

URBAN FIGURE
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Department of Architecture
January 18, 2018

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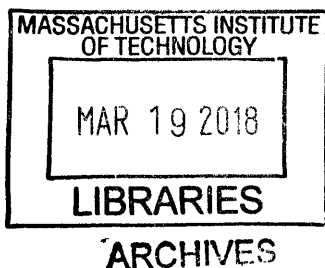
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Submitted to the Department of Architecture
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ABSTRACT

This thesis examines role of the mega-scale urban figure, specifically its appropriateness within contemporary cities. Since Rem Koolhaas's 1993 essay, "Bigness or the Problem of Large," the concept of mega-scale urban intervention has been a prominent issue both in architectural theory and practice. The newly created urban figures, physically dominant in the city, not only became catalytic but also became immortalized within an urban fabric. And while such urban figures remain intact, our contemporary cities are experiencing unprecedented speeds of change and complexity. This trend raises a question: "Is the mega-form still a relevant urban figures to respond to the needs of the cities.- If not , what are the causes and effects of urban figures, and how can the concept be revised to be more responsive to the aspiration of contemporary cities?"

This thesis investigates, a mega-form in Seoul, South Korea constructed in 1968. The mega urban form occupies the Jongno area of Seoul; as a significant and dominant urban figure registers at the larger scale of the city and yet divides the multiple industrial. It is likely that in the near future that this area will be subject to major redevelopment together with many of the surrounding smaller working communities.

The main body of this thesis, then, will be a design study into the appropriate urban figure that can operate as infrastructure that provides enhanced connectivity, generates new ideas about urban space and the public realm, and performs as an ecological system that fuels sustainable community revitalization. In rethinking the existing mega project, this thesis will consider how to integrate the layers of the past into a new relationship with reality of contemporary Seoul through the medium of the architecture and urban transformation.

Thesis Supervisor: Andrew M. Scott
Professor of Architecture, Associate Head, Department of Architecture

ACKNOWLEDGEMENT

The master of architecture program at MIT was both intellectually and physically challenging. However, the lesson learned throughout this experience is undoubtedly invaluable.

To confess the truth, I, a former art student, switched my field of interest to architecture simply to satisfy my ego with a bigger, more fancy and expensive medium. Now, I understand that an architect is not simply a producer of an image in this Neoliberal world but more close to a member of a civil service. I am sincerely thankful for this great 3.5 years of experience at MIT.

SPECIAL THANKS TO

Thank **God**, for this great opportunity at MIT and for strengthens me.

To my **family**, for their unconditional love and unending support.

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CHAPTER 1

1. INTRODUCTION



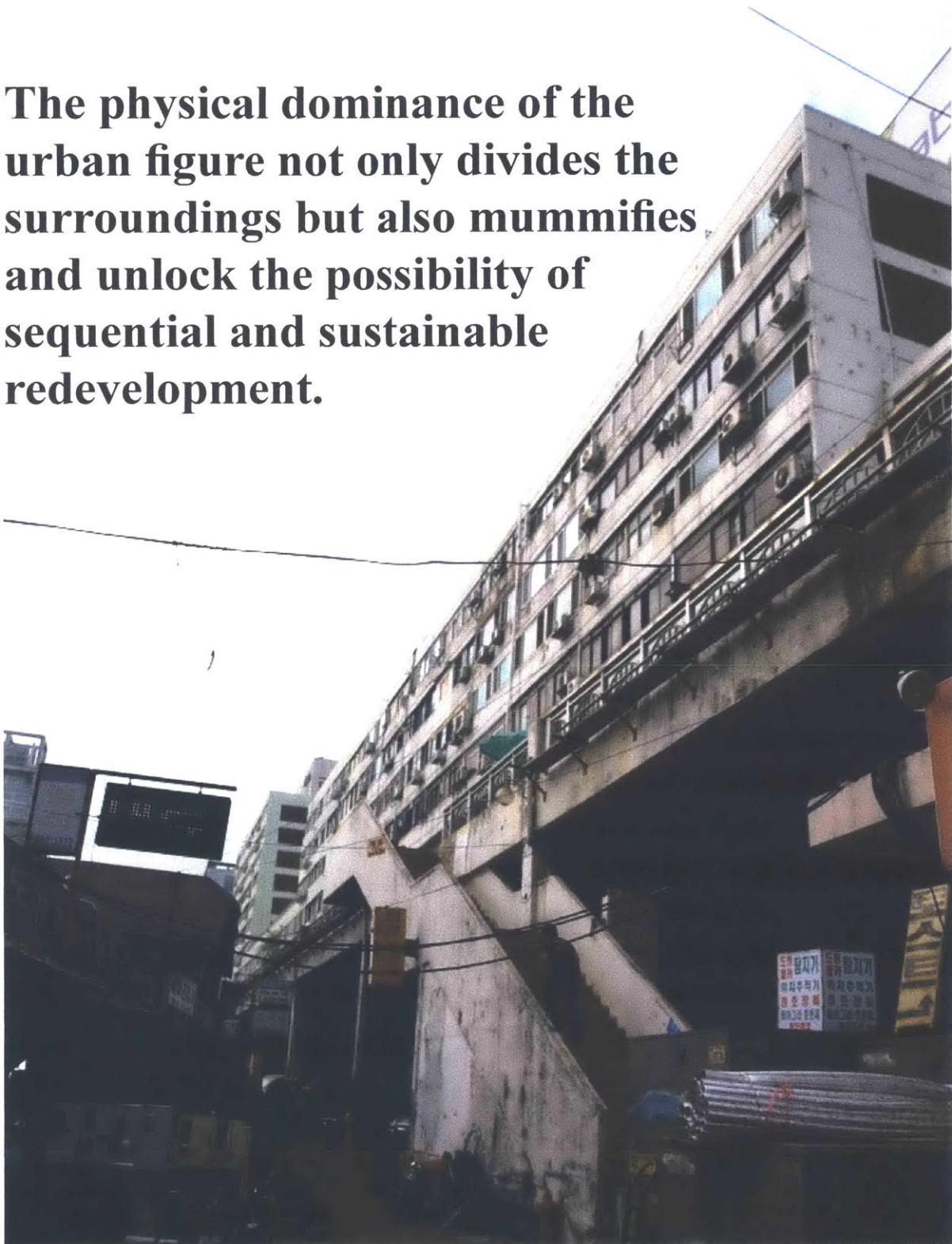


Constricted in 1968, Sewoonsangga complex is a significant and dominant urban figure registers at the larger scale of the city and yet divides the multiple industrial.

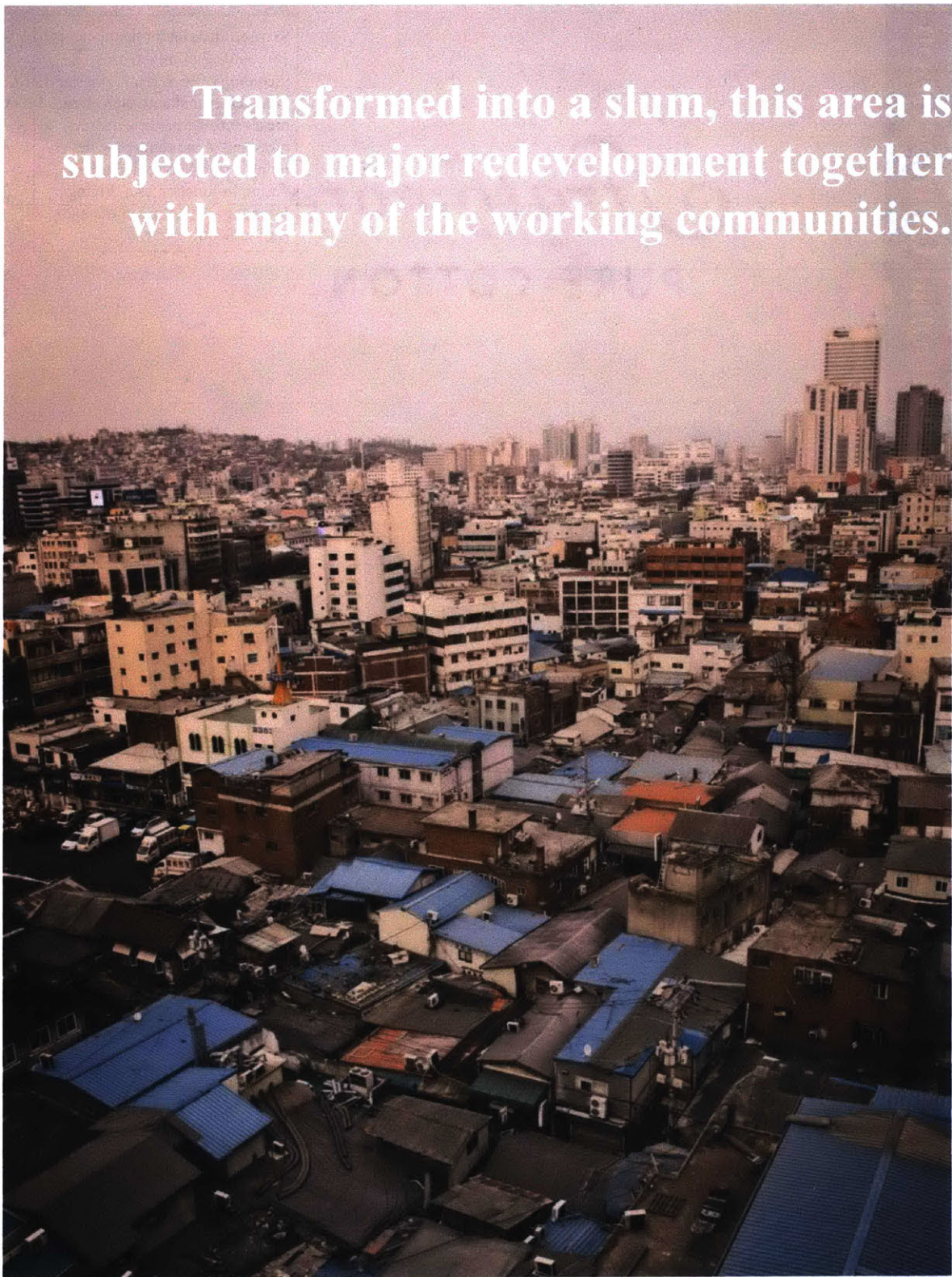




The physical dominance of the urban figure not only divides the surroundings but also mummifies and unlock the possibility of sequential and sustainable redevelopment.



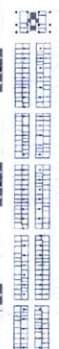
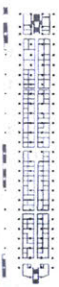
Transformed into a slum, this area is subjected to major redevelopment together with many of the working communities.

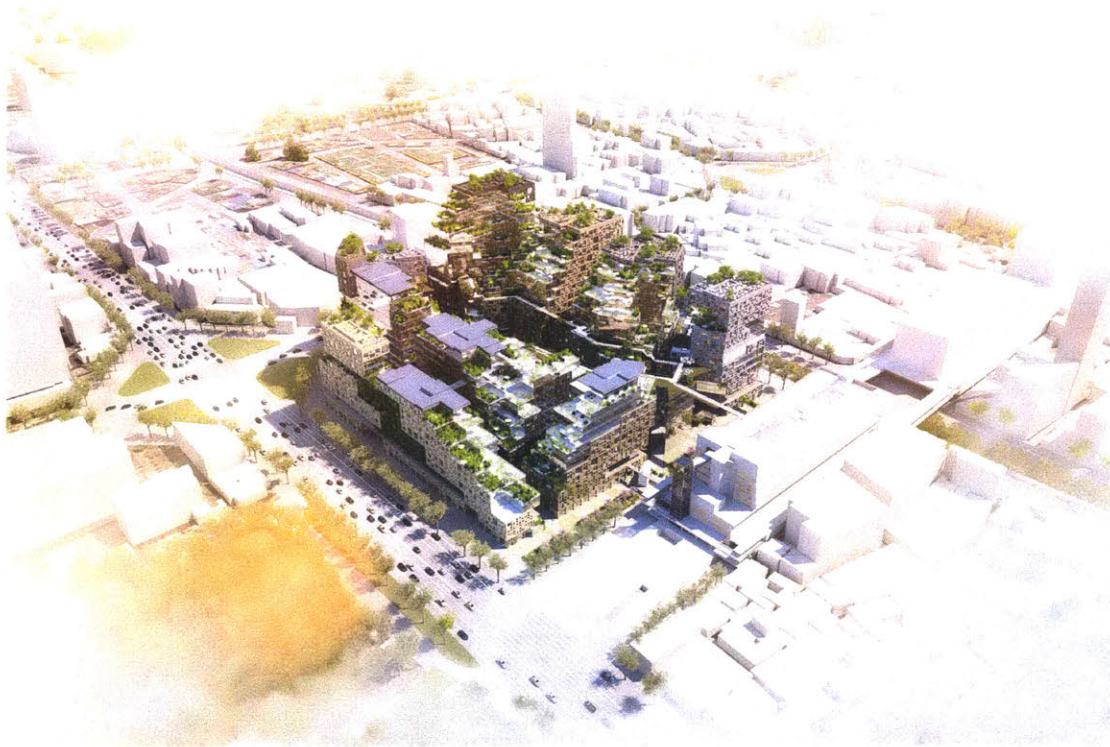


2017 Sewoon district #4 Redevelopment International Competition



Sewoon district #4 proposal
280.000 m2 of mixed uses including offices, retail, six-star hotel, entertainment, education, preserving the historical structures and at the same time developing a people-oriented urban design to function as a driving force for stimulating craftsmanship in Seoul





While arguing “the harmonious coexistence of the past and present will be promoted,” the winning proposal accompanies total erasure of the existing urban fabric and programs.





If architecture was a “guilty instrument of despair aggression, and destruction,” we need a new remedial conditions.” How can we subvert the dominance appropriate measure?



**responsible for division, isolation, inequality,
dial formula for the “warfare against undesirable
of the existing urban figure and establish an**

“It is clear that this current impasse in architecture is related to the inability of the architectural profession to form a clear idea about the contemporary city. In order to truly take action to change our world, we must make architecture a discipline that other disciplines related to, instead of architecture always looking to other disciplines to revitalize itself.”

- Vedran Mimica

URBAN FIGURE

This thesis is a figurative study of an urban condition in Jongno area of Seoul, South Korea. More precisely, an attempt to analyze forces that shaped an urban figure and to propose an antidotal figure to counter the urban problems triggered by the forces exerted.

In his 2007 essay “City as Political Form” Pier Vittorio Aureli stated, “the political is the decision on the organization of the space among individuals, and the formal is the very materialization of the space.” While the statement supposes a certain hierarchy of a space making process, a reversal of this order provides a designer a new opportunity to directly engage with the reality through his/her own tools. To restate, by understanding the interrelations between urban forms and human objectives, an architect, not a politics, can serve civic requirements better than politics using the functionality of a form as a medium. Though it might sound easy but this reversal is not an easy task since the variables that architects need to analyze are vast and not consistent but constantly shifting. It requires not only a visionary perspective but also requires unrelenting investigation and collecting sets of data to examine the legitimacy of the spatial grammar. Maybe the Rem Koolhaas’ argument saying that “the writing of architectural manifestos ceased in the late 1960s” is a gesture of submission to this seemingly impossible task especially in the era of globalization.

While individuals suffer the lack of adequate formal ideas, the impact of the commercial capital or the power of government on the fabric of the city is easily identifiable. Jongno area of Seoul makes a great case study of this phenomenon with a couple of reasons.

First - the contradictory condition of its central location and the deteriorated urban fabric

Second - the introduction of a mega-form as an urban figure and the aftermath of its physical dominance

Clearly, both phenomena are directly linked to the politics and economic situation of the post-war Korea. Since an in-depth analysis of the interrelations between those forces and the physical layout of the city is crucial to investigate my hypothesis further, the first chapter of this thesis focus mainly on the research of urbanism in Jongno area.

The second chapter of this thesis give more attention to Sewoonsangga complex and its surrounding neighborhood. Sewoonsangga neighborhood has officially declared as a special zone for revitalization since 1980's and many have proposed new plans to transform this outmoded neighborhood. However, majority of the proposals entail the demolition of some, if not all, existing programs and the reinvestment of the area with upscale shoppings or high-rise office buildings. Yet, this type of urban revitalization is merely a re-colonization of urban areas substituting deprived populations with middle and upper classes. The main goal of this research, in a macro scale, is to formulate a master plan with minimum impact on existing fabric yet yield maximum outcome.

The micro scale research focus on recombination of existing building types to introduce a new collective form. In this contextual approach, the new intervention promises co-existence with existing programs and represent both the interest of the current user and the interest of the public. Understanding a form as an entity and as a collective is a key to success in this regard.

With respect to its complexity and symbolic standpoint for the future of Seoul's urbanism, this thesis is not a definitive but more open ended exploration of new and better possibilities. This series of investigations will benefit the city to reinstate the concept of a city back to its original condition: a powerful center where various human activities intersect and trigger new ideas of a harmonious collective living. A place where essential human requirements are fulfilled and prosperity is guaranteed.

2. URBAN TRANSFORMATION

Major events 1932 ~ 1950

Though this thesis is mainly deal with contemporary condition of Jongno area, a thorough research on its morphological history especially under Japanese colonial rule is crucial to understand the layout of contemporary Jongno. Lacking both technology and planning experts, majority of planning decision made by Japanese were directly adopted in the process of post-war recovery and still identifiable in Jongno area.



Hanyang the Capital City, 1392

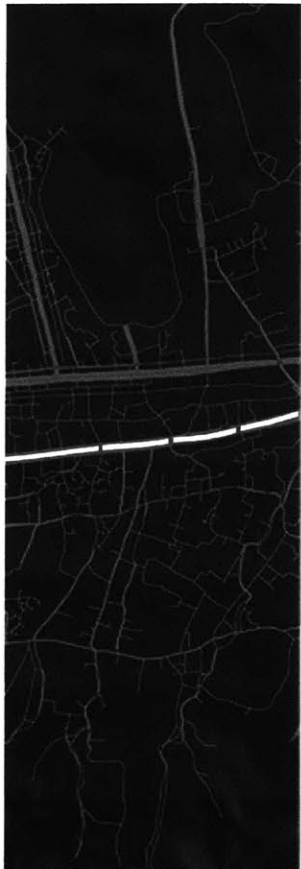
Area 17,800,000m²

Population Approxiamtely 100,000 in 1392

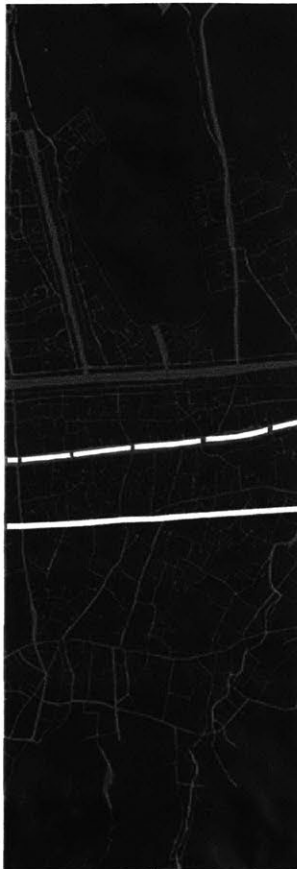
Mirroring the harmony of the cosmic order, proper balance among four surrounding mountains and a body of water, those factors were the main criterion in selecting the site for a new capital of Josun dynasty, Hanyang. Heavily influenced by Chinese culture and philosophy, the urban layout show similarity to the Chinese precedent such as Changan and Rakan. Hanyang was physically organized with five divisions and fiftytwo districts and this system demonstrate the social and spatial stratification.

While the major governmental facilities and residential quarters for ruling class was located at the slope of the Northern part, residential quarters for civilians were located at the plain Southern part of the city where frequent flood damages the community. The task of stream maintenance and development of tributary system was given to civilians. This logic of hydorological system is clearly embeded into the layout of both Northern and Southern park of Hanyang.

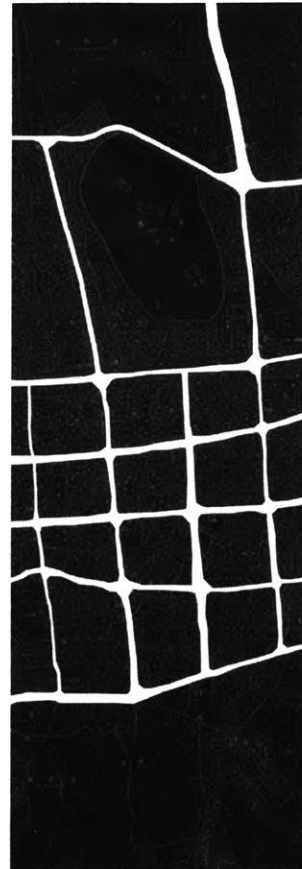
Urban transformation under Japanese colonial rule



urban layout
Hanyang, Joseon 1900



urban layout
Keijo, Imperial Japan 1910



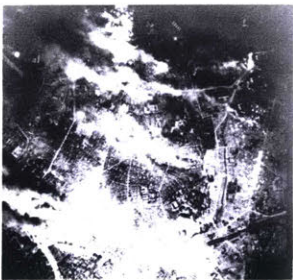
urban layout
Keijo, Imperial Japan 1940

The Japanese colonial period began in 1910. Despite the aggressive policy and exploitation, Japanese introduced modernity in Korea and the city began to change its form and function based on modern planning and mode of production. The refurbishment of infrastructure accompanied with the emergence new types of business. Modern day Sewoon-neighborhood began to emerge as a large scale industrial town during this period. The introduction of a tram system was a major factor in shaping the new urban layout. The pedestrian oriented urban structure was transformed into transport oriented one.

