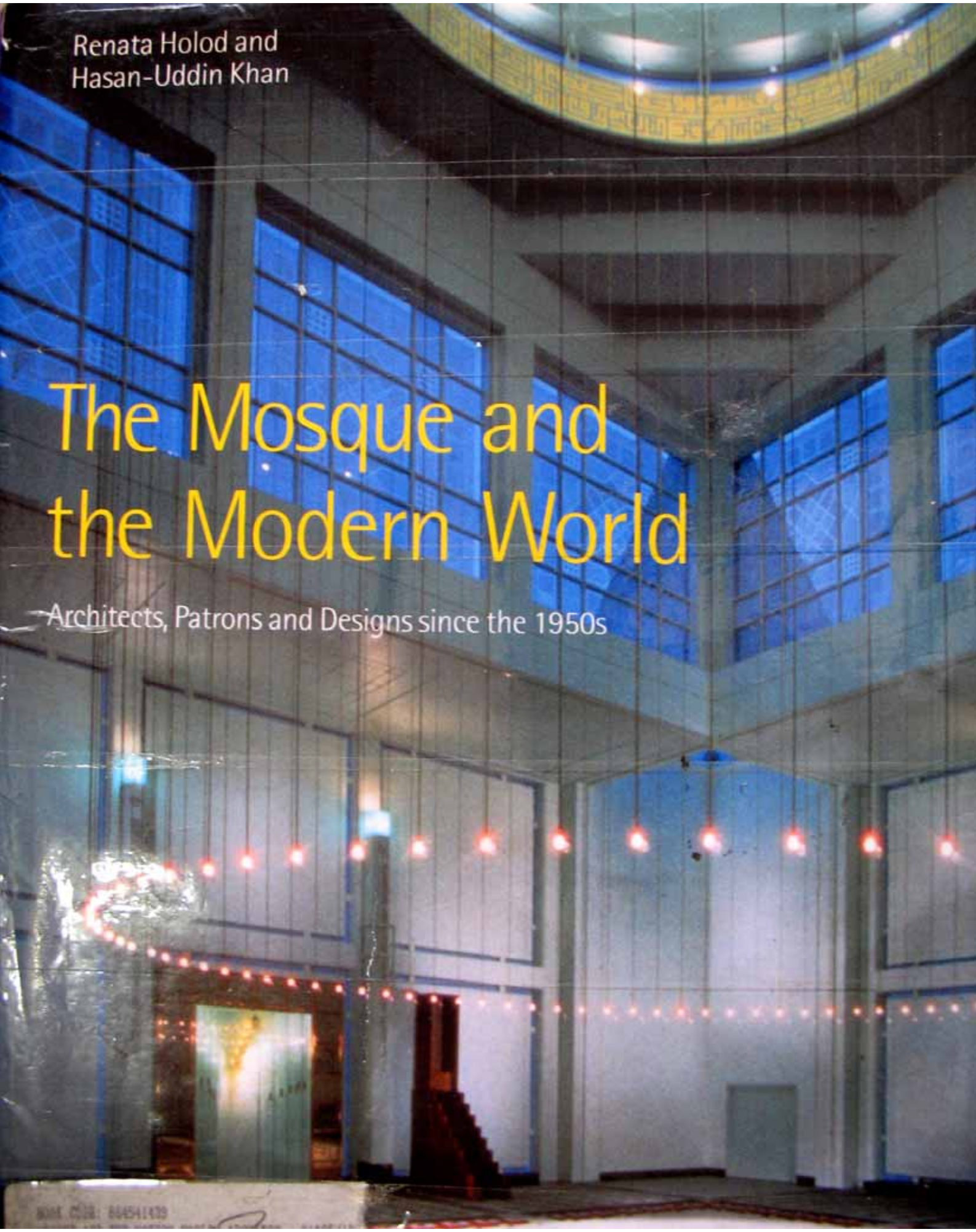
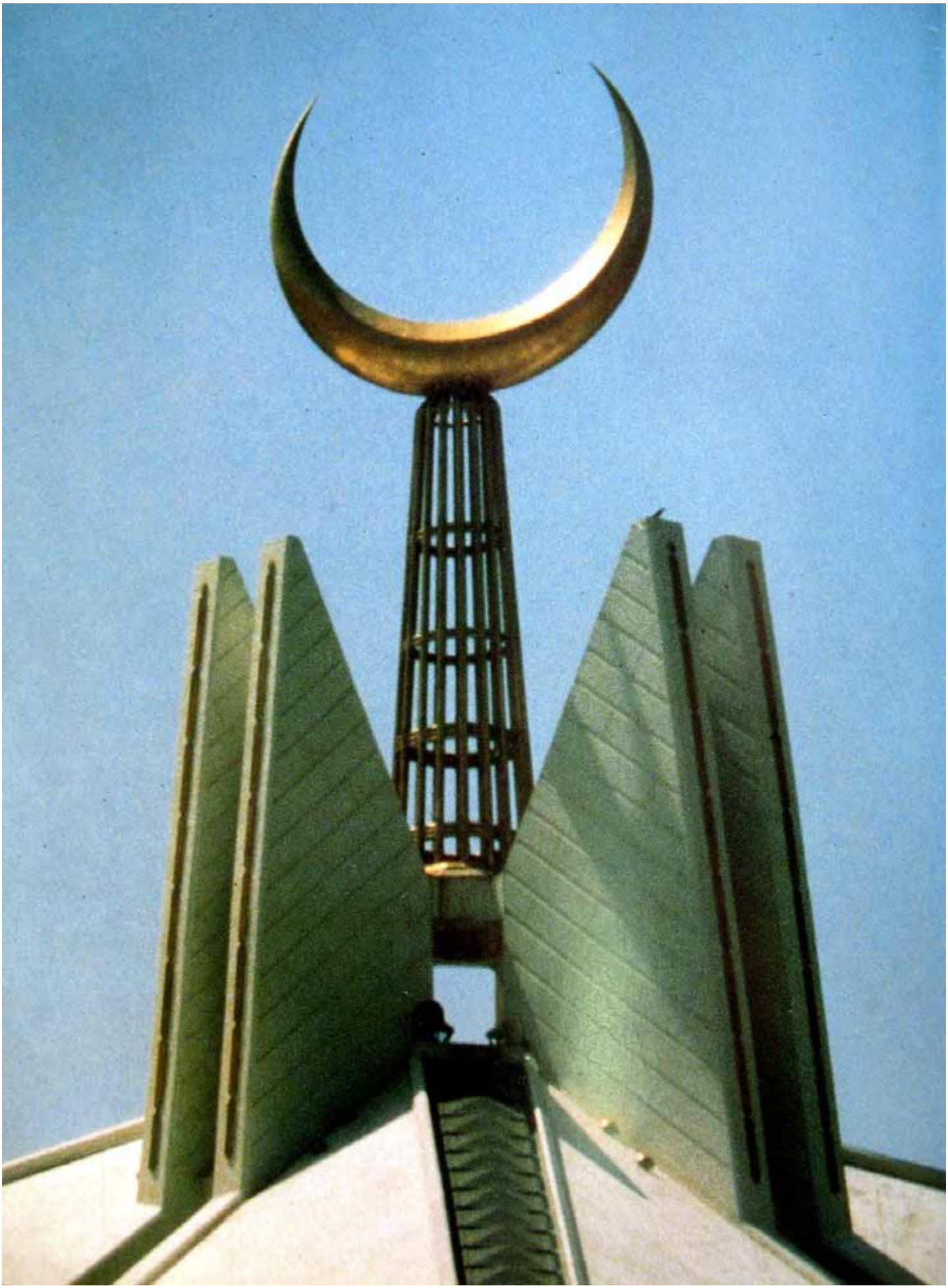
Renata Holod and
Hasan-Uddin Khan

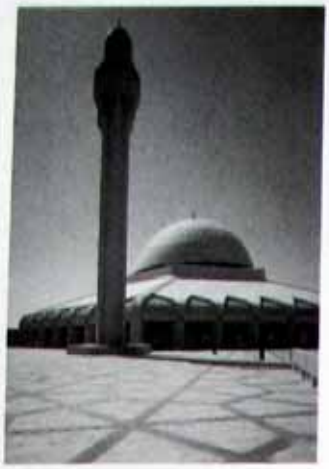
The Mosque and the Modern World

Architects, Patrons and Designs since the 1950s



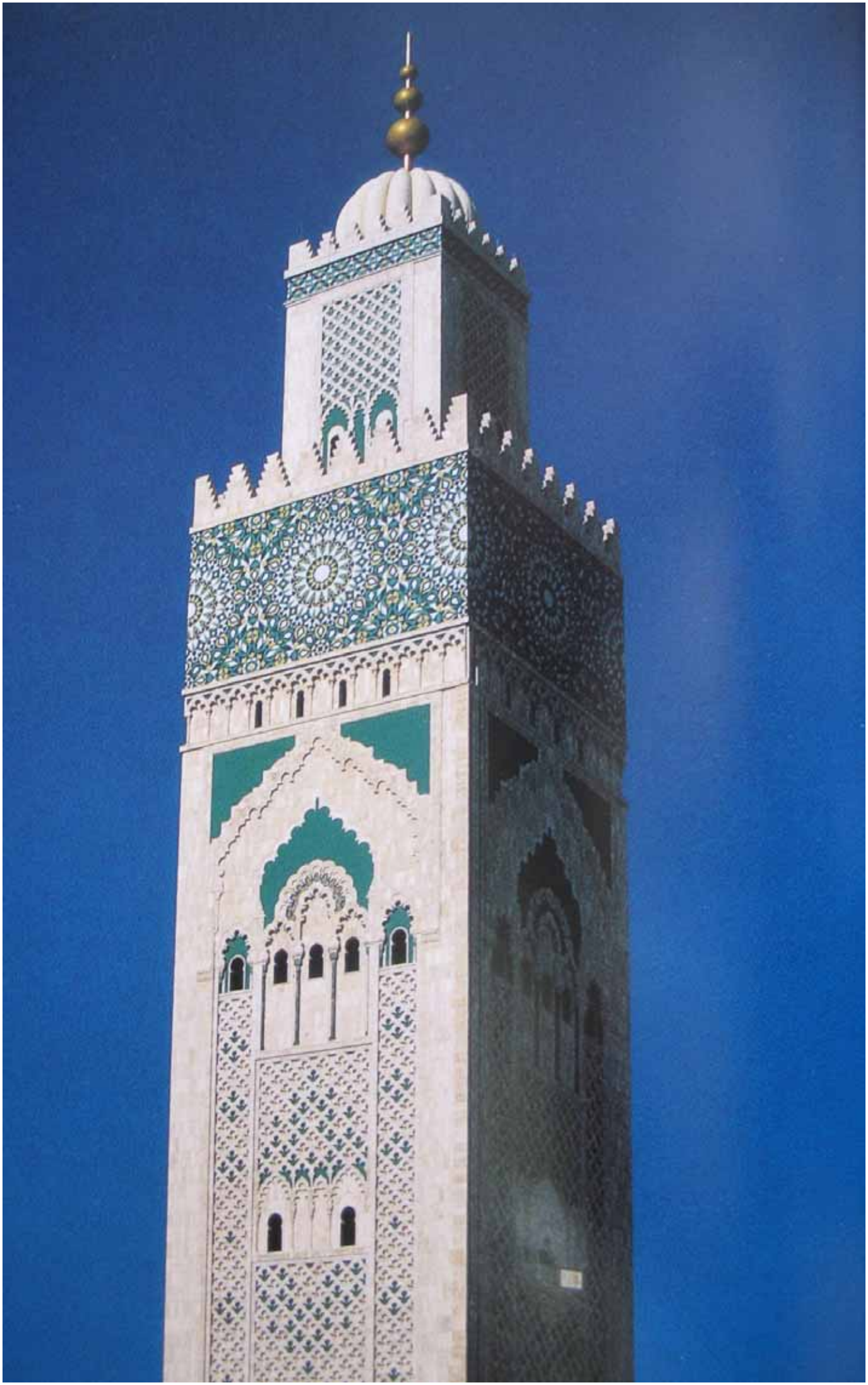


apter 4 **Mosques for public and commercial institutions**



pter 5 **Local community projects worldwide**

pter 6 **Islamic Centres in the West**



Chapter 1

Personal patronage

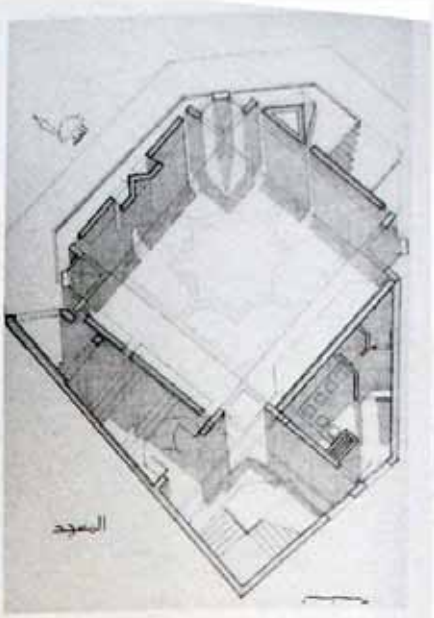
In the past mosques have been financed and built by wealthy individual patrons and given by them to their own communities and, in some cases, to communities other than their own, as manifestations of their piety and social status. Such patrons were generally members of a ruling or social élite, such as a monarch, a prince or princess, a sheikh or a religious leader, a landowner or merchant. The building of a mosque was considered to be a charitable act on the part of the patron, and was generally accompanied by the provision of an endowment in perpetuity through the creation of a *waqf* or pious foundation. It was widely believed that charitable acts constitute one of the three enduring legacies of a Muslim's life.[1] Yet, at the same time, many patrons were surely motivated to build mosques as symbols of political or dynastic power, or of the presence of the ruling power in a land conquered by the forces of Islam. In the pre-modern periods such acts could also be categorized as acts of the state if the patron was a ruler and if no real distinction between private and state acts could be made. In today's world, individual patronage, though far outnumbered by other forms, continues to be overwhelmingly by men, and is only rarely also an act of state.[2]

Featured in this chapter are mosques that were initiated and financed by individuals who did not normally have recourse to extensive governmental or community funding and retained control over design decisions. Such personal control does not necessarily yield more daring departures from type or produce innovations of mosque design, for the taste of the individual patron is usually limited by that of the group or the society. In practice, individual patrons have often sought the services of architects already known for specific types of design, leaving little room for the architect to press for a design which departed in any major way from the easily recognizable and understood features of the mosque. Only in rare instances does the patron set the overall stylistic and architectural agenda, as can be seen in the case of King Hassan II of Morocco or of the Aga Khan.

Because the examples discussed have been drawn from a large but not comprehensive sample, it may be too early to make a definitive characterization. An impression emerges,

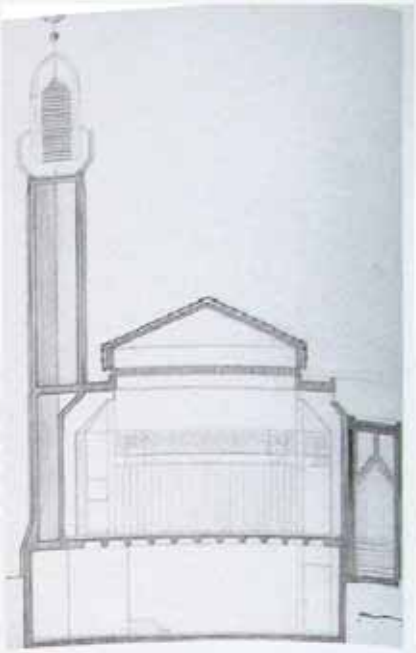
(Above) A view into the main dome of the Al-Harithy Mosque (1986), Jeddah (see p. 39), one of the series of mosques designed by Abdel Wahed El-Wakil, showing the intricate brick construction of the pendentives and the geometric pattern of the chandelier.

(Opposite) The upper part of the minaret of the Mosque of Hassan II in Casablanca, the tallest structure associated with a religious building anywhere in the world (see p. 54). It houses a computer centre from which technical services throughout the mosque complex are controlled; on important occasions a powerful laser beam can be projected from the summit.



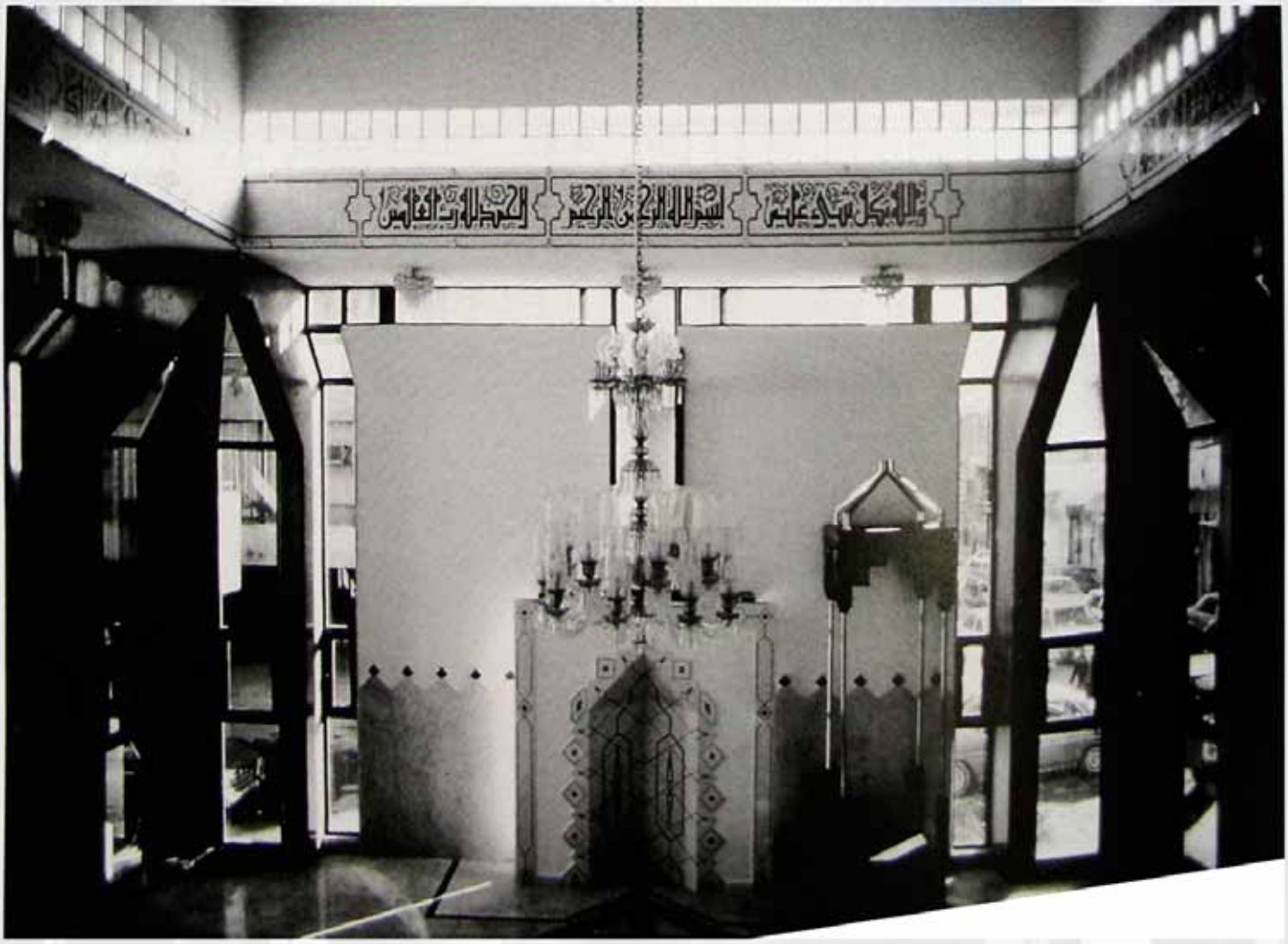
The Shafiq Amash Mosque (1984), Beirut, by Nabbil Tabbara.

(Above) Axonometric view; the main area of the mosque is inserted into a restricted site, with ancillary facilities below ground level.



(Above right) Section of the mosque showing the gateway and the minaret placed outside the main mass of the prayer hall.

(Below) Interior of the prayer hall, showing the *qibla* wall separated from the structural elements of the mosque by rows of windows; the corners are articulated as glazed niches permitting views into the street.

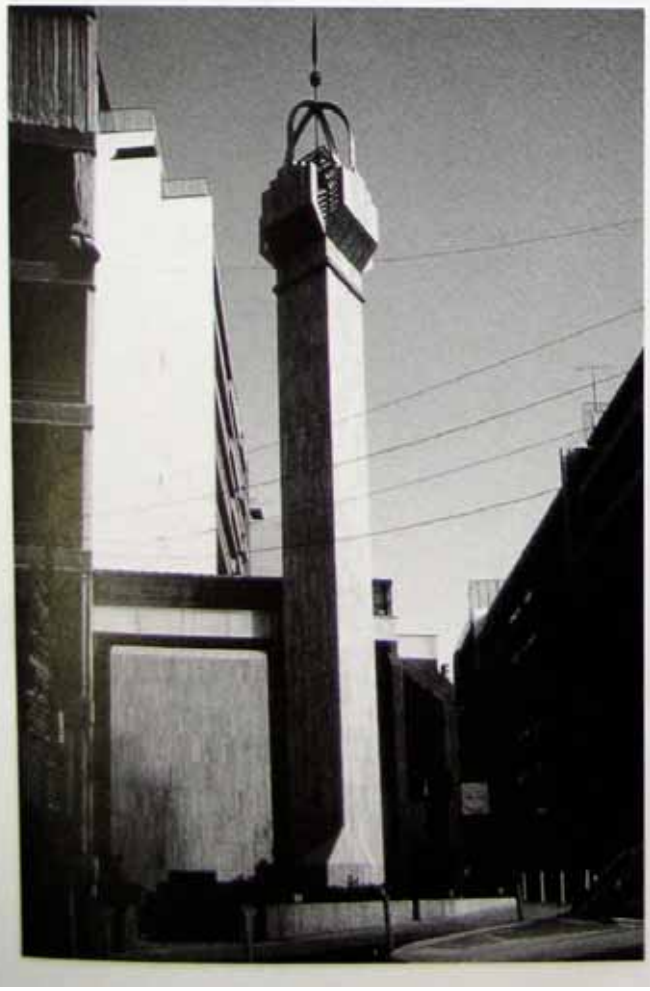


Shafiq Amash Mosque, Beirut, Lebanon

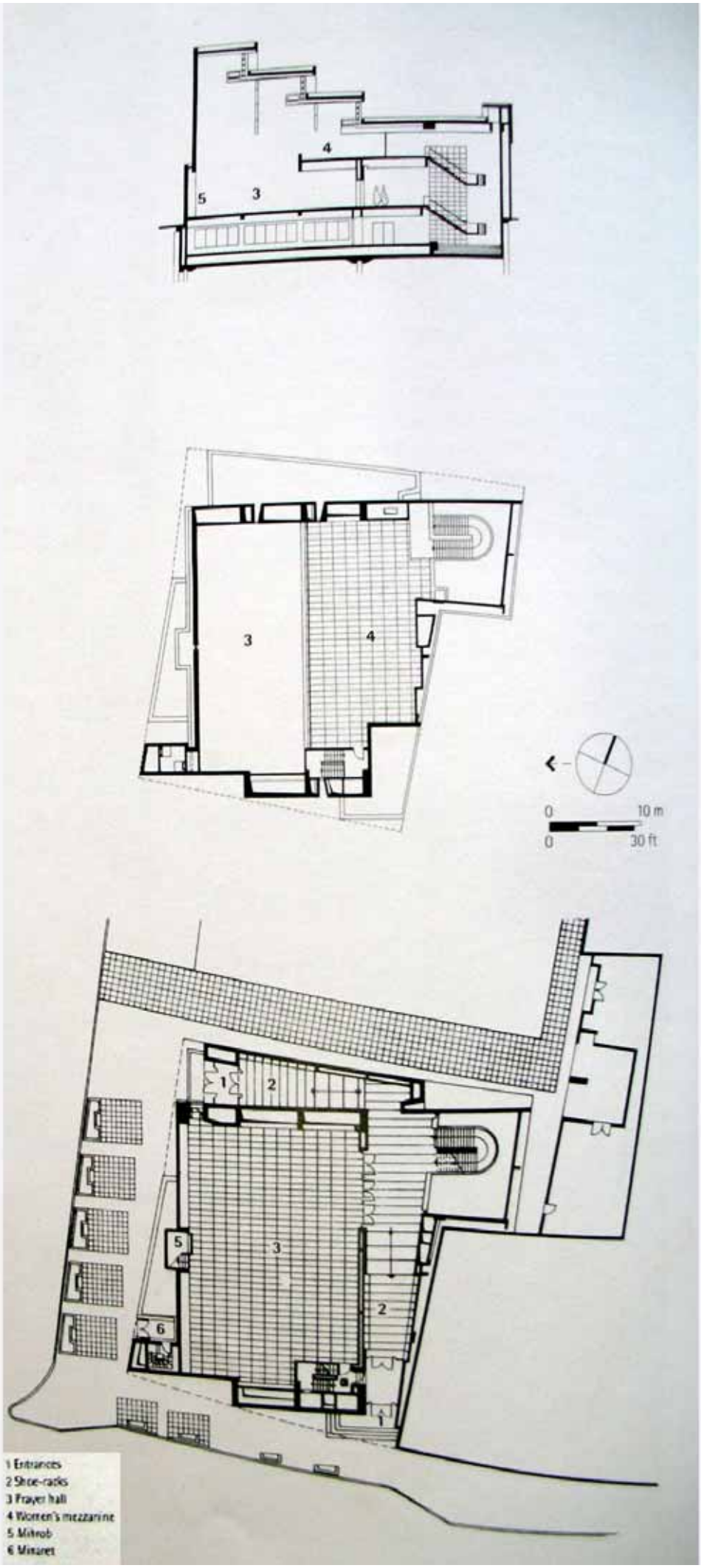
prayers, the Association decided to move to a new location. A couple whose identity remains obscure generously donated land for this purpose in the safer Ras-Beirut district. Saeb Salaam, the former Prime Minister of Lebanon and president of the Mohammad Al-Amine Islamic Association, was a prime mover in the project, and Rabih Amache, Chairman of Ramco Construction Company, offered to finance the construction of the mosque in memory of his late father.[3] Though technically this mosque was funded by a number of people, clearly the major voice in the design decision was that of the person of greatest renown and authority, who can be considered as the primary patron, if not the patron of record.

Saeb Salaam commissioned Nabbil Tabbara, a Lebanese architect, to prepare the drawings for a new mosque with a small community centre. Before starting the design, the architect conducted a thorough survey of existing mosques in the city in an attempt to discover and identify the particular characteristics of mosque design in Beirut. These characteristics, he determined, were basically defined by the building materials most commonly used in the city, such as local sandstone and terracotta tiles. In order to reflect this visual aspect in his design conceived in a modern idiom, he used travertine slab walls to suggest sandstone, while keeping traditional roof tiles.

The design and technology employed in the case of this mosque are based on variations of square and cube. The site was very restricted, with an area of only 200 sq. m (2,150 sq. ft) and was bordered on two sides by busy streets. The



Exterior views showing the *qibla* wall (above) and a detail of the *mihrab* (left); carefully crafted in local sandstone, elements of the *muqarnas* and the portal are given a monumental expression. The siting of the minaret (far left) at one corner ensures that both it and the mosque as a whole are prominently visible despite the presence of nearby high-rise buildings.


4
5
3
3
4
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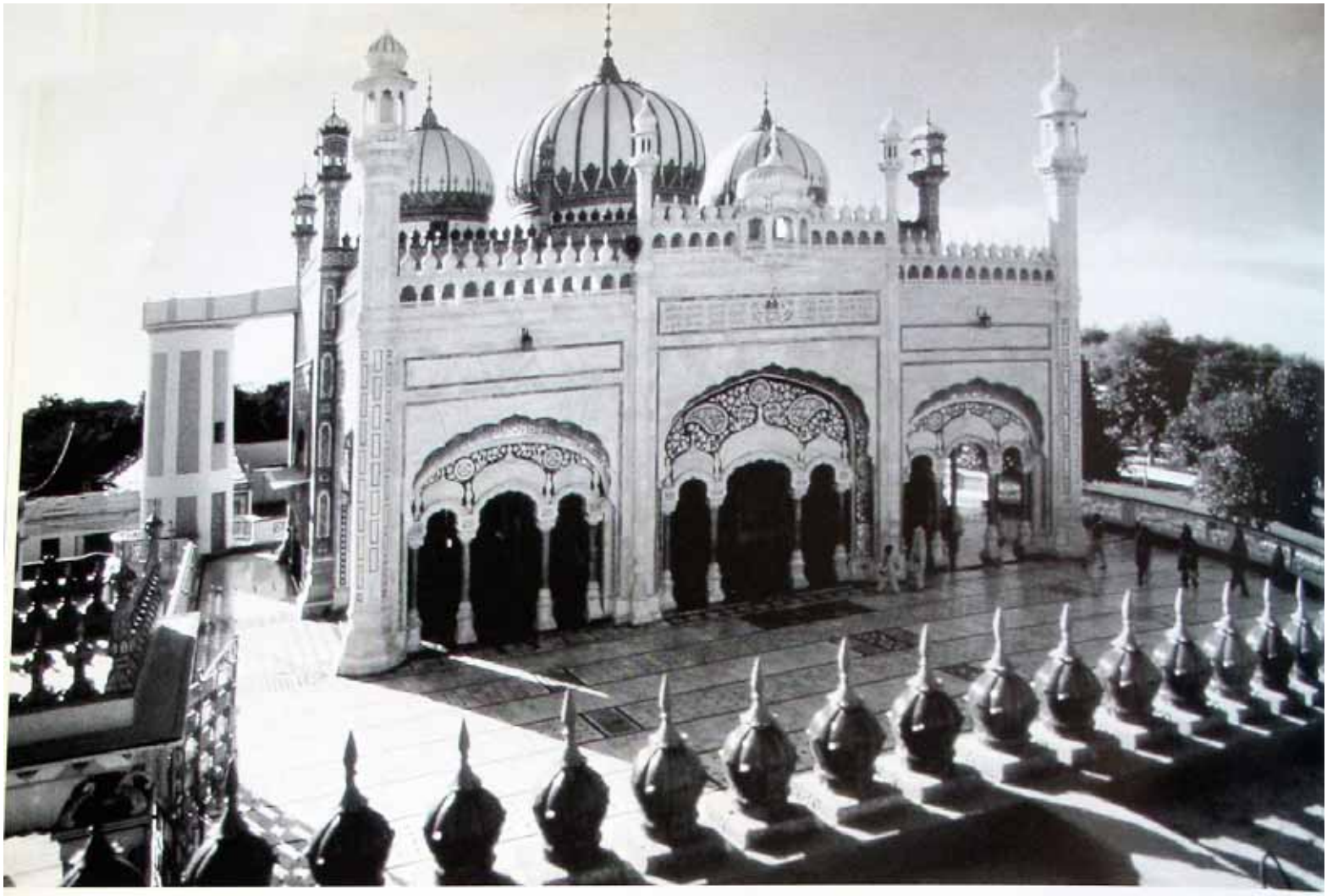
10 m
0
30 ft
1
2
3
5
6
2
1
1 Entrances
2 Shoe-racks
3 Prayer hall
4 Women's mezzanine
5 Mihrab
6 Minaret

(Right) The striking *mihrab* niche, with shimmering blue and beige decoration incorporating Qur'anic quotations in glass mosaic.

(Below) The brick-clad exterior of the mosque contrasts with the square minaret with its white balcony and oblique edge.

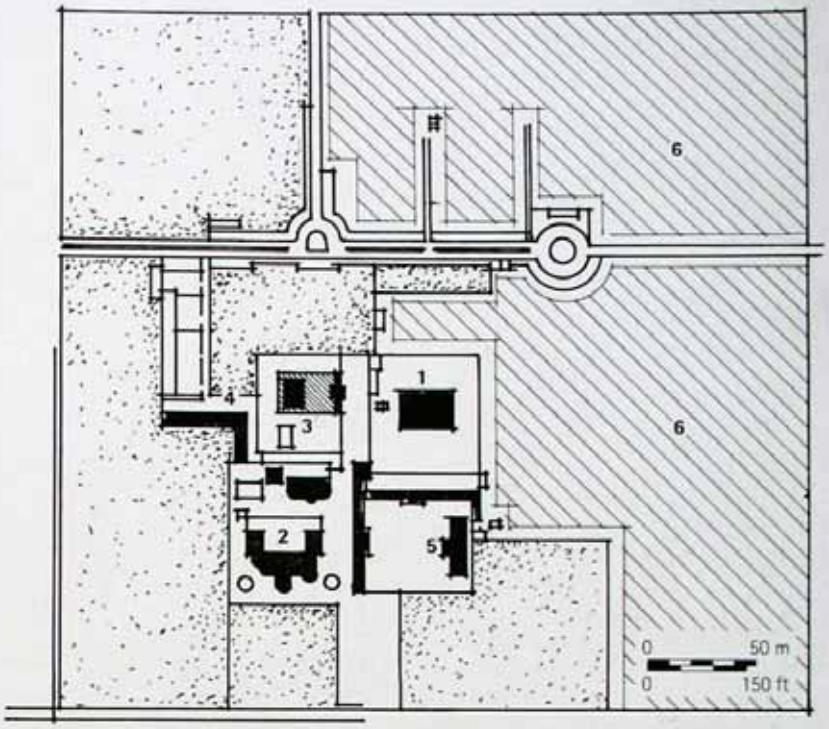


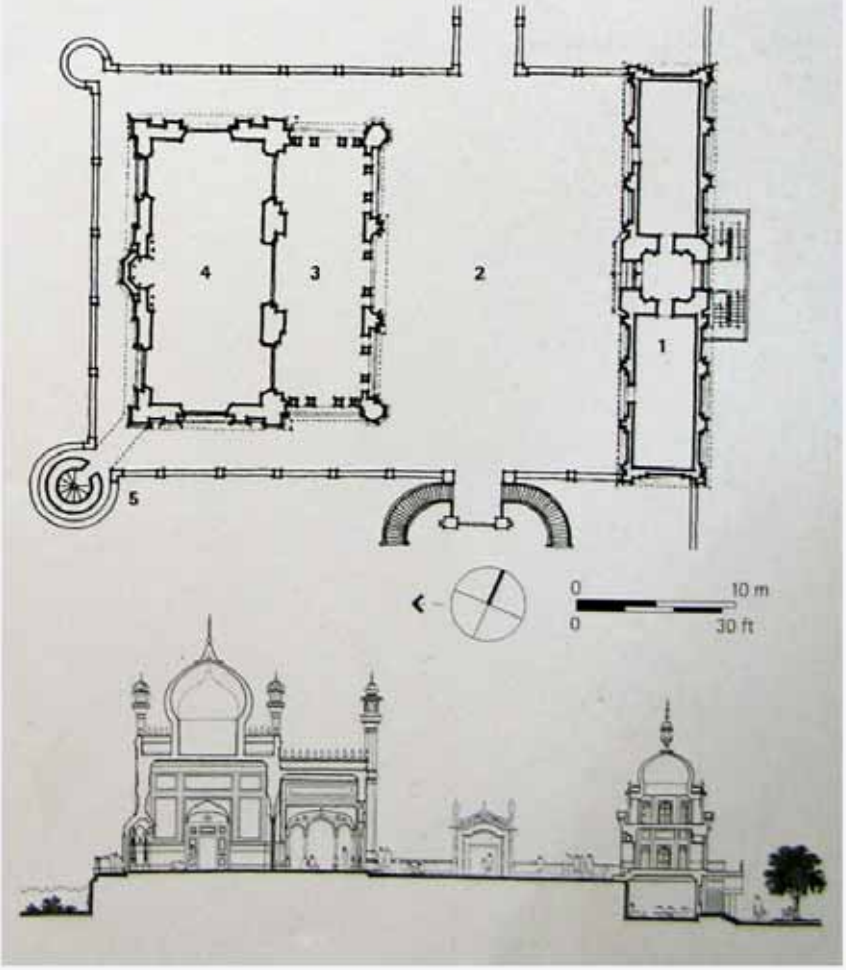
(Below) Site plan of the mosque complex showing its relationship to the village.

1 Palace
2 Main house
3 Mosque and library
4 *Madrasa*
5 New house
6 Village

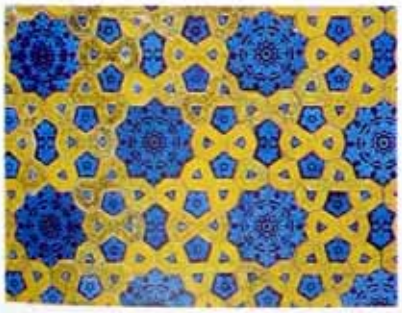
(Bottom) Plan and section of the mosque and library, showing the raised platform.

1 Entrance and library
2 Courtyard
3 Verandah
4 Prayer hall
5 Minaret





Bhong Mosque, near Rahimyar Khan, Pakistan

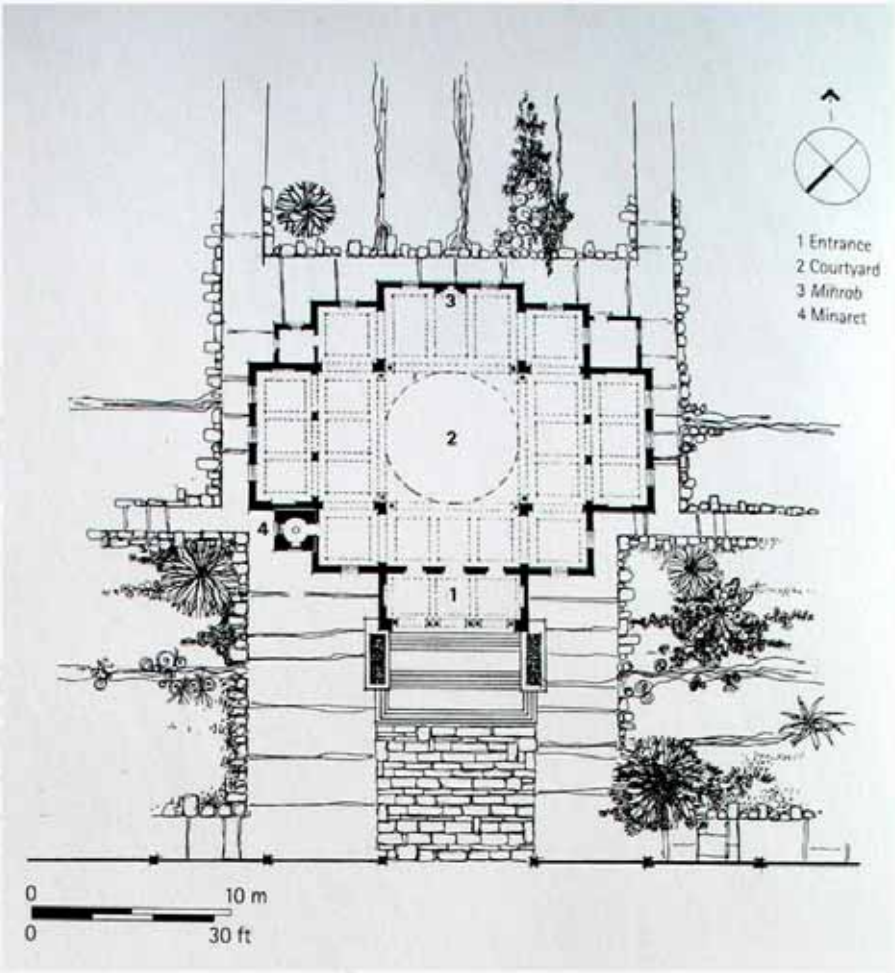


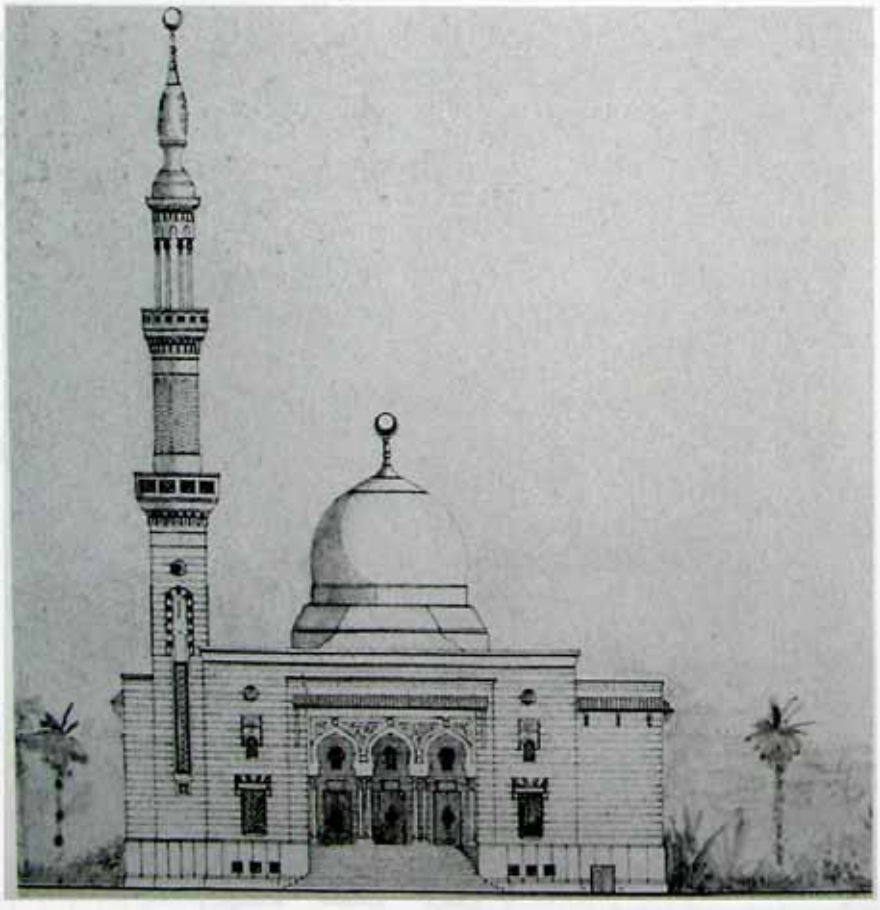
(Opposite) Decorative Multani tile work on the dome of the library pavilion; the three domes of the mosque are similarly finished.

(Top) General view of the complex; the overdetermined ornamentation reflects the prevailing contemporary popular taste of the area and of Pakistan in general.

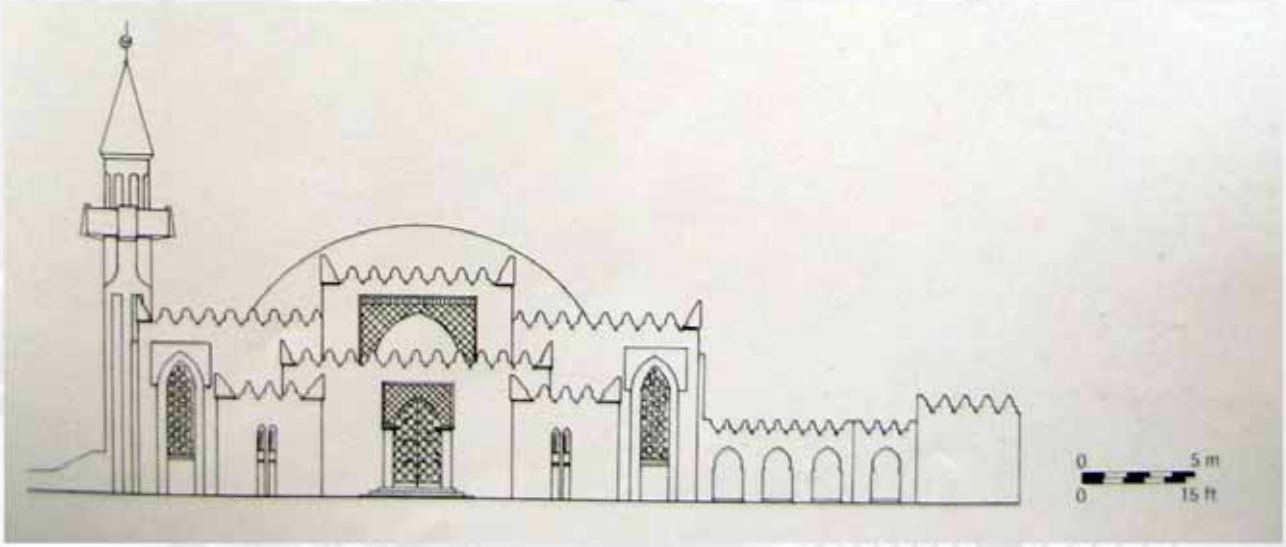
(Above) An example of the geometric patterns derived from the Multani tile-working tradition that were used extensively in the embellishment of the Bhong Mosque.

(Right) The *mihrab* niche; lavish ornament covers every surface in the prayer hall. The inclusion of ornate clocks follows a common trend in mosque interiors.

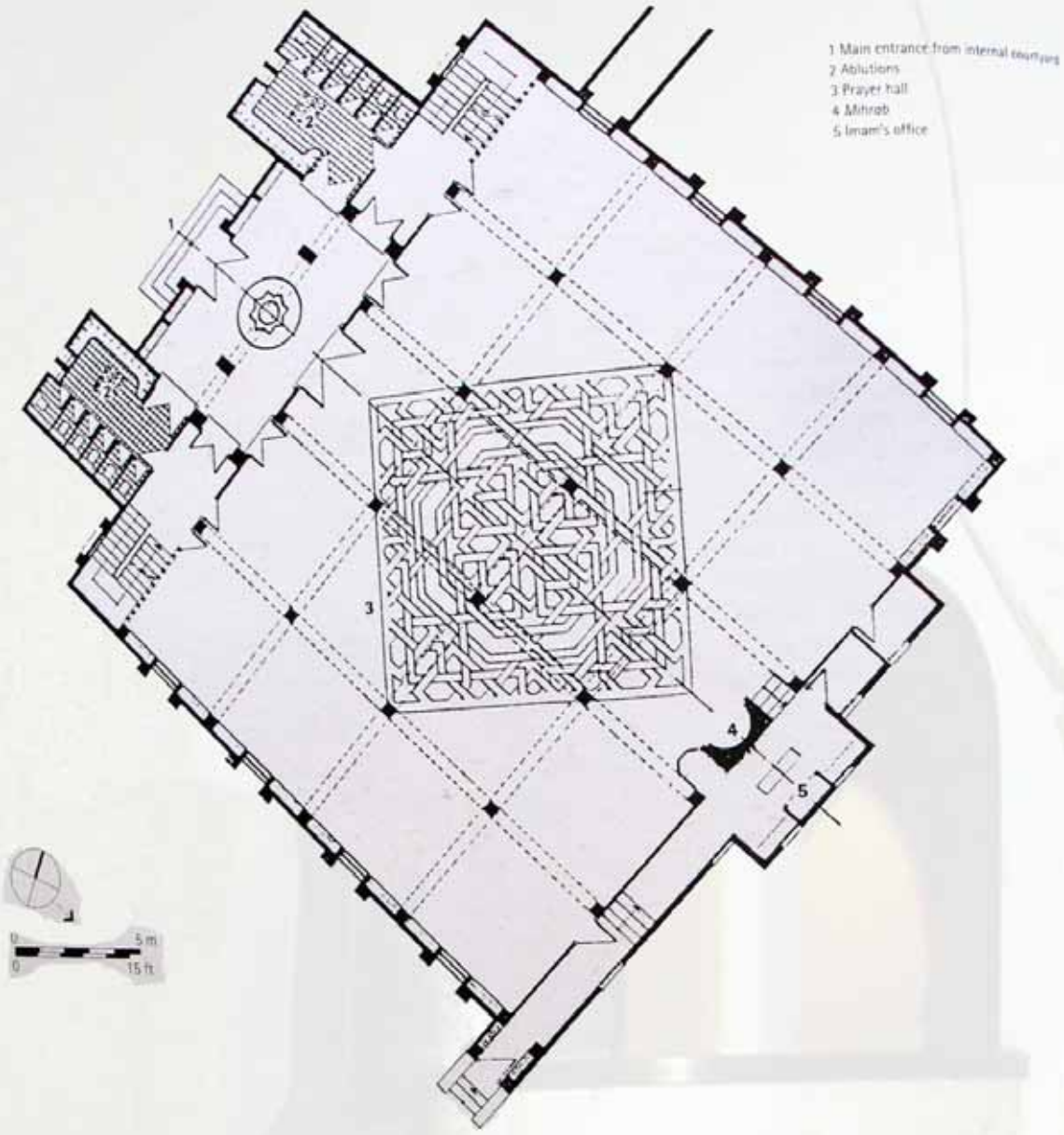




El-Sayyida Safiyya Mosque, Cairo, Egypt



Mosque and Cultural Centre, Marbella, Spain



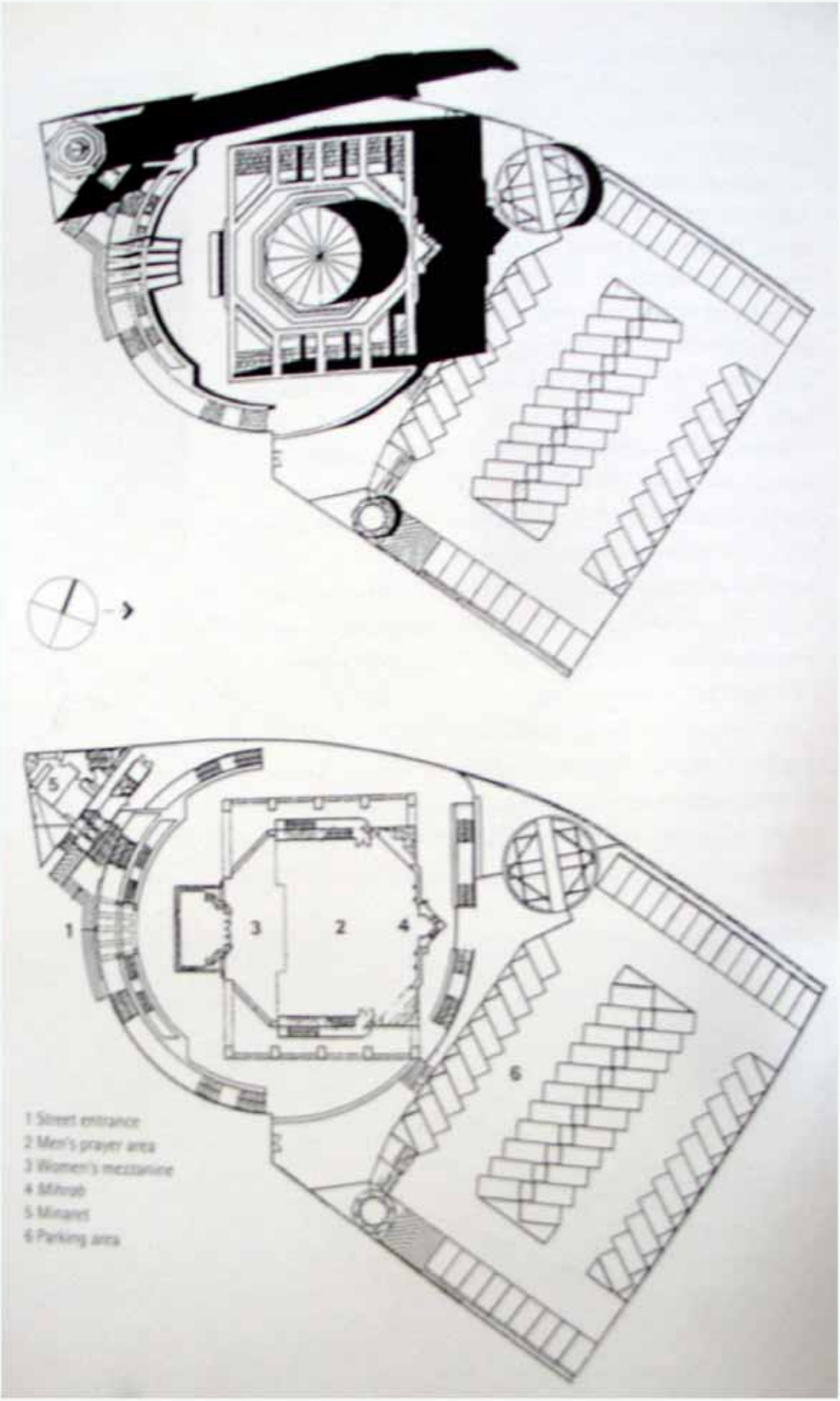
Mosque and Cultural Centre, Marbella, Spain

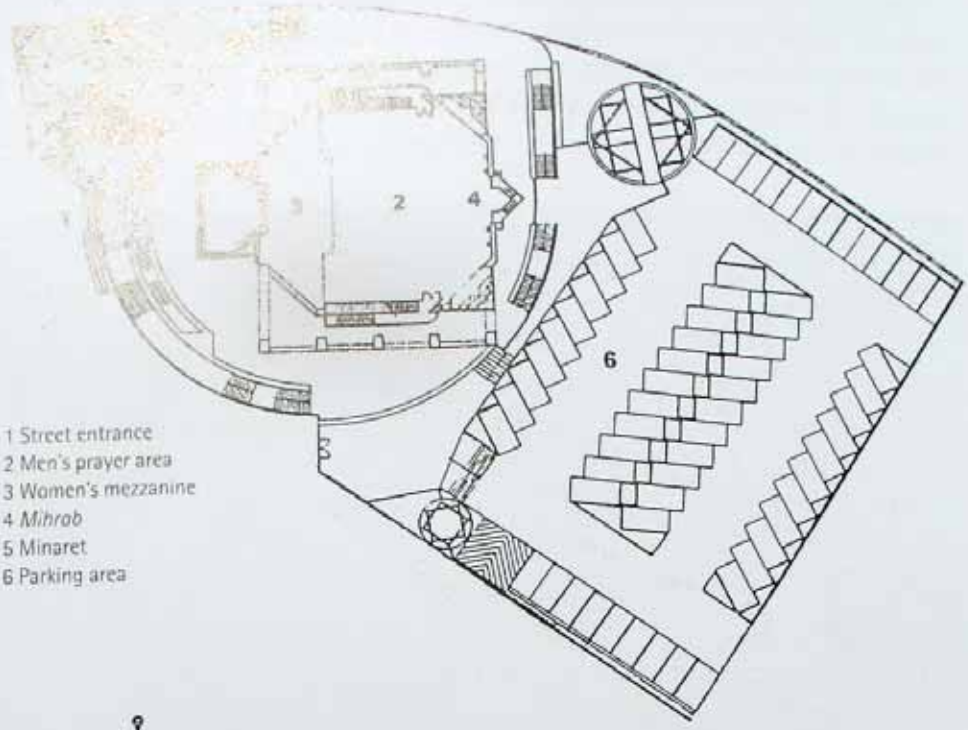
Al-Ibrahim Jami (1993), Caracas, by Oscar Bracho.

(Above) Standing on the Santa Rosa Boulevard, the building holds its own in competing for attention with a series of major religious, cultural and museum buildings along this street.

(Below) The exterior of the *qibla* wall. The upper part of the crystalline *mihrab* incorporates stained glass.

Al-Ibrahim Jami, Caracas, Venezuela

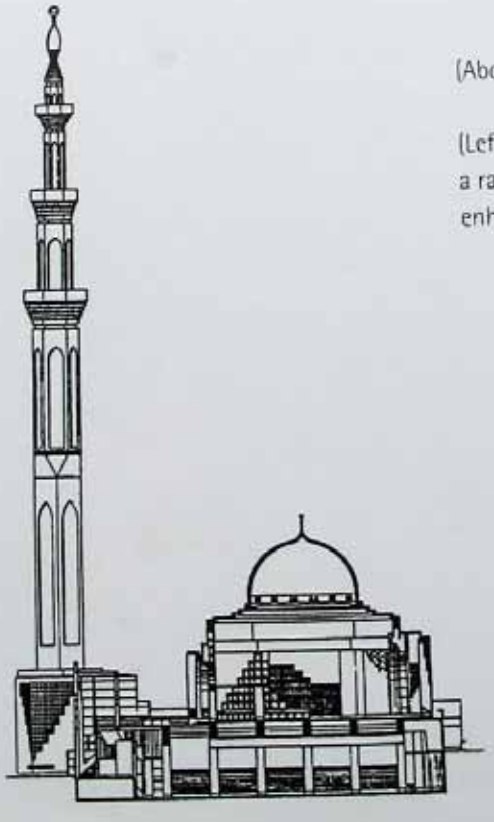

1 Street entrance
2 Men's prayer area
3 Women's mezzanine
4 Mihrab
5 Minaret
6 Parking area

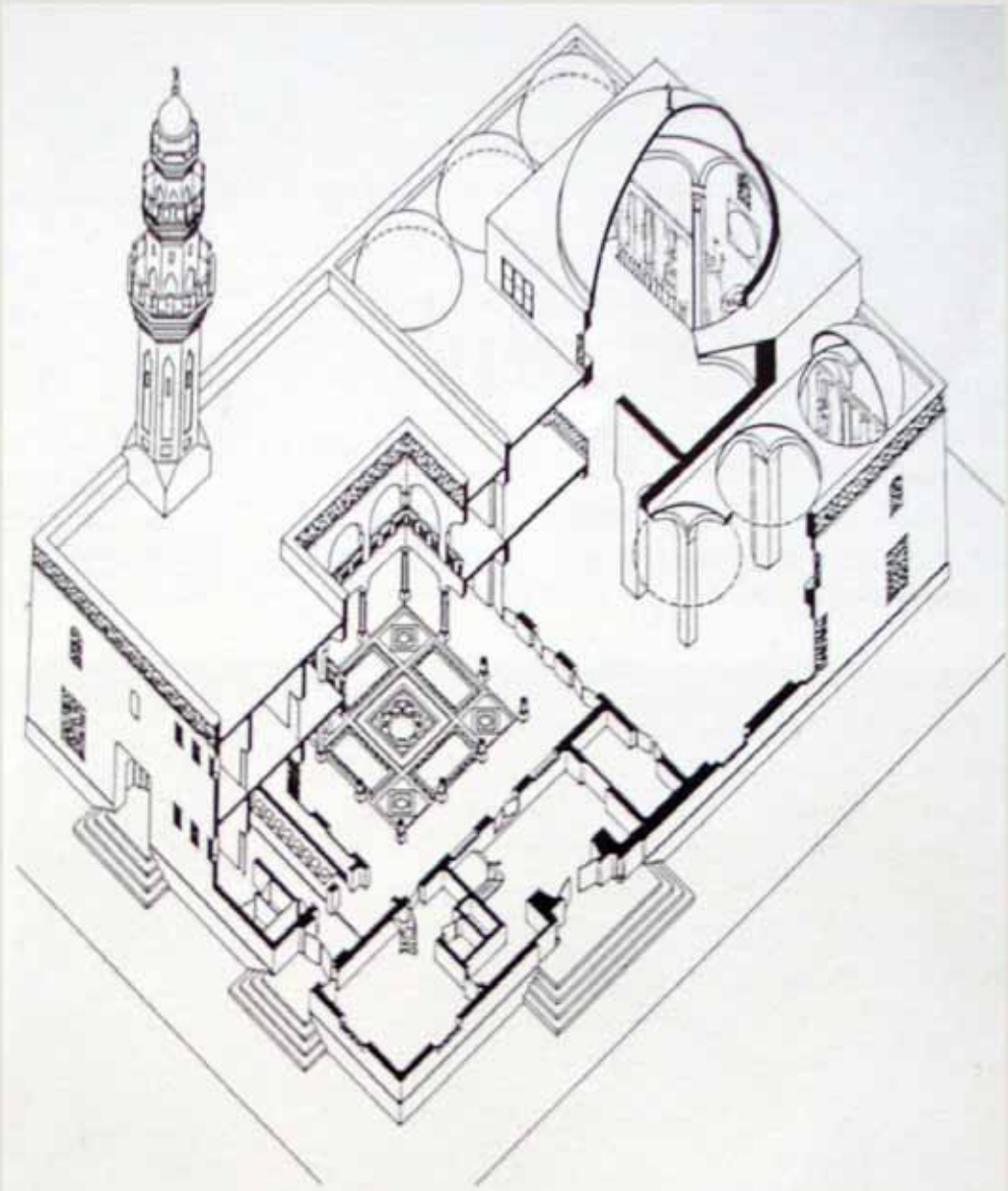


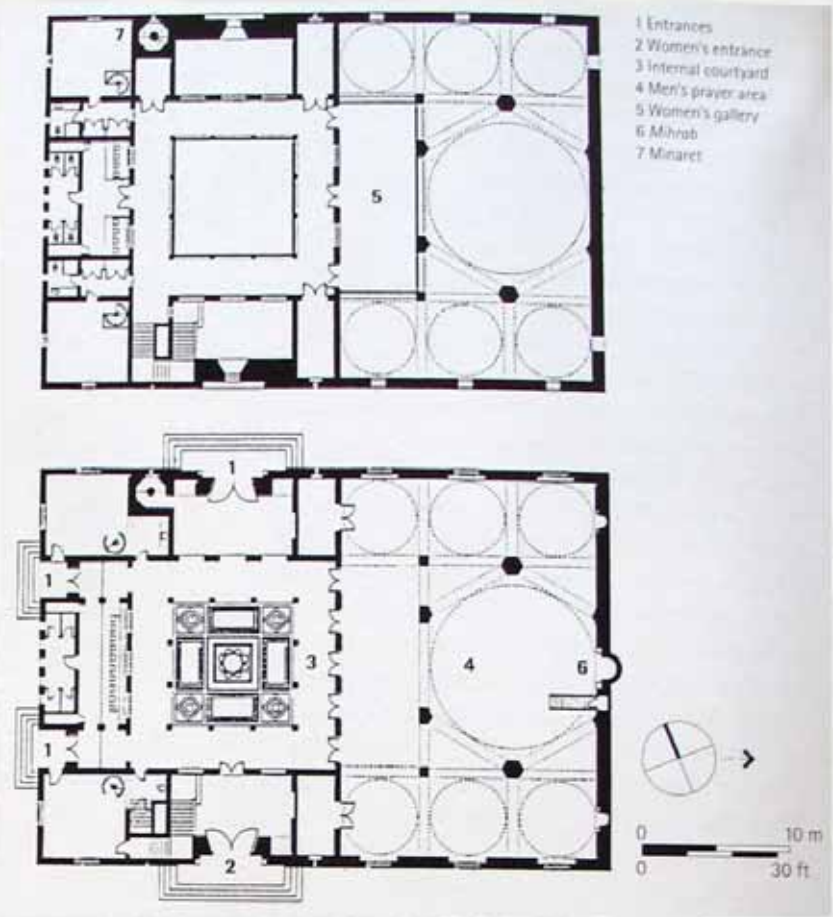
1 Street entrance
2 Men's prayer area
3 Women's mezzanine
4 *Mihrab*
5 Minaret
6 Parking area

(Above) Plans of roof level and main level.

(Left) Section showing the mosque standing on a raised platform to give it greater height and enhanced visibility from the street.







Sulaiman Mosque, Jeddah, Saudi Arabia

(Top right) Plans at the mezzanine and ground-floor levels. The layout is based on an Ottoman model, with a courtyard preceding the prayer hall. Flanked by two rows of three smaller domes, the main dome supported on six piers has a span of 12 m (39 ft).

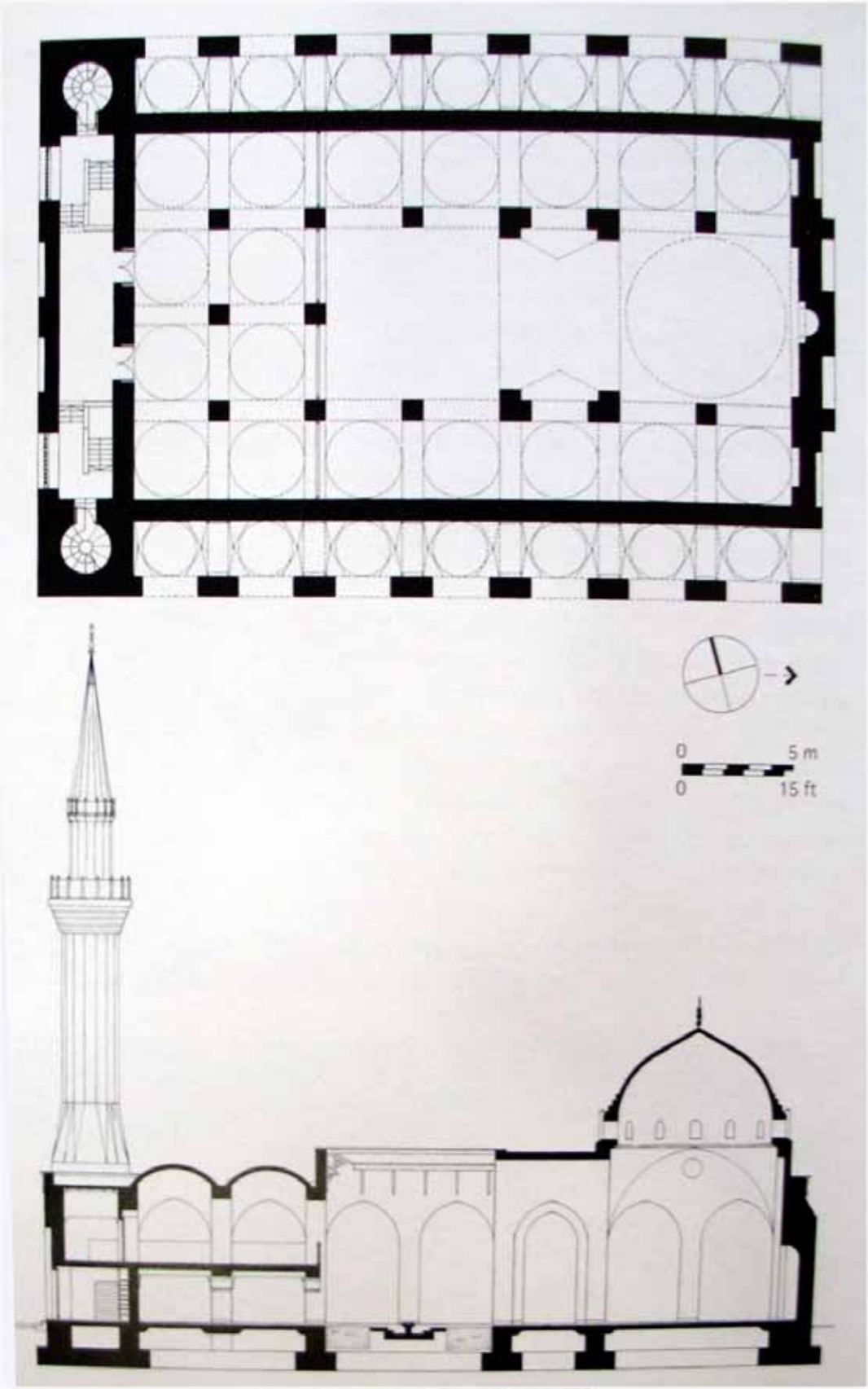
(Above) View into the main dome.

(Right) The interior with the chandelier beneath the dome and an oblique view of the women's gallery.

(Above right) View along the *qibla* wall with the carved wooden *minbar*. El-Wakil's mosques all contributed to the revival of traditional crafts; the chandeliers as well as the tile work were carefully planned to complement the overall interior design.

(Right) A view into the small courtyard, which can be adapted to an interior space protected from the sun by closing the retractable cover.

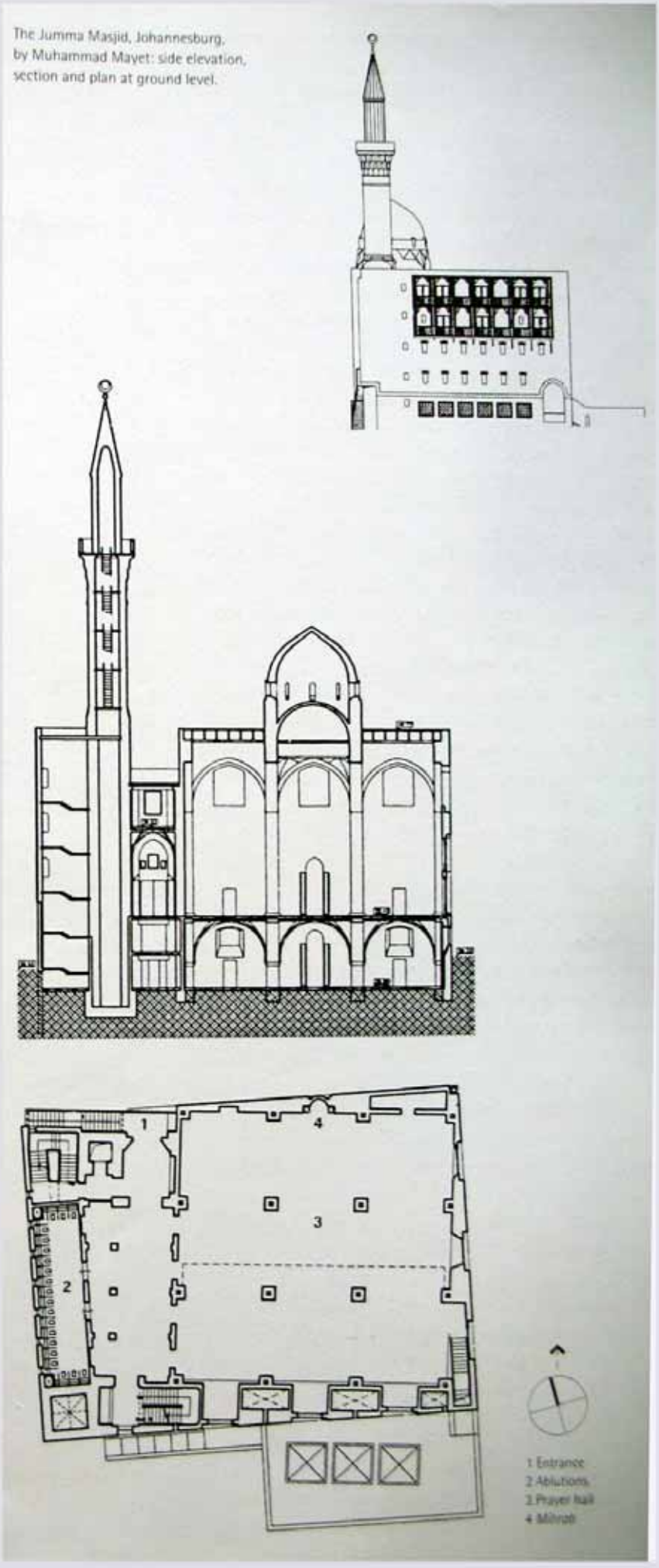
Al-Harithy Mosque, Jeddah, Saudi Arabia



(Above) Plan and section showing the much diminished courtyard space.

A view of the exterior showing the *qibla* wall and flanking porches which connect the building to the street.

Al-Harithy Mosque, Jeddah, Saudi Arabia



Jumma Masjid, Johannesburg, South Africa

(Below) The Ismaili Centre (1985) in London, designed by Neville Conder of the Casson Conder Partnership, emulates the scale of the surrounding buildings, such as the Victoria and Albert Museum (seen in the background), while simultaneously reflecting the mood of Islamic architectural tradition.

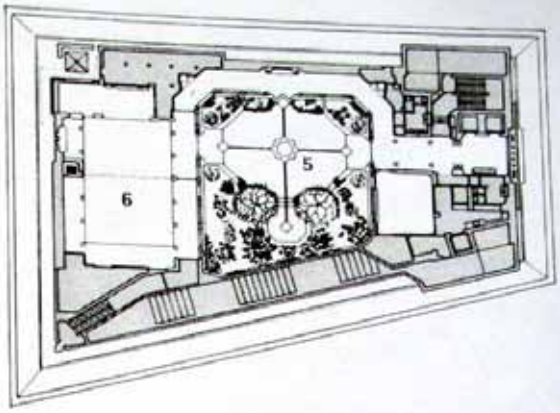
Ismaili Centre, London, UK

(Below) Detail of decorative panels in the prayer hall.

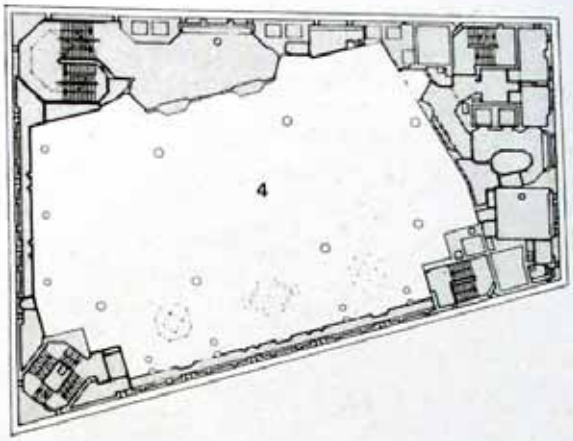
(Right) The architects exploited the irregular shape of the site which provided opportunities for developing special corner articulations, while at the same time responding skilfully to the overall requirements of a complex design programme.

(Bottom) The upper floor of the Ismaili Centre includes the library and meeting rooms, which are disposed around an exquisite small courtyard roof garden providing a restful haven amidst busy urban surroundings.

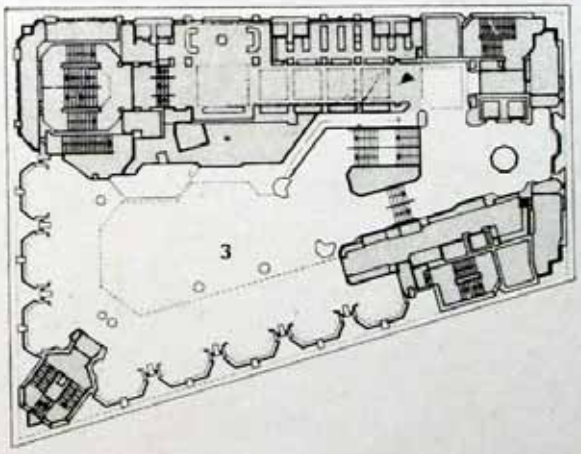
Ismaili Centre, London, UK



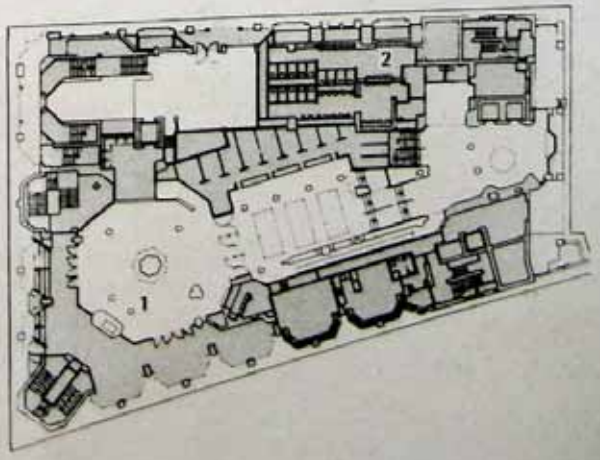
Third floor



Second floor



First floor



Ground floor

Floor plans of the Ismaili Centre, showing the prayer hall and roof garden at second and third levels respectively.

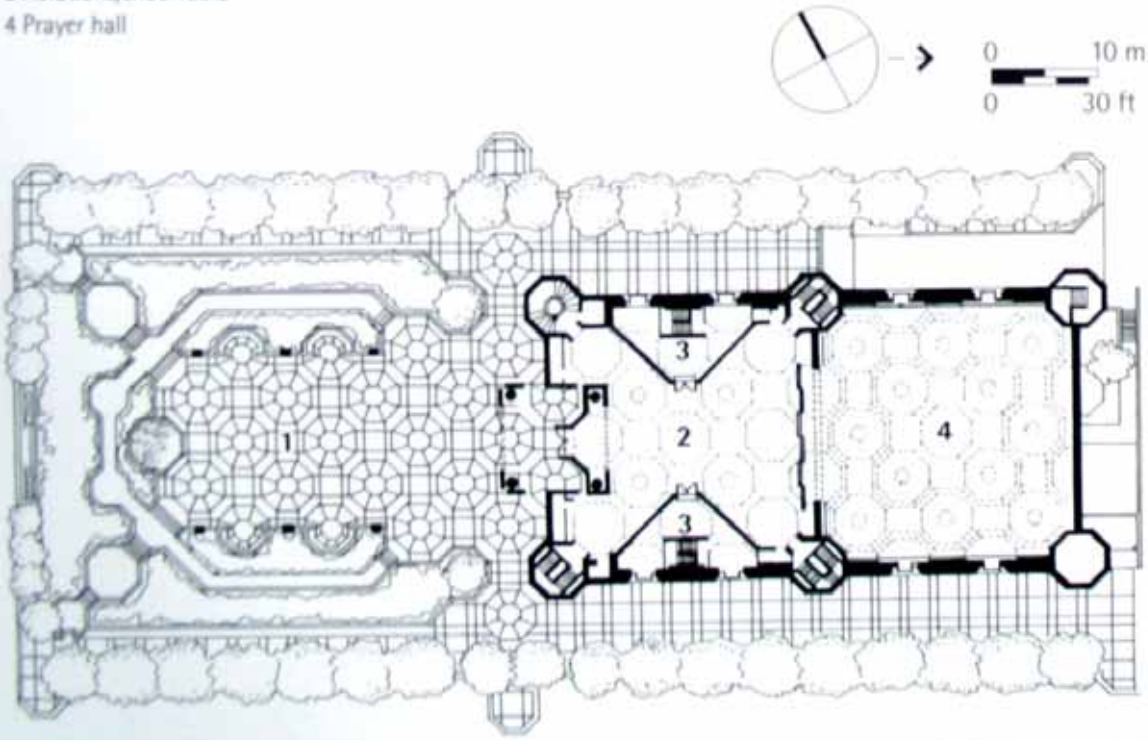
1 Entrance hall
2 Toilets/ablutions
3 Social hall
4 Prayer hall
5 Roof garden
6 Council chamber/ conference room

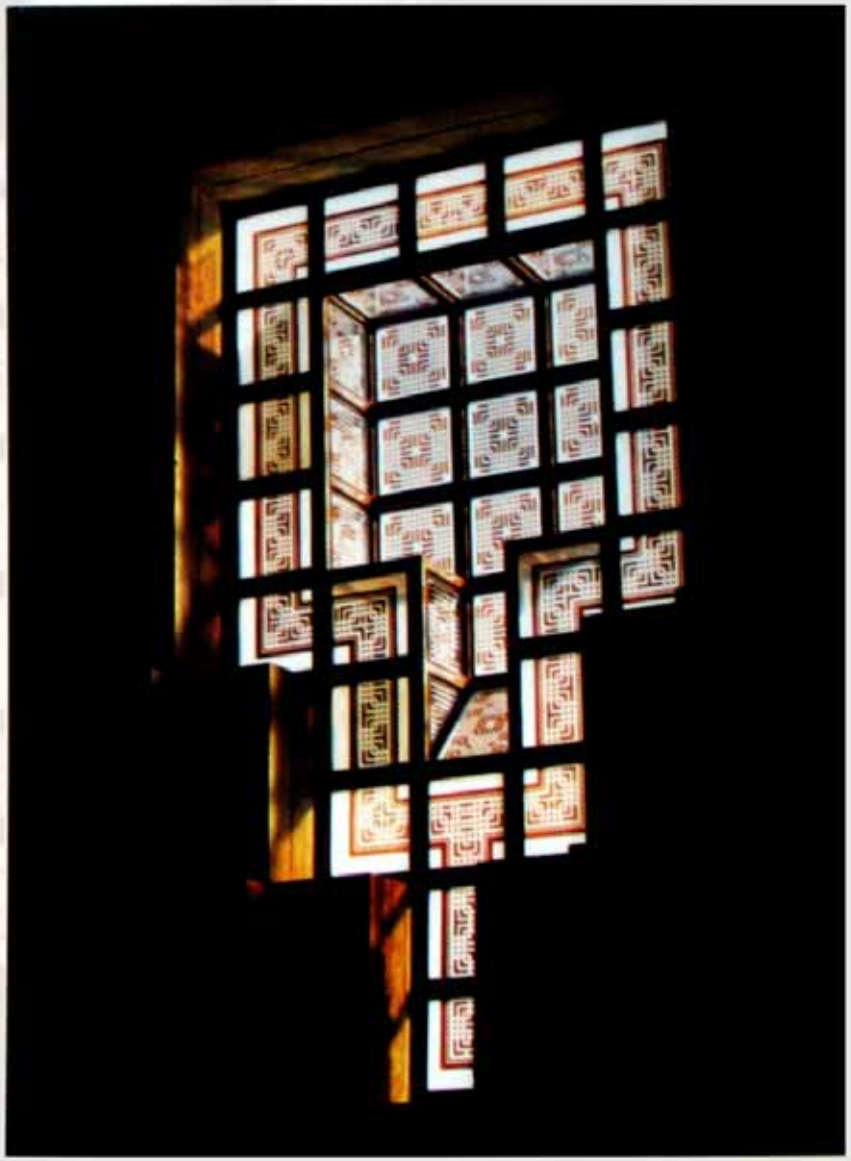
(Opposite) A view of the citadel-like exterior, and the interior of the double-height prayer hall showing the *qibla* wall decorated with panels of coral and marble. The sculptural ceiling features a series of shallow Ottomanesque octagonal domes.

(Right) Detail of one of the three-dimensional window openings seen from within. The striking glass construction resulted from systematic exploration of the traditional *muqarnas* and dialogue between architect and patron.

(Below) Ground-level plan of the Ismaili Jamatkhana and Centre.

