KUWAITI MODERNITY REVISITED:
A CONTEMPORARY MIXED-USE PROJECT IN OLD KUWAIT CITY

by
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ABSTRACT

Caught between a cultural scene nostalgic to historic architecture and economic growth manifesting its volume in tall skyscrapers, the overlooked modern heritage of Kuwait City is increasingly vanishing. This thesis tests to what extent modern heritage can inform a contemporary mixed-use development in Old Kuwait City. Not perceived as a source for fixed prototypes, modern architecture is studied both as a major component of the contemporary cityscape, giving the city its urban nature, and as a product of critical thinking that explores different possibilities in mediating the modern with the particularities of the Middle Eastern context. The work of elite architects inspired an investigatory reading of the contemporary City, with focus on lasting implications both modern planning and design had on the city. Modern heritage of Kuwait City is studied at various scales for strategies, in an attempt to arrive at a design that breaks away from prototypical forms while being continuous with the past.

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CHAPTER 1: INTRODUCTION

Aerial view of Kuwait City, late 1960s, showing both the modern and the historic. From Aljamea.

Modern architecture in Asia, Africa, and Latin America originated as uncritical, if locally flavored, reflections of European and American examples and ideas, rather than as a series of creative responses to local conditions. (Torre 2002, 138)

Frampton's and similar critiques of modern architectural practice in the Middle East contain some truth, and accusations of modern architecture being ill-digested and bearing no relationship to local traditions can be justified to an extent. But these accusations contribute to the exclusion of modern heritage from any architectural discourse today. In Kuwait City, where buildings from the 1960s and 70s constitutes most of the contemporary cityscape, such critiques are being employed to justify a new start from a clean slate, repeating the exact same approach for which modernity has always been condemned for.

Architectural heritage can be more than just "antique". It can become a valuable resource of knowledge and insights

for contemporary design. A heritage is not strictly limited to ancient architecture, or what the public mainstream brand as "historic". As a resource, architecture of the recent past can be of equal value with the historic if not substantially more. Furthermore, Modern heritage in Kuwait City can be examined to identify what architecture shouldn't be, but a more neutral assessment (looking at the "one third full" part of a cup) will reveal qualities that can be built upon.

Modern buildings in Kuwait City collectively form the "background" cityscape that must be analysed to better understand the urban nature of the city. Yet these modern buildings can also be seen as a product of critical thinking, since a great number of them were designed by elite international architects. The notion that modern architecture in the middle east has always been insensitive to context can be shown to be simply not true. Many modern design precedents show different aspects of an approach that sought to somehow incorporate a reading of the traditional surrounding in design. Today, modern architecture has become the contemporary surrounding, and the methods modernists used in reading the premodern city can be used to examine the modern "surrounding" of Kuwait City.

Thesis Question

By examining modern architecture in Kuwait City and the region of the Middle East, both as a product of critical thinking, and as a key component of the contemporary "cityscape", this thesis tries to answer the following question: how can the modern heritage of Kuwait City inspire and inform an architecture of density, diversity, and continuity in the changing City?

CHAPTER 2: SURVEY: REGIONAL THEMES OF MODERN ARCHITECTURE IN THE MIDDLE EAST

International Style in Tel Aviv, 1930s. From Back From Safdi (2002).
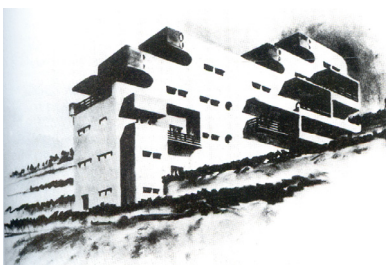
Modern building from 1930s adopted to topography, Haifa. From Safdi (2002).

Modernity in the middle east is quite distinct in nature from its peers of the industrial world. It can be characterized in general as an attempt to lift pre-industrial and indigenous societies to modern global standards. Modern architecture reflected progressive intuitions, while simultaneously, in less explicit language, shared sympathy towards local culture. This chapter tries to identify the different relationships of modern architecture to its local Middle Eastern context. The objective of this chapter is to build a constructive and critical approach towards the contemporary built environment, in which modern architecture itself has become a subject. It is understood that modernity and the accompanying political context are inseparable; political influence is hinted at but not discussed in full detail in this short survey.

Common Themes

Topography

In his article "East and West: Evolving Modernism", Moshe Safdie reflects on how Modern architecture in Israel reveals its adaptive qualities to the particularities of the Israeli context. The Jewish state became a new home for many European migrants who saw in the so-called "International Style" a link to their recent past. Modern language enabled the settlers to create a city "image" quite distinct from the Arab and Ottoman surrounding. In the mid 1940s, Tel Aviv was heavily comprised of lightly rendered four storey housing buildings, in what became known as the "bauhaus" style.

Stone clad international style in the city of Jerusalem. From Safdi (2002).

Another stone clad modern building in Jerusalem. From Safdi (2002).

In the city of Haifa, buildings took a slightly more complex form due to the irregular terrain of the city. Because of its complex topography, unlike Tel Aviv, buildings in Haifa often had multiple entries. Lower level apartments were often entered sideways, while higher ones were entered via bridges connecting buildings' main levels to sidewalks. The "International Style" was the dominant aesthetic preference for these buildings, but interestingly the contrast of the light painted facades to the surrounding vegetation, alongside the complex terraced massing showed a peculiar similarity to the hillside Palestinian villages in their relation to their own context. This approach towards topography can best be described by quoting Kenneth Framptons' remarks from his article "Towards a Critical Regionalism: Six Points for an Architecture of Resistances:

> The bulldozing of an irregular topography into a flat site is clearly a technocratic gesture which aspires to a condition of absolute "placelessness", whereas the terracing of the same site to receive the stepped form of a building is an engagement in the act of "cultivating" the site. (Frampton 1985, 27)

Material

The International Style of architecture took a unique form in the city of Jerusalem. In the 1920s, the British Mandate's design initiative issued legislation requiring buildings in Jerusalem of all kinds to be clad with traditional golden Jerusalem limestone in an effort to preserve the architectural heritage of the city, "Jerusalem was no place for red tiles" (Wharton 2008, 45). Architects had no option but to accept such a condition, and As a result developed an architectural language in which lightly cantilevered balconies, curvilinear masses, and vertical and horizontal articulations could be clad with limestone.

Example of modern architecture in Jordan. From Abu-Dayyeh and Abu-Ghanimeh (2006).

In both cities, Haifa and Jerusalem, modern architecture (and the International Style specifically) not only proved its flexibility to adapt to climatic conditions (to be discussed later), it also showed a capacity to adapt to uneven terrain, and to the employ local material.

A veneer of local material over modern forms was a theme evident in many other cities in the Middle East. Nabel Abu-Dayyeh and Ali Abu-Ghanimeh describe Jordan's architectural legacy as being "Lithic"; a hybrid modernity at best. In Amman, the Jordanian capital, Jordanian limestone is the predominant building material. As in Jerusalem, aesthetic preferences have been conditioned to the use of local stone. Perhaps the residence of the chief British representative best exemplifies a "colonial regionalist" approach (Abu-Dayyeh and Abu-Ghanimeh 2006, 87), an approach that saw an authority and responsibility to modernize and develop a nation while being somehow sympathetic toward local culture. The modern aspects of the design are apparent in features that had no precedent in traditional Jordanian residences such as the arched main entrance, the loggia opening onto the back garden, the cross vaulted garden pavilion, and the symmetrical

organization of the plan. The interplay of the cubic masses in the design are characterized by the simplicity of the exterior finish: dressed in plain smooth surfaces of local stone. Such duality has been perceived by Nabel Abu-Dayyeh and Ali Abu-Ghanimeh as simultaneously being modern and regional.
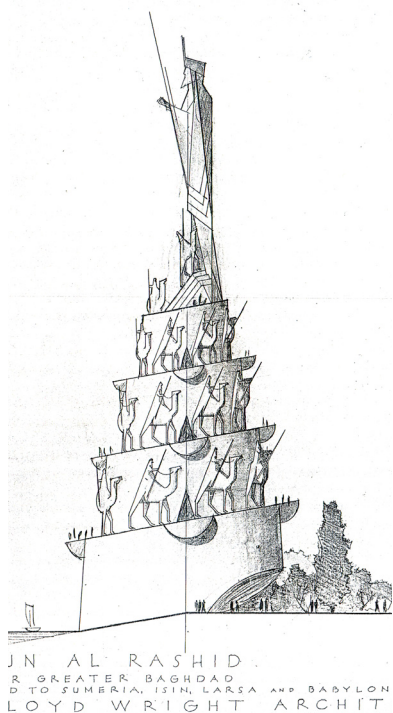
Historical Order
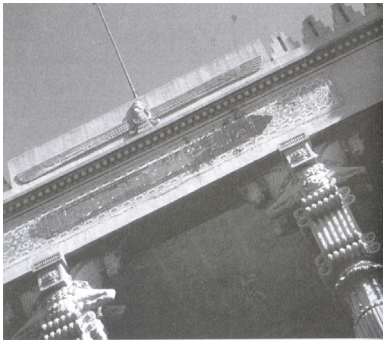
Ancient motifs on modern civic buildings, Tehran. From Grigor (2006).

The spread of the International Style in many cities across the Middle East, emerging or ancient, was a result of a resolute commitment to industrial, economic, and cultural progress. Modern architecture was at the forefront of nation building projects and infrastructural expansions. Intercity highways and railroads brought the International Style to the most remote and indigenous areas. Iranian modernism was not deviant from such pattern, in which the International Style of architecture reflected notions of change and progress. There, the language of modern architecture can be seen in many private houses, low rise housing complexes, clubs, and theatres built in the fifties and sixties of the past century. Having said that, civic buildings and public monuments, especially in the capital city Tehran, followed a different route. Buildings such as the first national bank branch, the archeological museum, the first public library, and the central police station of Tehran (built in 1930s and 1940s) are characterized by their impressive neoclassical street facades. In Pahlavi Iran, architectural expression of public monuments was channeled to serve the interests of the state and the royal court, and the revival of Iran's ancient culture defined the stylistic appearance of public architecture. Such practice sparked a discourse questioning the value of looking back

and forth in history for design solutions. In the first issue of Iran's first architectural journal, Vartan Hovanessian articulated the central dilemma of contemporary architecture, asking whether one should "imitate the past and recreate the notable works of that era; or should one look towards the future and adapt architectural design to the modern lifestyle?" (Grigor 2006, 36).

The use of historical motifs in modern architecture was not an exclusive quality of Iranian modernity; cities of rich architectural heritage have also undergone a similar experience. Critics have described the modern architecture of Baghdad, a city rich in both pre and post Islamic architecture, as attempts to create a "national personality" (Bernhardson 2008, 86). This approach of modernizing tradition started at a cultural level; artists and sculptors experimented with new vocabularies and forms motivated by a nostalgic and a romantic vision of local people and places. Iraqi architects -most of whom trained abroad- were heavily influenced by this cultural scene, and like those artists, experimented with forms and structures in search for a modern "Iraqi" aesthetic.

This fresh and young generation of architects played another key role in modern Baghdad: many, especially those who studied abroad, lobbied Iraqi officials to hire well known international architects to design major yet-to-be-built projects. This allowed for designers such as Alvar Aalto, Le Corbusier, Walter Gropius, and Frank Lloyd Wright to contribute in some way. The design approach of Wright falls within the category of playing with traditional vocabulary to create a "national identity". Wright appreciated this opportunity, and he replied to

Elevation of a public monument, Frank Lloyd Wright. From Pfeiffer (2009).
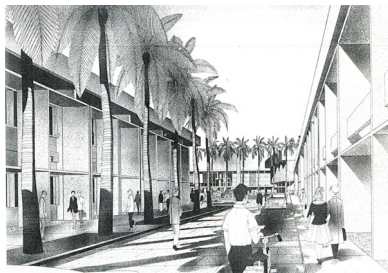
Rendering showing shaded outdoor space, University of Baghdad. From Nerdinger (1991).

Master plan of the university showing the broken down "neighborhoods" of the greater university. From Nerdinger (1991).

Walter Gropius in the city of Baghdad. From Nerdinger (1991).

this invitation with: "Pleased to join Iraq in the twentieth century enterprise. To me this opportunity to assist Persia is like a story to a boy fascinated by the Arabian night's entertainment as I was" (Bernhardsson 2008, 90). His schematic design for greater Baghdad (late 1950s) included a sculpture museum, an opera house, a post office, and a bazaar. He frequently referenced the tales of "A Thousand and One Nights" and "Aladdin Lamp". His designs seemed very futuristic, but they were based on ancient Iraqi themes. His proposals were very intriguing but never executed.

Climate

Adapting the international style to the harsh climate of the region is probably the most apparent theme of modern architecture in the Middle East. Sir Leslie Martin, a British architect with a contributing role in modern Kuwait, comments that: "The architects were influenced by climatic conditions. This was the starting point – climate. Westerners can never be expected to understand the intricacies of these peoples' Muslim culture. All architects are, however, are able to start from climate" (Gardiner 2008, 37).

Climate is a dictating theme: it influences shape, form, structure, material, color, size of openings, surfaces, and the plan. The University of Bagdad best exemplifies this approach; it is a classical essay in finding contemporary solutions for environmental control. The development board of Bagdad commissioned TAC (The Architects Collaborative) under the supervision of Walter Gropius in 1957 for complete services, from schematics to project management. The team's main topic of exploration during

the schematic design phase was the effects of harsh climate on architecture. Research into traditional architecture exploring ways of dealing with hot climate was carried out in which Old quarters of Baghdad were studied. The team highlighted features such as narrow streets, proximity of buildings, vegetation providing shade, correct orientation, water features, and courtyards, all of which were insightful traditional strategies. Climate control dominated much of the architectural treatment; final proposed building compounds featured climate control strategies including water canals, vegetation, courtyards, shaded walkways and deep recessed windows, "eyebrows" (as Gropius called them) covered with louvers and grills (Marefat 2006, 84). The formal language of modern architecture was relatively easy to adapt to particular climatic conditions.

Alternative Approaches to Context

Regional themes discussed in the previous section were responses to a direct reading of the natural qualities of a context. A place's topography, climate, and material were influential factors in design. This approach mostly affected building aesthetics and its environmental performance at best. Yet there were modern examples that looked beyond the physical nature of a context, and investigated social and cultural qualities as a way to understand a context. The following section reviews modern work in the Middle East that followed this approach.
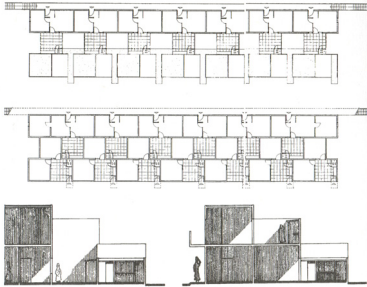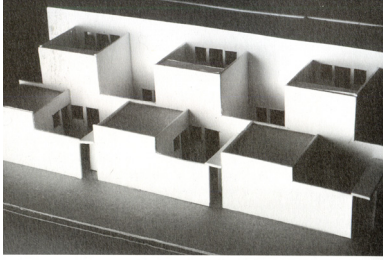
Candilis-Josic-Woods: Dwelling as a Central Concern for Architecture

To many Western European architects in the fifties of the past century, North African grounds became an

Example of a "Bidonville."
From Avermaete (2005).

Studies of different relationships between public and private spaces. From Avermaete (2005).

attractive field for experimentation and investigation, and the colonies were perceived as laboratories in which the relation between post war modernization and dwelling could be fully explored. Cities in Morocco and Algeria rapidly grew due to mass migration from the rural areas. This sudden flux of migrants resulted in the creation of many slums around the perimeter of those cities. Those slums were given the name "Bidonville". What made the work of Candilis, Josic, and Woods remarkable starts with the way they perceived those slums. To them, as much as a "Bidonville" was the problem, it also possessed the roots for a solution; a study and a closer examination of those areas revealed aspects of the dwelling culture of the inhabitants. In collaboration with Moroccan architects, ATBA was established. The firm set up a research methodology that consisted primarily of a mobile unit that travelled through rural areas to investigate dwelling culture in an ethnological fashion. Detailed findings were registered in texts, charts and illustrations.

The firm concluded that the Bidonvilles represented an intentional departure from traditional rural dwelling conditions, yet simultaneously (perhaps unable to escape

Housing complex, Casablanca. From Avermaete (2005).

reality) possessing the qualities of traditional dwelling culture within the modern urban environment. They demonstrated how the courtyard typology of the shelters in those new urban zones echoe the traditional courtyard houses of the Atlas Mountains. Candilis, Josic, and Woods were able to extract from Bidonville both urban and habitation lessons, then design in accordance to their findings. Their proposals reflected an understanding of three realms: the everyday life practice within a dwelling, the immediate vicinity of the dwelling, and the wider urban environment. Their designs were attempts to find new modes of combining dwelling cells adequately with modern construction methods, and their experiments investigated the relations between public and private spaces in an Islamic context. Candilis-Josic-Woods work in North Africa is neither completely modern nor completely traditional, but incorporates a field of tension between both (Avermaete 2005).

Alison and Peter Smithson: Mat Building and The Process of Investigating Social and Physical Environments

"Mat Building" (first proposed in 1963) the idea is arguably one of the strongest legacies of "Team Ten". The idea refers to a scale of work lying between urbanism and architecture. Mat Building aims to:

> ...epitomize the anonymous collective, where functions come to enrich the fabric, and the individual gains new freedoms through a new and shuffled order, based on interconnection, patterns of association, and possibilities of growth and change. (Avermaete 1991, 308)

Mat Building is a reaction against the specialization and segregation of functions. To Alison and Peter Smithson, the implementation of isolated housing projects or dormitory towns made as little sense as the building of educational
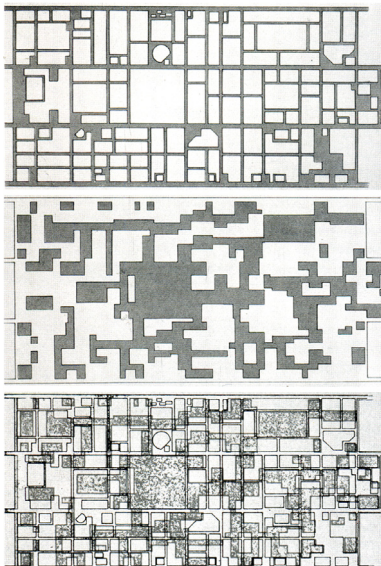
Diagrams showing structuring figures of Berlin Free University Mat Building. From Avermaete (2005).

Peter Smithson explaining a model of mat building to the crown prince of Kuwait. From Alison and Peter Smithson (2005).

or industrial parks, since public and private realms have always been inter-connected, each supporting the other. Mat Building also aims at achieving higher density, understood as the possibility of weaving diverse built and functional entities, not merely a matter of building height and floor-pro-area ratio. Lastly, Mat Building in principle is a mesh, or an organizational system that seeks its structure from the surrounding context. The proposal for the Berlin Free University by fellow Team Ten members Candilis, Josic, and Woods in 1963 was organized based on two urban figures; a grid of pathways and an outline of spaces. Each of those figures was based on a structuring element of the traditional dense European city.

The Smithsons were involved in the investigation of the qualities and logic of existing urban environments. The invitation in 1969 from Kuwait to propose a vision for the old part of Kuwait City was a great opportunity to implement the Mat Building idea. A study of the social and physical environment of the Kuwaiti context was necessary to identify the structuring elements of the proposed Mat Building. The quality of sunlight at sunrise and sunset in Kuwait was distinct, and a new grid was proposed to

Model of mat building in context. From Alison and Peter Smithson (2005).
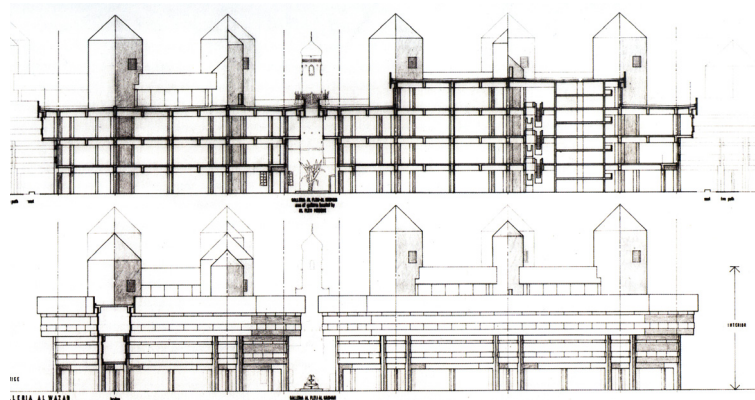
Sections through the proposed building showing a mosque acting as a axis line. From Smithsons (2005)
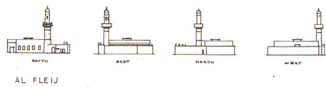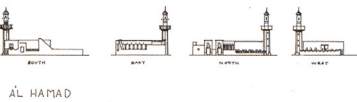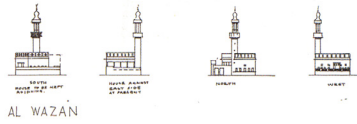
Survey of some existing mosques in Kuwait City. From Alison and Peter Smithson (2005).

take advantage of this characteristic. The ground level was kept entirely free for pedestrian encounters. This move came from that Arab sense of space as being low, not monumental, light, shaded, and full of stops, with a high degree of connectedness. The grid used mosques as fixed reference points, with galleries connecting them. While the ground level was left open as a pedestrian zone, great possibilities of program could be accommodated in the upper levels such as ministries, university, or markets. Overhangs provided shade and a veil of grids allowed for further regulation of sunlight. Unfortunately the proposal was never executed. Nevertheless the study itself illustrated a design process sensitive to context, and a design that is reflective of the urban qualities of a city (Alison and Peter Smithson 2005).

