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Orientation Towards Qibla in Iranian Mosques: The Confrontation of Elements

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Abstract

A deciding factor in the design of a mosque is the direction of the qibla. The qibla is directed toward the Kaaba, which marks a fixed direction of prayer for Muslims worldwide. The mosque adjacent to Prophet's house is credited with the earliest attempt at qibla-orientation, which was based on the canopy. Later on, the orientation would be determined through the courtyard direction. However, Iranian architecture has employed several other ways to orientate towards qibla, thanks to its specific elements that differ from those of Arabian architecture. The first mosques in Iran were formed through modifying the earlier chahar-taqi buildings. Yet, several other original mosque designs also emerged as Iranian architecture was dynamic and constantly evolving. The three elements of the "dome," "iwan," and "courtyard" have interacted with each other within Iranian mosques. This paper focuses on the role and implications of these three elements for qibla-orientation. As a primary research, it combines exploratory and descriptive-analytical approaches to study and examine various Iranian mosques from different periods. The results suggest that the courtyard was less influential than the other two elements in the mosques in shabestani, one-iwan and two-iwan plans. However, with the advent of the four-iwan scheme, the courtyard took on the primary role in the pre-Safavid mosques. Mosques would begin to develop a more centripetal organization in the Safavid period, when the courtyard and iwan, placed opposite to the direction of qibla, assumed a more critical role.

Keywords: Iranian Mosque, Qibla, Dome, Iwan, Courtyard.

Article Type: Review Article

Introduction

Religious constructions represented a most prominent architectural form throughout the history of Iranian architecture. As a symbol of its cultural history, religious architecture can facilitate a better understanding of a society's religious beliefs and convictions (Knott *et al,* 2016: 12–14). As this architecture is an upshot of a long-drawn process within that historical context, its elements are a reason for the physical and identical sustainability of Iranian architecture in this evolutionary architecture. "Iranian architecture had been the outcome of adjustment to three subspaces: room, iwan, and court" (Kiani *et al.* 2016: 54). Because before the arrival of Islam, the primary religion of Iranian society had been Zoroastrianism. Their religious buildings were chahar-taqis. The most critical elements of this building are the dome, and Iwans. With the Muslim conquest of Iran, these elements were incorporated and remained in mosques for various reasons. So, the dome and Iwan became an integral part of Islamic architecture, leading to the formation of Iranian mosques with indigenous characteristics.

In the past, mosques served as the most important gathering places for Muslims, and they were used to organize religious, social, economic, and political events (Moghani Rahimi *et al*, 2022: 10). One of the integral parts of the Islamic city is the mosque (Azizpour Shoubi *et al,* 2022: 126). Shapes and geometric features used in mosques reflect the thoughts of their builders(Vasigh *et al* 2022a: 8). The first mosque was formed in the yard of the prophet's house. After Muslims conquered

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Madinah, they introduced the shabestani pattern into mosques, giving rise to the early shabestani mosques with courtyards.

Research Methodology

On the one hand, because the framework of each space is shaped according to the function of that space, and on the other hand, the obligation is to perform necessary religious action (pray); therefore, the spatial continuity of simple shabestani mosques was best suited for the rows of prayers. Thus, the question arises as: why did Iwan and dome elements continue in the space of Iranian mosques? The court in the mosque is a memorial from the first mosque, the prophet's house, which was formed on the floor of the prophet's house; they also covered part of the qibla side of the court to achieve orientation toward the qibla. However, since Iranian architecture had a richer source of elements, Iranian architects tried to achieve this either by the pre-Islamic architectural elements or by changing the remains of chahar-taqi structures into mosques. Therefore, the above question can be answered by the fact that orientation toward qibla led to the use of elements such as dome and Iwan within mosques. However, since Iranian architecture was dynamic and constantly interacting, it changed significantly over time. Therefore, this research investigates the evolution of Iranian mosque orientation in response to these three elements: courtyard, Iwan, and dome.

History of Research

Mosques were the most prominent architectural space during the post-Islamic era. Therefore, there are several studies about them, an outline of which is presented in Table 1.

Although much research has covered Iranian mosques and their elements, they have failed to pin down the significance of each element in orienting toward the qibla. Therefore, the present work tries to fill this gap by investigating the action and reaction of Iranian mosques elements towards qibla direction.

Mosque

Mosque buildings were developed in different periods and became the first and foremost form of Islamic architecture (Jalali *et al*, 2021: 115). At the dawn of Islam in the time of the Prophet Mohammad, it required a worship space like all religions. Because pray is an obligatory worship in Islam, the prophet recommended the social performance of pray. Therefore, as a new concept, the mosque entered their life and became the most prominent space to respond to the spiritual and afterlife requirements. As mentioned, the pray is obligatory worship performed in mosques. So, "a primary feature of mosques is the position of the mosque toward the direction of the qibla" (Motedayen, 2007: 40). In terms of architecture, the first mosque was located in the prophet's house. This mosque had a rectangular plan and lacked in a roof. Then, because of the intense sunshine of Arabia, they built a canopy on the qibla side of the yard using trunks of palm trees (Nemati and Shahlaei, 2015: 76). Considered as the first shabestan ever made in a mosque, this wooden canopy marked the direction of the qibla in the yard (Table. 2).

