

Transformation of Minarets in Contemporary Mosque Architecture in Turkey¹

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Abstract

This study aims to explore the usage, the formal and functional transformation of minarets in contemporary mosque architecture in Turkey, through a survey of the selected cases. The selected cases are the outstanding examples of Turkish contemporary mosque architecture. Their architects are innovative in their design decisions and displayed their own design approach and interpretation outside the main stream contemporary mosque design in Turkey.

In this study, six mosques for every decade beginning from 1960's are analyzed in terms of their general architectural features, the usage and interpretation of minarets in their designs. Throughout the selected cases, the modification of forms and functions are studied and compared with the pre-modern ones as well as with each other. The changed forms and functions of minarets and the introduction of new ideas to their design are also discussed. By this way, a general evaluation regarding the developments and progress in contemporary mosque architecture in Turkey is proposed with reference to comparative results.

On this basis, this study demonstrates that the main elements, organization schemes and planning setups of Classical Ottoman Mosque are still preserved in the selected mosque examples. The novelty brought to their design is basically the usage of modern materials and techniques and a formal exploration of mosque design.

This study claims that, architects of contemporary mosques in Turkey are in search for newness and innovation in their designs as a contribution for the progress of mosque architecture. This search for innovation has mostly led the architects to some atypical forms, although in some cases traditional solutions and standpoints have taken place.

Keywords: Mosque, contemporary architecture, minarets, Turkey.

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1. Introduction

As the place of worship for Muslims, the mosque is one of the most repeated building types in Muslim countries. Turkey is not an exception to this and every year many mosques are built all over the country. Unfortunately however, most of the mosques lack the architectural design quality and become the examples of an environmental disfigure for the context they are in. This research focuses on outstanding cases, the ones that can be named as important representatives of contemporary mosque architecture in Turkey, which attempt to interpret and develop the mosque and minaret design in contemporary age.

This study examines the attempts of developing and interpreting the usage of minarets in contemporary mosque architecture in Turkey. It looks at a selection of significant contemporary mosque examples, which were designed in an innovative manner by attempting to go beyond the prevalent influential factors that shape the architectural formation of mosques in Turkey. These influential factors are mainly comprised of the ‘traditional mosque image’, which is mainly formed by the Seljuk and Ottoman mosques, and the restrictions applied to architects by their clients, who want to see the already established architectural forms of traditional mosques accumulated in their collective memory.

Without an understanding of tradition and its role in modern design, the contribution of the architects to contemporary mosque design cannot be underlined. Therefore this study puts an emphasis on the way architects have dealt with tradition and on how they have used the traditional elements of mosque architecture. On this basis, the study specifically focuses on the attempts of interpreting minaret design, through the analysis of six mosques, which are seen as the important representatives of contemporary mosque architecture in Turkey, beginning from 1960’s. The analysis is based on the general architectural features of the selected cases and the use of minarets in their design.

2. A Brief History of Minaret as a Traditional Element of Mosque

Today, most of the scholars share the idea that the Prophet’s Mosque constitutes the prototype of mosque architecture, starting from the early years of Islam, during the rule of Omar. This building, which is also called as “Mescid-i Nebevi”, is said to form the foundation of Umayyad Mosque style, with additions made in later years in order to enlarge it. As Jeremy Johns cites, the concept of the Mosque of Prophet is said to dominate the early Islamic religious architecture so much that it dictates the plan of almost every Jami mosque built. As Johns quotes, Omar was “portrayed as an almost obsessive mosque-builder”; he is believed to have decreed that all congregational mosques should be laid out according to a common standard and this standard had later become the standard for the religious architecture of Islam. (Johns, 1999:69, 109, 110-112)

Minaret is the characteristic architectural feature of the mosque, which is principally used for the call to prayer (adhan). Originally designed for the call for prayer in the past, minaret is not functionally needed today due to the developed technology. Nevertheless, it became an indispensable architectural component of mosque design and is still regarded as a must for a mosque due to its symbolic meaning.

With its visually striking figure being either free standing or taller than any connected support structure, minaret provides a visual focal point to the community and acts as a landmark. In the old times, the prayer used to be called from the gallery encircling the shaft of

the minaret by the muezzin, however today it is usually called from the prayer hall and transferred to a speaker system on the minaret.