Jorn Utzon: the Search for the Appropriate Traditional Typology

> I have organized the building complex in a fashion close to traditional Arabian bazaars. The system of a bazaar is so simple and clear that it results in an administration building that functions superbly. (Utzon 2008, 10)

Jorn Utzon clearly associates between his design for

Historic Arabian bazaar. From Utzon (2008).
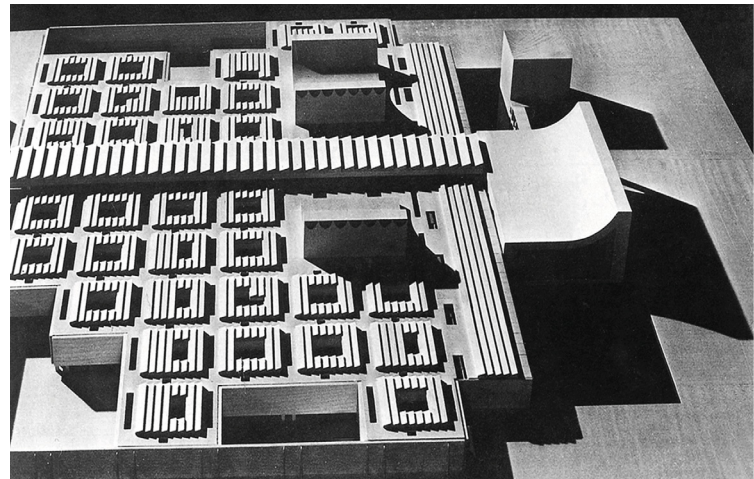
Model of Kuwait National Assembly showing main components of the building, and the modular quality of its units. From Utzon (2008).

Kuwait's National Assembly and a traditional Arab Bazaar. Heavily inspired by his trips to North Africa and Iran, and his studies of indigenous Middle Eastern architecture, Utzon investigated the typology of a traditional bazaar and broke it down to its components: a traditional Bazaar consists of a central shaded street with buildings aligned on both sides, separated by smaller side streets that eventually lead to pockets and spaces as lively as the central street. Traditional Souks are places where people meet and exchange goods and conversation in shaded open halls. In his design for the national assembly, in a site that is bounded by water to the north and the city to the south, the layout consists of a central internal street leading to an outdoor shaded hall, where "a leader meets his people" takes place (Utzon 2008, 10). Off the main street smaller entities of two levels were organized on a grid that allows for flexible future expansion. The expressive and ambiguous form of the building canopy,
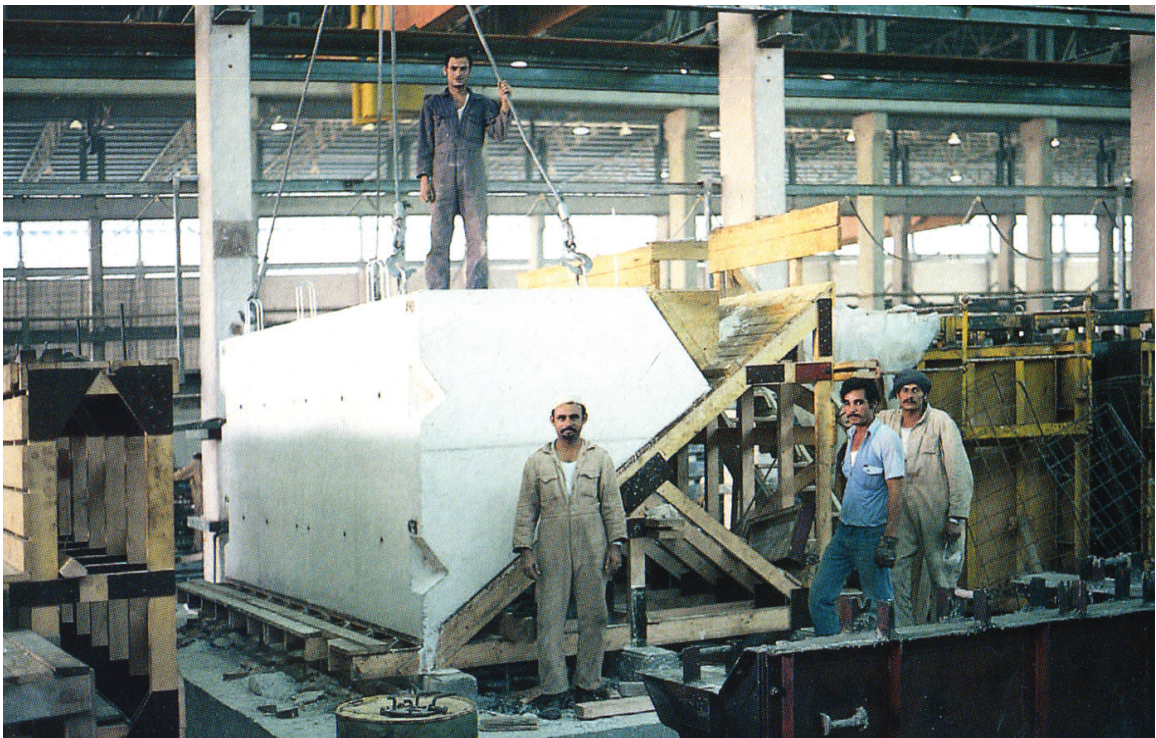
Prefabrication process of a structural piece in a prefabrication facility. From Utzon (2008).
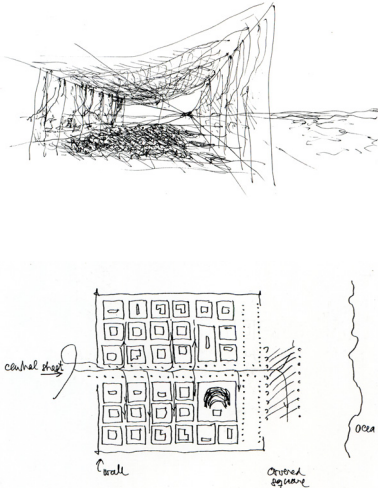
Preliminary sketch of building canopy and parti diagram of the design. From Utzon (2008).

something between a sail and a tent mat, reflects the spirit of the place: a place where the desert meets the sea, projecting to the rest of the world its progressive democratic achievements. As much as his interest in designing a legible scheme, Utzon was also interested in modularity and prefabrication. He transformed three dimensional building components into flexible building systems, that were easy to prefabricate and then assemble on site. Additive architecture was a principle used in design; each module that houses a particular function of the building is structurally independent, the scheme itself proposes an easy expansion strategy based on these modules. Utzon admits that his experience working in the Middle East revealed to him the value of open spaces between buildings such as squares, courtyards, streets, and gardens (Utzon 2008).

Critical Regionalism

Before drawing conclusions from the previous short survey, it is perhaps worthwhile to view the examples through the lens of "Critical Regionalism"; a theory that best examines the surveyed architectural practices. Liane Lefaivre and Alexandaer Tzonis provided a sharp analysis of this subject in their book *Critical Regionalism: Architecture and Identity in a Globalized World*. Critical Regionalism can be seen as an approach to design that gives priority to the identity of the particular rather than the universal, and utilizes historical and cultural knowledge. It is an approach that shows a commitment to the exploration of the identity of a place, and recognizes the value of particular physical, social, and cultural situations (Lefaivre and Tzonis 2003, 39). This definition might suggest that Critical Regionalism

is simply a reaction to the imposing of narcissistic formulas that perceive different contexts similarly, but the fact is Critical Regionalism is also critical of the reuse of historical vocabulary for a mere sentimental or commercial reason, or what Lewis Mumford described as being "Icing on a birthday cake" (Lefaivre and Tzonis 2003, 20). Critical Regionalism acknowledges the constantly changing reality societies undergo; thus, regionalism is not in conflict with the universal, and can become an exercise in overcoming contradictions, sustaining diversity while utilizing modern means.

Reflections

Modern architecture in the Middle East often used generous amounts of local motifs or materials for stylistic purposes, in many cases resulting in a poor mediation between the universal and the local, a shallow interpretation of a context. However, one cannot help but appreciate the side that manifested a genuine intention of the architect to understand the cultural and built nature of the place, and design in accordance to his/ her understanding of it, in which regionalism becomes not just a matter of using the most available local material. If a traditional Middle Eastern city can be described as an egg, then there were architects who looked at the egg beyond its shell.

Architectural heritage can be treated as a static thing in which historical buildings are nothing but "antique". Yet a historic fabric can also be perceived as a rich and valuable resource for active engagement. The complex urban form of a place can be broken down into its structuring elements and figures. Understanding the role of each figure, and

its relationship with the rest can only lead to a better understanding of the urban nature of a context, providing a stronger ground for a design sensitive to a place.

Cities are in constant need of improvement and change. Long-existing building typologies can have limitations, but simultaneously they also possess the roots for solutions upon which an architect can build on. A closer investigation of what constitute local architecture can reveal what those solutions might be. Design proposals can be different in form from the historic surrounding, and unique in their material or function, but when based on interpretations of the context they align with the ongoing tradition of critical regionalism.

CHAPTER 3: INVESTIGATION: THE URBAN NATURE OF KUWAIT CITY
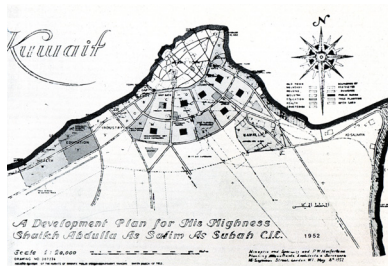
First enhancement plan for Kuwait City, submitted by the English planners Minoprio and Spency in 1952. From Gardiner (1983).

Contemporary Kuwait City is a product of modern planning and policy decisions, made by foreign planners and architects in the 1950s. Those decisions permanently changed the historical city, and established the contemporary city structure, and its pattern of growth. Until the early years of the past decade, almost all buildings within the perimeter of the historic part of Kuwait City were thirty, forty, sometimes fifty years old. What was once new and modern, became in the past decade the aging background ready for replacement. Images that show the brand new cluster of highrises in the city from a distance are the ones usually used to portray the city, but it is the modern fabric of the city, the aging one - often cropped out of those pictures - that best portrays the place. They reveal the true urban nature of the place and explain what the city is made of. One can find in many cities a historic part adjacent to a modern one, and observe an interesting relationship between the two. Yet in Kuwait City, the modern became the historic, in a way. What is remaining from the original local architecture is a handful number of buildings now turned into museums and cultural centers. Modern buildings collectively form the contemporary "surrounding", the subject of investigation in this chapter.

Aerial view of Kuwait City in late 1960s showing both the modern and the historic. From Aljamea.

It is worth noting that Kuwait City went through two phases of modernity. The first phase aimed at providing basic services for the city such as paved roads, schools, and hospitals: "Shaik Abdullah al Salim, who became ruler in 1950 has embarked on bold plans to use a large portion of this wealth for extensive rebuilding and modern
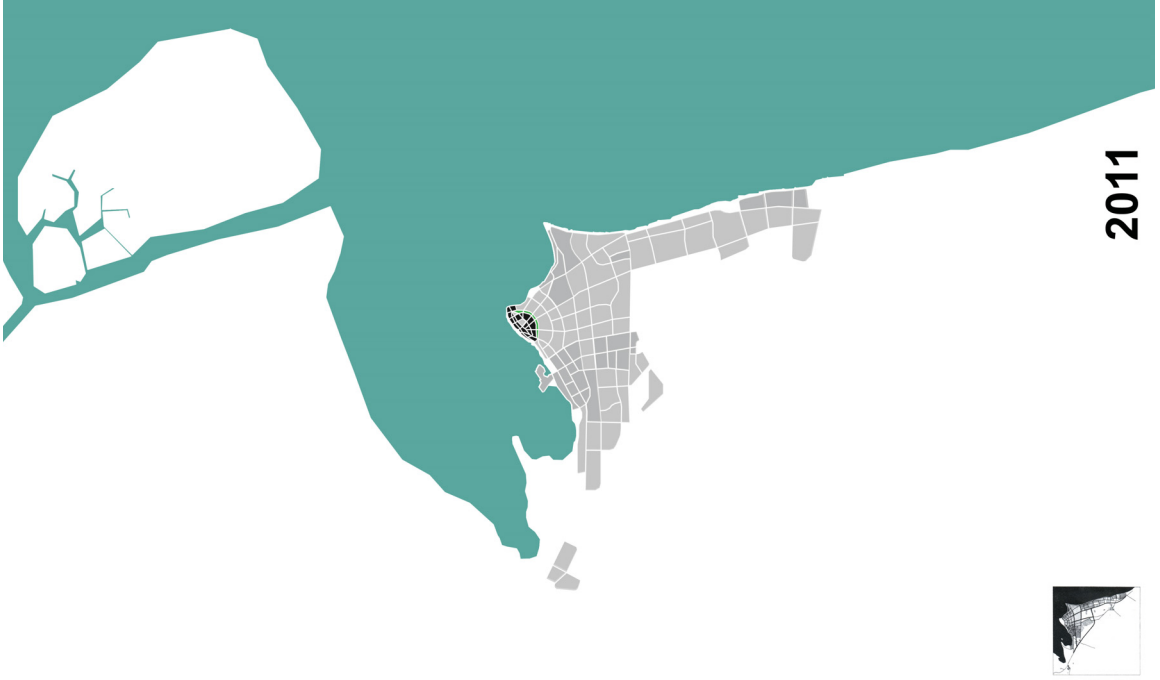
2011
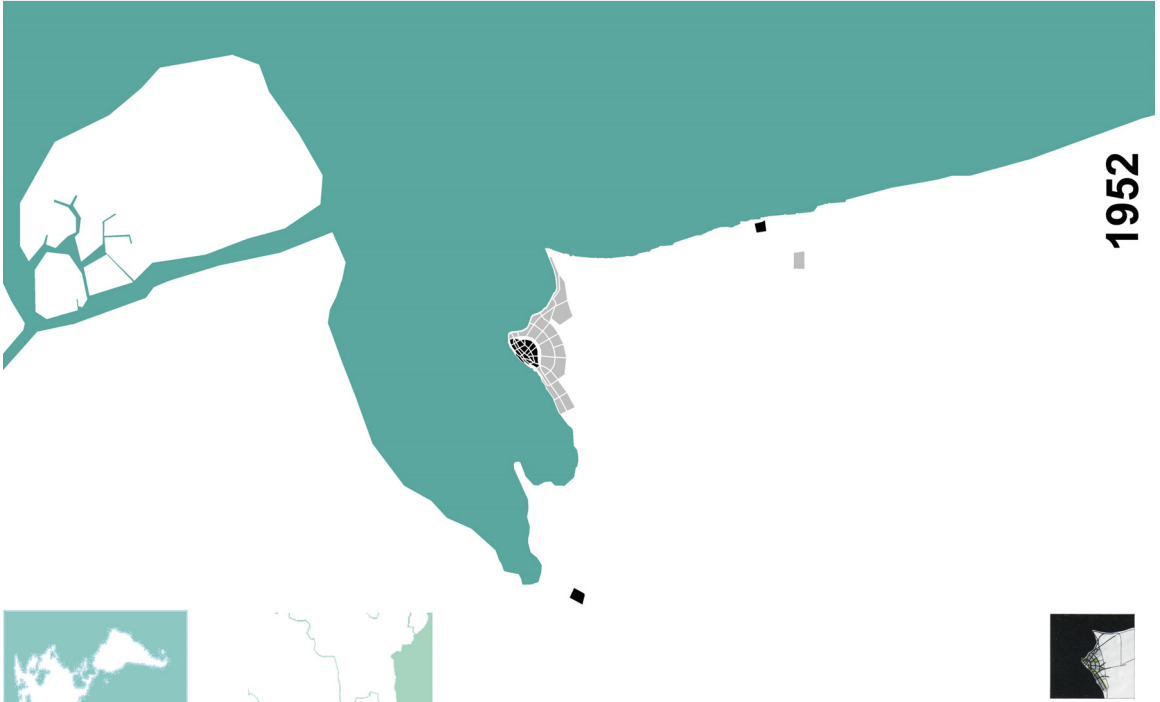
1952
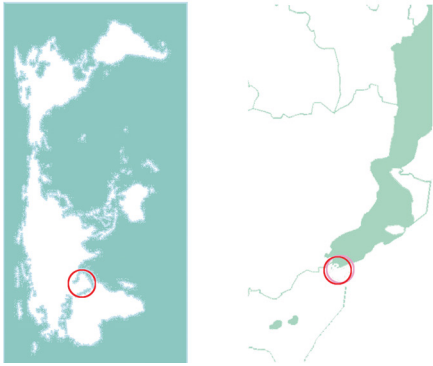
The term
"Kuwait City"
refers to the
historic part
of the greater
metropolis.
This panel
shows the
growth of the
metropolitan
area in a
period of 60
years.

1940s

1950s

1970s

1990s

2000s

Visual timeline showing the transition of Kuwait city from a simple Arabian town,
going through a progressive period, to a post gulf war financial center.

This map shows the no longer existing historic fabric, the perimeter of the city was defined by a wall with five main gates.

This map shows Kuwait City in its contemporary condition, buildings highlighted
in white are buildings of similar characteristics and were built 30 and 40 years ago.

Modern buildings and paved streets rapidly replaced the traditional Kuwaiti fabric. From Aljamea, www.flickr.com/aljamea

development in the town" (Freeth 1956, 43).

Minoprio and Spency, the English planners, reflected on their role in Kuwait's first enhancement master plan: "the Kuwaitis wanted a new city, hospitals, schools, housing and good communications, all what we could do is give them what we knew" (Gardiner 1983, 35). The decision to turn the historic part of the city into a commercial and administrative zone led to a rapid and uncontrolled increase in the number of commercial and mixed use buildings, all which can be identified by their common features such as height, organization of spaces, and aesthetic features and language.

In her book *Kuwait Was My Home,* Zahra Freeth, daughter of the head of the British mandate in Kuwait City during the 1940s, described the change she personally witnessed:

> Many indeed were the changes which were foreshadowed in 1946. That year was perhaps the last in which the stranger might have seen Kuwait in anything like her old traditional form. Since then her aspect has changed almost beyond believing. Old buildings and familier landmarks are fast disappearing; almost overnight whole quarters of the town became unrecognizable as new roads are completed or huge new concrete buildings rise amid the demolition of the old. (Freeth 1956, 47)
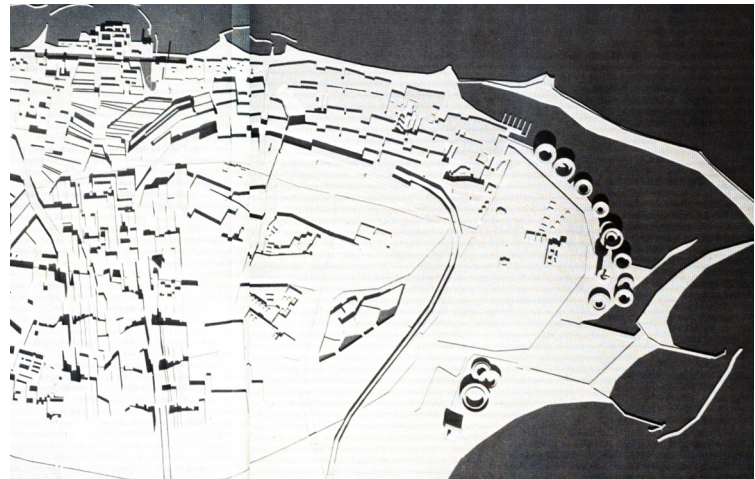
Model of a proposed plan to enhance communication and public transportation, done by Reima Pietila. From Gardiner, "Kuwait: The Making of A City"
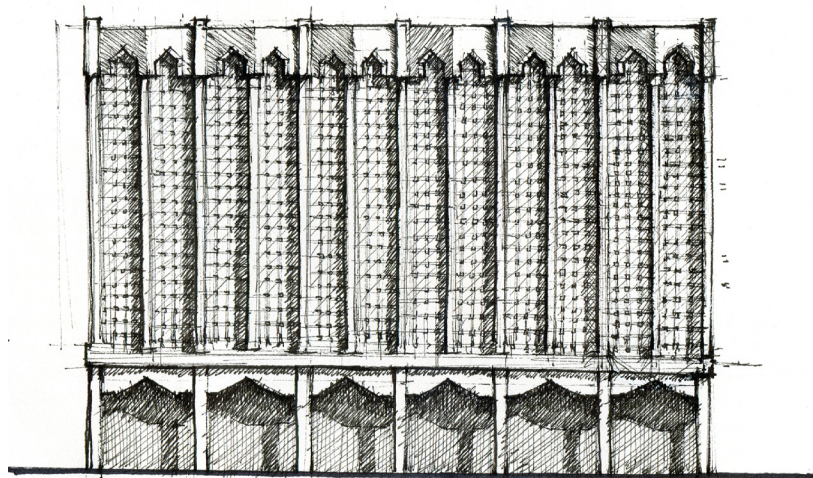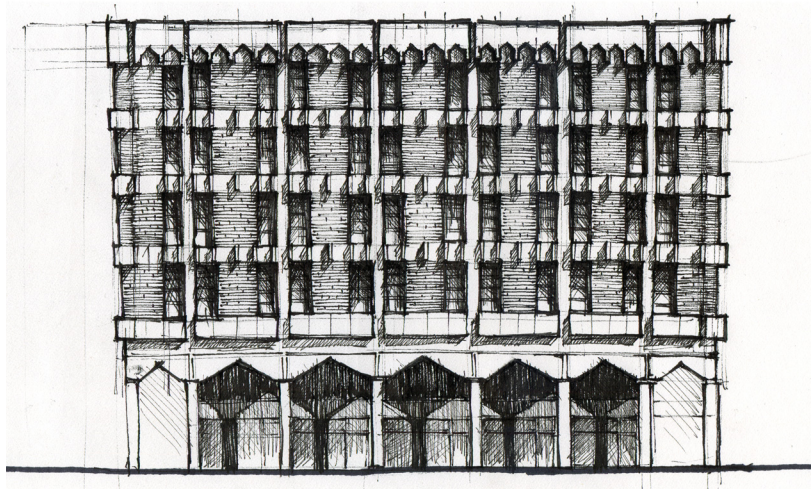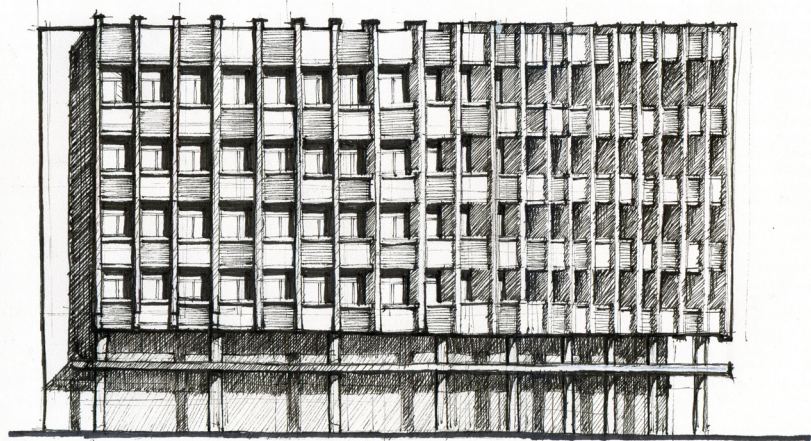
Facade studies of
modern buildings
in Kuwait city, more
facades on page
38-42

The beginning of the second phase can arguably be traced back to the formation of a control panel of four advisors headed by Shaik Jaber the Kuwaiti prime minister himself. The panel formation was a reaction to the total obliteration of the historic fabric. Its main objective was to play a more critical role in many yet to be built projects. Sir Leslie Martin, a member of this panel reflected on its first ever task:

> We decided on a plan where four firms of architects from different countries would be commissioned to study the planning of the new city of Kuwait. These were Candilis, Josic and Woods of France, BBPR of Italy, Smithsons of England and Pietila of Finland, the Kuwaities wanted well known names. We asked each of the architects to think about the City and to express their thoughts as architectural ideas visually, not as written reports. They were given about a year to do this … a dream of a commission. (Martin, quoted in Utzon 2008, 36)

A map of Kuwait City in its contemporary state. From Google Earth

Even though their ambitious plans were not fully implemented, the purpose of these studies was to provide desirable objectives and guidelines in relation the physical form of the city. This advisory panel was the reason behind the later commissioning of the likes of Kenzo Tange, Jorn Utzon, Reima Pietila, Sune Lindstrom, Stig Egnell, Malene Bjorn, and Arne Jacobsen.