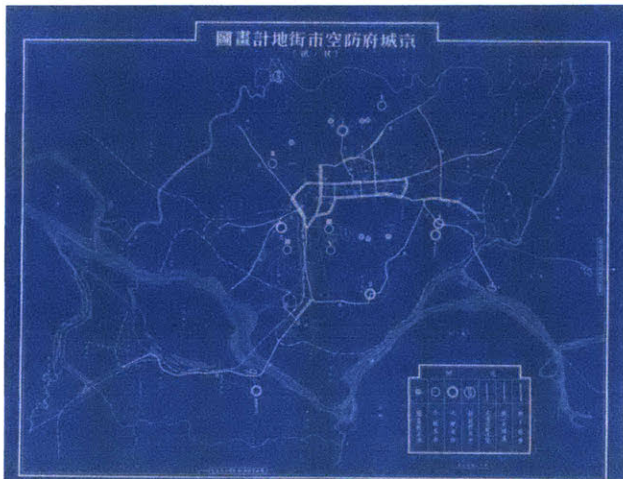
Impact of the Japanese Air Defense Law, 1945



1945 US fire bombing of Tokyo was one of the deadliest campaign during the Pacific war. Since South Korea was transformed into the biggest weapons manufacturing of Japan, Japanese decided to reorganize the city based on their air raid precaution act. Blocks were further discretized into smaller blocks and wide streets were created in order to stop spreading fire. One of the biggest streets created was 50m wide and 1,200m long. Residents and businesses on the designated area were cast out and the land ownership was forfeited in this process.



operation Meetinghouse, Tokyo 1945

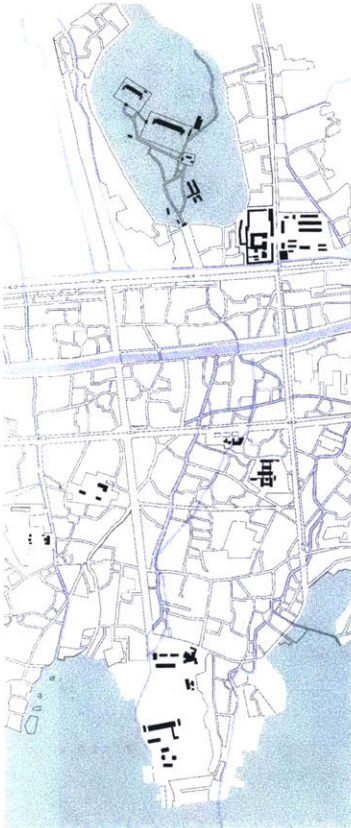


fire precautions plan, blue print 1937

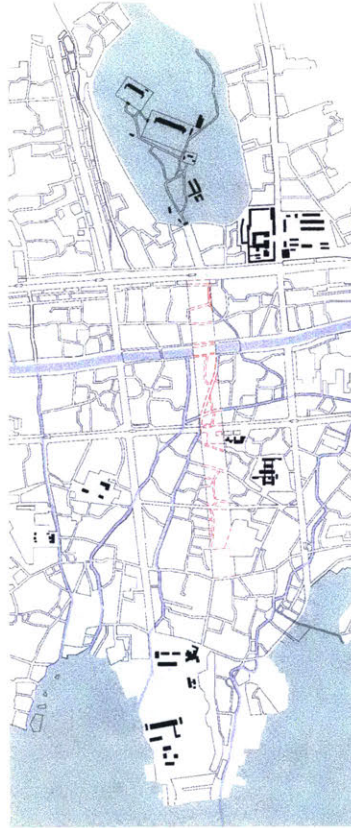


fire precautions plan, execution 1945

The first erasure, 1945



urban layout
Keijo, Imperial Japan 1945



site for fire precautions
Keijo, Imperial Japan 1945

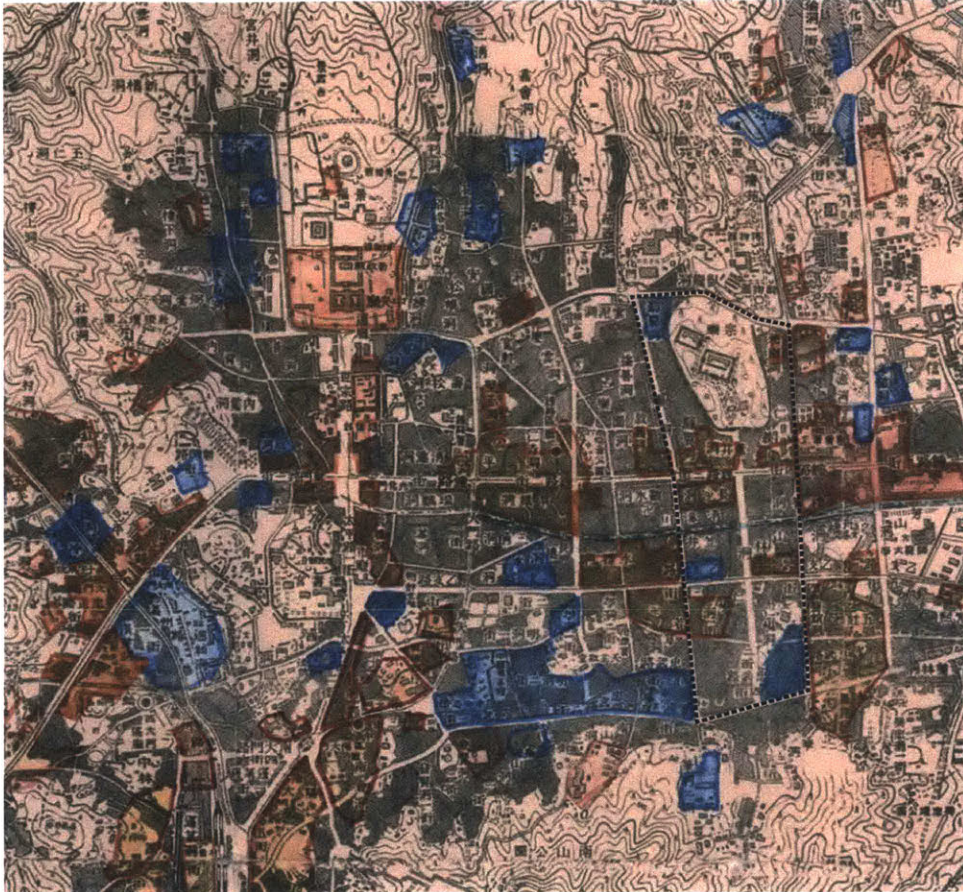


the first erasure
Keijo, Imperial Japan 1945

The erasure of 50,000m² dramatically change the urban landscape of the central area of Jongno. However, the impact of this violent act was somewhat limited. The unconditional surrender of imperial Japan was announced on August 15th, 1945 and the U.S- Soviet trusteeship began shortly after. This clash of two international hegemonies in Korean peninsula resulted in both division of Korea and Korean war on June 25th, 1950.

3. POST-WAR URBANISM

major events 1954 ~ 1967



the ruination of Korean war, 1954

Seoul is not simply a name of the city but also means capital city in Korean. It is important to understand that contemporary Jongno, one of the smallest administrative district of Seoul under current system, was Seoul (the capital city) of South Korea. The city, despite the smaller scale, played great role in terms of fueling national economy in the beginning of the post-war period.

The early stage of industrialization, 1960



celebration of the first export day, 1964



sweatshop, 1960's



sweatshop, 1960's

As David Harvey said, the process of urbanization is closely knitted with the idea of capital accumulation. The unique urban condition of Jongno area is also directly linked to the rapid economic growth of South Korea. Initiated by the military government in 1961, “the supreme order of economic development” promoted economic growth through labor intensive manufacturing. This emphasis on industrial sector quickly transform both the physical character and demography of Seoul. The factories in Seoul provided employment to 48% of the nation’s laborer. Motivated by the high demand on workforce, the population of Seoul exhibited unprecedented growth. The urban layout of Seoul clearly echoed to its function; an infrastructure for the production and the system for the transport of commodities. Seoul was the world’s outsourcing destination as well as a destination for poor Korean laborers.

The lack of housing capacity compare to the growing population created another problem; the illegal shanty town. Among many illegal shanties, the one occupies the central area was the most problematic to the eyes of politicians. Originally created by Japanese army corps engineers, 50,000 square meter axial void located at Jongno was transformed into a dense shanty town where illegal activities such as prostitution were rampant.

Illegal occupation and the problem of slum



void to solid-illegal occupation of national property, Jongno 1960

The slumification of this central area raised two serious issues among politicians. First, it was a great obstacle to the expansion of factories due to the limitation of buildable land. Second, since the reinvestment of a capital was crucial in terms of fueling industry, the prevalence of illegal activities such as prostitution was an obstacle to the national policy of savings promotion.



the crime of soliciting in the shanty, 1960



off limit signage, 1960

In 1967, the military government decided to clear out this problematic area by initiating large scale construction. The first mega scale mixed use complex in the nation's history was designed as a symbol of industrialization and the operation to evict thousands of illegal occupants were forcibly executed.

The second erasure, 1967

부역가 집을 철거 계획서

16. 계획목적
대입구중앙 공터전경 50미터 제방으로 확대 폭은50미터 연장704미터
면적 35,500평

21. 철거 지역 (구획별기 적상은 제외)

구분	종수	면적(㎡)	인구수	건립	비고
제방	371	5,370	5,370	1967	입입전경은 704미터
철거대상	0	473	2,294	573	
동원인원	305	5,577	2,160	1,470	

24. 비용 산출내역
400.00원 2,500.00원
인구수 증가 100.00원 1,000.00원

26. 철거 일자 66. 8. 14. 일, 일일
제일 10.00. 10.00.

27. 승인 사항 13.역 (1회)

28. 철거 지역

구분	면적(㎡)	인구수	건립	비고
제방	5,370	5,370	1967	
철거대상	473	2,294	573	
동원인원	5,577	2,160	1,470	

29. 부속내역

구분	면적(㎡)	인구수	건립	비고
제방	5,370	5,370	1967	
철거대상	473	2,294	573	
동원인원	5,577	2,160	1,470	

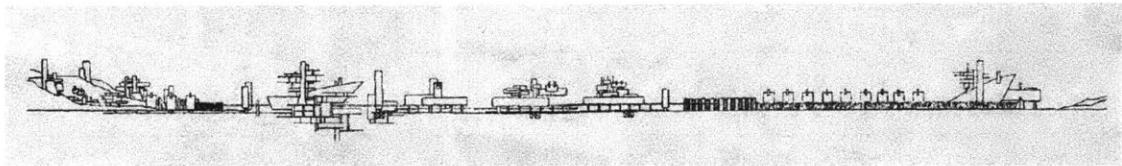
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demolition order, 1967



execution of the emolition order, 1967

Encouraged by the huge success of simple labor industry, South Korea attempted to develop more sophisticated industry in the late 60's. As a symbol of its economic growth, the government wanted to transform Seoul as a global city that attracts even more capital investment. The demolition executed in the central area, provided a rare opportunity to radically reform the physical structure of Seoul as well as the structure of its industry. The initial concept of superstructure was well suited to the intention of Korean Government. A mega form provides an opportunity to concentrate diverse functions conveniently in one place. As an urban figure, this prototypic architecture had potential to successfully reorganize the city and provide harmonious mixture of work and live. The unprecedented scale of the project that Kim Soogeun proposed also fit very well to the economic politics and the government's ambition to raise a monumental architecture as an emblem of power.



Sewoon sangga conceptual sketch, 1967 image courtesy of Kim Soogeun foundation



Construction of Sewoon sangga complex, 1967 ~ 1968



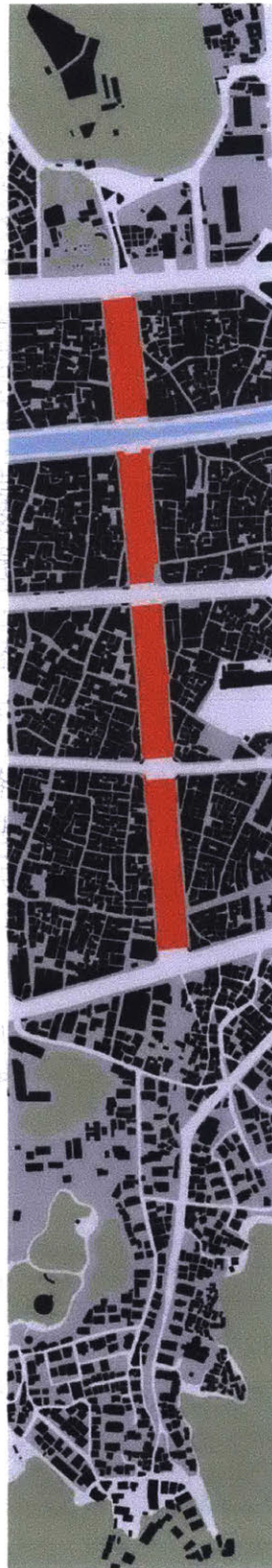


CHAPTER 2

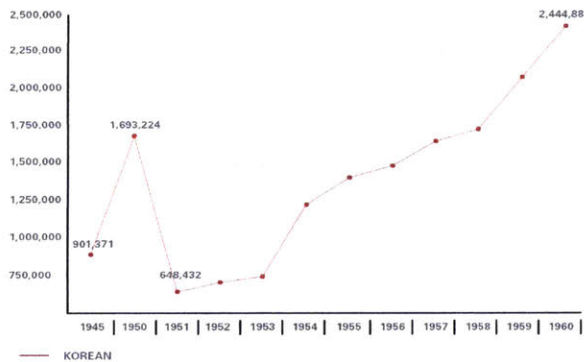
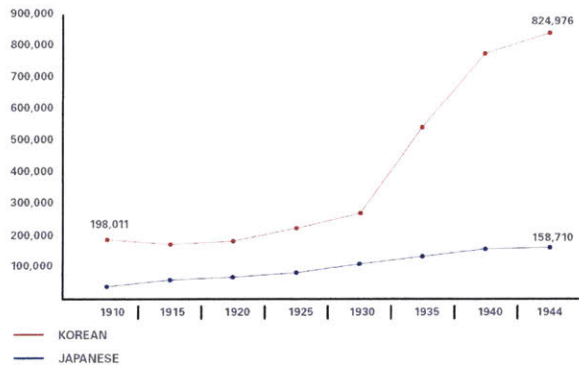
1. SITE ANALYSIS

“Since Sewoon Sangga is 50m wide and 1km long, it cannot be considered to be a unit of a neighborhood; rather it would be best reflected as being a part or a fragment of the city. In the long run, as the population of Seoul keeps on increasing and these linear blocks become longer, it will eventually form a city.”

- Kim Soo Geun



Expansion of the capital city



population growth

Experienced the problems of over concentration, the government began to focus more on developing sub-center cities in the beginning of 1970's. Freed from the limitation of pre-exist urban fabric and available land, the newly created cities offer more pleasant lifestyle to modernized Korean.

Designated as central business district, soaring office skyscrapers and residential apartment complex appeared in Gangnam, the south of Han river. Extended beyond the old city boundary, Seoul has transform into a gigantic metropolis. In 1980, Seoul won the bid to host 1988 International Olympics game. To meet the global standard of advanced Western countries, more investment on infrastructures and constructions on architecture were encouraged.



skyline, 1950

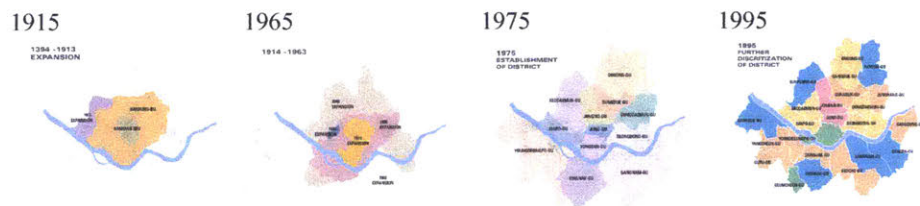


skyline, 2010



expansion of the capital city

Jongno district



process of the expansion



SEOUL
Area: 605 km²
Population: 10,197,604
Density: 17,000 per km²

LONDON
Area: 1,572 km²
Population: 8,787,892
Density: 5,590 per km²

BOSTON
Area: 232 km²
Population: 673,184
Density: 5,368 per km²

BARCELONA
Area: 101 km²
Population: 1,604,555
Density: 16,000 per km²

comparison with global cities

Mummification



aerial photo, 1973



aerial photo, 1988

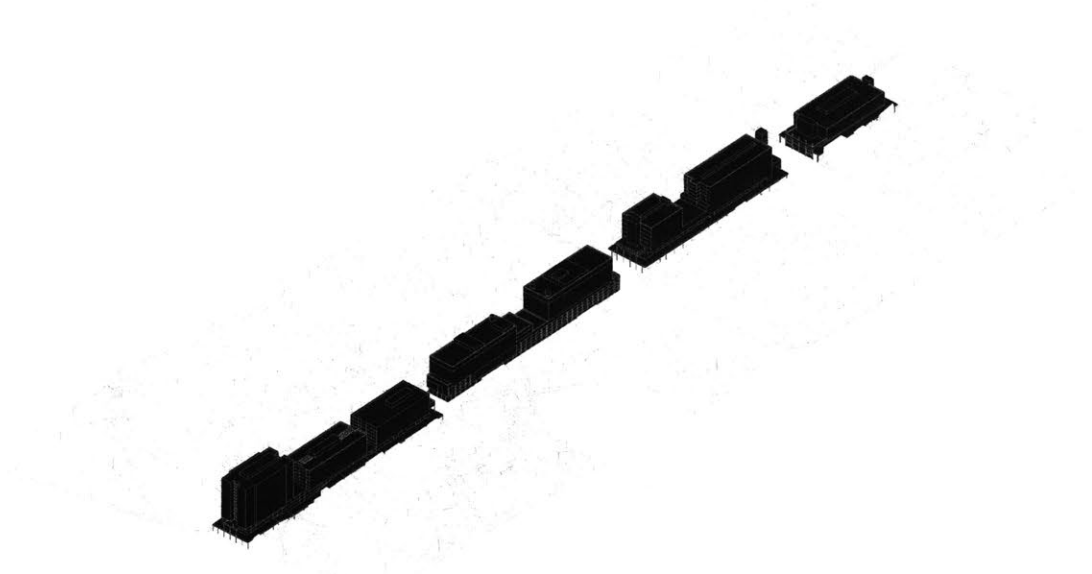


aerial photo. 2008



aerial photo. 2017

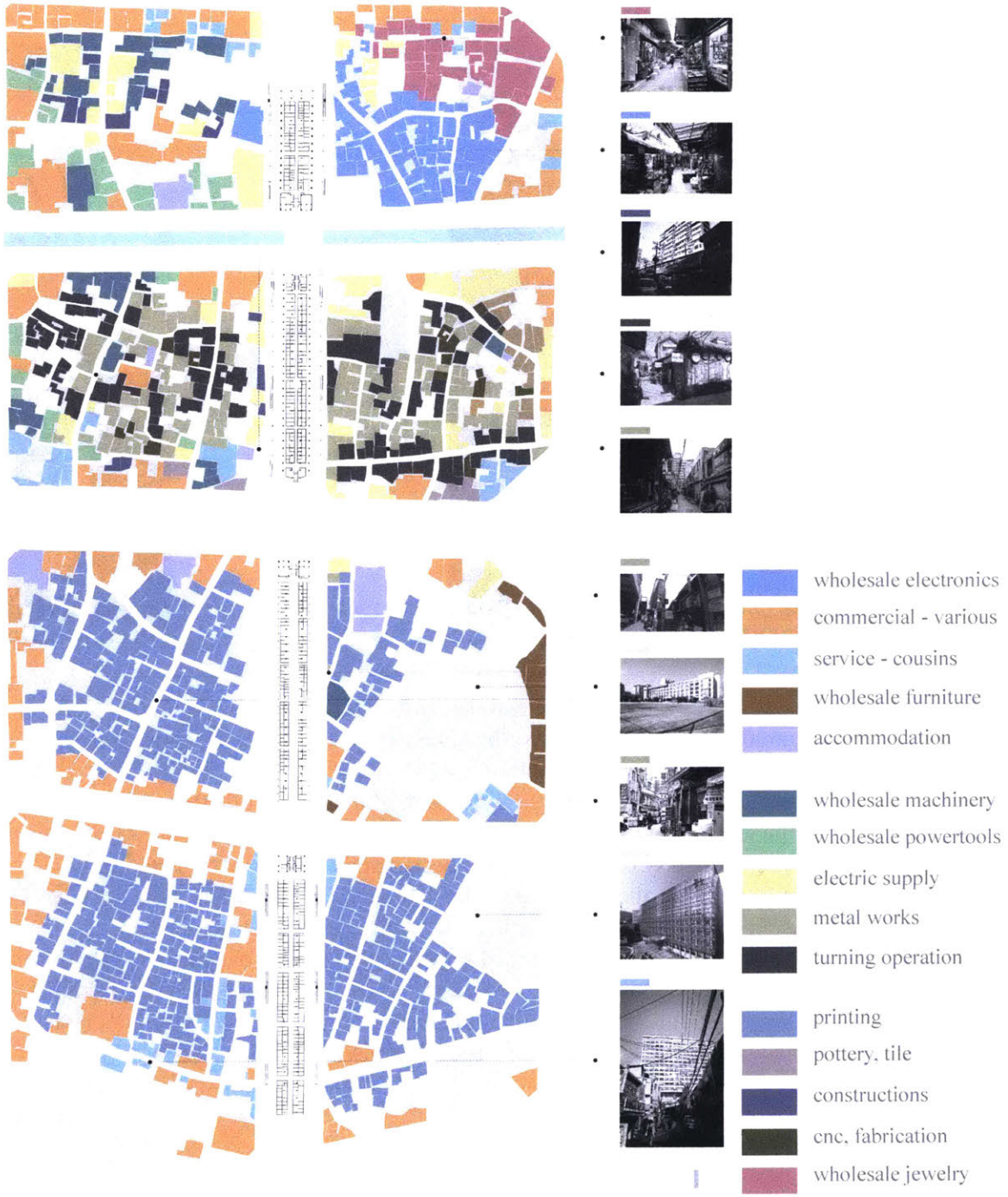
Social decay



isometric, current condition

The development of sub-core cities and changed mode of production brought rapid declination to Jongno area. Korean industry has switched from labor-intensive to more lucrative, technology oriented such as ship building, automobiles manufacturing, and electronics manufacturing. Large-scale factories and R&D centers were built on the outskirts of metropolitan area and finance and stock market became major urban industry. Demand on office tower in the metropolitan area swelled as a result and newly developed districts such as Gangnam and Yeouido started to outshine the old city center. The outmoded urban fabric failed to meet the contemporary demand and decreased rent motivated even more and more outdated industries to cluster in Jongno. This transformation hastened the deterioration process of central Jongno and this former center of capital began to be portrayed as a socially decayed, unsafe slum area again.