1 Landscaped forecourt
2 Entrance loggia
3 Ablutions/shoe-racks
4 Prayer hall

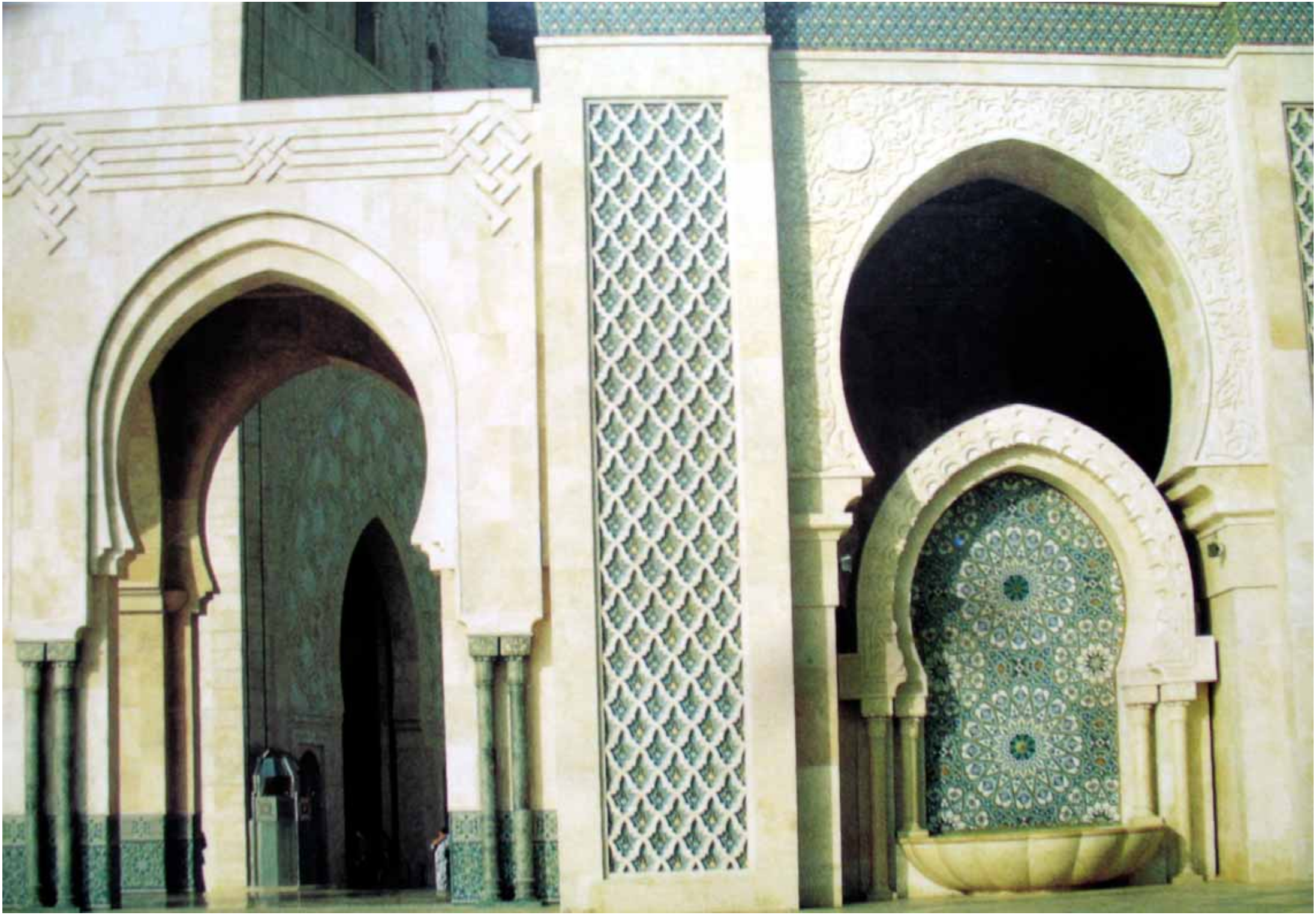


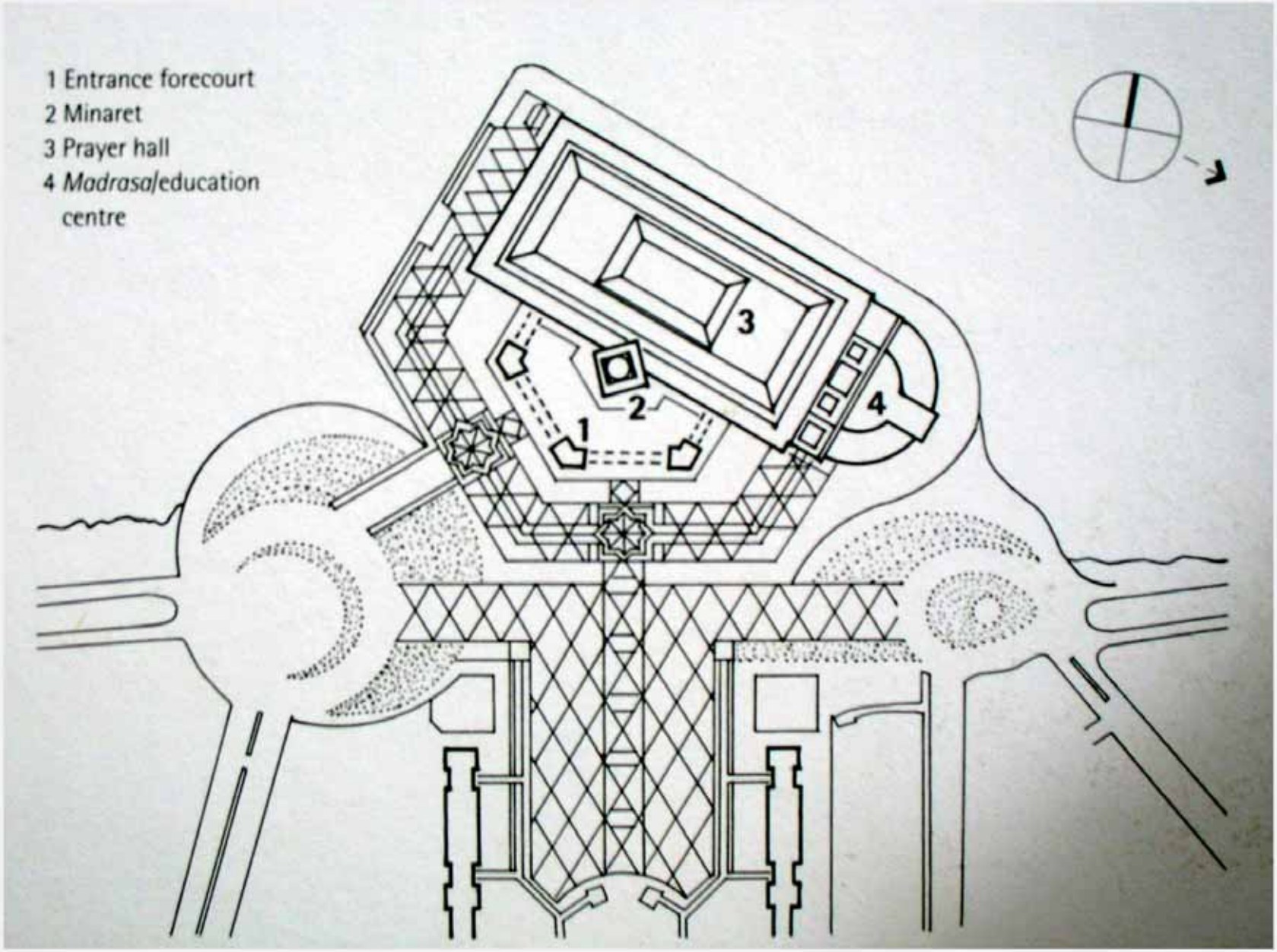


(Above) The street façade of the King Abdul Aziz Mosque and Foundation, Casablanca, by Coteba International. Completed in 1983 and dressed in acceptable ornamental garb, the mosque was built and decorated in the space of ten months using many prefabricated elements.

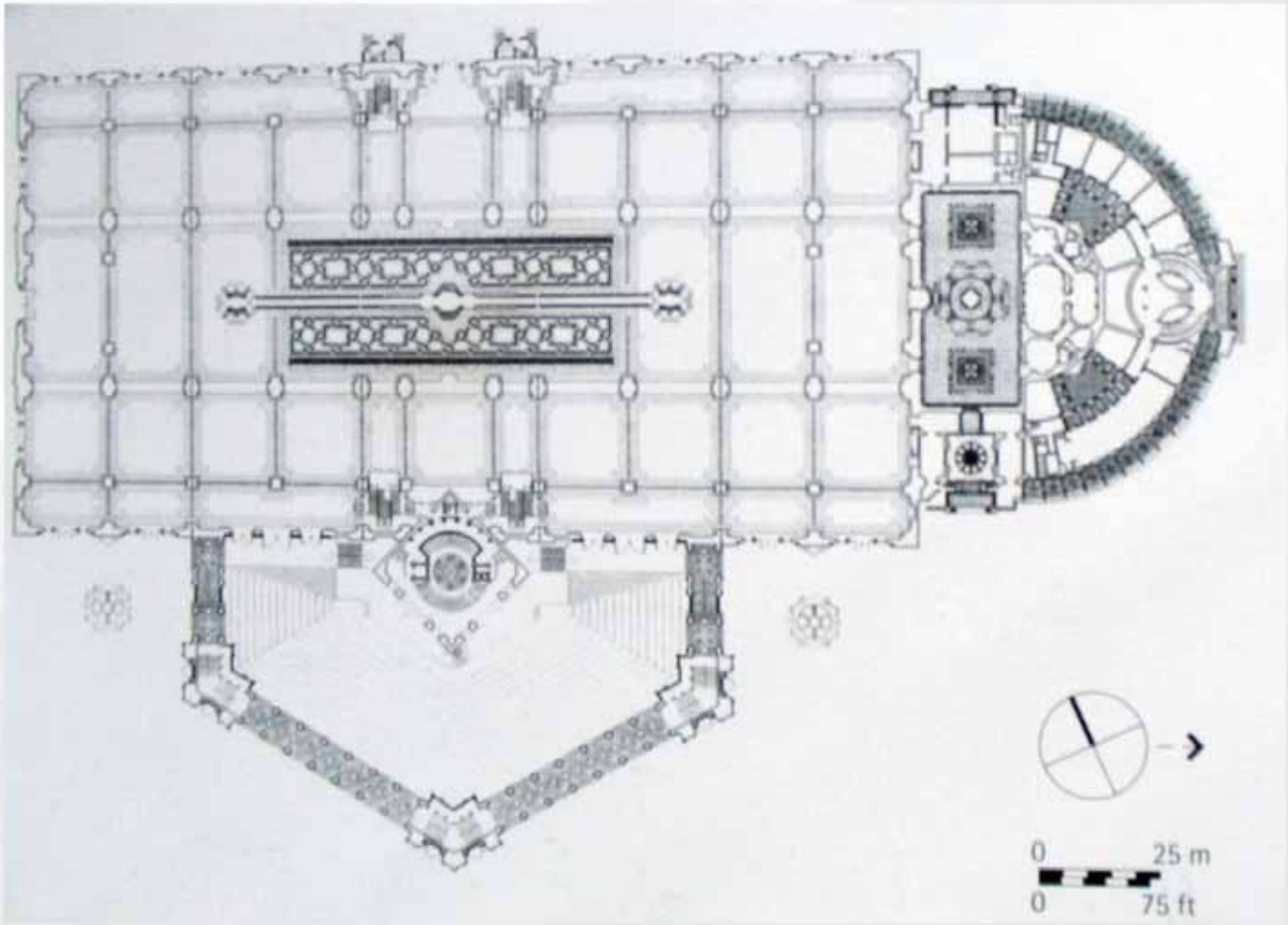
(Below) View of the interior, the decoration of which was executed by a workforce of 800 craftsmen, carvers, tile cutters and painters.

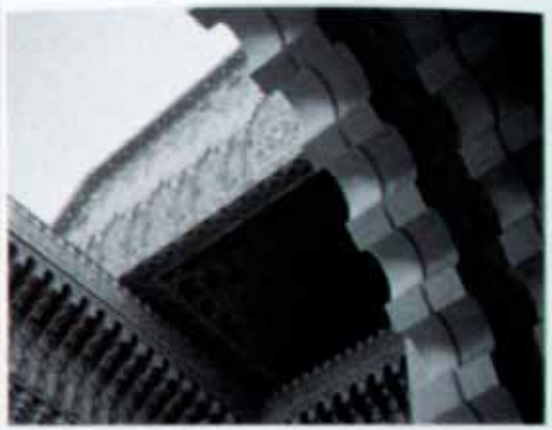
King Abdul Aziz Mosque Foundation, Casablanca, Morocco





Mosque of Hassan II, Casablanca, Morocco

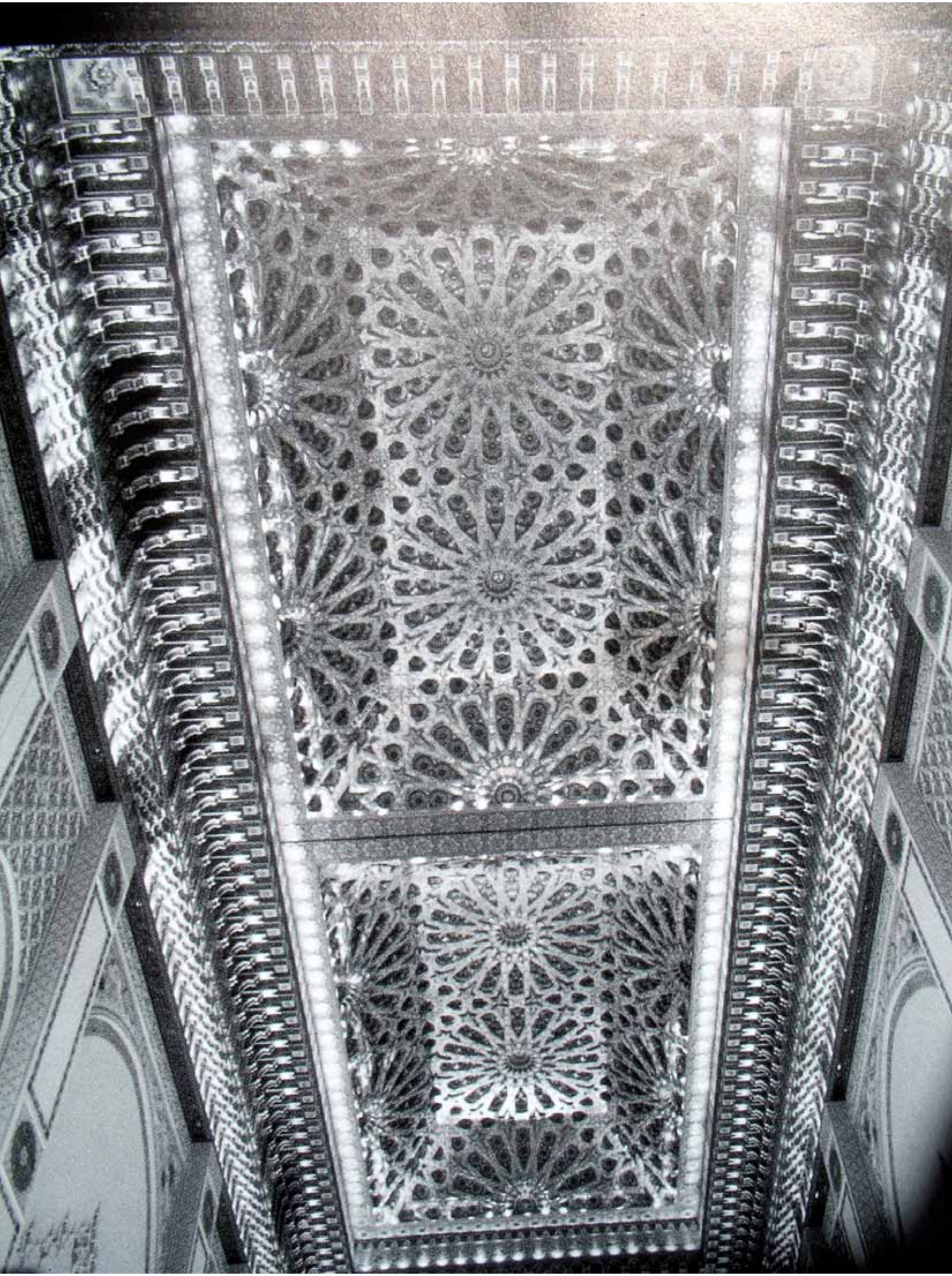


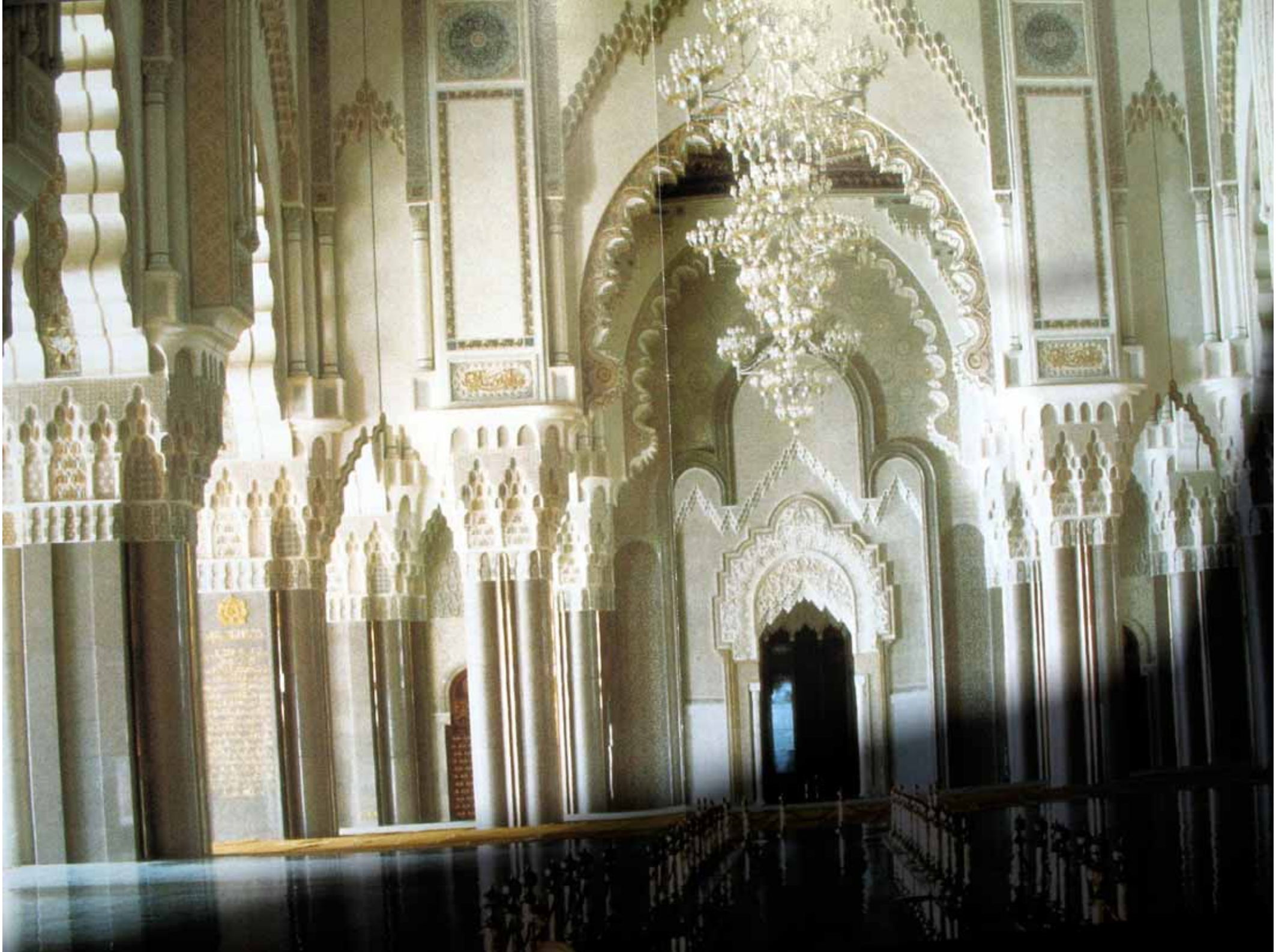


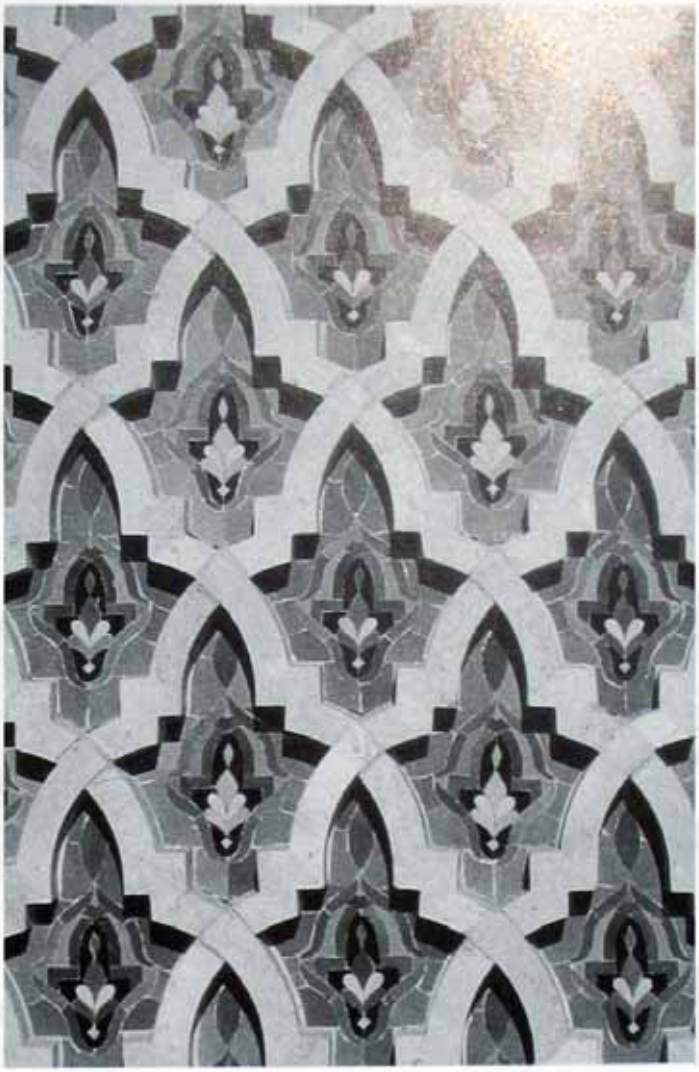
(Left) Plan of the Great Mosque complex, with forecourt, arcade and minaret, large rectangular prayer hall and semicircular *madrasa*/education centre.

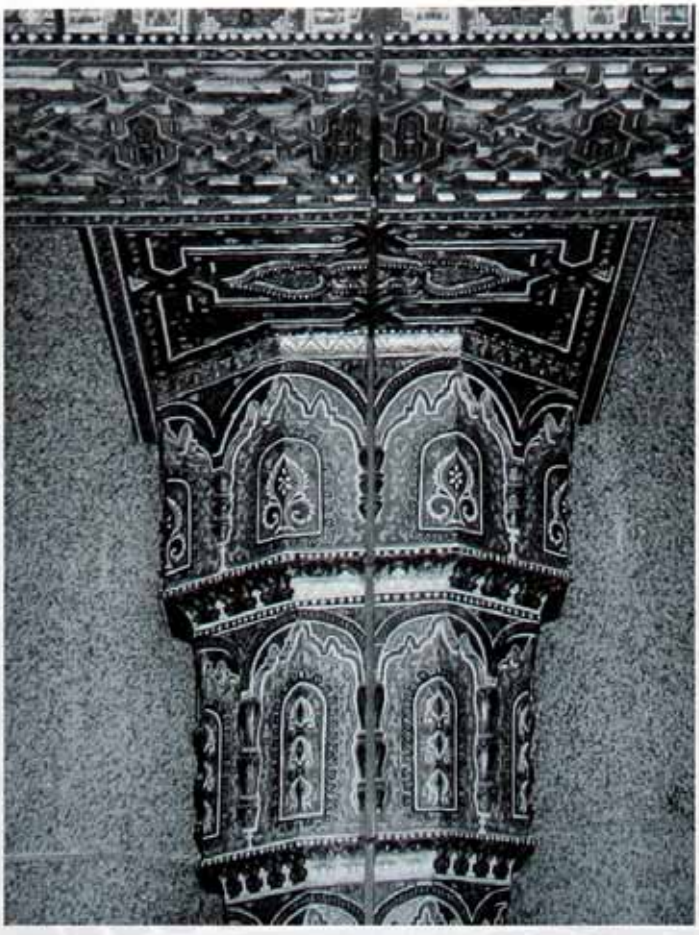
(Opposite) The highly ornamented roof which, when opened (see detail above), creates an internal courtyard in the prayer hall.

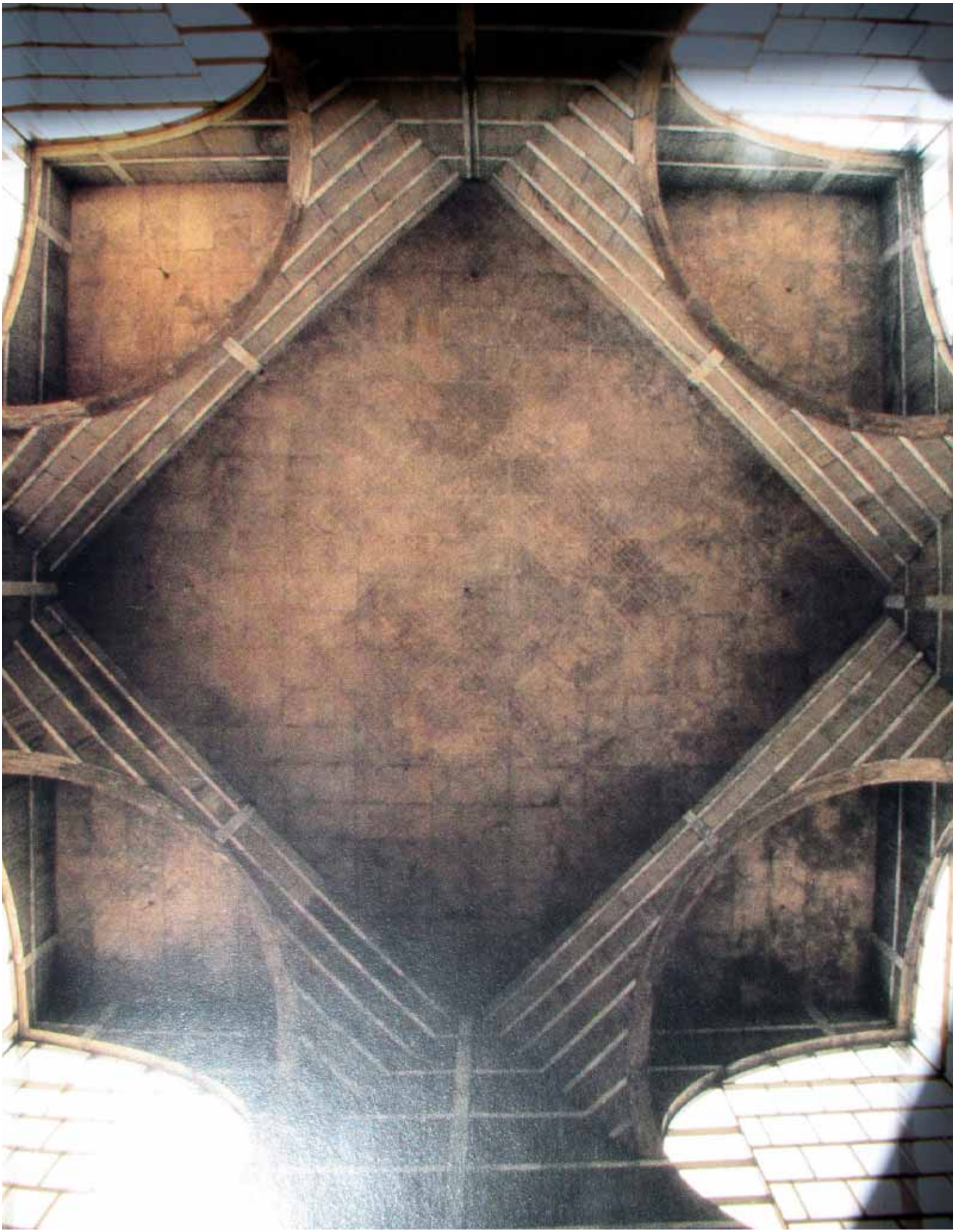
(Overleaf) A view of the prayer hall looking towards the *mihrab*.

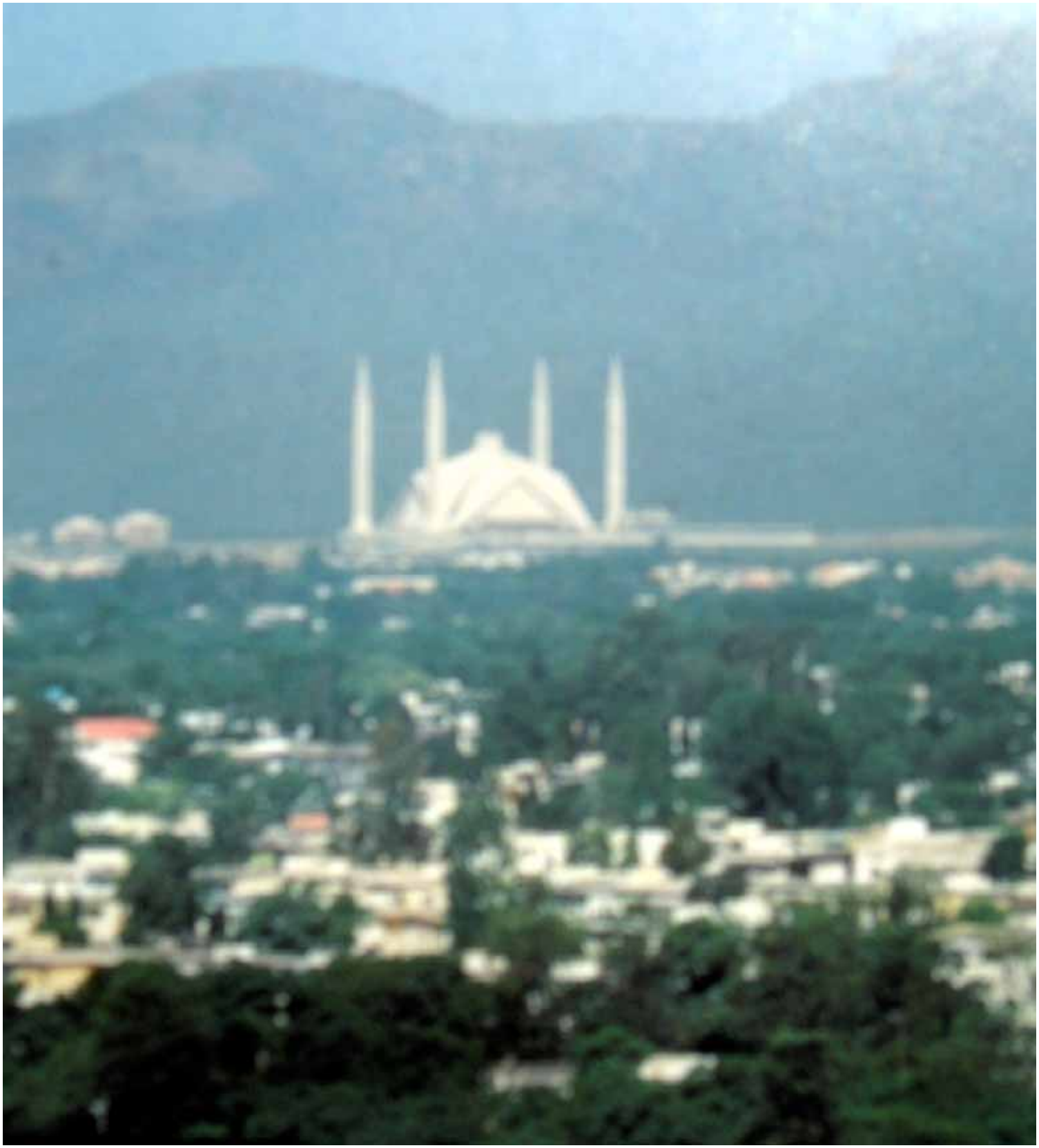


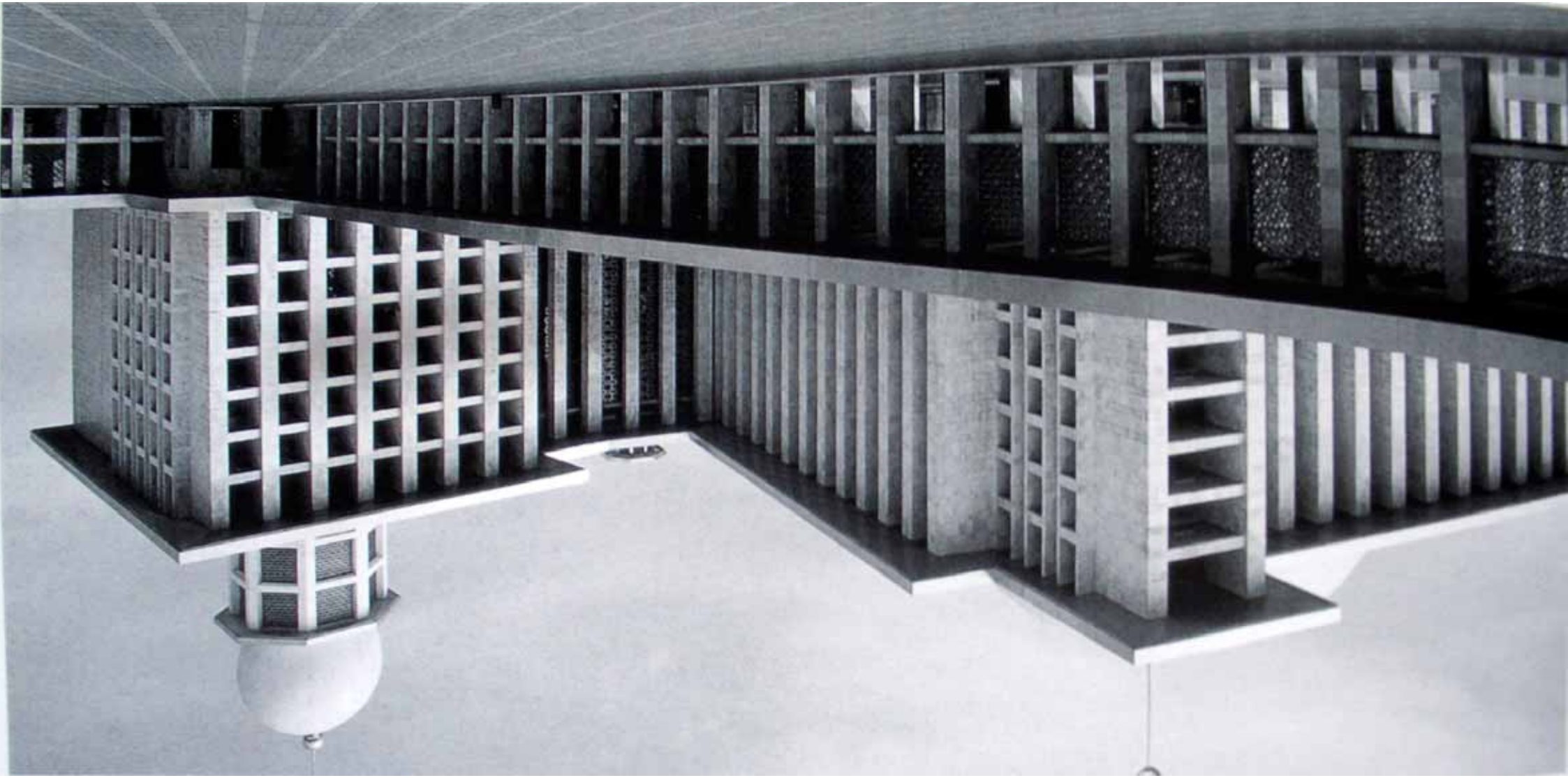


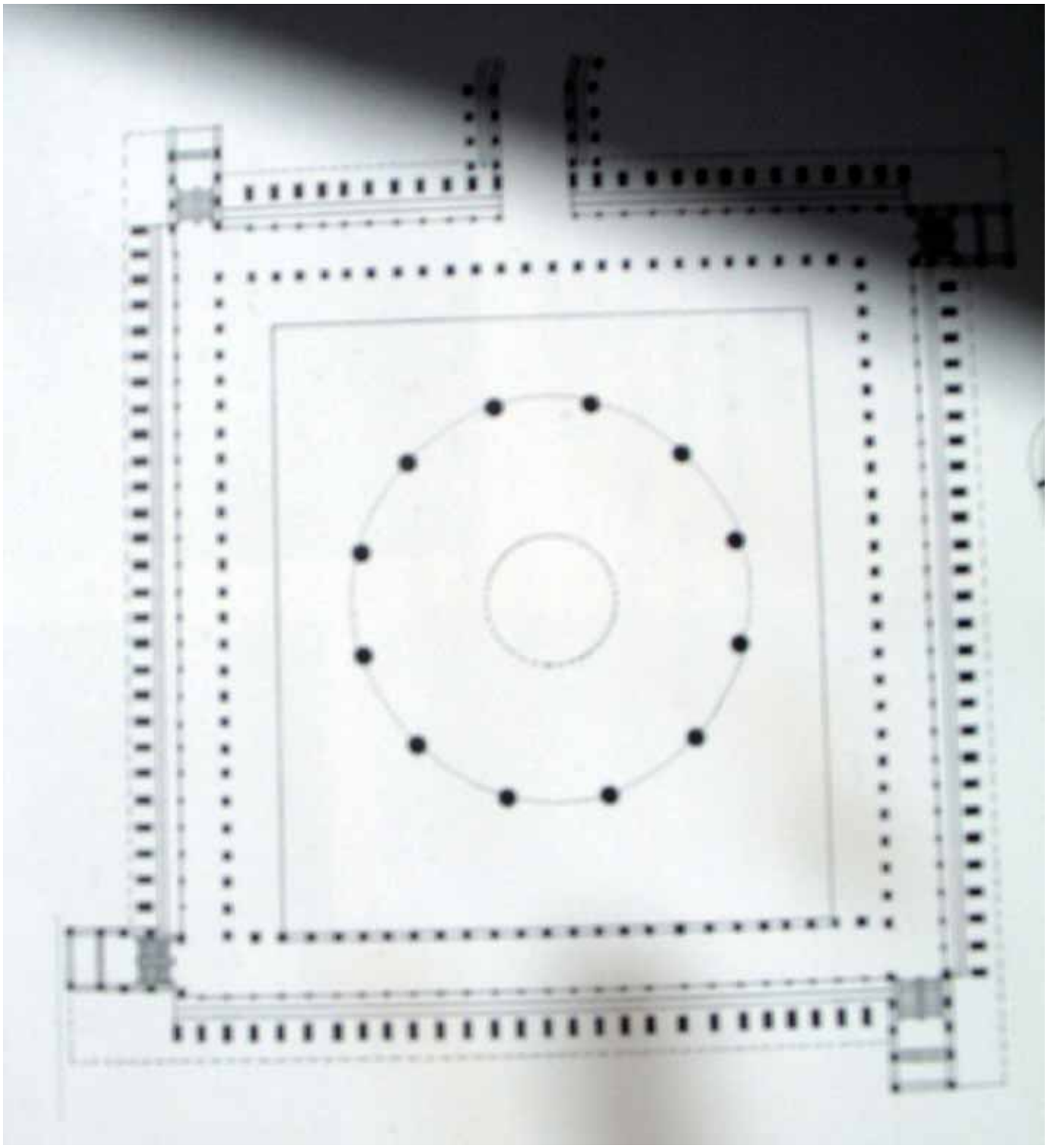


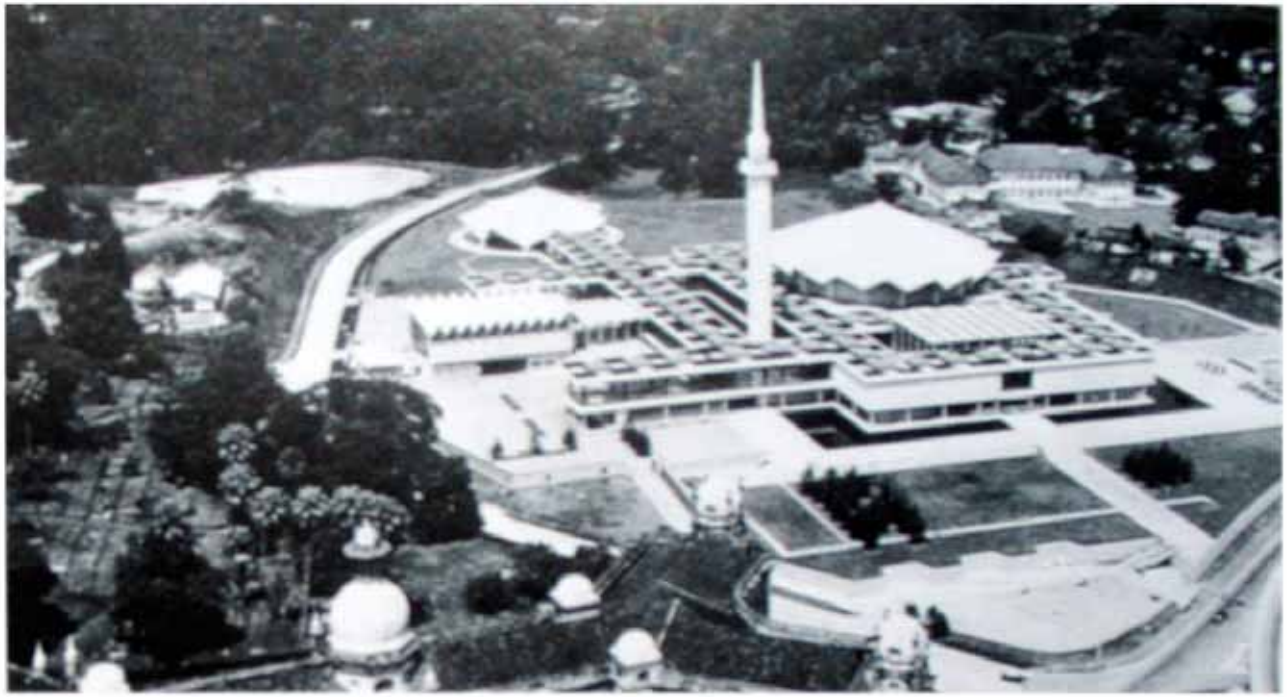


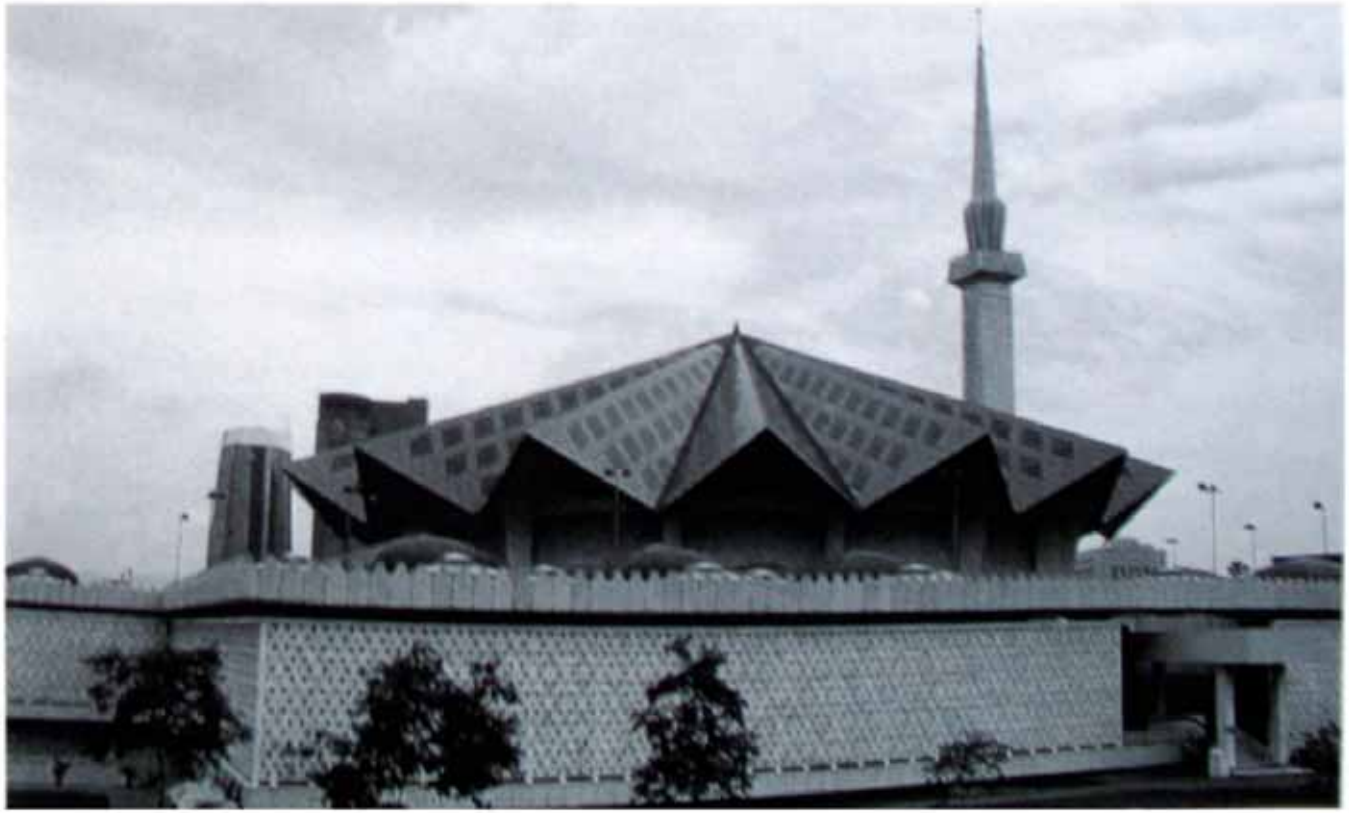






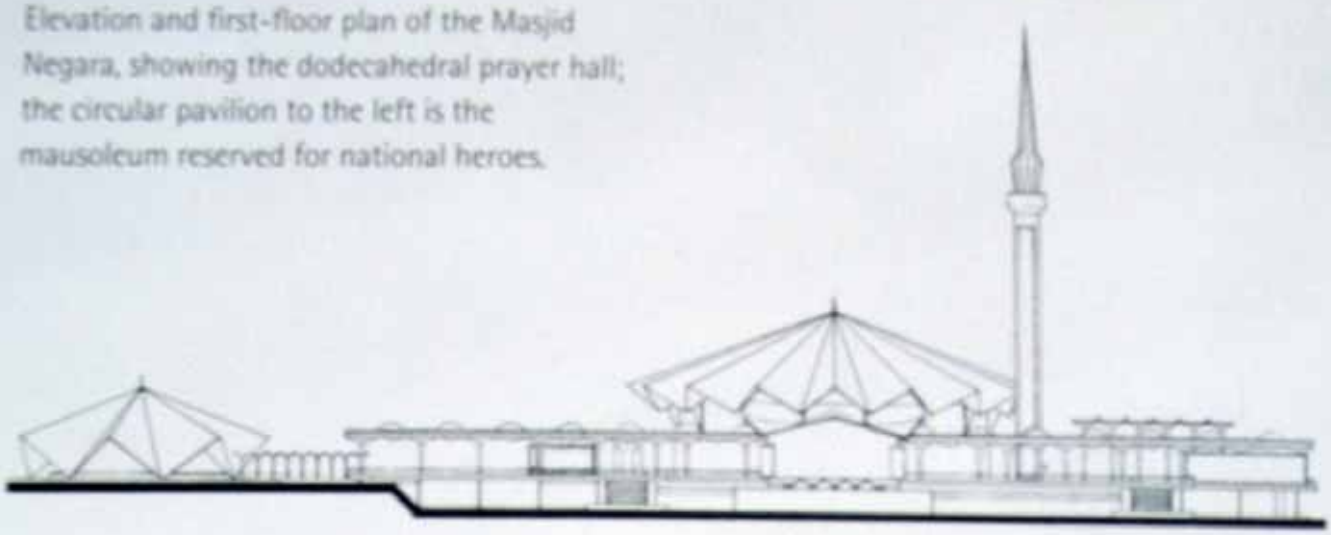


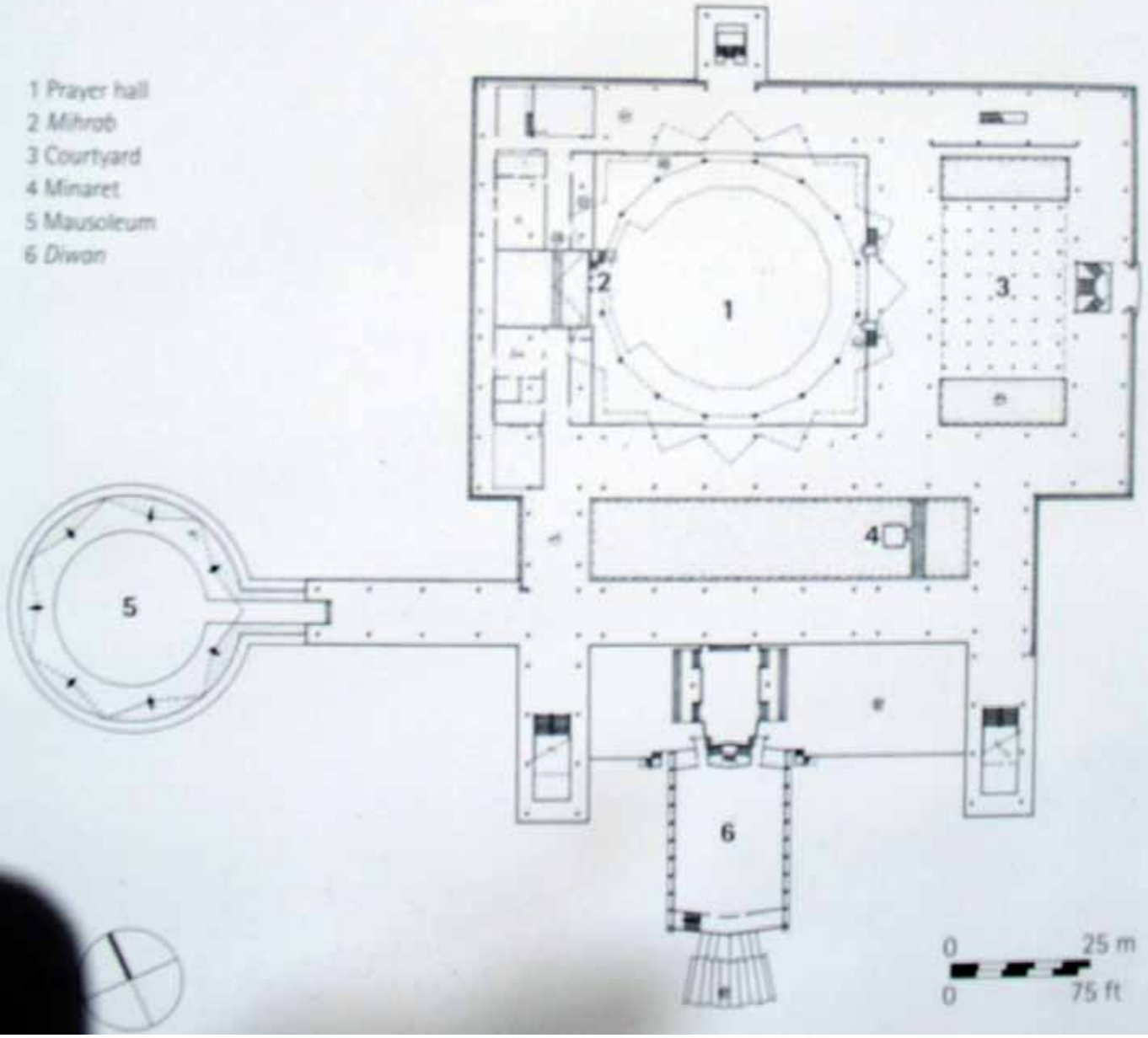




The Masjid Negara (National Mosque; 1957–65), Kuala Lumpur, capital of the Malaysian Federation. Designed by Baharuddin Abu Kassim, this was the first example of a state mosque to be completed in a newly independent Muslim nation. The building is notable for its Ottoman-like minaret set in a pool (above) and its tile-covered folded concrete-plate roof (right), recalling the parasol, a traditional emblem of Malay royalty.

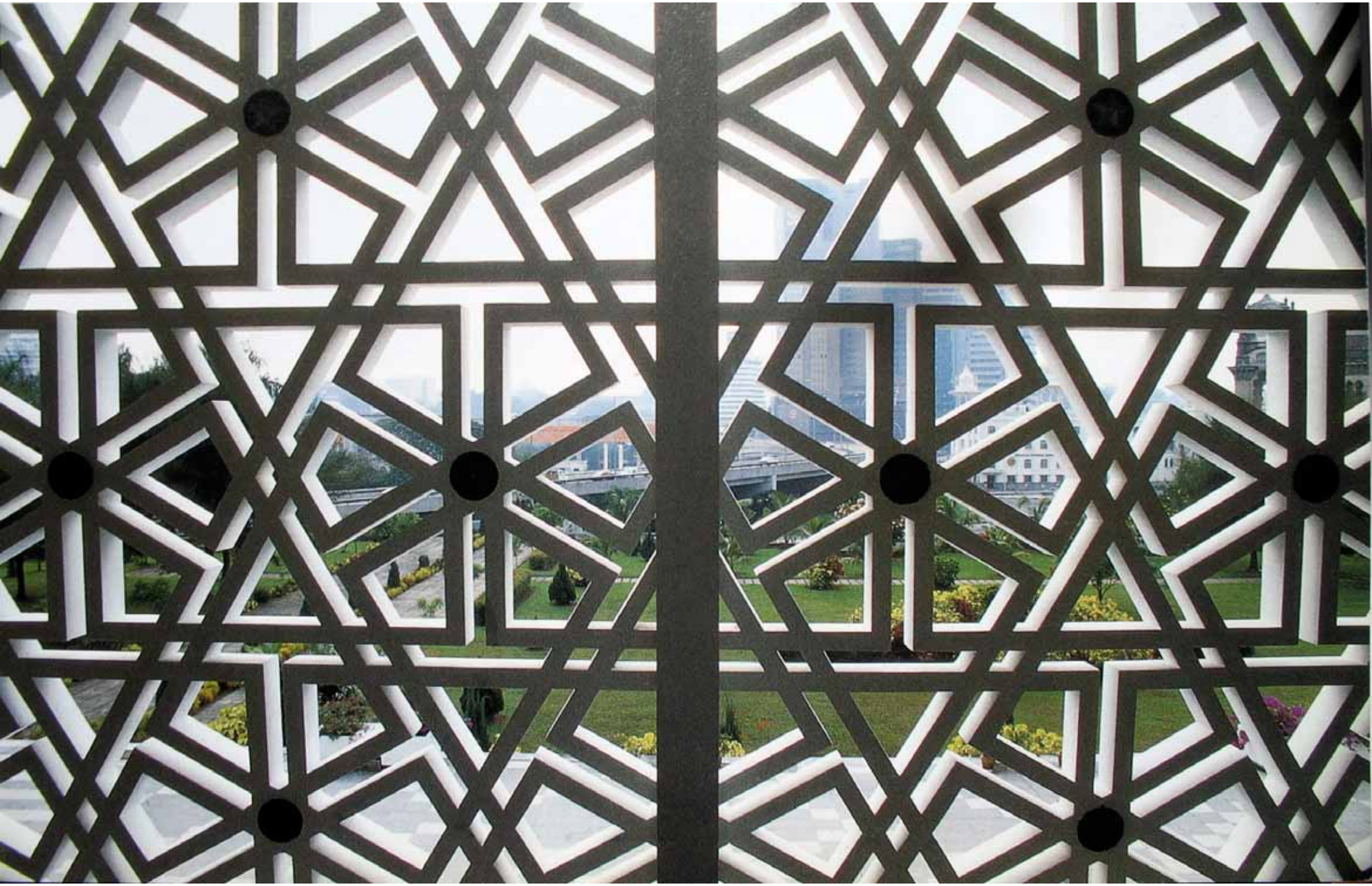
Elevation and first-floor plan of the Masjid Negara, showing the dodecahedral prayer hall; the circular pavilion to the left is the mausoleum reserved for national heroes.

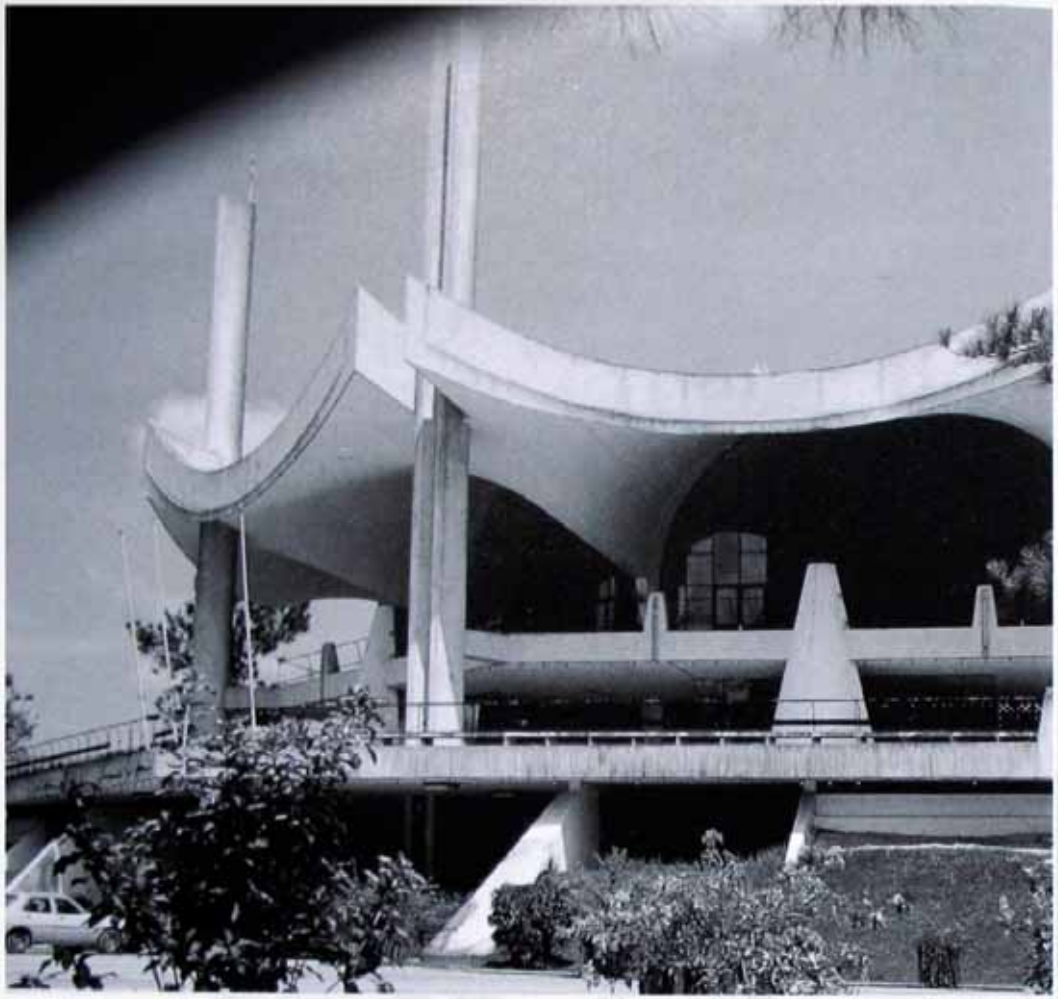


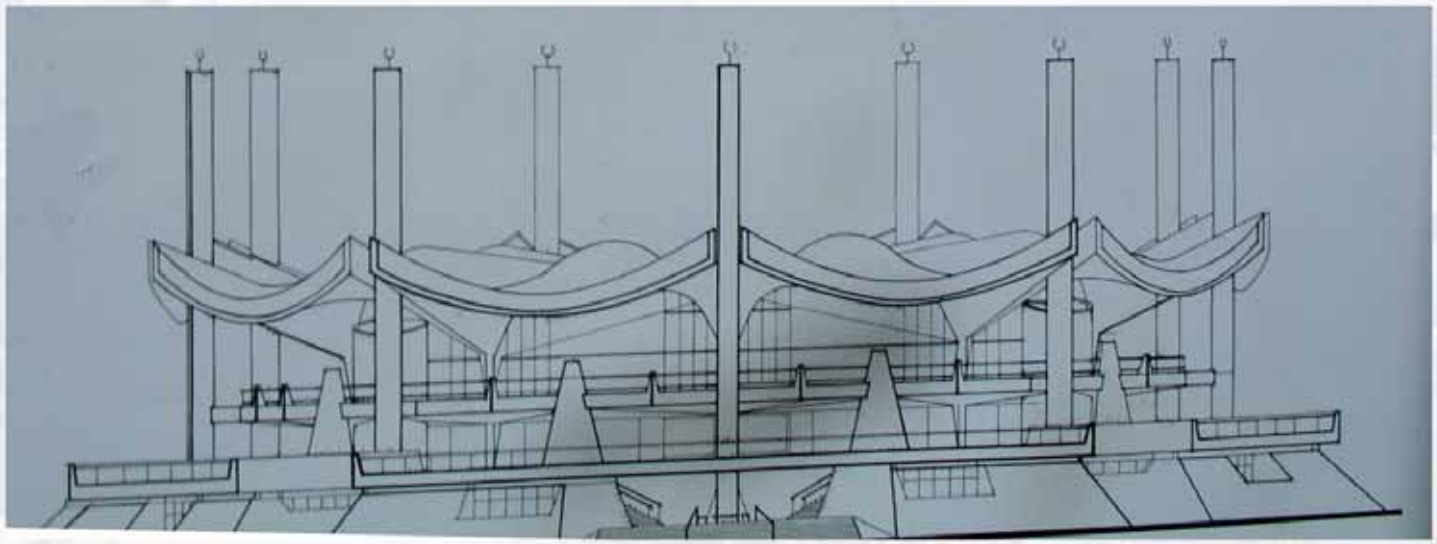


1 Prayer hall
2 *Mihrab*
3 Courtyard
4 Minaret
5 Mausoleum
6 *Diwan*

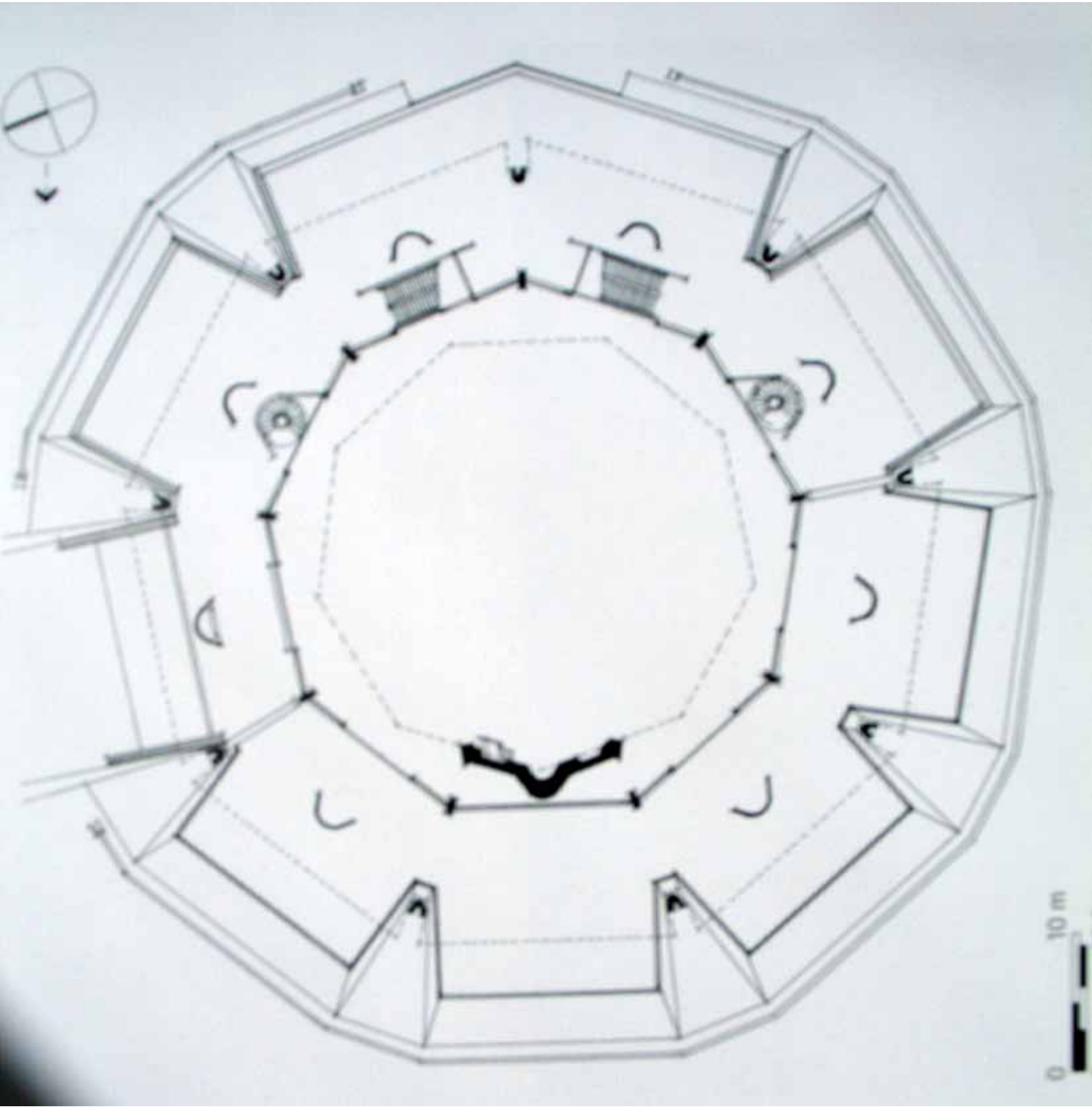
Masjid Negara, Kuala Lumpur, Malaysia

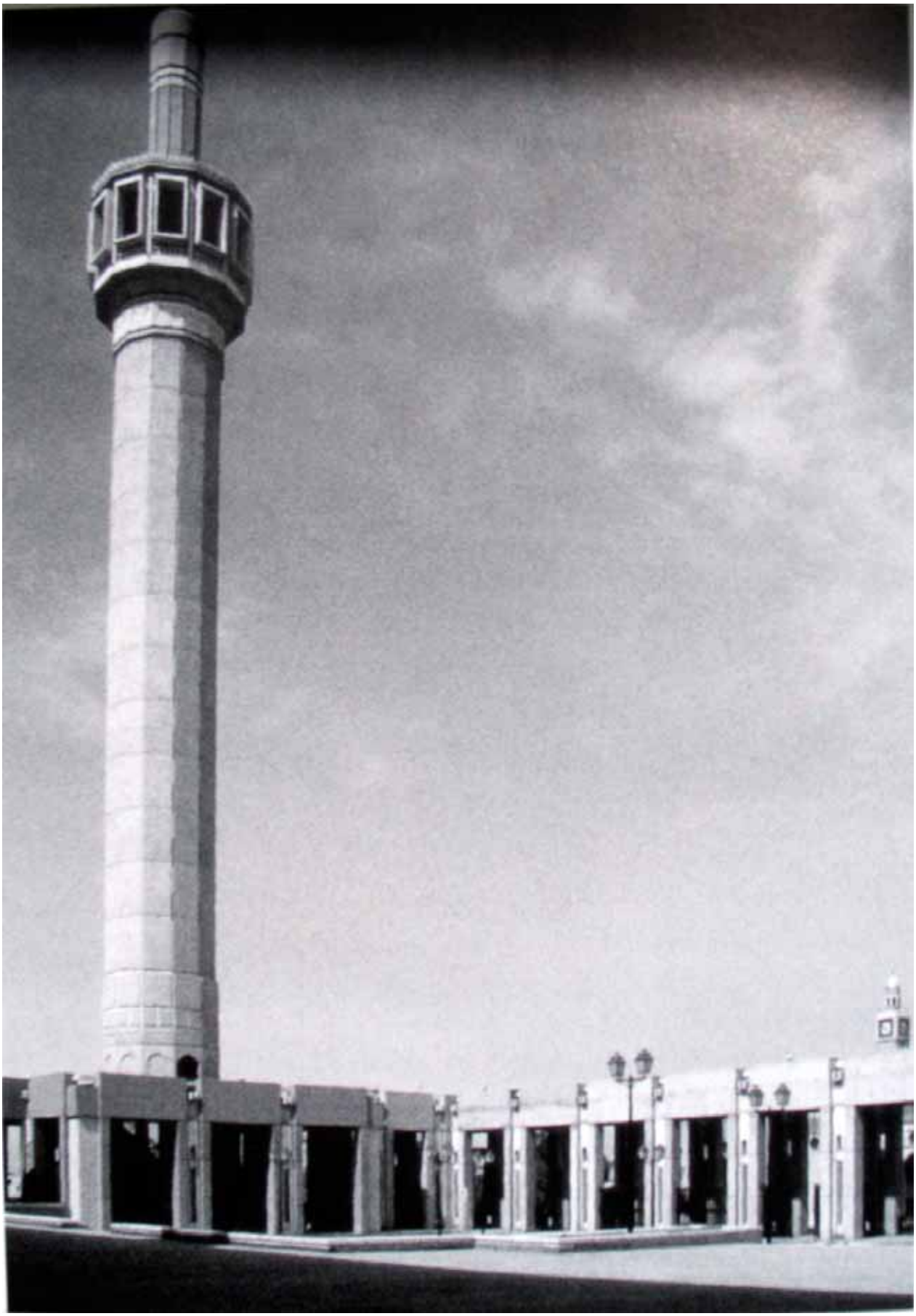


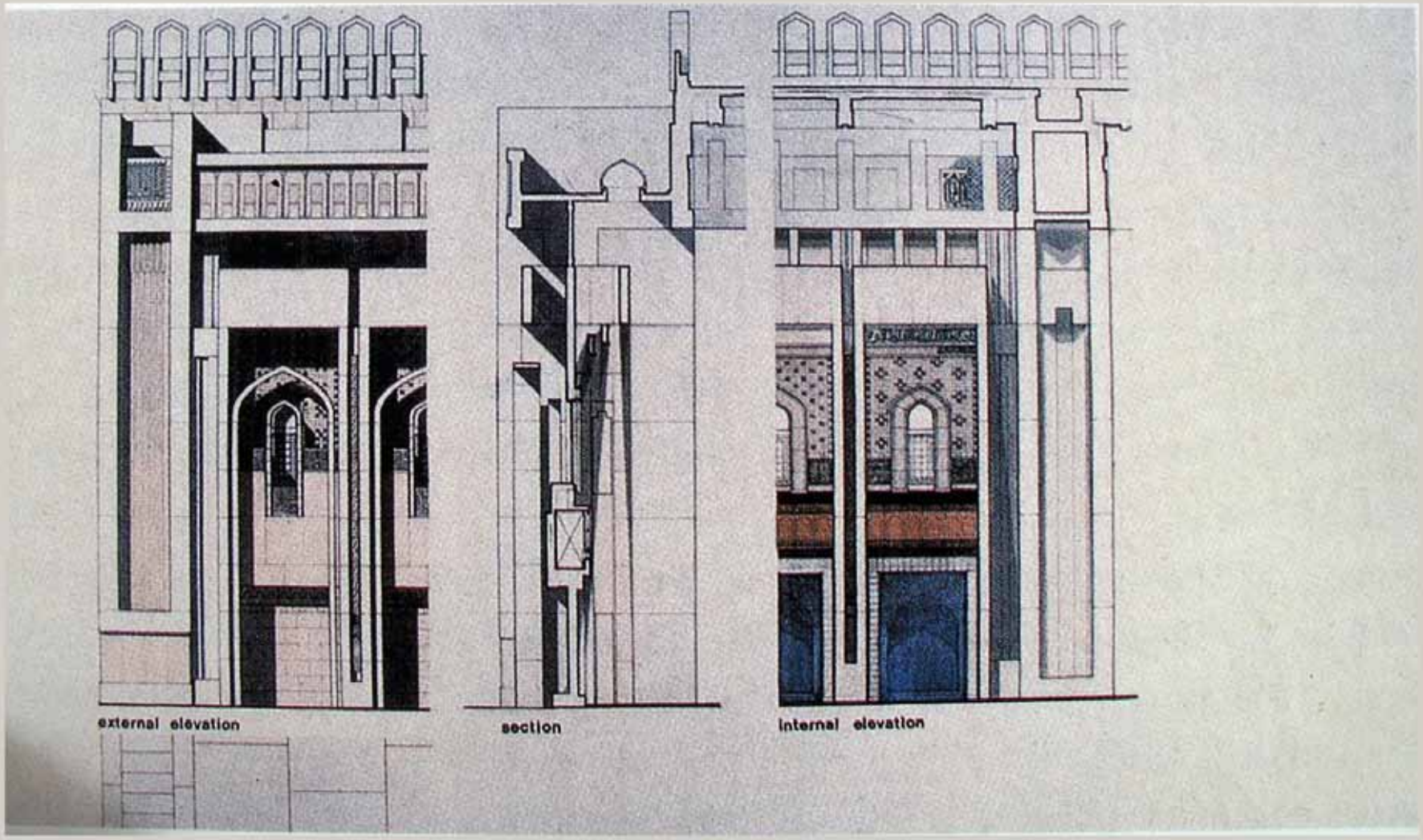




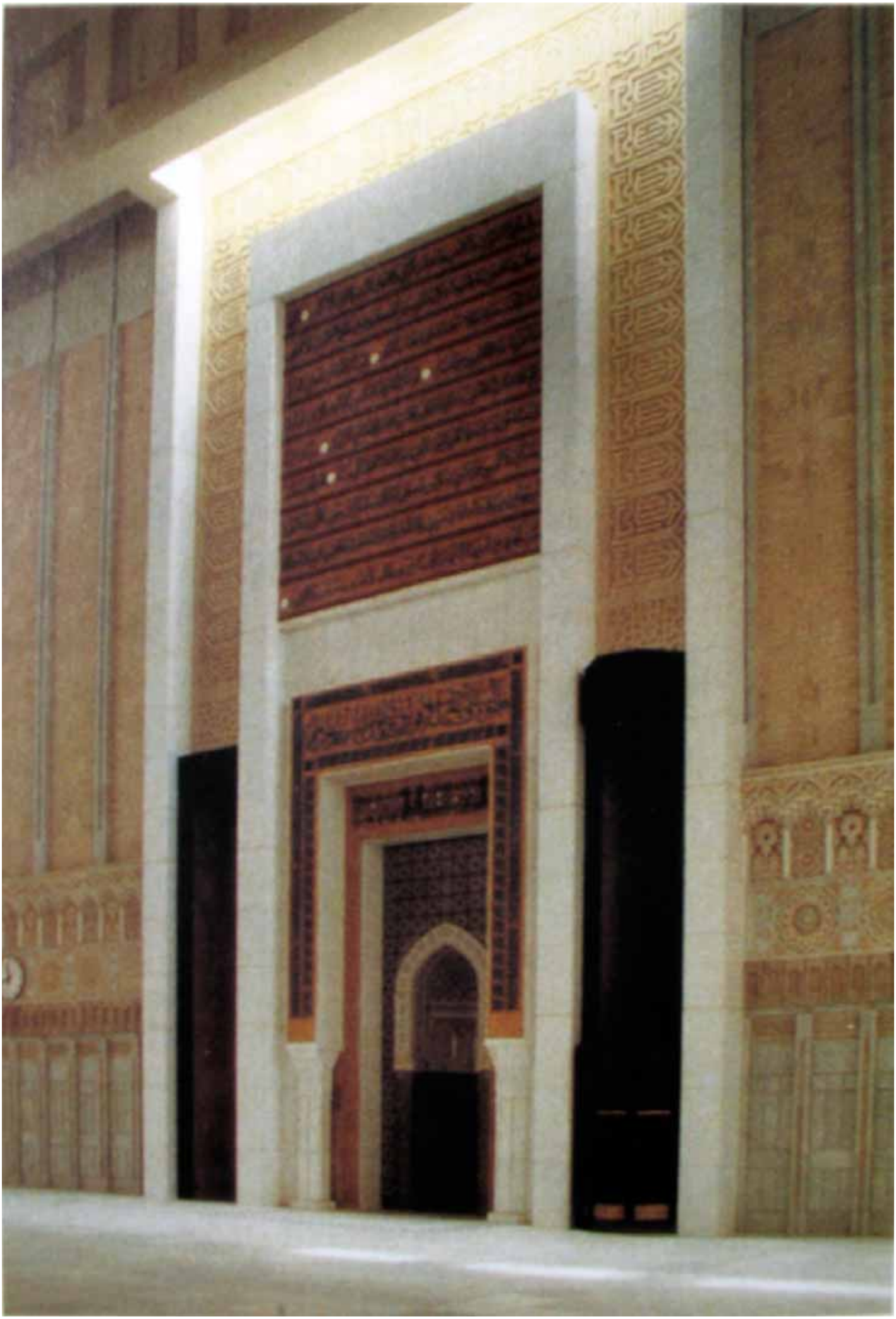
The nine-sided Negeri Sembilan State Mosque (1967) also features the use of the parasol form; the regular polygon has a roof comprising nine sections and has a minaret at each corner. The building is placed on a raised podium, as seen in the east elevation (right).

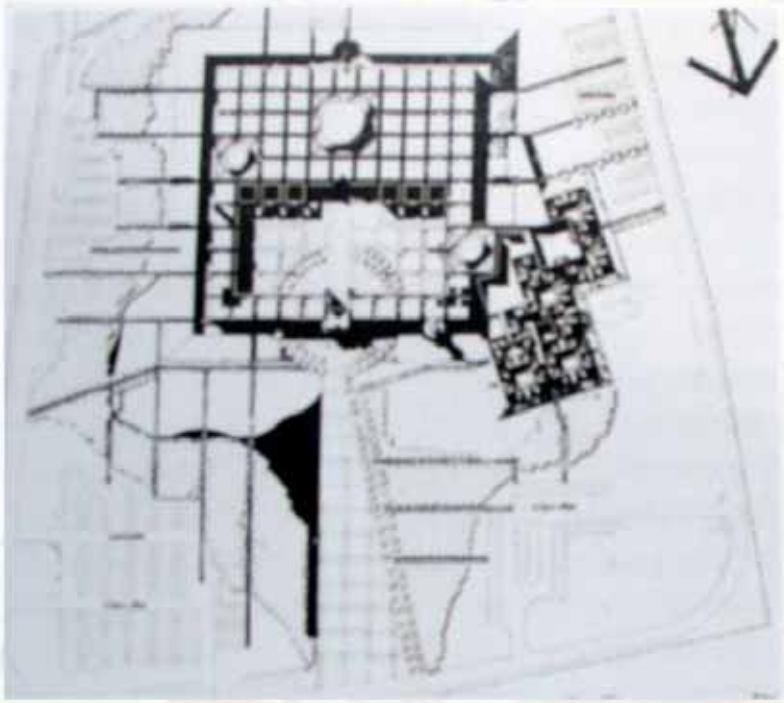

0
10 m

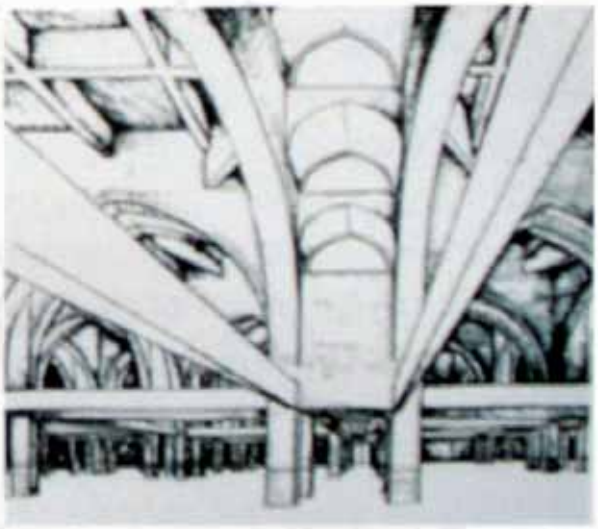




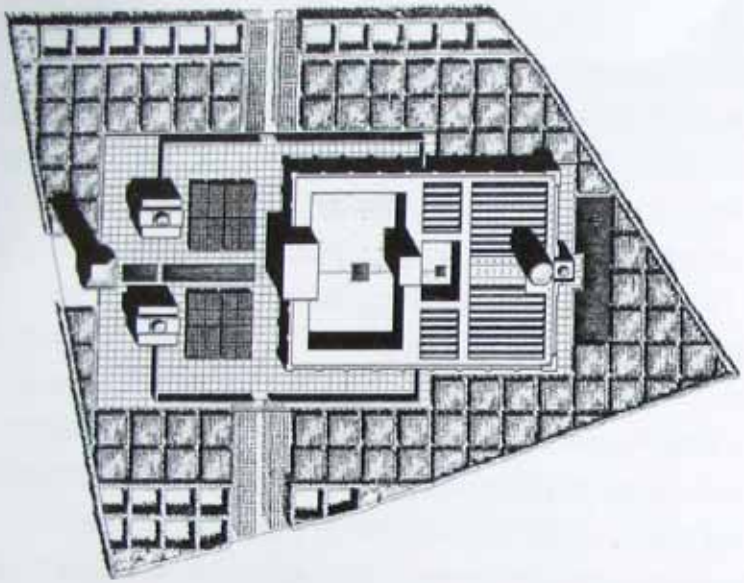
Great Mosque, Kuwait City, Kuwait

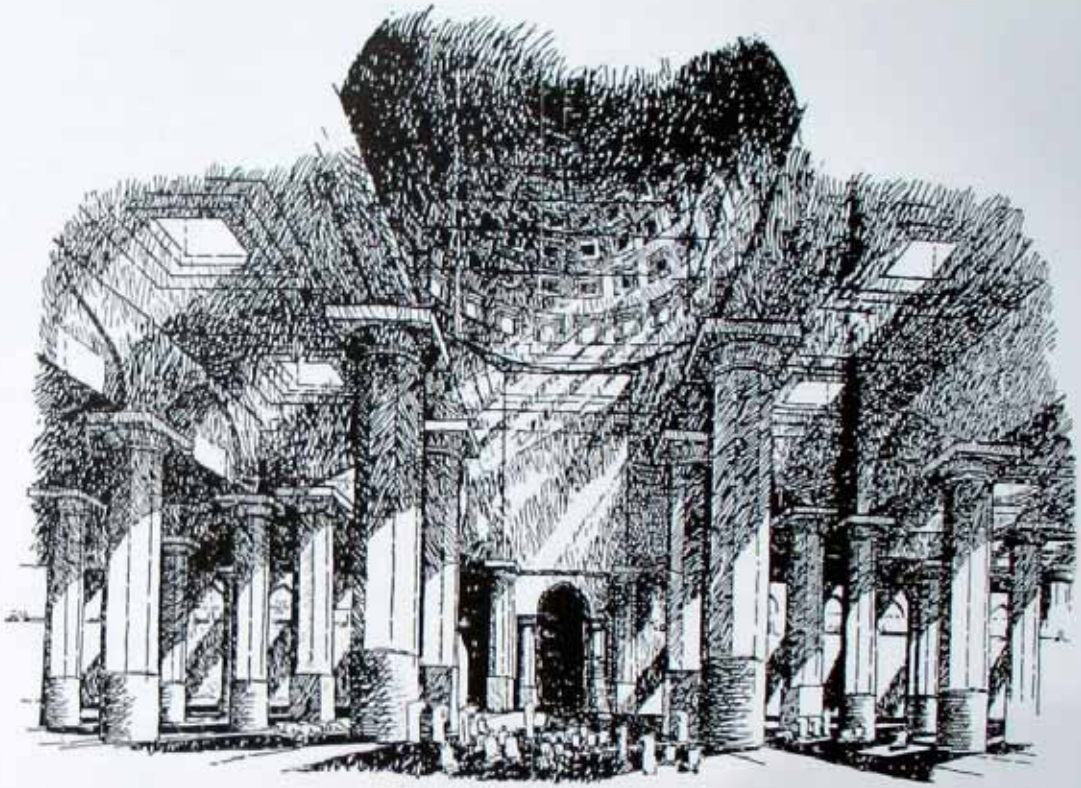




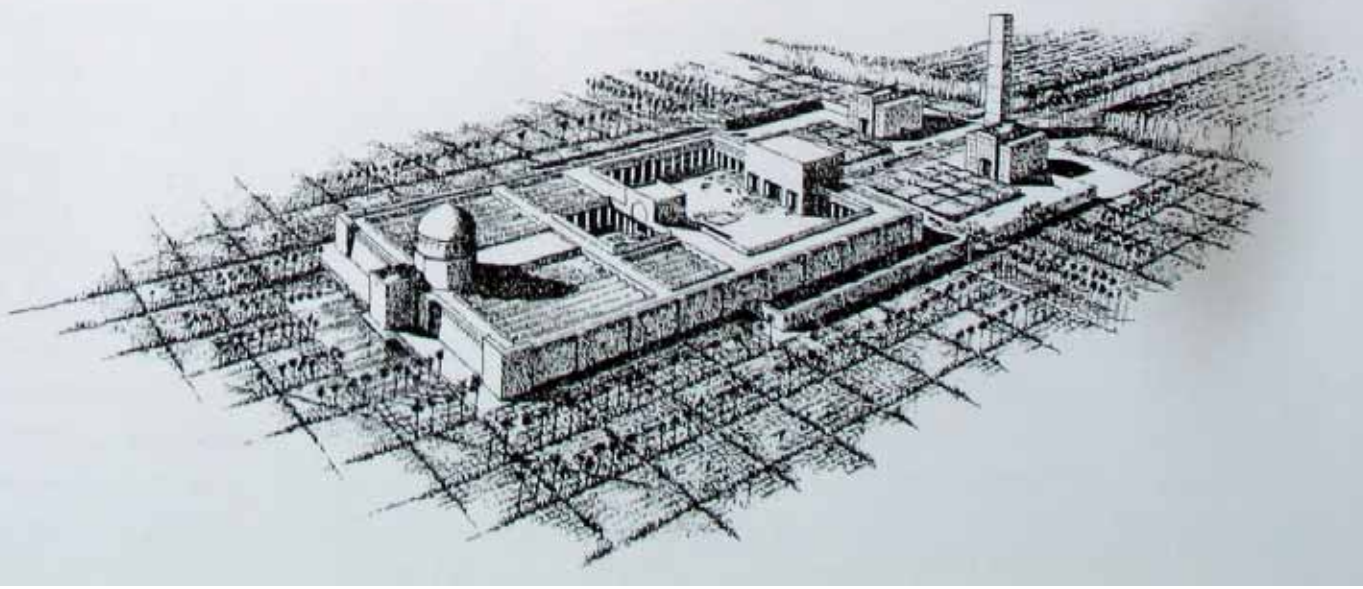


The winning scheme by Rasem Badran consists of a brick structure comprising a traditional rectangular hypostyle hall, domes and minarets, and courtyard with surrounding porticoes. The buildings stand on a raised platform, beneath which all the ancillary services are located.

