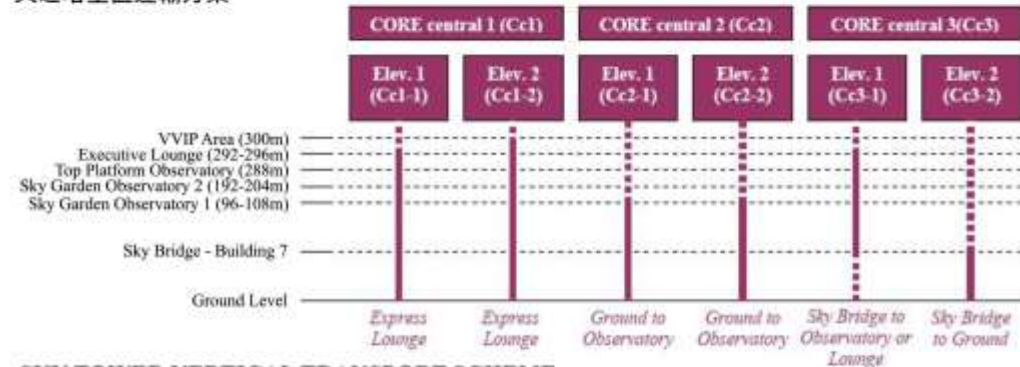
EARTH PLATFORM VERTICAL TRANSPORT SCHEME

地之座垂直運輸方案



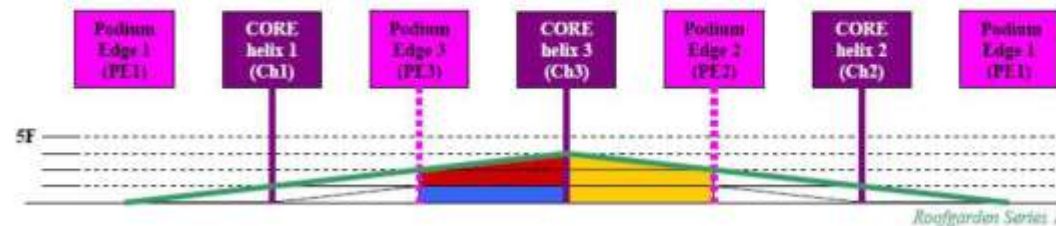
SKY TOWER VERTICAL TRANSPORT SCHEME

天之塔垂直運輸方案



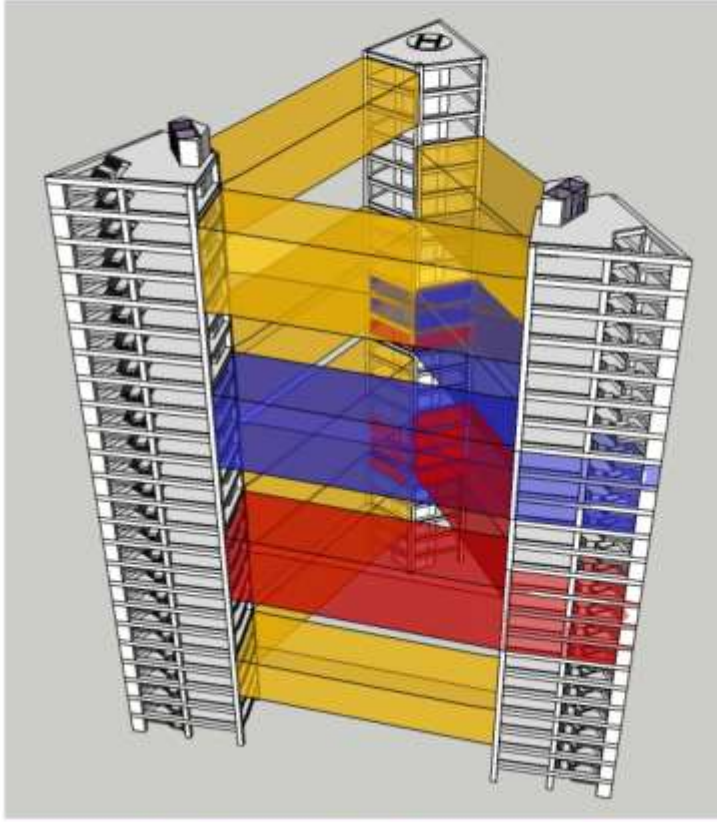
SKY TOWER VERTICAL TRANSPORT SCHEME

天之塔垂直運輸方案



FUNCTIONAL PROGRAMATIC SCHEME

機能規畫方案



Lobby (500m ²)	→ P.2
Information (120m ²)	→ P.2
Elev. Lobby (75m ²)	→ B.7
Shop (100m ²)	→ P.2
FA&B (400m ²)	→ B.7 & T
Observatory (800m ²)	→ T
Enviro St. (450m ²)	→ B.8

Lobby (350m ²)	→ 0.5 P1
Information (50m ²)	→ 0.5 P1
Exhibition (8000m ²)	→ B.4&5
Multimedia (2500m ²)	→ B.4
Offices (1500m ²)	→ B.4

P : Podium
地面輔助平台
B : (Earth Platform) Building
(地之座)建築
T : (Sky) Tower
(天之)塔

PROGRAMMATIC DETAIL 規劃細節

Chiefs Office (260m ²)	→ B.12
Town Plan (1364m ²)	→ B.2&3
Build. Vio. (756m ²)	→ B.6
Build. Adm. (1972m ²)	→ B.10&11
P.H.U.R. (1076m ²)	→ B.9
R & D (40m ²)	→ B.9
Divisions (120m ²)	→ B.6
Others (456m ²)	→ 0.5 P1
Meeting (1120m ²)	→ B.2,3,6,9, 10,11,12

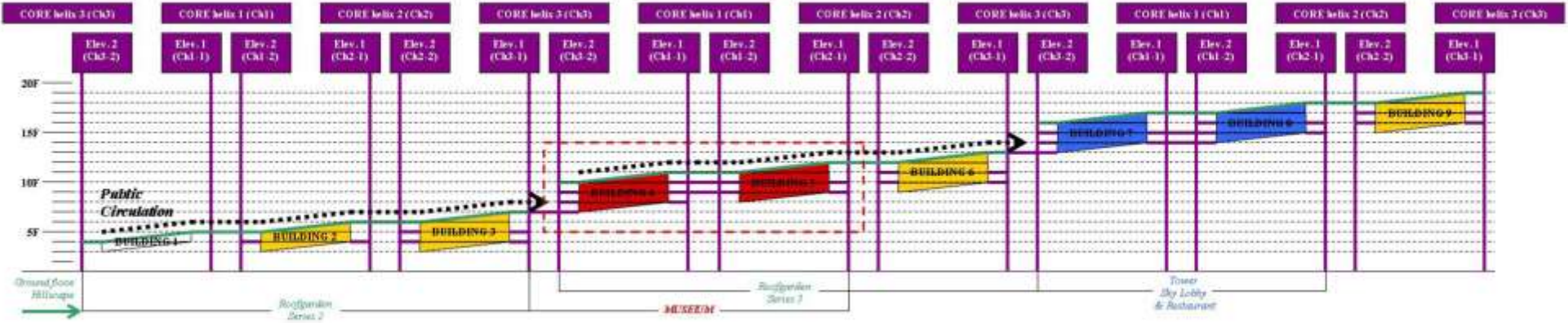
Core number 3 (in between the podium) hosts 2 private elevators for the government office functions (yellow programs). Core number 1 and 2 are mix zones. Although public visitors have many vertical transport options from these 2 cores, the main public scenario consists of 'one way pilgrim', starting from the surrounding hill-scape (series 1), to roof garden series number 2 (16-28m above ground), into the museum (building 4 and 5), out again to the roof garden series number 3 (40-56m above ground), into Sky Lobby, Restaurant, and Sky Bridge.

So the 9 Sky Gardens above building 1-9 will be open for public and are "continuously climbable" all the way from the 6 ground floor lower lobbies. The rest building 10-12 Sky Gardens are reserves for more private uses.

除了機能單純的3號服務核（在地面輔助建築之間）控制2個專屬於在此上班的員工專用電梯（黃色方案）之外，1號和2號服務核都是屬於機能混合區。雖然在這兩個服務核口遊客有很多垂直運輸電梯，但是本設計設計給公眾的主要動線是從周圍的綠色景觀（系列一）開始，然後移動到空中花園（系列二，距離地面約16-28公尺），而後再進入博物館口（建築4和5號），之後再移動到空中花園（系列三，離地面40-56公尺），並前往空中大廳、餐廳、和天空之橋。

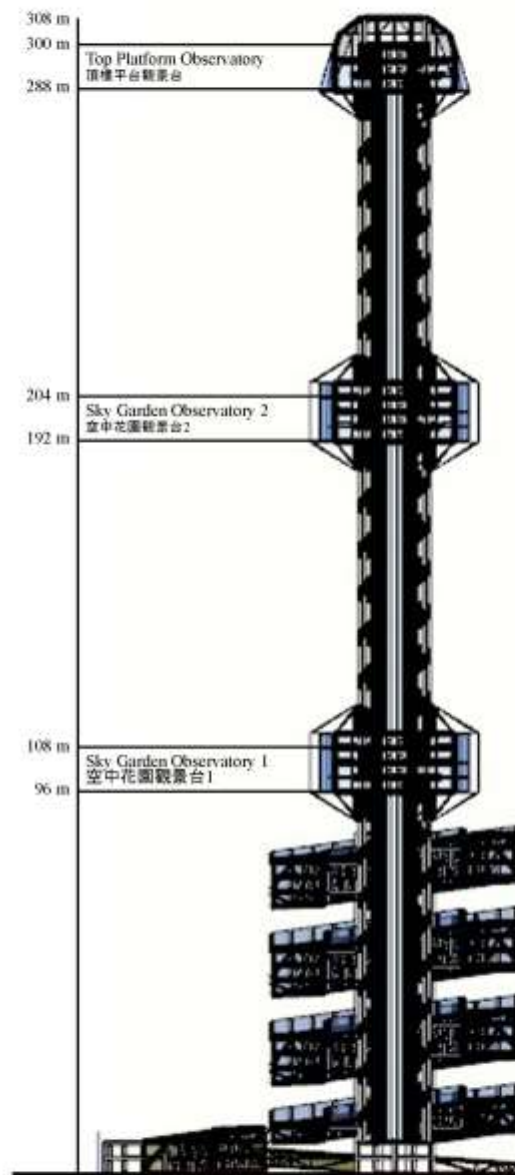
因此，一號到九號建築的九座空中花園將開放給市民，這九座皆是從六樓大廳開始「不斷爬坡」口生連續坡道的空間。其餘十號到十二號建築的空中花園是專門提供私人用途。

PROGRAMMATIC CIRCULATION 機能規畫方案



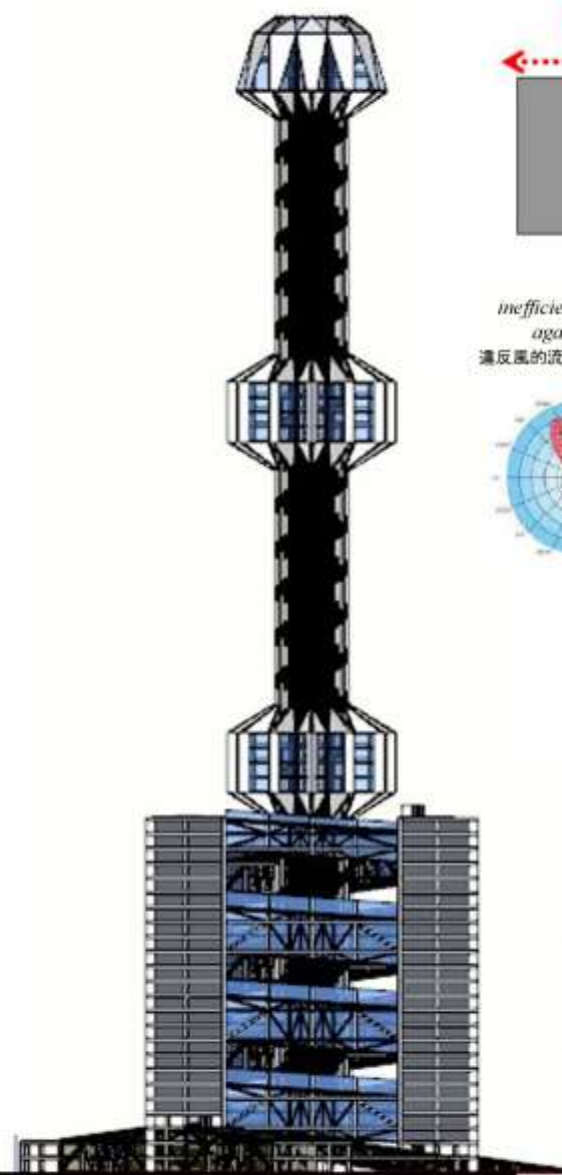
SKY TOWER

天之塔



SECTION

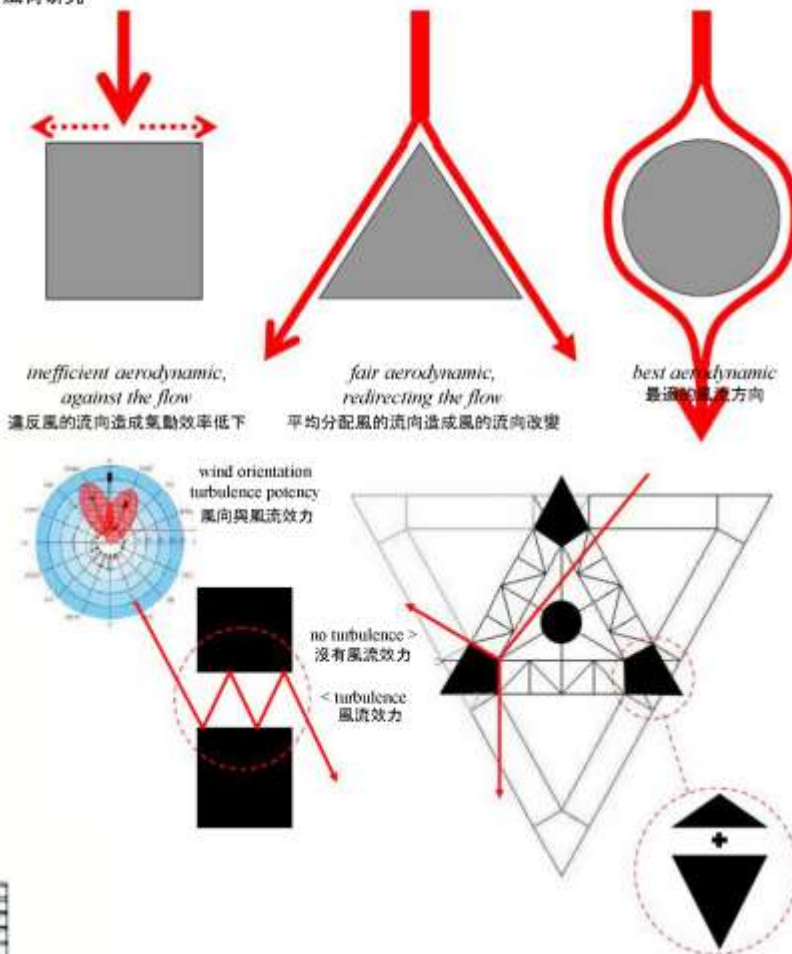
剖面圖



ELEVATION

WIND LOAD CONSIDERATION

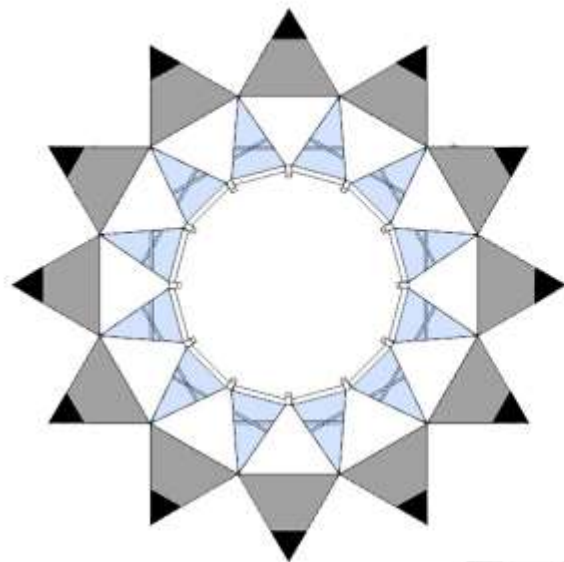
風荷研究



Regarding the close narrow spacing between the Tower of the Sun and the Hanging Gardens causing the possibility of wind turbulence, the Central Tower is designed with a circular plan for aerodynamic reasons, while the three cores of the Hanging Garden are designed in double-edge triangular plans for good redirection purpose.