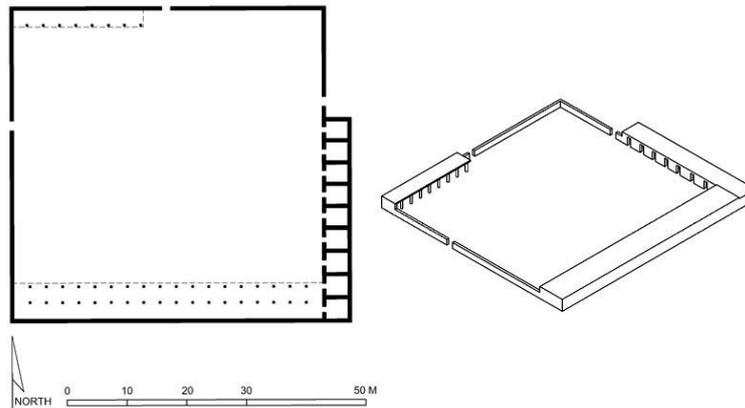


Figure 1. Reconstructed floor plan and perspective drawing of Prophet's House, Medina, Saudi Arabia. (Drawn by Saeed Arida, http://www.archnet.org/library/images/one-image-large.jsp?location_id=14542&image_id=150422; accessed 08.03.10)

Norberg Shulz describes minaret as a “mere reminder of heaven”. Being a vertical axis positioned comparatively free with respect to the nearby buildings, it is thought to express an a priori link between earth and sky. (Norberg Shulz, 1986: 12) Likewise, in Arabic liturgy, it is also defined as the “gate from heaven and earth” and identified with the Arabic letter *alif* (which is a straight vertical line). (Johnson, 1979: 173)

Creswell believed that the functional core of the minaret was the adhan, or call to prayer. The first Muslims came to pray without any preliminary call, but “having heard that the Jews used a horn and the Christians a naqus or clapper, they wanted something equivalent for their own use.” (Creswell, 1926: 137) One of the Prophet's Companions suggested using the human voice, and after some deliberation, the Prophet agreed and ordered his herald to call the people to prayer. The earliest mosques lacked minarets, for at first, the adhan was chanted from city walls or from the roofs of mosques or other buildings. (Bloom, 2001: 55) It is stated in hadiths, that the Muslim community of Madina was called to prayer from the roof of the house of the Prophet.

Creswell states that, a minaret first arose under the Umayyad dynasty in Syria, where Muslims first came in contact with Syrian church towers, which they adopted and spread throughout the lands they conquered. According to Creswell, the minaret as we know today is accepted as to appear in the Abbasid period. Even though the mosques of Damascus, Fustat and Medina had towers during the Umayyad period, it is agreed by and large that the minaret came to the scene during the Abbasid period (i.e. after 750 CE). For Creswell, six mosques belonging to that period all have a single minaret connected to the wall opposite the mihrab. In these mosques, the intention for building the minaret was to reveal the power of Abbasid authority in religion. People opposing to the Abbasid power like Fatimids were not using minaret as it was their symbol of power. Thus Fatimid mosques did not have towers (Creswell, 1926: 134-40, 252-8, 290-8).

However, in spite of that, Johnson indicates that the first known minarets appeared approximately eighty years after the Prophet's death (Johnson, 1979: 173). Yet, another theory about their appearance says that the first example of minaret was formed by the reutilization of the watchtowers of the Roman temenos (Hillenbrand, 1994).

In later periods minarets varied in shape and size according to the period and region they were built into. They were made conical, square, cylindrical, or polygonal. In post-Fatimid Egypt, minarets acquired a complex and characteristic form. Each tower is comprised of three separate sections: a square section at the bottom, an octagonal middle section and a dome on the top. The transition zone between each section is enveloped with a band of muqarnas decoration. (Creswell, 1926: 134-40, 252-8, 290-8)