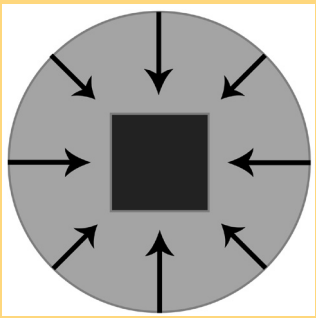
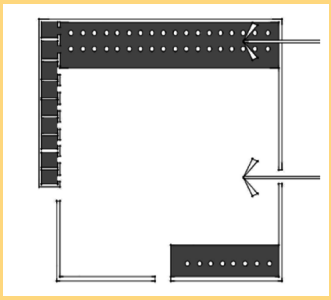
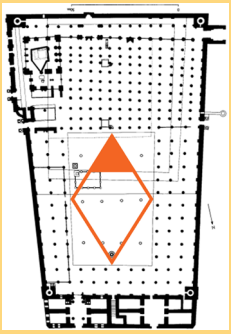
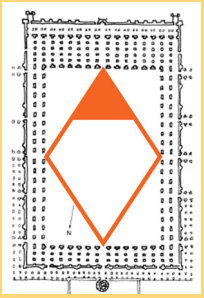
Emphasizing on axis was an essential principle that traditional architects always took it into account. The axis is the line that connects two crucial points in the building, e.g. when two iwans on two sides of the courtyard located vis a vis each other (Nava'I & Haji Qassemi, 2011: 59). Axes in designs often have no objective presence in space by one prominent point: like a dome, or two significant points, vis a vis each other: like iwans. Orientation can be obvious or lie in hidden layers of a space. In mosques, the axis is responsible for creating movement hierarchy, symmetry, finding a rhythm of the elements parallel to the axis, and emphasizing the qibla direction (Vasigh *et al*, 2022a: 8).

Architecture is the art of regulating space, and sacred architecture's primary goal has put a man in the sight of god; it achieves this goal by giving sanctity to space that is built and regulated as well as decorated. In Islamic architecture, this sanctity formed according to the presence of the Kaaba ((Nasr , 1994: 55 cited in Hamzeh-nezhad & Arabi, 2014: 50). The Kaaba, the qibla of all Muslims, forms the direction of prayer on the earth. Therefore, all of the Islamic sacred spaces are shaped according to its direction. Moreover, in many cases, it also shapes the direction of houses or the general orientation of whole cities.

Table. 1: *Previous research*

	Author	Description of the work
Investigate and analyze past researches	Pirnia (1974)	An article titled "God House in Iran" considered that the lack of proportion of early shabestani mosques was the reason for changing mosque architecture.
	Motedayen (1999)	In the paper "Four-Iwan Mosques" he investigates the opinions of scholars about the origins of the four-Iwan mosque and mosque history of the Islamic era. Moreover, considering four considered four-Iwan mosques as a result of both confronting the Abbasid style plan of the mosque and replacing the Iranian plan.
	Hillenbrand (1994)	Believed that Iwan and dome chambers were quickly introduced in mosques architecture; they offered a wider variety of architectural expression by the power of their articulation than what Arabic plan offered.
	Motedayen (2007)	The paper entitled "Chahar-Taqi with the Dome Turning Point of Iranian Architecture" considered the conjunction of chahar-taqi into space of a mosque after four-Iwan mosques; as a result of both need to strengthen the qibla and confront with Arabic style plan.
	Hojjat and Maleki (2012)	Their paper "The Convergence of Three Primary Geometric Forms and the Appearance of the Geometry of Iranian Mosque" investigated the formation and transformation of mosques since the arrival of Islam. Moreover, its continuation in the Islamic era divides mosques into three fundamental forms and expresses that the conjunction dome into mosques gave it a dual axis.
	Hojjat, Golestani, and Saedvandi (2015)	An article titled "The Addition of Dome Chamber To Iranian Mosques, The Story of Joining And Separating of Space" narrates the break-up and attachment of space. It investigates the efforts of Iranian architects to join the dome chamber into the courtyard and shabestani for eight centuries. Also, it expressed that despite their sustained principle, the organization of Iranian mosques spaces had never been inactive, and they had progressed.
	Rezaeinia (2017)	The article titled "The Form of Iwan in Iranian Architecture, From the Beginning until the Early Islamic Centuries" investigates the early roots of Iwan from Islamic periods and then identifies three classes of Iwan: columned, vaulted, and a combination of them as well as believed that the creation of dome chamber behind Iwan was the result of the continuation of the Sasanian tradition, which was very important during Islamic periods.
	Musavi and Hamzeh-nezhad (2019)	The categorized the mosques in Khorasan into two types: with and without a courtyard. Those with courtyard are further subdivided into three categories.
	Balali Oskoyi , *et al* (2020)	Identifying and analyzing the fundamental elements of the Safavid mosques in Isfahan city, focusing on their classifications, allows us to continue to use these patterns in the new architecture of mosques.
	Balali Oskoyi and Alimi (2021)	They examined the role of mosques in traditional Iranian society and discuss the different roles of these two types of mosques by examining and analyzing the mosques of two important bazaars of Iran, namely the Tabriz Grand Bazaar and Qaysari Bazaar of Isfahan.
	Azizpour Shoubi *et al* (2022)	Adopting a cultural studies approach, this research examined the architectural symbolism of Iranian mosques from different eras and demonstrated that symbols and signs influenced the audience's actions. Therefor it is essential to use mosque symbols for the design of contemporary mosques.
	Vasigh *et al* (2022a)	It examined the effect of the qibla side on the geometric diversity of Yazd mosque plans which are also known as Dar al-Abad.
	Vasigh *et al* (2022b)	This research examined the plans of mosques in Yazd based on explaining their relationship with the hierarchy and rituals of worship
	Moghani Rahimi, *et al* (2022)	It examined relationship between the mass and space in the old and new mosques of the hot and dry climate mosques in Kashan City. Their findings indicate that the numerical pattern of mass and space in new and old mosques of Kashan has some differences.
	Solymani, *et al* (2022)	An examination of the historical mosques of Shushtar was presented in order to design contemporary mosque design based on the historical mosques.