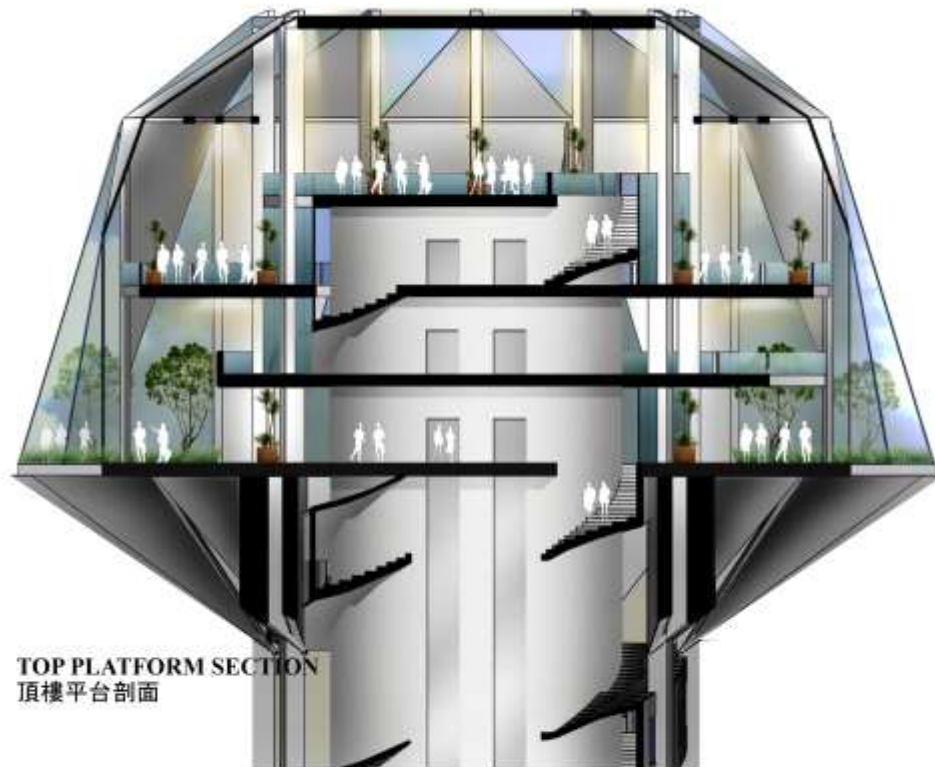
關於塔的配置和風流效力的關係，中央塔的設計是為了不干擾空氣的流動，而三個螺旋塔核之所謂安排成等邊三角形是為了引導風的流向。

立面圖



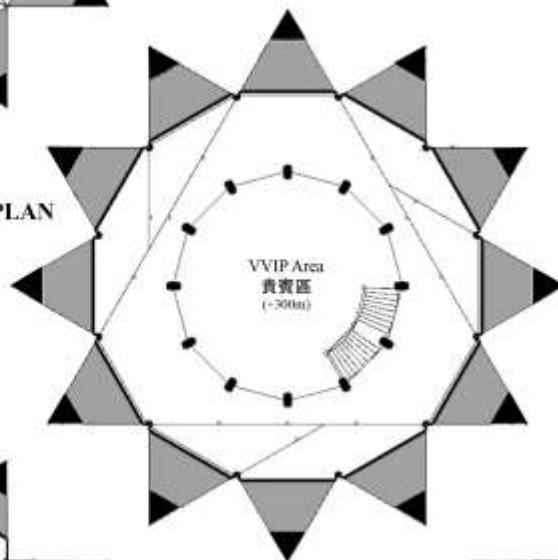
TOP PLATFORM
頂樓平台

ROOF PLAN
屋頂平面

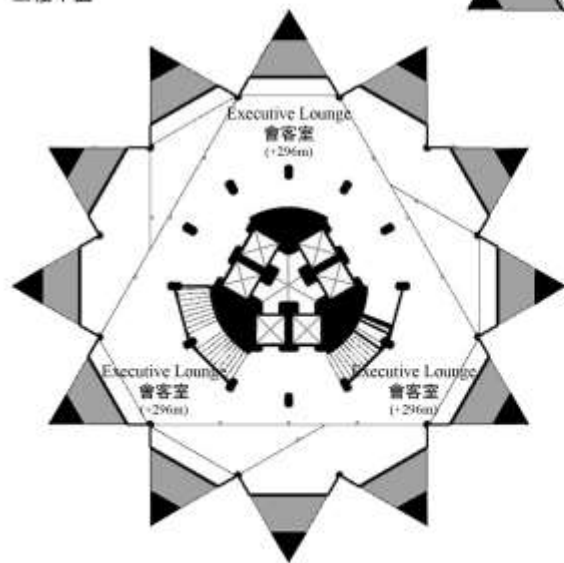


TOP PLATFORM SECTION
頂樓平台剖面

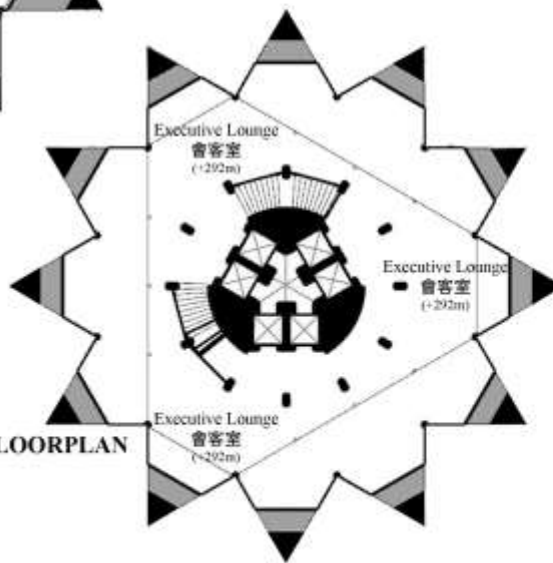
LEVEL 4 FLOORPLAN
四樓平面



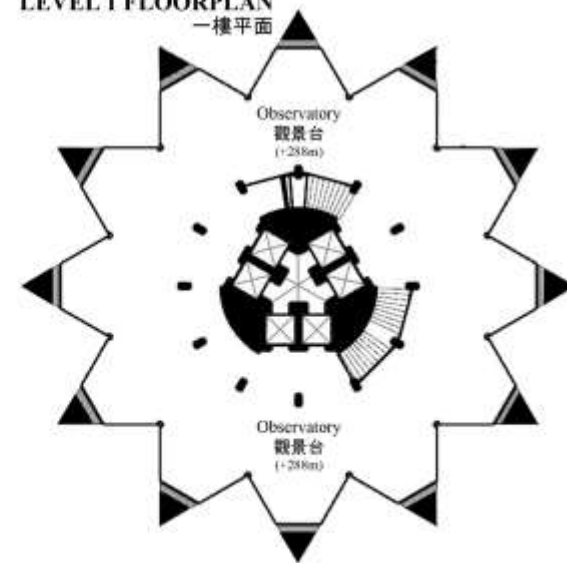
LEVEL 3 FLOORPLAN
三樓平面



LEVEL 2 FLOORPLAN
二樓平面

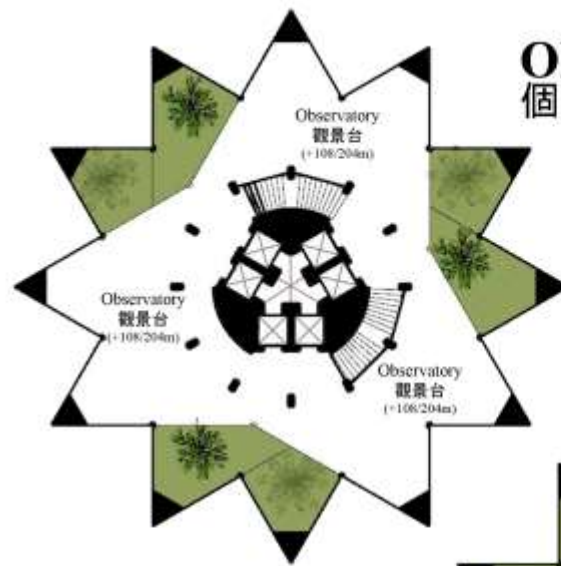


LEVEL 1 FLOORPLAN
一樓平面



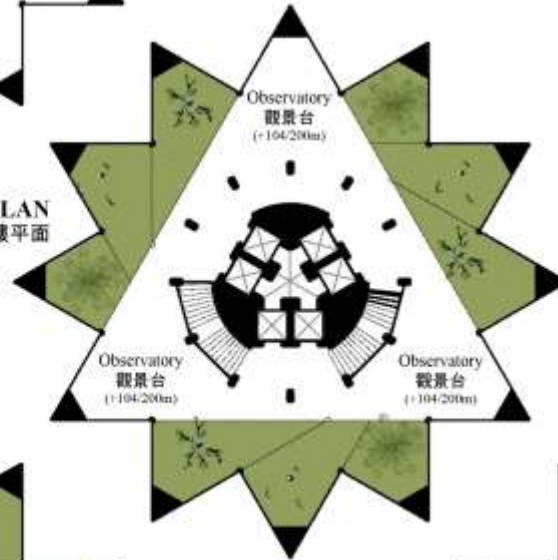
OBSERVATORY POD 1/2

個人觀景台區



LEVEL 4 FLOORPLAN
四樓平面

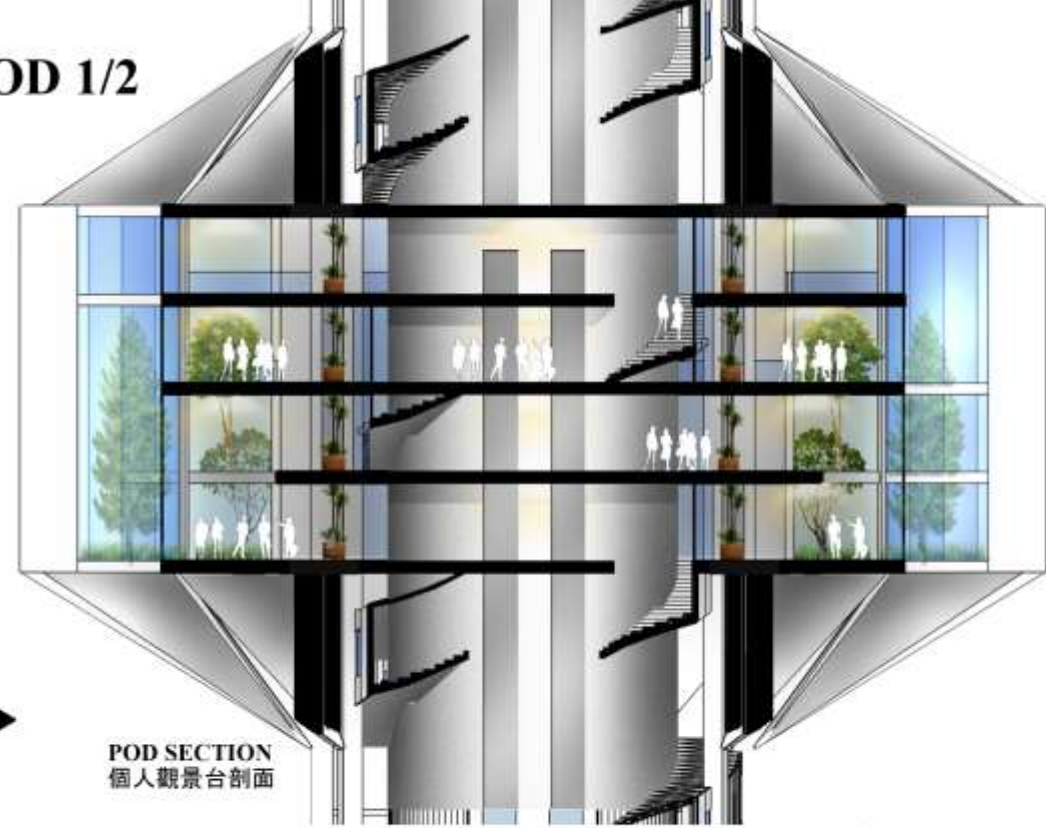
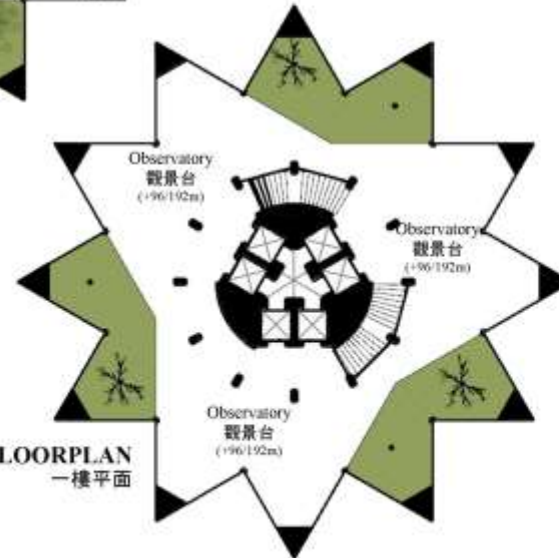
LEVEL 3 FLOORPLAN
三樓平面



LEVEL 2 FLOORPLAN
二樓平面

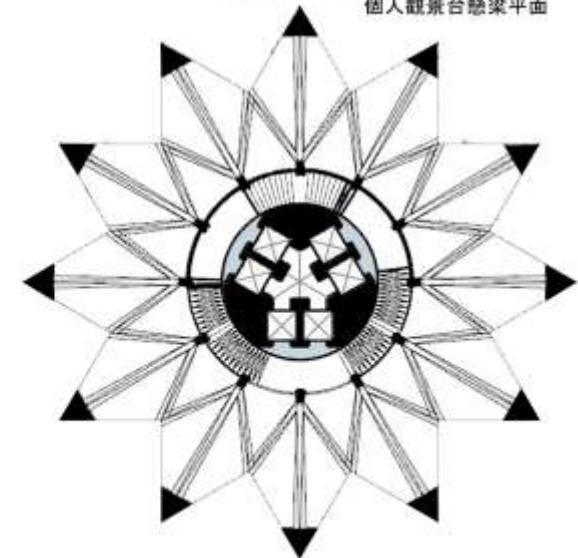


LEVEL 1 FLOORPLAN
一樓平面



POD SECTION
個人觀景台剖面

POD OVERHANG BEAMPLAN
個人觀景台懸梁平面





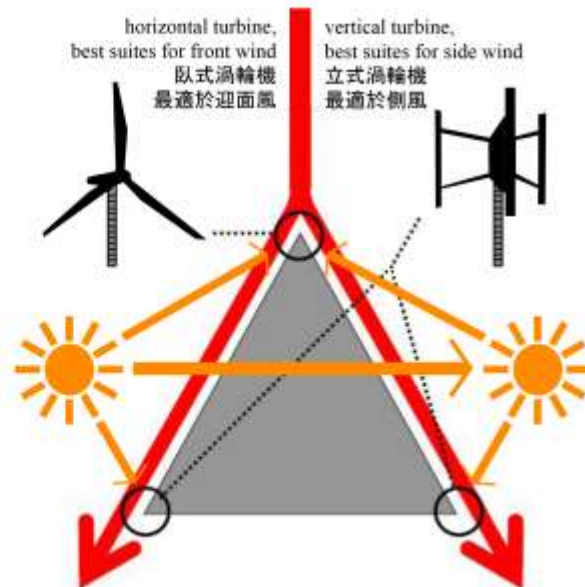
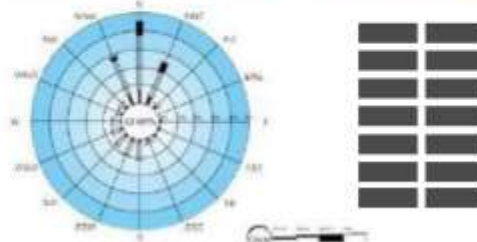
ENERGY MANAGEMENT 能源管理

WIND POWER SCENARIO

風力發電方案

Echoing the success of Kaumei wind-farming, in relevance to the wind direction graph, our aim is to use the building's triangular shape to redirect the wind flow and 'collect' them on already set locations. By installing horizontal wind turbines on the northern helix core and vertical wind turbines on the south west and south east helixes we are proposing to 'harvest' the wind power energy.