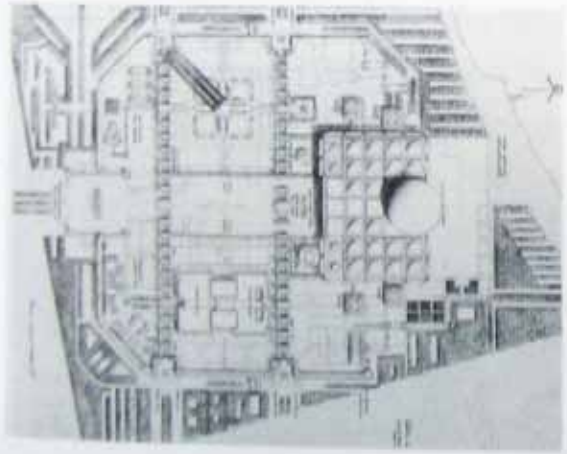




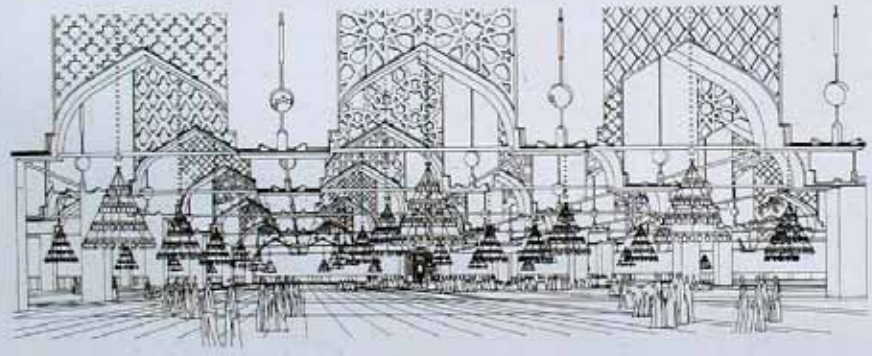
Ricardo Bofill's entry emphasizes regularity and symmetry; the vast prayer hall is set within gardens laid out in grid form. The single tall minaret, set on the main axis, acts as a marker for the mosque site. The prayer hall with massive columns consists of uniform bays lit by small openings in the roof.

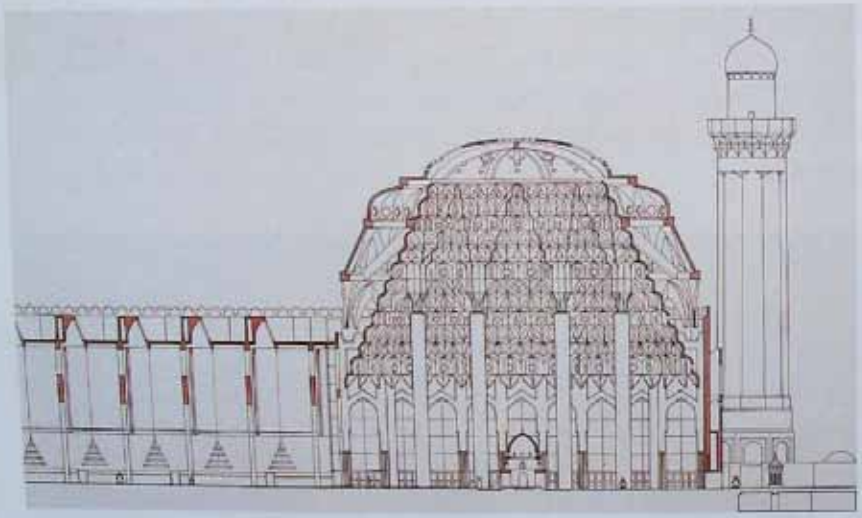


Mohamed Makiya's design features the tallest minaret (intended to serve as an observation tower) and a prayer hall surmounted by the grandest Safavid-style dome, all set within a scheme of modular units in formal gardens.



0 100 m
0 300 ft





Robert Venturi's design is also based on a scheme inspired by the traditional hypostyle hall; here the interior space is measured in bays which no longer need support from below but hang as decorated screens parallel to the *qibla* wall. The courtyard with its small domed pavilion is shaded by a giant *muqarnas* parasol. The overall project, featuring a single freestanding minaret, has been carefully detailed to be read on an urban scale and then on a much reduced human scale within the complex itself.

express monumentality in architecture as well as human scale; in which the spatial layout is unequivocally egalitarian; and where symbolic elements such as arcades, ornament, dome, *muqarnas*, crenellations and minaret have clear and acceptable referents'.[56] From these basic premises, he has developed a design programme in which form and ornamentation operate on two levels: thus, the design seeks to produce easily recognizable and readable symbols, while toying with expectations and illusion in a provocative manner. This tendency is evident in his treatment of the hypostyle hall, the domes and the inscription programme.

For his development of the main hypostyle hall, Venturi focused on the same key historical models as those used by the other architects, but chose the Mosque of Ibn Tulun in Cairo as his inspiration for ordering the vast interior space. The repetition of the long screens of arches, each one with a band of calligraphic inscriptions, was the compelling image he transformed and elaborated on the necessarily vast scale of the new mosque. No longer constrained by structural limitations such as the need to support the arches with piers, he chooses to suspend the screens from the ceiling and thus free the floor. In order to relieve the vastness of the resulting open space, rows of low candelabras were planned. The bright colour and oversized scale of the calligraphy are revealed in their essence on the *mihrab*, which is treated as a flat-framed arch. A fenestrated dome of modest proportions admits light to the space in front of the *mihrab*, and marks its location in the *qibla* wall when viewed from outside.[58]

The specifications for a separate daily prayer hall and a hall for women allowed the architect to place them on either side of a great court which would also accommodate the overflow of worshippers on special holidays. It was the size of the resulting court and the fact that it would become a completely open, sun-lit space that engendered the idea of providing a shade or parasol for it. This, in turn, was a pretext for the inclusion in the complex of a design feature unique to the architecture of Islam – the *muqarnas*. The model for the proposed *muqarnas* parasol was not a single example, but a number of stone and plaster portals and domes, ranging from the Iman Dur mausoleum near Samarra in Iraq to the reconstructed *muqarnas* dome from Takht-i-Suleiman in Iran. The moulded and pierced double-shell canopy was to be raised on eight supports above the open space; it is important to note that while its circumference covered only the width of the rectangular courtyard, the ends of the longer sides were left open to the sky – another indication of the parasol nature of the 'dome'.[59]

Considering the prospect of the entrance façade seen from close up and from a distance helped to determine the height and exterior colour of the canopy. The chosen colour, blue, is echoed on the monumental front wall in a tiled band with an inscription in white Kufic script, lending a sense of sobriety to the ensemble. The landmark minaret, placed at the end of this wall, completes the exterior.

The housing and other facilities called for in the brief are treated by Venturi as urban appendages which depend and

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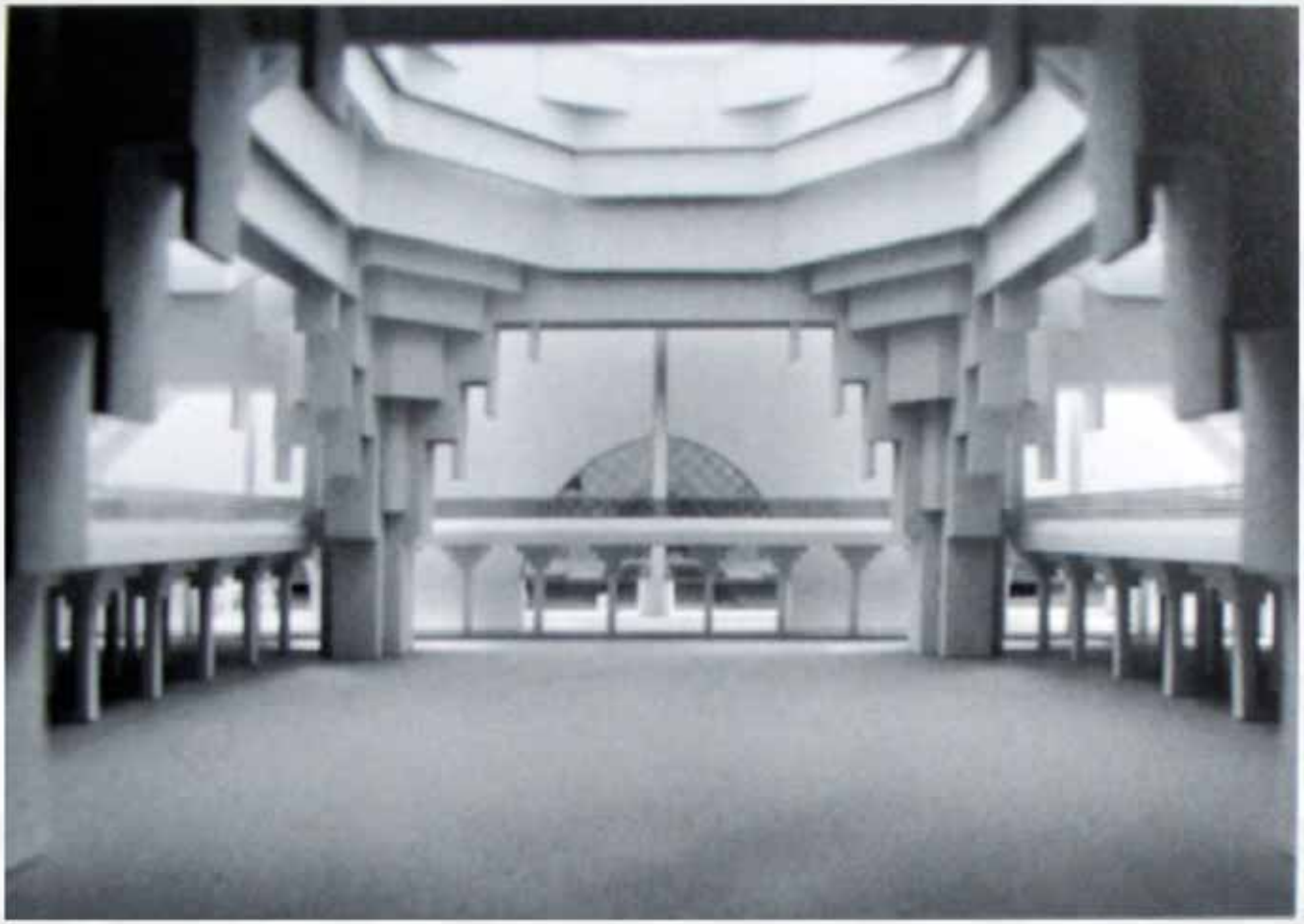
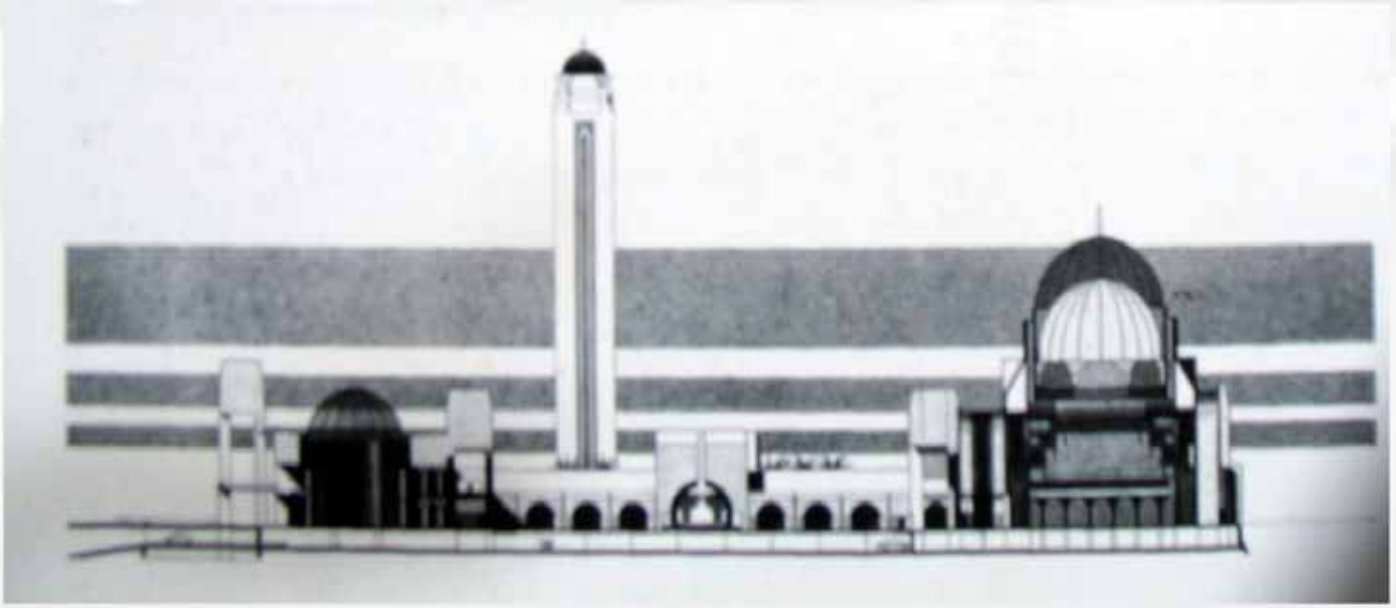
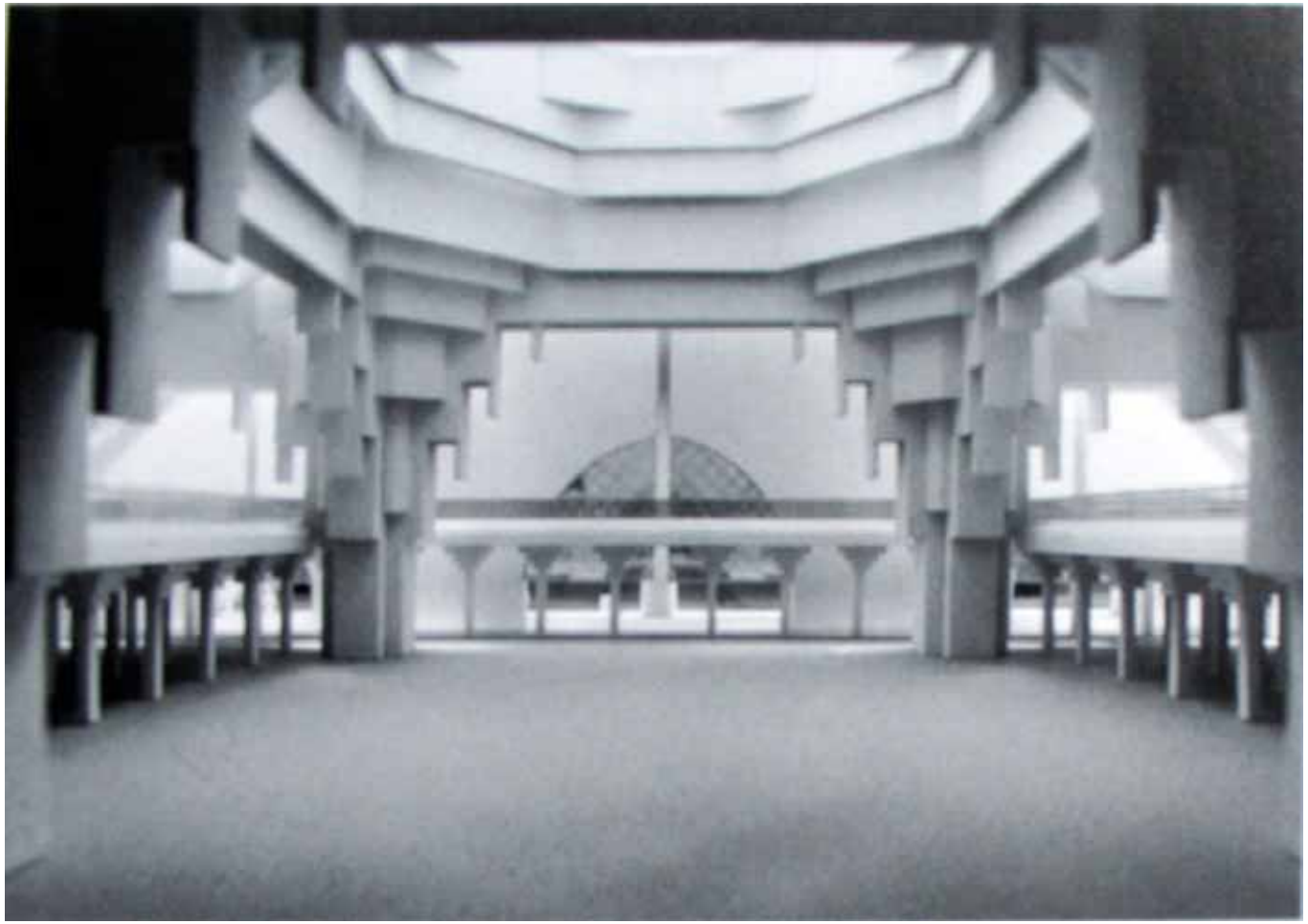
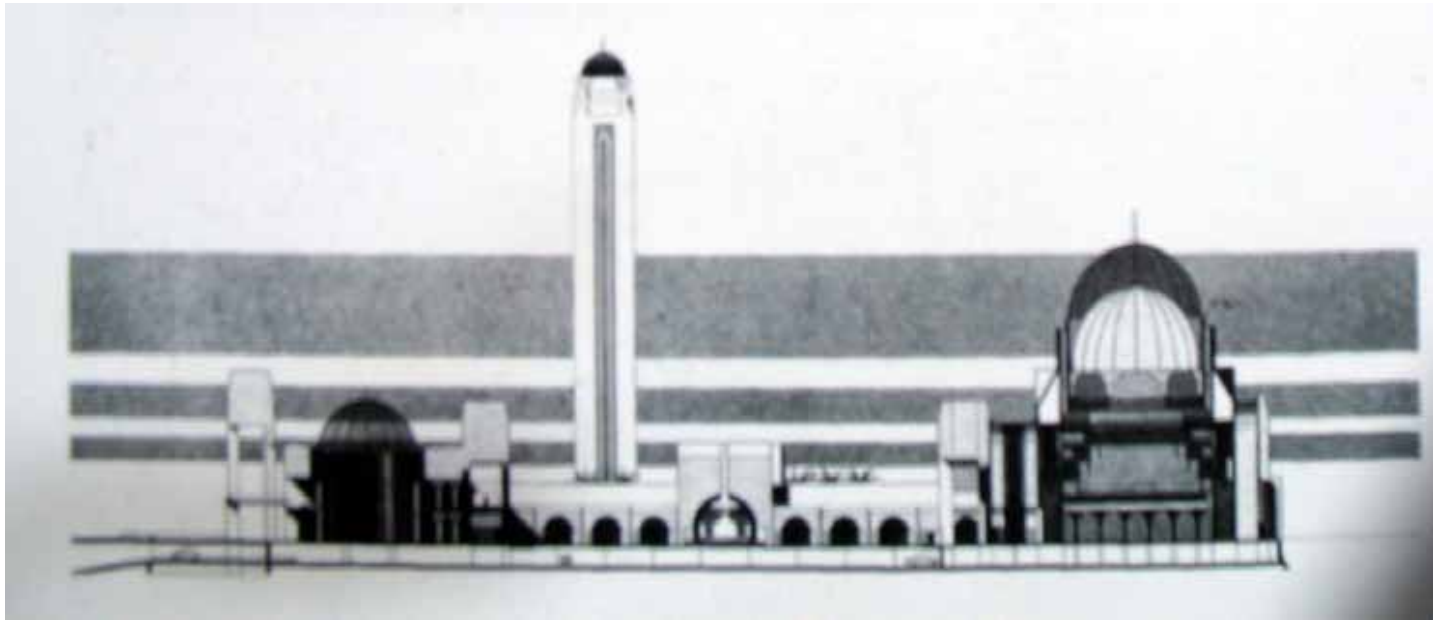
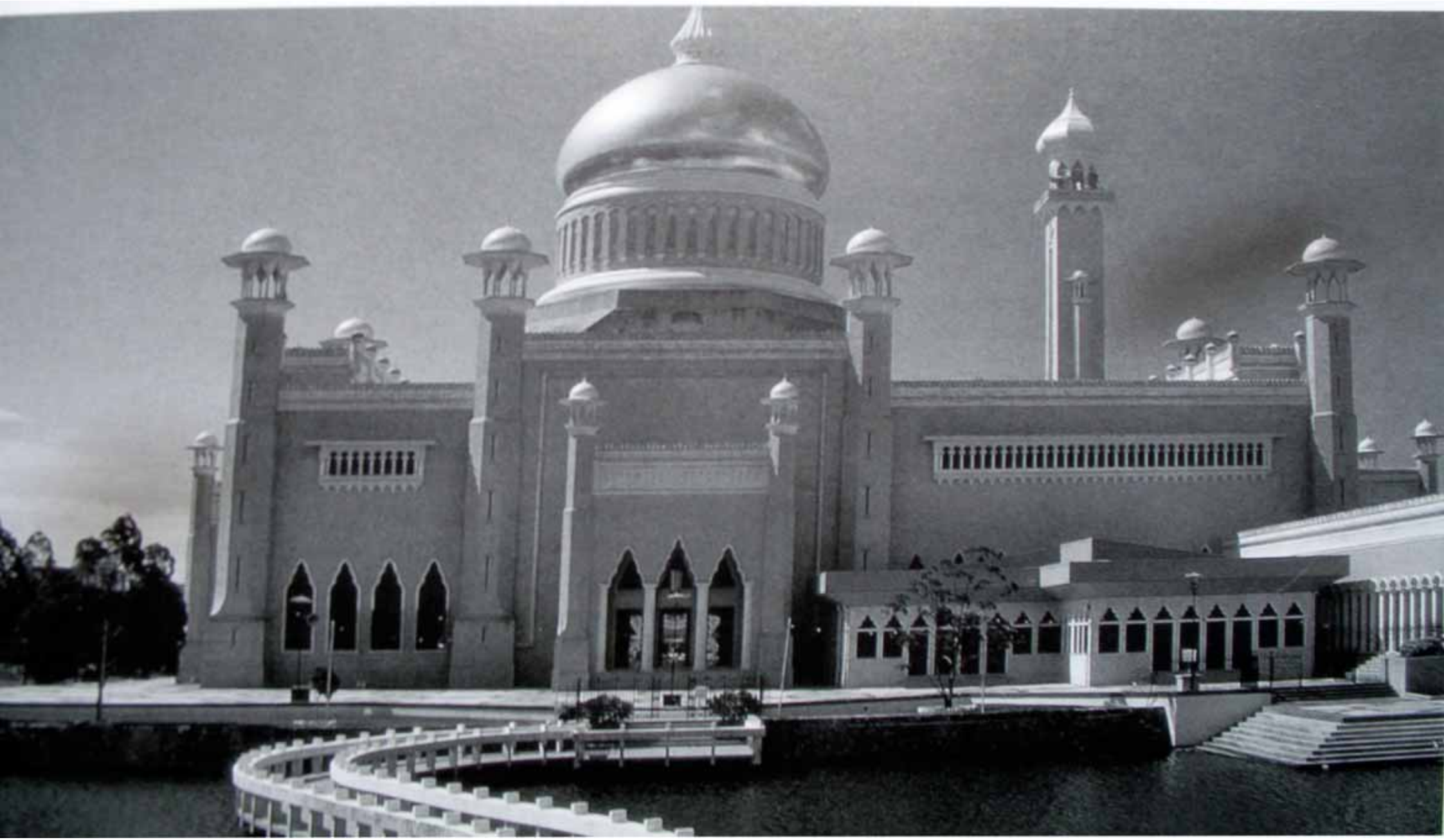
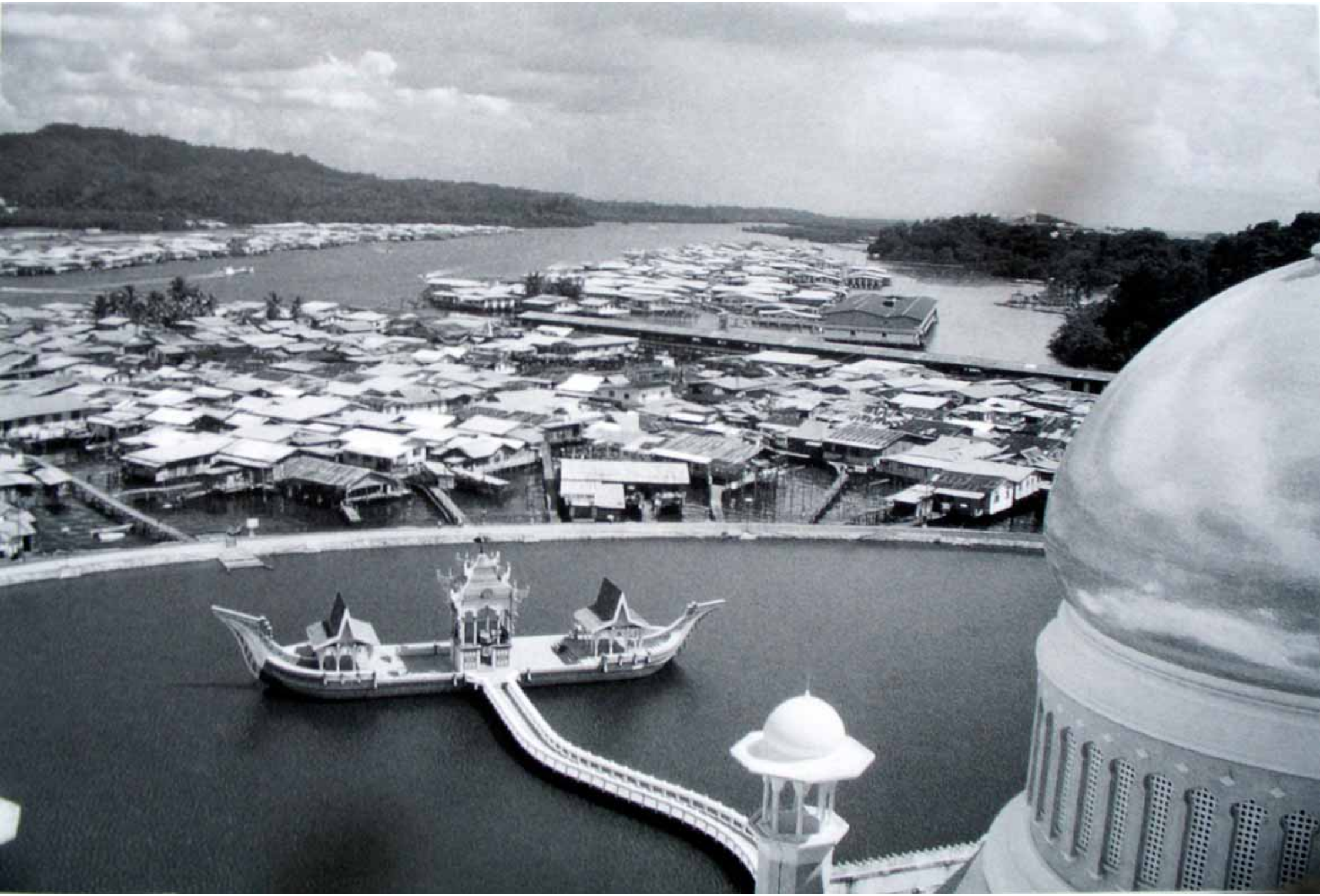


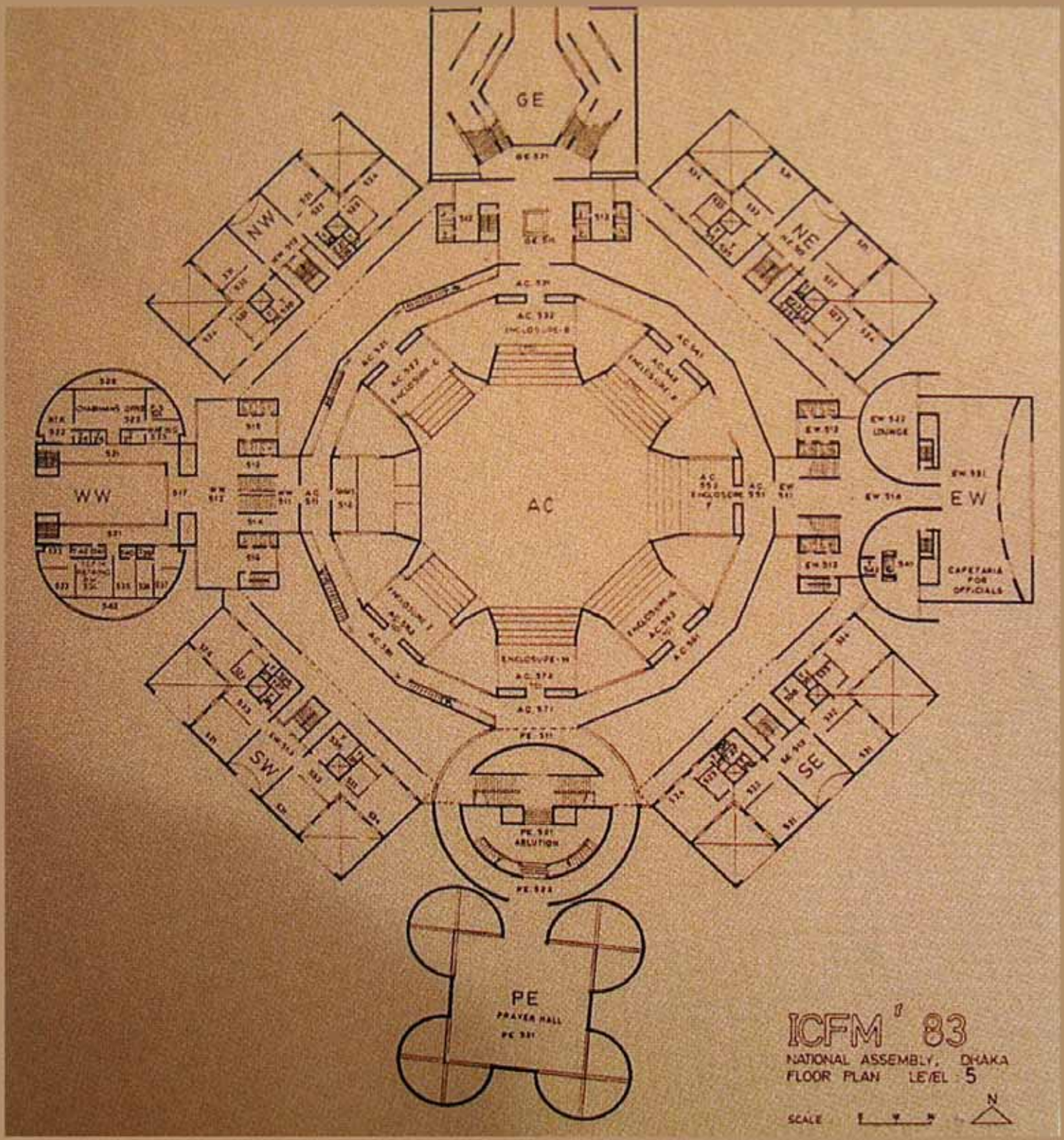




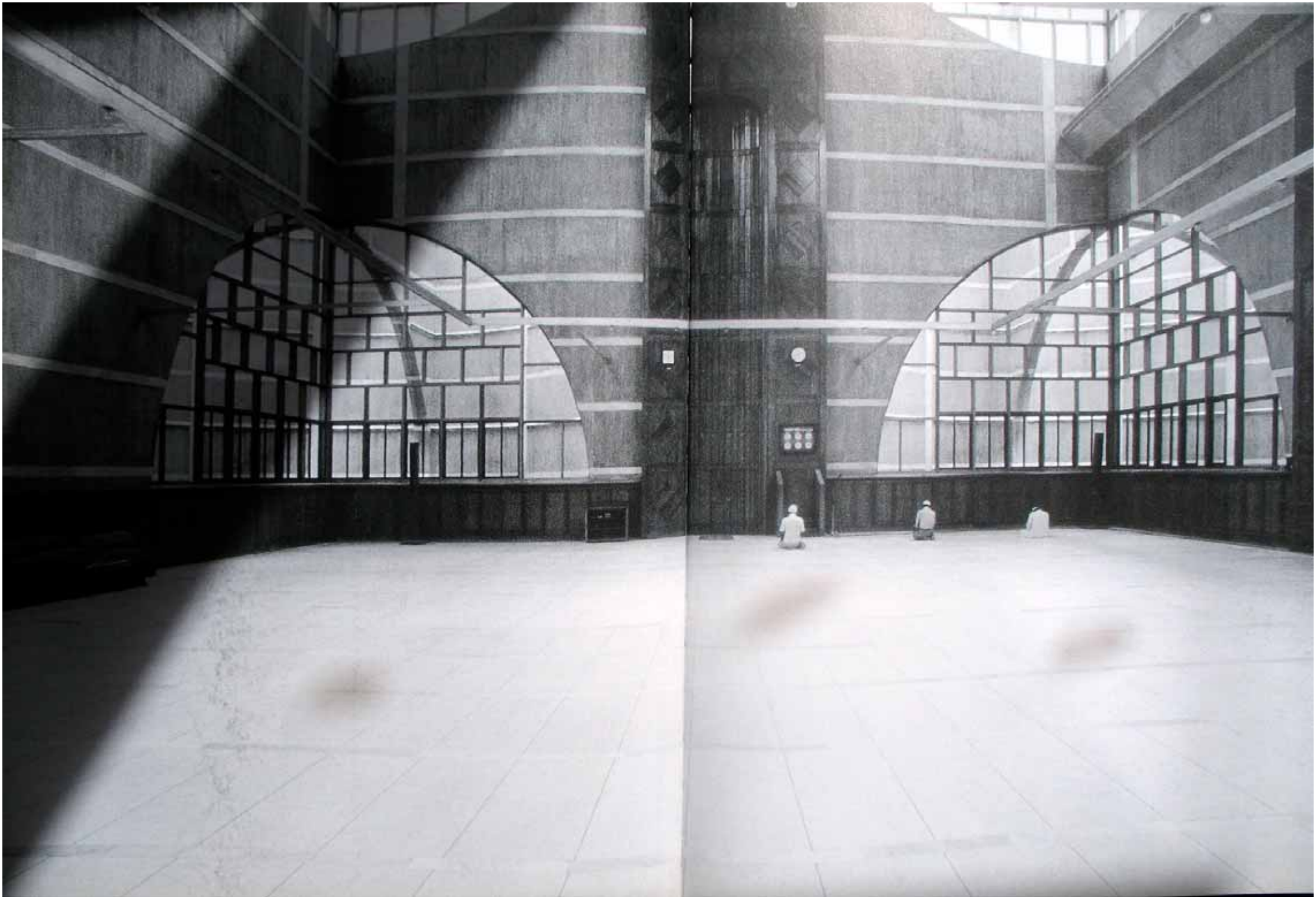


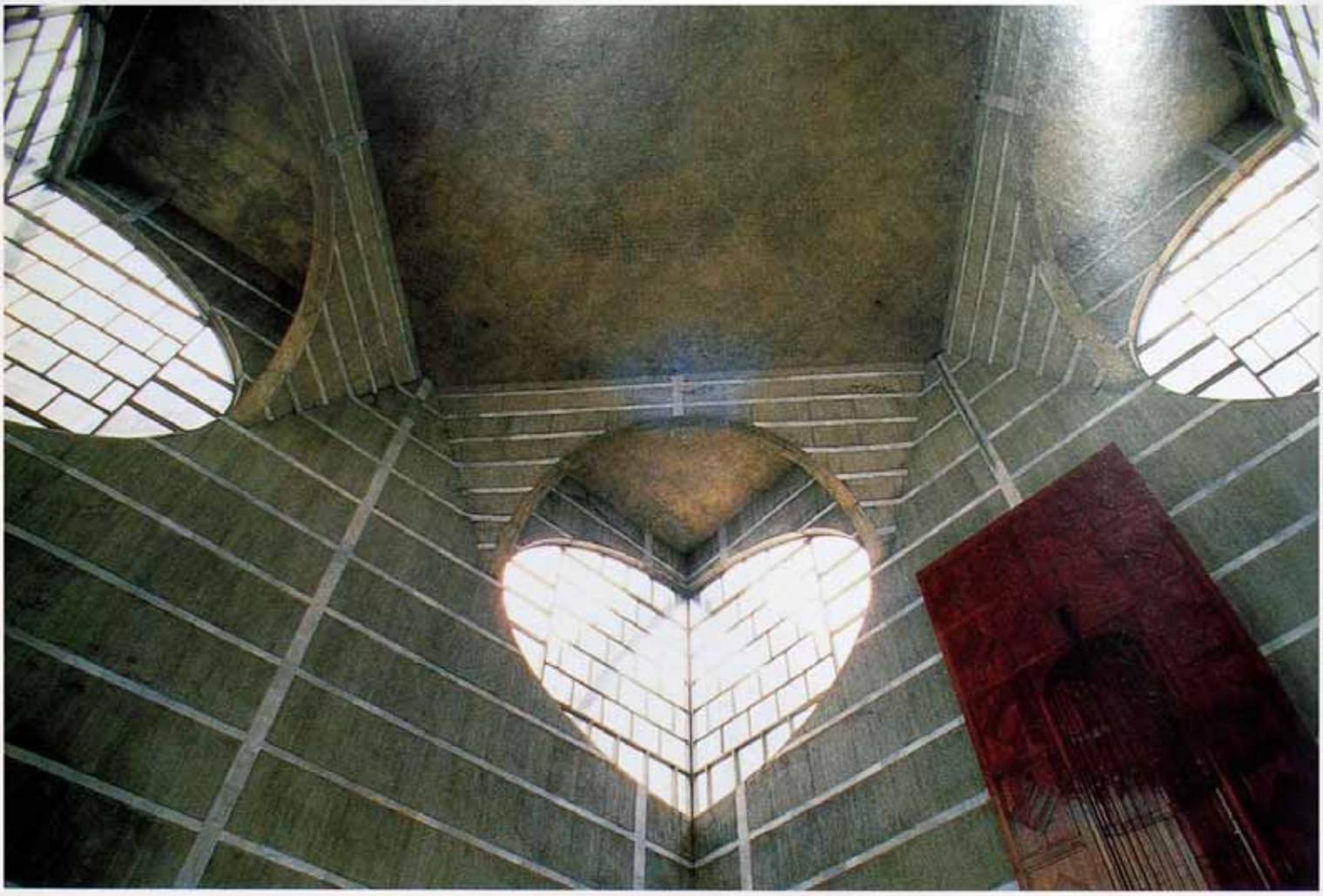


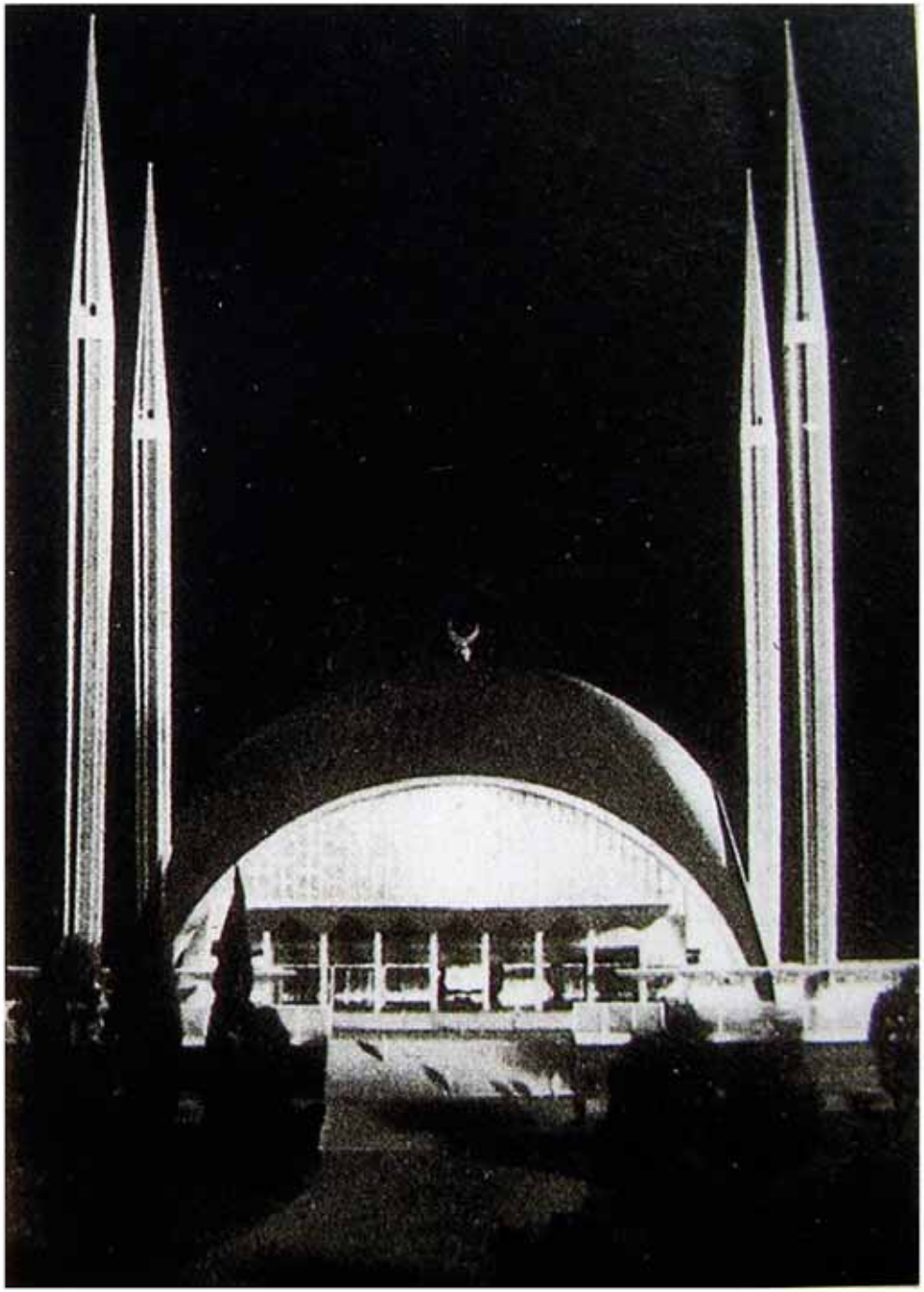


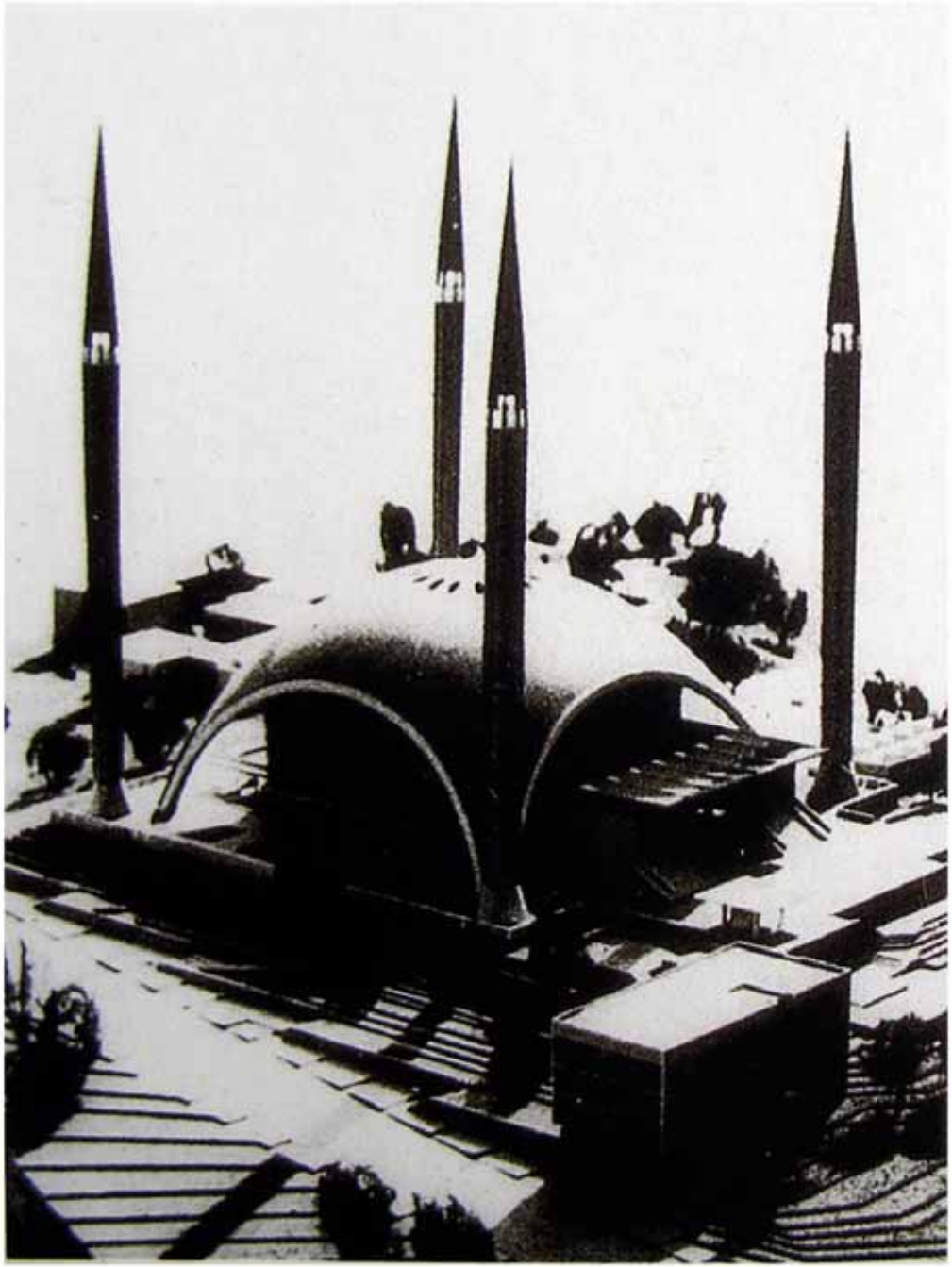


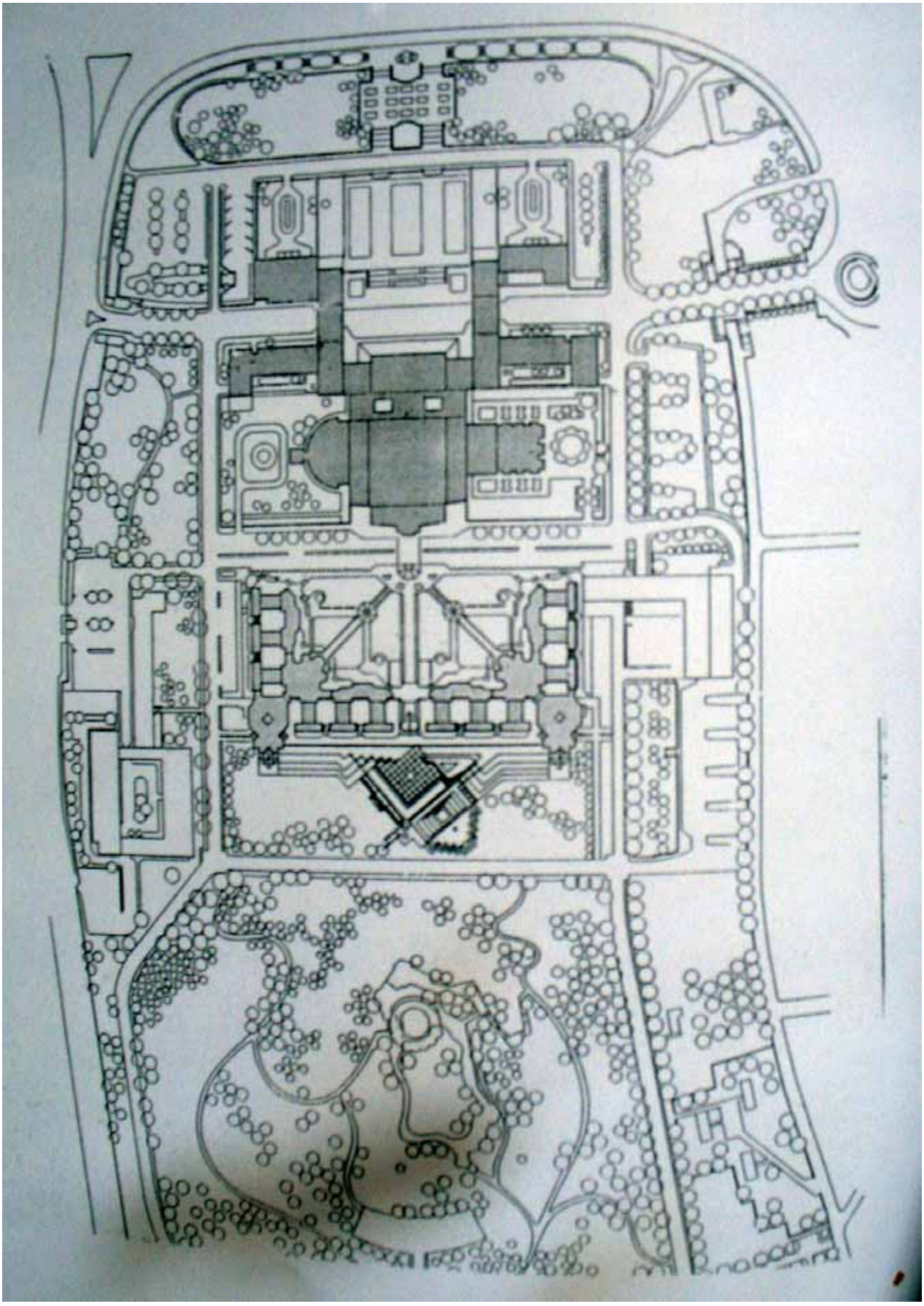
Capitol Complex Mosque, Dhaka, Bangladesh

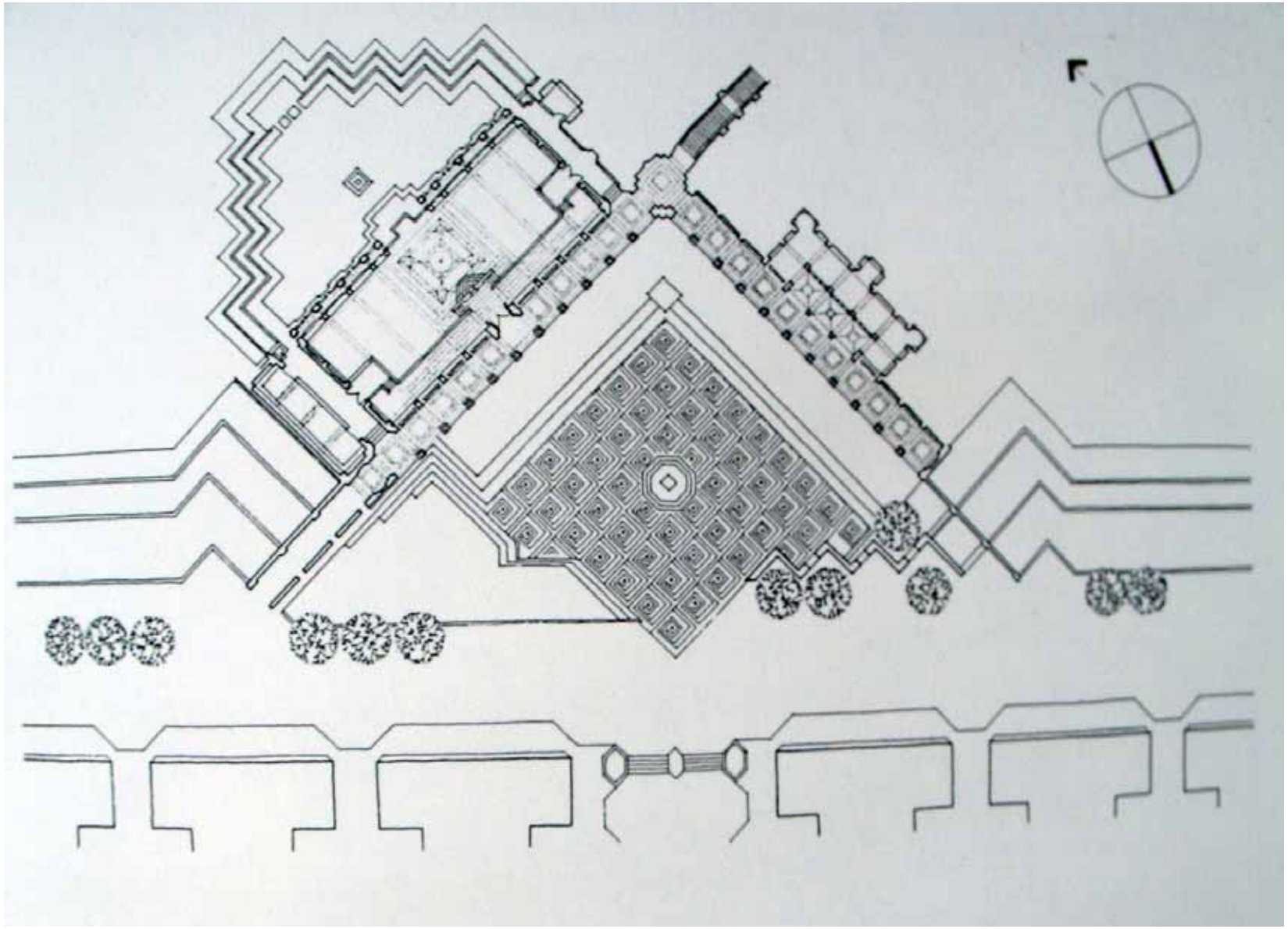


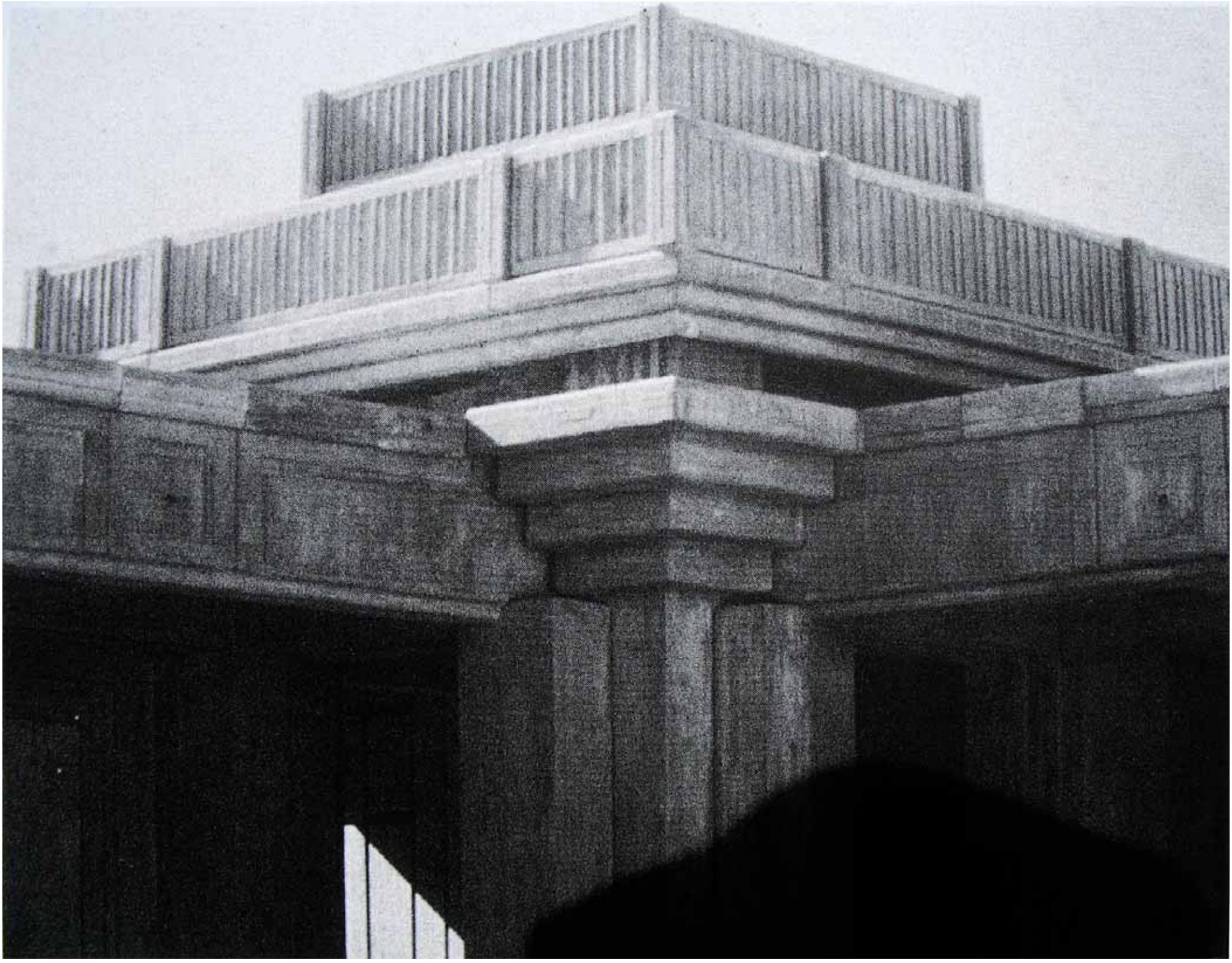


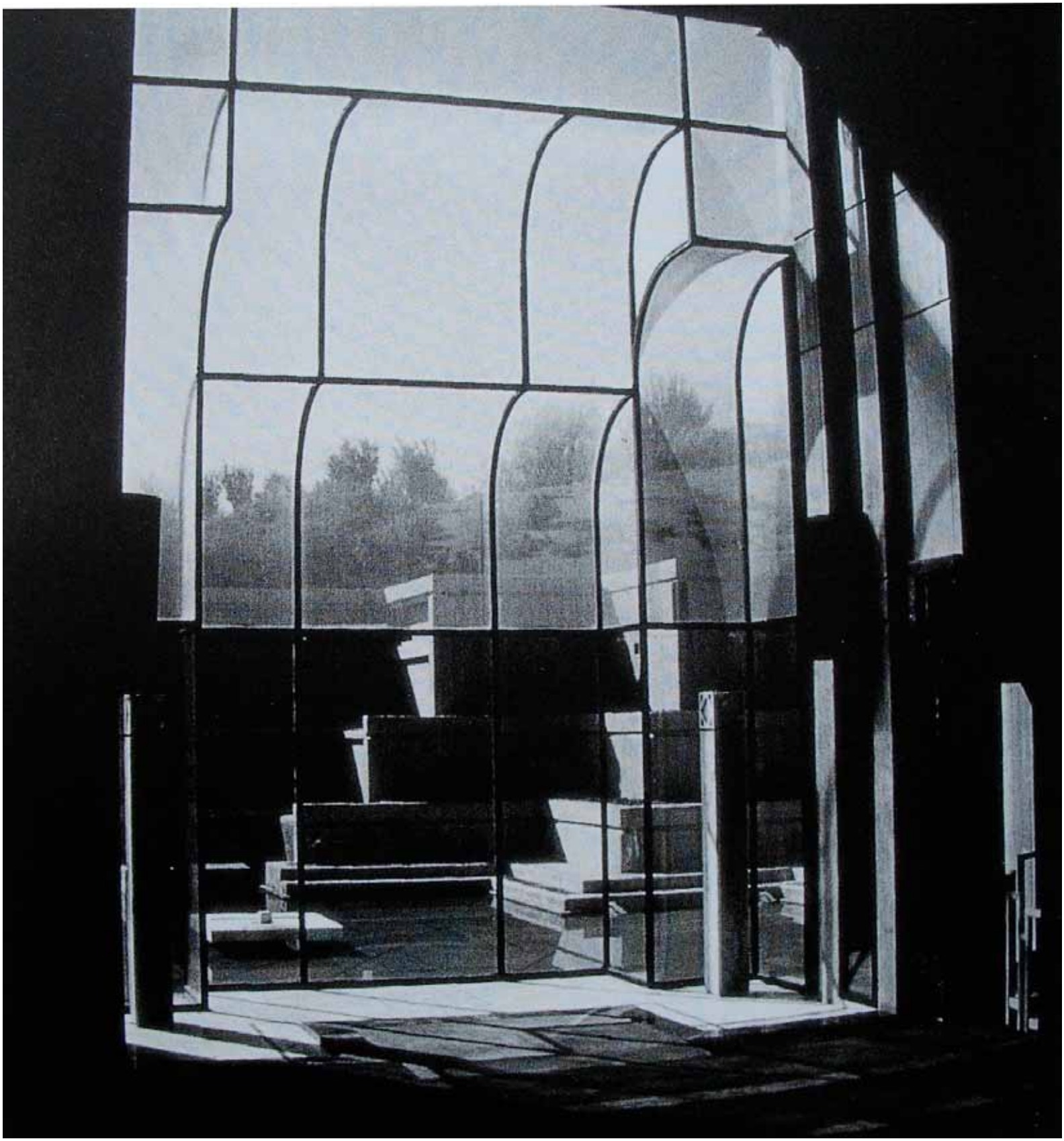








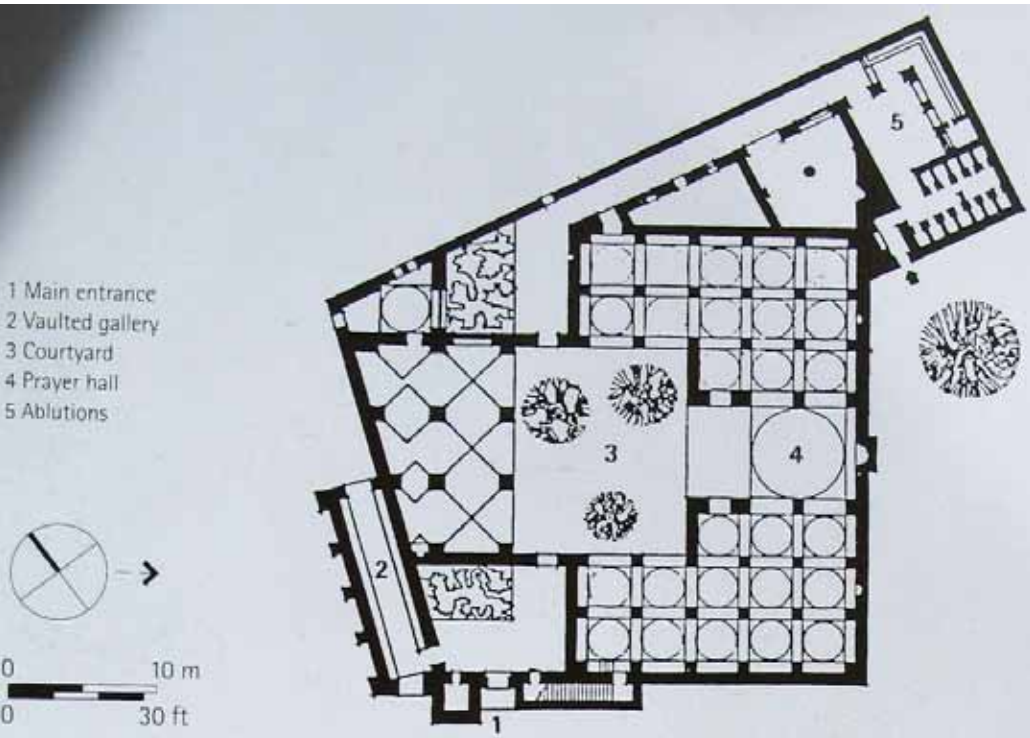


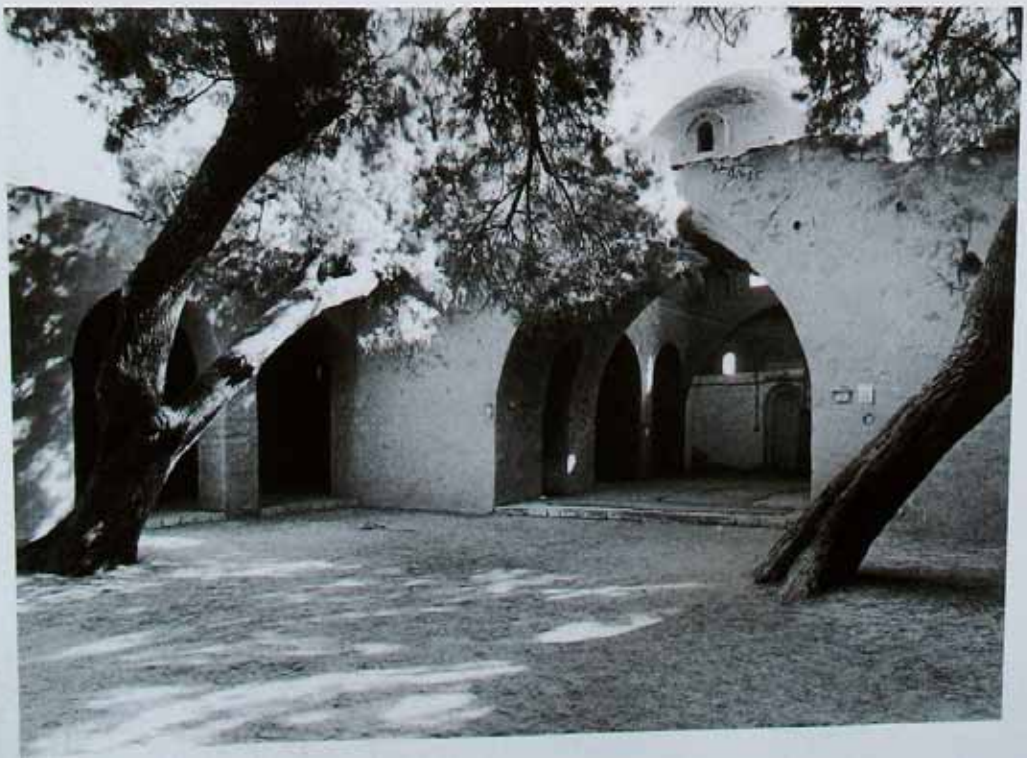


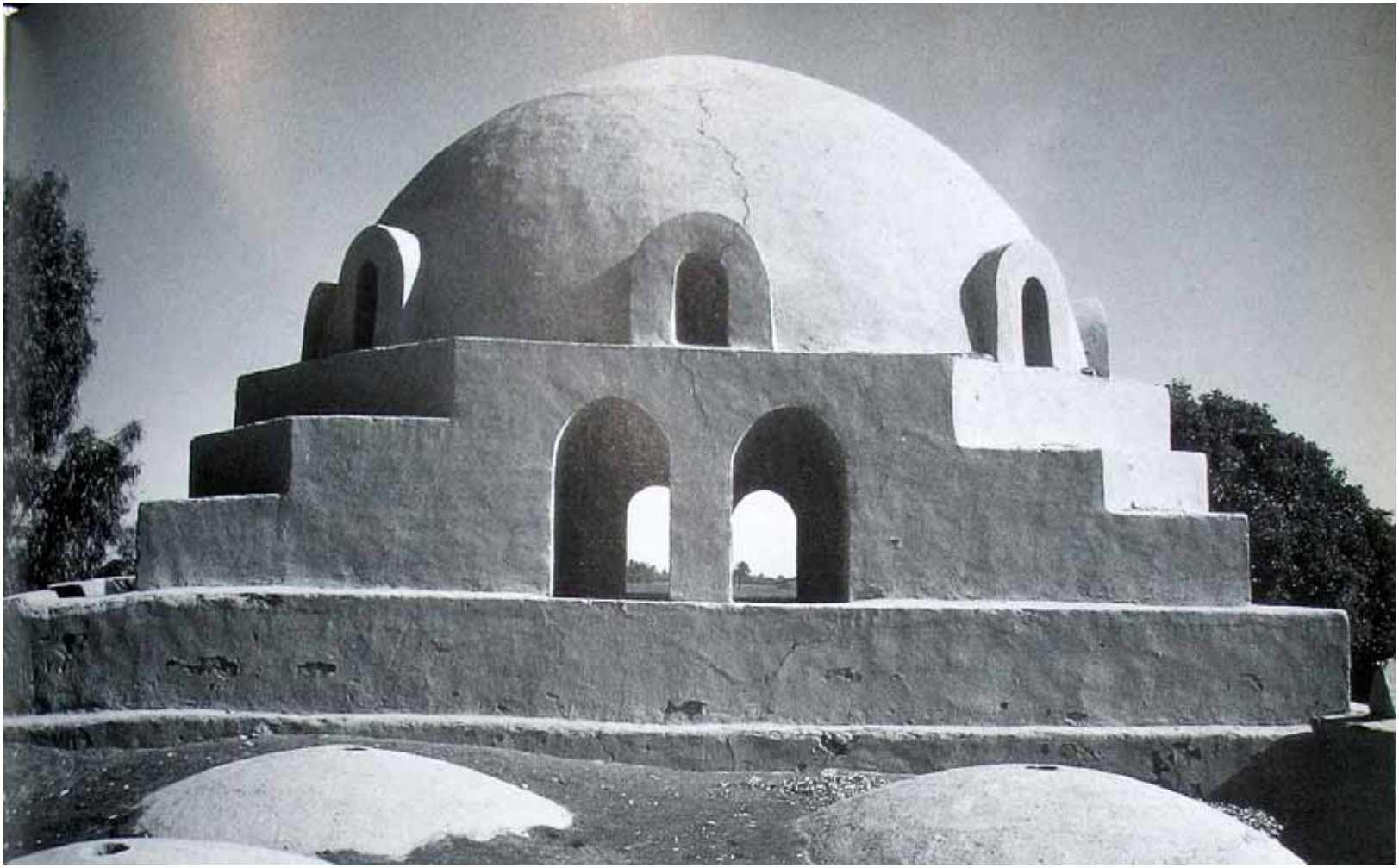
(Above) The underside of the bronze chandelier suspended from the dome of the Island Mosque (1986) on the Jeddah corniche, designed by Abdel Wahed El-Wakil (see p. 134).

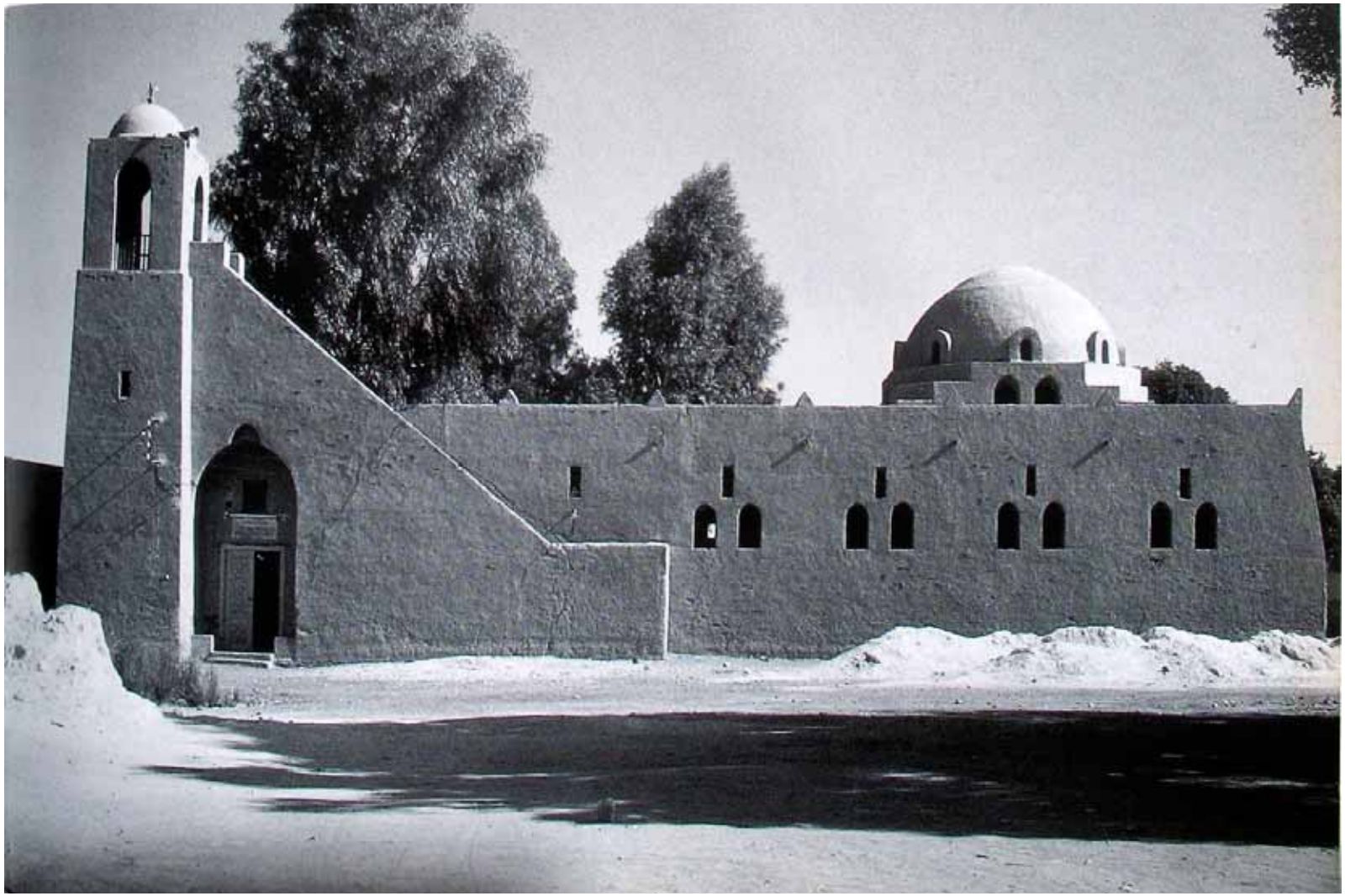
(Opposite) The courtyard of Al-Kindi Plaza Jami (1986), the mosque commissioned by the Riyadh Development Authority as part of its development of the city's Diplomatic Quarter (see p. 128).

