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The Typology of the Mosque-Schools¹ of Iran Based on the Method of Access

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Abstract

In order to teach religious philosophy and affairs in a religious space, Theocratic regimes of have begun to build a new school called the mosque-school with the help of the field provided by the mosque-shrines and the mosque-khanghah. Several studies have been conducted on the formation of these particular buildings and their properties; however, it seems that these architectural buildings still have many instructions for contemporary architecture of Iran.

In this research, descriptive, historical-analytical research method has been used and the required information has been collected through written sources and field studies. In the article, suitable methods for typology were investigated and an interpretive method was found to be appropriate for the specific typology. Accordingly, the form and structure of the mosque-schools were studied and it was attempted to suggest a suitable typography based on the way of placement and the relationship between the two educational and religious parts and functions of building. The present study, based on the results, divides and categorizes this type of architectural buildings into three general groups.

The first types of mosque-schools, in the central region of Iran -including Isfahan, Kashan and Yazd- have been constructed with a distinct view of Islamic Sharia based on the separation of religious and educational space. The second types of mosque-schools are simpler and more modest, and are designed and implemented in situations of lower political and social sensitivity with broad geographic spread. In the third type of our suggested typology, which is more recent of two other types, the full composition of the mosque and school has emerged. This type was very popular in Tehran and during the Qajar period and mosque-school form and structure of Marvi mosque-school had great effect on this type and followed by many of its mosque-schools.

An examination of the existing relationships between the time and place and the form of the mosque-schools indicates the influence of religious beliefs and sensitivities, the amount of costs and space intended to build and following of the form and composition of well-known mosque-schools.

Keywords

Mosque-school, Religious space, Educational space, Mosque-school typology.

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Introduction

“Education is one of the vital needs of humanity, which is satisfied by mankind through the creation of educational spaces. It’s such an important issue that today a precise historian is able to portray a clear picture of the civilization of past nations only by studying in these spaces.” (Pahlavanzadeh, 2012). The close relationship between educational and religious functions in Islamic civilization of Iran, which sometimes these two functions appeared in the single body or appeared side by side, indicates the specific relationship between education and culture and beliefs as well as the spiritual dimension of education for the Iranian Islamic individual.

There are several ways to explore and provide a better understanding of built spaces, and typology is one of the most powerful tools in this field. “The types and typology are important topics in modern architecture. It could be considered as important as to other main concepts of architecture, space and form. The types and typology have been used in various fields of sciences including architecture since about two hundred years ago, and over the past thirty years there have been a large number of architectural researchers having dealt with it.” (Memarian, 2013). The present article is an attempt to classify school-mosques and determine the relationship between the religious and educational spaces and a better understanding of the evolution of this type of buildings over time.

It is to be hoped that the study of the formation and emergence of the mosque-schools, in addition to being useful to understand how the evolution and arrangement of spaces and elements affect the appearance of functions in this type of body, will pave the way for more extensive research on the mosque-schools in Iran and the acquisition of valuable spiritual lessons from this kind of building.

Research Questions

The present research will try to answer the following questions by studying the mosque-schools of Iran:

1-What is the proper criterion for mosque-schools

typology?

2-How is the relationship between the mosque and the school in the single body as a mosque-school?

3-Can the relationship between the form and structure of mosque-schools and time and place of their construction be found?

4-What issues influenced the arrangement of form, space and the body structure of the mosque-school?

Theoretical fundamentals and research background

● Previous studies

The study of mosque-schools in Iran has been carried out by several researchers. In his article entitled “The Relationship between Mosque and School,” Zarrinchian (1998) studied the features and functions of each of these spaces semantically and saw the two very closely related. Momeni (2011), studying the Iranian mosque- school during the Qajar period, attempted to recognize the concept of the cultural identity of the Iranian people and concluded that the architectural developments in the Qajar period had a direct effect on the details and decorations, but the overall structure of this kind of body was almost unchanged.

Hoshyari et al. (2013) studied the relationship between educational and religious environments on the basis of sample bodies, including both religious and educational activities and tried to explain the characteristics of mosque-school as a kind of Iranian architecture. According to this researcher “Of the six combinations of educational and religious spaces, the characteristics of the building called the mosque-school should be distinguished. The mosque-school is a building with a complete school and a complete mosque combined with a perfect method. The researchers also announce one of the six suggested types”

In view of the fact that all religious elements, such as the summer and winter prayer hall and the sacred domes and the two components of educational space, such as the chambers and the classes, are gathered

in one building and can be used for all as well as for women, this type can be viewed as more complete and called the mosque-school.