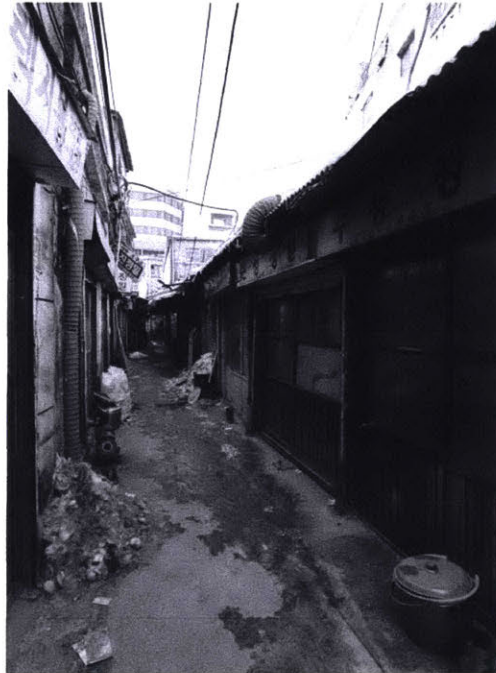
The cluster of outmoded industries, 2017



mapping, plan, current program

legend - program

Aftermath of the megastructure



Deterioration



Disconnection

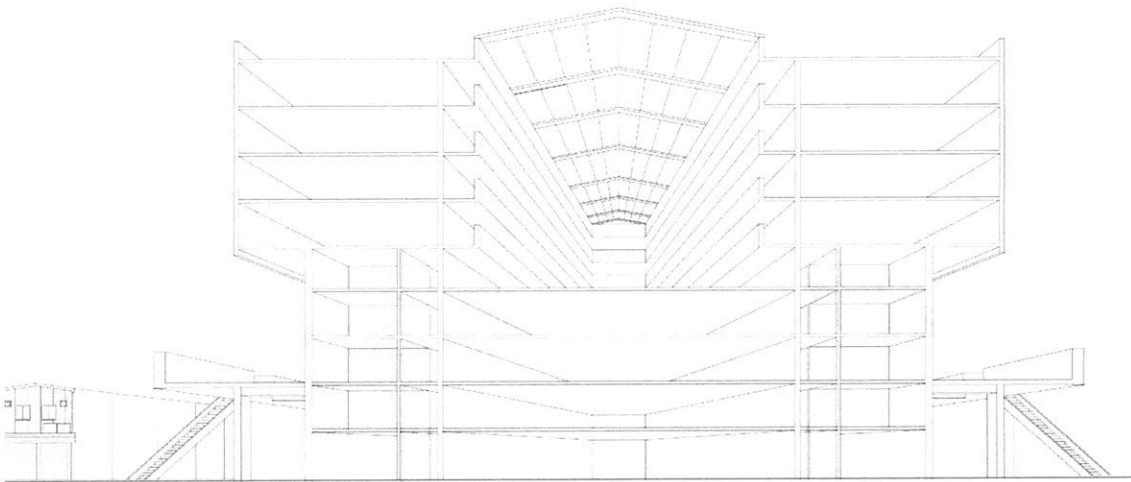
Both the construction of the megastructure and declination of its use created huge impact on the surrounding communities. Among many, the issue of vacancy, disconnection, and deterioration are some of the most noticeable.

The issue of vacancy is directly linked to the expansion of the city. While the retail plinth is still in service, the residential tower on top of it is no longer functioning and shows an extreme level of vacancy. The continuity of the pedestrian deck, which was originally designed to separate pedestrian traffic from the vehicular traffic, is broken. The deck and its structural element only provided a 1m gap between existing fabric and the megastructure, causing extreme congestion. The physical dominance of the megastructure also created a hostile environment for the neighborhood and unlocked the possibility of small-scale refurbishment. Extreme density, level of contamination, noise, and hostile atmosphere, all together created a negative image, making this neighborhood an industrial enclave.



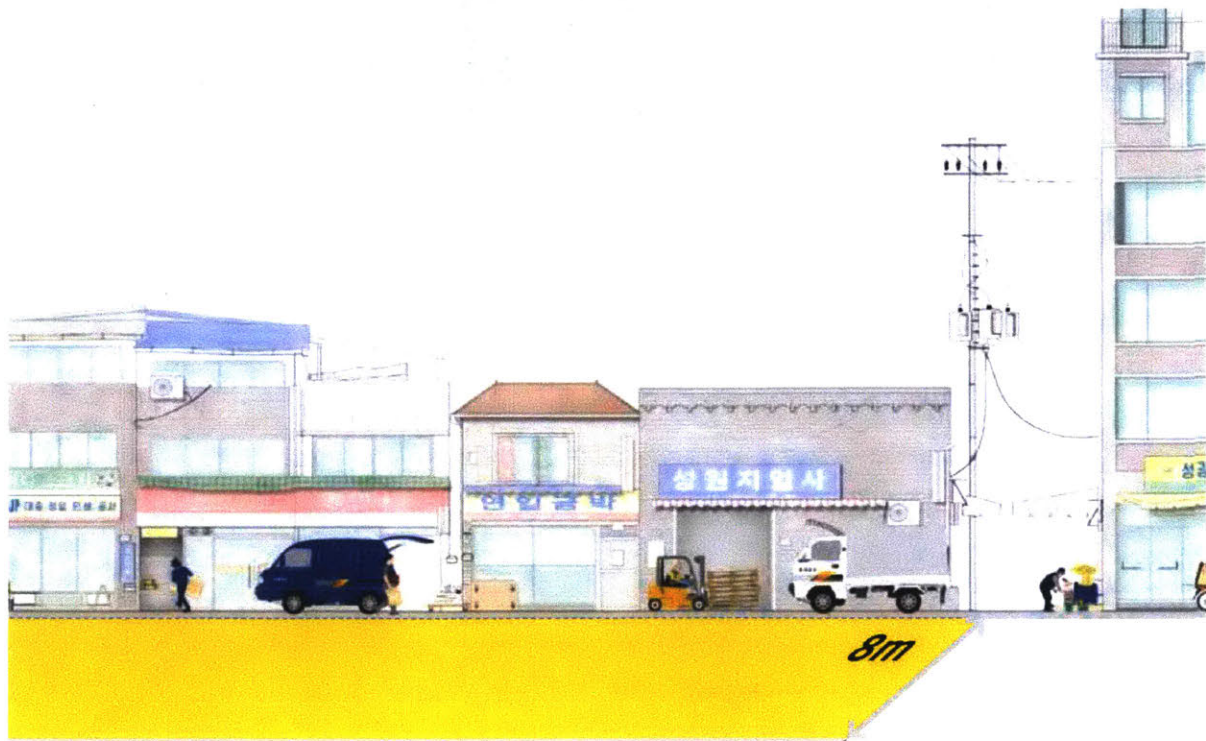
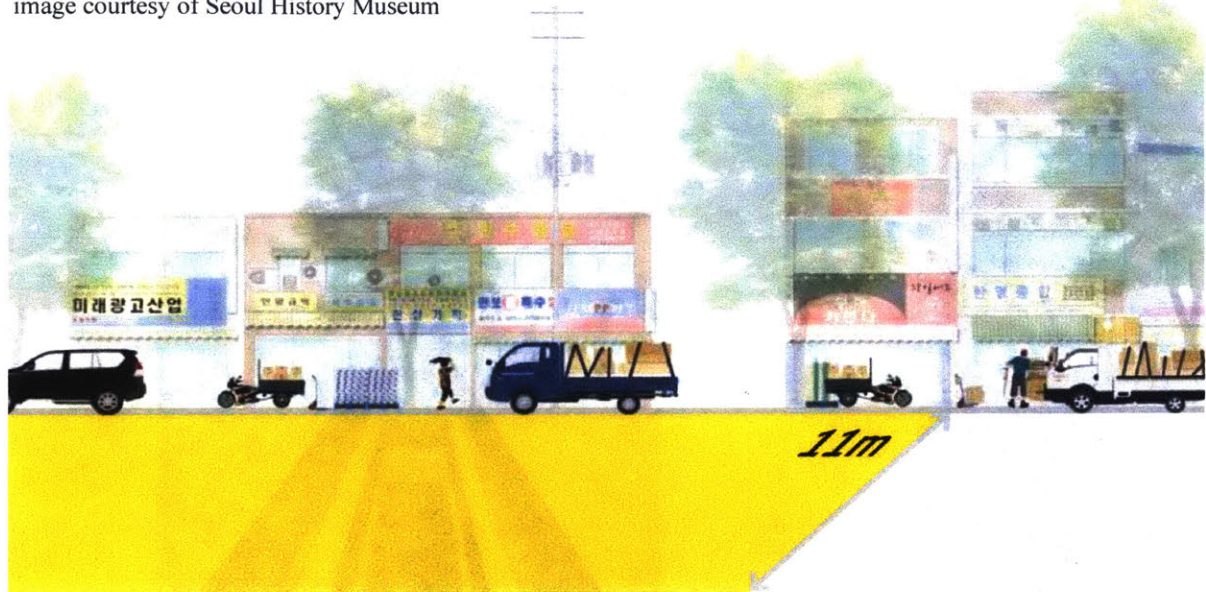


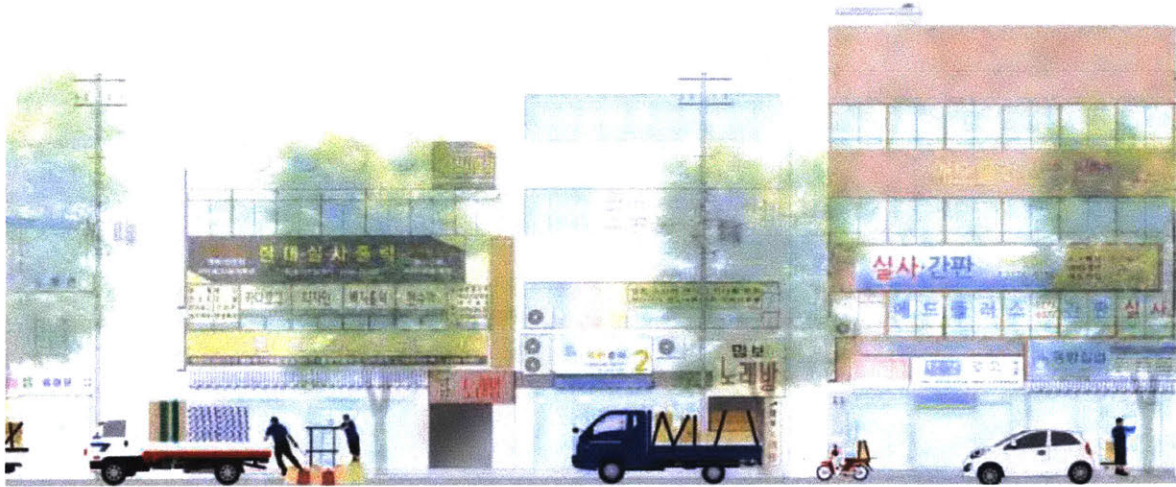
Disappearance



Street condition and the program distribution

image courtesy of Seoul History Museum

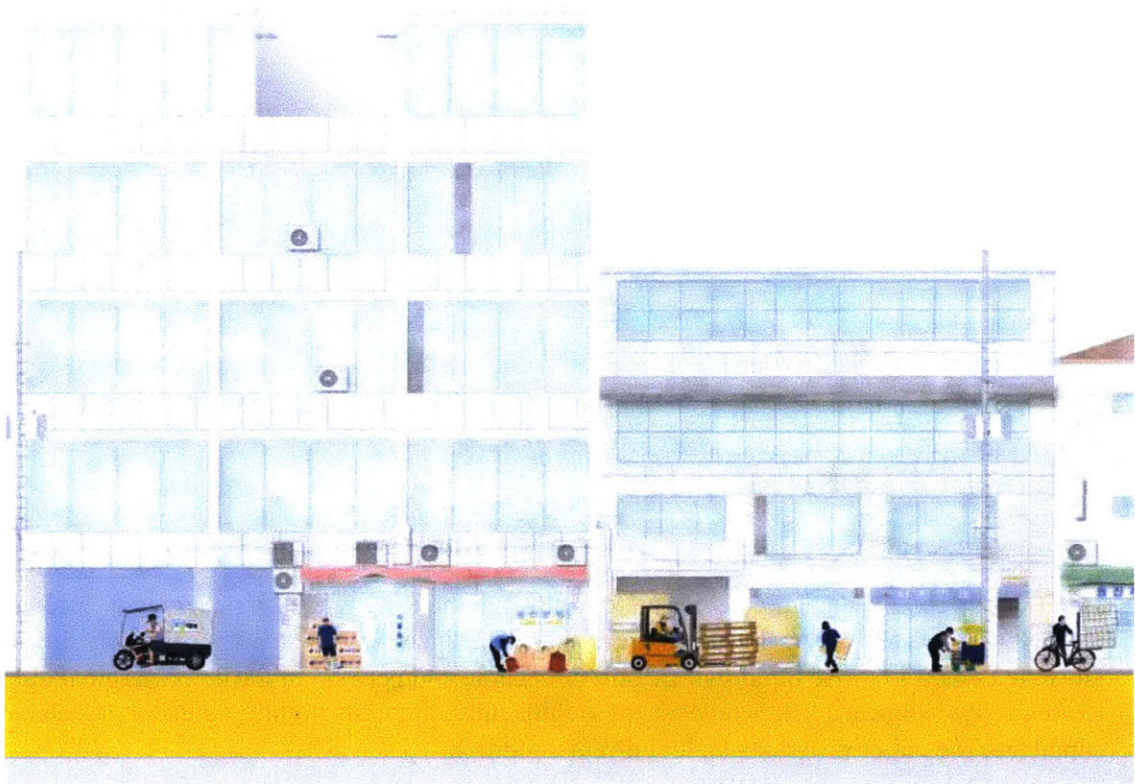




11m wide street is typical on the perimeter of the neighboring blocks. Conveniently located at the side of the vehicular traffic artery, many of the business on this street is relatively thriving. However, dated low-rise buildings are still noticeable and pedestrian traffic is marginal due to the narrow sidewalk. The wholesale of architectural materials, lighting, machinery, electric supply are the major programs under current condition.



One of the biggest tributaries of Chenggye creek in former time, 8m wide street is a rare condition only witnessed on the third and fourth block. Major program in these blocks is a printing and book making which requires large scale machinery. Since this street is accessible by car, the business on this street is thriving. Introduction of modern buildings is also noticeable.



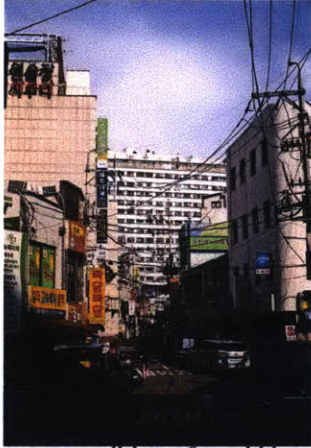
5m wide street is still functioning as a main traffic artery in majority of the neighboring blocks. A car can get an access to this street but major mode of transportation is customized motor cycle and heavy machineries such as a fork lift.



1m wide street is an extreme but prevalent condition easily witnessed in all eight blocks. Major mode of transportation for commodities is a human labor and program along this street is limited since large scale machinery cannot get an access through this narrow street. This condition is illegal under current safety regulation due to the inability to accomodate vehicular traffic.



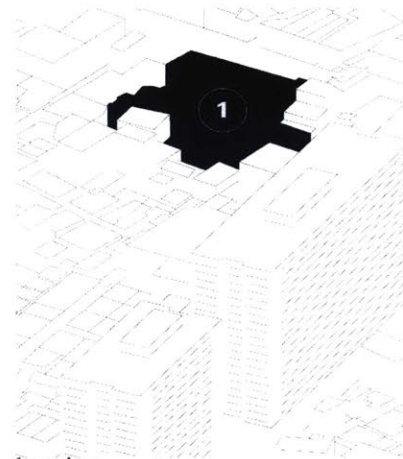
Detailed condition of the blocks



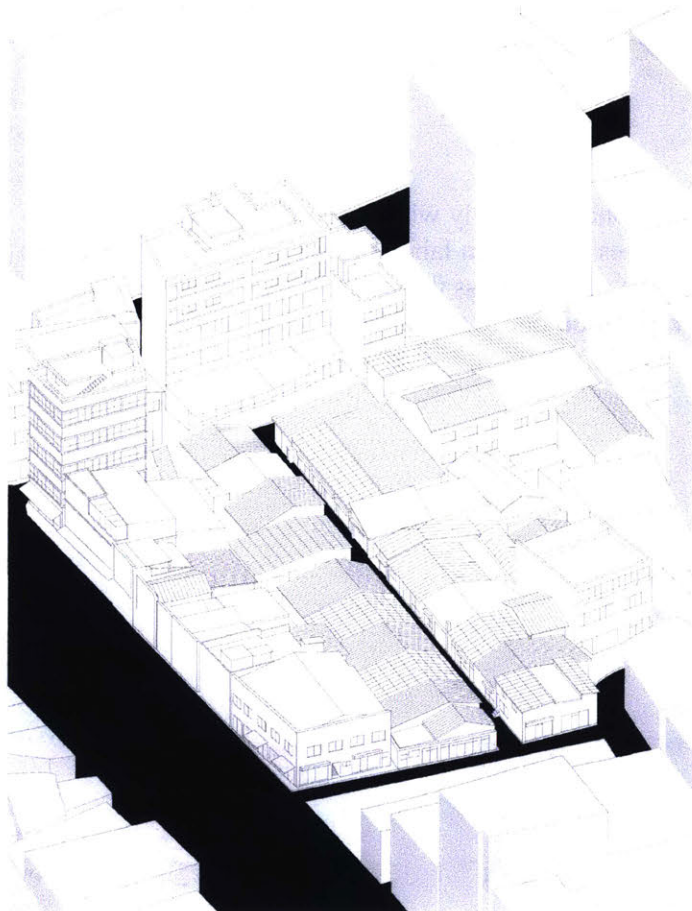
street condition - 8m width



street condition - 1m width



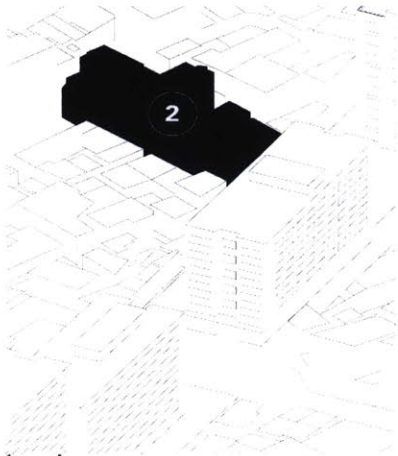
location



The field research conducted on site provided a great opportunity to record current condition of the site vividly and also an opportunity to cross examine the actual condition with result of the research done previously.

