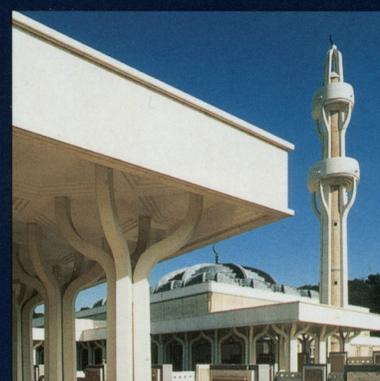
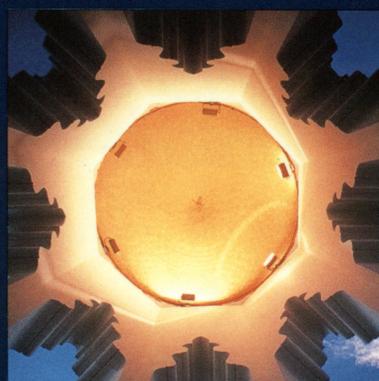
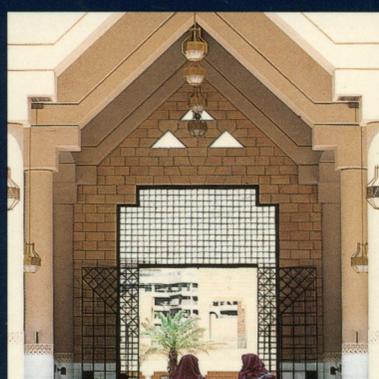
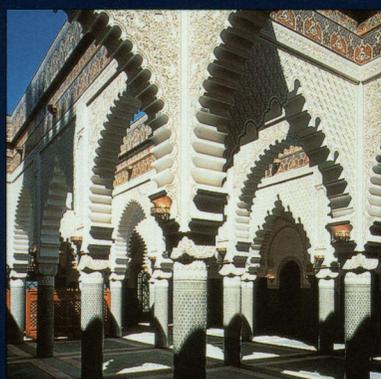
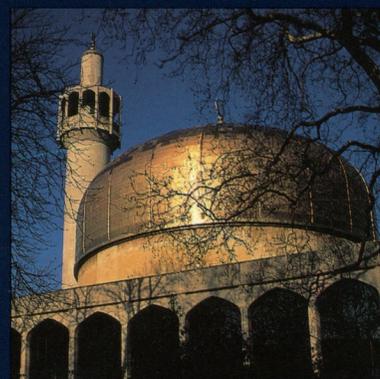
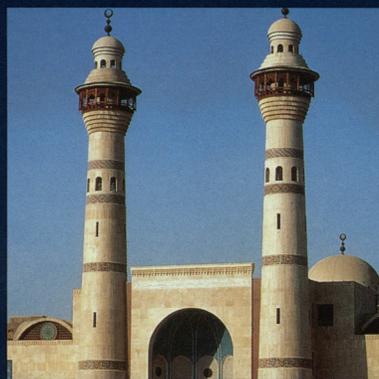


# ARCHITECTURE OF THE CONTEMPORARY MOSQUE

EDITED BY ISMAÏL SERAGELDIN WITH JAMES STEELE



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# FOREWORD

BY ISMAÏL SERAGELDIN

This book is an eclectic collection of essays, project reviews and personal perspectives about a complex and challenging subject: the architecture of the contemporary mosque. The subject is complex because it involves an understanding of the societal context in which the building is situated. It is also the most challenging building type for any architect practising in the Muslim world today. No other building is so charged with symbolism, so hemmed in by established architectural convention, and so likely to be scrutinised in the minutest detail by friend and critic alike. Above all it is a building that has to answer the spiritual as well as the functional needs of a community, while also making an eloquent statement about that community.

Realising the complexity of the subject, and the diversity of the cultural and architectural expressions of the societies of the Muslim world, this book does not seek to be historically or geographically comprehensive. (An excellent start has already been made at this by Martin Frishman and Hassan-Uddin Khan.)<sup>1</sup> Nor is it intended to be encyclopedic in coverage. Rather it presents a number of contemporary mosques, intended to provide a palimpsest for interested scholars and to engage the attention of practising architects and students.

In keeping with this aim, *Architecture of the Contemporary Mosque* opens with a background study and introduction which places the subject in its historical context, offering a brief synopsis of the development of the mosque, its forms, styles and place in the urban fabric. The many Islamic terms which will be new to those unfamiliar with

mosque architecture are explained here and in a comprehensive glossary at the end of the book. A second introductory essay sets out a framework and critical approach to the architecture of the contemporary mosque. This is intended to provide a conceptual matrix into which the individual project can be mapped, to provide context while also advocating a multi-layered critique to enrich our understanding of the significance of the buildings examined.

The book is then divided according to broad national or geographic areas, though the emphasis within each section is upon specific examples and case studies. Individual buildings are singled out for special coverage in order to reinforce particular points. Thus the 'browsers' will be able to access information as effectively as those who wish to read the volume from cover to cover.

The geographic regions covered include Saudi Arabia, Egypt, the Maghreb, Turkey and Iran. Inevitably, given the strong views on the influence of the West on these societies, it makes sense to round off the book with a discussion of a few examples of mosques built in the West.

In *Architecture of the Contemporary Mosque* there is no unanimity of views among the authors, nor is there any effort to homogenise their differences. Ultimately, the buildings will speak most eloquently to the reader in their own inimitable way.

1 Martin Frishman and Hasan-Uddin Khan (eds), *The Mosque: History, Architectural Development and Regional Diversity*, Thames and Hudson (London), 1994.

## INTRODUCTION

### BACKGROUND STUDY

BY ISMAÏL SERAGELDIN

The architectural expression of Muslim societies has tended to function as a subtle overlay on existing physical realities and cultural traditions. This has led to a wide array of stylistic expressions which requires that any examination into the common threads which link Muslim peoples around the world goes deeper than external appearances, to address the structure of society and its common cultural elements.

In all Muslim societies the mosque is the most important building in the community and arguably in the townscape, providing a sense of identity and place. However, it is just one of four building types which dominate the Muslim townscape – the others being the market, the palace or citadel, and the residential building – and in order to understand its role in the city, it is important to understand the mosque's position in the overall urban fabric.

The Friday mosque, whose central role in the city may be likened to that of the cathedral in Christian societies of the West, developed both as landmark and congregation point. It was frequently surrounded by densely packed buildings, so that the approach through narrow streets led to a sense of discovery, very different from the broad avenues and public places found in Western urbanism. Stylistically, architectural expression varied by region and period, though key features such as the minaret and the gateway remained universal. (The dome is found in Egypt, the Middle East and North Africa and arguably finds its greatest expression in the Ottoman architecture of Turkey.)

The market (*suaq*), the centre of economic activity, was frequently found near the Friday mosque and tended to comprise a series of streets with commercial stalls on both sides. The main effect of this contiguity was that the mosque was never far removed from the centre of the activities of daily life. However, it also necessitated a transitional architectural symbolism to effect the move from the common place of the street to the spiritual space of the mosque. Hence the gateway became an important architectural element.

The palace or citadel tended to be the seat of temporal power, the expression of the ruler or the ruling elite's wealth it displayed an elegance of construction and the best technology of the period. The citadel in Cairo and the Topkapi Palace in Istanbul are prime examples of this type of building complex. The citadel in Cairo is

dominated by the Mosque of Muhammad 'Ali and its minarets that identify the skyline of the city.

The residences, which constituted the bulk of land use, included apartment complexes known as *rab* (plural *riba*) which consisted of several duplex units frequently but not always laid out around a courtyard. The individual homes of the elite were usually built around a courtyard, with a garden and water, which were important for the privacy and enjoyment they provided. The sanctity of the inner courtyards, frequently protected by a broken entrance, led to 'oases in the city'.

Neighbourhoods organised around cul-de-sac streets called *harat* were the basic building blocks of the city, and frequently the uses and activities of urban areas were based on clan, ethnic or guild associations which gave a strong sense of community. The organising framework of the city was provided by the street, which was characterised by broken alignments, variable land use, and its skilful transition from tight narrow spaces to the open spaces for public interaction.

The organisation of these neighbourhoods and the growth of the city's population meant that the local mosques, as distinct from the Friday congregational mosques, played a major role in identifying the community and giving it a focal point. Indeed, within this urban context different types of mosques emerged, as is explained in the 'Critical Methodology'. These ranged from the massive state mosques used for Friday congregational prayer all the way to tiny *zawiya*s. All were integrated into the townscape, and many were associated with community functions such as schools or charities, and the provision of fountains for passers-by.

Amidst all of this, the congregational mosque remained the single most dominant structure. While in many ways its functions are well defined and its architectural iconography well understood, there are many variations in architectural expression and functional characteristics. The functions of the mosque once frequently went beyond congregational prayer (for example, edicts were often announced after the Friday prayer), though specialisation in more recent periods of history has led to the creation of ancillary buildings to house these activities. Thus it is appropriate to define what the irreducible functional aspects of mosque architecture are.

The basic elements of the congregational mosque are well established: a prayer space, part covered hall (*haram*) and part open to the sky (*sahn*), where the worshippers can face Makkah, whose orientation is identified by a niche (*mihrab*) in the *qibla* wall, and the pulpit (*minbar*) from which the leader of the prayers (*imam*) can deliver the sermon (*khutba*), which is placed to the right of the *mihrab*. The space for prayer could be surrounded by colonnades or arcades (*riwaqs*) with the one oriented to Makkah (*riwaq al-qibla*) larger than the others. Alternatively it could be designed as four vaulted spaces (*iwans*) around an open central courtyard, or as the Ottoman mosque design made famous, a domed space supported by pendentives.

Usually the open courtyard also included an ablution fountain, and was accessed through a gateway that in places like Iran acquired a great architectural and symbolic value. A minaret served the dual function of landmark and place from which the muezzin could deliver the call to prayer (*adhan*).

In addition, there are in many places subsidiary features such as the *kursi* (literally chair, but in this context meaning support or lectern) on which the massive copies of the Qur'an could be held open, and the *dikka al-mubbaligh* (stand of the relay) where devout men would repeat (relay) the key statements of the *imam*, punctuating the prayer to the whole congregation.

Although the rites of prayer are identical for all branches of Islam, there is no rigidly prescribed architectural vocabulary. The elements allow endless combinations and permutations, bounded only by the inventiveness of the architects and the responses of the community. As is shown by the many examples in this book, the variety of architectural solutions and expressions are indicative of the richness of the possible variations that this basic set of elements allows.

Historically, the development of mosque architecture has been straightforward. Starting with the House of the Prophet in Madinah, the prayer space was the courtyard. Bilal, the first muezzin of Islam, called to prayer from the rooftop. There was no minaret. A two-step platform was provided for the Prophet to address the congregation, thus becoming the first *minbar*.

This simple design was a direct response to the functional needs of the community of worshippers. It did not ascribe any complicated mystical significance to the structures or the layout, and underlined the simplicity of the radical monotheism of Islam, where the bond between God the Creator and his submissive subjects is direct and without intermediation. Thus any space is suitable for prayer, provided that it is clean and functional. The Prophet's Mosque was also more than a prayer space: it was the seat of temporal power, the place where people learned from the Prophet and the centre of civic activity in Madinah. Although there was no formal delineation of functions in the early period, this was defined by tradition and well documented in the Middle Ages.<sup>1</sup>

The next stage in the development of mosque design came with the Umayyad dynasty (AD661-750) when the Great Mosque of Damascus (eighth century AD) became the new model. Much

larger than the modest House of the Prophet, it took a rectangular layout with four *riwaqs*, the *riwaq al-qibla* being deeper than the other three. An axial dome over the central part of the *riwaq al-qibla*, in front of the *mihrab*, was used to highlight the importance of the space. A minaret served the dual function of landmark and place from which the muezzin called to prayer. This basic design was to spread far and wide into the newly Islamicised lands from Spain to India. It is also said that it was at that time that the *maqsura*, or privileged part of the covered prayer hall, was introduced by Mu'awiya, the first Umayyad caliph, though it was considered undesirable since it separated the prayer lines of the faithful.<sup>2</sup>

It is important to note, however, that several other structures had a profound influence on the evolution of the architectural vocabulary of Muslim societies which do not directly fit into this archetype. One such building is the Dome of the Rock in Jerusalem, built by Abdel-Makek ibn Marawan (AD685-91) to mark the place of the Prophet's ascension to heaven in the Isra'; it was a masterpiece of early Muslim architecture and marks the apogee of Umayyad artistry. It is the oldest surviving Islamic shrine building in the world.

The Abbasid revolution and rule (AD750-1258) did not bring about major changes in the architecture of the mosque, although the evolution of the minaret was influenced by the unusual *malwiya* tower of Samarra (AD842-52), a beautiful minaret with an external spiral stairway. The only other famous minaret with an external stairway is the Ibn Tulun Mosque in Cairo, built shortly afterwards in AD876-79 and undoubtedly influenced by it. The *riwaqs* continued to be built with variations of arcades or colonnades, and sometimes with a series of small domes in the squares between the columns. The mosques in Andalusia, Spain, including the Great Mosque of Cordoba (AD786), are of that type.

Variants of this basic design are found in the Indian subcontinent, with a greater emphasis on the three domed accentuation of the *riwaq al-qibla* and a somewhat larger *sahn* than those found in the central Islamic lands from Morocco to Iran.

The next major development of the mosque was the evolution of the design into the four *iwan* form around a major courtyard. This is unusual since it does not offer any clearly functional advantages over the *riwaq* based design. It did, however, coincide with the attainment of a great deal of technical mastery in incorporating circular elements with the linear in construction and design. Not only are vaults, domes and arches used more effectively and elegantly than before, but the enormously complex art of the *muqarnas* (stalactites which effect the transition from square to round shapes), flourished with incomparable virtuosity. The complexity of these three-dimensional geometries remains awe-inspiring and required precision which was unrivalled in that period – a tolerance of millimetres being the norm. In fact, the *muqarnas* is unique to Muslim architecture, and is found in palaces and public buildings in addition to mosques.

The *iwān* based design also coincided with a rise in the *madrasa* in many parts of the Muslim world. This teaching and prayer complex was to become increasingly common in the Middle East and North Africa from the thirteenth to sixteenth centuries AD. One of the most famous of these *madrasas* was the Mosque of Sultan Hasan in Cairo (AD1356–62), an enormous structure that many consider one of the finest exemplars of the Mamluk architecture of the period. To this writer, however, the elegance of the smaller and later Qaitbay Madrasa and Mausoleum (AD1472–74) remains unsurpassed.

