

Villa Mesopotamia 2002-2020

By
S.M.Arch.S. Jalal Algaood
AKpia MIT Alumni 1990
B.Arch. USC 1986

Alanbar- Iraq
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author. Jalal@iwaniq.com



Villa Mesopotamia – 2002-2020

Introduction:

This project is a personal investigation in architectural design: One that allows the outdoors to determine the indoors? How views, Sunlight, context, utility and zeitgeist can define the form of Architecture.

Le Corbusier viewed architecture; "there does exist this thing called *ARCHITECTURE*, an admirable thing, the loveliest of all. A product of happy peoples and a thing which in itself produces happy people"¹

Can we make happy Architecture that inspires people's souls without overwhelming them?

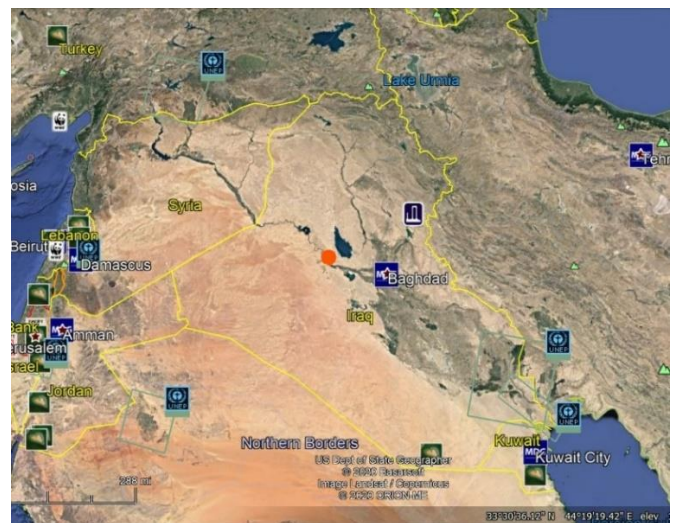
Site Location

I selected a unique site (land owned by family for hundreds of years) in my home town that offered the proper elements to achieve the task at hand: open expansive views, oriented west to capture dramatic light, sitting on the river bank of Euphrates's crystal clear waters (River from Heaven) at the western frontier of Ancient Mesopotamia.

Figure 1 Harnessing Nature is man's greatest challenges



Figure 2 Mesopotamia: land between two rivers



¹ Towards new Architecture. P15.

Building materials will be local as well as building techniques and technology. Local skills will be employed to execute the project. This is necessary in order for locals to understand that such building can be built by them.

I encouraged them to be involved in design when appropriate, and guided them to challenge their traditional ideas and beliefs when necessary.

Their imperfections were part of the process which defines the buildings locality.

Figure 3 Local materials used for shading



I knew from the outset that the local tradition was to build high and away from the mighty river of Euphrates; between summer and rainy season it could rise up to 8m in height and expands from 300m in summer to 1000m in flood season. The river became the focal point of the project not only because it was massive and spectacular at the site, but because it holds holy and historical significance to locals and world culture.

Figure 4 River Euphrates at the site



Figure 5 Water wheels at city of Hit

Euphrates River must become integral part of the project where it could rise and recede seamlessly without a threat to the project. Fortunately, local skills from the Mesopotamian times continue in nearby 6000 years old city of Hit: It is also home of the ancient Tar pits used to build the streets of Ancient city of Babylon.



Context:

The project is located in town of Furat, 15 KM south east the ancient city of Hit. The town sits on the western side (Aljezeear- Mesopotamia) of Euphrates River.

Lush agricultural river basin lined with palm groves and fruit trees such as oranges, apples, grapes, figs, apricots and lemons are typical of the region.

Most products are organic and have very natural strong taste. River basin remains under developed.

This part of Iraq remains agrarian society from ancient times.

