

ANALYSIS OF SELECTED PHYSICAL ISSUES AND THEIR  
IMPACT ON BEHAVIORAL ISSUES IN BEIRUT

by

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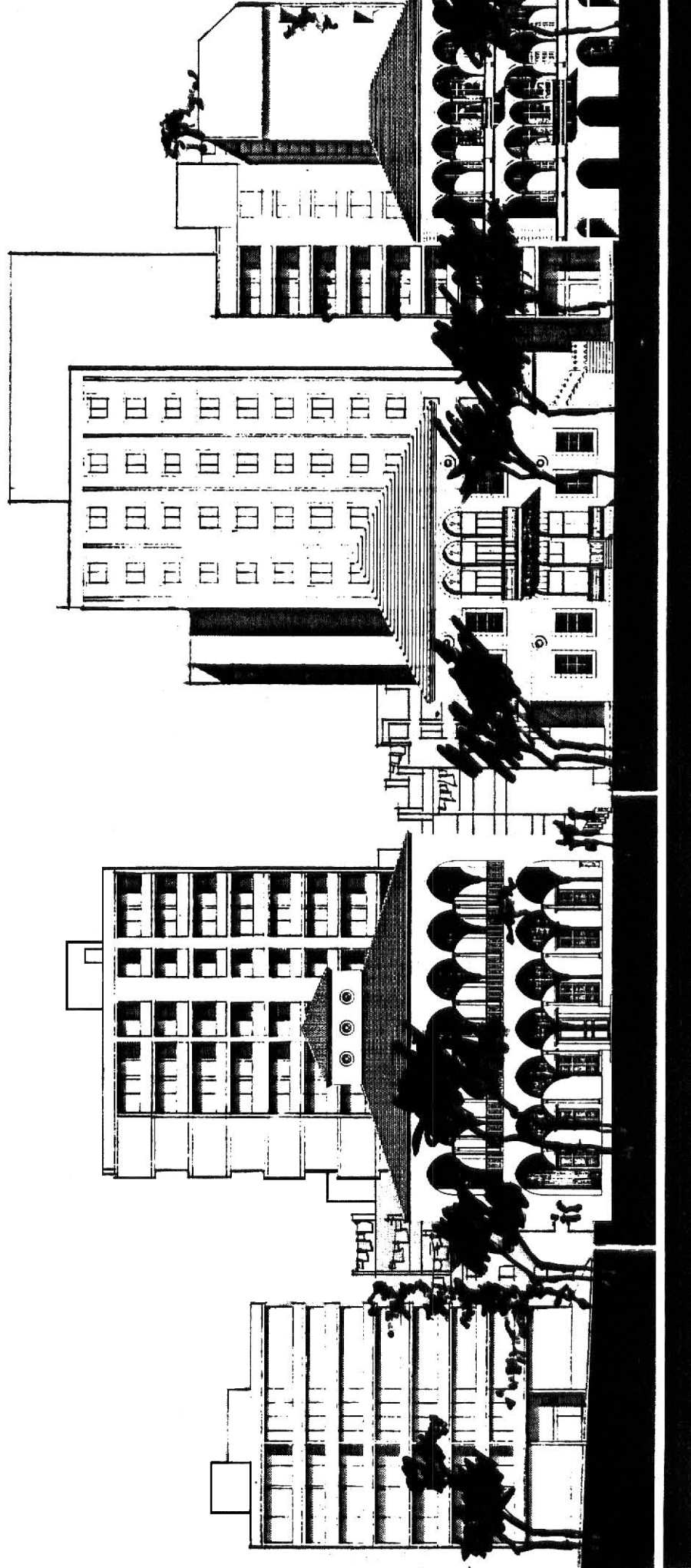
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ANALYSIS OF SELECTED PHYSICAL ISSUES AND THEIR IMPACT ON BEHAVIORAL ISSUES IN BEIRUT



## CHAPTER 1

### INTRODUCTION

#### General Overview of Beirut

Throughout history, Beirut has been rebuilt many times; now it is no different. Disasters inflicted enough destruction every time to bury most of its past, and the civilization was left with very little to show. Today, the destruction is brought about by man, and this is beyond that from war or invasion. Everywhere, bulldozers raze the central hall houses that are treasures while excavating gardens and trees of all kinds. The cost of land precludes gardens and a shortage of space apparently precludes trees. This makes preservation impossible financially. The value of a piece of land rises above the value of whatever construction is situated on it.<sup>1</sup> This leaves Beirut with very little to show from its recent past of houses, gardens, and fruit groves.

When one talks about modern Beirut, there is very little to talk about other than its modern buildings. Whatever is left from its past that man has not destroyed, the Preservation Association and the Department of Urbanism and Regional Planning will try to preserve. Even this is doubtful since funding for these new departments is minimal. What is more alarming is that the time-lapse that separated the city from the village and helped preserve a span of more than two centuries of vernacular architecture in villages no longer exists due to efficient transportation and communication systems. Even the vernacular architecture in the outlying village areas is becoming overwhelmed by modern concrete construction.

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<sup>1</sup>Friederich Ragette, *Architecture in Lebanon* (Beirut: American University of Beirut, 1974), p. 194.

J. John Palen wrote in his book The Urban World the following about the city of Beirut:<sup>2</sup>

In the absence of urban planning, growth of the city has not followed any discernible pattern. Commercial, residential, and industrial usages all intermingle. Newer housing sections tend to locate on the periphery, but modern housing is also being built in central locations...(with) mixed usages within the same building.

Fulvio Roiter, author of the book Lebanon, describes Beirut as "a somewhat bewildering capitol" with a growing population of over one million people and development of uncontrolled building construction in the past few decades.<sup>3</sup>

Despite the problems of today's building activities in Beirut, Fuad Khuri best describes the typical suburb of Beirut in his book From Village to Suburb as a reflection of the city consisting of "confused spatial arrangement of buildings and streets" but runs a very efficient system of services.<sup>4</sup> Each resident can get the daily essential services needed due to the fact that almost every ground floor of an apartment building contains a business. Every street or quarter has a butcher shop, bakery, hardware store, furniture store, a barber, and tailor. The people of Beirut are within a five-to-ten minute walk of banks, pharmacies, clinics, schools, churches, taxis or buses, and movie and coffee houses. Many transactions can be carried out on the sidewalks of Beirut making the city a very efficient and productive one.

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<sup>2</sup>J. John Palen, The Urban World (New York: McGraw-Hill, 1975), p. 389-390.

<sup>3</sup>Fulvio Roiter, Lebanon (Beirut: National Council of Tourism, 1980), p. 189.

<sup>4</sup>Fuad Khuri, From Village to Suburb (Chicago: University of Chicago Press, 1975), p. 39.

### General Overview of a Typical Village

The following is a quote from Anne H. Fuller's book, Buarij: Portrait of a Lebanese Muslim Village (Section III, "The World of Nature"), observed by the author during 1937-38:<sup>5</sup>

Where springs break from the Lebanese mountains, there is human habitation. Water is a source of power, feeding and nourishing the soil... The village of Buarij (as all Lebanese villages in varying degrees) is set within and surrounded by the world of nature.

Mountain slope and stretch of plain rather than man-made objects dominate the landscape, while man's handiwork in itself reflects the close dependence on natural surroundings. The village houses of stone blend and are at one with the earth and rock from which and upon which they are built... Towards all nature's forms the peasant has a sense of piety, since they are signs of deity and since they relate closely to his own welfare. Towards these sources of his being, which his own life depends, the peasant shows reverent attachment. Certain trees are considered holy; their branches are not cut.

The endurance of earth is its stabilizing quality. To own a plot of land is to participate in that stability. A village through ownership of land partakes of that stability. A household through ownership of land has a guarantee, though often minimal, of its own life course. It also has assurance for the life of coming generations. From the peasant's viewpoint there is neither community nor family without land or work on land... A man, moreover, plants not only for himself but for future generations, since orchards may well come to bear after he is part and parcel of the soil.

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<sup>5</sup> Anne H. Fuller, Buarij-Portrait of a Lebanese Muslim Village, (Cambridge, Mass.: Harvard University Press, 1963), p. 20-24.

The sweeping view seen from village thresholds is primarily admired because it belongs peculiarly to the village and is an extension of, and from, village doorways. Potted herbs and flowers about household yards find appreciation because they have become part of the household and are cared for by household hands.

Yet at one and the same time an overall generalized feeling of man's relationship to nature and his consanguinity with nature exists, feeding the peasant emotionally. Folk songs are filled with metaphors and similes expressed in terms of the natural and flowering world. Proverbs and pithy sayings are likewise expressed in terms of physical surroundings and creature inhabitants... Group ceremonies, serve to impress upon the peasant his tie to the community and its life-sustaining lands.

#### Purpose of the Study

The city of Beirut is used as the focal point of this study. There is a need to develop an understanding of the two most predominant forms of residential units in Beirut (the central hall house and the modern apartment building), to identify some of the issues pertaining to the behavioral patterns associated with these forms of residential units, and to examine the reason behind the overwhelming destruction of the central hall house and dominance of the new type of construction (the modern apartment house).

One has to analyze some of today's building activities and try to link behavioral patterns associated to the impact of the physical dwelling of the past (central hall house) on behavior today. This will hopefully lead to a better understanding of the reflection of the past on new changes that have occurred in Beirut.



Friederich Ragette points out in his book, Architecture in Lebanon, that:<sup>6</sup>

The dwelling is the unconscious expression of a people's culture. Much more than the secular or religious powers, the houses of a people mirror the needs, desires, and living habits of a time, because they are the direct result of the interaction between man and his environment.

### Contents

"Analysis of Selected Physical Issues and Their Impact on Behavioral Issues in Beirut" contains eight chapters, the first of which is an introduction and the last a conclusion which summarizes the intent of this study. The second chapter covers the history of Beirut which is provided to help the reader establish an image on the city's past. The third and fourth chapters describe the Central Hall House and the Modern Apartment which are the two most predominant types of dwelling units found in Beirut and throughout Lebanon. Three issues are presented in the following chapters. Issue One focuses on the importance of history and its influence on the two types of dwelling units. It also covers the importance of proximity, transportation, migratory patterns, and their role in influencing architectural change from traditional construction to modern construction. Issue Two deals with change as related to people's habits and behavior influencing the physical form as illustrated in the example of laundry drying, an activity that has been carried out from the past into the present. Issue Three analyzes a situation dealing with intergroup relations at Al-Bustan building, an apartment complex located in Beirut. This apartment complex is a middle to lower middle class complex with a multitude

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<sup>6</sup>Ragette, p. 184.

of religious backgrounds represented by the occupants. All families in the building have experienced and are still experiencing at least one form of migratory patterns. This building is selected as such to illustrate the organizational change in the Lebanese dwelling from individualistic (Central Hall House) to group-oriented as presented in this issue.

Photographs, maps, and tables are used in support of the information presented to help the reader achieve a clearer idea of the issues under discussion.

## CHAPTER 2

### HISTORY OF BEIRUT

#### The Second Millenium B.C.

Beirut was inhabited 250,000 years ago during the Lower Palolithic Age.<sup>1</sup> Tools for hunting and fishing, and pottery have been found but little else is known about these early inhabitants of the coast. Pieces of evidence indicate that a period of close commercial and cultural exchange existed between Egypt and Byblos which passed through the port of ancient Beirut. Egyptian commercial interest sprang up along the Mediterranean coast for the procurement of precious cedar wood. Timber was the capital upon which trading activity was based.<sup>2</sup>

At the time, these early traders were open-minded, multi-lingual, tolerant, great colonizers, but never forgot their home cities.<sup>3</sup> These characteristics are retained today with more than a million Lebanese abroad helping support the Lebanese economy with trading connections and financial transactions.

#### The First Millenium B.C.

Records of the first millenium B.C. make no mention of Beirut. No written or archaeological records of Beirut exist from the time of the collapse of the Egyptian empire, by which time Egyptians controlled Beirut,

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<sup>1</sup>Nina Jedejian, Beirut Through the Ages (Beirut: Dar El-Maskreq, 1973), p. 6.

<sup>2</sup>Friederich Ragette, Architecture in Lebanon (Beirut: American University of Beirut, 1974), p. 8.

<sup>3</sup>Jidejian, p. 6.

to the sixth century B.C.<sup>4</sup> During the ninth century to sixth century B.C., cities throughout the Middle East were being taken over by Assyria and Babylonia, but no mention of Beirut is made.

During the first millenium B.C., Beirut did change hands many times. Under the rule of the Athenian empire (315-167 B.C.), Beirut had many commercial quarters and warehouses along with chapels built to honor the gods of the Greek homeland.<sup>5</sup> A vast project for drainage of stagnant waters and construction of a wall around the swamps was undertaken by a group of natives to benefit the city. A large sanctuary was built to worship the gods of Syria. Banks did a thriving business.

Piracy along the Mediterranean grew. Pirates attacked towns and destroyed them. Beirut was one of their targets. The commercial quarters, buildings, and warehouses were reduced to ruins. Most merchants fled or sought business elsewhere.

#### The Roman Period (64 B.C.-330 A.D.)

When the Romans took over the area of Lebanon in 64 B.C., written sources about the history of Beirut became more abundant. Beirut came under the rule of Augustus. The city was named after his daughter, Julia Augusta Felix "Berytus".<sup>6</sup> Beirut became Rome's prized colony city and an important and prosperous city of Phoenicia. Because of its geographical position and favorable port facilities, Beirut was singled out by the Romans as a base for the Eastern Mediterranean fleet.

Herod Agrippa I, grandson of King Herod of Judea, erected many buildings in Beirut including a theater, which surpassed all others in costly beauty,

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<sup>4</sup>Jidejian, p. 20.

<sup>5</sup>Jidejian, p. 35.

<sup>6</sup>Jidejian, p. 43.

as well as Roman baths and porticoes. After Herod I's death, his son, in turn, adorned the city of Beirut with statues and replicas of ancient sculptures. Beirut was described as follows:<sup>7</sup>

Flower-laden terraces, houses with slim pointed arches, flat roofs topped with parapets of stone or wood, mauresque walls crowned with flowers and greenery, brightly-colored modern fortifications, groups of rocks rising from the ocean, a harbor protected by a sharply jutting promontory, mulberry trees extending on the outskirts, elegant palm trees in the squares, graceful lines of red and blue-washed walls, minarets, domes, and above all the every pure sky.

In the sixth century A.D., Beirut was referred to as the "most handsome Berytus, the jewel of Phoenicia."<sup>8</sup> The city was renowned for its law school which flourished from the third to sixth centuries A.D. and attracted students from all over the world. Temples, great public buildings, a hippodrome (circus), theaters, porticoes, and other great structures were built. A large aquaduct was built which spanned the city and brought water into the city of Beirut. Provisions for sewage were made by the Romans. The Roman atrium house developed consisting of a central hall from which rooms could be attached as crowded city conditions developed, so that openings could be turned toward the inside instead of opening toward noisy streets. The Roman Berytus was a flourishing city at that time.

Of Roman Berytus, all that remained in 1920 were remnants of a hippodrome and an aquaduct.<sup>9</sup> A stretch of Roman street complete with pavement, columns, capitals, and an architrave were uncovered in recent years in the city. A Roman bath was cleared and restored. Another bath and part of a

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<sup>7</sup> Halim Said Abu-Izzedin, Lebanon and Its Provinces (Beirut: Khayats, 1963), p. 92.

<sup>8</sup> Jidejian, p. 47.

<sup>9</sup> Jidejian, p. 54.

municipal building were unearthed. These are spare remnants of the Roman Berytus. The Roman levels of Beirut lie at a depth of seven to ten meters under the present day city.<sup>10</sup>

#### The Byzantine Period (330-635 A.D.)

The flourishing law school that began with the Roman period continued into the Byzantine period. The law school became world renowned, and Beirut became the center for issuing statute laws for the East and the center for teaching Roman law. The law school remained in Beirut until it had to be moved to Sidon after the great earthquake of 551 A.D.<sup>11</sup>

Two devastating earthquakes occurred on the Syrian and Lebanese coast. One of these destroyed Beirut. The earthquake in 551 A.D. killed the hopes, dreams, and realities of a metropolitan city. The tremors of the earthquake caused buildings to collapse and brought down the towering Roman aquaduct. The city was reduced to ruins. A tidal wave came in the wake of the earth tremors which caused further ruins. A fire ensued which reduced anything left to ashes. The city was rebuilt, but ever so slowly. In ancient times, it never again regained the importance once known during the Roman and Byzantine periods.

#### The Medieval Period (700-1517 A.D.)

By the beginning of the medieval period, Beirut had not fully recovered from the huge disaster of 551 A.D. It was not an important city at the time Islam swept over Syria. Beirut became a port city for the district of Damascus, one of the six districts of Syrian rule. Moslems began to settle here and gradually supplanted the Christian population.

The Crusaders swept through the area to restore Christianity. The

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<sup>10</sup>Jidejian, p. 51.

<sup>11</sup>Jidejian, p. 70.

first Crusade passed through Beirut. The city was attacked and seized by the Crusaders. They fortified the city with stone walls.

The building activities of the Crusaders was extensive. The greatest buildings were their huge fortresses. Continuing the Byzantine fortification technique, the Crusaders added pointed vaults and Gothic details. The quality of masonry construction, particularly the adherence to and perfect execution of pointed groin vaults, may stem from this period.

Until 1187, Beirut was under the control of the Crusaders. The only evidence of Crusader Beirut lies in the remains of the Church of St. John the Baptist built by the Knights of the Hospital of St. John of Jerusalem, today the mosque of El-Omari.<sup>12</sup> The Christian wall paintings were plastered over with lime and whitewash when it was converted. The church was built over a Byzantine church, which in turn had been erected over the ruins of a temple.

