#### 1986 TECHNICAL REVIEW SUMMARY

Bhong Village Mosque Complex Bhong Village , Pakistan

717. PAK.

Date of Completion: 1982

#### SUMMARY

Between 1930 and 1980, the landlord of Bhong, an estate in the southern end of Punjab, Pakistan, undertook construction of a grand mosque as part of a complex that included a smaller mosque (built first and now used as the women's prayer hall and library), gardens, a madrasa and dormitories for students and visitors. In the same period, he also undertook several major works for the village (irrigation works, a market) and a palace and guest house for his own estate. He is known to have expressed his desire that the grand mosque be a superlative undertaking, and to accomplish this he followed models of erudite architecture with which he was familiar (from Lahore to Iran, and from Spain and Turkey). He engaged craftsmen from various parts of the country and established a workshop in the village which, at its peak, counted more than one thousand workers, over 200 of them being skilled craftsmen. Two generations of craftsmen were trained here, and some of them have been employed in the restoration of monuments by the government.

The end result reflects the intention of utilizing, within a classic framework, the best of as many traditional crafts as possible; at the same time, it shows the influence of western styles and usages of materials. This is bolder in the ancillary buildings (the gates, or the small mosque), but appears in the grand mosque, as well, where the decoration of the porch blends traditional decoration with western materials. The interior of the grand mosque is richly decorated, and makes use exclusively of traditional materials and crafts.

The complex is well integrated with surrounding constructions, and is widely used by the local residents and by a steady flow of visitors. The madrasa was an important regional centre of learning until the 1960's, but its importance has declined with the diffusion of secular education.

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# I. OBJECTIVES

To create a congressional mosque in the village of Bhong that would appear as an outstanding building;

To create a local centre of learning;

To create an employment centre, namely in the field of building crafts ;

### II. DESCRIPTION OF SITE

# A. Topography and climate

Bhong is the name of a large estate in the Rahim Yar Khan district, where Punjab meets Baluchistan and Sind. This is a region of large estates and powerful landlords some of whom could, until the independence from the British, boast of artillery in their private armies. It is a flat, hot and dry area, but fertile where irrigated with water channeled from the river.

The estate covers several scattered villages, the most important being Bhong village proper where the landlord has his quarters. The village (5,000 people), the mosque complex, and the landlord's compounds are all surrounded by a wall with three gates opening to the village and one, on the opposite side, to the landlord's compounds.

# B. Historical background

The following account is based solely on information provided by the present landlord (son of the builder of the complex) and his family, since there was no means of checking it against other sources.

Early in the 1930's, the landlord of Bhong, Rais Ghazi Muhammed, built a small mosque on the grounds of his property and immediately afterwards undertook the construction of a big house - henceforth designated as 'the palace' - for himself. As construction of the palace proceeded, he decided to demolish the mosque and build a larger one, on a platform raised from the ground. The reasons presented for this were two: one to prevent infiltrations from the ground; the other, that the temple be not overpowered by the palace. This mosque is the one that now shelters the women's hall and the library. However, he apparently felt that this building was not sufficiently grandiose to compete with the palace ("the house of God should be higher than my own") and proceeded to build a larger mosque, set on the same platform. This became the main prayer hall as we see it today.

Other works followed. One has to understand that the great mosque was not an isolated building, but part of a series of construction projects undertaken by Rais Ghazi in the course of several decades. For the village, he built irrigation works, a road, and the market; in his compounds, he built the palace, the mosques, a madrasa and rooms for students and guests, a house for family guests and service quarters, and, in addition, a few small mosques on the way to Sadiqabad (the nearest town) and in Sadiqabad proper, as well as the shrine next to the tomb of Shah Rukn-i-alam in Multan.

He pointedly wanted to make the mosque the most glorious of these buildings, and he sent for materials and craftsmen that would be up to the enterprise. He followed the models of his time and it is a curious mixture between the styles of the western early 40's adopted for the guesthouses and market, and the traditional forms borrowed from the great structures of Lahore or Iran that he used in the mosques. The palace itself is a hybrid of colonial architecture, local decorative techniques and modern materials and an important contribution for the understanding of the mosque.

Rais Ghazi eventually moved out of the palace and went to live in the 'ullama quarters of the mosque where he ended his days.

## C. Local architectural character

Excluding the urban examples best represented by Multan, the architecture in the region is characterized by a rural type of one room, one storey mud or baked brick buildings opening to a court enclosed by high walls, which may take additional buildings as the need rises. The external decoration of the houses is subdued, consisting mainly of some treatment of the main façade (opening to the court and organized symmetrically around the main door and windows on both sides), and of the ventilation openings — either by bricks bordering ventilation holes, or by the precast cement grills that are so popular in the towns.