Figure 6 Site at Euphrates river with desert to east

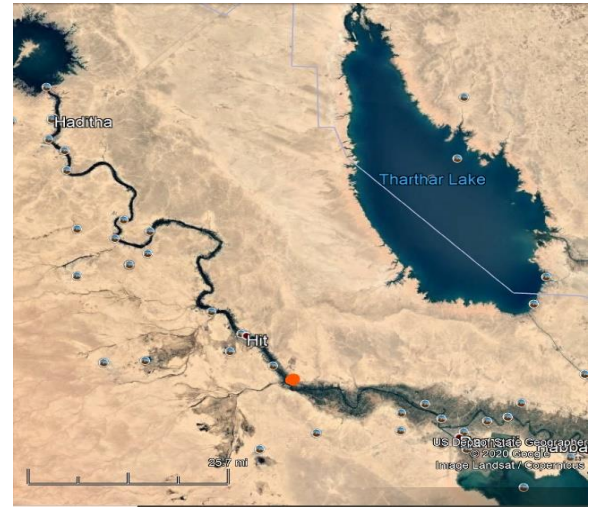


Figure 7 Town of Furat with site in center



Figure 8 Palm groves in Euphrates river basin



Figure 9 Aljazera desert to east is natural grazing fields



Figure 10 Aljazera desert Blooms in the spring (2020)



Internet and Netflix has reached the homes of local inhabitants. They watch what is happening in the world, and peoples aspirations are grwoing. Modern farming techniques has arrived. Life is becoming more demanding and complex. Modern phones with all types of applications are avilable to kids and adults a like. The world is only a click away. No more boundries, and one is amazed at the level of social media penetration in these agrarian communities.

Figure 11 Modern farming is a new trend in Furat



People no longer want to live in mud houses or tents. They aspire for more permanant homes fulfilling their dreams. Architectural design remains for the rich and affluent, and many people adopt typical builder's houses that are economic and meets their basic needs. Fig. 13 is a typical example of \$40K houses (300m²) that are very popular in Iraqi twons and villages.

Figure 12 Popular house design in Iraq (2020)



Figure 13 Towns and villages adopts typical builders designs

Other example with basic plans but variations on façade treatment using very strong tile cladding designed for kitchens and bathroom walls and floors?!!! Local Iraqi architects faced with economic constrains produce these designs, and when one is successful, its coppied every where. As shown in (Fig.14) nouvo reche are moving from mud huts to large popular houses.



Master Plan:

The project consists of two houses mirroring each other turned at 45 degree facing the river and sit on both sides of the main axis that leads to multilevel embankment on the river. This central Axis create a plaza defined by the houses on each side, and a dense palm Grove one must go through in order to reach it. The western side is defined by the expansive view of the Euphrates River framing the sunset every day.

Figure 14 Project master plan

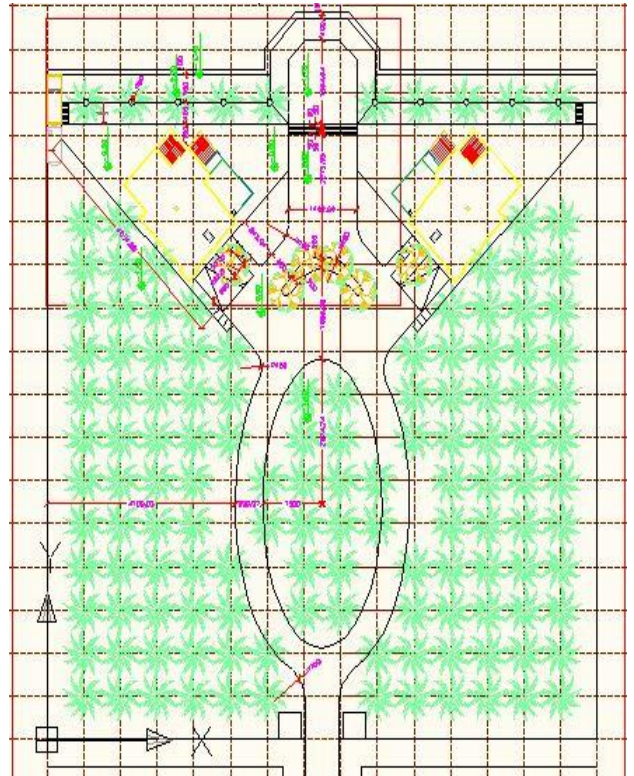


Figure 15 Aerial view of Villa Mesopotamia (2018)



I added central building that links the two houses. This new building was a large reception hall (Dewan) to receive large number of visitors. A tradition in Iraq and Arab world.

