STATE MOSQUE – BAGHDAD

COMPETITION DESIGN REPORT
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Bibliography:

Drawings:
This submission is made further to an invitation from R. Chadirji councillor to Amanat Al Assima reference no. 3293 on the 21st July, 1982 and subsequent selection by the committee to participate in a limited competition for the design of a State Mosque in Baghdad as notified by telex on 23rd September, 1982. Project no. 651/328.

Information received by telex and interim briefings on 22nd November, 1982 have, combined with the written brief, produced many stimulating ideas the synthesis of which are contained in this submission.

The submission includes a design report; an architectural model at 1:500. The presentation consists of drawings and perspectives on 18 one metre by one metre panels comprising the following:

- Site plan at 1:100.
- Maps and concept analysis diagrams.
- Floor plan of site at 1:500.
- Detail design of mihrab at 1:100.
- Detail design of wall bay at 1:100.
- Elevations and sections at 1:500.
- Aerial perspective.
- View of mosque from main entrance.
- View of entrance to mosque.
- Interior view towards mihrab.
- Interior view of wall bay unit.
- Environmental sketches.

The requirements for the State Mosque as proposed are as follows:

2. Female prayer area for 3000 persons.
3. An open air prayer area for 4000 persons.
4. Library for 100,000 books and 50,000 manuscripts.
5. Carpark for 1200 cars and 120 buses.
6. Accommodation for approximately 40 staff.
7. Daily prayer area for 1000 persons.
8. Meeting room for 300 persons.

The requirements for the State Mosque as proposed are as follows:

2. Female prayer area for 3000 persons.
3. An open air prayer area for 4000 persons.
4. Library for 100,000 books and 50,000 manuscripts.
5. Carpark for 1200 cars and 120 buses.
6. Accommodation for approximately 40 staff.
7. Daily prayer area for 1000 persons.
8. Meeting room for 300 persons.
10. Meeting room for 800 with a wing for 200 women.
11. Teaching institute of 10 classrooms.
12. Institute of 6 classrooms for Koran study.
13. Dining room for 500 with suitable kitchen facilities.

Suggested additions to the proposed requirements:

2. Malls (Kaisariat): for book binders, booksellers, calligraphers etc.
3. Malls (kaisariat): for traditional craftworks as prayers rug, weavings (Zanabeel, Hisran etc.), pottery etc.
4. Thursday Market.
5. Sport and recreation spaces: for traditional (fencing, sword dancing, Zorkhana) and for modern sports.
6. Amphitheatre.
7. Picnic areas.
8. Traditional coffee shops.
9. Housing.
INTRODUCTION

The statement of the purpose and objectives of the competition as set out in the competition brief clearly summarises all the aspirations to be considered by a designer when approaching a task of such magnitude and importance.

It is worth repeating in full these criteria.

"The creation of a State Mosque in the capital of the Republic of Iraq is a historic event. Its design and construction will be the highest expression in creative and physical terms of the religious, state and national beliefs and aspirations of the people of the Iraq and their leadership.

A State Friday Mosque is created to provide a worthy monumental frame and setting for the expression and practice of the beliefs and achievement of the aspirations of Islam. Throughout the Islamic world such settings, when they are being created, synthesise the history and heritage of Islam with the contemporary quality of life.

The current resurgence in the city of Baghdad harkens back to the Round City of Al-Mansour, capital of the Abbasid Empire, and is a time of such creative achievement of the beliefs and achievement of the aspirations of the people of Iraq and their leadership.

This synthe...
These concepts reflect the philosophy of our design approach.

Chapter one explores the status of Iraq and Baghdad in history.

Chapter two examines the choice of a site for a State Mosque and its relationship to the Baghdad of today and the Baghdad of the future. These concepts are presented as a series of maps.

A philosophy of a design approach is summarised in Chapter three.

Chapter four presents our approach to the spatial concepts by analysing the design as a series of site plans.

In Chapter five we approach the elements of a State Mosque Complex - dome, mihrab etc. Each element is treated as an entity relating to the whole. A visual montage seeks to record our conceptual approach to each element of the design by synthesising concept, idea, influence and metaphor.