Mahdavi Nejad et al. (2012) have studied the mosque-schools of the Qajar period and, like the present article, have made 'access' the main criterion for the categorization of this type of body; but they did not succeed in explaining the reason for the difference in the different types and they concluded that "By examining the time and place of the construction of this mosque-school, namely the attention to the climate in which it is located and the time it was constructed, it is clear that at all times and in all studied cities all three types can be seen. Therefore, it is concluded that the relationship between these three species cannot be found in terms of their construction history and location; in other words the relationship between the years of building each of these mosques-schools and the types on which they were based cannot be identified. It seems that there are other relationships that can justify the construction of the mosque-school structure, which requires independent research in this area."

● **Typological Methods**

"A type is a scheme in which one can see the common characteristics of a group of buildings. The main question here is the specific view at common features" (Memarian, 2013).

Historical architects have chosen different characteristics for typography, according to the nature and characteristics of the subject matter under consideration. These features are very wide and diverse and can be formed on the basis of any characteristics of the elements of the set of study that the researchers consider to be more basic and more important. By definition, successful typology must divide the subject into specific categories with specific distinctions, in such a way that the members of each group have multiple similarities and differ from the members of another group (Marradi, 1990). Acceptable typology can also provide grounds for explaining the emergence and existence of these differences.

Common typologies in architecture can be generally classified into two interpretive and historical-evolutionary ways based on the criteria used. The method of interpretive typology examines the structure of space and tries to interpret this structure in social relations. In this method of typology "building is a composition of spaces which are created by its elements. These spaces form based on specific functions for the people or their consumers. Each space creates a specific relationship between the consumer and the desired space. Therefore, by recognizing spatial relationship, the social relations of their consumers can be recognized" (Memarian, 2013).

On the other hand, the historical-evolutionary typology has taken a different perspective and focused on the evolution of buildings and the emergence of functions throughout history. "An historian of architectural history can use a method of recapturing and understanding the history of the buildings, to put them in a certain time over a timeline, and to refer to the major architectural events of this period. But it just does not end there. Many scholars in the West, in particular, see a building just as the evolutionist biologists look at as being a "phenomenon" of species that can belong to a "generation tree" and grows in this group." (Memarian, 2013).

● **Using historical-evolutionary criteria in the typology of the mosque-schools**

The emergence and existence of mosque-schools in Iran is clearly a combination of educational and religious space that seems to have occurred during the Safavid period. The Safavids, who were rigorously religious, had a great deal of interest in the teaching of religion and religious affairs, and thus created many religious schools. "Because the spirit of religion always aspires to be taught, religious-educational centers are usually located alongside or along the flow of people, that is, in the corners of the markets. As the mosque approaches the market and is close to the neighborhood to call for people's prayers, the school is also seated next to them to answer the people's hearts and questions.

In some cases, the placement of these two entities together and their interpenetration and sharing led to the emergence of a number of mosque-schools or school-mosque, places that both meet the needs of worship and the educational needs of these followers of the emerging religion. (Pahlavanzadeh, 2012).

It seems that the mosque-schools did not have changed significantly since its birth as a new architectural body. These buildings base structure and function is invariant at least during the Qajar period, which most of such buildings were built in. According to the studies, “the cultural changes of the Qajar period often have had an indirect impact on the overall design of the mosque-schools, and both direct and indirect impacts on the architectural elements of these buildings, and a direct impact on the mosque-tiling and carvings of this period”. Uncertain design patterns of architecture, complexity and diversity of space, openness and lightness of the courtyard space by the moonlit space and the evolution of dome space, Western modernism and the like, are some of the indirect effects of Qajar cultural events in the architecture of the mosque-schools of the Qajar period” (Momeni, 1991).

In this regard, the changes in the mosque-school over time may be influenced by changes in the methods of construction in different periods, and the historical-evolutionary typology of the mosque-schools is considered as a subset of changes in Iranian practices and the same variations for the mosque-schools throughout the history of architecture. Another reason for the improbability of creating a successful typology using historical-physical criteria is the fact that the historical-evolutionary typology emphasizes on the material dimension of spaces and buildings, while the mosque-schools are rich in semantic and spiritual notions. As Memarian point out, “the materialization of architecture and its separation from the contemporary human metaphysical world reduced architectural theories to its most material form. The evolutionary look at phenomena, especially historical buildings, is one of not so useful results of materialization approach.” (Memarian, 2013).

Research Methodology

The research method of this paper is descriptive and historical-analytic, which uses compound solutions suggested by Groat & Wang (2002). The method of collecting information in the first stage was based on reviewing and summarizing the articles and related books through purposeful search of the libraries and electronic resources and databases for obtaining articles. In case of need and case studies, field studies have been conducted.