The Dewan frames the river plaza to the east creating a transitional space between main arrival plaza and the river. The Dewan was built in the same architectural style of the houses.

The Palm tree is symbol of life and prosperity in Mesopotamia. It remains so till today. The use of palm trees is extensive in the project to keep with local traditions. I wanted to celebrate the tree as economic provider and as a heritage. This will manifest its self in everyday life in the project where visitors are offered fresh dates from the grove all year round.

The Plaza is elevated 8m above lowest water level, opens to the Majestic Euphrates River with breath taking sunset that offers spectacular skies every day especially during the months of Oct. to May. (Fig.20).

Figure 16 Palm tree overlooking the River (2019)

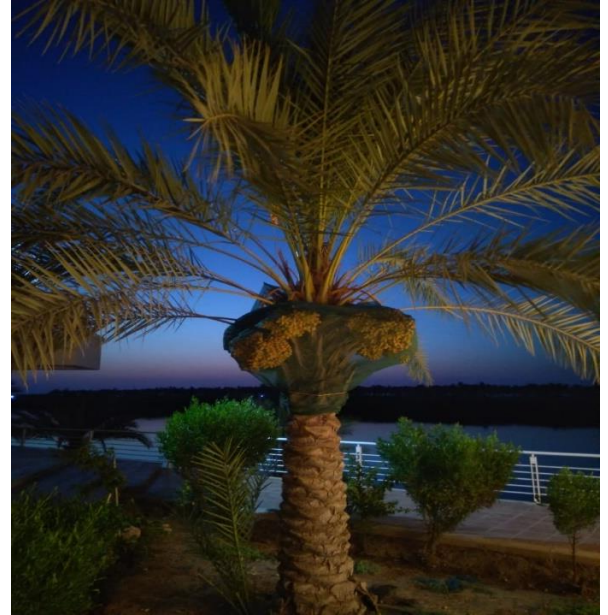


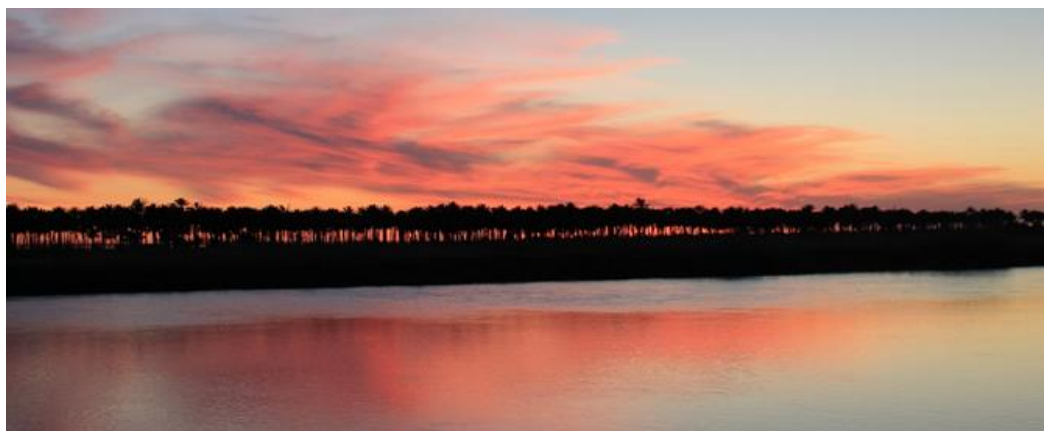
Figure 17 Entrance to the project



Figure 18 View from Arrival plaza to main entrance



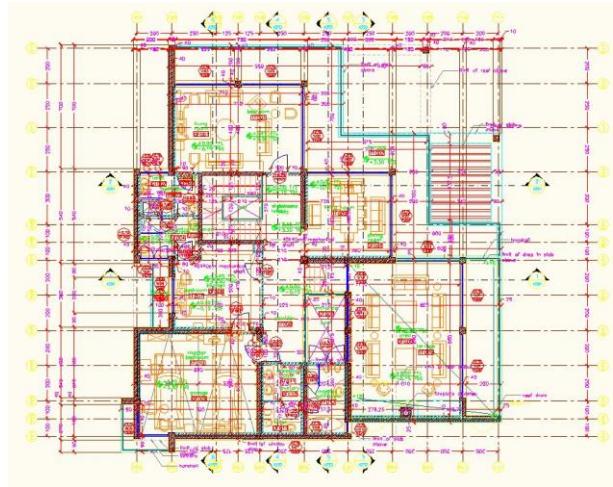
Figure 19 Panoramic view from plaza overlooking Euphrates river



House Design:

White minimalist modern style with expansive ceiling to floor windows facing the river. Continuous white marble floor inside -outside emphasizing the outdoor indoor relationship. The house has transparent side to the River, and solid protected side to the desert; the palm grove.