The evolution of the dome, the vault and the arch all laid the foundation for what was to be the most compelling achievement of Muslim mosque architecture, the Ottoman domed mosque. This masterpiece of design, pioneered by the incomparable Sinan in the sixteenth century AD, divided the mosque space into a large courtyard surrounded by a colonnade with arches or domes and then an almost equal covered area on the *qibla* side covered by a huge central dome supported on half domes and subsidiary structures. The whole complex was framed with two, four or six minarets to create an ensemble where the whole is much more than the sum of the parts and where the elegance of the structural design is accentuated by the extreme fineness of the proportions: the pencil point minarets had some of the smallest diameter to height ratios ever achieved.

It is against this backdrop that the mosques examined in this book must be understood. The weight of past practice has made it difficult for today's architects to provide continuity *and* change in the design of the contemporary mosque; to answer the need for a symbolism in architectural vocabulary that matches the scale and materials of the past. Certainly the patina of age has given the older mosques many of their most highly valued aspects and familiarity has strengthened the effectiveness of the older vocabulary to communicate with the people. But the challenge remains nevertheless profound: the general sociological phenomena of anomie and marginalisation produced by the modern metropolis requires an even greater effort on the part of designers to promote stronger community bonds, of which a common architectural language is an important part.

As has been mentioned, the specific liturgy and functional requirements of the mosque do not dictate any particular architectural and physical layout. Thus architects are bounded only by their imaginations in what they can propose. If some have preferred to go back to the classical forms then this has been by choice rather than limitation. If some have broken radically with tradition they have been able to do so while remaining faithful to all the requirements for prayer and worship in the Muslim liturgical doctrine (for example, Behruz and Can Cinici's Parliament Mosque in Ankara). This book seeks to present a wide range of these differing interpretations.

By starting with Saudi Arabia, *Architecture of the Contemporary Mosque* focuses on the transformation of the Muslim heartland.

Not only are its cities of Makkah and Madinah home to the holiest mosques in Islam, but it is also the area where the greatest amount of new construction has taken place within the last twenty years, coinciding with the post-1974 boom in oil prices. The architecture of these new mosques is therefore driven by a set of forces and imperatives that are different from those found in many other Muslim countries. There is a style-setting function associated with these projects, a certain self-consciousness about their role. There is also the desire to remain 'authentic' or 'true' to tradition while recognising that the Najdi architecture of the past must be reinterpreted in both scale and materials to fit the needs of contemporary society. The marriage of technology and architectural convention has opened up new avenues and developed a wide variety of new interventions that merit attention.

James Steele introduces the first case study by looking at the inherent tension between innovation and tradition in the architectural expression of mosque design in Saudi Arabia. Three projects that address different aspects of this tension and its resolution are then presented. The first is the dramatic innovation of Bodo Rasch at the Prophet's Holy Mosque in Madinah. Here palm-shaped umbrellas combine aesthetic and functional success in a sensitive and dynamic approach to environmental conditions. This is a dimension not sufficiently addressed in an era otherwise obsessed with form and appearance. Two great mosques are then presented, each of which has a very different approach and design philosophy: the King Khaled International Airport Mosque, by Hellmuth Obata and Kassabaum, is a totally modern structure which retains vague echoes of tradition, yet remains remarkably conservative. The mosque by Rasem Badran at Qasr al-Hokm in downtown Riyadh, is a dramatic and successful effort to reinterpret the past in contemporary terms and to solve the problems of today at the scale of the modern metropolis with a sophisticated combination of artistic and technological mastery. It is an outstanding success that earned the building the 1995 Aga Khan Award for Architecture.

A special portfolio of the mosques of Abdel Wahed El-Wakil is then presented. These constitute a corpus of work that lays down a profound challenge to contemporary designers and which has had a far-reaching influence on a large number of architects in the Muslim world and the West. El-Wakil's twelve mosques (seven of which are featured here) range from the very small and modest structures that he built on the corniche in Jeddah to the monumental King Saud Mosque where, in a brilliant *tour de force*, he actually reproduced the gateway and *muqarnas* of the Sultan Hasan Mosque in Cairo. The craftsmanship and mastery of construction and detailing have placed these mosques at the fountainhead of the revival of a new classicism in contemporary mosque architecture.

The second case study concentrates on Egypt. Here, in Cairo, the largest concentration of Islamic monuments from the Middle Ages can be found, and these have naturally had a profound influence on contemporary architectural expression. The layers of

tradition represented by these monuments are explored in the introductory essay by James Steele. It is clear that from this rich background three trends have emerged which seek to anchor contemporary expression in a reinterpreted idiom of the past. These are the Pharaonic, represented by Osman Muharram; the Islamic, represented by Hassan Fathy and others; and the popular vernacular, albeit with a strong Islamic character, also represented by Hassan Fathy. In mosque architecture the last two are well represented in the selections surveyed here. Hassan Fathy's New Gourna Mosque demonstrates the vernacular reinterpretation, standing as a masterpiece of simple elegance and harmony. The classical interpretation finds its exponents in Aly Khairat's Salah Eldin Masjid and Mohamed Abdallah Eissa's Sayyida Safiyyah Masjid. Contemporary expressions go from the unusual architecture of Mohsen Zahran's International Garden Mosque, to the spectacular Nasser's Mosque of the Momens, from the simple design of Abdel Salem Ahmed Nazif for the Moustafa Mahmoud Mosque, to the challenging innovations of the Al-Zahra' Mosque by Abdel-Bakki Ibrahim. (In addition to these, a fourth stylistic approach to mosque architecture can be discerned: International Modernism, whose powerful exponents in the first half of this century were Ali Labib Gabr and Sayyid Karim.)

Mosques from two of the nations which form the Maghreb (Morocco and Tunisia) constitute the third case study. A brief essay discusses the essential elements of the Maghrebi heritage, and the collection of mosques captures the tremendous variety of contemporary expressions from the small-scale elegance of the *zawiya* of Sidi Abdel Kader in Tunis to the spectacular grandeur of the King Hassan II Mosque in Casablanca. It shows the various functions that the mosque complex can play as a cultural centre in the case of the Prince Abdullah al-Saud Mosque and Library, as well as the more traditional Lalla Soukaina Mosque in Rabat.

In the fourth case study on Turkey, Aydan Balamir and Jale Erzen present the rich variety of the country of Sinan; buildings which range from the Kocatepe Mosque, a replica of the Sinan model, to the Parliament Mosque which completely breaks with tradition (sunk into the landscape, it is without both the conventional minaret and dome, and provides worshippers with a glass wall where the conventional closed *qibla* wall is usually found). This noteworthy project won the Aga Khan Award for Architecture for 1995. These, along with the other mosques featured, such as the TEK Armed Forces Mosque, the Gölbaşı and Kinali Island mosques, combine to illustrate the vibrancy and variety of different trends, demonstrating how contemporary Turkish architects are searching for ways to step out of the long shadow of Sinan.

Iran, the land of the unique and splendid Safavid architectural legacy, is the setting for many contemporary mosques and provides the subject of the fifth case study. The splendid Azam Mosque in Ghom with its innovative T-shaped space, the modest village structures of Velayet Roud and the fishermen of Bandar-Lengueh,

and the traditional *mimar's* successful treatment of the Iman Hossein Mosque in Shiraz, all speak of a marriage between the spiritual and the physical manifestation of design, a theme well articulated in the introductory essay by Darab Diba and Hussein Sheikh Zeyneddin. There is also evidence of the elegance of the new in innovative designs such as the Al-Ghadir Mosque.

Finally, since the tension between a modern idiom dominated by Western architectural schools and the need for authenticity felt throughout the Muslim world underlies the architecture of the contemporary mosque, the last case study addresses the question of the growing populations of Muslims in the West. The challenges here are multiple. Included is the sad case of Utopia confronting reality in Hassan Fathy's design for a mosque for the new Muslim community of Dar al-Islam in New Mexico. Also featured are three Islamic centres in three major Western capitals: London, Rome and Washington, DC. Each approaches the problem differently, and the variety of responses range from the traditionalist style of the Washington Center to the elaborate contemporaneity of the Rome Mosque. But how many of the new mosques in the West are being built by the communities themselves? Dar al-Hijrah in Virginia is one example which has been, and represents a model of the increasingly common new development of the mosque cum community centre. The question of the link with tradition in the West is of course a loaded one. One has to ask whose tradition, and whose architecture is being used for inspiration by Muslim minorities in a Western, predominantly Christian, culture. As the preservation of the Al-Rashid Mosque in Edmonton, Canada, shows, Muslim communities have now been implanted long enough to have their own historic monuments.

All this demonstrates that the topic of this book is a living, growing, vibrant reality, that defies easy categorisation or classification. The Muslim world, as it emerges from the historic rupture of colonialism and its aftermath in the cold war, is like a waking giant, barely stretching its creative limbs. As it confronts the imperatives of the new millennium, the creativity of its billion or more adherents will continue to provide a myriad of solutions to the ever present problems of authenticity and innovation, of modernity and tradition, of continuity and change, of the sacred and the profane, of the spiritual and the temporal, all of which come together in the crucible of the design of the contemporary mosque.

#### Notes

1 See Muhammad Al-Zarkashi (AD1367-1416), *Ilam Al-Sajid bi Ahkam Al-Masajid (Informing the Worshippers of the Rules of Mosques)*, Dar Al-Kitab Al-Masri (Cairo), 1982. This classic work is the basic reference on the mosque and behaviour in and around the mosque. The book devotes three sections to each of the Makkah, Madinah and Al-Aqsa Mosques, with the fourth section covering other examples.

2 Ibid., p375.

## INTRODUCTION

# A CRITICAL METHODOLOGY FOR DISCUSSING THE CONTEMPORARY MOSQUE

BY ISMAÏL SERAGELDIN

Nothing generates a higher degree of critical polemicism today than the question of the appropriate connection between the spiritual and secular aspects of religious architecture in Muslim societies. On one side of the debate are those who would limit the vocabulary used to a select range of easily recognisable, traditional forms. On the other are those who believe that the only way to truly express the central role of the mosque in contemporary culture is to be iconoclastic and to utilise the full range of industrial materials and technology available, in the search for a new architectural language. Yet between these two extreme positions lies a wealth of other possibilities, which must be both acknowledged and critically analysed in order to arrive at a more accurate assessment of the contemporary condition, and which is much more complex than this simplistic dichotomy would lead one to believe.

The position that 'tradition' (which is usually represented as the recapturing of a romanticised and idealised past) and 'modernity' (associated with the contemporary) represent the only two alternatives available to architects today is counterproductive because it tends to polarise theoretical positions and make critical discourse difficult. It is also technically flawed in its simplistic reductivism, which assumes that a rich and varied historical experience can be reduced to a single 'tradition', or that the highly relative and complex concept of modernity, as it is now evolving, can be neatly circumscribed into a single definable reality that is applicable to all Muslim societies.<sup>1</sup>

Architecture is the physical mirror of the socio-economic, cultural and technological reality of a society. Thus a word about the evolving realities of the Muslim societies and the West is pertinent.

The many and highly varied Muslim societies, united in faith but divided by distance, geography,

climate, terrain and economic resources, are now being subjected to major changes in demographic structure due to population growth and rural migration to the cities, both of which have radically altered the established social order. To these trends one must also add the evolving notion of cultural identity which has been severely shaken by events over the last three decades. A powerful new tide is rising which is opposed to 'Western materialism', a materialism most closely identified with images from the United States. Unfortunately, this new tide comes at a time when Arab and Muslim societies are actively trying to redefine their identities in the face of many contemporary challenges. They are doing so amidst a constant, overwhelming barrage of stimuli from the most overtly media-conscious culture the world has ever known.

Yet 'the West' is not a single entity. The vibrancy of Western culture, coupled with its domineering tendency, narcissistic character and myriad of artistic expressions, has its roots in the historical experience of particular subsets of that society. It is only through an examination of each subculture that one can properly decode the subtle meaning that each has contributed to overall society. It is a mistake to mentally lump this rich mosaic together, or to misread it and its symbols as being superficial. These sub-cultures are continuously interacting with each other to varying degrees, which enriches and changes each of them, as well as the nation of which they are a part, and the other cultures they influence.

Similarly, the 'Muslim World' has many sub-cultures which interact amongst themselves. The entire Muslim world has benefited from such significant interaction, as well as from intersecting with the dominant otherness of 'the West'.<sup>2</sup>

Yet at the level of artistic endeavour, each segment of the Muslim world has had less interaction with

others in its own realm than with Western influence – this is especially true in architecture. In substance, therefore, the dominant axis of intellectual endeavour in the Arab-Muslim world revolves around the quest for contemporaneity on the one hand, and the search to develop and re-emphasise a predominately ‘Islamic’ cultural identity on the other.

For the purposes of the current study, we must look at the evolution of the role of the mosque in Muslim society from the beginning of the faith into the complex and varied present. As was shown in the background study, in its earliest manifestations the mosque was both a spiritual and secular space – not only a place for prayer, but also a place where important matters affecting the community were discussed and resolved. In accordance with this, the role of the mosque has varied from time to time and from place to place, and the form, structure and overall appearance have reflected a similar evolution and variation.

Today, there is tremendous variation in social practice across the wide spectrum of Muslim nations. This translates into a complex contextual framework within which the self-perception of men and women is now being defined, a framework which acknowledges a common thread but also the significant differences among the individual members of the collective family, all of which must be recognised in the role and form of the mosque.