Table. 2: *Qibla direction*

Qibla and the Kaaba	Prophet mosque		Abu Dulaf Mosque
	Early mosque	Developed mosque	
			
By Authors	(After: Hojjat and Maleki, 2012)	(After: Petersen, 1996: 183)	(After: Hamdouni Alami, 2011: 111)

The Beginning of Mosques in Iran: In the early days, Muslim conquerors used the buildings that remained from the pre-Islamic architecture. Before Islam came to Iran, the primary religion of Iranian society was Zoroastrianism, and the related religious buildings were the so-called chahar-taqies. Therefore, there were many chahar-taqies in Iran during the Sassanian period.

Chahar-taqi: Chahar-taqi is a covered space where a dome on four bases shapes its form. The buildings like Bazeh-hoor and Nia-sar Chahar-Taqi show the primary and simple form of this architectural space. "Some mosques in Iran were formed by transforming the chahar-taqis" (Hojjat and Maleki 2012: 8). This was realized by blocking their three openings and preserving the fourth one that lay opposite the qibla (Table. 3).

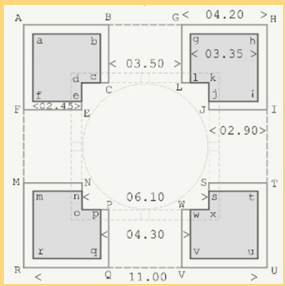
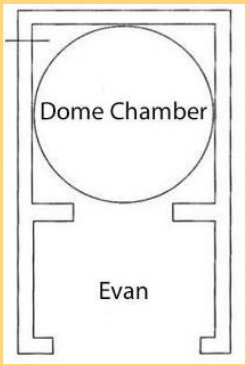
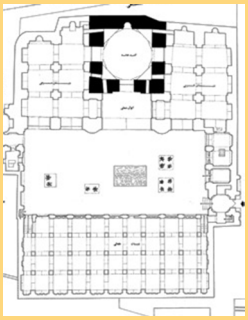
In general, the mosques built in Iran following the phase involving the modification of chahar-taqis split into these four categories: shabestani, iwani, iwani with dome chamber, and dome-chamber. The present paper considers the first three of these categories.

Shabestani Mosque

After Muslims extended their territory through frequent conquests, the prophet's mosques in Medina became a model for new mosques. Because the prominent physical element of this architecture was shabestani, the resultant plan came to be known as shabestani, which prevailed in the architecture of Islam countries. This pattern comprised a courtyard and a shabestan that surrounded the former. Shabestan is a big roofed hall with many columns placed at regular intervals.

The orientation toward qibla in these mosques

Table. 3: *Chahar-taqi*

The chahar-taqi of Nia-sar		Izadkhast mosque	The Friday mosque of Brujerd
			
Authors archive			

had formed in two ways: in one way, the courtyard extended along the qibla direction, and the shabestan of the qibla side is deeper, and the porch of the qibla side is characterized by a central opening that was bigger than the others. An example of this mosque plan is the Tarikhaneh mosque in Damghan. The second way consisted of a combination of odd or even numbers of openings around the courtyard so that the sides directed towards qibla contained odd numbers of openings. Also, the central opening of the qibla side is bigger than the others. In some mosques, a combination of the number of openings has more priority than the elongation of the courtyard; their courtyards have the contrary direction to qibla. Example of this mosque scheme includes the Friday mosques of Fahraj and Na'in. Therefore, at the beginning the courtyard had not fundamental role in the architecture of the Iranian mosques, as it did in Arabic mosques (Table. 4).

Iwani Mosque

Iwan is an stable form of Iranian architecture organized around the courtyard. It is a space with a vaulted cover, with three sides closed and the front open to the courtyard (Rezaeinia, 2017: 127). Iwan can be assumed as a spatial filter and shared space between open and closed spaces. "The incorporation of iwan between the hall and courtyard of a mosque was the second step during the Seljuqs period for directing and enhancing the Iranian mosque plan" (Motedayen, 2007: 142). Putting a dome chamber behind iwan continues the Sassanid tradition (Rezaeinia, 2017: 127). Then, the four-Iwan mosque with a dome chamber became a prominent feature of the architecture of Iranian mosques (Nazif, 2013: 60). This process started by enlarging the central opening of mosques such as Friday mosque in Fahraj, and Tarikhaneh mosque in Damghan, then completed by presenting iwan. Therefore, they restored the combined form of the pre-Islamic period in buildings like the Sarvestan palace (Table. 5).

Iwans do not have the same significance and often differ in size, decoration, access, combination with peripheral space, and function. Generally, iwan is bigger than peripheral space, and it is placed in the center of vertex or vertexes of building elevation, as well as in the symmetry axis of the building.