Suggested typology

According to the studies carried out in this project, social typography was considered as the main method for the classification of mosque-schools. As mentioned, the mosque-schools were created by the combination of religious and educational spaces. The religious and educational spaces at the time when this association was made have a specific and well-known structure, and the structure of the mosque-schools clearly demonstrates the emergence of a new body in architecture, which has an educational and religious space in one body based on its previous and well-known component structures. Therefore, it seems that the basic point of understanding the mosque-schools and their categorization is the way of co-existence between the educational and the religious environment that emerges due to the entrance of the total building and its relation to these two parts. The entrance and its relation to the main spaces are important in this regard, which can indicate the importance of each space and determine the main and the second hand spaces, specify the hierarchy of the spaces of the collection and even form the overall structure of the building. Accordingly, by examining the mosque-schools of Iran with regard to its entrance and its relation to the two main parts, three general types can be found.

First type: mosque and school together and with independent function. In this type mosque and school act separately, each with its own separate entrance and vestibule. Usually the connection between the two parts takes place through a porch. For example,

for the first species of the mosque, the Rahim Khan School of Isfahan can be named. Mir Sayyid Hassan Mujtahid Isfahani was its founder, which after his death, his actions were followed by in the year 1963 by Mohammad Rohim Khan Biggleriqi and his brothers (Hajji Qasemi, 1996); (Fig. 1).

The mosque and its entrance are located on the northern side of the building and are lowered by a few steps from the adjacent street level. There is a vestibule after the entrance, which can be reached to the prayer hall or adjoining courtyard. There is also an additional access from the courtyard to the prayer hall. The prayer hall has six rows of columns and connects to the main courtyard through the porch. Two school entrances are located on both eastern and western fronts (Figure 1). The eastern entrance is the main entrance, which goes down the steps to the level of the school. After passing through the vestibule, we will go to school. At the eastern and western sides of the courtyard school chambers are located. In the southern part of the courtyard is a porch that leads to the dome floor space. The dome is used as a madras. A step is seen at the end of the

eastern and western sides to reach the upper floor. In the upper the belvedere and chambers are placed, and the students use the belvedere for gathering and discussing (Diagram 1).

Second type: mosque and school merged. In this type mosque and school are in a same body, and access to it is possible through a common entrance and vestibule. One of the examples of the second type is the Hakim Mosque-School in Isfahan. The construction of this mosque-school lasted from 1943 to 1954. The Hakim mosque was built at the site of an old mosque during the Dailamiyan period by Hakim Mohammad Dawud Esfahani, known as the Tagharob Khan, the physician of Shah Safi and Shah Abbas II (Fig. 2).

Based on inscriptions in the mosque, the architect of this building was Mohammad Ali Ibn Ostad Ali Bik Bana Isfahani. (Haji Ghasemi, 1996). The mosque-school of Hakim has four porches and two floors (picture 2) and an area of 8,000 square meters. The tomb of Mohammad Ebrahim Kalbasi is also in this building. This mosque-school has three main

