MARIO ROSSI AND THE EGYPTIAN SCHOOL OF ARCHITECTURE IN ALEXANDRIA

Until the middle of the 19th century, building of mosques in Egypt and Syria was limited because of poverty and the prevailing opinion was that there was no reason in building new bigger mosques. The starting point of this school and this modern Egyptian style goes back to the 1920s when the government wanted to renovate the Amr Ibn al-As mosque in old Cairo (Fostat, now south Cairo).

This was the first mosque to have been built in Egypt and the fourth since the beginning of Islam.

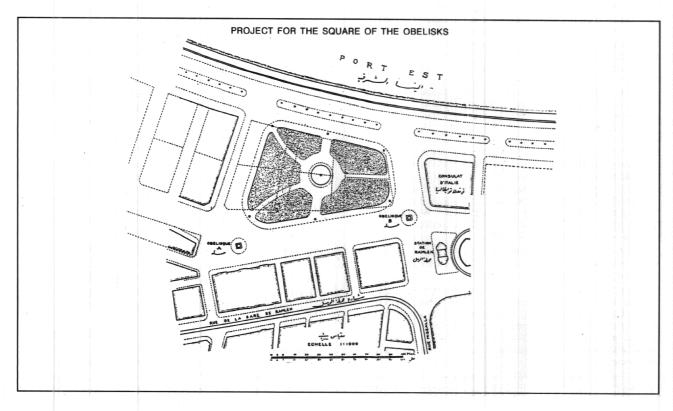
Architects became aware of the old architectural design and started studying and rediscovering its treasures in order to build new mosques in Egypt following the same old style. It seems that the revival of the modern Islamic mosque architecture in Egypt started with the beginning of Egypt's general recovery which took place in the beginning of the 19th century as Mohamed Ali established a local independent government. During his reign the nation started to regain its original characteristics.

Mohamed Ali crowned his major development achievements by building his famous Turkish style mosque in the precincts of the citadel. The mosque was then regarded as a symbol for the Islamic revival in Egypt. To be assured the beauty of the mosque many Italian and French architects were hired.

Mosques built in the beginning of this century indicate the sincere effort towards renovation of the traditional Egyptian school which started during the Mamluq period. What is worth noticing that not one of Mohamed Ali's successors thought of following his example in mosque construction until King Ahmed Fouad. During this period the Egyptians managed to rebuild the villages and cities, and the middle class together with the aristocrats showed great interest in mosques building.

The Egyptian government hired the talented Italian architect Mario Rossi. It is to this architect that can attribute the work which is now seen at Ahmed al-Refaee's mosque in Cairo.

This talented Italian architect, who was born in Rome in 1897, left for Egypt in the early 1920s. Ahmed Fouad first hired him to work in the ministry of labour and then in the royal court. Rossi's genius is reflected in his willingness to blend in with the Egyptian life sty-



le. His work in architecture reflects the customs of the Egyptian Islamic civilization in which he spent his mature years. He became a Muslim and died in Cairo in 1961, leaving behind a scientific and architectural inheritance, as well as many talented scholars of Islamic architecture, such as Ali Thabet and Ali Khairat, who wrote famous books about the history of mosque building in Egypt.

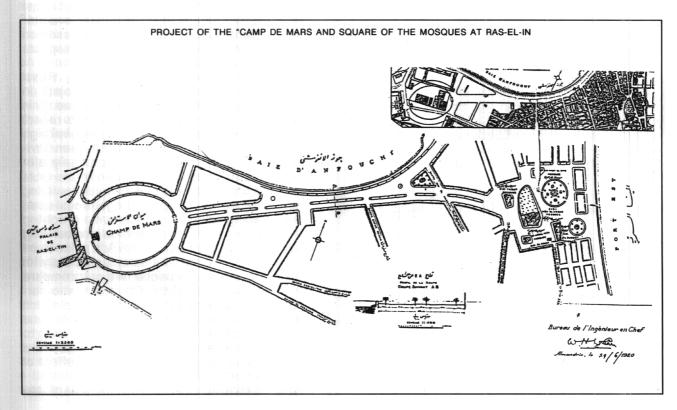
Rossi's talents are clearly demonstrated in the building of the Abou al-Abbas mosque in Alexandria, completed in 1945 after some 16 years of construction. The mosque was sited on the burial place of an 18th-century Andalusian teacher, whose tomb burned down

after a lightning strike.