Beirut changed hands from the Crusaders to the Saladins to the Saracens. The Saracens tore down whatever buildings and fortifications they could. Beirut was in a shambles. It was then taken over by Jean of Ibelen. It was he who rebuilt the walls and towers of Beirut which served as sound protection against repeated attacks from other armies. But in 1291 when Beirut fell to the Mameluke armies, the city was again left to become rundown.<sup>13</sup>

Before the turning of the thirteenth century, a mountain population consisting of Maronite Catholics and Druze Muslims developed, who elected to retain as much independence from coastal inhabitants as possible.

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<sup>12</sup>Jidejian, p. 88.

<sup>13</sup>Jidejian, p. 87.

Living conditions shaped the attitudes of these mountain villagers, that being a strong sense of community coupled with mutual tolerance and love of independence.<sup>14</sup>

#### The Ottoman Period (1517-1918 A.D.)

The Ottoman Turks appeared at the beginning of the thirteenth century. Beirut came under their reign in 1512. A period of suppression and governmental corruption followed, and Beirut declined rapidly during this period.<sup>15</sup> Freedom and special privileges were enjoyed by the Lebanese living in the mountain regions where no one had to fear the military officer, district governor, or the pasha sending soldiers to oppress them. The coastal cities including Beirut had less favorable conditions.

The architecture of Turkish houses was integrated into Lebanon during this period. The concept of a central court suited sophisticated Ottoman life where each member of the family required his/her own room. The rooms looked outward through windows.

Fakhreddin II Maan liberated Lebanon from Ottoman rule in 1623.<sup>16</sup> He was made officially the Grand Emir of Lebanon. Beirut was a shabby city, and he gave orders to transform it. Fakhreddin was always impressed by the architecture of the Italians. He summoned Italian architects and landscape artists to build his palace and public buildings in Beirut. Beautiful gardens were made in the midst of most of the buildings. Fountains were built along with great statues on pedestals to grace the garden areas.

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<sup>14</sup>Ragette, p. 10.

<sup>15</sup>Jidejian, p. 93.

<sup>16</sup>Ragette, p. 117.



The affinity of Lebanese architecture with Venetian architecture of the Middle Ages was very obvious. Venetian houses of the thirteenth to fifteenth centuries were predominately of carefully executed stone-masonry construction. The Venetian house of this period has a plan of an open central hall flanked by two rooms on each side. The outside look was one of sandstone walls with rectangular doors cut and groupings of two to three arched-framed windows.

Beirut in Fakhreddin's day was bustling with commercial activity. Silk of the finest quality was produced and brought wealth to the city. The port was improved in order to open up trade. Fakhreddin based his rule upon principles of security, prosperity, and religious equality.

In 1697, a group of notables called the Chehab family were elected as Emir of Lebanon.<sup>17</sup> The Chehabs governed Lebanon until 1840. The Emir Chehabs of the eighteenth century built lavish residences. They contributed to restoring the glorious and prosperous times of Beirut.

During the Chehab reign, a Russian attack took place, and towers of the port area and the port itself were destroyed. A great part of the city was reduced to ruins. Beirut was turned over to Emir Bechir in 1794.<sup>18</sup> Later in 1832, Beirut fell into the hands of the Egyptians. The Egyptians were driven out of the city by the British fleet in 1841. Beirut was reduced to shambles once again. What earthquake, tidal wave, and fire had not destroyed, man demolished and carried away.

Beirut declined rapidly in the eighteenth century. It became a small town of five thousand; the houses poor, built of mud and sandstone, and the port choked with sand. The collapse of the silk industry because of introduction of European industrial fibers and the decline in local

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<sup>17</sup>Jidejian, p. 97.

<sup>18</sup>Jidejian, p. 101.

handicrafts due to European industrial competition brought about a lasting flow of immigrants. France gained influence in Lebanon during this time. King Louis XIV and Louis XV took the Maronites under their special protection and offered Christian students reduced boat fares to France. These immigrants remained attached to their native country. This was due to the fact that the family held a central position in communal attachments and in traditional loyalties of the Lebanese society which is still true today.<sup>19</sup>

The city's ideal geographical position as a gateway to the East and the ingenuity of the inhabitants during the nineteenth century slowly brought Beirut back with increased interest in the definition of space and function in domestic architecture. Large halls opening either to a courtyard or to the outside developed because of oriental sociability, prevailing warm climate, and the wish for openness without full exposure.<sup>20</sup>

William Thomason described Beirut in 1870 as follows:<sup>21</sup>

Within the last thirty years our city has rapidly increased population, commerce, and wealth... The population grew from 5,000 to less than 40,000 inhabitants. The city of Beirut was dependent on Sidon for supplies, but now Sidon is dependent on Beirut. European merchants have selected Beirut for the seat of their operations; foreign consuls settled in the city; the government was led to make it the capitol of the country; scarcely now two-thirds of the people reside in gardens and hundreds of convenient dwellings. If Beirut can attract the mighty line of trade and travel to her door, she will quickly rank among the great cities of the world.

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<sup>19</sup>Ragette, p. 118.

<sup>20</sup>Ragette, p. 119.

<sup>21</sup>Jidejian, p. 103.

By 1881, the population had risen to 75,000. Important national and foreign schools were established and increasingly raised the cultural standard. A press industry was established and newspapers were published which also contributed to the cultural, social, and political development of the country. A road connecting Beirut to Damascus was established in 1857, and 1891, a railway connected the two cities.

During World War I, Beirut was caught in yet another epoch of upheaval in which mobilizations, locusts, cholera, typhus, famine, and terror caused new misery. An earthquake in 1918 was the worst of all these disasters.<sup>22</sup>

### The Present

In 1920, Lebanon was put under French rule and came under direct French influence. Strong cultural and economic ties resulted. The country remained under French rule as a republic until 1946 when Lebanon acquired independence as a nation.

Introduction of concrete and steel were made in building construction. The forces of general economic growth, expansion of industry and commerce, mechanization of agriculture, rural to urban migration contributed to the growth of Beirut. In the early fifties, real estate transactions began to increase and continued to reach a climax in the middle sixties. A phenomenal growth in real estate activity was due to 1) a shift in capital to the political Lebanese market in the early fifties, following the socialist measures adopted in Syria, Egypt, and Iraq, and 2) the drift of capital into Lebanon from the oil-producing countries of Kuwait, the Gulf

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<sup>22</sup>Abu-Izzedin, p. 93

Emirates, and Saudi Arabia.<sup>23</sup> A great part of the incoming capital was and still is invested in construction.

In keeping with every tradition, Beirut has developed once again into the major intellectual, cultural, and commercial center in the eastern Mediterranean. •

On the pages that follow, photographs of selected historic landmarks in Lebanon are presented to help establish images of buildings and settings now destroyed in Beirut.

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<sup>23</sup>Khuri, p. 67-68.

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Figure 2.0 General Map of Lebanon.

Figure 2.1 The aerial view of Byblos with its port.

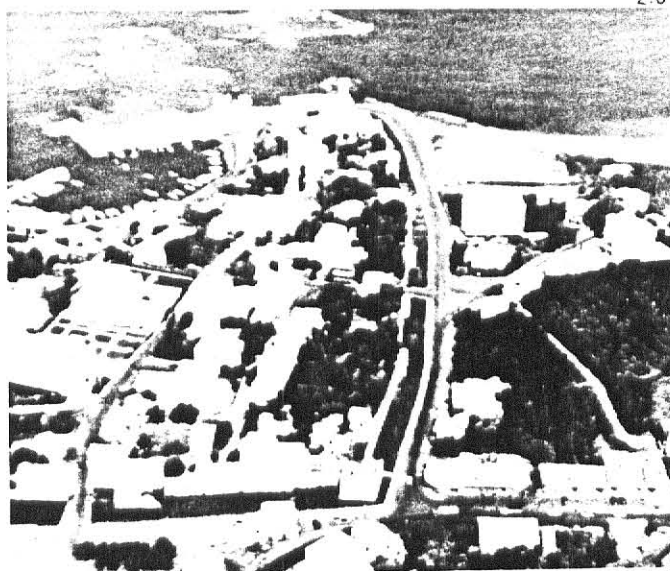


Figure 2.2 A typical Lebanese village of red-roofed houses clinging to the mountainside.

Figure 2.3 Distant view of the city of Jounieh.

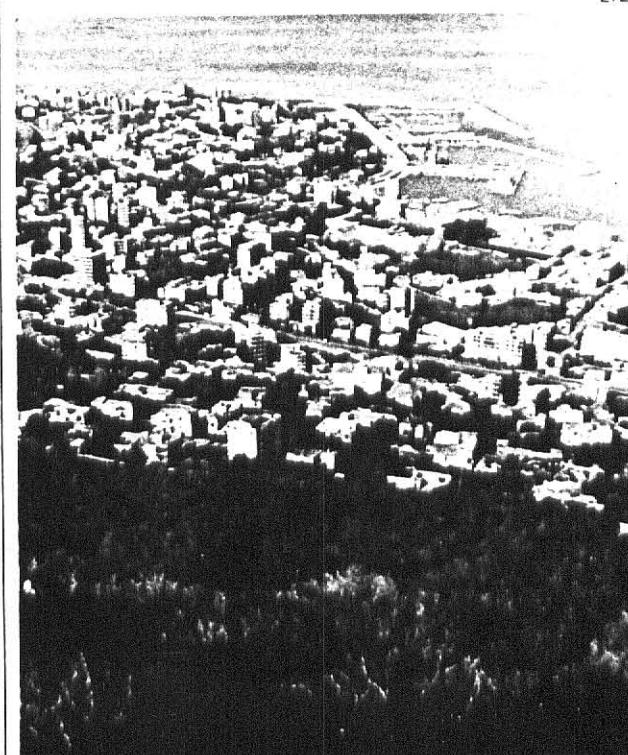
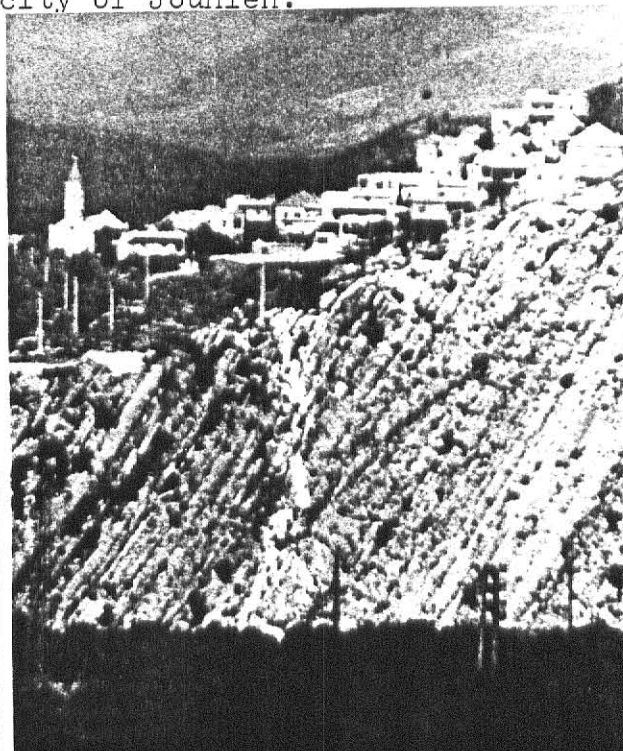
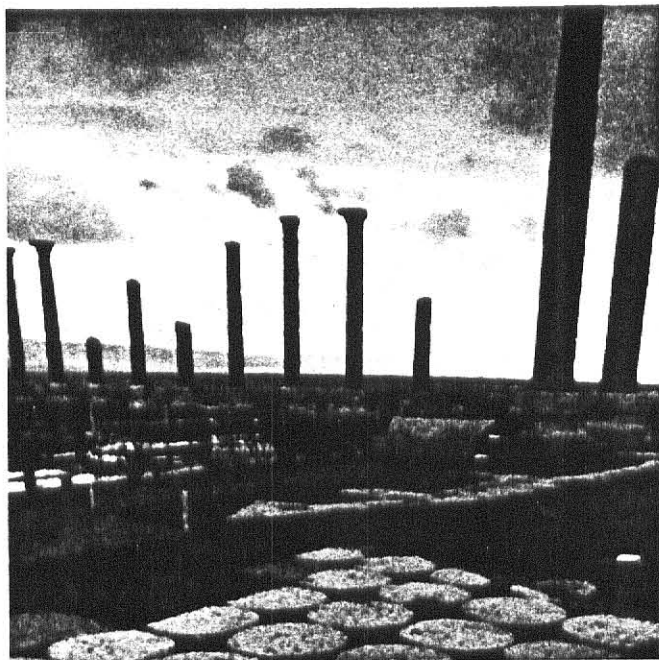




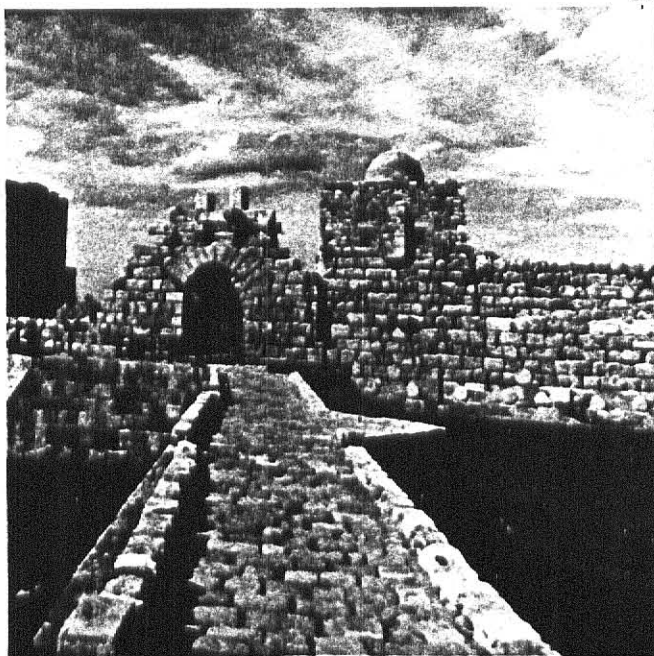
Figure 2.4 A Mosaic Floor at Tyre.

Figure 2.5 The thirteenth century Sea Castle at Sidon with the Arab bridge leading to the ancient Crusader Castle.

Figure 2.6-7 General View of Baalbek in the Bequaa Valley. Section of a sculptured cornice from Baalbek's temple of Jupiter.



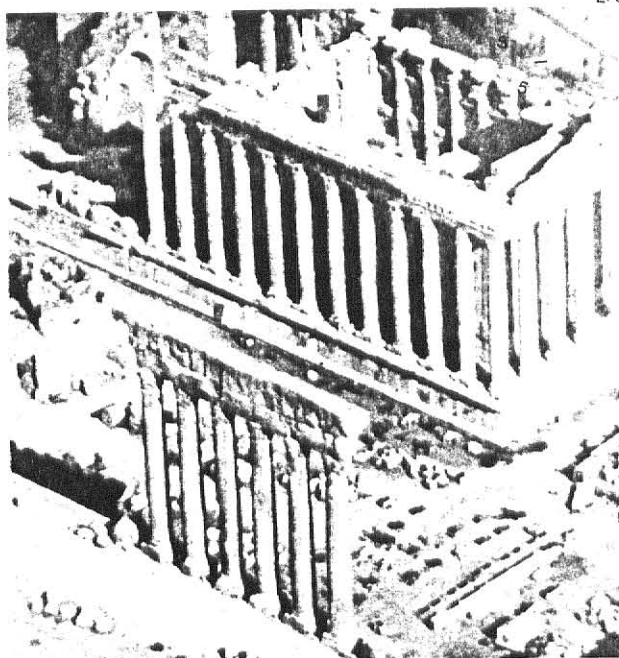
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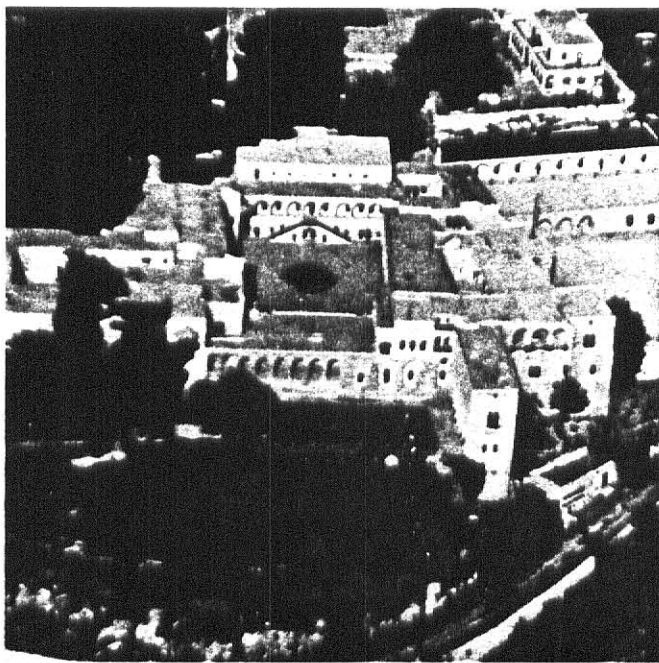
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Figure 2.8 The palace of Emir Bechir at Beit-ed-Dine general view of the complex built by Emir Bechir, a masterpiece of Lebanese architecture.

