

## **MECCA: Cosmopolis in the Desert**

### **THE HOLY CITY: ARCHITECTURE AND URBAN LIFE IN THE SHADOW OF GOD**

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#### **Introduction**

In 1993, I was asked to head the project for documenting of The Holy Mosques of Makkah and Madinah Extension. The project was based at Areen Design, London, the architectural office associate of the Saudi Bin Ladin Group. Completed in Summer 1994, the research and documentation was published in 1998.<sup>1</sup>

Several factors contributed to the complexity of the task that was closely associated with the completion of the Second Saudi Extension that commenced in 1989 and was completed in 1991. Foremost was the nature of the design and construction processes taking place and an alienated attempt at reinventing "Islamic Architecture". This was fundamentally superficial and the architecture weak, verging on vulgar. The constant dilemma, or enigma, lay in the actual project: a most challenging architectural venture, symbolic and equally honourable, providing the historic occasion for a significant architectural statement. The rendering, it soon became apparent, was unworthy of the edifice and its historical or architectural connotations. In brief an architectural icon, the heart of Islam, was to be determined by contractors. The assigned team of architects and engineers responsible were intellectually removed and ill equipped, both from cultural knowledge, design qualification or the level of speciality required to deal with this immense, sensitive and architecturally foreboding task.

The Beirut based engineering firm, Dar al Handasah, was originally granted the contract and commenced the job. We have no information on whether the latter hired specialised architects or conducted any research to consolidate their design. The project was then awarded, mid-way, to the SBL Group who had by then created considerable progress with the Madinah Extension. Dr Kamal Ismail, an Egyptian architect, was the sole appointed project consultant.

The agenda for the two extensions, while it called for "excellence", could hardly qualify to the endorsed (both professionally and academically) Islamic or international architectural terms of reference. This would have called for an appointed board of designers, of international repute and qualification to deliberate on the involved design task. A team including Arab architects (Badran and Wakil e.g.) with considerable experience in the design and research of mosque architecture, with venerated architects like Renzo Piano, Tadao Ando and Jean Nouvel, backed by Islamic art and architecture authorities like Robert Hillenbrand and Oleg Grabar, would have been more plausible. The spirit behind both the Umayyad Mosque of al Walid, that of Samarâ' in Iraq and Cordoba<sup>2</sup> provide a credible premise and precedence<sup>3</sup> for this important mosque.

Delivering a "high technological" structural feat, with attached trappings that befitted the identification of "The Custodian's Extension" was instead, drawn up arbitrarily. The result at the time seemed to represent a possible "Saudi" architectural style. One I then sought to both understand and define. If style should matter, it was at best eclectic, but neither Arab, Islamic nor International. The result a corporate "post-modern" building that is essentially devoid of content, meaning, geometry or craftsmanship.

In this construction there was certainly no trace of "the past", not even the effort to pay tribute to it. In fact everything that related to the "urban past" seemed to be, in this context, a hindrance to the adopted form, informed by "development" as in "property development", and an underlying greed and ignorance. The outcome of the individual spaces and elements, and feel of the material finishes, testify to the cold and spiritless nature of the project's inception.

Perhaps function is the only success the project may boast, in hindsight by the contractors and originators, in the capacity of the building to accommodate the millions of Ōujjāj.

In fact the story of documenting the Extension of the Holy Mosque of Makkah project relates very much to the story of the architecture and urban fabric surrounding the Mosque. The concept and attitude behind the Extension is endemic of what transformed and continues to happen in the beleaguered urban fabric of this city.

Research on the origin of the Holy Mosque at Makkah, the design processes that contributed to its development and the definition of styles and efforts, across past centuries that informed the building during the successive Islamic eras, and the urban development of its immediate and surrounding fabric, was discouraged and undermined. The consultant (directly in charge of the “design”) constantly disputed the need for such a chapter in the book. The “Historical Context” was deemed irrelevant since “this was a project concerned with the Second Saudi Extension only”. Against such a background, the attempt at understanding both past and present mechanisms, conceptual processes, or thought, in order to introduce the project to an international audience, to acquire professional and academic credibility, became a point of contention between the writer as architect and the client representatives led by the consultant who is identified as the “committee that wrote the work”.