Villages are made of clusters of this type, and their skylines are identified by the domes and ornamental small minarets of their mosques. These are contrastedly decorated on the exterior in variable degrees, and colour and sheen play an important part.

Decoration, so restrained in the external image of houses, has to find other outlets, in a country that is a continuous whirlwind of colour and light. Means of transportation are favourites - trucks, buses, horsecarts, rickshaws, bicycles - each of them providing its own framework for colour and formal variations: stripes around a bicycle frame, peacocks made of patchwork and bright studs on the canvas of a rickshaw, ornate aluminium cusped arches framing the windows of buses with their appliqués of flowers and birds in coloured plexiglas, idyllic scenes painted on the panneling of trucks and horsecarts, etc.

This popular taste for intricate and colourful decoration has its respective counterpart in the places of power or prayer. Highly decorated, to the point of saturation, three-domed mosques with a large number of small ornamental minarets marking the entrance and the corners are fairly common in the Islamic part of the Indian subcontinent. In this, the mosque of Bhong follows a well-defined formula.

### D. Access

When construction of the mosques started, Bhong had no links with the rest of the country. Nowadays, it is accessible by a small paved road built by the landlord from the artery between Karachi and Lahore, and by train (a station is in Sadiqabad, 25 kms to the east). Between Sadiqabad and Bhong, there is a regular bus service (4/5 times a day). The major bus fleet - 10 buses - belongs to the landlord and his family; this started with the traffic created by the mosque, and is now operating at a profit.

## III. DESIGN AND CONSTRUCTION

### A. Architect's brief

A congressional mosque and ancillary services (madrasa, students and visitors' rooms, 'ullama quarters, library, ablution places and garden) comprised the basic programme.

### B. Evolution of design concepts

The process that led to the construction of the grand mosque is described above in Section II.B. The complex, by its own nature, was conceived to stand out rather than to blend with adjacent constructions.

Both mosques have large windows and doors on all sides and are oriented so that they benefit from seasonal SW to NW winds.

As said before, the mosques are set on a platform raised some three metres from the ground (part of the space under the platform is used as a basement for storage and provided occasional living quarters for labourers during construction). They define the eastern and western sides of a courtyard accessible, from the other two sides, by stairways. On the south side, the stairs lead to a forecourt, at an intermediate level, with a covered round ablution pool, a school room and the 'ullama quarters. On the west side of this intermediate court, a flight of stairs descends to the madrasa and student/guest rooms, and on the east to a distribution space with the gates to the palace, family guest quarters and the mosque garden. The stairs on the North side are the main access to the mosque garden and the great gate to the village.

The complex is fully used by the local population and has become a major regional attraction drawing a small but regular flow of visitors from various places. The madrasa is still functioning although with less importance than it had in the past: at its peak, students came from Turkey, Afghanistan and Iran and, until the 60's, it was the main centre of learning in the region. The library consists of a room with a couple of locked cabinets containing Rais Ghazi's personal collection of books, including some precious copies of the Koran. The books can be consulted upon request to the landlords.

The ensemble is dominated by the massing of the two mosques, whose roofscapes are defined by the domes and the multiple ornamental minarets. The larger mosque, although much bulkier, does not overpower the other and, in fact, the two complement each other in terms of massing and the shaping of a space. Some spacial relations are easily identifiable when looking at the plans: thus, for instance, the proportion of the platform is based on a relation 2:3, as is that of the courtyard in which the dimension "2" of the platform becomes the "3" of the courtyard. This and other relations are visible both in the emplacement of the buildings and in their own proportions, as partially illustrated in the attached sketches.

There is the intention of displaying the best of as as many traditional crafts as possible at the same time that important contributions are made by materials and styles being developed by western influence. This is particularly visible in the gates to the courts, in the interior of the main gate and in the exterior of the small mosque.

Externally, the two mosques are treated in very different ways. Whereas the first and smaller mosque is almost entirely covered with glazed tiles of many origins and in many combinations, the walls of the mains mosque are treated in lusterless materials: marble, in the porch, and marbleized cement tiles covering the bulk of the building. In this, the predominant ornamentation is confined to underlining the main angles with Multan glazed tilework, which is also used for the minarets and for the decoration of the white washed domes on both mosques. In the porch, however, detailed decoration is multiplied by a great variety of materials, techniques and combinations, extending to the interior in an ever-increasing complexity of patterns, sheen and preciousness of materials.