The traditional Syrian minaret included a square plan tower, which is made out of stone. It is thought that this form is obtained from the traditional Syrian church tower of the Byzantine period. The oldest minaret in Syria stands opposite the mihrab in the Great Mosque of Damascus, which dates from the early ninth century. It is believed that the square tower was abandoned for the octagonal or cylindrical minaret during the Ottoman period. (Creswell, 1926: 134-40, 252-8, 290-8)

The square tower form of Syria is also shared by North Africa and Spain. It is believed that this form is obtained from the identical source, which is the Syrian church towers and was adapted by Christians in Spain for use as church bell towers eventually. The earliest minaret in North Africa is the Great Mosque of Qayrawan, which was built in 836. (Creswell, 1926: 134-40, 252-8, 290-8)

Originally created in Iran, the cylindrical minaret form proliferated over a vast area with the Seljuk conquests of Syria, Anatolia, Iraq, Afghanistan and India. The brick was the common material. Some structures consisted plain brick shafts while others were elaborately ornamented with complex brick patterns. The appearance of various forms of cylindrical fluting came as an alternative of the standard form. The oldest known minaret in Iran is the congregational mosque at Siraf, which was built in the ninth century. (Creswell, 1926: 134-40, 252-8, 290-8)

It is accepted that the Seljuks built the earliest minarets in Anatolia. These minarets were generally pairs of towers with a brick shaft and a stone base. Some of them however were built with single minarets such as the Alaeddin Mosque at Konya. (Creswell, 1926: 134-40, 252-8, 290-8)

Ottoman mosque architecture could be distinguished with its use of the tall pointed minarets and large lead covered domes. In a majority of small Ottoman mosques there was a single minaret attached to the corner of a mosque. However, in bigger mosques built in major cities there were two, four or even six minarets. It is indicated that only a reigning sultan could erect more than one minaret per mosque. A distinguishing characteristic of these minarets is the utilization of multiple balconies. This feature was first introduced in the Uc Serefeli Mosque in Edirne, built in 1447. Although this form had a tendency to change in to baroque forms in 18th Century Ottoman mosques, Classical Ottoman style became the dominant mosque architecture style in the Republican Era including minarets.

In Arabia, outside Mecca and Medina, minarets were quite scarce before the nineteenth century. The surviving few minarets are often with a faintly narrowing profile with either a square or a circular plan. (Creswell, 1926: 134-40, 252-8, 290-8)

Although its style differs according to the region and the period it is built, the basic form of minaret is comprised of a base, shaft, and gallery. Within the shaft, the stairs circle upwards counters clockwise and offer the necessary structural support to the shaft. On the outside, the gallery, or galleries, exists encircling the shaft as a balcony. Minarets are generally covered by an ornate roof and decorated with brick or tile work, cornices, arches and inscriptions. The transition from the shaft to the gallery is characteristically made with muqarnas. The level of flamboyance of a minaret generally determines its origin and period. (Creswell, 1926: 134-40, 252-8, 290-8)

3. A Survey of Selected Cases

3.1 Kınalı Island Mosque (İstanbul, 1964)

Kınalı Island Mosque was designed by the architects Turhan Uyaroğlu and Başar Acarlı in 1964. Having a capacity of 100 people, the mosque is located on the eastern shore of the island, on the seaside. The mosque is visible from the sea, especially while approaching from Istanbul by boat with its outstanding minaret. As Erzen and Balamir notes, the silhouette of the mosque puts itself forward by way of the prominent forms of the minaret and the roof that is covering the prayer hall. (Erzen and Balamir, 1996: 112-114)



Figure 2. Main entrance, Kınalıada Mosque (Photograph by Özgür Ürey)

Minaret of this mosque is a very outstanding element in terms of its design. Looking very different from the traditional minarets, it has plastic values that make it look very avant-garde. It is basically formed by two elements. One of them is the main component of the minaret, which reaches the highest point of the mosque complex; while the other regulates the verticality of the minaret with the pyramidal form of the mosque building. There are some textures applied on the longer element by using the potentials of concrete, but the secondary component is left blank, which creates a stronger differentiation between the components. As generally seen in most of the contemporary mosques, the minaret is a self-standing structure, freed from the main building. Unlike the traditional examples and just like many of its contemporary relatives, there are no stairs in its inside and it is not possible to go up to the minaret. There is a small room in the ground floor of the minaret, where the muezzin enters and makes the call for prayer by the help of the loudspeakers. This design value shows architects respect to its historical function, since there is not a real need for this right in the

minaret structure. There is also a traditional alem located on top of the minaret, emphasizing the verticality. With these features, the minaret is treated as a symbolic element, which carries the function of being a landmark for the mosque.



