

SHEREFUDIN'S WHITE MOSQUE, VISOKO, YUGOSLAVIA
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Objectives

- I. In the formulation of the prevailing ideas of his design concept, the architect put the accent on the contemporaneity both in technological and expressive terms. He has emphasized translating the basic functional organization and the spiritual and symbolic meanings inherent to Islamic sacral buildings into a modern architectural formal vocabulary. This shows his clear choice of a search for a new spatial and morphic arrangement and a complete refutation of any element or form borrowed "tél quel" from the traditional vocabulary.

II. Description of Site

- A. A topography of site and climatic conditions.

The town of Visoko is located on the south-eastern end of a valley. The rivers of Fojnica and Bosna run through. The topography of a plain as well as the micro-climate which is a mixture of Mediterranean and continental characteristics provide favorable conditions for agriculture. Summer season has a moderate climate, while winter is generally rainy, relatively cold with frequent snow falls.

- B. Historical background

The recent history of the small town goes back to late medieval times; earlier settlements dating from neolithic age were also discovered in the area. From the middle XIV. century, it became a trade exchange center of the surrounding cities. Its location on a caravans' passage helped its development. A commercial colony of people from Dubrovnik lived there, contributing to the economy of the town. Visoko has often been the capital residence of the Bosnian kings during the period of the independent state of Bosnia. Besides the agricultural activity, leather has been the major production of the town. These manufacturing and trade activities continued during the Ottoman period (1463-1878) which gave the town its Muslim character.

Seven small mosques were built, corresponding to the typical social and spatial organization of the community in quarters or "mahala".

The prevailing Muslim character of Visoko continued after the Turkish times. The great majority of the population of the town, exceeding 30.000 people, are still the Muslims, and the mosques shelter a lively religious activity. Some of these buildings have already been restored whereas some were replaced by new ones.

C. Local architectural character

In 1911, Visoko had a big fire which destroyed most of the houses. It can be assumed that these were similar to the existing traditional houses of many neighbouring historic "Bosnian" towns, best examples being in the capital city Sarajevo.

This domestic architecture of wooden houses also common to most Ottoman Balkanic towns and to some extent to Western Anatolia did not survive in Visoko. The architecture of the remaining old local mosques also follows the same style and typology common to the above mentioned cultural area. The new houses built after the fire are two storey masonry structures with pitched roofs. They communicate the influence of a more urban and modern architectural and technological tendency.

However, the old spatial morphology which has disappeared in the typology of the houses of Visoko, still remains in the urban scale. While the formal and constructional features have changed, the scale of the houses and their relation with open spaces, i.e. streets and backyard gardens remain the same. These facts also help the relation of the residential fabric of the town to the mosques, keeping the same scale.

D. Access and approach to the site

The main road to Visoko passes through the town and its market area, namely the "čarsija" in which the complex is located. The old Sherefudin mosque was also there, surrounded by a series of shops, as one can see in old pictures. The new one as well as the plan of the building plot on which it was built are based on the same setting idea, allowing a lateral approach and an indirect access to the mosque, surrounded by rows of shops which give it an introverted atmosphere. A small plaza on the western side precedes the entrance of the outer court of the mosque.

Some of the shop blocks of the development plan for the triangular plot on which the mosque is situated have been built. (by architect Oruc Ibrahim). They reflect a certain neo-traditional or pseudo-vernacular architecture. But the construction of the whole market complex is not yet accomplished.

III. Design and construction

A. Functional requirements

After the destruction of the old mosque - which was the largest of the seven mosques of Visoko - building a new one was a must, and the Islamic Community of Visoko - which seems to be a strong organization - decided to rebuild it.

It was decided that it should still be the biggest one and even larger than the old mosque. The fact that the community practices their religious activities, defined a more voluminous praying space. The decision also corresponded to a current period and tendency in Yugoslavian social politics of giving a new emphasis to religion - especially for Muslim communities of Macedonia and Bosnia - Herzegovina - and it was also decided that the program provides space for a larger cultural and intellectual activity: Originally the program defined an annex building which housed offices, a koranik school and an assembly room. Then, this decision was changed for a public library. However, the basic idea remained the same: rebuilding the central mosque of the town, conferring to it the quality of a wider intellectual center for the community and integrating it to the surrounding activities, thus leading to the creation of a new complex (kulliya) in the town.

B. Evolution of design concepts

1. From the preceeding lines, it becomes obvious that the site plan for the mosque was at a large extent defined by the development plan. A second prerequisite was the existence of the old graveyard which was to be preserved and integrated to the system of spaces of the new mosque. Finally the climatic conditions were requiring a more protected space - inner and outer spaces as well-. So the architect's decision has been to develop the main praying activities in a lower level than the leading market area and the access road, thus allowing at the same time a more private, introverted praying space, a better protected interior climate, and finally a more subtle arrangement of different accesses, inner spaces - both of the mosque and the annex building - and the courts and graveyards.