The spatial quality and the level of noise created by the operation of machinery is recorded in film and the combinatory form of existing architecture was sketched and re-illustrated in axonometric drawing.

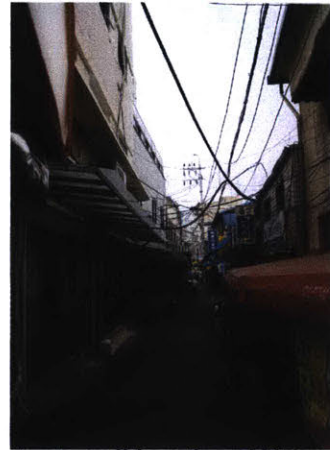
To fully understand the interrelations between a form, spatial quality, and the pattern of its current use, the street condition, architectural type, program, number of pedestrian is also recorded.



location



border condition

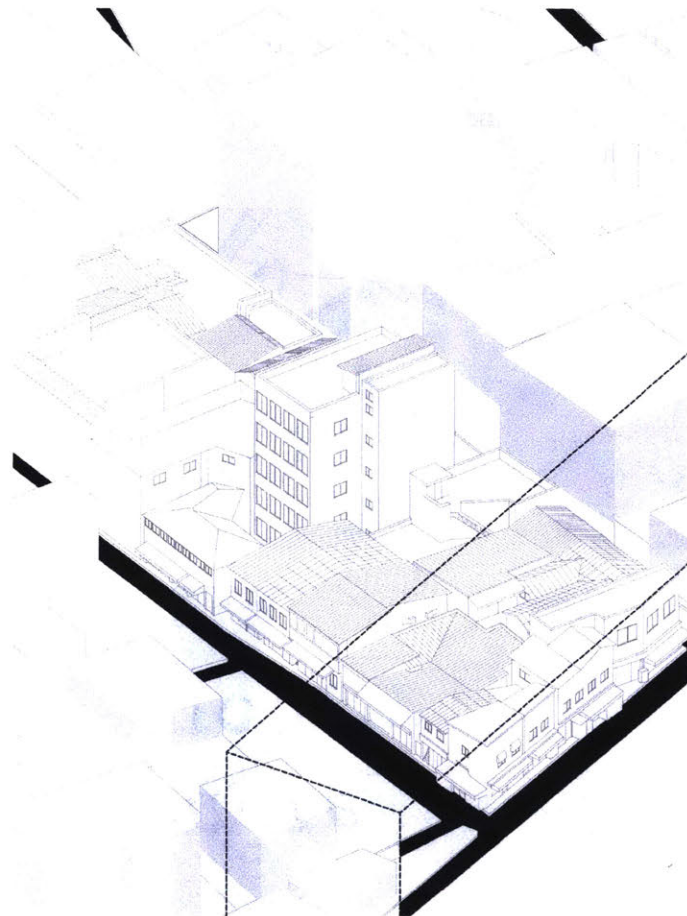


street condition - 2m width

Strikingly enough, all of the eight neighboring blocks are fully operating with vigor. Yet, it is difficult to spot a pedestrian such as myself on the street.

The industrial enclave, while fully functioning in terms of economic activity, created hostile environment and deteriorate the liveability greatly with noise, filthiness, density and so on.

This condition matches perfectly with the 2003 research indicates that the percentage of residential house in this area is now only 0.39%. The symptoms of social cleavage such as innercity problem and doughnut effect is clearly indentified in this neighborhood.

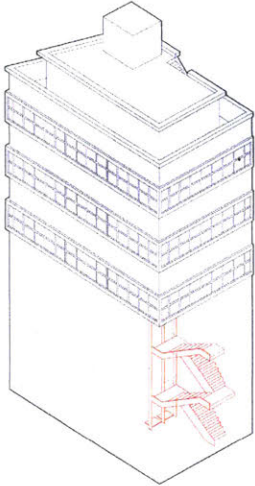


Adaptation

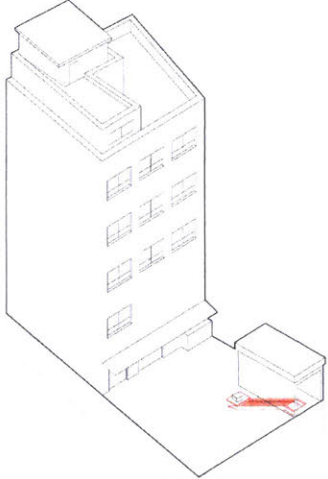
One of the interesting conditions is the adaptation and introduction of new architectural devices that enable typical residential houses to serve commercial and industrial purposes. Since these architectures have characteristics of both residential and commercial, this unique hybridization opens up a new possibility of co-habitation of working and living. Understanding the form and function of each components as an entity and as an agglomeration is crucial in order to reorganize the block and enhance its performance.



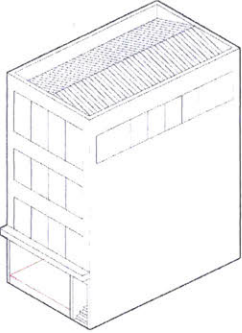
internal cargo lift
@ staircase



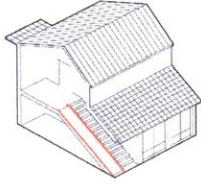
additional entry
to basement



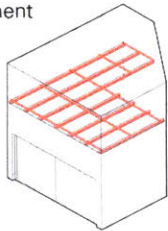
raised platform



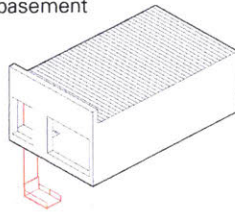
cargo slide



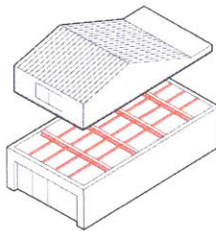
height adjustment



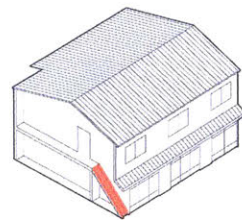
cargo lift to basement



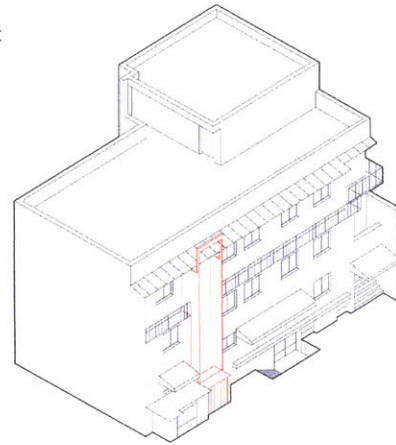
additional floor



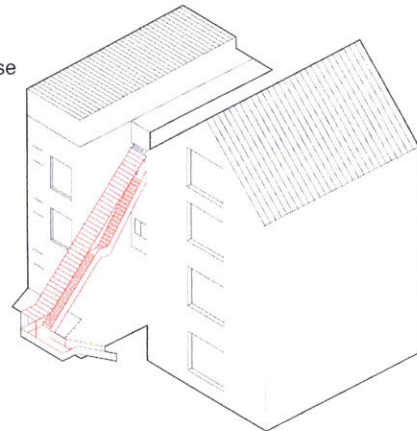
conveyor belt



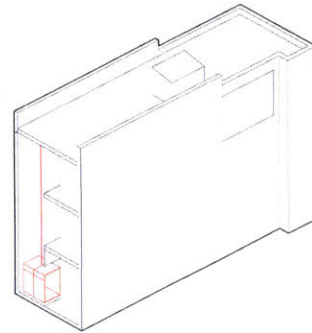
external cargo lift



external staircase



internal cargo lift



2. URBAN INTERVENTION

Prevalence of hardscape

Constructing infrastructure as a means of transportation became prioritized national goal in order to achieve modernity. In this process, thirty out of thirty five tributaries of the Han river were covered with concrete and Cheonggyecheon which had served citizens for more than five hundred years transformed into a combination of freeway and underground sewage system. An elevated highway that overpasses the newly constructed road was introduced later due to the frequent traffic congestion.

Cheonggye stream transformation



introduction of hardscape



— permeability impaired



Frequent flood

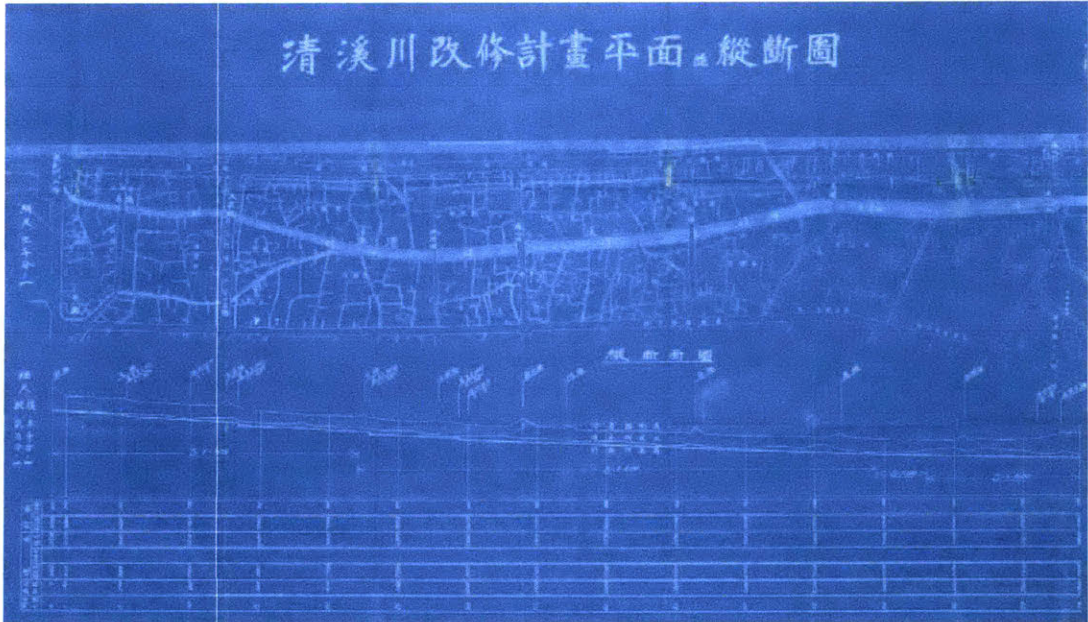
Bukaksan mountain 250m

national shrine sewoonsangga

Namsan mountain 159m



The conducted survey revealed that organic layout of the site is a direct reaction to the hydrologic system. However, the introduction of the new pavement failed this natural cycle. Restoration of this unique system will benefit a designer to reorganize the neighborhood in accordance with existing fabric as well as natural system.



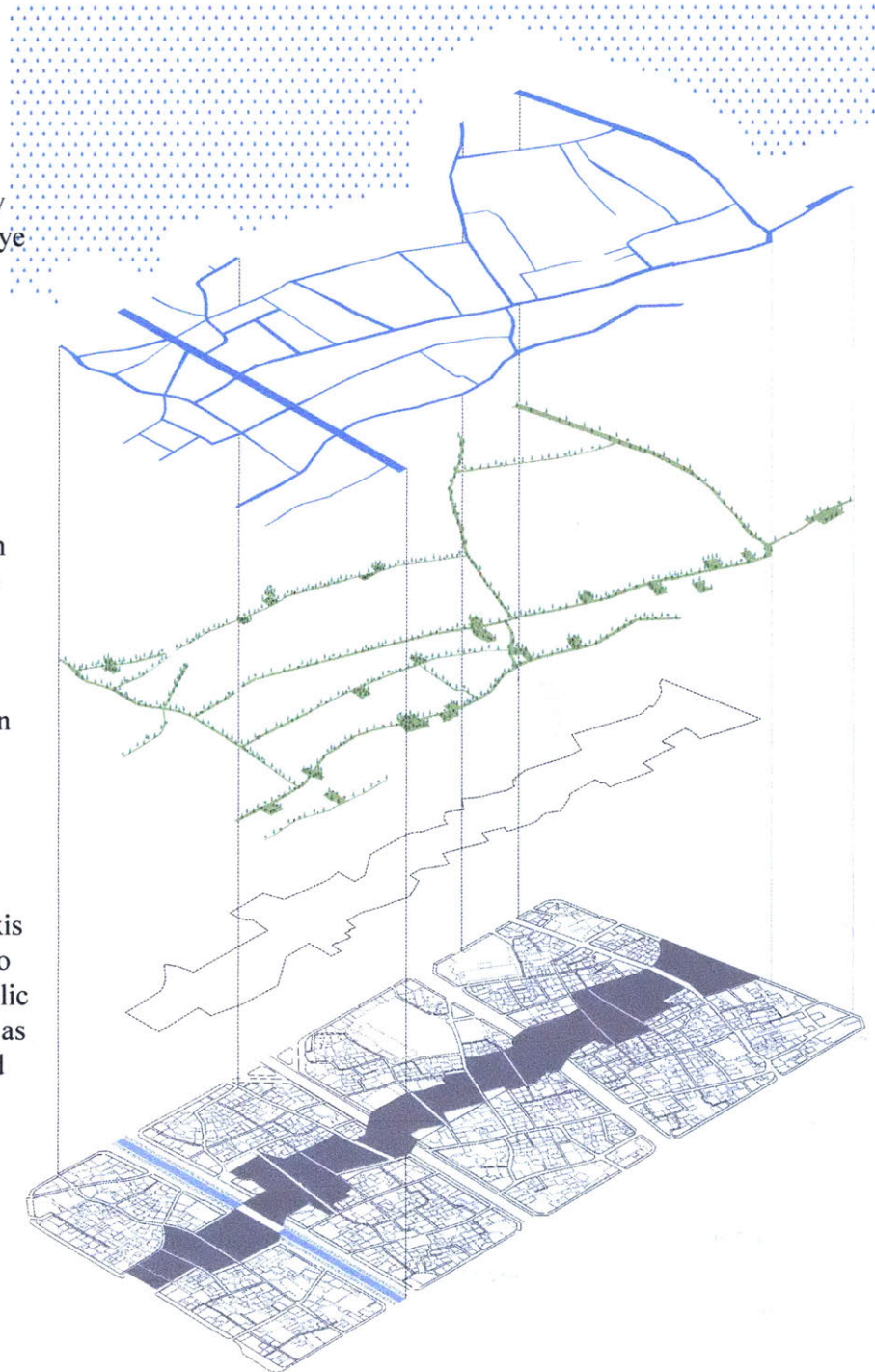
Cheonggye creek survey, plan, section

Sustainable infrastructure

1. tracing the former tributary of the Cheonggye creek

2. restore the tributary system with permeable pavement, transform the street as a permeable green network

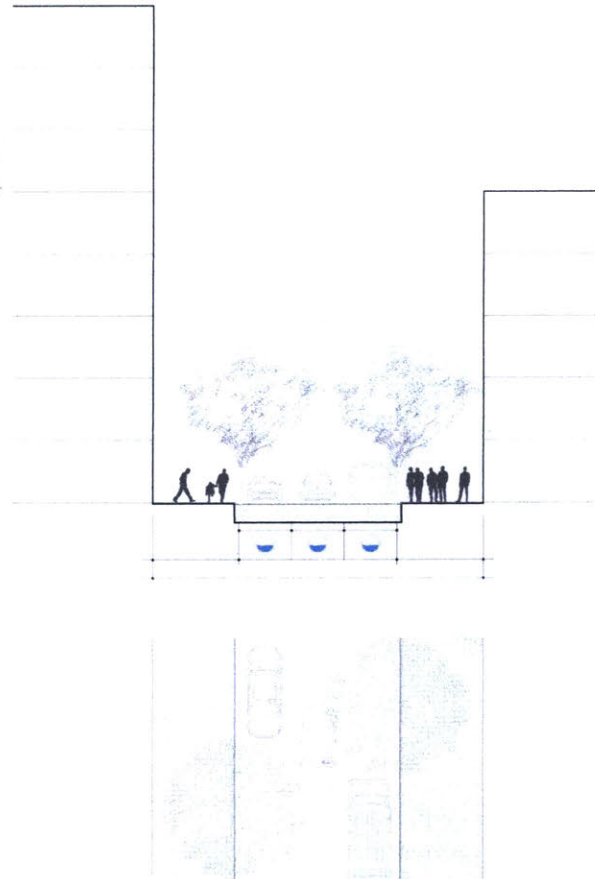
3. the central axis transformed into a vegetated public space performs as a watershed and temporary rainwater repository



Street refurbishment - a green network

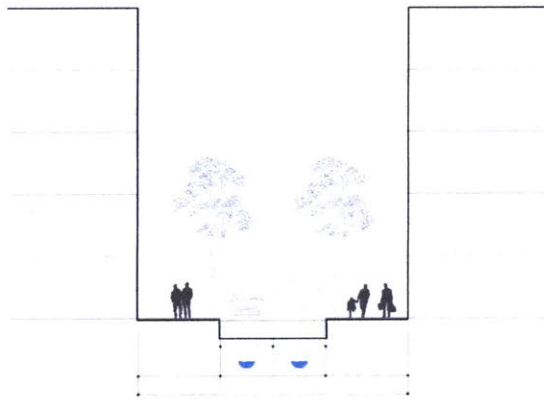


Pervious street

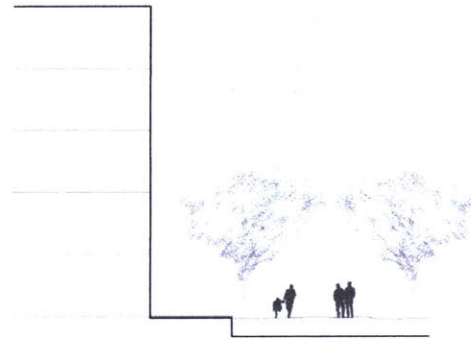


Main traffic loop
width 8m
shared traffic - vehicular, pedestrian

Inherited pedestrian oriented street system of 1900's, majority of the streets within the blocks are narrower than 5m. Refurbishment of this unusual system will be extremely beneficial. It is not only a chance to enhance connectivity but also a chance to introduce permeable pavement system.



Minor traffic loop
width 5m
shared traffic - vehicular, pedestrian



Central public axis
width 50m
pedestrian only

Introduction of vegetation will also enhance liveability of the neighborhood by absorbing noise, enhancing air quality, providing privacy, and purifying storm water. The vegetated uneven pavement will also be beneficial to regulate traffic flow slow, help to prevent potential traffic accident. Since the condition of pedestrian share the road with cars is not rare in Korea, this type of safety precaution is required.