These chapters illustrate a philosophy of approach and a series of concepts around which can be built the complexity of details necessary to elaborate the scheme into a further design stage.

CHAPTER 1
BAGHDAD
AN HISTORICAL PERSPECTIVE
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AN HISTORICAL PERSPECTIVE
The heritage of a country is the rock from which today's generation looks forward to the future. An awareness of past history, sociology, religion, culture and environment is the stable warp through which threads the weft of the influences of modern technology and accelerating change to form the rich and complex fabric of a modern society.

Iraq, the land of the twin rivers, mountains and deserts has been the setting for some of the greatest cultures in the history of mankind.

The Sumerian, Assyrian and Babylonian cultures evolved over a period of 4000 years. The remains of their cities and works of architecture, especially the ziggurats and Hanging Gardens of Babylon still evoke the admiration and wonder of present generations.

The birth of the Prophet Mohammed in Mecca in AD570 was an event that signaled a transformation of the world. Arab legions spread the faith of Islam after the death of the prophet Mohammed, east to the Maghreb and Andulusia and west to the borders of India, within the space of one hundred years.

An enormous variety of peoples, cultures and environments were united by Islam. The concept of Unity through diversity, so central to Islam, created a synthesis of society, culture and architecture that enabled strongly diverse cultures from North Africa to India to be regarded as Islamic. Islam is the underlying principle of all Moslem societies and built forms as expressed through each society's architecture strongly reflect this principle. Thus, architecture in the Islamic world and throughout its history, whilst displaying great diversity of style, materials and form, clearly exhibits an essential Unity synthesized by the spirit of Islam.
The Abbasid Caliphate was established in Iraq in 750 and lasted until 1258. The second caliph Abu Ja'far Abdullah Al Mansur, founded the first great city of Baghdad on the banks of the Tigris, the famous circular city of Al-Mansour. Here the power of the Abbasid Caliphs was centralized controlling an area from Tunisia in the East to Central Asia in the West.

During the reign of his successors Baghdad continued to prosper, admirably sited in the centre of this far-flung empire.

The most celebrated ruler was the fifth Caliph Harun Al-Rashid 170/786 – 193/809. This was the golden age of Baghdad – the city of 1001 nights. Baghdad was a city of domes, minarets, towering walls and arched gates; shrines and Khans; hamams; schools which are the nuclei of the present day Universities and palaces which once resounded to the sound of tambourines, flutes and harps. It was a commercial centre where merchants could be found from China to East Africa. Travellers came from all over the known world in search of education or fortune or to witness the Caliph Al-Muktadar and his parading force of 160,000 horsemen and footmen, 7000 slaves, 700 chamberlains and 100 lions. Baghdad was a city whose arts, crafts and culture spread East and West.

The enormous development that Baghdad as a city has experienced in recent years has raised many questions in relation to the changing urban environment, an evolving society, and the influx of modern technology as a result of growth and change. The challenge that these influences present to the development of the Iraqi nation and the growth of Baghdad are paramount.
One of the major challenges is how to go forward to the future whilst respecting the past, how to be true to one's heritage whilst building for tomorrow.

Environmentally this is the major concern for planners and architects.

It is in this light that we should consider the design of a State Mosque for Iraq in Baghdad.
CHAPTER 2
BAGHDAD
THE URBAN AND ENVIRONMENTAL PERSPECTIVE
The crossing of the Tigris in central Iraq at the point where that river is most closely approached by the Euphrates, was for millennia the critical centre of Middle East communications, focussing together overland routes which link Asia Minor and the Mediterranean with Central Asia and India.

The name of Baghdad itself is attested in various forms as early as the 2nd Millennium B.C. A plausible etymology of the name is (Baga-data-'given by God') and may be a Babylonian name re-interpreted and persisting in later times.

The second Abbasid Caliph Abu Ja'far Abdullah Al-Mansur made an extensive search for a site for a new capital. He finally chose Baghdad, then a modest village, for the new foundation, and began work on building the new city in 145/762.

The new city, on the West bank of the Tigris, was planned with a circular outline 2638 metres in diameter according to a recent estimate, with an outer ditch, and a double line of walls. In the centre was the palace of the Caliph, and adjoining it to the north-east the cathedral mosque. The mosque occupied the heart of the round city with everything else revolving around it. The mosque was in reality and symbolically the centre of the religious, social and cultural aspects of daily life.