The new mosque - which occupies 435 m^2 of floor area - is larger than the old one. So the plot ratio increased. The increase was defined basically by the required floor space and is also corresponding to the new balance of built-up and open spaces of the present urban pattern: A certain increase in built-up areas while preserving the basic relation of volumes and open spaces within the limits of a reasonable scale.

2. Five functional elements define the spatial and volumetric arrangement: the access space with the first courtyard (the semi-open outer praying area), the mosque (inner praying space), the annex building, the graveyards and the minarets.

In the access space, the emphasis is given to accentuating the entrance of the mosque: a curvilinear path, the ramp leads to the first courtyard with the fountain and the outer praying area

which are in some extent preparatory elements for the climax: The central space of the mosque. The replaced grave stones of the left side of the ramp and the "water-music" of the fountains also contribute to this processional scenery. Each step is a gradual descent from the outer - profane - world towards the inner/intimate - sacred/ communal - atmosphere.

The ground floor of the mosque is arranged to obtain the largest possible space for praying and at the same time to allow other activities, i.e. religious lectures and discussions to take place in suitable conditions: a simple, global space based on a square scheme which shelters the maximum number of prayers on the same floor area. An arrangement of steps and corresponding platform groupings allow a more efficient visual contact and participation during lectures ("vaaz"). The large glass surface between the inner and outer praying areas is also conceived to obtain the best optic integration of these spaces and thus allowing the highest possible participation for all prayers.

The annex building is seen as a simple functional element: an office or working space separate from the praying activities and areas with possibility of an independent use, thus with a special entrance from the street as well, and arranged on a different level.

The graveyards are buffer zones between the mosque and surrounding buildings. Like in old Bosnian mosques, they encircle the main mosque block, and are left as simple, natural, and very quiet outer courts, without any pre-conceived formal arrangements. In the Sherefudin mosque they are a bit more separate from the mosque since they constitute the "backyard" of the complex and because the mosque space does not open to the graveyard by windows. This isolation effect can be changed after the complete implementation of the development plan of the complex.

Two minarets (one of them with loud-speaker system) were built. They are basically symbolic elements.

3. The five elements each have a different formal configuration and expressive entity: they constitute a highly dramatic spatial articulation but basically each element possesses an independent morphic system. Also different materials - and colors - correspond to different elements. The choice and hierarchy of these building materials seem to have some relation with the levels (in purely topographical terms) they correspond to.

The entrance space is the most dependent element of the composition. It realizes the basic articulation of the masses: mosque, annex, minarets and the surrounding blocks too. On the other hand it leads to the main space, ending at the outer praying areas. The material used for covering almost all surfaces - both the ground and the walls - are same: beige travertine tiles. The color of the stone corresponds to the lower level for which it was used: the soil itself.

The conception of the mosque block is based on a few ideas very implicitly rooted on traditional Bosnian mosque schemes: a simple square plan preceded by a porch and one central space sheltered by a cupola. However, the formal configuration is very unusual and more complex. At the ground level, despite the more articulated transitory porch area, the archetypal scheme remains unchanged, simple and clear, even more united than the traditional local mosque typology, as the result of the use of large glass panels. On the other hand, the use of a freely deformed quarter of cupola pierced by roof windows - "towers of light" - is creating a dynamic antagonism between the simplistic plan scheme and the mass resulting from the roofing system. The architect explains this by his approach to the use of tradition in contemporaneous context: "either covered by pitched roofs or cupolas, all Bosnian mosques respect a hierarchy of pyramidal organization; so are the mountains surrounding Visoko. The idea was to respect this principle...." without repeating preexisting forms. A quarter of the cupola is a slight reference to the old cupola, possible to realize only by the use of a new building technology.

The five roof windows are part of this system of vertical relations: they were aimed to accentuate the asymmetrical order of the upper structure, with some symbolic connotation of sky... "the heaven" (?). They also allow the partial view of the real sky, and according to the architect, "have symbolic references to the five principles of Islam".

Another connotation the architect recognizes in the asymmetrical form of the cupola has some anthropomorphic reference to the praying man: the cupola at the south-eastern façade "bends forward to Kaaba", following the movements of the prayer. This volume is painted white in the interior and the exterior. In the inner space, it creates a rather simple, quiet and unified interior of the mosque with slight differences of illumination and an undulating roof: an artificial sky covered by clouds..... However, seen from the exterior the same mass has the appearance of an amorphous rock - which strangely recalls the vernacular architecture of some Mediterranean/or Aegean churches- . This dynamic mass covers the quiet ground of the lower floor. An interesting arrangement is that in both levels a continuity of natural and artificial surfaces was obtained: In the ground floor, the courtyard surface continues in the interior of the mosque, while the soil surface of the graveyard "climbs" on the rocky mass of the dome.