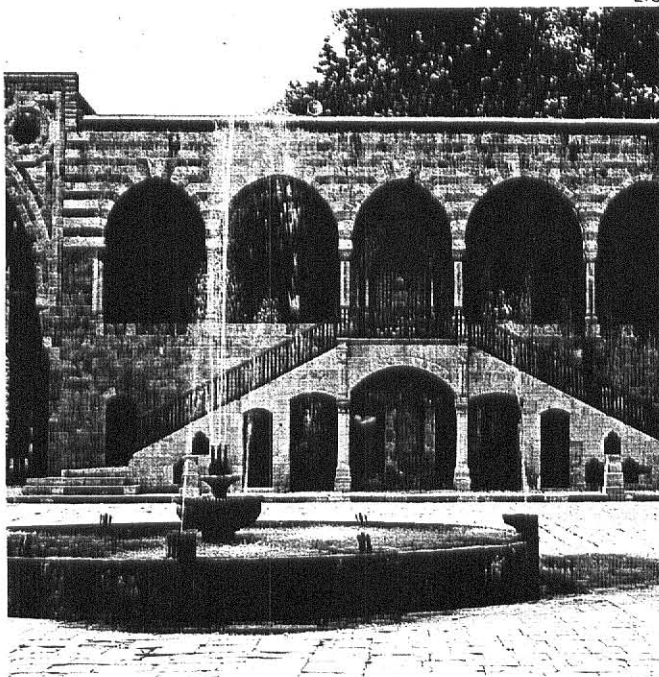
Figures 2.9-11 Details of the palace of Emir Bechir. Conceived by Italian architects and built by the finest artists and craftsmen from the region. It draws on the traditional forms of Lebanese architecture.



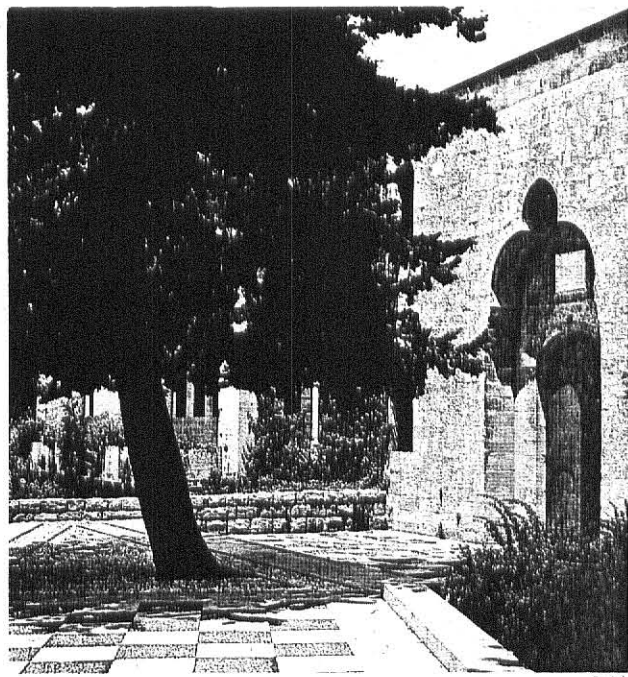
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## CHAPTER 3

### THE CENTRAL HALL HOUSE

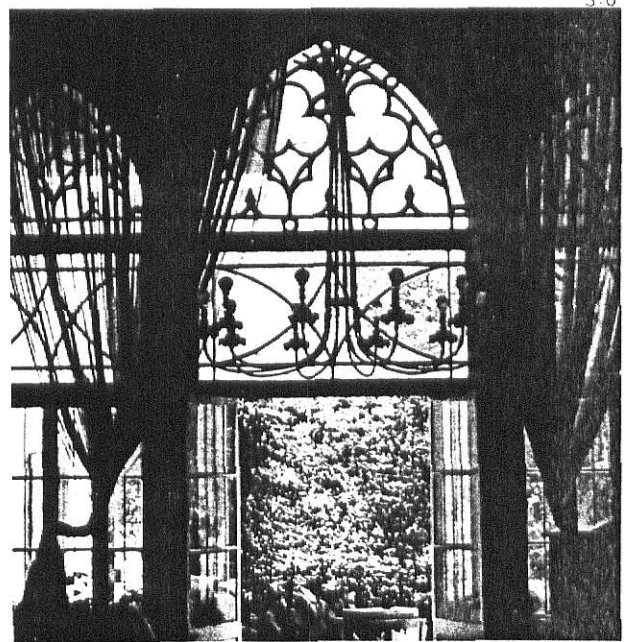
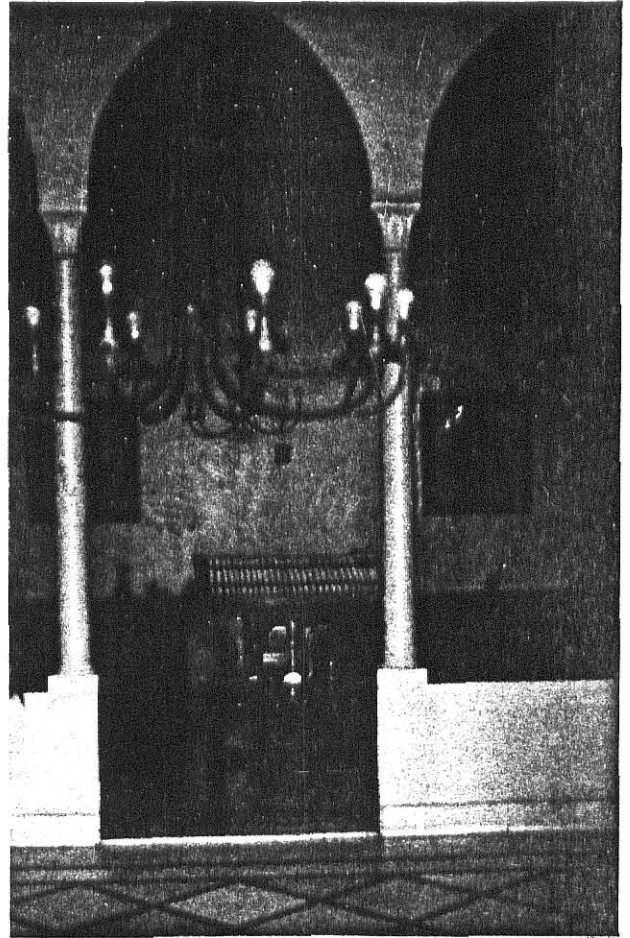
When it comes to vernacular architecture of the late 1800's to the 1930's, the Central Hall House was most predominant throughout Lebanon. It is the Lebanese house that is most often repeated and attaining the highest degree of identity.

This information is taken in full from the book Architecture in Lebanon by Freiderich Ragette.

The following are the most prevailing characteristics of the central hall house:

- 1) It has a triple arcade (88%).
- 2) It consists of two floors (81%).
- 3) It has major entrances to the main floor (81%) which usually lead directly into the central hall (41%) or reaches the hall from the side through a corridor (33%).

They have predominantly symmetrical composition except for those with a lateral access (corridor to the central hall).



If the central hall is taken as a nucleus, one to seven rooms can be added to it, finding all stages of completion or extension. If a large number of rooms is needed, additional wings may be attached by means of intermediary corridors. The rooms are square to rectangular in plan.

Towards the end of the nineteenth century, when Western influence began to be felt, the central hall scheme was adopted as the most widely used plan, and the design became increasingly formal. The houses turned into veritable villas, which majestically dominated their surrounding. In towns, the villa principle of siting was introduced, placing the building in the middle of the lot and considering all elevations as having more or less equal importance.

The existence in traditional Lebanese architecture of a detached multi-level house, namely the house with the central hall, offered at this stage an opportunity to maintain a local model under Western



3.2

Figure 3.0 Example of the triple arcade and the central hall (called "dar" which basically means home), the most important room of the house. This is an example of many houses in Mouseitbeh, but few remain.

Figure 3.1 The triple arch combines window, door, and arcade. The three arches are either of identical width, or else the arch in the middle is a trifle larger which is the case in this example.

Figure 3.2 Example of the intricate and patterned glass panes in the windows of the arches.

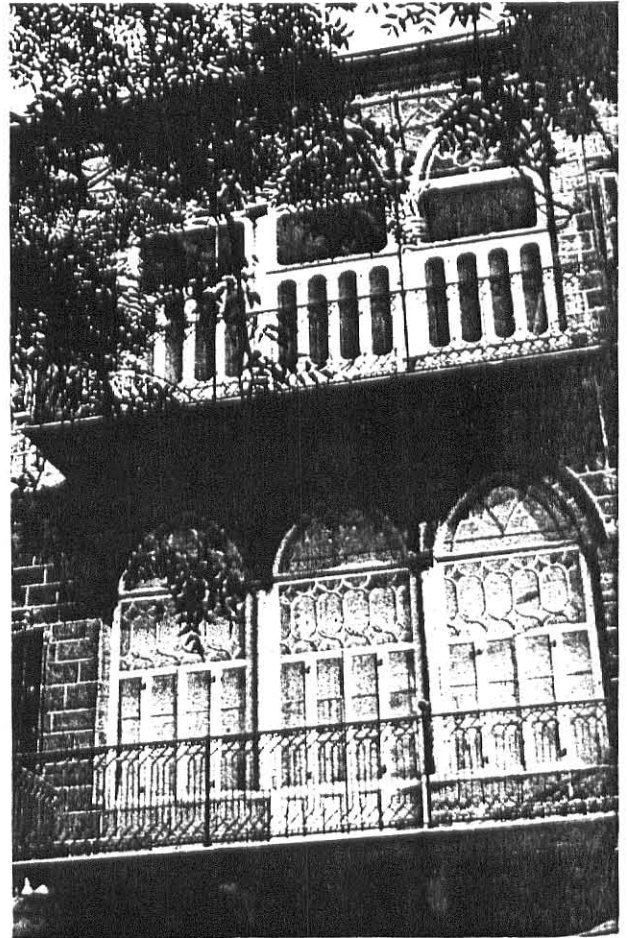
siting conditions. This explains the flourishing of the central hall scheme until well after World War I.

In Beirut, the two-story central hall house with the triple arcade has usually one independent apartment on each floor, the upper stories being reached by an external stairway. Due to Western influence, the staircase was moved inside at the end of the 19th century.

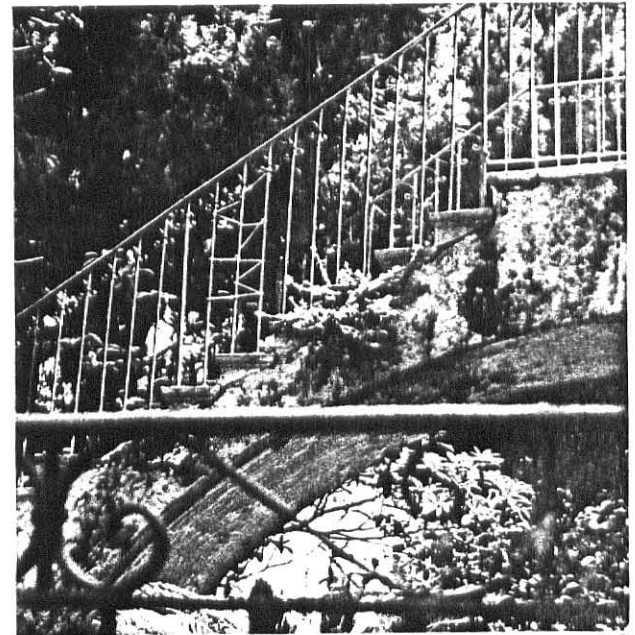
In rural areas, amenities were still lacking from the second half of the nineteenth century. Toilets were placed in the garden, and washing was done with buckets and pitchers.

From the turn of the century and up to the 1920's, the central hall concept persisted. However, subdivisions of rooms and piped water were introduced to offer more convenience, more privacy, and areas of a more specialized character.

With few exceptions the central hall house is built of stone. As a rule the lower floor is vaulted while the upper floor has a roof frame of timber with red tiles. The lower



3.4

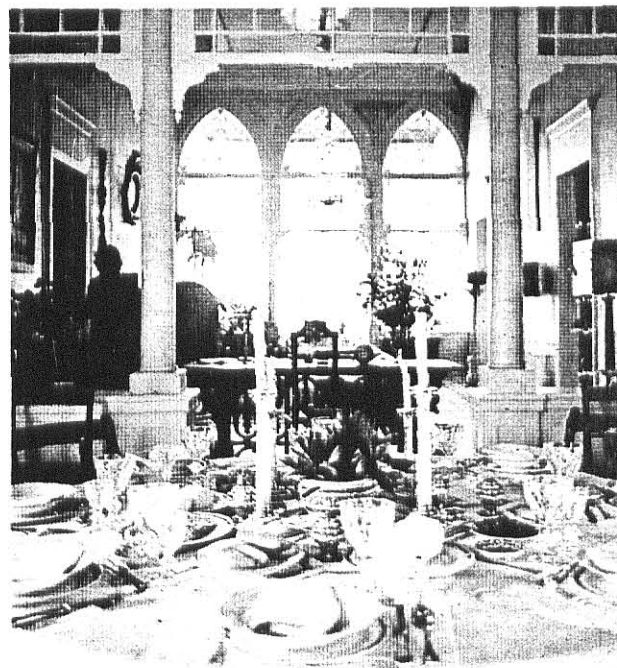


3.5

floor also has a timber ceiling either with or without supporting arches.

The building is generally a clearcut, simple cube where all four facades are clearly defined. Naturally, the elevation with the striking triple-arch motif of the central hall is dominant. As a rule, this elevation is symmetrically designed and the windows of the lateral rooms are plain rectangular openings, deliberately kept secondary to the triple-arch. The triple arch is usually composed of a door in the middle and a window on each side. The frames are of wood, and the panes are often subdivided in elaborate decorative patterns.

The Central Hall House is almost invariably covered by a red tile roof. Only very rarely does one see a flat roof, sometimes covered with vines during the summer. In all cases the roof is



3.6

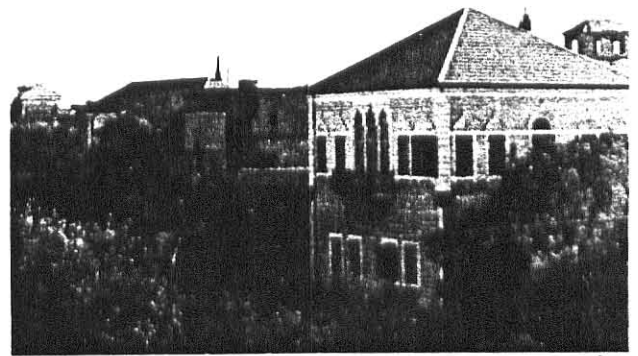
Figure 3.4 This is a three-story central house. Iron railings are used for enclosing the balconies.

Figure 3.5 Example of wrought iron railings with stairs used as an exterior stairway to the upper level of the second story.

Figure 3.6 Example of the interior dining area of a renovated central hall house.

of tent or hip shape without dormers or chimneys. It harmonizes agreeably with the simple cube of the building, and its vivid red color enhances the appearance of settlements in the green landscape. The combination of triple arch and tent roof is so striking in appearance and so characteristic of Lebanon, that it has an almost symbolic value for the country, furnishing an important theme in graphics and painting. Also, the triple-arch is not a foreign importation, but it seems to have come as an inevitable solution.

Gradually, after the turn of the century, the central hall concept (a simple arrangement of rooms) was augmented by subdivisions which were introduced to offer more convenience, more privacy, and areas of more specialized character. Three steps in this



3.7

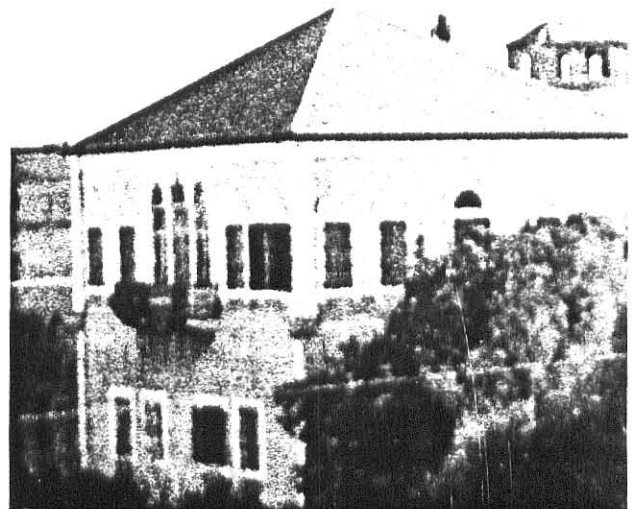


Figure 3.7 Example of the typical central hall house with the cubical-shaped building and the vivid red color contrasting with the green landscape. This example is taken from Aniou Coura where the natural landscape has not been distorted and blocked like its Beirut counterparts.