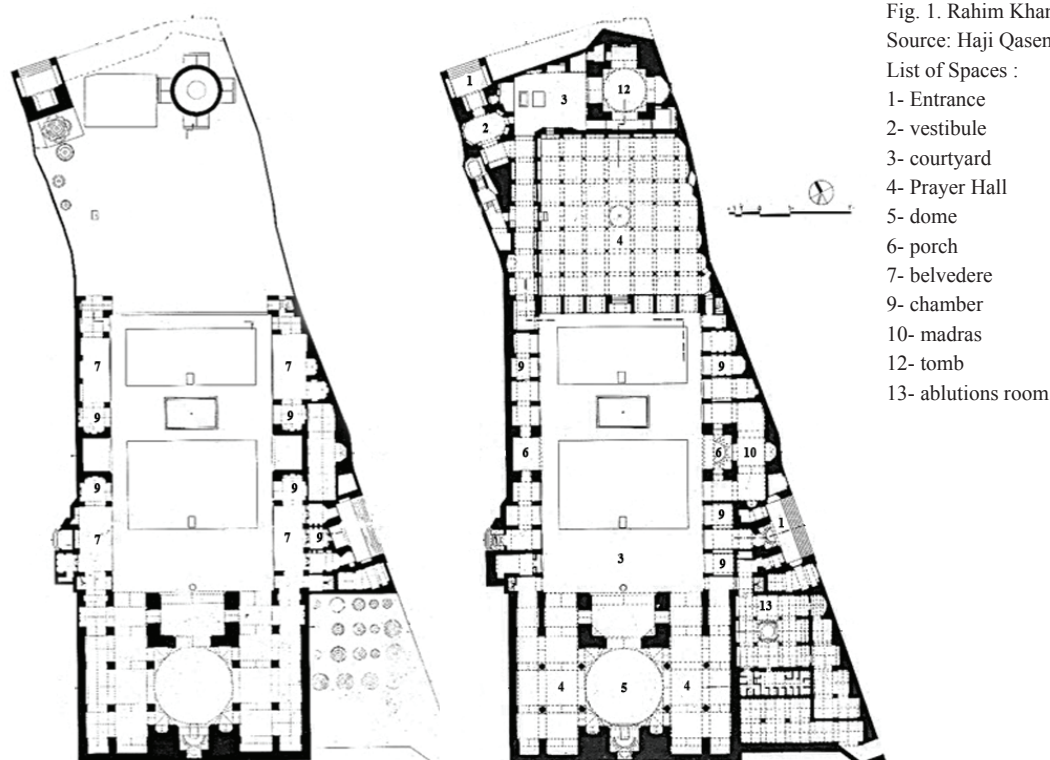


Fig. 1. Rahim Khan mosque-school plans.
Source: Haji Qasemi, 1996.

List of Spaces :

- 1- Entrance
- 2- vestibule
- 3- courtyard
- 4- Prayer Hall
- 5- dome
- 6- porch
- 7- belvedere
- 9- chamber
- 10- madras
- 12- tomb
- 13- ablutions room

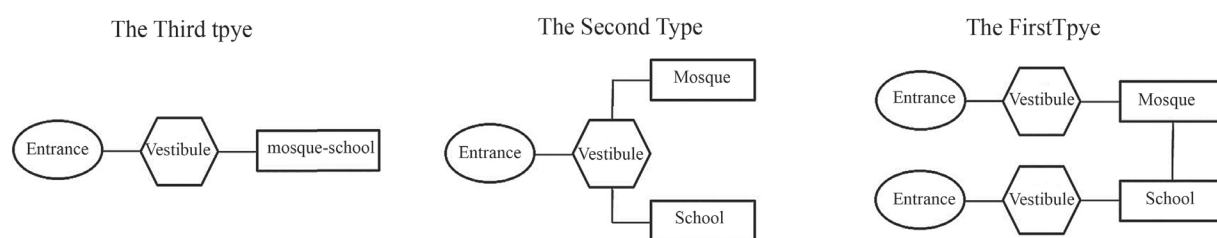


Diagram1. Spatial Diagrams of Different Types. Source: authors.

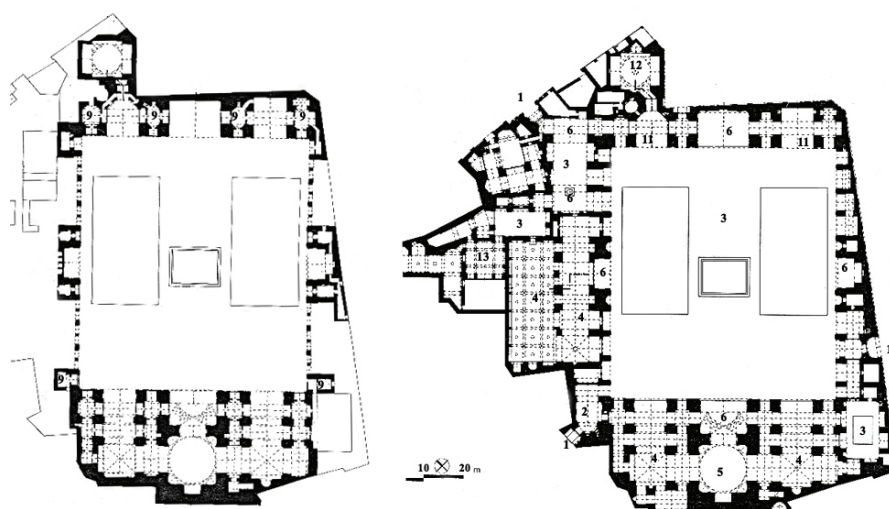


Fig. 2. Hakim mosque-school plans. Source: Haji Qasemi, 1996.