Any attempt to set up an architectural line of inquiry, discuss relevant conceptual design or relevant planning issues, introduce references, both contemporary and historical, literary and architectural was not favoured. The official line was: the project is not concerned with the past. Hence, there is no precedence or point of reference, and contemplation, intellectual or architectural, was deemed unnecessary.

The discussion of this background is important to highlight the same forces at work, underlying the design of the actual complex and in order to understand how the urban fabric of its surrounds has been more recently affected. All of which found justification in property development policies, to accommodate the increasing numbers.

The malady in the flagrantly corporate development of Makkah’s urban development today is, effectively, an extension of the same irreversible attitude, undoubtedly behind the execution of the Mosque “Extension”. Evoking a systematic policy of awarding contracts for further “extensions”. On the other hand if this could have happened to the much revered site of the Holy Mosque, the urban fabric and vicinity became a mere “addendum”, to the original “text”, and continuation of the theme.

Irrespective of how inconceivable and unacceptable this “extension” process and condition of the current urban development of Makkah is, I hasten to add, it is not surprising that the real estate and tower “Abraj” development, of hideous forms and scales, have the audacity to commercially advertise to house, accommodate, overlook and provide immediate accessibility to the Holy Haram. A sanctuary after all, lest we or the Saudi responsables forget.

It is also important to add that this “Extension” phenomenon has spread in the region. Valuable mosques built hundreds of years ago across Yemeni cities, are being removed and rebuilt anew with the “tawsi’ah” wave. Funded private enterprise, has resulted in the destruction of two historical mosques in al Hajarayn, one Masjid al Jami’ and the other Masjid Êaha dating back to 700 years, the Abân Mosque of Aden, to mention three examples of worthy buildings that suffered this recent disconcerting condition of urban surgical treatment.

The expression of a “post-colonial” or “post-modern” era devoid of cultural or historical content has become an accepted and set trend (favoured in the Gulf region), subjected neither to scrutiny or accountability: hence the destruction and obliteration of the urban historic fabric, including mosques and architectural landmarks affiliated to the era of the Prophet himself. A bizarre phenomenon to say the least. The removal of the Ottoman fort of Al Ayyad (it was Ottoman, hence acceptable to remove was the rhetoric) will see a replacement of a skyscraper to house the Ōujjāj. The practice has consolidated a distorted form of ruthless development, monitored by crude forms of material speculation. In an increasingly lucrative construction

domain, the quality of architectural design, and consideration attached to the urban fabric cultural, social or aesthetic values, has dropped to an unprecedented low ebb. This mode of operation, and increasing investment in the commercial building sector, has endorsed the replacement of architects by contractors and engineers.

Qualifying for projects is measured according to materials, budgets, expenditures and/or real estate profiteering. This, we ought to remember, was the 1990s (when post modernism in international architecture had begun to wane, and the affair of the press with it come to a close). Philip Johnson and corporate institutions made their statements by the 1980s, backed by Charles Jencks and seen at Canary Wharf. The result of post-modern classical styles, became a marketable product that found buyers in the Middle East, and particularly across new cities of the Gulf region. The over-development of Dubai<sup>4</sup> (and Beirut in a lesser but similar vein) is an excellent case in point.

Notwithstanding new clumsy towers and dull high-tech development, Makkah is Makkah: not Dubai, Las Vegas, or downtown San Diego. And in an era where the lines between professional practice and principles and accountability are so blatantly blurred, the role of architecture, has been conveniently undermined and dismissed by bureaucracy and corporations.

More significant has been the architectural establishment's demise. The establishment that propagated institutions of excellence, governed by laws of geometry and established restraints in respect of building rules and regulations, urban traditions and disciplines that constituted town-planning criteria.