Figure 3. Minaret from courtyard, Kınalıada Mosque (Photograph by Özgür Ürey)

Some later additions to the minaret, which are completely alien both to the minaret and the mosque, are also observed in the overall look. One of these additions is the before mentioned loud speakers, which is a problem seen on most of the mosques, both on new and old ones. Being a very common problem that we face in most of the examples, very few architects have attempted to solve it and this mosque was not one of these rare examples. It is an interesting point that the architect knew about the need of loudspeakers, but did not take them into consideration in the design process, which finally made them look alien on the exterior. The other addition is the chimney of the imam's house, which is rising to the sky with the minaret, only being smaller from it for a few meters. Although this is a small effect, it bruises the overall look of the minaret harshly.

3.2 Turkish Institution of Electricity Mosque (Ankara, 1988)

Tek Mosque is situated on top of a hill in TEK Campus, overlooking a huge part of its immediate environment. It was built in 1988 in Gölbaşı, a district of Ankara. The building, which is designed by Cumhuriyet Keskinok, has a capacity of 400 people in 500 m². It is located in a staff-housing complex of the governmental institution of TEK (Türkiye Elektrik Kurumu) and accordingly it is a small mosque due to the limited number of its users. (Erzen and Balamir, 1996: 116-117)

TEK mosque stands as an abstracted form of a Classical Ottoman Mosque with its mass, façades and proportions. In Peker's words, because of the direct reference it makes to the idealized forms of early Ottoman Mosque, by means of its symmetrical minarets moulded in

reinforced concrete, it exists as a modern abstraction of the Ottoman Classical mosque. (Peker, 1999: 89-111)



Figure 4. North Façade, TEK Mosque (Photograph by Özgür Ürey)



Figure 5. Minaret, TEK Mosque (Photograph by Özgür Ürey)

Like most of the contemporary mosques built in Turkey, the minarets of this mosque are self-standing elements, away from the main building. They keep the same proportions with traditional Ottoman minarets, but are slightly abstracted with their sharp-hexagonal shapes. Although the minarets are somewhat freestanding, it is seen that the architect had attempted to connect them with the main structure, by using a reinforced concrete slab connecting them to the structure. By this way the architect also formed the ceiling of the “son cemaat yeri” (or the latecomers portico) and sheltered it on both sides. Like the plan of the main space, the minarets also have octagonal cross-sections. Loud speakers and light sources are seen on them, which appear absolutely un-designed and alien to the project. The Şerefes of the

minarets have a completely new design understanding and over them the minaret ends with an alem, which is very similar to the ones used on the dome.

3.3 Grand National Assembly Mosque (Ankara, 1989)

Grand National assembly Mosque is located in Ankara, at the southern side of the TBMM (Türkiye Büyük Millet Meclisi) campus. Designed by Behruz and Can Çinici in 1989, it immediately became one of the outstanding contemporary religious buildings in Turkey and a focus of discussion among scholars, because of its unique innovative values. (Erzen and Balamir, 1996: 104-106)



Figure 6. North Facade, TBMM Mosque (Photograph by Özgür Ürey)

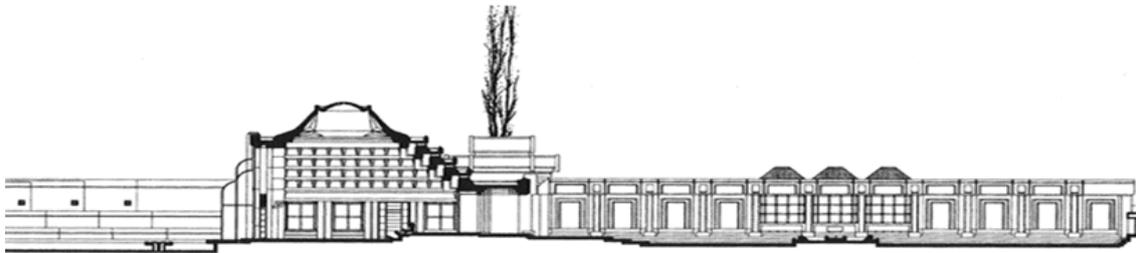


Figure 7. Longitudinal section, TBMM Mosque

(Drawn by: Behruz Cinici; Source: Uğur Tanyeli. Improvisation: Mimarlıkta Doğaçlama ve Behruz Çinici (İstanbul: Boyut Kitapları, 1999).