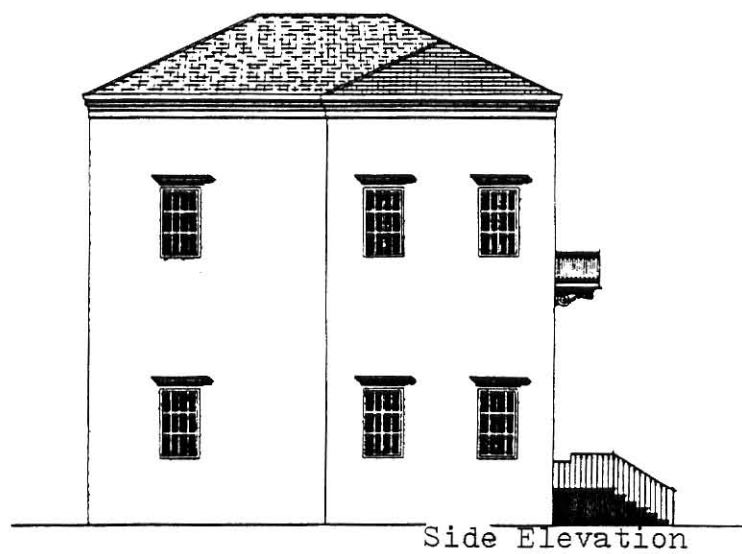
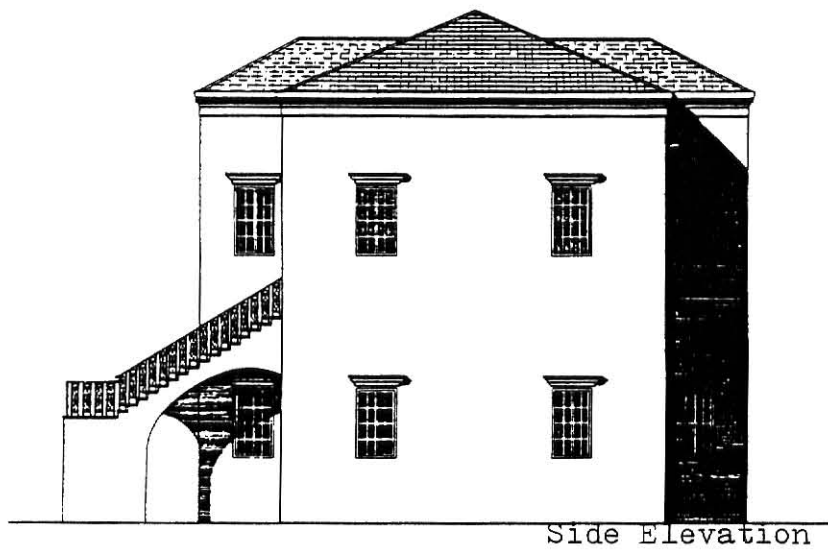
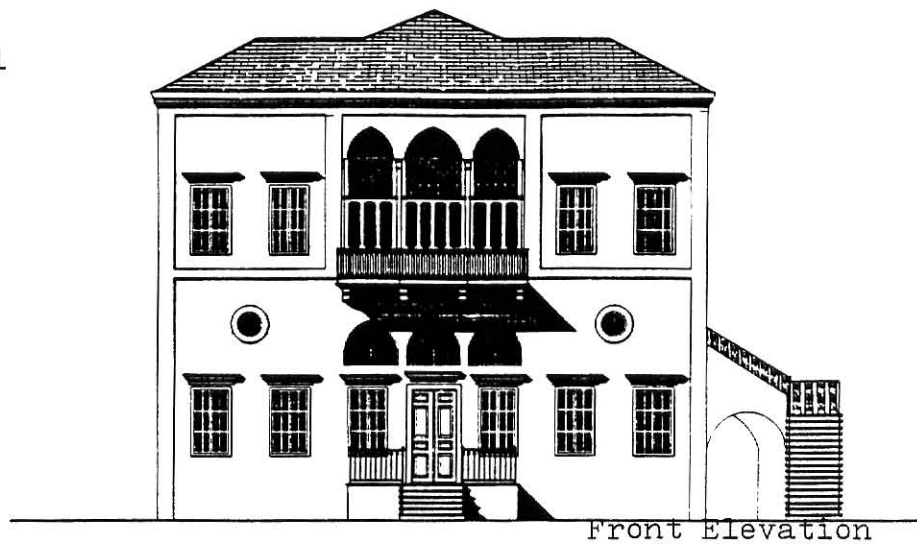
direction:

- 1) Incorporation of the stairway inside the building.
- 2) Subdivision of the central hall into a general living area (dar), a solan or reception area, and a dining space.
- 3) Grouping of kitchen and bathroom/toilet in a corner with a small corridor as a buffer zone (introduction of piped water, bringing about the installation of kitchen and bathroom).

The number of floors was increased, first to three then to four floors (including ground floor). This was the limit until concrete frame construction and lifts were introduced. Basements were not adopted until after the appearance in Beirut of efficient excavation machinery.

During the 1930's, the adoption of bathrooms as part of the sleeping area was brought about due to the existence of a dependable water supply and a suitable sewage disposal system. During this period, reinforced concrete frames consisting of columns, drop beams, and slabs gained full acceptance. Structurally, the bearing wall was eliminated; the arcade, as a supporting device, was replaced by rectangular openings.

Figure 3.8a Typical  
Central Hall House  
elevations.



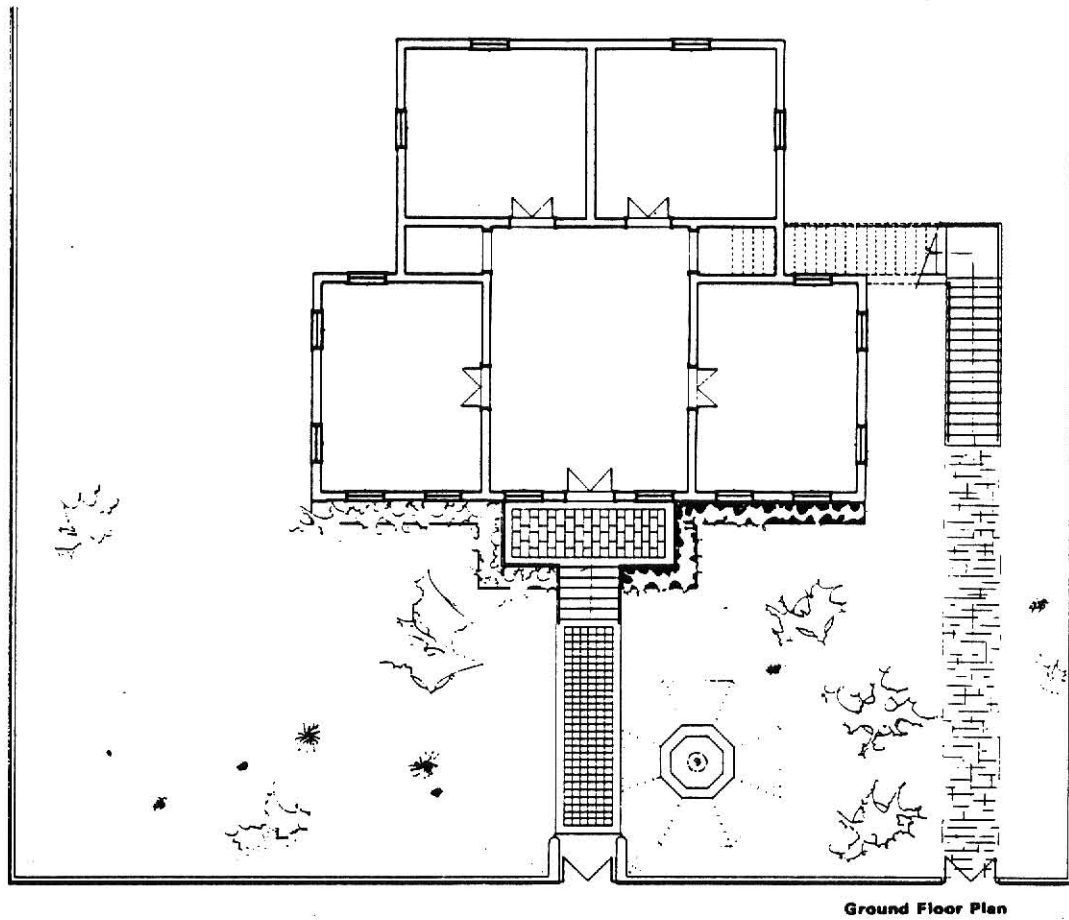
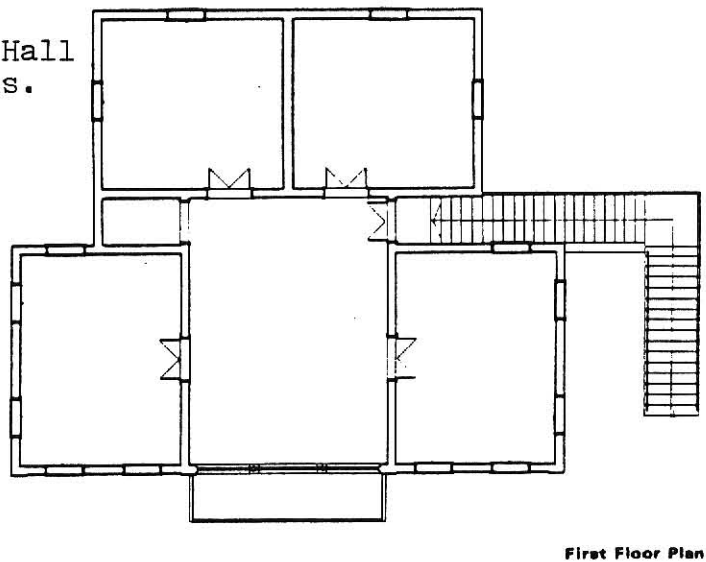


Figure 3.8b  
Typical Central Hall  
House floor plans.





## CHAPTER 4

### THE MODERN APARTMENT

In Beirut, modern residential dwellings in the form of modern apartment buildings are replacing all the other forms of living units. It is the predominant type of building because the lower floors including the basement are mainly used for commercial businesses, leaving upper floors for residential uses. Other building forms such as those for banks, offices, and government are being built but are accounted as being minor in number and beyond the scope of this study. Also, hastily-built settlements, such as shanty towns, are not included in this study.

With the economic boom of the oil-rich Gulf countries, Beirut became the commercial and professional center of the Middle East. The influx of people moving into the city created a great demand for apartments. To satisfy this demand, Echochard, a French urban planner, was hired by the Lebanese authorities during Shehab's regime to formulate a master plan for construction policies. The plan was completed in 1961.<sup>1</sup>

Buildings are constructed with several apartments per floor. The number of stories is based on the width of the street, size of the land, and the setting. The "Echochard plan" for an apartment complex project requires five signatures -- four engineers and one architect -- for government approval only if the size of land exceeds a certain dimension. The "plan" deals in detail with the elevations and their openings, ceiling height (minimum three meters high), and percentage of

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<sup>1</sup>Fuad Khuri, From Village to Suburb (Chicago: University of Chicago Press, 1975), p. 248.

balconies (20% of the built area), etc. A distinction between primary and secondary elevations is made. The sequence of living-dining salon area is arranged parallel to the major facade (front elevation) accompanied by balconies and facing a major street, which provides sufficient light and view. The "back elevation" is a separation of the three main areas of home services (kitchen, laundry, storage, maid's quarters) and sleeping areas (bedrooms and baths). The side elevations are basically blocked by adjacent buildings, but if one is facing a minor street such as a corner street, then the bedrooms would be parallel to the minor side facade. The "Echocard plan" lacks landscaping requirements and does not consider internal organization of multi-use buildings. Crowded construction limits green spaces, playgrounds for children, and community facilities. However, the nearby beaches are used as an escape from the crowded conditions.

Most of the lower-middle class apartment buildings in Beirut have a definite style yet no two buildings look alike. The frame is reinforced concrete, and the nonbearing walls are usually made of concrete blocks. Balconies are stacked one above the other with all apartments having at least one. The outside surface is smooth stucco painted white or light gray, or a variety of pastel blues, greens, yellows, or pinks. Combinations of colored walls and white trim around windows and balconies are common. Windows are never screened for flies, but they always have shutters consisting of one or two types -- a set of hinged wooden panels with louvers, or a screen of horizontal slats to be cranked up and down.

In general style, these buildings are very similar to structures in present-day southern France, Italy, Greece, and many other Mediterranean countries.<sup>2</sup> The lack of decoration, the emphasis on balconies, the fre-

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<sup>2</sup>John Gulick, Tripoli: A Modern Arab City (Cambridge: Harvard University Press, 1967), p. 213.

quent use of curved surfaces, and the pale colors all convey a more "modern" effect than is customary in North American cities of the same general size.<sup>3</sup> Hand labor is readily seen in their construction. Concrete is mixed in the street, and large piles of sand and gravel are obstacles on the sidewalks. The workers often camp out in the building while it is under construction. Also, shopkeepers may set up business in the ground floor before any of the apartments above are completed.

Lower class (poor communities) apartment buildings of less than maximum height are frequently unfinished; each sprouting reinforcement rods which may eventually support additional floors. Inspection of additions to apartments thirty to forty years old shows that this practice of leaving buildings unfinished is nothing new and that many years may elapse before they are completed.<sup>4</sup>

Upper class apartments share similar building construction as the lower-middle class apartments but with a few exceptions. Upper class apartments are better planned. Colors are well manipulated. Expensive finishes, such as marble and glass, are utilized more, along with a full range of industrial building materials imported from all corners of the world. Emphasis is put on singularity (sharpness of boundary), contrast of surface (harmony), clarity and simplicity of form, continuity of edges and surfaces, clarity of joint (clear relation and interconnection as a building to its structure), and spatial location which are not taken into consideration in lower-middle class apartment construction.

In comparing the various dwellings, housing for the upper class in Beirut is superior to that of Western standards in space allocation,

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<sup>3</sup>Gulick, p. 213-213.

<sup>4</sup>Gulick, p. 212.

adequacy of room size, extent of balconies, the number of bathrooms, and built-in services.<sup>5</sup> Housing for low income groups in Beirut is desperately lacking. For instance, the number of persons-per-room occupying a living space is high, meaning more than three to four persons share a small space.

There is a high degree of difference in balcony use between the different classes of apartments. The upper class apartment dwellers use the balconies on the back elevation strictly for drying laundry and domestic use (barbequing, etc.), whereas the front elevation balconies are used for lounging only. The lower-middle class tend to mix the two at times using front and back balconies for both laundry drying and lounging. The lower class of poor people use their balconies for both purposes all the time resulting in elevations of hanging laundry that tend to be eyesores. This is due to the lack of balconies and to the size and number of families sharing one apartment.

On the pages that follow, examples of the three types of apartment houses (upper, lower-middle, and lower class) are shown.

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<sup>5</sup>Friederich Ragette, Architecture in Lebanon (Beirut: American University of Beirut, 1974), p. 191.



Figures 4.0-2.  
Typical Upper Class Apartments  
in the Verdin area

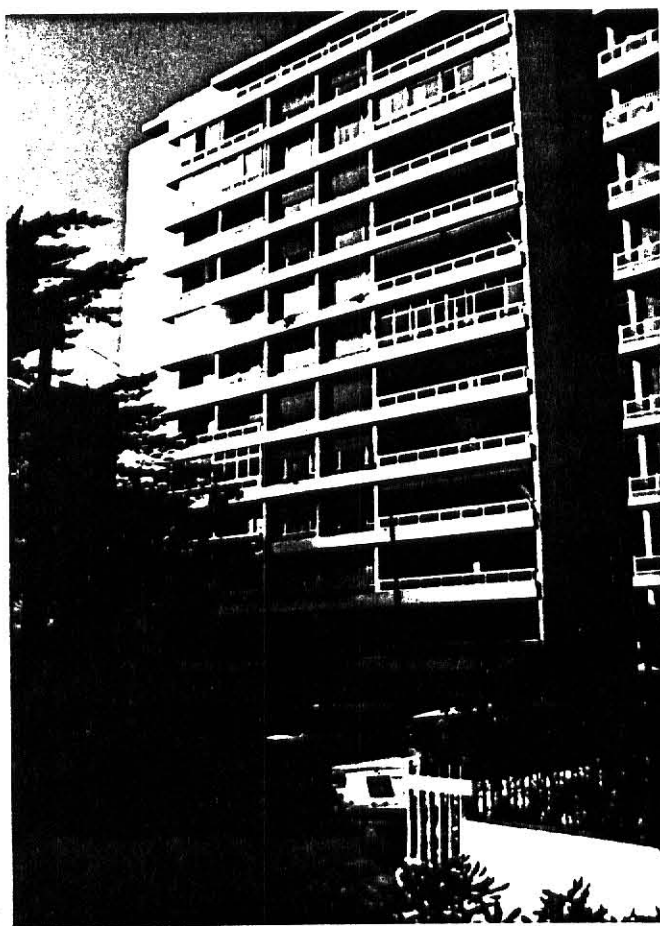
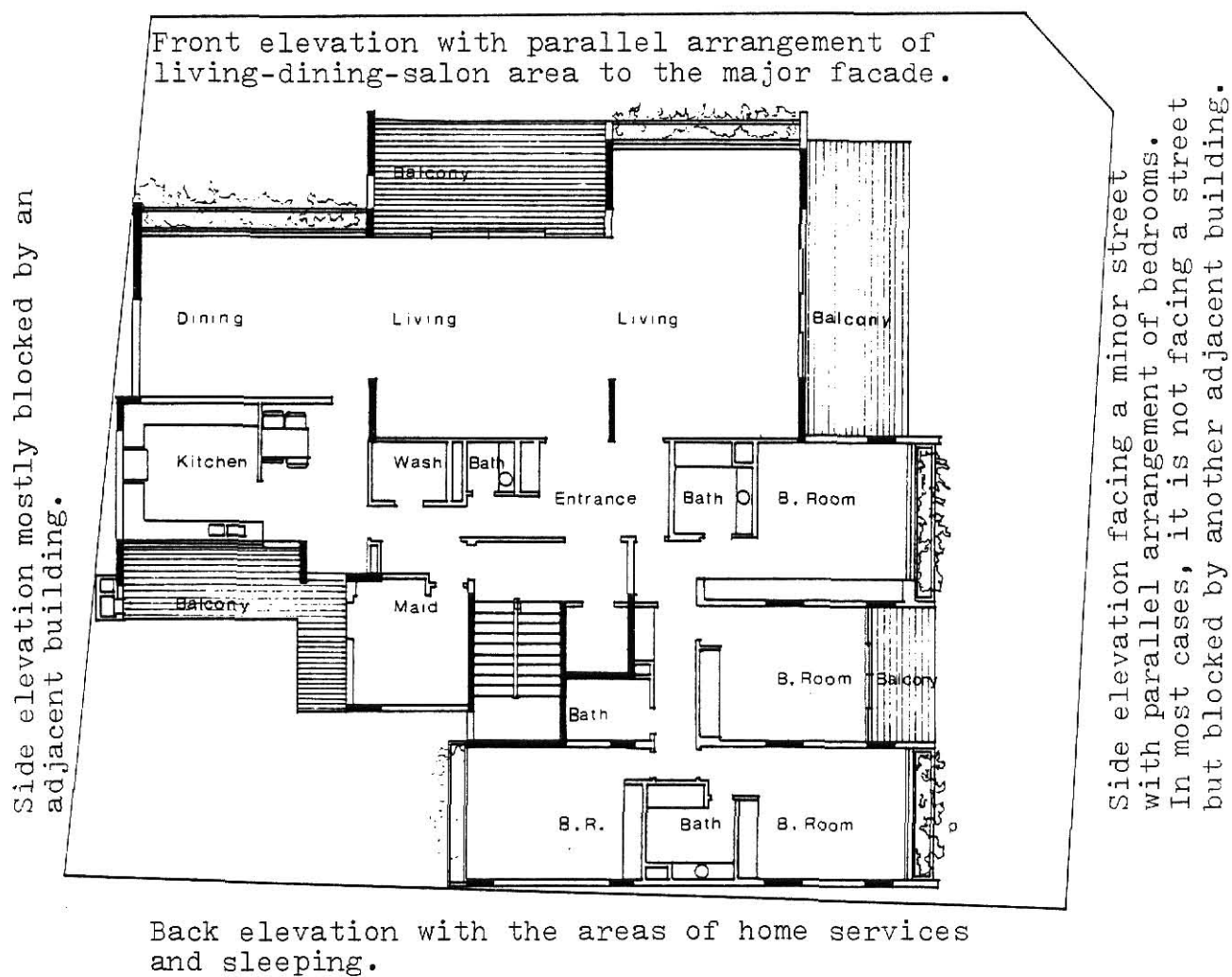


Figure 4.3 Floor plan of a typical upper class residential apartment.