The City

The physical form given to the contemporary city can be traced back to a number of factors. First, was the decision to turn the historic city, defined by the gulf to north and the city wall to south, into a commercial and administrative zone, and the relocation of residents to new outlying suburbs. Each of those suburbs or "neighborhoods" was planned to be self-sufficient, consisting not only of housing units, but also markets, schools, health clinics, police

The green belt acting as a hard edge separating the city from the rest of the metropolis. From Loolykinns.

Arteries/ Cells. From Jetblasts2k.

stations, public gardens, recreation and sporting facilities, and mosques. Meanwhile the "downtown" witnessed the rise of low-rise buildings of commercial and administrative functions; stores and retail occupied the ground and mezzanine levels, while offices occupied the upper levels. As a result, more and more apparent distinctions arose between the downtown and the outlying neighborhoods as the city grew: "...and the once empty desert around the town is now dotted with houses of wealthy Arabs" (Freeth 1956, 47).

Second, was the decision to demolish the city wall and replace it with a green belt. The original goal was to create a natural threshold between the old and the new, a breathing space consisting of gardens and greenery, jeweled by the five old gates as historic landmarks. The plan was never completed. A small section was planted while the rest was left undeveloped, and with the city increasingly becoming a day destination, a ring road was constructed parallel to the green belt zone to accommodate traffic. The original wall street and the no-man zone alongside the new and wide ring road became a true boundary impenetrable by pedestrians, and the five gates became major intersection nodes controlling the flow of automobiles in and out.

Third, and most important, was the decision to plan the new city grid on top of the historic one, and to retain original patters such as caravan routs and public squares. Complete historic neighborhoods were turned into single blocks. The vastness of those blocks allowed not only the planning of large building plots along the block perimeter, but also the planning of larger ones inside those blocks. The increasing dependence on automobile for transport

The new grid of the city imposed on the historic fabric of the city.
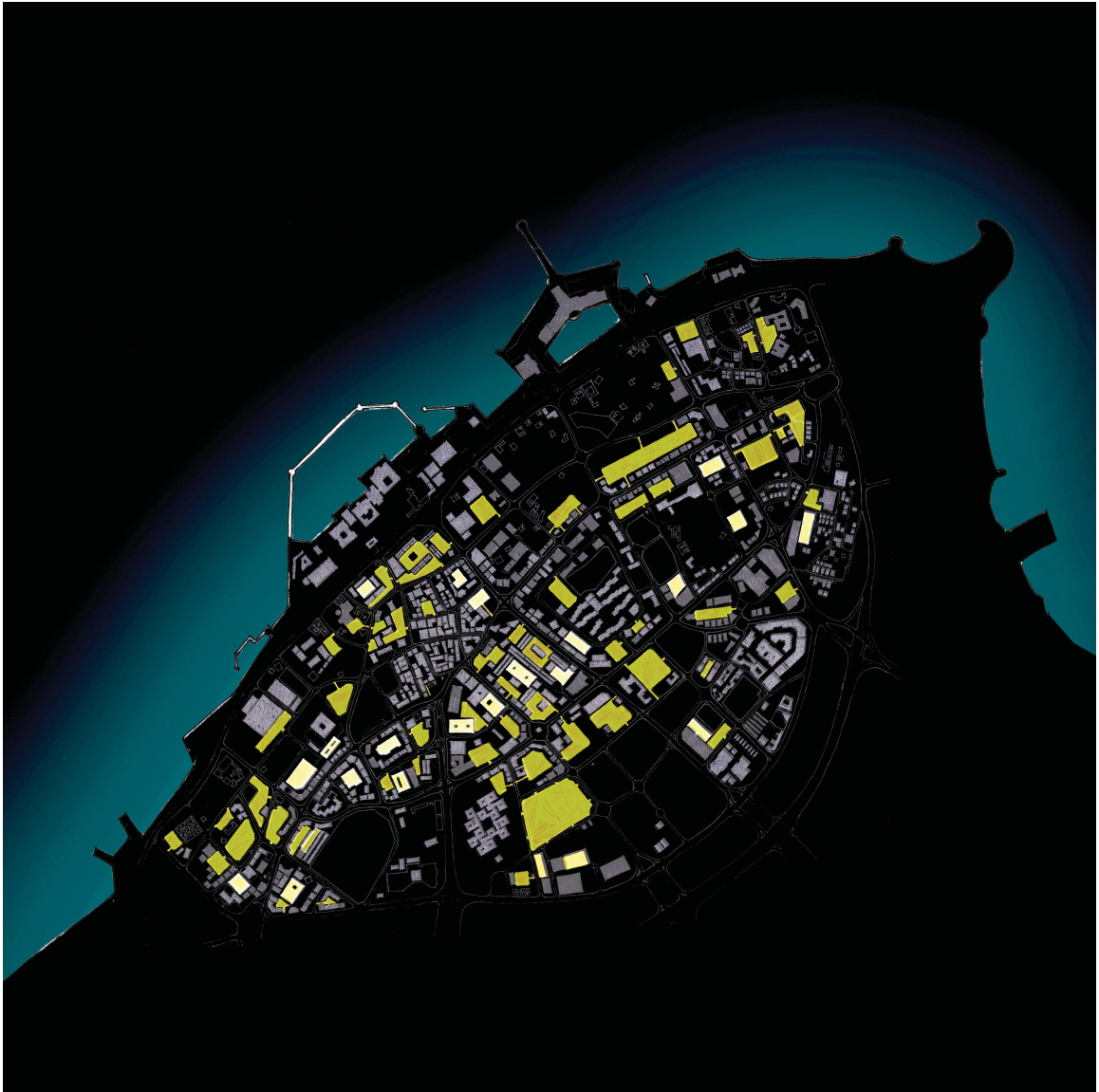

This map shows the green belt and the network of streets/ blocks in the city.
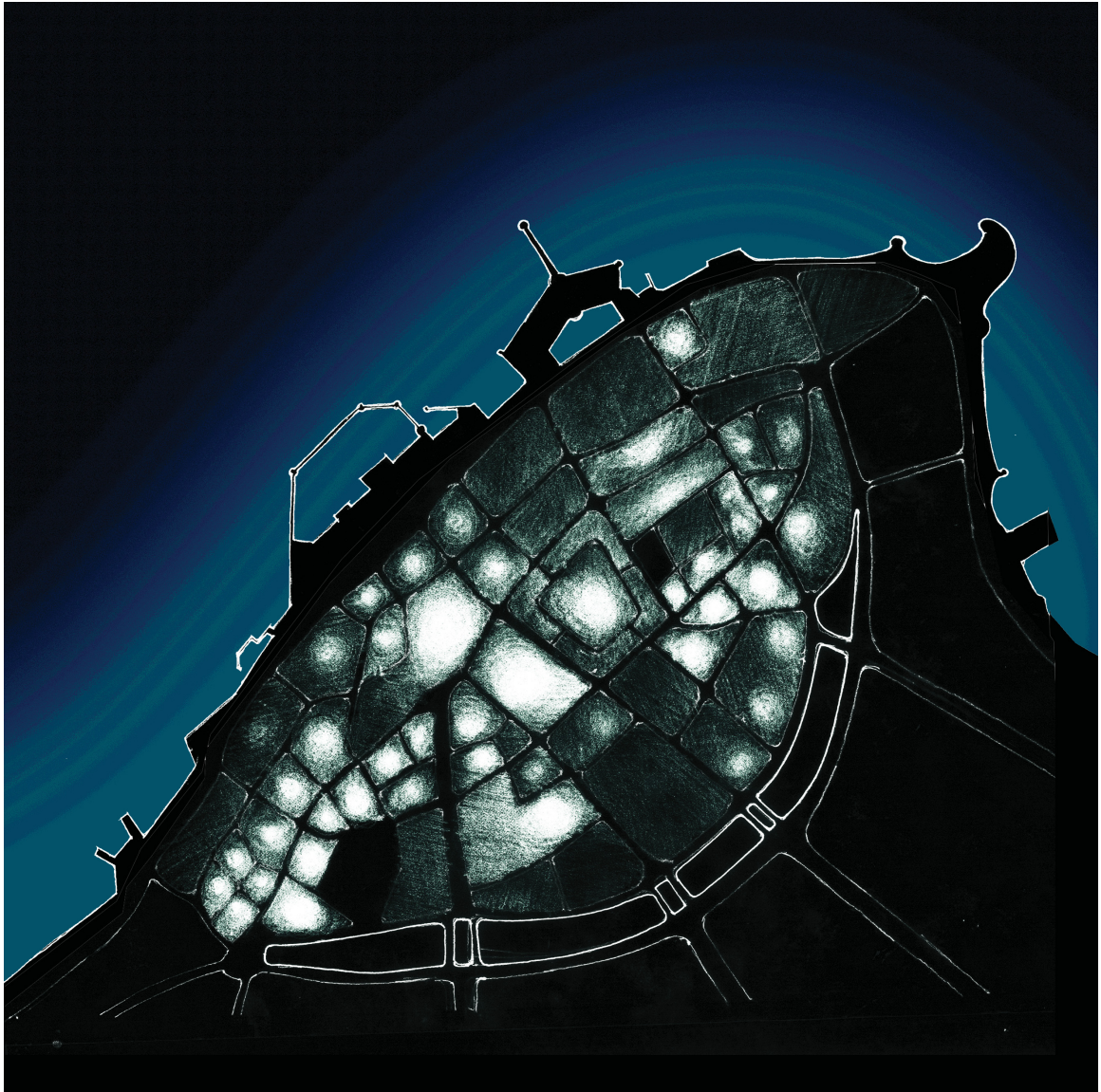
Concentrated zones of activity in the city.

This map shows both outdoor voids within blocks and multi-storey buildings that are being used as parking space.

eventually led to the widening of streets separating those blocks to accommodate three or four lanes, on each side. In a way the city not only became its own zone separated from the rest of the greater metropolis, but also it housed self contained zones, smaller segregated islands or cells. They are the subject of investigation in the following section.

The Blocks

To better understand the physical nature of the blocks, one must see them in comparison to the typical rectilinear North American city blocks, where spaces framed by the back sides of buildings mostly (not entirely) serve supporting functions. The deep nature of Kuwait city blocks allowed for the existence of another layer of buildings within the blocks. The in-between spaces between buildings became pedestrian routes, and pulled the outdoor pedestrian life deep inside the blocks. In a bizarre way, modern city blocks of Kuwait city encompassed the traditional nature of a Middle Eastern city where one can find active major streets, but also narrow streets leading to lively pockets and courtyards.

Besides buildings and outdoor spaces, parking is a major structuring element of these blocks. In every block there is a dedicated space for parking in the form of outdoor parking, or massive multistory parking, or sometimes a combination of the two. Parking structures usually occupy the large pockets between buildings or yet to be built plots, but in many cases priority was given to parking, which defines the alignment of buildings in a block. With the lack of residents inside the city and a proper public transport system, and the heavy reliance on automobiles

Examples of existing
blocks in Kuwait City
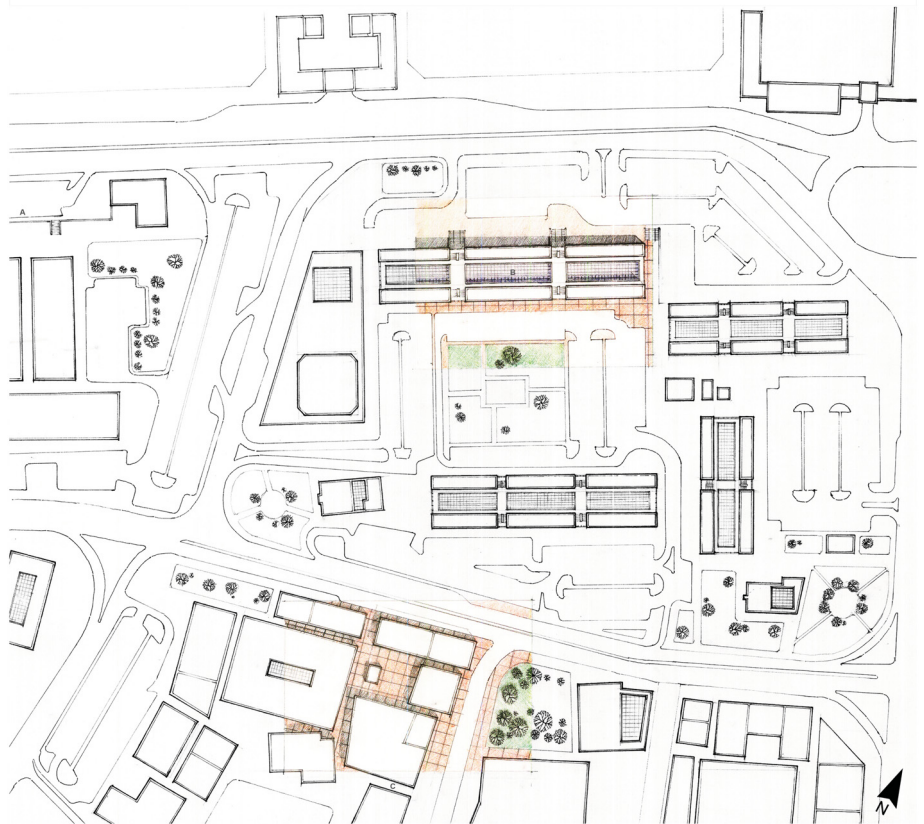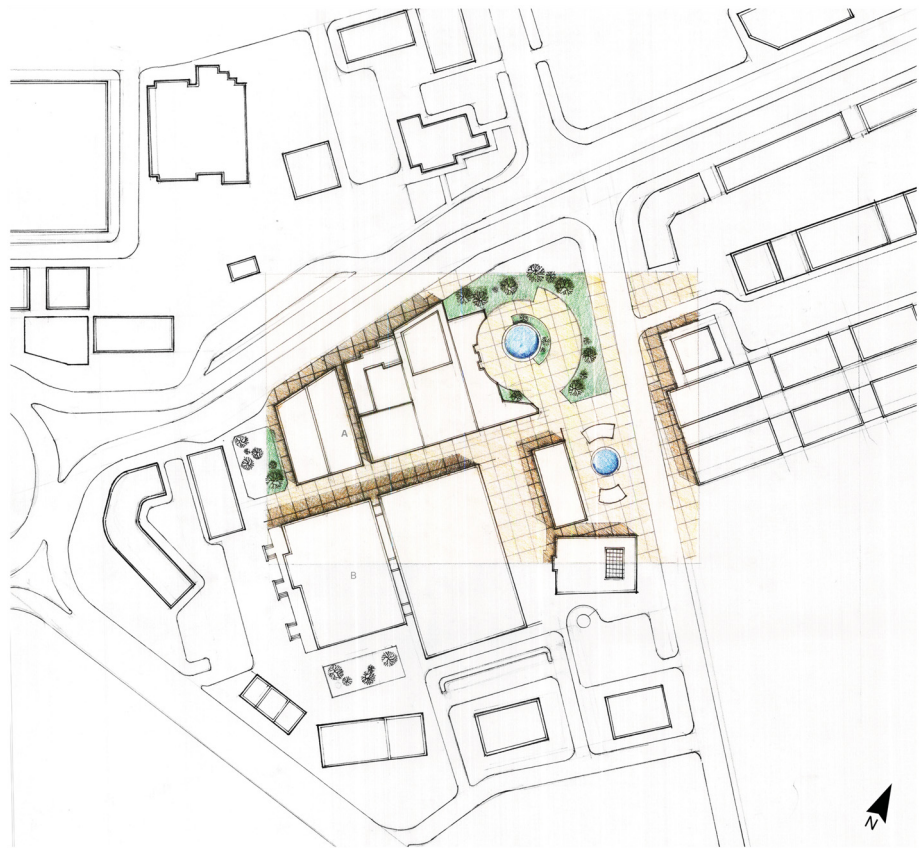
Examples of
existing blocks in
Kuwait City.

The urban structuring elements in play (green belt, streets, buildings, indoor and outdoor parking, and pedestrian zones).

Streets · Buildings · Pedestrian zone · Parking, Indoor/ Outdoor

The urban structuring elements in isolation (green belt, streets, buildings, indoor and outdoor parking, and pedestrian zones)
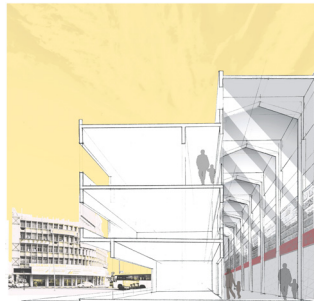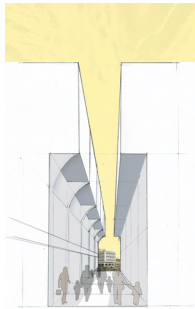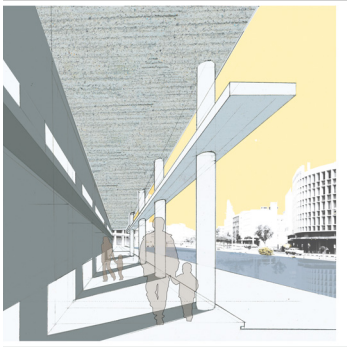
to get into the city from residential neighborhoods, those parking spaces became ports off-loading people into the city from within. In a way they are the nuclei of each block and destinations for the stream of cars pouring into the city. With the existence of parking space in each block, it made more sense to drive to another block rather than walk to it, if one takes into consideration the hostile pedestrian nature of the streets. However, not every outdoor space within a block is a vibrant outdoor environment. Some are complete, while many are mere parking spaces. Nevertheless each block possess the potential to house a great outdoor environment, and the structure of each block allow those pockets to transform with very minimal work.

Internal courtyard of a block adjacent to the proposed site framed by aging buildings, not utilized yet and left undeveloped.

The Buildings

One can identify common features apparent in buildings that are thirty and forty years old. In every building with a commercial ground and mezzanine level, one can observe a setback by a few meters of the commercial façade, creating a well defined colonnade that is both continuous along the four sides of a building, and also consistent through adjacent buildings. The two-levels arcade is broken vertically with a continuous datum, a shelf that not only provides shade for storefronts, but also provides indirect reflected light, a space for air conditioning units, and support for billboards and signage.

In the market area, where buildings are mostly three levels high, one can observe another shading feature, which is the cantilever of the entire top level. Third floors of market buildings are always cantilevered one or two meters, and collectively they form a more intimate and cooler pedestrian environment below.

Not all commercial buildings are exclusively outward looking. One can identify another building typology that serves commercial purposes where stores are aligned along indoor pedestrian streets. Those streets are usually sealed from the outdoor environment except for clerestory windows. Those buildings follow a very rational and modular form, and finishes were minimal. Nevertheless there are examples where roof beams formed pointed arches, mimicking Islamic arcades.

Buildings that contain indoor parking follow one general formula, where parking space is often raised two levels above ground, accessed via extravagant flying ramps.

Thumbnails of building studies, full details on pages 38-42.

This elevation of parking clears the bottom levels for more commercial spaces within a block. Multistory parking buildings are usually capped with another inhabitable space, most often offices, and penetrated centrally with a light well that brings natural light all the way to the ground level.

Aesthetically, almost all modern facades consist of details and features that primarily serve a shading function. One can observe an interesting range from simple vertical and horizontal articulations, louvers, and abstract screens, to Islamic influenced grills.

Perhaps the most important feature of modern architecture in Kuwait City is the use of concrete as a prominent building material. Concrete was not only used to erect building skeletons, but in addition, concrete blocks were used for partitioning and sheathing, precast pieces as building screens, sandblasted or smooth concrete as cladding material, even concrete tiles were used for exterior and interior flooring. Modernity has revolutionized, then standardized, local construction culture such that concrete has become the its most "vernacular" material in contemporary Kuwait City.