In addition to the quest for contemporaneity now under way in the Islamic world, there is a strong emphasis on the delineation of cultural identity. This is perhaps most legible in the growing trend towards regionalism, with all the singular agenda the word implies.<sup>3</sup> Regionalism, like most other ‘isms’, is a much debated term in architectural literature. Simply stated, it is the notion that an architectural work should reflect the particularities of the region in

which it is located. It is a call for contextualism in the broader sense of accepting both the physical context – including site, climate and materials – as well as the socio-cultural context, related to both style and function. Suha Özkan has contributed a useful differentiation between what he has termed ‘vernacularism’ and ‘modern regionalism’ as a way of understanding contemporary architecture which seeks to address a specific identity.<sup>4</sup> In the course of making this important distinction, Özkan stresses that regionalism does not reject modernism, but abjures internationalism, along with its tendency to promote the ubiquitous prototype through the media and to follow temporal fashion. Many architects in different parts of the Muslim world today are attempting to grapple with the issue of regionalism, and Ken Yeang, who is one of the most visible and vocal of these, has defined the tendency as follows: ‘the emergent Regionalist Architecture seeks its architectural significance through relating its built configuration, aesthetics, organisation and technical assembly and materials to a certain place and time’.<sup>5</sup> This view clearly defines regionalism as bridging both technology and culture, and may also reflect the ideas proposed by some who advocate the view that the proliferation of a uniform, media-generated, international culture has caused an equal and opposite effort to reaffirm and proclaim individuality and local specificity.

In the case of the mosque, there is both a functional and an artistic dimension to consider in this regard. Prayer halls must naturally be suitable for worship in accordance with the liturgy of Islam, but the mosque itself must speak to those who use it, providing both an uplifting, spiritual experience and an anchor for the identity of the community. The way in which the building communicates to the community is dependent on the particular ‘code’ forged by the

evolution of the society in that specific region. The differentiation of the codes by region does not deny the existence of a 'common code', but recognises that regional variations have provided distinct architectural languages. Like vocal dialects that have a common ancestry, these architectural languages have evolved to the point where they are natural contributive elements to the society in question, but may not be immediately recognisable to those outside it.

Congruent with this reality of local architectural dialects is the aspect of 'overlays', since the Muslim contribution to the conditions with which it has interacted has enriched them and created a new synthesis. When Islam combines its subtle overlay with the different original, different patterns emerge. Those who try to compare only the final appearance may find nothing in common, since they focus on physical evidence alone.

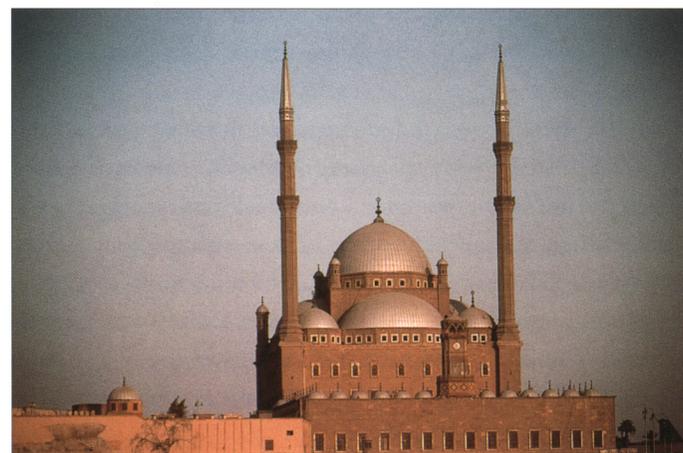
Whilst the homogenising influence of a common, international, consumer society of technologically-based industries will undoubtedly continue to affect every aspect of the Muslim built environment, it has also reinforced the psychological need to reaffirm the identity of self and society and to reassert those factors which make them special. Nowhere will this be more manifest than in mosque architecture. Many architects today are looking to symbolism to achieve this goal.

### Symbolism and Mosque Architecture

Traditionally the mosque has played a central role in most Muslim environments as the organiser of space and society. It is also the definer of the society's identity and the provider of a point of reference for citizens and passers-by as well as travellers. The powerful symbolism of the mosque's traditional architectural vocabulary is unique to the Muslim culture and is uniquely identified with it, to the extent of being almost a shorthand for designating 'Muslims'. The minaret, dome, gateway and *muqarnas* are the key elements of much mosque architecture. These elements speak to all Muslims (and even non-Muslims) with a powerful symbolism that transcends space and time. Yet today these symbols have been degraded to signs and even signals, with a concomitant loss of architectural expression.

In trying to cope with this problem, the historical exemplars raise another paradox: they are impressive monuments which have provided the sense of identity for societies living in a culture of mass poverty. The

ability to reproduce and relate to an architectural iconography that is reflected primarily in monumentalism and opulence needs to be redefined. This and other dichotomies and tensions within contemporary Muslim societies, pose problems for all contemporary architects and all Muslim intellectuals. Indeed one has to recognise the need to re-symbolise the existing environment in Muslim societies as a fundamental task of contemporary intellectuals in the Muslim world, and no architectural expression is more likely to re-symbolise the built environment of Muslim societies than mosque architecture.



*ABOVE: The Al-Aqsa Mosque in Jerusalem – the serenity of the established vocabulary of mosque architecture speaks with exceptional power to the Muslim population. BELOW: The Muhammad 'Ali Mosque at the citadel in Cairo, whose minarets define the Cairene skyline, is a model of elegance attained by the classical Ottoman style defined by Sinan.*

There are many issues involved in approaching the problems of designing a mosque for a contemporary Muslim community. The continuity of key symbolic elements, such as the minaret, dome, gateway and *muqarnas* can be transformed without eliminating the deep imagery inherent in them. It is the skill of the architect and a degree of affinity with the community in which a mosque is to be built that creates the difference between kitsch and creativity. There are many ways of providing better mosques and areas for the congregation which respond to the need of Muslim societies to anchor their self-identity to structures built today, and which speak to them as eloquently as earlier symbols have to past generations. Architects must be allowed to free their imaginations so that continually evolving Muslim cultures which are capable of integrating the new may benefit fully from their contribution. To achieve this, it is necessary to look beyond individual examples and to avoid the temptation of simply cataloguing the many interesting contemporary mosques which have now been built. Rather, an attempt should be made, through attentive and insightful criticism, to define patterns and identify trends.

### Patterns and Trends

Among the issues that should be addressed are the following:

- The emergence of the state mosque and the divorce of the massive public works structure from its social milieu.
- The degree of success of novel modern architectural forms and their acceptance by the population. The Sherefuiddin White Mosque in Visoko, Bosnia (1980) is a notable example, where the population has not only accepted and used the mosque but is proud of it as well. To what extent are other structures also elements of identification for their users and the surrounding society, and to what extent do they contribute to the development of a new symbolism that is read and understood by the population? The Bhong Mosque complex in the Punjab province of Pakistan (1930–82) is certainly understood and appreciated by the population, but does it define a new symbolism or does it simply reflect a wave of populism?
- The visibility of mosques in the contemporary building environment, in spite of the emergence of other large modern structures, continues to underline their importance and impact as form givers in contemporary architectural language. But are they performing the required role in developing new forms and new languages capable of enriching the architecture of other building types?
- The place of traditional forms in contemporary mosques: how does one position the notable work of Abdel Wahed El-Wakil, for example, in the overall scheme (not dichotomy) of modernity and tradition in contemporary mosque architecture?

In addition to these formal concerns, the social context must also be evaluated. The study of architecture cannot be undertaken without an understanding of the society that produces it. Thus here the evolving socio-cultural milieu and the changing functions of the mosque in a changing society must be considered. The questions to be addressed include:

- To what extent should functional changes be reflected in architectural form, and to what extent should architecture respond to other, more subtle symbolic messages while reflecting an ever greater scope of building technology?
- Do alternative structures or activity nodes develop their own architectural lexicon? For example, modern universities in contrast to older Islamic universities, have chosen to build separate student centres, congregation areas and activity nodes, while relegating the mosque to a peripheral ‘prayer-hall-functional’ position. Could the functions of these different structures still be subsumed within the architectural constructs of a modern mosque?
- Can the multiple purposes of modern complexes be redefined as the new functions of a mosque structure, or is the mosque inevitably to be relegated only to prayer by the necessities of responding to ever more specific functional requirements?

In order not to simply discuss individual buildings or to generalise too easily with superficial evidence, a more systematic way of looking at these issues is required. One way of dealing with the wealth of material available would be to try to position them within a matrix that looks at both *building types* and *architectural approaches*. This can be done for all types of buildings, to tease out the myriad manifestations of the spiritual in all facets of the built environment and to help different researchers compare like with like in their analytical studies. For this essay, and for



*LEFT: The great State Mosque which dominates the landscape, is exemplified by the Hassan II Mosque in Casablanca. It is one of the largest ever built and dominates the urban design of the city. RIGHT: The Saud Mosque and Library complex in Enfa, Morocco, is a large community mosque that speaks to the needs of the community and defines the neighbourhood.*

simplicity, the architecture of the contemporary mosque is mapped in such a matrix. There could conceivably be five building types (or four if we omit *zawiya*s) and five architectural approaches.

### Building Types

*Large state mosque:* large structure commissioned by central government authorities to express the state's commitment to Islam, or to create symbols of national purpose. Usually there is only one such monument in a country (possibly two or three in large countries, but certainly no more than one in a city).

*Major landmark structure:* large mosque that is architecturally designed to provide a 'landmark' function above and beyond fulfilling their social function(s). Architectural monumentality is sought by the designer. It dominates the townscape and affects the order of spaces in the urban environment.

*Community centre complex:* a building (which can have many of the same characteristics as the major landmark) structure, specifically intended to house multiple functions (library, school, meeting rooms, gallery, clinic, etc) in addition to the mosque *per se* as a place for prayer.

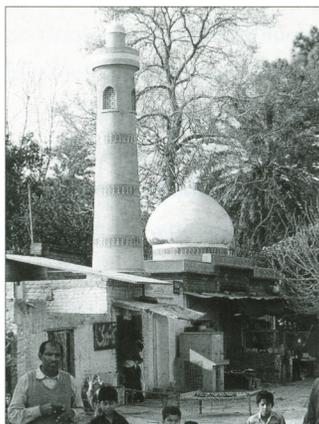
*Small local mosque:* either a small neighbourhood mosque, or the central mosque of a small village. The structure's most distinguishing characteristic is that it is of modest dimensions. This type of mosque may have multiple functions.

*Zawiya:* Small prayer area within a larger complex. These are *not* covered in the typology proposed here, because they do not usually provide an architectural construct by themselves. From a sociological point of view, however, the proliferation of *zawiya*s has become a noticeable phenomenon in some countries.

### Architectural Approaches

Architectural expressions have reflected a whole range of approaches to the many issues previously discussed. While gradations exist, they can be grouped into five broad approaches, each of which can be exemplified by contemporary mosques.

*Popular (vernacular) approach:* identified by the use of a traditional indigenous architectural language, with building work undertaken by the local mason and community rather than an architect in the modern sense of the word. The Niono Mosque in Mali



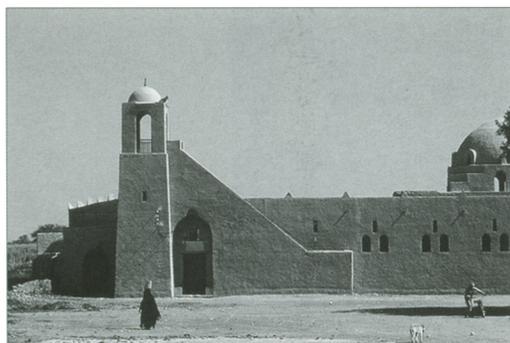
*LEFT: The small neighbourhood mosque is a defining part of the urban texture of all Muslim societies. This example, the Chughtayan Mosque, is from Lahore. RIGHT: The zawiya is a small prayer space that is usually associated with the tomb of a holy person, and is located in another building. The Zawiya of Abdel-Kader in Tunis is a superb example of this type of building.*



*LEFT: The beauty of the popular tradition, exemplified in the great Mosque of Niono, Mali, is serene and self confident. RIGHT: The detailing and composition of the traditional popular mosque designs are extremely sophisticated, even if they are built in mud brick, as shown by this mosque in Yaama in Niger.*

(1973) and Yaama Mosque in Niger (1962-82) have the serene balance of the traditional. Both were winners of the Aga Khan Award for Architecture (AKAA), in 1983 and 1986 respectively. Their message is clear and understood by the community they serve. There is no denying the authenticity which they exude, even to the foreign visitor. The only jarring note appears when in one part of the Niono Mosque the mason tried to insert some corrugated tile, which he himself later acknowledged as being incongruous. On receiving his AKAA prize in 1983 in Istanbul, he informed those present at the seminar that he wanted to rectify this because it did not 'fit well' with the product of traditional builders.

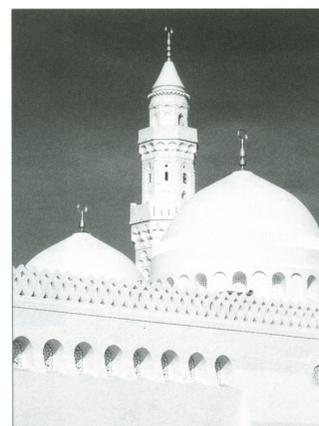
*Traditional approach:* taken by trained and registered architects, who choose to work in either the vernacular or historically relevant traditional architectural language. They imbue their work with the self-discipline that the mastery of these conventions, techniques and proportions requires. The small mosque by Hassan Fathy at New Gourna, Luxor (1948) is one example, and the many mosques currently being produced by Abdel Wahed El-Wakil in Saudi Arabia are another.



*Populist approach:* like the vernacular approach, but embracing a wider gamut of popular formal references and imagery. The exuberance and delight that characterise the mixture of crudeness and stylishness in the Bhong Mosque say much about the present semantic disorder. It is successful with the people it serves and it raises key issues that architects must address fully if they are to contribute their share in re-symbolising the Muslim environment today.

*Adaptive modern approach:* seeks to assimilate traditional vocabulary into a modern approach. The Said Naum Mosque in Jakarta demonstrates this.

*Modernist approach:* places originality and use of modern vocabulary, form and technology at the fore. The Sherefudin White Mosque of Visoko stands out as an attempt to break with the traditional Bosnian architecture surrounding it, while providing a landmark building. This project, which is an exemplar of the Modern Movement, has the convincing distinction of having been commissioned and paid for by the users. The seven-year debate that preceded its construction, and the community's subsequent use of it, shows that it is possible for traditional communities to sponsor avant-garde works and identify with them.