Mario Rossi designed the mosque after spending several years in studying and understanding Islamic Egyptian Architecture, during which time he wrote his famous atlas for architecture and Islamic ornaments. This atlas is still a reference in the Egyptian Ministry of Endowments, available to all architects. It is time that this scientific work is published so that all architects may benefit from it.

Rossi built his mosque in an octagonal shape borrowed from the Ottoman architect Sinan who built his domes directly over the corners of the octagon. Rossi instead left enough headroom for the ceiling and built his domes in the centre, supporting them by stone poles covered with marble, leaving room for a corridor circulating the praying grounds, accordingly allowing the whole area to be a praying ground, this however was modified when he built the Alkaed Ibrahim Mosque (also in Alexandria) as he separated the praying grounds in his design. Rossi was also influenced in his choice of the octagonal shape by the Dome of the Rock in Jerusalem and the Oljeytu memorial at Sultaniyeh in Azerbaijan.

As for the dome of the Abou al-Abbas mosque we find that it reaches 26 m. high, with a sizeable chandelier hanging from its interior. The dome is considered similar to the one hanging from Mohamed Ali's mosque. In order that the dome could carry such a considerable weight of bronze, copper and crystal, Rossi provided additional support through 8 granite poles especially carved in Italy. Rossi's influence is evident in the gra-



nite poles as we see the high pointed arches which he invented after his thorough study of Islamic architecture. Rossi's ingenious structural invention was copied by architects in later times, and we find many examples in the columns covered with bronze that add support to domes inside mosques.

But Rossi was not only an architect, he was also an interior designer. The evidence of this is clear in the interior decorations of his

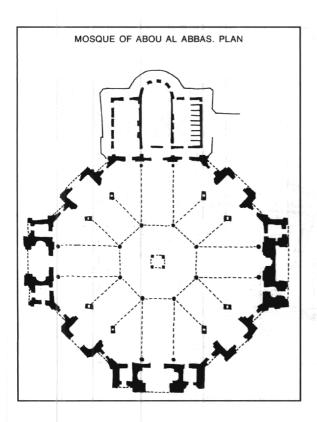
mosque.

When Rossi studied the minarets of his mosque, which are of considerable height, we see that he designed the lower part in four corners giving rise to a cylindrical shape which shows how he gave attention to the space in which the minaret will be put.

This mosque determined basic criteria which was later on followed in building Egyptian mosques. Such criteria included the cancellation of the mosque patio due to the lack of

space.

But patios did not disappear totally as they were originally used for ceremonial prayers. Today, if the mosques are full, individuals pray outside and around the mosque. This indicates that the architect managed to utilize



the available space in the best possible way. When choosing the location of a mosque, Rossi was influenced by the Ottoman directives of surrounding a mosque with a walled garden. This on one hand protects the mosque and its holiness, and on the other hand adds a beautifying touch.

It is to be mentioned that all ancient Egyptian mosques were built on large area of land according to the above mentioned directives. The mosque was designed in an efficient way so that no additional building extension may be allowed as in the case of most of the previously built mosques.

One of the main characteristics which was born when this mosque was built is the reappearance of the arabesque again in Egypt's mosques, little of which had been used in Mohamed Ali's mosque. Rossi excelled in using arabesques in the interior and exterior of Abou Al-Abbas mosque; he also used it when building Omar Makram mosque in Cairo, particularly in its surrounding wall.

This design was widely used later on and at

times with exaggeration.

Rossi also used what was known to the Turkish as the decorated domes. Rossi's modification was using this technique for making small, but complete domes around the corners of the ceiling.

It is, therefore, evident that the work of Rossi was highly influenced by the Islamic architecture, and that his procedure was based on scientific research that covered all aspects

of functional architecture.