This building is believed to be the first building constructed using concrete as a prominent building material in Kuwait City. From Aljamea.
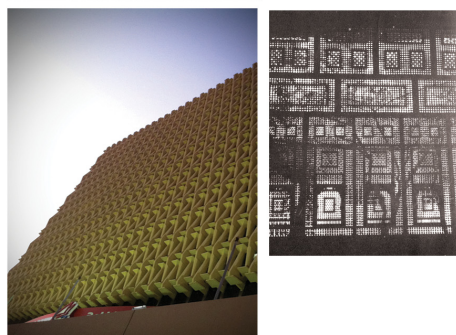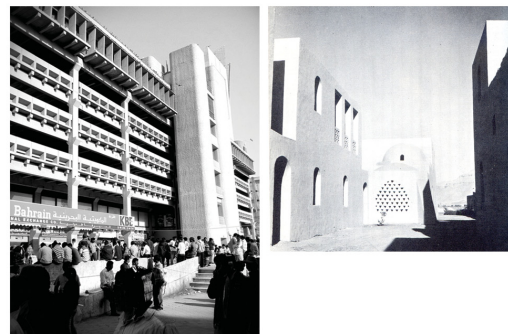
Images in the left column show qualities of modern building in Kuwait City, while images in the right column show traditional Middle Eastern precedents. From Fathy (1973).
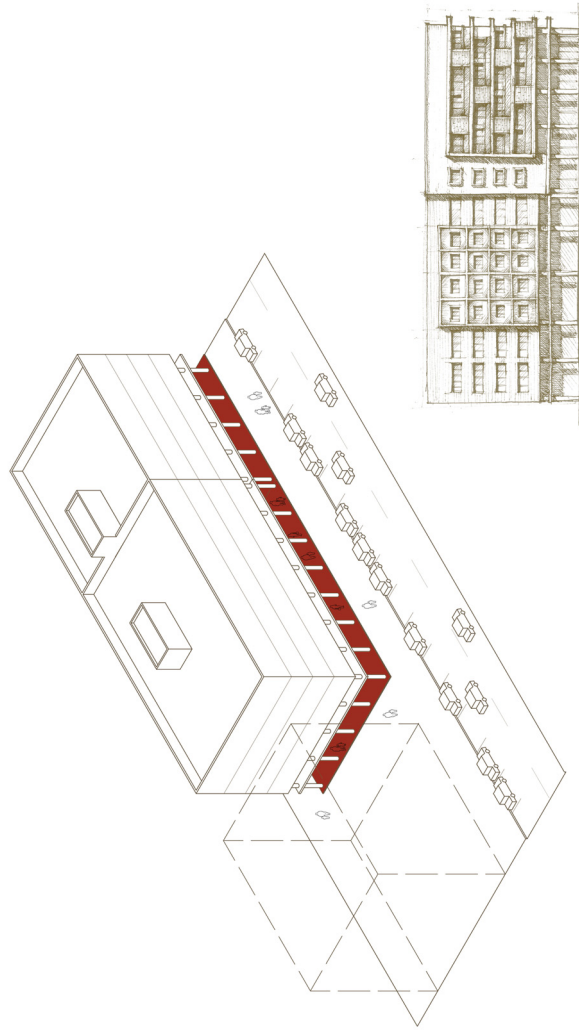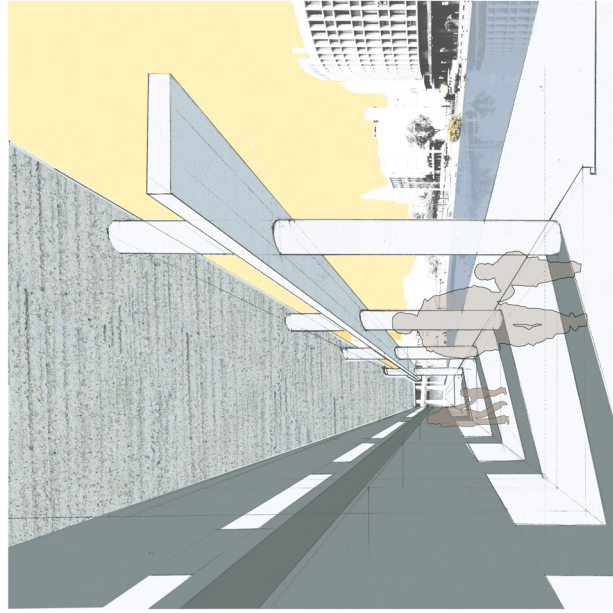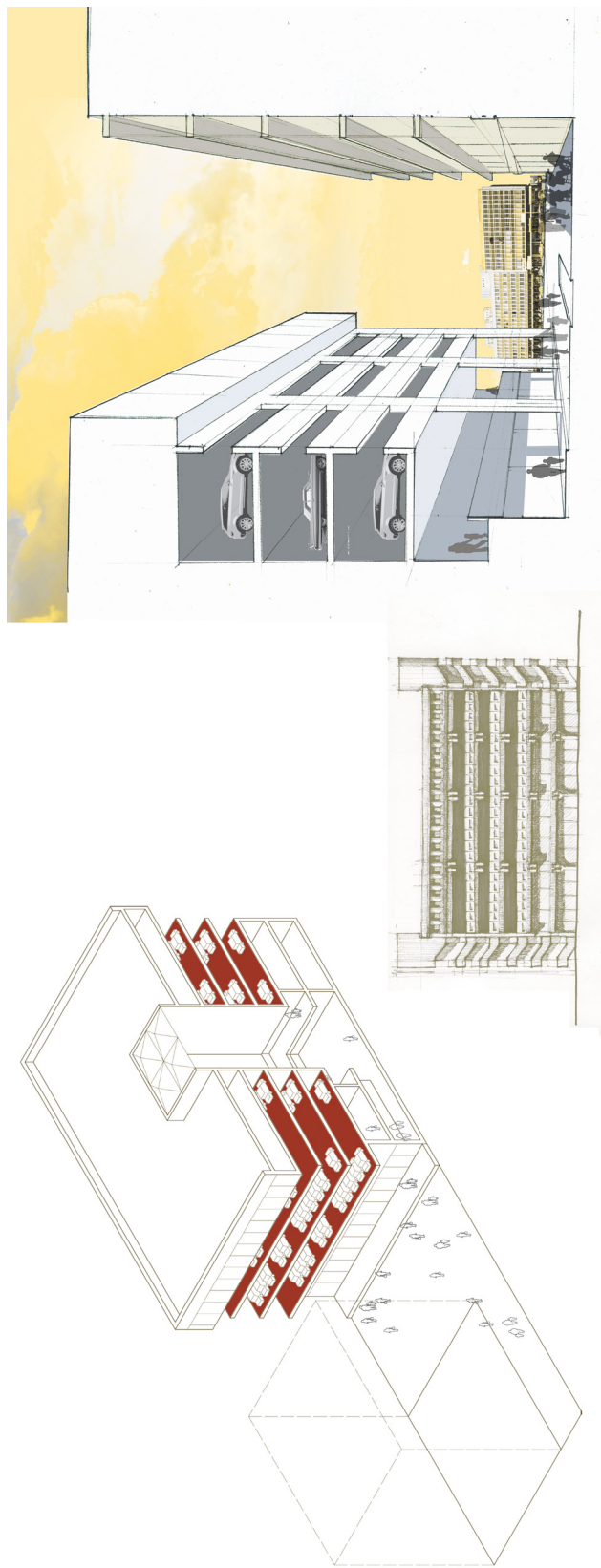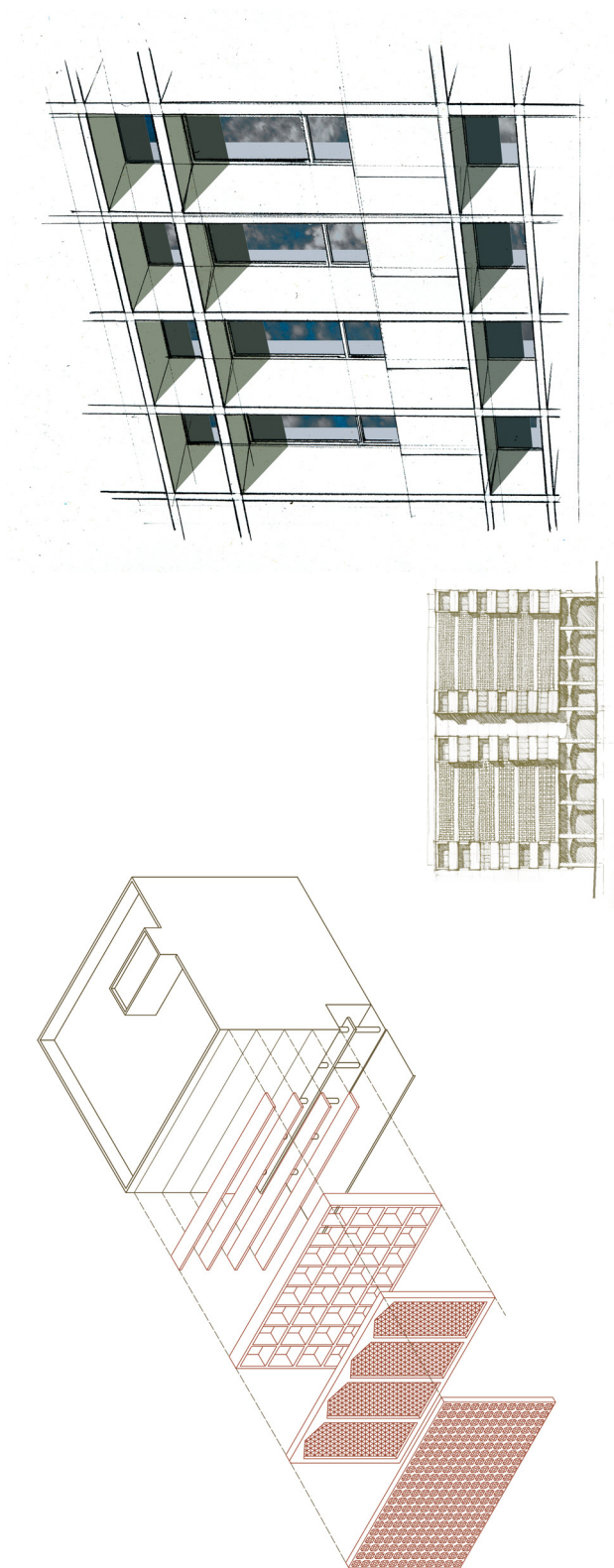
Building-street relationship
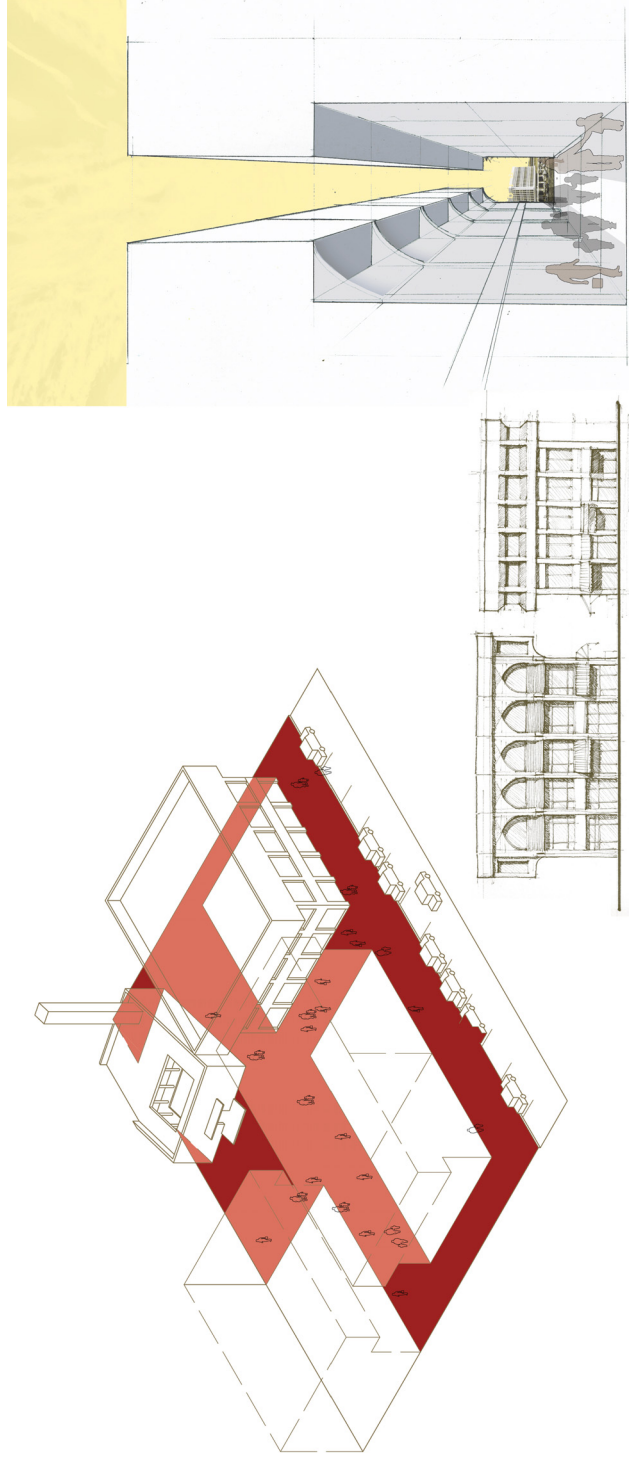
Building-outdoor pedestrian space relationship

Building-Automobile relationship
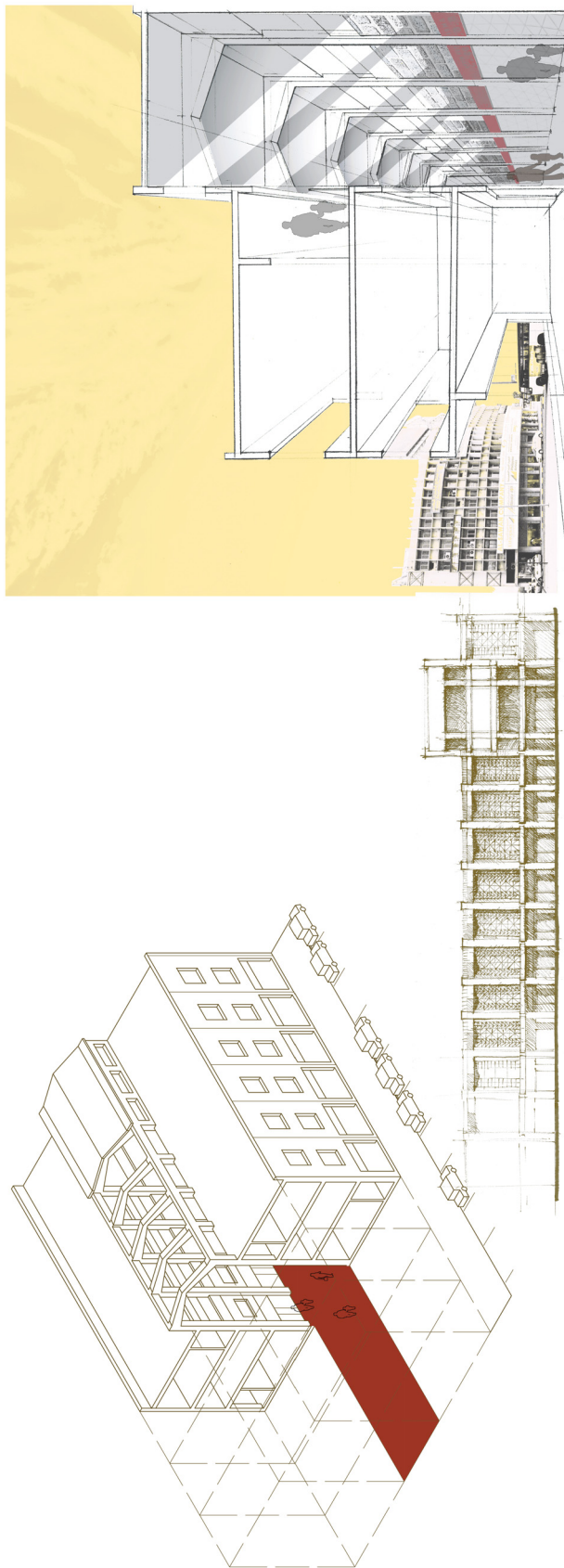
Shading devices as cultural expressions

Explorations

Those common features when seen in relation with the automobile, pedestrian life, and other factors, speak of broader guiding principles and desires. Their long existence, over half a century so far, left a lasting impact on the city, an impact that can be identified very clearly. These features should not be taken for granted. One should identify their limitations and prospects, and examine them in a contemporary context. The first principle is the creation of a clear threshold separating buildings from streets. Continuous arcades allow for a spontaneous movement from one building front to another, and a more natural spill of activity outside the building within this defined zone. However, these arcades are always raised a few steps above ground level, or fenced with vegetation, separating the building not only from busy streets, but also from sidewalks. The need to shelter the building entry at ground level is understandable and necessary, but slicing a pedestrian sidewalk and turning it into two parts when they are supposed to serve the exact same function is unjustifiable. There are many solutions that are
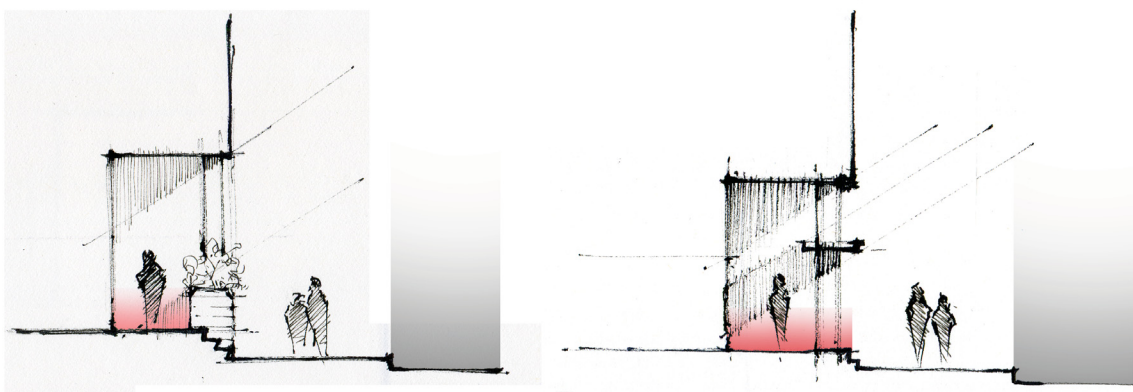
Examples of colonnades splitting a street sidewalk into two zones
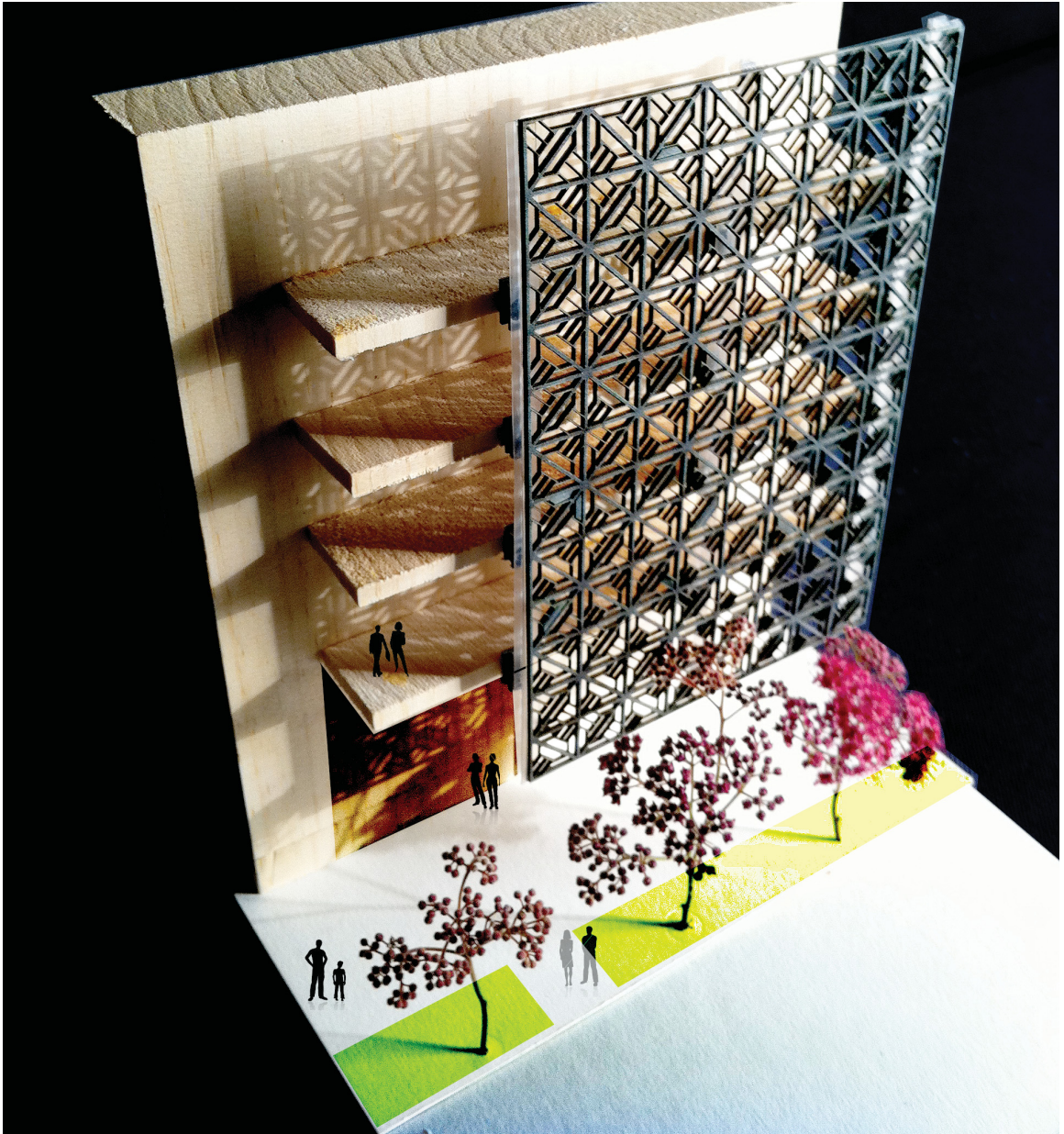
Model of a proposed strategy
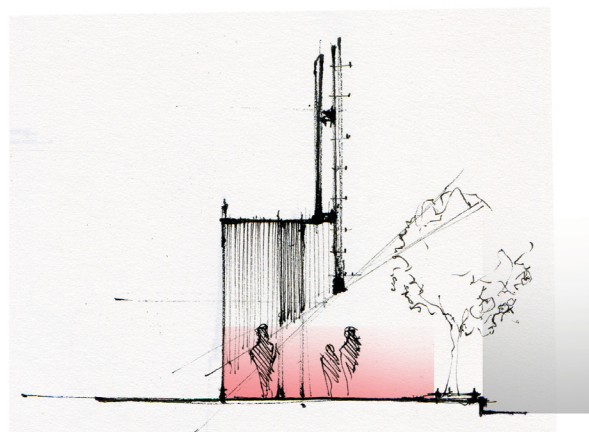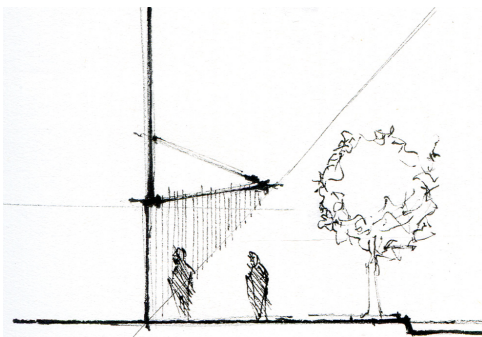
Proposed strategies

less divisive, and can maintain both shelter for building fronts, and a continuous pedestrian sidewalk all at the same time.