*LEFT: The traditionalist approach to architecture is reflected in the work of a master such as Hassan Fathy, who chose to work within the constraints of the traditional idiom and with mud brick. RIGHT: Classicism and tradition are hallmarks of the work of El-Wakil, who prefers to use the language of the past for its emotive power and affective content. He has had a profound influence on mosque building through his large series of mosques in Saudi Arabia.*

**For a More Thoughtful Criticism**

Beyond the mapping comes the critique. This should respond to the challenges laid out above, and address the building at different levels:

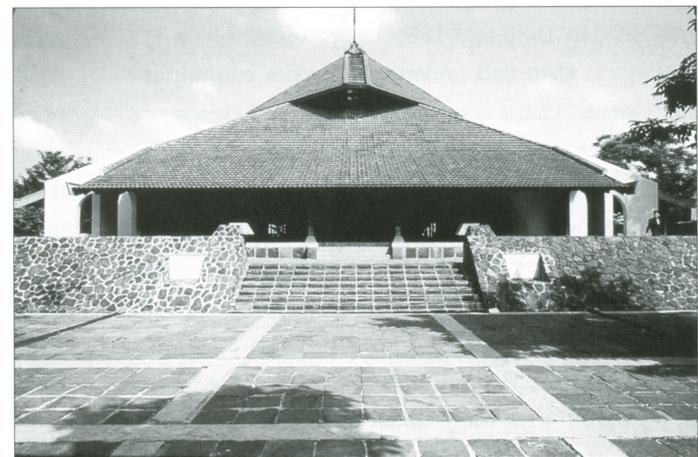
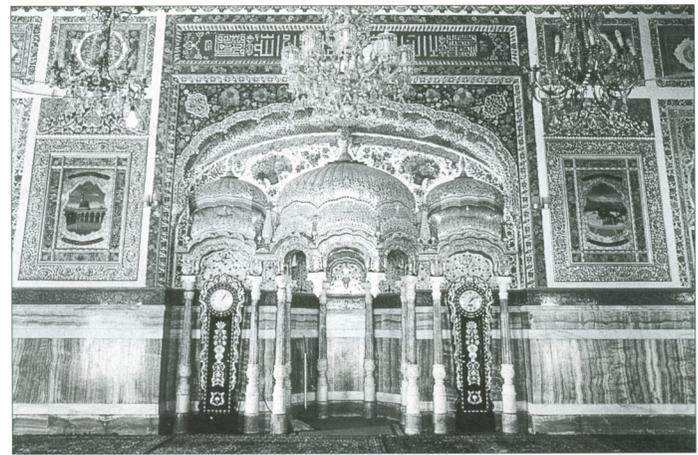
*The building qua building:* the simplest, most direct appreciation of the building's functional response and aesthetic qualities, its volume, space, light, materials and colours. The entire lexicon of studied architectural criticism is brought to bear on the building, taking it apart and putting it together again both in physical and experiential terms.

*The building in its physical context:* its relation to the environment, both natural and man-made, can enhance or diminish the stature of the achievement. Harmony or discord, intentional or unintentional, can be either positive or negative.

*The building in its cultural context:* its appropriateness to the context of a cultural heritage expressed through a legacy of built forms produced throughout the society's history.

*The building in its international context:* the positioning of the creative act as a part of the international network of currents, styles, schools, and ideas, as well as the extent to which it contributes to the evolution of that debate, either through reinforcement or innovation.

*The building in its own local/regional intellectual milieu:* the extent to which it makes a statement in the debate that presses upon the intelligentsia of the region. This is no mere reflection of the international context, although it could be. The local/regional intellectual



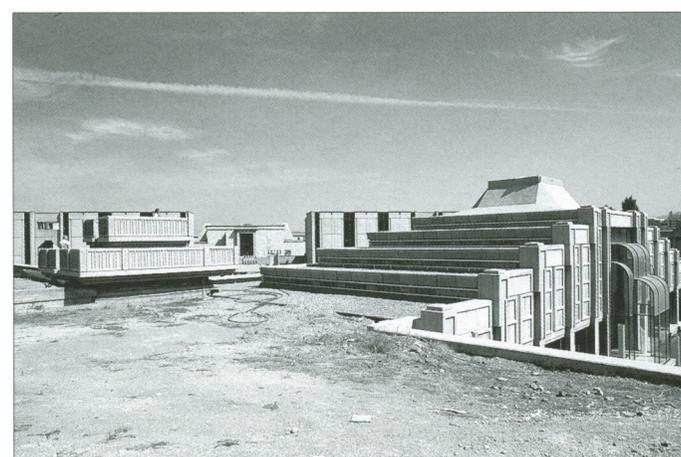
*ABOVE: The Bhong Mosque in Pakistan is an exuberant structure whose ornate and joyful decorations appeal to the popular taste, but push it to extremes. It has been dubbed as the epitome of the populist in mosque design. CENTRE: The Said Naum Mosque of Adhi Moersid in Jakarta is an adaptive design that is truly modern, but very much reinterprets the local cultural idiom in contemporary terms. BELOW: The Sherefuddin White Mosque in Visoko, Bosnia, is a bold attempt to break with the past and provide a language that is totally modern and contemporary.*

milieu is much more concerned with issues of an urgency and immediacy that is geographically circumscribed, even though it may have universal overtones.

It is hoped that in applying this type of criticism to contemporary mosques, the most symbolically charged buildings being constructed in the Muslim world, light will be shed on both the architectural and the contemporary cultural scene in the Muslim world today.

#### Notes

- 1 See Ismaïl Serageldin, *Space for Freedom: The Search for Architectural Excellence in Muslim Societies*, Butterworth (London), 1989, pp60-63 and Ismaïl Serageldin 'The Aga Khan Award for Architecture', *The Aga Khan Award for Architecture: Building for Tomorrow*, ed Azim Nanji, Academy Editions (London), 1994, pp10-31.
- 2 Note that some writers, notably Mohammed Arkoun, have spoken of the problems of 'rupture' in the cultural history of Muslim societies. Mohammed Arkoun, 'Current Islam Faces its Tradition', *The Aga Khan Award for Architecture (AKAA): Architectural Education in the Islamic World*, Concept Media (Singapore), 1986, and Mohammed Arkoun, *L'Islam: Morale et Politique*, UNESCO (Paris), 1986, p36.
- 3 See Ismaïl Serageldin, 'Introduction: Regionalism' in 'Part II: The Regions and their Styles', *The Mosque: History, Architectural Development and Regional Diversity*, ed Martin Frishman and Hassan-Uddin Khan, Thames and Hudson (London), 1994, pp72-75.
- 4 Suha Özkan, 'Regionalism within Modernism' in *Aga Khan Award for Architecture: Regionalism in Architecture*, Concept Media (Singapore), 1985, pp8-16.
- 5 Ken Yeang, *Tropical Urban Regionalism: Building in a South-East Asian City*, Concept Media (Singapore), 1987, p12.



*ABOVE: Buildings must be discussed in their local context. Populism can find expression in many ways. This 'airplane mosque' from Bangladesh, is a local expression that has become a major landmark. BELOW: The Parliament Mosque in Ankara, has purposely tried to elaborate a new language for the architecture of the mosque that escapes the long shadow of Sinan. Its contribution to the architectural debate transcends the local Turkish scene.*

**MOUSTAFA MAHMOUD MOSQUE, CAIRO**

ABDEL SALAM AHMED NAZIF

BY SAMIR EL-SADEK AND ISMAÏL SERAGELDIN

This mosque is named after the client, Dr Moustafa Mahmoud. The national acclaim which this mosque has received stems mainly from the name it carries. Dr Mahmoud has espoused a school of Islamic thought that has become both very popular and attractive. His message is simple, yet has profoundly influenced various layers of society. It is founded on the premise that the Holy Qur'an contains theories and ideas that are beginning to be understood and verified based on current knowledge and scientific evidence. He examines advanced concepts in medicine and atmospheric phenomena in relation to Islamic concepts on popular television and radio programmes, in addition to regular seminars and classes at his mosque. The mosque has therefore gained national recognition, becoming a centre for debating the interrelationship between Islamic concepts and scientific research, spiritual values and the material world, secular and temporal approaches.

The building is located in a prominent position on the axis of one of Cairo's main squares, known by the mosque's name, on Gam'at el Dowal El Arabeyah Boulevard, in el Mouhandeseen suburb. The surrounding tall multistorey buildings offer a sharp contrast to the scale of the mosque. However, the 30-metre-high minaret allows the building to maintain an appropriate level of prominence.

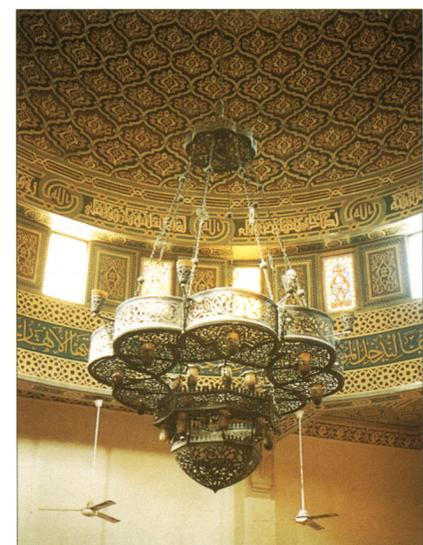
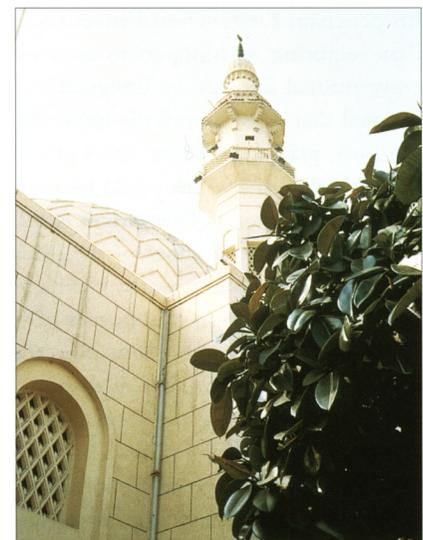
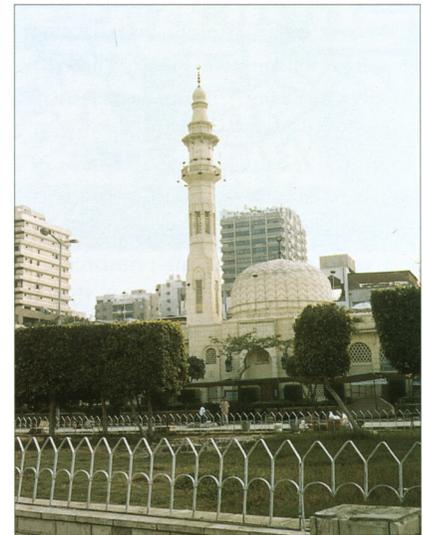
The mosque is composed of

three main elements: the central square-plan prayer hall surmounted by the dome, the multi-purpose double-height space which forms the left wing of the building, and the two-level clinic and education centre which forms the right wing. Each element has its own separate entrance which allows flexibility of use. Alternatively, the three entrances may be combined to provide access to the mosque for larger gatherings. On the facade, the strict geometry of the plan is reinforced by an imposing symmetrical arrangement which serves to address the main square. The minaret reinforces the religious, public nature of the building.

The structural elements of the building and its foundation are of reinforced concrete. The facades are clad in artificial stone with a granite base plinth. Floors and the exterior of the dome are finished in marble slabs.

This building complex has become a major landmark largely due to its successful accommodation of unusual educational and social functions. The complex building provides a good volumetric and spatial response to the functions, while relating well to its physical context. The mosque, in addition to the prayer hall, includes medical and educational facilities – on a small scale – to benefit neighbourhood citizens.

This privately sponsored complex illustrates the much larger role which the mosque can play as a focal point beyond the boundaries of its immediate community.



## INTERNATIONAL GARDEN MOSQUE, ALEXANDRIA

MOHSEN ZAHRAN

BY SAMIR EL-SADEK AND ISMÄIL SERAGELDIN

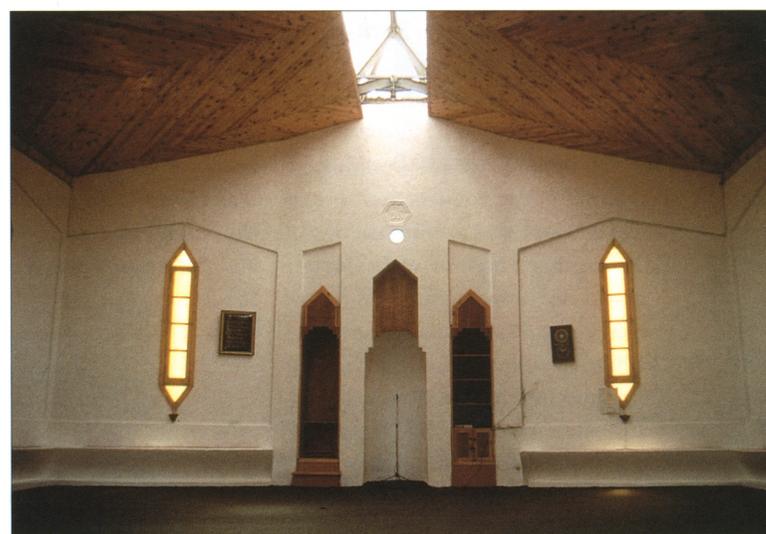
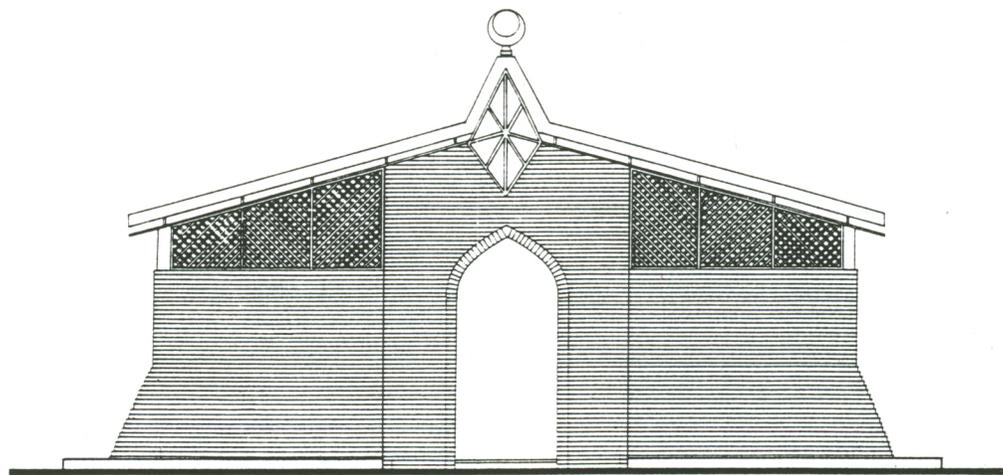
This unusual mosque located near the entrance gate of a 130-acre public garden in Alexandria, has completely broken with the traditional idiom for mosque architecture.