In order to refrain from using the direct references of Ottoman mosques, the architects did not use traditional dome and the minaret forms. For Balamir and Erzen, the references to traditional mosque architecture in TBMM mosque are “far from being literal; on the contrary the generic elements of the mosque such as mihrab and minaret have been generously abstracted”. (Erzen and Balamir, 1996: 105)

The two-stepped pyramid on the corner intersecting the mosque and library symbolizes the minaret. On top of this pyramid, a tree, which is also contributing to the expression of verticality, is planted so as to remind the form of a minaret. The pyramid naturally does not serve as an actual minaret, but carries the needed symbolic function by its abstracted form. This is again a very unique approach in terms of its interpretation of the traditional minaret

form. In TBMM Mosque, the abstraction of minaret climbs to its peak and makes the attempt of change in mosque design very obvious.

3.4 Buttım Mosque (Bursa, 1996)

Designed by Yücel Sertkaya, Buttım mosque was built in 1996 in Bursa by Arı İnşaat. It is situated at the north side of Bursa, as a part of a big commercial complex, called Buttım. Mosque has 300 people capacity.



Figure 8. North façade and courtyard, Buttım Mosque (Photograph by Özgür Ürey)



Figure 9. Minaret, Buttım Mosque (Photograph by Özgür Ürey)

Buttım Mosque has a symbolic minaret that does not have access to the top. As a very common tendency in contemporary mosque architecture, it is a free, self-standing structure in square shape, which is made of four posts on each corner. The posts are connected to each other at three points, in order to brace the long, self-standing structure. The minaret has a

narrow pyramidal cap on top of it with a traditional alem. Altogether, it has a very abstract form. The architect Yücel Sertkaya has shown sensitivity to the common problem of loud speakers and has designed suitable places for them on the minaret. They are placed on top of the minaret, in between the iron grids that continue to the top of the minaret from the bottom.

3.5 Yeşilvadi Housings Mosque (İstanbul, 2004)

Yeşilvadi Mosque is designed by the architect Adnan Kazmaoğlu from Kiptaş Architecture Office. It is situated in a mass housing project in İstanbul, Ümraniye, which is ordered by the Municipality of Istanbul. This mosque is planned for 150 – 200 people, with 120 m² closed area.

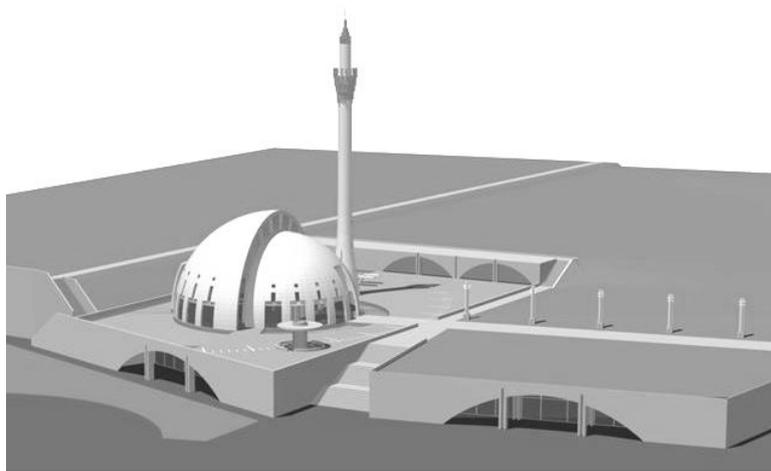


Figure 10. General View, Yeşilvadi Mosque (Drawn by: Adnan Kazmaoğlu; Source: Adnan Kazmaoğlu)

