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THESIS

ARCHITECTURAL DESIGN OF
A COMMERCIAL BLOCK IN HOMS
BY A.M. ATASY B.A. in C.E.
1947 - 1948

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Thesis

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A Commercial Block in Homs

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I INTRODUCTION

Of man's lasting accomplishments in civilisation and Culture ^c
The fine arts have been the most genuine and progressive, because
they express man's inner craving and appreciation for beautiful
forms.

Architecture is the branch of fine arts which aims at the
erection of structural forms to produce things that give pleasure
and comfort to the human being.

Architecture is "music in stones." 

In the ancient centuries this Arab world was the Center of Civilisation; many cities, palaces, and other engineering works were found buried in the earth; some of them are still standing defying age and history. Examples of these are Baalbeck, Palmyra and Omayad Mosque.

At the beginning of this century this Arab world has awakened from a long sleep, and has discovered how much the western Countries are ahead of ~~him~~ ^{it}. He wanted to regain what he once gave; thus he began his struggle again. He encountered failure and success but, he is still, in his own way, digesting and developping new arts of his own.

The present architecture in this part of the world is very much affected by the western one. Although this effect shows very well in the external appearance of the building, the plan is still related to the kind of life we live. And although the ^saracenic architecture is still influencing the public buildings, the modern

architecture is predominating over all the other types of buildings, including the Commercial ones.

The City of Homs

Homs is a city in the midst of Syria. It is a center of Communication between Syria and Lebanon, and ^{an intersection} ~~a cross way~~ of roads coming from Tripoli, Damascus, Aleppo and Palmyra. Having the pipe line Camp, the big irrigation project, the national sugar factory, and ^{with plans for} ~~planning to have~~ a dye factory, a new railroad to Baghdad; all of which would create of Homs a big commercial, agricultural, and industrial city.

The ^{population} inhabitants of Homs are ^{is about} ~~around~~ 80,000 people but the future development of industry, commerce and agriculture will increase the number of inhabitants and also the passenger traffic.

The present Condition of Construction in Homs

Very few big buildings are found in Homs, and that is because of the lack of ^C Capital, encouragement, and good engineers. Before the last war a big movement of construction started, but mostly of villas and small appartements in the flat ground west of Homs. Because of the cheapness of land there, a residential quarter with large streets and large gardens around the buildings was erected.

That important reason mentioned above limited the construction of large and high buildings to a very small amount.

In this part of the world, every city is divided into two-parts: The old City with its narrow, meandering streets and its unhealthful and condensed buildings, and the new city with its large straight streets and its modern and healthful buildings. The problem which is always presenting itself in such a city is the widening of the old narrow streets and the Construction of new ones; thus creating new commercial streets or centers which require the Construction of large buildings.

II - Location and Condition of the Piece of Land

The piece of land which is chosen for the construction of the block, is one of the best in Homs, and that is because of the two following reasons.

A - Location

The land is located in the best part of the city or better to say in that vital part of the City where all focal points are gathered (See the location plan).

On the one hand

It is in front and near the following public buildings:

1. The government building (Serail) having most of the administrative offices.
2. The Governor's house.
3. The Automatic telephones building.

The other public buildings not being very far from the land, help very much in the increasing of its importance.

On the other hand

It has the following important boundaries.

1. From the east, a square which is the intersection of five streets, one of them, Fayçal street, is the main street in Homs, 30 meters wide, surrounded by cafés, Cinemas, public and Commercial buildings.
2. From the north a twelve meters street, which branches off from the main street mentioned above and which joins the Commercial and residential quarters.

3. From the south-east, a fourteen meters street, separating the land from the government building.

4. From the west an eight meters street separating the land from an area which is planned to be a public garden.

Only a part of the south side is blocked and all the rest gets plenty of air and light.

B - The present Condition of the Land

The land is about 2500 square meters in area. Only the east part is *has been built*, thirty years ago, consisting of a Café, an apartment above, and a two storys house next to them. All the rest of the land is left without use and only the part near the house is used as a garden.