Figures 4.4-7 Typical lower-middle class apartments in the mixed district of Moussaitbe.



4.4



4.6



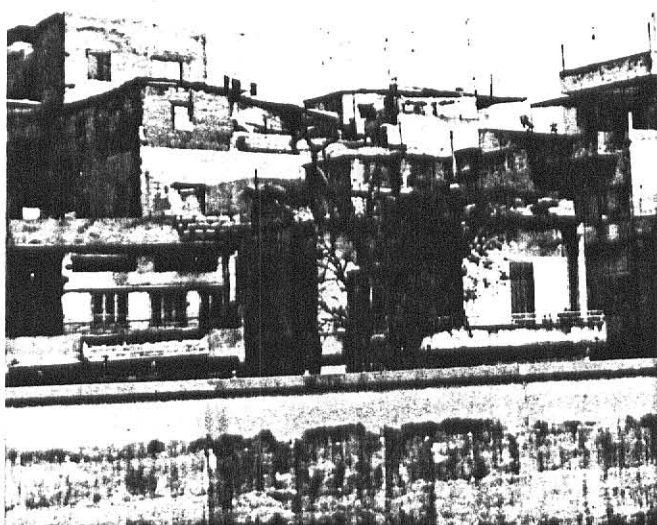
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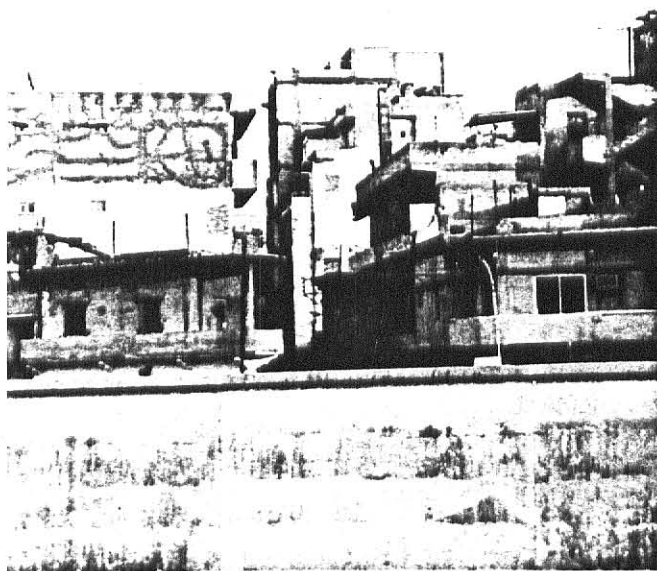
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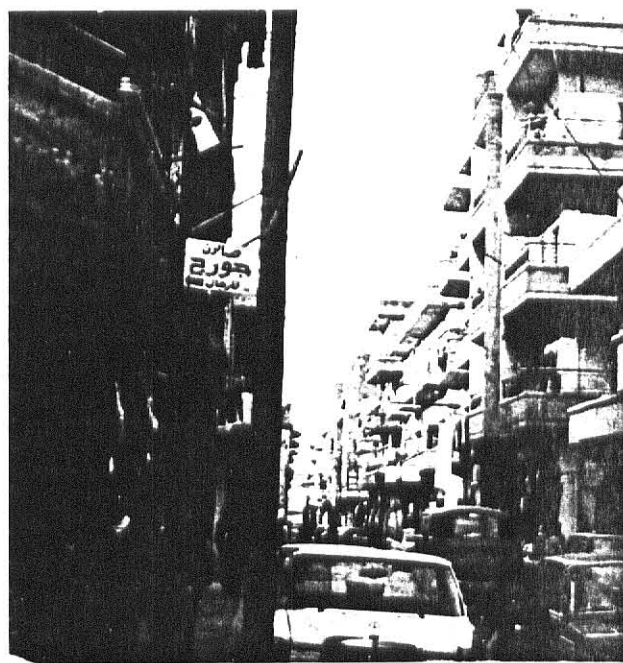
Figures 4.8-10 An example of hastily built settlements, typical shanty towns, occupied by refugees outside the Corniche area.



4.8



4.9



4.10



Figure 4.11a-b. Typical lower-middle class apartment floor plan and elevations which are designed and planned without the direct involvement of either an architect or an engineer; however, this particular example was granted a permit to begin construction. It is the popular architecture that is due to imitation without concern for the physical or social aspects. The area of which is subdivided through inheritance of land explains the crookedness of the boundary represented in the site plan. This site is located at Amioun Coura to be constructed within a block from the Central Hall House presented in Figure 3.7.

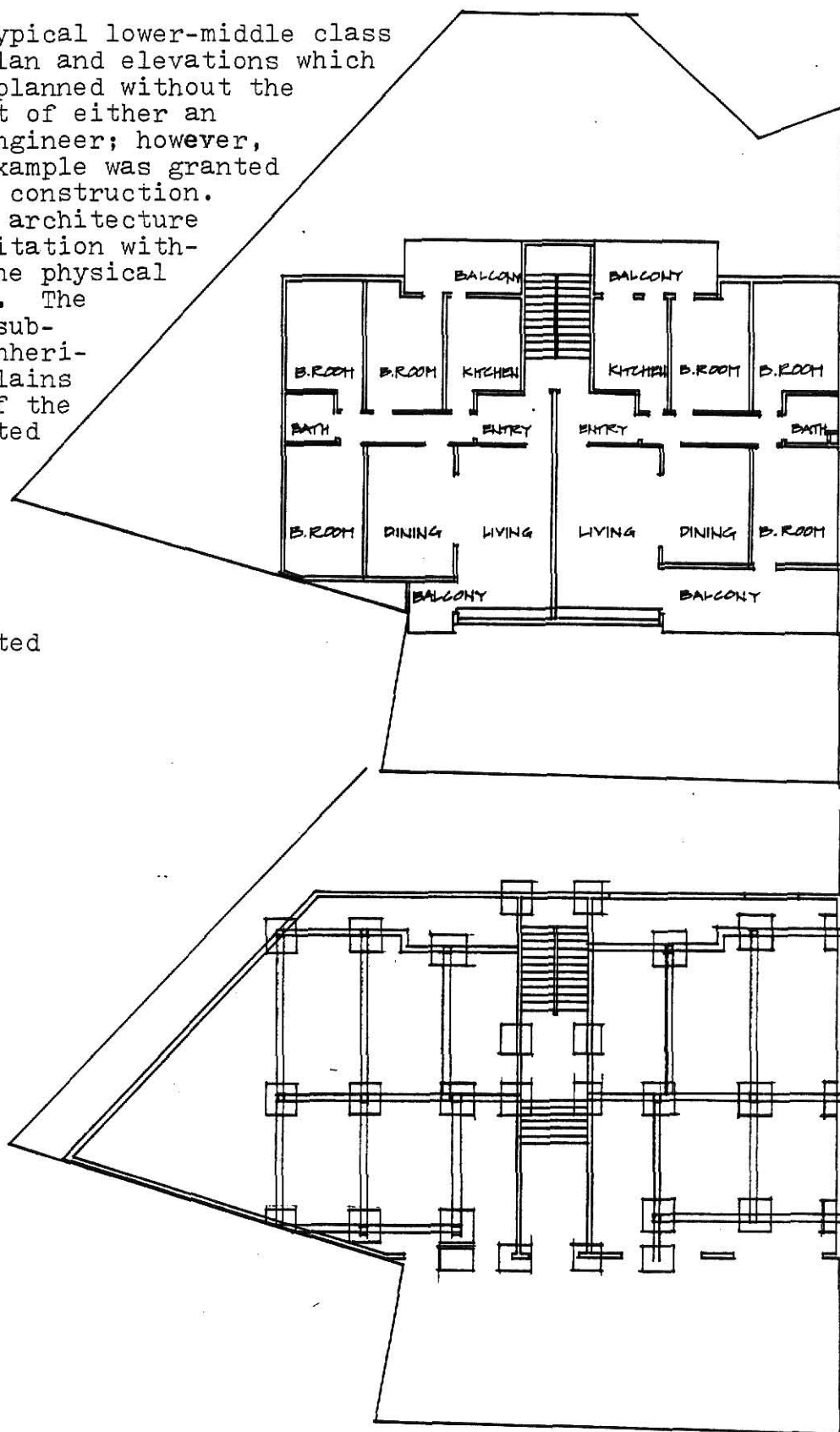
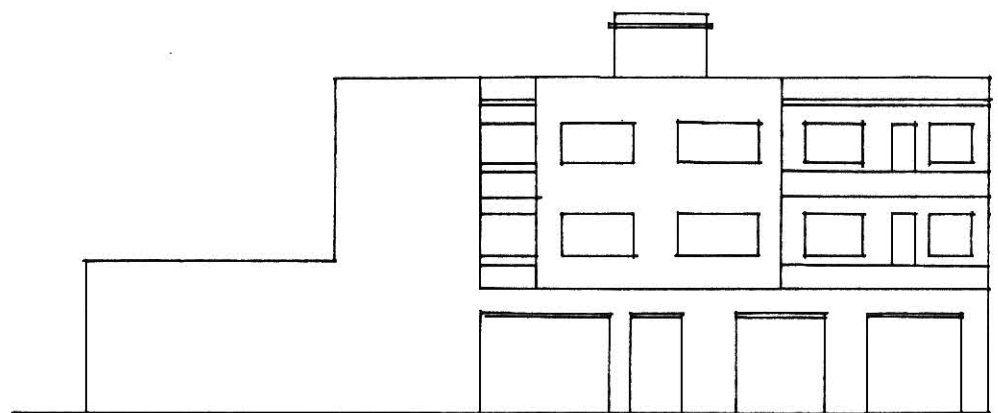
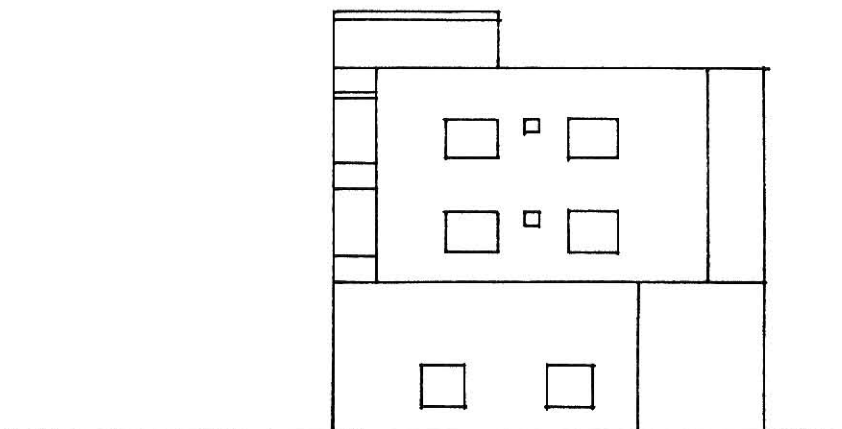


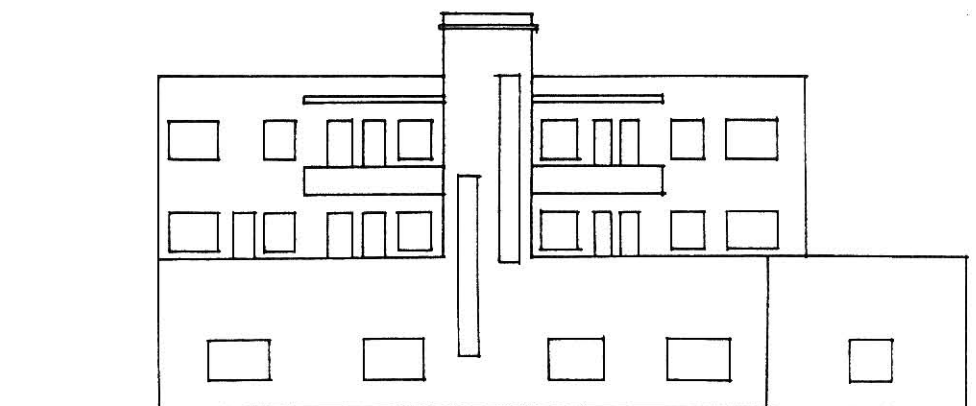
Figure 4.11b



Front elevation



Side elevation



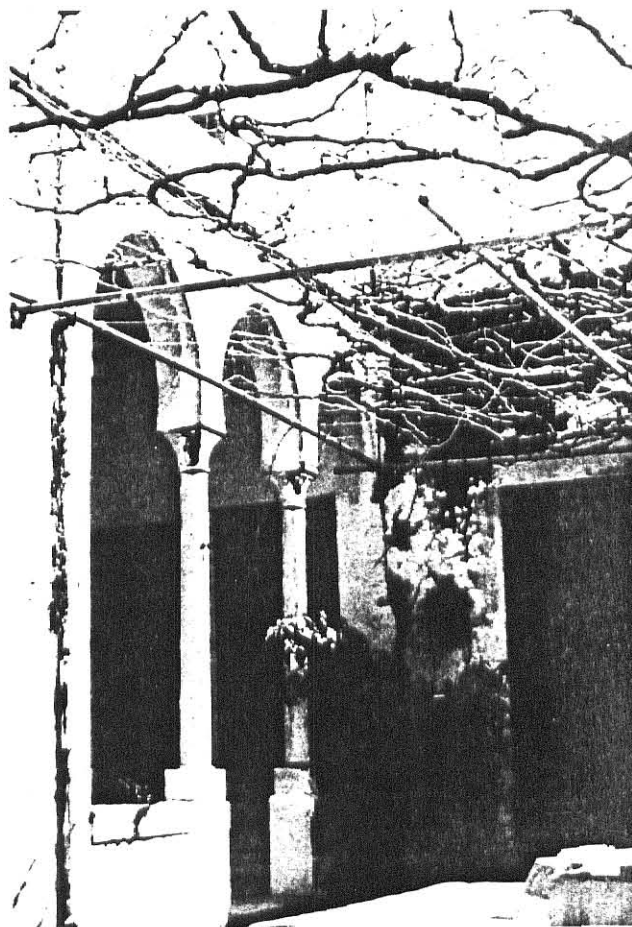
Back elevation

## ISSUES

ISSUE ONE: How the background of some factors in the Lebanese history influence and affect the development of the present as reflected in the two most predominant forms of housing.

ISSUE TWO: Confrontation and contradiction in habits as a consequence of architectural change as illustrated by laundry drying.

ISSUE THREE: Resident's adjustment and organization as it relates to associations, actions, and habits in a group-oriented apartment complex.



## CHAPTER 5

### ISSUE ONE

In this issue, the author's discussion will focus on the importance of the history of Beirut and its influence on the present as it related to the Central Hall House and The Modern Apartment Complex. The discussion also covers the importance of proximity, transportation, migratory patterns, and their role in influencing architectural change through time. This architectural change is introduced through "structural" and "organizational" change cast against the two most predominant housing units in Lebanese architecture of the past and present.

Fuad I. Khuri said in a study of one of Beirut's suburbs that "local history becomes a projection of cultural affinity, reflective of self-image."<sup>1</sup> History, here, is viewed as a sociological mirror of the present. The history of Beirut is provided to help the reader achieve an image of the city's past and the importance of the past in forming marks of imaginary nonexistent reality. This reality is nonexistent because most of the physical elements of those periods were destroyed in Beirut. However, physical marks (artifacts such as the ruins of Baalbek and Beit-ed-Dine etc.) of all periods are still existing all over Lebanon to give Beirut and its residents a reality that extends beyond its borders.