Between the years 1948 and 1951, Rossi completed his second religious project in Alexandria, the Alkaed Ibrahim mosque. This is considered a good addition to the recent mosques as it was built between several high buildings and could have easily been invisible. For this reason Rossi purposely elevated the mosque. In the middle of the qibla wall stands a thin elegant minaret towering above the surrounding buildings. Rossi used landscaping as a major element in solving the problem of the many high surrounding buildings, and he placed row of palm trees around the mosque, the same as he did with the Abou al-Abbas mosque. We can compare his style with that of the Ottomans who surrounded their mosques with a garden which had two functions, one is the aesthetic and the other is the environmental which tends to separate the interior from the exterior in a harmonious way which reduces the effect of the environmental pollution.

Rossi achieved the desired height of the

Alkaed Ibrahim mosque above the surrounding buildings by stretching the distance between the two stages of the minaret which he extended to a considerable height, crowning it with an egg-shaped dome on a small pavilion. This was regarded as a daring achievement based on a well calculated scientific approach, which utilized all available elements of Egyptian building art.

A feeling of darkness is immediately felt on entering the mosque, due to the considerable variation in light between the outside and the inside. Rossi compensated for darkness with an extraordinary dome which resembles a reversed deep plate. It rests on four corner poles, while at its centre it has a variation of colored beams of red, black and gold. It also contains small windows allowing enough light for the viewer to see the ornament carved on the ceiling.

The chancel is covered by a magnificent pointed arch. This is copied from many older mosques in Almez Lidinelah street in Cairo, indicating Rossi's ability to successfully modify existing architectural features.

The Mohamed Koraymen mosque was the third to be built by Rossi in Alexandria, and it opened up the wide door of innovation in mosque design. It was built on a hill next to the Ras Altiene palace, thereby serving as a royal place of prayer.

Rossi utilized the available space to build in an efficient way. He gave the mosque an entrance of three doors; the walls were erected on a rectangle, with four real domes at each corner, and a major dome in the middle roofing the praying area. He designed its arches in a round shape, with windows taking the shape of an octagonal star or flower surrounded with a circle to give the final image of the sun. All this was designed in a highly original manner, unlike any other mosque. Another important architectural comment is that Rossi has thoroughly studied the octagon and used it in most of his work.

As for the minaret, it should be considered a new idea of its own. Rossi intended to copy the minaret of Alkaed Ibrahim mosque but the port authority objected because the minaret in such a form would confuse ships because the port was very close; they demanded that the minaret should be considerably shorter. Rossi accordingly changed his plans and built a fully covered pavilion on top of the minaret's first stage, borrowing the idea from Indian architecture. On top of the pavilion he placed a turbanlike dome form. This device shape was later on copied by other architects.

Rossi built two other mosques in Cairo, the Omar Makram mosque in the centre of Cairo and the Zamalek mosque on the river bank. He built these in a late stage of his life when his genius started to fade away. The Zamalek mosque is considered more successful than the Omar Makram mosque, as the former enjoyed the new touch of an elevated based reached by wide marble steps. Its elevation is rather broad containing arches and posts. Its interior provides calmness and tranquility due to the harmony between the chancel and the iwan.

As for the Omar Makram mosque, its main characteristics lies in its gypsum curtains containing Arabian ornaments. As for architectural structure, we find it consisting of a suspended building reached from the street through seven steps.

The mosque is divided into two separate parts. The first consists of a square with the main entrance from the northeast corner and the other from the southwest. The ceiling is built on top of a number of patios and contains several windows for illumination. Many windows are covered by beautiful gypsum ornaments. The second part is a rectangular shape surrounding the patio with openings for ventilation and illumination. This part is available for funerals.

Mario Rossi's school of thought had considerable influence. Ali Khairat, for example, designed and built the Salah Aldiene mosque in Cairo in the same beautiful and harmonious way. His work was a reflection of balance between the dimensions and the building parts, such as the domes, ornaments and the main central dome.

In this particular mosque the old Mamluq dome style was utilized in the same manner which Rossi used. This is a clear indication of how Rossi influenced the work of his students, and it is believed that his modern Egyptian building style will continue for a long time, as it follows purely Islamic traditions.

Magdy M. Moussa