Table. 4: *Shabestani mosque*

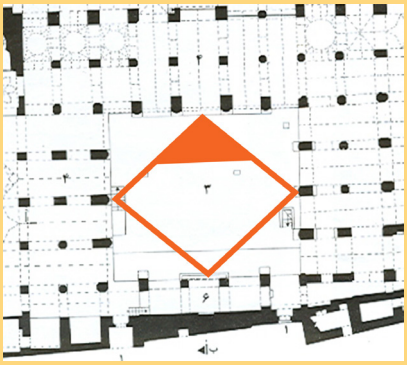
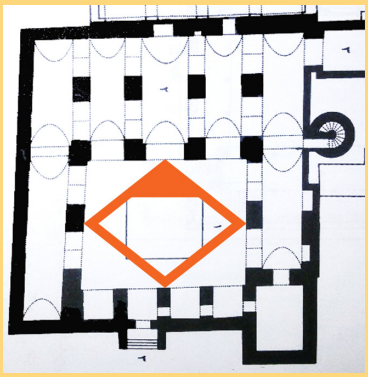
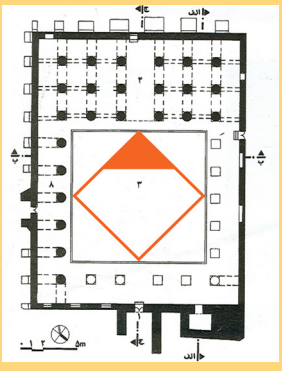
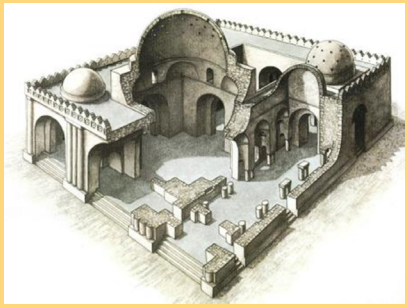
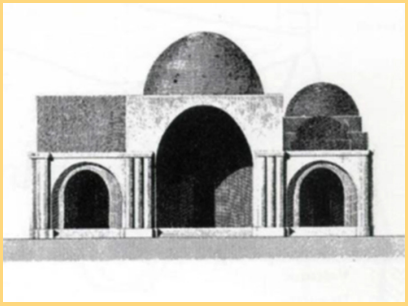
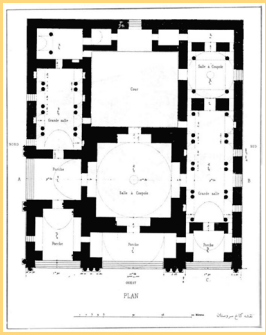
day mosque of Na'in	Friday mosque of Fahraj	Tarikhaneh mosque in Damghan
		
Authors archive	Authors archive	Authors archive
		
(After: Haji Qassemi, 2004b: 82)	(After: Pirnia & Memarian, 2013: 138)	(After: Haji Qassemi, 2004a: 215)

Table. 5: *The Sarvestan palace*

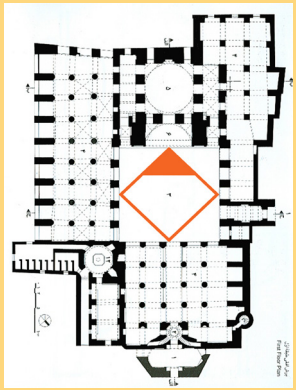
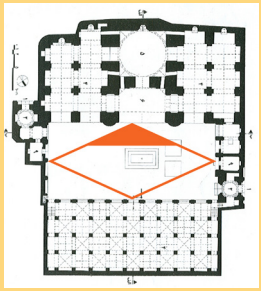
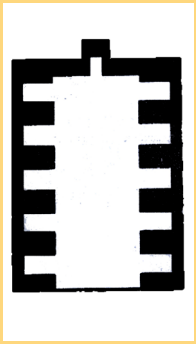
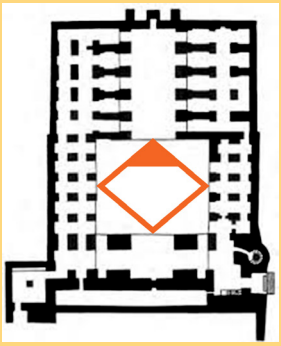




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One-Iwan Mosque: The addition of iwan to the mosque plan strengthened orientation toward qibla, which would be further bolstered by its combining with the Mihrab. A notable example of this mosque type is the Neyriz Friday Mosque that once included a single iwan as a later addition to the primary structure of the mosque (Table. 6).

Four-Iwan Scheme in Iranian Architecture: The pattern of two perpendicular crossed axes is one of the earliest and the most common as well as the most durable designs of Iranian Islamic architecture. This principle is in the overall geometry of the whole space (Nava'I and Haji Qassemi, 2011: 61). "The first four-iwan in Iranian architecture formed within Ashour palace during the Parthian period" (Asgari, 2014: 152). Afterwards, it was continually concomitant with Iranian architecture and introduced to different spaces." The first four-iwan mosque is the Friday mosque of Zavareh constructed during the Seljuq period.