These two reasons, discussed above; the good location, and the present condition; justify the choise of this piece of land.

III Choice and location of the block units

It was said that this land is located in the most important part of the City which is the business Center! Thus, the different block units should be chosen in such a way as to fulfill most of the requirements of the place and neighbouring buildings.

It is not enough to know the requirements of a place to decide on the choice of its units, but also it is necessary to examine these units from the economical point of view so as to have them the most efficient and the most beneficial.

The choice of the units is only a part of the problem, but the position of these units with respect to each other and with respect to the land as a whole constitutes the other greater part, and should be given the utmost ^{consideration} ~~importance~~ and care.

These three reasons discussed up: the requirements, the economy, and the location lead to the choice of the following units in their exact places:

1. The stores:

It is obvious, that in such a vital locality, stores must be built on all the sides of the land facing streets. One of the important reasons for the choice of the stores is their cheap construction cost compared to their large income.

2. The Café

not good

The existing café is very much ~~succeeding~~ ^{not good} even though it is neither [?]higienic nor comfortable! However, such a busy locality necessitates the existance of a ^e good café and restaurant.

It is found that the best place for the Café would be in the east part of the land, so as to have it facing the square and the two streets, well-ventilated, and nearer to the Commercial Center.

3. The Cinema

The Commercial and entertainment center around the piece of land necessitates the existance of a ^e cinema; in fact a proposition to build one was made to the land owner. Another important reason for the planning of the Cinema, is the following:

The dark place which is blocked by the stores on the south-east and by the neighbouring building on the south, creates a problem which must be solved. The solution which is found to be the best is to have a Cinema in that place, because it is well known that practically all the Cinemas are closed from the sides.

Another solution for the problem would be to open a steet or a system of streets to reach the ^southern blocked side. This means a loss of about 300 - 400 square meters of relatively valuable land. However, the need for many clear-storysts will complicate the problem and will increase the wasted area ^{by} a considerable amount. ₁

tried

Many other solutions might be ~~found~~ but probably none of them would satisfy the conditions of the problem.

4. The Tea Room

It was found that a tea-room located part on top of the Cinema hall and part on top of the Cinema entrance would fulfill the architectural and economical requirements of the problem.

5. The offices

The offices are very necessary in such a Commercial locality, in fact an office gets the same income, if not more, than a store. On the north side of the block, in front of the government building, & over the café, offices with one or two rooms are planned.

6. The Roof Garden

A roof garden, on top of the block, has very low construction cost compared with its large income, besides it helps very much in the outside architectural treatment.

7. The Commercial and Residential Apartments

The location of the land is not far from the residential quarter eventhough it is within the Commercial one; thus Commercial and residential apartments are planned in the west part of the land.

IV Design of the Block Units

Having chosen the block units and having located them in their exact places, the problem is now to analyse^z every unit alone so as to make its design clear and reasonable.

The west part of the land which is planned to be Commercial and residential apartments is left without architectural design because of the simplicity of design involved therein.

The following block units are designed.

* 1 - The stores:

The stores are located on all sides of the land. The distance center to center of stores is 4.00 meters, the clear width of the door is 3.00 meters, the depth is 6.20 meters and the height is 22 steps or 3.74 meters. All the stores have the same area and shape, and only two stores have their doors curved so as to satisfy the architectural treatment of the Cinema entrance.

2 - The Café

The Café is located on the east side corner of the land for the reasons discussed above. It is planned to accommodate 300 persons. Considering that an area of 0.80 square meter is needed for one person, the Café should have an area of 240 square meters.

Actually the Café is planned to cover an area of 250 square meters. It has five store spaces on every side and one at the corner, thus making a total of eleven store spaces. In so doing the Café, is well ventilated and lighted, is giving much space for the people to sit and look to the outside, and could be used as an open air café once the doors are opened. The Café is two storeys high having a clear height of 7.50 meters.

designed The mezzanine which will be used as restaurant and bar is ~~estimated~~ to accommodate 150 persons. Considering that an area of 0.90 square meters is needed for one person, it should have an area of 135 square meters. Actually the mezzanine is planned to cover the area of 130 square meters. It is located over the west part of the Café extending on two store spaces from each side. The mezzanine has the height of one story so as to leave one story height for the Café below it.