The interiors are predominantly treated along traditional models: in the smaller mosque painted calligraphy in the walls and floral motifs in the walls and ceiling co-exist with marbleized industrial tiles; but in the grand mosque, in which the whole spectrum is used, from wall painting to mirror work, gilded tracery, etc, innovations, both of materials and of forms, tend to concentrate on the porch and blend with the traditional in an elaborate decorative fabric.

It seems that the architect had the intention of amalgamating in the complex all possible styles that he had encountered through his travels and his erudition. The manifestation of this comes at the textural level. All surfaces of the mosques and accessory constructions (pond, gates, stairs) are profusely decorated mixing various materials, technologies and styles. Traditional motifs are interpreted in traditional techniques - mirror and glass work, glazed tiles, various types of calligraphy, etc. - all along with versions in contemporary materials: artificial stone, industrial tiles, etc. Calligraphy plays an important role and appears in glazed tiles,

carved stone, mother of pearl inlays, painted in the walls and glass, in glass mosaic (the interior walls of the prayer hall are topped all around with the 99 names of Allah in glass mosaic), etc., using Kufic, Turkish, Iranian and local types of script, side by side.

The mosque garden (6400 m<sup>2</sup>) is geometrically organized along two perpendicular axes defined by water ponds. The main axis connects the courtyard with the main gate to the village and is intersected in the middle by the secondary axis which leads to the side entrance of the garden (and from there to the madrasa and to a secondary gate to the village). The whole is pleasantly grassy and shaded by large trees and widely used by locals and visitors. The ablutions area is set in a covered recess of the wall, to the left of the main entrance, and consists of a row of taps and foot-rests along a shallow trough.

# C. Structure, materials and technology

### Foundations:

brick masonry with cement mortar.

### Walls:

brick masonry with cement mortar; brick and stone arches.

## Roofs:

reinforced concrete. Brick domes are set, as independent domed rooms, on top of the reinforced concrete roofs.

### Finishes:

marbleized cement tiles for the main portion of the external walls of the great mosque;

in the porch, the pilasters and arched tympana are faced with carved marble, slender columns are onyx, as is the floor paving, and roof parapets are carved in marble;

the courtyard is paved in white marble, with coloured marble inlay;

glazed tiles of the Multan type are used to face domes, pilasters, minarets, roof parapets, and around windows and doors in both mosques and in the main gate;

bas-reliefs in glazed ceramics are placed in the tympana and in the crests of the gates;

# Finishes (continued):

the walls of the small mosque and gates and the ceilings of the courtyard gates are faced in ceramic tiles, both imported and of national production and dating from various periods between the 1920's and the 1970's;

some tympana, columns, and pilasters are faced in artificial stone with calligraphic and/or floral inlays;

the floor and stair paving in the smaller mosque and gates is in terrazzo and patterned and coloured cement tiles;

painted decoration of floral motif is found on the interior walls of the mosques and on the roof of the structure above the round pond;

much use is made of calligraphy, which at times is carved, painted, glazed, or inlayed (in mother of pearl or glass);

coloured glass and mirrors are used in the stucco and wood tracery of the walls and ceilings of the main mosque;

the mihrab of the main mosque is gilded and gold-painted;

doors are of local teak, and Burma teak and ivory are used for inlays;

coloured glass is used in the wooden tracery of doors and fanlights in the main mosque;

the courtyard gates are wrought iron with aluminum facing, with marble plate "cloisonné";

(A more detailed description of the materials and the places where they are employed is shown in appendix 1.)

#### D. Origin of Materials, technology and labour force

When construction was begun, there were no roads, no electricity and none of the majority of the materials employed. These were brought in bulk via the river (then located a mile away, and later diverted) and then carried by ox-cart to the construction site.

Bricks and wood - except for some Burmese teak - were from the region. Marble came from Peshawar and Quetta, except for black marble, which was imported from Europe. Glass and mirrors came from Karachi.

A construction site was set, and craftsmen were sent for from several places.

The master mason was from Bekanir, in Rajasthan, India, as were the masons for marble work; other masons were from Multan. Multan also provided most of the special crafts (glazed tiles, glass mosaic, woodwork, painting, etc.). Karachi provided painters and calligraphers; Bhong itself provided craftsmen for the artificial stonework, and the majority of unskilled labourers. It is estimated that at the peak more than 200 qualified craftsmen were working for the whole complex - mosques, palace, and ancillary buildings - which, with apprentices and unskilled labour, brought the total force to about 1000 men.