Construction costs were met by anonymous donations and the building was inaugurated by the Governor of Alexandria in 1990. Both contractor and architect were involved with the layout and construction of the International Garden.

A spinal, triangular section rooflight serves to reinforce the visual importance of the *mihrab* wall in the prayer space. The ladies' mezzanine is situated above the entrance and the ablution area leaving an unobstructed column-free space for the devout. Along the base of the outside walls, a reflecting pool, coupled with a splayed, hidden opening rising to sill level, allows natural light to enter in an innovative way. The intention was to create a mosque with several non-traditional features.

The structure consists of a reinforced concrete skeletal frame resting on 15-metre-deep pile brick infill and is plastered internally. The roof is of Roman pantiles resting on steel purlins with a steel triangular section rooflight. The ceiling is oak, with a herringbone pattern.

The building, which goes beyond its specific functions to act as a gathering point for the public, is notable for its intentional break with the established tradition of mosque architecture. The extent to which it succeeds in creating a powerful new language, however, remains problematic.



ABOVE: North-west elevation, not as built

## GAMAL ABDUL NASSER MOSQUE, CAIRO

GALAL MOMEN, FAHMI MOMEN AND MOSTAFA MOMEN

BY SAMIR EL-SADEK AND ISMAÏL SERAGELDIN

This mosque is a remarkable outcome of the socio-political developments that swept Egypt during the late fifties and early sixties. These involved a strong sense of nationalism and a movement towards the empowerment of communities. The project was initiated by a local society, the Kobri al-Qubba Charitable Association, which purchased a plot of land (3,656 square metres) from the Cairo Governorate. The Association identified the functional requirements and the design was completed in 1959.

It is a large community centre complex which accommodates various functions:

- The five daily prayers in the congregation hall with preaching under the auspices of the Egyptian Ministry of Awqaf (endowments).
- Holy Qur'an School, a training centre to teach orphan girls to sew, along with classes for other educational studies.
- Polyclinic to provide medical treatment at nominal prices.
- Offices for the Association and for the organisation of pilgrimages and *omrah* trips to Makkah and Madinah.

Construction of the mosque started in 1959 but faced financial difficulties. While the building was still under construction, President Nasser was accompanying the visiting Emperor of Ethiopia from Cairo airport when his imperial guest asked him to stop for a while 'to visit this unusual and elegant church'. As they walked into the congregation hall and saw the *qibla* which is directed to Makkah, they both realised that it was a mosque designed in a modern style very different to traditional Islamic architecture. As a result of that visit, President Nasser offered to finance the completion of the mosque from the

presidential budget, and the first phase was finished in 1959. After his death in 1970, Nasser was buried there.

The mosque's layout is symmetrical. The ground floor encompasses Nasser's Tomb, the Holy Qur'an School, the training centre, and the polyclinic. The administrative offices of the association that runs these activities are also included on the ground floor. The first floor accommodates the main prayer hall, a library and a residence for the *imam* of the mosque. The upper floor includes a congregation hall for ladies with a separate entrance.

This offers several innovations. The form is bold, strongly sculptural and yet displays modern simplicity. The design does not incorporate a dome. However, the minaret is well located to make the building complex imposing within its physical context. The structural system used in the prayer hall relies on curved reinforced concrete membranes designed to allow minimum use of vertical supports on columns.

Today, the mosque is a major landmark in Cairo. Its unusual form is complemented by new Islamic motifs, which decorate its arches and main body, as well as by the unique minaret which was carefully located following a thorough visual study of the area and the major roads leading to the site.



## MOSQUE OF AL-ZAHRA, CAIRO

ABDELBAKI IBRAHIM

BY ISMÂIL SERAGELDIN

The expansion of mosque construction in Egypt during the last twenty years has led to the proliferation of two types of mosque. On the one hand, are the state sponsored and architect designed mosques, which tend to be formal and reflect an established architectural language largely derived from the Mamluk and Ottoman idiom; one such example is the Mosque Salah al-Din in Cairo. On the other hand are the local community mosques, which thrive as centres of community life, combining clinic, classroom, meeting place and prayer hall. These are usually architecturally unremarkable, being derivative pastiches of the established idiom.

A notable exception is the new Mosque of Al-Zahra, where the multitude of functions are combined with the assured hand of Abdelbaki Ibrahim, an architect with a long scholarly career, who held the Chair of Architecture at Ain Shams. He is the Editor of *Alam al-Benaa*, the only Arabic language architectural magazine in Egypt, which has been a major influence on a whole generation of students, and he has also undertaken many detailed inquiries into the nature of architecture and the history of architectural expression; co-authoring a monumental work with Professor Saleh Lamei Mostafa, which documents many features of the heritage of Muslim cities and systematically describes their monuments.<sup>1</sup> Thus at the Mosque of Al-Zahra he was able to bring a very large store of historical references to bear on his design.

Yet Abdelbaki Ibrahim is also an innovator. His own home and office, combined with a training and research centre, is in an imaginatively designed house that

breaks with the conventional middle-class buildings surrounding it, while echoing the spirit of Cairene Muslim architecture without replicating any specifics.

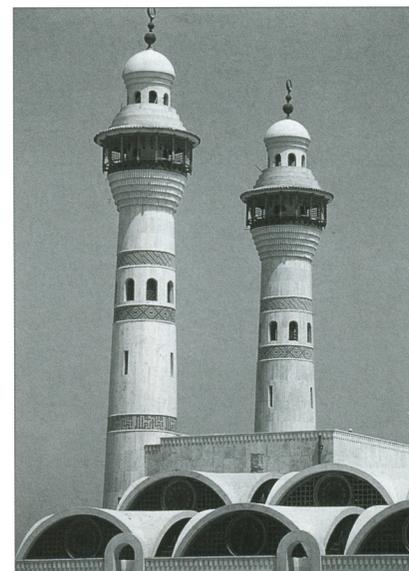
The Mosque of Al-Zahra also differs from the two traditional generic categories mentioned earlier. It eschews the Mamluk and Ottoman vocabulary found everywhere in Cairo and seeks a different expression that pertains to many diverse sources from Muslim societies worldwide.

The mosque is located at the intersection of two major streets in the Madinat Nasr district of Cairo. It is designed to accommodate the large number of worshippers who visit on Fridays and special days, with the option of using the building for classrooms for the college of Islamic Da'wa during non-prayer times.

The building is rectangular with a square prayer area (42 by 42 metres) with a central courtyard (18 by 18 metres). Its floor is elevated 1.8 metres above street level and there is a full basement for ablution and other facilities that cover almost all aspects of community needs. A mezzanine floor is provided as a prayer space for women. All in all, the mosque can accommodate about 2,300 worshippers when required.

At other times, the mosque can compress the prayer space to the region of the *qibla* wall and convert large parts of the rest of the space on both the north and south sides into twelve classrooms, each of 80 square metres. The seats ingeniously fold into the floor and the walls separating the classrooms fold into special recesses in the walls of the main mosque.

Structurally, the roof is supported by twenty-four intersecting vaults carried on reinforced concrete frames with a 12-metre





span, thereby avoiding columns in the classrooms. A dome, 8 metres in diameter and 20 metres high, covers the centre of the *qibla riwaq*. The two circular minarets rise to 23 metres, flanking the entrance whose gateway is shaped as an oversized *mihrab*.

Thus the building uses all the recognisable elements of mosque iconography – dome, minaret, gateway – but in an architectural expression which is neither a straight copy of past idiom (as in the Salah al-Din mosque) nor an effort to reinterpret a particular architectural idiom in contemporary terms (as Badran has done with Najdi architecture in his mosque in Riyadh). The result is the integration of the new with a certain continuity. The modest

finishes let the structure speak clearly. Although the use of the stairs in the minarets to access the mezzanine and the basement gives them an added function at a time when few muezzins go up to call to prayer, how well that will work awaits the verdict of users.

The most radical part of the programme, however, is the architectural expression given to the revival of a multitude of civic functions in the mosque complex. It does what other vernacular community mosques try to do (like the Moustafa Mahmoud Mosque in Dokki), but brings an educated and trained architectural expertise to the task, a difference which is clear in the final building.

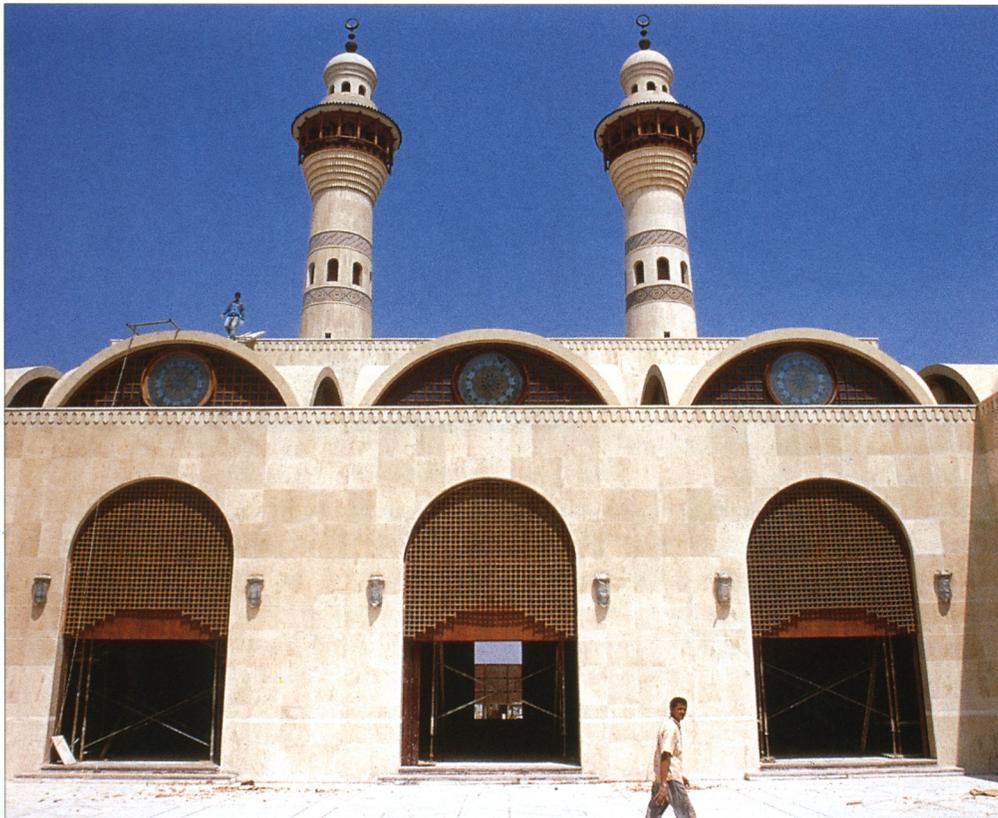
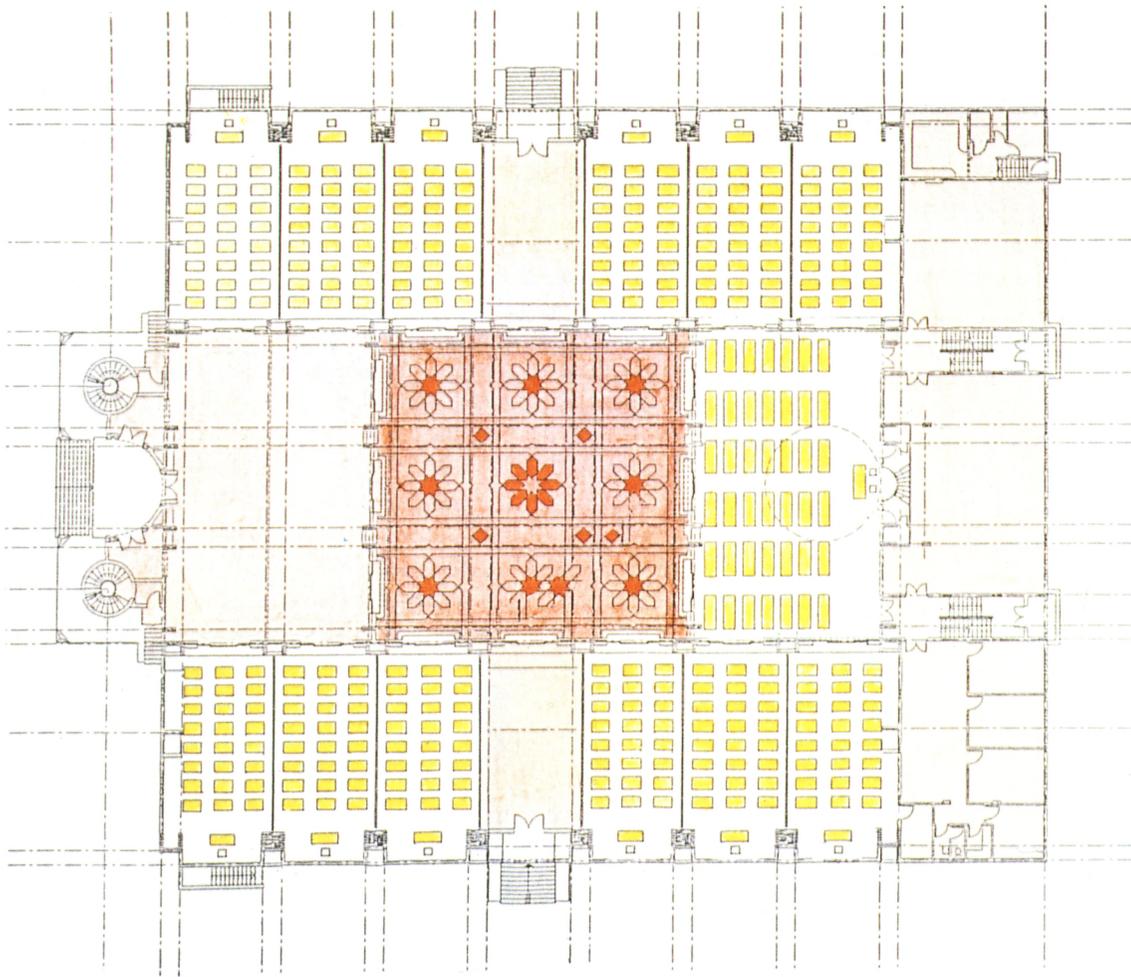
The Mosque of Al-Zahra is an ambitious attempt to tackle

varied functional requirements, as exemplified by the complex issues of transforming classrooms into common prayer space and vice versa. This is a bold architectural solution which will now be tested in the crucible of everyday use.