Institutions and patrons have been replaced in this scenario by companies and contractors, and architects and craftsmen by "project managers" and "consultants". Design has, in turn, been reduced to downloading the latest computer-generated design files of reductive copies. This is the bleak architectural reality of cities in the Middle East that is not discussed. It is the future Hasan Fathy fought relentlessly during the 1940s and up until 1980s, as did Louis Kahn who believed in architecture as a genuine process of art and design, as both their projects separately testify. It was the battle, Titus Burckhardt told me in the 1970s, "we have to fight until we lose." With the battleground usurped, and turned into speculation sites, architecture and cities were lost instead.

The description of avid forms of development and the loss of the architectural heritage may be well-reviewed through several websites related to Makkah and the Holy Mosque. In the absence of more accessible academic research, or architectural publications, these are interesting, albeit depressing, to scan. A list of towers published on the SkyscraperCity website, is quite telling. Of these it suffices to list the following for attention: Abraj al bait<sup>5</sup>, a tower complex that is advertised as rising to 485 metres, overlooking the Óaram. A photo on the site called for the commentary of one subscriber<sup>6</sup> as: "Moscow State University meets Detroit's Renaissance Center...in Mecca"... Another is listed as Al Abrar Towers composed of 7 towers with 520 units. Ajyad Towers (presumably replacing the destroyed Ottoman Ajyad Fort) boasts a 27-level tower. Two other advertised development towers are the Meridian Hotel Towers, 8 towers each purporting 21 floors at a height of 400 metres, and a Zamzam tower. That the towers, desecrating the very spiritual sanctity of the urban space, are being marketed by carrying the very same names attached to Óajj places of performed rituals is an act of bad taste.

Regarding the destruction of the urban heritage and the spirit of the city, accentuated by the meaning and ritual of the historic Óajj, a recent article published by CNS News reports "the hypocrisy" of the OIC (Organisation of Islamic Conference) Mecca Conference convened on December 7 to 8, 2005, that was concerned with "preserving the holy sites in Jerusalem" while ignoring the condition of the very venue it was held in.<sup>7</sup>

The destruction of the Holy Sites in and around Makkah and Madinah are topics discussed in some detail in *Islamica Magazine*. Although undated, the published articles are

informative, provocative and the credibility of information (in the absence of official published sources and data) remains uncertain.<sup>8</sup>

More acutely, the practice and condition we are here reviewing has resulted in irreversible damage, exacerbating regional urban development problems that are effected and governed by projects such as the Makkah Extension, an official fervour from constructing “state mosques” to generating property-development projects. Architecturally, both the problem and solution are identifiable, and require culturally informed patrons to restore to architecture, city construction and urban planning, its dignity, creative role, noble and meaningful value.

## **Makkah Concepts and Design**

Research into Islamic geometry and architectural philosophy point to the cosmic importance of the Ka'bah as related to the centre of the universe. The architecture of al Masjid al Óarām's holy complex represents the enclosure of an exceptional and unique space, governed by the precedence and importance of its sacred sites and landmarks.<sup>9</sup>

For a considerable time, the city of Makkah al Mukarramah occupied an area around the Óaram which did not exceed half a kilometre. The city was walled by a *sūr* and defensive forts were constructed on the peaks of mountain tops. The city had three gates: Bāb al Ma'lāt, leading to the cemetery, Bāb al Misfalah, leading south and Bāb al Shabayk, leading westwards. Urban planning was a feature of the city, its area demarcated by the cemetery, residential areas for the nobles and slaves and commercial centres, at various distances from the Óaram, placed at the heart of the city surrounded by the grand Maṭāf open space. The mountain *shī'āb* surrounding the Óaram formed the quarters of Makkah upon the plateaux of which the inhabitants constructed housing.