The second principle is the interdependent relationship between buildings and surrounding outdoor spaces, pedestrian ones to be specific. In a way the nature of these outdoor spaces is determined by the buildings surrounding them, while the qualities of those outdoor spaces have a direct effects on what takes place in the adjacent buildings. The intimate nature of an outdoor market street is shaped by the proximity of two opposed buildings and the cantilevered top, yet the group of stores at ground level would not become a great market place without the existence of such an outdoor space. In addition, the dimensions of these outdoor spaces has an impact on the surrounding program. Narrow spaces are usually associated with retail, while more generously
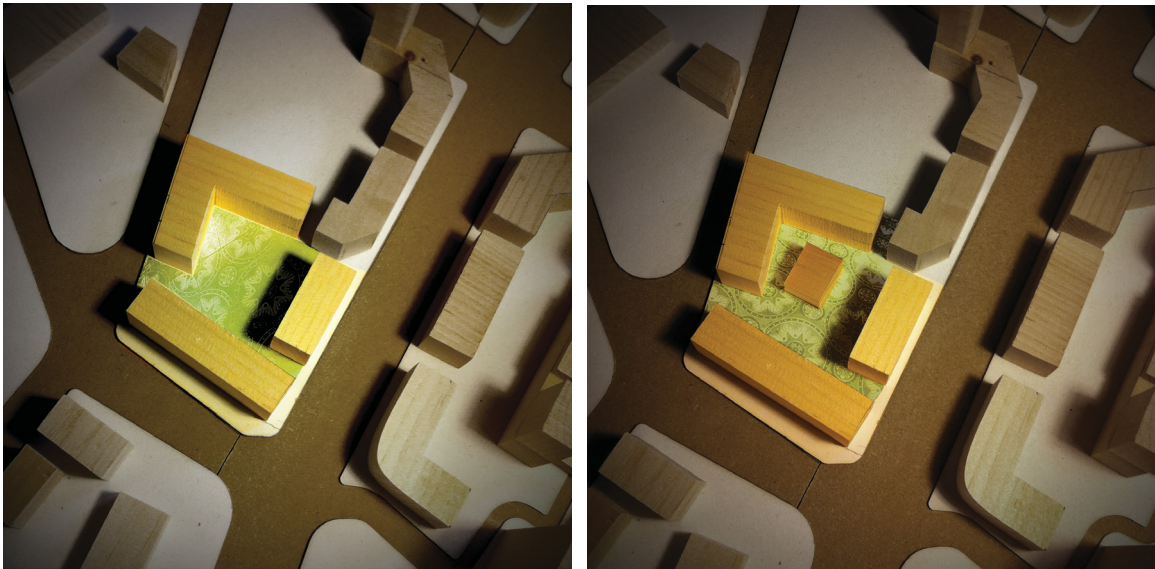
This comparison doesn't compare the advantages of having an open plaza versus a less defined outdoor space. It simply highlights the different outdoor quality in each, to which the surrounding form and program should respond to.
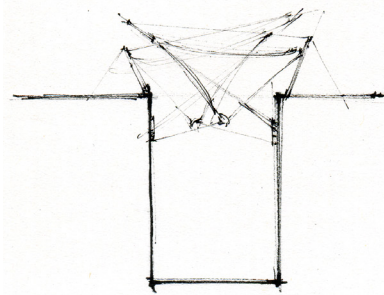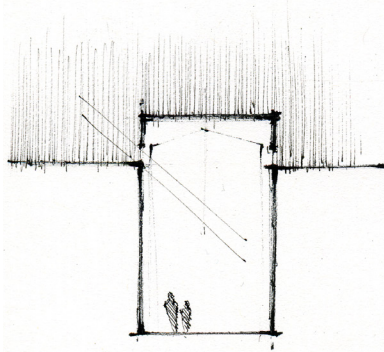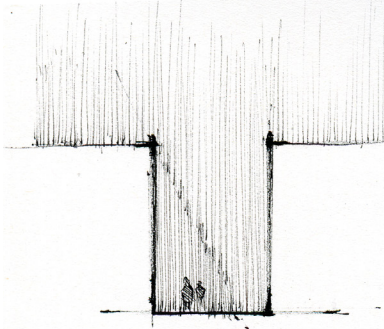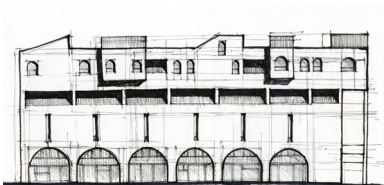
dimensioned spaces allowed restaurants and cafes to extend outwards into these spaces. In most cases, those outdoor spaces resulted from setbacks between buildings. One must understand the intricate relationship between a building and an outdoor space when confronting the task of designing one.

Internalizing circulation spaces is the broader desire drawn from the third example. The street-market is a very clear and legible building typology, and its modular form allows for easy expansion. One can witness in Kuwait City multiple buildings of the same typology, but of different lengths. Aside from the high environmental cost those indoor streets impose, internalizing them creates a sense of confusion amongst occupants. Many contradicting features lead to this sense of confusion such as metal benches and lamp posts, and the occasional stray cat running on reflective marble flooring in an air conditioned space. Providing a more comfortable pedestrian environment was the primary objective, but this objective can also be achieved through a semi-indoor environment.

Multistory parking hints to a desire to minimize building footprint through the vertical staggering of different functions. In one case (Wataniya Complex) a single building complex accommodated a commercial ground and mezzanine level, offices and parking in the following three levels, and exclusive duplex units surrounding one open courtyard with a central light well penetrating the floors all the way to the bottom level. The staggering of different programs in a building, in addition to its advantage of minimizing footprint, it creates an interesting relationship among the different functions, especially between the


Sheltering options for pedestrian streets

Elevation of Wataniya Complex, designed by TAC
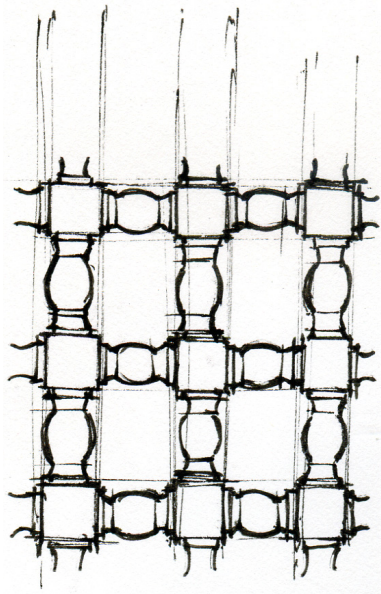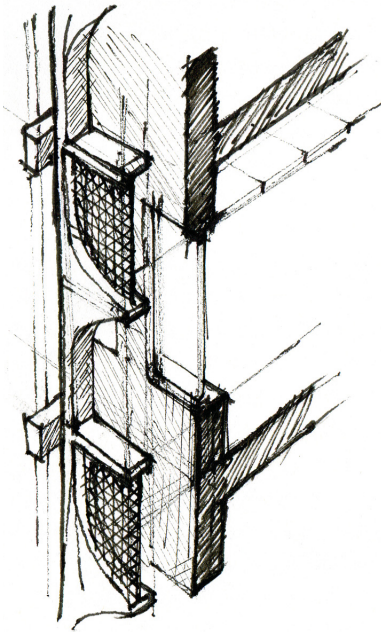
automobile and inhabitants. Dedicating bottom levels for commercial use maintains a continuous pedestrian zone at ground level in each block. However, rising parking levels not only imposes strict limitations on the rest of the buildings, they grew from the presumption that pedestrian environment at ground level is continuous throughout the city, when in fact it is undisturbed only within the perimeter of each block. The principle is valid, yet the vertical order of functions shall be examined to achieve a more continuous pedestrian environment throughout adjacent blocks.

The primary function screens on building facades is to improve the environmental performance of those buildings and to reduce the intensity of natural lighting to a desirable level. But one cannot ignore their symbolic and expressive quality. It is true that their appearance can be brought down to personal decisions based merely on a preference of style, whether by the architect or the client. Yet collectively they convey a general expression about the city. A wide range of highly abstract styles to very traditional and Islamic details can be seen as an interesting dialogue between the international and the regional, but can also reveal the reverse. Mimicking aesthetics of modern Europe for international appreciation, and the act of hiring well known European architects by itself is a clear manifestation of those desires. On the other hand the use of Islamic language in the young city looked for acceptance from the surrounding cities; cities of rich Islamic heritage like Cairo, Baghdad, and Damascus. When looking at the implications of these facades on the urban form of Kuwait City,   Those expressions were expressed through a lineup of modern buildings along the major streets of the city, where one can best observe this showcase while driving along them.

Detail of modern shading devices

An area was perceived complete once a continuous street façade was built and not when the entire block was fully developed, framing a misleading image of the context, one which cared more about an outward image rather than an inward, and missed unique opportunities the urban structure offered.

The existing vertical order of program imposed on the proposed site
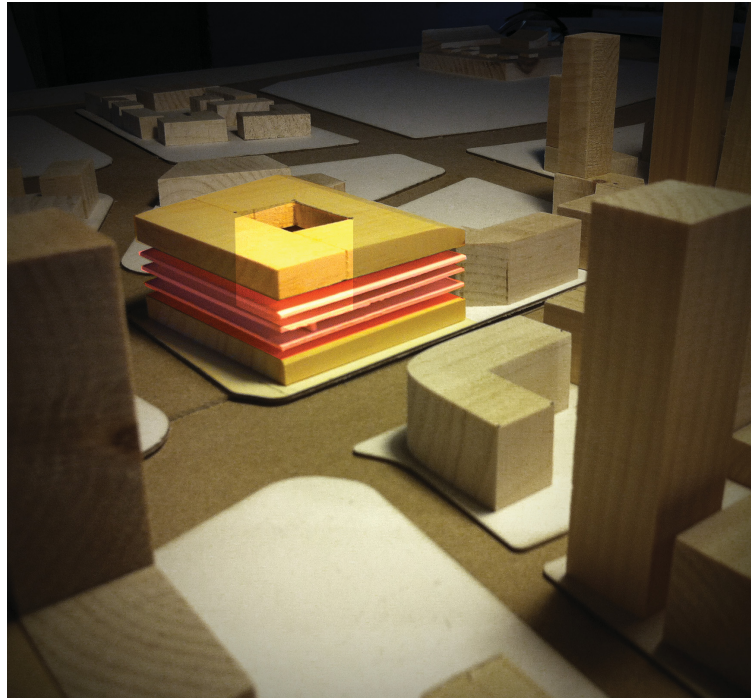
Dedicating the ground and sub levels for parking turns the light well into an internal outdoor courtyard, raised one level above ground
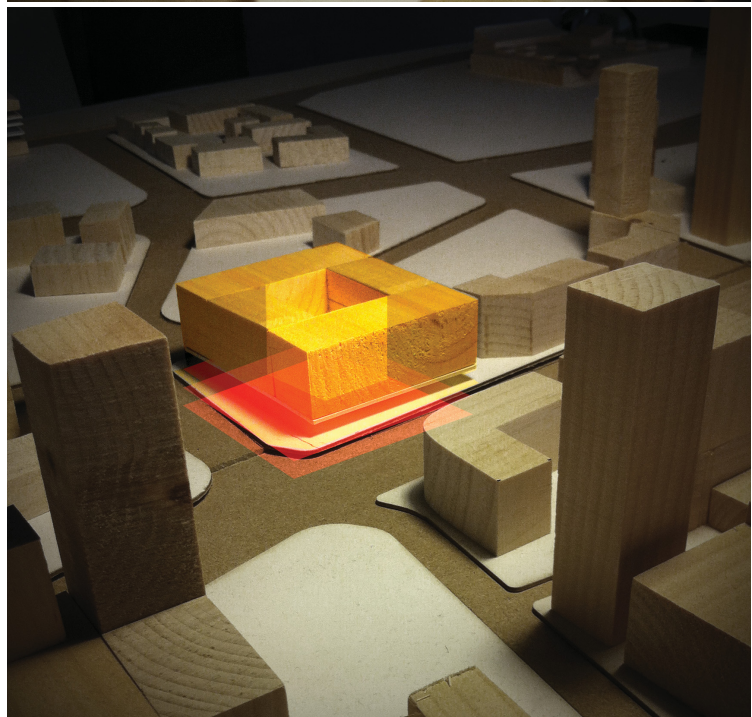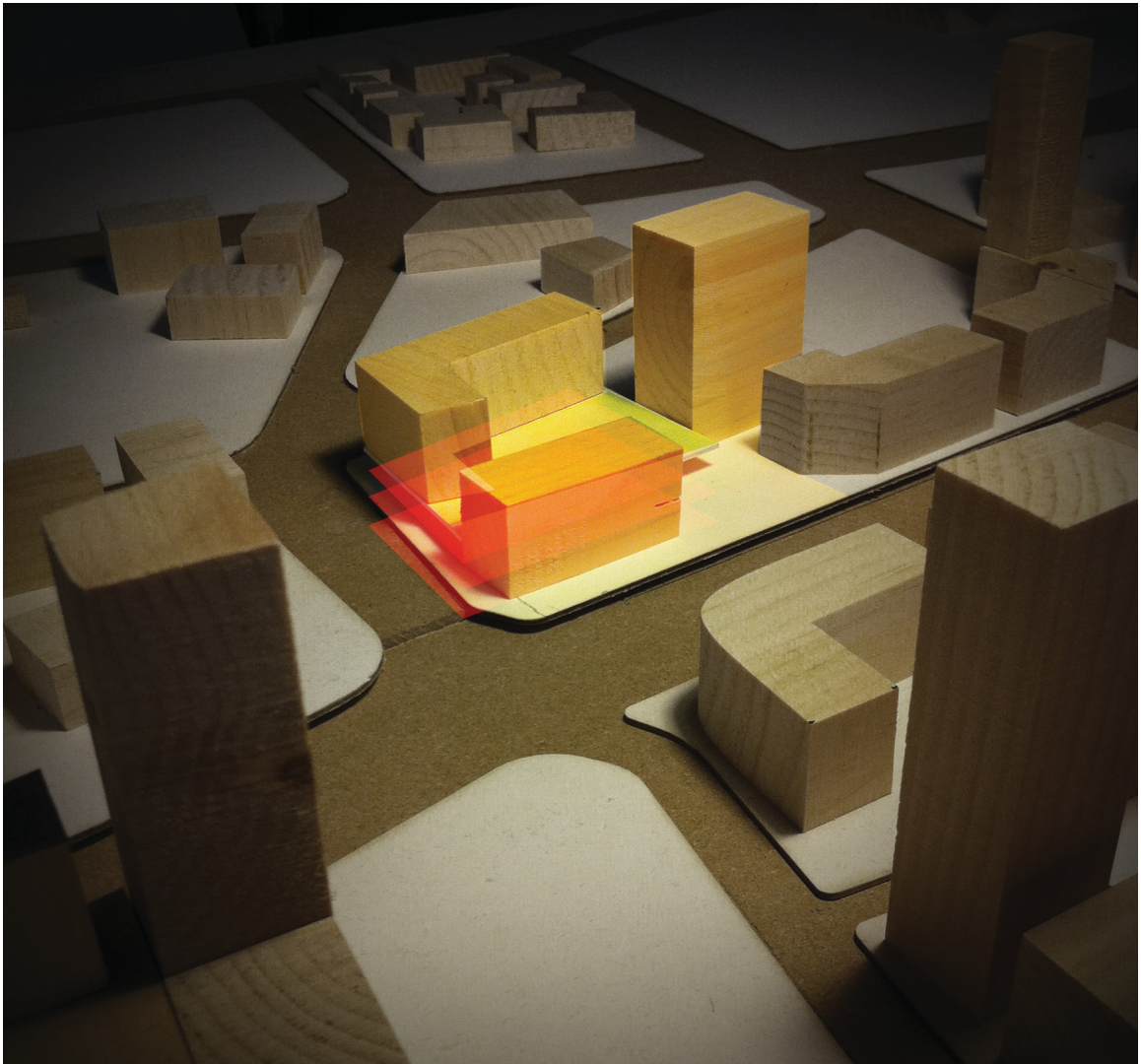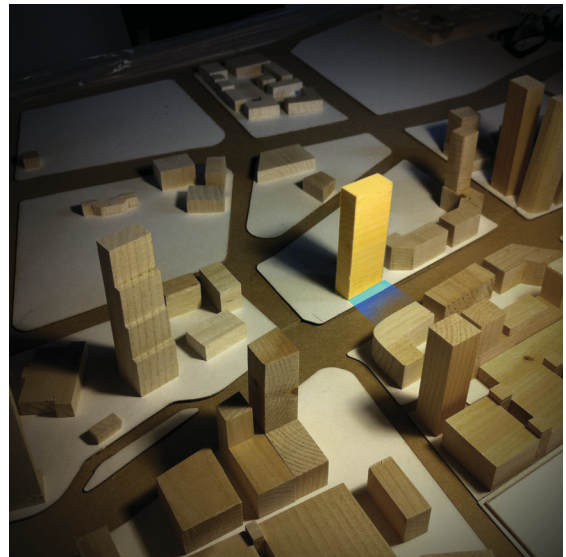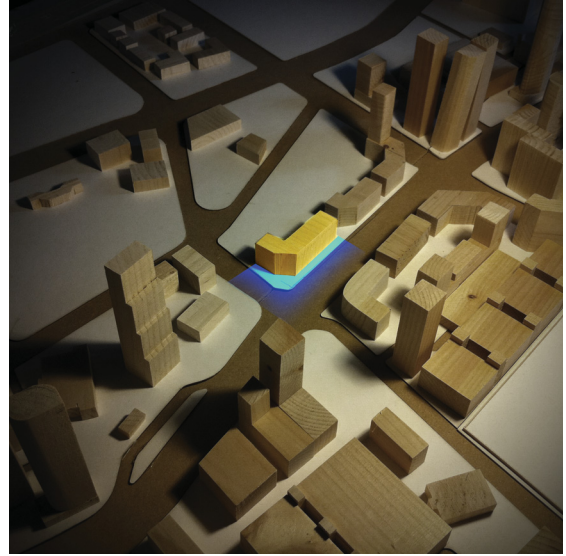
Once the previous order is sustained, one can break from a singular mass and propose multiple smaller ones; the internal courtyard can become an actual outdoor space.

The first two images show buildings responding primarily to streets

This intentional break from the existing pattern treats both streets and internal spaces of city blocks as primary structuring elements
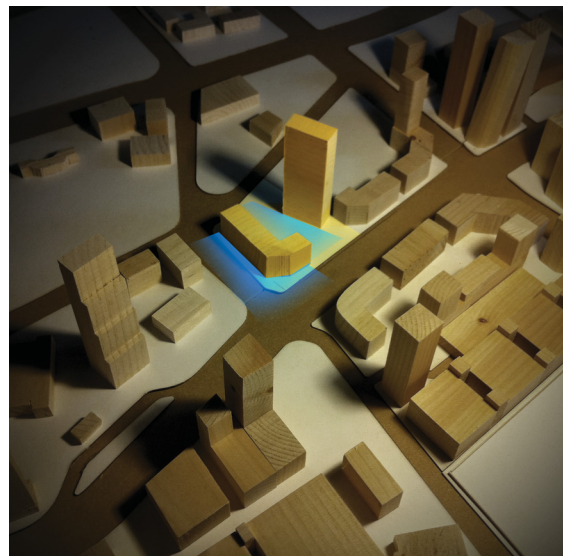
CHAPTER 4: DESIGN: A MIXED-USE PROJECT IN THE HEART OF OLD KUWAIT CITY

Approach

The main objective of this thesis is not to look at the modern architecture of Kuwait City for proper building height, distribution of program, or detailing techniques, but rather to work with the embodied principles and intentions discussed in the previous chapter in a critical fashion. The design approach considers them open for embracement and improvement, not as strict and limiting guidelines. While studying the qualities of individual buildings is revealing, this project also tries to respond to the collective conditions modern buildings impose on the context: to the block nature of the city, and to the modern city planning as a whole.

Ambition

This project draws attention to the internal spaces of Kuwait City blocks as structuring elements of equal importance with the streets. Typically the street was the primary axis or element that buildings have responded to, and the depth of blocks was considered secondary, if considered at all. This project responds to the two elements (the street and the depth of the block) with equal concern. The design not only utilizes the potentials of an internal space within a block, but also bridges multiple spaces within segregated blocks to retain a continuous pedestrian environment uninterrupted by automobiles. A map of Kuwait City highlights a seamless network of streets for automobile flow, but this map does not necessarily describe the

Area highlighted in red represent residential districts, the proposed site is highlighted in red too.

pedestrian flow in the city which is often not parallel to the network of streets. This design contributes to the creation of another map which highlights a seamless network of paths, pockets and breaks for pedestrian flow.

Solution

In a traditional courtyard house, the house responds to two different outdoor environments; the internal courtyard and the external street, each with different functions which walls had to respond to. Furthermore, in a traditional Arabian neighborhood, major streets and squares serve a function different from stemmed allies and pockets between buildings. In modern Kuwait City, buildings have created a similar condition for pedestrians; a pedestrian zone between a building front and a street and a pedestrian space framed by buildings. If the first is being limited to moving along building fronts, or from side parking to buildings, in the second zone, the outdoor spaces away from streets serve many more functions. The fact that both are outdoor pedestrian spaces does not necessary mean they should exist at the same level. With this in mind, the design proposes elevating the central outdoor space within the selected block by one level with a clear and smooth transition from the ground to the upper level, freeing the ground level for parking and allowing a bridge to extend over major streets to connect with surrounding blocks.