呼應高美口地的風力利用以及相關的風向圖，我們的目的是利用三角形的建築物去重新引導風的流向流到預先設定的位置。通過螺旋北側的水平風力渦輪機和西南與東南側的垂直風力渦輪機，我們可以獲得這些風力電能。



SOLAR POWER SCENARIO

太陽能發電方案

In relevance to the all year long sunshine and low altitude, massive layers of photoptic walls are installed to the already prepared 'free-space'; the eastern-western sides of side cores, spaces where interiors do not need translucent openings.

參考全年的日照圖和低海拔的因素之後，開放空間皆安排在陰涼處；而本設計的東西向亦被安排不需要透明開口。

On the overall design application, voids between the hanging gardens help to create dynamic 'flow of wind current', that is overlapping and thus re-harvest-able on different part of the tower. Meanwhile the use of 'outer' cores ensuring the provision of maximum photoptic spaces.

在整體設計應用中，空中花園之間的空隙能幫助風的流動，同時開口再一次的獲得風力發電的能源。此外，也確保口外擁有大量涼爽空間。

DESIGN APPLICATION

設計應用

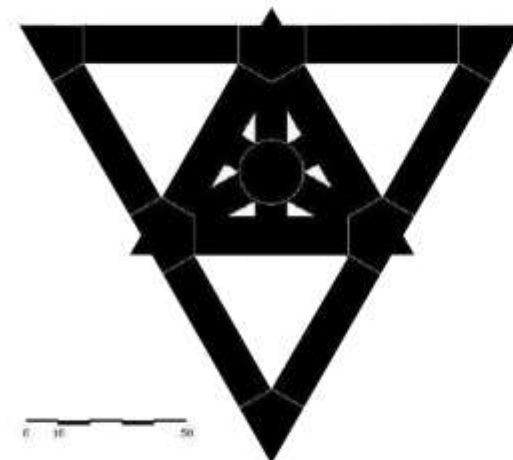




LOBBY & ENTRANCE MANAGEMENT

UNDERGROUND FOUNDATION SCHEME

地下基座空間計劃



- Outer Triangle (Podium)
外三角(地面建築)
= $1,468 \times 3$
= 4,458 m²
- Inner Triangle (Earth Platform)
口三角(空中花園)
= 2,476 m²
- Inner Square (Skt Tower)
中央廣場(天之塔)
= 857 m²

TOTAL

合計

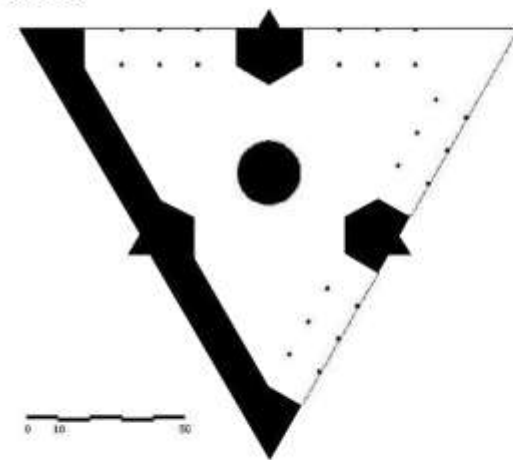
= 7,791 m²

*in relevance to 1 hectare maximum
foundation area, our design is 2,209 m²
in excess.*

地下層最大可利用面積為1公頃
而本設計保留2,209平方公尺的未使用空間彈性

GROUND FLOOR BUILDING FOOTPRINT

地面層建築投影



- Podium Buildings
地面輔助建築
= 576×2
= 1,152 m²
- Podium Edges
地面輔助建築邊緣
= 250×2
= 500 m²
- Podium Columns
地面輔助落柱
= 1×24
= 24 m²
- Earth Platform Cores
空中花園
= 333×3
= 999 m²
- Sky Tower Core
天之塔
= 314×1
= 314 m²

TOTAL

合計

= 2,989 m²

Roof Garden Substitution

屋頂花園面積差

= 2,989 - 10,396

= -7,397 m²

In relevance to the building footprint issue, The Helix Tower as a hanging garden possesses 12 roof gardens and another 6 on its podium with total area of 10,368 m² vertical green, giving excess of 7,379 m² footprint area.

關於建築足跡，螺旋塔上有12個屋頂花園，加上6個在地面輔助建築上的屋頂花園，以及總面積10,368平方公尺的垂直綠化體，生口出7,379平方公尺的綠地面積。

EARTH PLATFORM HANGING GARDEN

ROOF GARDEN CIRCULATION SCHEME

空中花園動線計畫

本件台灣塔的設計共有18個空中花園，分成3個部分。第一個部分是地面建築空中花園（空中花園系列一）由6個空中花園組成，每個花園皆可以從地面層進入。第二個部份是公共花園，包括建築1~3（空中花園系列二），建築4~6（空中花園系列三）。在考量公共通道的連貫性之後，公共活動在這個部分最多只到此處，無法在往上移動。最後一個部分是非公眾花園，專屬於在此處工作的職員，包括建築7~9（空中花園系列四），建築10~12（空中花園五）。18個空中花園的面積皆為12公尺乘以48公尺，因而一共創造了10,368平方公尺的垂直綠化壁。從基地外來看，本設計360度都看到綠化的部分，甚至從台中市都可以看到空中花園，形塑一個真正的綠化且永續的博物館。

Our proposal for Taiwan Tower's Hanging Garden concept posess 18 blocks of Hanging Gardens of 3 sectors. The first sector is the podium garden (Roof Garden Series 1) consist of 6 block roof gardens each with hill-scape direct access from the ground level. The second sector is the public garden, consist of building 1-3 (Roof Garden Series 2) and building 4-6 (Roof Garden Series 3). In coherence to the Public Circulation Scenario, the public activity in this sector stops at Sky Bridge which prevent access to the next sector. The last sector is the private garden belongs to the officers, consist of building 7-9 (Roof Garden Series 4) and building 10-12 (Roof Garden 5). Each of the 18 blocks have dimension of 12m x 48m, which in total we propose a tower design with 10,368 m2 vertical green, a massive urbanscape above the ground with complete 360 degrees multi level views of Taichung City.

A truly sustainable museum of development.



Earth Platform 'Hanging Garden' is directly accessible from the ground level, and is strong enough to bear dense light plantation. Hanging Earth Platform planting directory:



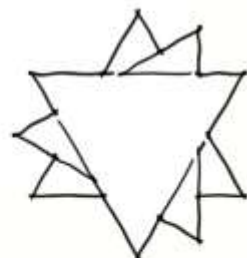
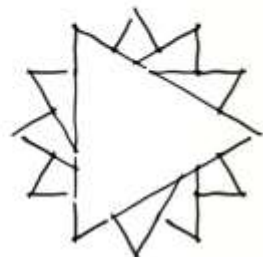
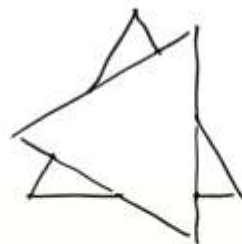
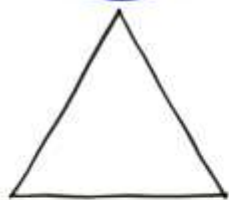
台中門口城市構想



SKY TOWER EXPANSION MODULE

天之塔延伸模塊

Our expansion module started from 'Refunctioning' the tower's monolith itself. This is done by 'inserting' office spaces 'in between' the three sky platforms and observatories. Triangular loci-based plans are permuted 30° to resemble ROC national symbol, transforming the landmark tower into one functional tower.



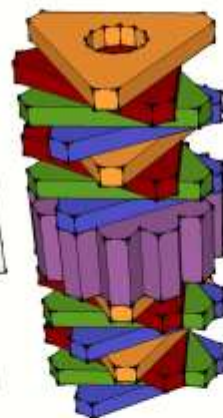
**Triangular based plans
(Office Tower)**
三角形組成的平面
(辦公塔)



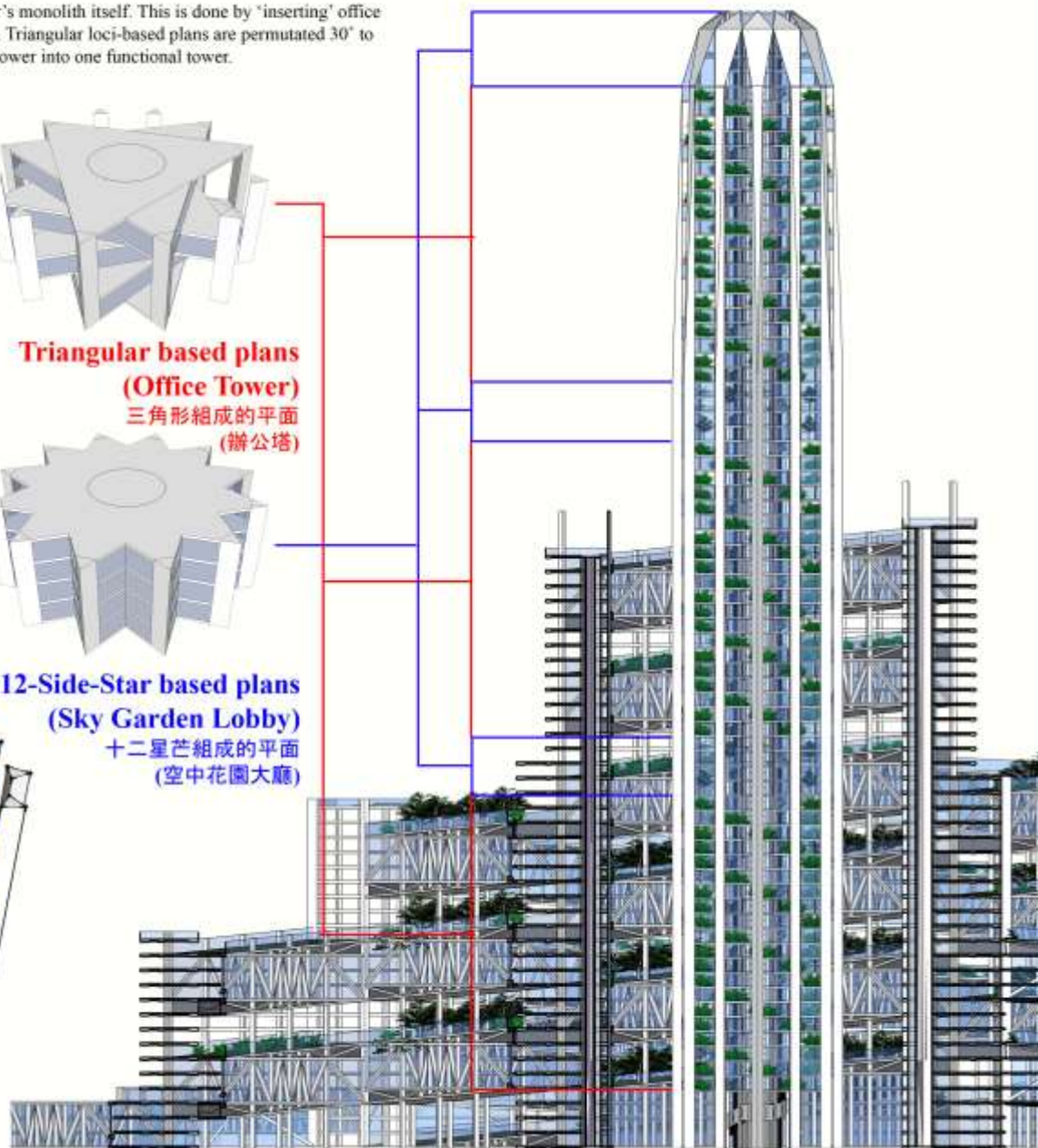
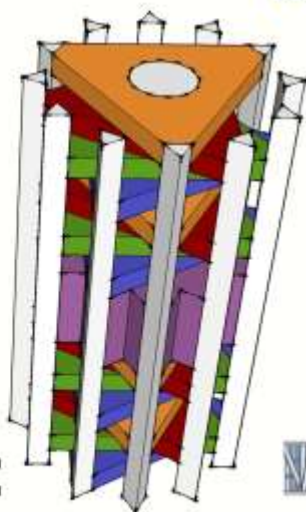
**12-Side-Star based plans
(Sky Garden Lobby)**
十二星芒組成的平面
(空中花園大廳)



**Structural System
結構系統**



**Spatial System
空間系統**





LANDSCAPE IN THE SKY

天空的景觀

The refunctioning of Sky Tower brings new possibility, in installing terraces of shrubs. The Sky terraces will not be accessible due to its extreme height. The terraces have more of sustainable rather than functional reason. The shrubs planted are used to filter the sun reflection over the high glass facade, reducing the carbon load of the building.

重新定義的天之塔帶來了新的可能性：陽台的綠意。由於其高度，天空平台將無法任意進入，平台將能口更永續而不只是因為機能。種植的灌木被用來過濾太陽反射光，也減少了碳排放的負擔。

The next principle of our expansion module is the restructuring the Earth Platform. 'Refunctioned' as dwelling spaces, basic 'rigid frame' structural system are proposed to strengthen the hanging cantilever, allowing more load to bear, and most importantly, more plantation to be planted in between the platforms. Green dwelling socialscape in the sky, a new definition of sustainable living.