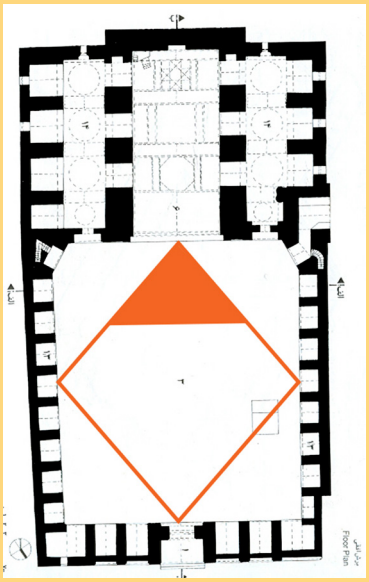
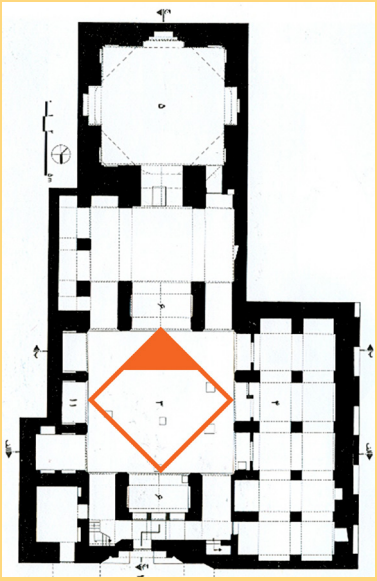
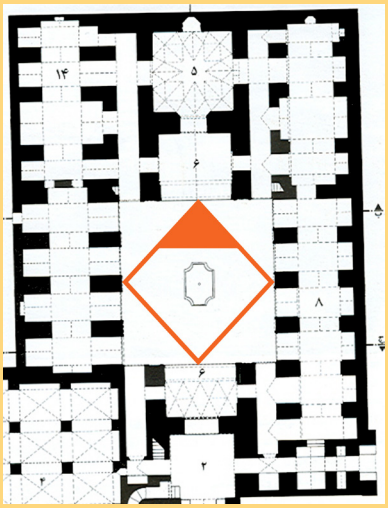
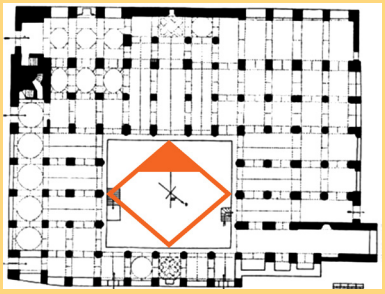
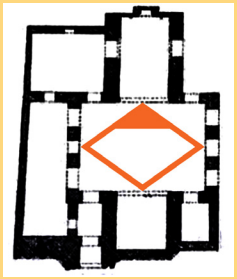
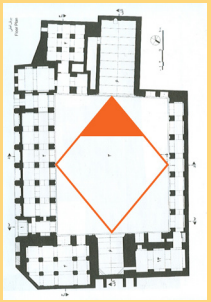
Table. 6: *One-iwan mosque*

The Friday mosque of Semnan	The Friday mosque of Brujerd	The Friday mosque of Neyriz	
		Early mosque	Developed mosque
			
(After: Haji Qassemi, 2004c: 24)	(After: Haji Qassemi, 2004c: 108)	(After: Pirnia and Memarian, 2013: 155)	

Two-Iwan Mosque: The next step of strengthening orientation toward the qibla involved adding another iwan to avoid confusion. This second iwan was built in smaller dimensions than the first one. Examples of such mosques are illustrated in Table 7. The earliest two-iwan mosque was seemingly the Friday Mosque of Toon, built during the Seljuqs period.

The role of the courtyard in qibla-orientation decreased with iwan replacing the central opening, as a result of which iwan and dome chamber assumed the primary role. Because of the strong pull created by two vis a vis iwans, the two-Iwan plan formed the most robust axis configuration, so many courtyards at such mosques are aligned to directions other than that of the qibla.

Table. 7: *Two-iwan mosque*

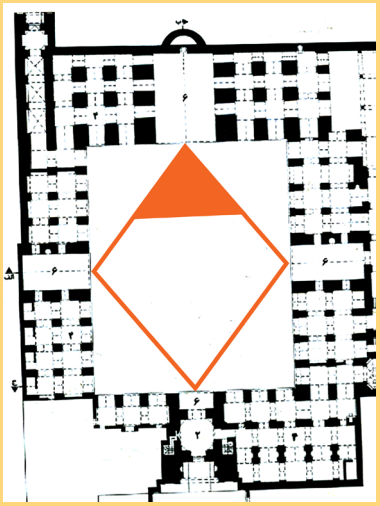
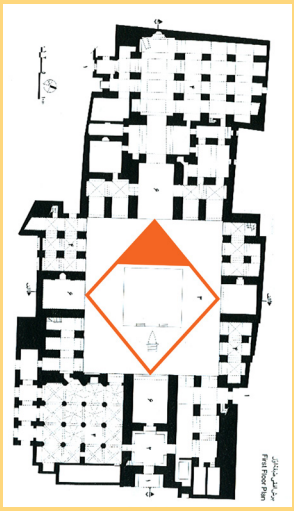
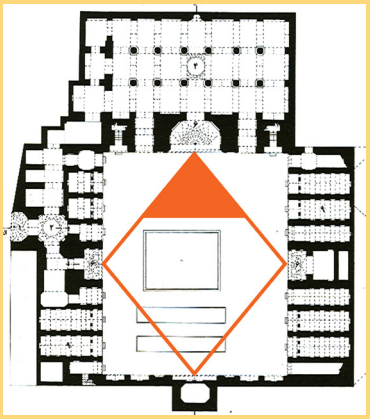
The Friday mosque of Ghayen	Baba Abdulah mosque in Na'in	The Friday mosque of Varzaneh
		
(After: Haji Qassemi, 2004b: 147)	(After: Haji Qassemi, 2004a: 71)	(After: Haji Qassemi, 2004b: 37)
The Friday mosque of Forumad	**The Friday mosque of Forumad**	**The Friday mosque of Gonabad**
		
Authors archive		(After: Haji Qassemi, 2004b: 97)

Four-Iwan Mosque Without Dome Chamber: As the four-iwan mosque scheme reached its peak in symmetry and equilibrium, orientation toward the qibla through creating centralism diminihed. To confront this issue, in the axis corresponding to qibla was employed an iwan that was more extensive, deeper, and more elaborated than those of the other sides. Two perpendicular iwans to qibla were also built symmetrical (Table.8).

The configuration according to two axes creates the center, increasing attention and emphasis, and the center defines and validates axes. The emergence of new axes or centers also causes a kind of non-direction in space (Nava'i & Haji Qassemi, 2011: 63). Due to centralism created from four vis a vis iwans, the role of the yard was more highlighted in orientation toward qibla.