The annex building has a simple rectangular geometry, contrasting to the free volumetric organization of the mosque. The difference remains recognizable also in details: while the roof holes of the mosque have curvilinear forms supported by wooden frames in the interior, thus giving a soft, natural impression, the zenithal light equally used in the entrance hall of the library block has a clearly prismatic geometry.

Manufactured materials such as glass panels and iron frames are used for it. Even the small minaret linked to the same block has a more defined geometry, compared to the roofing system of the gallery of the bigger minaret, with its sinuous forms, the "iron serpent" of the Kufic calligraphy which also serves as illuminating device of the gallery - the "kandil" of the "sherefe" -.

Thus the whole formal configuration is based on a detached, metabolistic expression: more geometric and artificial in the utilitarian annexes whereas freely sculptured and connotative in the sacral and symbolic focus.

Some minor elements: fountains, "mihrab", "minber" and few decorative designs - all by the architect himself - have a very modest scale and were conceived as simple, spontaneous objects similar to those encountered in the streets. They reflect a spirit very close to folk design, and forms were reduced to an elementary level. It is that the architect has tried to design every detail and object in all his other buildings, but while these designs are generally highly sophisticated, here they remain reduced to a certain minimum.

Three colors are used: beige for the ground; white for all the upper structure: walls, roofing and minarets; and green in a few metallic elements: frames and tubes.

4. The basic landscape principle of a "natural" graveyard encircling the local mosque, common to traditional Bosnian mosques is essentially kept. The only difference is that the graveyards here "go up and down" the buildings realizing a more integrated articulation between the landscape and the "artefacts".

C. Structure, Materials and Technology

1. The structural system for the whole building is reinforced concrete: generally an orthogonal system of columns and beams supporting the floors.

For the mosque block, two reinforced concrete walls provide supports for the cupola, whereas one part of the latter starts from the ground level.

2. The repertory of building materials used for construction is very limited. Plastered concrete painted white for the walls and the cupola of the mosque; white mortar covered inner walls; a combination of pine wood and white mortar surfaces for many interior elements like "minber", "mihrab"; green carpet for interior floors, local travertine tiles for exterior paths and courtyard covering; finally few finishing devices and elements on green painted iron tubes.
3. The only construction problem of a certain importance has been the building of the cupola. They started from 1/50 models to realize the shuttering. Another small problem has been the installation of the illumination system in the cupola.

All the construction was realized on the spot and no innovative technology was introduced, there has not been any attempt to use or develop more traditional building techniques.

4. The site on which the mosque has been built had the basic utilities and services for the construction and no problem of this kind was reported.

D. All the technology, materials used, as well as the labour recruited including the master craftsman were domestic, and generally local - i.e. of Visoko-.

The architect, his assistants and consultants are from Sarajevo. They constitute a team working in the Institute of Architecture and Urban Planning of the University of Sarajevo. The main contractor was from Visoko too.

IV. Construction Schedule and Costs

A. The program development began in 1967 and was finalized at the end of the same year. The design has been developed during 1970.

The preliminary site works started in early 1968. The essential construction works were realized between 1970 and 1980 with long intervals. First a state contracting firm undertook the works. Finally a local private firm achieved the construction. On September 1st, 1980 works were completed except the finishing details and the furniture of the annex building. The inauguration of the mosque took place on September 7, 1980. Delegations from many Islamic countries were present. Since then, the mosque has always been used, as the main mosque of the town.

B. Total costs and main sources of finance

The initial budget was estimated 2.500.000 dinars, while the final actual cost reached 6.619.575 dinars (after 12 years of project history) 94% of this amount was the voluntary donations of the community members, while 4% was sent by Yugoslavians working abroad. Finally there has been a foreign contribution of 2% coming from Saudi Arabia. Another marginal subvention issued from Libya was never received by the Muslim Community of Visoko because of the transfer problems of foreign currency.

V. Technical and Aesthetic Assessment

A. Functional assesment

The mosque is presently in use. During normal week days, about 10 to 15 people come for each prayer time. [during the technical study the same figure was also checked]. This number increases to 300 on Fridays and holy days [Eid-i Ramazan, Eid-i Kurban] prayers. During certain religious lectures ["vaaz"], it reaches to 400 as it has been reported. This information confirms that the building is actually used as the main mosque ["mascid-i Cuma"] of the town.

The levelling of the mosque's ground seems really efficient for better participation to some activities like religious lectures and community discussions; it also helps the orientation to Kaaba.