我們的擴展模塊的下一個原則是重組地之座(平台)。重新定義地之座的機能為居住空間，且透過剛性框架的結構體系加強懸臂，讓其承受更多的負荷。最重要的是，我們創造更多的綠意平台。"天空中的綠色住宅"將賦予永續生活一個新的定義。



Expanded Sky Tower planting directory:



Expanded Earth Platform planting directory



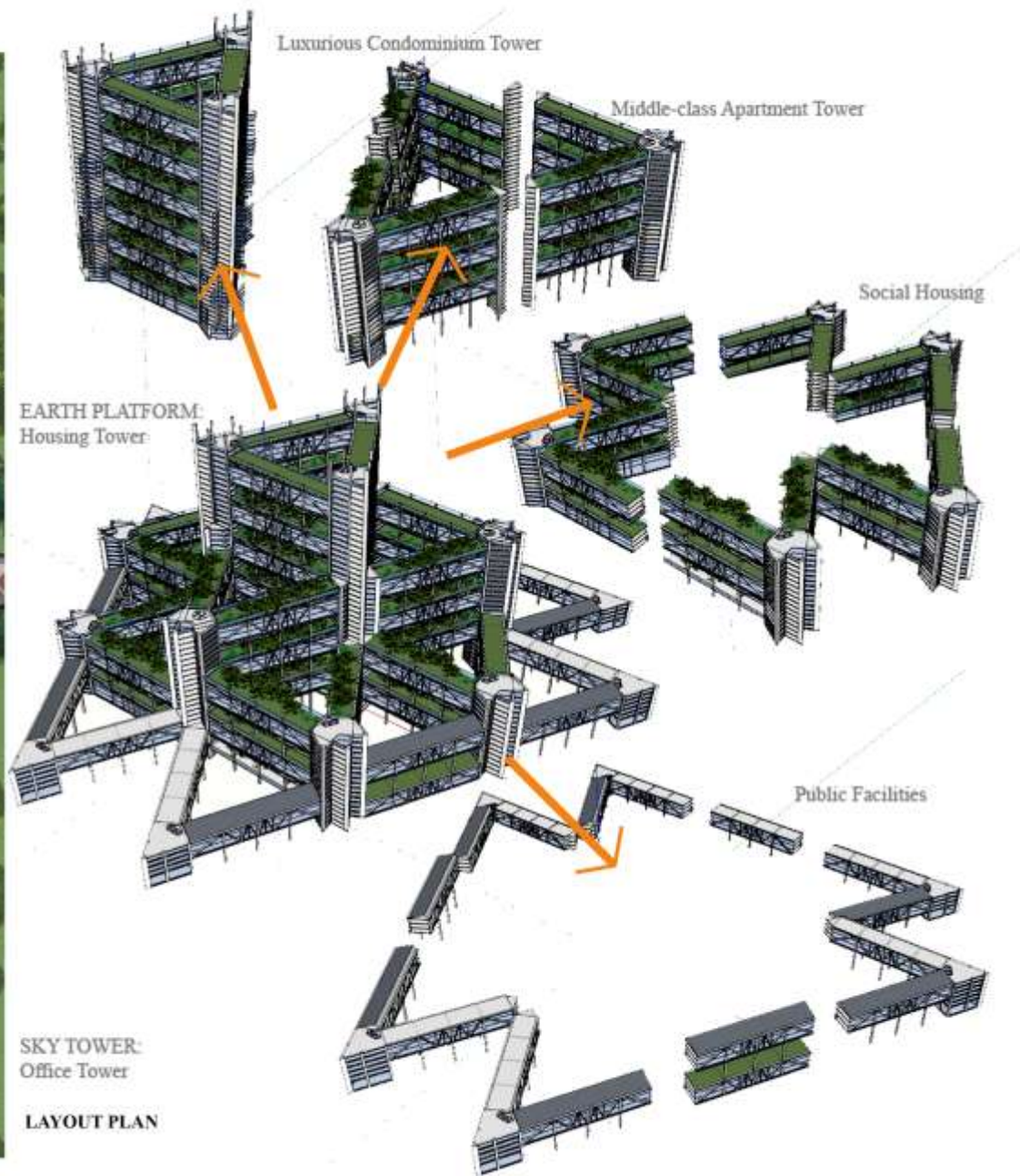
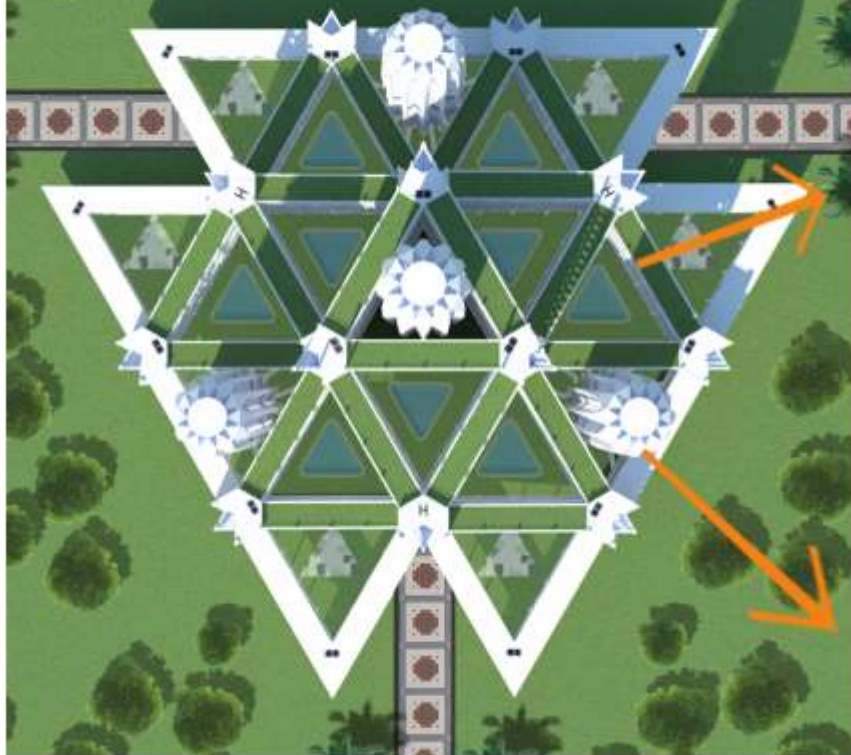
URBAN TISSUE EXPANSION POSSIBILITIES

As an open ended expansion module, the Taiwan Tower development is designed to easily grow and change according to the needs and wishes of its future occupants. It does not only provide accommodations to live in, but also essential everyday services necessary for such super-blocks, such as grocery stores and shopping malls, as well as social institutions, such as schools, hospitals and police stations.

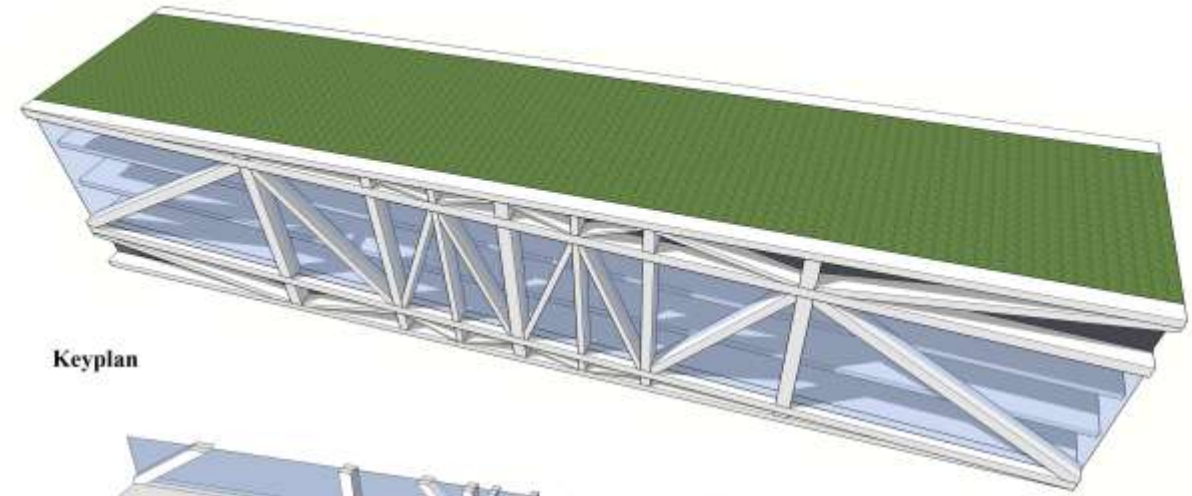
Designed as a multi-layer structure the development will be able to assemble a modern multilayer urban tissue. The Earth Platform's Expansion Module will not only accommodate spaces for luxury condominiums, but also for common social housing.

作為一個開放式的擴展模塊，台灣塔的設計將得以隨著未來的居住者使用上的需要而隨著發展和改變。它不僅提供住宿，也提供日常生活的一切服務，例如便利商店、購物商場，以及社會機構，如學校、醫院和警察局。

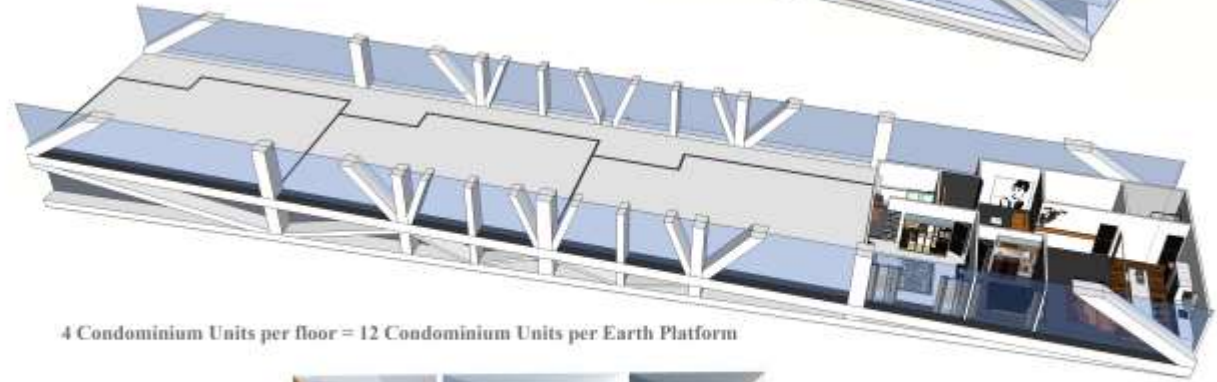
設計一個多層結構建築將能重新構思一個現代城市的組成方式。地之座(平台)的擴展模塊，不僅容納空間的豪華公寓，也能成為全民房價得以負擔的社會住宅。



DWELLING SCENARIO 1: CONDOMONIUM



Keyplan

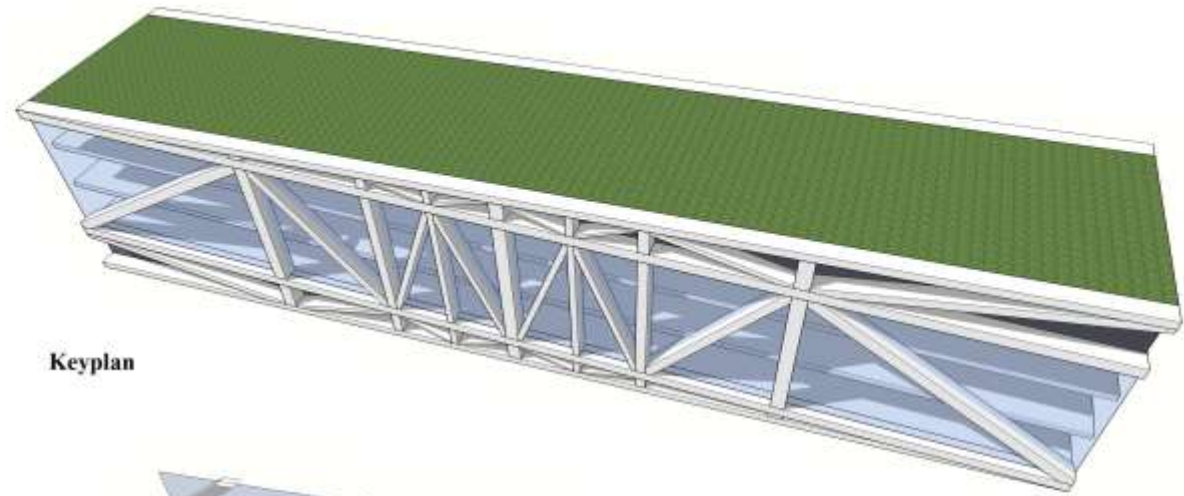


4 Condominium Units per floor = 12 Condominium Units per Earth Platform



Unit Plan

DWELLING SCENARIO 2: SOCIAL HOUSING



Keyplan



16 Social Housings per floor = 48 Social Housings per Earth Platform



Unit Plan



Through the flexible mechanics of the Expansion Module, the Taiwan Tower itself will become Taichung Gateway City. It is designed and programmed to expand openly, through the influence of many owners, many contracts, and over many layers of time. Thus, in an abdicative process of gradual growth the Taichung development will ultimately result in a vertical city at a scale never seen before.

通過靈活機制的擴展模塊，台灣塔本身將成為台中市的代表。因為擴大它的設計和機能的想法，未來也將影響很多業主、許多未來的建築案以及台中市的未來。因此，台中的發展最終將成為一個規模前所未有的垂直城市。

The Expansion Module would also facilitate and celebrate the birth of Taichung Gateway Forest. Occupying 152 hectares of the city area, the forest would be using the Taiwan Tower's hollow podium and rich voids to completely melt with the man-made domains. Far from a philosophy of a man-made parkscape for merely decorative and aesthetic purposes, the Taichung Gateway Forest should fulfill a double role: first, to infiltrate the whole development as an example of modern green planning and green architecture and thus to integrate spaces for humans and other living beings. The second role will be to help nature to heal itself in our industrial urban landscapes. We as parts of nature will have to re-learn the ways of nature by actively participating in the process of planting and maintaining nature over time. Both roles are essential to create a sustainable urban environment for our future generations.