The four gates were those of Damascus, Al-Kufa, Al-Basra and Khorasan. Between the perimeters were arched corridors, used at first to accommodate bazars. Later, as pressure on space within the Round City grew, the whole commercial area was moved outside the gate of Al-Kufa into the fashionable quarter of Karkh (close to the site of our project) which extended nearly three miles southward of the city walls.

After the Caliphs abandoned Samarra in 892 AD a new walled city was built on the east bank of the Tigris.

المصادر: محمد النصور البهية

THE ROUND CITY OF AL MANSOUR
The State Mosque is viewed as a focal point - a centre focusing religious, social and cultural aspects of life ensuring a dignity and status to the rapid urban development taking place on the west bank of the Tigris. It will provide a notable landmark in the new city scale.

It is one's total approach to the urban environment that has influenced the concept of our design proposal.

The purpose of the design is to create an environment for continuous use and not a single monument standing in a vast open space. As such the State Mosque complex is viewed as a continuously growing process - a centre to attract people, a focal point for worship, a centre for study, for social activity, for festivals and fetes.

This aspect will also generate the potential for an aesthetic renaissance that will see Baghdad as a centre of Islamic art from all over the world expressing both the heritage of Islamic art and the aesthetic consciousness of new generations.

Thus a State Mosque should reflect the essence of Islam, the national aspirations of the people of Iraq, the environmental consciousness of an expanding society and the aesthetic awareness of the Iraqi people whose great historical and cultural traditions provide a direction and impetus for the future to build a revitalised Baghdad once again a centre of the Islamic world.
The site is located alongside Al Rabia street, an existing dual carriageway linking the Khadamlyah area to the north with the airport road to the south.

An existing public park lies to the north of the site while its south boundary is bordered by an ancient canal.

Existing low density residential development (2 storey houses) flank the western boundary, while across al Rabia street a railway line acts as a buffer to an industrial area.

The site itself is at present a nursery under the control of the Amanat al Assima bordered by mature groves of eucalyptus trees, enclosing citrus and other fruit orchards, pine trees and glass houses for rearing nursery plants.

The site is currently used for agricultural purposes and houses a number of farm buildings and equipment. It also includes a large area of open land suitable for development.

SITE AS EXISTING

الموقع بالوضع الحالي
The planning development for the year 2000 conceives of low density housing flanking the eastern and western boundaries of the site.

The canal to the south is to be revitalised as an urban green belt meandering through the western development of Baghdad to link up with the Tigris.

To the north the existing public park is to be retained.
In line with our conception of a State Mosque as a centre for the new urban expansion to the west of Baghdad we would propose to create a denser multi-use development in the vicinity of the mosque complex. This development could include hotels, offices, bordered by light industry. The location of the municipal and civic amenity buildings would reinforce the nature of the complex as an area of local government and administration. The immediate borders of the site could be flanked by 4-6 storey residential development to add a denser urban scale to the site.

In line with the revitalization of the canal zone the area to the south could be developed as a public park linked by pedestrian routes and a canal bridge to the mosque. The existing public park to the north would be developed as an avenue of approach to the mosque, and a setting for fairs and fêtes celebrating the great festivals of the Islamic year such as the two feasts of Eid.
CHAPTER 3
THE PHILOSOPHY OF A DESIGN APPROACH
A fundamental tenet of Islam is the principle of Unity manifested in diversity.

This determines the Islamic view of art and consequentially architecture. Underlying all the profusion of detail and form is the generating principle of Unity. Behind the complex manifestation of creation there is the underlying Unity of God, and it is the function of Islamic art to interpret this to man.

Islamic society is seen as a process of continuous development based on principles revealed in the Koran. The architecture of an Islamic society should also reflect this process of continuity. Built forms are the conscious expression of the subconscious aspirations of a society.

An approach to designing a State Mosque should reflect these fundamental principles. The great heritage of Islamic architecture in Iraq and the Islamic world should be seen as the powerful current that generates the inspiration for today's aspirations of a society.