The Combination of the Dome Chamber, Iwan, and Courtyard: The critical introduction of the dome chamber in Iranian mosques occurred during the Seljuq period in two primary forms: 1) adding dome chamber to shabestani mosque plan through eliminating south space as is evidenced at the Friday mosque of Isfahan; 2) construction of the dome chamber as the core of mosque then its expansion by adding a shabestan, iwan and courtyard, e.g. at the Friday mosques of Brujerd, Golpaygan, Barisan, Dashti, Sin, and Ghorveh (Hojjat *et al*, 2015: 23–24), or building the dome chamber along with other spaces of the mosque at the same time, as is the case for the Shah mosque in Isfahan. As one of the most prominent architectural elements in the mosque, the dome also plays a central role in highlighting the direction of the qibla (Figure. 1).

Table. 8: *Four-iwan mosque without the dome chamber*

The Friday mosque of Kerman	The Friday mosque of Abarqu	Emad al-Duleh mosque in Kermanshah
		
(After:Haji Qassemi, 2004b:121)	(After: Haji Qassemi, 2004c: 175)	(After:Haji Qassemi, 2004a: 95)

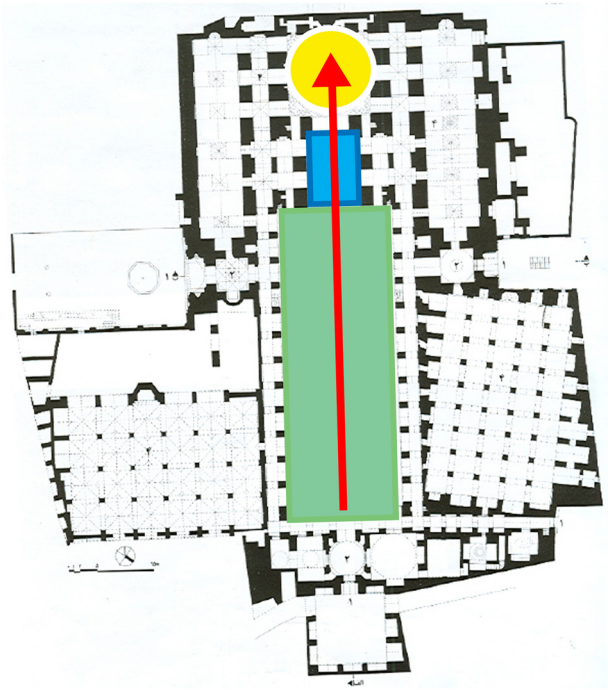


Figure. 1: *The Friday mosque of Yazd(After: Authors)*

The combination of iwan and dome chamber was a well-known pattern employed widely in Iran, Iraq, and Jordan during the Sassanid period (Rezaeinia, 2017: 137). The iwan connected to the dome chamber was used for strengthening the qibla. At this time, the dome chamber, along with iwan, was quickly introduced to the thesaurus of mosque architecture. They could achieve a broader range of architectural expressions than the shabestani plan. Iranian mosques were formed by connecting dome chambers, iwan, and shabestan (Hillenbrand 1994) (Table. 9)

Hillenbrand also believed that Iranian mosques were more characterized during early periods by enriching columned with two elements deeply rooted in pre-Islamic architecture: The dome chamber and iwan. Their dome chamber is rooted in Sassanid architecture. In this way, the new composition of the old form of the classic version was created from the old four-iwan yard design that dominated Iranian architecture in future centuries. Thus, the four-iwan mosque gradually became the dominant mosque of the eastern world (Hillenbrand, 1994: 97).

Four-Iwan Mosque with Dome-Chamber from the Seljuq to the Pre-Safavid Period: Some mosques were provided with a dome-chamber built in the back of their iwan during the fifth century. The qibla axis was further strengthened by the addition of iwan and dome against the qibla direction, thus the four-Iwan mosque scheme achieving its full-blown form.(Table. 10)

Four-Iwan Mosque with Dome-Chamber During the Safavid Period: The evolution of courtyard's "orientalism" (direction-orientedness) in the four-iwan design persisted into the Safavid period, when the courtyard was one of the essential items in defining orientation towards the qibla. So, it can be considered as necessary as iwan and the dome