#### Note

- 1 *Principles of Architectural Design and Urban Planning During Different Islamic Eras: Analytical Study of Cairo*, prepared by the Centre for Planning and Architectural Studies (Chairman: Doctor Abdelbaki Ibrahim) and the Centre for the Revival of Islamic Architectural Heritage (Dr Saleh Lamei Mostafa), The Organisation of Islamic Capitals and Cities (Cairo), 1992.

*Ground floor plan*



**MASJID EL SAYYIDA SAFIYYAH, CAIRO**

MOHAMED ABDALLAH EISSA

BY SAMIR EL-SADEK AND ISMAIL SERAGELDIN

A phenomenon which has proven to be deeply rooted in Egypt, able to survive political and social changes and movements, and to transcend all conflicts, is the strong partnership between the private sector and the government in the construction of community centre mosque complexes. Typically, the private sector takes the initiative, the government donates the land, an association is formed to construct the project through donations, and the completed project is jointly managed by the association representing the donors within the guidelines and regulations of the Ministry of Endowments. As such projects originate through a participatory process that involves large segments of the community, they are normally very responsive to needs, and well sited to act as focal points for social gatherings.

Masjid el Sayyida Safiyyah is a good example of that phenomenon. The programme called both for the provision of religious facilities for a community not previously served by a local mosque; and the creation of a social and cultural community centre, primarily for the elderly.

Located near the road which joins the centre of Cairo to the airport, the 3,500-square-metre site is defined on its perimeter by a concrete and crafted iron fence; while the grounds are paved and landscaped.

The mosque stands on a podium reached by twelve steps at the entrance facade. Entry to the prayer hall is through the three pointed arches of the portal porch, which are supported on columns faced in rose-coloured marble. The prayer hall is square in plan, defined by four pairs of interior columns, surmounted by a clerestoreyed drum and horseshoe dome over the central court. A

gallery is composed of square bays on three sides; on the fourth *qibla* wall, the three bays are rectangular and house the *mihrab* and wooden *minbar*. The two lateral galleries provide three-bay prayer areas on both sides.

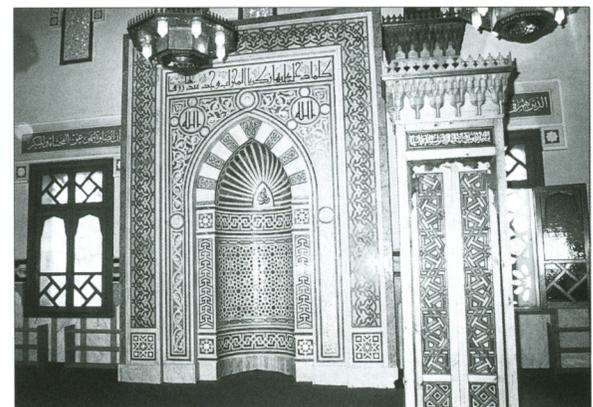
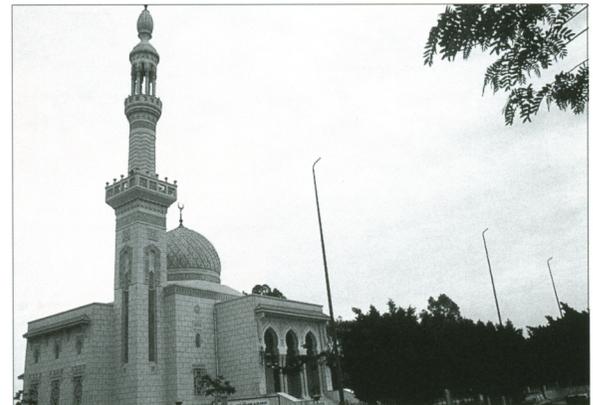
The men's and women's ablution facilities are located on the lower floor, as is the community centre. The minaret is slightly recessed from the principal entry facade.

Reinforced concrete is used for the mosque's skeletal frame, the floor and roof slabs, and for the dome and minaret. Wall infill is of kiln dried brick. Much attention has been paid to exterior and interior finishes and ornamentations. Carved decorations were prefabricated to specific designs in local workshops. Most of the materials are of local origin, though some of the timber and marble was imported. Among the features displaying elaborate craftsmanship and great attention to detail are the marble inlaid *mihrab* and dome, the brass chandeliers, the timber and inlaid partitions and window screens, the ceramic surfacing, and the brass crescents atop the dome and minaret.

User requirements were established and the design was completed in 1977. Construction work started in 1978 and was completed in 1980.

Cairo is rapidly expanding. The creation of this mosque and social centre helped to provide a focal point and cultural identity for a newly established community. The design of the complex adequately addressed the functional requirements. The selection of materials was appropriate, considering the tight budget for both construction and operations. The building is well placed on the site, and forms a landmark visible from

all major directions. Mohamed Abdallah Eissa has chosen traditional models for both the volumetric organisation and ornamental schemes, however, rather than attempting to develop a truly contemporary Egyptian mosque architecture.



## MASJID SALAH AL-DIN, CAIRO

ALY KHAIRAT

BY SAMIR EL-SADEK AND ISMAIL SERAGELDIN

This project deliberately draws on a popular traditional style, the late Mamluk, as is evident in the two minarets and domed prayer hall. The vocabulary of this style remains so powerful that for many it is still the archetypal language of the mosque. The Masjid Salah al-Din aims to provide a point of reference for students of the Medical School of Cairo University as well as for passers-by.

It is characterised by a number of important symbolic and architectural elements. A monumental portico with three pointed arches supported on double columns is built on a platform twelve steps above ground level and provides access to the front entrance. Two minarets rising to equal heights flank the portico. A large dome with a clerestory drum surmounts the main prayer hall located behind the entrance portico area.

The building is divided into two major spaces: the prayer hall, and the side courtyard wing which comprises two floors. This side wing has its own entrance, which also leads into the main prayer hall through two doorways. The courtyard rises to a double height with a second floor gallery. The second floor gallery running around the courtyard houses a library on three sides and a women's prayer hall on the fourth side adjacent to the main building. The courtyard contains a central fountain and is surrounded by an arcade. The pointed arches are supported by double columns. Large arched windows surround the exterior walls.

The main prayer hall is conceived on a square plan. The central square is defined by four square columns at each corner. Additional prayer space is provided by two parallel, rectangular bays on each of the four sides of the prayer hall. The *qibla* wall

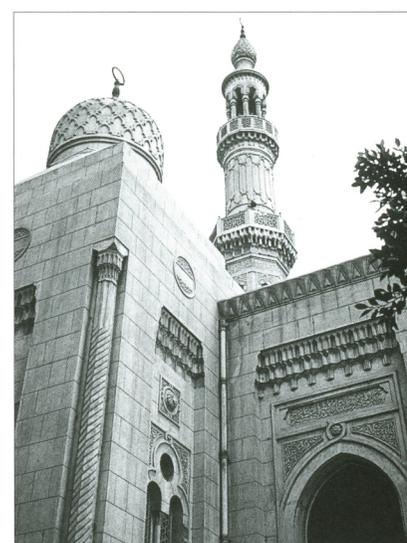
extends out from the parallel bays to house the *mihrab* and *minbar*. The entire prayer area is characterised by rows of octagonal columns supporting pointed arches symmetrically located around the central square. Elaborate ornamentation and calligraphy adorn the prayer hall walls. An impressive, tiered chandelier hangs from the central dome.

A rear, two-storey annex abuts the corner of the library wing and prayer hall building and contains a central hall, two stairways, and two entries. One entrance leads to a stairwell down to the basement ablution room. The other leads into the central hall and the courtyard area, or to a stairwell up to the library and women's prayer hall.

The building is constructed with a reinforced concrete frame. Reinforced concrete slabs were used for the floors and roofs. The dome and minarets are also concrete. Infill is kiln-dried brick. Facades are clad in artificial stone. Ceilings are plastered. Mouldings and ornaments were fabricated on site. The floors, the fountain, and the *mihrab* are faced with mosaic tiles and marble. The *minbar* is wooden and hand carved. The labour force, 80 per cent of which was skilled, was entirely local.

The design programme was defined in 1958, and the design was completed by 1959. Construction began in 1960 and ended in 1962.

The Masjid of Salah al-Din is one of the last contemporary mosques built in Egypt to faithfully observe classical forms, traditional designs and details. The elaborate interior and exterior decorations display highly skilled workmanship. The courtyard area provides a quiet spot in contrast to the urban context. The tall



minarets and large dome mark the urban quarter's spiritual centre. The design has taken full advantage of a unique site and provided an elegant building form with refined details which contribute to its presence as a significant landmark on one of the more important stretches of the Nile river front. It remains as a constant reminder of the challenge facing those who would break with the architectural language of the past: indicating the need for a statement as powerful as that provided by this contemporary mosque in its classical garb.



### THE MAGHREB: HERITAGE AND RENEWAL

BY ISMAÏL SERAGELDIN

The Maghreb is traditionally defined as comprising the countries of Morocco, Tunisia and Algeria, though the current discussion is limited to the first two. The Maghreb was conquered by the advancing Muslim armies in the seventh to eighth centuries AD. It has had a remarkable history, interlinked with Europe and European civilisations more than any other part of the Muslim world due to its proximity to the Iberian peninsula and Sicily. By and large Morocco and Tunisia were remote provinces of the Umayyad empire (AD661-750). The situation changed when the Abbasid revolution resulted in the massacre of the Umayyads in AD750. The youthful Umayyad prince Abdul-Rahman escaped to Spain and founded a new independent dynasty there in AD756. From that day onwards, Al-Andalus, as it was known, was never to be part of the common empire of the Muslim world until its collapse to the forces of Ferdinand and Isabella in AD1492.

In Morocco, there appeared the very first Shia dynasty in Islam, that of the Idrissids, which lasted two centuries from AD788 to AD974. It was named after Idris ibn Abdullah, a great grandson of Al-Hassan, who revolted in Madinah and fled to Morocco where he founded the dynasty, with Fes as its capital. Fes has remained to this day a complete entity of intertwined and living tissue with magnificent monuments, most notably the famous Qarawiyyin Mosque, along with many other residences and *madrasas*. It has a wonderful system of waterways and outstanding glazed tile works. It is recognised as an integral part of the world's heritage, and still bears the imprint of its glorious past, inspiring even the most casual visitor.

The Idrissid dynasty succumbed to the forces of the Andalusian caliphate in Cordoba, at approximately the same time as the Fatimids conquered Egypt, establishing a brilliant Shia dynasty there.

Parallel to those developments, Caliph Harun ar-Rashid (of *Arabian Nights* fame) appointed an able governor Ibrahim ibn al-Aghlab in AD800. Ibn al-Aghlab consolidated his rule over vast parts of central North Africa in the following decade (AD800-11). This was the beginning of the Aghlabid dynasty which was to dominate the Mediterranean from AD800-909, seizing Sicily, Sardinia and Malta, and sending naval sorties as far as Greece and France. Their capital was Kairouan (Al-Qayrawan). This was founded by Uqba ibn Nafi, and was expanded under Aghlabid rule, the Great Mosque being rebuilt by Ziyadat Allah in AD836 and completed by Ibrahim II (AD874-902). It was to rival the best structures of the East. Its square minaret, retaining the original Umayyad design, is considered the oldest surviving minaret in Africa, and its design influenced the forms of subsequent North African mosques.

The last of the Aghlabids, Ziyadat Allah (AD903-09), was driven out of the country by the arriving Fatimid Ubaydullah al-Mahdi (AD909-34) who established himself in Raqqadah, a suburb of Kairouan. In AD914 he seized Morocco and a few years after that extended his rule over all of the Maghreb to the borders of Egypt, also consolidating the hold of the Muslims over Sicily. About AD920 he founded a new capital on the Tunisian coast which he called Al-Mahidiya. His armies and navies extended the Fatimid influence and ultimately his successors conquered Egypt in AD969 and founded Al-Qahira (Cairo).

Kairouan remains an impressive treasure trove of architectural monuments to this day. It includes, in addition to the Great Mosque, the mosques of Ibn Khayrun and Al-Bey, as well as many fine mausoleums, mostly dating from the fourteenth to nineteenth centuries AD, a *suq* of some sixty shops, and other structures and residences. Today it is a well preserved historic city thanks to the efforts of the Association pour le Sauvegarde de la Medina de Kairouan, founded

*El Mansouria Mosque,  
Marrakesh, Morocco*

in 1977, whose work to conserve and reuse this architectural legacy were recognised by an Aga Kahn award for Architecture in 1992.

The Middle Ages witnessed the development in the Maghreb of the Berber Islamic dynasties. While the Sanhaja Kabyles supported the Fatimids in Kairouan, the Zenata Berbers were supported by the Umayyads of Cordoba and gradually won over the whole of Morocco to orthodox Sunni Islam. The Almoravids were Saharan nomads who came from Mauritania and founded their kingdom in southern Morocco, establishing their capital, Marrakesh, in AD1070. They wrested control of the whole country from the Zenata and established a Maliki school of law. Yusuf ibn Tashufin was the first Almoravid sultan to unify Morocco under his rule, and he extended his African dominion as far as Algiers and northwards. After shoring up the Muslim *amirs* of Spain against the advances of the king of Castille in AD1086, he deposed them and annexed their territories. This led to an enriching intermingling of the art and culture of the Andalusian and Maghreb Muslim cultures, though these shifts between Shia and Sunni Islam did not significantly affect mosque design, since the liturgy and ritual are not different.

The reform movements of Ibn Tumart and his followers led to the establishment of the Almohad dynasty which gradually wrested control of all the Maghreb from the Almoravids and under Abu Yakub Yusuf consolidated its hold over the Spanish dominions as well. The Almohads represent the zenith of Berber Islam in Morocco. The Andalusian influence took root in the cities and synthesised with the local culture to produce the unique flavour of classical Moroccan institutions and artistic impressions.