List of Spaces :

- 1- Entrance
- 2- vestibule
- 3- courtyard
- 4- Prayer Hall
- 5- dome
- 6- porch
- 7- belvedere
- 9- chamber
- 10- madras
- 11-stall
- 12- tomb
- 13- ablutions room

entrances and people reach to the main courtyard after passing through the eastern entrance and the porch. The entrance to the west also leads to the main courtyard after entering a vestibule. One can also come from the entrance to the western entrance to the prayer hall and the dome of the house. The northern entrance leads to a porch and then a smaller subsidiary courtyard which connected to the main courtyard by a porch.

The tomb of Mohammad Ebrahim Kalbasi is located in the northern part of the building below a dome. There are booths around the main courtyard. The mosque consists of two prayer halls, the main prayer hall located under the dome on the south side. The winter prayer hall is located on the west side of the building and has two parts: feminine and masculine, which runs from the northern entrance. On the top floor there are chambers and access to the chambers is behind them. In this mosque-school teaching place

is located in prayer halls.

Third type: mosque and school together with separate access and common entrance. As shown in Figure 1, in this type the mosque and school entrances are common and it is possible to enter the mosque and the school from one vestibule. Sometimes there is direct access from mosque to school and vice versa.

For example, the Memarbashi mosque-school of Tehran is in this way. According to the inscription of the endowment in the head of the building, its construction date is 1885 and Haj Abolhassan Isfahani was the founder of this mosque. (Haj Ghasemi, 1998). During the Qajar period, he had a Memarbashi position, and the name of this mosque is derived from his reputation (Fig. 3).

The mosque-school building has two floors. A prayer hall is one of the main spaces of the mosque on the first floor, which is located on the south side of the building. As shown in Figure 3, the main entrance of

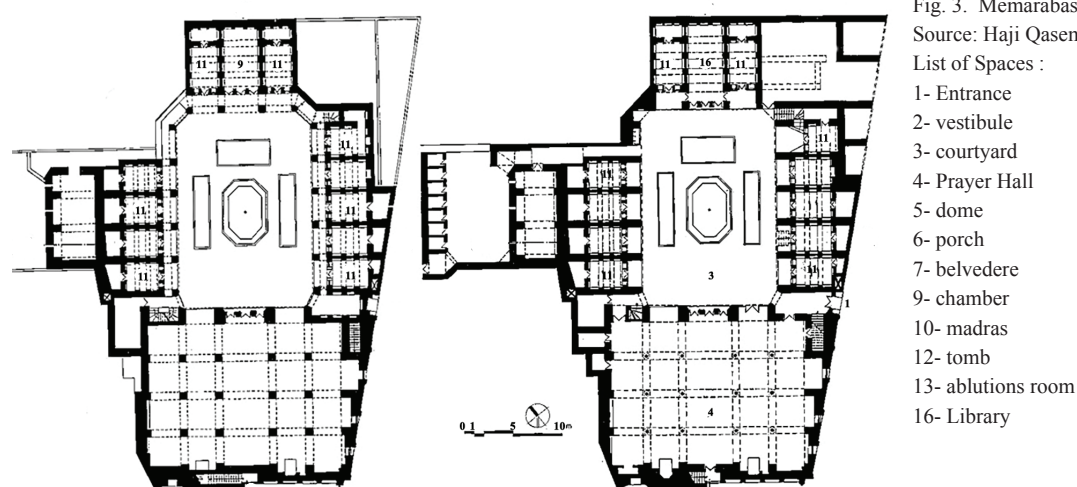


Fig. 3. Memarabashi mosque-school plans.

Source: Haji Qasemi, 1998.

List of Spaces :

- 1- Entrance
- 2- vestibule
- 3- courtyard
- 4- Prayer Hall
- 5- dome
- 6- porch
- 7- belvedere
- 9- chamber
- 10- madras
- 12- tomb
- 13- ablutions room
- 16- Library

the building is on the eastern side and separated from the entrance to the mosque and school through a vestibule. Around the courtyard of the school are the chambers that each chamber contains a small porch on the front and a closet at the bottom. Located on the northern side of the mosque-school is a library. There is a corridor on the western side that ends in the public toilet and ablution rooms. On the second floor, chambers are placed all around the courtyard, and in front of the chambers there is a porch. On the northern side is the school teaching place.

In Iran, only during the Safavieh and the Qajar period mosque-schools are built. Some samples were selected from different cities of Iran for this article. Due to the wide scope of the subject and the large number of examined samples, it is not possible to provide all the samples in detail in the article. For this reason, other analyzed samples are included in the table below based on the construction date (Table 1).

Discussion

In the present study, 37 mosque-schools were studied. Of these 37 school-mosques 6 has built in the Safavid period and 31 in the Qajar period, and in these two periods, all three types of mosque-schools have been constructed. So at first glance, it seems that different types of mosque-schools have been made at different times and in different places without a well-understood order. A chart is provided to better understand the occurrence of different types

of mosque-schools in different periods and times (Fig. 2).