該擴展模塊也將促進台中森林公園的誕生。佔地152公頃的台中森林公園將利用台灣塔的天空平台柔和一切人造環境。過去的人造公園的僅僅是裝飾和審美目的，而台中森林公園將有雙重作用：第一，要能影響現代永續城市規劃和綠建築的發展，進而整合對人類和自然空間；第二個作用是幫助癒合我們因為工業城市而破壞的自然景觀。我們作為地球的一份子將不得不重新學習以上兩點，透過積極創造自然綠意和維護地球環境本身。如此一來，台中必然成為一個永續發展的城市環境。



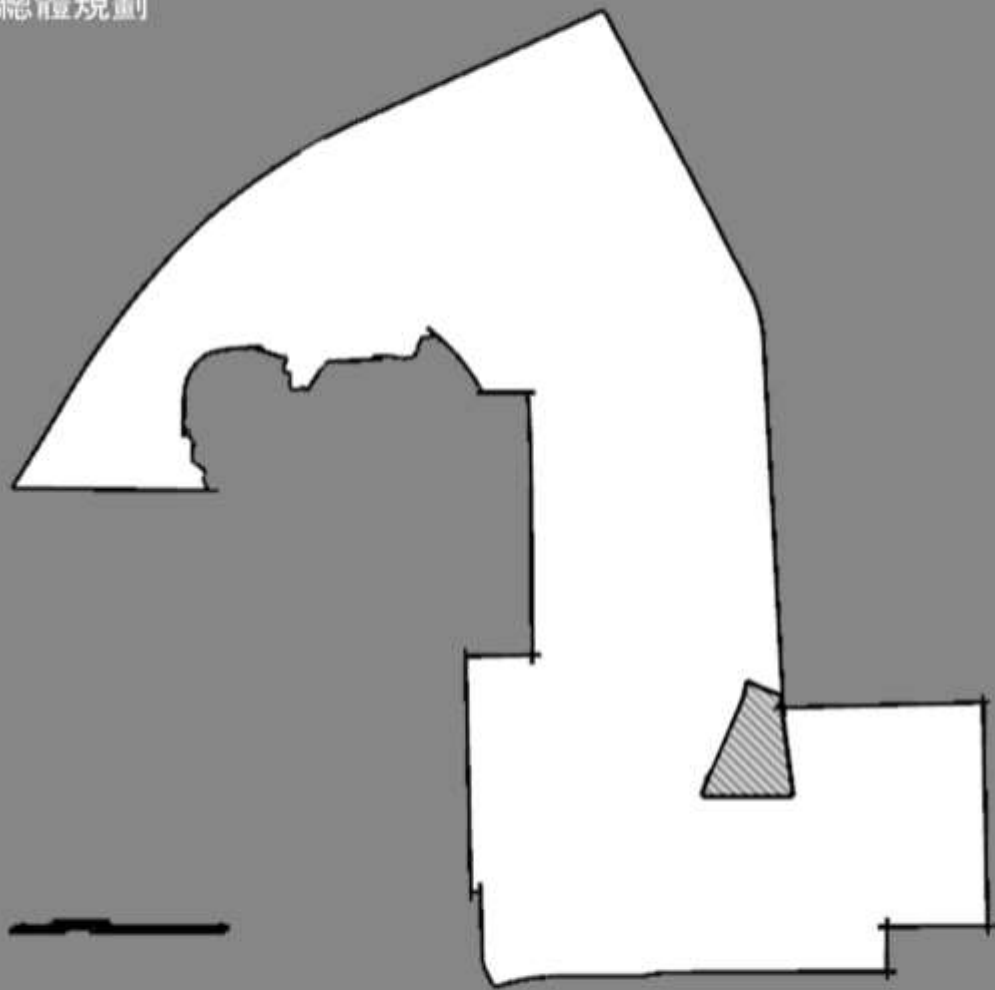


City as Garden and Garden as City

The SKY TOWERS are suggested quasi as economic beacons of the nation, to be built as a vertical CBD in an ever changing metropolis. The EARTH PLATFORMS, however, offer simultaneously man-built landscapes, latest solar energy collectors, high-rise agriculture and green living spaces. In many industrialized urban civilizations where original natural landscapes will become extinct, the only way for human survival will be to harvest his food on man-made ground high-up on multi-storey platforms. Here these spaces are directly connected to their counterparts, the Sky Towers for modern work. Mechanical interurban traffic will thus be reduced. Result: a dream of modern architecture: City as Garden and Garden as City.

天之塔將成為未來每一個已發展國家的範本：垂直向度為主的中央商務區。另一方面，地之座將提供最新的太陽能集熱器、高層農業和綠色生活空間。現存的工業化都市架構往往犧牲原有的自然景觀，唯一的解決之道就是透過發展高層農業。每個天之塔將彼此連接，城市間的交通負擔將因此大為減少。結果：一個夢想的現代建築誕生：城市般花園和花園般城市。

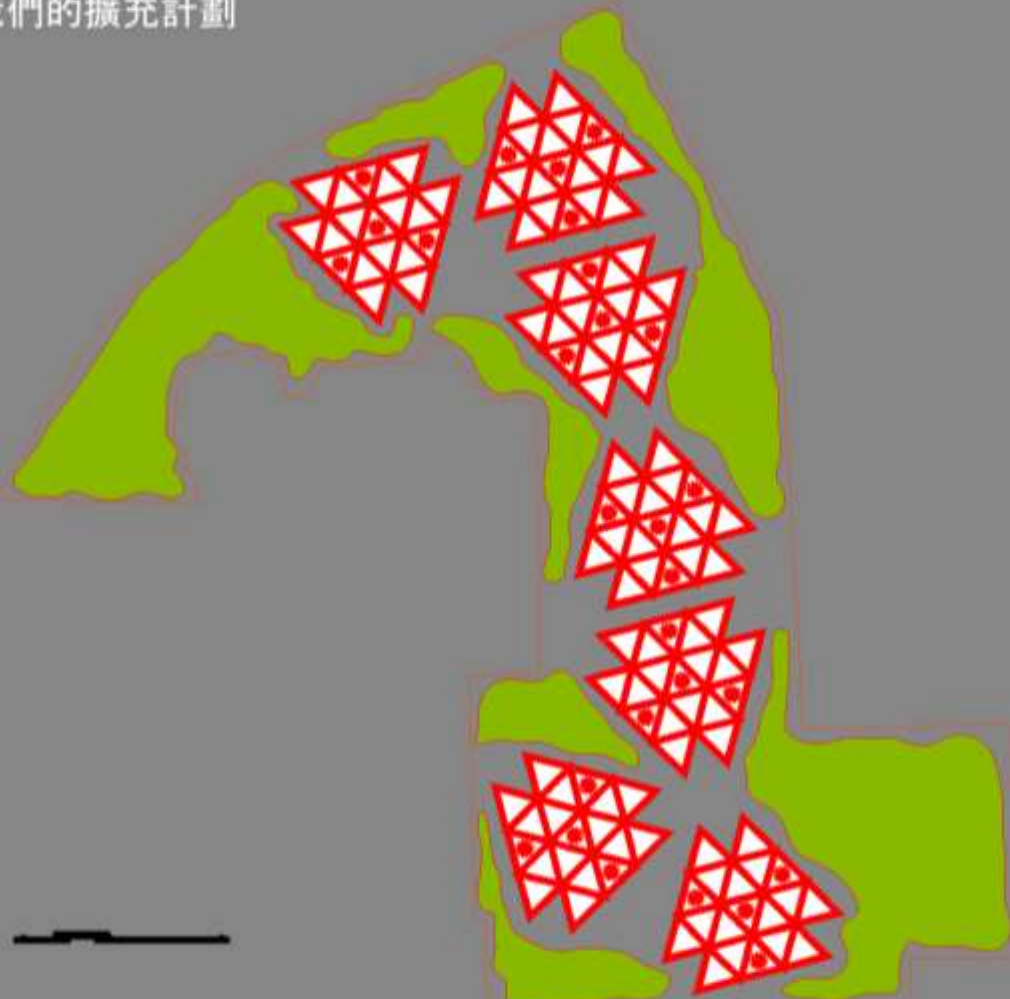
ORIGINAL MASTERPLAN 原總體規劃



台中門口城市
台中塔
台中門口公園

Taichung Gateway City = 254 hectares (100%)
SYMBOLIC Taichung Tower = 4,3 hectares (1,69%)
Taichung Gateway Park = 68 hectares (26,77%)

OUR EXPANSION PLAN 我們的擴充計劃

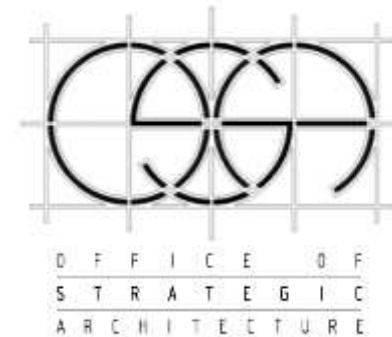


台中門口城市
台中塔
台中門口公園
動線

Taichung Gateway City = 254 hectares (100%)
FUNCTIONAL Taichung Tower = 76 hectares (30%)
Taichung Gateway Forest = 152 hectares (60%)
Circulation = 25 hectares (10%)

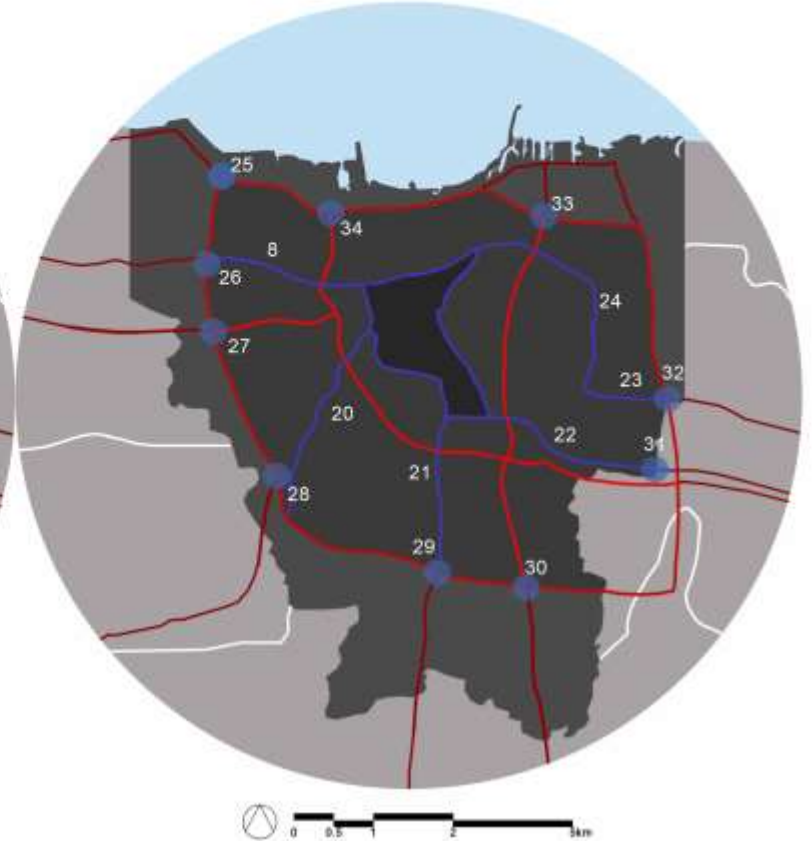
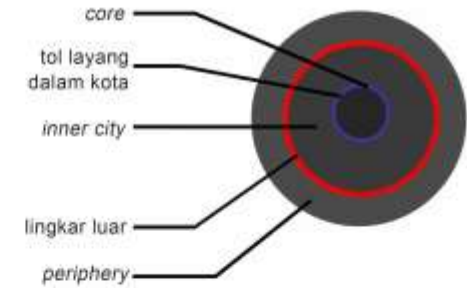
EXPERIMENT 2

Jakarta



STATIC CITY Densitification, Case Study: Jakarta

1. TAHAP NORMALISASI



STATIC CITY Densitification, Case Study: Jakarta

2. TAHAP STATIKFIKASI



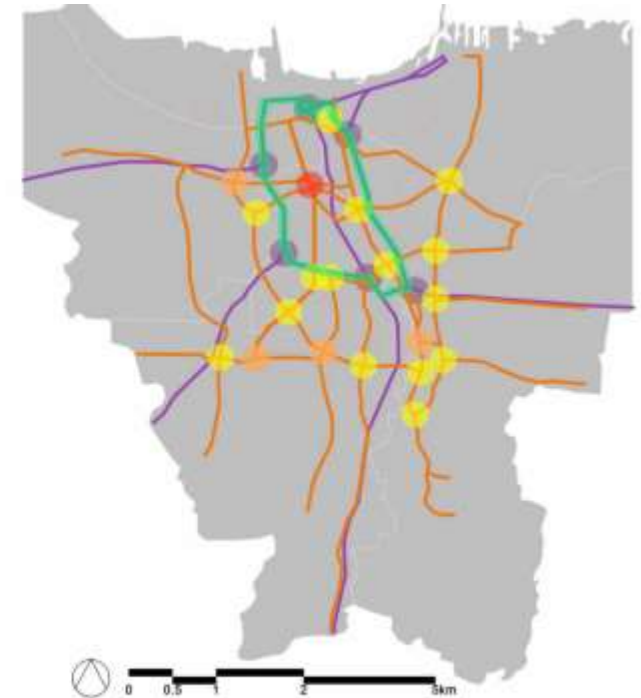
15 koridor busway transjakarta beserta hub nya

+



6 jalur KRL beserta hub nya

=



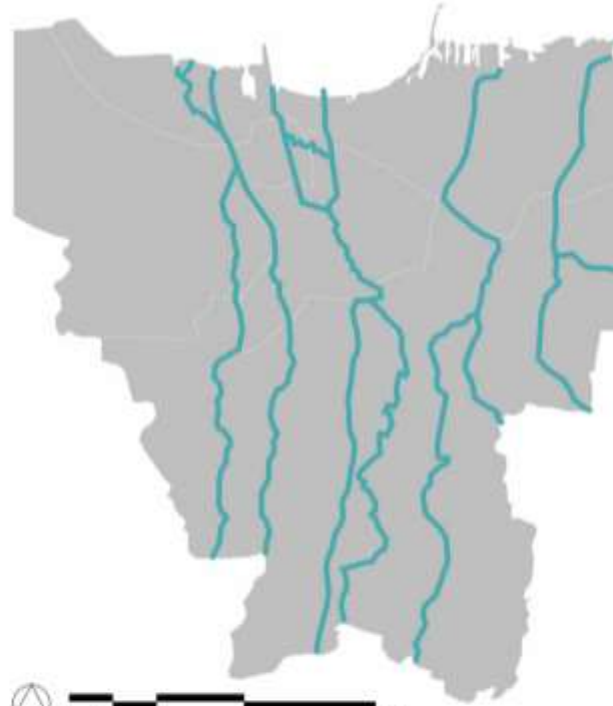
usulan pemukiman vertikal murah tengah kota di atas jalur transportasi. Mengadopsi konsep Bus Rapid Transit (BRT) peninggalan Gubernur Sutiyoso dan Tol Layang 6 ruas peninggalan Gubernur Fauzi Bowo.