Potential site for new hybrid typology

INDIVIDUAL COMPONENTS BLOCK1



AREA: 1,153m²
NUMBER OF GRAIN: 8
CURRENT USE: RETAIL, SERVICE



AREA: 2,510m²
NUMBER OF GRAIN: 18
CURRENT USE: RETAIL, SERVICE



AREA: 1,564m²
NUMBER OF GRAIN: 10
CURRENT USE: RETAIL, SERVICE



AREA: 1,457m²
NUMBER OF GRAIN: 2
CURRENT USE: RETAIL, SERVICE



BLOCK2



AREA: 799m²
NUMBER OF GRAIN: 2
CURRENT USE: RETAIL



AREA: 1,647m²
NUMBER OF GRAIN: 12
CURRENT USE: RETAIL, PARKING



AREA: 3,090m²
NUMBER OF GRAIN: 23
CURRENT USE: RETAIL, FABRICATION



AREA: 1,992m²
NUMBER OF GRAIN: 10
CURRENT USE: RETAIL, OFFICE





BLOCK3



AREA: 2,998m²
NUMBER OF GRAIN: 15
CURRENT USE: PRINT, SERVICE

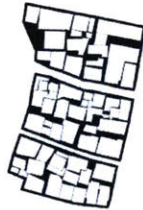


AREA: 1,692m²
NUMBER OF GRAIN: 10
CURRENT USE: PRINT, SERVICE



AREA: 2,087m²
NUMBER OF GRAIN: 21
CURRENT USE: PRINT, SERVICE

BLOCK4



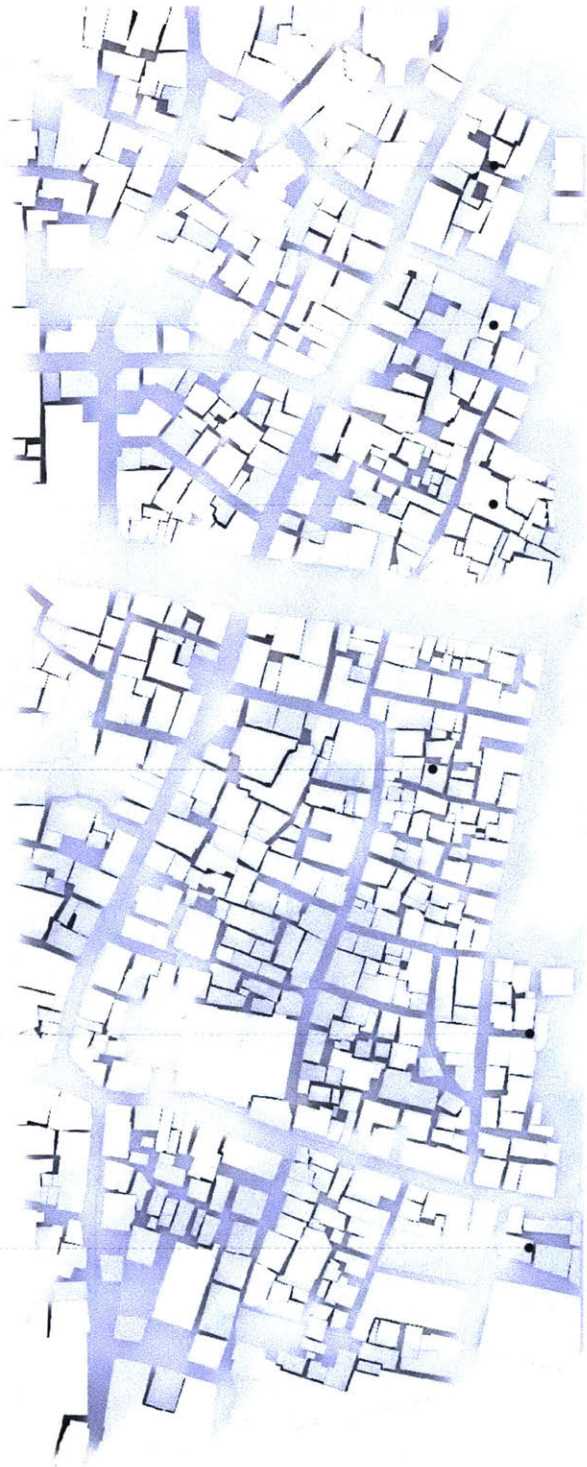
AREA: 4,485m²
NUMBER OF GRAIN: 61
CURRENT USE: PRINT, SERVICE

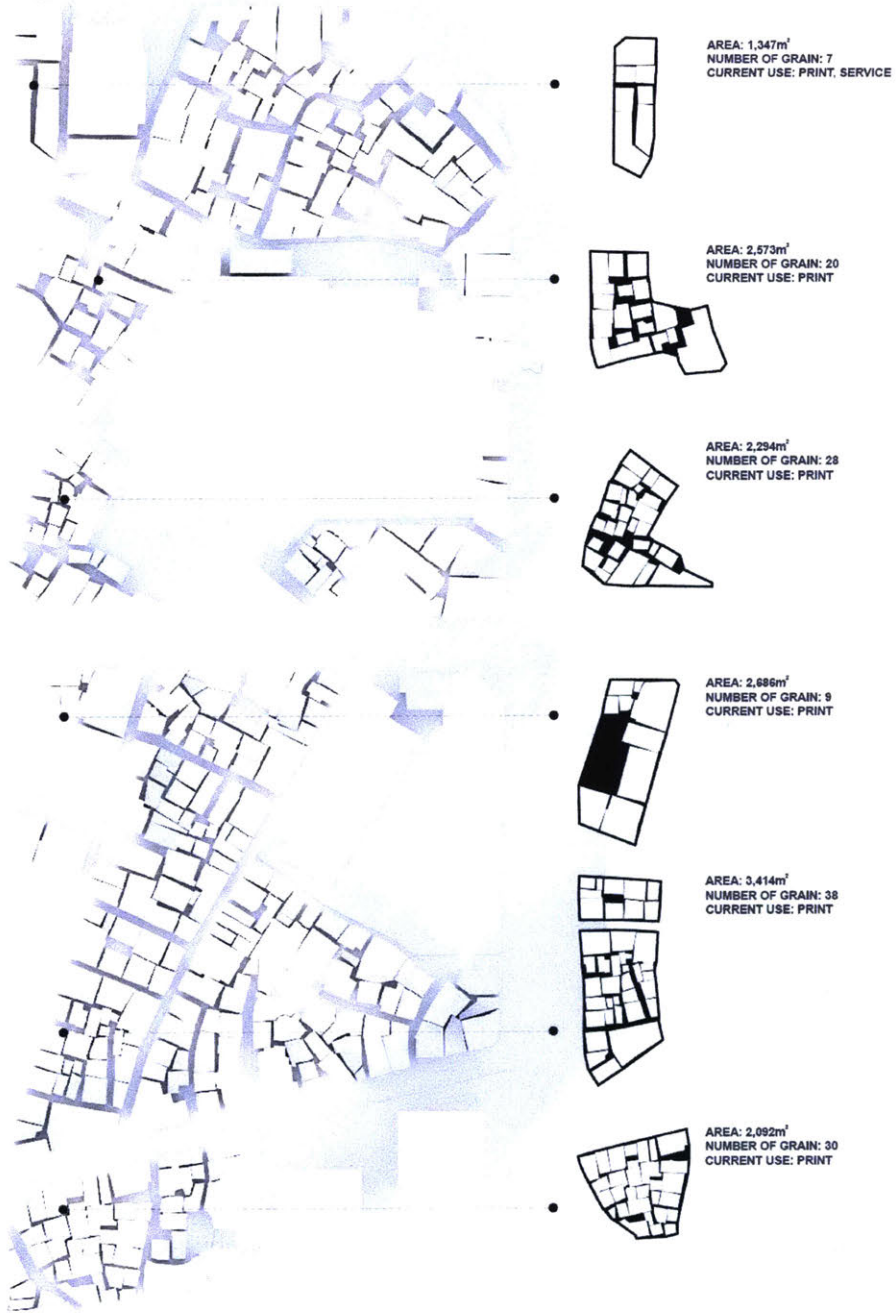


AREA: 2,277m²
NUMBER OF GRAIN: 22
CURRENT USE: PRINT, SERVICE



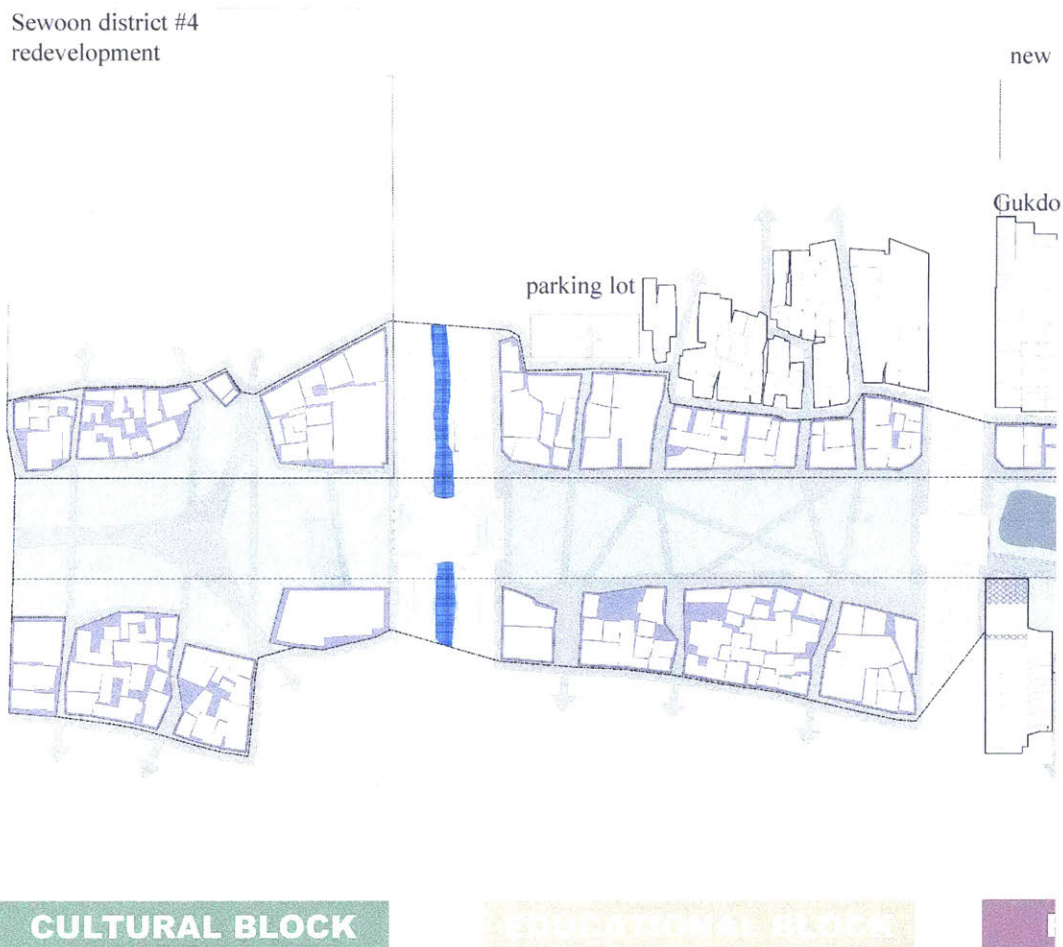
AREA: 2,041m²
NUMBER OF GRAIN: 7
CURRENT USE: PRINT, SERVICE





SCALE 1:1000

Master plan



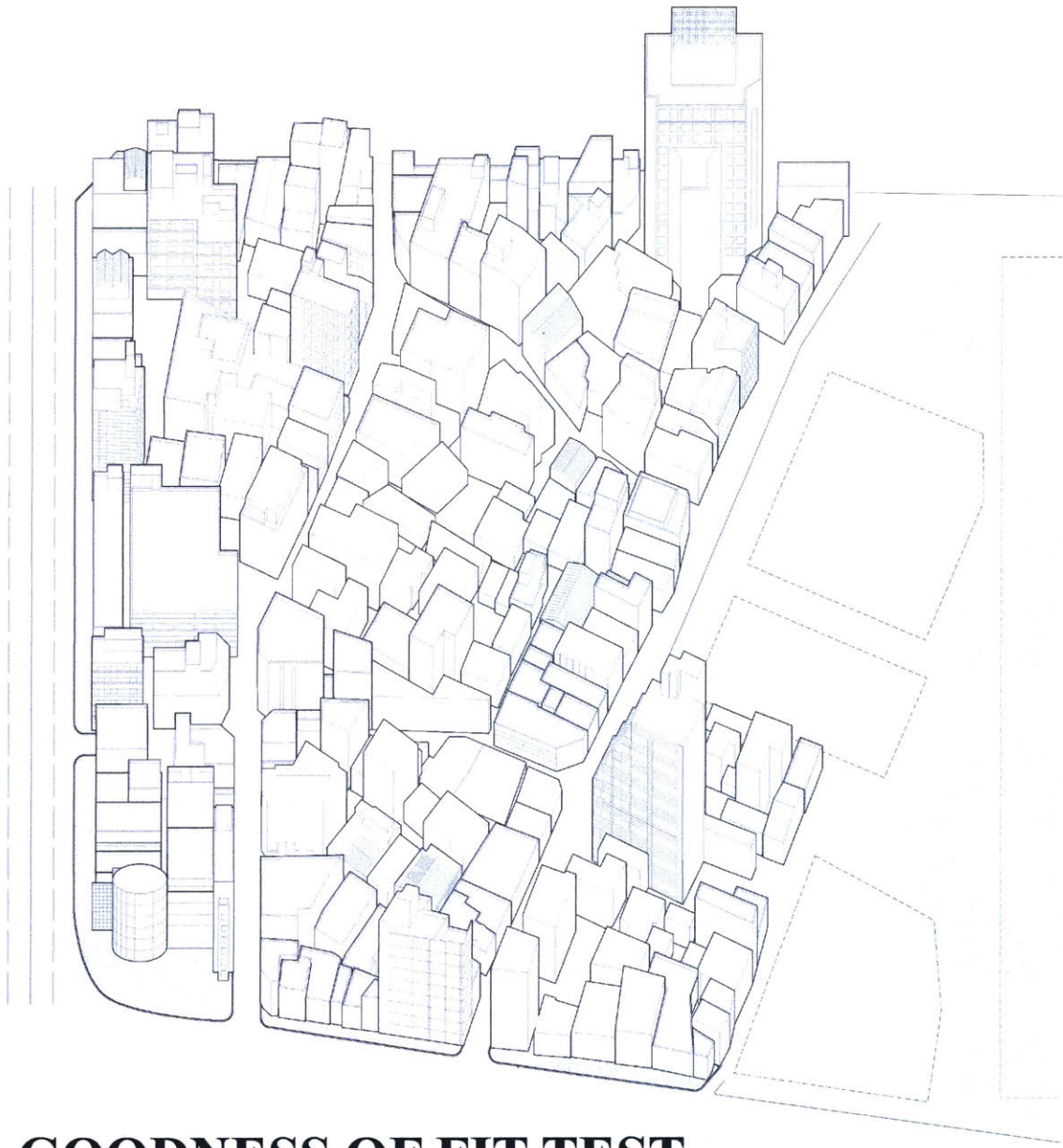
The most important feature in this proposal is the transformation of the central axis. The urban figure is now void and public space that fuels diverse public activities and encourages small scale revitalization of its surrounding neighborhood. Combined with the street refurbishment plan, now the central green axis provides multiple entry point to the neighboring blocks encourages its users to freely navigate the surrounding neighborhoods. The existing blocks on the perimeter of the central axis gives opportunity to reorganize the grain with new form and functionality.



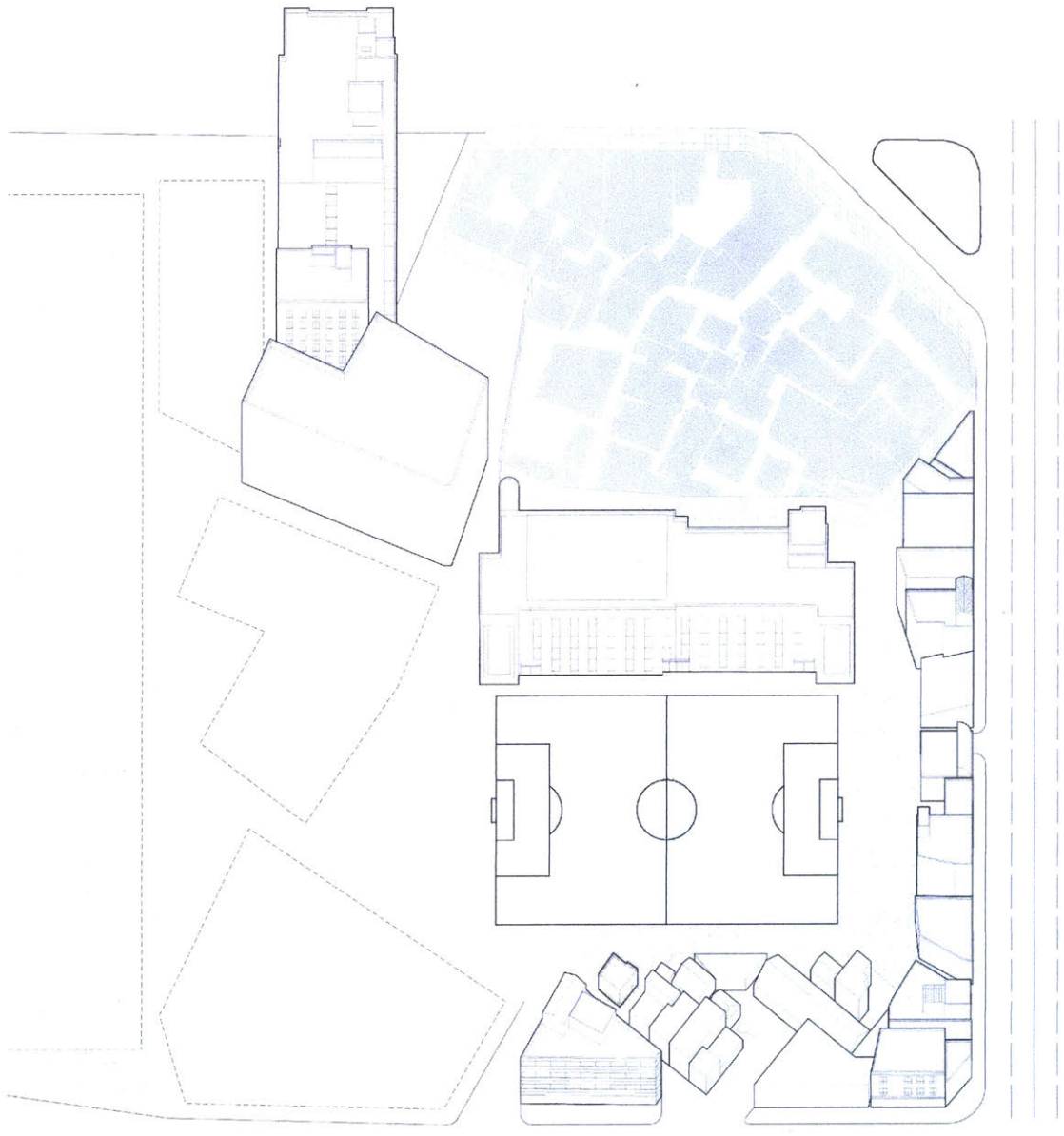
RESIDENTIAL BLOCK

BOOK MAKING BLOCK

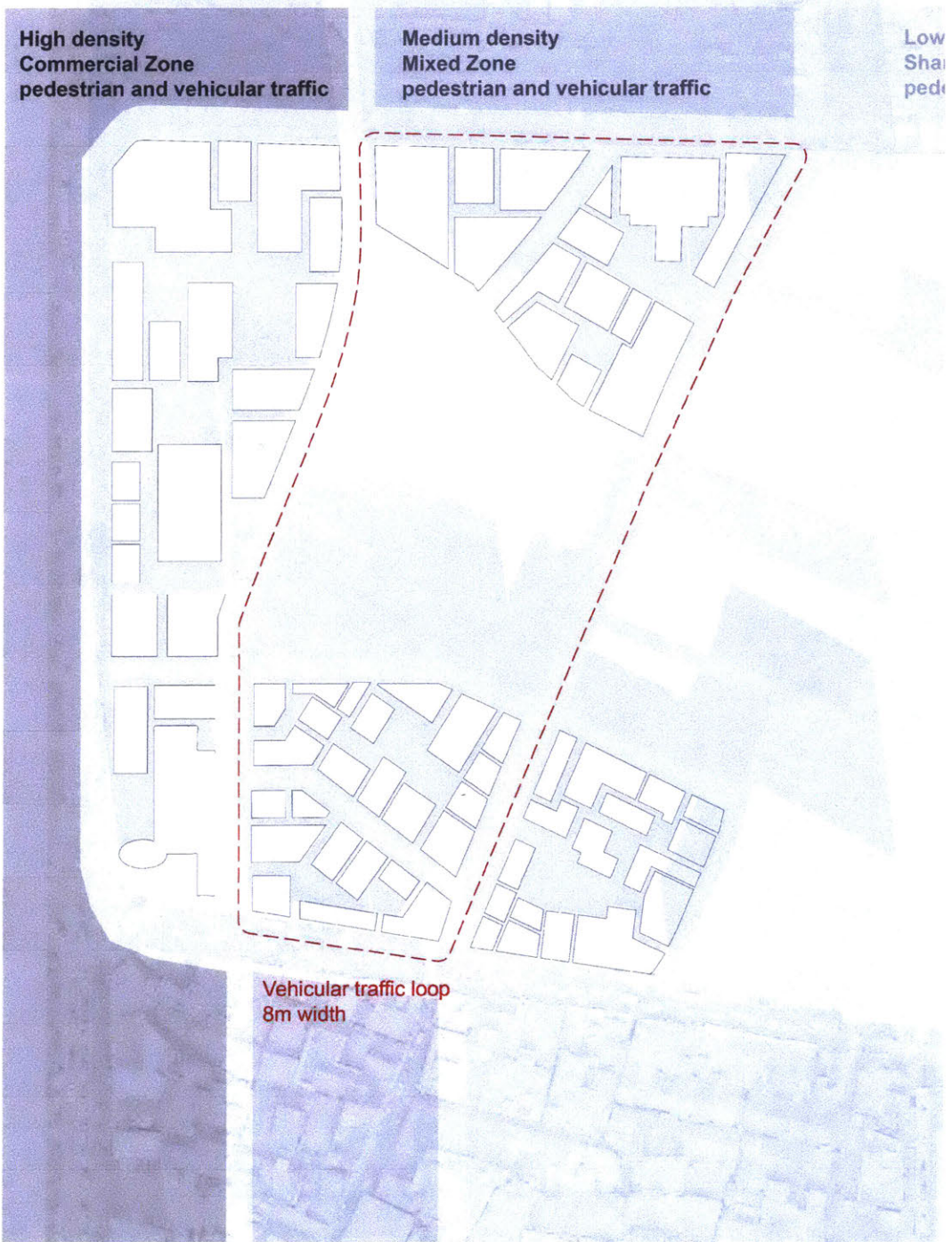
The design study of this combinatory/collective form will further guide the transformation of the inner blocks with similar logic. This is also very important due to the fact that this masterplan entails total deconstruction of the existing mega form. To minimize the impact of this erasure, the new projects planned on the periphery should provide adequate space for business to the current user of Sewoonsangga complex. Over 600 business is currently registered. Fail to provide space for those 600 will make this approach another form of gentrification. While enhancing the identity of each block, a clear plan to redistribute the existing business is crucial.