Due to the tight site which surrounded the Óaram, and the desire to build adjacent to the sacred Old House, the Ka'bah, houses were constructed in tight clusters, with few open spaces, narrow streets and small squares and only rarely had internal courtyards.

## **Historic Context : Urban Development and Changes**

Al Masjid al Óarām was the core of the city around which religious, administrative, cultural and commercial activities took place. Since pre-Islamic times Makkah has been one of the trade centres on the ancient caravan routes which crossed Arabia into Damascus, Palestine, Egypt, Ethiopia and Yemen.<sup>10</sup> The Arabs had several famous *sūqs* or traditional markets in which to exhibit and trade their merchandise, in different locations of Arabia. The *sūqs* of Makkah, however, were distinguished by being larger in size and in terms of the tribal conglomeration. The most famous was Sūq 'UkāΩ which, although close to al Êā'if, was affiliated with Makkah. This *sūq* surpassed the commercial aspect of markets, and became an important cultural centre and seasonal platform. The Quraysh turned it into a venue for poetry writing and reading, speeches and for discussing tribal disputes with governing parties. As its functions expanded and flourished, 'UkāΩ became akin to a theatre for eloquent speakers and poets, a fact dated by Farīd Wajdī to 540 AD.<sup>11</sup> The benefits of 'UkāΩ to the Quraysh exceeded the economic and social gains by, to a large extent, influencing the cultivation of the Arabic language, so that its dialect was considered the purest of Arab dialects, devoid of complexity and incongruity.<sup>12</sup> The importance of Makkah and 'UkāΩ as prominent cultural centres of the era was to set a precedence in the tradition of the *Mu'allaqāt*, the seven finest poems selected by the Arabs to be written in gold and hung upon the drapes of the Ka'bah to honour the poets. This poetry has since been established as the finest classical poetry in the language, dated to the Jahiliyyah

period. Naturally this enhanced Makkah's cultural and economic role from a very early period, prior to Islām.

Other *sūqs* of importance were the *sūq* of Dhī al Majāz in the vicinity of 'Arafah, and the *sūq* of Majinnah near Makkah.<sup>13</sup> Makkah was clustered in the following quarters: al Shāmiyyah, al Shbaykah, al Qarārah, al Qashāshiyah, Ajyād, al Mafalah, Jrül, Óarat al Bāb al Sulaymāniyyah, Shi'b 'Āmir, Shi'ib 'Alī and Sūq al Layl.<sup>14</sup> The old streets enjoyed the shade and coolness of narrow meandering alleys, some of which were partially covered with vaults, and some completely covered, for example Suwaqat al Shāmiyyah, al Mas'a (where the markets were located), the new Khān, al Yūsifī Khān, al Marwah and al Mad'ah.

The old gates of the Óaram had distinct characteristics, some of which are still apparent. Al MuQallalah (shaded) gates, for example Bāb Qāytbāy, Bāb al Duraybah and Bāb al 'Umrah, led pilgrims and visitors to the court of the mosque through a dark tunnel. Bāb al 'Umrah was characterized by the abundance of *al zamāzim* (the zamzam water bearers) and ablutionary areas. The large gates, Bāb al Salām, Bāb Ibrāhīm and Bāb al Ziyārah, opened onto street level, receiving the large number of visitors from the residential areas or main entrances to Makkah al Mukarramah. Beside the doors, public libraries were set up, for example at Bāb al Salām.

The traditional character of Makkah was preserved until AH 1344/1925 AD.<sup>15</sup> The writings of travellers to the city give a fair descriptive account of its traditional architecture and quarters, especially Niebuhr (AH 1174-1181/1760-1767 AD), Ali Bey (AH 1218-1222/1803-1807 AD), Burckhardt (AH 1230-1232/1814-1816 AD) and Burton (AH 1270/1853 AD). Contemporary Makkah has passed through a number of planning stages, which can be outlined as follows:

In the period AH 1344-1375/1925-1955 AD, the city grew informally in directions devoid of the natural mountainous barriers, through the opening known as Jabal al Ka'bah to Óarat al Bāb and Jrül in the north-west, and through al Ma'lā to al Sulaymāniyyah and al Óajūn, al Jummayzah and al M'ābdah in the north-east, and to al Masfalah in the south. The new quarters were an extension to the planning of the Óarah and its functional aspects with closed façades. The narrow paths between the houses were wide enough to accommodate camels heading to the mountains. In AH 1371/1951 AD the water of Wādī Fāṭimah was extended to Makkah.<sup>16</sup>

AH 1375-1384/1955-1964 AD was a primary planning phase which witnessed the construction of new quarters on the western, eastern and southern borders. These were known as al Êandabāwī, al M'ābdah, al Malāwī and the extension of al Masfah to the south. It was during this era that wide streets and multi-storey buildings were first constructed.

In AH 1384/1964 AD, a renewal phase was set in motion to develop the urban fabric of the city. Socio-economic plans and architectural studies were conducted in order to establish the first general town plan for the city. The planning strategy was based on accommodating the population increase and the increasing number of pilgrims which was projected at two million by the year AH 1412/1991 AD. It also took into consideration the expansion of the flat area to the east and south of the city, due to its topographical nature. The master plan also included the development of a road network linking Makkah, Jaddah and al Êā'if with other cities, with a main road cutting inside the city and a circular internal road surrounding the central area.

After AH 1412/1991 AD, the development of the master plan was mainly concerned with housing, the *muṭawwifin* (those who guide the pilgrims in the 'ajj rituals), and pilgrimage agencies, in addition to low-cost housing provided for pilgrims arriving by overland routes or workers in the Kingdom. High-rise buildings and the problems which ensued with their construction was also considered in this study. Other aspects covered related to the central area and the necessary commercial and cultural services, in addition to the accommodation of religious functions, while any industrial activities were prohibiting within its fabric. The area surrounding the Óaram was designated for pedestrians only. Finally the plan took into account the preservation of the city's traditional urban fabric, historical landmarks and those remaining

quarters in the vernacular architectural style (such as Óayy al Shabaykah, Óârat al Bâb, al Ma'âlâ and al Shâmiyyah).<sup>17</sup>

At the time of the Second Extension the planning directives and development recommendations were particularly concerned with legislation to limit the heights of high-rise buildings in Makkah, removing the upper floors where necessary, and the adoption of an architectural style and form which would correspond with the heritage of the site and its importance. This approach favoured the vernacular renderings and style of whitewashed housing with lattice screens, conserving the privacy of individual housing while achieving design solutions for the harsh environmental and climatic conditions. The plan included the renovation of historic buildings and the preservation of their built surrounds and attached open spaces, taking into account the relationship with adjacent new buildings, in order to control the development of these structures and ensure a certain continuity with the characteristics of the urban fabric. Amongst the recommended historical locations and mosques for preservation were Ghâr Óarrâ, Ghâr Thawr, Masjid al Râyah, Masjid al Bay'ah, Masjid al Kawthar, Masjid al Jinn and Masjid Bilâl.<sup>18</sup>

### **Conceptualization of the Project**

The architectural composition of al Masjid al Óarâm was the result of successive architectural styles developed throughout the Islamic eras. The design was thus inspired by rich elements this architecture had encompassed and applied in its artistic and geometric vocabulary. Whether manifested in arches, the *muqarnaß* stalactites, or other essential components that formed the language of this architecture, these elements were adapted incorporating different scales and materials. In this quest, the design could have benefited from architectural principles of design and their revival, in a selective form, instead it merely relied on the eclectic transfer of traditional forms.

In a similar vein, the international style of post-modern architecture recognized anew certain classicist forms of reference (albeit the application was strictly ornamental as opposed to spatial or functional), endeavouring to embellish the abstracted nature of the architecture of the late 20th century. This may have only delayed the course of revival, however. The lapse of the historical context within modern design became arbitrary rather than implicit.