STATIC CITY Densitification, Case Study: Jakarta

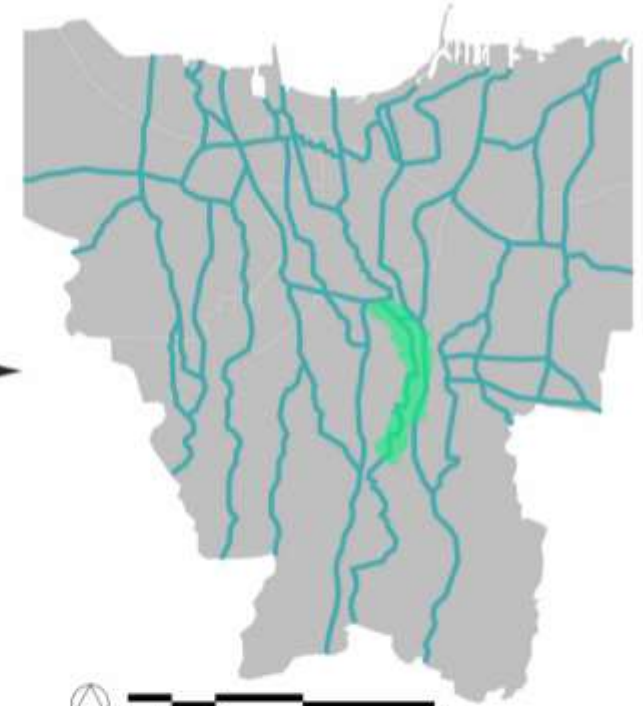
2. TAHAP STATIKFIKASI



2 sungai induk : Ciliwung dan Cipinang

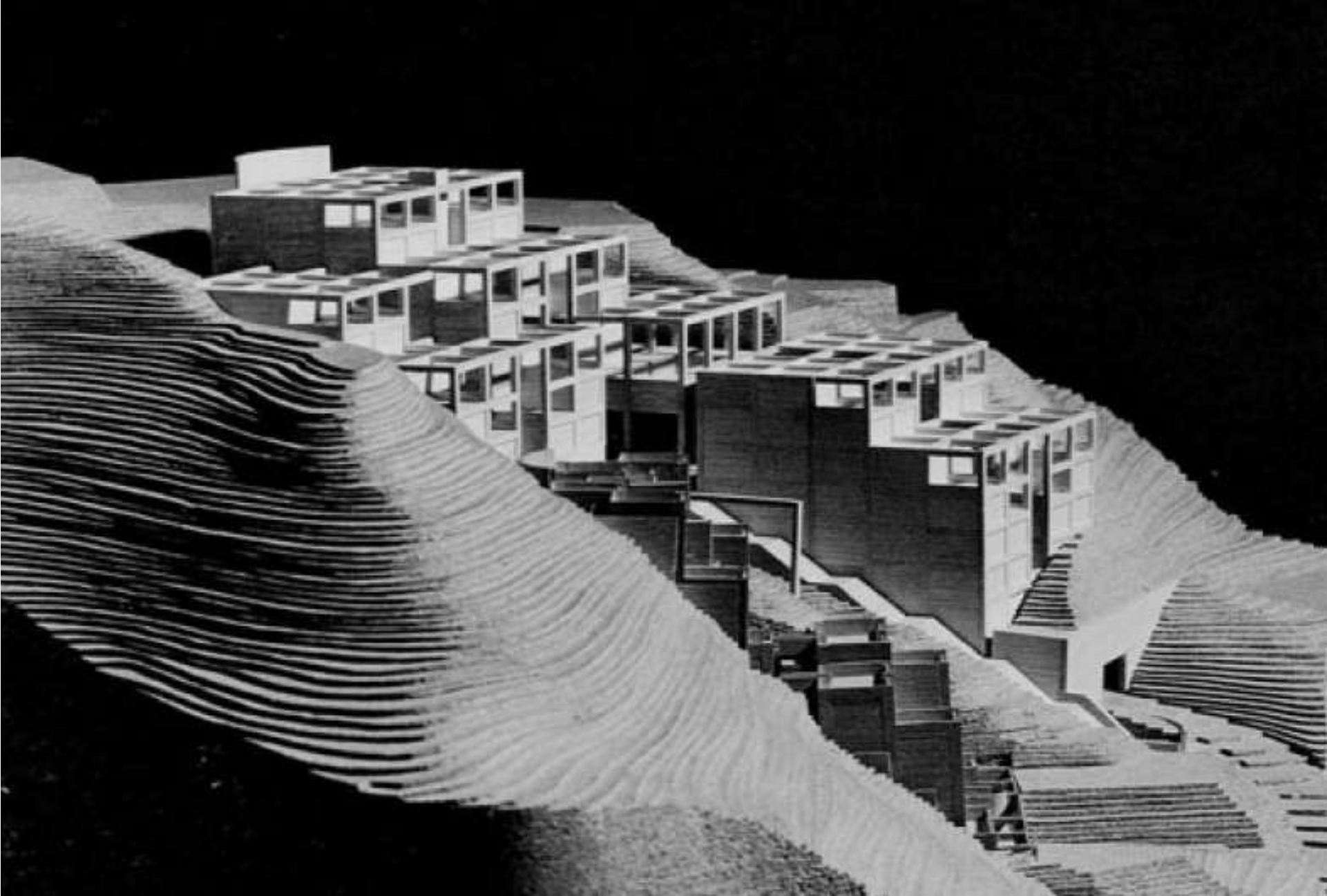


sungai besar lintas provinsi



usulan pemukiman vertikal murah tengah kota di sekitar Daerah Aliran Sungai. Mengadopsi usulan Kemenpera pada Oktober 2012 yang mengacu pada UU No.28 tahun 2002 dan UU No. 20 tahun 2011.

Expanding to Forbidden Geographies



Expanding to Forbidden Geographies



Expanding to Forbidden Geographies



3R3S adalah sebuah eksperimen yang berlandaskan pada hipotesa 'Urban Architecture'.

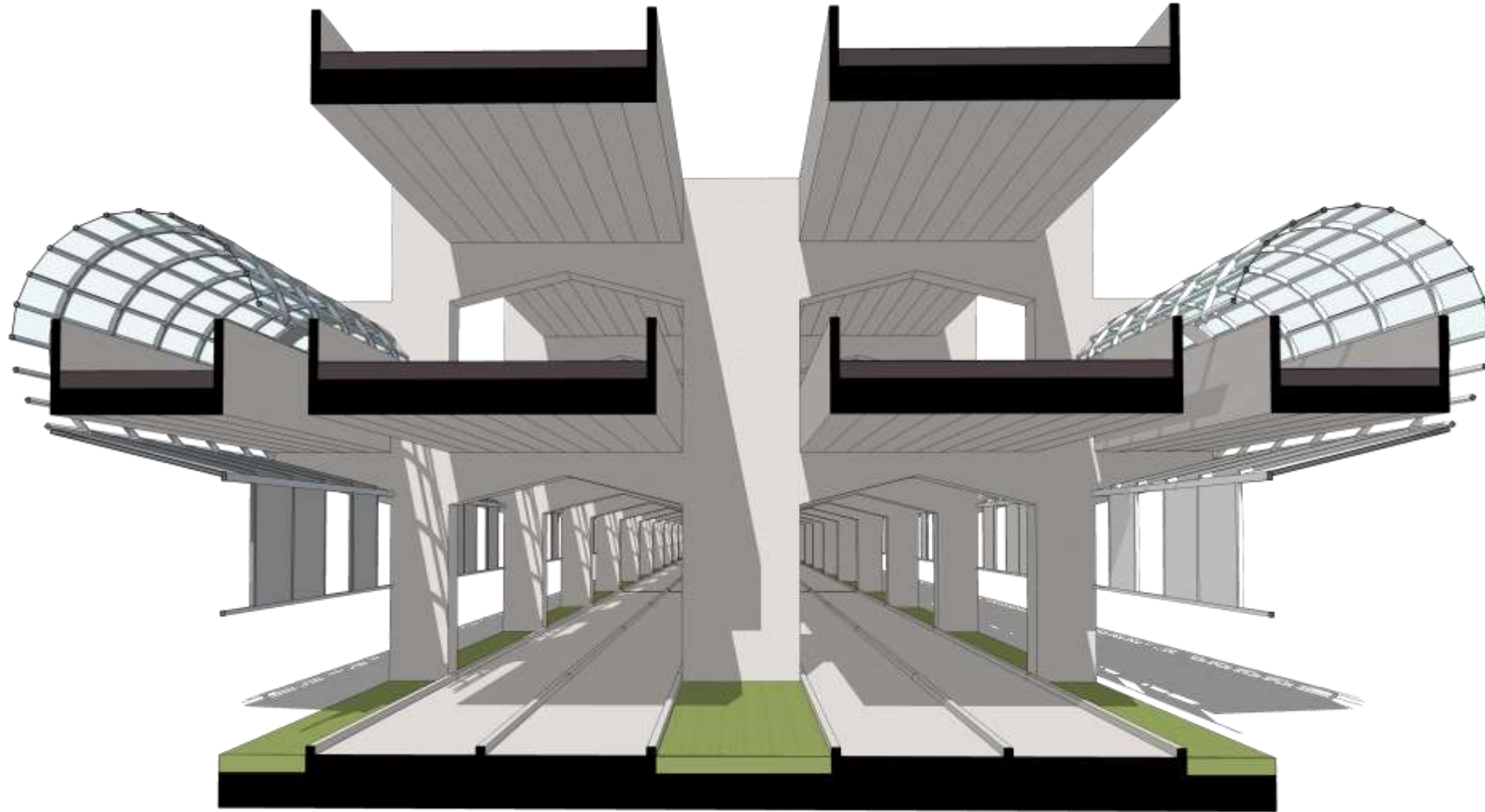
Urban Architecture adalah bangunan arsitektur yang dibangun untuk memberikan impact berskala kota. Eksperimen diawali dengan 8 Hub di Lingkar Luar tol yang berfungsi sebagai 'filter' kendaraan pribadi. Hub ini bisa berbentuk gedung parkir raksasa yang memudahkan perpindahan moda transportasi dari pribadi ke publik melalui jasa Trans Jakarta atau KRL yang melayani rute-rute Lingkar Dalam. Kedua moda ini kemudian dilengkapi dengan 'Sky Tube' sebagai moda ke-3.

STATIC CITY on MOVEMENT

NORMALIZATION EXPERIMENTS

All the states of Heterotopias must be considered as complete elementary facts to arrive at the right solution. Mobility is the main issue as most densely populated emerging cities failed to provide affordable and fast mobility services. The dependency upon international aid and the issue of fossil fuel depletion make the mobility reformation even harder, if not an impossible task. Thus, the city must be deconstructed into Static City: city without mobility.





To provide the low and middle income groups with spaces, city's collages must also be deconstructed further, creating a series of reforms that not only recycle the city but also revolutionise it completely. The 'Urban Design' needs to be transformed onto more focus Urban Architecture — a building-sized architecture that is designed to create impact on the city-scale.