3. GOODNESS OF FIT TEST



block 3 - testbed



Revision of zoning

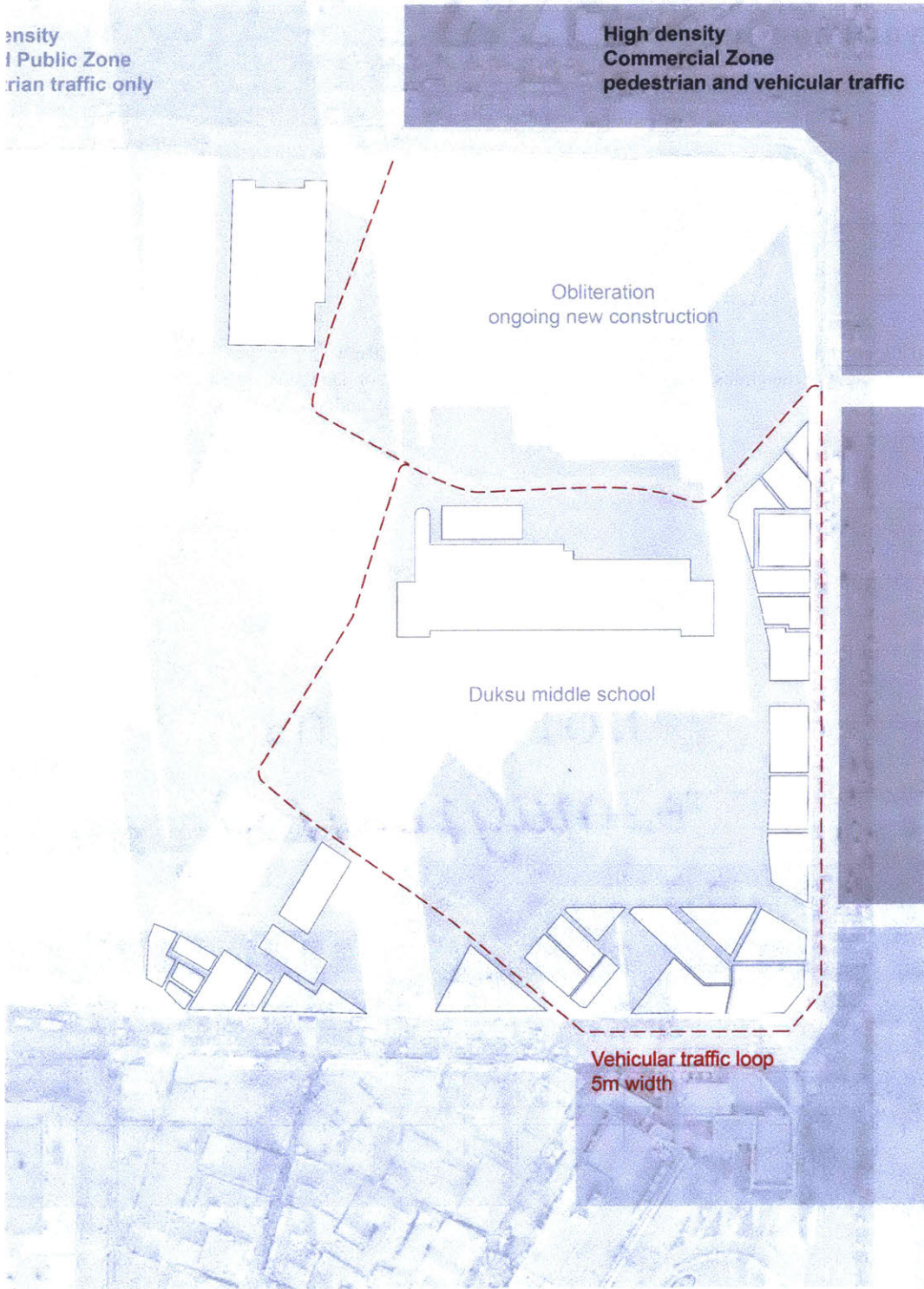
High density
Public Zone
Pedestrian traffic only

High density
Commercial Zone
pedestrian and vehicular traffic

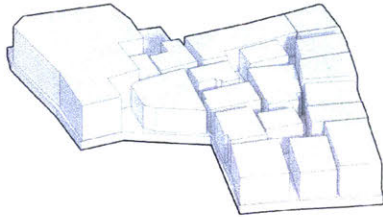
Obliteration
ongoing new construction

Duksu middle school

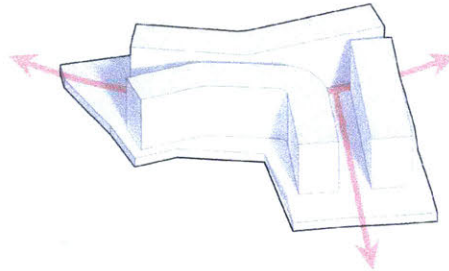
Vehicular traffic loop
5m width



Courtyard housing



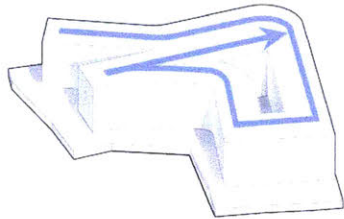
Existing cluster
average height of the grains - 8m



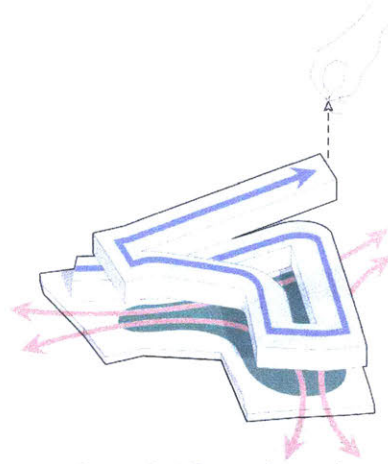
Reorganization
new spatial organization which enhances
connectivity and provide space for a public space



West elevation

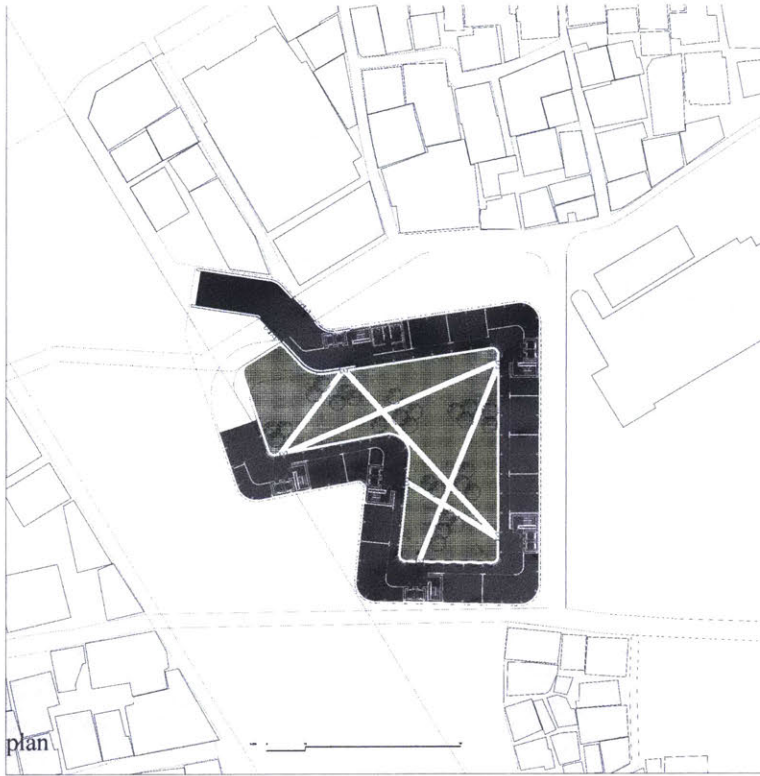


Introduction of internal circulation
merge individual buildings into one
no public access is available



Three dimensional transformation
both public and internal connectivity is enhanced
space for public activity is provided



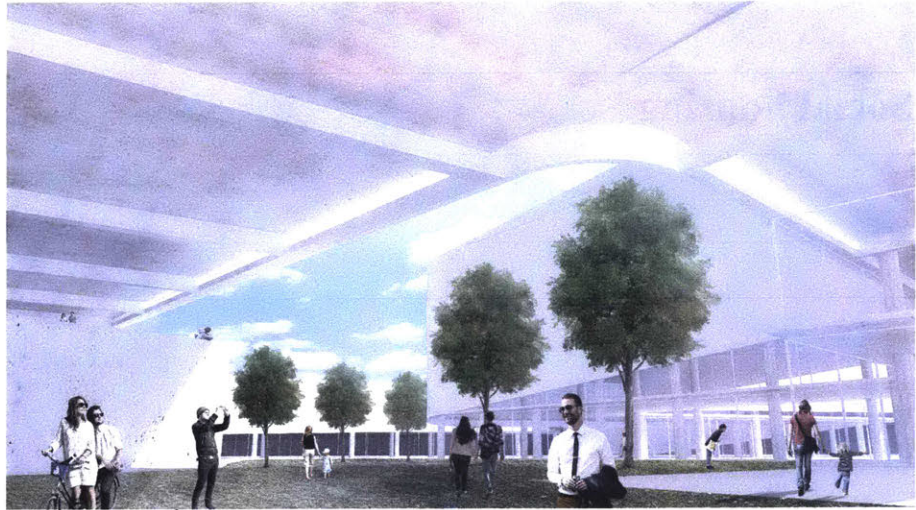


Replacing a block consists of multiple low rise buildings, proposed courtyard housing provide vast central courtyard area that is publically accessible. This mixed use architecture provides various functions such as commercial store, rental office, and residential units. The unique spiral form of this building provides maximum space for program while occupies minimum footprint. The continuous roof top ramp also provides a unique opportunity to occupy and use roof area as a public space for communal activities.

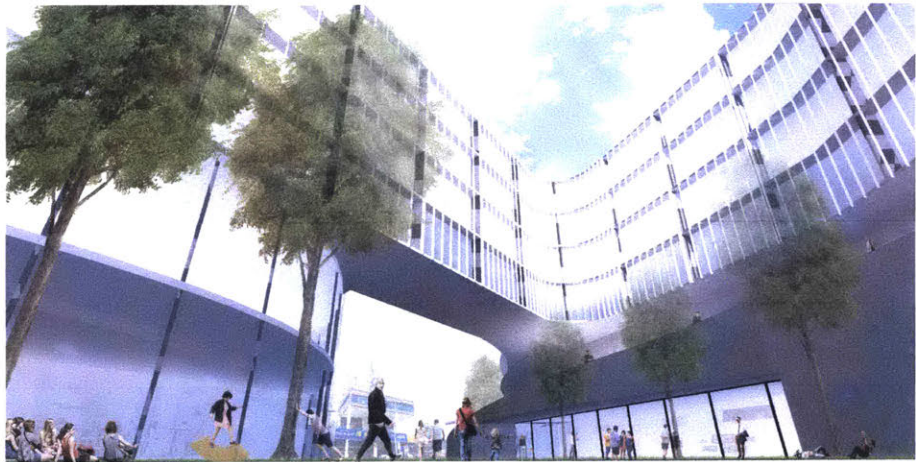


section

The structural system of this project is a simple and economic column and slab. What differentiate this building from others is the use of its skin. Since the commercial and retail programs prefer transparency over adequate shading, the facade system of this project continously elevates following the gentle angle of the ramp, distinguishes private and public programs .



exterior perspective

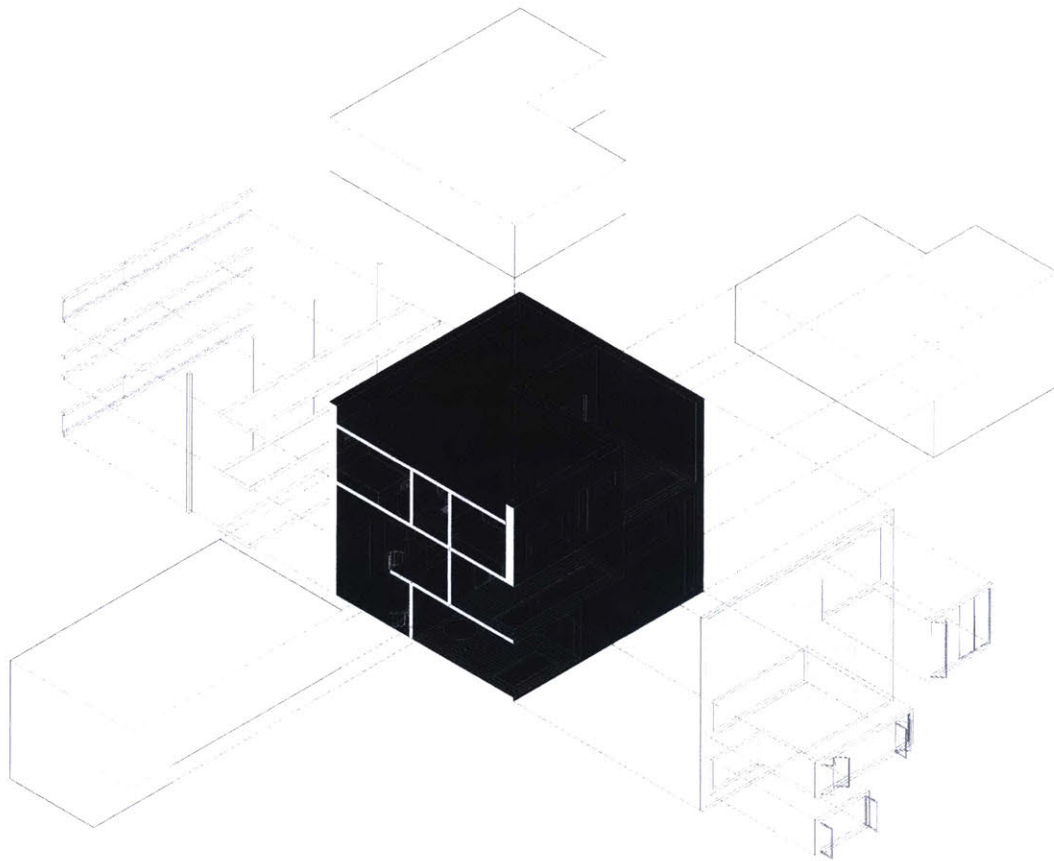


exterior perspective



interior perspective

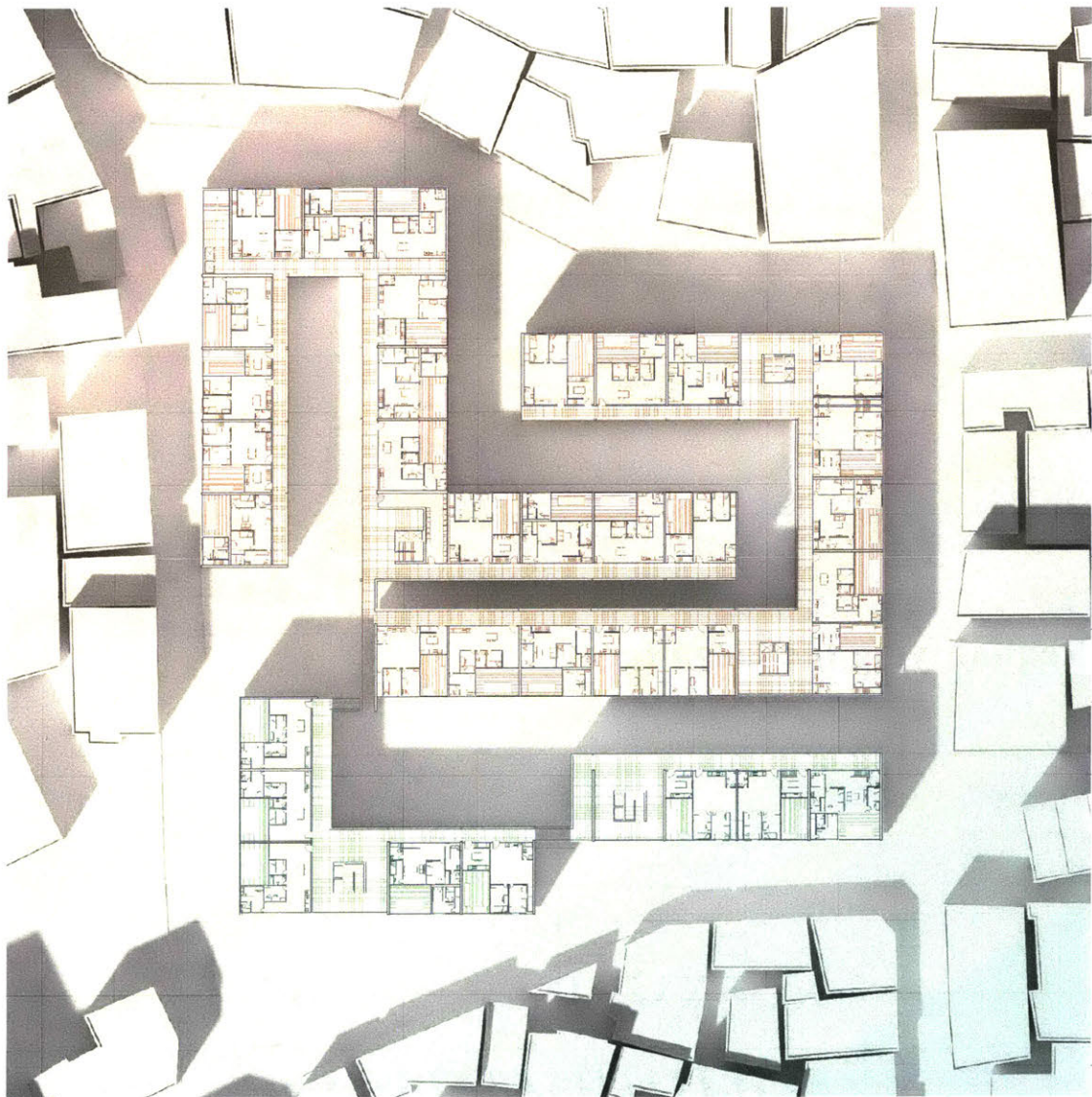
Social housing



spatial interlocking

While majority social housing is known for its uninspiring use of simple geometry in order to minimize the construction cost, this project proposes a series of combinations of customized, pre-fabricated housing unit spatially interlocked to form a micro community. This spatial combination of three units will form a single unit in a perfect cube form, easily agglomerate together to form a larger cluster.

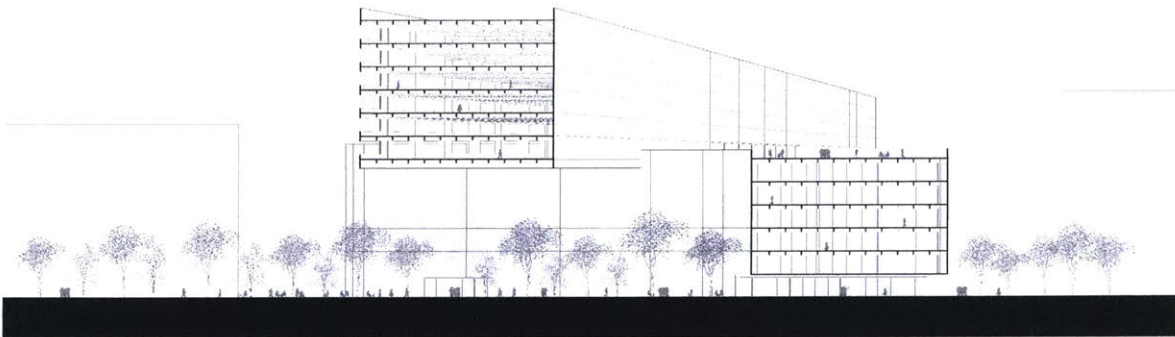
The publicly accessible interior courtyard, pleasant shading on the ground level, and adequate daylighting on residential levels, as a whole will make this proposal a community friendly hybrid housing. The interior courtyard will be beneficial to the commercial programs on the first and second level as well as the residents who need a cozy place to rest.