J. John Palen comments that "the city is large, culturally heterogeneous and socially diverse... The problem with the cultural

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<sup>1</sup>Khuri, p. 22.

definitions of an urban place is the impossibility of measurement; for example, if a city is a state of mind, who can ever say where the boundaries of the urban area lie?"<sup>2</sup> In Beirut's case, the boundaries are set on the map physically but hard to define mentally since the farthest villages, towns, cities, historic sites, etc., are within a three-hour drive. As J. Douglas Uzzell suggests in his article "Which Region? Whose Context? Problems of Defining the Regional Context of Frontera Texas," the critical element is not the ruralness of the area, but the means of transportation, which may reduce the friction of distance to a negligible factor.<sup>3</sup>

While one can not abandon the terms rural and urban as Richard Dewey suggests in his article, "The Rural-Urban Continuum; Real but Relatively Unimportant," he argues that as much as those two terms are needed, there is not any agreement among theorists as to which characteristics are urban and which are rural.<sup>4</sup> Therefore, as the Central Hall House and the Modern Apartment Complex are discussed, there is no attempt to classify them as urban or rural since there is no territorial architectural distinction due to the homogeneity of housing throughout Lebanon.

One point to be stressed is the time-lapse between village and city. The term time-lapse here means while almost all the central

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<sup>2</sup>Palen, p.68.

<sup>3</sup>J. Douglas Uzzell, "Which Region? Whose Context? Problems of Defining the Regional Context of Frontera, Texas", in Thomas Collins (ed.) Cities in a Larger Context (Athens: University of Georgia Press, 1980), p.34.

<sup>4</sup>Richard Dewey, "The Rural-Urban Continuum", American Journal of Sociology, LXIV (March, 1960), p. 60-66.

hall houses have been destroyed and replaced by the modern apartments in Beirut, the same phenomena is taking more time in the villages farthest from Beirut. However, it is much more obvious in villages closer to Beirut. As proof of this, Khuri's book From Village to Suburb, provides information about two suburbs in Beirut that evolved from what used to be a village called Chiyah, which was one of the closest villages to Beirut. The suburbs, Chiyah and Ghobeire, achieved their character in the early 1950's due to an enormous resettlement of migrants that disturbed the physical and social arrangements of neighborhoods. Khuri adds that no community (village, suburb, or city) in Lebanon today has physical boundaries corresponding to its sociocultural or territorial limits.

This study of houses and apartments in Beirut, as discussed in previous pages, does not conform to geographical limitations because of the impact of modern systems of transportation and communication with a massive flow of humans and information in Lebanon. This is not only due to the transportation systems themselves, but also to the close proximity of all the areas in Lebanon to the central capitol, Beirut. This proximity causes all areas in Lebanon to experience all kinds of migratory patterns. These migratory patterns are described by Hackenbery and Wilson as sedentary, circulatory, oscillatory, and linear.<sup>5</sup> Sedentary refers to an individual whose patterns of movement is primarily restricted to his home territory with occasional visits outside. Circulatory migration is movement at least once or many times to an urban setting for extended periods; oscillatory migrants are those that left their homes for extended periods and returned but do not want to remain in the home

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<sup>5</sup>Richard Basham, Urban Anthropology (Palo Alto, California: Mayfield Publishing Company, 1978), p. 77.

community and leave to settle permanently in the city; and finally, linear emigrants are true rural-to-urban migrants who leave their homes and never return.

One migratory phenomena detrimental to our study, discussed in the book Urban Life, edited by George Gmelch and Walter P. Zenner, in the article "Migration and the Adaptation of Migrants to City Life" deals with migrants who arrive in the city and do not remain permanently, then move on to other new countries.<sup>6</sup> Cultural contacts due to migration patterns go on between residents of the city and country, between westernized Lebanese and other Lebanese, and between Westerners and Lebanese. Neville states that "city to rural movements and migration systems are cultural systems enacted in social form to present a web of interconnections among country, town and city residents, and to create transgenerational linkages among scattered people."<sup>7</sup> This phenomena is called "acculturation" or "culture contact." The same "culture contact" was brought in through other means such as the French colonial policy in Lebanon, and through other Westerners evangelizing or opening educational institutions such as universities. The emphasis here is on Western and not Eastern influence because the Western influence, (dominated by Lebanese returning from Western universities abroad) brought about the new mode in building construction with a whole host of new building construction materials. Uzzel points out that local transactions cannot be understood unless one includes transactions outside the local area; these transactions do not

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<sup>6</sup>George Gmelch and Walter P. Zenner (ed.), Urban Life (New York; St. Martin's Press, 1980), p. 71-77.

<sup>7</sup>Gwen Kennedy Nevill, "Protestant Pilgrims and Interurban Linkages; The American South and Scotland", in Thomas Collins (ed.) Cities in a Larger Context (Athens: University of Georgia Press, 1980), p. 97.

fit into a fixed geographical locality.<sup>8</sup> This is not to deny the fact that concrete is produced locally, and the new type of construction still has a regional style if not local.

Construction now is viewed as a reflection of external factors as well as regional and local. As one sees from the history of Beirut, those external factors that are present today from their counterparts of the past did not change much, which would lead one to conclude that the architecture of the past in Lebanon was as much influenced by the external factors as is today's architecture. The changes occurring are no different in kind (same living habits, same culture, same living necessities); however, the past was slower in pace and thus conceived as a process of adaptation to local circumstances and conditions.

As it is difficult to establish a direct connection between the Lebanese Central Hall House and other houses of the Mediterranean region, it is easy to assume, as Ragette does, that the central hall design with the triple arch is not a foreign importation but seems to have come as an inevitable solution and reflects an indigenous development.<sup>9</sup> As this might be true, one cannot deny that some of the external factors that are present today were present then (with slightly different circumstances), for example, Beit ed Dine, the palace of Emir Bechir, was designed by Italian architects but carried through by Lebanese masons (see page ). This point might lead one to assume that the type of construction of the Central Hall House as it developed was carried through as a norm, (Norms are products of interaction among people, and subject to change as a consequence of further interaction, implanted through enculturation and

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<sup>8</sup>Uzzel, p. 34.

<sup>9</sup>Ragette, p. 52.



are derived from the past.).

This tradition of homogeneous architecture throughout Lebanon was brought about by the fact that stone masons (builders and designers of the Central Hall House) passed down their skills from generation to generation retaining tradition in design. Soraya Antonius, in her book Architecture in Lebanon, remarks that "this enduring tradition of the Central Hall House was helped by the Lebanese proneness to imitation -- the prospering client asked for a house 'just like the one across the road', the mason was given a straight forward model to copy. Perhaps this denial of any creative individuality was responsible for the fact that so many master-masons of the nineteenth and early twentieth centuries made their facades asymmetrical...yet these nonconformists proved their mastery by preserving the balance of the house."<sup>10</sup>

In looking at the modern construction from this angle, one can notice that the same strategy is carried through. As prominent architects introduced reinforced concrete in construction, construction workers that helped build those buildings established enough skill to start building similar structures on their own, without relying on an engineer or architect but merely a constructor, which is a substitute of what was in the past a mason. One major difficulty and difference arises in this situation. What was before one type of house (Central Hall House) and construction is now the reinforced concrete apartment complex, which is similar in structure but extremely diverse in form and finishing materials creating a major dilemma. Allowing that a contractor is skilled in building, he is not yet familiar with those aspects that make the modern apart-

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<sup>10</sup>Soraya Antonius, Architecture in Lebanon (Beirut: Khayats, 1960, p. 9.)

ment aesthetically pleasing. Yet this indigenous development that appears to be a source of confusion right now can be developed and refined given the time. Unless very carefully designed, with nature taken into account, concrete can overwhelm the natural environment. With the massive quantity of construction, this phenomena could be irreversible and dangerous, if given the time needed for development. Unlike the Central Hall House, this diversity and the ill-knowledge of selectivity could result in total collapse to the environment that earlier had made the Central Hall House possible through refinement based upon limited, unconfused choices.

To sum up, Fayez Hussein stated in his work "Toward A Better Architecture in the Arab World" the following:<sup>11</sup>

The problem today seems to be one of excessive choice, and the breakdown of folk art may be due to the fact that the vocabulary is not limited and choice becomes too difficult. Folk art would then be seen not as the result of some mysterious good taste but as the result of learning to make choices among a limited number of approved alternatives. The lack of taste shown with reference to new products and buildings may merely be an inability to choose outside the framework of traditional forms.

Only through time and future observation will this dilemma resolve itself. The prediction is that at sometime in the future the concrete apartment complex will be as indigenous and successful as was its earlier counterpart.

In a dualistic view, the flux of history is cyclical rather than progressive. While this theory has merit, a phenomena such as migration

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<sup>11</sup>Fayez Hussein, "Toward A Better Architecture in the Arab World", Thesis Kansas State University, 1978, p. 59.

might remain inherently the same from its historic form, however the violent shift in transportation between the past and that available in the present creates a totally new perspective to migration. This new perspective to migration takes on a new dimension that renders migration of the present as structurally cyclical, however organizationally progressive--structurally as in "structure" meaning a general ideological background of concepts according to which organization is carried out, and organizationally as in "organization", meaning the actual ordering of groups and things in changing circumstances imposed by immediate needs.

While migratory patterns of the past and present created enculturation bringing about the homogeneity of architectural form throughout Lebanon, the past migratory patterns were slow and related to that of adaptation (reflected in the Central Hall House) while the abruptness of migration today is reflected in disorganization and nonindigenous developments. The principal "structural" aspect of the Lebanese dwelling unit has not changed. After all, the Central Hall House and the Modern Apartment Complex serve the same purpose and provide the essentials of daily living habits; however, the organizational aspects in those two forms varies drastically as it will be illustrated in the Al-Bustan building issue (in Chapter 7).

On the pages that follow, a mileage chart, a map of Beirut, and photographs of general locations of historic, vernacular and modern character, are selected to give an idea of general landmarks. Those landmarks of Lebanon will help reinforce images of those in Beirut.

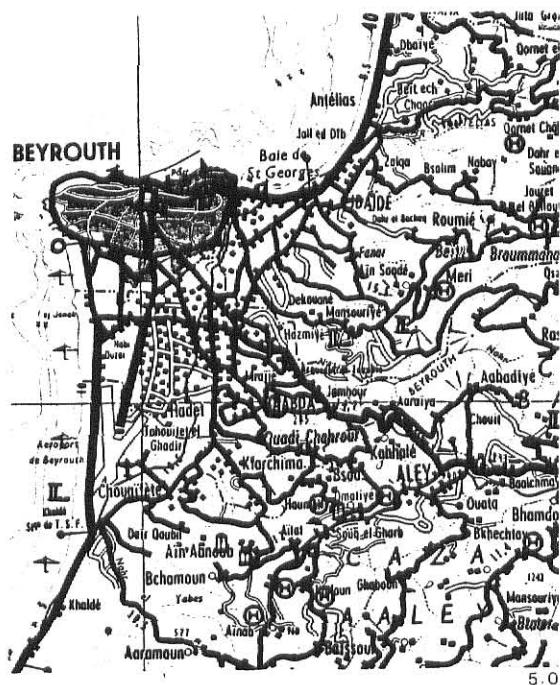


Figure 5.0 Map of Beirut with its outlying villages area.

Figure 5.1-2 Scenes from the mountain areas surrounding Beirut (from Broummana).

Figure 5.3 Scene of Beirut from Araiya (area of low range hills around Beirut).



5.1



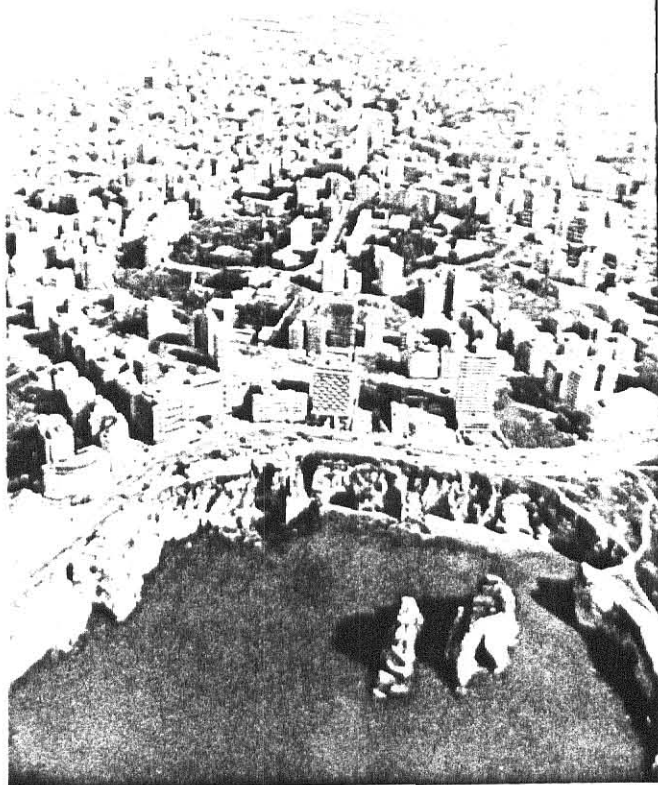
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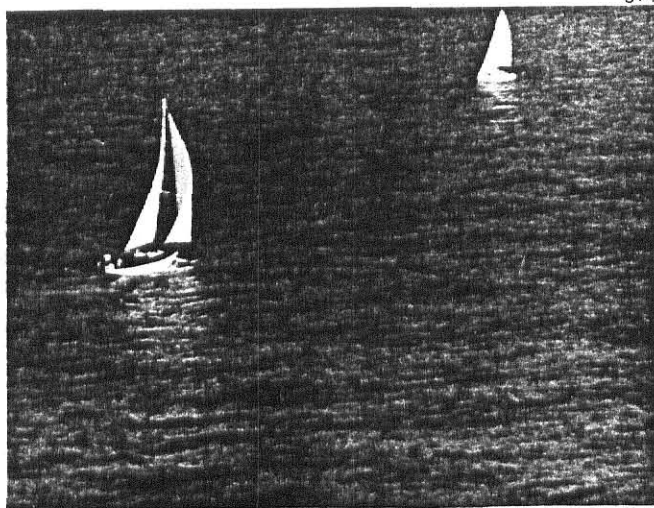
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Figure 5.4 The skyline of Beirut with Pigion Rock in the foreground, a well-known landmark of the coast of Beirut, taken in the 1970's.

Figures 5.5-5.7 Fishing and yachting off the coast of Beirut.



5.4

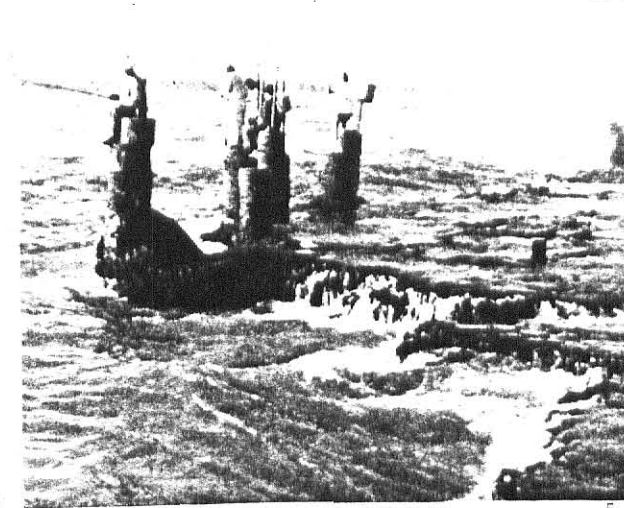


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Figure 5.6 Aerial view of Beirut with Pigeon Rock in the foreground taken in 1939.



5.6



5.7

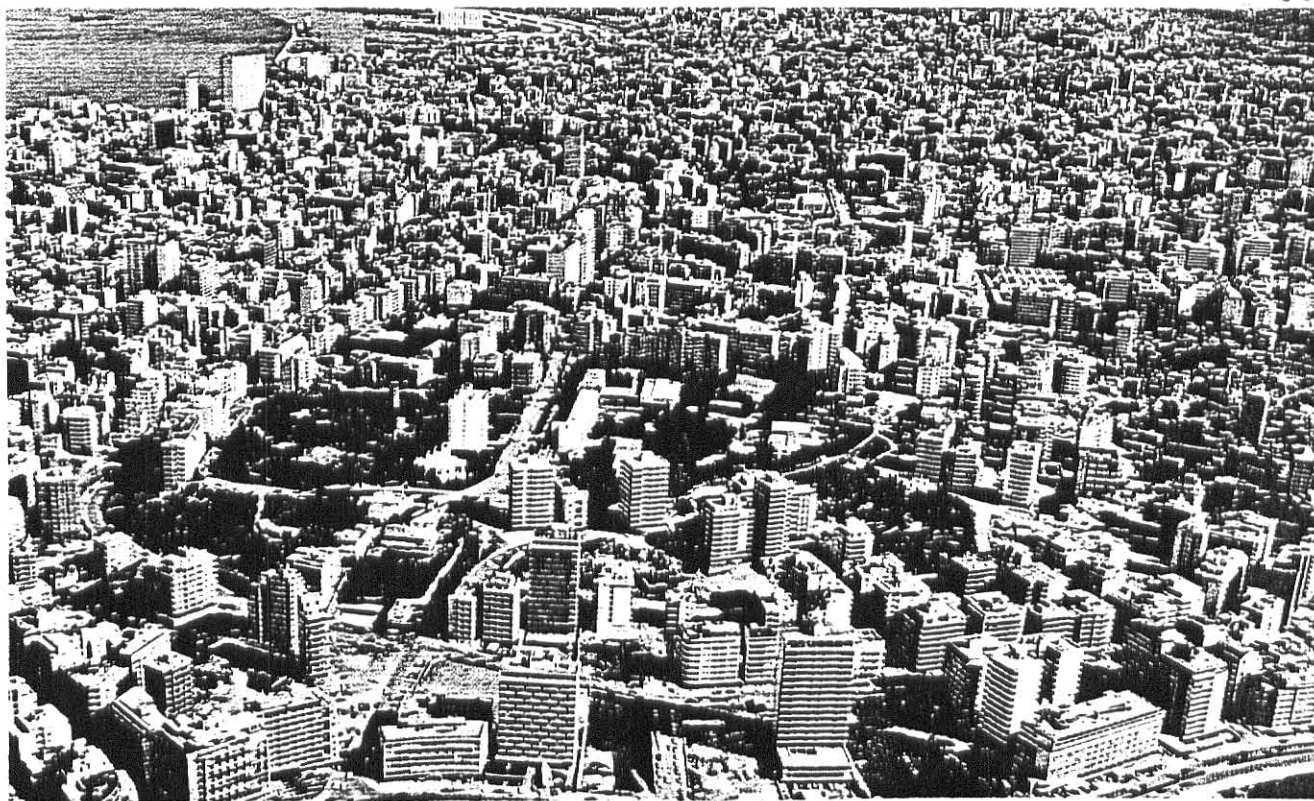


Figure 5.8 Aerial view of Beirut, taken in 1931, reflecting the numerous Central Hall Houses common to that period.