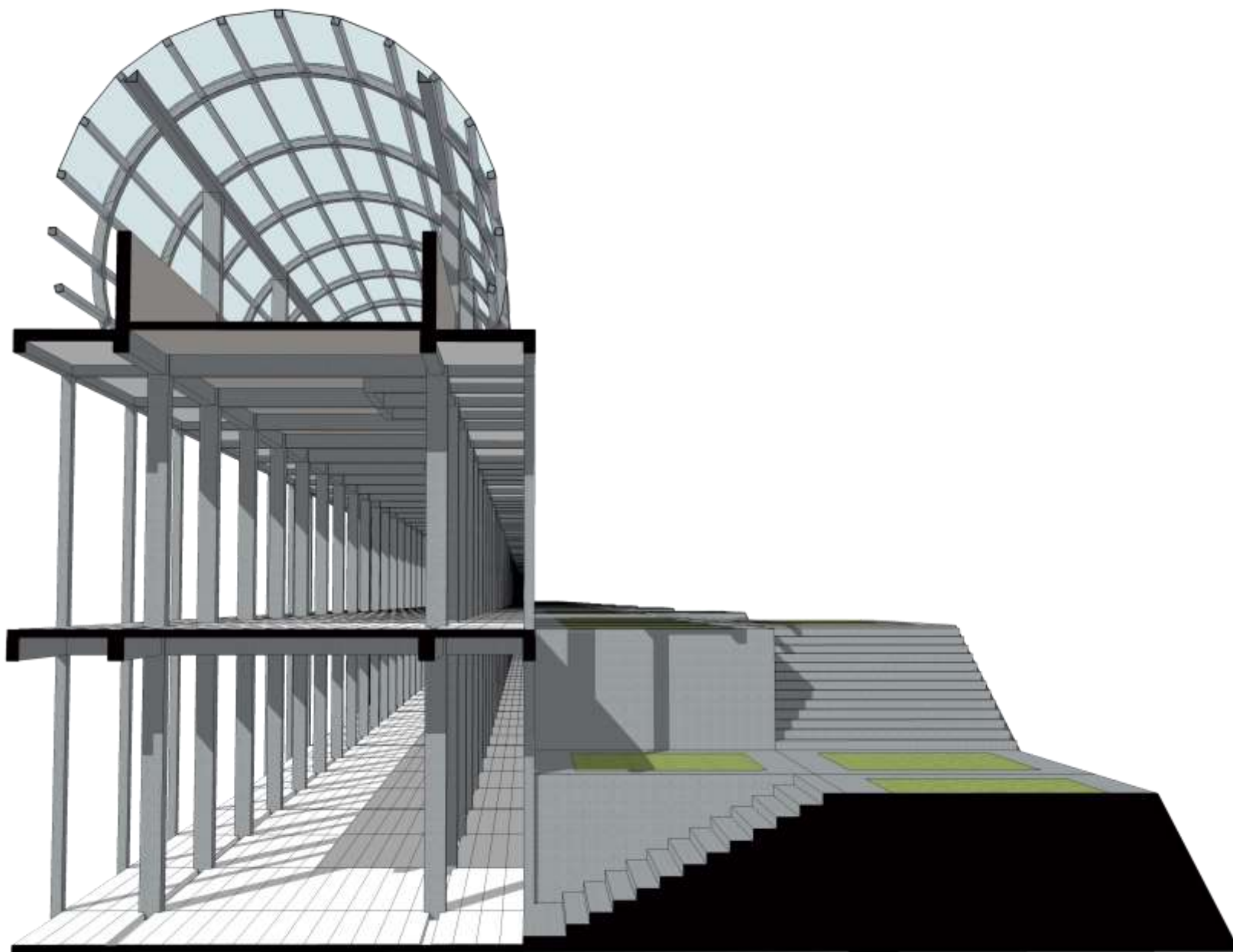






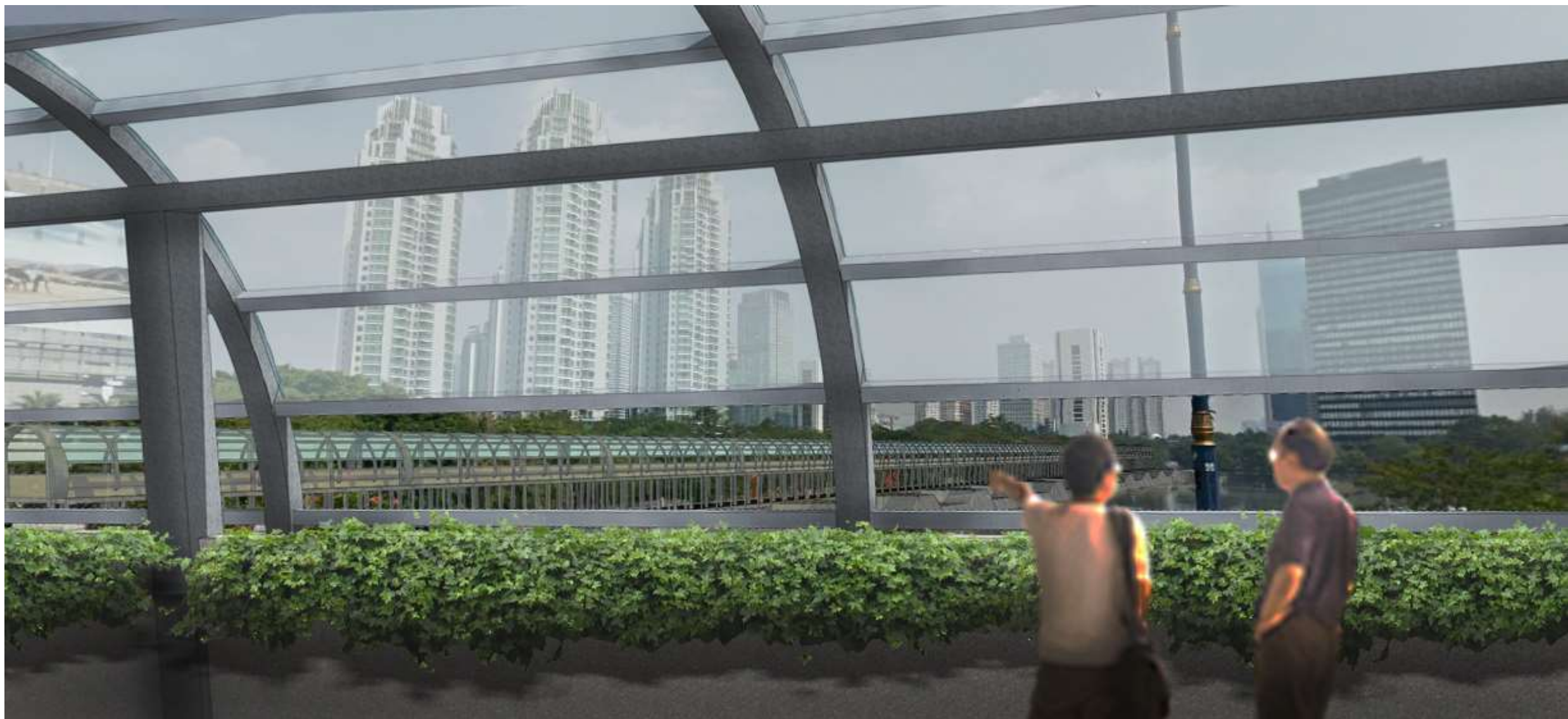
STATIC CITY on FOOD SOVEREIGNTY

STATIFICATION EXPERIMENTS









STATIC CITY on HABITAT

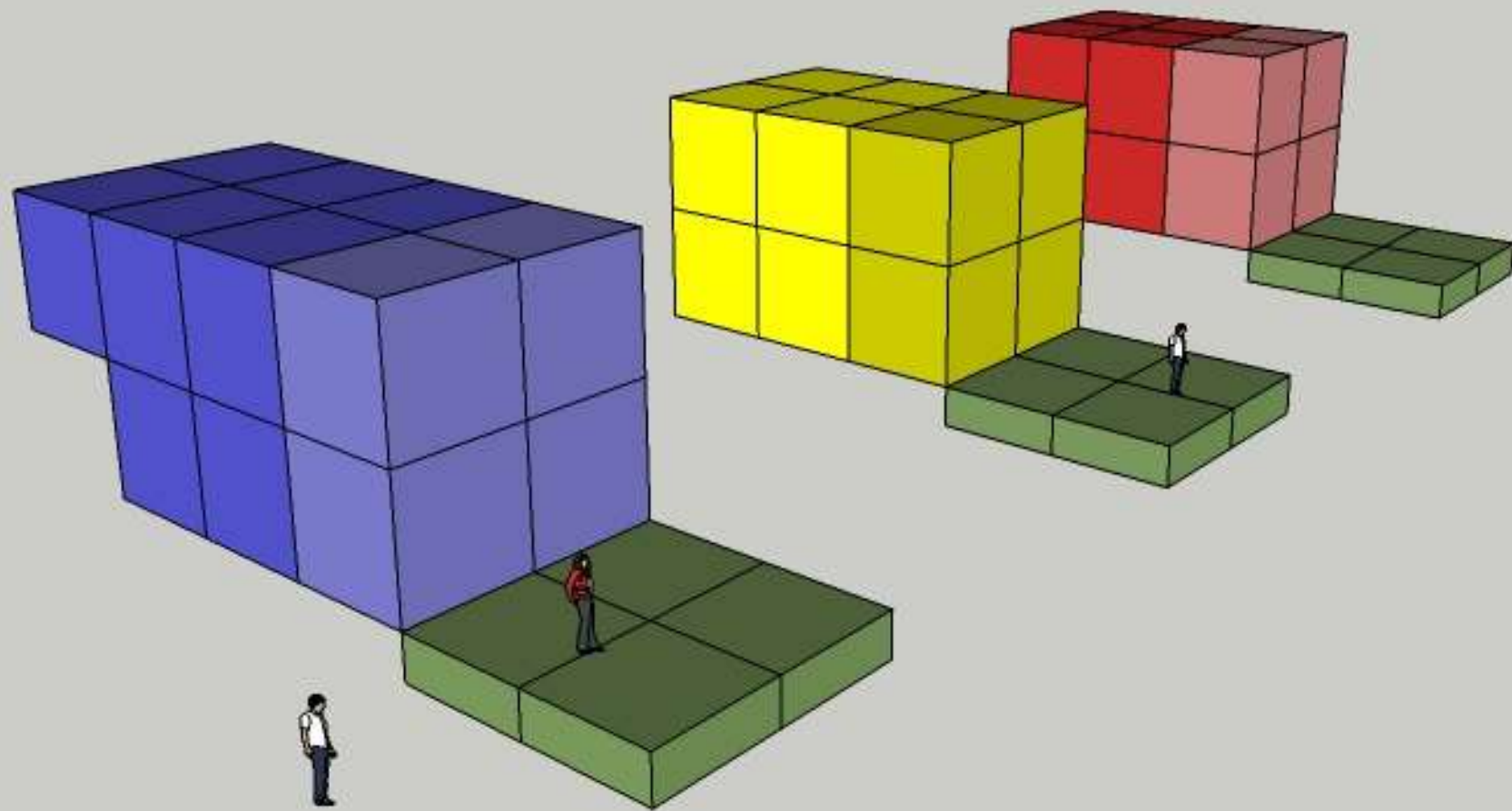
Hyper-densitification on Transportation Trails

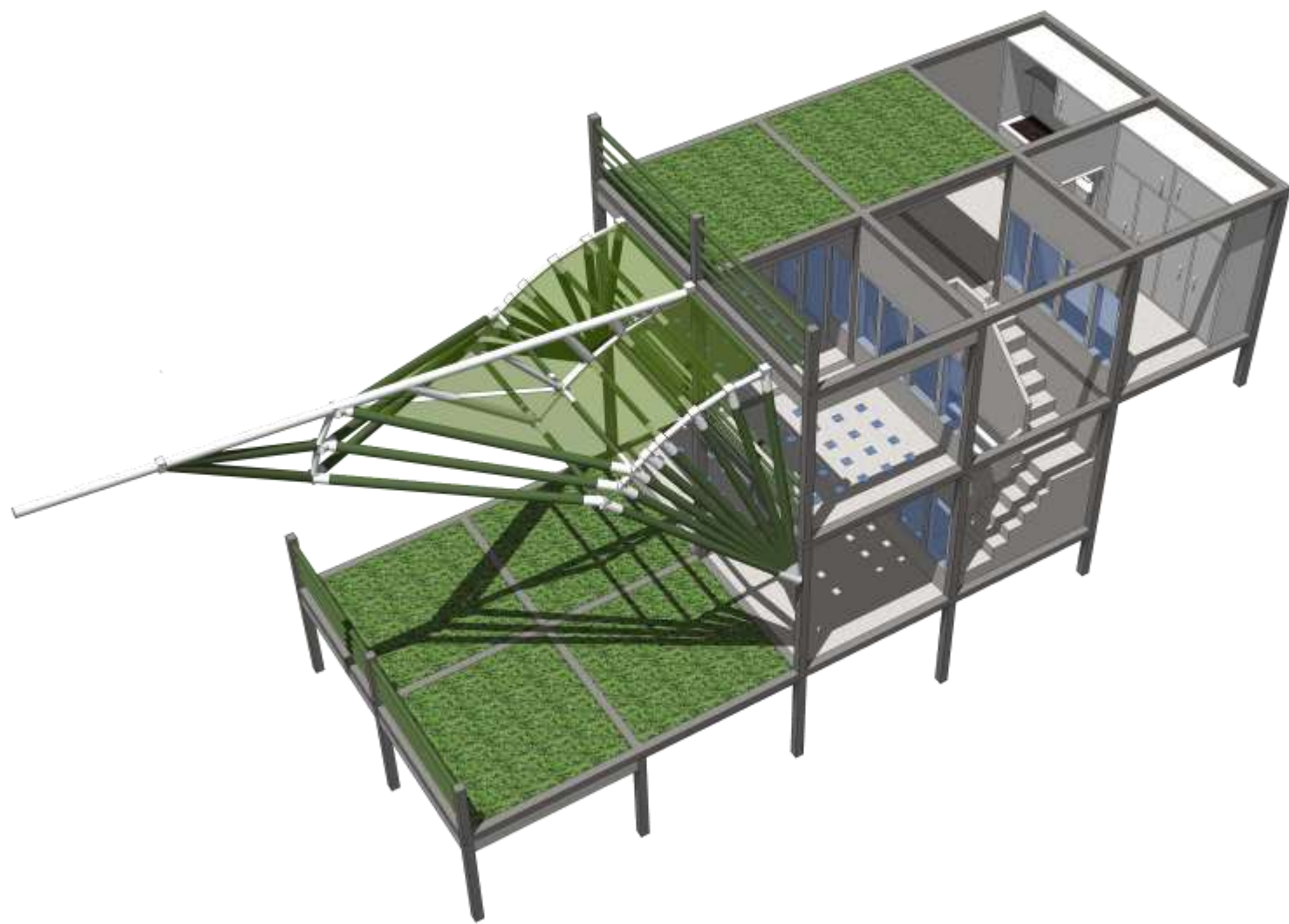
Existential Minimalism
(see video)