Site

The selected site is located within the boundaries of Kuwait City. The plot spans a part of an existing block, currently being used as outdoor parking space serving

the busy part of the city. The site offers space big enough to implement the ideas discussed previously at a smaller scale. However, the main reason for this selection is the nature of the surrounding blocks: the vacant lot is adjacent to vacant blocks, in which internal spaces have not been fully utilized, and blocks of dense and vibrant pedestrian life. In addition, the surrounding is a mixture between six story modern buildings (subjects of this thesis) and contemporary high-rises. The selected site offers an opportunity to extend beyond the containing block and integrate the surrounding in the design process.


Project plot in context.

Project plot (highlighted in red) in context.
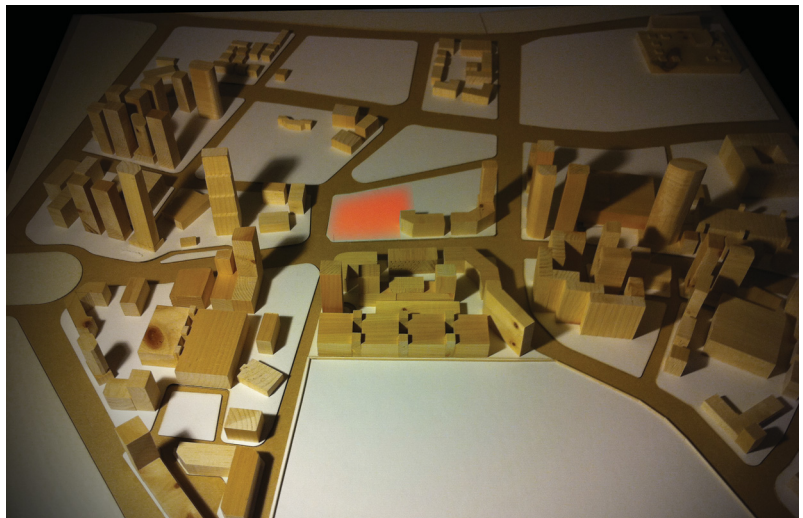
Orientation

Building orientation responds to multiple intuitions: the chosen orientation is a result of a desire to break away from the typical pattern of situating buildings. Furthermore, in addition to providing daylight quality and a view to the gulf, the diagonal alignment of the two towers frame an intermediate space, attempting to bridge the fully developed blocks on one side of the site, to the yet to be developed blocks on the other.
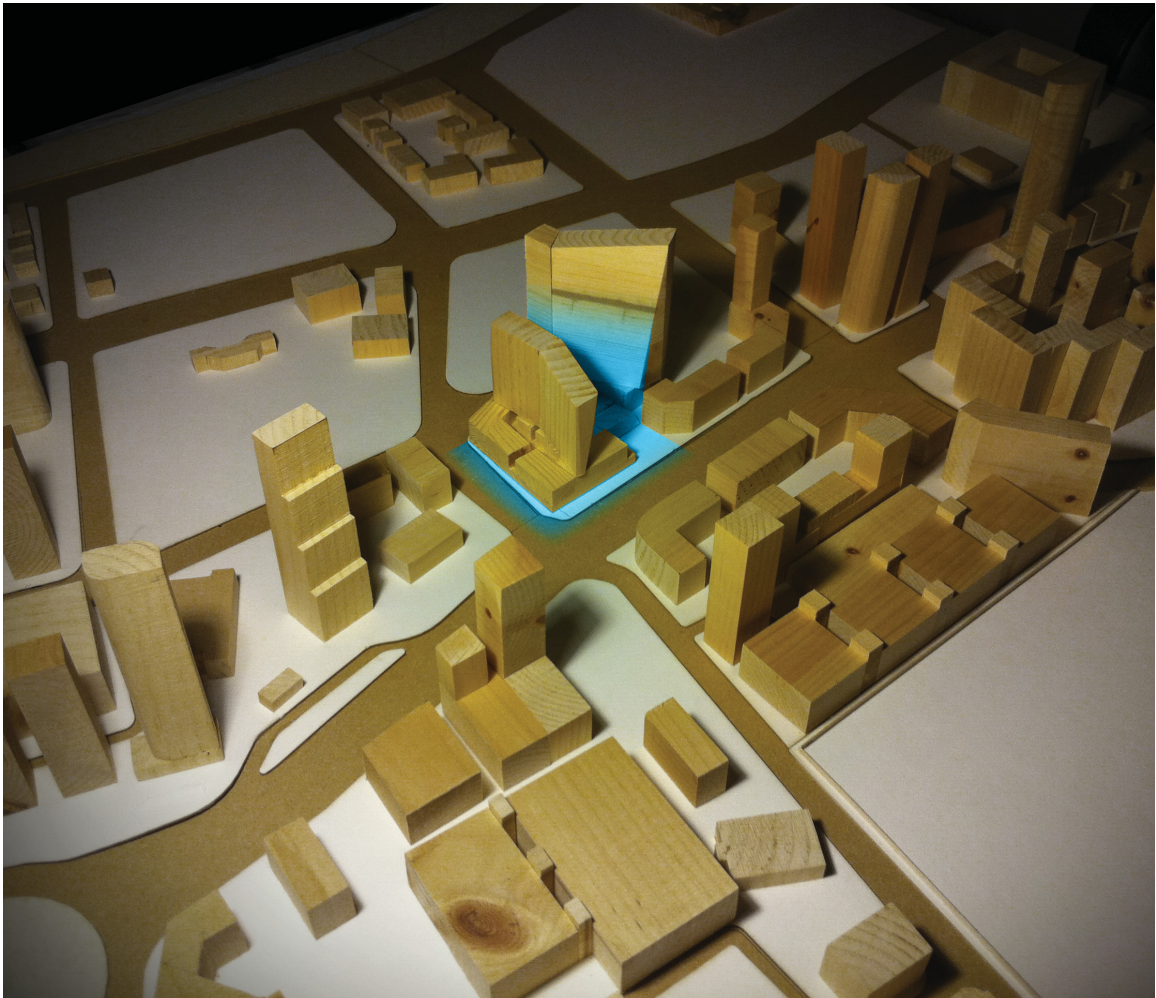
Model of the proposed massing.
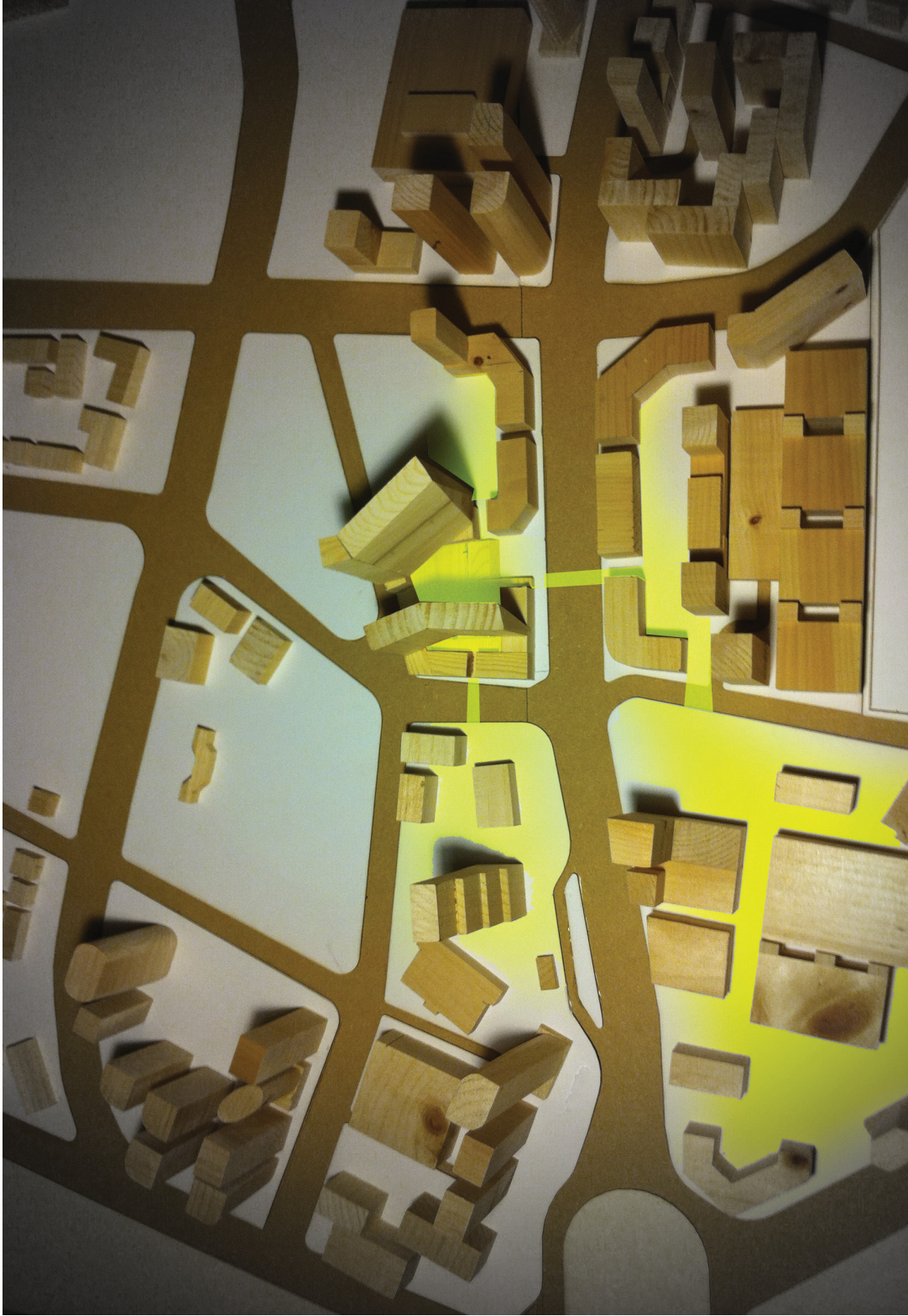
Spaces highlighted in yellow are of pedestrian use only, one can imagine a pedestrian route from one block to another by walking through these courtyards.
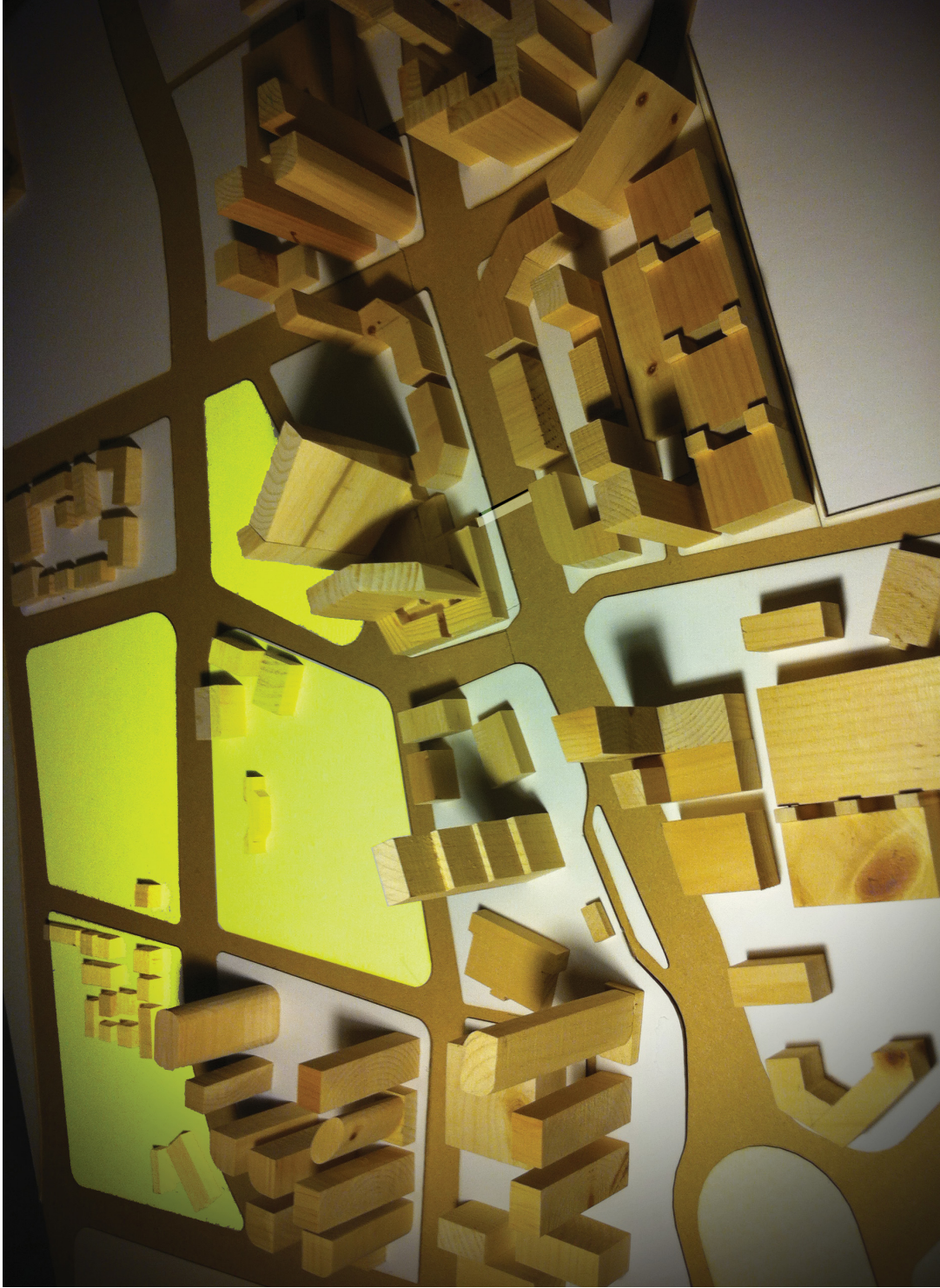
Blocks highlighted in yellow are currently vacant, ready for development, when developed, the plaza of the proposed project can turn into an important midpoint connecting these blocks to the complete ones on the other side of the street.

Program

Collage of proposed program.

The same rules that pushed housing outside the perimeter of Kuwait City are being explored to bring housing back. The selection of housing as a primary program responds to three intuitions. First, when looking at historic architecture for insights, one can expand the search and look beyond buildings of similar function. Many modernist architects looked at traditional housing for contemporary housing solutions, but they also designed buildings with no existing precedents, where they studied the surrounding in a constructive way. Second, bringing back housing to Kuwait City can have a significant impact on the pedestrian environment of the city. One can expect less reliance on the automobile if safe crossing mechanisms among blocks are provided, where one can move from a residence to a commercial or recreational area within the city on one's feet. Third, bringing back housing is a statement that bridges the segregated city with the surrounding metropolis, at least in terms of program. Kuwait City can be more than just a day destination, and the existing edge zone can becomes a mark of exchange between residents and visitors coming and going.

This design proposes an alternative housing model in contrast to the existing suburban models. In a city of three million inhabitants, with residents coming from all over the world, there is a demography and a market for those who prefer living in an urban environment instead of a suburban one.

Housing Units

The typical model of double loaded corridors with housing

units aligned on each side is avoided. Instead, a spacious single loaded outdoor corridor leads to units on one side, and is open on the other. Each unit consists of two levels, a main level accommodating public spaces such as a living area, a kitchen, a recessed balcony, and amenities, and a second level of bedrooms, bathrooms, and a smaller living area. The main level of each unit has a view of the public plaza, while bedrooms on the upper level orient outwards. This model maintains a proper level of privacy, in addition to taking advantage of both northern and southern sunlight and views.

Public Spaces

Creating public spaces for residents such as rooftop gardens or tennis courts does not in itself make the complex a better civic place or public environment, but rather turns it into a more exclusive one. Public spaces in an urban setting should not only serve residents, but also cater to the greater public; a gym or a recreational center, a day care, and a gathering hall serve those who come to the city to work as much as the inhabitants of the complex themselves. A hypermarket, restaurants, retail space and office spaces are incorporated in the design at public levels. Outdoor public space is divided into two zones, an outdoor plaza surrounded by restaurants, the gathering hall, and day care all of which can spill out and make use of the plaza. The second zone is a semi outdoor market street, sheltered with light canopies for both climatic and aesthetic reasons.

Pedestrian Bridge

Bridging to the opposite block responds to a general

understanding of the city (as discussed in chapter three). However, raising pedestrian spaces one level above ground and connecting to the opposite block via a pedestrian bridge is not meant to be a general prototype to be applied everywhere. A prototypical solution to any block can either complicate a condition rather than resolve it, or the solution itself is too general if it is meant to be applicable in every case. Hence, the aim is to provide a better street crossing mechanism, one that responds to the particularities of the site: the double height ground level of the building across the street can respond to the raised plaza in an interesting way. Crossing at more permeable streets can be improved with speed bumps or crossing lights at ground level. In this way the shift in levels of outdoor public spaces can be exploited in a positive way.


Light quality at sunset.
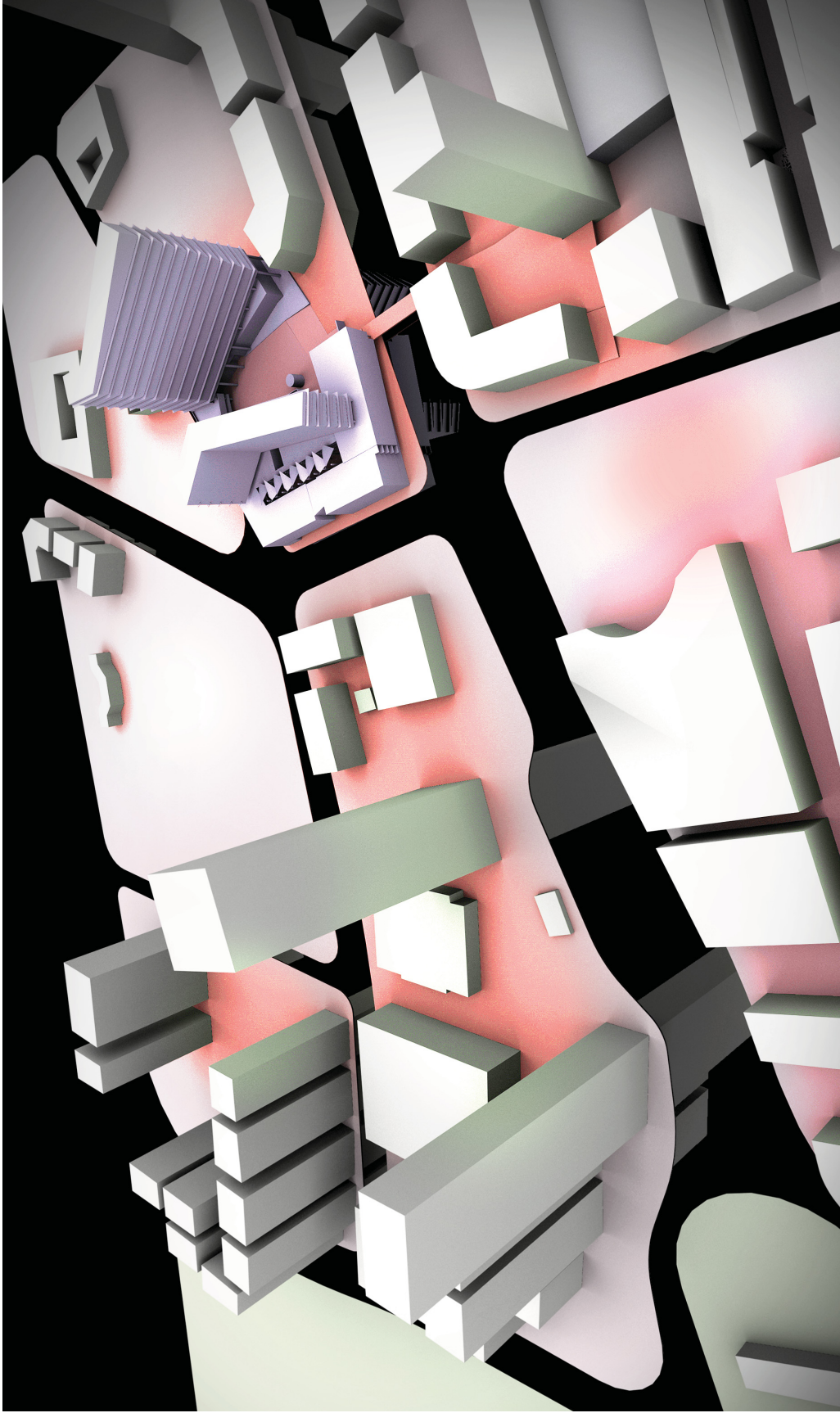
Massing model of the project in context, with internal courtyards highlighted in red. The design both highlights the value of internal courtyards as important urban feature in which buildings should respond to, and proposes a bridging solution to offer an alternative pedestrian route among the blocks.

