

Typological Extent of Timurid Mosques in Iran and Central Asia

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ABSTRACT

Persian mosques were formed and developed according to the Arabic model (Hypostyle mosque) and the fire temple from Pre Islamic Persia, although Iranian master buildershad introduced architectural innovations which had an impressive effect on mosque architecture in the Middle East and Central Asia, such as the 'ivan', domed chamber. The architectural advancement flourished and developed in four significantPersian Islamic periods (850-1736AD) - Seljuk, Illkhanid, Timurid and Safavid.

The influence of Persian mosques was widespread even expandingoutside Persia's territory (Persia means Iran & Central Asia). The architectural period in Persia, Timurid style (1370-1526) had influential and specific position, because of diverse types of buildings including tombs and mosques. The Timurid dynasty's architectural legacy was rooted in its history as an expansive empire that drew on formalistic centrally planned, highly symmetrical, Persian architectural structures and typologies, while integrating reinterpreted architectural elements, mostly decorative.

This paperpresents the typology of Timurid mosques in Iran and central Asia. Even though, the architectural importance and vastness of Timurid territory, several timurid mosques were destroyed or damaged badly due to wars and earthquakes, so that this research can improve the knowledge about the history of architecture in this era. By typological analysis of samples, the paper addressedclassification and distribution of Timurid mosques according to type, place, and time .the results can help historical architects and experts to have clear and precise view about the Timurid mosques.

KEYWORDS: typology, mosque, Timurid architecture, Iran, Central Asia

INTRODUCTION

The historical region which is called Persia, and to which the Persians themselves used to call Iran had been an independent kingdom extending from the Caspian Sea in the north to the Indian Ocean in the south, and from Afghanistan and Russian Turkestan in the east, Mesopotamia, Kurdistan, and Armenia in the west[4].

After the arrival of Islam, Persian historical periods were divided into four main periods including: Seljuk (1071_1194 AD), Illkhanid (1256_1335 AD), Timurid (1370_1526 AD), and Safavid (1502_1736 AD). Among these periods, Timurid style had an influential and specific position because of vastness and spread of Timurid territory (Iran, Central Asia), influence in other countries such as India and Pakistan, and also novel and new architectural innovation (none folds, double dome ...).

This was accomplished under the direction of the Central Asia conqueror, Timur, his successors, Shah Rukh, Ulugh Beg, Baysunghur, Abusaid, were all enthusiastic exponents of Persian culture and presided over veritable Golden Age which saw all of the arts including the arts of living carried to new height of perfection[5].

Numerous articles and books have been written about Timurid religious building specially tomes and shrines, due to the development and diversity of these functions in Timurid period [3, 6-15].

Compared with tomb and shrine, other religious functions such as mosques have been studied less despite of the importance this function in the Islamic world [3, 15-18].

This paper attempts topresent the classification and distribution of Timurid mosques base on type, place, and time. The results can help architects and historical experts have a clear and precise view about the Timurid mosques.

With regard to the architectural importance and vastness territory of Timurid period, one of the main significance of the research is that several Timurid mosques were destroyed or damaged due to wars and earthquakes (BibiKhanum Mosque, Masjidi Kabud, Ghiyathiyya mosque, Ano mosque, Friday Mosque of Hendovalan, Friday Mosque of Abrand, ChihilSutun Mosque). Unfortunately, among these mosques, two mosques (BibiKhanum Mosque at Samarkand and Masjid-i Kabud, at Tabriz) are masterpieces of Timurid architecture.

METHODOLOGY

The present research adopts a historical interpretation as the main strategy from secondary data that include these levels: At the first level, a summary of typology of Persian mosques and characteristic of Timurid mosques was described based on the literature review.

*corresponding Author: Maryam Khazaee, Department of architecture, Faculty of Built Environment, University of Malaysia. maryam.khazaee329@yahoo.com The second level was concerned with gathering the data of Timurid mosques (plan, date of construction or main change, place). An important point is that some of the mosques have been changed during several periods. Only the mosques that were constructed or had main changes in Timurid period could be selected.