As it has been pointed out, Visoko is a leather manufacturing center. The community reports that every person coming to the town for this purpose visits the mosque and it is also a center of cultural interest.

Women come to pray also but less than men, since the mosque regularly serves the community of the market area mostly consisting of a male population. [During the technical visit one woman came to pray].

The outer praying area, one part of which is covered, was being used, especially on Fridays and holy days. However, due to the presence of the fountains and lateral doors, it is not very suitable for this purpose.

The annexes are not used yet. Finishing works are going on. the library is planned to begin to function by the end of the year.

Minarets are not efficiently used: They use the loud-speaker system for the call to prayer. The minaret towers remain purely symbolic elements.

B. Climatic performance, lighting and ventilation

The climatic performance of the mosque space is found adequate by its customers. It is easy to confirm it because of the thickness of the outer membrane- also partly due to its form - , and because of the protected arrangement in the lower level. The heating system works efficiently, according to the report of the community. The small gallery which communicates to the covered passerelle of the annex building and the access door to the main minaret may technically aid natural ventilation but it has not really been possible to check it.

The dome windows do not produce any glare effect, due to their position on the top of small "towers", suitably oriented. They produce uniform illuminating level and some differentiation effect on the walls which were found not inadequate.

People find the acoustics very efficient, which has also been confirmed during the technical visits: In different points of the interior of the mosque the somewhat "loud" acoustic atmosphere proved to be very impressive.

C. Choice of materials and level of technology

Within the basic assumptions of the architect in his approach to the design and technology problems, the choice of materials and technological level seem adequate. The

cost per square meter is not very far from the national average figures, thus an average level of technology was also meaningful, since the architect's choice is for modernity. However, within the framework of the "compromising solution obtained" by the use of this medium size technology, the materials used are quite simple and not expensive. The working details used for some of them seem too simplified - the corner joints of plastered and stone covered walls; or some wood works - They can create repair problems in the future.

D. Ageing and maintenance problems

The building is generally well upkeep: It is clean and systems work properly. The graveyard appears a bit abandoned, and not really appreciated, maybe partly because the neighbouring area is not yet completely re-arranged according to the development plan; but perhaps also because people of the mosque do not really "see it", since the mosque space does not have lateral windows.

The irregular geometry of the cupola can also create high maintenance costs for any repair or repainting operation.

E. Design features/Aesthetic Assessment: Massing and volume, articulation of spaces, integration into site, formal expression

It can be assumed that three aesthetical principles have guided the design concept of the building: unity, hierarchy and contrast.

The choice of one basic color: white, the simplicity of the elementary forms used: square, rectangle, cylinder etc. can be related to the first principle.

The pyramidal massing system beginning with the large minaret and the cupola of the mosque and continuity down to the annex and the topography of the open spaces are formal repercussions of the second principle which is also reflected in the spatial expression of the interior of the mosque.

Finally, the antagonistic duality of pure geometric and deformed - elaborated/"manneristic" (?) - forms, rectangular and curvilinear shapes, easy continuity of horizontal surfaces and the asymmetrical dynamism in verticality, the austere nudity of inner space, and the formal richness of the mass, the presence of illuminated and dark spaces together reveal a strong tendency of contrast effect in design.

Within this aesthetic context, open space becomes the key element in the articulation of masses and spaces. In other terms, the different functional parts of the complex: i.e. the mosque, the annex, do not present volumetrical articulation except in detail features. They are detached metabolisms, with very mechanically arranged solid linking elements between them. The same is true in the juxtaposition of inner spatial parts: the access from the mosque space to

the minaret hall, the passage from the library passerelle to the mosque space are simple doors: isolated holes opened in a wall. They communicate spaces, without articulating them. On the contrary, the courtyard element of the open access space "merges with" the mosque. It links the neighbouring market area to the mosque complex too. It also "articulates" the inner mosque space to the massive elements of the annex: passerelle, outer walls, etc. This effect is realized with the use of semi covered spaces: the outer praying area, the porch of the entrance, or the inner court of the fountain. The use of natural light is also a contributing element of this articulation.

The "topographical continuity" of the graveyard onto the mass of the cupola is another subtle solution which accentuates the articulated integration of the mosque mass to the neighbouring volumes of the market area.

These formal and aesthetic mechanisms are pertinent in a relatively small scale. On an urban scale, the highly sculptured pyramidal mass of the mosque complex is perfectly integrated within the tissue of pitched roofs and gardens systems of the central area of Visoko, and becomes the focal landmark element. Again the contrast between the red tiles of the surrounding buildings and the white undulations of the mosque should be mentioned. However, this fact emphasizes the landmark effect of this "primary element" of the town compared to the anonymous uniformity of the pitched roofs.



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