Residential Towers

3rd level

Plaza Level

Street Level
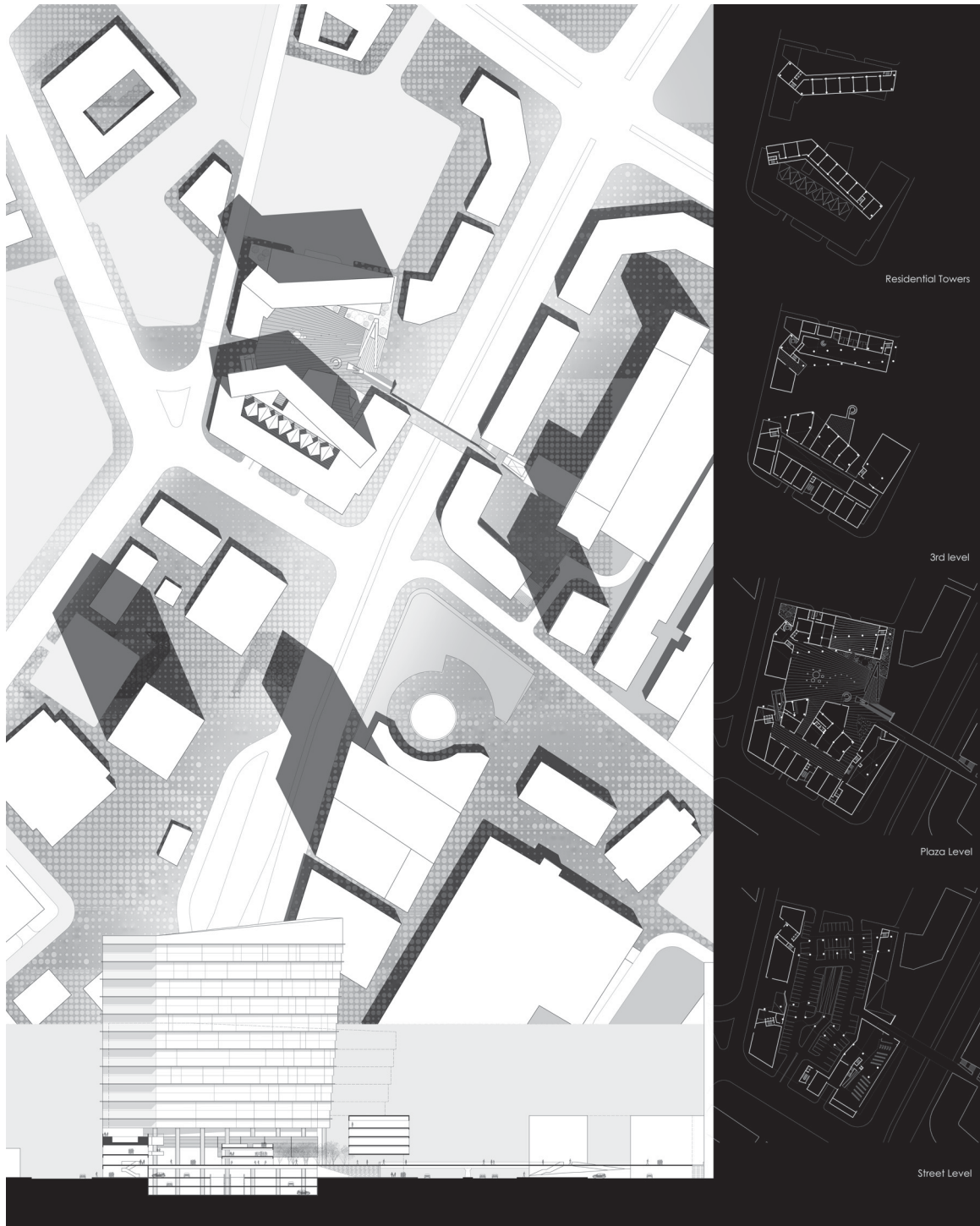
Site plan, section, and floor plans (details in page 65-70)
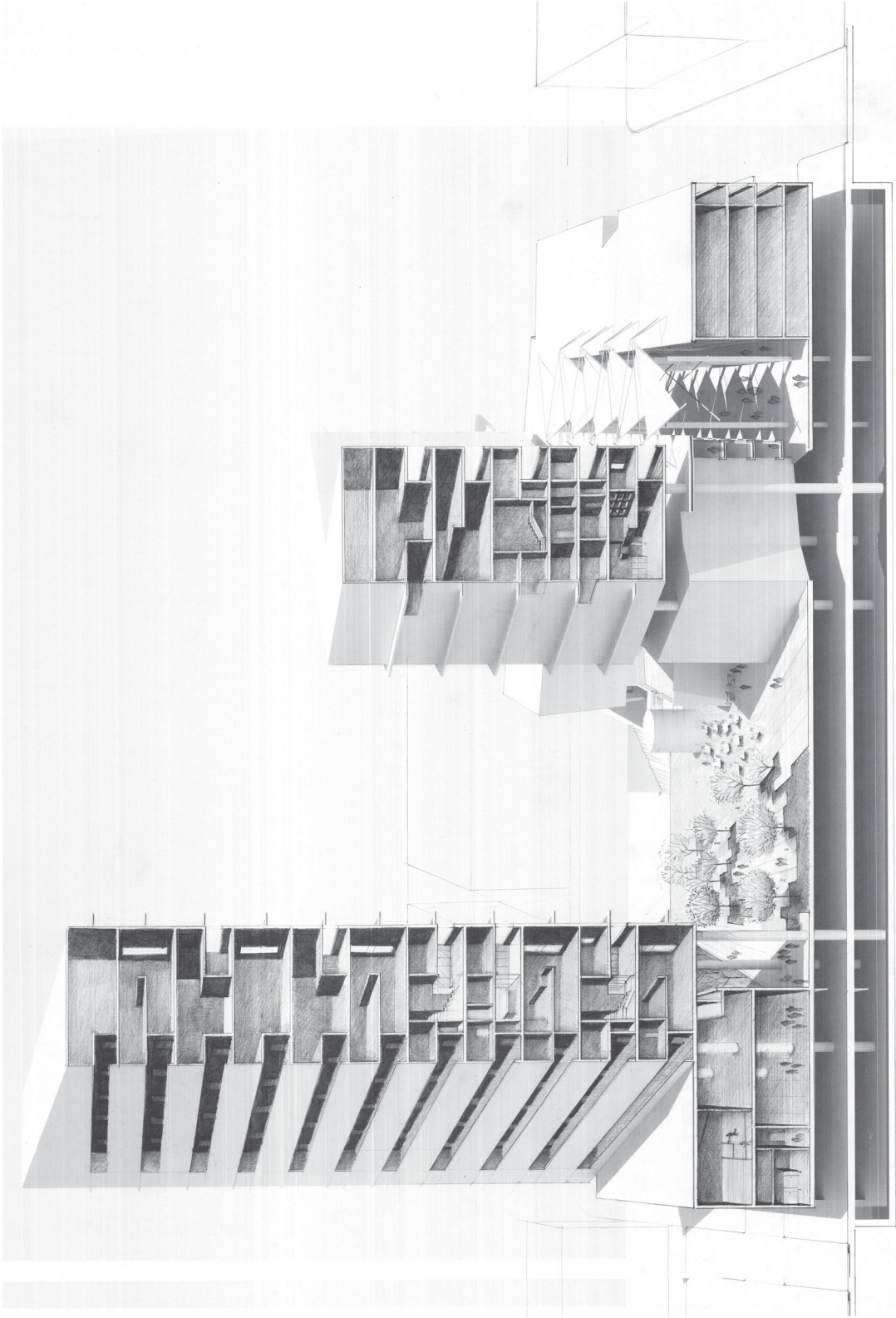
Section through the building, showing relationship between building components: parking at ground and sub levels, public spaces at plaza level, and housing units at higher levels, the insertion of the mid rise divides the plaza into two zones, each of a different function.
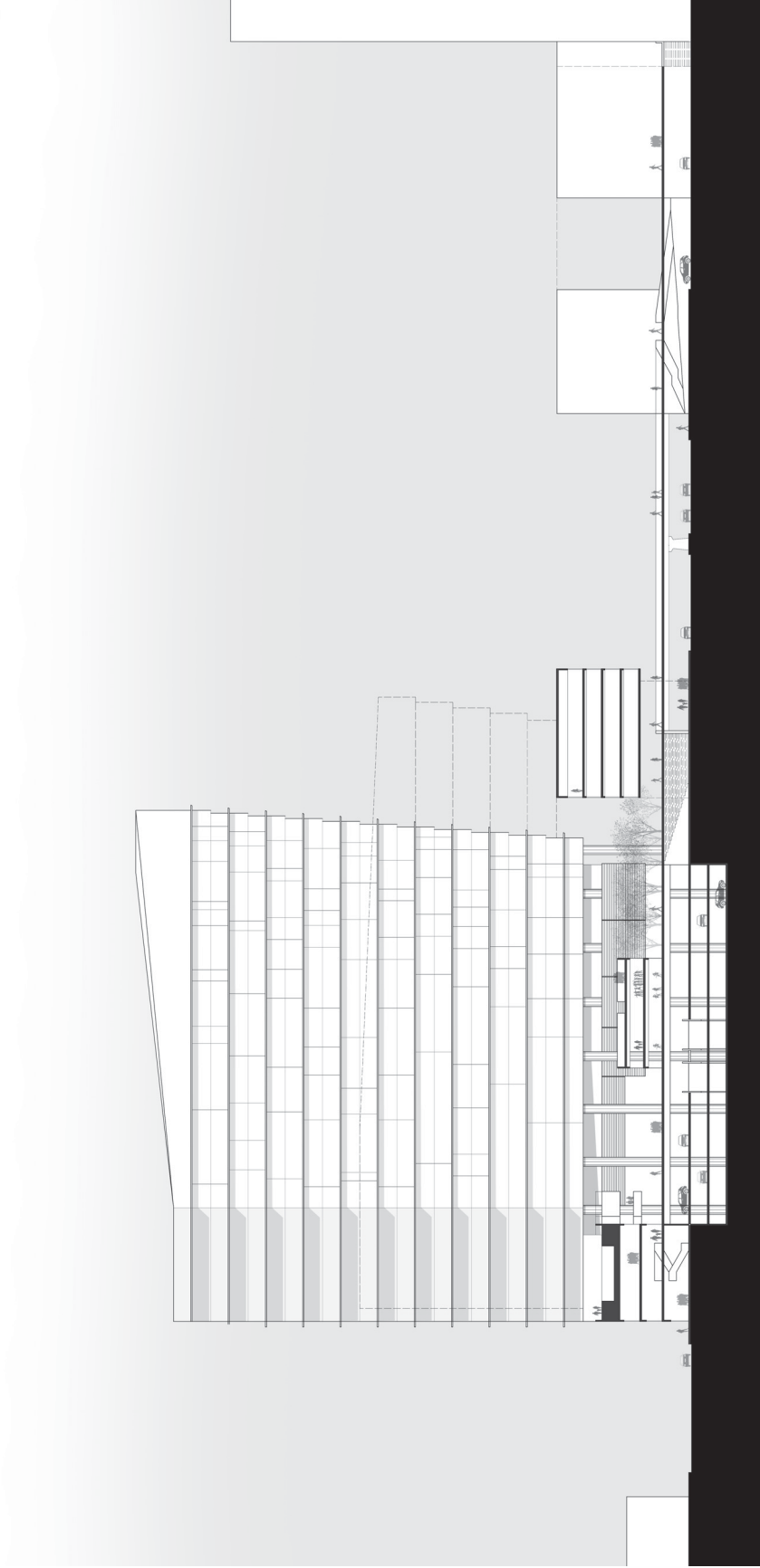
Section through central plaza and pedestrian bridge, highlighting the value of the central plaza within the block as on outdoor pedestrian space in the city, connected to another courtyard across the street via a pedestrian bridge.

Floor plan at street level showing supermarket on one side, towers' entry and retail space on the other, and parking in between.

Building at plaza level, showing grand hall, tower entry, gym entry, and retail space on the north side. The southern part at plaza level consists of retail space, restaurants, and tower entry.

Gym and offices
level

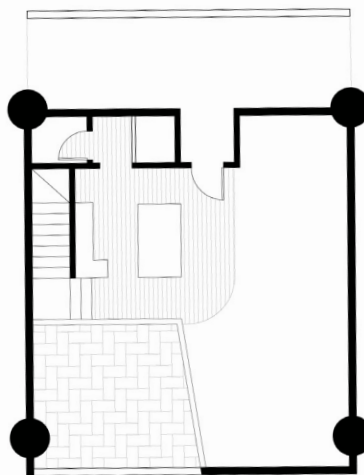Residential level
(detail of housing
units on page 69)
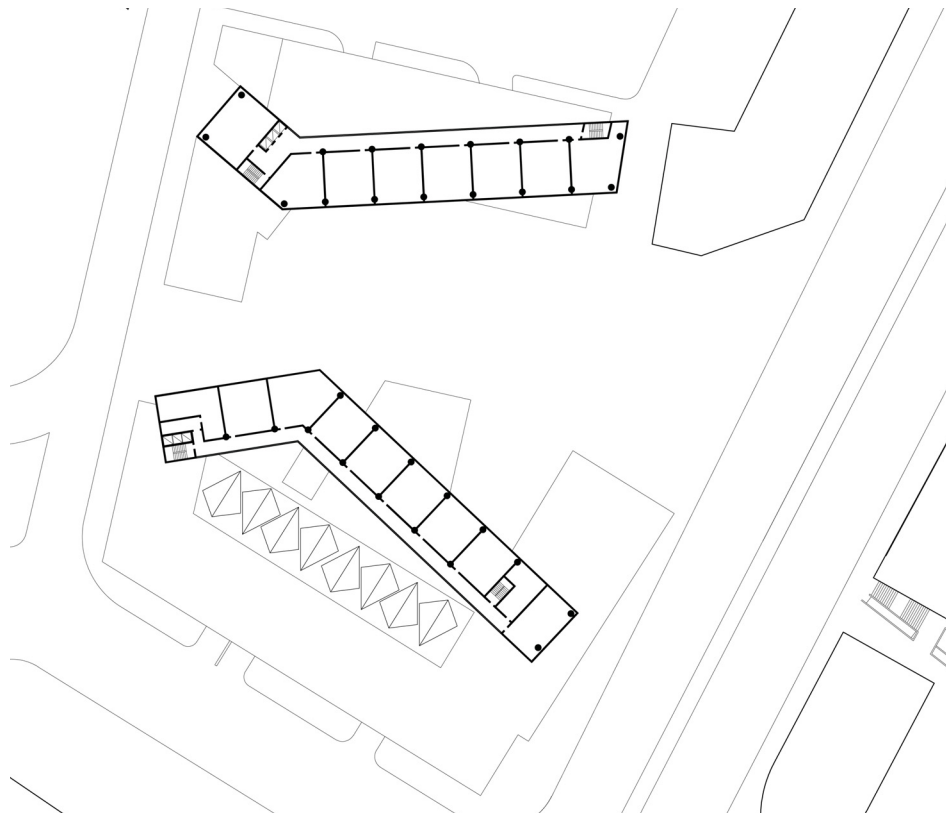
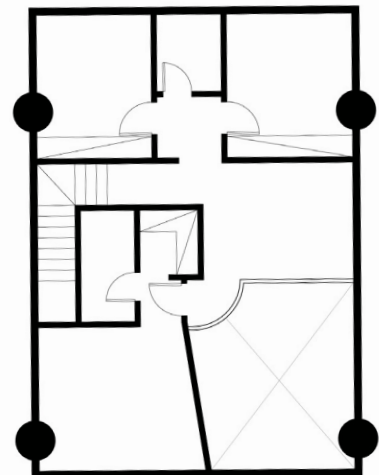Supermarket, facing the street on one side, and the raised plaza on the other.

Grand hall
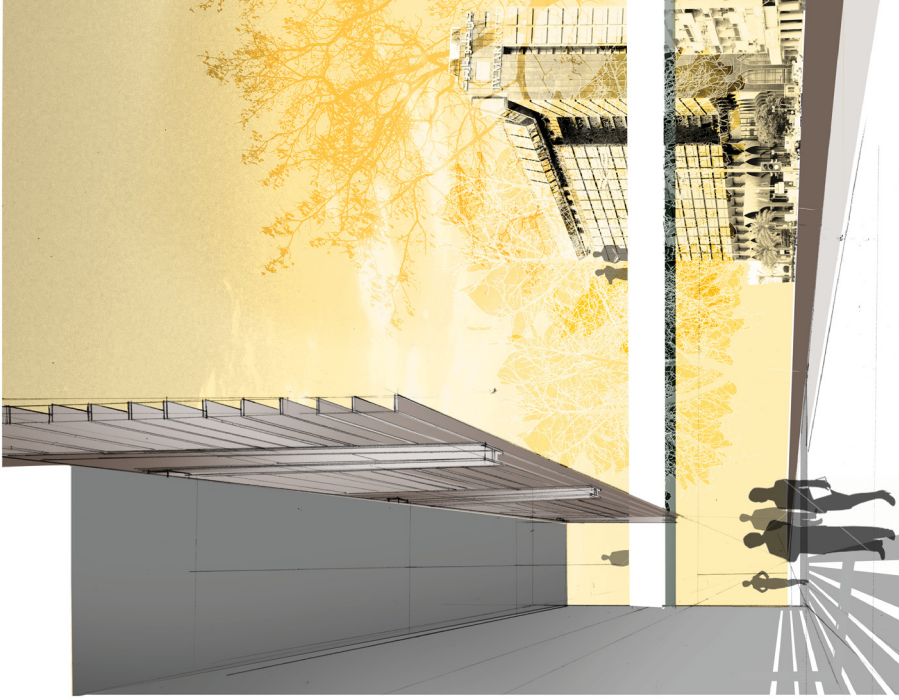(one level
above street),
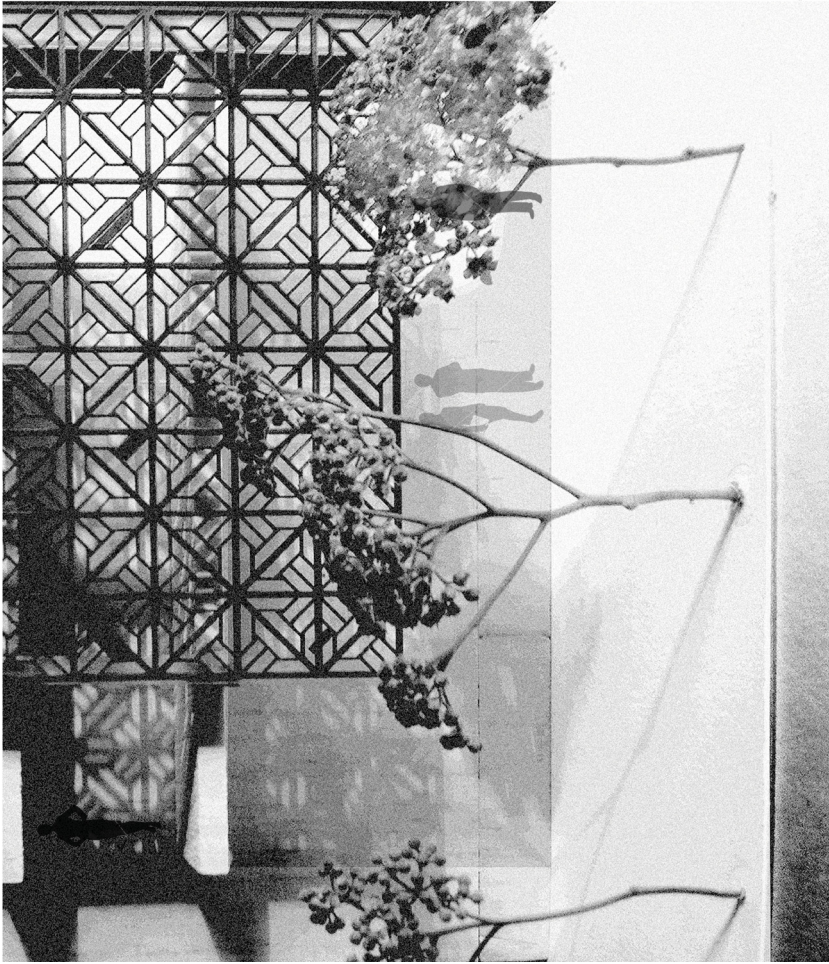open to plaza
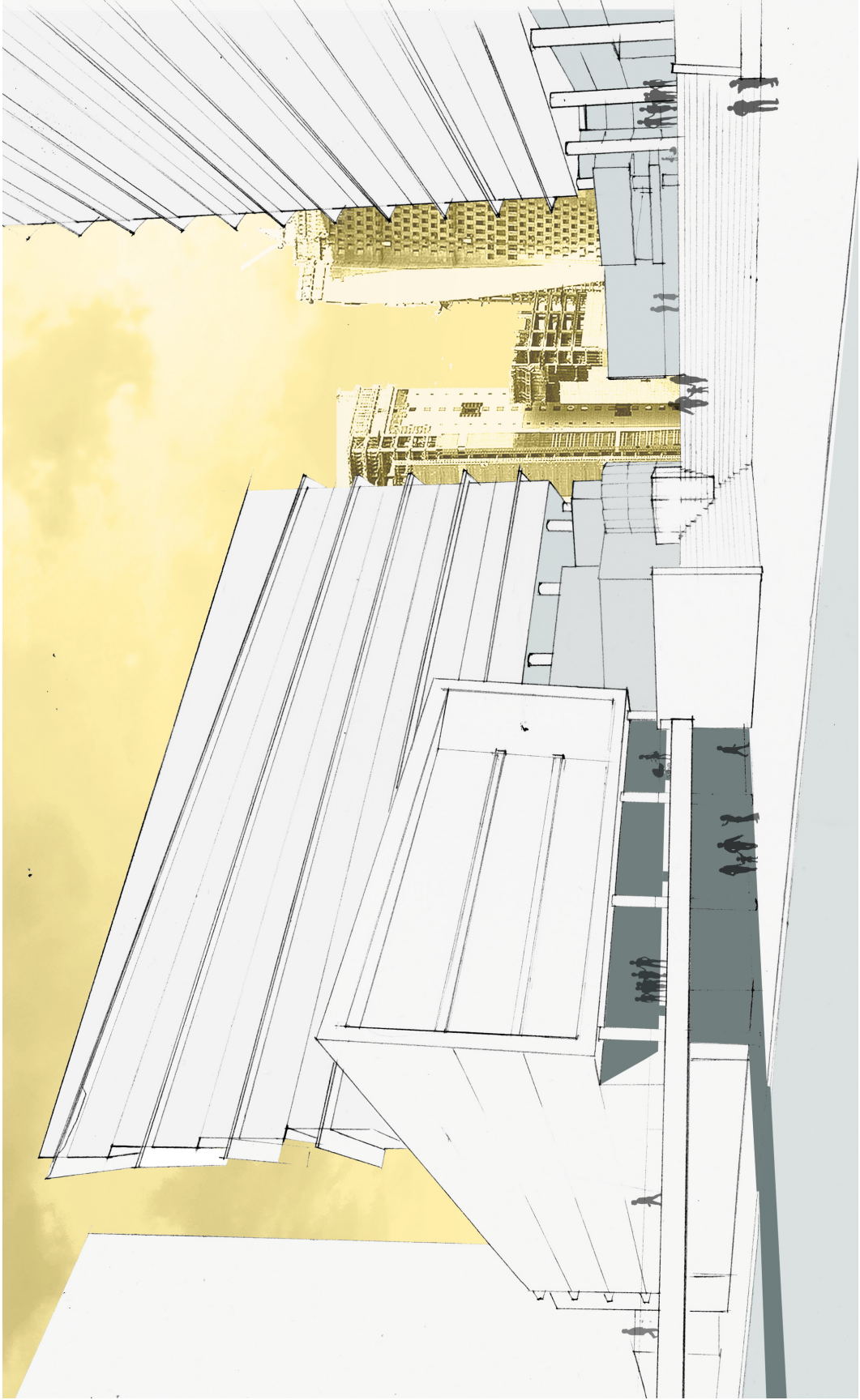on one side
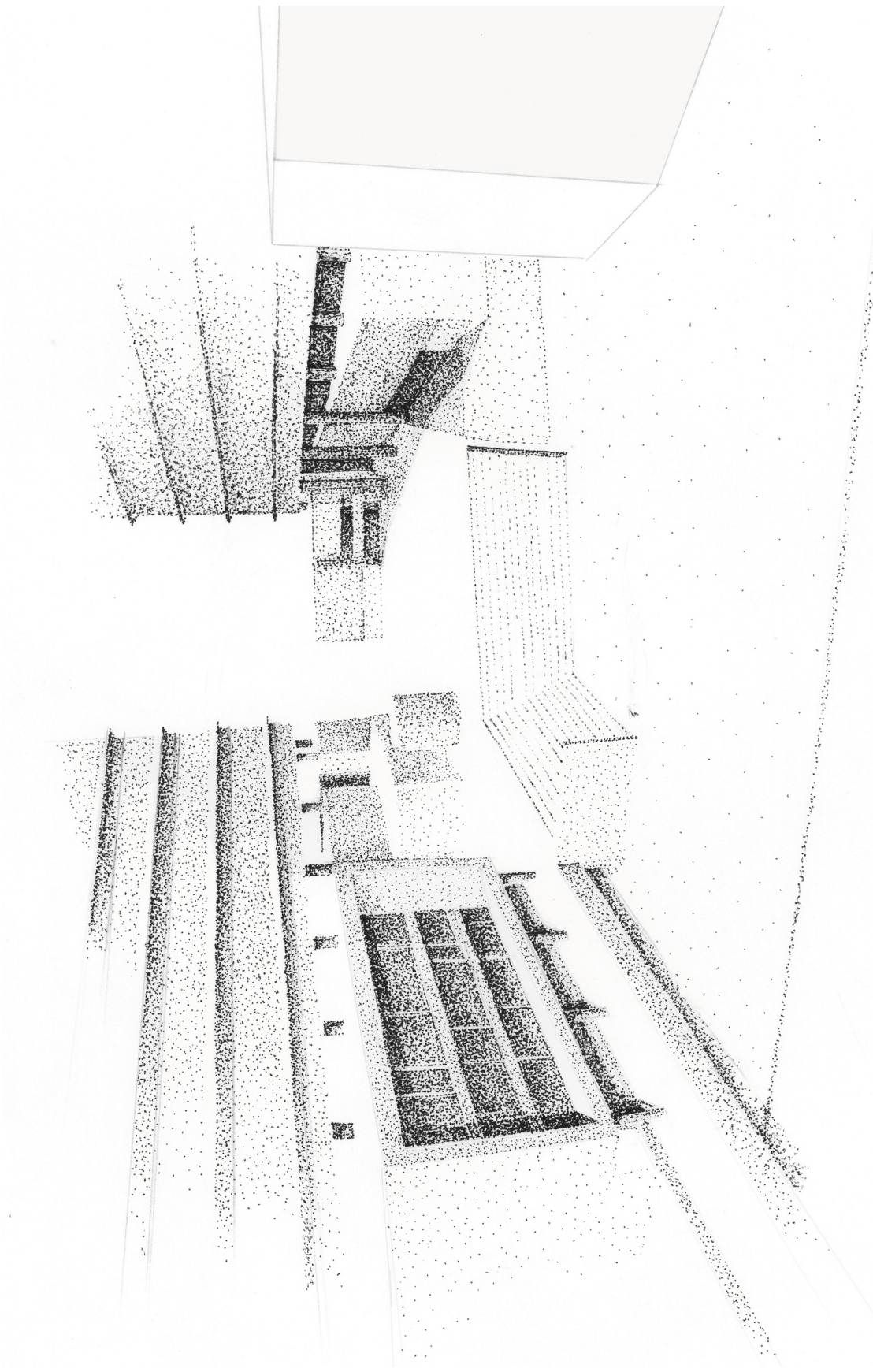
Perspective view of a housing unit.