The invasions of the Banu Hillal and other tribes unleashed by the Fatimids in Egypt against their erstwhile subjects left deep scars in the social fabric and weakened the structure of the Maghrebi states. The Almohad empire collapsed in AD1269 following defeats in Spain and the rise of the Marinids in eastern Morocco. The Maghreb was profoundly altered, with Marinids in Fes, the Hafids in Tunis, and the Wadids in Tlemcen (Algeria), sharing different parts of an increasingly limited power.

A transition then occurred with the Banu Wattas in Fes, succeeded by the Saadi of Marrakesh (AD1465-1659), as the Moroccan part of the Maghreb fell into gradual disarray and anarchy. This was consolidated by the new Filali (Alaouite) dynasty which then took

Morocco into isolation. It lived on its medieval institutions and culture limiting contact with the Turkish presence in Tunisia and Algeria and the rising European presence in the whole region. A long and slow decline, punctuated by occasional uprisings and re-established order, took place which paved the way for European intervention in the nineteenth century, during the reign of Mulay Abdel-Rahman (AD1822-59).

The French occupation of Algeria in AD1830 marked the beginning of the colonial period for the Maghreb. Morocco remained relatively independent until the beginning of the twentieth century when the French protectorate was established in AD1912 (except for the recognition of Spanish interest), and the long arduous climb of the nationalist movement continued until independence was achieved by Tunisia and Morocco in the 1950s. During this time profound transformations took place on the urban scene and affected the pattern of urban and architectural expression in the Maghreb. The colonial powers introduced a vastly expanded system of town-planning that laid out modern metropolises frequently distinct from the old medinas. Over the years these became the Maghrebi elite's chosen places of residence and their large thoroughfares and functioning infrastructures contrasted sharply with the run down facilities in the medinas. The elite also adopted modes of architectural expression for their residences that mirrored the European and rising International style in architecture. The mosques, however, were not affected by the transformation, but rather suffered from a stylistic dichotomisation that confined their vocabulary to the traditional with only a limited number of examples of non-traditional design dating from this period.

Following independence, the new states have had to confront the reality of their dichotomous cities. These rapidly urbanising countries face many challenges: population growth, influx of rural migrants, and an evolving economic base, all challenge the ability of the cities to provide jobs and livelihoods. Crumbling infrastructures, poor and over-stretched social services, rampant real estate speculation, and weak governments all contribute to put incredible pressure on the central cities, often loci of invaluable architectural heritage, while the degradation of the urban environment limits the abilities of a growing shifting homeless population to take root and establish communities with a minimum standard of decent

housing. Tension between groups frays the social fabric as much as economic speculation transforms the urban tissue. The former cores of historic cities are increasingly ghettoised, with the middle class and economic activities fleeing them or actively destroying their very fabric.

Against this spiral of mounting problems, valiant efforts have been mounted by a group of national architects, urbanists and conservationists, who take pride in their heritage and seek to reverse its destruction. Their work has much to say to the rest of the Muslim world, and is a valuable contribution to international debate on the problems of rapid urbanisation, historic cities, and the growing urban under class.

Most importantly they have recognised that the solution to these problems requires the rejuvenation of the entire areas of old medinas and their integration into the fabric of the living metropolis, not just the preservation of individual monuments. This cannot be achieved without the significant involvement of the local community in reclaiming its heritage. In most cases it is the local neighbourhood mosque or *zawiya* that plays a central role in the rehabilitation. The rejuvenation of the economic base of the historic city and its links with the rest of the city is recognised as a goal, although the problems of vehicular access and solid waste management remain.

The Hafsia district in Tunis represents an exemplary success in revitalising the economic base and diversifying the social mix of the inhabitants of the old medina. It is a financial, economic and institutional success. Cross-subsidies have made the project financially viable; the rates of the return on investment have been high. The reduction of densities in the old *wekalas* has been successfully accompanied by a sensitive resettlement scheme, and the removal of rent control laws has effectively lifted the obstacle to commercially financed rehabilitation of non-owner occupied rental units. This has been accompanied by a sensitive treatment of the urban texture, and an inte-

gration of the old city with its surrounding metropolis.

Paralleling this renewal of interest in the heritage is a renewal of interest in the mosque. The unprecedented increase in new building activity in the Maghreb, which has arisen from the expansion of the urban population and the growth of cities, has led to a proliferation of local mosques as well as to an expansion of the role of the state-sponsored mosque. The few examples presented here are indicative of the range of new construction that is reaffirming the renewal of the mosque as a centrepiece of the neighbourhood, as an essential element in the definition of urban character, and as the articulator of urban form.

The Lalla Soukaina Mosque in Rabat, with its expansive accommodation for Friday congregational prayer, reflects the state's commitment to its Islamic identity. The Hassan II Mosque remains unsurpassed in its attempt to claim grandeur for the Moroccan present while respecting the heritage of architecture and artisanship, even though it was designed by a non-Moroccan. The Prince Saud library complex shows that the suburbs are also being infused with new efforts at mosque construction. Finally, the *zawiya* of Sidi Abdel Kader in Tunis shows how sensitive treatment can provide coherence to the urban structure, going further than simply fulfilling the religious needs of the local community. In all of these examples the emergence of the new is still based on the past. The careful use of old motifs, ceramic tile decorations and glazed green tile roofing all hark back to the artisanship of the past. The new designs also connect with the past through the maintenance of the established architectural vocabulary of square minarets and other features such as the articulation of space between buildings. All of this creates a sense of continuity with the past except in the larger structures where the scale alone sets them apart. But in the smaller buildings, as in their urbanism, the Maghrebi architects and urbanists have much of value to contribute to the renewal of architecture in the Muslim world.

## LALLA SOUKAINA MOSQUE, RABAT, MOROCCO

MOULINE, ZEGHARI & SAID

BY SAMIR EL-SADEK AND ISMAIL SERAGELDIN

Lalla Soukaina Mosque was commissioned in 1985 by King Hassan II of Morocco, to respond to population growth in the expanding city of Rabat. Prominently situated, the mosque is intended to act as a landmark on the main Casablanca to Rabat thoroughfare and to accommodate worshippers from the adjacent Hay Ryad and Souissi residential quarters of the city.

Built on a 10,000-square metre site of flat land, the project is dominated by a large prayer hall, which is accessed through four separate entrance porticoes. The main entrance, situated on the axis of the *mihrab* wall, is distinguished by an interior, arcaded courtyard and the minaret. These covered spaces combine with a landscaped courtyard to offer cool shade for worshippers, and can also be used to increase the capacity of the mosque to three thousand. The roof of the central prayer space can be opened using a system of sophisticated computer-controlled motors and hydraulics, and the floor is heated to induce upward air movement; these elements combine with the vegetation and system of fountains to offer an innovative and flexible response to the climate which can be quite hot and humid. Internally, spaces are lavishly decorated with hand-crafted timber and plaster work as well as with marble and traditional *zellig*, or mosaic.

Construction is based on a reinforced concrete frame, infilled with brick and local stone. The removable section of the roof has a three-dimensional metal structure supporting concrete roof tiles laid on timber purlins.



## PRINCE ABDALLAH AL-SAUD MOSQUE AND LIBRARY COMPLEX, CASABLANCA, MOROCCO

MOHAMAD RACHID SABOUNJI

BY ABDELHALIM I ABDELHALIM AND ISMAÏL SERAGELDIN

This project aimed to provide a facility for religious, educational and social services for the community of Enfa, near Casablanca. A rich suburb, Enfa is an upper-class residential district, with few public or community buildings. Individual villas with extensive landscaping form the dominant type of housing, though a few condominiums or town houses are now developing along the east side, linking Enfa's environment to the more public character of Casablanca.

Architectural style is mixed and individualistic, buildings showing a clear European influence existing alongside more traditional houses. There is no sense of unity or cohesion, though the lavish and extremely well kept gardens give the community a pleasant sense of order. Commercial casinos, restaurants and beach facilities for tourists form the public facade of Enfa.

Prince Abdallah al-Saud Mosque and Library Complex, known as the Al-Saud Center for Islamic Studies, is located on the cornice of a luxurious suburb some 4 kilometres south of the centre of Casablanca. The site is a part of Prince Abdallah's summer residence compound which stretches to the west of the complex and contains two palaces and vast gardens.

The site is mainly accessible from the cornice where the entrances of the mosque and the library are located. Pedestrian access for the residential units and the women's mosques are located on the east and south sides of the site.

Initially a small mosque able to accommodate four hundred faithful was attached to the Prince's summer residence, which was established in Enfa-Casablanca in 1979. Increasing numbers of

worshippers led the Prince to build a much larger mosque and also a library: initially a modest proposal for an Islamic library attached to the mosque, this was developed to a full scale research and documentation centre for Islamic sciences. The size, capacity and scope of the services offered were the result of a local as well as a regional assessment of library needs in Casablanca and the surrounding region.

Arranged in four sets of *riwaqs* (aisles), the prayer space is organised around a central *sahn* which runs the entire height of the building, and links the mosque space to the library above. The *sahn* is covered with a very large, traditional cupola.

However, the entrance from the ablution area to the mosque through the *qibla* wall is somewhat awkward, and interrupts the front row of worshippers. The main entrance runs axially to the prayer space, which also interrupts the sense of prayer, though it is a beautifully articulated space.

The atmosphere of the mosque is pleasant: the main gates open towards the sea and create, along with the other doors, a refreshing and ventilating breeze. The quality of light is also beautiful: diffused light floods the carpeted floors from the main gates creating a sense of direction towards the central space, which is lit from above.

The spaces of the library are organised above the mosque, following the arrangement of the prayer aisles. The entrance, information, card catalogues and main desk are to the north of the central space. Staff and librarians are to the left of the entrance. Periodicals and reading spaces are to the right. The library is open-shelved, with varying

arrangements of shelves, from the periodical section which is open to the public to the rare-books section with restricted entry. Microfilm and other library aids are available and are located around the central space. Computers, filing and catalogues occupy the south-east corner of the library. Binding, photography and book repairs are in the basement.

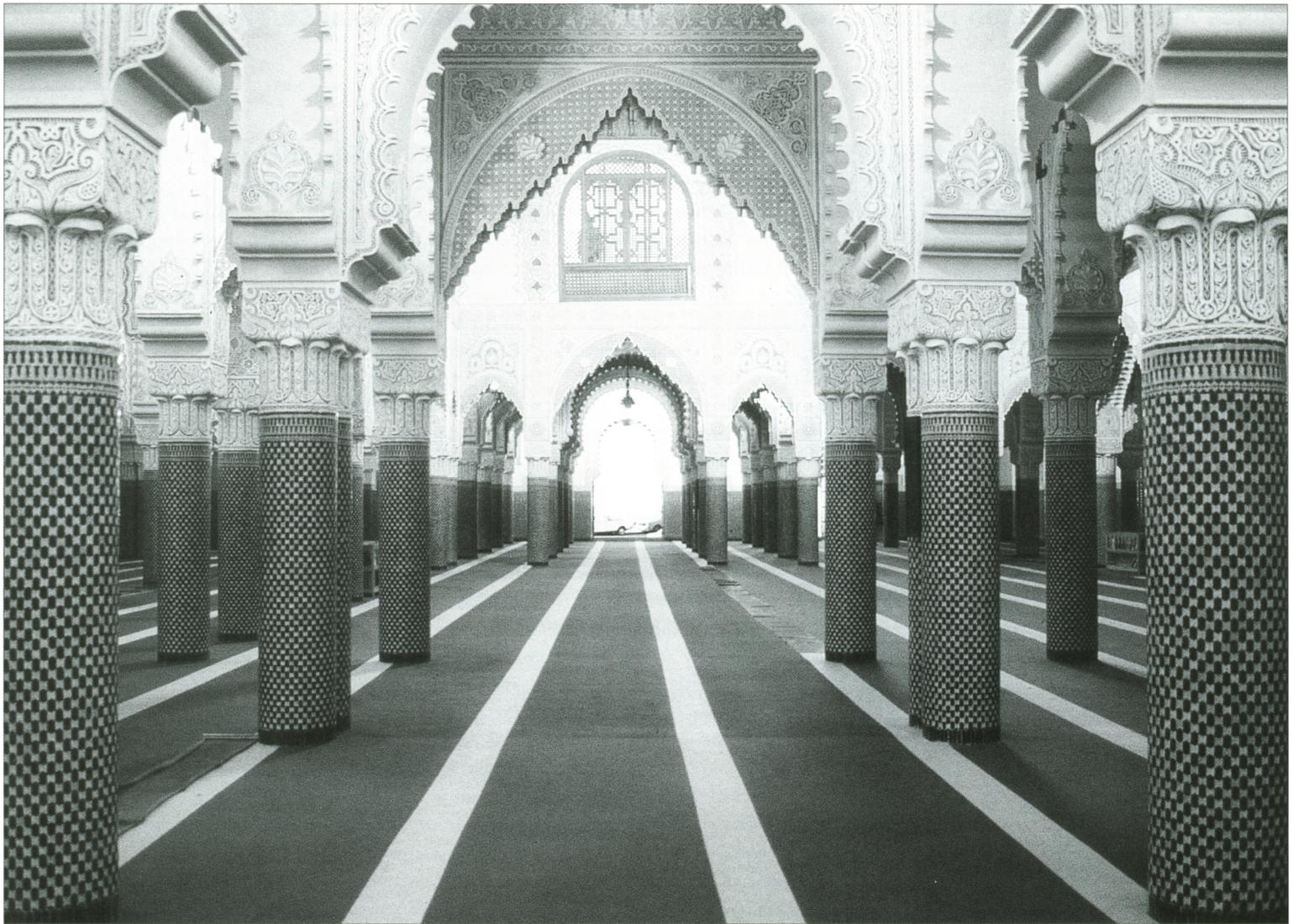
The library has a computer link with the Arab League Documentation Center, as well as ninety-three documentation centres in Europe and the United States.

Visiting scholars, book exhibitions, seminars and lectures are among the regular events held at the library, in addition to its basic service as the main centre for library research in the field of Human Sciences of Islam. Thus, this mosque complex is much more than a place for prayer.

The library is air-conditioned and artificially lit. This has been complemented by series of skylights using plexiglass domes to generate a fairly interesting quality of light, and a unique sense of place for reading.

The mosque/library building is lavishly decorated using the finest traditional crafts, motifs and materials. Although there is little innovation in the ornamentation, the excellence of the craftwork and the superiority of the materials are commendable.