This information was collected from writing reference ($[\underline{2}, \underline{3}, \underline{5}, \underline{15}, \underline{19}]$ and electronic data $[\underline{2}]$. Due to the limitation in English references, some of the Russian and Persian books were also used for measure drawing $[\underline{2}, \underline{19}]$.

The main criteria for selecting samples can be classified in these items:

- 2.1. Masterpieces of the Timuird style that were mentioned in the Persian and Timurid architectural references (that were cited before in this section) that comprising:BibiKhanum Mosque, Gawhar Shad Mosque of Herat, Gawhar Shad Mosque of Mashhad, Friday Mosque of Torbat-i-Jam, Kalyan Mosque, Masjid-i Kabud, Masjid-i Shah of Mashad
- 2.2. The Friday mosques (11 mosques) with historical values.
- 2.3. The mosques are located in particular situations such as integration with funerary buildings (mosque-tomb complex) including: Shah zendeh mosques, Masjid-i Shah of Mashad, Masjid-i Mawlana, Darb-i Imam mosque, Ano mosque, or the mosques that integrated with Madrassa (religious school) such as:Ghiyathiyya mosque.
- 2.4. The other mosques were mentioned in the main references of Persian and Timurid architecture (ChihilSutun Mosque, Shah Vali Mosque [19] Masjid-i Maidan[5].

Finally, the data was gathered by typological study of samples. The typical language of general form withdistribution according to place and time could be achieved.

History of Early Persian Mosques

According to Godard[20], after arrival of Islam in Iran, four basic mosque types have been used :

- 3.1. Hypostyle mosque (Arabic mosque)
- 3.2. domedchambermosque(kiosk mosque)
- 3.3. *Ivan* mosque without domes
- 3.4. dome chamber mosque with *Ivan*

Hypostyle mosque (Arab mosque) was the perspective power of the "Arab Plan" that its influence have developed in the non-Arab lands too[21]. Several of early mosque have hypostyle plan with arcades perpendicular to the *qibla* and with central nave (Tarik-Khana mosque ,Damghan ,Friday mosque of Fahraj)[21, 22].

Persian mosques acquire its distinctive character by enriching the hypostyle form by two elements deeply rooted in pre _Islamic Iranian architecture: the *ivan*(a vaulted open hall with a rectangular arched façade) and the **domed chamber**(derived either from Sasanian fire temple architecture is called *chahartaq*).[21]

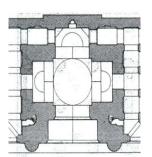
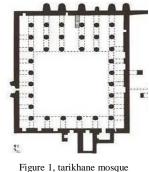


Figure 2, domed chamber and ivan Friday Mosque of Ziyaratgah [3]



(hypostyle mosque) [1]

Typology of Persian Mosque

Pereira[23] in his book "sacred Islamic architecture" classified the Persian mosque in eight types, comprising:

4.1. Domed Ivan mosque(kiosk mosque)

The pavilion (a dome over a square chamber from the Sasanian fire temple) adapted to Islamic ritual[5]. This layout obviously lent itself to Muslim ,By the simple expedient of blocking up the arch nearest the *Qibla* and replacing it with a *Mihrab* such as the mosque of Yazd _i_Khast and Qurva[5, 21].

4.2. mosque with one or two Ivans, court

A single *Ivan* on the *Qibla* side of a courtyard and also mosques with two axial *Ivans* occurs in some mosques. this type have spread in Seljuk periodsuch as Firdous mosque, Bashan mosque(one *Ivan* mosque) and Friday mosque of Faryumad and Gunabad (two *Ivans* mosque).[22]

4.3. four –Ivan congressional mosque:

A harmonious synthesis of traditional elements like the *Ivan*, the two or four *-Ivan* court and the *Ivan*-dome combination. It was dominate Iranian architecture for the centuries to come. and also it became in time the dominant mosque type of the eastern Islamic world[23].