Figure 20 House Floor plan Design



The house Skewed 45 degrees to maximize the view of the river from 2 sides of each room. 2m cantilevers covering the expansive windows offering protection from the elements, at the same time creating outdoor terraces facing the river side. All glass facades are sliding doors allowing access visually and physically to the outdoors. The foot print of the house located on the edge of the top terrace of embankment in order to allow the river becomes part of interior space visually.

Figure 21 South elevation toward the river



Figure 22 South Western elevation towards the river

The house is terraced and jetting into the river like a boat. Its transparent facades offer continuously changing views as sunlight moves from east to west, changing its angle and brightness, thus constantly changes the landscape. The effect of natural light redefine the interior as well the exterior.



Figure 23 Western elevation towards the river

The house terraces down towards the plaza in order to continue the outdoor river embankment terracing system. The different levels of embankment necessary to allow each level to flood and yet keep them usable throughout the seasons.

*Figure 24 North Western elevation towards plaza*

The house become solid on the northern facade, facing the cold winds of winter. It also houses the services and support functions of the house.

*Figure 25 North Eastern elevation*

As the house turns to north east, it maintains its solid form, with two type of balconies are introduced: one as projection dominating the corner of North-eastern facade. The projection offers shading and protection for the large windows. This added mass hungs in the air operating as watch tower looking at the palm grove.

*Figure 26 Eastern Facade*

As the house turns east, it maintains the solid facade. The only exception are the upper bedroom balcony and lower kitchen windows and its service entrance are carved from the solid mass of the house. It is instructive architectural exercise of how to protect an opening and create a balcony.



The Balconies emphasize the outdoor - indoor space relationship, besides protecting the large windows. The feel of the house is one of continuous sailing in the Euphrates river. This is further improved by the sharp drop off by the embankment, giving the illusion of water being at the edge of the house.



Figure 27 Deep projections protects glass facade

This feeling is also true at the ground level as well. Maintaining the indoor- outdoor relationship both visually and physically is very important. The indoor space is defined by the outdoor. This magnificent river becomes the focal point of every room as the water surrounds each space from two sides.



Figure 28 Terraces protects glass façade at lower level

The relationship with the river was emphasized by 45 degree position of the house provoking the illusion of a ship sailing in the water as seen from below.



Figure 30 View from upper terrace

From above, the feeling is exhilarating as there no nothing but water ahead. There is no doubt that for a moment and surely when sitting down, the house is sailing up the Euphrates river as seen from the terrace above.



Interior Design:

The interior opens to the outdoors visually and physically. The river becomes the focus of interior spaces and they redefine each other.

Figure 31 View from inside lower floor



Figure 32 View facing south (plaza and river)



Figure 33 View from inside to plaza



Figure 34 Upper sitting room with full view of river



Figure 35 Dining room seems floating



Figure 36 Wide windows offer panoramic views



Figure 37 Sunset always dramatic



Figure 38 Sunlight changes the indoor and outdoor views



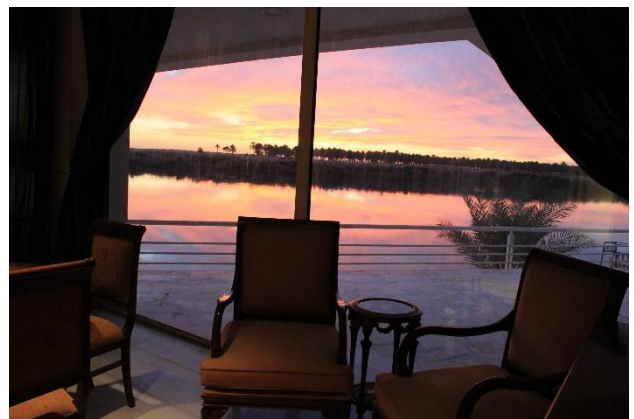
Figure 39 Upper level office with expansive view



Figure 40 Lower level reception hall redefined by sunset



Figure 41 Interior space is dominated by outdoor views



Dewan:

This building is the main male gathering space for locals and visitors. Traditionally it is a standalone structure that is open to visitors from 8 am till 10 pm. Visitors are served water and Arabic coffee. I added fresh dates to be served with the coffee. Dewan location and relationship to the houses must be carefully planned. One must consider privacy and accessibility to the houses.