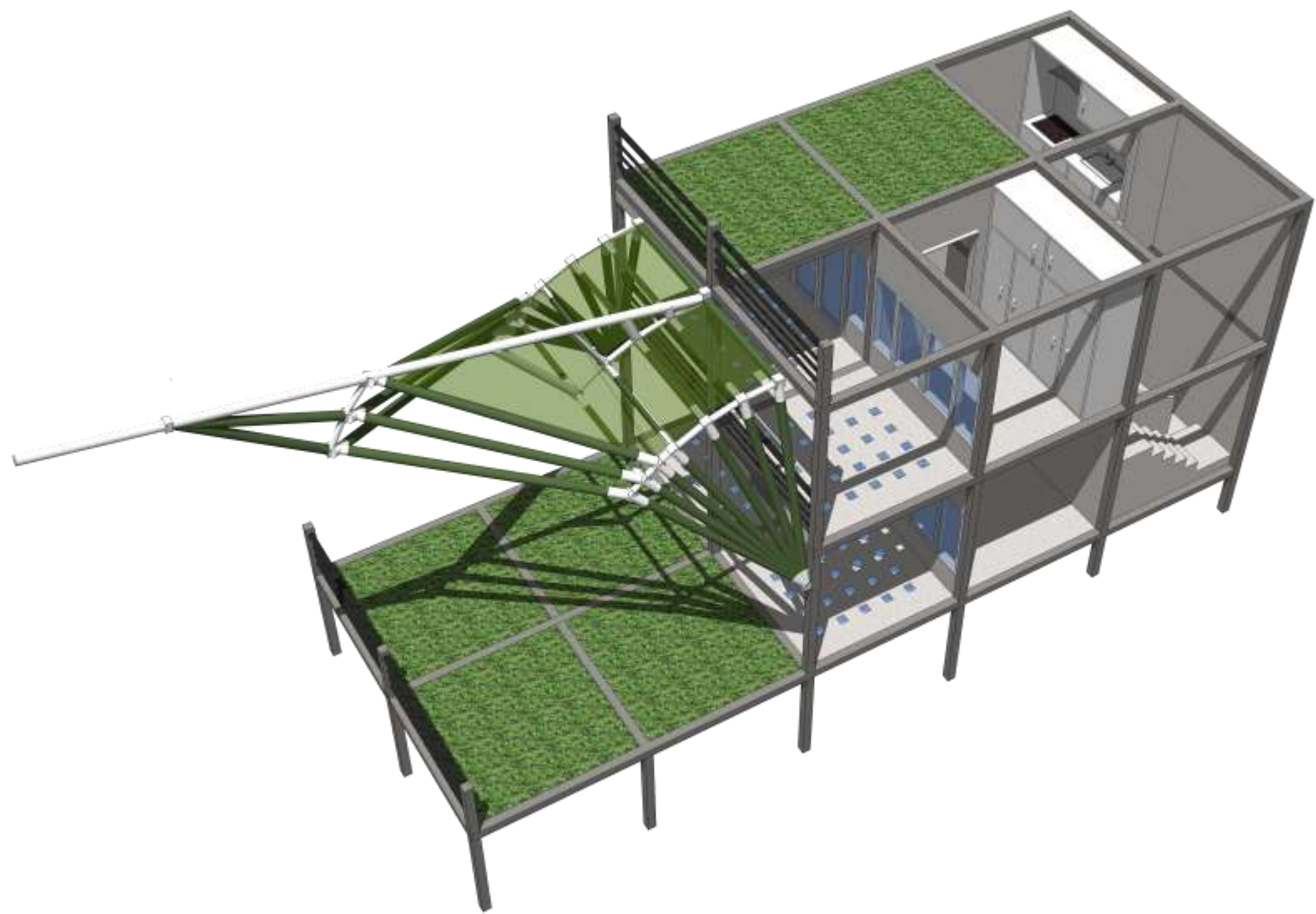
STATIC CITY on HABITAT

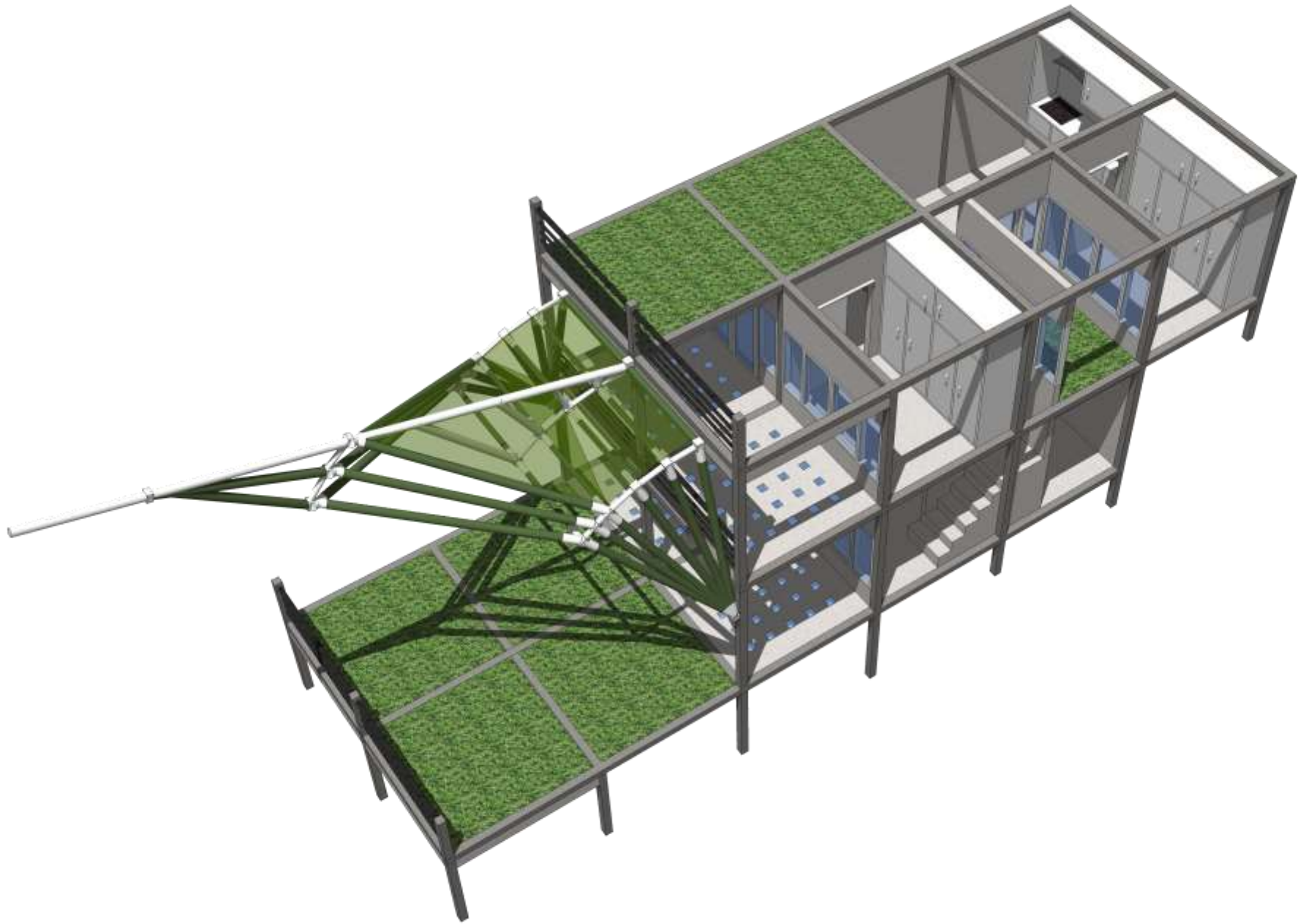
Ruralization of Water Trails

Maximization of Land Use

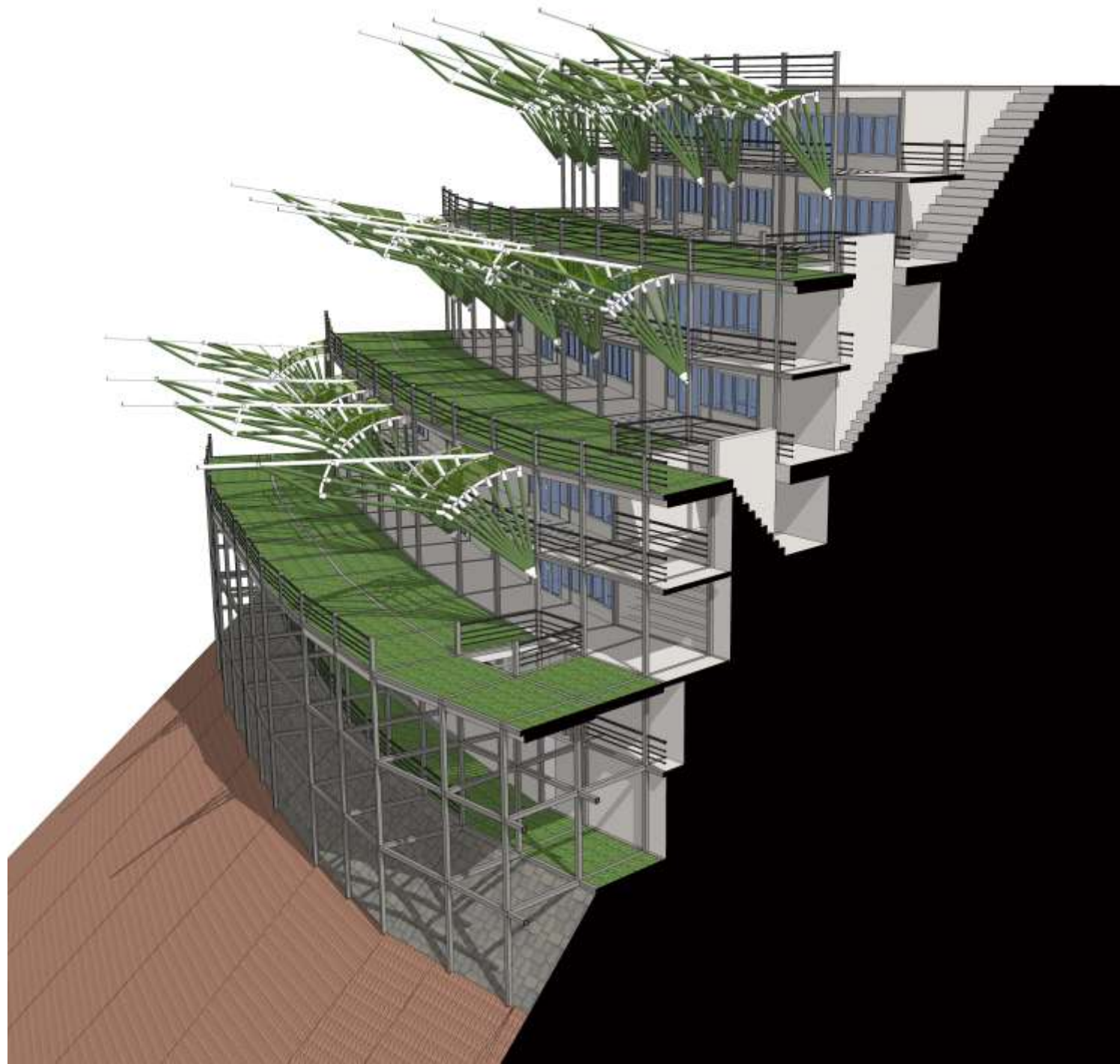




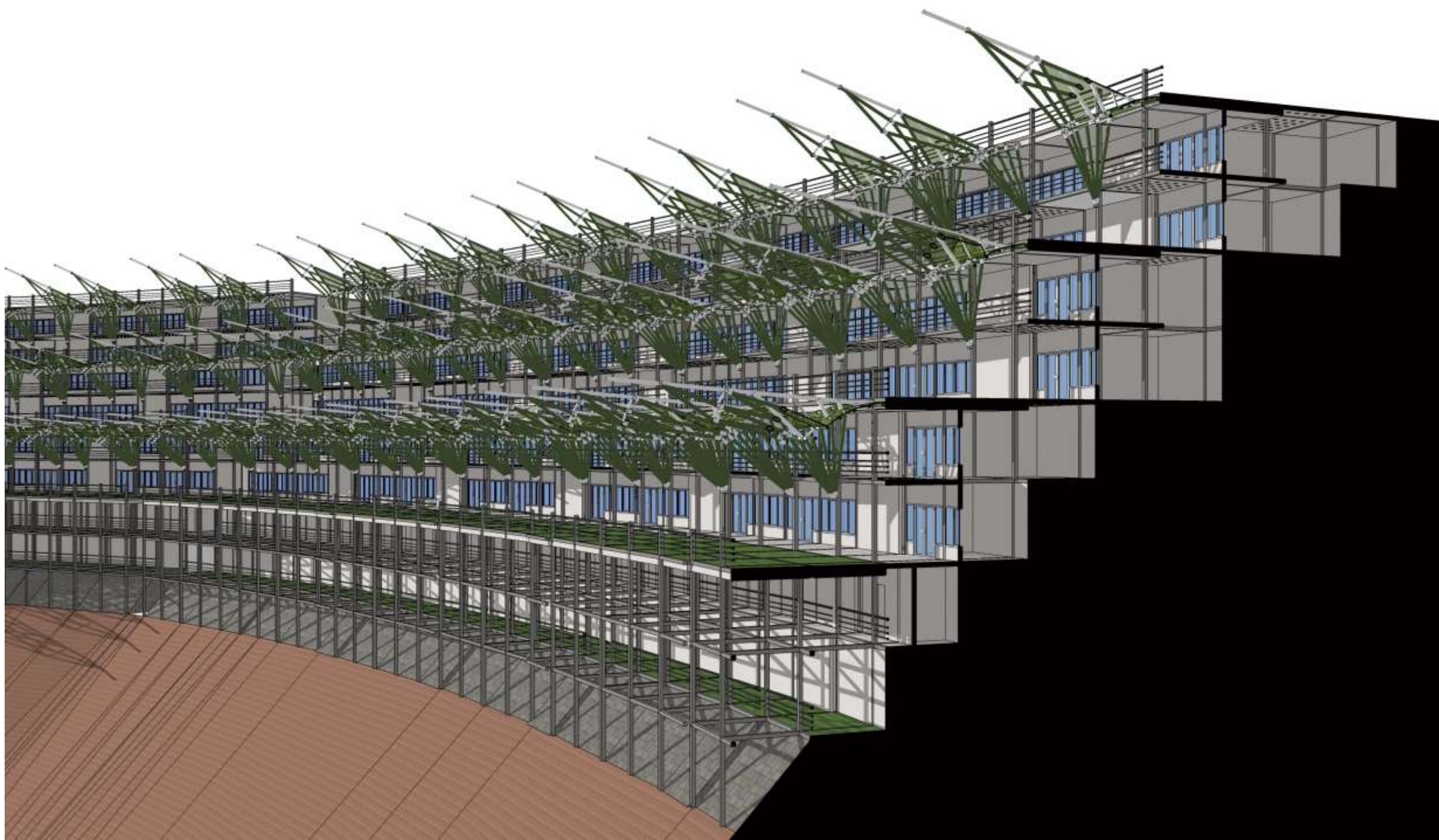








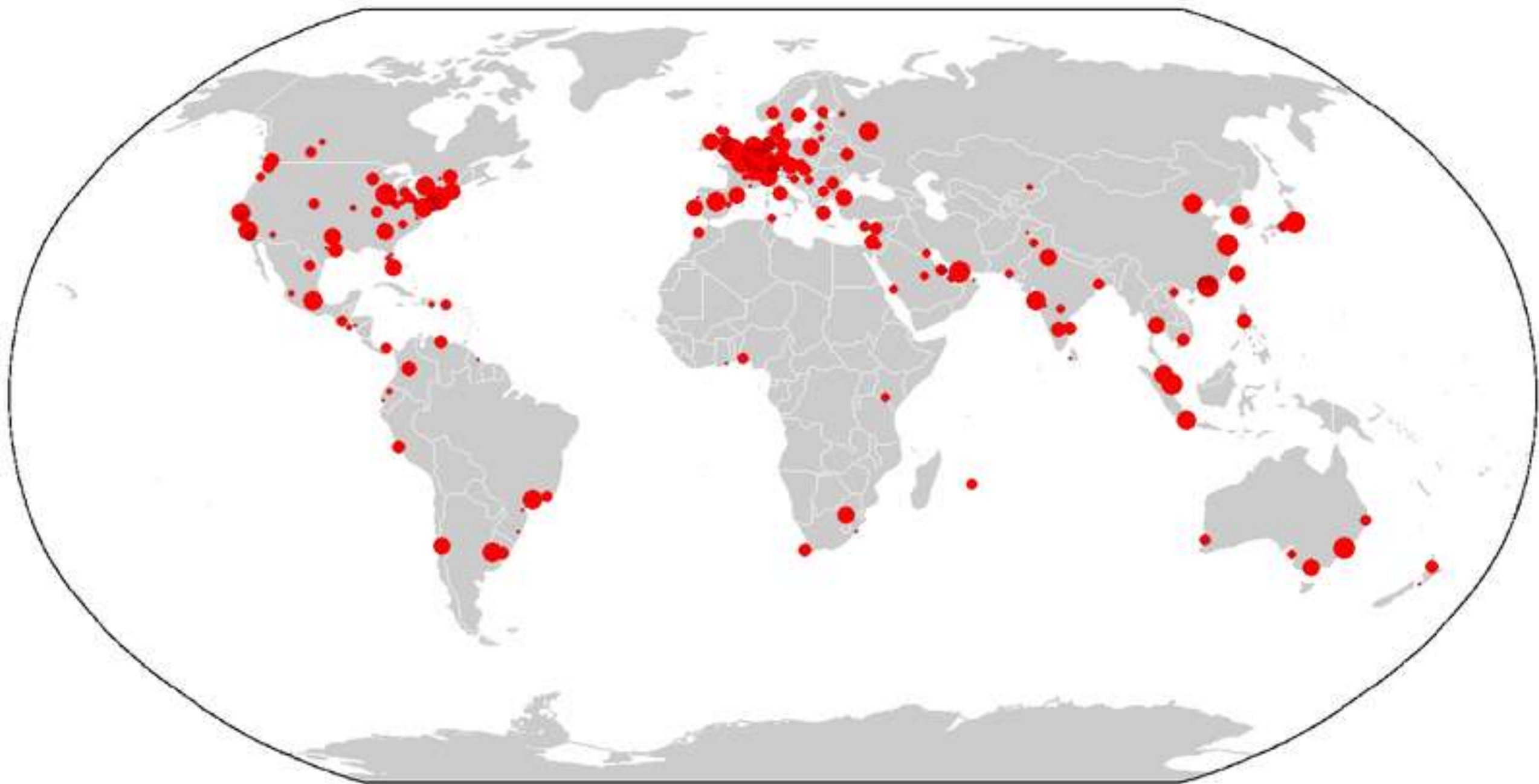


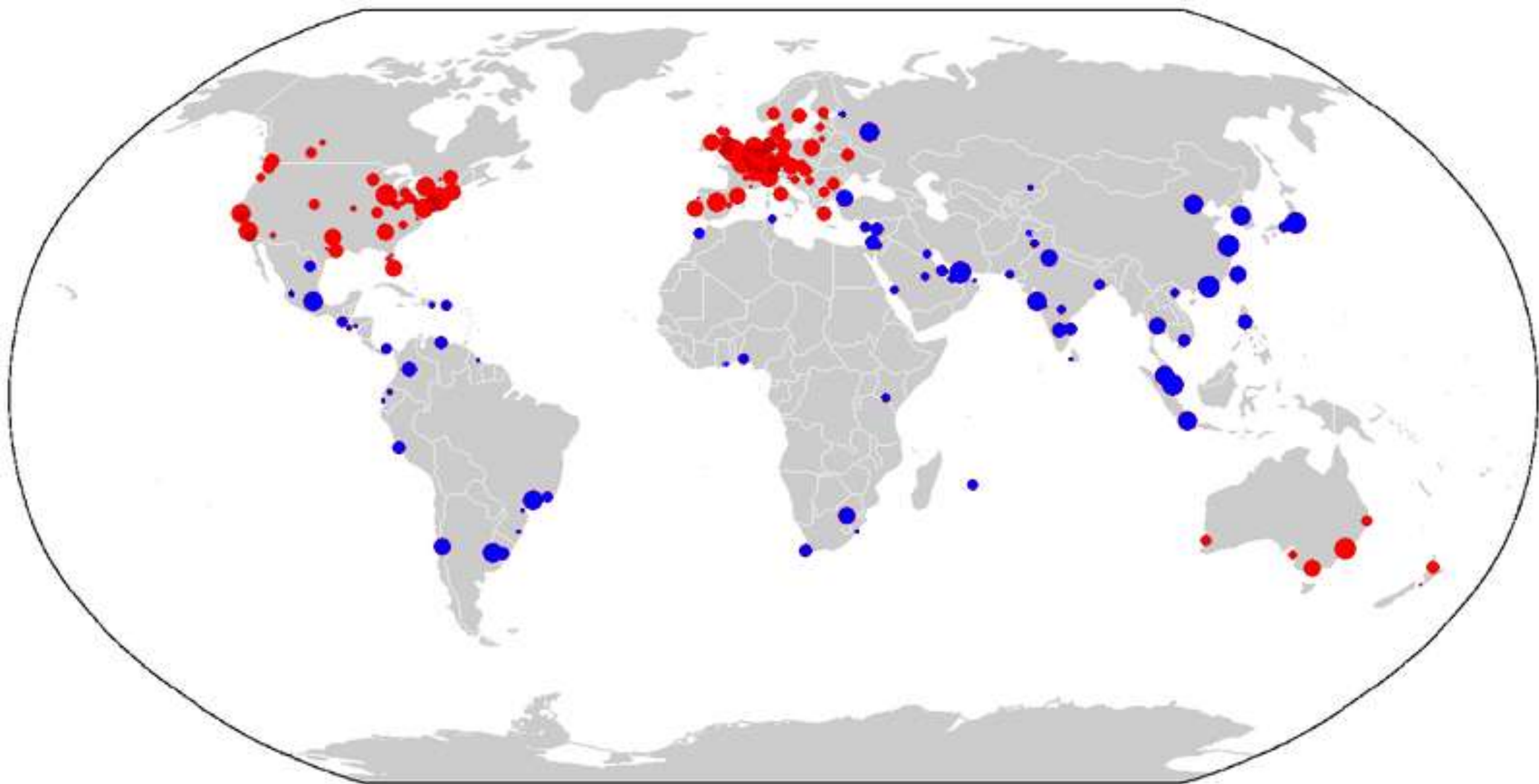






...if the world is confined as Mother Nature and human being; then the destruction of the planet will also mean the downfall of the human civilization... Catastrophic turmoil was generated when generations after generations of human being failed to see this (the) paradox, only to be deceived by what they believed to be the ever-growing (economic) progress... this (living) condition can only be achieved through a state of common sovereignty and prosperity, a state where all human shall be – equally aware and able- to make radical change... the question that our generation must answer today is definitely not exclusively ecological one nor, it is politically or economically secluded. It is about all the –ism- there is combined.





THANK YOU

Eka Swadiansa