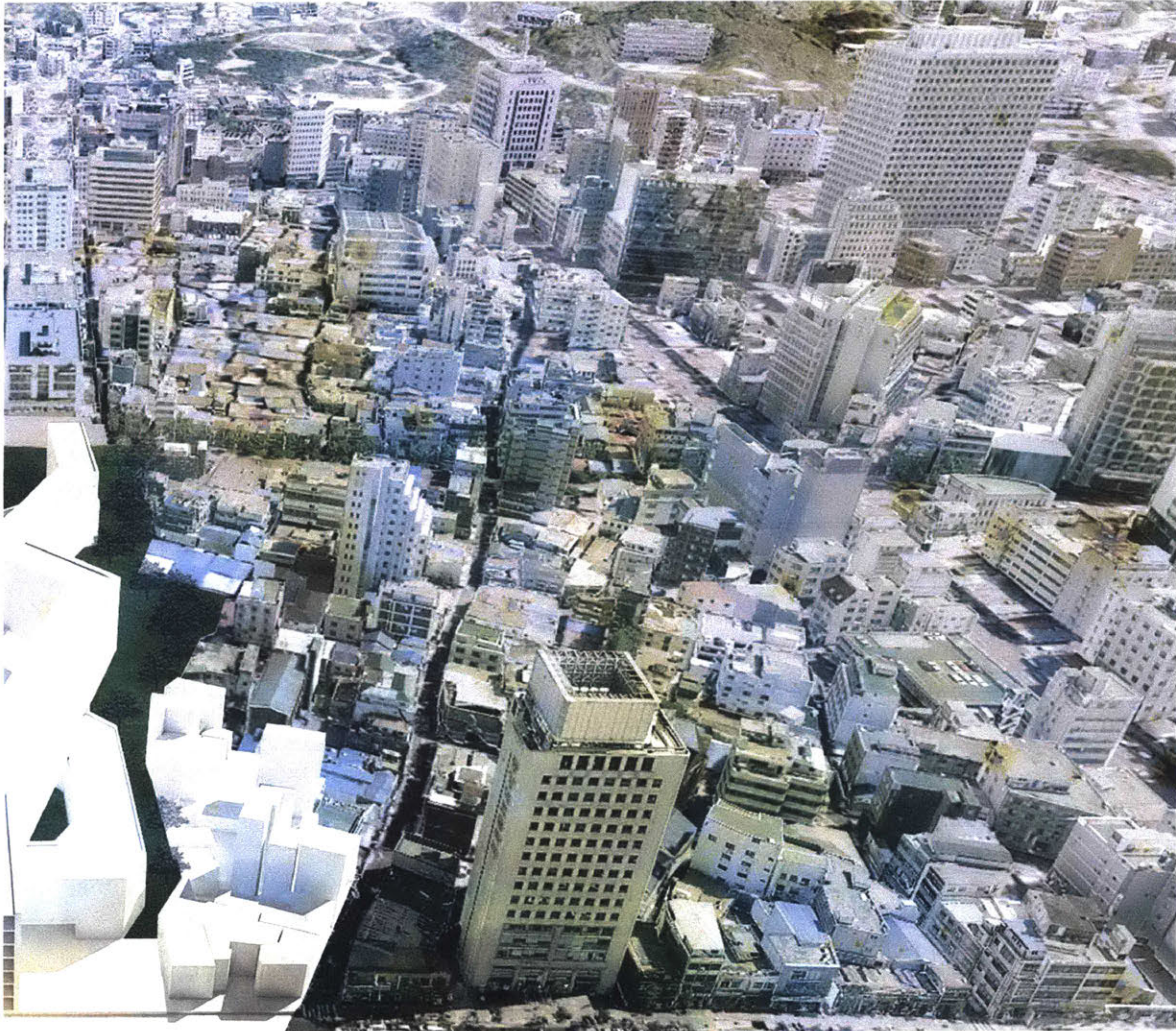


the cluster

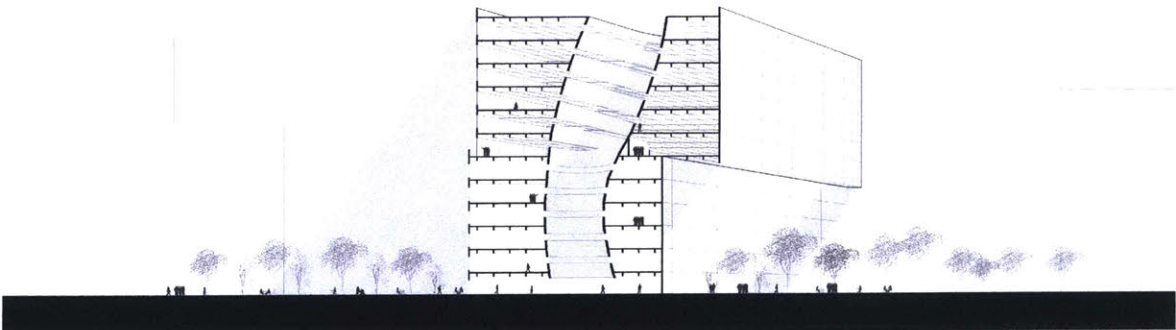


Requalifying the mega form





Despite the fact that the idea of mega form is causing numerous urban problems in Sewoonsangga neighborhood, the potential of this concept still requires further investigation. In this study, the monotonous massing of the existing mega form is replaced with more dynamic and less intimidating one.



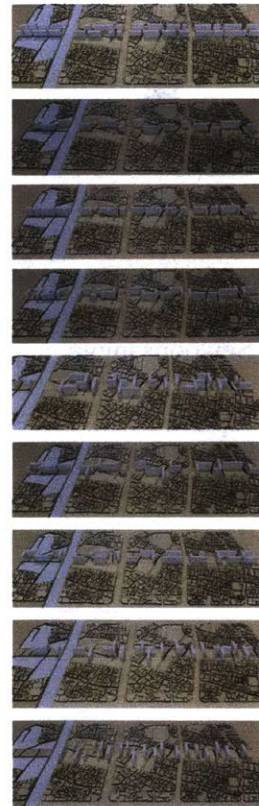
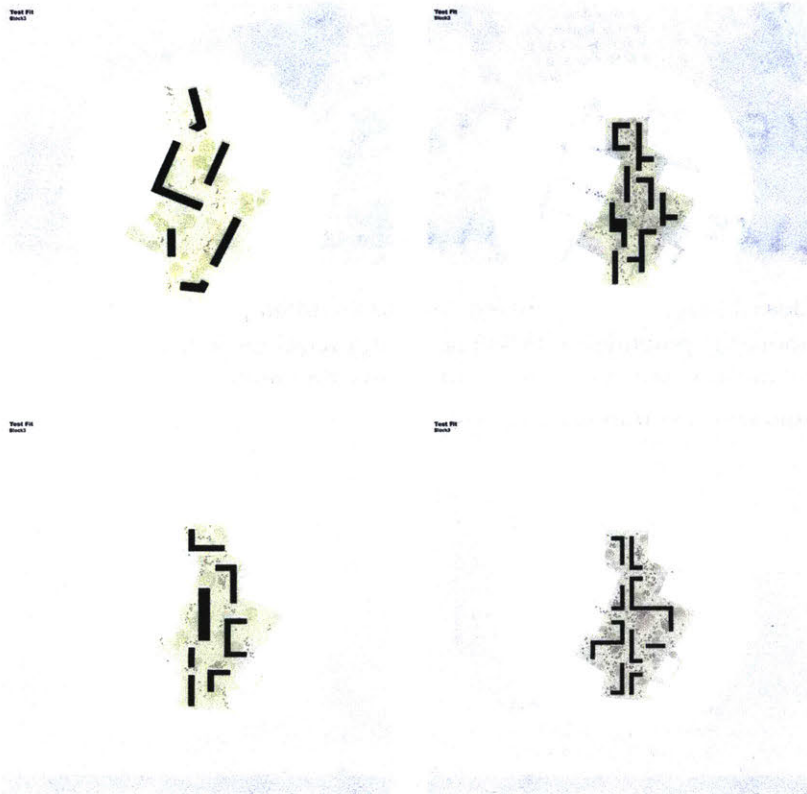
Linear perimeter block



Karl Marx Hof, Vienna 1927 ~ 1930
image courtesy of worldpress.com



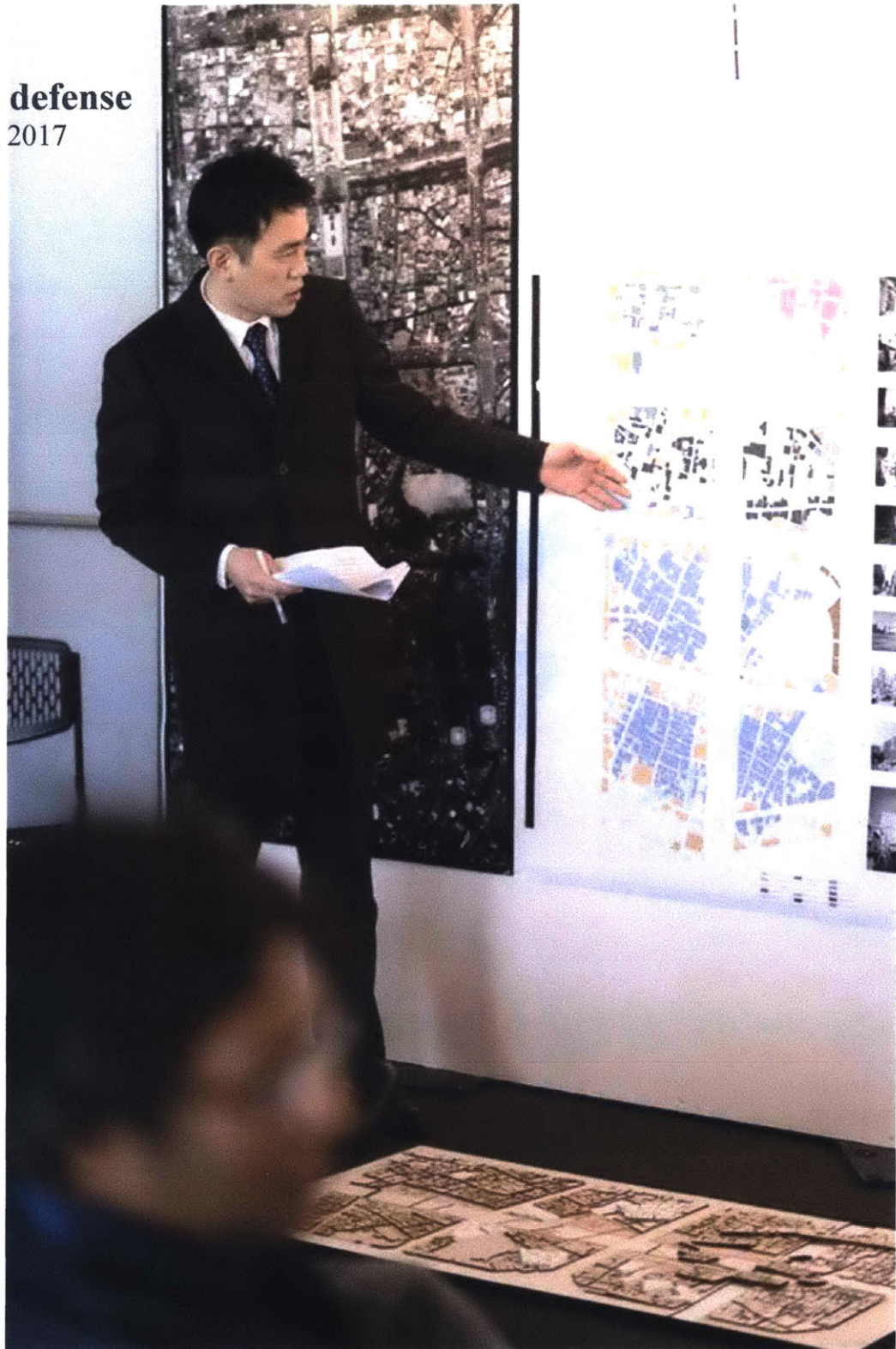
Both the scale and the form of this European precedent has multiple similarity to the Sewoonsangga project. This precedent study introduced a new perspective and different interpretation of existing urban figure; the figure as void. Since the strict use of pure geometry is proven problematic already, this study investigated the use of fragmented components as a spatial armature that defines the central public space.

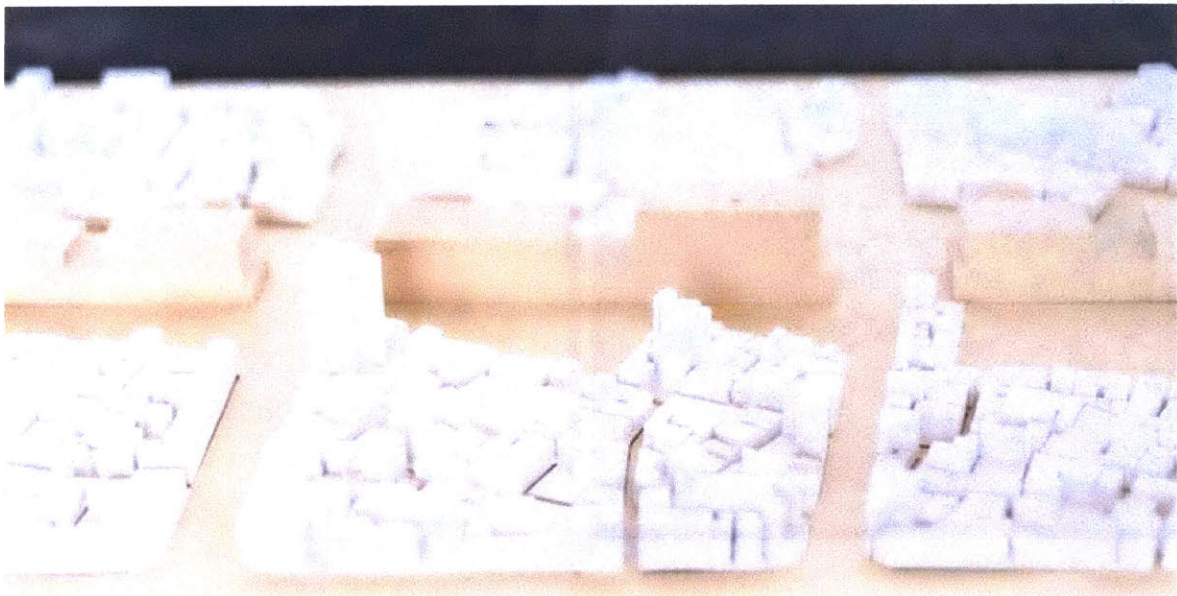
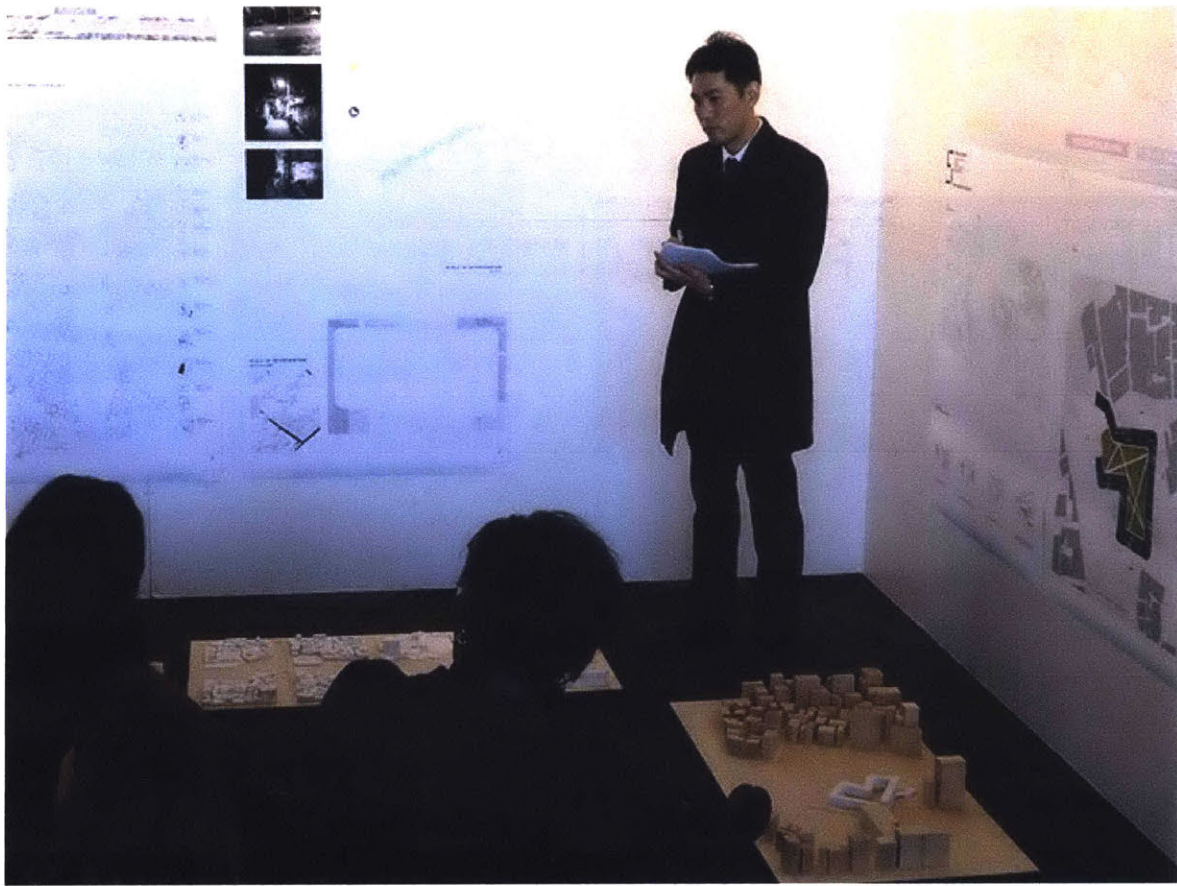


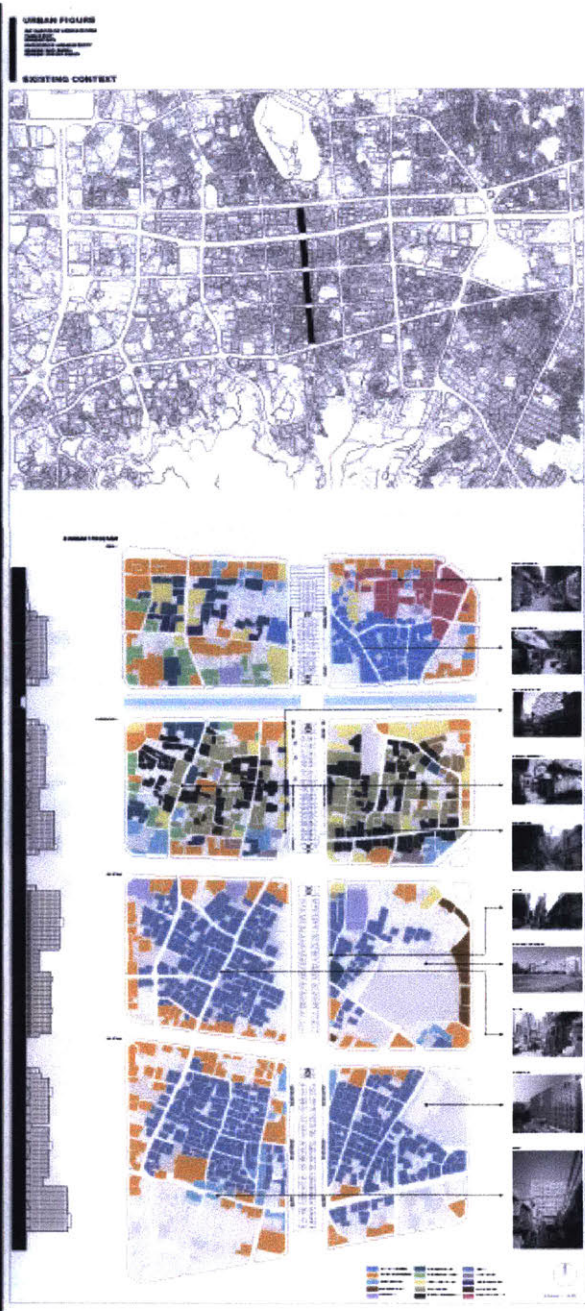


APPENDIX

Thesis defense
DEC 21, 2017






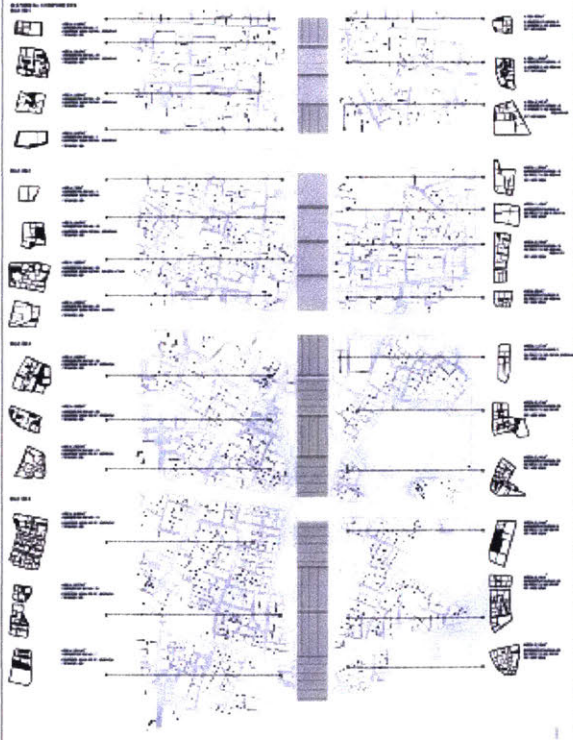


URBAN FIGURE
 AN ANALYSIS OF THE URBAN FIGURE
 THROUGH THE ANALYSIS OF THE
 URBAN FIGURE AND THE
 URBAN FIGURE

REVISION OF URBAN FIGURE




OPPORTUNITIES FOR NEW ARCHITECTURAL TYPOLOGY



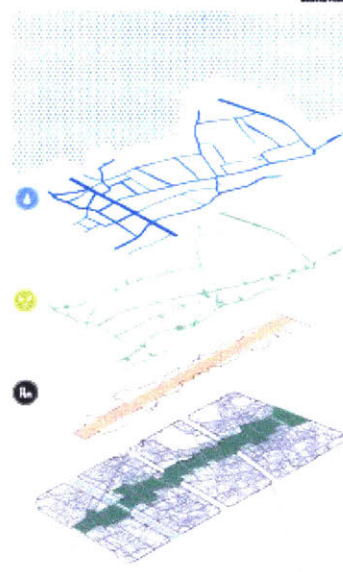
URBAN FIGURE
 AN ANALYSIS OF THE URBAN FIGURE
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ANALYSIS AND TACTICS