The final composition of the building with its New Extension strived to be both innovative and unique. The design of al Masjid al Óarâm had to entertain the basic principles of mosque architecture and the influence of the Islamic architectural models as source of inspiration. The New Extension of al Masjid al Óarâm could have also represented a modern architecture, with specificities of design and the dialectics posed in the poetics of its space, based on the genius of architects and the skills and precision of a building art which was manifested in the varied styles and forms of the Islamic architectural civilization.

Thus, it was essential that any subsequent work responded to the criteria set by classical examples of mosque architecture, while simultaneously becoming an integral part of the surrounding environmental and urban fabric. The Ka'bah al Sharîfah, al Masjid al Óarâm and the surrounding structures, situated against the natural background of the mountains on the horizon, are woven into a spectacular complex which creates a strong visual impact. On the other hand, the open spaces around the New Extension should have ensured an appropriate separation zone from the structural mass of urban development on the borders of the Holy site.

### **Design and Planning Constraints**

The complexity of this project lay in the need to understand the language of mosque architecture, with its regional and historical variation, in order to establish a concept of design that complies with the exceptional spiritual and contemporary design criterion. The treatment of

the Óaram complex, moreover, is to be carefully considered in terms of planning constraints and parameters, rich in focal points and essential landmarks that have a direct bearing on the visual, spatial and material aspects of the architecture, governed by spiritual and intellectual components.

The design therefore needs to define a conceptual framework for this religious centre, enhanced by being the space of contact between the worshipper and origin of Islām.

It was also contingent upon taking into account the variant cultures of the Islamic world, each with distinct characteristics, that flood into Makkah, united by the ritual of the pilgrimage and a belief in Islām. These very cultures have contributed to the heritage of the mosque architecture which flourished under Islām and which developed the framework of both traditional and contemporary design. Previous cultural influences which existed throughout the historical building and rebuilding of al Masjid al Óarām and the various Islamic dynasties, were dedicated, as at the Masjid al Nabawī al Sharīf in Madīnah, to introducing excellence, be it in the choice of building materials, *kiswah* cloth, calligraphy, ornament, or in the actual design and construction.

Contemporary architecture and its discourse, is further governed by this historical precedence in order to establish the required concept for the architectural space within the aesthetic, symbolic and functional realm. Subject to these serious design challenges, the architect is faced with constraints relating to the aspired quality of a unique edifice. In the city of Makkah the Blessed in particular and the Sa'ūdī Kingdom in general, architectural projects have flourished in the past decades, generating monumental edifices to modern architecture. However, the influence of this modernity and the development of its urban context does not necessarily reflect upon the design of the Holy Mosque, with the exception of the fact that the complex had to make use of technological advances in order to facilitate both the construction process, fittings, finishes and infra-structural services.

These interrelated social and cultural nuances provide the initial design considerations for the Extension, and assist with establishing an architectural vision for a contemporary and future landmark.

Despite the privileged location of the new building, the development of the area has to take into account the Makkan context and landscape, that requires additional consideration and a certain design skill. This is tangible if one approaches the building from different angles, as when grasping the wide openness of the space on the interior, or against the exterior environmental backdrop and skylines viewed from the surrounding arcades. The sharp geometry of the building complex, the cubic Ka'bah, combined with the general straight and specifically inclined surfaces of the Mas'a, taken up by the right angles of the minarets at the building's corners, contrast this mass and form with the environmental features of the site.

Superficial rendering was applied to the exterior of the building and its surfaces, particularly the treatment and use of building materials and related technical aspects, most of which were locally produced. This is apparent upon entering the building and approaching the Ka'bah, distinguished by an austere treatment when compared with the quality of materials rendered in the execution, construction and finish of the New Extension.