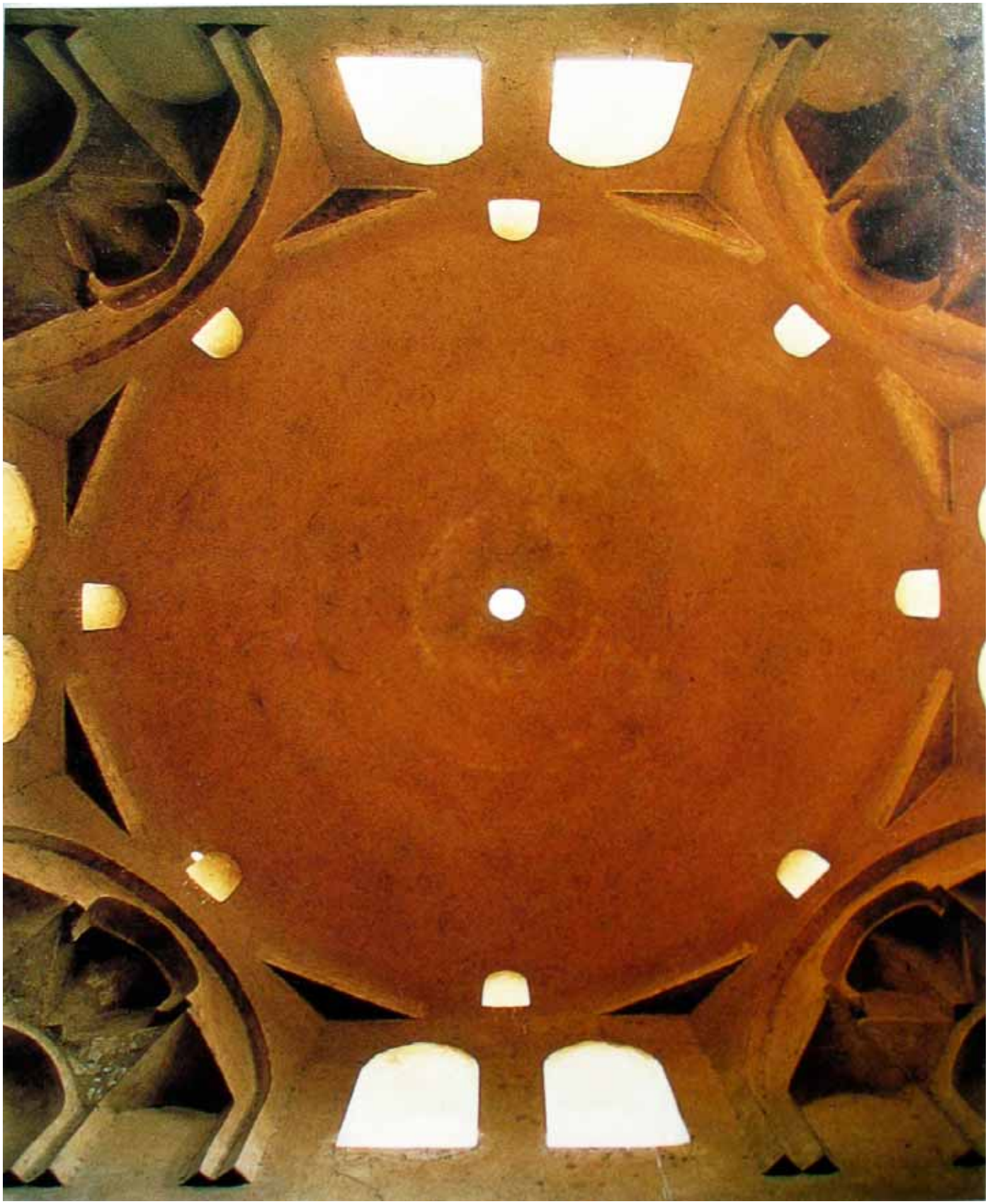
1 Main entrance
2 Vaulted gallery
3 Courtyard
4 Prayer hall
5 Ablutions



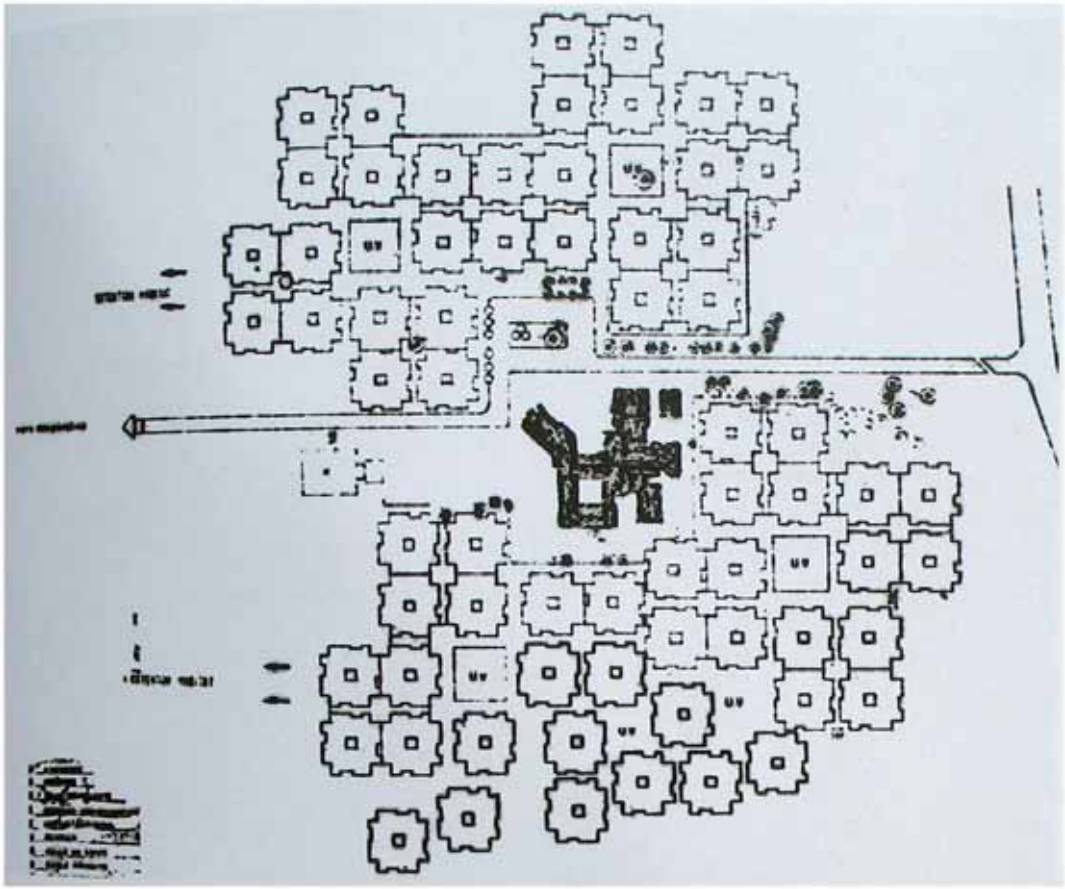




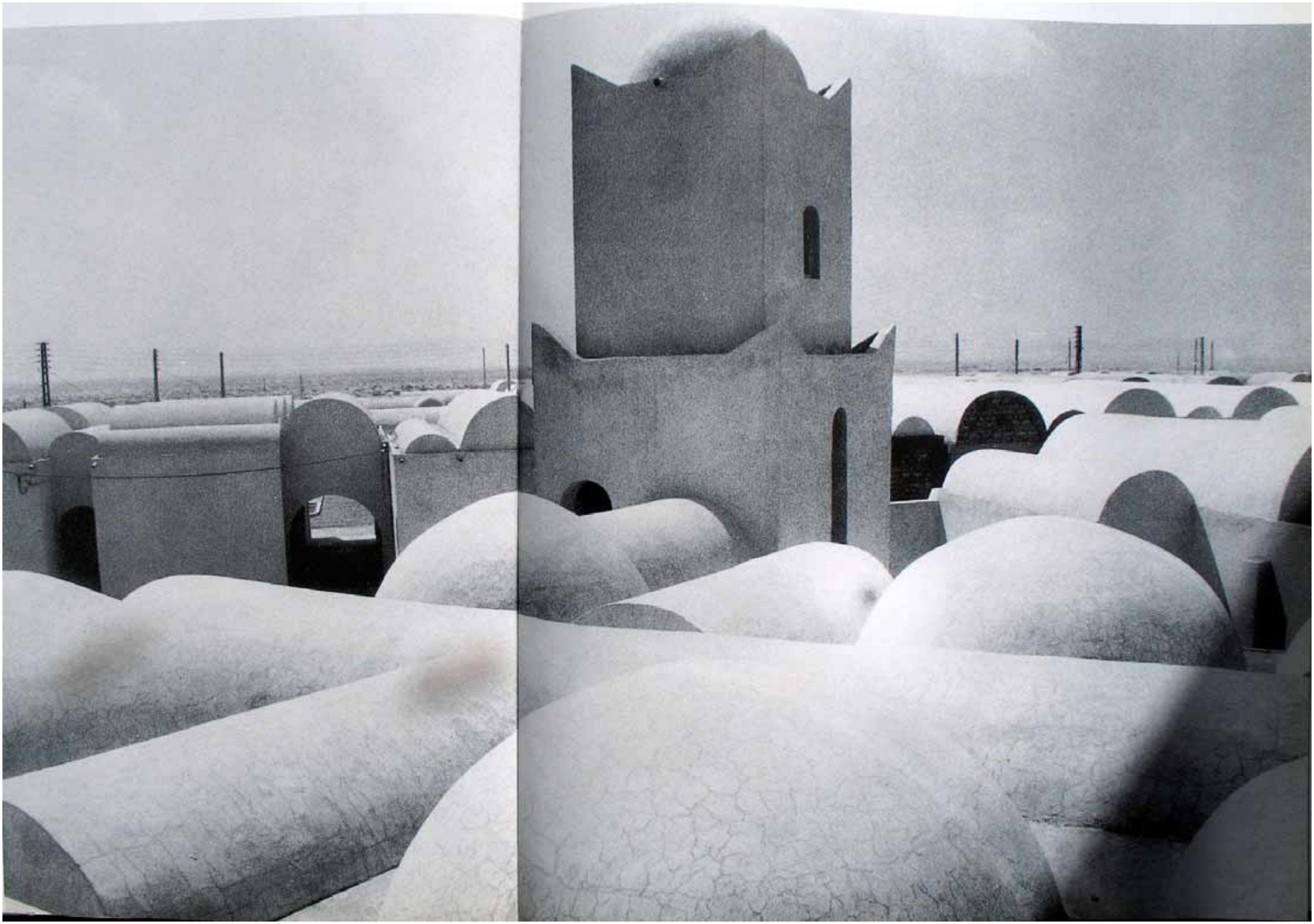


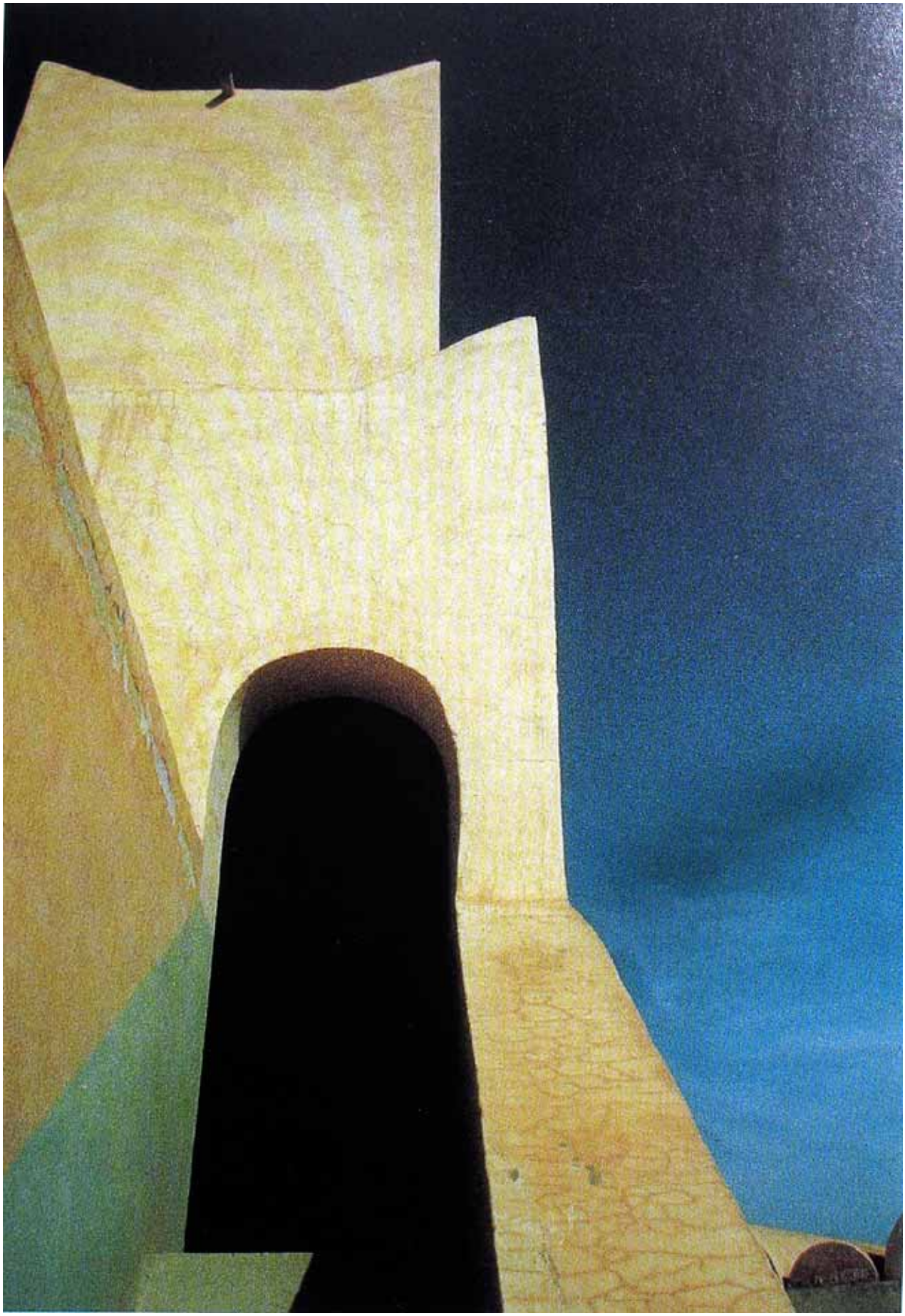


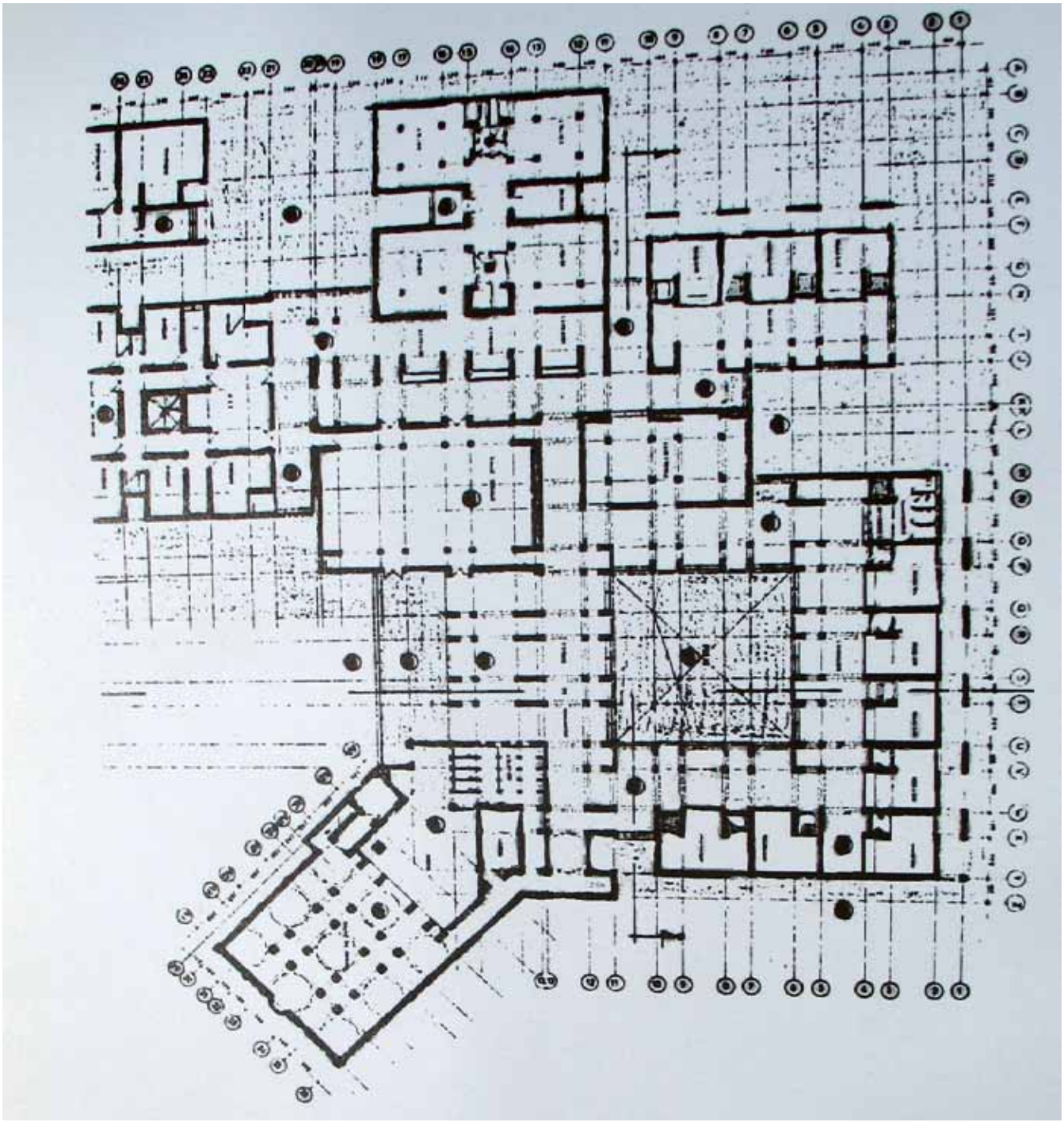
Village Mosque, Ma'ader, Algeria



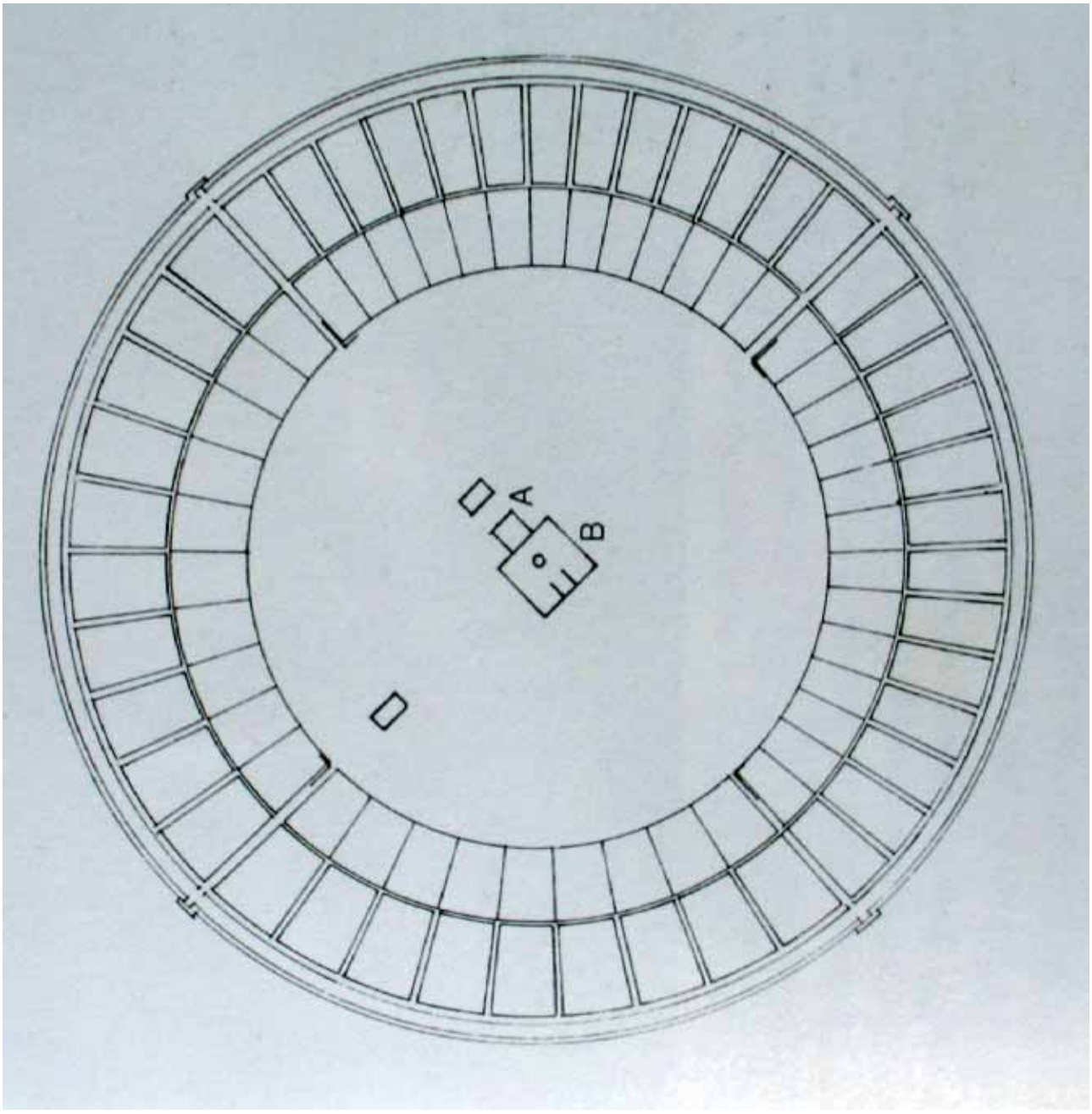
Village Mosque, Ma'ader, Algeria





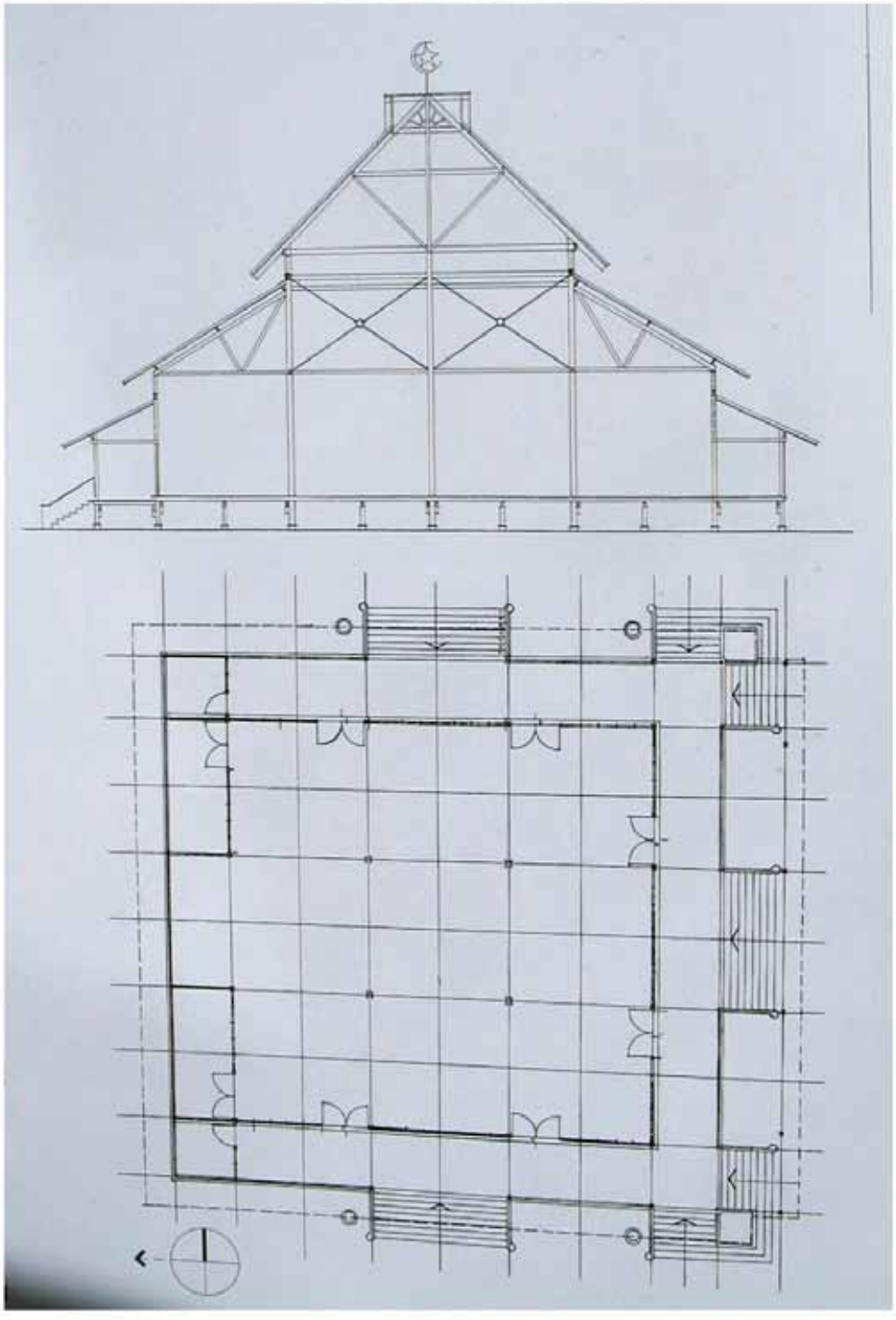


Boumedienne Village Mosque, near Abdala, Algeria

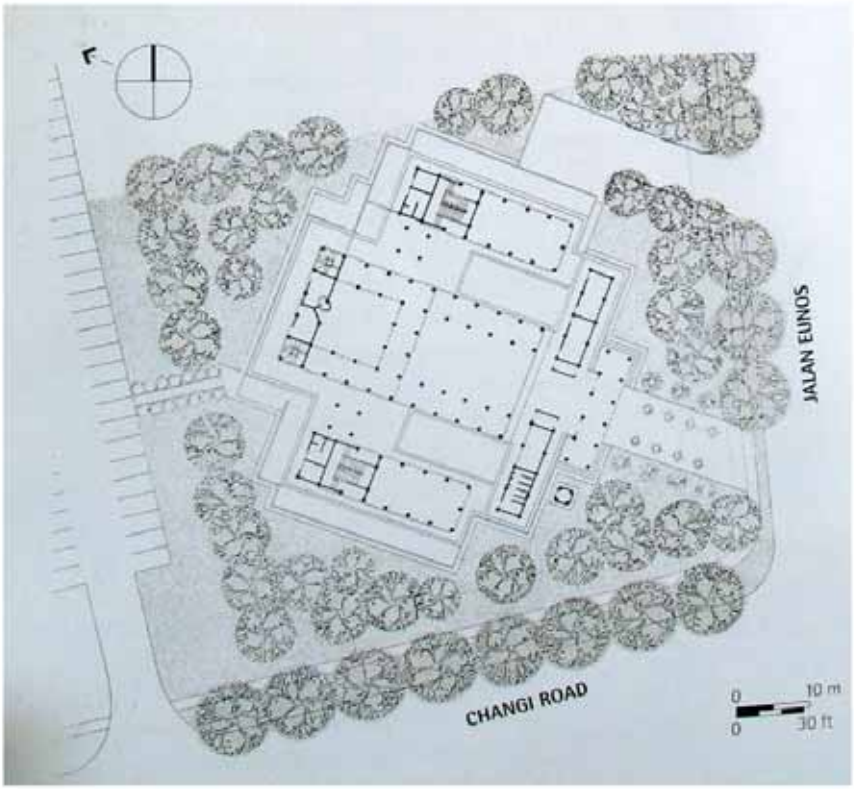

A
B

Mosque Programme for Pahang State, Malaysia

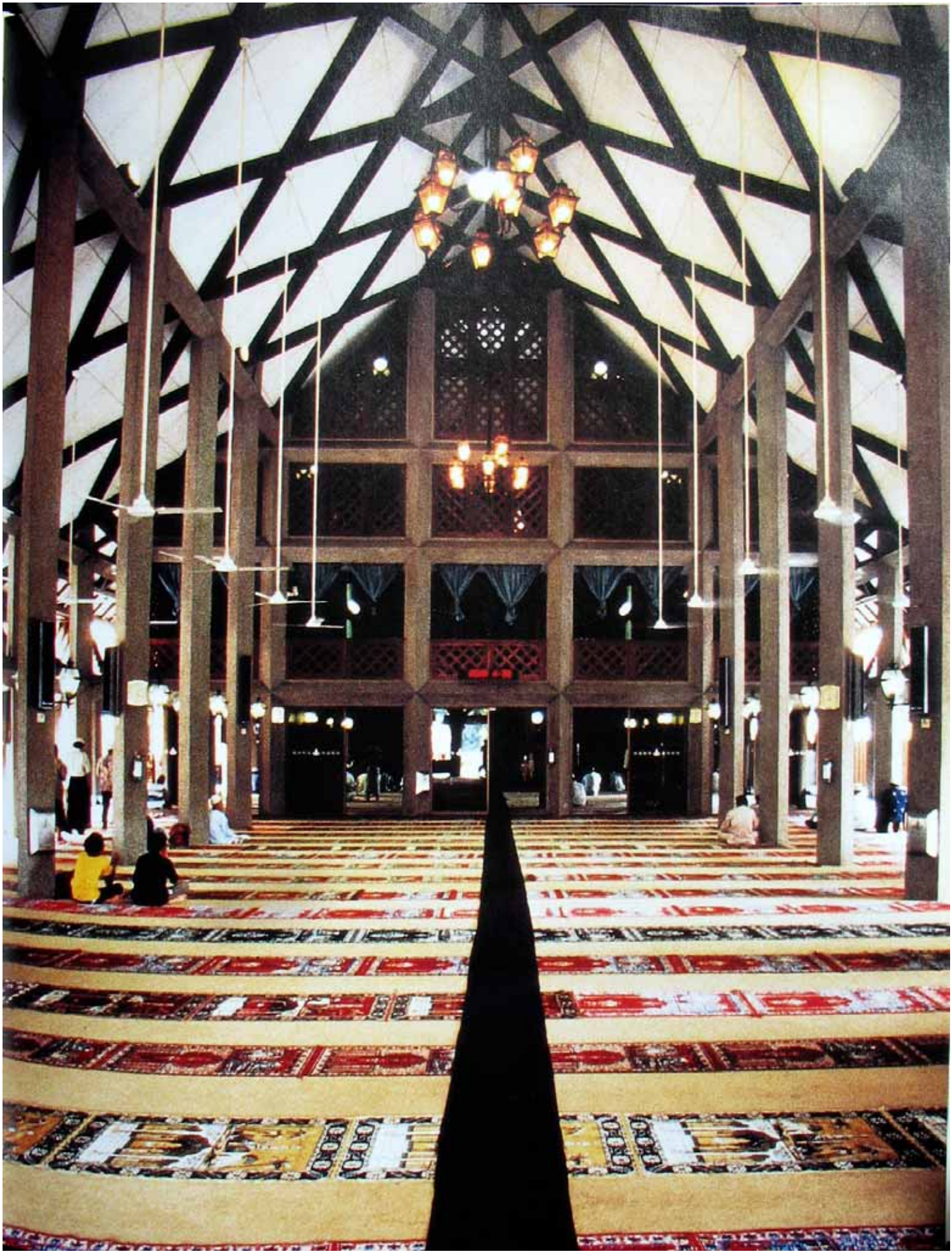
Mosque Programme for Pahang State, Malaysia

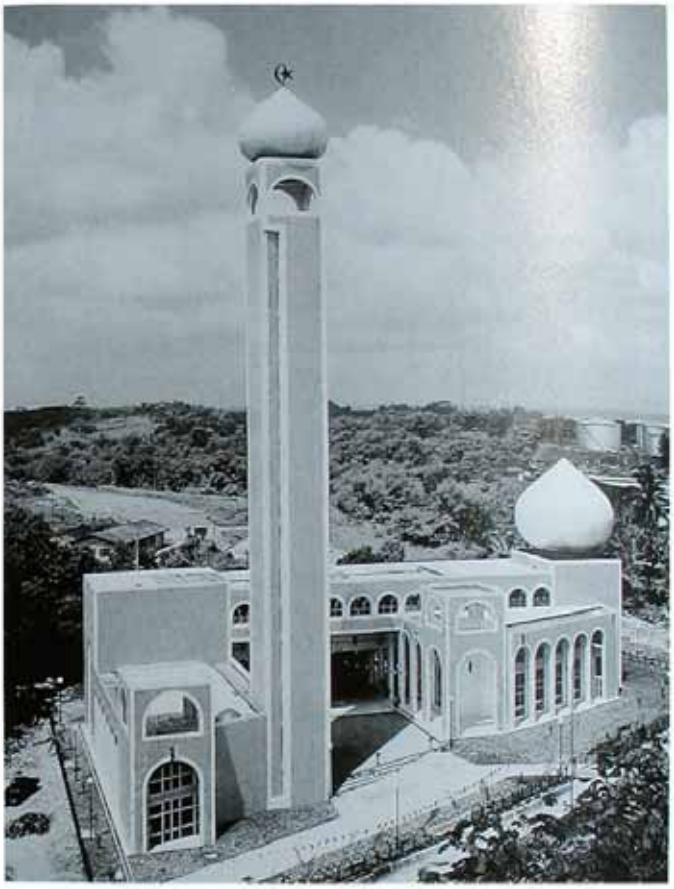


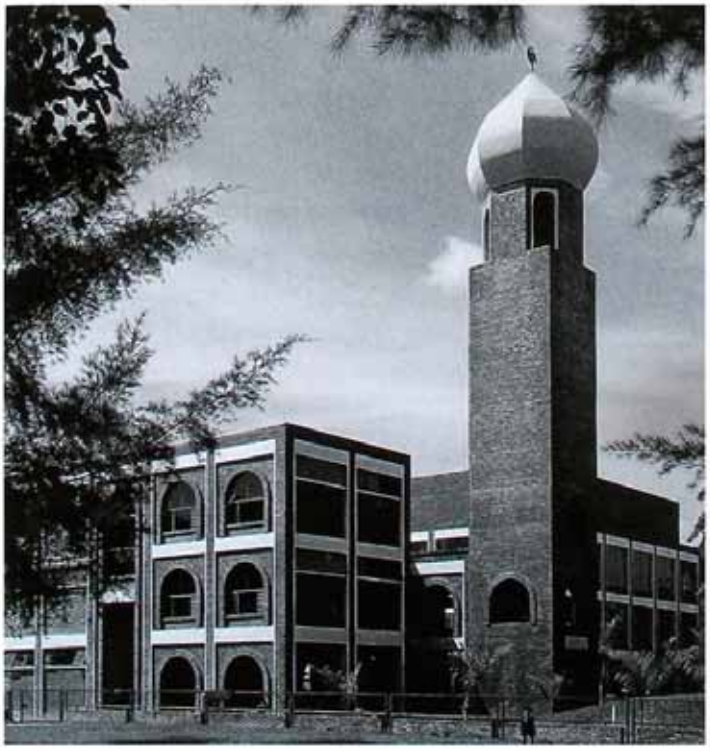
Mosque Programme for Pahang State, Malaysia



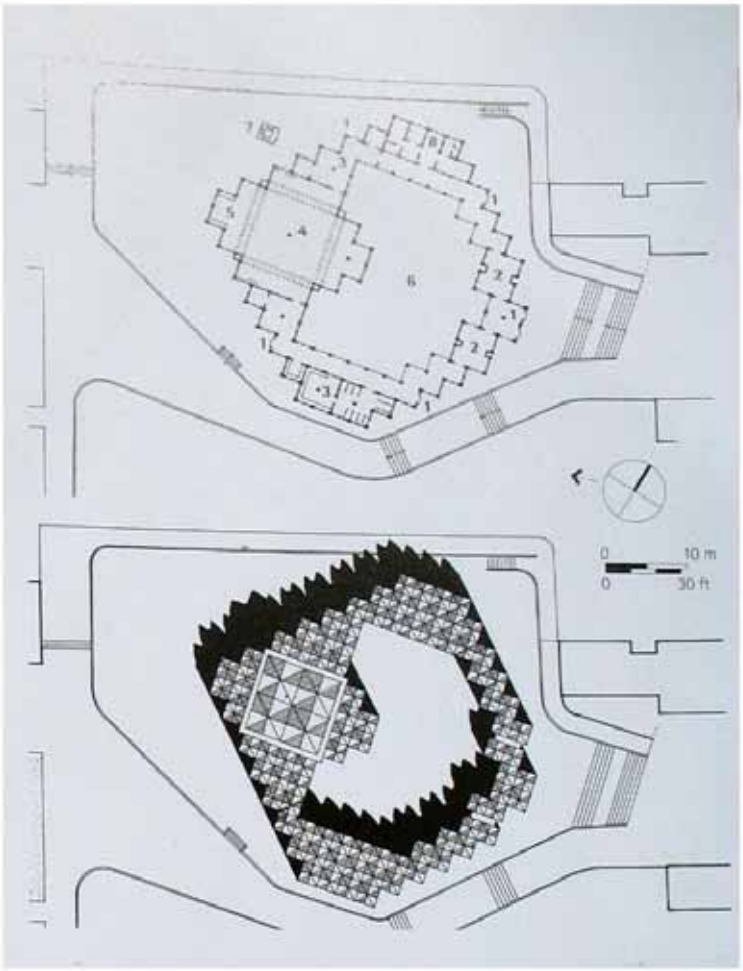
Housing and Development Board Mosques, Singapore



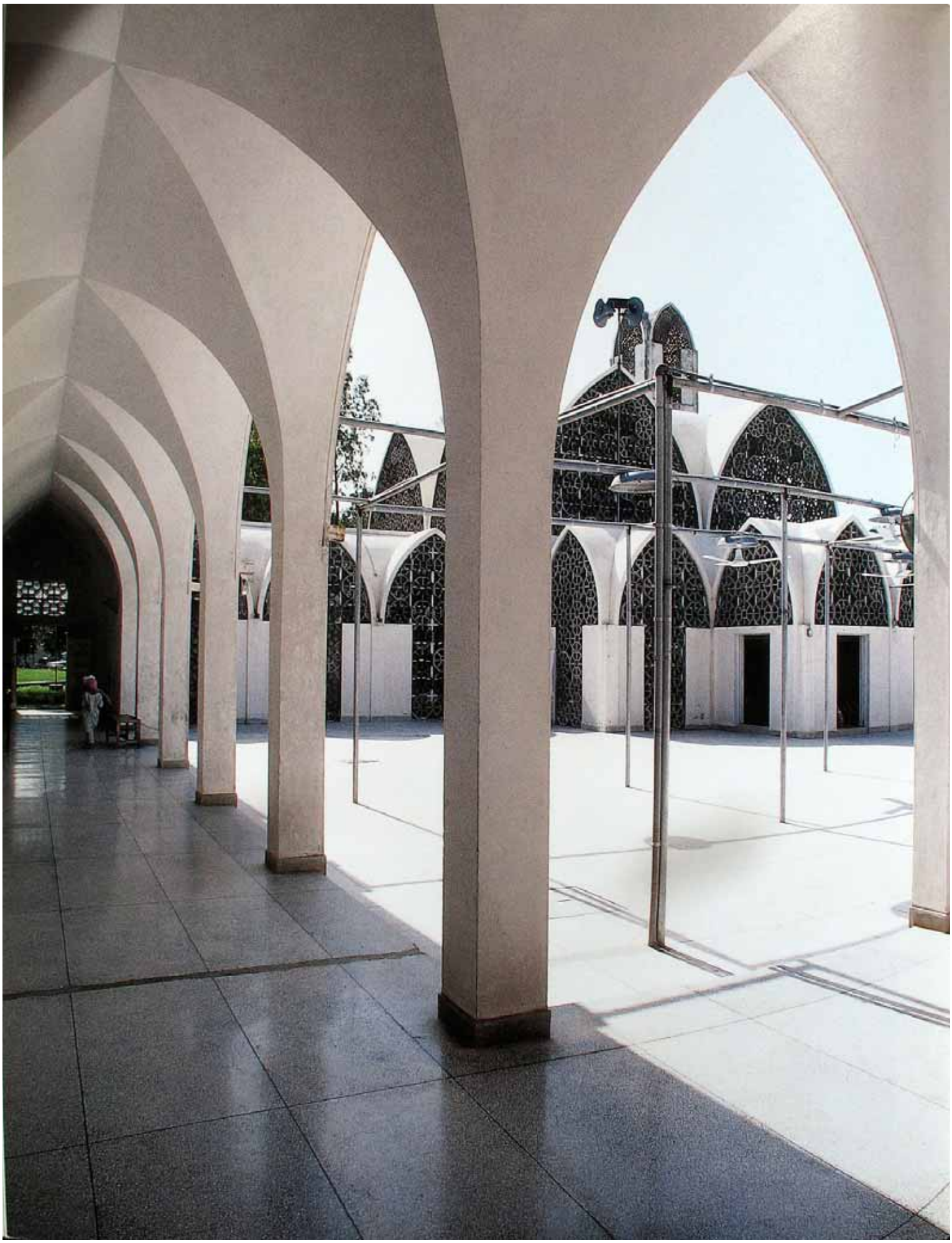


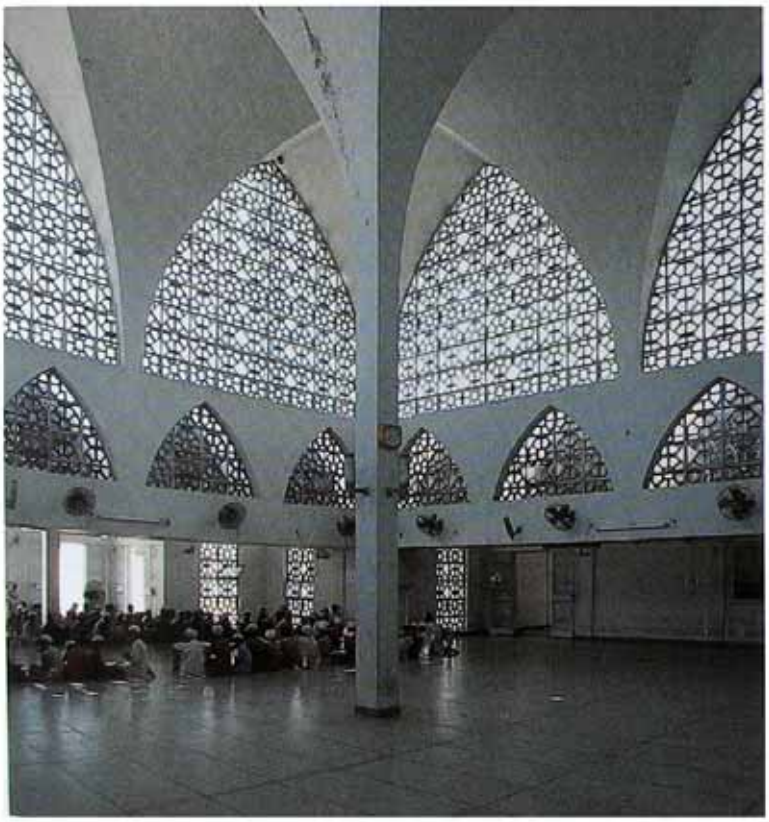


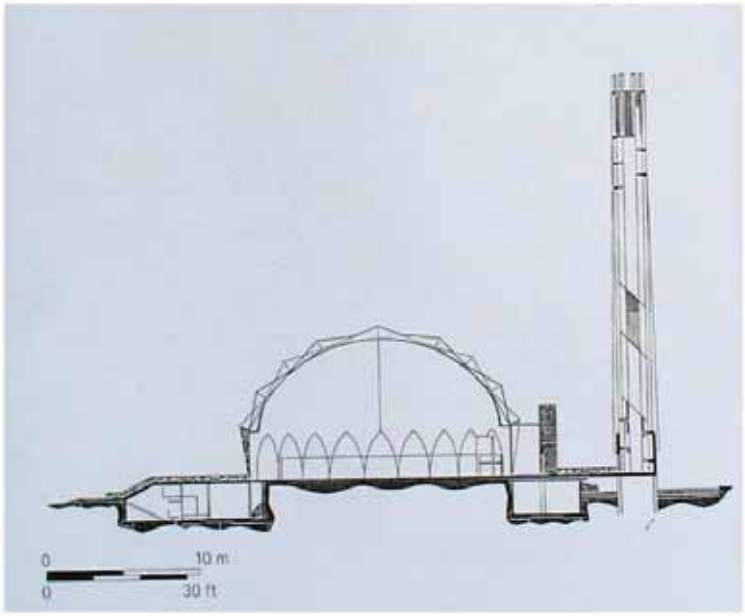
Housing and Development Board Mosques. Singapore

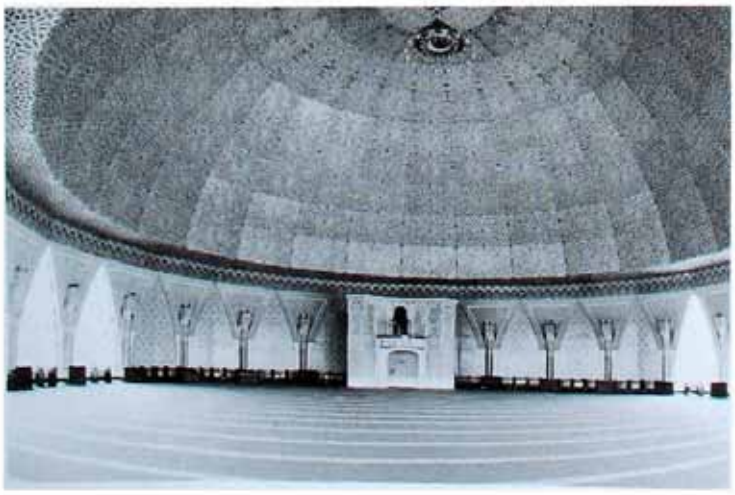


Capital Development Authority Mosques, Islamabad

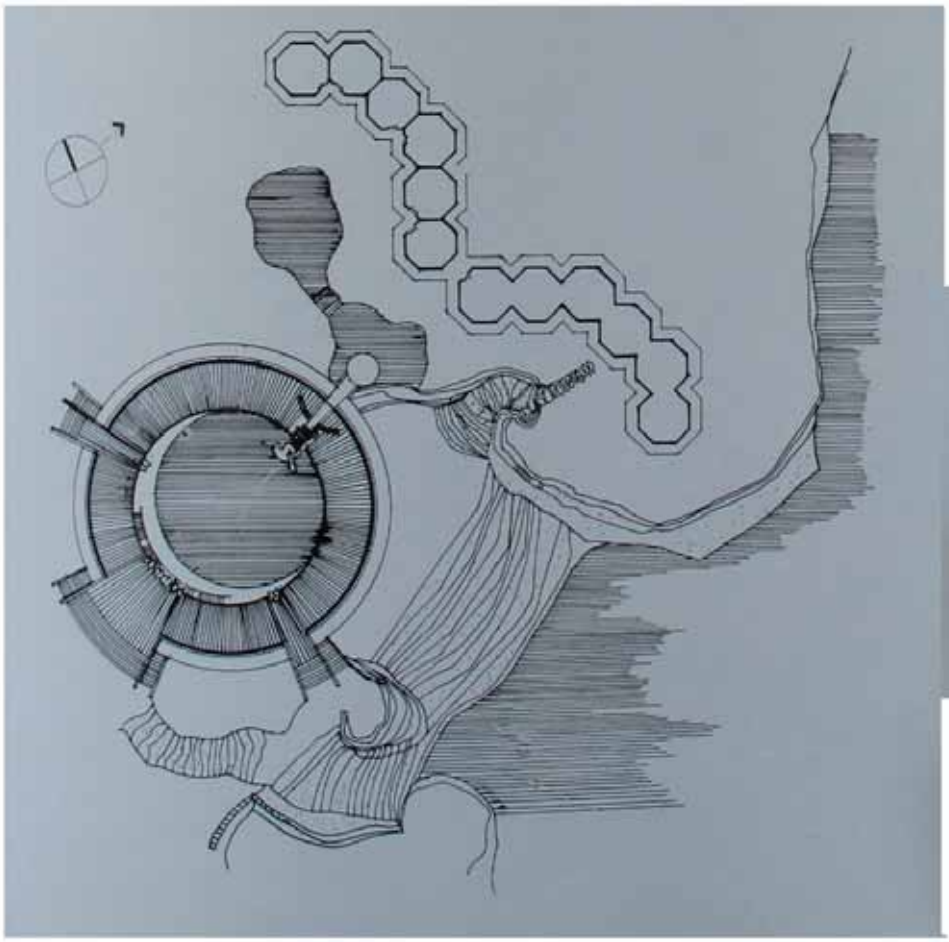


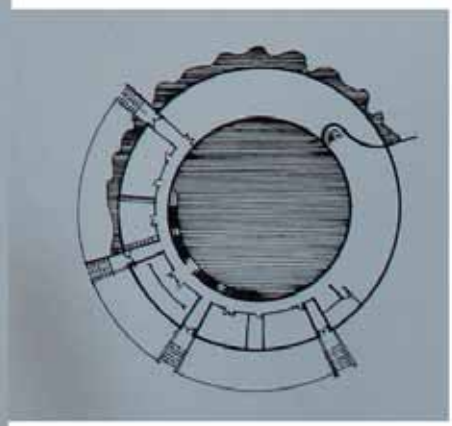




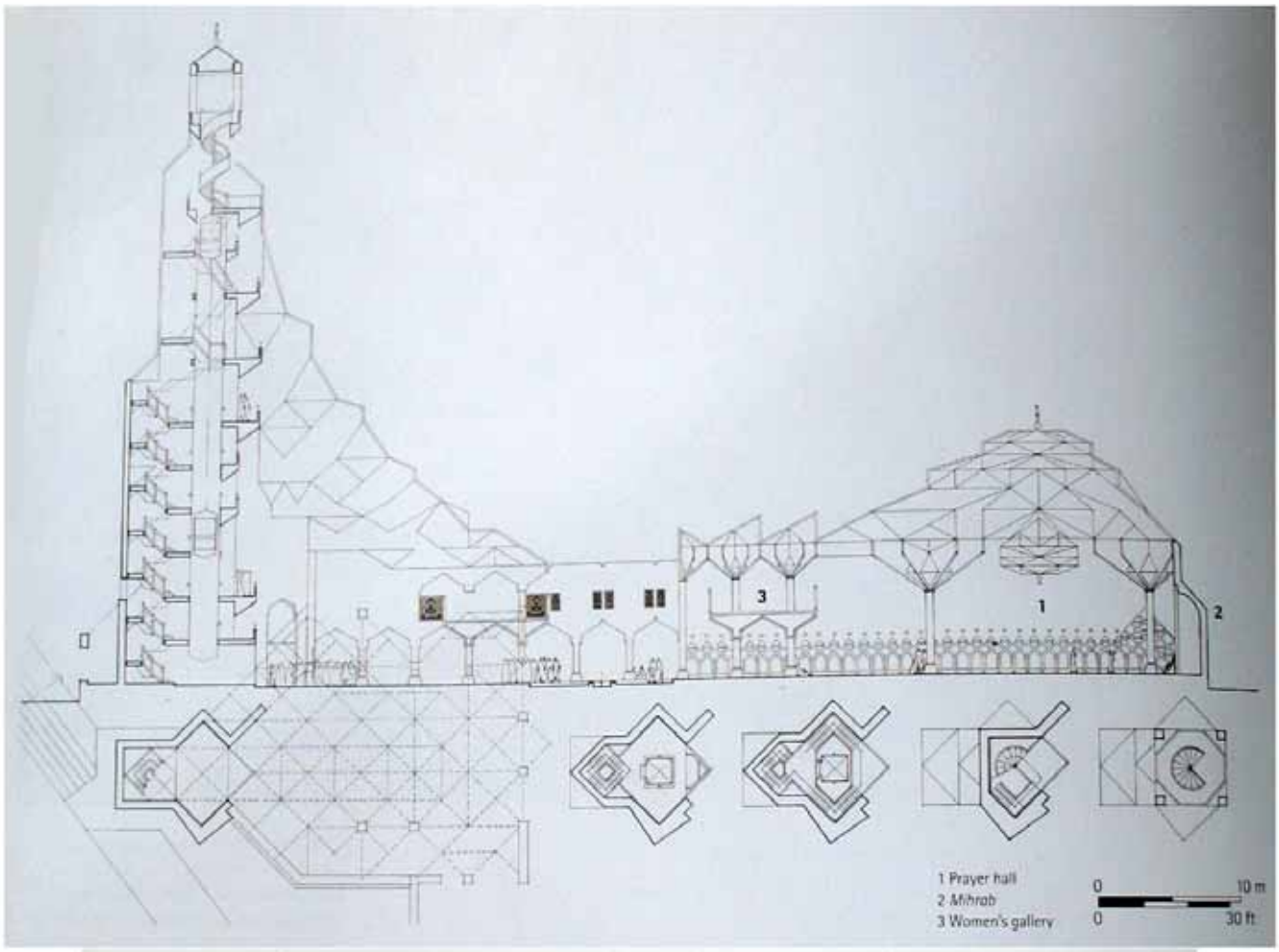


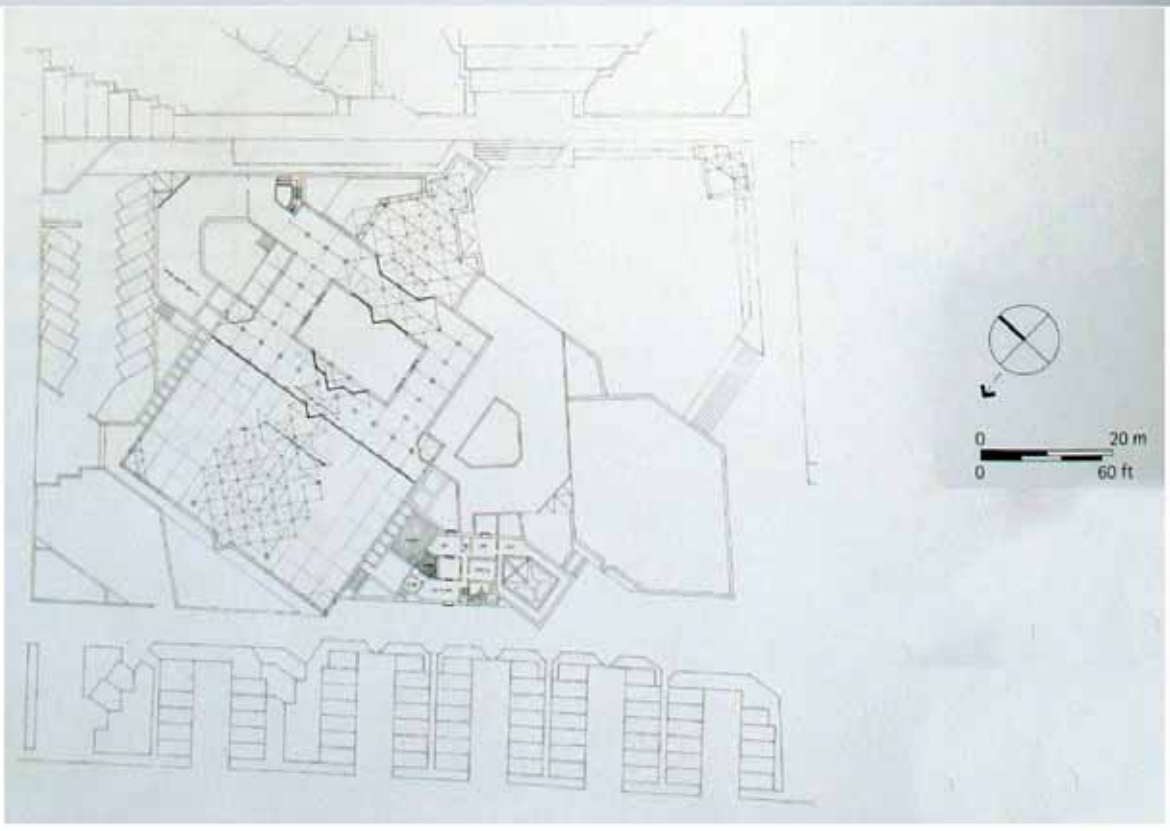
Nilein Mosque, Khartoum, Sudan



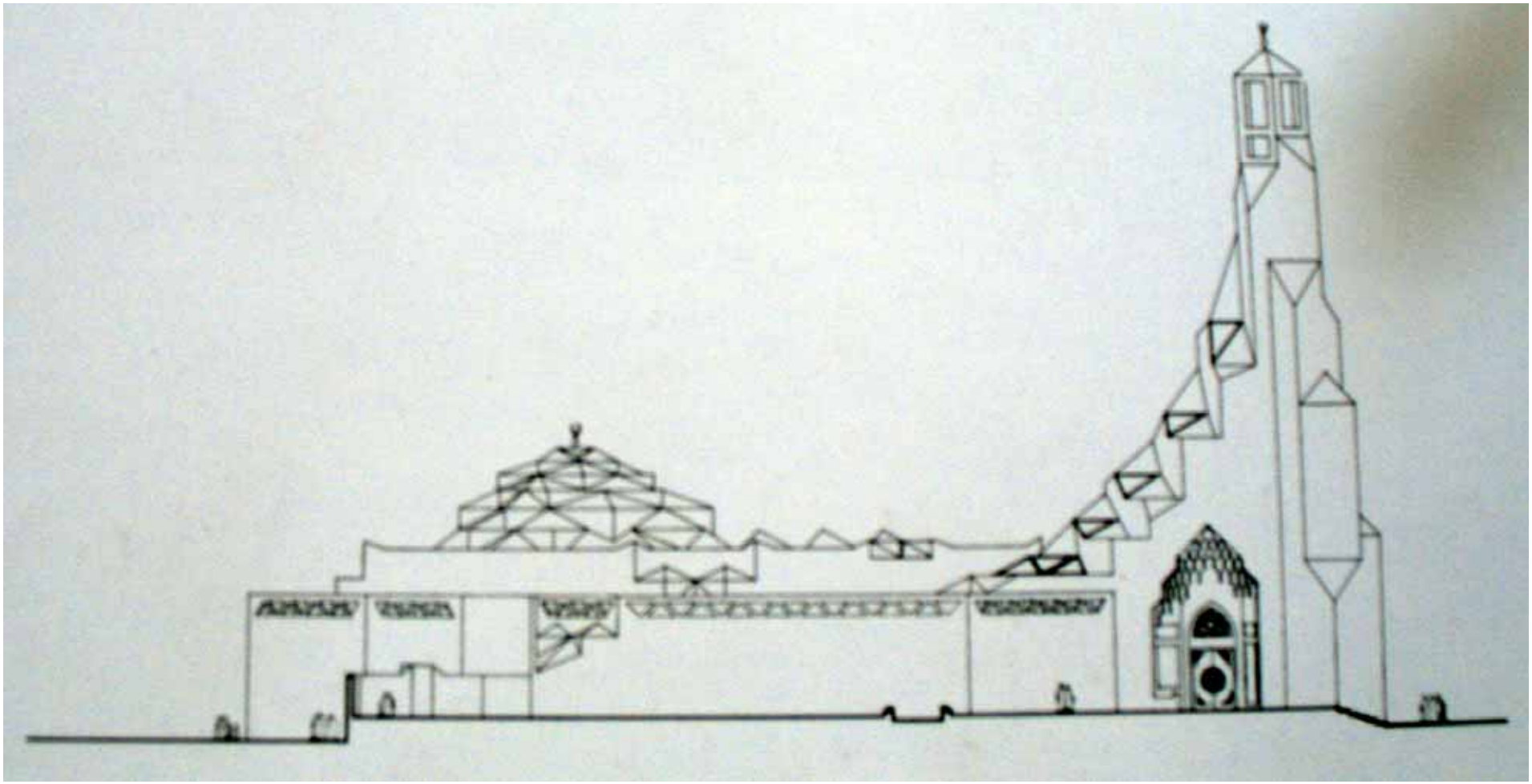


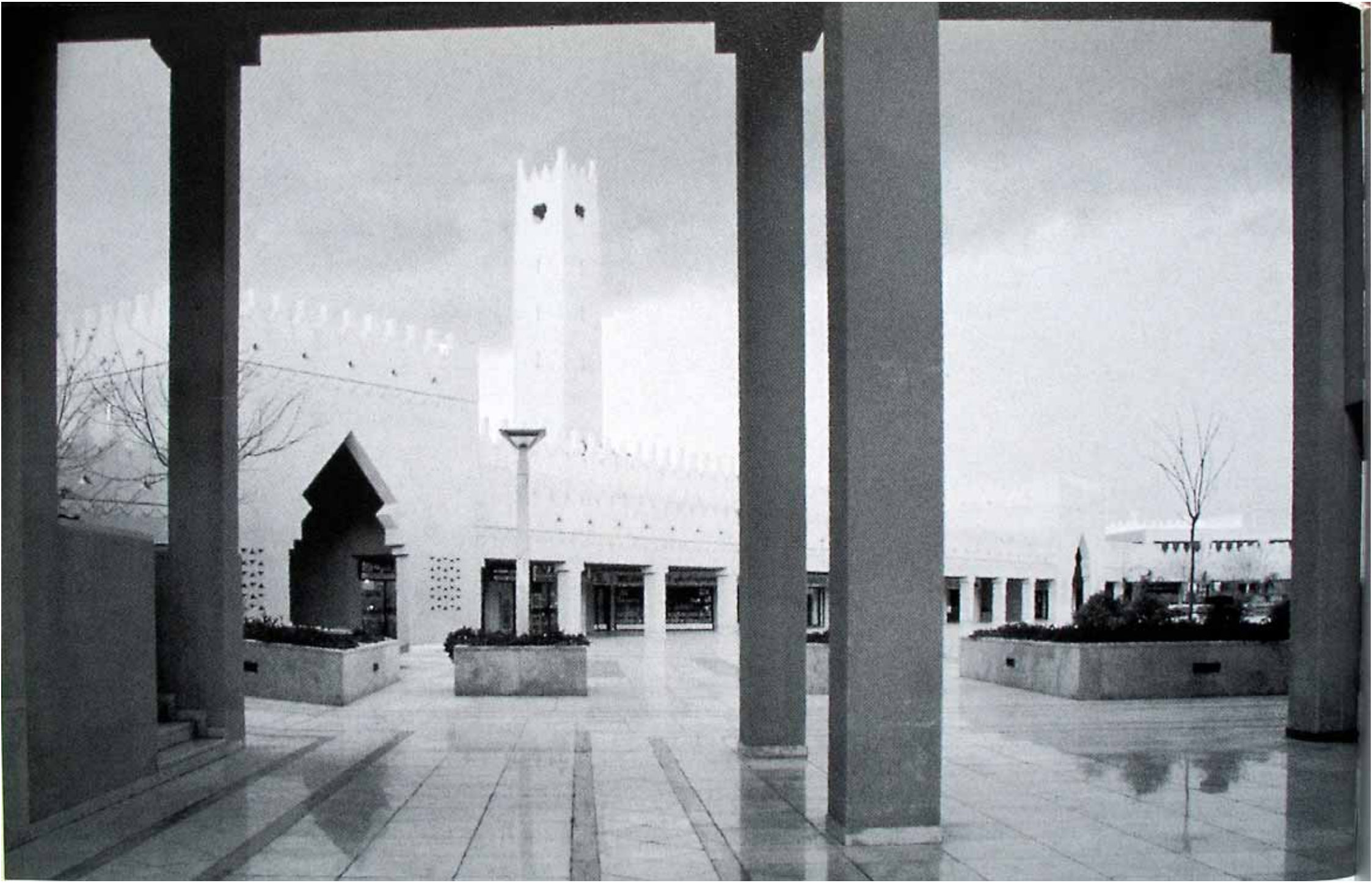
Nilein Mosque, Khartoum, Sudan

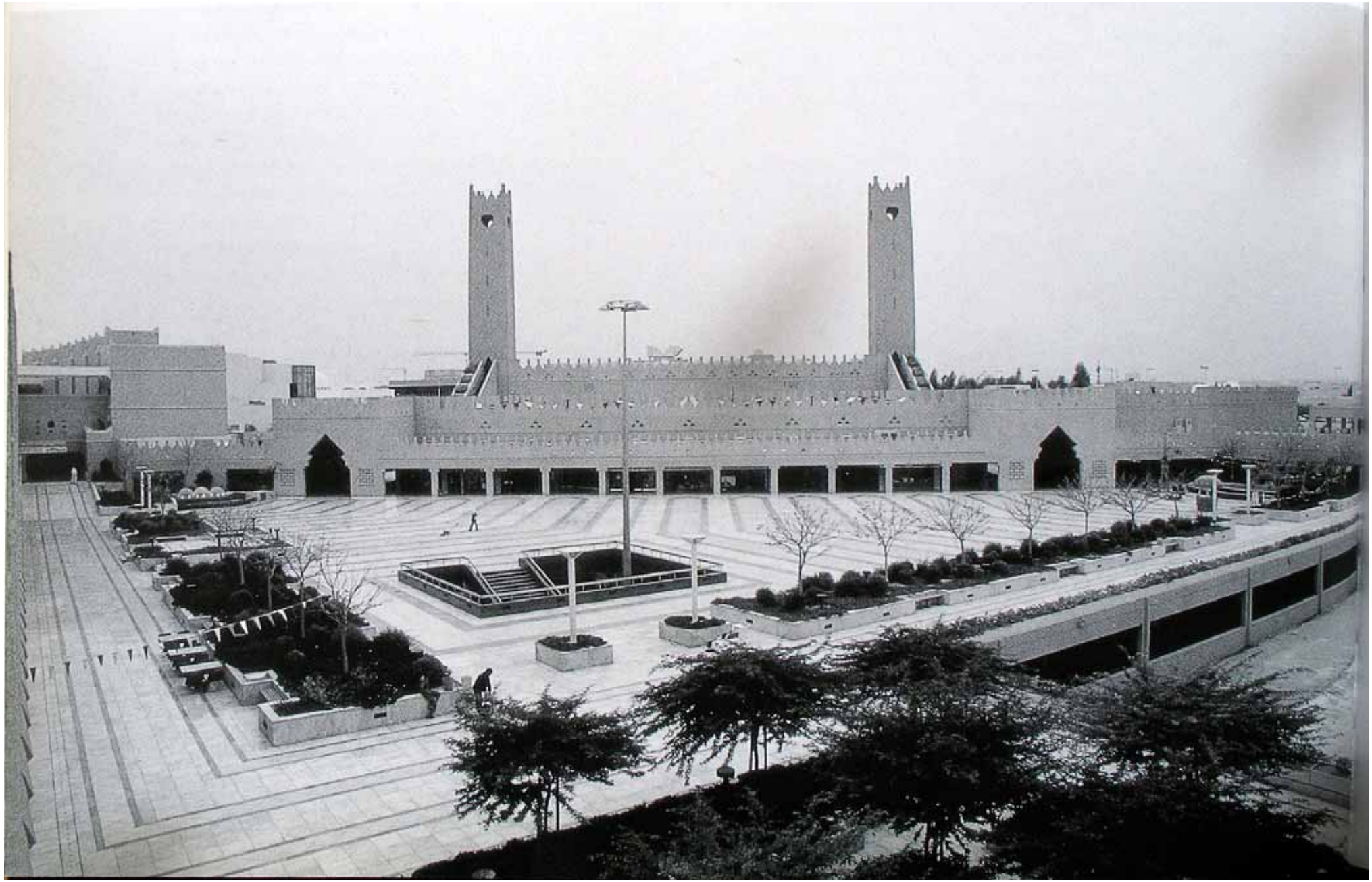


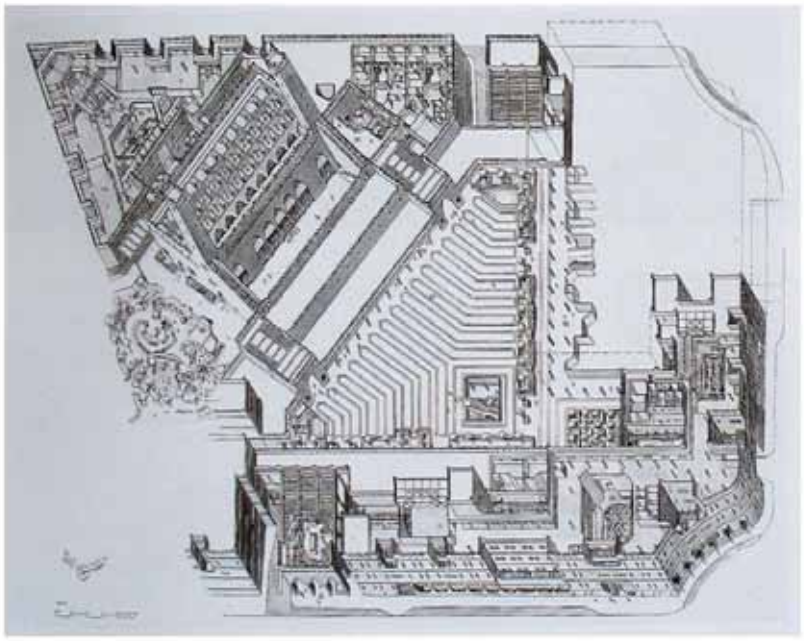


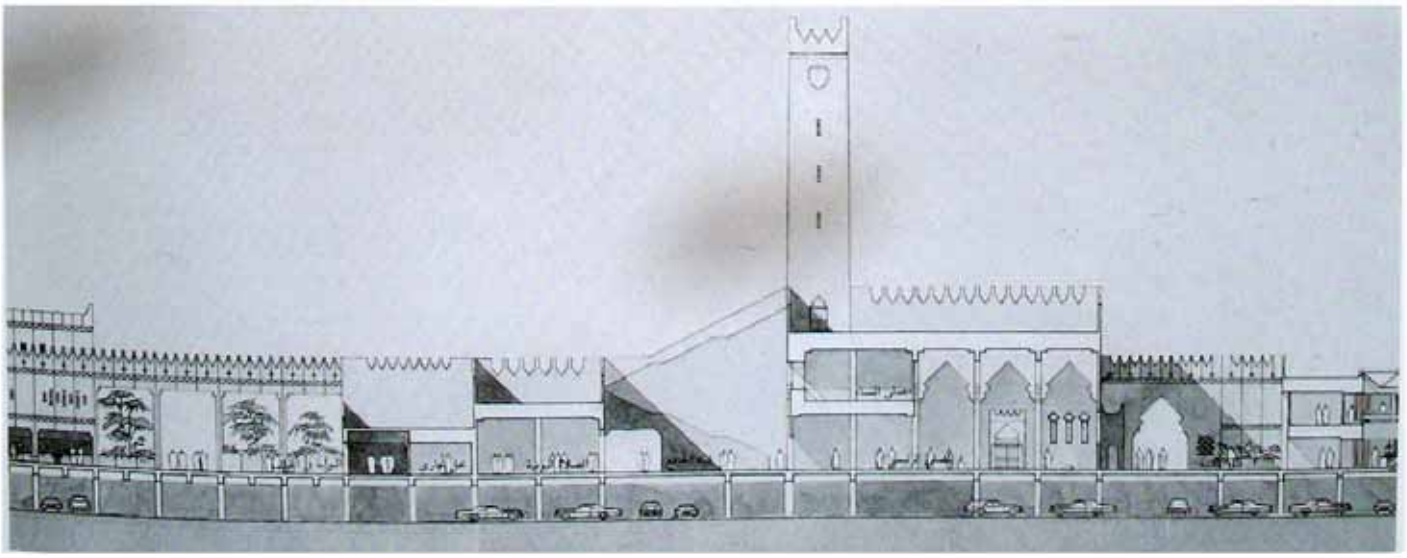
Osman ibn Affan Mosque, Qatar (project)



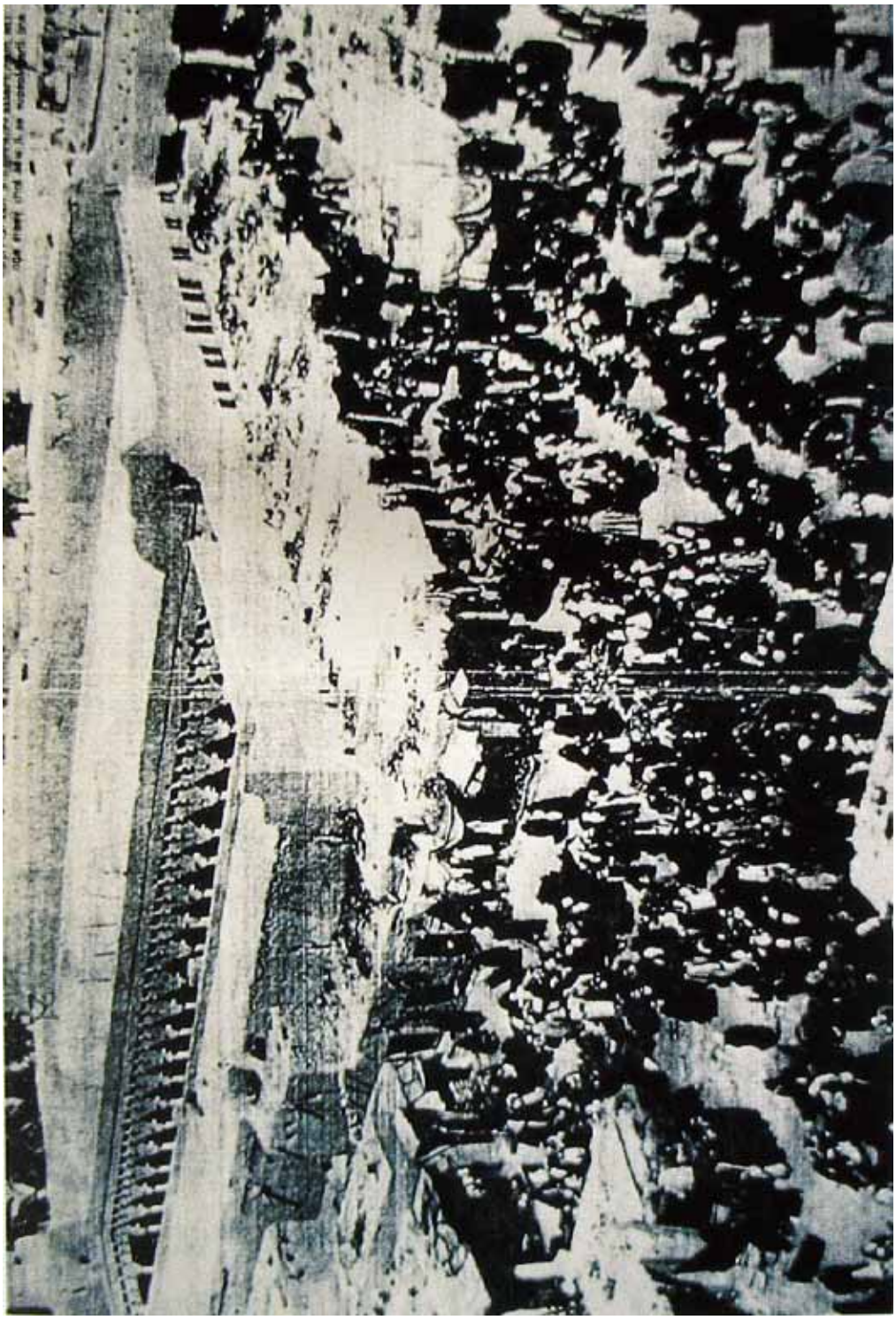




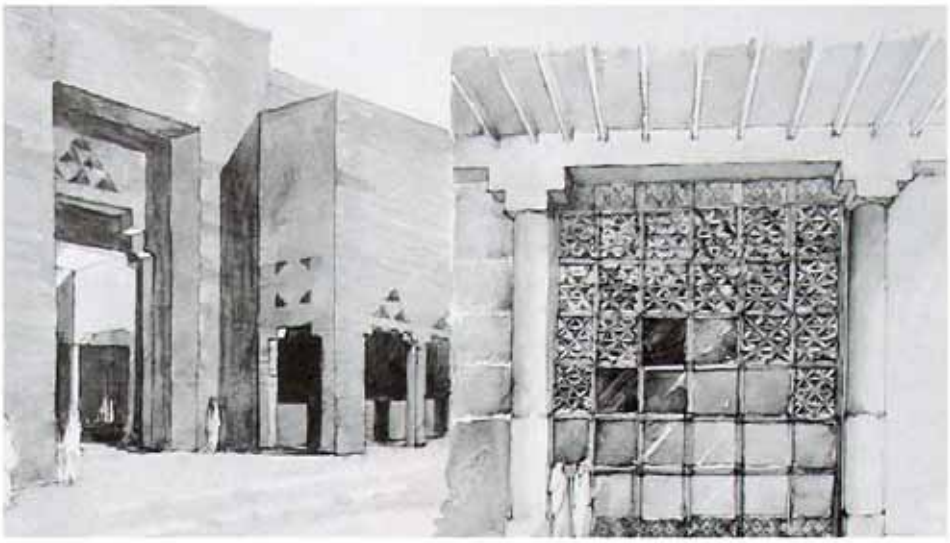


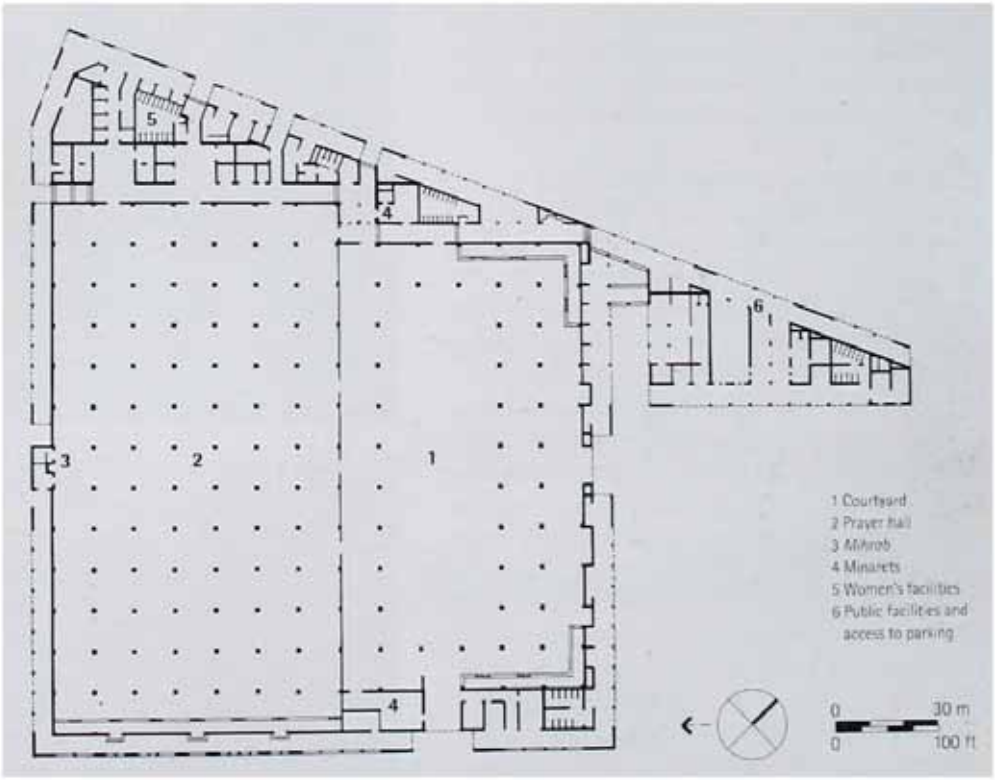


Al-Kindi Plaza Jami, Riyadh, Saudi Arabia

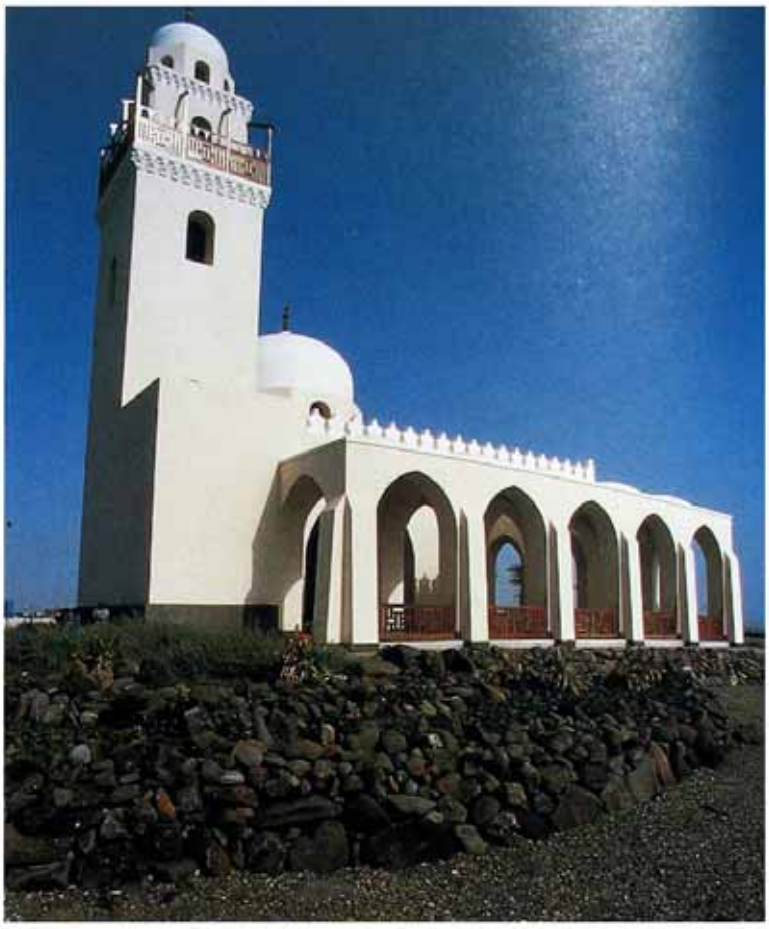


Imam Turki bin Abdullah Jami, Riyadh, Saudi Arabia

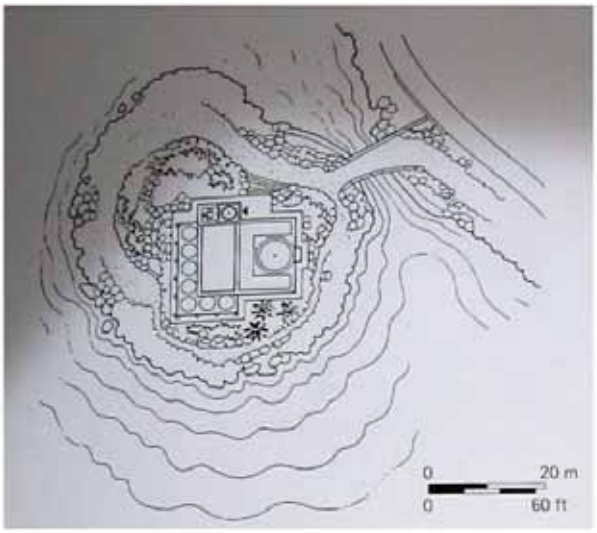


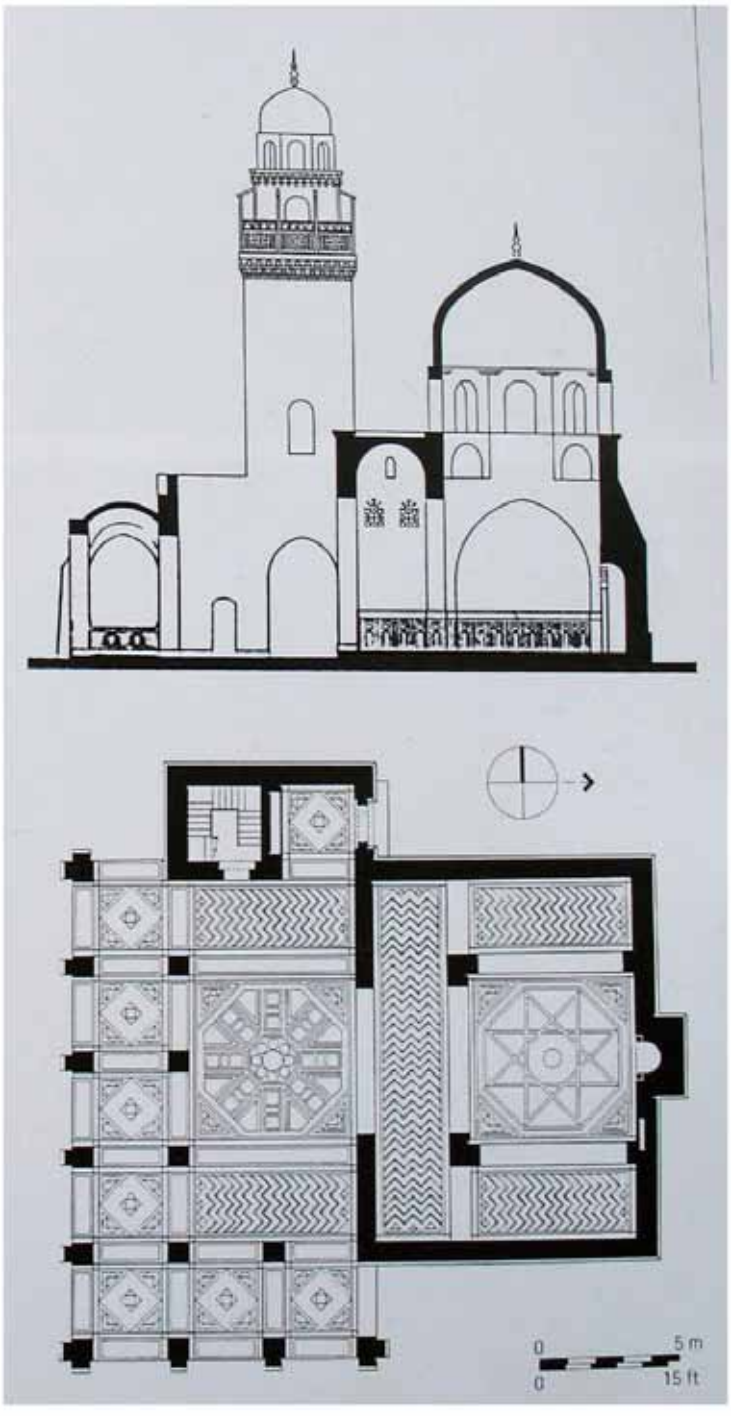


Imam Turki bin Abdullah Jami, Riyadh, Saudi Arabia

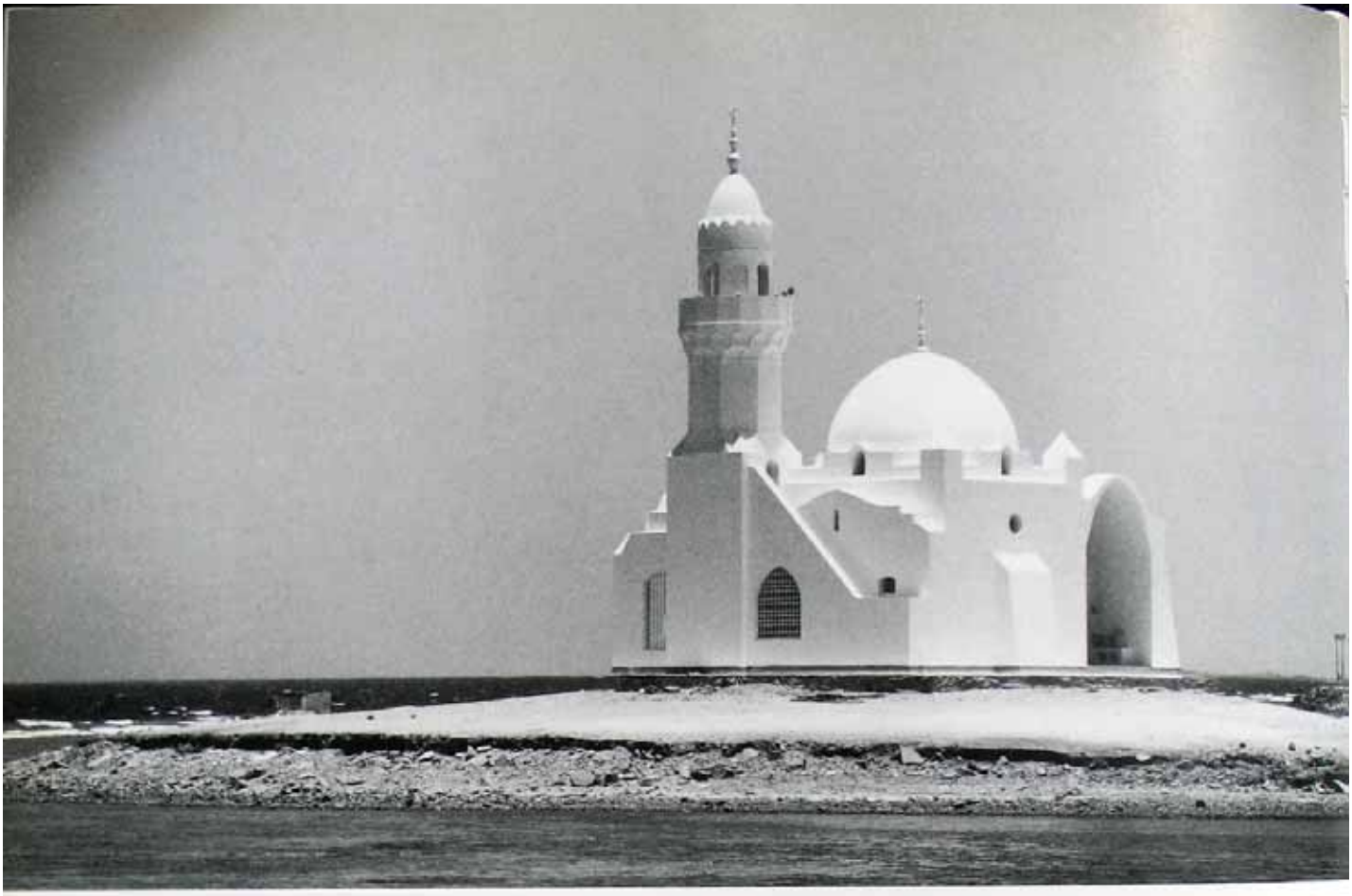


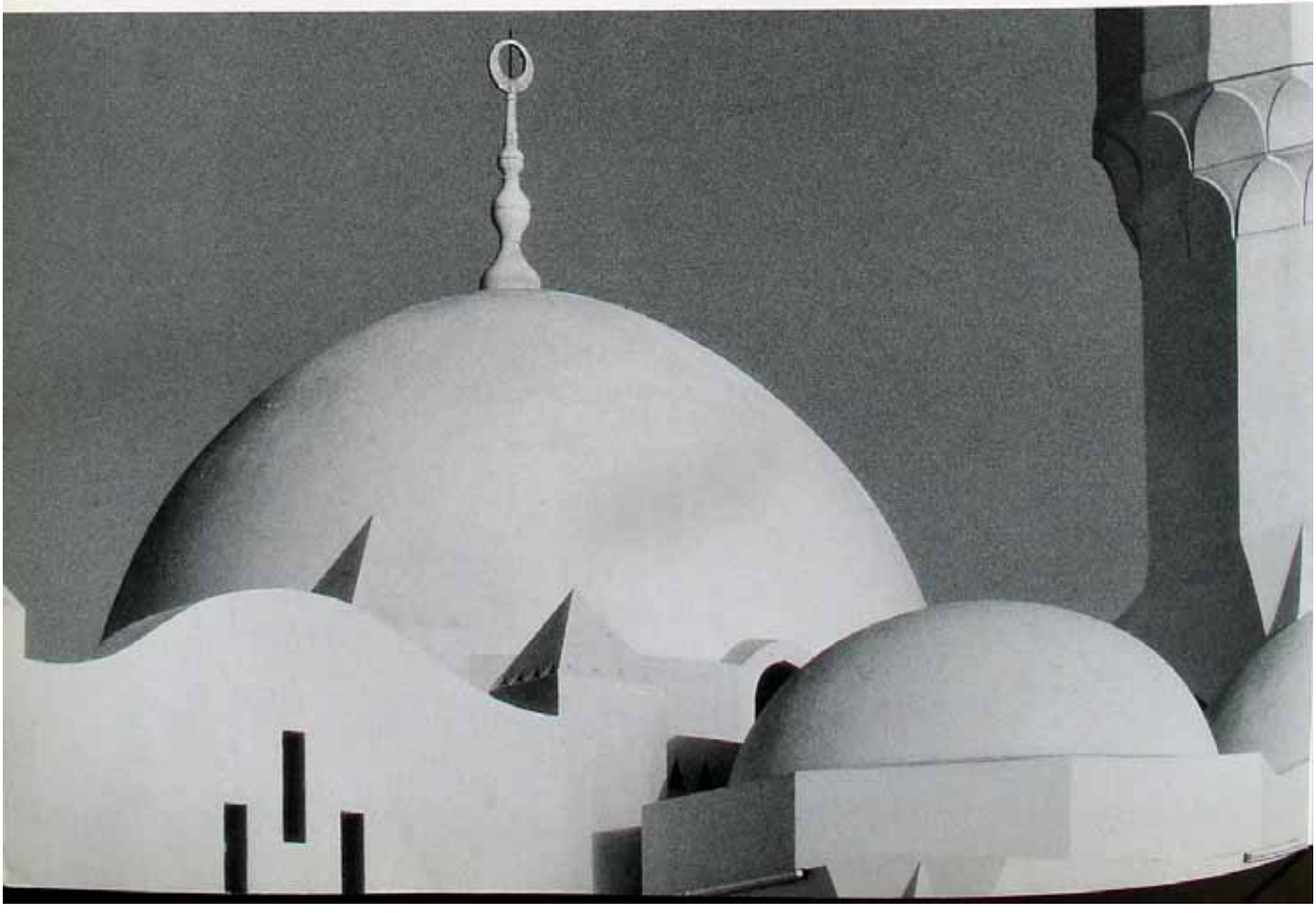
The Seafront Mosques, jeddah, Saudi Arabia