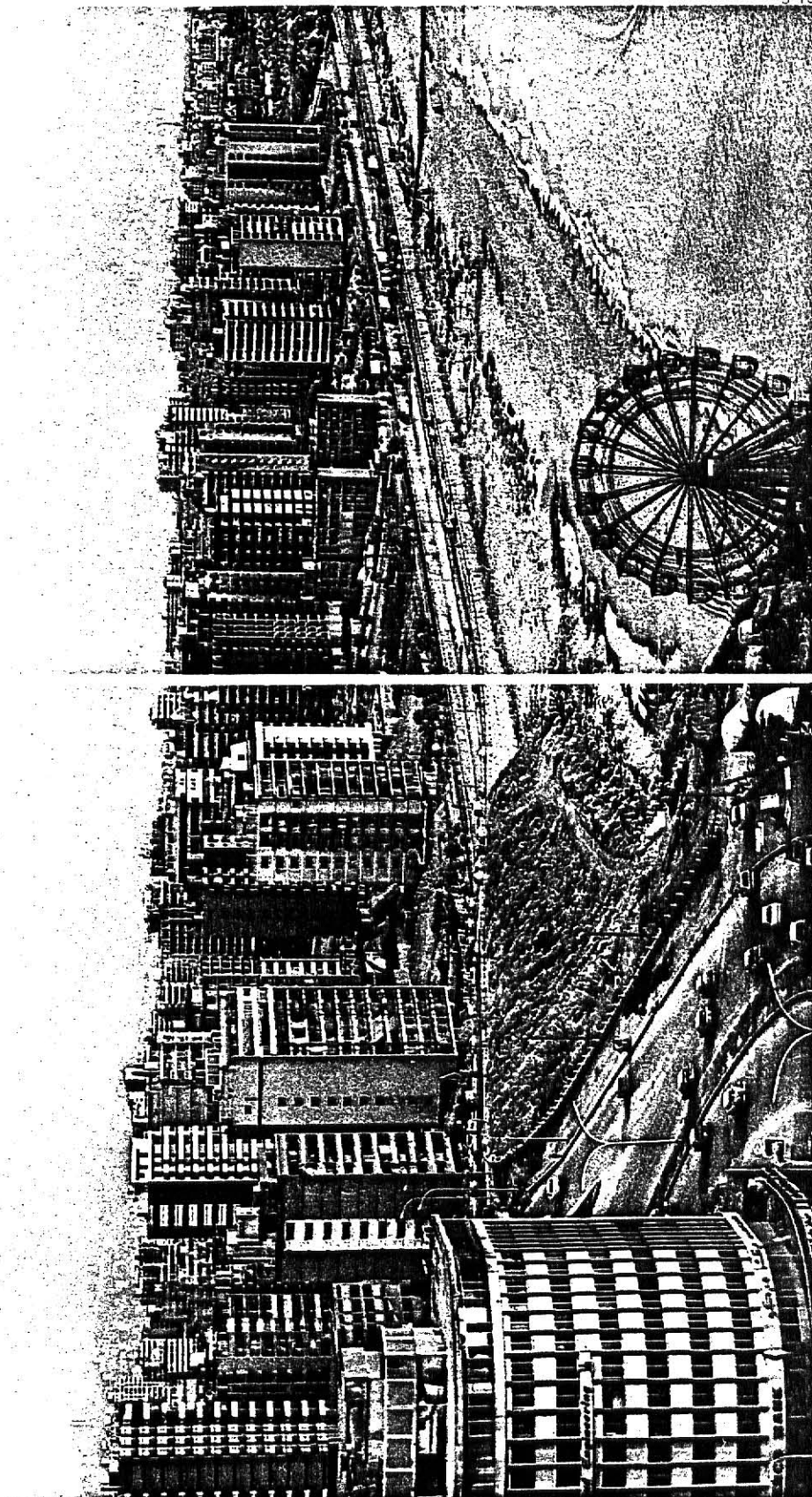
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Figure 5.9 Aerial view of Beirut, taken in the 1970's, reflecting the Modern Apartment complexes, that replaced all housing units in Beirut, leaving no trace of the Central Hall Houses.



5.9

Figure 5.10 The skyline of apartment buildings along the Mediterranean Sea. The popular Ramlet el Baida beach)







## CHAPTER 6

### ISSUE TWO

Inconsistent and confrontational elements in physical form and in behavior often occur when a society is subject to rapid change. Unfortunately the results and meanings are also often obscure. To clarify this phenomenon, this chapter utilizes a comparative analysis of a rather singular issue, that of laundry drying, as it relates to the evolution of architectural forms and habits.

Change is concerned with cognitive consistency. Perceived inconsistency among attitudes is likely to produce some instability and change. Cognitive interaction relies on certain essential points which are paraphrased from Osgood as follows:<sup>1</sup>

- 1) When an individual's cognitive structures are perceived to have inconsistencies, they are more likely to change.
- 2) For cognitive elements to be perceived as inconsistent, they must be brought into conscious confrontation with one another.
- 3) The amount of potential attitude change increases with the degree of cognitive inconsistency.
- 4) As cognitive structures are disturbed, they tend to change to reduce cognitive inconsistency.

John Friedmann, in his article "On the Contradiction Between City and Countryside", cites Mao Tse-Tung as saying the following:<sup>2</sup>

In any contradiction, the development of the contradictory aspects is uneven. Sometimes, they

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<sup>1</sup>E.E. Osgood, "Cognitive Dynamics in the Conduct of Human Affairs", *Opinion Quarterly*, 24 (1960), p. 341-365.

<sup>2</sup>Alvin W. Wolfe, "Multinational Enterprise and Urbanism", *Cities in a Larger Context*, ed. Thomas W. Collins (Athens: University of Georgia Press, 1980), p. 86.

seem to be in equilibrium, which is, however, only temporary and relative, while unevenness is basic. Of the two contradictory aspects, one must be principal and the other secondary. The principal aspect is the one playing the leading role in the contradiction. The nature of a thing is determined mainly by the principal aspect of a contradiction, the aspect which has gained the dominant position.

That the modern apartment complex has gained a dominant position in Lebanese architecture over the central hall house causes one to assume that a confrontation occurred which brought about the change. A multiplicity of elements brought about an inconsistency which in turn influenced and brought about the change. It is thought of in this way or manner because the change was abrupt, covering the whole country in a relatively short period of time.

Before talking about change, there is a need to talk about the confronting elements that brought about the contradiction leading to change. As mentioned earlier in the previous chapters, economic growth and massive migratory patterns brought about the new techniques to deal with the demand for construction. One of the most important techniques was the introduction of concrete through the colonizing country at the time, the American University of Beirut and other universities, and the migrants returning home after completing their degrees in various design fields abroad. It is not important to note who was the one that introduced concrete first, but that the material was introduced and shortly after that, Lebanon became a producer of and exporter of that material. Later in the mid-nineteen hundreds, the concrete construction technique flourished, and stone masons and stone construction became extinct.

Another section of Mao Tse-Tung taken from Friedmann declares that "there are many contradictions in the process of development of a complex thing, and one of them is necessarily the principal contradiction whose existence and development determine or influence other contradictions."<sup>3</sup> The principal physical contradiction is the traditional

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<sup>3</sup>John Friedmann, "On the Contradictions between City and Countryside", Comparative Urban Research, 6 (1978), p. 9.

materials and way of construction versus the modern concrete material. The principal social contradiction is the confrontation of modernity versus tradition. This social contradiction is best expressed in D.S. Fatouros and C. Chadjimichalis article on "Self-Generated Settlement in the Thessaloniki Area of Greece" as follows:<sup>4</sup>

Elements from the typical urban environment are widely used, though here the conditions of construction and function are entirely different. Their adoption may be due to two reasons, a) these are the only images the local people have of a "developed" social environment and b) they try to imitate the urban environment and to detach themselves from their rural origins.

From this example, we can note that the most important aspect is that the new mode of construction was thought of as a way to seek modernization and social status. Many people still have not realized that that was a contradictory approach to modernity because one can achieve modernity (Western living habits and values) while living in the Central Hall House.

Some change occurs merely to fulfill a certain need like the need for more floors per lot. In some cases, confrontation and contradiction are apparent. In the case of the shift from the Central Hall House to the Apartment Complex, the sources of confrontation and contradiction are not apparent. Contradiction and confrontation in this case definitely exists but is hard to pinpoint. The only way to clarify such an obscure phenomena is to tackle issues that arise from the negative after-effects of unplanned change due to circumstantial needs. The following is an example that is hoped to clarify the preceding statement.

When the apartment complex replaced the Central Hall House, the balcony in the highrise simply took the place of the backyard. Few

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<sup>4</sup>D.A. Fatouros and C. Chadjimichalis, "Self-generated Settlement in the Tessaaloniki Area", Architecture in Greece, ed. Orestis B. Doumanis (Athens, Greece: Malam Ltd., 1974), p. 143.

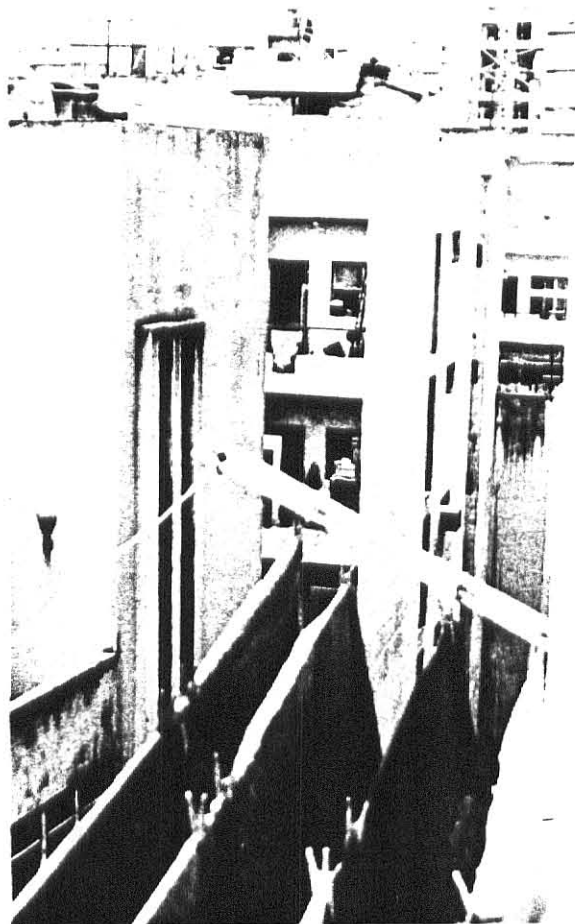
observers took note of that phenomena because it did not pose a threat at the time. Now it is a threat and there is no indication that anyone is doing anything to investigate or correct the after-effects of such phenomena. The simple task of laundry hanging at the kitchen balconies has become the eyesore of modern Beirut. The major setback was due to the fact that Echochard (a French urban planner hired by the Lebanese authorities during Shehab's regime to formulate a master plan for construction policies in the country in 1961) allowed less emphasis for the back facades of buildings where the task of laundry normally takes place.

This aspect might have worked in France due to the evenly grided rectangular blocks where back facades of a building would only face another back facade. In Beirut small lots and crooked streets end up exposing so many back facades leading to eyesores of unrefined elevations decorated with drying laundry. While a simple important aspect as that was ignored, it is a major problem of the day and still is not confronted if at all noticed. What exists is a contradiction between the Lebanese habit of drying clothes and the way modern concrete construction in Lebanon exposes this aspect. The sudden need to change to higher elevations gave designers little time to study such change and counteract its negative effects. To further clarify this aspect, a more detailed explanation of the laundry issue follows.

Laundry-hanging is still carried out in the modern apartment as it was in the Central Hall House. One major aspect developed. The physical form of the modern apartment complex did not influence the habit of laundry washing and hanging; however, the same laundry hanging habits carried on from the past did influence the physical form of the modern apartment building.

When laundry was hung at the back garden of the Central Hall House it was hardly noticed. In the present apartments the same element causes visual disorder due to the fact that hardly any designer would agree that eleven floors of laundry hanging would be an attractive sight to the building facade.

A solution to this problem cannot be reached unless people are confronted with this aspect of visual disorder. In upper class apartments, architects have solved this aspect by introducing French louvers and disguising elements where laundry is



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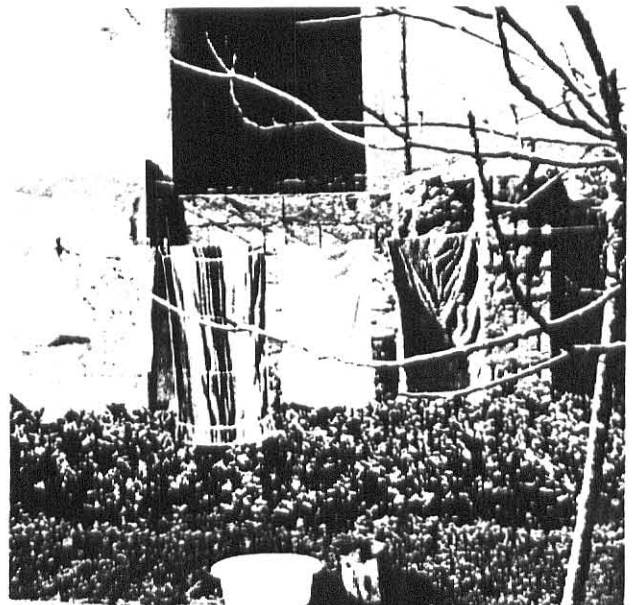


6.1

hung. Other upper class apartment complexes use dryers in which case one can clarify that the consciousness of the physical form causes people to change habits and select a new way to do laundry.

Dryers are hardly needed in a city where the weather and low pollution are natural ingredients to drying laundry.

The major problem exists among the middle and lower class apartments in which people are not aware yet, or are aware but not willing either to change habits or to create solutions for something they do not feel is their duty to resolve, or something by which they do not feel threatened.



6.2



6.3

Figures 6.0-1 Laundry hung in service area (kitchen balcony) in back facade in a middle class and poor dwellings.

Figures 6.2-3 Hanging laundry and typical fruit trees in back garden of Central Hall House.

Bem's theory (instances in life when a person is surprised to find that his own behavior is not consistent with what he had believed to be his own internal feelings)<sup>5</sup> reflects the method in which upper middle classes achieved their behavior change in selecting new modes of action to be consistent with their internal feelings (wanting to have a nice presentable apartment). This behavior is compatible with "processive" change that involves drastic and lasting alterations of the pre-existing habits (changing to electric dryers to maintain the physical appearance of the building).

"Continuities" of change (habits that existed in the Central Hall House and persists through the apartment complex) are reflective of lower middle to lower classes where laundry is hung on almost all balconies (like it was in the back garden) with a total disregard to the image of the building. It is merely a matter of adaptation that would help transform "continuities" into "processive" through time. Lower and middle lower class maintain the inner feeling of wanting a nice apartment even if they don't show it; however, the important factor is to be confronted and to realize that what they have, is far from being nice and to realize that their habits are inconsistent with what they have believed to be their own internal feelings. This leads to an understanding that only time is needed to help "change" shift from that of "continuities" to that of "processive". Time is the factor that will certainly prove whether or not the new mode of construction (concrete) will be transformed to a new organized and indigenous form.

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<sup>5</sup>Robert A. Baron, and Donn Byrne, Exploring Social Psychology (Boston: Allyn and Bacon Inc., 1982), p. 9.



History has shown that people of the area have a desire to maintain the physical appearance of their dwelling units; this does not appear to be true today. If the future does not lead to better housing then the conclusion would indicate that the concrete construction with its rapid formation had damaging consequences to a people and a culture that once had pride in the physical form of their dwelling units.

## CHAPTER 7

### ISSUE THREE

An incident of intergroup behavior in a village<sup>1</sup> and a research study conducted by Sherif and Sherif in 1954 on cooperative and competitive interaction between groups<sup>2</sup> are used to provide a background for analyzing a situation dealing with intergroup relations at Al-Bustan building, an apartment residence located in Beirut. This information is to be analyzed and integrated with group behavior in environmental psychology to understand how some factors of group behavior affect physical form along with how some aspects of the building affect the well-being of the residents.

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<sup>1</sup>Fuad Khuri, Village to Suburb (Chicago: University of Chicago, 1975), p. 248.