The study also shows that of 37 mosques-schools, 14 are located in Tehran (the Qajar capital), 14 in Isfahan (The Safavieh capital) and 9 in other cities. There are all three types of mosques-schools in both Tehran and Isfahan, and the mosque-schools in other cities are of two types, two and three. To find out the location of the mosque-schools and explore the dispersion of their construction in Iran, a map was prepared to clearly reflect the geographical dispersion of these buildings, as seen in Fig. 4.

Also in Table 2, the multiplicity of building mosques-schools in different places is shown. Despite the fact that there is no general order between the time and place of the mosque-school, but there are remarkable points of contemplation on the time and place that unfolds by more accurately studying the information and the manner in which this mosque-school is structured, as outlined below.

Initially, the fact that most of the first type mosque-schools are built in the central region of Iran-Isfahan, Kashan and Yazd-are noteworthy. The number of first type mosque-schools and the small number of second type represent a more serious effort to separate the two spaces of the mosque and school from each other in these areas. Given that the issue of the permissibility and legitimacy of the composition of the school and the mosque in Islamic beliefs is in a state of ambiguity and controversy, this attempt can

Table 1. Introduction of Mosque-Schools types in Iran, base on this article typology. Source: authors.

mosque-schools	Construction Date	period	Construction Place	typology
Mosque of Mullah Abdullah	1591	Safavieh	Esfahan	First type
Sorkhi mosque	1614	Safavieh	Esfahan	Third type
Imam Mosque in Isfahan	1612	Safavieh	Esfahan	Second type
Farahabad school	1616	Safavieh	Sari	Second type
Sarooqi mosque	1643	Safavieh	Esfahan	First type
Hakim mosque	1656	Safavieh	Esfahan	Second type
Sadr Khaju School	1802	Qajar	Esfahan	Third type
Faizia Mosque-School	1803	Qajar	Qom	Third type
Sephardic school	1812	Qajar	Arak	Second type
Sardar School mosque	1815	Qajar	Qazvin	Second type
Mari school mosque	1816	Qajar	Tehran	Third type
Ibrahim Khan school mosque	1816	Qajar	Kerman	Third type
Hidden Mushi School	1818	Qajar	Tehran	Second type
Mosque-syd school	1824	Qajar	Esfahan	Third type
Imam Khomeini school mosque (Soltani)	1824	Qajar	Kashan	Second type
Imam Khomeini school mosque (prince)	1824	Qajar	Yazd	Second type
Malay Esmaeel School of Mosque	1825	Qajar	Yazd	Third type
Salihia school mosque	1832	Qajar	Qazvin	Third type
Aqa Basrah School of Museums	1834	Qajar	Kashan	First type
Haj Rajabali School of Mosque	1836	Qajar	Tehran	Third type
Sheikh Abdul Hussein school mosque	1853	Qajar	Tehran	First type
Sadr school mosque	1858	Qajar	Esfahan	Second type
Mirza Mosque school mosque	1860	Qajar	Tehran	Second type
Old Sepahsalar Mosque (Shahid Beheshti)	1866	Qajar	Tehran	Third type
Mojaal-Al-Malek School of Museums	1867	Qajar	Tehran	Third type
Hajj Ghanbar Ali Khan school mosque	1871	Qajar	Tehran	Second type
Rahim Khan school mosque	1873	Qajar	Esfahan	First type
Mosque-school of Yalan	1875	Qajar	Kashan	First type
Mosque-School of Kazan-Al-Mamalek	1876	Qajar	Tehran	Third type
Sepahsalar Mosque (Martyr Motahari)	1877	Qajar	Tehran	Third type
The mosque-school of memorials	1885	Qajar	Tehran	Third type
Mojz-e-Doleh School of Museums	1899	Qajar	Tehran	Second type
Al-Mashaye Mosque (Moshir Al-Saltanah)	1903	Qajar	Tehran	Third type
Mecca-school of Roken al-Mulk	1903	Qajar	Esfahan	Second type
Mosque-School of Philosopher-al-Dawlah	1904	Qajar	Tehran	Third type
Madam school	1905	Qajar	Zanjan	Second type

be made of the roots of Islamic beliefs and the more rigorous conformity of Sharia of Islam in the central regions of Iran.