The preservation of the Ka'bah's unique and original form necessitates a neutral finish, to blend simultaneously with the surrounding spatial forms and finishes, a complete contrast to the rich embellishment of the *kiswah*, embroidered in interlaced calligraphic scripts of exquisite beauty and unsurpassed excellence: a reflection of the Divine inspiration that marked the inherent geometry and art of Islamic architecture.

### **A Note on The State Mosque**

In addition to becoming a focal space for congregation during religious occasions of particular significance, the mosque creates an exclusive environment on the cultural, social and

communal level open to all worshippers and seekers. The culture of the Jāmi‘, the Central Mosque,<sup>19</sup> as opposed to the Masjid or the mosque constructed in every quarter, is after all an early Islamic urban concept. One that was always marked by royal patronage and the establishment of learning institutions or madrasahs. These played a prominent role in advancing the structure of knowledge and scholarship.<sup>20</sup> Furthermore the seclusion of the mosque enhances contemplation and meditation, evoking the practice of remembrance in seeking spiritual knowledge attained through the heart, the seat of learning.

In essence, the walls of the monument are only a distinct endorsement of the spiritual enclave that is attached to a higher realm of learning, endowed and inspired by Islam, above the streets and clamour of life’s transient reality. Its architecture has to be imbued with the spirit and nature of beauty in Islam, as testified to in the excellent architecture of the grand or central mosques established in Islamic cities. The legacy of this tradition was firmly established with the “canonical mosques”<sup>21</sup> of Al Walid I (d.96 /715) in Jerusalem, Damascus and al Madīnah al Munawwarah during the early Umayyad dynasty, and continued to flourish with Sammarra and Cordoba exploring previously unmatched creative depths of expression and innovation, in form and structure. By the 16th century, the royal mosques of the architect Atik Sinān had become the emblem of the “imperial architectural idiom” of the Ottoman period. Notwithstanding the prolific and erudite architectural styles (Moghal, Mamluk, Safavid or Seljuk) and derivatives that emerged and flourished in between, across from the western to the eastern edges of the Islamic empire. In fact the criterion of this mosque, in terms of the emulated artistic expression, and the permanence factor, owes much to the broad and free spirit which was invested in the aforementioned outstanding mosques [which capitalised on ancient traditions] that brought in and paid tribute to universal cultural traditions in the concentration of the supreme arts of the day that were employed.

Hence any modern project has to contend with an established architectural legacy that informed a rich and sophisticated matrix. This includes the history of the mosque-madrasah complex which established an important architectural paradigm.<sup>22</sup> In the cities of Arabia there was no architectural precedence for this building, that flourished in urban Islamic cities, like ‘Abbasid Baghdad, al Qayrawān, Isfahan and Fās.

#### Notes

1. DAMLUJI, S. S. (ed.), *The Architecture of The Holy Mosque of Makkah*, Hazar Publishing Limited, London 1998.

2. Founded by the Caliphs Abdul Rahman and Hisham I (785-796) the building was continued and expanded from 961 to 990. The architecture revealed unprecedented discipline and rigidity of space. As Robert Hillenbrand eloquently noted, “architects explored subtleties of lighting, repetition and rhythm to a degree rare in mosque architecture...” (*Islamic Art and Architecture*, London 1999, pp. 172-174).

3. A recent article by this writer, published in *Al Ayyām* (Aden, 28th and 29th January 2006) elaborates on this major shortcoming in Arab countries where State Mosques have been constructed over the past decade, following the construction of the Makkah and Madinah Mosque extensions. See also DAMLUJI, S. S., *The Architecture of the United Arab Emirates*, Garnet, Reading 2006, pp. 23-30.

4. See DAVEY, Peter, *The Architectural Review*, March 2005, p. 51.

5. [www.abrajalbait.com](http://www.abrajalbait.com) listed as a forbidden site to this writer when attempting to access. See [www.skyscrapercity.info](http://www.skyscrapercity.info).

6. Jan: Rotterdam, December 2004.

7. “Mecca Conference Criticized for Hypocrisy on Holy Site Destruction”, by Sherrie Gossett, Cybercast News Service/ CNSNEWS.com, 9th December 2005.