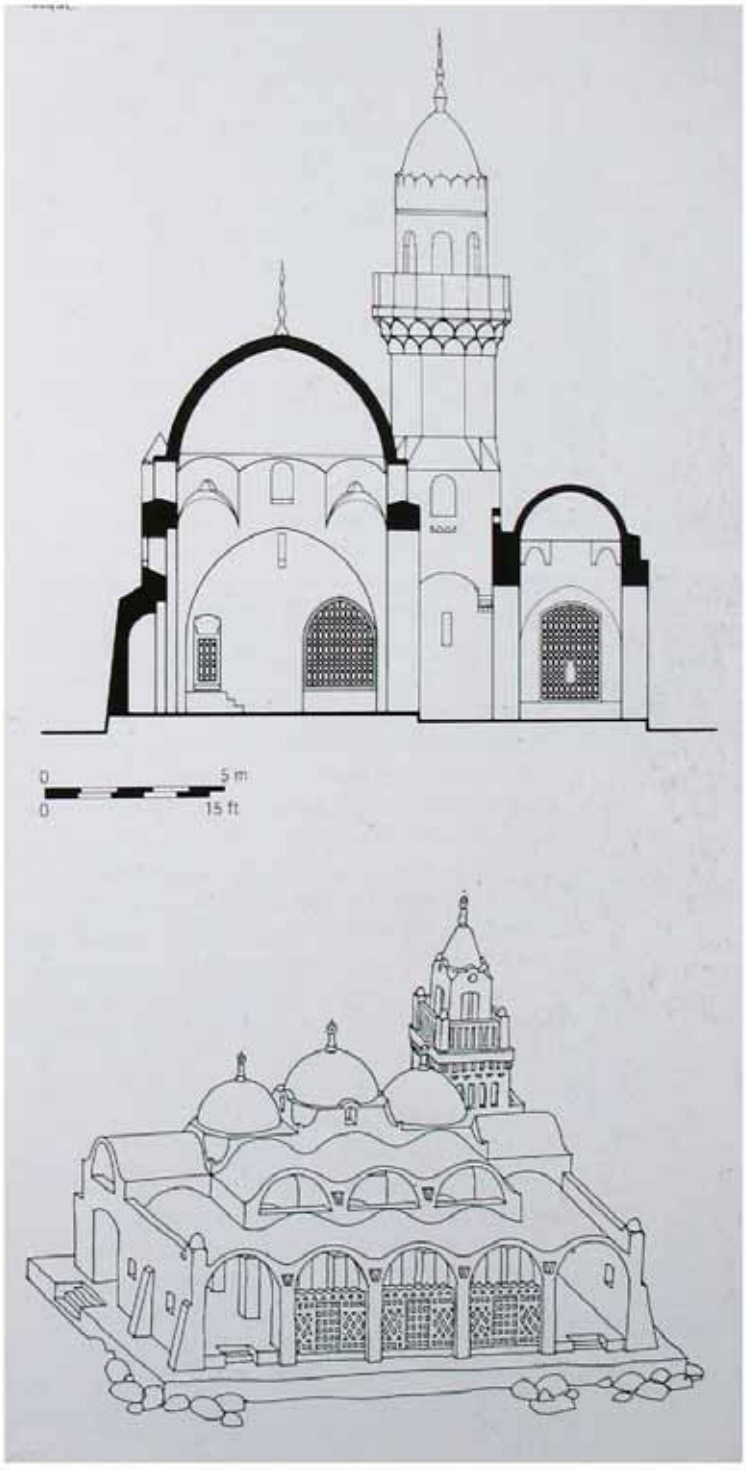




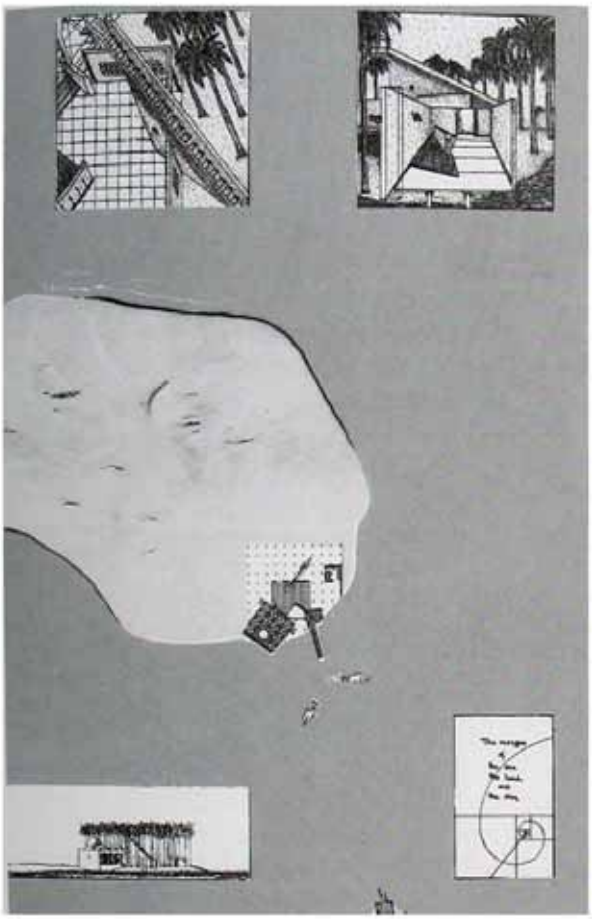
The Seafront Mosques, jeddah, Saudi Arabia

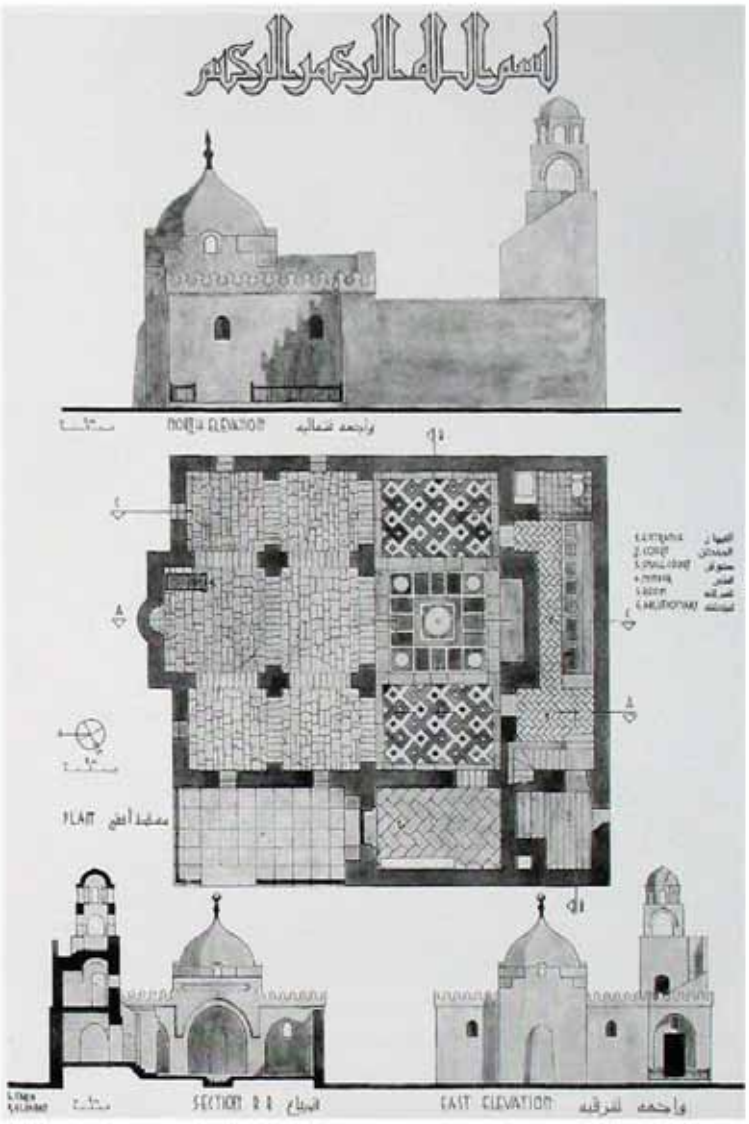


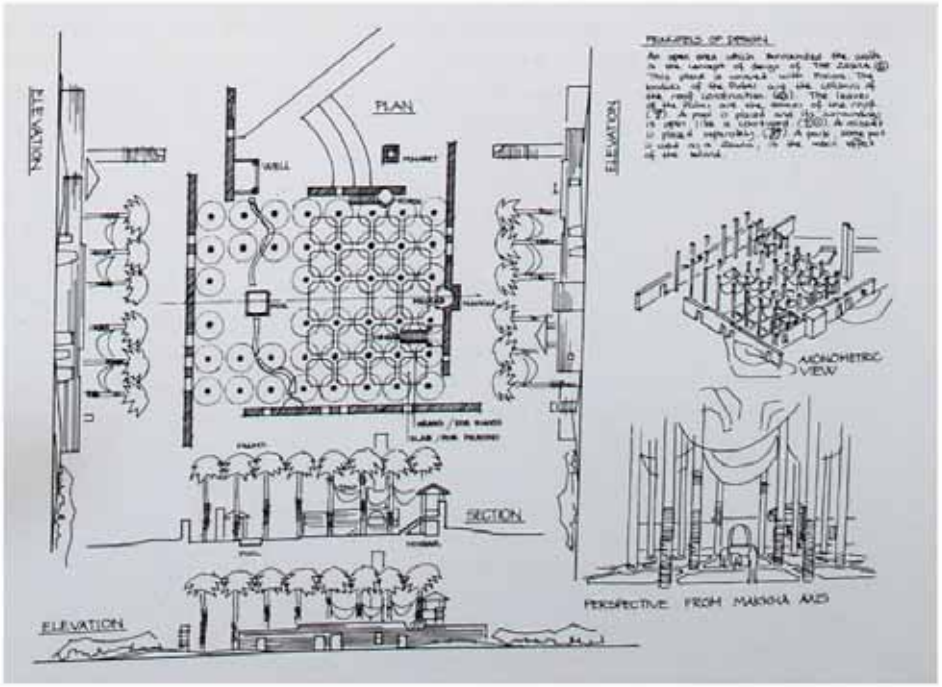




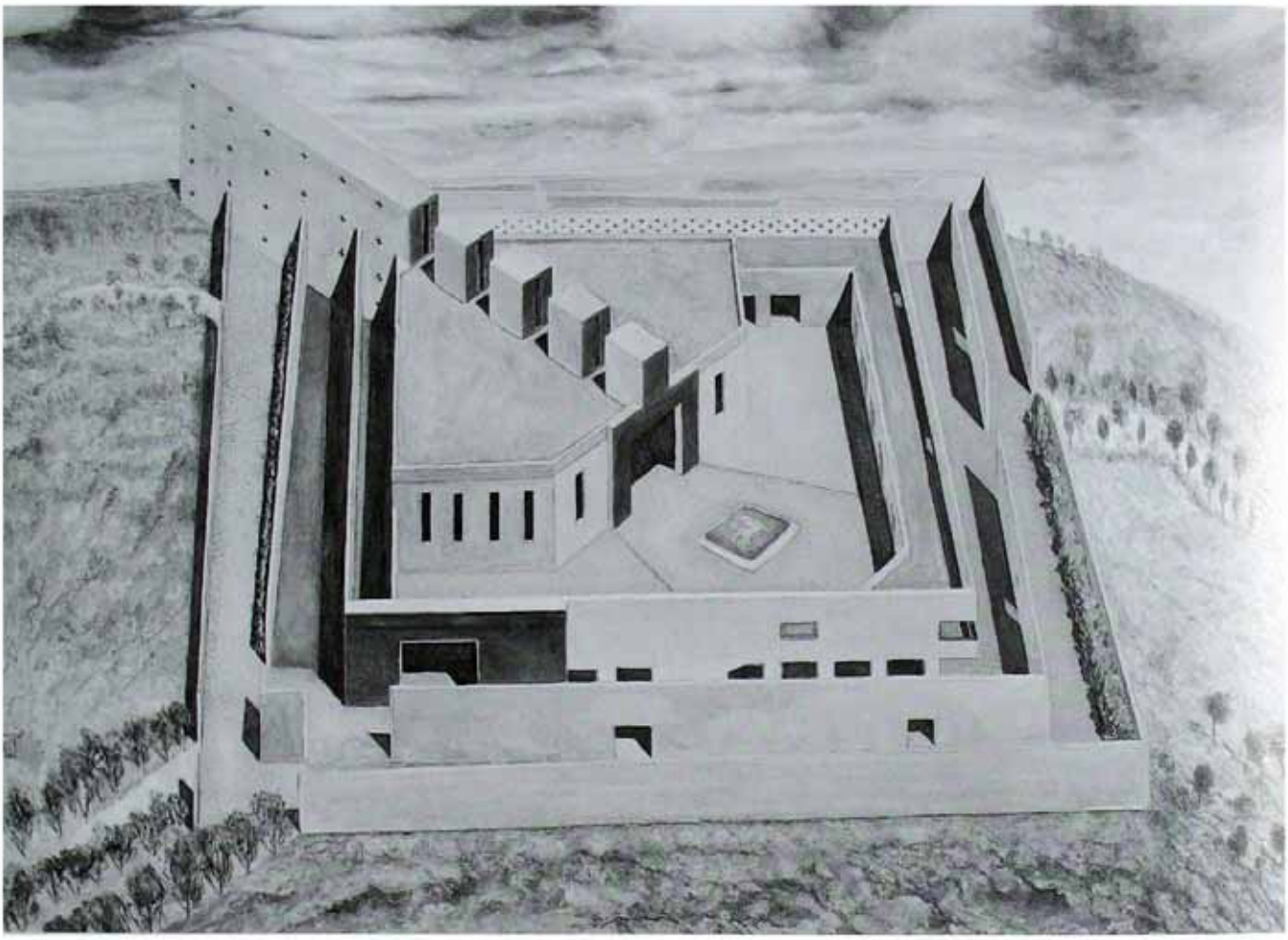
The Seafront Mosques, jeddah, Saudi Arabia



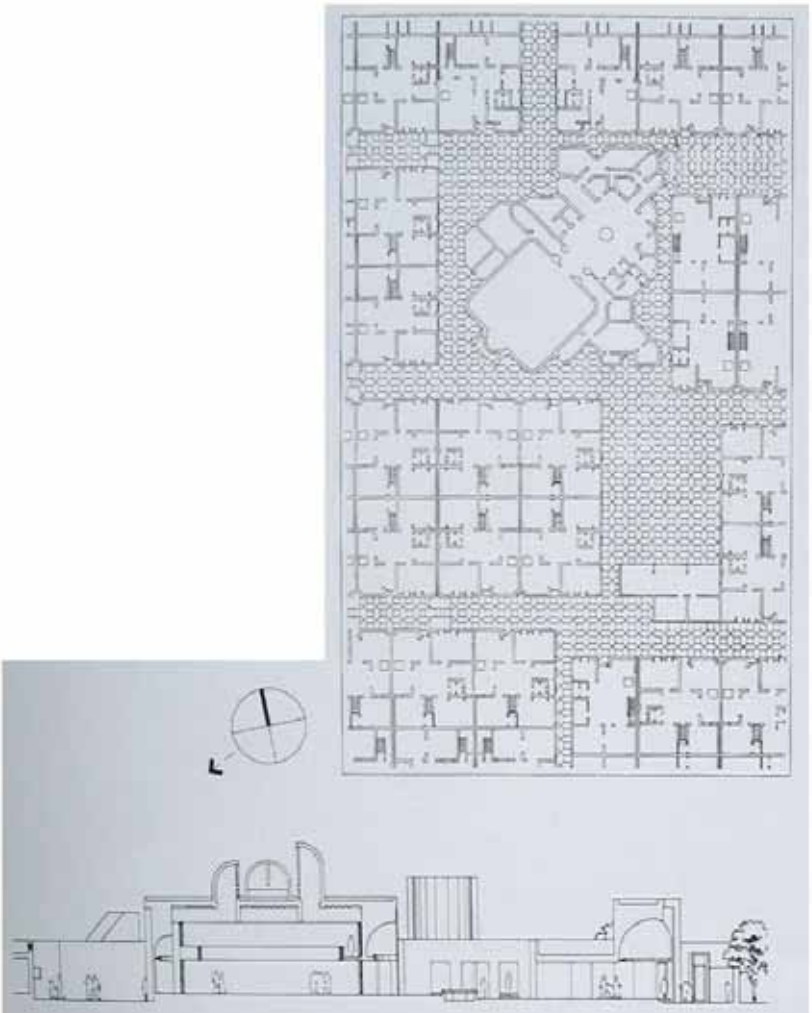




'Mimar' Mosque Competition



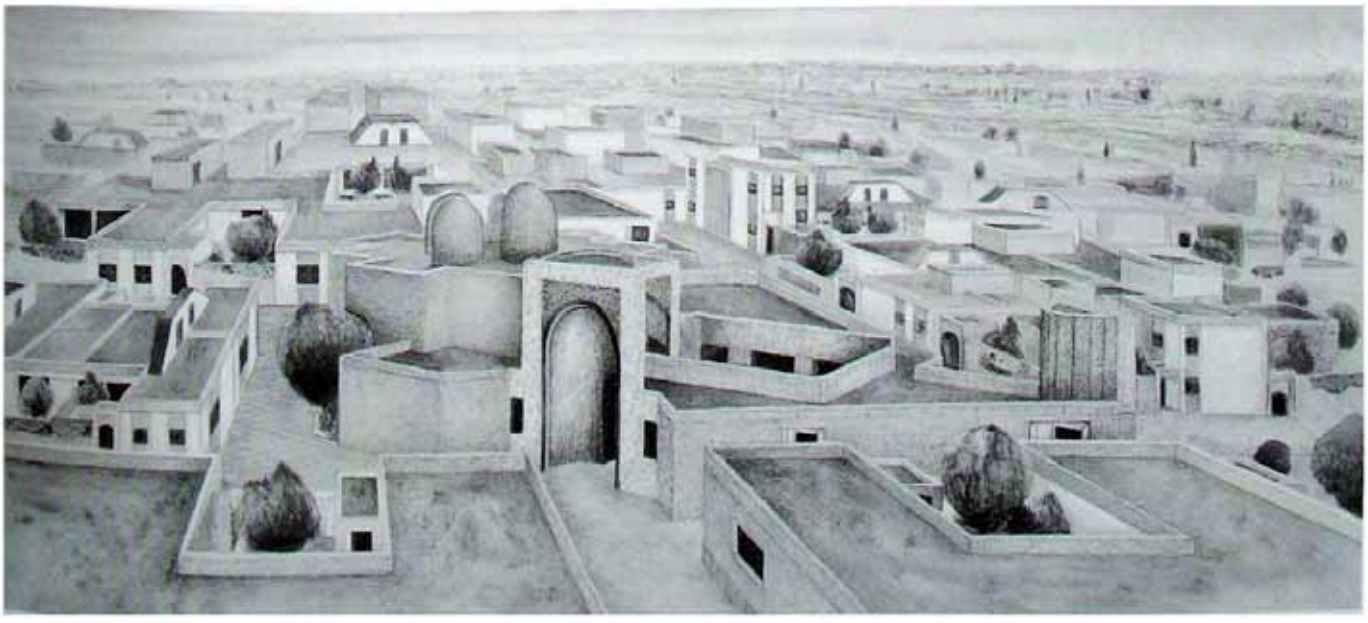
Mosque in Shushtar New Town, Khuzestan, iran



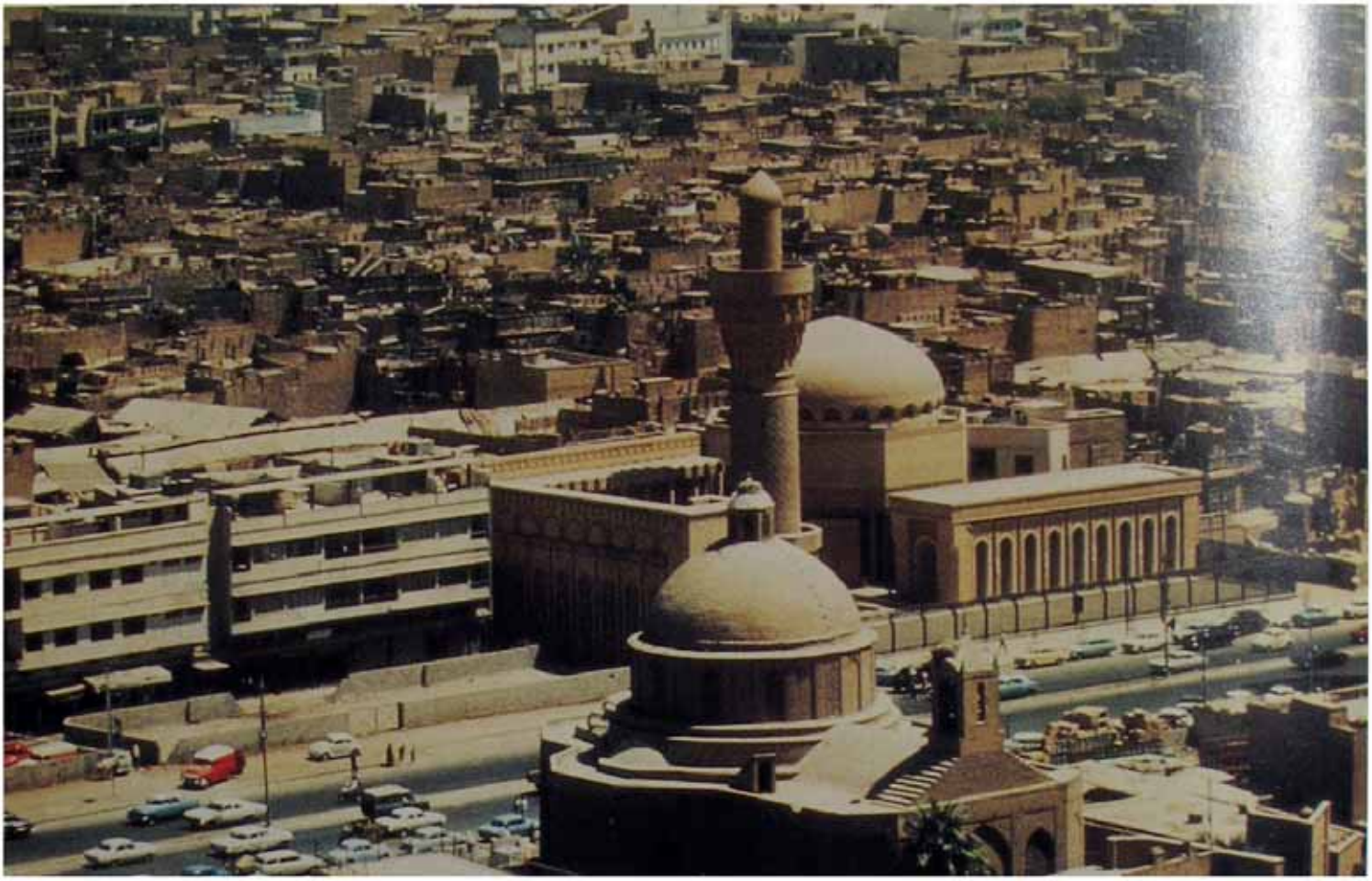
(Opposite) Project by Kamran Diba of DAZ Architects for a *jomi* (1977), which explored a new formal language for the proposed mosque in the Shushtar New Town scheme (partially completed by 1978).

(Above) Plan and section for a neighbourhood mosque in Shushtar New Town. The section reveals Diba's use of 'light-catchers' and concrete structure.

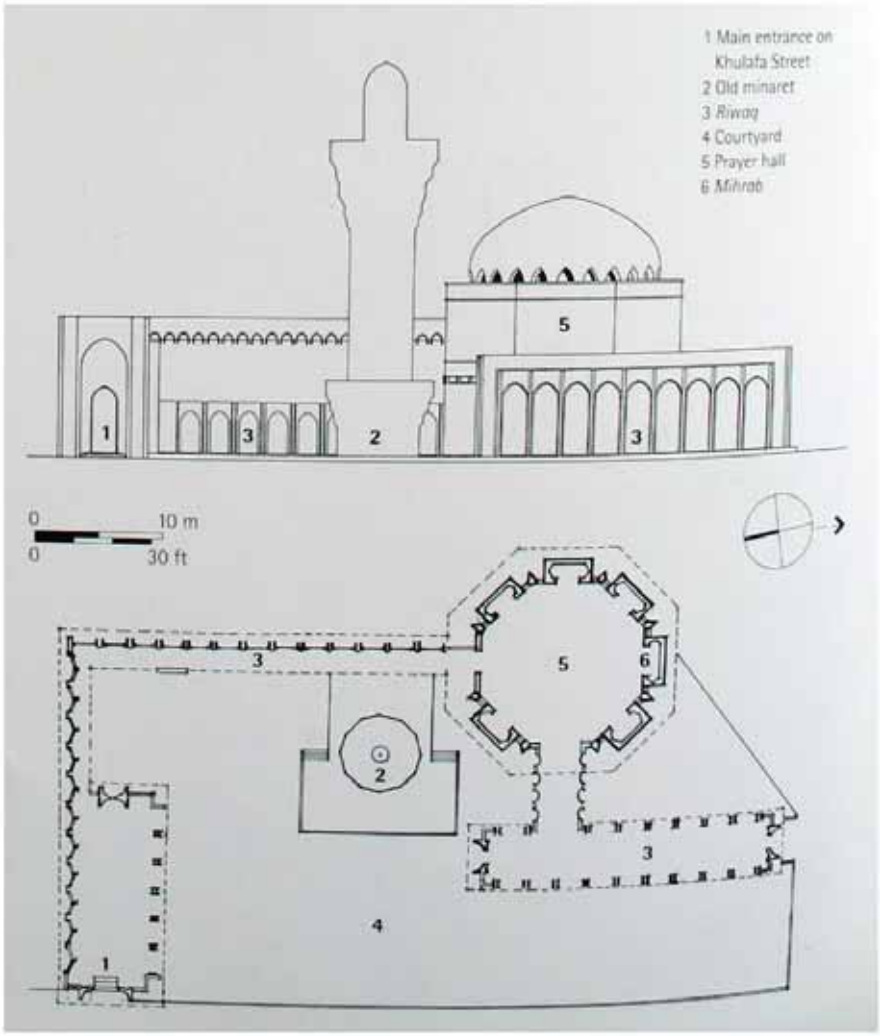
(Below) Artist's impression of the Shushtar neighbourhood mosque in its urban setting; the building was intended to break the monotony of the grid through its orientation and the use of colour.

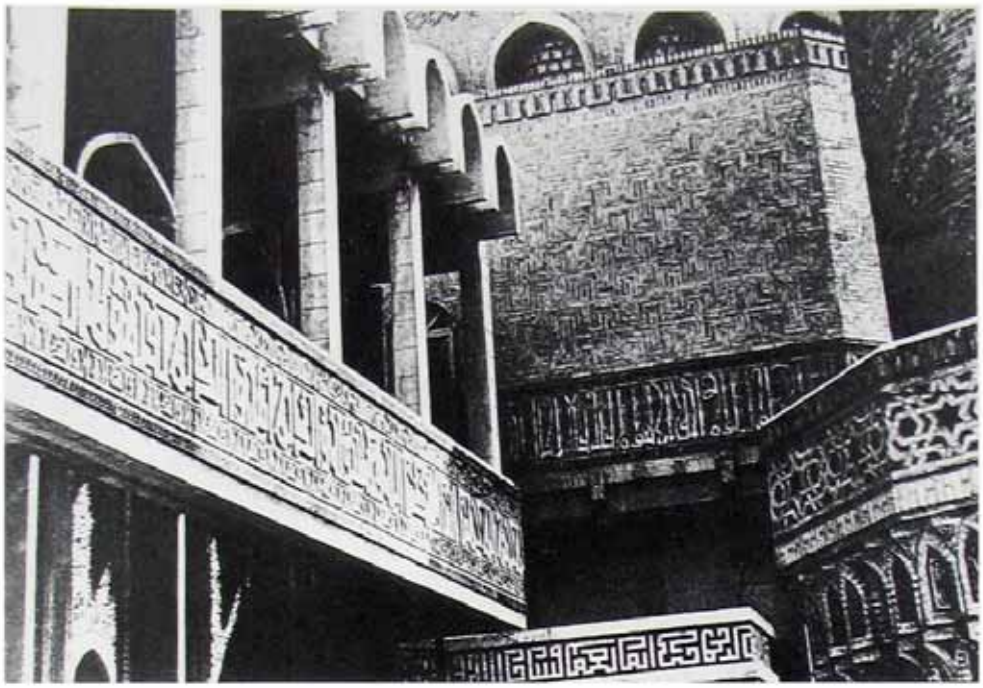


Mosque in Shushtar New Town, Khuzestan, iran



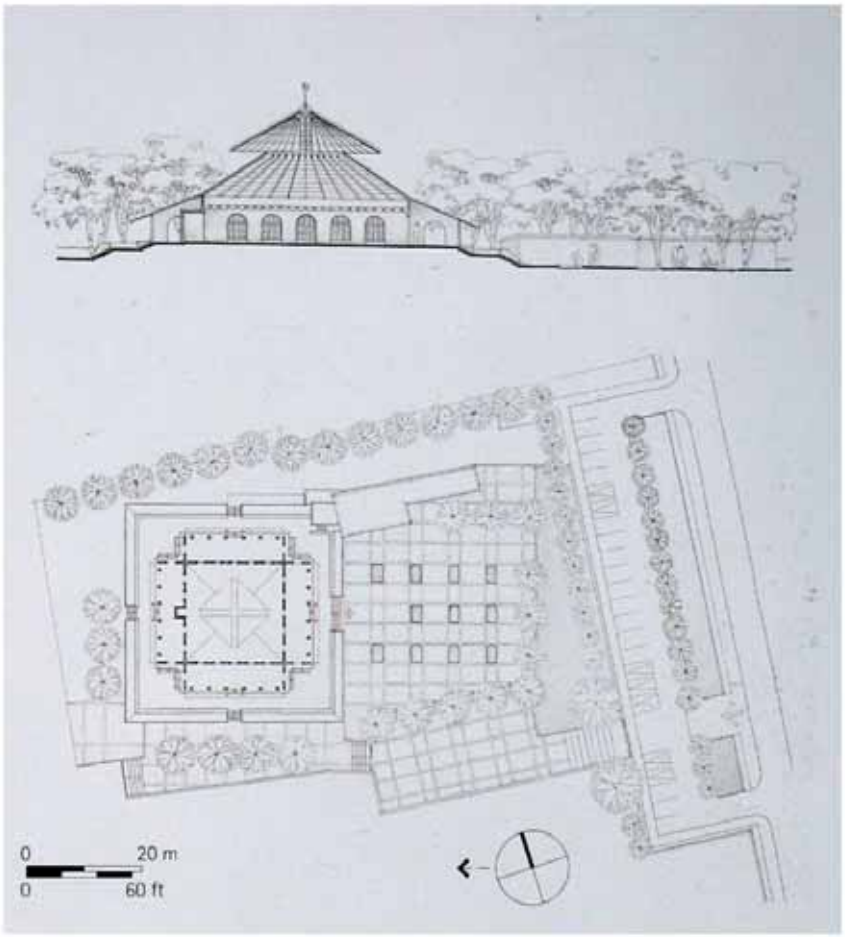
Khulafa Mosque, Baghdad, Iraq



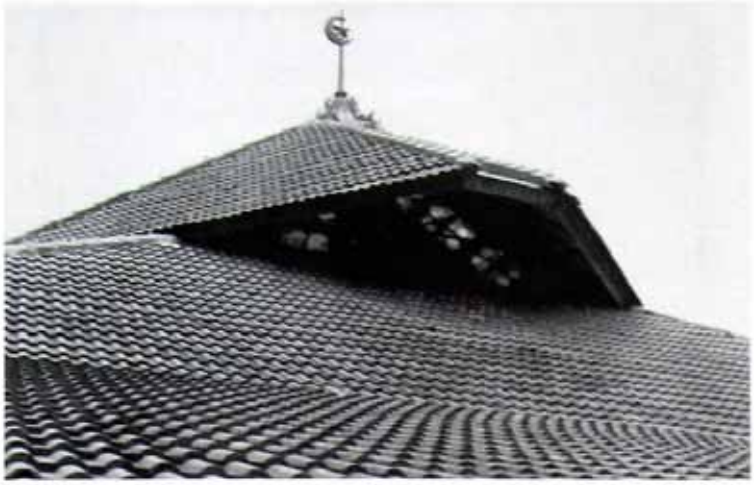


Said Naum Mosque, Jakarta, indonesia

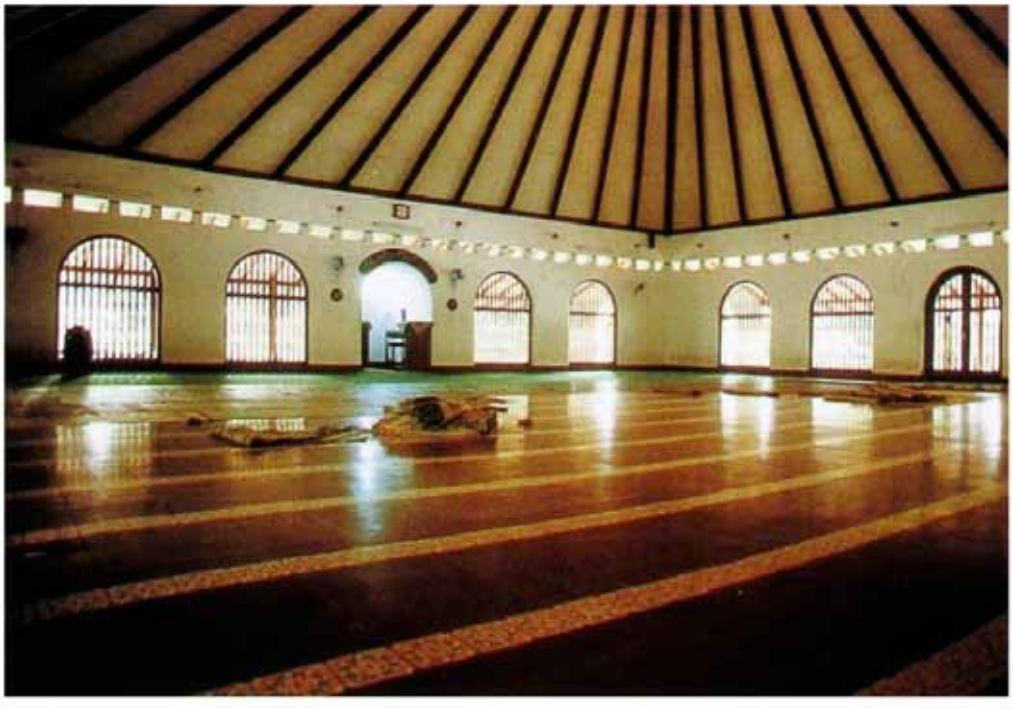
Completed in 1977, the Said Naum Mosque in Jakarta designed by Adhi Moersid provides a refuge from the crowded urban environment with its landscaped grounds and verandahs providing shade. The design of the traditional Javanese roof is in this instance an unusual variation, the upper part being rotated through 45° (top). Arched openings lead from the verandahs to the prayer hall.



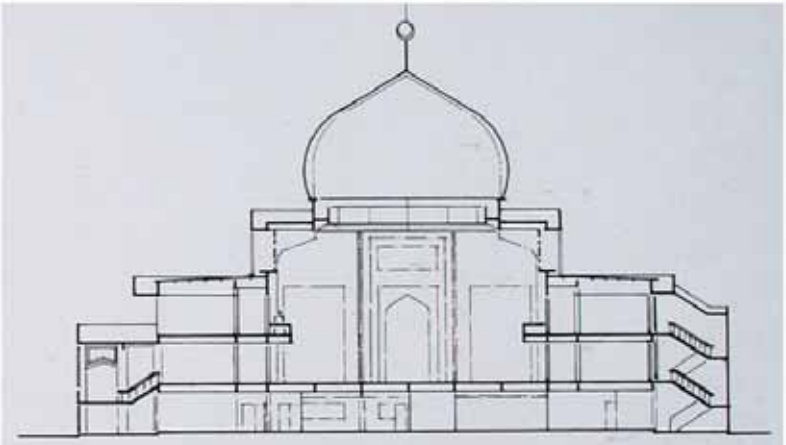
Said naum Mosque, Jakarta, Indonesia



Said naum Mosque, Jakarta, Indonesia

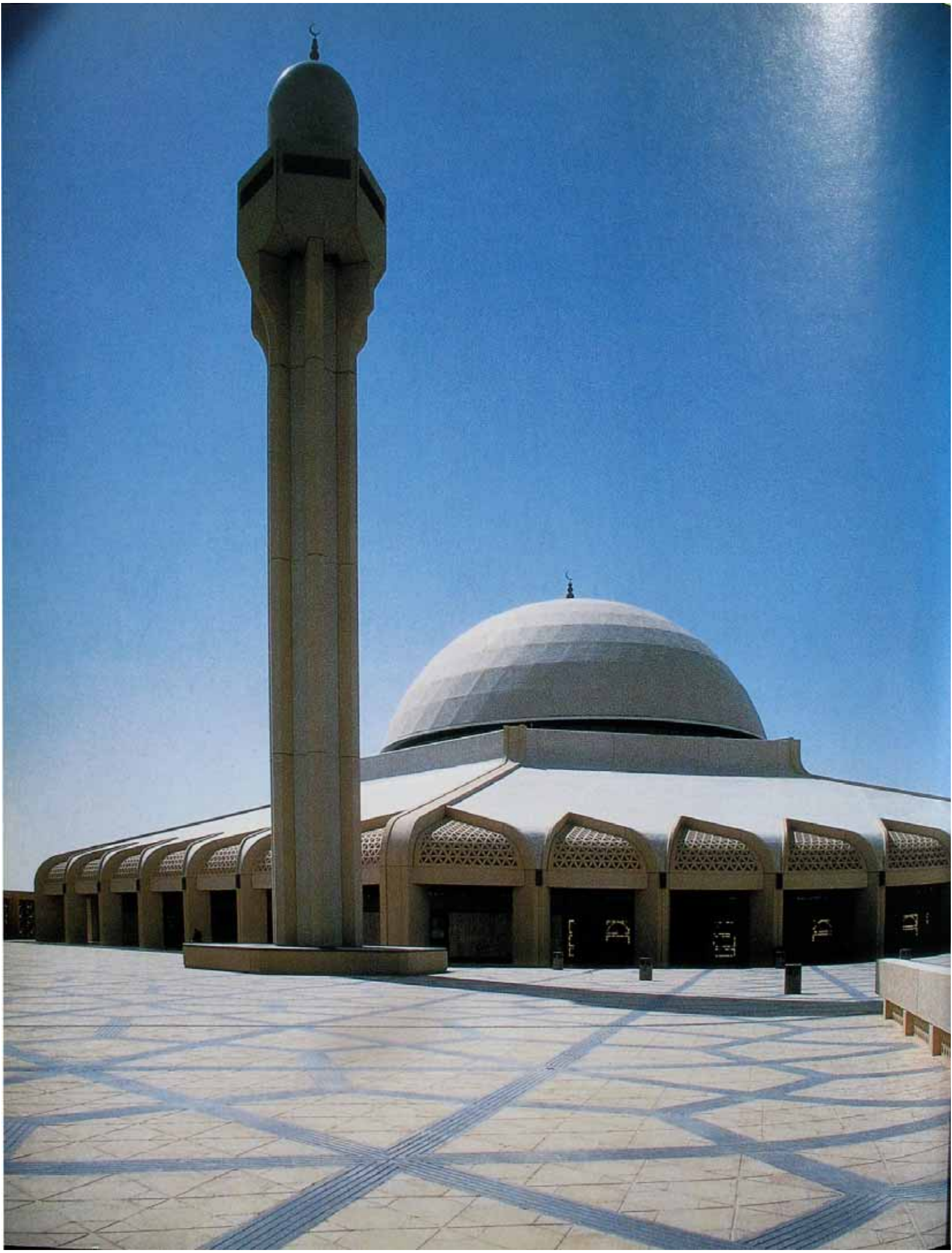


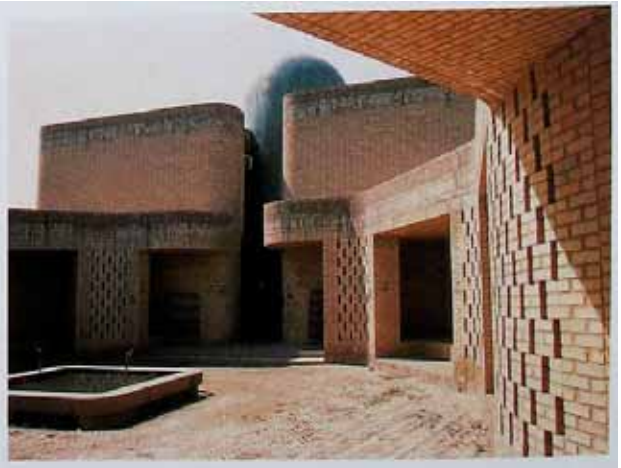
Abu Bakar as-Siddiq Mosque, Kuala lumpur, Malaysia



(Above) Interior of the domed prayer hall looking towards the *mihrab*. An attempt has been made to soften the severity of concrete structures and surfaces by introducing wooden screens and doors.

Abu Bakar as-Siddiq Mosque, Kuala lumpur, Malaysia



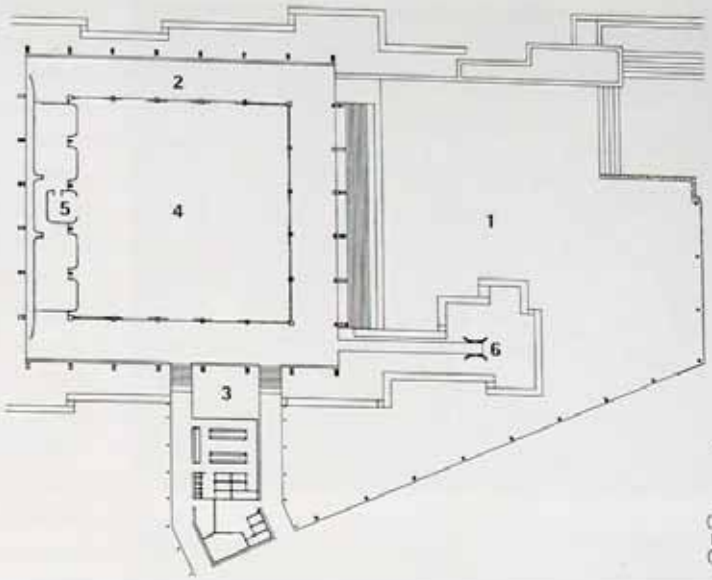


(Above) The approach to the entrance of the mosque at Jondishapur University (1975) through an octagonal courtyard (see p. 156).

(Opposite) The mosque and its freestanding minaret at the King Khaled International Airport (1984), Riyadh, seen from its hexagonal plaza (see p. 176).

(Right) Site plan by Achmad Noe'man for the Salman Mosque and accompanying facilities.

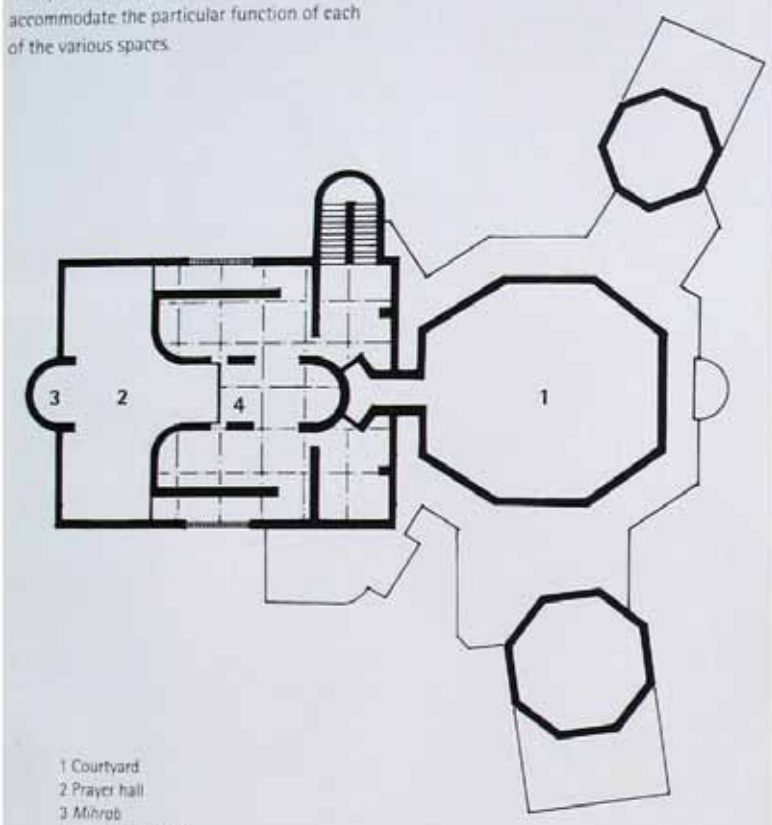
(Below) The architect initiated an uncompromisingly modernist design for a new mosque and student centre across the street from the main campus of the Institut Teknologi Bandung (ITB) in 1959, but the complex was not completed until 1972.



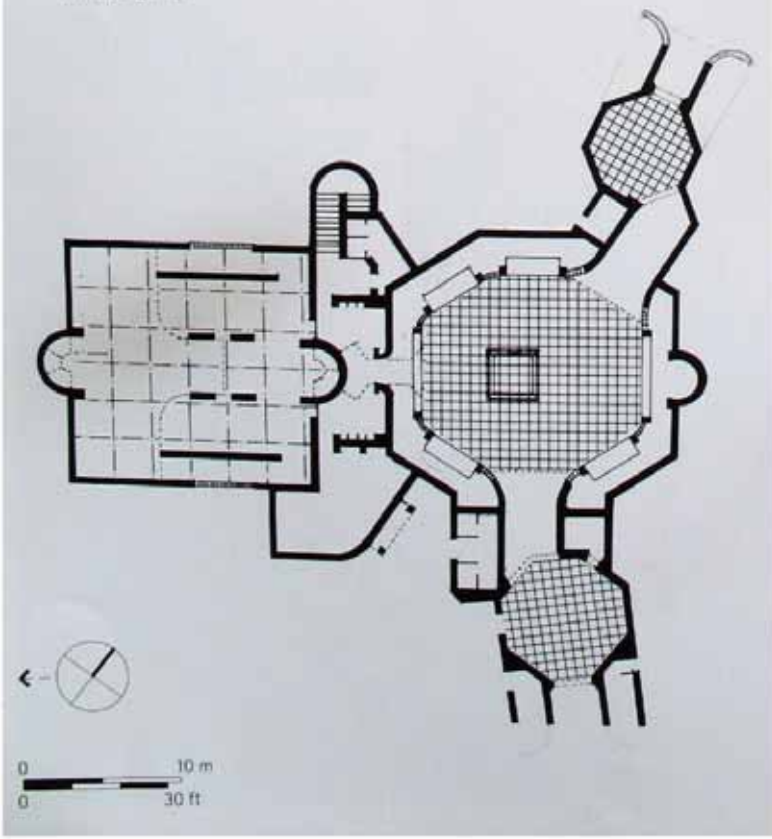
(Left) The main buildings of ITB dating from 1918–20 were designed by Henri Maclaine Pont in a style which drew on indigenous Minangkabu architecture for its external appearance, as well as on traditional Javanese reception pavilions.

Salman Mosque at ITB, Bandung, Indonesia

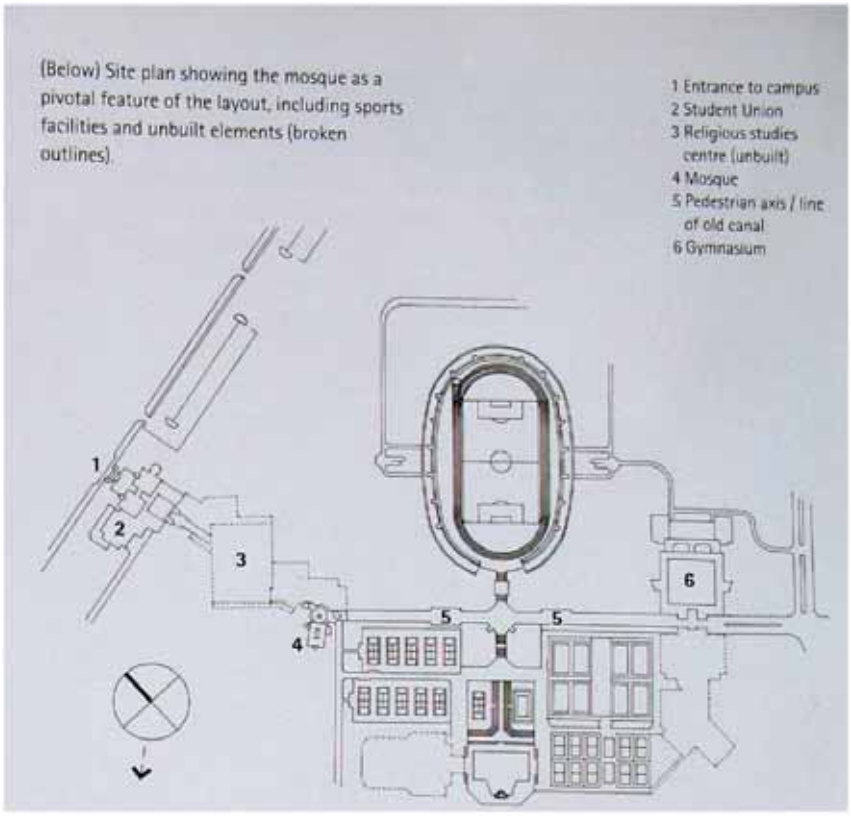
(Below and opposite below) First-floor plan, ground-level plan and section of the mosque. A pedestrian pathway passing through the courtyard provides a link to social and sports facilities on the university campus. The first-floor plan shows the extent of the women's gallery, while the section reveals the subtle manipulation of levels within the building to accommodate the particular function of each of the various spaces.

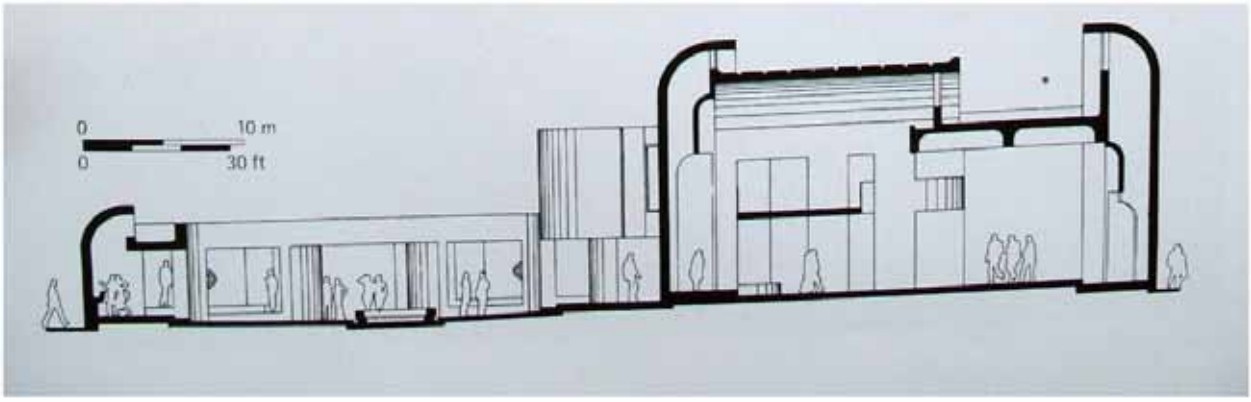


1 Courtyard
2 Prayer hall
3 *Mihrab*
4 Women's gallery

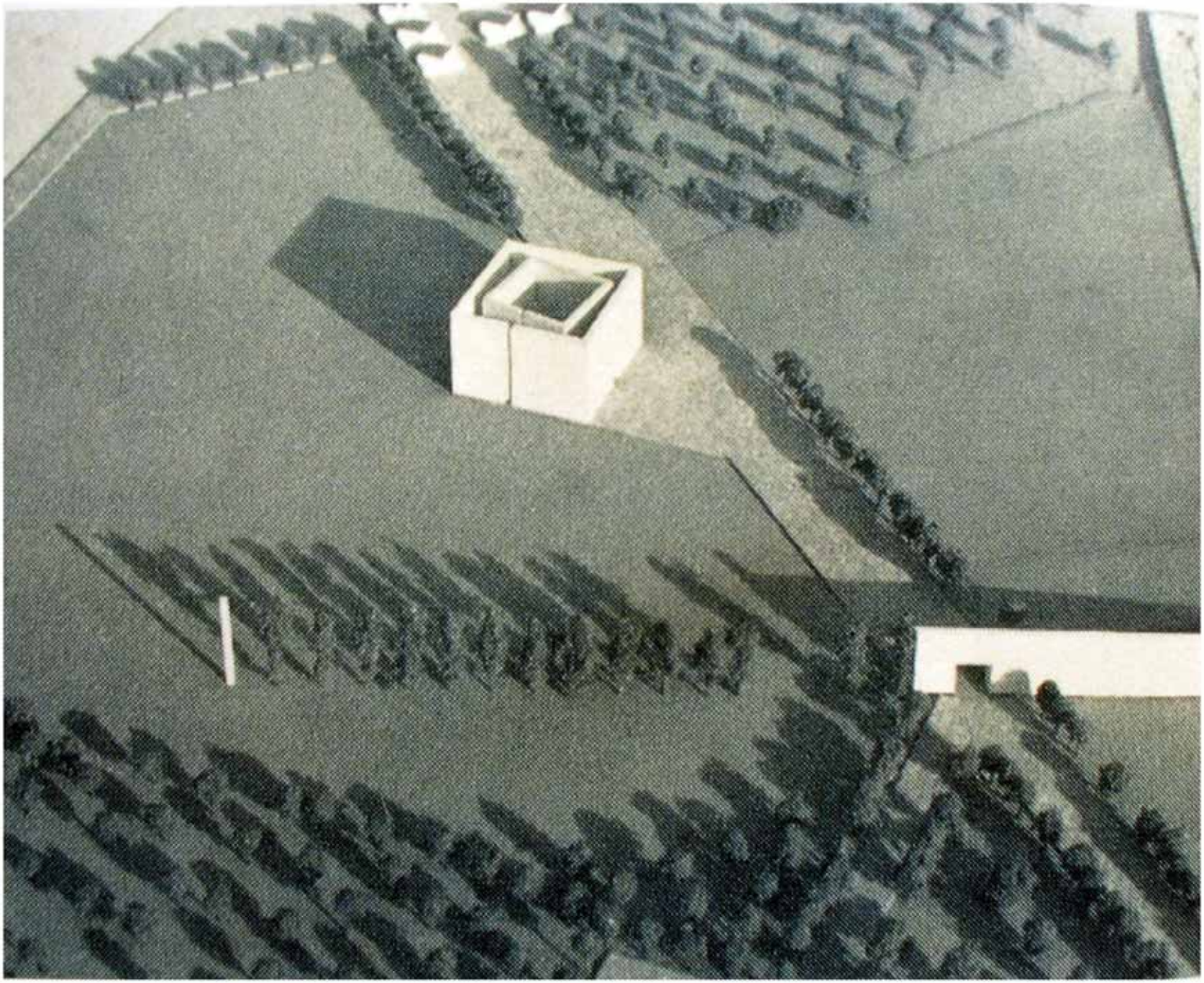


Jondishapur University Mosque, Ahvaz, iran

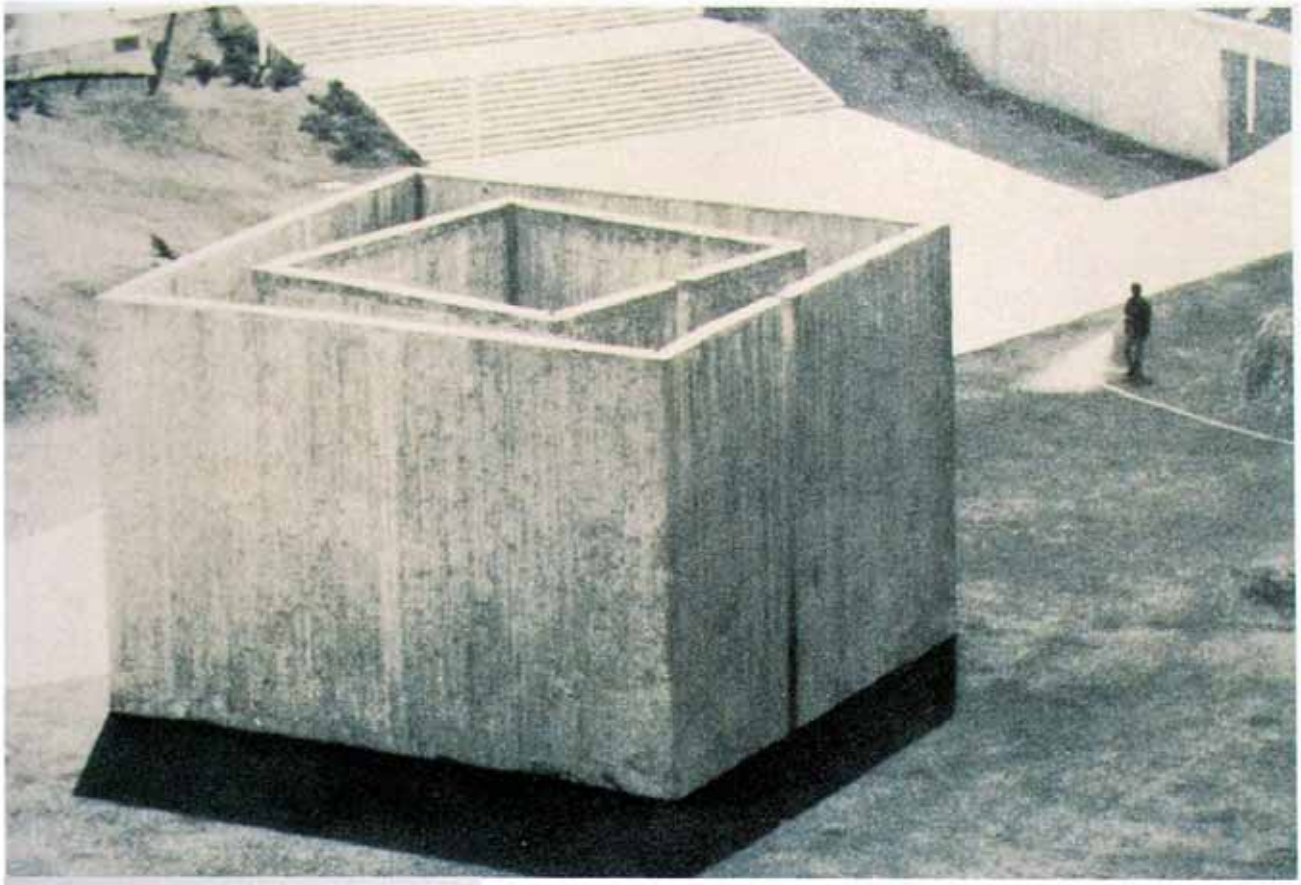




Jondishapur University Mosque, Ahvaz, iran



Namaz khaneh, Tehran, Iran



(Opposite and above) The Namaz Khaneh (1977–8) in Tehran by Kamran Diba. This small prayer space is open to the sky but protected by two enclosure walls from visual and aural distractions The rotation of the inner enclosing wall to conform with the *qibla* is clearly visible, while the outer wall is slit vertically along the sight line of a sculpture depicting the hand of Hazrat Abbas.

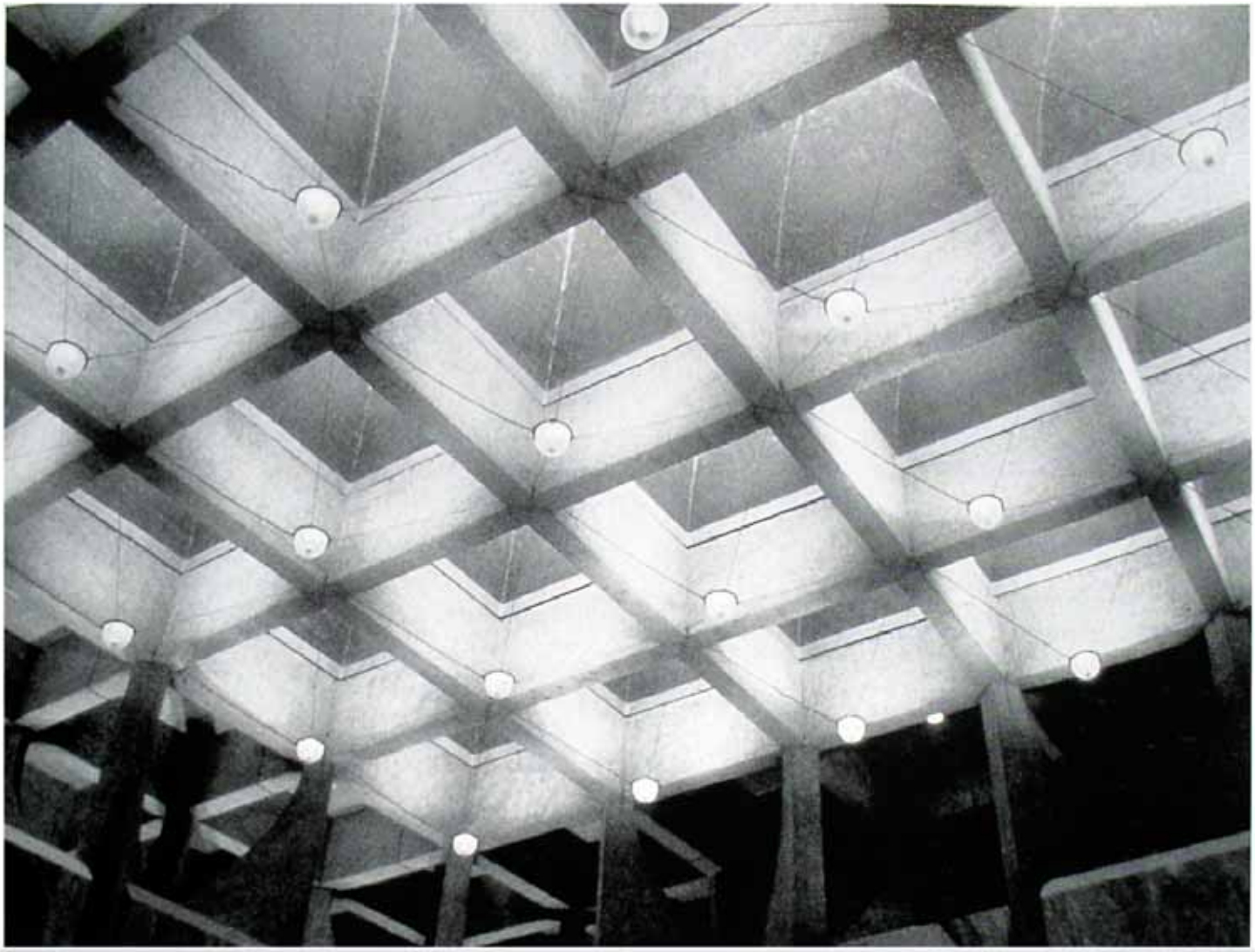
Namaz khaneh, Tehran, Iran

(Below) The University of Petroleum and Minerals at Dhahran was designed to have its mosque as the focal point of the hilltop campus. The building, designed by Caudill, Rowlett, Scott and completed in 1974, rises out of an oasis pond; standing on a podium, it is covered with a canopy that is supported by slender columns. The interior is faced with marble, while the contrasting *mihrab* niche is accentuated by the use of gold and black mosaic decoration.

(Opposite top) Part of the coffered ceiling in the enclosed, air-conditioned prayer hall.

(Opposite below) Ground-floor plan of the mosque showing the area of the podium and roof canopy and the enclosed prayer hall.

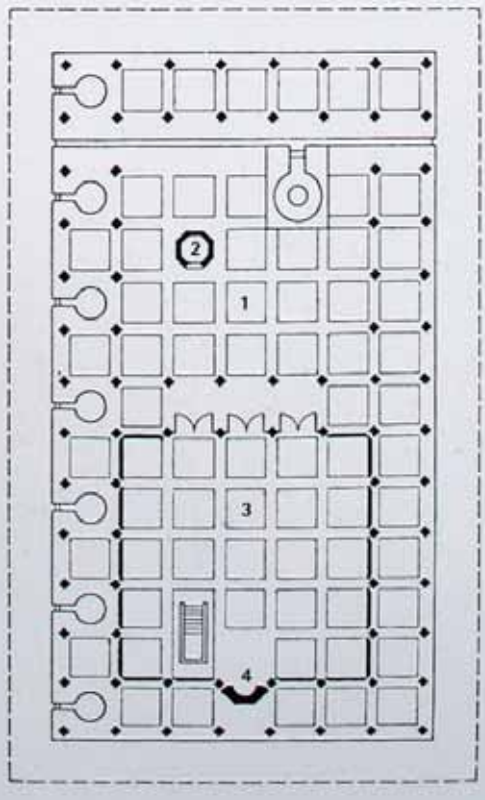
University of Petroleum and Minerals Mosque, Dhahran, Saudi Arabia



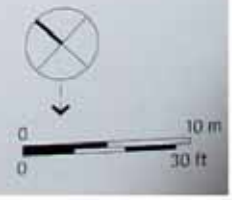
thus successfully fulfilling the intended architectonic and emblematic function.

The concept of employing an umbrella structure to provide shade for other structures or functions beneath is not an entirely new idea. The device is common in hot climates, particularly in Southeast Asia and in India, for example in the sixteenth-century Padmanabhapuram Palace in Kerala. Yet, in Saudi Arabia, the recent Dhahran example was perhaps the first of its kind to be completed, followed closely by proposals put forward by Frei Otto in the preliminary design for the Mecca Conference Centre, in which he envisaged a massive tent sheltering the entire complex (see p. 172), and subsequently in the Diplomatic Club in Riyadh.[34]

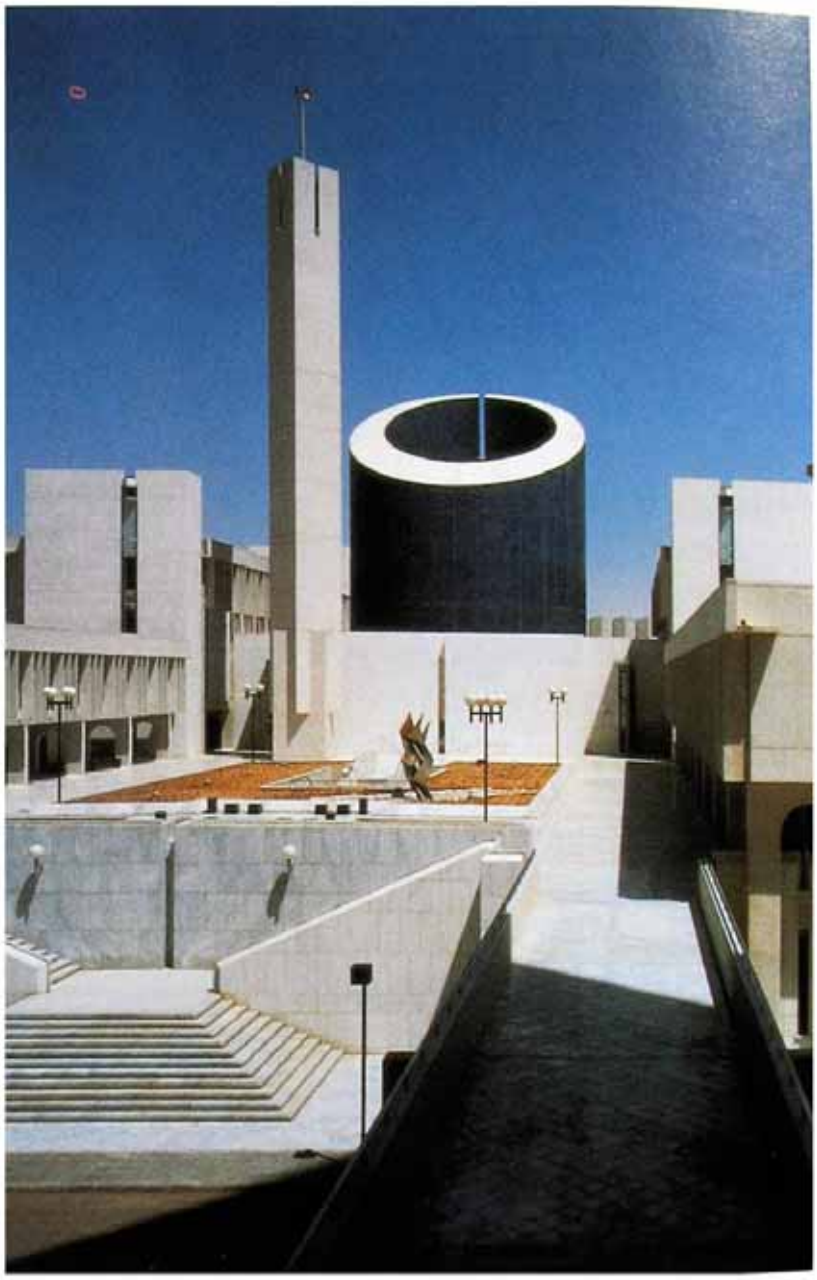
In determining the essential character of the campus, the architects had to take into account two fundamental considerations: the desert environment and the desire expressed by the client that the architecture should reflect Saudi character. A response to the desert environment was the use of a local concrete mixture of sand, limestone aggregate and cement which was sandblasted to blend in with the natural colours of the surroundings, and the use of large canopies to provide shade. Their interpretation of the 'Saudi character' is thoroughly rooted and does not break

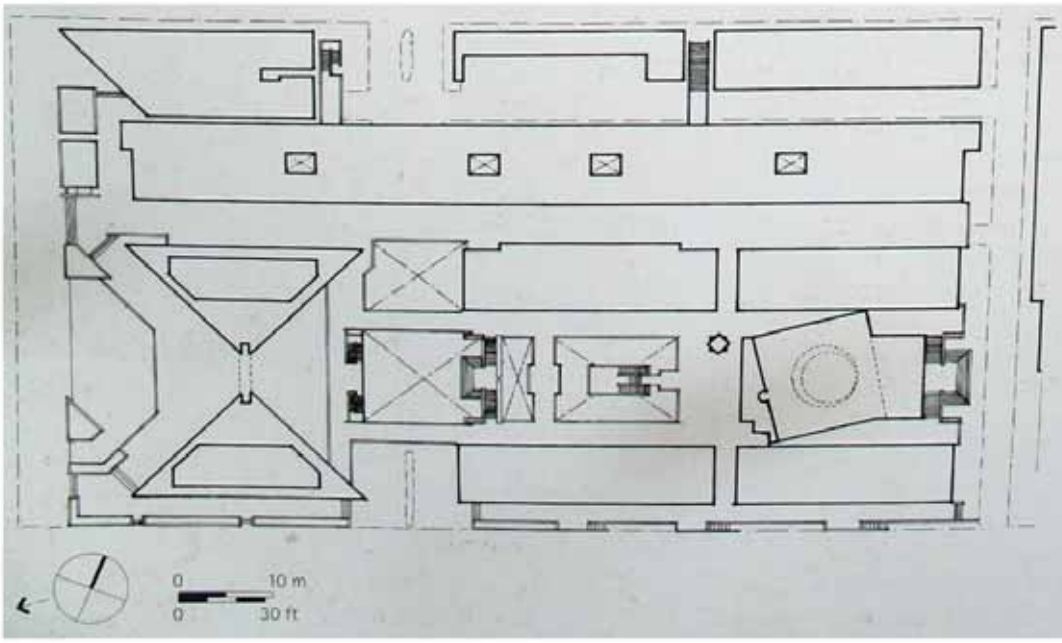


1 Courtyard
2 Minaret
3 Prayer hall
4 *Mihrab*



University of Petroleum and Minerals Mosque, Dhahran, Saudi Arabia





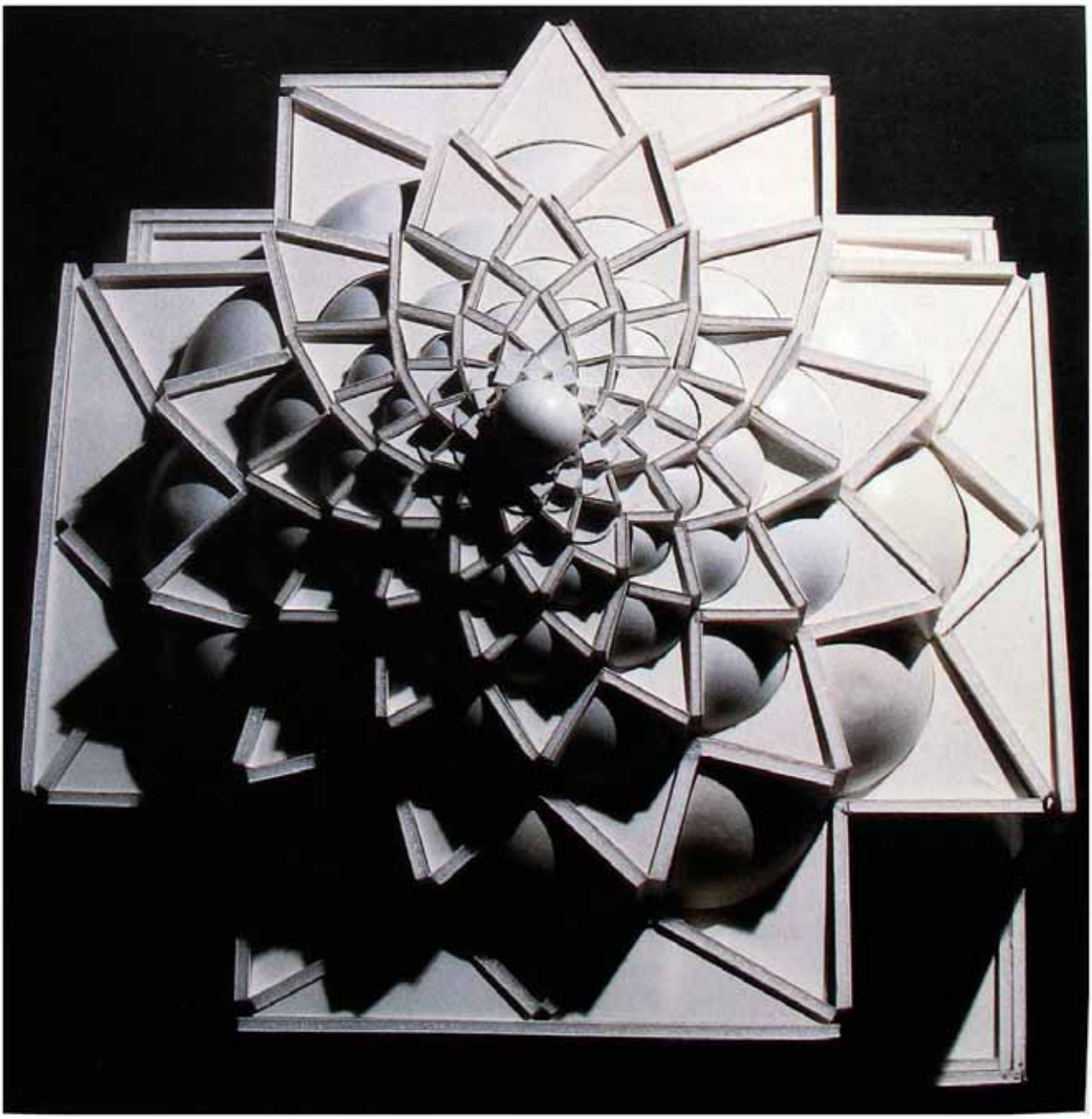
(Above) The mosque of the King Faisal Foundation (1981–2) in Riyadh, designed by Kenzo Tange, displays basic forms such as tower, cylinder, crescent and cube in an emblematic fashion. Deep-blue tiles were used to create a strong contrast between the vertical cylindrical form and the surrounding elements faced with white marble.