The structural system consists of semi-prefabricated girders and columns assembled on the site. The materials are mainly reinforced concrete for structural elements; cut stone and double layer brick for the walls; plaster and gypsum ornaments for finishing the walls; marble or cut stone for the floors; ornamental carved woods for the ceilings; and glazed tiles and terracotta for the roof.



Housing and community facilities, such as the *hammam* (public baths) and bakery, although initially planned to generate an income for the complex and its operation do not, in fact, provide such support. Neither the *hammam* nor the bakery are in use because of the high cost of operation. The housing is located along the north-eastern corner of the site to connect it to the existing residential development of Enfa, while the community facilities (though now closed) are on the south-east corner to link up to the centre of Enfa.

Architecturally, the project complex is part of a much larger development including two palaces for Prince Abdallah. In a

formal sense, the language used in the articulation of the building is at best eclectic. One of the Prince's palaces is an exaggerated Moorish building, with traditional cupolas, glazed roof and characteristic horseshoe arches. Next to it lies an ultra-modern free-form palace. The mosque/library complex, located immediately adjacent to the modern palace, employs traditional Moorish motifs and facades. On the extreme east side of the site, the modernist expression of the apartment building follows the character of the residential areas of Enfa.

Yet, the whole is made comprehensible by two elements. The first of these is a tall sandstone retaining wall, about 7 metres in

height, which runs the entire length of the site's boundary and forms a horizontal podium for the development, with terraces and gardens arranged atop in an Andalusian tradition. The second is the towering minaret of the mosque, the tallest element in the environment of Casablanca, which serves as a landmark. These two elements unify the whole complex and establish an unmistakable identity for Enfa.

The arrangement of the buildings on the site leaves a small plaza in front of the mosque and a pedestrian street between the mosque and the rest of the facilities.

As a whole, the building acts as a landmark for the community of Enfa. The minaret, the mosque

and the massive presence of the palace complex form a pole around which the scattered suburban character of Enfa has become more unified.

The project was executed in record time: three months for design development, with twenty collaborating builders working simultaneously to complete the entire complex in eight months.

Aesthetically, the Prince Abdallah al-Saud Mosque and Library can be judged on a number of levels. The complex has added grace and beauty to the skyline of Casablanca, a city otherwise distinguished by its European and modernist character, while the mosque and the minaret give both the architecture and community of Enfa a sense of cohesion, resolving the

chaotic character of its beach developments.

Without monumentality or grandeur, the complex adheres to the traditional vocabulary of mosque architecture in North Africa. A modest approach is taken in the architecture of the houses, where plain surfaces, secluded yards and fenced gardens help to integrate them into the neighbouring community.

As a whole, the complex appears as a restrained exercise in formal aesthetics, with clear reference to traditional Moroccan architecture.

The project has succeeded in achieving its functional objectives in varying degrees. The mosque has become a magnet for prayer in Casablanca at large, and the library is an important research facility

not only for Casablanca but for the entire region.

The complex has not, however, been as successful in integrating and articulating the relationship between these religious and research activities. But on a symbolic level it has provided Enfa, as well as Casablanca, with a landmark which has helped to identify them both with the Islamic heritage characteristic of most Moroccan cities.

A sense of cultural identity for the entire community has successfully been created. The complex has become a visual as well as social centre for Enfa. Economically, it has helped to shift the land use along the corniche from strictly transit facilities to more local economic and social facilities.





## KING HASSAN II MOSQUE, CASABLANCA, MOROCCO

MICHEL PINSEAU

BY ISMAIL SERAGELDIN

There are few mosques in the Islamic world that have attracted as much attention as the Hassan II Mosque in Casablanca. It is the most ambitious example of a state mosque in recent years and epitomises the contemporary conception of Moroccan architectural elegance.

This spectacular mosque complex, placed at the water's edge on a reclaimed part of the bay, is large enough to accommodate 25,000 worshippers, and has a Qur'anic school, *hammams* and a library cum museum covering over 33,000 square metres.

The mosque itself has a floor area of 138,700 square metres with a built up area at ground level of 91,600 square metres. The site covers 144,000 square metres and includes landscaping and underground parking for a

thousand cars and fifty buses.

The mosque is connected to the centre of Casablanca by a grand avenue, and also forms part of the environmental programme to remove pollution from the bay. The project was started in 1986 and completed in 1993.

This is without question one of the most spectacular buildings in the world. The construction of the minaret, 200 metres above sea-level, required the use of a 210-metre crane, a world record. The structure is of reinforced concrete covered with Moroccan travertine and is rich in traditional Moroccan decorations using *zellig*, wood carvings and coloured glass. The monumental doors and chandeliers are designed and executed to match the scale of this imposing structure. The roof of the prayer hall,

a triangular trussed construction, can be moved over an area of 25 by 70 metres in about 5 minutes.

The mosque's location in the water is intended by the patron, King Hassan II of Morocco, to encourage visitors and worshippers to contemplate the immensity of the ocean and the sky, and thus the immensity of God's dominions.

Whether the spectacular scale and the formal arrangement of the surrounding site and access ends up encouraging or discouraging attendance remains to be seen. What is not in doubt is that a truly landmark structure has been added to the lexicon of

mosque architecture and the built environment of Morocco. The classicism of Michel Pinseau's approach is reminiscent of El-Wakil's large Saudi mosques, though here it remains typically Moroccan, as it should, whereas El-Wakil introduced a more playful interjection of Mamluk elements into the Hijaz or Najdi environment.

The Hassan II Mosque is thus a *tour de force* in terms of scale, structure and detailing. It may well become the definitive statement for this kind of architectural vocabulary, but it is unlikely to generate a profound influence on new forms and

ideas. This may well be partly because of its overwhelming scale, and partly because of its unique location. But whatever the cause, it is to be taken as a *sui generis* creation, remembered primarily for its engineering and structural achievements rather than its architectural innovation. Because of the uniqueness of the circumstances and the classicism of the treatments, it is unlikely to be either emulated or much studied. This huge mosque is thus, above all, the affirmation of temporal power and state commitment to Islam as a social and spiritual force in today's evolving world.



## RESTORATION AND EXTENSION OF SIDI M'SADAK MOSQUE, ZARZIS, TUNISIA

ALI AND MARGERITE DJERBI

Sidi M'Sadak Mosque is one of the oldest mosques in Zarzis and was famed for its *marabut* (mausoleum commemorating a local saint). Due to the population increase, this small mosque was no longer sufficient to accommodate the worshippers, and the local community agreed to its restoration and extension into a Friday mosque. The works were commissioned and financed by a member of the community.

The building is constructed using a system of reinforced concrete columns and beams with hollow block infill and natural stone for the external walls of the prayer hall. The roofing of the porticoes and annexes is of reinforced concrete filler block, and the prayer hall is covered with cupolas and vaults. The exterior surfaces are rendered with plaster and display traditional decorative ceramic tiles. The workforce, consisting of 30-per cent skilled labour, was entirely local. The mosque is an excellent example of the adaptation and translation of local content, in this case that of the island of Djerba, which had developed a distinct style due to its isolation.

The village of Mouensa, originally a rural *sug*, is now part of the small town of Zarzis in the Governorate of Medinine. The town is located on the Mediterranean coast, to the south of Djerba, facing the Gulf of Syrthe. The region consists of coastal plains surrounded by a semi-desert zone. Sidi M'Sadak Mosque occupies a central location in Mouensa and the original structure was bordered by undeveloped

land, a main factor in the decision taken to extend it.

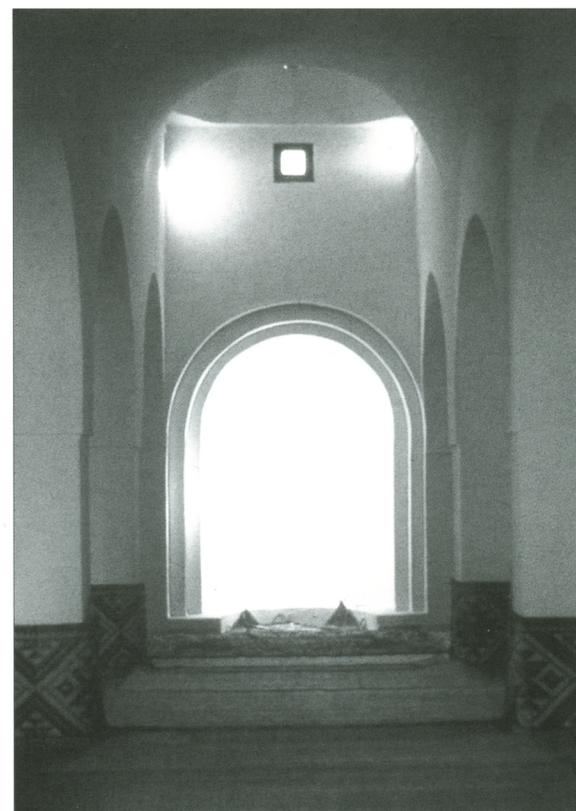
The existing mosque was made up of juxtaposed elements including a prayer hall covered by small cupolas, a freestanding minaret and dilapidated neighbouring rooms, with the *marabut* obstructing the main entrance to the prayer hall. The new arrangement was required to link the various elements into a coherent whole while doubling the capacity of the prayer hall.

The resulting design doubled the size of the prayer hall and added a courtyard lined by an arcaded portico giving access to the ablution room, the minaret and the prayer hall; the *marabut* was suppressed and a second *mihrab* was placed on the new part of *qibla* wall, the latter is indirectly lit from the sides, thus conveying the illusion of infinite dimension. The minaret was raised in order to keep the original proportions of the mosque. The sober decoration displays traditional ceramic tiles, round arches and diamond-shaped openings.

In spite of its small scale and limited budget, the project develops a contemporary architectural idiom. The various spaces unfold in a sequence from the gateway, acting as a transition between the village square and the inner courtyard, through the prayer hall entrance and culminate with *qibla* wall.

The mosque opened in 1984 when work was completed.

*(Text courtesy of The Aga Khan Award for Architecture's Library and Documentation Centre.)*



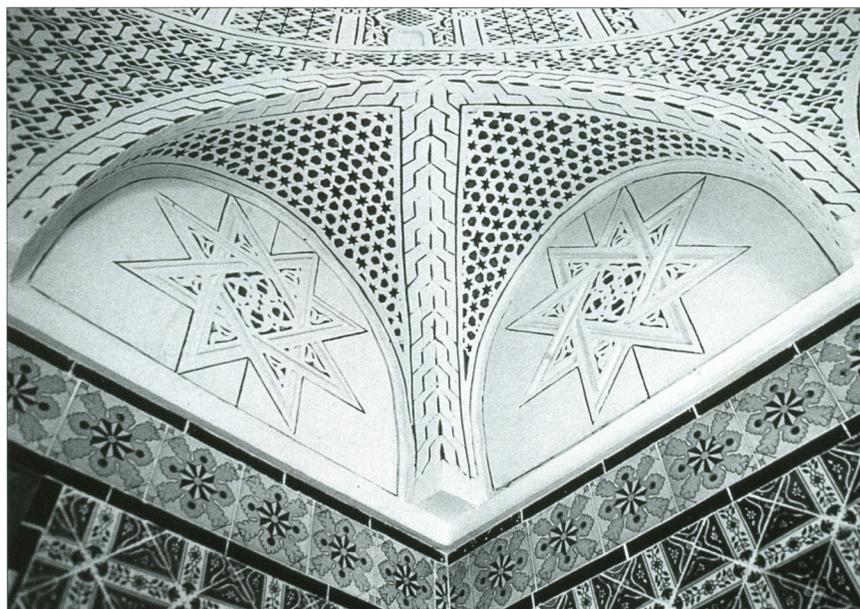
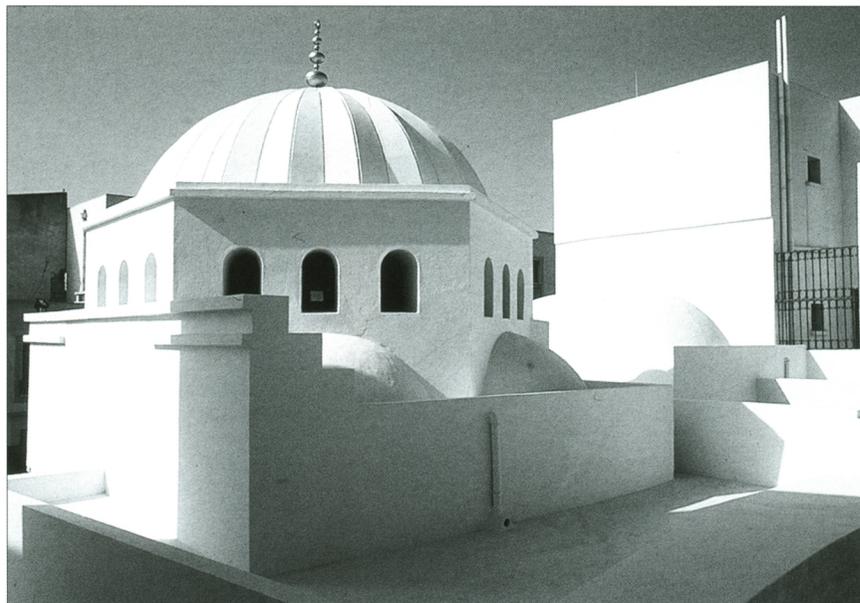
**ZAWIYA OF SIDI ABDEL KADER, TUNIS, TUNISIA**  
ASSOCIATION DE SAUVEGARDE DE LA MEDINA

BY ISMAÏL SERAGELDIN

This small *zawiya* near Bab Souika in Tunis, was built in 1993 to replace an older *zawiya* which had been destroyed in the 1980s. It has successfully reinstated a sense of identity to the area. The ASM, entrusted with this project, had to complete it in six months.

The design reflects the madrasa styles of the seventeenth century in Tunis. The bright white facade splendidly captures light, and its simple detailing is in keeping with the tradition of the region. The gypsum and interior stucco work, as well as the use of tiles, reflects the craftsmanship seen in so many of the historic buildings of the old medina of Tunis.

More importantly, this *zawiya* performs its traditional functions: it is a refuge of calm for meditation in an otherwise busy district, and it invites the faithful to come in and pray. It commemorates Sidi Abdel Kader, an important saintly figure and scientist from the past, and acts as a focal point in the relatively unstructured urban milieu of Bab Souika.



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