The construction site consisted of several workshops some, of which have been incorporated into the farmhouse complex of the landlords. The architect and landlord, Rais Ghazi, closely supervised all aspects of design and construction (e.g., he would have the craftsmen make samples of their work, and only after approval would they proceed to the final job). The buildings were laid out without preliminary drawings, and only at a later stage was a draftsman hired.

### IV. CONSTRUCTION SCHEDULE AND COSTS

Construction of the complex was begun in 1932, and was completed in 1982 (great mosque). The cost is estimated at more than 10 million Rupees, totally financed by the landlord and architect.

# V. TECHNICAL ASSESSMENT

- A. The mosque complex performs well as a religious centre and a focal activity point for the community.
- B. It was not possible to assess climatic performance in summer. As mentioned before, the mosques have ample openings on all sides, and are oriented so that they catch the prevailing winds. Ceiling fans are used in the main prayer hall. Direct light is regulated by wood shutters, and fanlights with coloured glass on wood tracery in the western side of the main prayer hall.

C. Materials were chosen with attention to quality, sound performance and ornamental value. The marble balustrades of the roof on the main mosque are finished only on the outside; this, apparently, is a common device to cut costs.

Maintenance of the mosque is claimed to be continuous. Ageing problems have appeared on the glazed tiles from Multan, with flaking of the surfaces, in some points. One important aspect is that of the water - or the lack of it - in the pool of the forecourt and the ponds in the garden. The former is dry, apparently for hygienic reasons, as people tended to foul the water; the latter are usually dry because of the limited supply of electricity to power the pumps.

In both cases, an important feature is lost, particularly in the case of the forecourt pool in which the water was to reflect the elaborate paintings of the ceiling.

E. Design features were highlighted in Section III, B.

#### VI. USERS

The villagers of Bhong and visitors from varied origins.

### VII. AESTHETIC ASSESSMENT

The intention of this project, as repeatedly stated by the architect's descendants, was to create a monument to the greater glory of God. The masses of the complex are imposing yet do not overpower the neighbouring constructions. In this, the creation of a raised platform, unusual in this type of mosque, was a major achievement.

In the basic framework of traditional models, materials and crafts adopted for the mosques, the architect wove a decorative composition dictated by his fantasy and his interpretation of traditional as well as of western models of his time. Therefore, forms, styles, and materials appear often associated regardless of their rank in a conventional hierarchy of 'nobler to less noble' (in which, for instance, carved

marble is at the top and cement tiles at the bottom; frescoes at the top and standard 'bathroom tiles' at the bottom). Yet, on one hand, techniques and materials that are usually associated with lower grade construction are developed to a rather refined point - such is the case of artificial stone and the variety of inlay work it allows; on the other hand, in a culture where surfaces saturated with decoration are the leit motif and an obviously desirable goal, to utilize standard patterned materials both to cover large surfaces, as in the case of the interiors of the gates and the exterior of the small mosque, and as interstitial punctuations - as happens in the porch and to a certain extent in the main gate - seems probably an irresistible proposition to an unprejudiced mind.

The ultimate purpose is grandiosity. Grandiosity is associated with a number of values - such as bulk and the preciousness of materials, for instance. Preciousness is associated, among other things, with rarity of materials, complexity of technique, sheen, and colour.

Thus, the ideas that in practice seem to regulate the presence of the mosques are that their bulks be imposing and proportionate, that they carry the visible signs of their function (domes and minarets), that sheen and colour abound, and that they be in every respect visually entertaining or edifying for the quality and diversity of materials, the ingenuity of their treatment, and dramatic overall effect.

On one hand, one admires the ease with which the architect mixed sometimes contradictory elements; in some instances, it seems that there is a purposeful design against an established order (e.g. some of the medallions in the courtyard floor, made in regular diamond patterns of black and white marble, next to which others appear with the marble elements disposed at random, as if the pattern had exploded); on the other hand, the usual questions come to mind about the line that separates ingenuous exuberance from sheer ostentation.

The quality of some of the individual components is not outstanding (Talib Hussain, the director of the workshop at the tomb of Shah Rukn-i-alam, had reservations about the quality of the calligraphy and painting, for instance); and there are unpleasant presences, such as that

of the aborted minaret that stopped at being the staircase to the mosque roof. The buildings lack the discipline of essentials that would make them model pieces of erudite architecture, and the inocence to be taken simply as naive creations; nevertheless, in the context of its environment, this is a successful project and a daring statement.

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