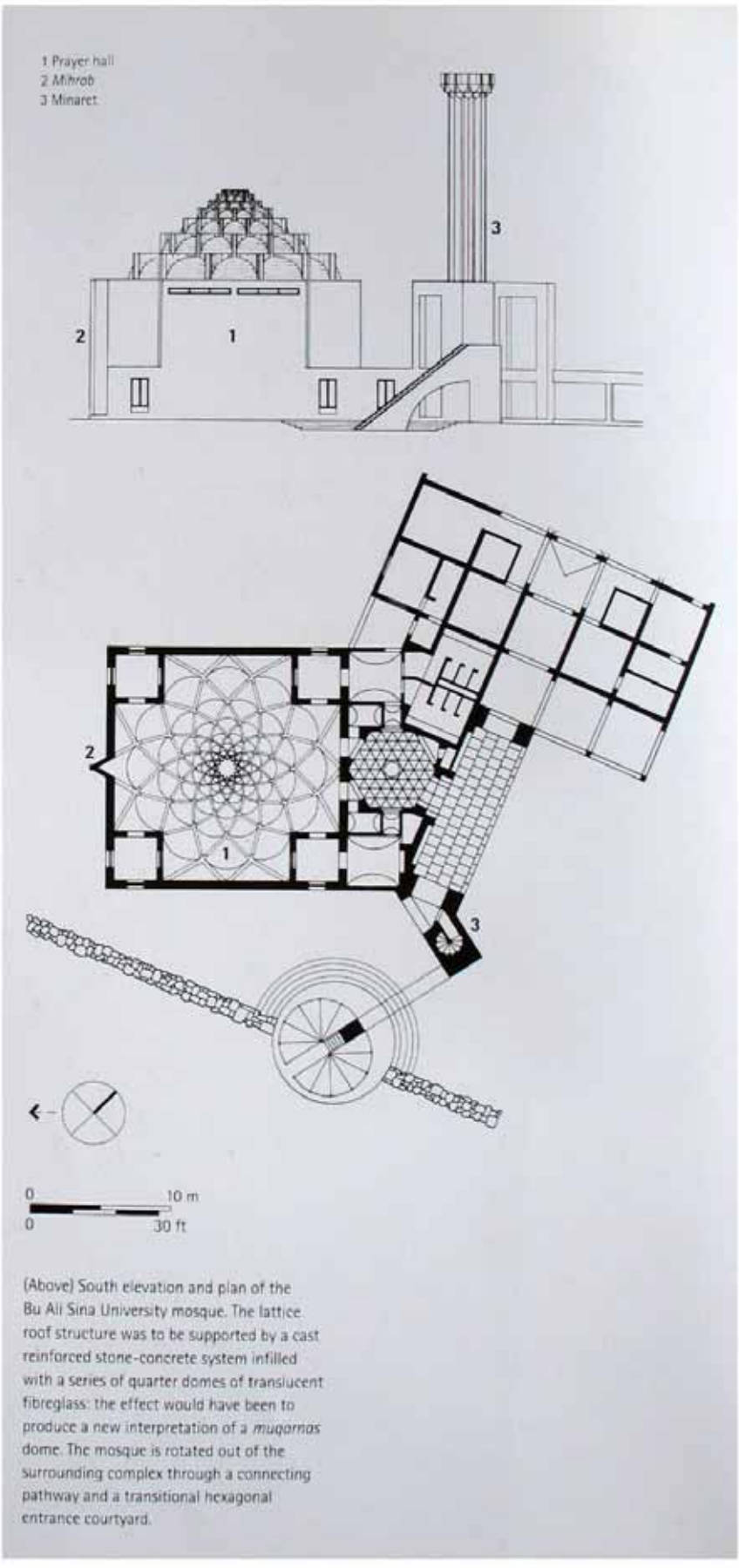
(Left) Site plan of the entire Al-Khairia complex, with the mosque turned within the grid to face Mecca.

(Opposite) Model for the dome of the projected mosque designed by Nader Ardalan in 1978 for the new Bu Ali Sina University in Hamadan.

King Faisal Foundation Mosque, Riyadh, Saudi Arabia

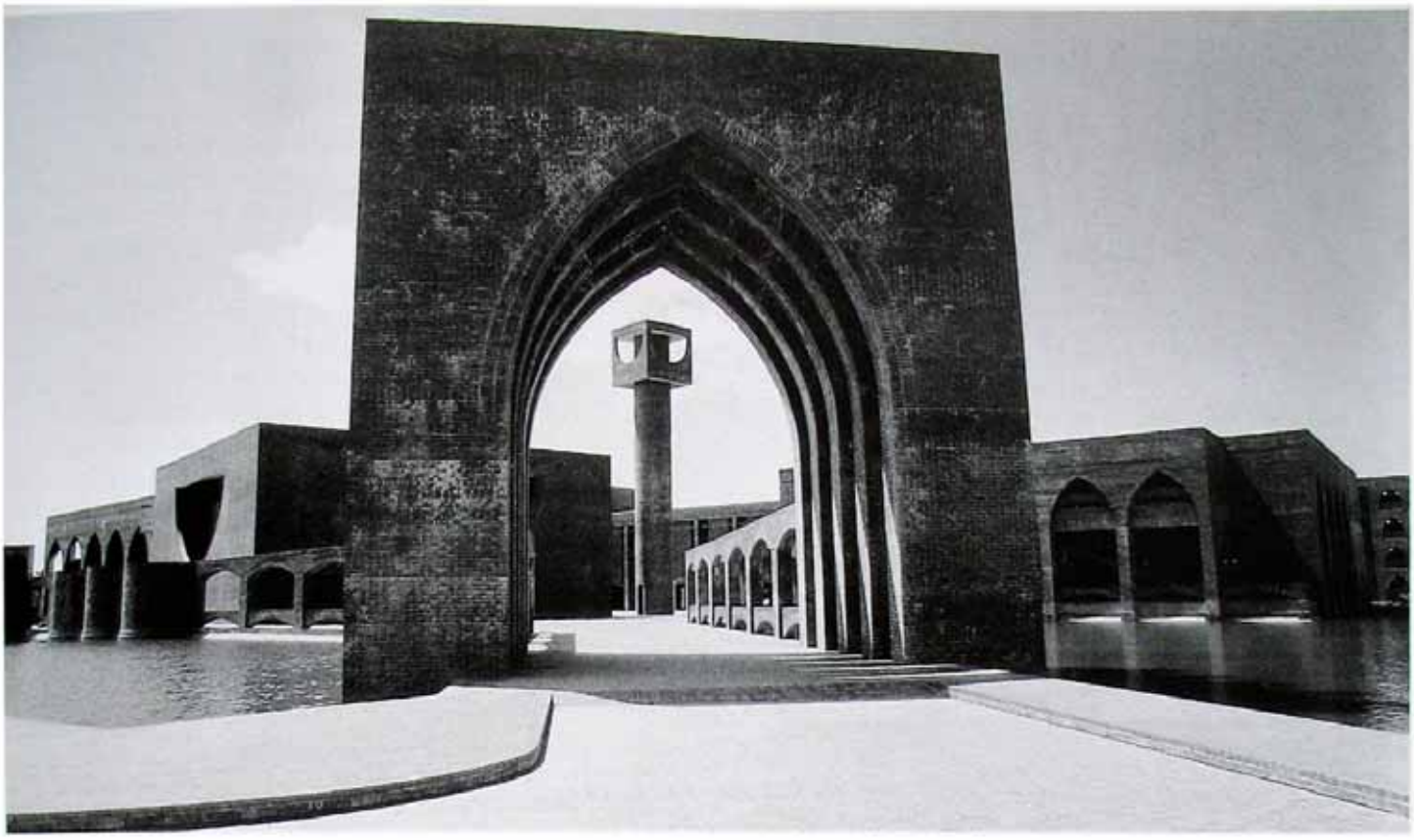
Bu Ali Sina University Mosque, Hamadan, Iran (project)





(Above) South elevation and plan of the Bu Ali Sina University mosque. The lattice roof structure was to be supported by a cast reinforced stone-concrete system infilled with a series of quarter domes of translucent fibreglass: the effect would have been to produce a new interpretation of a *muqarnas* dome. The mosque is rotated out of the surrounding complex through a connecting pathway and a transitional hexagonal entrance courtyard.

Bu Ali Sina University Mosque, Hamadan, Iran (project)



(Above) The ceremonial entrance portal, set at one corner of the site and consisting of five freestanding arches, gives access to the Islamic Centre for Technical and Vocational Training and Research (1978–87), Dhaka. The design for the entire complex by the Turkish firm Studio 14 was guided by the principles of the historic Ottoman *külliye* layout. The freestanding minaret marks the centre of the complex and also serves as a rotational pivot for pedestrian circulation around the mosque.

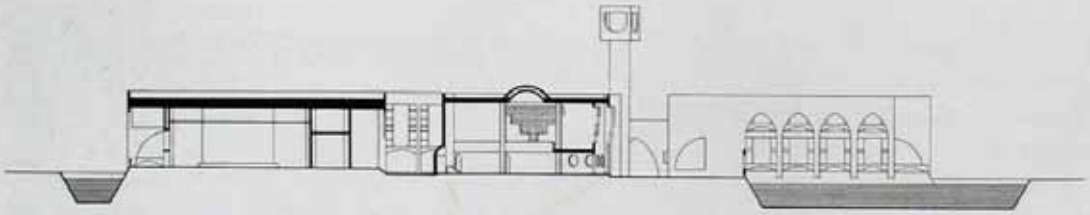
Islamic Centre for Technical Vocational Training and Research, Dhaka, Bangladesh

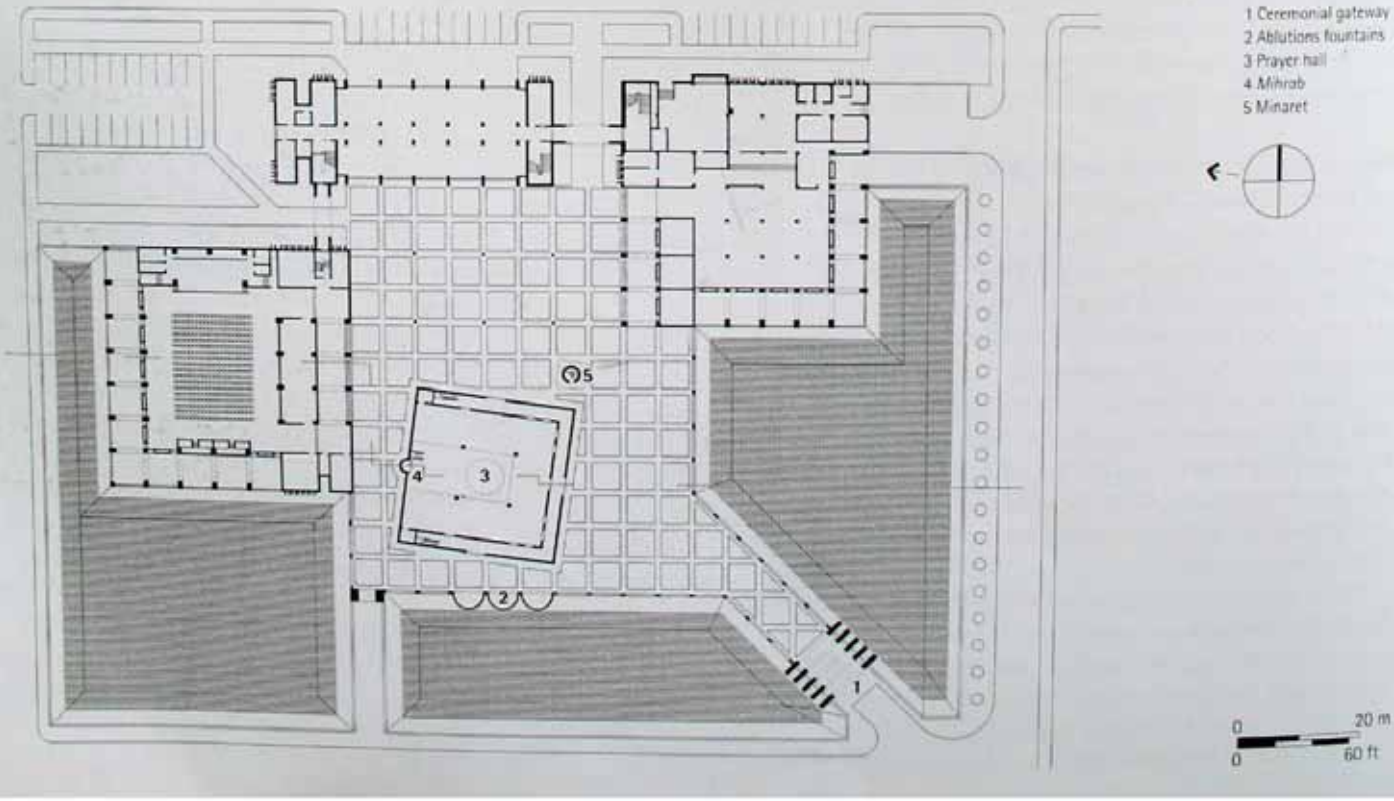
Libya, Saudi Arabia, Senegal and Turkey) was appointed for the purpose, while each member country proposed a candidate designer from among its own nationals. The scheme submitted by Doruk Pamir of Studio 14 was selected by the Board in December 1979, and the design process was completed by mid-1983. The project manager was Gültekin Aktuna of Studio 14, and the client was represented by Dr Rafiquddin Ahmad, the Director of ICTVTR (1979–87).[42]

Located some 30 km (20 miles) north of Dhaka, outside the Jongi Industrial zone and in the vicinity of the Islamic University, ICTVTR is organized around a central courtyard. The core of the layout was programmed as a social-cum-administrative area including an auditorium for up to 500 persons, a cafeteria with a capacity of 1,000, a library and research centre, an administrative building with an arcade for exhibitions, shops and a mosque to accommodate 500 worshippers. The rest of the facilities, such as dormitories, academic buildings and workshops to the north, faculty and staff housing and a guest house to the west, and a student centre and sports facilities to the east, constituted an outer ring around the core.

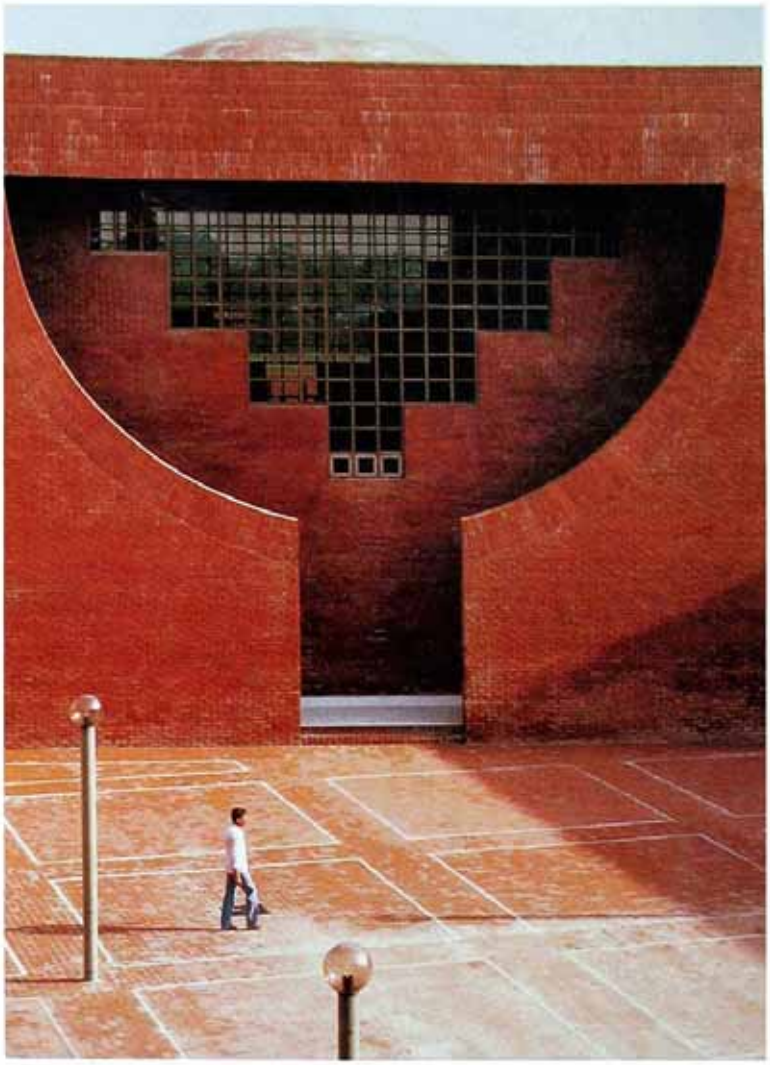
The plan of the central courtyard and the surrounding buildings is governed by a rigid orthogonal grid. The need to rotate the mosque in the centre to achieve the orientation

(Below) Section and ground plan of the ICTVTR complex. The layout of the central court and surrounding buildings is governed by an orthogonal grid, within which the change of the mosque's orientation to the *qibla* creates a dynamic tension. The buildings are surrounded by water on three sides.





Islamic Centre for Technical Vocational Training and Research, Dhaka, Bangladesh



(Top) The main entrance to the mosque. Cut-out forms in brick set up a dialogue with other examples of contemporary architecture in Dhaka engendered by Louis Kahn's design for the Capitol Complex.

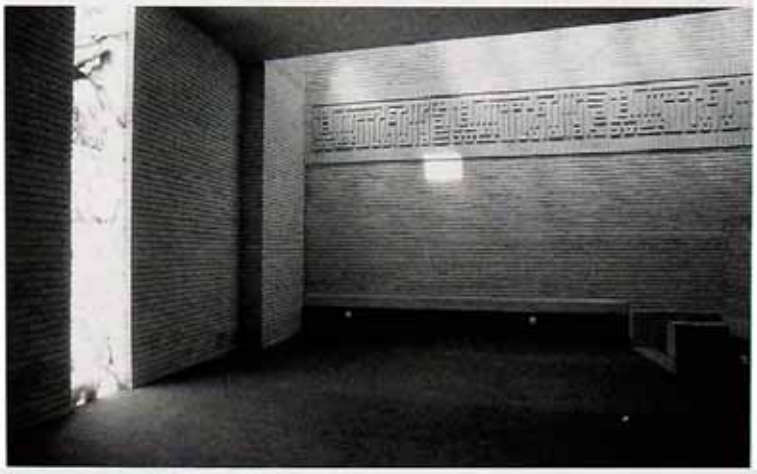
(Above) A view along the exterior of the *qibla* wall demonstrates the dynamic intrusion of the bulk of the mosque and its projecting *mihrab* into the straight line of an access path for pedestrian circulation.

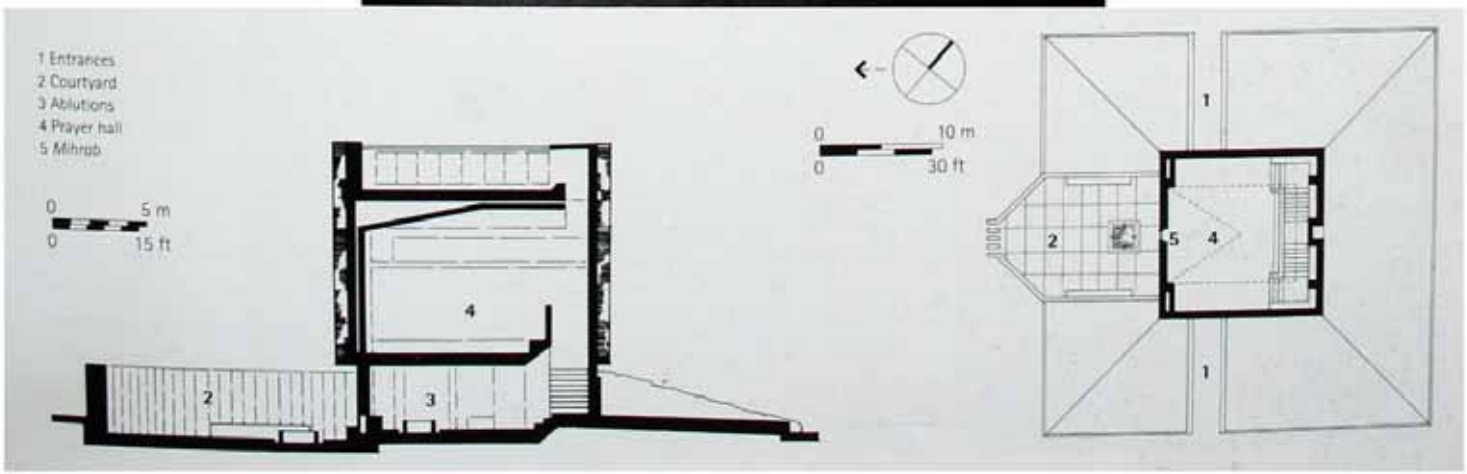
Islamic Centre for Technical Vocational Training and Research, Dhaka, Bangladesh

(Opposite) The Kerman University Mosque, completed in 1989, is given visual prominence by being raised on a mound. The prayer hall in the form of a cube is intended to accommodate 150 worshippers.

(Below) Entrance to the mosque is through a ground-level courtyard and ablutions area. In the interior the play of light brings out the horizontal band of calligraphic inscription on the brick walls and casts a yellow glow through the translucent marble of the *mihrab*.

(Bottom) Section and plan of the mosque and its courtyard.

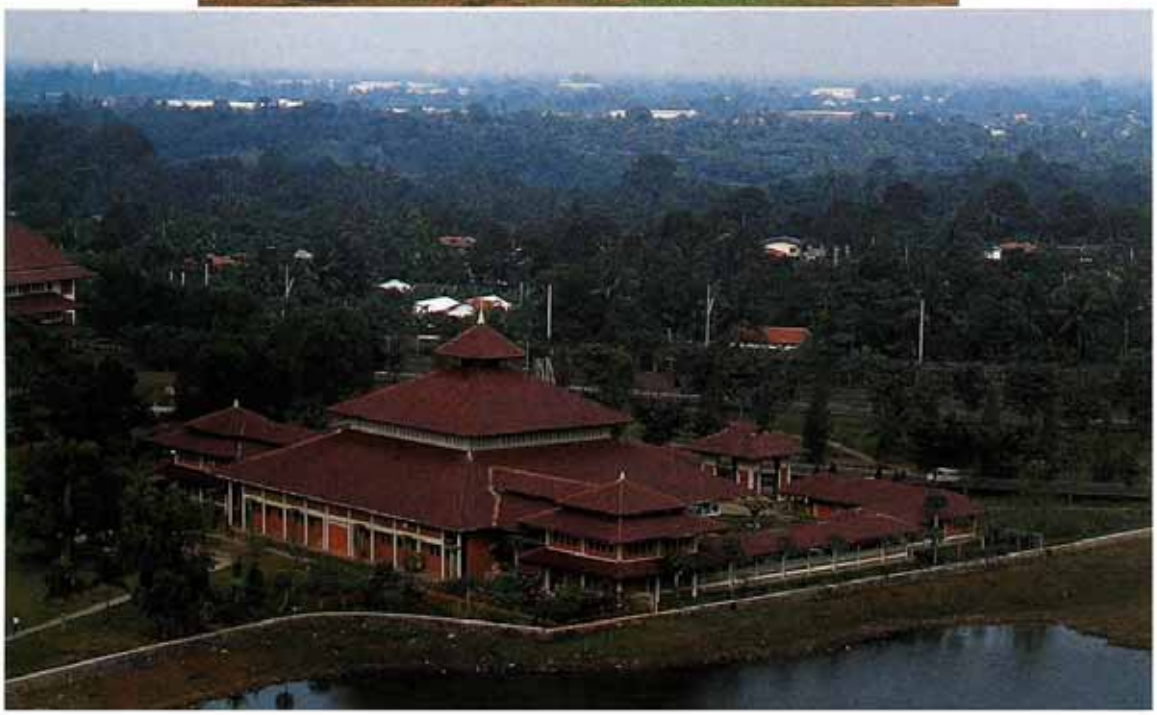




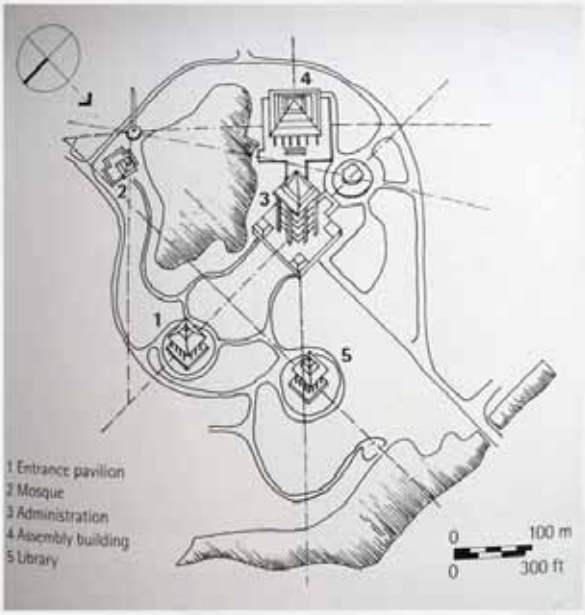
University of Kerman Mosque, Iran

(Below) The mosque of the University of Indonesia at Depok, completed in 1966, was designed by Triatno Yudo Hardjoko. It is sited close to the edge of one of a series of reservoirs which dot the campus. The morphology of the entire university was programmed to make use of indigenous architectural traditions.

(Opposite left) Axonometric partial site plan of the university showing the mosque, together with faculty and administration buildings.



University of Indoesia Mosque, Depok, Jakarta, Indonesia

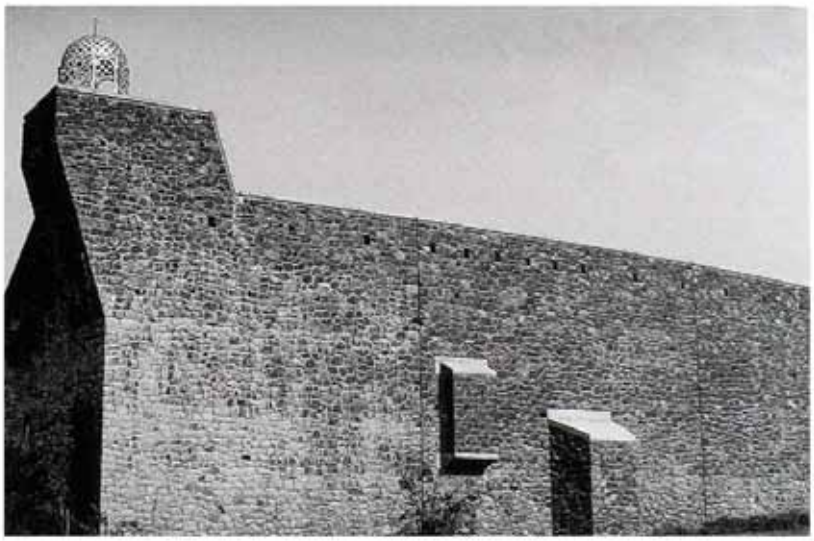


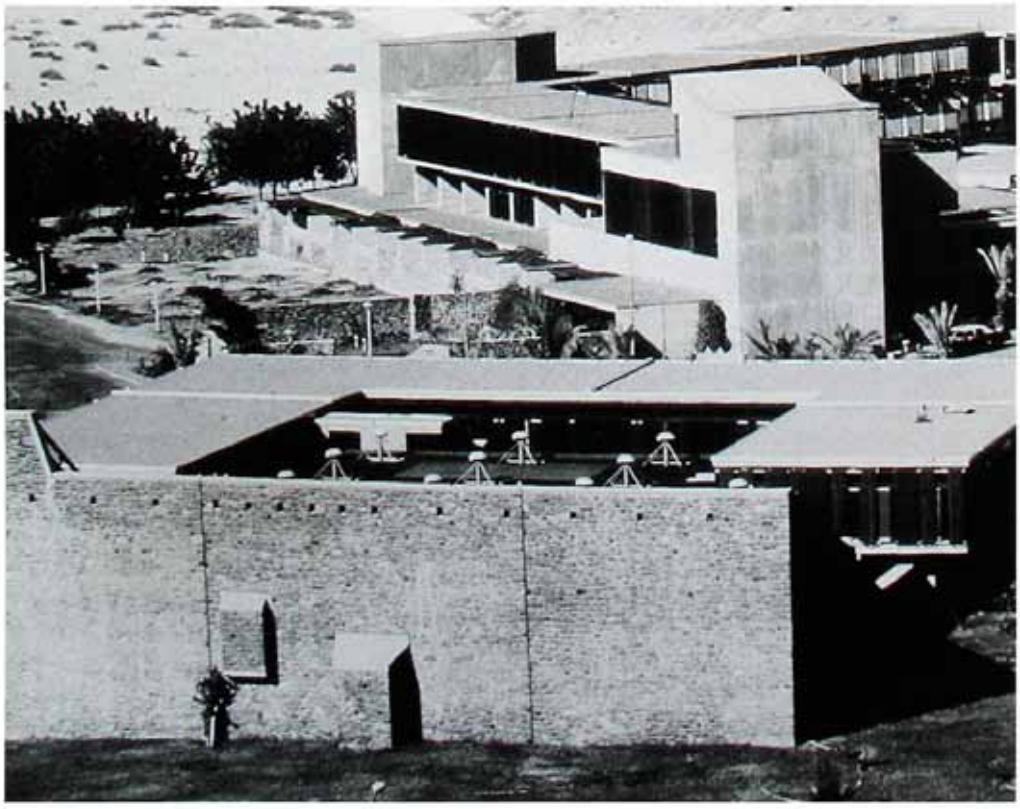
University of Inonesia Mosque, Depok, Jakarta, Indonesia

Hotel and Conference Centre Mosque, Mecca, Saudi Arabia

While universities provide the largest sample among recent buildings that offer challenging solutions to the problem of contemporary mosque design, a number of those associated with other institutions also deserve mention. One of these, designed for a specialized commercial client, is the Inter-Continental Hotel and Conference Centre in Mecca, by the German team of Rolf Gutbrod and Frei Otto. Their project was the winning design in an invitational competition sponsored in 1966 by the Saudi Arabian Ministry of Finance and National Economy. It was an innovative proposal for a mast 60 m (200 ft) high, from which a large fabric structure (based on the idea of the Bedouin tent) would be suspended, while the buildings beneath it were to be organized around an artificial oasis. After the competition the architects were asked to develop their scheme for use on a different site, which they did in 1968.[9] The new site was located some 6.5 km (4 miles) west of Mecca along a dry river bed, with the Sirat Hills as a backdrop. Retaining the basic idea of the tent structure, the architects adapted their original design to incorporate a cluster of separate focal points, each with its own shading device.

Completed in August 1974, the Hotel and Conference Centre was intended to provide conference facilities and lodging for pilgrims making the *Hajj* and *umra*. As Mecca is inaccessible to non-Muslims, it proved difficult for the architects to supervise construction on site. This radical





(Top) The courtyard of the Conference Centre Mosque by Rolf Gutbrod and Frei Otto (1974), shaded by wooden lattice screens.

(Left and centre right) The *qibla* wall of the mosque from the exterior with its rectangular projections of the *mihrab*, *minbar* and the corner staircase minaret. The general view shows the mosque in the foreground in relation to the Conference Centre.

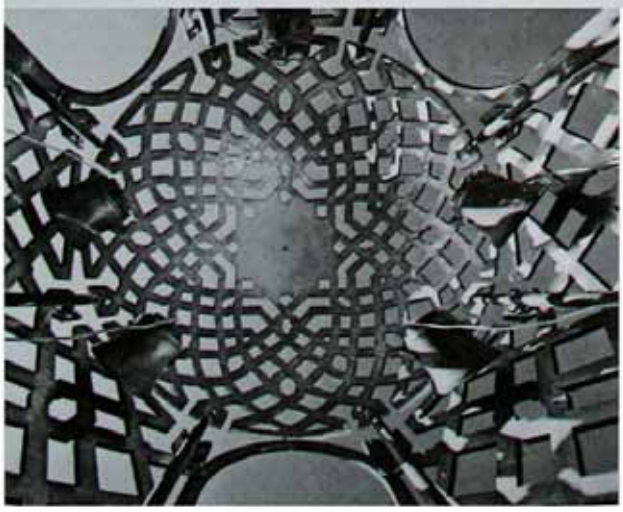
(Above) Detail of the Masjid-i Bilal, Mecca, the design of which provided a stylistic precedent for the staircase minaret of the Conference Centre Mosque.

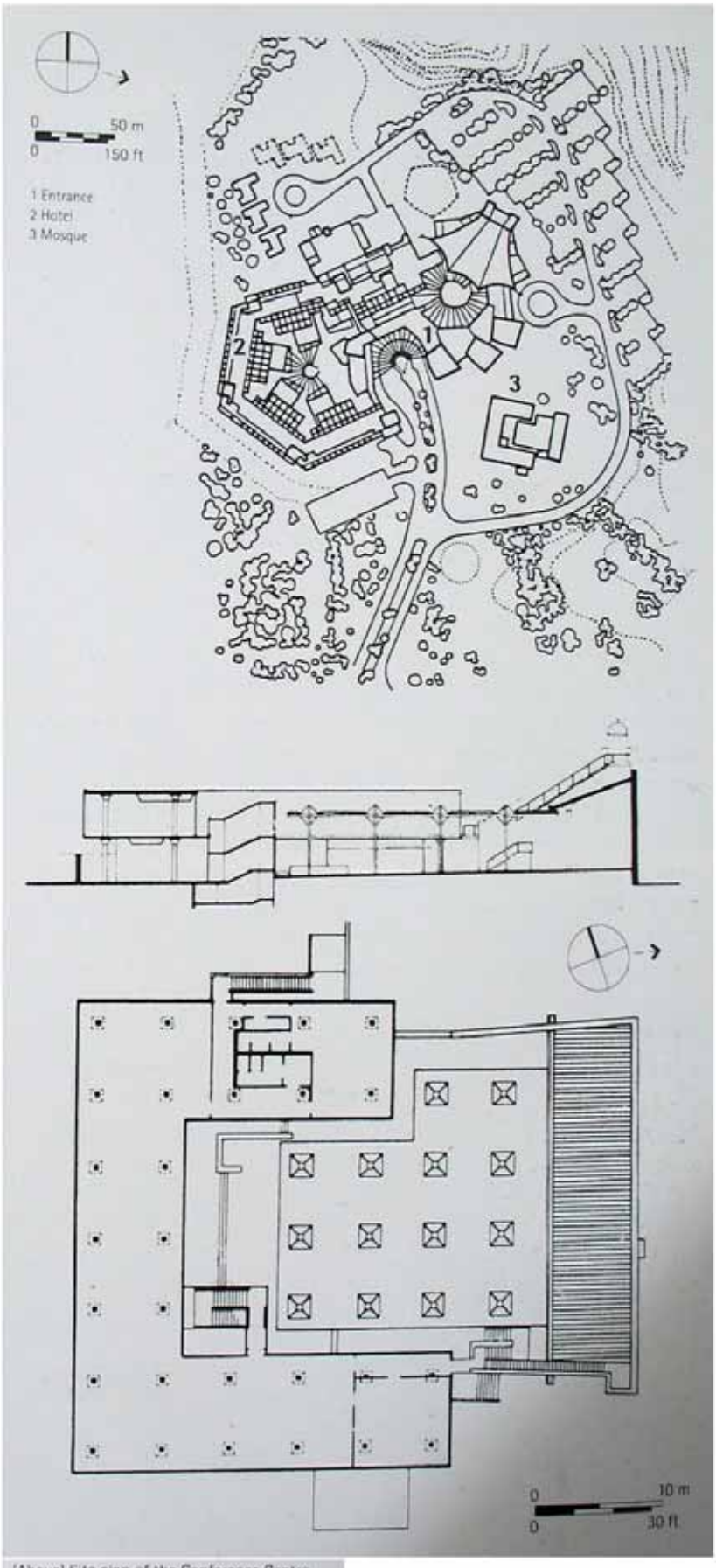
Hotel and Conference Centre Mosque, Mecca, Saudi Arabia

handicap was overcome to some extent by installing TV monitors to help control the work in its early stages. A predominantly domestic labour force was employed and the architects made a point of employing local artists to make the population feel that the project belonged to them.[50]

In an effort to produce a scheme with recognizably Saudi Arabian design features, the architects combined three basic themes – the tent, a type of wooden lattice screen called the *kafess*, and the oasis – reinterpreting them through the medium of contemporary materials and technology. The scheme was divided into two parts, the hotel with 170 rooms and five large private suites, and the conference centre comprising: a main auditorium with seating for 1,400; three seminar rooms, each with a capacity of 200; a royal suite; six small meeting rooms; and offices. These were in turn articulated around two central cores within the oasis-like site.[51]

From the complex, a landscaped pathway leads to the mosque, which consists of three basic elements: a central courtyard, a shallow rectangular prayer hall, and a U-shaped office block raised on columns. The raised block serves as the entrance to the mosque, with an ablutions area at ground-floor level, above which are a reception area and office space on the first floor. Like the conference centre, this entrance block is built of concrete with exposed steel beams. The central courtyard is shaded by wooden lattice screens suspended from steel columns. Across the court from the raised block of offices rise the enveloping stone walls of the prayer hall and its pitched roof covered by ribbed aluminium sheeting. The juxtaposition of different materials, such as aluminium over the stone walls, and the arrangement of steel columns from which the wooden lattice screens are suspended provides a subtle and elegant comment on the continuity (and discontinuity) between the manufactured materials of the present and the natural materials used in the architecture of the past. The most memorable aspect of the mosque is its stone *qibla* wall. Incorporated into its exterior articulation are the rectangular projection of the *mihrab*, a smaller rectangle related to the upper part of the *minbar*, and most dramatically, into the corner, the staircase minaret. Even though the minaret is topped by a canopy of

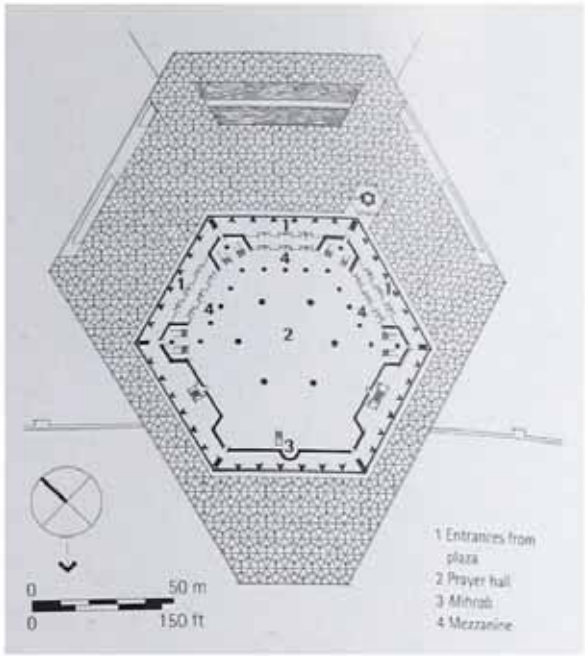


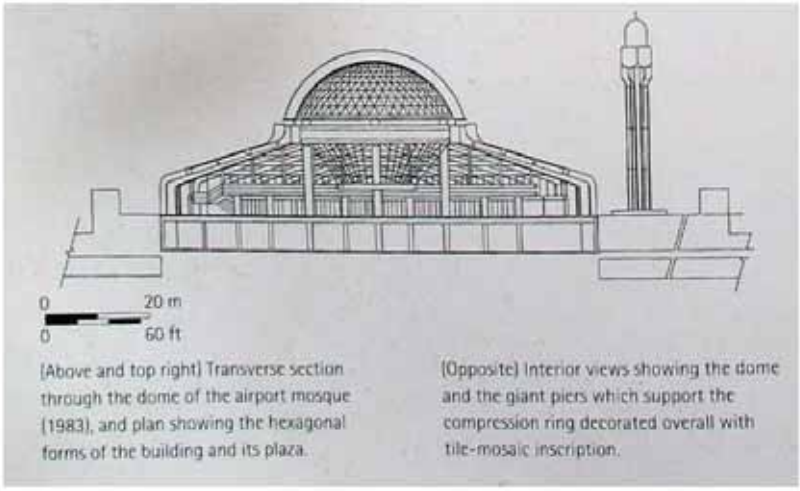


(Above) Site plan of the Conference Centre complex and mosque; section and plan of the mosque showing the shaded courtyard and the appended administrative buildings.

(Left) A view into the aluminium lattice-work canopy above the staircase minaret.

Hotel and Conference Centre Mosque, Mecca, Saudi Arabia

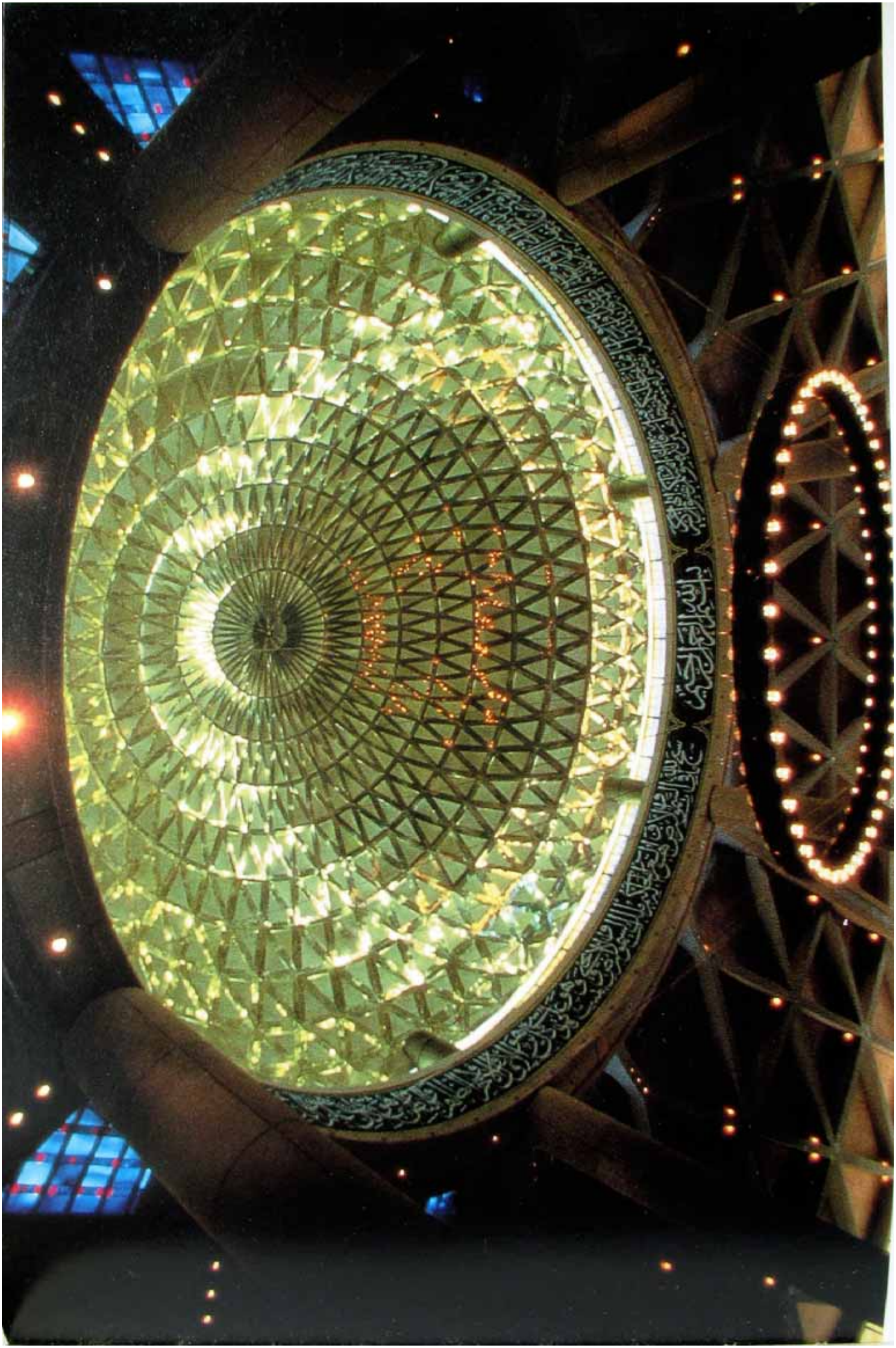




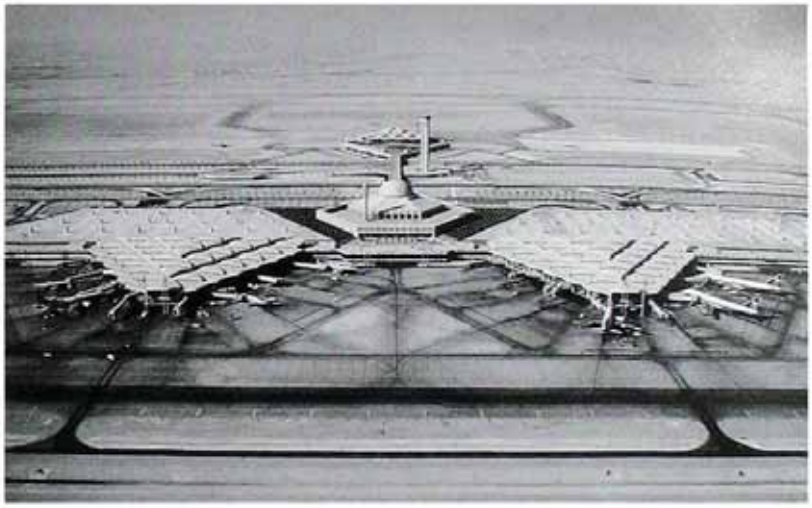
(Above and top right) Transverse section through the dome of the airport mosque (1983), and plan showing the hexagonal forms of the building and its plaza.

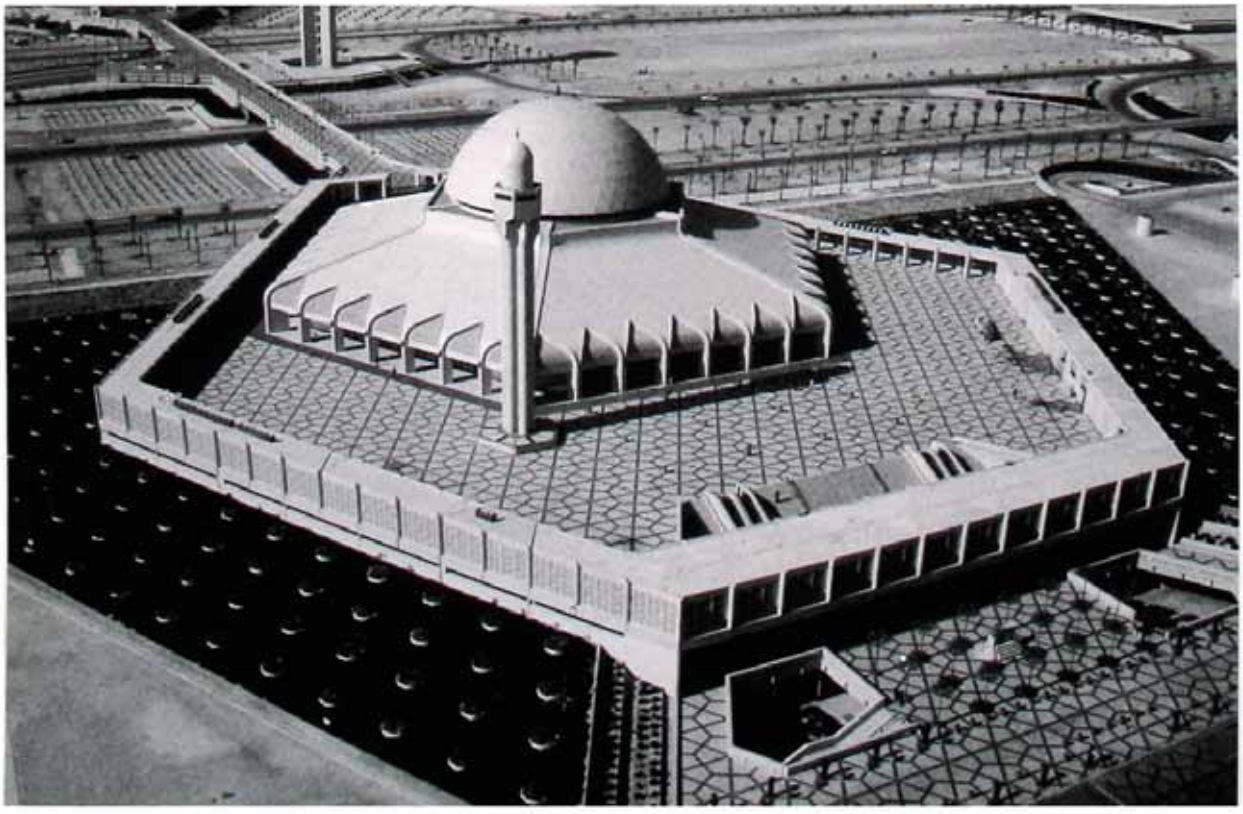
(Opposite) Interior views showing the dome and the giant piers which support the compression ring decorated overall with tile-mosaic inscription.

King Khaled International Airport Mosqu, Riyadh, Saudi Arabia

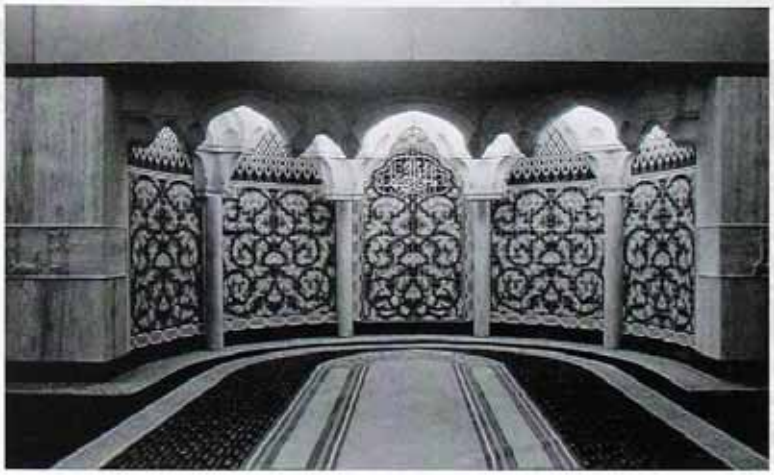


(Below) The airport mosque is situated between two of the terminal buildings and was conceived on the same scale. The hexagonal mosque surrounded by its own plaza and then in turn by an 'oasis' of plantings has become a magnet for the people of Riyadh, who come in large numbers to attend Friday prayers and for recreation.

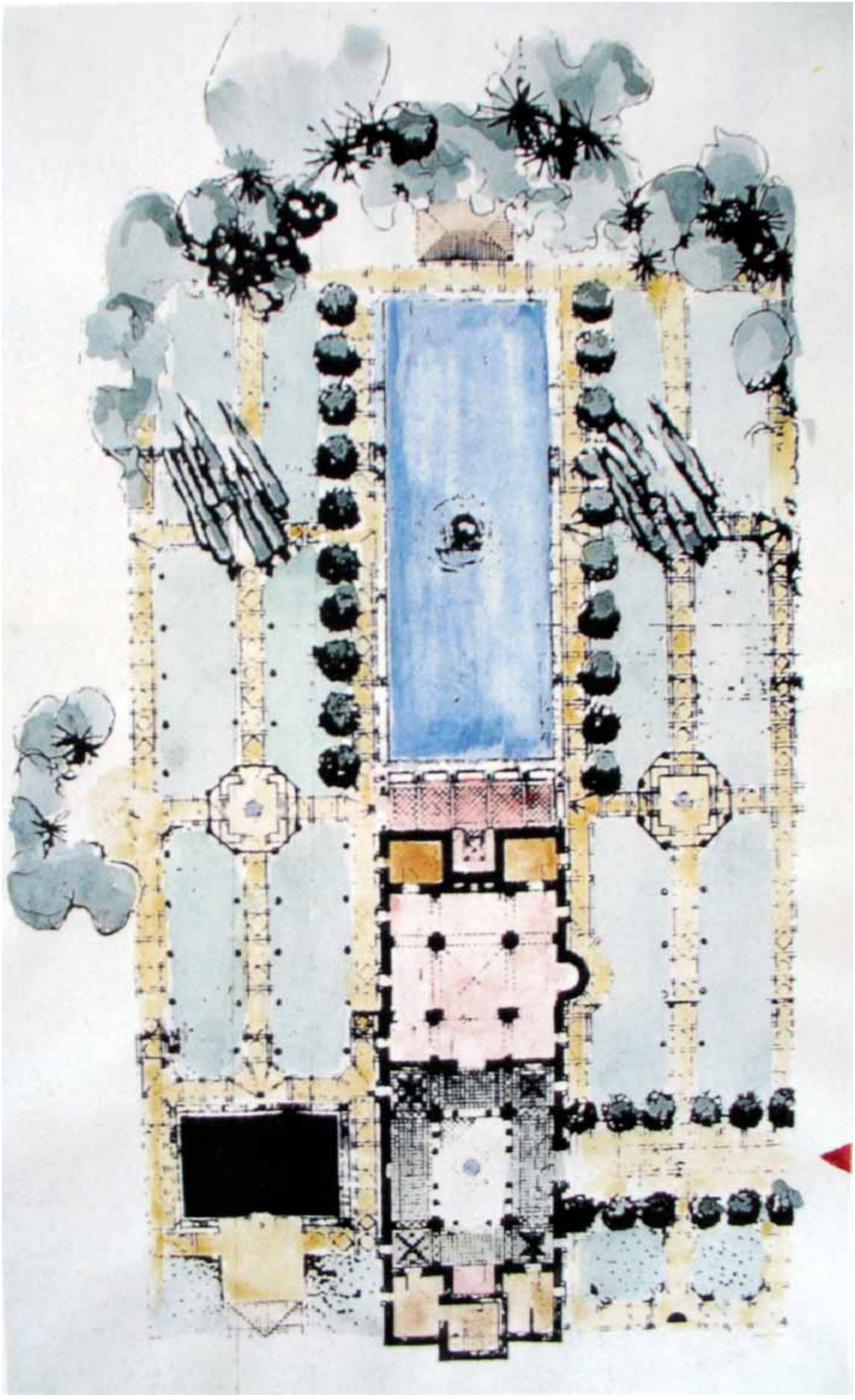


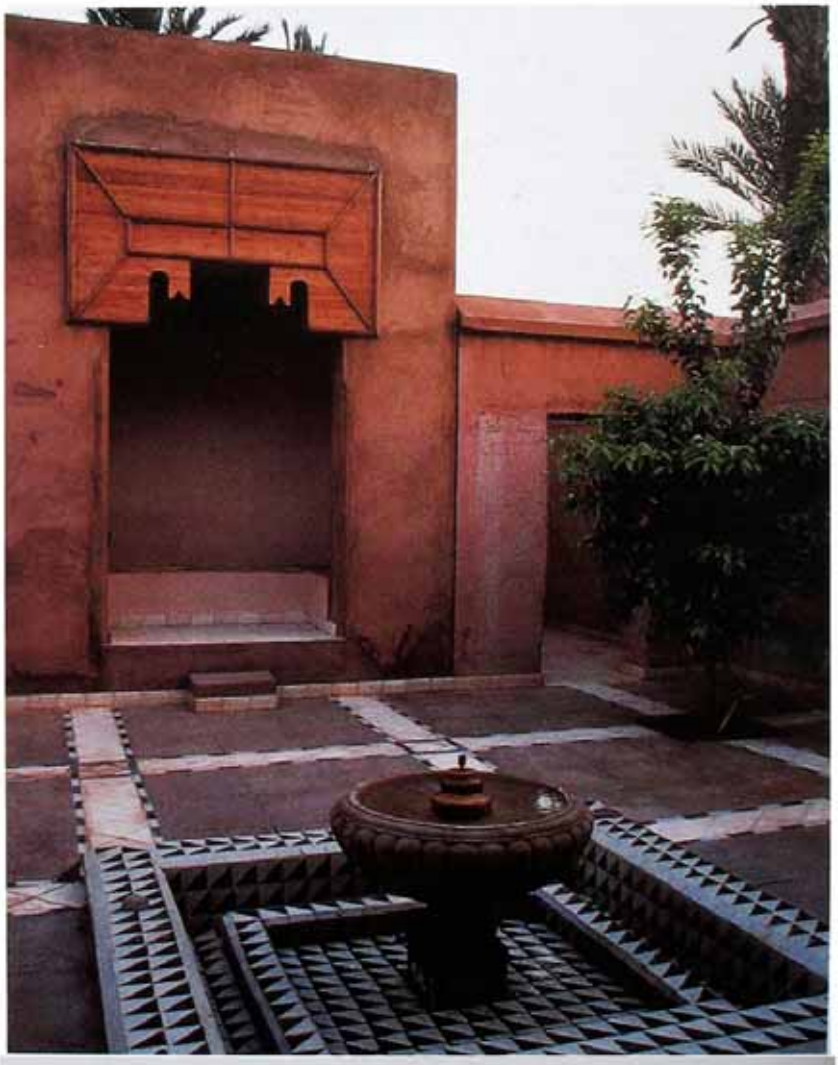


King Khaled International Airport Mosqu, Riyadh, Saudi Arabia



King Khaled International Airport Mosqu, Riyadh, Saudi Arabia

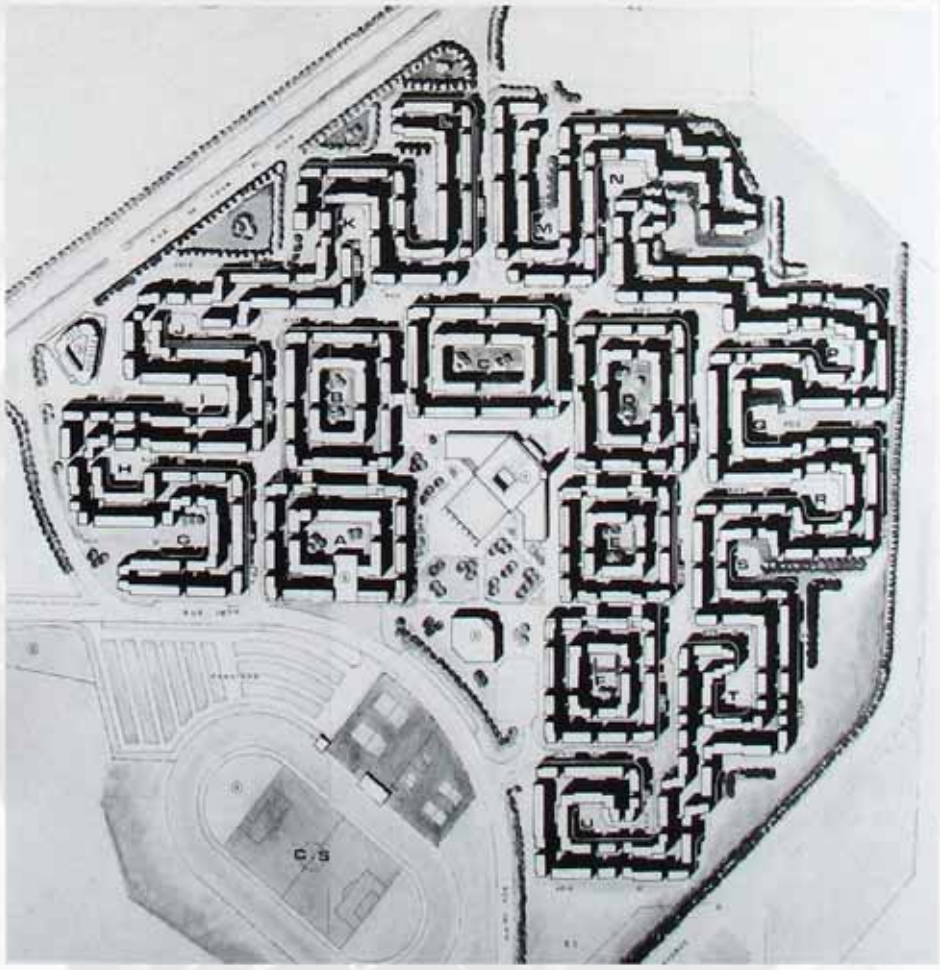




(Opposite top) Exterior view of the mosque, designed by Charles Boccara, built in 1982 in the grounds of the Avicenne Military Hospital, Marrakech, and site plan showing the mosque set in a formal garden landscape.

(Above) The central entrance to the mosque and a view into the enclosed garden (*riad*), which provides a peaceful and secluded area for meditation.

Avicenne Military Hospital Mosque, Marrakech, Morocco

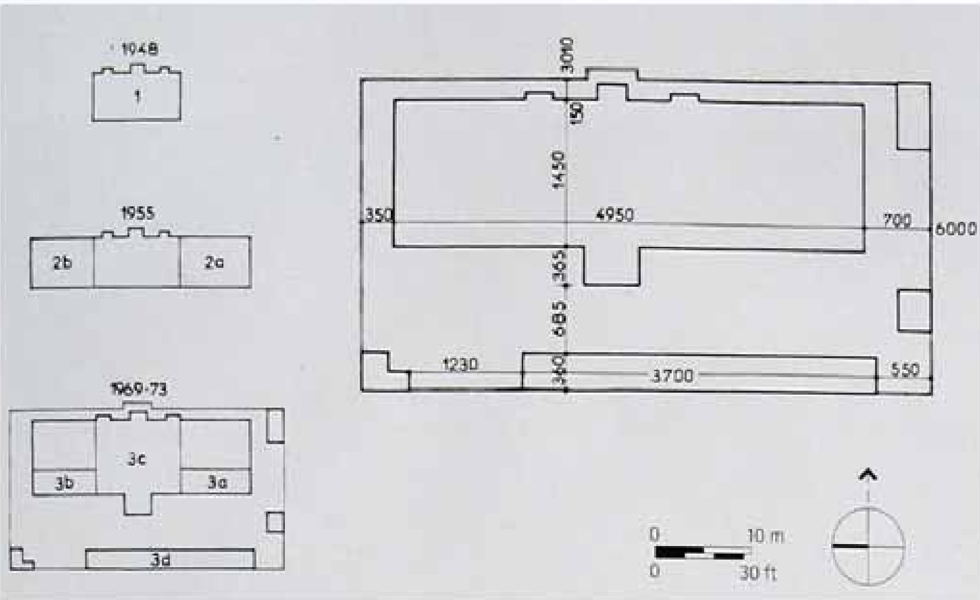


(Above) A view of the Dar Lamane Mosque, designed by Abderrahim Charai and Abdelaziz Lazrak, seen from the minaret showing the inner courtyard, its exterior extension, and the surrounding low-rise housing built in the 1980s for a new community.

(Right) Site plan of the Dar Lamane housing scheme, completed in 1983, which provides housing for 25,000 people; the mosque is the central feature of services provided for this community.

(Opposite) The Dar Lamane Mosque, built in the officially sanctioned Moroccan style, features a square minaret, green-tiled roof and white plastered walls.

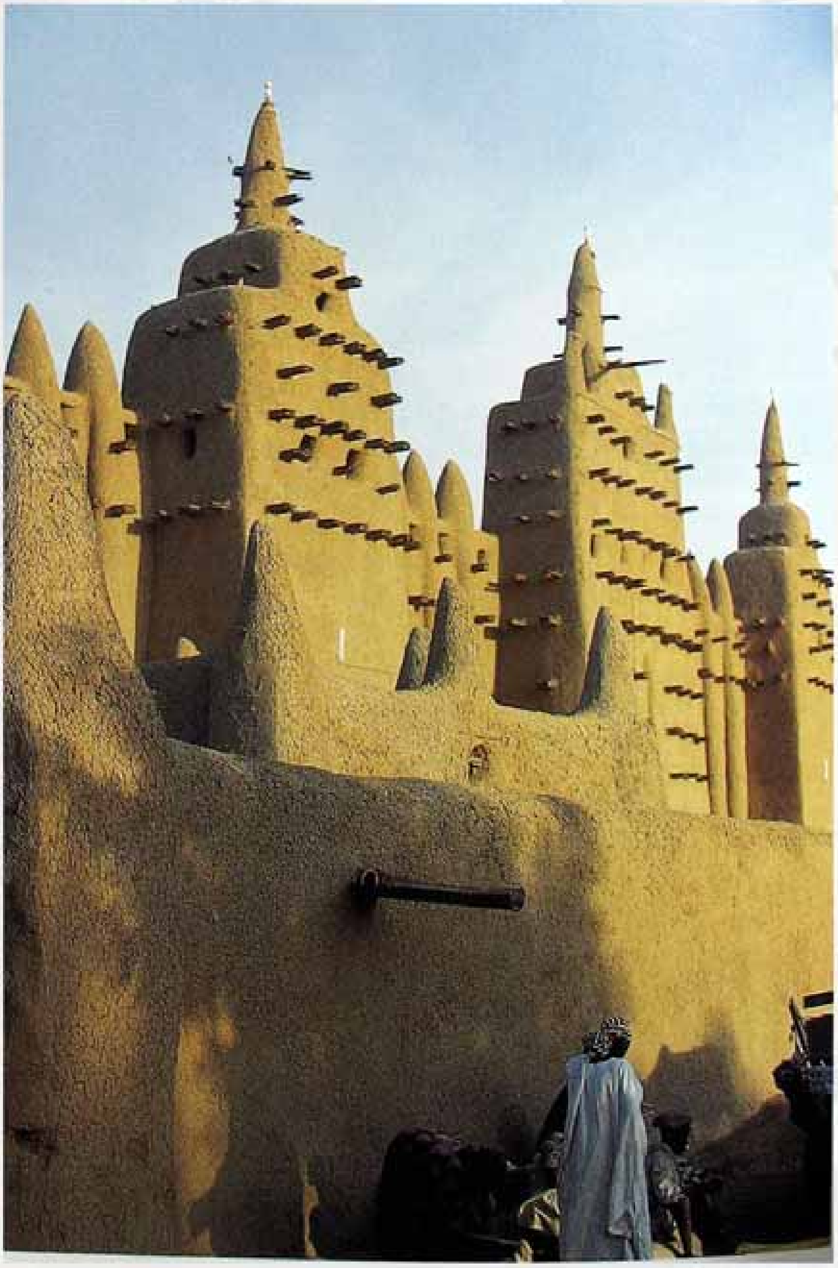
Dar Lamane Mosque, near Casablanca, Morocco



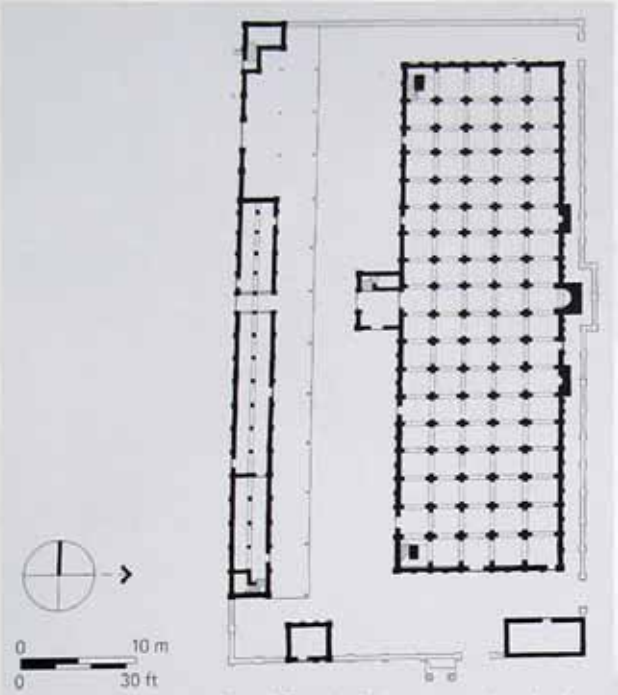
(Left) Schematic ground [illegible] the phases of development of [illegible] que, as recorded by Raoul Snelo [illegible] starting as a small building in 1948 [illegible] ped in several stages. After 1969 [illegible] t was completely reconstructed [illegible] ensions are shown in the larger ske [illegible]

(Below) Detail of the exte [illegible] façade of the Great Mosq [illegible] building which served as th [illegible] the Niono mosque. Rows of proje [illegible] wood beams form part of the struc [illegible] the three main towers; their ends – ak [illegible] manent scaffolding – facilitate the peri [illegible] resurfacing of the exterior.

(Opposite) The entrance to the Niono Mosque is flanked by traditional ancestral pillars, the shape and symbolism of which date back to a pre-Islamic period.



Great Mosque, Niono, Mali

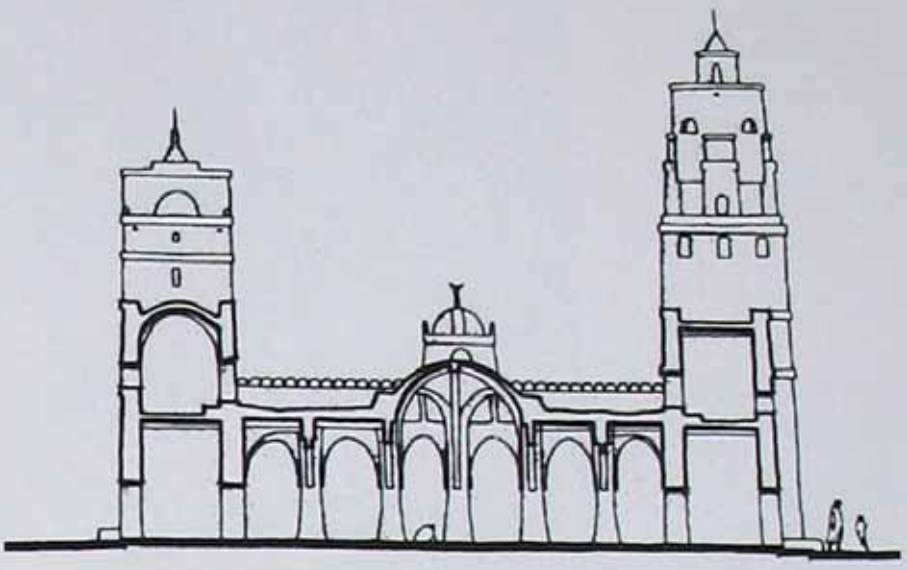


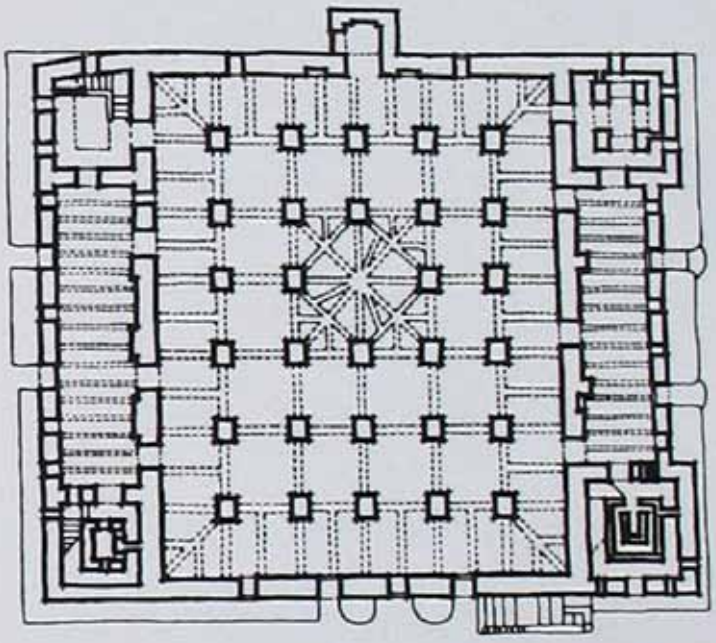
(Above) Site plan of the mosque, drawn in the 1980s, showing how the main structure has grown to fill the greater part of the plot; the ablutions building lies to the west.

(Below) Interior of the hypostyle prayer hall with its forest of supporting columns.

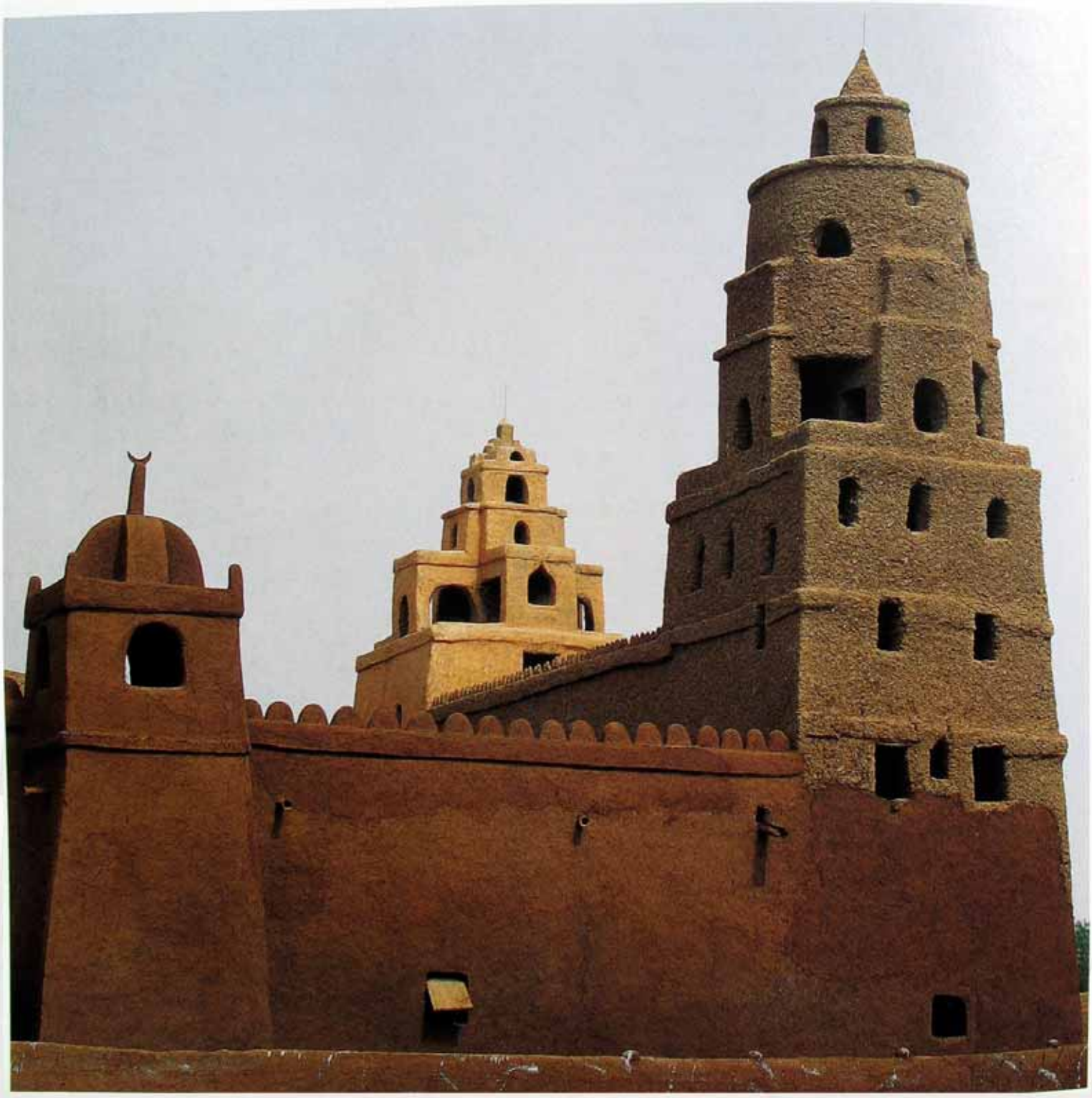
Great Mosque, Niono, Mali

(Below) North-south section and ground-floor plan of the Yaama Mosque. The minarets and gallery on the north side were completed in 1980 and those on the south side in 1982.