The simple modern white stone structure which has large windows covered by continuous front colonnade provides shaded space to receive guests. The Entrance pavilion is located to right side of the Dewan preserving an old Arabic-Islamic tradition.

The entrance pavilion leads to a courtyard that is not formal, but it is a positive space that is defined by positioning of the Dewan and the house. This court leads to the main entrance of the Dewan.

The court is intimate and landscaped with colorful Bougainvillea flowering plants (uncommonly used in the area even though the weather is ideal) and provides a glimpse of the plaza overlooking the river on the back side.

Figure 42 Main approach to the Dewan



Figure 43 Dewan façade facing east with entrance pavilion right



Figure 44 Entrance pavilion opens to courtyard



Figure 45 View from Courtyard looking west to the River

The Palm tree stand centered between the Dewan and the house looking west towards the river. The Glimpse of the River is revealed for the first time.



Figure 46 Dewan western façade overlooking the Euphrates river with deep canopy protecting the glass facade



The western façade maintains the same architectural design theme, with full height windows opening to the river. The deep western sun demanded the additions of shading devise, thus a canopy was added in 2018 that provided deep shade of summer western sun. The Shade covered the plaza and created a protected seating area thus adding a multiuse space with spectacular views.

Figure 47 Dewan main reception Hall

The Main reception hall has an Arabic seating style with traditional Iraqi wool mattts. The seating layout flexible and can be rearranged or added to depending on the event or expected visitors. This flexibility is necessary for such a multipurpose hall. To the western side is full height windows opening to the river view. The space can hold up to 100 seated visitors.

Figure 48 Dewan holds Tribal, social, and political meetings

Figure 49 Typical nightly meetings at Dewan

It is traditional practice to meet after dinner (which is normally at sundown) or after Night prayer. This traditional nightly practice is the way to discuss daily matters and solve tribal problems. It is also an opportunity to recite poetry in Nabataean style and recall tribal stories and history. This is fundamental learning process to the young generation to re-affirm their identity.

Figure 50 Outdoor terrace overlooking the river is popular place to meet

The outdoor Plaza became popular space to gather or even to feast out. It offers a spectacular view of the river and fresh air.

Msanayeh (River Embankment): This is the Iraqi term used to describe the stone work covering and stabilization work for river embankment.

This is the most difficult and complex work of the project. The Msanayeh required over 4000Tons of large stones from a Quarry near city of Hit. Alma'amura stones are well known from ancient times as solid water resistance stone used in building water wheels and Msanayeh for thousands of years. Water front Msanayeh is 250m in length, and has 3 main levels. Each level is 2.5m higher than the other.

Figure 51 The Plaza (terrace) overlooking the Msanayeh



Figure 52 Midlevel Msanayeh with Arabic seating

Middle level has a traditional Arabic stone seating area that can seat 40 people. All stone work and motifs were the work of local craftsman from Hit. This level floods during flood season. The seating area sits on the main axis of the plaza. And provides excellent setting for viewing



Figure 53 Local Stone Motifs Arabic Seating



Figure 54 Stone lighting fixture



Figure 55 View from midlevel Msanayeh to the upper plaza and the house



Figure 56 View from Upper plaza towards the river



Figure 57 View from Midlevel of Msanayeh



Figure 58 The River challenges the Msanayeh



Figure 59 Euphrates concurs 2nd level of Msanayeh



Figure 60 The River more threatening



Figure 61 Euphrates over takes planters



Figure 62 Euphrates submerges the Msanayeh creating beautiful view of its pedestals railing



The canopy was important addition to provide more shading to the plaza and provide comfortable outdoor sitting area. I have designed the canopy with modern materials and light weight. Local fabricator and local help were used to accomplish this project.