PROBLEM



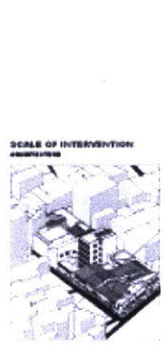

SCALE OF INTERVENTION
 SITE PLAN

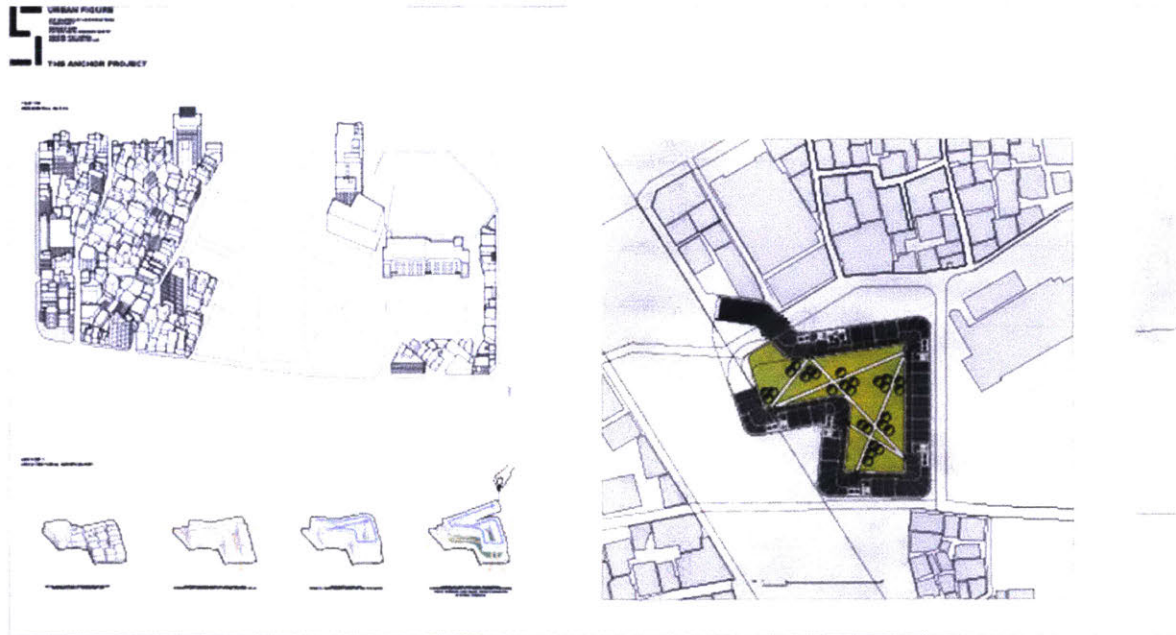
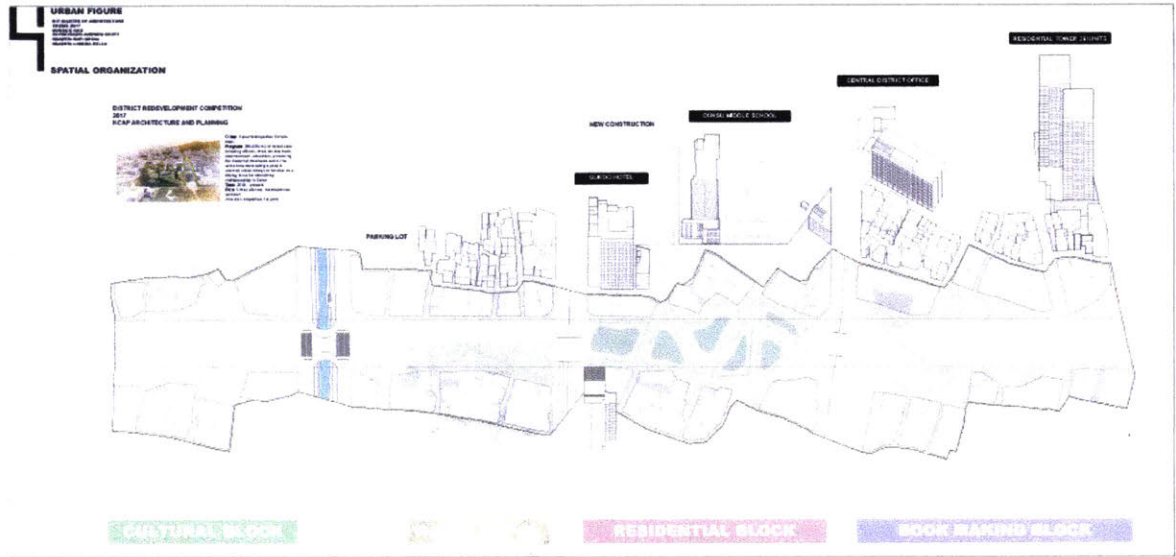


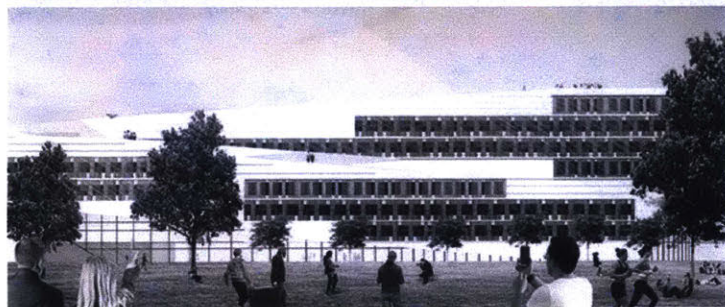
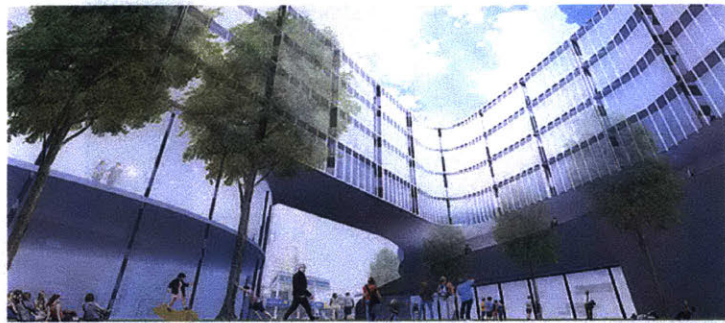
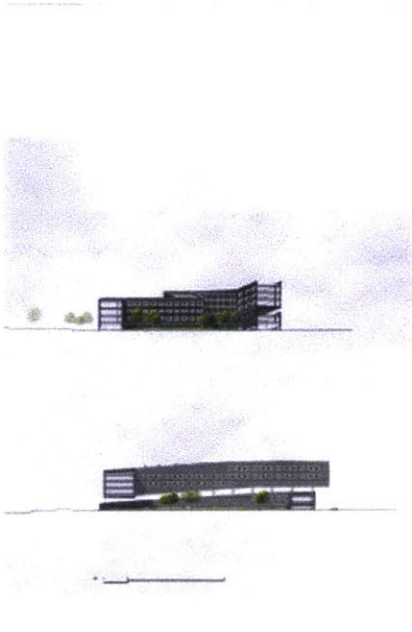
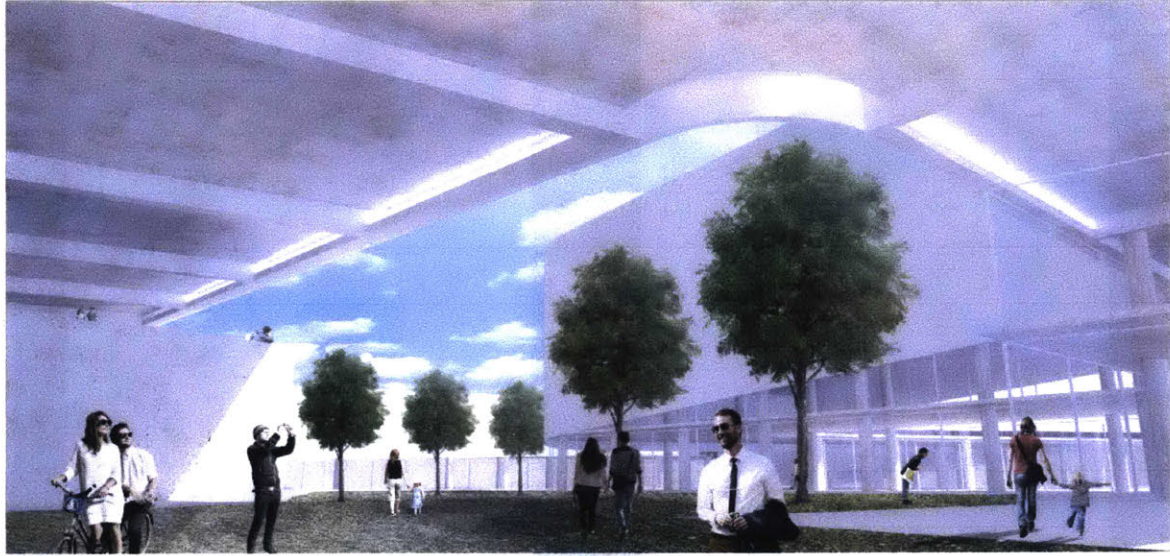
SCALE OF INTERVENTION
 PLAN

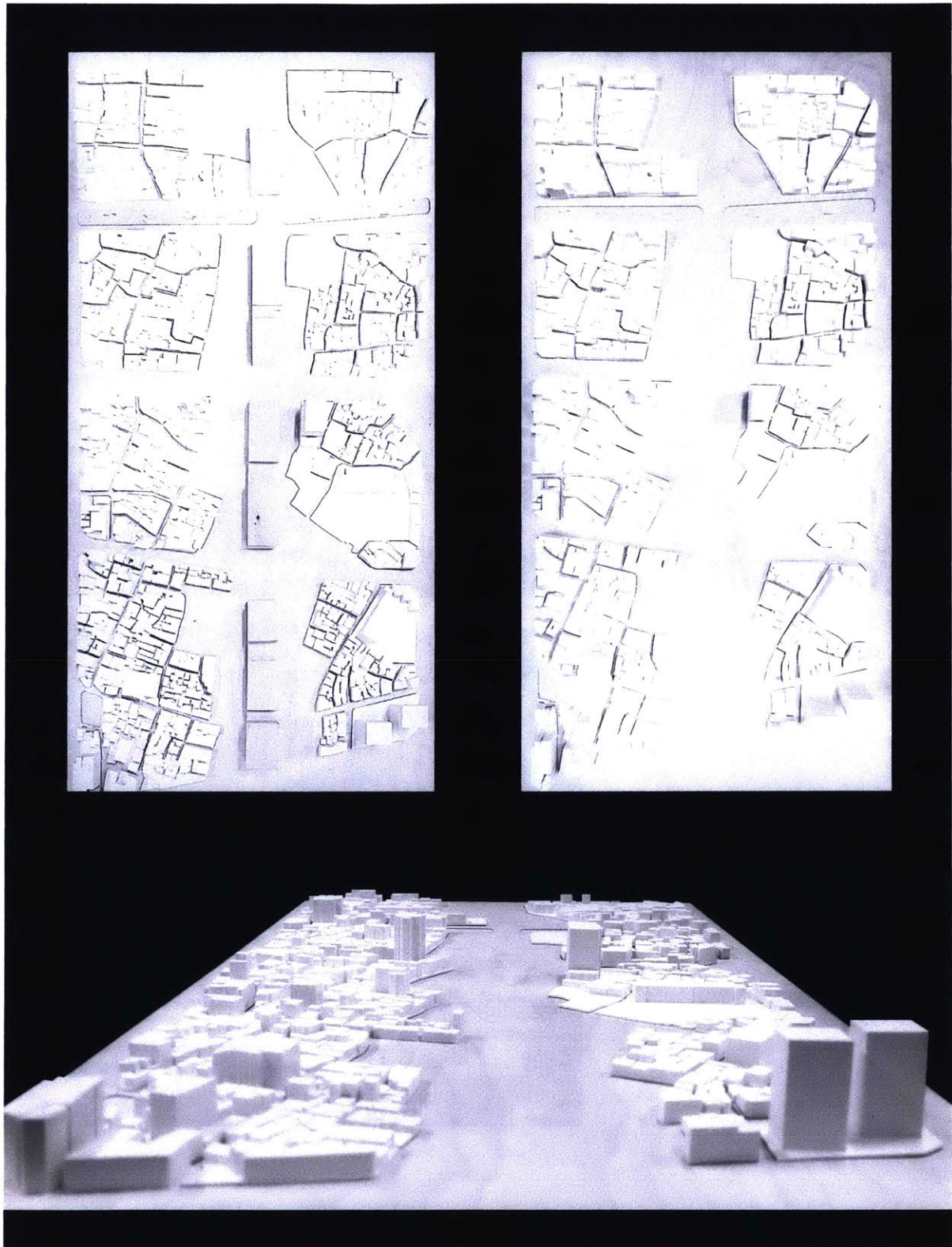


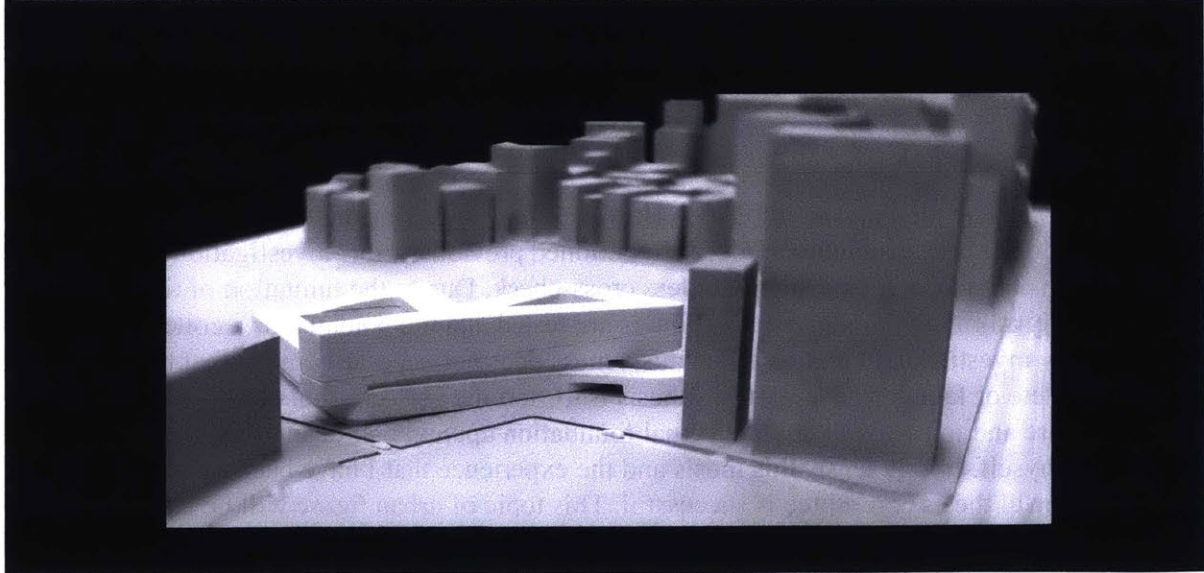
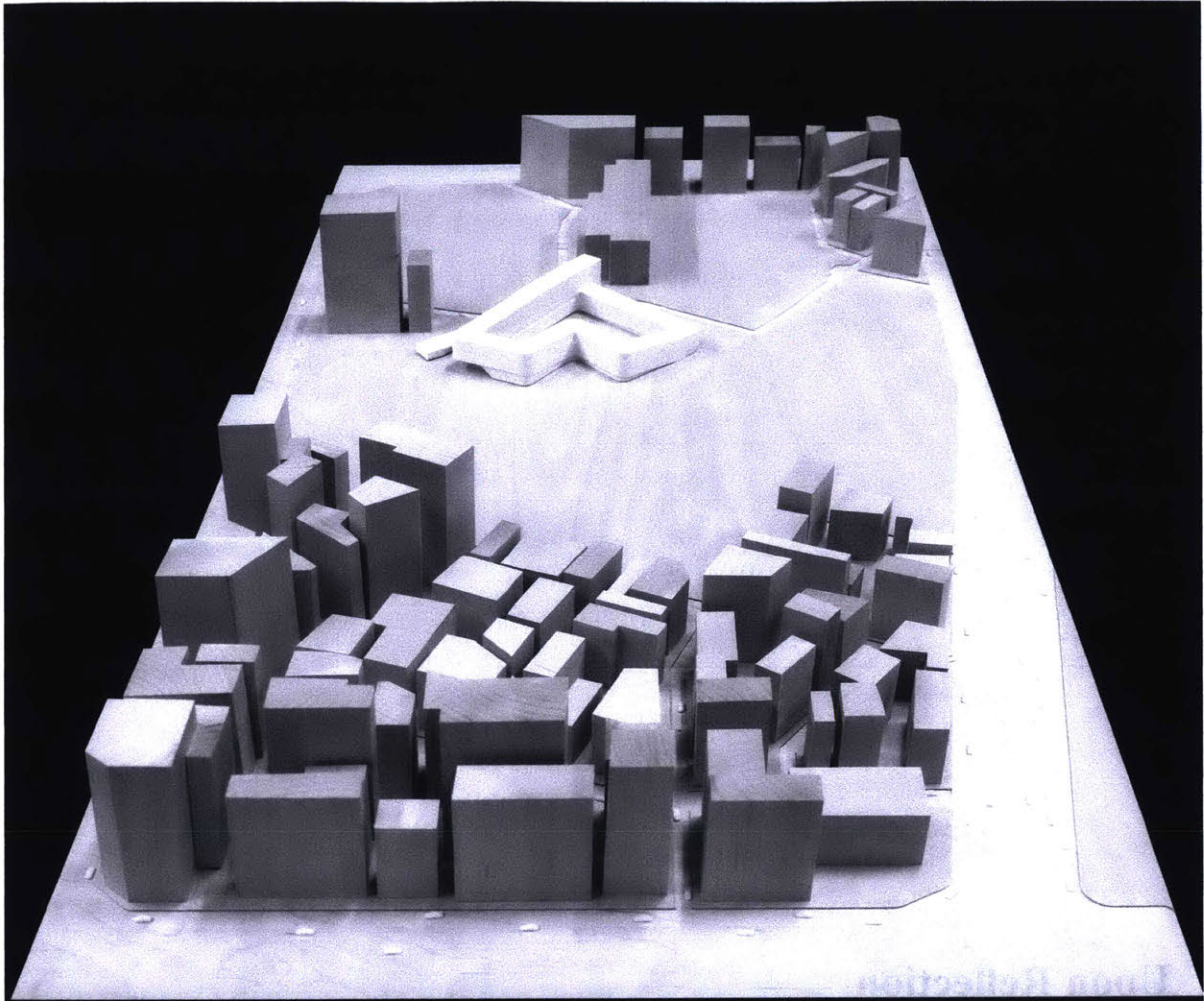
SCALE OF INTERVENTION
 ARCHITECTURE









Upon Reflection

This thesis is defended on Dec 21, 2017. However, this neither means that this research is over nor a clear conclusion has made. As mentioned previously, this investigation requires a thorough collection of data and relentless cross-check. Due to the limitation of time and ability, only a limited number of possibilities are tested and the potential of a collective form is not fully investigated. Yet, this inconclusiveness does not necessarily mean that this thesis is incomplete or failed. The aim of this thesis is to start the conversation on this topic of urban figure and to establish an intellectual foundation upon which I can carry on this research myself. In this sense, this thesis and the experience that I have been through with my wonderful thesis committee is successful. This topic of urban figure will be continuously investigated in my future career.

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