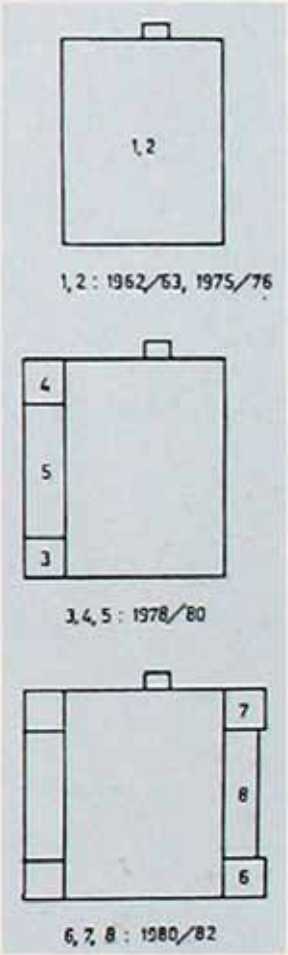




Yaama Mosque, Tahoua, Niger



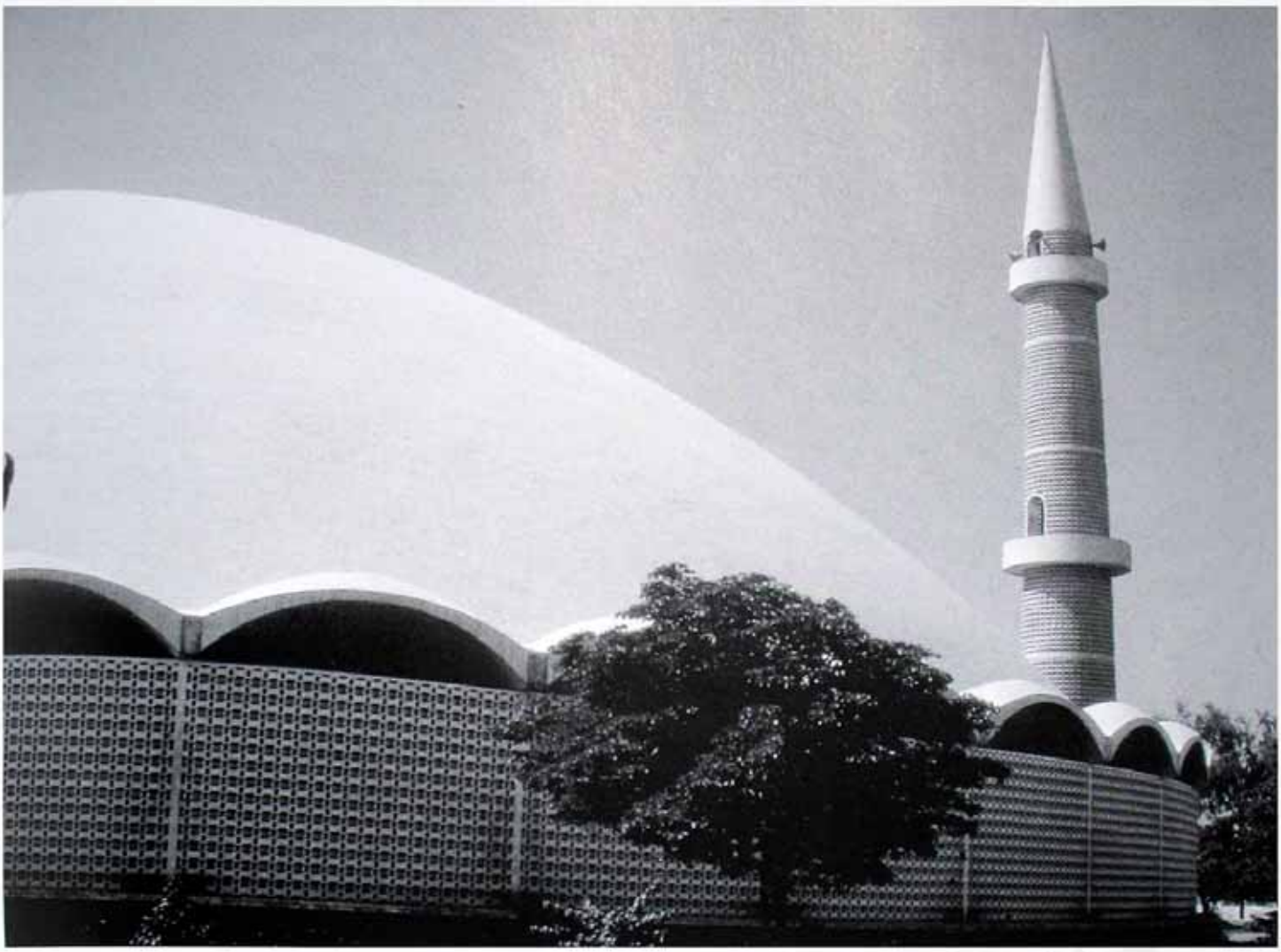
Yaama Mosque, Tahoua, Niger



Yaama Mosque, Tahoua, Niger

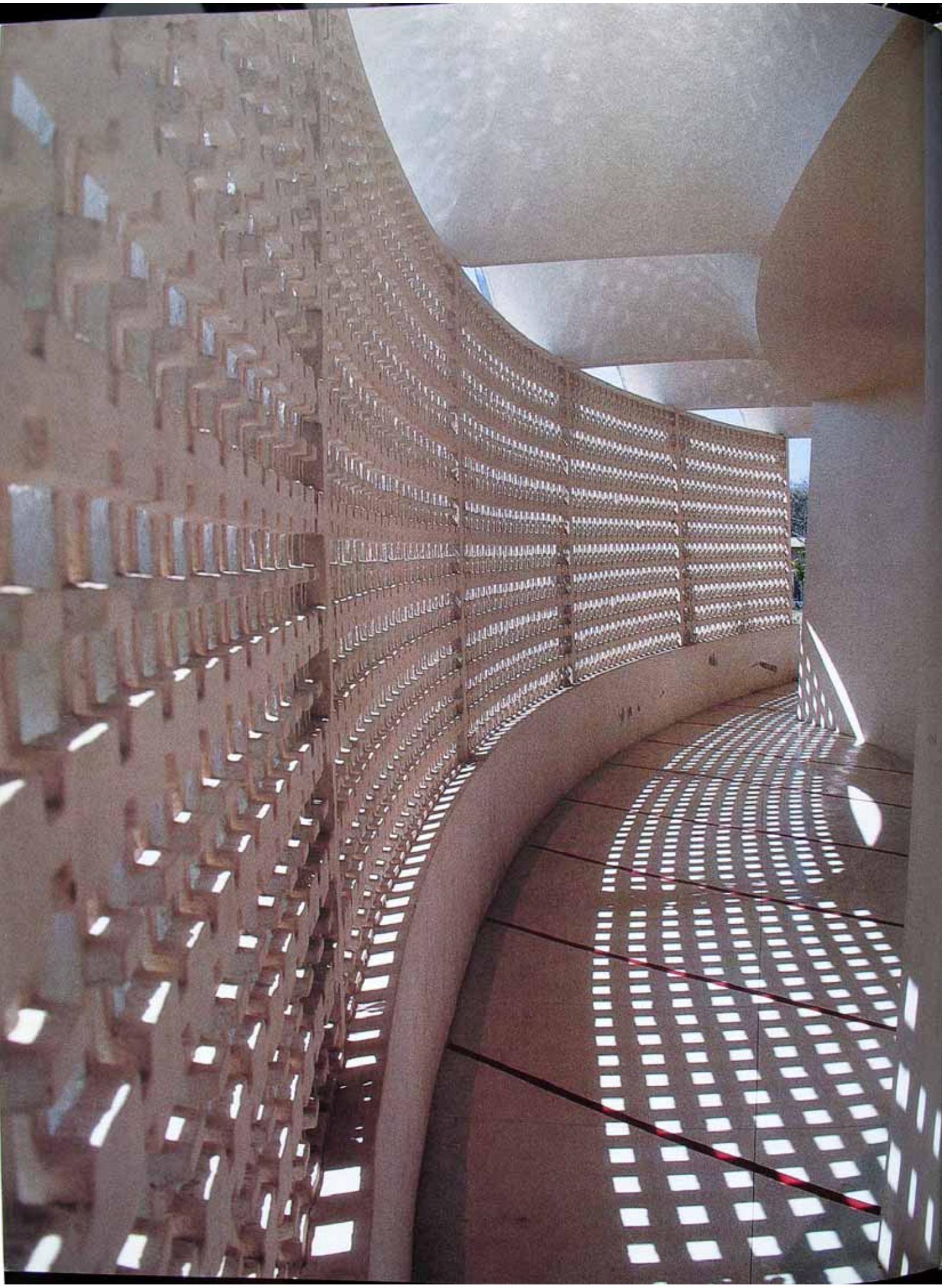
(Below) The only known representational drawing made by the builder of the Yaama Mosque.

Yaama Mosque, Tahoua, Niger



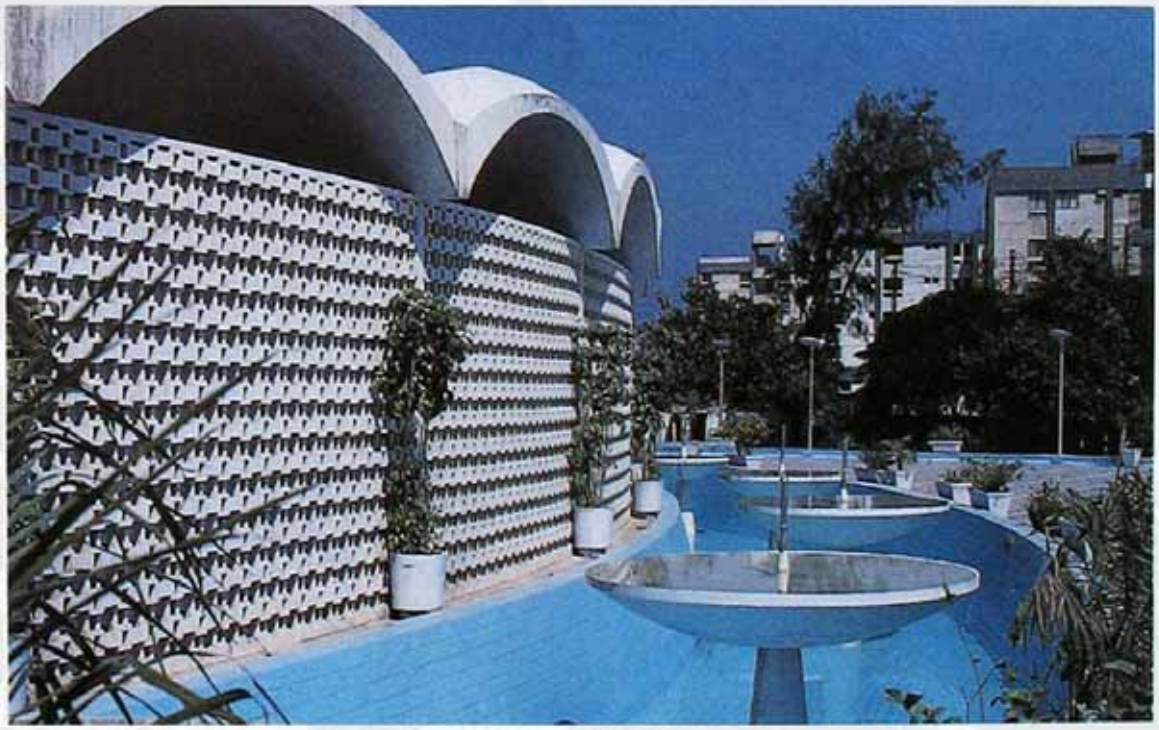
The concrete-shell structure of the Masjid-i Tooba (1969) in Karachi, designed by Babar Hameed, makes an uncompromisingly modernist statement. The circular mosque is approached by a formal walkway with a central pool and fountains.

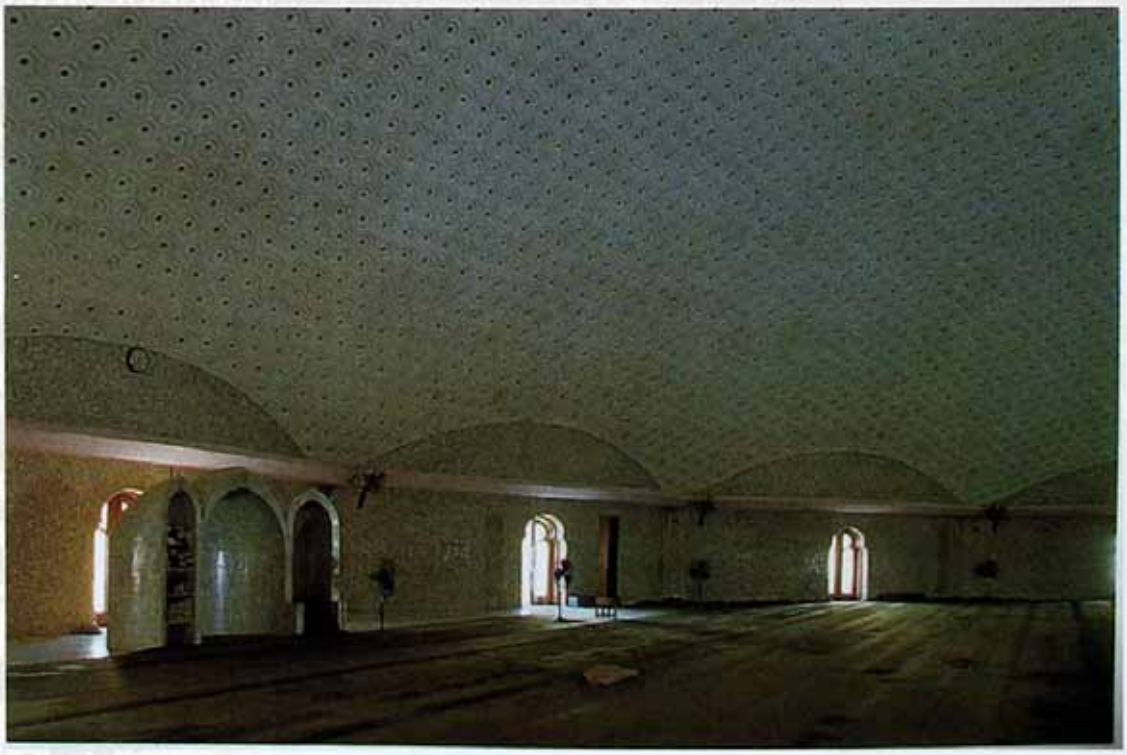
Masjid Tooba, Karachi, Pakistan



(Below) Detail of the *jali* walls and the repeated arches of the roof as seen from the garden.

(Bottom) The circular prayer hall, a single domed space with a diameter of 212 ft (65 m), has to be artificially lit and mechanically cooled in the hot climate of Pakistan.

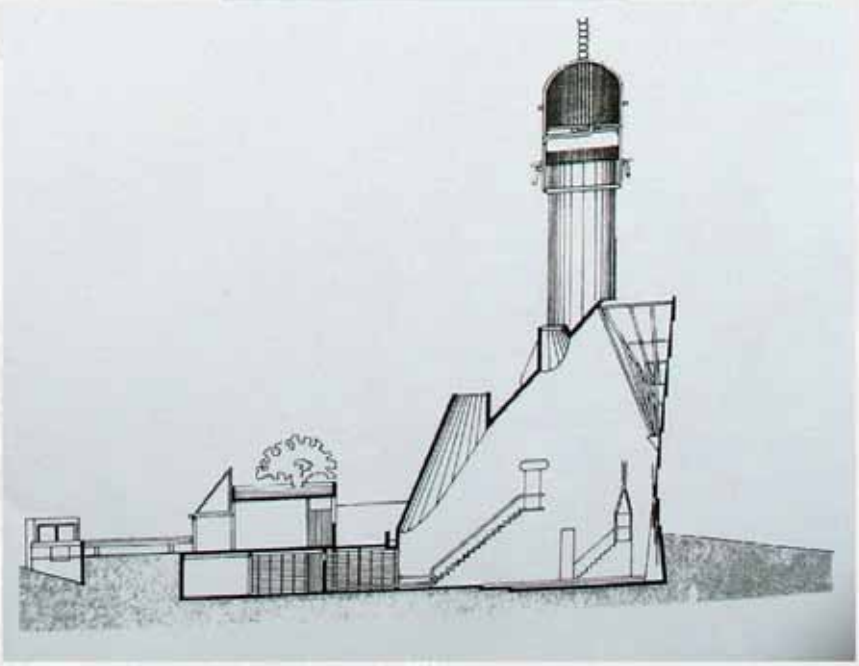




Masjid Tooba, Karachi, Pakistan

(Above) The powerful forms of Sherefuddin's White Mosque (1980), Visoko, designed by Zlatko Ugljen, are best revealed when viewed from the adjacent Muslim cemetery.

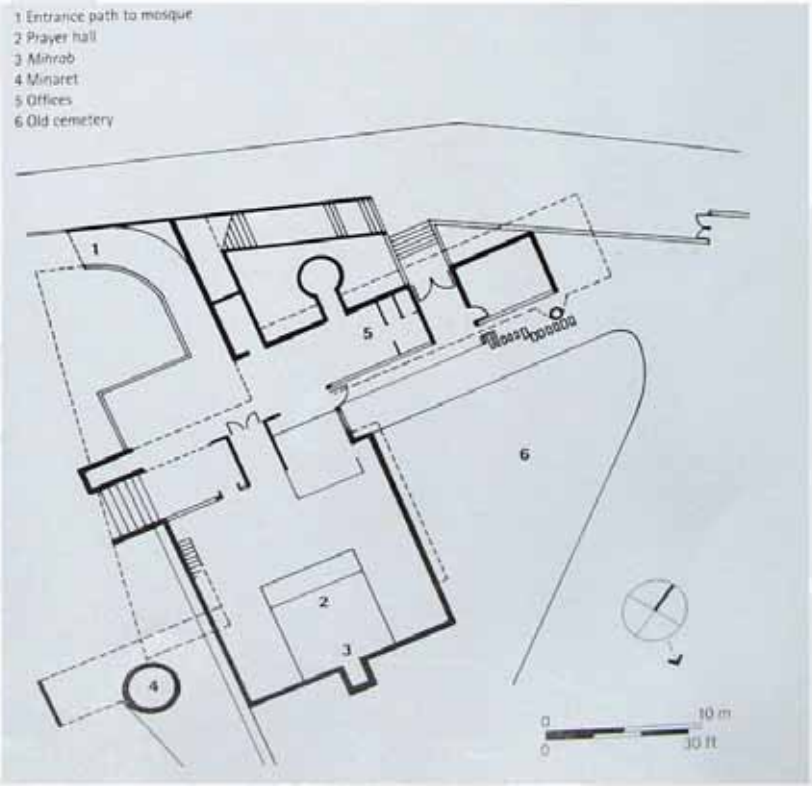
(Below) Section through the prayer hall. The complex form of the roof over the hall is apparent, as are the two main levels of the complex: the sunken courtyard and prayer hall, and the office and an annexe at street level.



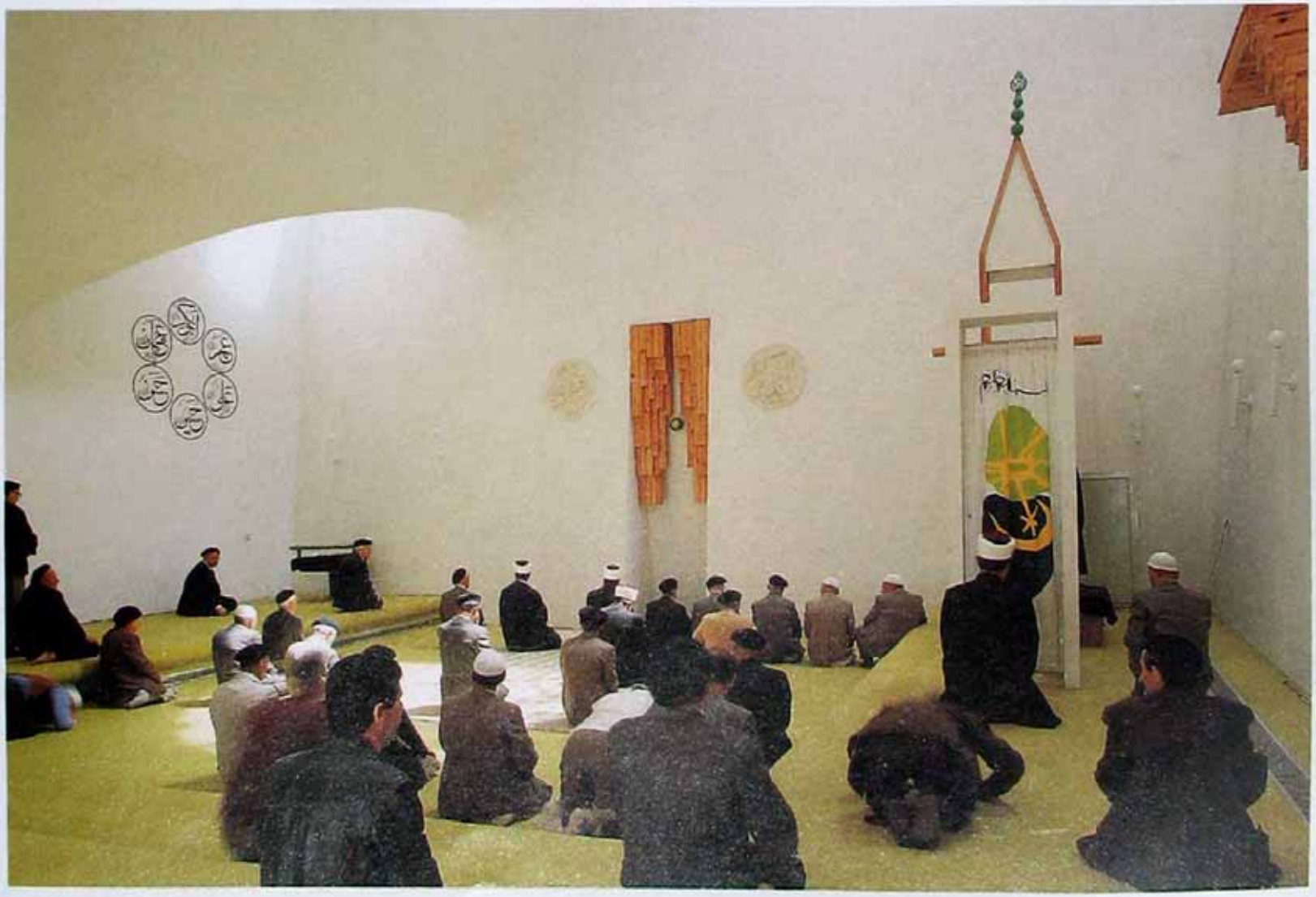
Sherefuddin's White Mosque, Visoko, Bosnia

(Above) A curved pathway leads down from the street to the courtyard of the mosque; to the left is the glassed-in entrance to the office at ground level.

(Below) Plan of the mosque and the annexe with its separate entrance.



Sherefuddin's White Mosque, Visoko, Bosnia



(Opposite above) The interior of the prayer hall is dramatically lit from above by the use of skylights.

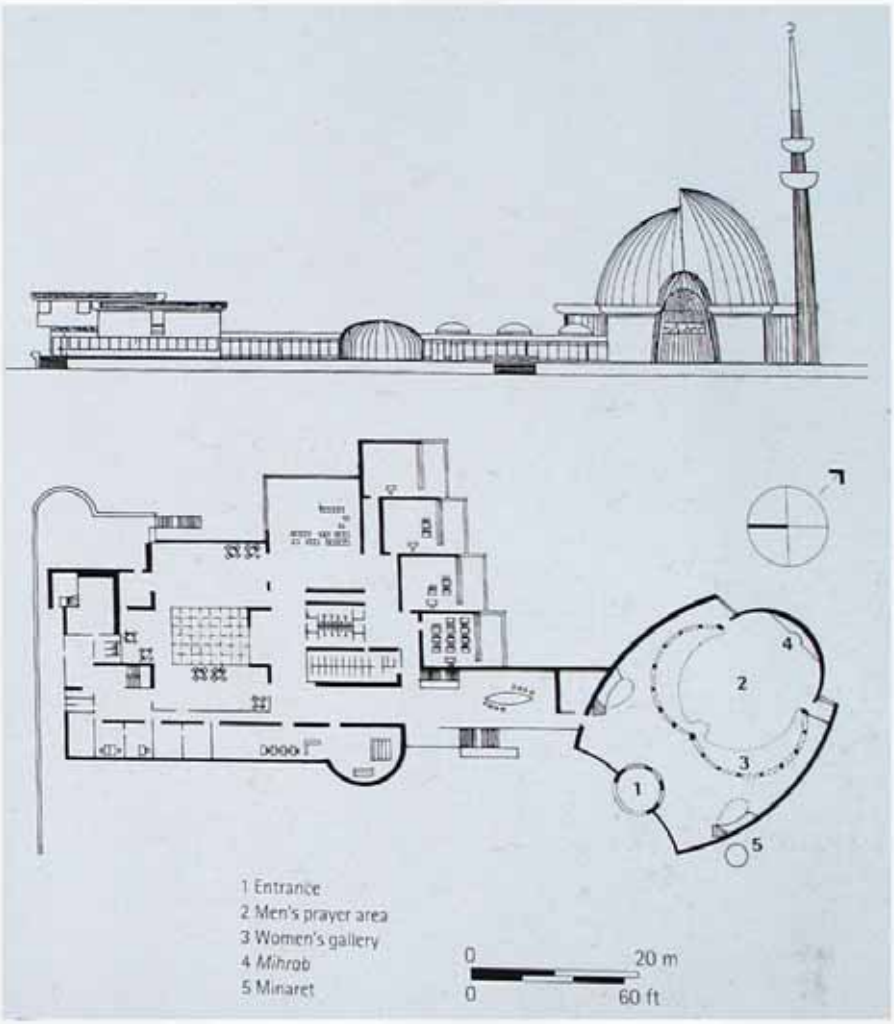
(Opposite below) The ablutions fountain in the courtyard, separated from the prayer hall by a large glass partition.

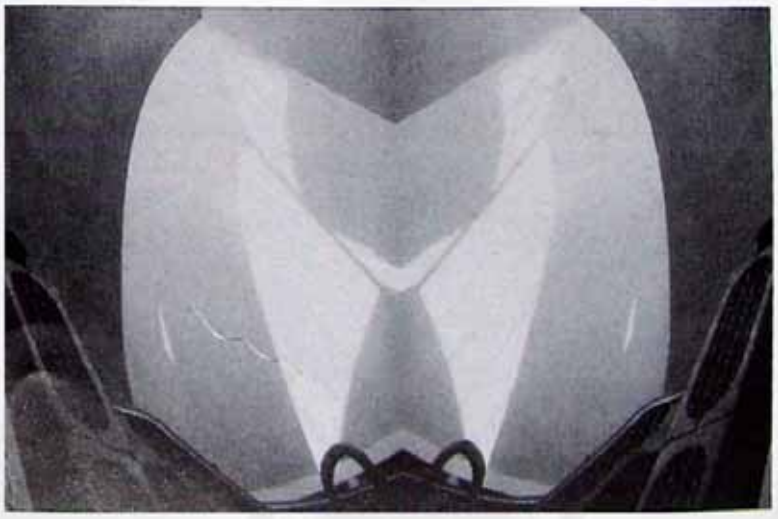
(Above) The floor of the prayer hall is graduated towards the *qibla*. The *mihrab*, *minbar* and calligraphic medallion stand out against the plain white walls.

Sherefuddin's White Mosque, Visoko, Bosnia

(Below) Entrance elevation and plan of the complex. The Islamic Centre to the left consists of an auditorium, gymnasium, library, slaughterhouse, classrooms and offices. To the right and set apart stands the sculptural mass of the mosque, with its freestanding minaret.

(Bottom) An interior view of the prayer hall showing the split plates of the dome.
(Overleaf) The white curving and sinuous forms of the interior are set off by the 700 carpets donated by Iran. The area of the gallery is proportionally one of the largest spaces provided for women worshippers in contemporary mosques.

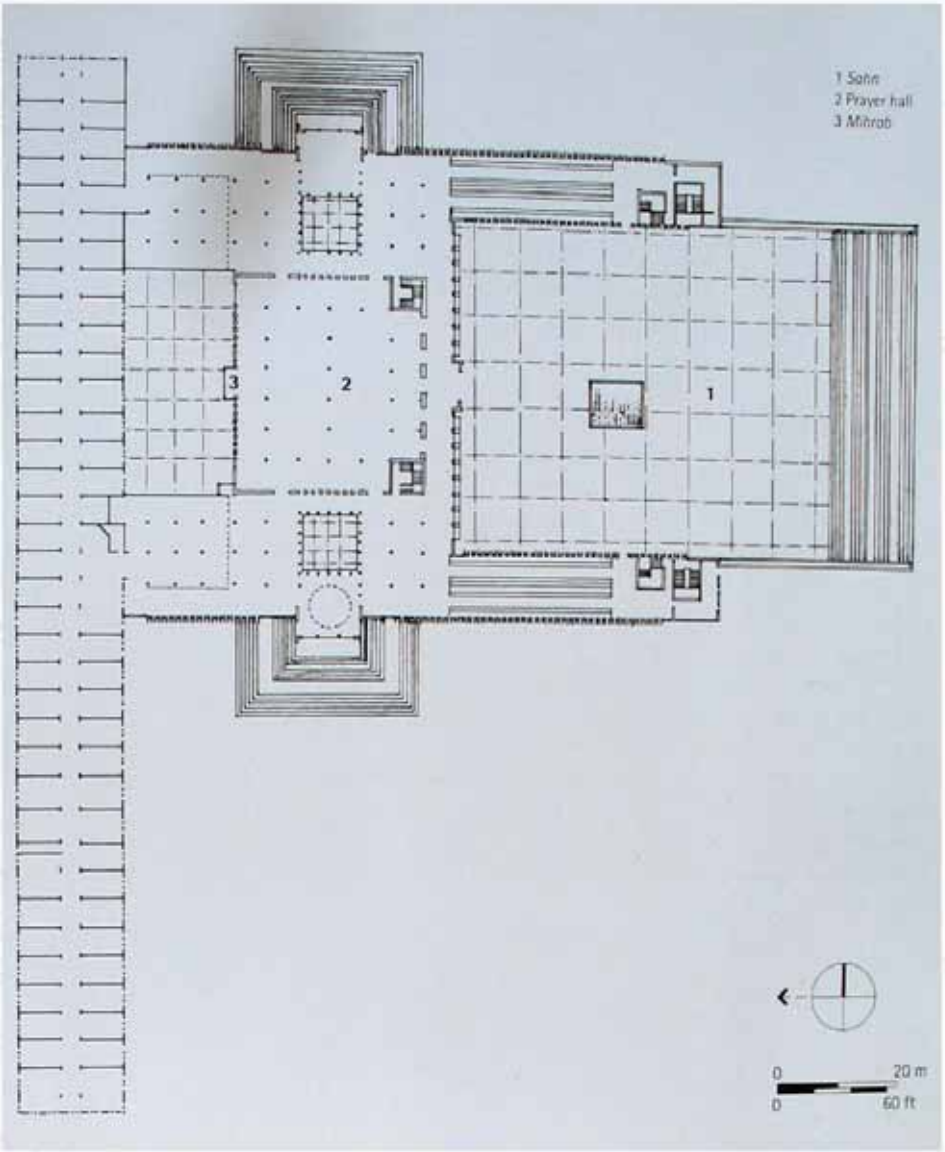


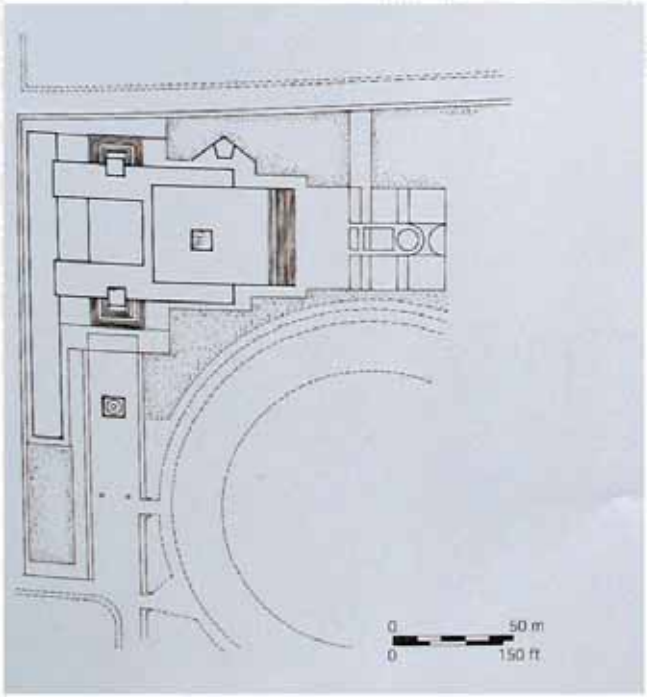


Islamic Centre and Mosque, Zagreb, Croatia

Bait ul-Mukarram, Dhaka, Bangladesh

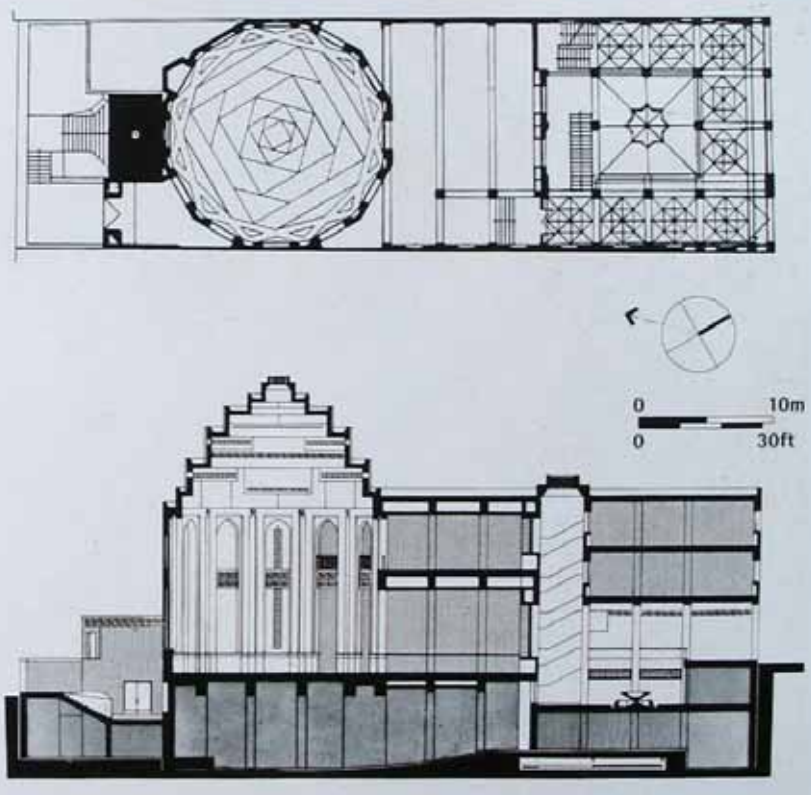
(Right and below) Ground-floor plan of the Bait ul-Mukarram, which is set in the central business district of the city, and site plan.





Bait ul-Mukarram, Dhaka, Bangladesh

Bait ul-Mukarram, Dhaka, Bangladesh



Al-Ghadir Mosque (1987), Tehran, by Jahangir Mazlum.

(Top) The entrance portal and the externally expressed *mihrab* at the corner of the site.

(Above) Plan and section of the 12-sided prayer hall and separate block for social facilities on the right. The section shows the stepped domical profile of the men's prayer hall, and the women's gallery; the social spaces on the left are arranged around a covered atrium, and an amphitheatre is located directly below the prayer hall.

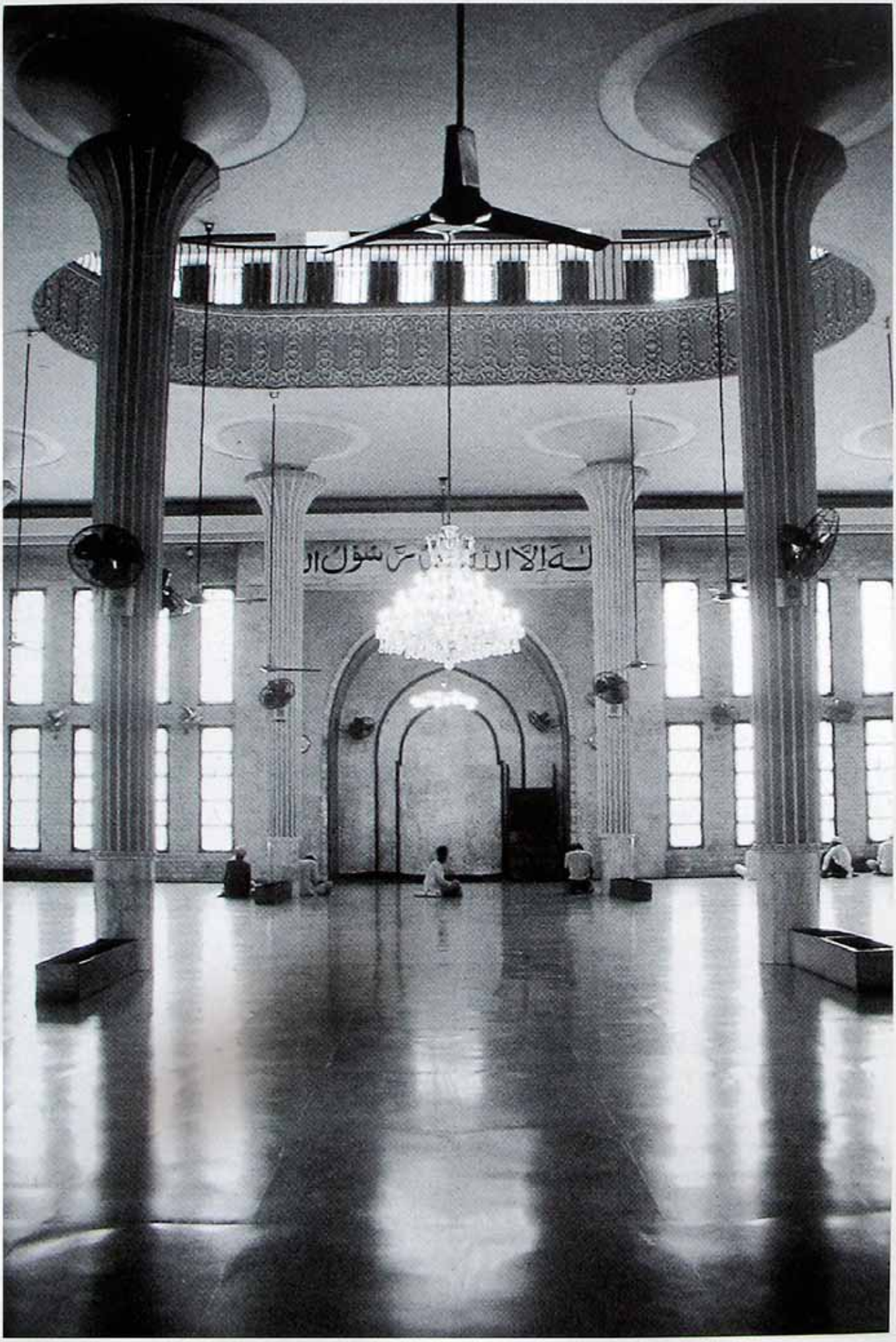
Al-Ghadir Mosque, Tehran, iran

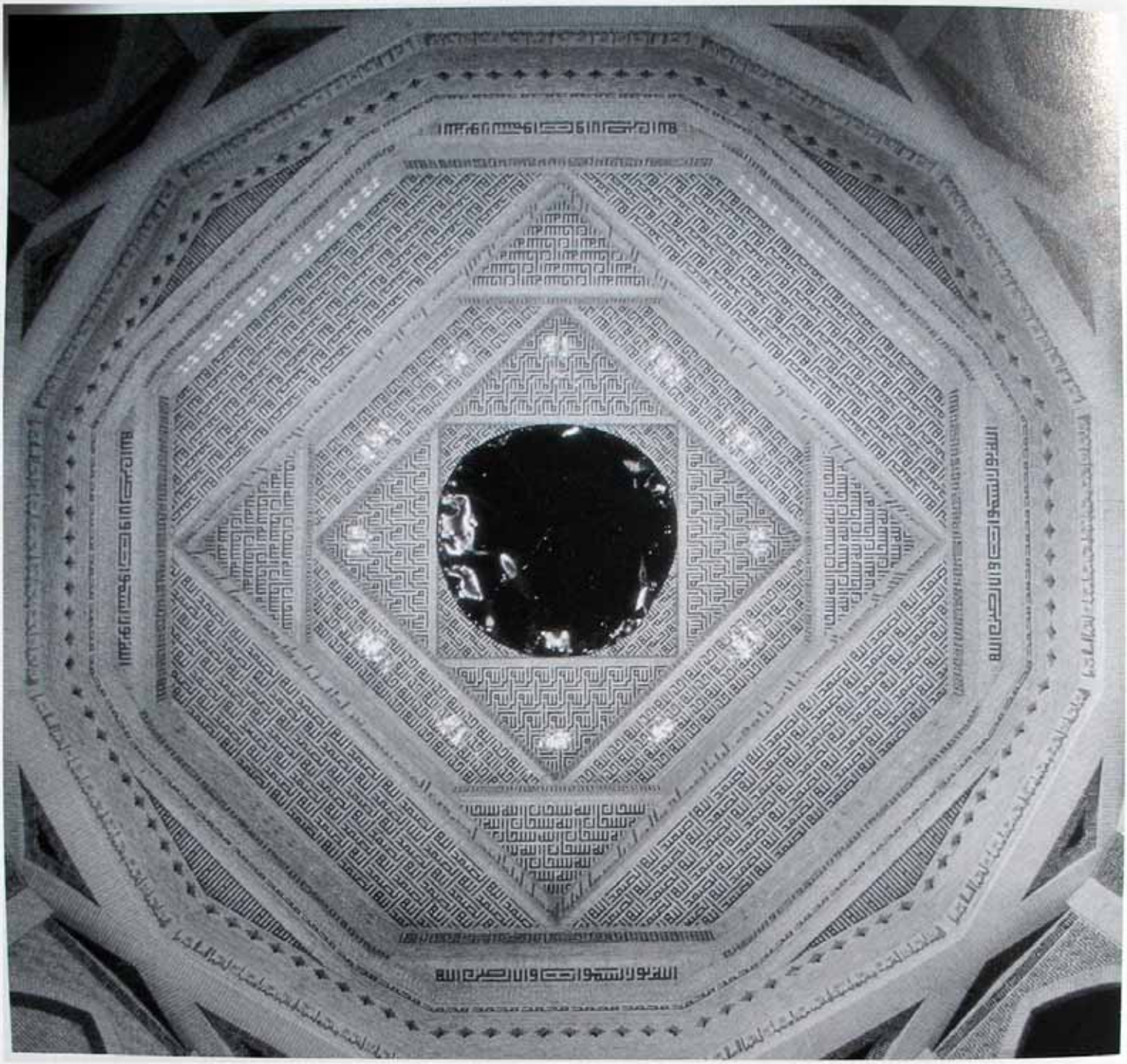
Al-Ghadir Mosque, Tehran, iran

(Top) The exterior view of the superstructure shows the projecting *mihrab* and decreasing, rotating squares serving as a substitute for a conventional domical vault. Calligraphic inscriptions in brick are a prominent decorative feature.

(Above) Calligraphy in square Kufic script continues the programme of ornament developed for the mosque into the amphitheatre below.

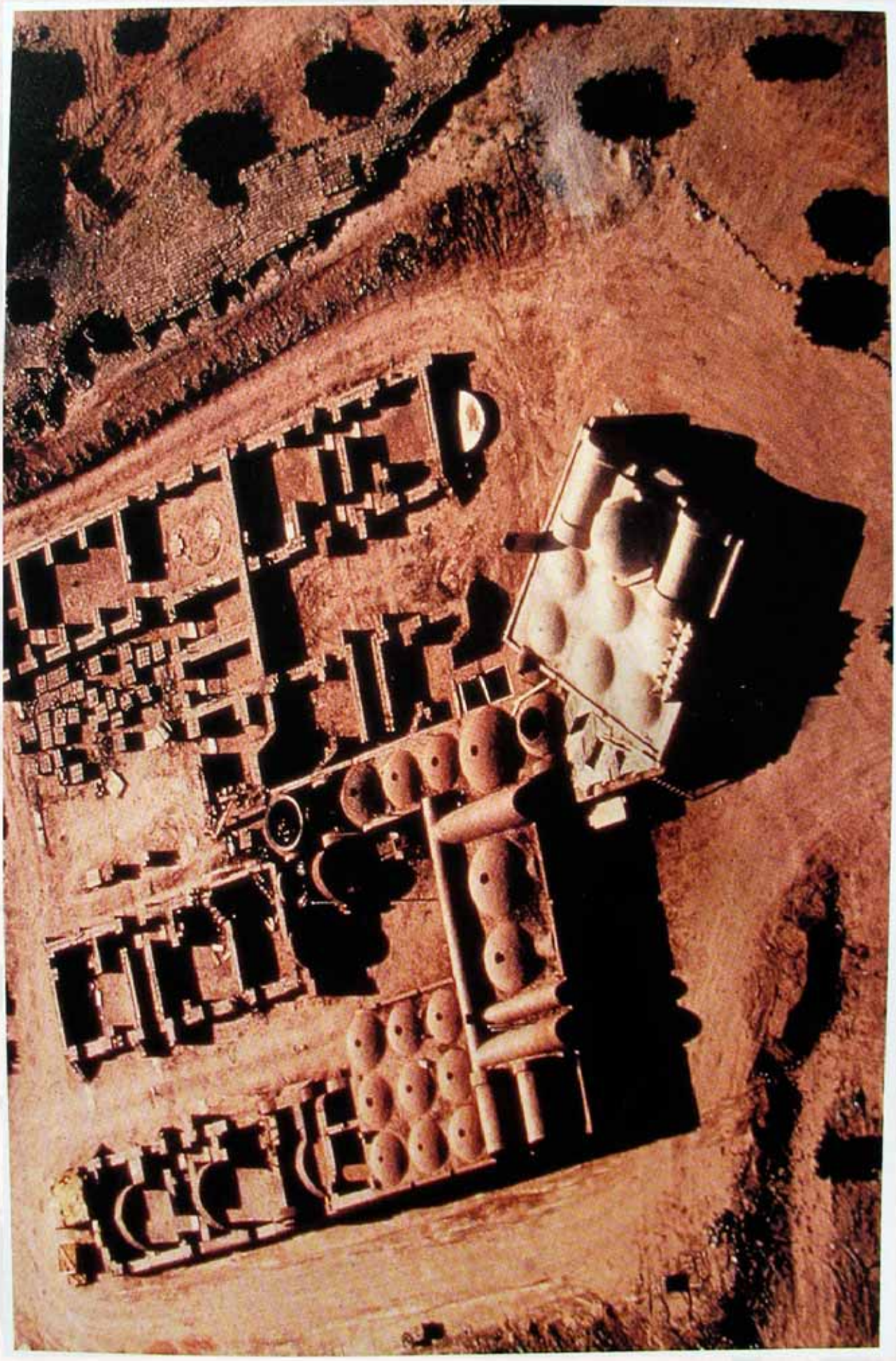
(Opposite) The tall narrow dome chamber of the Al-Ghadir Mosque is reminiscent of pre-modern memorial buildings found in the Tehran region.

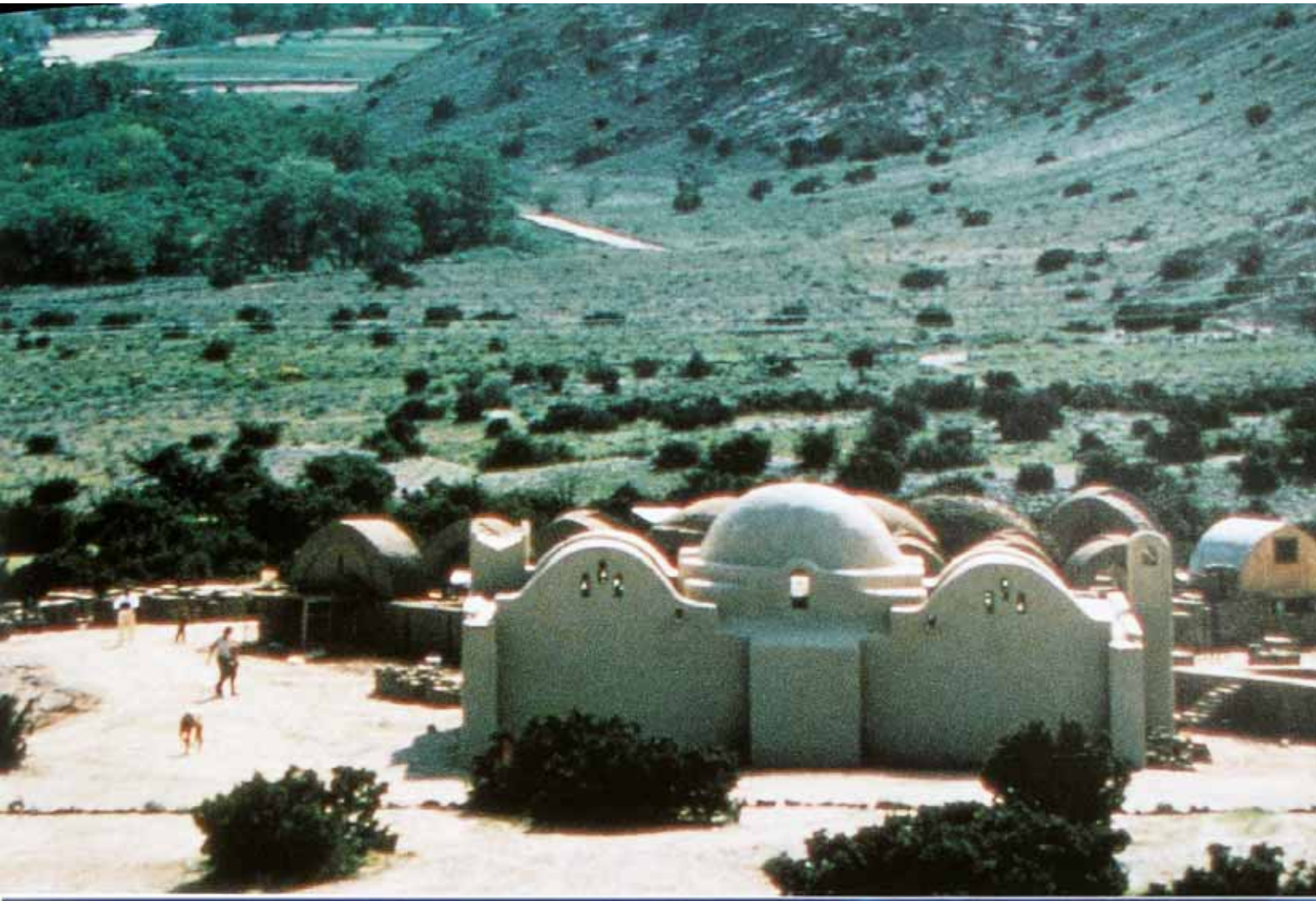


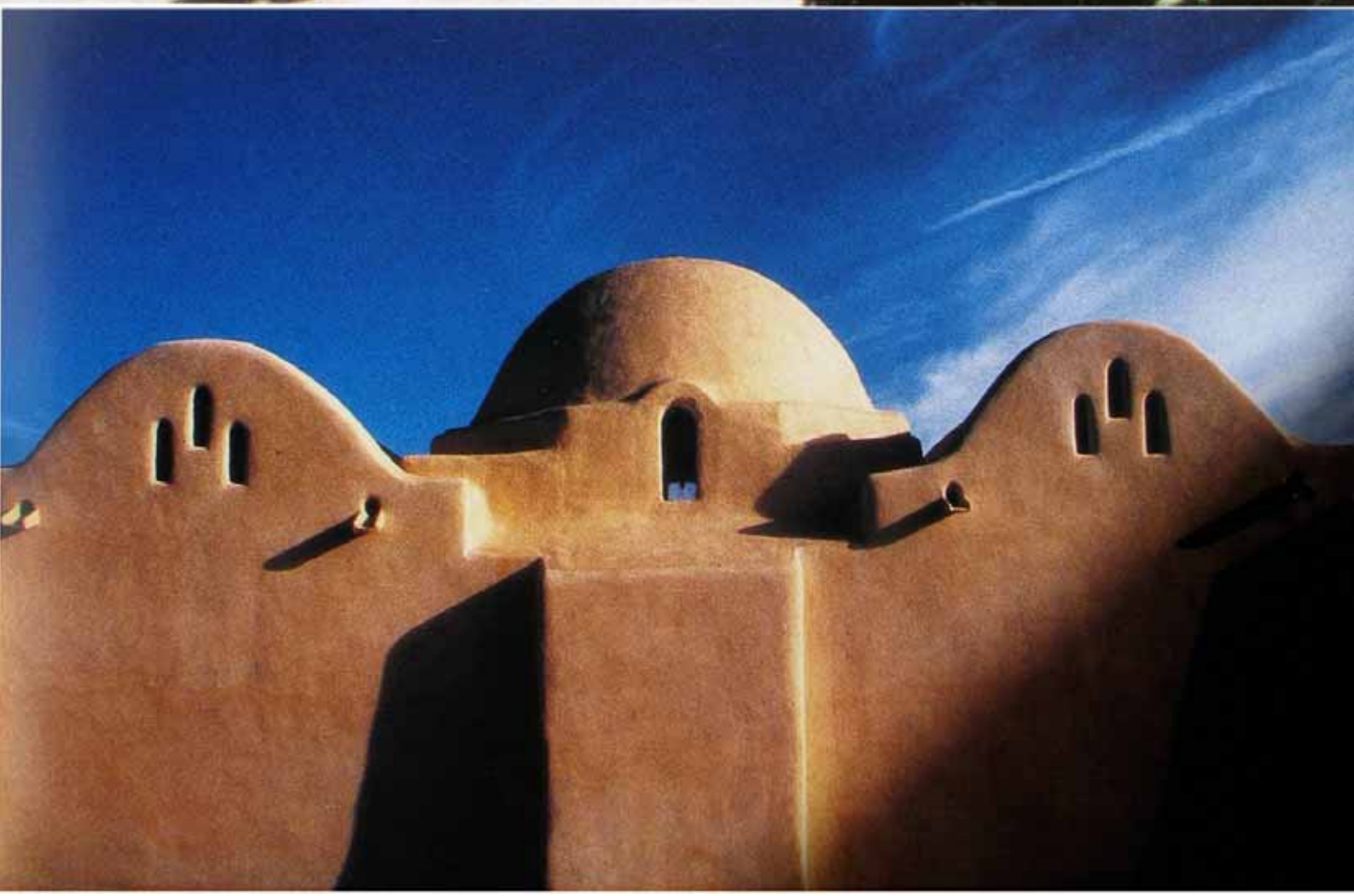


(Above) View into the apex of the prayer hall; the calligraphic and geometric ornament executed in brick is illuminated by a central brass chandelier.

(Right) The women's gallery, providing a partial view of the *mihrab*.

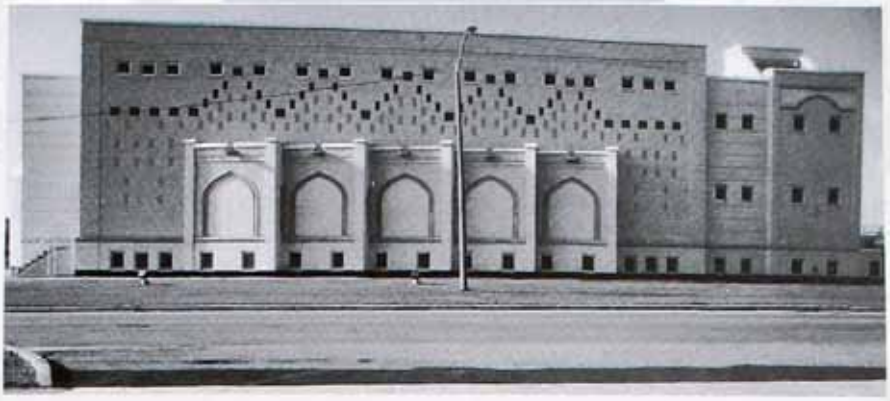


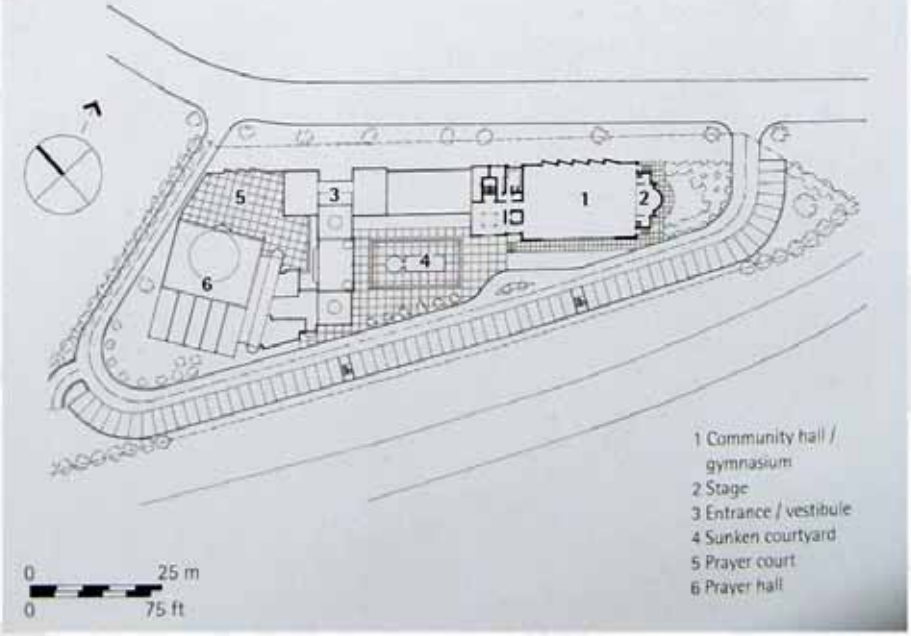




(Below) The Taric Islamic Centre, Toronto, by Loghman Azar. The first phase, completed in 1991, consists of a community hall which is also used for prayer. The exterior façade of the rectangular hall is patterned with arches and windows, and the *mihrab*-like protrusion is in fact a stage.

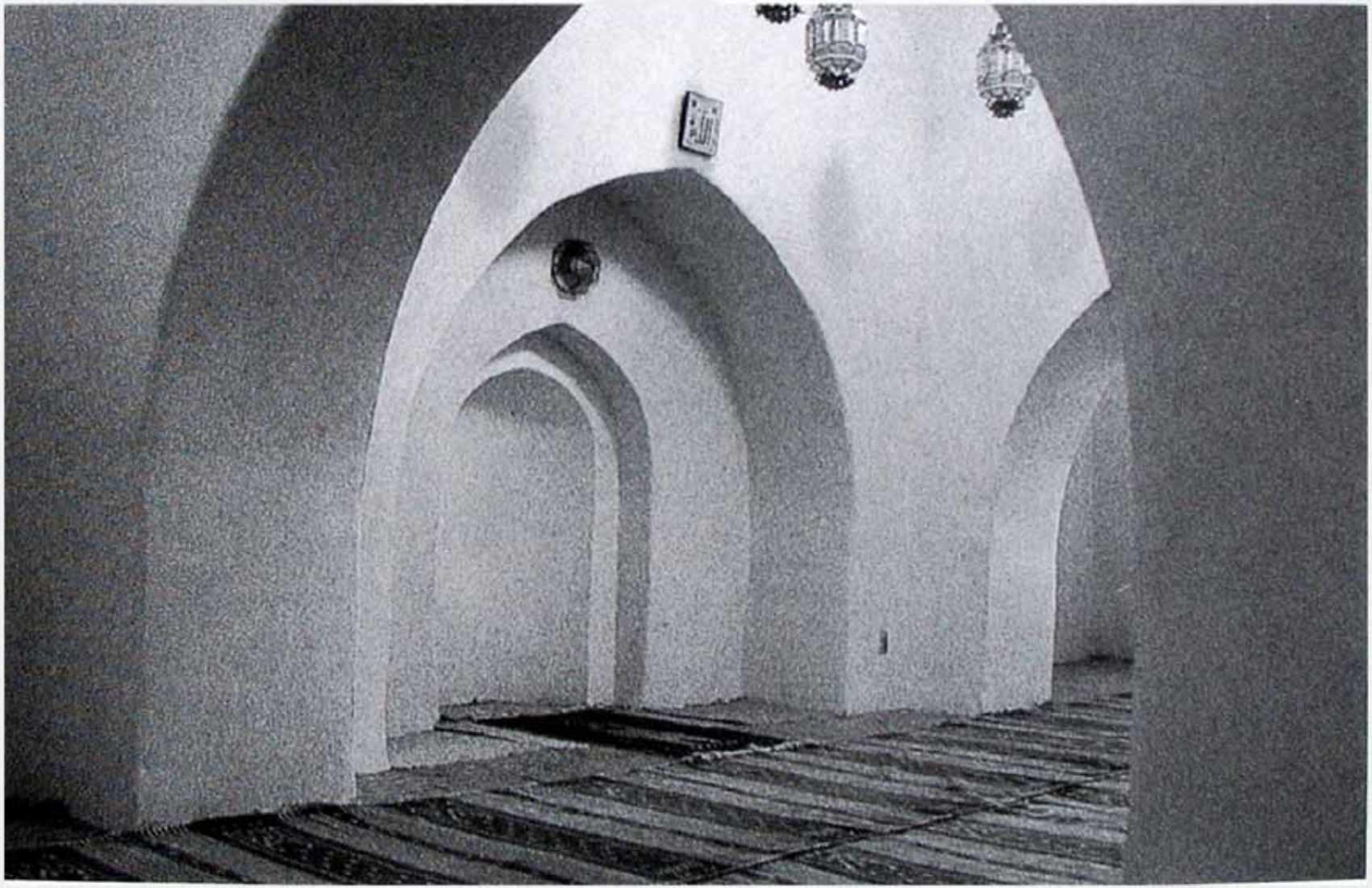
(Bottom) Site plan showing the existing community hall and the layout for the mosque and ancillary buildings to be completed in the second construction phase.



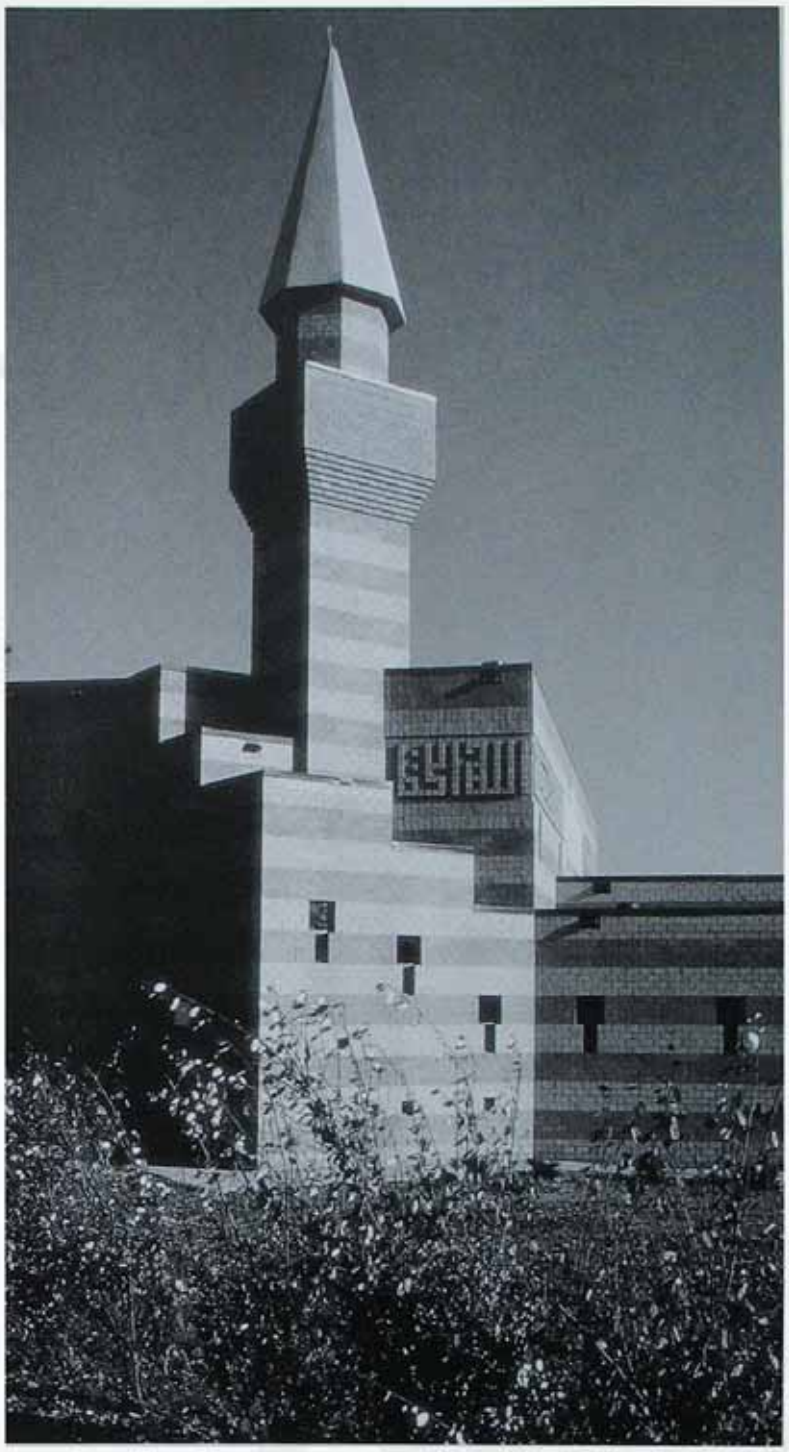


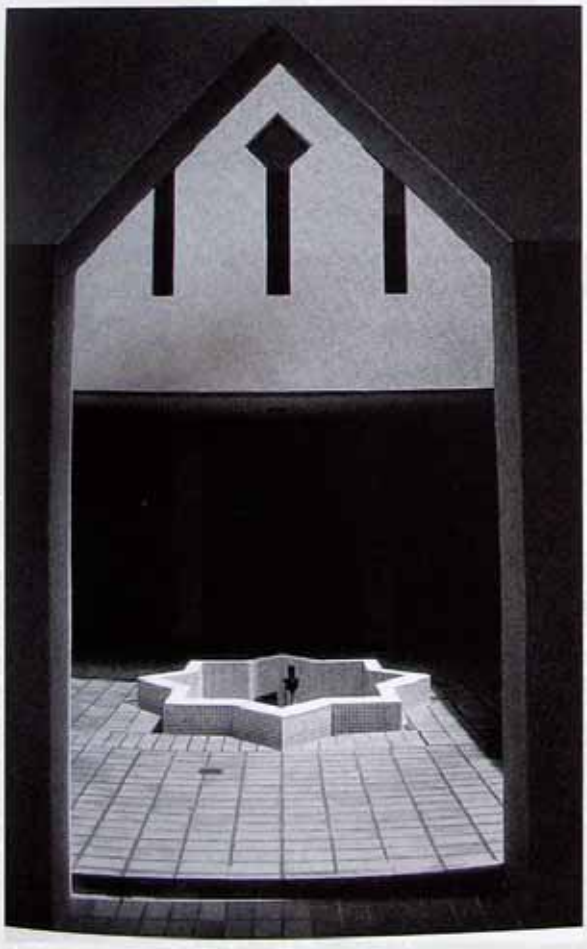
Taric Islamic, Toronto, Canada

(Below) Dar al-Islam: an interior view of the mosque showing the principal dome lit from above.



ISNA Islamic Center, Plainfield, Indiana, USA

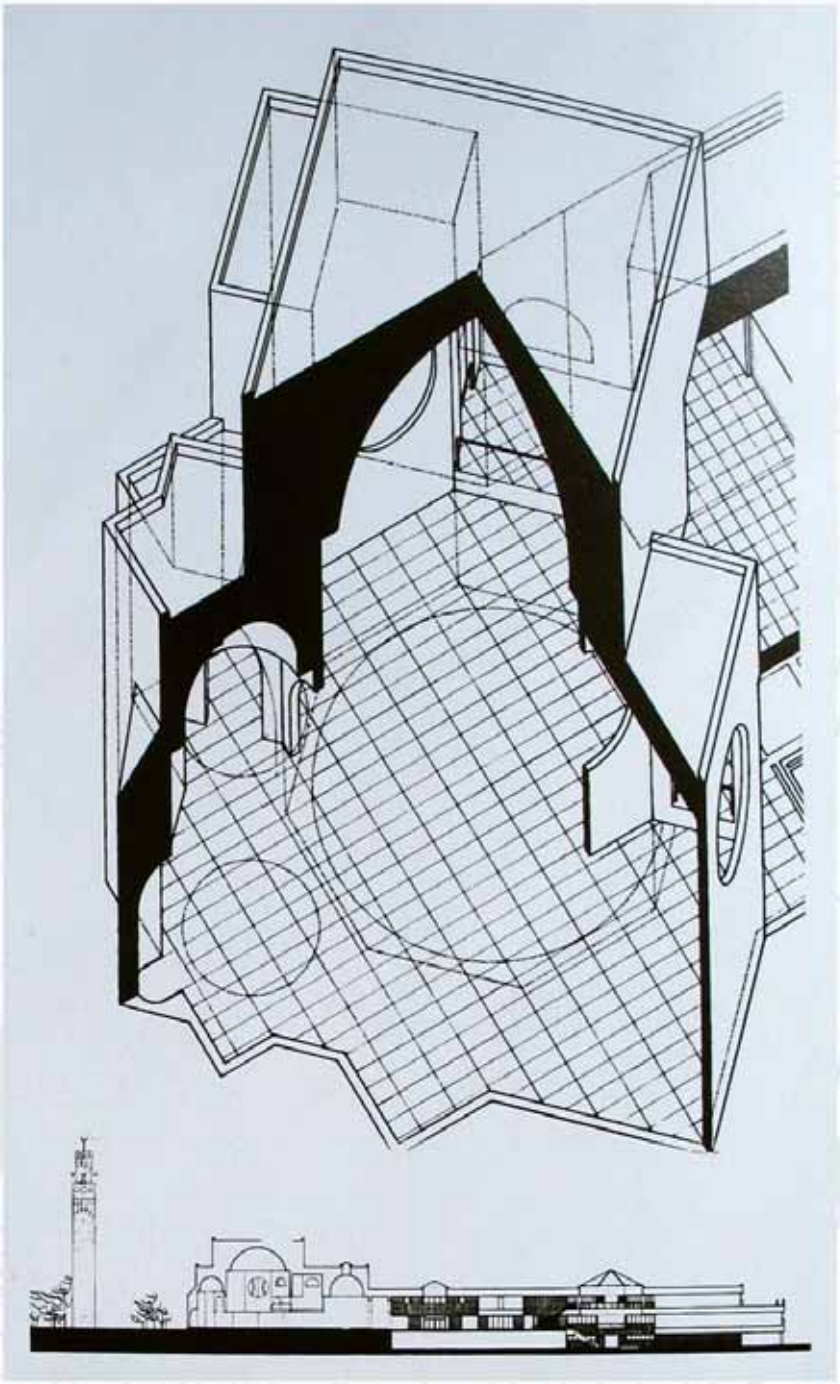


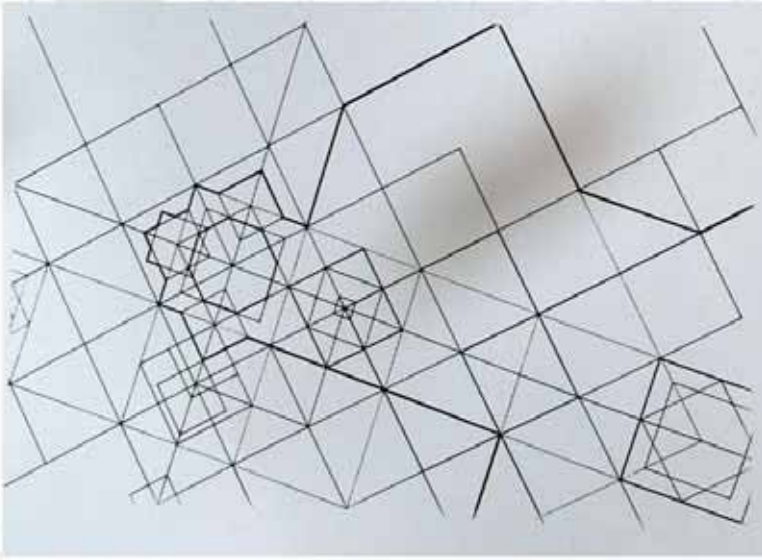


The Islamic Center at Arkansas State University (1984), Jonesboro, by Gulzar Haider. The building features the use of red and white striped brickwork that is visually reminiscent of the treatment of stone architecture in Syria.

(Left) A view into the small entrance courtyard.

University Arkanas Mosque, Jonesboro, Arkansas, USA

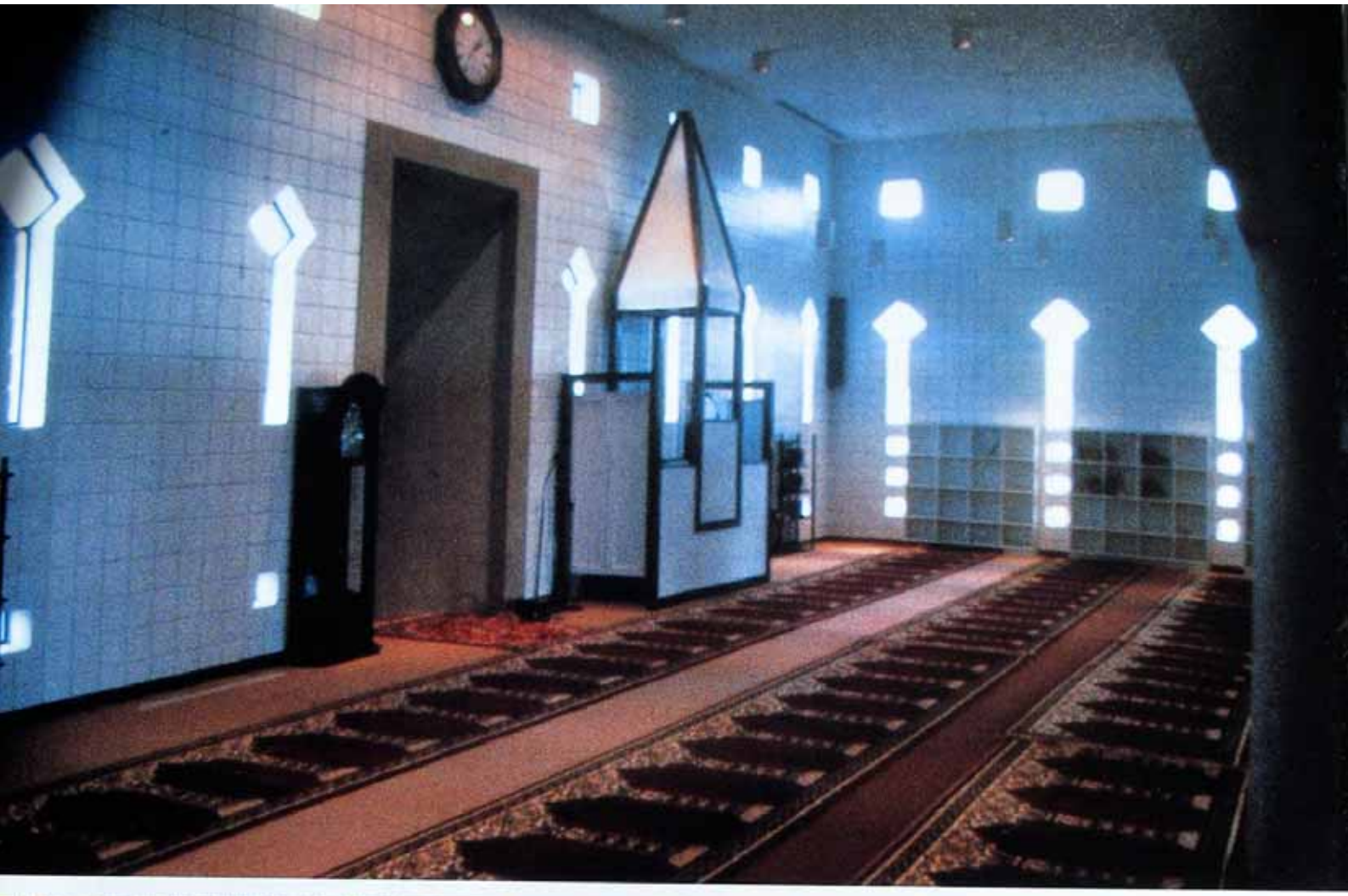


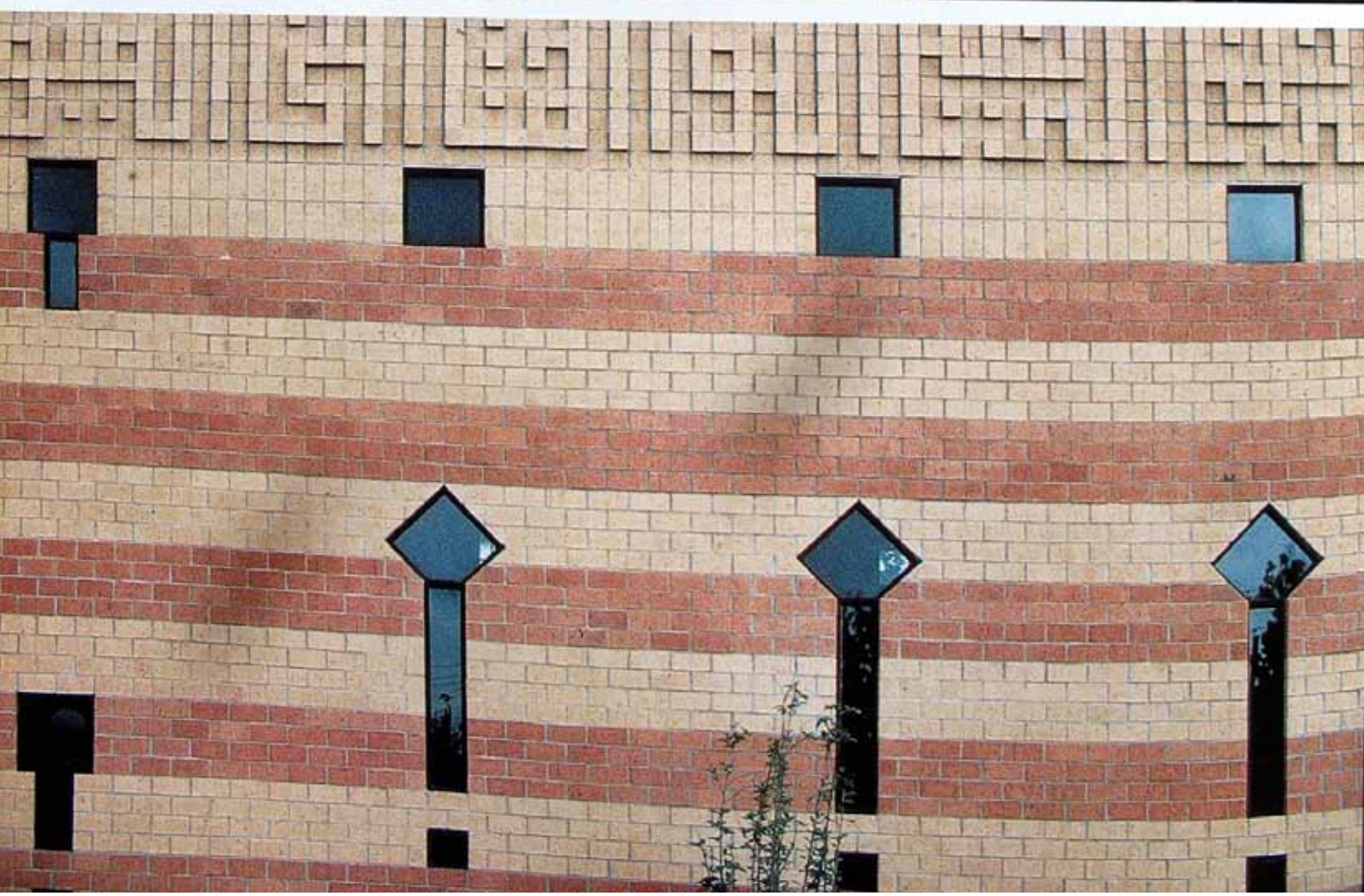


(Top) Axonometric projection of the prayer hall, revealing its geometric order and the insistent verticality in the treatment of interior space.

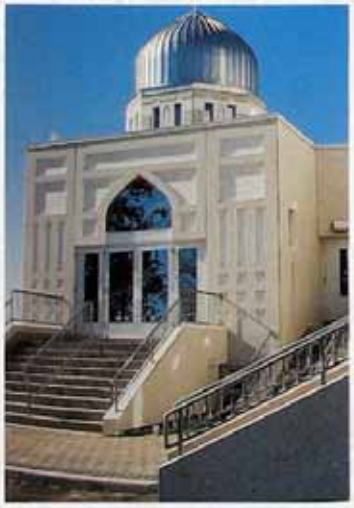
(Above and left) Section of the ISNA complex and an interpretive drawing by the architect, based on carpet and garden designs, to explore the overlapping geometric organization in relation to the progression of spaces in the ISNA layout as a whole.

ISNA Islamic Center, Plainfield, Indiana, USA





(Below) The Bait ul-Islam (1992), Toronto, Ontario, by Gulzar Haider: general view; steps leading to the separate entrance of the women's prayer hall; and the interior of the men's prayer hall.



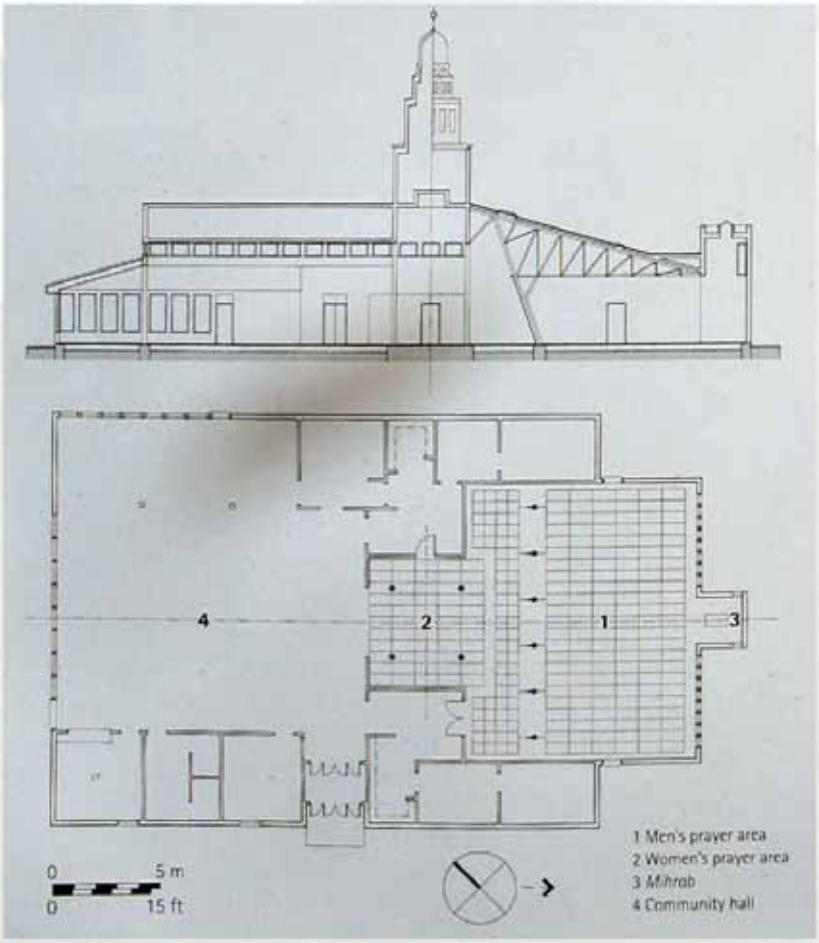
Bait ul-Islam, Maple, Toronto, Ontario, Canada

Islamic Centre, Kinston, Ontario, Canada

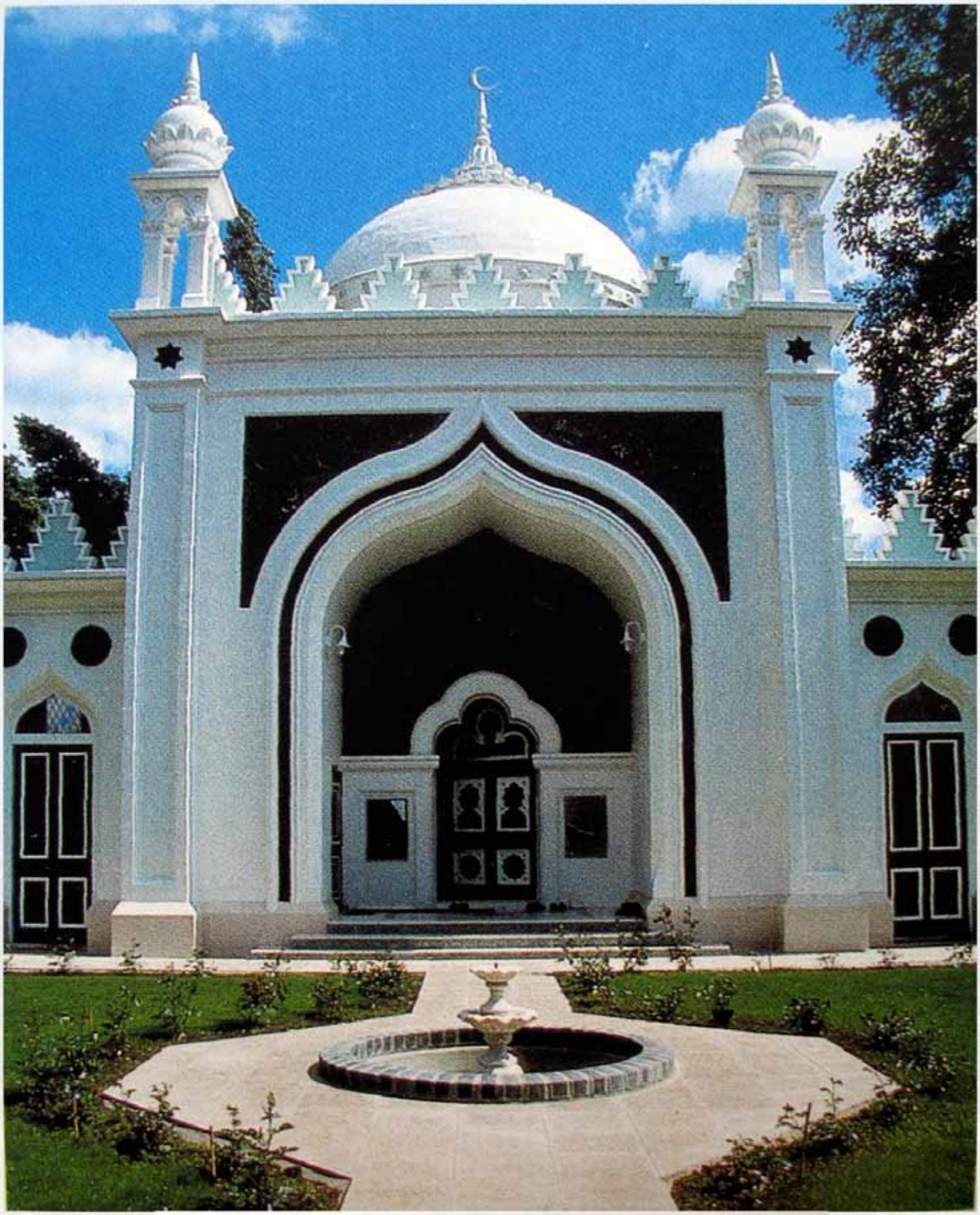
(Below) The Islamic Centre (1996), Kingston, Ontario, by Gulzar Haider. This building, rooted in the Canadian regional vernacular, features a three-stage tower that serves as a minaret signalling the presence of a Muslim community in the area.