Inspiration does not mean slavishly copying the architecture of yesterday but rather understanding its aspirations and how truthfully they reflect the Islamic and Arab way of life.

Society today is affected by rapid change in all aspects of life. In architecture modern technology, new building methods and materials have wrought great changes on the face of city and urban life all over the world.

The challenge the architect and planner faces in the Middle East today is how to use technology to its best advantage - as a tool - subservient to the overall aspirations of a society's way of life. Architecture should be environmentally sympathetic, both in scale and form, reflect the status of an Islamic society in the modern world and at the same time be seen as part of the overall evolution of Islamic architecture.

It is how to interpret this in the architecture of today that presents the challenge. The architects of the great Abbasid buildings in Baghdad interpreted building forms with materials and technology relevant to their era.

The modern architect, sensitive to all these criteria can partake in the creative joy of interpreting these qualities with new materials and forms of construction.

A State Mosque must reflect the dignity of Islam and the status of Iraq as a modern nation.

Islamic architecture developed and utilized a vocabulary of spatial elements from the very large in scale (the dome, minaret, thick wall, arch) to the very small (the niche, the Mukarnass, arabesque geometry, built-in-seating, decoration). These elements arose from a given historical, cultural and technological context. In time they acquired an independent architectural significance related uniquely to the Islamic faith and culture. This we have tried to emphasize, preserve, and enhance in all aspects of our design.
The spatial quality of these elements arose from a given type of technique and craftsmanship which is no longer with us. The arch like the thick wall, was then loadbearing and a structural member uniquely suited to the task of carrying the roof or the dome.

Modern technology frees us from the necessity of carrying load with a thick wall or through an arch. The problem for Islamic and modern architecture thus becomes: How can we preserve and enhance upon the particular spatial qualities arising from traditional Islamic architectural forms - related as these still are to a living spiritual, social and cultural tradition - through their deliberate and intentional insertion into a modern technology of building construction? We would not be true to the spirit and essence of great Islamic architecture if we did not pose the problem in this way.

Our approach to a solution can be expressed by the following ideas which are developed in the design.

(i) The linear walled enclosure gives way to the volumetric wall bayunit. The thick wall becomes a "U" shape adding to the depth, thereby regenerating the traditional niche in a new way, and recreating a quality of space and light, which is fundamentally Islamic.

(ii) The structural function is freed from the space-generating function and each maintains an independent and articulated expression.

The traditional load bearing arch becomes a free standing precast element, which introduces a new architectural quality. From being a means to an end, the arch has become an end in itself.

The parapet which used to be a crenellated ending of the very fabric of the wall, becomes instead another assembly of precast units.

(iii) The relationships of structural elements to space-generating elements, like the freestanding arch and the wall bay unit are used to establish a common modular geometry which allows every detail whether structural, spatial or decorative, to follow a logic inherent to the whole design at every scale.

(iv) The variety of building elements, thus assembled are used as vehicles for the exploration and study of proportion, depth and rhythm, in plan, section and elevation.

(v) Building elements are enhanced by a carefully selected application of texture and colour, to the varying planes and volumetric surfaces, in the form of Arabesque geometry and precast calligraphic panels.

These characterizations of the existing spatial quality of the building enclosure are expressed in a new way. The traditional load bearing arch becomes a free standing precast element, the wall, becomes instead another assembly of precast units.

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The linear walled enclosure gives way to the volumetric wall bayunit. The thick wall becomes a "U" shape adding to the depth, thereby regenerating the traditional niche in a new way, and recreating a quality of space and light, which is fundamentally Islamic.
These patterns and calligraphic panels are not applied to cover up the building elements in any sense. They are integral additions which are used to highlight or understate the spatial qualities of the various parts in their relation to each other. They therefore integrate with the design as constituent elements derived from the same overall modular logic, but at the scale of finishes.

(vi) The process of design continues into the details. Joints indicative of the assembly process are at times expressed and at others hidden. The same pieces of stone are assembled, say on different wall bay units in varying bond patterns, creating a new rhythm between what would have been identical bay units.

It is this manner that we have approached the design of the State Mosque and this is further explored in detail by a conceptual analysis of the elements of the complex.