Table. 9: *The tendency towards the dome chamber and iwan*

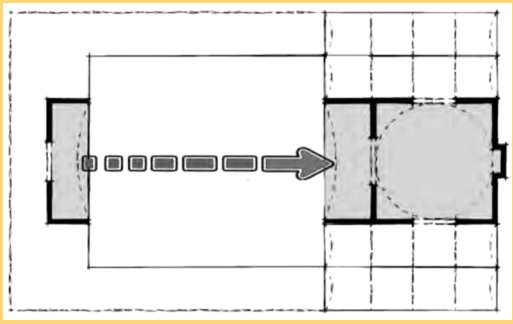
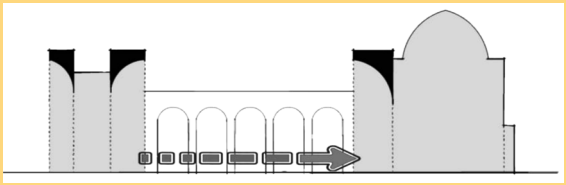
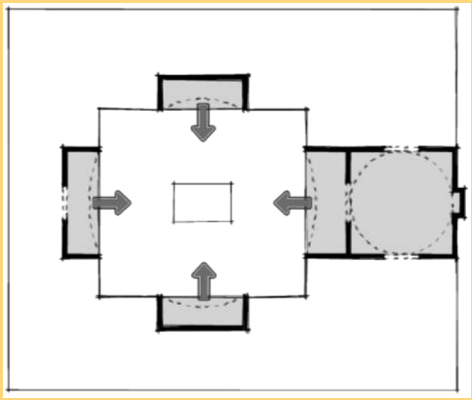
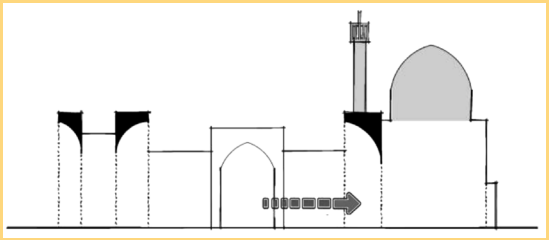
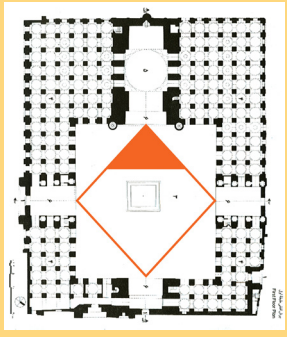
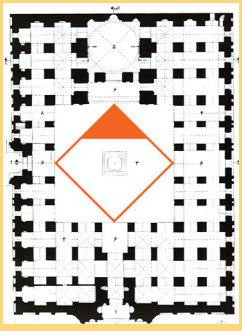
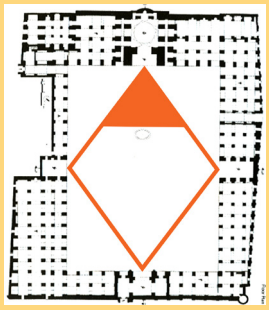
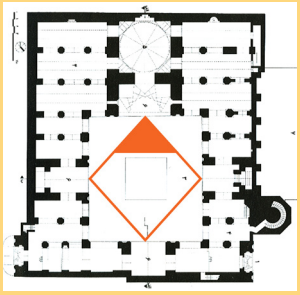
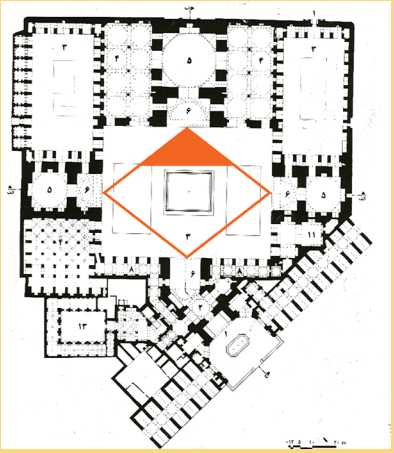
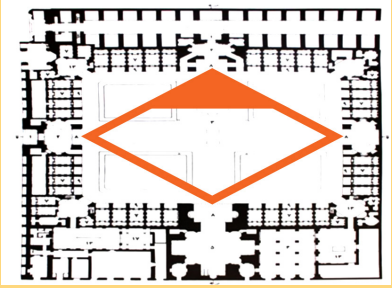
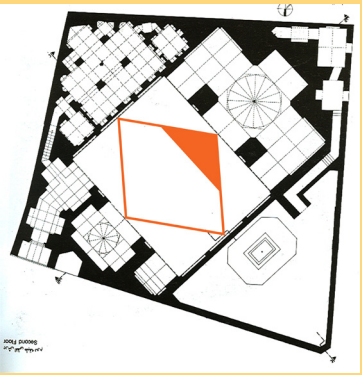
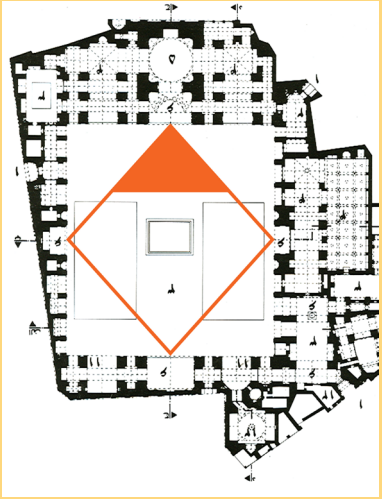
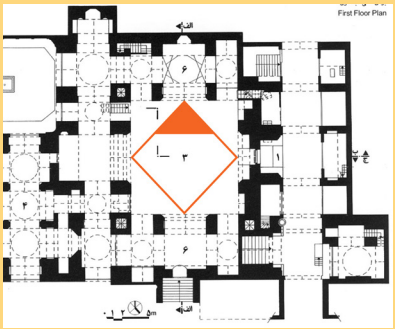
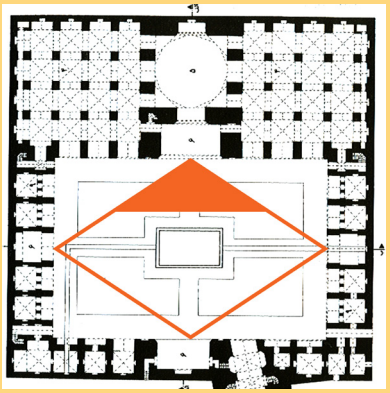
	Plan	Section
First step		
Second step		
(After: Mir Ahmadi & Mahdavipour, 2015: 10–13)		

Table. 10: *Four-iwan mosques with dome-chamber from the Seljuq to the pre-Safavid period*

Guharshad mosque	**The Friday mosque of Varamin**	**Malek mosque in Kerman**	**The Friday mosque of Zavareh**
			
(After: Haji Qassemi 2004a: 71)	(After: Haji Qassemi 2004b: 48)	(After: Haji Qassemi 2004a: 101)	(After: Haji Qassemi 2004c: 159)

chamber. However, the courtyard lost this function at the expense of increased centralism. However, many of the Safavid mosques show the perpetuation of the old tradition of orientation towards the qibla, among them being the Hakim mosque of Isfahan. In the following, we will analyze several Safavid mosques (Table. 11).