Like most of the contemporary mosques built in Turkey, the minaret of this mosque is separated from the main mass. It appears as a self-standing, vertical element, which has basically a symbolic function. As a similar feature among other contemporary examples, it is likely that the architect interpreted the design of the minaret with great care. What is innovative in its design is the integration of illumination to the main design of the minaret. Galvanized metal pipes are shaping the minaret balcony and they are also hiding the light sources and the loud speakers. By this way, the architect prevents some common unplanned and undesired later additions, which are widespread in most of the mosques in Turkey. As a very innovative function, the minaret is also serving as a sundial. By its shadow falling onto the markings inscribed to the ground of the main piazza, it is planned to show the time. In this mosque, the usage and interpretation of minarets has reached to a high level and finally a consistent mosque design was acquired.

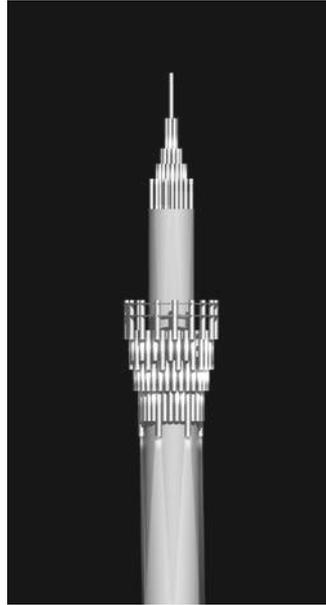


Figure 11. Minaret detail, Yeşilvadi Mosque (Drawn by: Adnan Kazmaoğlu; Source: Adnan Kazmaoğlu)

3.6 Derinkuyu Mosque (Nevşehir, 1971)

Derinkuyu Mosque, or the Park Mosque as some call it, is designed by Hakkı Atamulu who is not an architect, but a sculptor, situated at the southern side of the town of Derinkuyu, Nevşehir. Derinkuyu Mosque is situated in a large recreational area, called the Kültür Park. The mosque is designed as one single mass, which takes the form of the minaret in one end in a plastic way.



Figure 12. General view, Derinkuyu Mosque (Photograph by Özgür Ürey)

As the mosque is designed as one single mass, it takes the form of the minaret in one end in a plastic way. It exists as the tallest part of the mosque on the north with a traditional alem on top of it. With this plastic quality, the design of the minaret stands as a very innovative and unique interpretation of the traditional minaret form. As mostly seen in the contemporary examples, it exists again as a symbolic element and also as the part of the mosque that makes it a landmark. Again, it is not possible to get on top of it, but as usual it has audio speakers on top of it in order to call the community to prayer, in accordance with its traditional function. Those loud speakers are later additions, which were possibly installed without the permission of the designer. This is again a common design fault as in most of the contemporary mosques. But in this case, since the designer is not an architect, it is not a big surprise to see such a defect, especially when we think that even experienced architects make similar mistakes.



Figure 13. South and west facades, Derinkuyu Mosque (Photograph by Özgür Ürey)

4. Conclusion

Architects, who tend to be creative in the design of mosques in contemporary age, have paid a special attention to the design of minarets. Various forms are tried for this reason. While some of them choose to re-interpret the traditional forms, others started from scratch. At some point, this effort of interpretation came to such a point that, the designer even decided not building a minaret; but using a symbolic element instead, such as the tree in TBMM mosque.

With the exception of Derinkuyu Mosque, designing the minaret as a self-standing element is the common tendency in the cases examined in this study. Derinkuyu Mosque, on the other hand, has a unique interpretation, where the minaret is integrated to the main mass and is extended vertically as a part of the covering. In all the cases, there is only one minaret, which is treated as a purely symbolical element referencing to tradition. In none of the examples there is an access for the imam, or any other person, to top of the minaret; they are used mainly for the placement of the loud speakers for the call of prayer. The position of these speakers is also an important problem for the minaret design. As can be seen in Kınalıada,

Derinkuyu and TEK mosques, the addition of these elements to the mosques are out of control of the architects and therefore have caused undesired appearances on the minarets. Nevertheless, this problem is noticed and evaluated by the architects of Buttim and Yeşilvadi Mosques and they had offered suitable solutions.

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