The remarkable issue of the second type mosque-schools is the distribution of these types of buildings. The presence of this mosque-school is also seen in 77% of the cities in which the mosque-school is located. Also the main factor that distinguishes this type from the other two is that making it is simple and requires less space. On the other hand, it is noteworthy that most of the small or low-rise mosque-schools are built in this way. Therefore, the reason

for the existence of this type of mosque-schools in cities other than the capital, and the dispersion of this kind of mosque-schools throughout Iran, seems to be simple to construct and cheaper than other mosques-other schools. However, primary mosque-schools in the city of Isfahan - with the exception of the Imam's mosque, for their own particular sake - have escaped this way, so that even small mosques are built in the form of first or third type.

Nearly half of the third type mosques, which show the religious acceptance of the issue of mosque and school combinations, were built in Tehran during

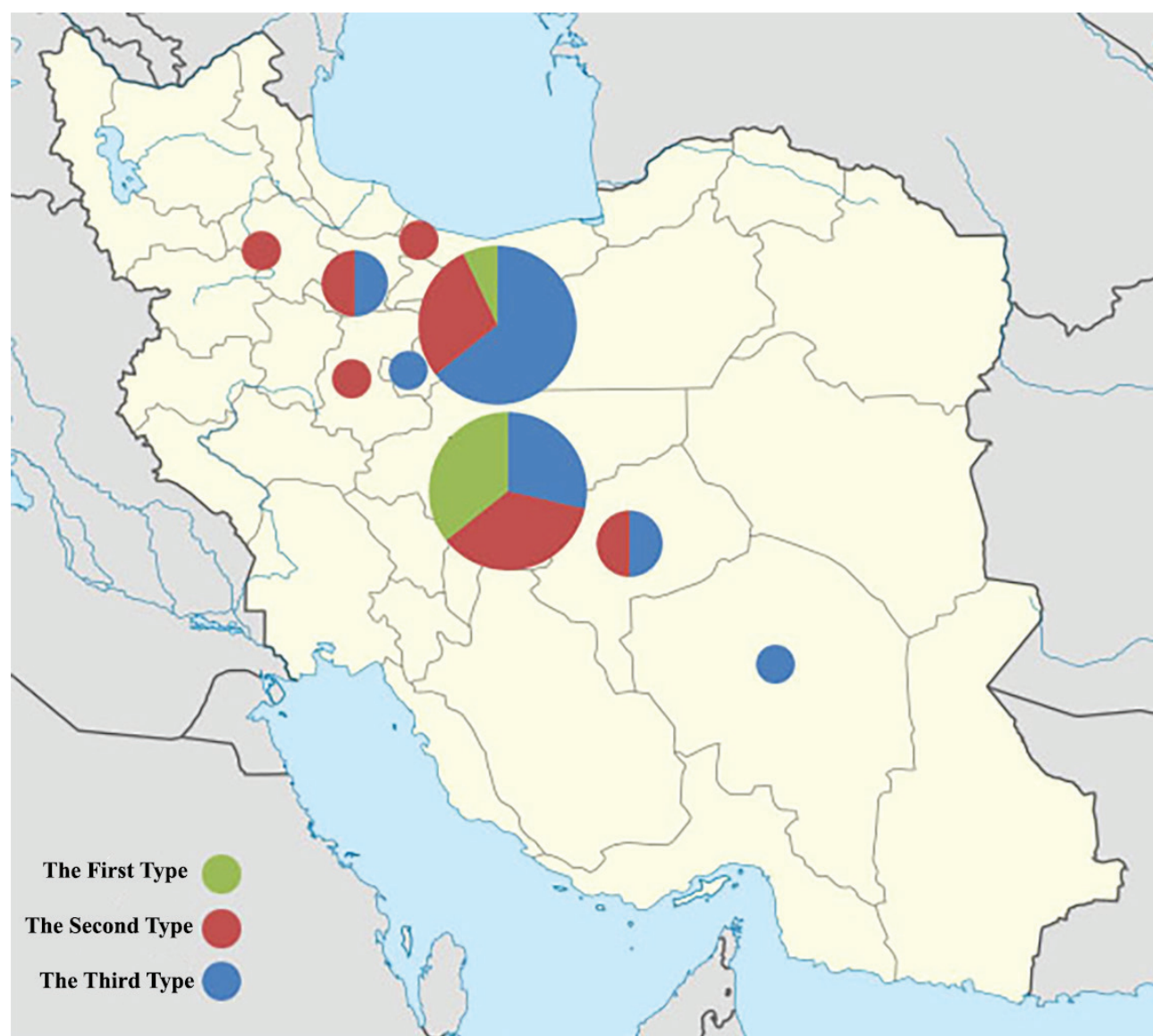


Fig. 4. Geographic Distribution of Mosque-Schools in Iran. Source: authors.