<sup>2</sup>John C. Turner, Intergroup Behavior (Chicago: University of Chicago, 1981), p. 74.



Figures 7.0-1 Al-Bustan building as marked by the arrows and location shown on the map of Beirut.



Fuad Khuri spoke of an incident found in a Lebanese village on the subject of intergroup relations.

While I was carrying out research on the suburbs, I learned about a village called Aydamoun in north Lebanon, where political cleavage between two families split the village into two sects. Towards the end of the nineteenth century, Aydamoun was a Greek Orthodox village with two relatively large families, the Haddads and the Bitars, opposing each other in local politics. This opposition, which continued for several decades, began gradually to create two social communities within the village. No interaction at the personal or institutional level, such as market exchange, marriage and visiting, was carried out between them. The Haddads, who were more powerful and numerous than the Bitars, began to use their influence in the church, which was then responsible for the legitimation of property, to register in their names that which was originally the Bitar's property. The Bitars protested against the Haddads' aggression to the Greek Orthodox bishop of the area, who, falling under the influence of the Haddads, refused to interfere. To save their property, the Bitars appealed to the Greek Catholic bishop, who offered to interfere if they would convert to the Catholic church, which they did on October 11, 1920. On becoming Catholics, the Bitars surrendered themselves to this church's legislature -- an act which, while it prevented the Haddads from annexing the Bitar's property, simultaneously generated a series of accommodative principles that kept the two confessional groups apart. In 1927, the Bitars built a separate church, thus sealing themselves off legally and socially from the rest of the Greek Orthodox community of Aydamoun.

In this book, Intergroup Behavior, John Turner writes of the following study on cooperative and competitive interaction between groups:

The pioneering research on this issue was conducted by Sherif and Sherif and their colleagues. Their work was important because it demonstrated experimentally the role of intergroup relations in social conflict, identified social and psychological consequences of intergroup competition, and also presented a specific theory of intergroup behaviour.

Three field studies were carried out in 1949, 1953 and 1954 in the United States with young male subjects at summer camps (Sherif, 1951; Sherif and Sherif, 1953; Sherif, White and Harvey, 1955; Sherif et al., 1961). They were similar in basic design and comprised four stages in the development and reduction of intergroup conflict. In the first stage, the subjects engaged in sports and outdoor activities on a camp-wide basis, and normal friendships developed. In the second, they were divided into two groups through

the separation of their living arrangements and camp activities; close friends were assigned to different groups. The groups gradually evolved status and role differentiations between their members and shared social norms. In the third stage, the camp authorities (the researchers) instituted an organized competition between the groups embracing sports contests and other camp activities. In consequence, overt hostility developed between them both within and outside the organized contests. The last study included a final stage which provided the warring groups with superordinate goals: Compelling objectives desired by them both but which neither could achieve without the help of the other. They were placed in settings where collaborative action was necessary such as a lakeside outing where they had to join forces to rescue a truck which was to bring them food. A series of such encounters reduced mutual antipathy and led to favourable intergroup attitudes.

The researchers interpreted their observations as support for the following hypotheses (Sherif, 1967):

- 1 Where individuals interact under conditions that embody common goals requiring cooperatively inter-dependent activities for their attainment, a definite group structure will emerge, consisting of differentiated status and role positions and shared social norms.
- 2 Where two groups come into contact under conditions that embody a series of incompatible goals -- where both groups urgently desire some objective which can be attained only at the expense of the other -- competitive activity towards the goal changes over time into hostility between the groups; also:
  - (a) unfavourable attitudes and images (stereotypes) of the outgroup come into use and become standardized, placing the outgroup at a definite social distance from the ingroup;
  - (b) intergroup conflict produces an increase in solidarity within the groups and other changes in intragroup relations;
  - (c) increased solidarity and pride in one's own group lead to ingroup biases which over-evaluate the characteristics and performances of ingroup members and underevaluate those of outgroup members.
- 3 Where conflicting groups come into contact under conditions that embody a series of superordinate goals, cooperative activity towards the goal has a cumulative impact in improving intergroup relations; in reducing social distance, dissipating hostile outgroup attitudes and stereotypes, and making future intergroup conflicts less likely.

Al-Bustan building, like other buildings in Beirut, receives its water from city water mains. Pressure from city water mains is insufficient to maintain adequate fixture pressure at the top stories, so water is pumped to a steel elevated roof tank for gravity downfeed. The amount of water stored is available for use as domestic (service water). The amount stored is usually enough to supplement what the pump delivers during the several daily hours of high demand that occurs in most buildings. The pump then continues, often for several hours, to replenish the house supply that had been partially depleted during the busy period. Feed distribution from the street main collects in a suction tank (a buffer between the system and the street mains). It usually holds enough reserve to allow the pumps to make up the periodic depletion in the house tank. It refills automatically by gravity flow from the street main since it is at ground level.

When the residents of Al-Bustan first occupied the building (buying the apartments as people would a house in the U.S.), the roof tank was divided into nineteen house tanks -- one for each apartment. After living in the building for awhile, the residents noticed that the pump fills the house tanks in chronological order; this means that the last few will not get water unless the first few are already filled. It was quite an undertaking to convince the residents that had no water problem (the house tanks of those that filled first) to accept a replacement of the nineteen individualized house tanks by a common large one, thus eliminating a distribution problem. The issue was debated through a public meeting and the majority of the residents voted to implement the project thus consenting for one large, common roof tank.

To make sense out of the incident and the resolution, the author provides the following assumptions that were not considered in the meet-

ing but might provide an insight to the logic of such a solution (switching to a common tank instead of the individualized tanks:

1) Even if some people use more water than others, there is always plenty for all.

2) If there is going to be a water shortage, the residents are considerate enough to ration evenly.

(The author assumes that all these points were not debated or noticed when action about the issue took place.)

Sure enough there was a water shortage when trouble occurred in Beirut. Some residents abused their rights instead of taking a moderate share; some ended up with very little water. In addition, some plumbing leakages occurred unnoticed and depleted the water which consequently put unfair blame on certain residents. The individualized tanks, in contrast, were more easily monitored and thus any unexplained depletion due to leakages were easier to detect.

The abuse of water rights, the unevenness in usage and the problem of family size led to conflicts and tension that resulted in yet again several meetings over the water issue. The residents again arrived at a solution giving the go ahead for the reinstallation of the nineteen tanks thus dividing the water equally and giving full freedom in water usage. One adjustment was made that clearly solved the problem; they devised a system where all nineteen tanks fill evenly from the pump thus eliminating the chronological order. An addition of the twentieth tank was installed for building cleanup and plant watering thus maintaining the building's physical image.

The conflict over water lasted about two years and caused much tension and stress. Luckily, each resident in this particular building has his own heating units and fuel tanks so this was not subject to the

same debate. Many buildings all over Beirut share these amenities.

There is a clear message for approaching similar projects; abandon the use of common large water tanks, heater, etc. in buildings regardless of feasibility. Neither of the two assumptions that were given earlier fit human habit (meaning that a shortage could always occur and in case of a shortage one cannot ask people to be rational, i.e. giving up a shower to make it possible for a neighbor to water their plants). This would allow each individual to make their own decision about what they value most -- cleaning house or water plants -- in such shortages.

In comparison with Sherif's study, Al-Bustan building went through the following developmental stages:

- 1) In the early stages of the building development, the groups (people of different age groups that form a family and occupy an apartment) engaged in social activity on a building-wide basis, and normal friendships developed (random friendships in the building).

- 2) The second stage of natural division in friendship occurred based on mutual interests, class, and kinship however not religious (the building consists of residents of all religious groups found in Lebanon). The groups gradually evolved status but not enough to form constellations because of a constant shift in friendships based on other factors such as conflicts depending on situations ranging from organizing parking spaces in the building, the consierge's (building keeper) credibility, to simple antagonistic social attitudes.

- 3) Competitive activity towards some goals consequently changed to hostility between a few groups; earlier when an easy task, such as selecting one color for the French canopies for all the balconies to homogenize the physical image of the front facade, now became impossible



thus having each floor select a different pattern that totally diminished the building's physical image.

In comparison of the water situation with Sherif's hypotheses, the author has the following explanation:

1) Hypothesis No. 1 applies to the group structure of the whole building and their set standards and regulations. The building has a president, vice president, and the treasurer that keep track of the arising needs of building maintenance. Building meetings are held in the residents apartments alternating hosts from meeting to meeting. Money is collected on a monthly basis and payments are increased if the need arises. Issues are voted upon and a consensus of more than 60% is required to go ahead with a project.

2) Hypothesis No. 2 - With the water conflict, constellations (each comprising of a few families with some remaining neutral) in this situation are divided with respect to how large a family is and how much water they consume and not according to sect, class, and kinship. Competitive activity toward attaining more water changes into hostility thus leading to an even share of water, dissipating hostility, and making future conflicts about water less likely.

Social interaction is minimized (barely saying "hello" when meeting at the entrance of the building, rarely conversing in the elevator, calling ahead for visiting even if it is next door on the same floor), thus diminishing the effects of cooperative and competitive intergroup behavior within the building.<sup>3</sup> Many buildings in Beirut have eliminated problems of conflict leading to hostility through companies that take

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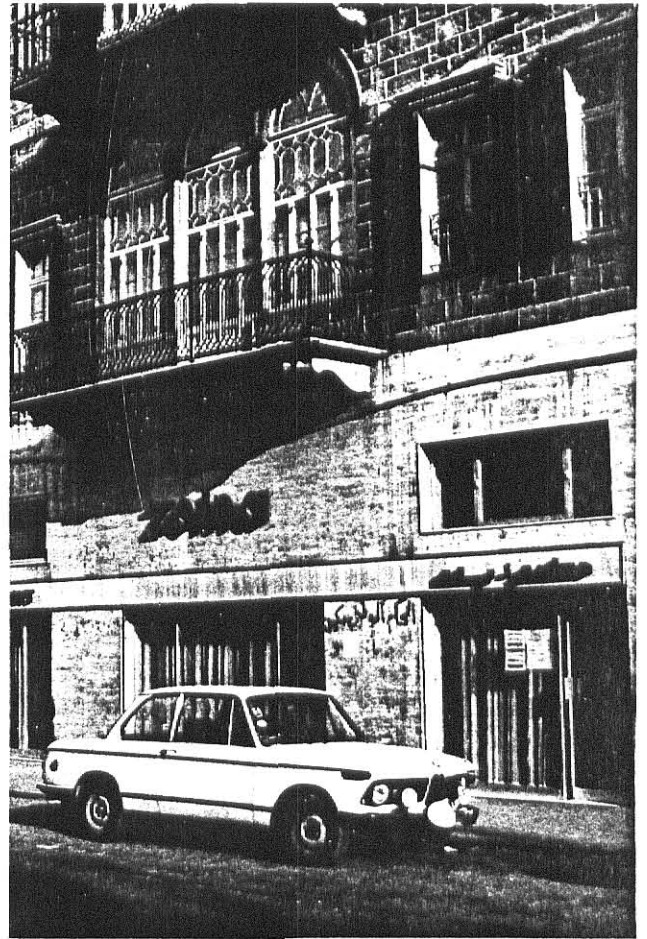
<sup>3</sup>John Turner, "The Experimental Social Psychology of Intergroup Behavior". Inter Group Behavior (Chicago: University of Chicago Press, 1981), p. 74.

charge of management through a paid fee. (It is important to note again that rental apartments have a manager. Only those buildings such as Al-Bustan building that are owned by the family groups (which account for more than 70% of the buildings in Beirut) go through that. Many cannot afford some management companies thus having to develop their own system in managing the building.

One can know that the building, unlike the village (the first study quoted in this chapter), has only one entrance and one elevator thus eliminating conflict resolution through divisions and working for compromise.

## CONCLUSION

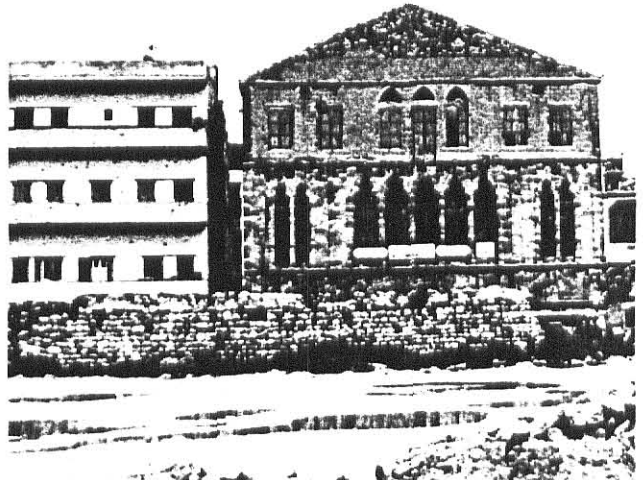
This has been a problem-oriented study that focused on Lebanese dwelling units and examines, through a comparative analysis of the contrast between the Central Hall House and the Modern Apartment Complex, the variation that has occurred. Photographs are used to support the author's ideas and give the unfamiliar reader a clearer picture of the situation in Lebanon. The two photographs in this section illustrate how the Central Hall House with its magnificent triple arch has been severely mutilated. Unfortunately it is increasingly difficult to find in Beirut and throughout Lebanon examples of the Central Hall House which are still standing or which have not been distorted. The pictures reflect a society in transition; a society that does not appreciate one of its symbolic values



8.0

(the combination of the triple arch and tent-brick roof that are striking in appearance and so characteristic of Lebanon)<sup>1</sup>, and a society that has no understanding of Lebanese architecture due to an increase in need for quick construction. As Ragette adds, "Even today no official distinction is made between civil engineers and architects as far as the design of buildings and the granting of building permits are concerned. More buildings are designed and built by civil engineers than by architects, and still much more without the direct involvement of either."<sup>2</sup> This surely indicates how little planning goes into the average Lebanese dwelling of the day and how little attention is made for the change that is occurring and its influence on the culture.

This study brings out and generates certain explanations of



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<sup>1</sup>Ragette, p.112.

<sup>2</sup>Ragette, p. 112.

issues present in the recent house form because of set habits of the past and because of a shift from the individualistic living of the Central Hall House to the group-oriented situation of the Modern Apartment Complex. This change implies organizational restructuring of individuals in a household to each other and to other households. This study merely begins the search for an understanding and an enhancement of the Lebanese dwelling units of today and tomorrow. Hopefully the issues presented will challenge others to further investigations along the line of comparative analysis of these two forms of dwellings.

The problems of housing in Lebanon are certainly worthy of study; and it is hoped that such studies will help to limit the negative effects and to enhance the positive elements in today's housing construction. Given its rich history and situation, Lebanon deserves a new housing type that values the past and exploits the positive contributions of contemporary construction.

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## APPENDIX A

### Figure Credits

#### Chapter 2

Figure 2.0. Middle East Review (1982), p. 190.

Figures 2.1-2.8. Fulvio Roiter. Lebanon (Beirut, Lebanon: National Council of Tourism, 1980), p. 23, 84-5, 97.

Figures 2.9-2.11. Pablo Riani. "Casa Del Libano." La Mia Casa (April, 1982), p. 116.

#### Chapter 3

Figures 3.0-3.5 and 3.7. Personal Photographs.

Figure 3.6. Riani, p. 117.

Figures 3.8a-b. Friedrich Ragette. Architecture in Lebanon (Beirut: American University of Beirut, 1974), p. 100-01.

#### Chapter 4

Figures 4.0-4.2, 4.4-4.10. Personal Photographs.

Figures 4.3, 4.11a-b. Supplied by the Shabshab Group of Engineers, Beirut, Lebanon.

#### Chapter 5

Figure 5.0. Map supplied by the Office of the Consulate General of Lebanon, Detroit, Michigan.

Figures 5.1-5.3. Personal Photographs.

Figures 5.4-5.5, 5-7, 5.9. Roiter, p. 188-215.

Figures 5.6, 5.8. Jidejian, Nina. Beirut Through the Ages (Beirut: Dar El-Mashreq Publishers, 1973), p. 243, 247.

Figure 5.10. William Ellis. "Beirut - Up From Rubble." National Geographic 163 (February, 1983), p. 276.

Figure 5.11. Middle East Review (1982), p. 190.

Figure 5.12. Ragette, p. 165.

Chapter 6

Figures 6.0-6.3. Personal Photographs.

Chapter 7

Figure 7.0. Personal Photograph.

Figure 7.1. Jidejian, p.242.

Chapter 8

Figures 8.0-8.1. Personal Photographs.

ANALYSIS OF SELECTED PHYSICAL ISSUES AND THEIR  
IMPACT ON BEHAVIORAL ISSUES IN BEIRUT

by

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## ABSTRACT

### ANALYSIS OF SELECTED PHYSICAL ISSUES AND THEIR IMPACT ON BEHAVIORAL ISSUES IN BEIRUT

Nadim Najib Shabshab

The city of Beirut is used as the focal point of this study. There is a need to develop an understanding of the two most predominant forms of residential units in Beirut (the Central Hall House and the Modern Apartment Complex), to explain some of the issues pertaining to the behavioral patterns associated with these two forms of residential units, and to identify the reason behind the overwhelming destruction of the Central Hall House and the dominance of the Modern Apartment Complex. This is a problem oriented study which focuses on the contrast between the two dwelling units mentioned and examines the variation through a comparative analysis.

This study contains eight chapters, the first of which is an introduction and the last a conclusion which summarizes the intent of the study. The middle chapters cover the history of Beirut and descriptions of the Central Hall House and Modern Apartment Complex. Analysis of three important issues follows which deal with some of today's building activities and behavioral patterns associated to the impact of the physical dwelling of the past on the behavior today. The intent of this study is to help lead one to a better understanding of the reflection of the past on new changes that have occurred in Beirut.