The staircase which leads from the Café to the mezzanine is located in the middle of the Café. It has 22 steps. It is 2.30 meters wide and 5.2 meters long.

The service quarter consists of a big room with a large window opened to the Café, a kitchen on one side, and a toilet room on the other side. These three rooms have windows on the common clear story behind from which they get enough air and light.

This same arrangement of the service quarter is carried on through the mezzanine.

3. The Cinema

The Cinema is planned to accommodate 500 persons in the orchestra and 300 persons in the balcony. These estimations are based on some considerations concerning the special Condition of the City of Homs. Considering that an average of 0.7 square meter is needed for one person, areas of 350 and 210 square meters are needed for ~~both~~ the orchestra and balcony, ^{respectively} ~~Actually~~ areas of 370 and 200 square meters are planned.

The Cinema consists of four main parts, these parts are:

- I The entrance
- II The Hall
- III The Orchestra
- IV The Balcony

I The entrance

The entrance to the Cinema is situated on the northern street. It is made large enough, 7.7 meters with the walls curved on both sides so as to have it attractive and inviting. It is made 3.6 meters deep with two large doors opening to the Hall.

II The Hall

Since the Hall is used for both the Cinema and the tea-room, it should have a considerable area and should be located in a position so as to join the Cinema entrance to the orchestra, the balcony, and the tea-room.

Because of that the orchestra and the Cinema entrance are not on the same axis, and in order not to break the symmetry of the plan, the Cinema entrance is placed in a way as to occupy one side of the pentagon^{do} hall which is on the same axis with the orchestra. According to this axis, the entrance door and the ticket room are symmetrical as well as the two-stair-cases leading to the balcony. This solution is found to be the best, taking into consideration the position of the Cinema with respect to the street, or in other words the oblique intersection of their axes.

The two stair cases into the hall lead to both the balcony and the tea-room. The useless space under them is turned into two stores and two toilet rooms. The stores open to the hall while the toilet rooms are reached from the orchestra; and both the stores and the toilet rooms are lighted by clear storys.

The side of the hall next to the entrance comprises three rooms: a small office, a ticket room, and a store. The ticket room could be reached through the small office; ^{and} it has two windows, one for selling orchestra tickets and the other for balcony. [^] The three rooms are opened to the clear story.

III The Orchestra

The east wall of the orchestra is already fixed by the position of the stores behind; the opposite wall is fixed by the space required for the orchestra. The orchestra has 17 rows of seats spaced 0.90 meter. The seat has a width of 0.55 meter, thus making a total of 540 seats.

The orchestra has an exit to the south-eastern side though a stair case room used for the upper storys. It has also two toilet rooms that were discussed above.

The stage is made large enough so that the Cinema could, also, be used as a theatre. It is 1.20 meters above the orchestra floor. It has two doors, one on each side leading to a corridor, with the screen 5.00 meters away from the edge.

Two rooms are ~~annexed~~ ^{added} on the west side of the stage for artists in case of a play.

IV The Balcony

The balcony has the same arrangement as the orchestra and it contains 300 seats. Two toilet rooms are located on top of the two stair cases leading to the balcony in a place that a sufficient height for a person to pass is provided. These toilet rooms are smaller than those of the orchestra, and get their light and air from the two clear storys mentioned above.

The ventilation of the Cinema

An air-conditionning system will be used for the ventilation of the Cinema and a place in the basement is provided for it. But since this system is very expensive in these days, another provision is made. This is to have eight high windows on the north wall of the balcony. They are large enough, so as to get plenty of air and light. These windows are open on the inside area above the tea-room and behind the Second floor offices.