(Bottom) Section and plan of the mosque and community hall (on the left) which can be used as overflow space for prayer. The main prayer hall has a protruding *mihrab*, and the women's prayer area is located in the centre (defined by a series of columns).

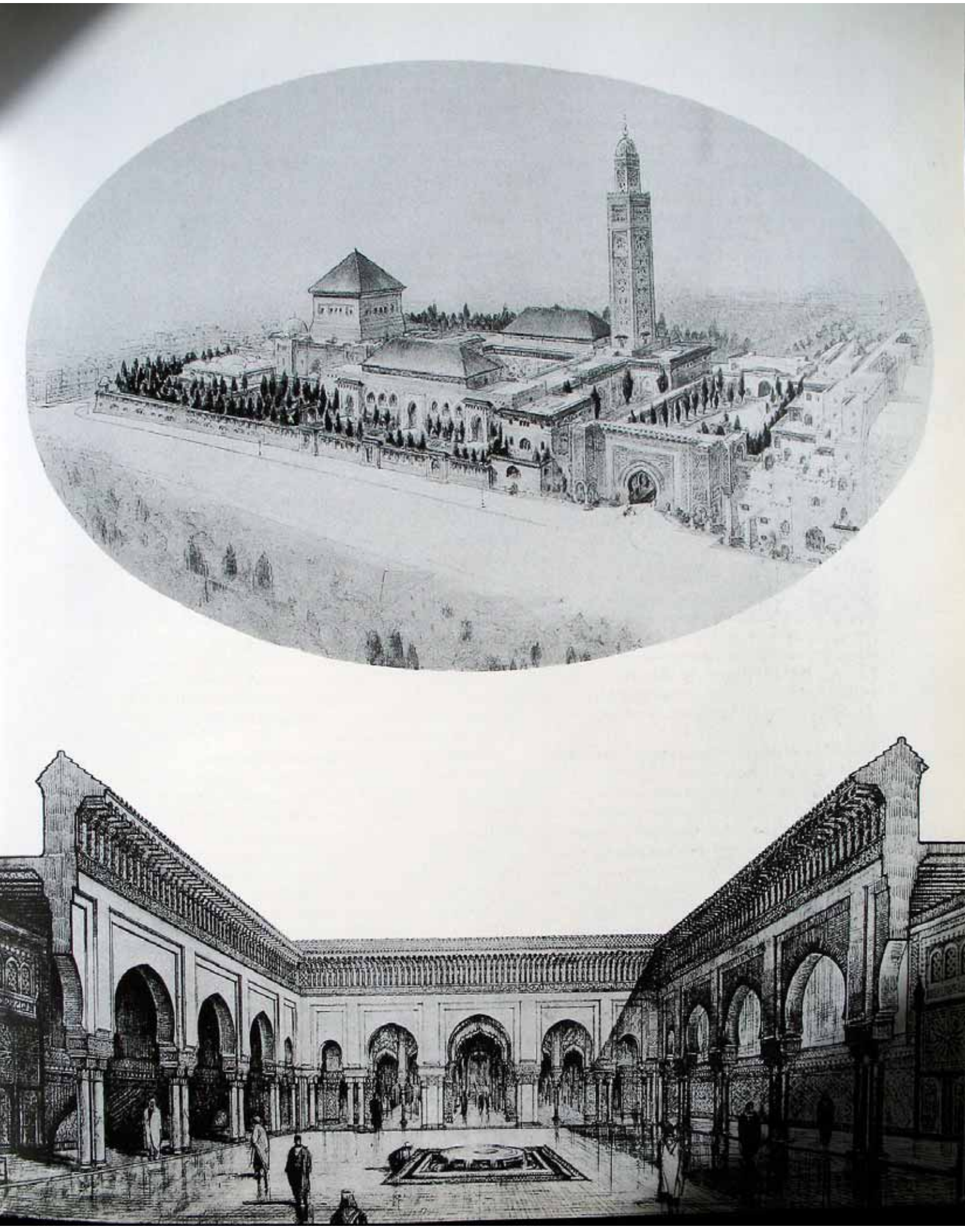
(Opposite) A view of the *mihrab* (above), in the form of a light tower, as seen from the women's prayer area. The steel structure of the main hall (below), featuring backward-sloping supports, is not only architecturally dramatic but also combines the original notion of a hypostyle hall with the local precedent of timber-framed barn construction.



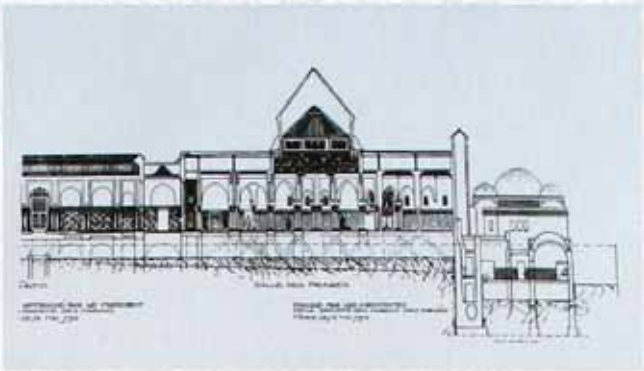
Islamic Centre, Kinston, Ontario, Canada

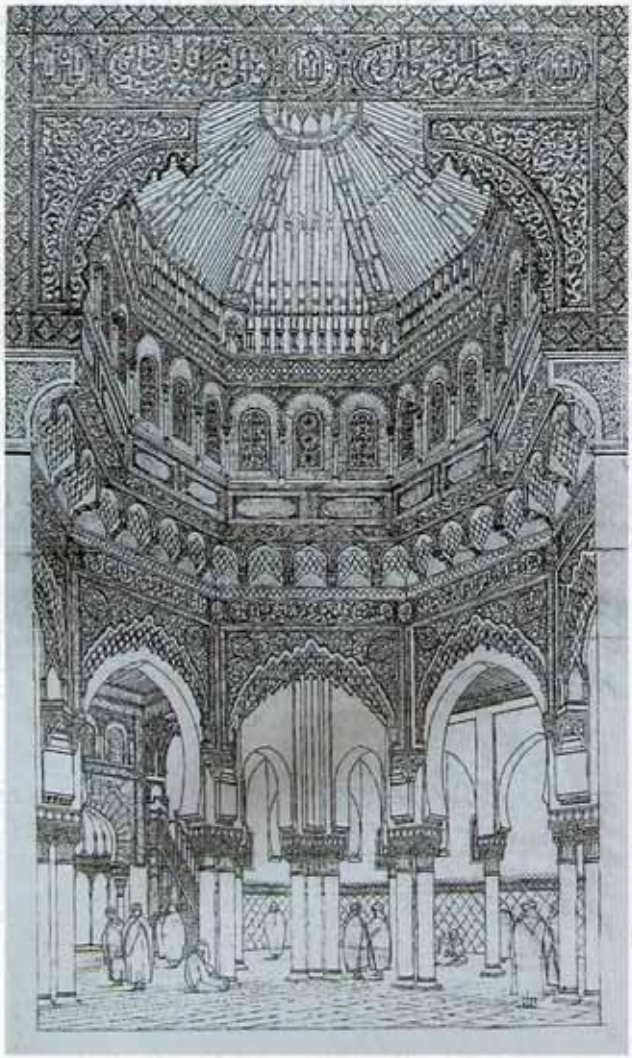


(Above) The mosque at Woking, Surrey, inspired by the Taj Mahal and dating from 1889, is one of the earliest purpose-built examples in Europe.

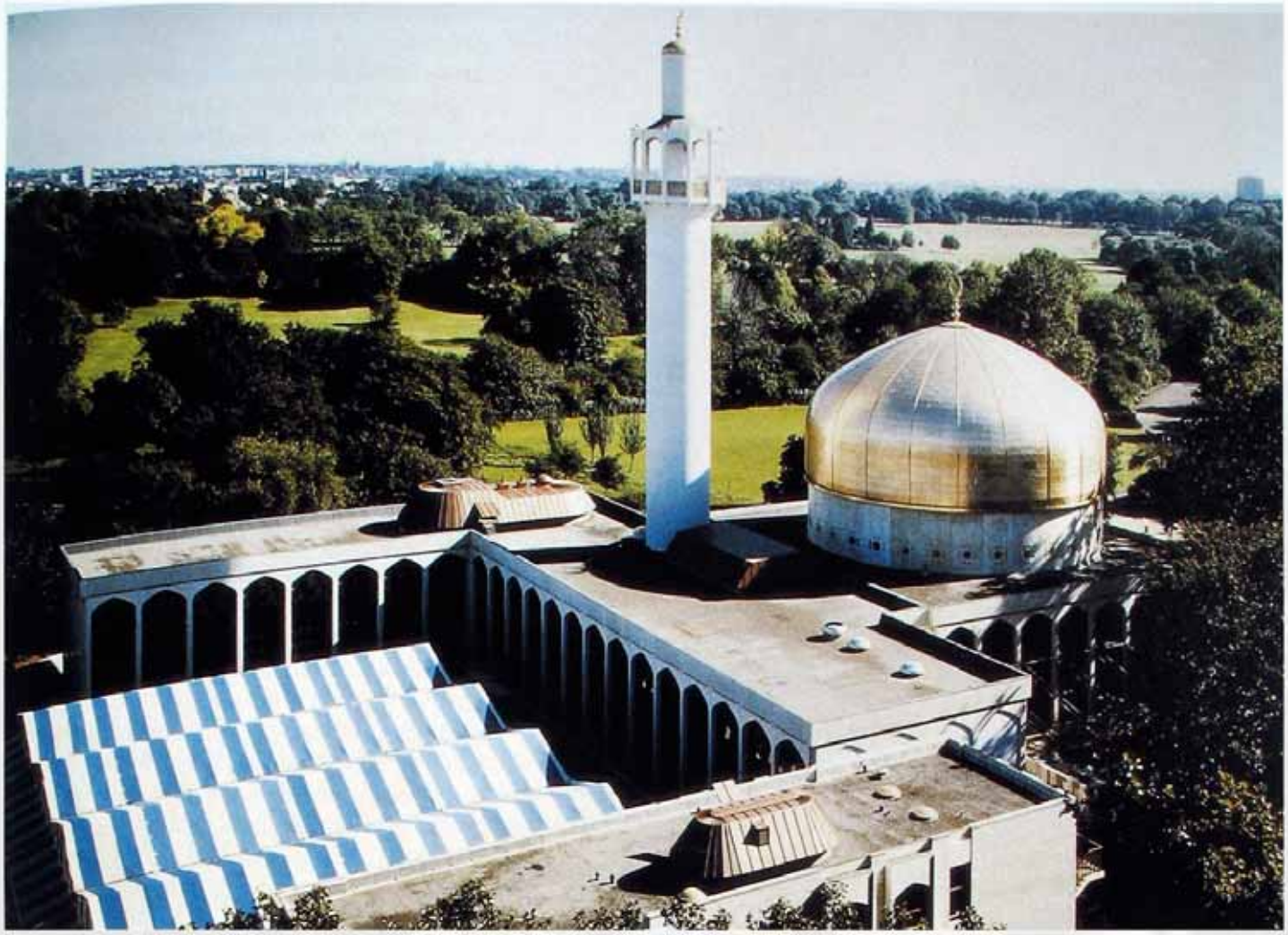


(Below and bottom left) Longitudinal section of the mosque complex showing the domed prayer hall and the *hammam* on the right; and interior perspective of the prayer hall, with decoration featuring elaborate carved woodwork and plasterwork.



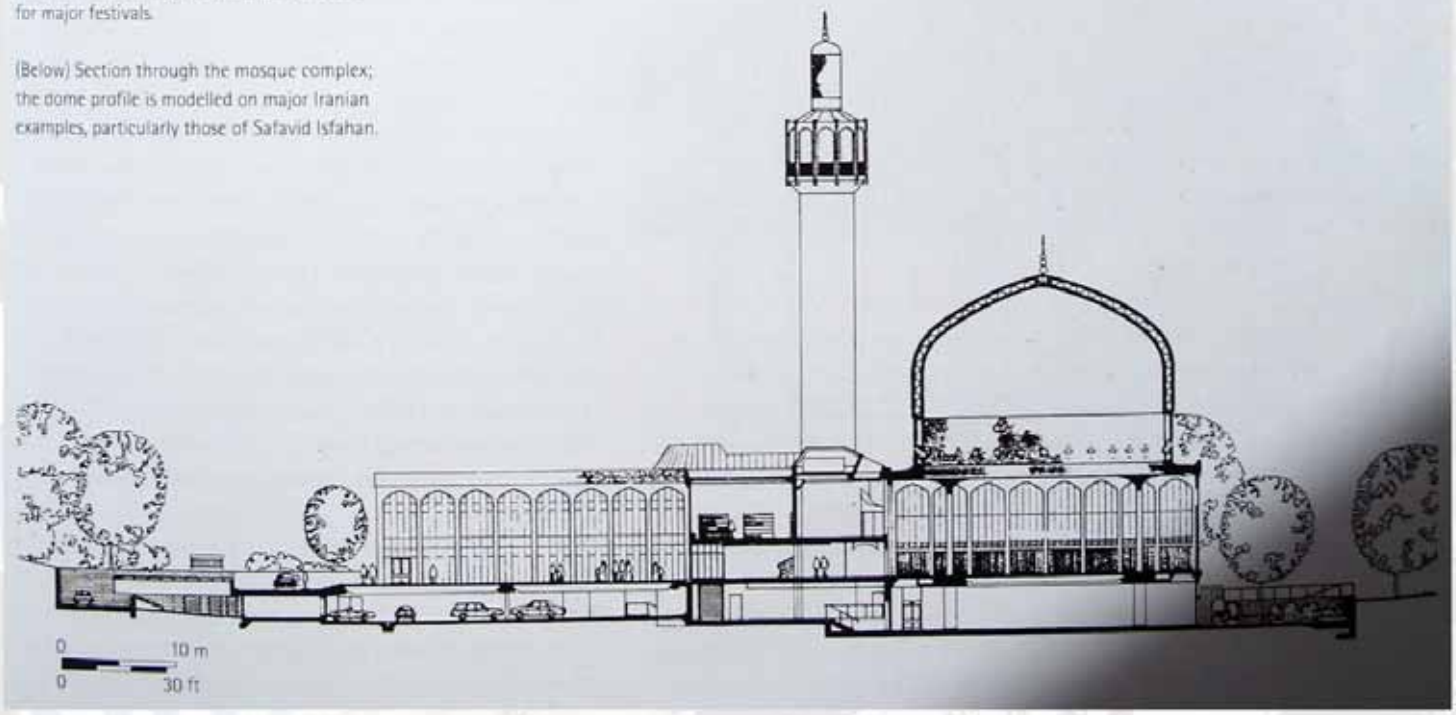


Mosqu and Musim Institute, Paris, France



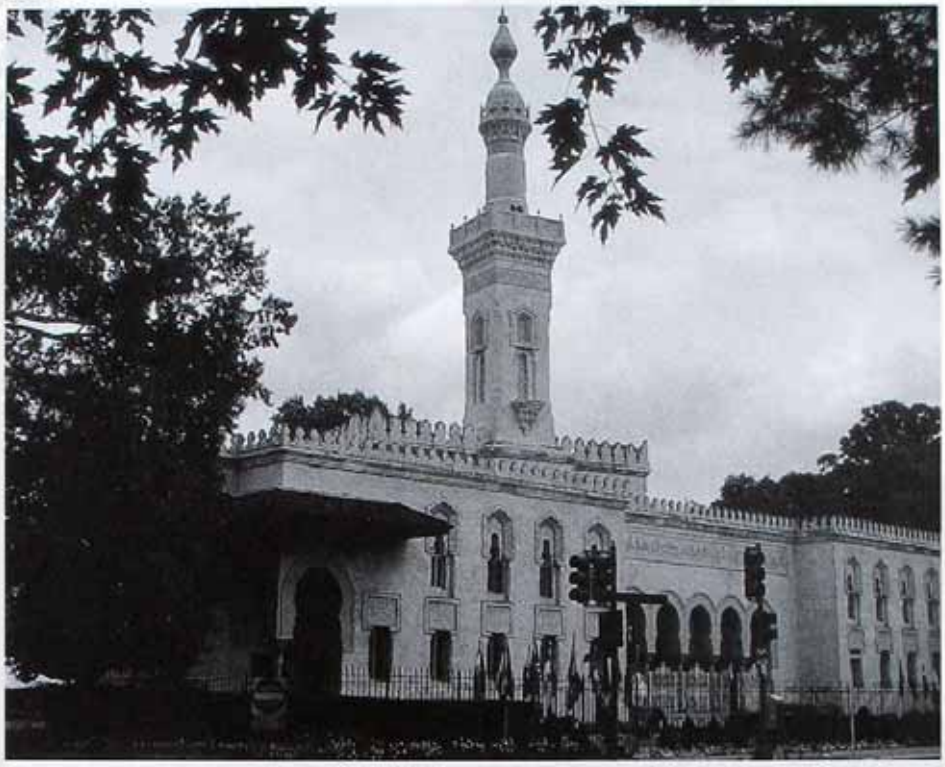
(Above) The London Central Mosque (1969–77) by Sir Frederick Gibberd features the use of modern building techniques to express a pan-Islamic form. The mosque is seen against the background of Regent's Park; the courtyard is covered, so providing additional prayer space for major festivals.

(Below) Section through the mosque complex; the dome profile is modelled on major Iranian examples, particularly those of Safavid Isfahan.



London Central (Regent's Park) Mosque, London, UK

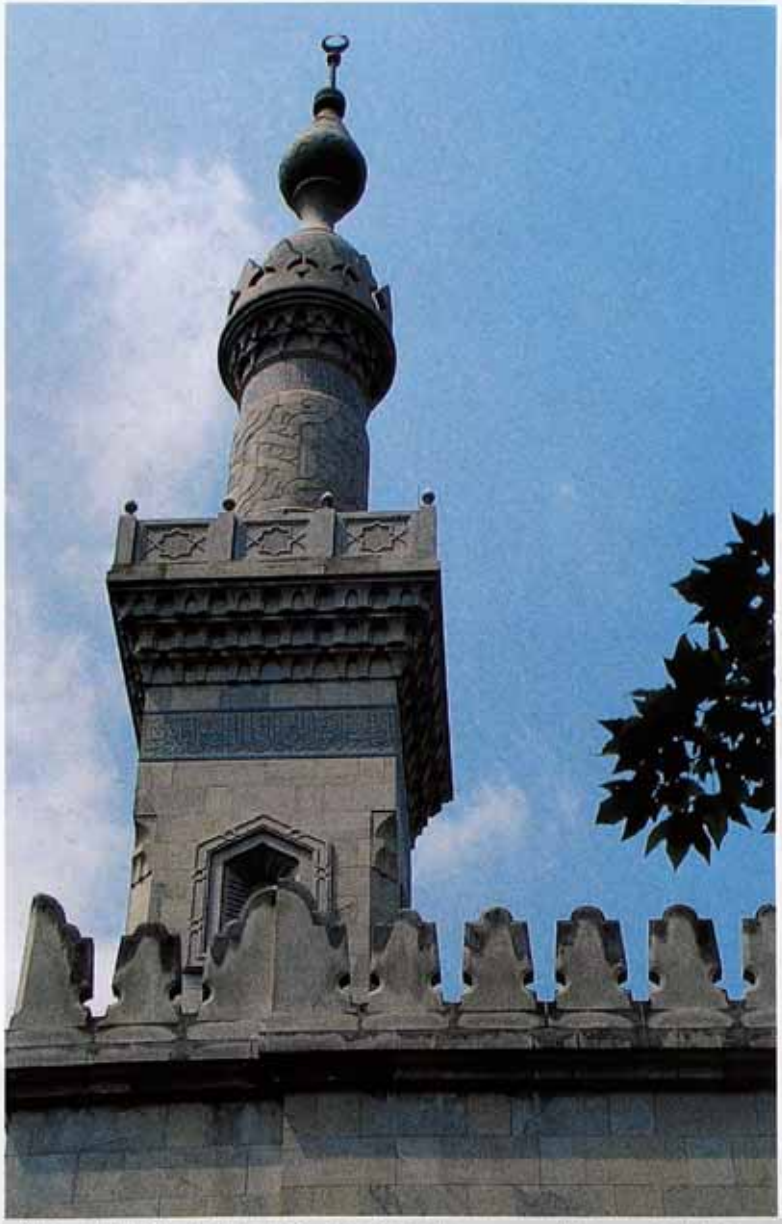
(Below) The Islamic Center (1945–57), Washington, DC, designed by Mario Rossi: general view of the street façade, the style of which follows formal aspects of Mamluk architecture; and the main entrance decorated with a monumental Qur'anic inscription executed in light-blue and white marble chips.



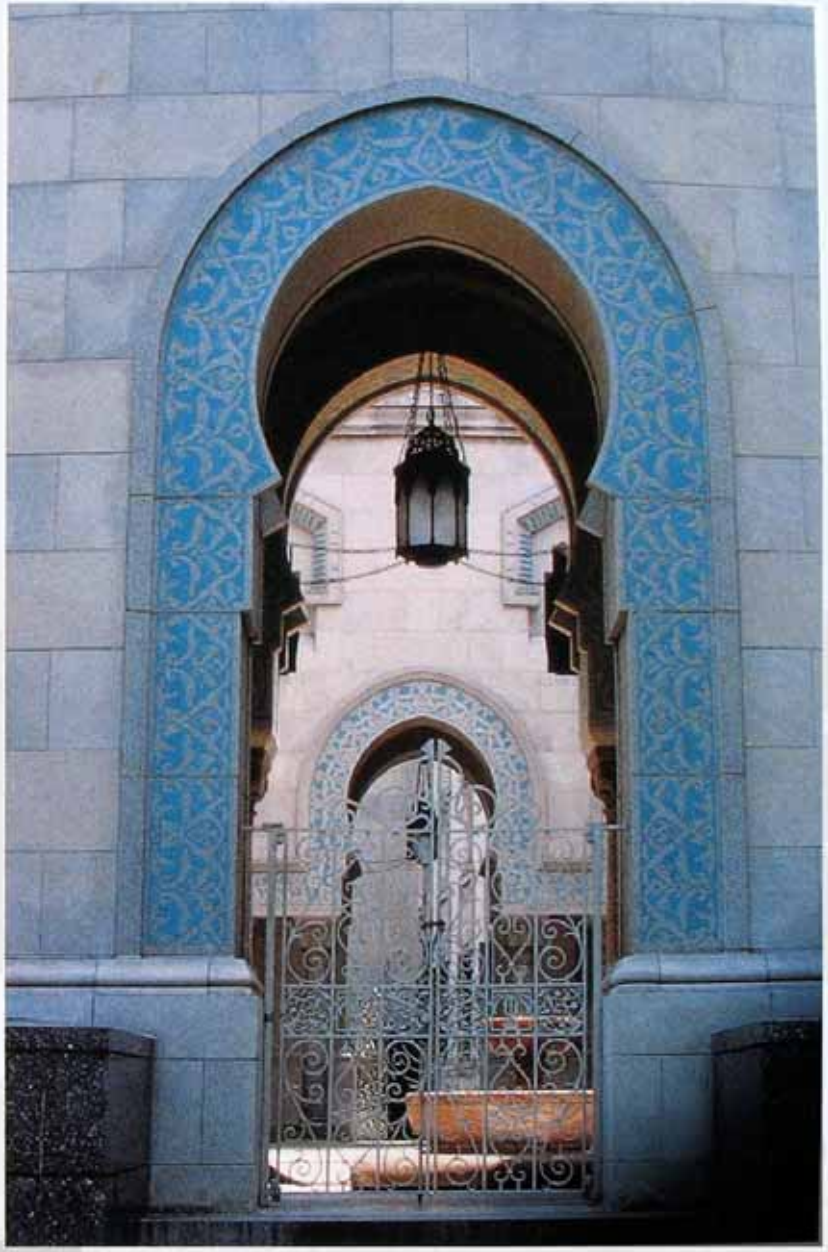
Islamic Center, Washington, DC, USA

London Central (Regent's Park) Mosque, London, UK

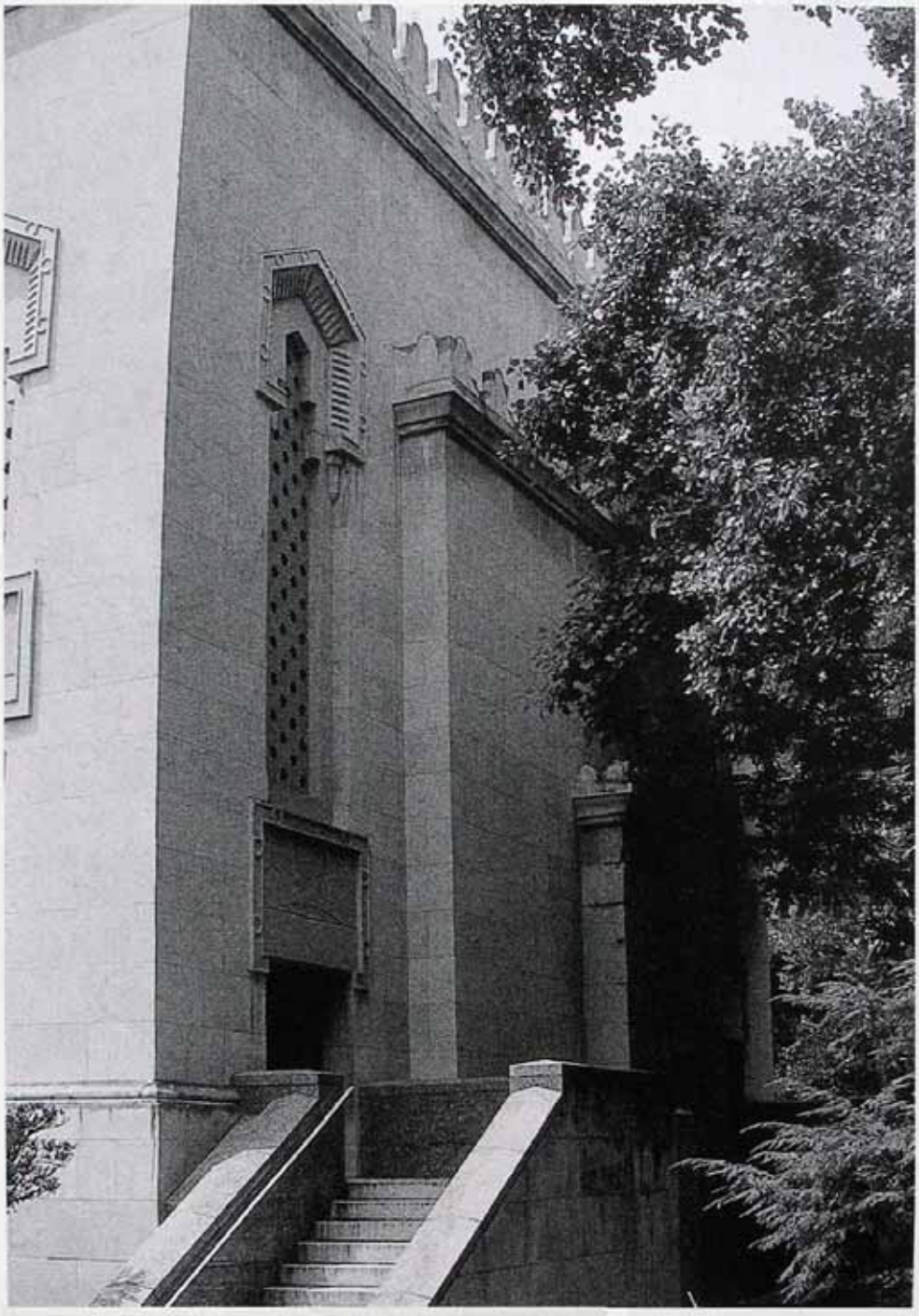
(Below) Plans of the mosque at upper-floor, ground-floor and basement levels showing the square prayer hall and the L-shaped section occupied by the library, administrative offices and utility spaces. Parking facilities are located beneath the courtyard.



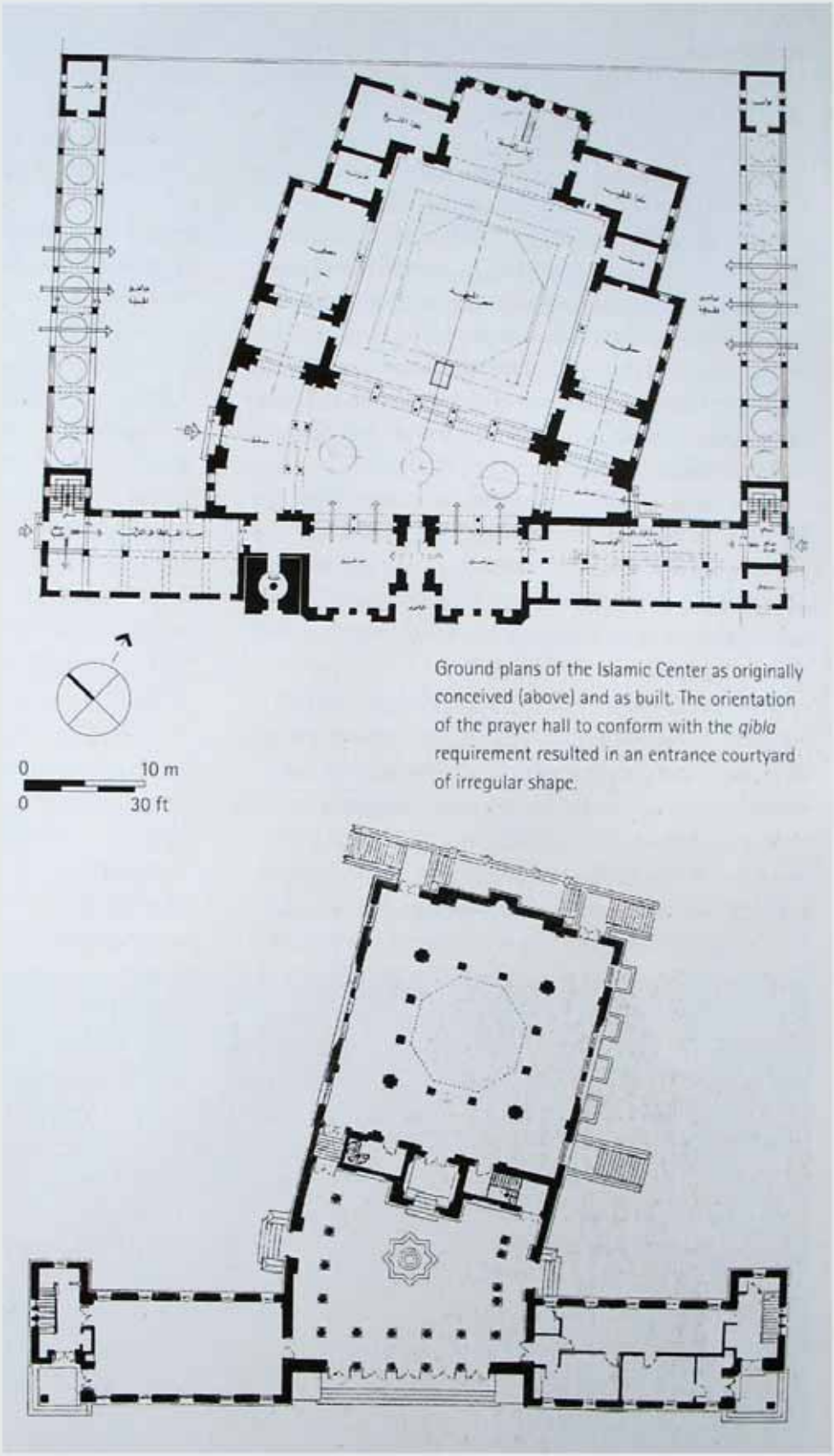
(Above left) Detail of the minaret; minarets constituted an important feature of all new mosques built by Mario Rossi in Egypt in the 1930s and 1940s.



(Above right) A view through one of the side archways that give access to the garden; the courtyard beyond functions as a public transitional space leading to the prayer hall.

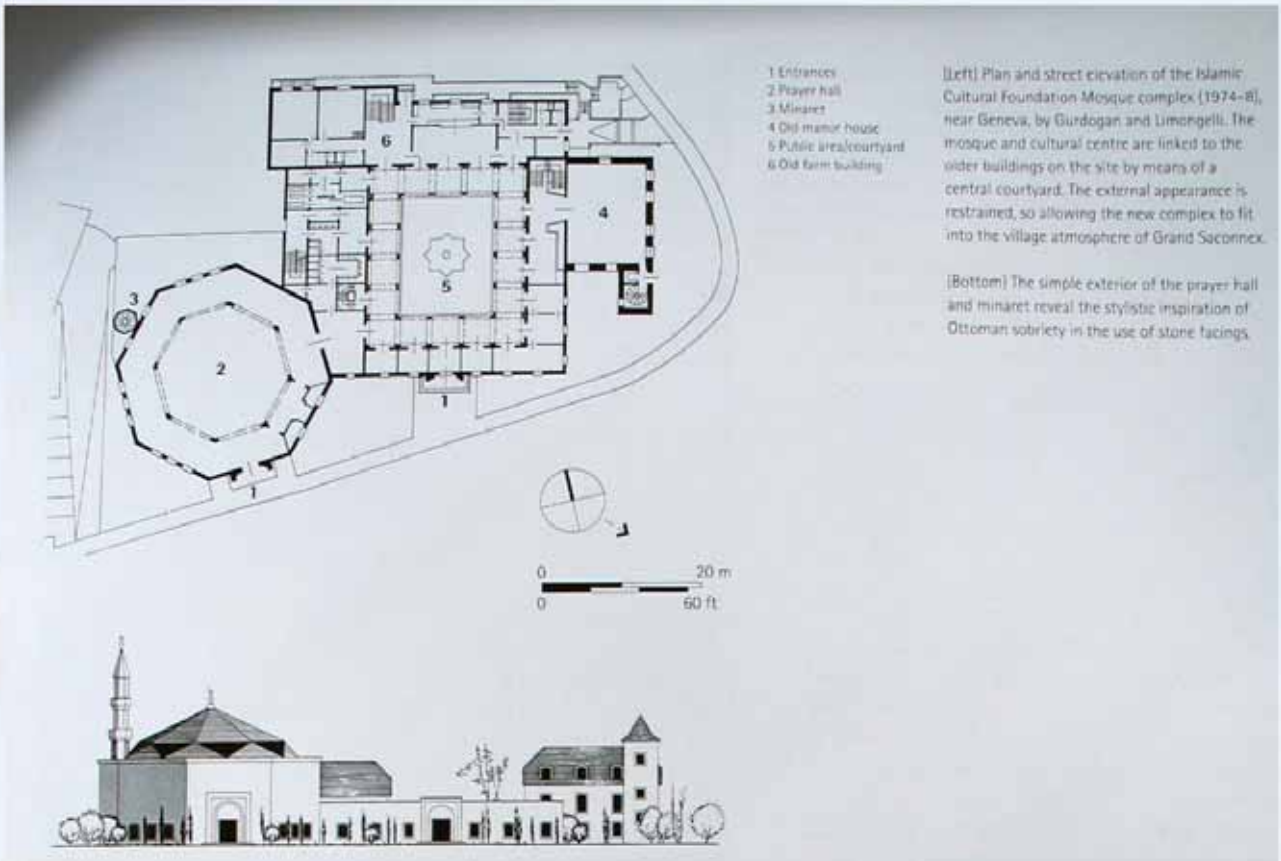


Exterior view of the *qibla* façade, with emergency escape stairs leading down to street level.



Ground plans of the Islamic Center as originally conceived (above) and as built. The orientation of the prayer hall to conform with the *qibla* requirement resulted in an entrance courtyard of irregular shape.

London Central (Regent's Park) Mosque, London, UK

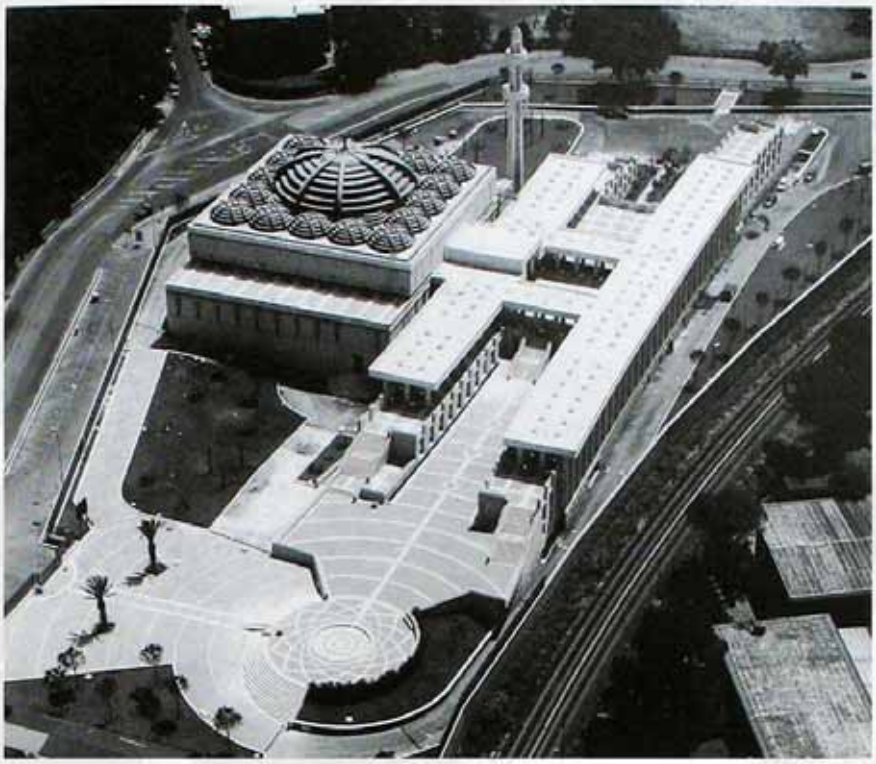


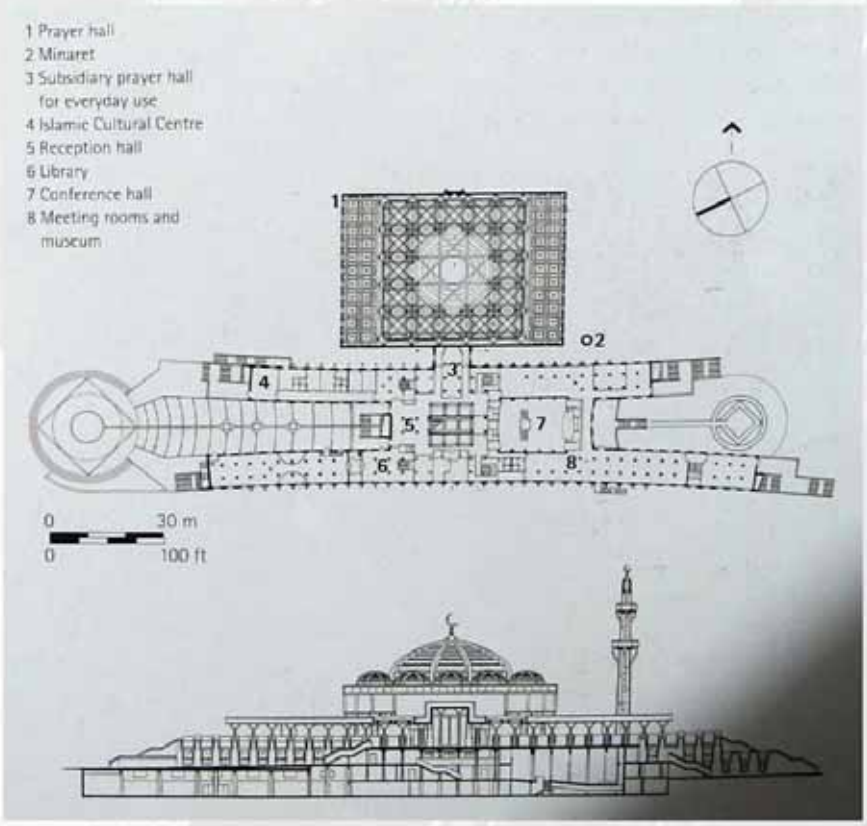
(Left) Plan and street elevation of the Islamic Cultural Foundation Mosque complex (1974–8), near Geneva, by Gurdogan and Limongelli. The mosque and cultural centre are linked to the older buildings on the site by means of a central courtyard. The external appearance is restrained, so allowing the new complex to fit into the village atmosphere of Grand Saconnex.

(Bottom) The simple exterior of the prayer hall and minaret reveal the stylistic inspiration of Ottoman sobriety in the use of stone facings.

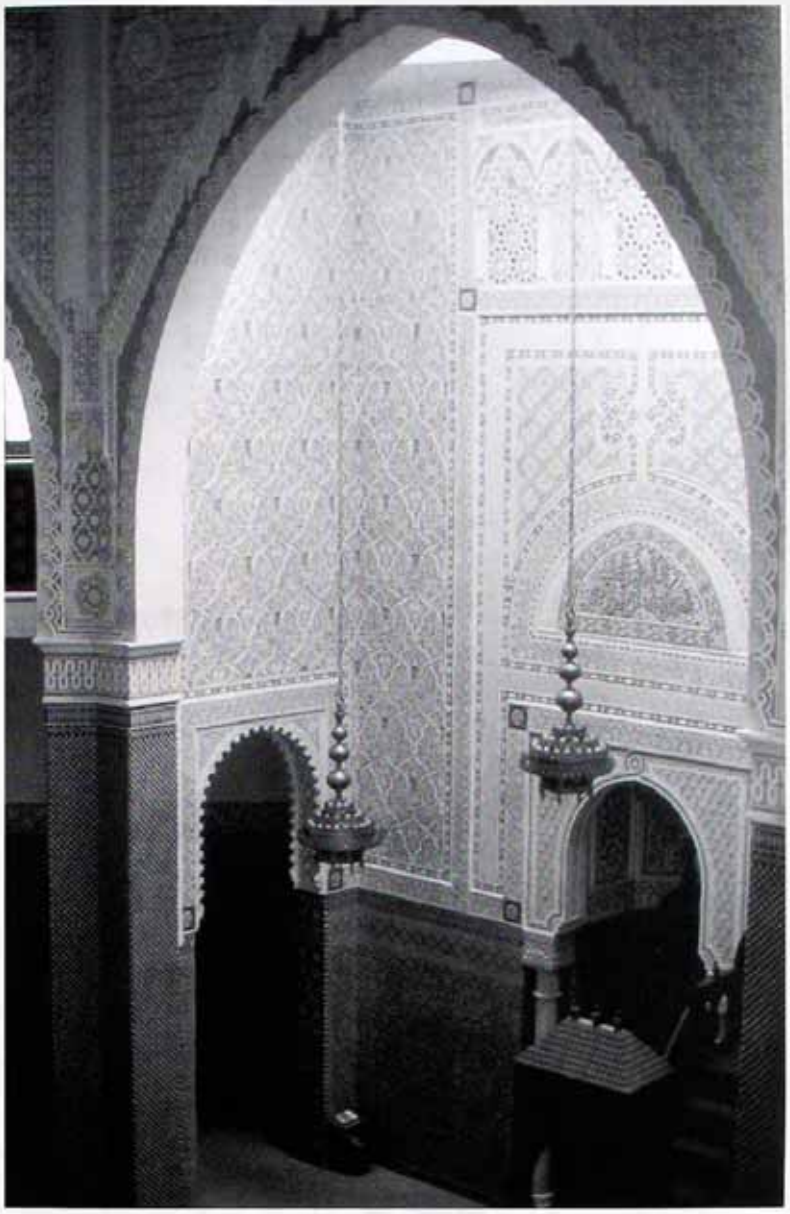
Islamic Center Foundation Mosque, Petit Saconnex (Geneva), Switzerland

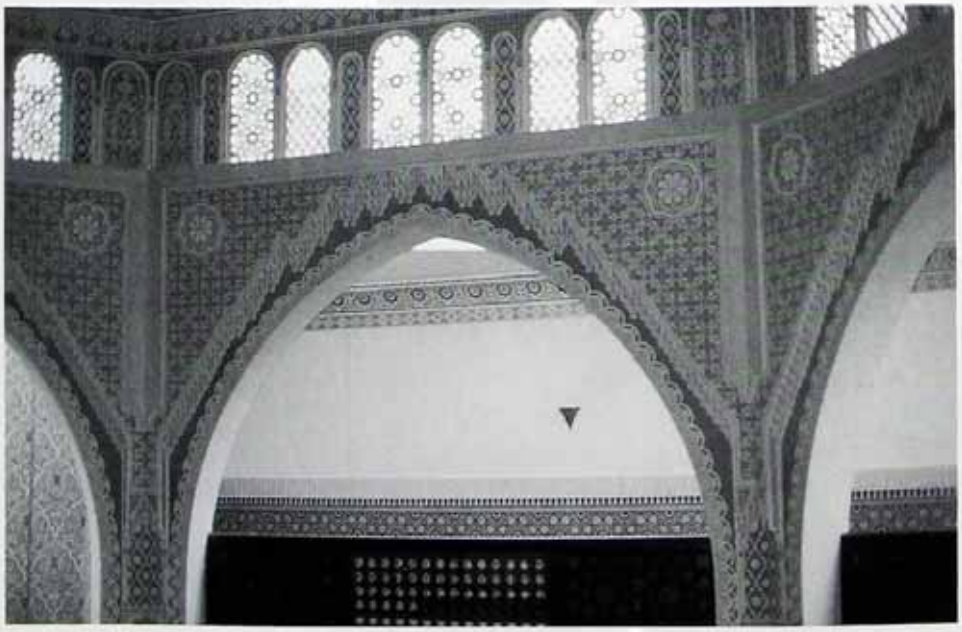
(Below) An aerial view, plan and section of the Islamic Centre and Mosque (1975–94) in Rome, designed by Portoghesi, Gigliotti and Moussawi. The layout of the entrance plaza, the gardens and the auxiliary services is conceived within the monumental building traditions of Roman, Baroque and Islamic architecture. Access to the main prayer hall is via a staircase leading to the podium on which it stands.





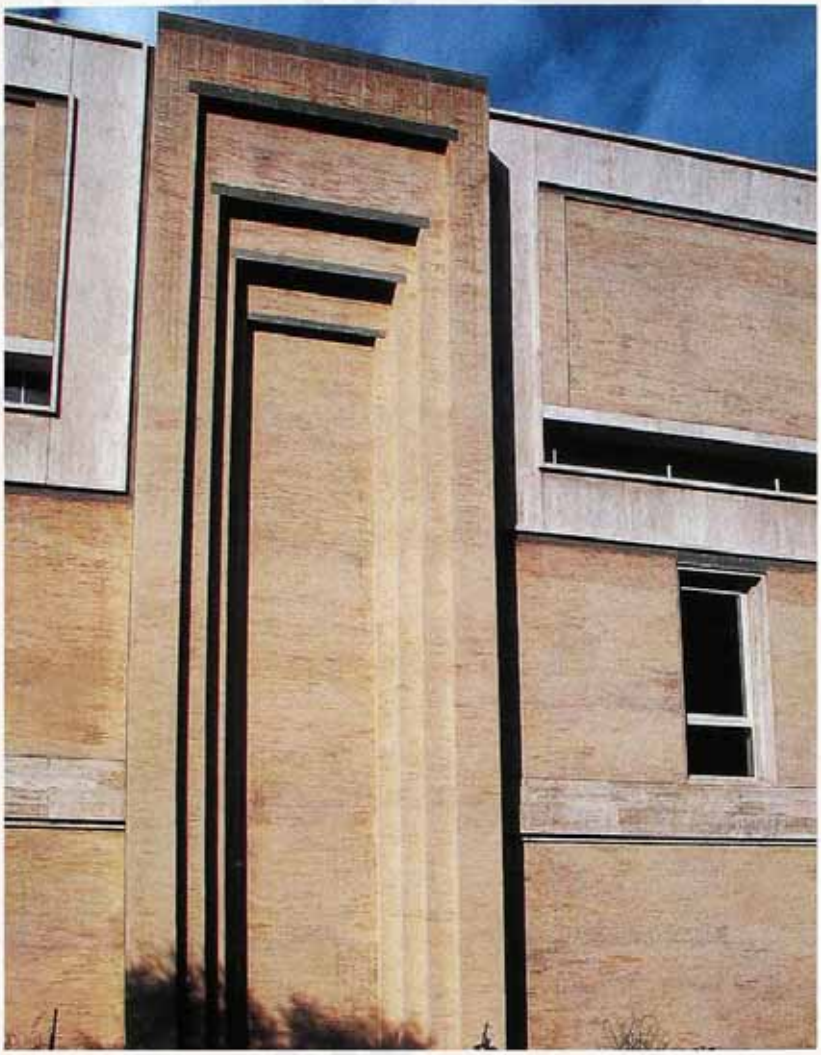
Islamic Centere and Mosque, Rome, Italy





The *mihrab* niche and detail of the octagonal prayer hall showing the transitional area below the dome. The ornamentation executed by craftsmen sent by King Hassan II of Morocco reveals characteristic North African features.

Islamic Center Foundation Mosque, Petit Saconnex (Geneva), Switzerland

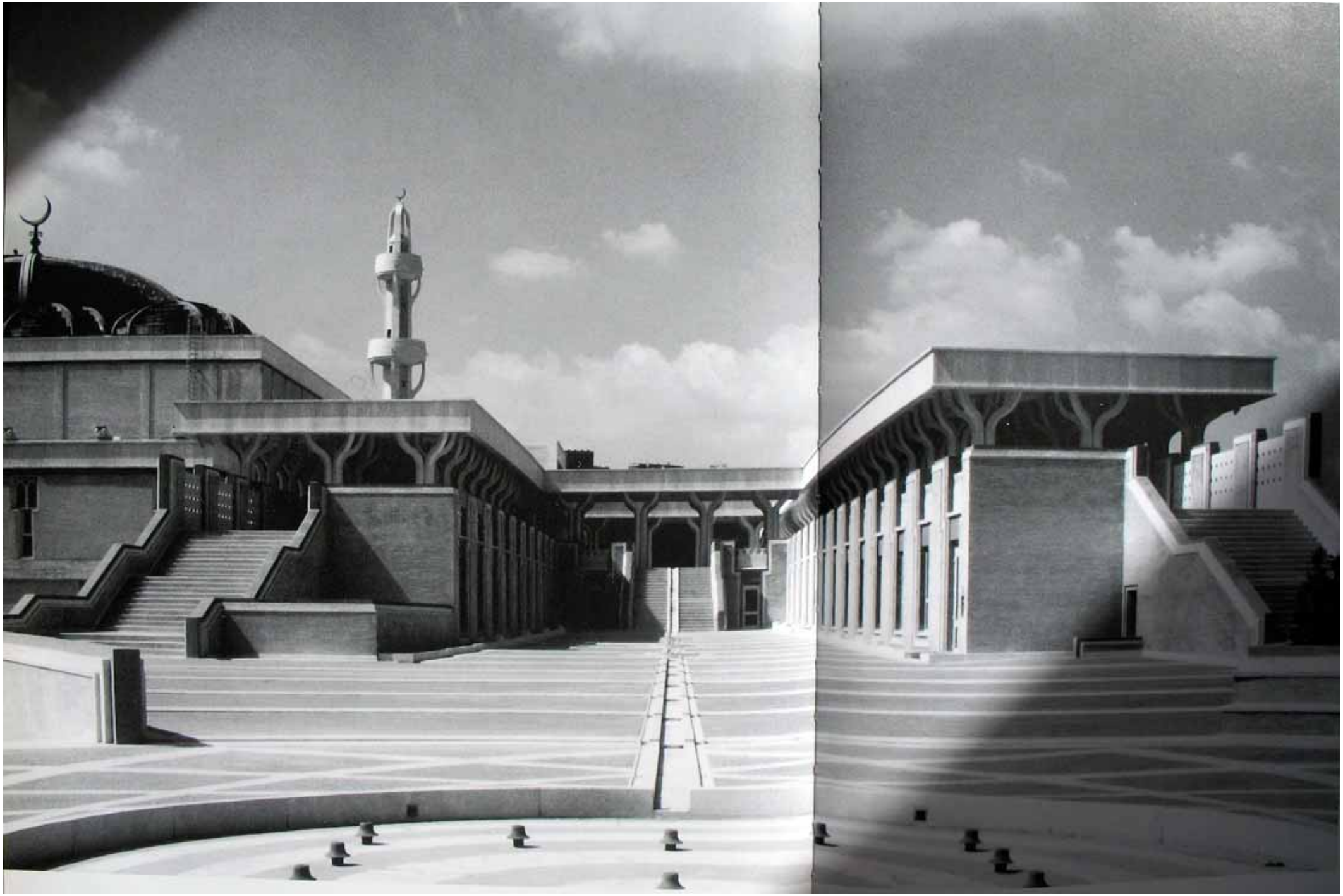


(Above) The *mihrab*, which is covered in blue, green and ochre ceramic tiles, offsets the varying tonalities of the white interior, while on the exterior its position on the *qibla* wall is indicated by a recessed niche on either side of which part of the horizontal glazed band can be seen.

(Right) Historic Andalusian-Maghrebi mosques with ribbed domes, such as this example over one of the bays adjacent to the *mihrab* in the Great Mosque in Cordoba, provided the inspiration for the superstructure of the Rome prayer hall.

(Opposite) Views of the interior showing the superstructure of the prayer hall and the ribbed dome; supported by eight columns, the dome's appearance is dematerialized by seven rings of glazed openings.

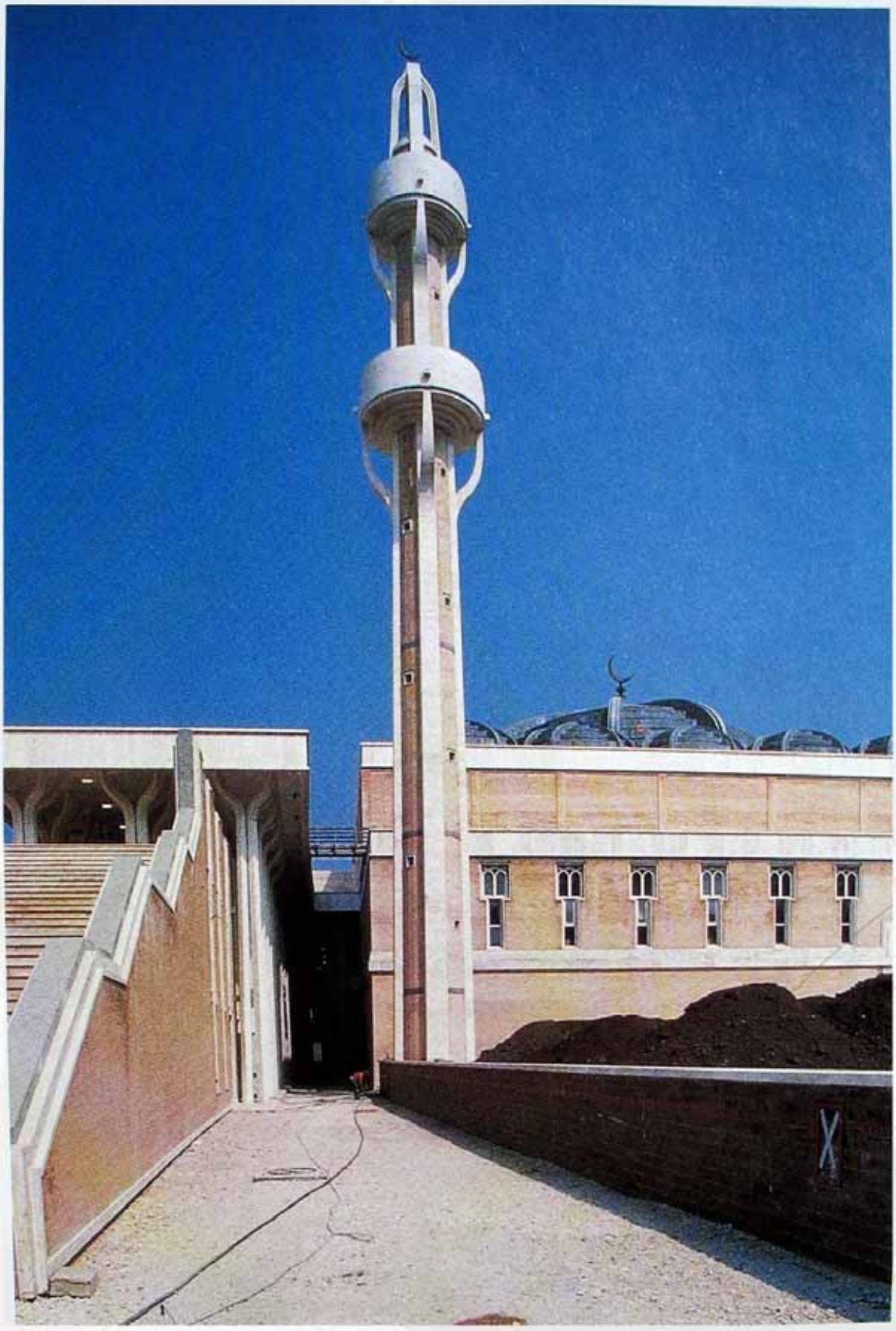
Islamic Centere and Mosque, Rome, Italy



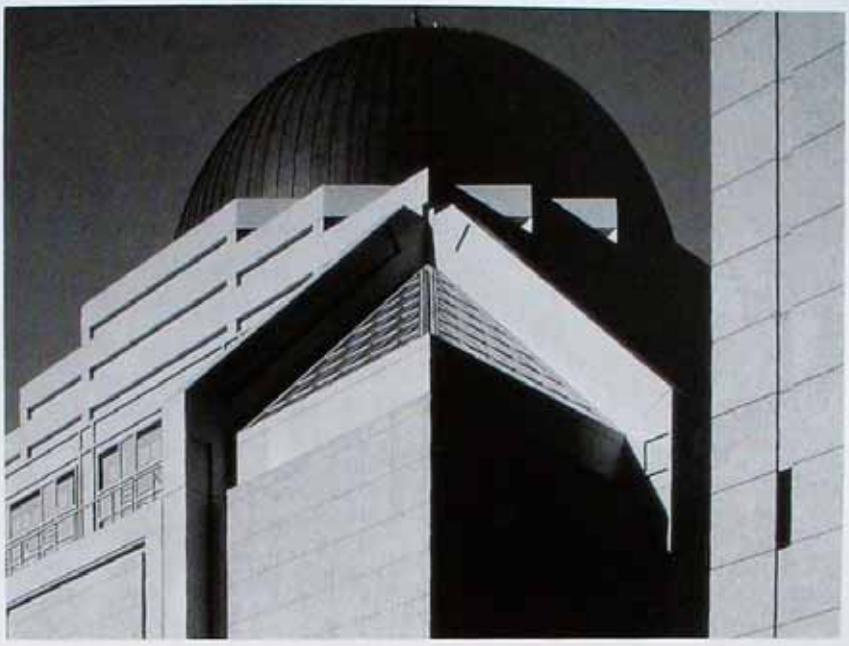
(Above) Interior detail of one of the flanking colonnades which unify the entire complex.

(Right and opposite) Exterior details showing the library with its floating slab roof supported by externally expressed columns, and the freestanding minaret, 40 m (130 ft) in height, with two-tiered galleries.

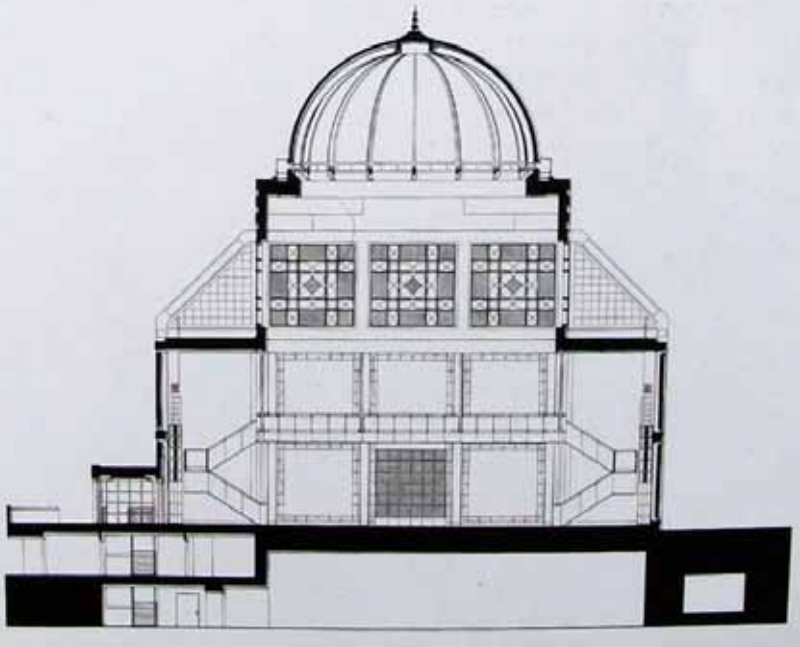
Islamic Centere and Mosque, Rome, Italy



Islamic Centere and Mosque, Rome, Italy

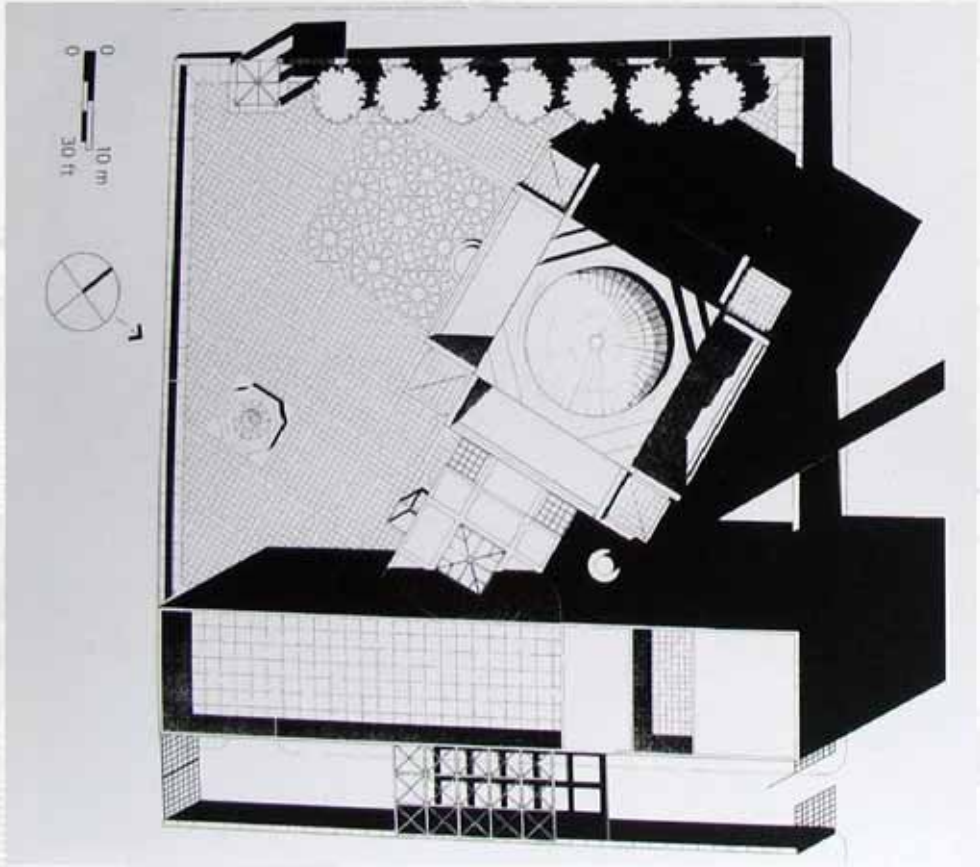


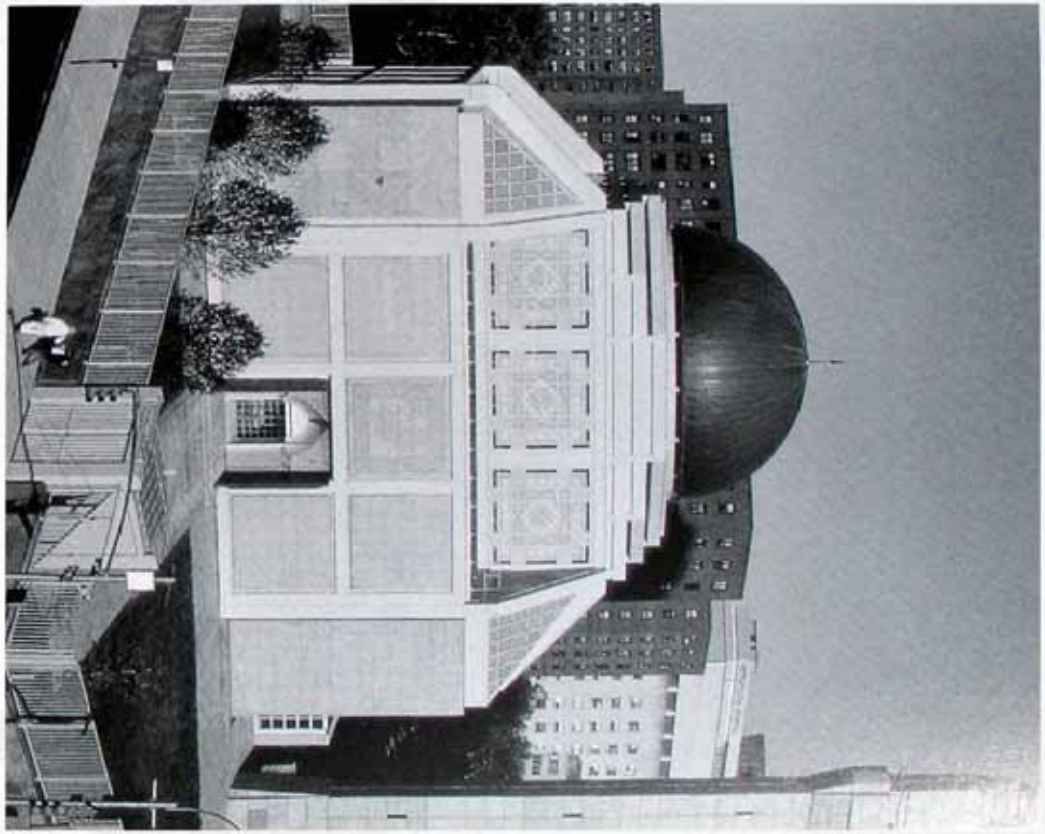
Exterior corner detail and section through the prayer hall. The single dome of the mosque sits on a transitional zone of stepped reinforced-concrete beams infilled with etched-glass panels. The use of uniform square panels of either granite or glass on all four walls gives the interior a sense of order.

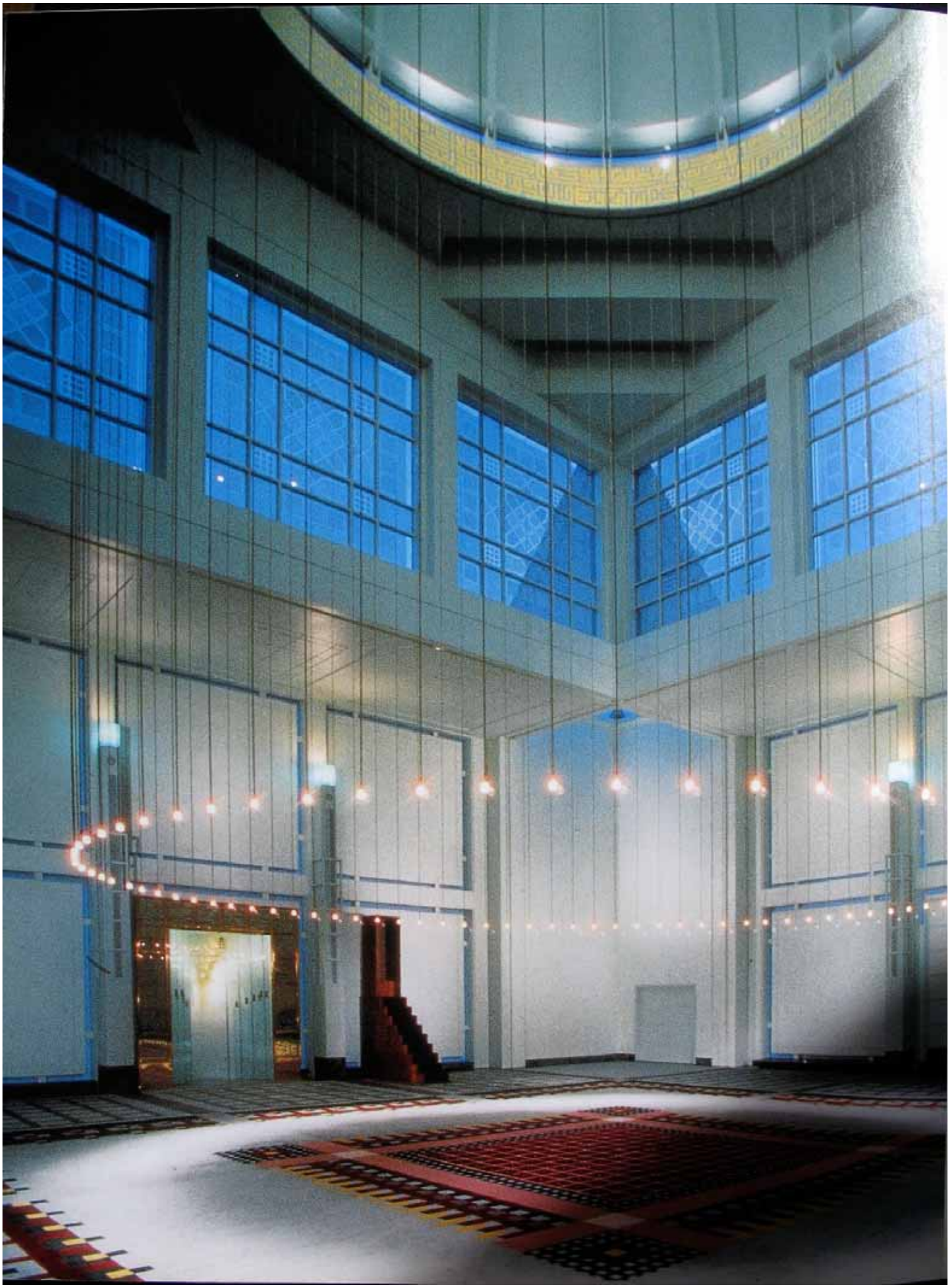


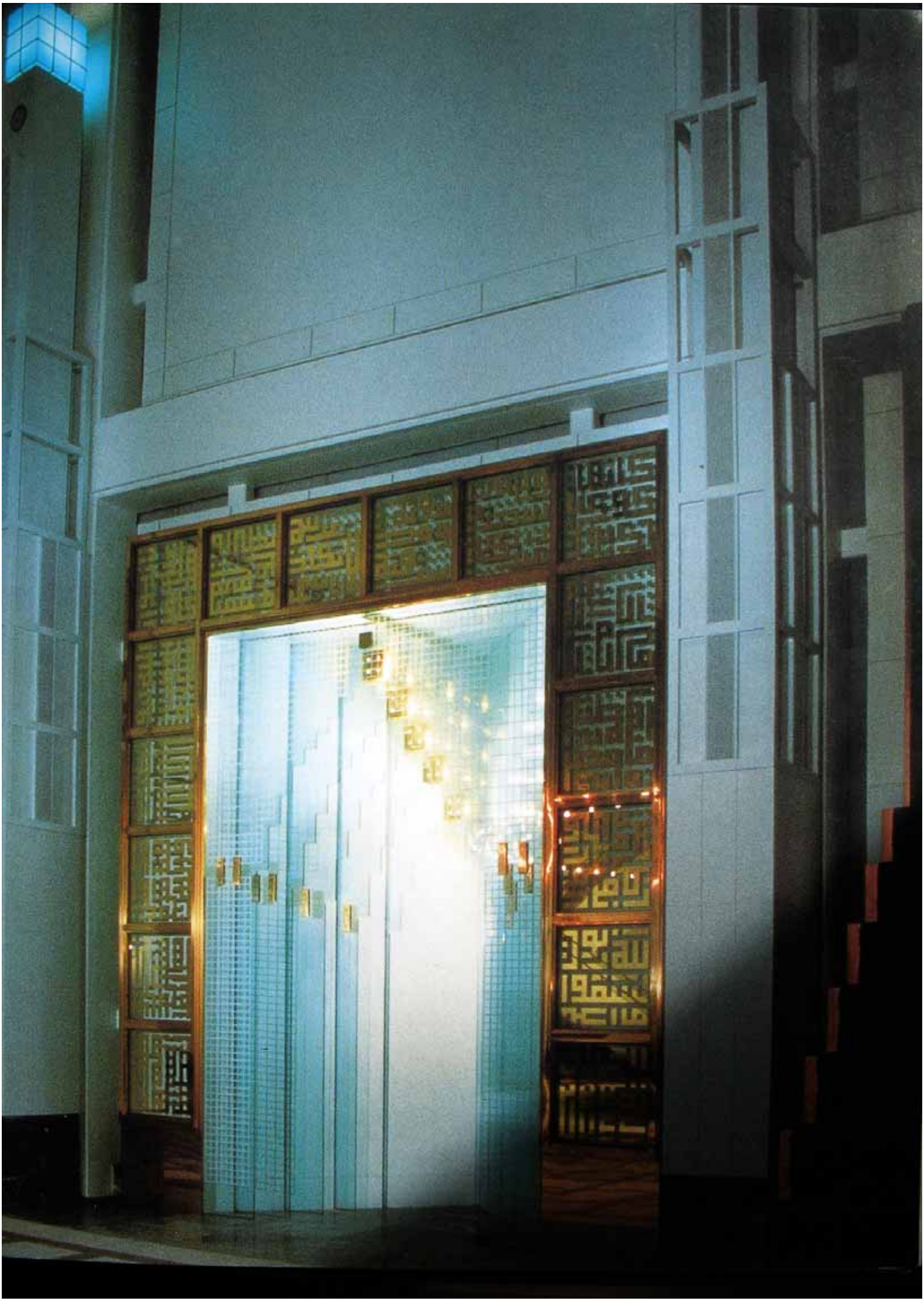
The Islamic Cultra Center of New York, USA

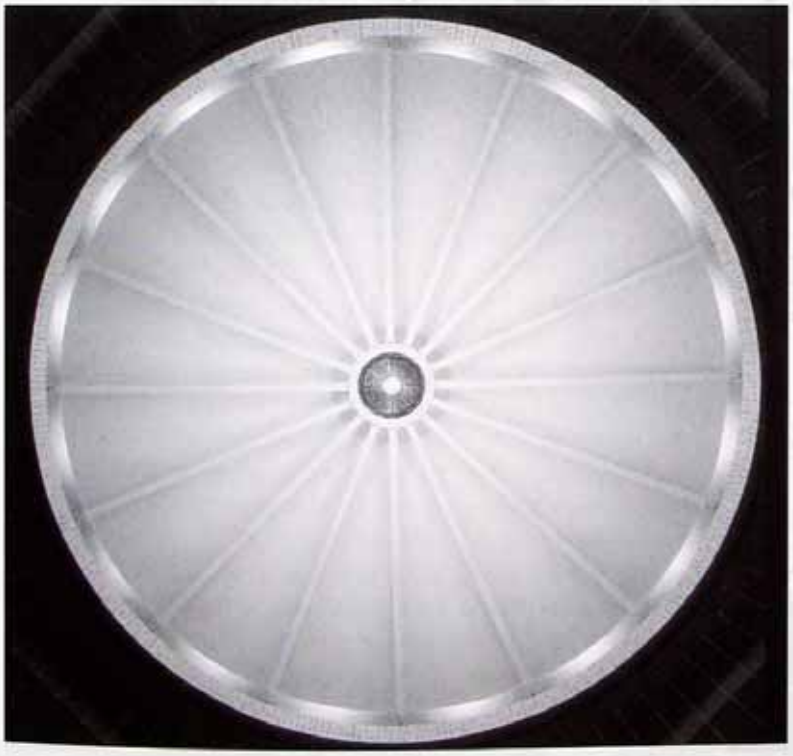
The Islamic Cultra Center of New York, USA





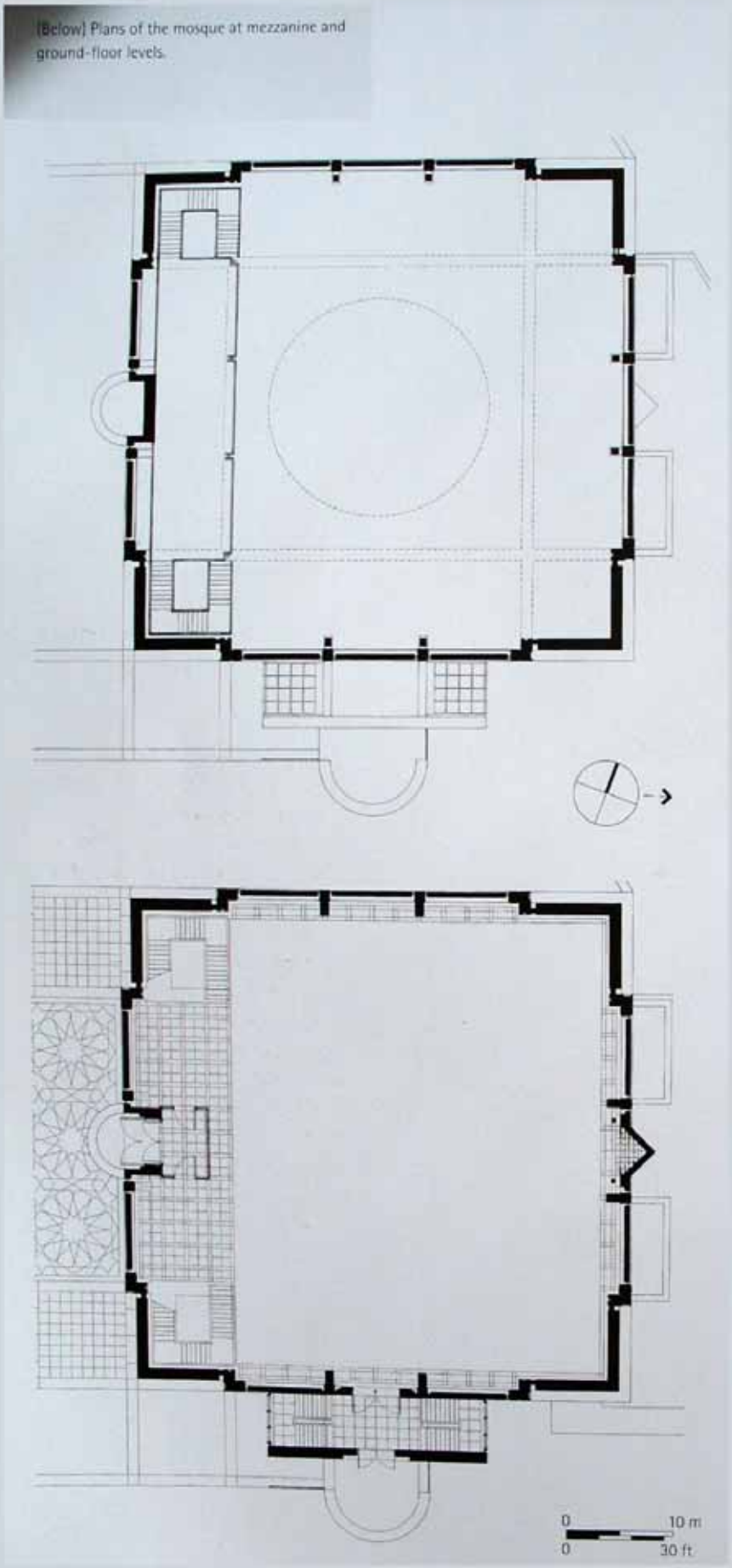






(Top) The main entrance to the prayer hall, which, like the *mihrab*, features a modern version of the *muqarnas*.

(Above) The interior of the dome showing the use of steel ribs and a ring of windows around the base to admit natural light.



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