Figure 63 Canopy from plaza level



Figure 64 Canopy under construction



Figure 65 Light weight steel structure



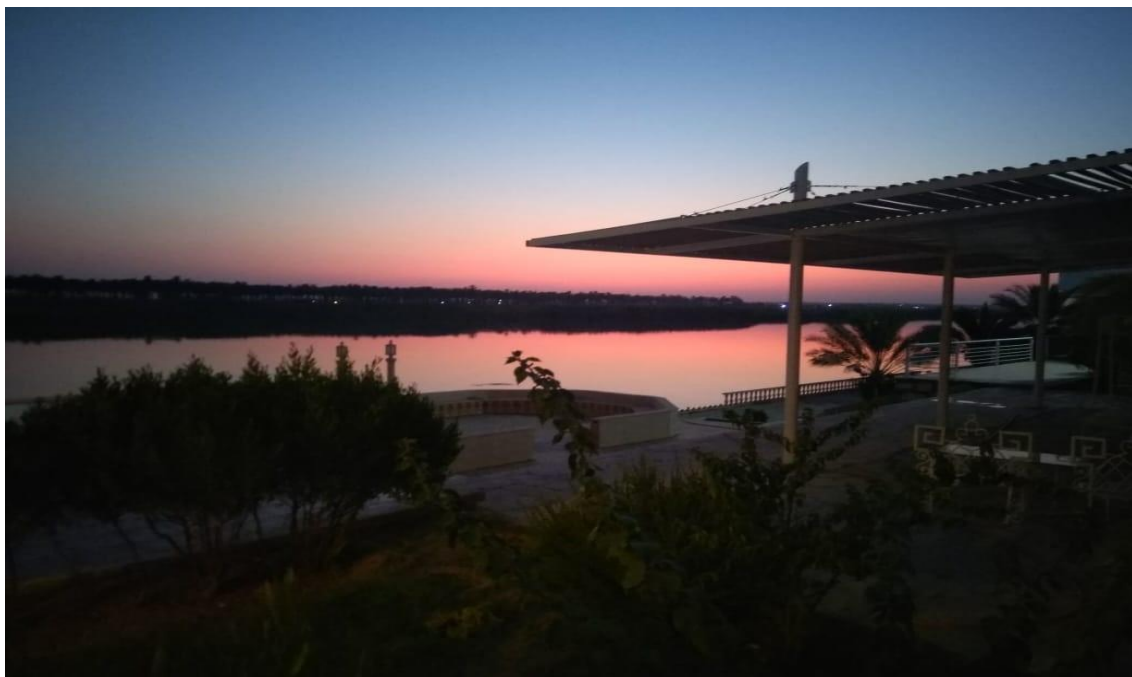
Figure 66 Steel, wood and fabrics



Figure 67 View from midlevel Msanayeh to canopy and Dewan beyond



Figure 68 View of Majestic Euphrates River From the Plaza



Colonnades, outdoor landscaping and People:

The region has hot summer and mild winter. This year we had significant amount of rain and many days of below 0C temperature.

The harsh summer sun requires all windows to be protected. This tradition was adopted by colonial British architecture. It proved very effective.

All windows in the project are covered and well protected.

Figure 69 Dewan entrance Pavilion



Figure 70 Colonnade connecting the house to Dewan



Figure 71 Colonnade covered by local materials



Figure 72 Entrance

Figure 73 Traditional wood

Figure 74 Local Reed

Figure 75 Front of Dewan



Figure 76 Courtyard and Bongavillea



Figure 77 Palm tree and flower beds with the river beyond



Figure 78 Palm Trees are main feature of the project



Figure 79 Tree of life for Mesopotamia



Figure 80 Villa Mesopotamia from the River Euphrates



Architecture is for the people. It is amazing how Architecture can influence people's mood and behavior.
Happy Architecture makes people happy.

Figure 81 Guest enjoying the River View



Figure 82 Taking pictures with house and view



Figure 83 Enjoying tea on the Euphrates River



Figure 84 Relaxing under the canopy overlooking the River



Figure 85 Bongavillea offers great background for a photo



Figure 86 Guests enjoying the shade and the view