Table 2. Historical dispersion of different types of mosque-schools over time. Source: authors.

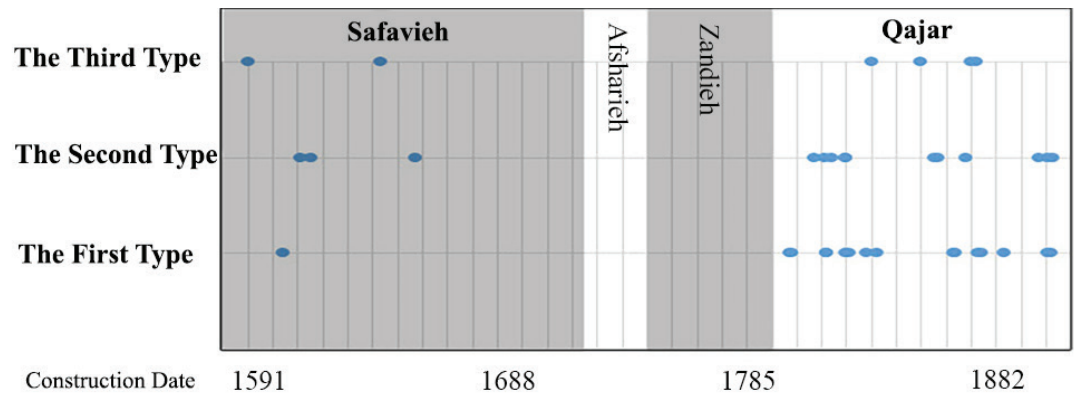


Table 3. The quantity of different mosque-school types made in different places and periods. Source: authors.

Historical Period	Safavieh			Qajar		
	Isfahan and Kashan	Tehran region	Other cities	Isfahan and Kashan	Tehran region	Other cities
First type	2		0	3	1	0
Second type	2		1	4	5	4
Third type	2		0	1	8	4

the Qajar period. On the other hand, according to Hoshyari (2013), the most perfect and comprehensive mosque-school in Iran is the mosque-school of Marvi. This mosque-school, which is classified as the third type in our typology, is the first mosque-school

built in Tehran. These two facts together suggest that the next mosque in Tehran was influenced by the mosque-school of Marvi, which is a complete example of this kind of buildings.

Conclusion

Due to the complexity of the physical form of the mosque-schools and their diversity, the characterization of these buildings is a controvertial and challenged many researchers. In the present article, based on the primary studies, typology based on access was proposed for Mosque-Schools in Iran. Based on this type of classification, three general types of mosque-school were defined and explained.

Type One: Such mosque-schools, which are the first mosque-schools emerged in Islamic architecture, were built in the central region of Iran and the cities of Isfahan, Kashan and Yazd. In this type , due to the more rigorous following of the particular rules of the Islamic Sharia in the region and controversiality of subject, the most separation between religious and educational is observed. In some examples of this type the functions of mosque-school are so separated that the collection can be considered as a mosque and a school together.

The second type: the mosque-schools of this type are simpler and shorter and have a wide geographic spread. This type of mosque-schools appear in the second grade cities of each government and in situations with lower political and social sensitivity and with more emphasis on meeting needs. These mosque-schools are often smaller and have less spatial detail.

Third type: The complete composition of the mosque and school is fully accepted and emerging. This type, which is later than the other two types, was very popular in Tehran and the Qajar era. The Marvi school mosque can be seen as a flagship and an example body.

Summarizing the results shows that the method of building mosque-schools in different places and times has been influenced by three factors:

A: The Islamic and religious beliefs and the importance of separating the religious and educational space from the point of view of the Islamic community of the region have a significant effect on the composition of the two functions of the mosque and the school, and as a result, it is very effective in the formation of the final body.

B: In many places, the social and symbolic significance of the mosque-school is relatively lower and the performance and cost criteria considered for construction are considered to be priorities. It affected the dimensions, the diversity of spaces, and the presence of spaces with special functions, and encouraged architects to combine more religious and educational space.

C: During the Qajar period, in many cases, the structure of the mosque-schools is affected by the typical mosque-schools, especially the mosque-school of Marvi. During this period, a special form for the mosque-schools is accepted in the society that influences the formation of the latter mosque-schools.

Of course, these three factors seem to be a part of the influential factors and the reasons for the creation of different types of mosque-schools in different times and places, and other unknown factors also affect this issue which can be investigated in more detailed researches.

Endnote

1. The school mosque is a special kind of building in the Middle East, in which educational and Religious activities are conducted simultaneously.

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