Table. 11: *Four-iwan mosque with dome-chamber during the Safavid period*

Imam mosque in Isfahan	**Madar-shah in Isfahan**	**Sheikh Ali-khan mosque in Isfahan**
		
(After: Haji Qassemi, 1996: 161)	Authors archive	(After: Haji Qassemi, 1996: 165)
Hakim mosque in Isfahan	**Vazir mosque in kashan**	**Farah-Abad mosque in Sari**
		
(After: Haji Qassemi, 1996: 141)	(After: Haji Qassemi, 2004a: 114)	(After: Haji Qassemi, 2004a: 209)

The Plurality and Confrontation of Iwans and Domes

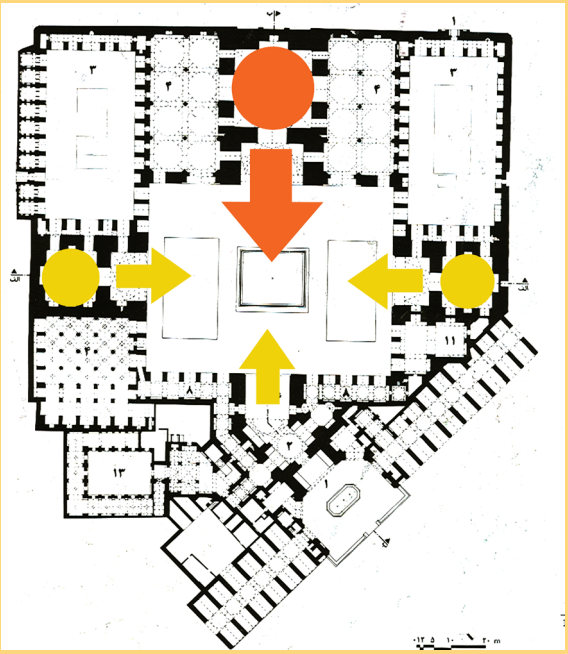
The plurality of domes and iwans decreased the pull of the qibla direction, creating a kind of centralism within the courtyard. So, one may surmise that the four-iwan mosque is a centralistic mosque rather than an orientation-based one (Table .12). However, architects devised the following solutions to avoid misdirection in recognizing the qibla direction:

1. Making the dome and iwan of qibla direction in larger dimensions than the others.
2. Applying more ornamentations to the dome and iwan of the qibla direction.

Comparative Analysis

To summarize, the examined sample has been compared based on the elongation of courtyard with respect to the qibla direction in Table 13.

Table. 12: *The plurality and confrontation of iwans and domes*

Aerial photo	Plan
	

(After: Authors)

Table. 13: *Comparative analysis*

Mosque		Elongation			Mosque		Elongation			Mosque		Elongation		
shabestani	Tarikhaneh	**Align**	**Balance**	**opposite**	Two-iwan	Ghayen	**Align**	**Balance**	**opposite**	The four-iwan mosque with dome-chamber during the Safavid period	Imam	**Align**	**Balance**	**opposite**
			*				*					*		
	Fahraj			*		Baba Abdulah		*			Madar-shah	*		
	Damghan			*		Varzaneh	*				Sheikh ali-khan	*		
One-Iwan	Semnan		*			Faromad			*		Hakim			*
	Brujerd			*		Faruomad			*		Vazir		*	
	Neyriz			*		Gonabad	*				Farah-Abad	*		
Four-iwan mosque without dome chamber	Kerman	*			The four-Iwan mosque with dome-chamber from the saljuqid period until	Guharshad	*							
	Abārqu	*				Varamin	*							
	Kermanshah	*				Malek in Kerman	*							
						Zavareh	*							

Conclusions

The early Iranian mosques were created through making modifications in non-Islamic religious structures (chahar-taqis). Because the essential principle in space organizing of Islamic religious places is qibla direction, these mosques were created by closing the side that faced the qibla. This resulted in the arrival of a series of Iranian mosque plans. The early shabestani mosques lacked the dome and iwan. Thus, the qibla direction was characterized by a central opening and a number of other openings. Some of these mosques show a courtyard that extend along a direction other than the qibla. Therefore, one may infer that the courtyard had lesser priority than other elements in orientation toward the qibla. Because of the need for a more significant element to determine the qibla and a sizeable open-pitch space without columns, the subsequent mosques were provided with a dome and iwan, elements of pre-Islamic architecture, which along mihrab characterized the qibla direction. Thus, these were added to the one-iwan and two-iwan mosques. The strong pull of the iwan resulted in the dwindled role of the courtyard in orientation toward the qibla. Many one-iwan and two-iwan mosques are oriented to directions other than the qibla. These kinds of mosques were created as the most substantial axial organization.

Following the evolution of mosques during the Seljuq period, a pair of further iwans were added to other sides of the two-iwan mosque, hence the emergence of the four-iwan mosque scheme. Therefore, the Seljuq period can be considered the most significant period in the construction of mosques. The four-iwan mosque is centered on the courtyard rather than the qibla, so it can be said that the four-iwan mosques are center-oriented instead of being qibla-oriented. Due to the concentration of four iwans facing each other, the role of the courtyard in the dome-less four-iwan mosque was more prominent than in the domed mosques. This kind of orientation of the courtyard continued into the Safavid period. However, during this period the courtyard in the four-iwan mosques lost its significance with respect to orientation toward the qibla. In many of such mosques, the courtyard lies opposite the qibla. Thus, centralism in these mosques peaked. However, the dome and iwan of the qibla side were made in differing dimensions and elaborations to facilitate detecting the qibla direction at the mosque.

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