4. The Tea-Room

The tea-room consists of two main parts. One part is over-looking the hall and 3.50 meters high; the other is over the Cinema entrance, projecting to the outside a distance of 1.05 meters, and is 3.90 meters high.

The two stair cases which lead to the tea-room branch off from the two main stair cases leading to the balcony.

The tea-room has a kitchen and a toilet room; both get their air and light from the Common clear story.

5. The Offices

The offices are located in the three following places of the block:

1. On the south-easternside.
2. Over the Café.
3. On the northern side.

1. On the South-Eastern Side:

Offices are planned over the south eastern stores through the three upper storys. Four of them have one room, and the two on the sides each have two rooms connected together. The corridor is made wide enough, 1.70 meters so as to aid in the ventilation; however, it has a window open to the clear story.

A stair case room with an elevator 1.40 x 1.80 meters and a toilet room used for all the offices, are located in the middle.

2. Over the Café

Over the café and through the second and third storys, nine rooms with a large hall are located. They are so planned that they could be turned into, one single office, or into many offices. Two toilet rooms are located over the Café service quarters.

3. On the northern side

In the first floor and over the two stores east of the Cinema entrance, two offices with a toilet room are planned. In the *first* floor and over the two stores west of the Cinema entrance, two other rooms are planned; they constitute a part of the apartment which is not shown on the plan.

In the second and third floors this same arrangement is carried on. Over the outside part of the tea-room, two large offices are planned leaving behind a space for the ventilation of the Cinema.

6. The Roof Garden

The roof garden is located on the same place occupied by the café in the ground and first floors. Its west part is covered with a concrete roof and its east with percolas. The toilet room, the kitchen, and the buffet are planned in the same way as those of the Café. A manager's room is added on the western side.

The stair case room, leading to the Café and mezzanine service quarters, to the offices in the first, second, and third floors, leads also to the roof garden. It is provided with an elevator 1.40 x 1.80 meters.

V External Architecture

A successful design of a building is that which fulfills in the best way the three following items:

1. Function
2. Economy
3. Beauty

Among the important architectural elements noticed in this block, two are predominating; they are

1. Unity
2. Contrast

1. Unity is secured through the repetition of the same doors and windows throughout the whole block; thus giving to it the simplicity and the Commercial Character.

2. Contrast is secured in many forms:

Contrast of size, lines, form, direction and character is found, between the projecting part over the Cinema entrance, and the block as a whole.

Contrast of treatment is found between the two different stone finishes introduced in the block.

The roof garden on the east side of the block, breaks the monotony and gives nicer effect.

VI Building Materials and Types of Construction

Basalt is the most prevailing building stone in Homs, but however, lime stone could be easily obtained from the regions near Homs. The outside walls, of the building in question, are constructed of lime stone with two types of stone finishes; the pointed finish with horizontal black lines, and the smooth finish. The interior walls are constructed of basalt and cement blocks because, of their cheapness as compared to lime stone.

Two types of construction are introduced in the building; the bearing wall type and the framed type. It is the local practices in Homs to have the exterior walls and the interior main walls 40 cm. thick, the ^{secondary} interior bearing walls 20 cm. and the secondary partition walls, resting on concrete beams, 12 cm.

Eventhough the general types of construction were discussed above, it is necessary to give the outline and the general structural elements introduced in the design of the following units:

The stores: The stores are constructed of three bearing walls from the interiod and two columns from the exterior, supporting a concrete slab.

The Café: The café is built of a system of beams and girders supporting the slab and resting on the exterior columns, and on two interior ones in the middle, which support also the mezzanine

The Cinema:

The roof of the Cinema is constructed of steel trusses with a false ceiling below; these trusses rest on columns on both sides. One side of the balcony acts as a cantilever while the other as a beam.

The tea-room: is built of a system of beams and slabs resting on bearing walls and columns, with the projecting part acting as a cantilever.

The offices: The offices are made the same as the stores with an additional beam under the partition wall.

The roof Garden: The roof garden is plastered from the outside with the concrete roof made in the same way as the mezzanine.

The end.