Main level

Upper level

Building-street relationship, shading device detail: the hanging screen provides shade and shelter for the building storefronts, without marking a hard line on sidewalk that splits it into two.

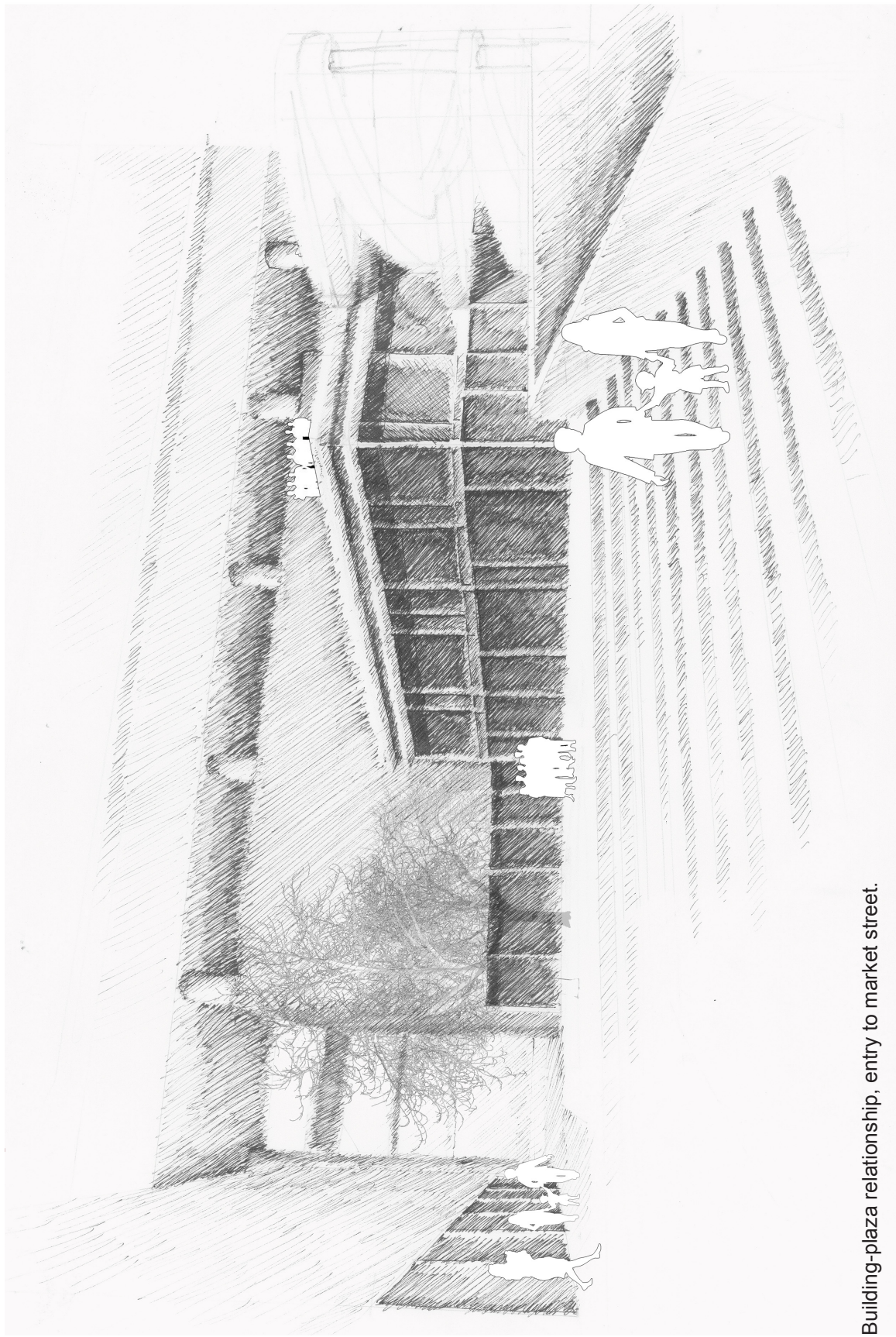A perspective view showing street, building, plaza, and pedestrian bridge.

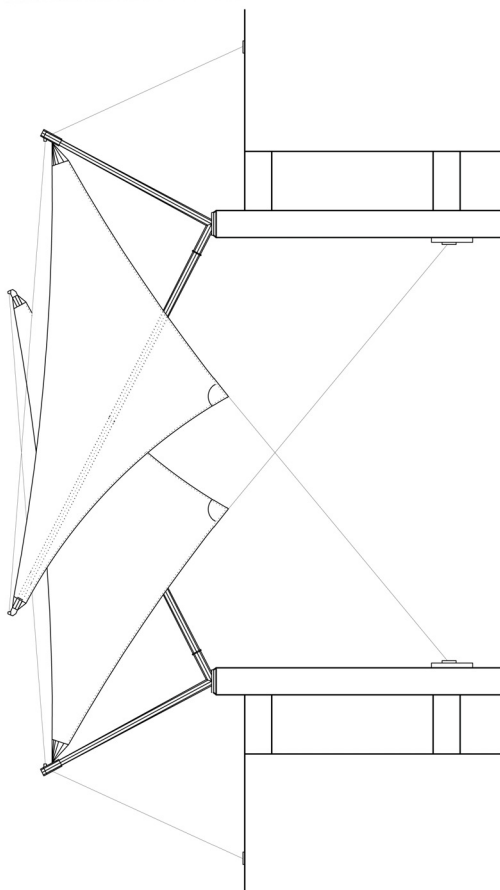A perspective view showing street, building, plaza, and pedestrian bridge.
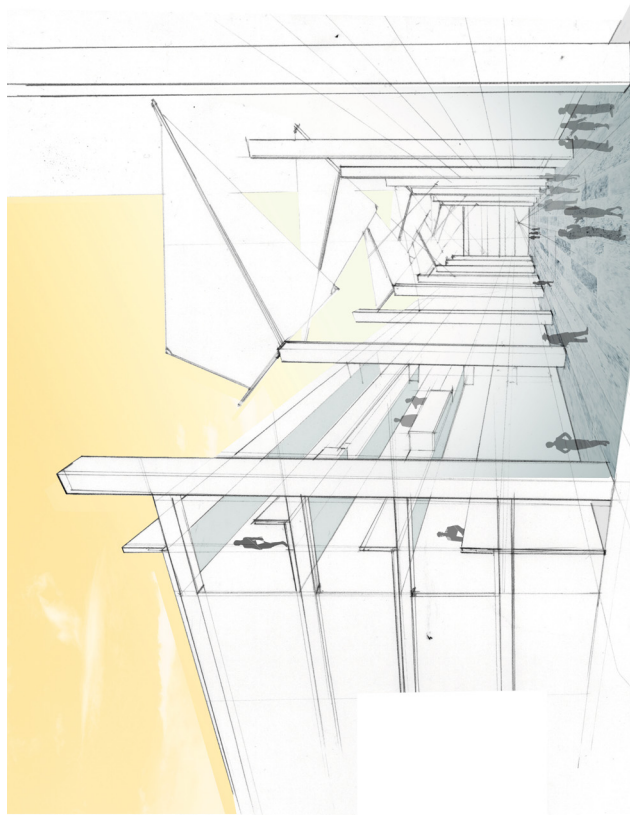
Building-plaza relationship, a sheltered building entrance.
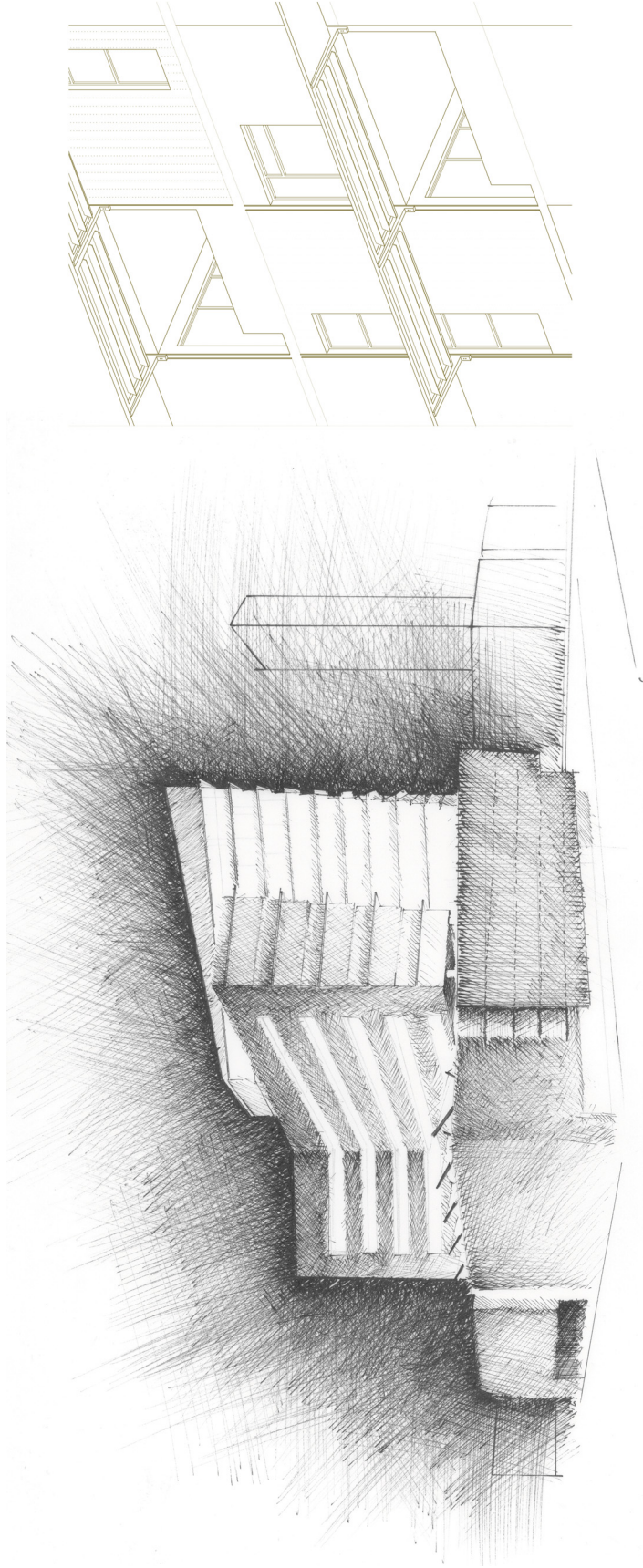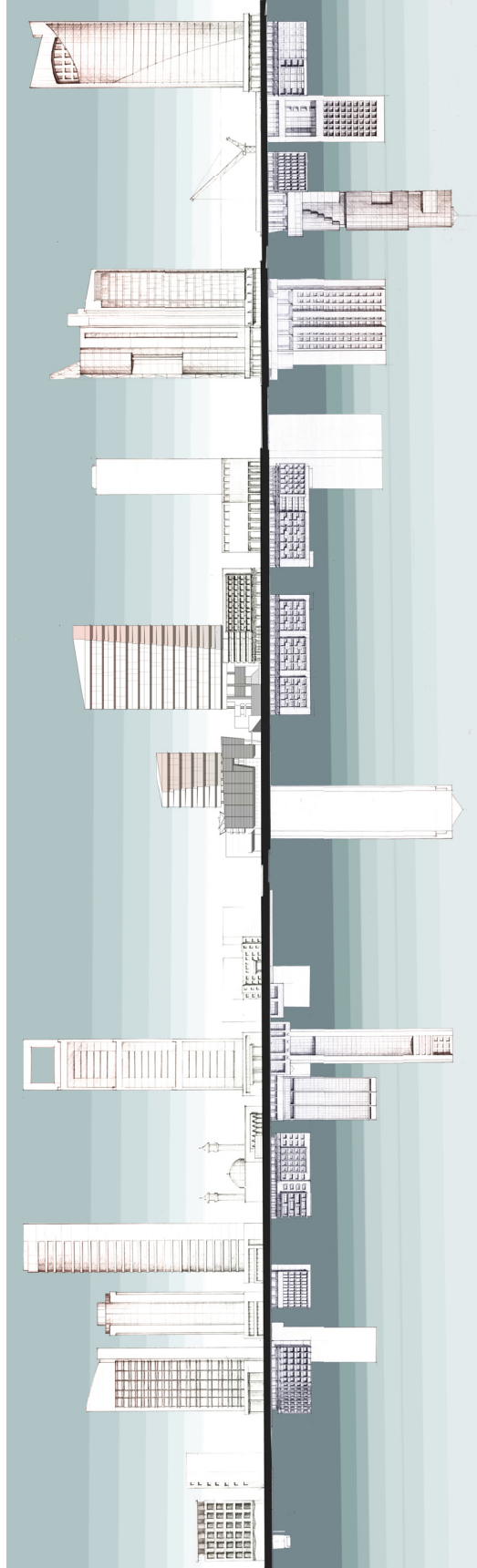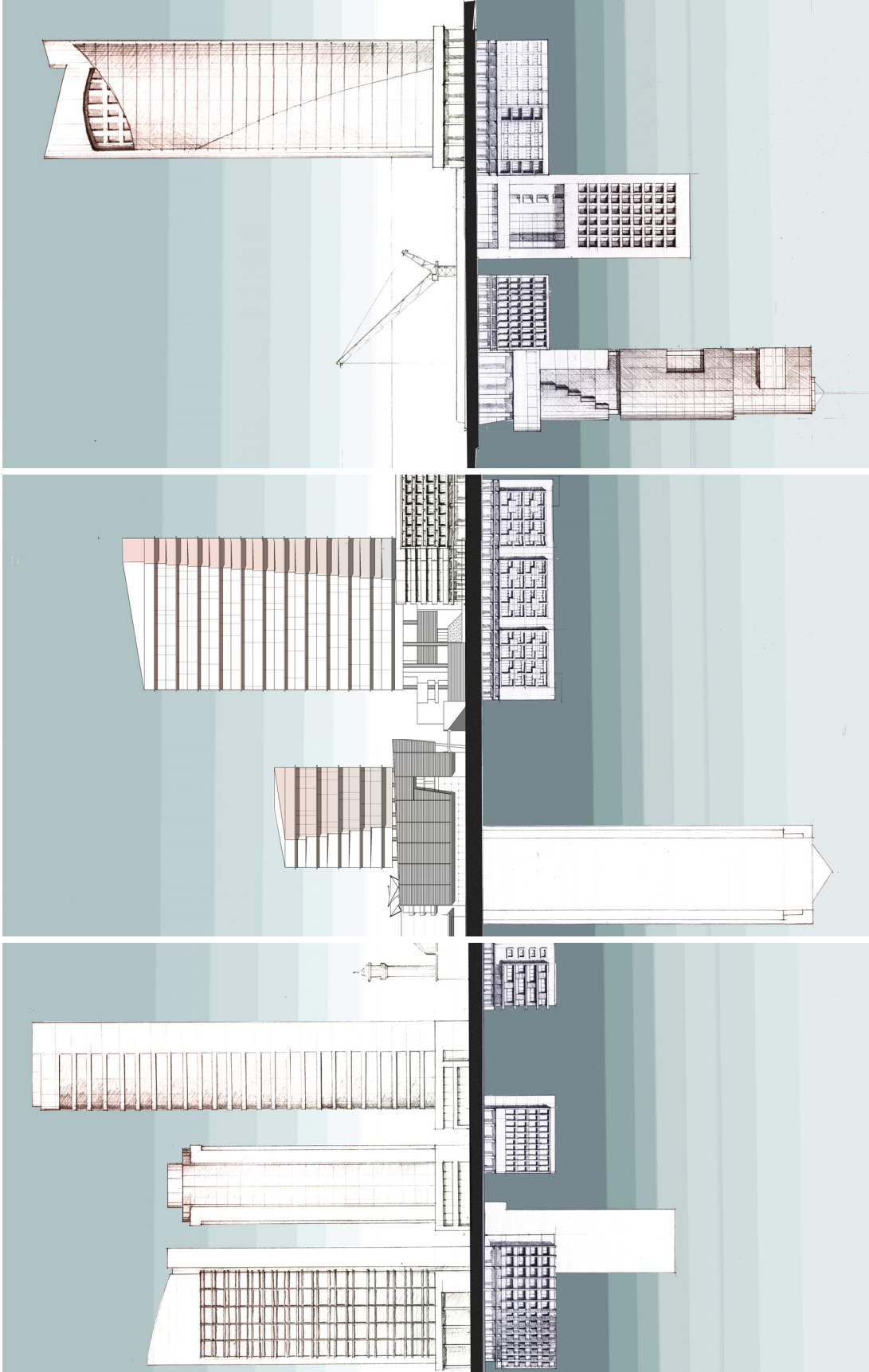
Building-plaza relationship, entry to market street.

Semi indoor market street, and a detail of sheltering canopy.

Building expression.

Street elevation.

Sections of street elevation.

CHAPTER 5:

CONCLUSION

The idea that architectural heritage can pave the way for contemporary architectural solutions continuous with the past is beyond argument. Historical knowledge can be translated into a useful resource for design. Architectural heritage is not limited to what the mainstream brand as "historic". In Kuwait City, a movement to revive the premodern architectural heritage is taking place, yet the modern fabric of the city is being disregarded and threatened by irresponsible mass construction of skyscrapers. The contemporary city is shaped by its modern fabric, and policy decisions made in the 50s and 60s of the past century permanently changed the place. For this thesis, investigating characteristics of modern Kuwaiti architecture - the dominant component of the contemporary cityscape - is an obvious necessity. But it is the understanding that this architecture was a product of critical thinking that bears the most fruit. The works of modern architects studied in this thesis inspired an investigatory reading of the Kuwait City. Their work can be read as rich histories in trying to interpret contexts, histories which can be used when approaching contemporary context.

The presented study of Kuwaiti modern architecture focus on basic characteristics and issues that each architect must deal with today when working in Kuwait City, such as the relationship of buildings to streets, internal courtyards, the automobile, and the climate. These qualities reveal the true urban nature of the place, in which as a consequence

demanded a project that is best understood at an urban scale. The proposed design is a start, an important exercise in reading the city in a responsible, intelligent, and sensible way, with hope that such a reading will bear fruit in a city that is at once diverse, dense, and appropriately balanced between its past, present, and future.

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