8. *Islamica Magazine*, [www.islamicamagazine.com](http://www.islamicamagazine.com). An article by Irfan Ahmad, and another on “the destruction of the House of Khadijah”, unsigned, and a comment on “Rumours of archaeological discoveries...” by Mohamed Zakariya. All three reiterate a number of stories that are not officially documented but have been well-circulated amongst scholars and academics, including oral reports from contractors working adjacent to the Holy Sites.



9. An edited version of this text was published in Damluji, London 1998.
10. FĀRSĪ, Mu'ammad Sa'īd, *Pilgrimage Cities*, 1984, p. 62.
11. WAJDĪ, M.F., *Encyclopaedia of the 20th Century*, in AL KHALĪLĪ, Ja'far, *Mawsū'at al 'Atabāt al Muqadassah*, vol. II, *Makkah*, 1987, p. 50.
12. AL KHALĪLĪ, Ja'far, *op. cit.*, 1987, p. 50.
13. *Ibid*, p.51.
14. Fārsī, Mu'ammad Sa'īd, *op. cit.*, p. 26.
15. *Ibid*, pp. 62-63.
16. *Ibid*, pp. 66-67.
17. *Ibid*, pp. 68 and 70-72.
18. AL BATĀNÜNĪ, M.L., *Al Ri'lah al Ójjāziyyah*, second edition, 1911, pp. 68 and 72.
19. This text is an extract from DAMLUJI, S. S., *The Sultan Qaboos Grand Mosque*, chapter II, Muscat 2000, forthcoming Apex publishing.
20. "The traditional university in Islamic cities was very closely connected with the mosque. Indeed, the earliest and some of the most famous universities were housed within the precincts of mosques. Some of those which still survive are al-Azhar in Cairo (founded 361/970), the Qarawiyyin in Fez (founded 226/841 but largely dating from the twelfth century) and al Zaytūnah in Tunis (founded 250/864). Originally, it was the teaching of Islamic scholars and scientists that brought learning into the mosque. Even when the mosque began to be superseded by the *madrasah*, a purpose-built institution of higher education providing both teaching and residential facilities, the *madrasah* often remained located within or immediately beside the mosque, maintaining the close connection between worship, scholarship and learning. The *madrasah*, and mosque-*madrasah* complex, became one of the essential architectural focal points in the structure of the Islamic city." (DAMLUJI, S. S., *The Architecture of Oman*, Garnet, Reading 1998).
21. "[...] within a hundred years of the Prophet's death the guidelines for the future development of the Arab Mosque plan had been laid down [...] the Umayyad caliph Al Walid I [...] was responsible for a trio of strategically sited mosques which consolidated earlier experiments and introduced several features which were quickly to become canonical [...]" (HILLENBRAND, Robert, in *Islamic Architecture*, p. 68, also see pp. 68-73, Edinburgh 1994).
22. "The 'Abbasid *madrasah* (or *Jāmi'ah*) of al Mustanṣiriyyah at Baghdad (completed in 630/1233) set a precedent in the Islamic world by establishing the concept of an elitist institution of higher education with an architecture appropriate in design and style. The architectural concept, essentially ruled by geometric proportions... was to influence the design of similar buildings across the Islamic world... As well as teaching the disciplines of the Qur'ān, [the science of fiqh] and 'adith, al Mustanṣiriyyah began the multidisciplinary teaching of various sciences and subjects that included Arabic, medicine, health and mathematics. The building (which accommodated 300 students) housed a library, an *'ammām* (bath house) and a hospital. Unprecedented in size and architectural design (it took six years to construct and cost 700,000 dinars), the building, whose patron was the Caliph al Mustanṣir (623-640/1226-1242), according to Hillenbrand's befitting description 'explicitly claimed universal status'." (DAMLUJI, S. S., *The Architecture of Oman*, Garnet, Reading 1998).