By common consent the sanctuary *Ivan* was the largest and deepest, the opposite *Ivan* next in size, though often very shallow, while the two lateral *Ivans* were usually the smaller.

4.4. ivan mosque without domes :

the open Ivan _a simple barrel vault[5].

 $furthermore\ , Pereira[23]\ cited\ that\ other\ type\ mosque\ that\ never\ become\ widespread\ ,\ encompassing\ :$

- 4.5. The square many-bayed omnidomed mosque (mosque with roof all covered with domes)
- 4.6. Central domed chamber and omnidomed wings
- 4.7. Narthex-and-Noas or domed apsidal mosque :a central dome chamber enveloped on the three side by a dome veranda
- 4.8. Mosque integrated to madrassa-tomb:In later medieval history of the mosque (Illkhanid -Timurid Safavid) is sometimes hard to disentangle from that of the *madrassa*,tomb, or shrine complex. Prayer and communal worship were, after all, integral to the operation of such "little cities of God" as the shrine of Ardabil, Natanz. Turbat-i-Jam, Bastam. [21]

Timurid Mosque Architecture (1370_1526)

After Seljuk period, the most innovations and change have been happened in Timuird architecture so that Numerous Timurid features continued in the Safavid period.

Fisherman& Khan [22] cited the features used in the Timurid mosques that including :

- 5.1. Formal incorporation of teaching with mosque.
- 5.2. Attention to symmetry and union on the design.
- 5.3. False upper galleries linking the ivans.
- 5.4. Multiplicity of paired minarets in entrance pishtagh or the ivans on the qibla side. .
- 5.5. Emphasize display at the expanse of structure.

In addition Pirnia[1]and Kuban [24] mentioned other features like:

- 5.6. Use discontinuous double dome with high drum.
- 5.7. Different variation of arch and vaults [1].

Dominant use of faience mosaic decoration as decoration both for the interior of mosques and for the portal façades,

RESULT

Among the 24 mosques that were constructed in Timurid period, three samples were omitted: Friday Mosque of Semnan, Friday Mosque of Abarquh, and Friday Mosque of Yazd. Because, the main period of these mosques w before Timurid (<u>II-Khanid, Seljuk</u>).

Then remained mosques were classified according to the Persian typology of mosques (see Table 1, Table 3, Figure 2).

In the *Table 1*, some mosques can be classified under more than one type of the eight types discussed above. Because the general form is related toone type but integrated with other functions such as tombs and *madrassa* (religious school).

Moreover, one mosque (ChihilSutun Mosque) didn't match with the existing typology. It was designed according to the hypostyle type (Arabic mosque) that was popular in early Islamic period.

The main point of *Table 1* is to consider the relationship of different mosque type with time and place. According to encyclopedia Iranica[25], Architecture of the Timurid period can be divided into four periods, distinguished by each timeframe's ruler: Under Timur (1370-1405), Under Shah Rukh (1405-47), Under Sultan Muhammad Baysongor (1447-1470), late of timurid period under Sultan HusaynBayqara (1470-1506). By 1500, the central Timuird government had lost the control of its territory and was disestablished in 1526.

Table 1, Typology and time line of Timu	id mosques	(authors)	
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Table 1, Typology and time file of Timund mosques (autions)							
No	Name	place	Date of construction	Period	type		
1	Gawhar Shad Mosque of Herat	Herat, Afghanistan	1200, 1498	Ghurid, Timurid	Туре3		
2	Shah zendeh mosques	Samarkand, Uzbekistan	1350-mid 15th c.	Timurid	Type1,8		
3	Friday Mosque of BibiK hanum	Samarkand, Uzbekistan	1398-1405	Timurid	Туре3		
4	Friday Mosque Gawhar Shad	Mashhad, Iran	1405-18	Timurid	Type3,8		
5	Friday Mosque of Torbat-i- Jam	Torbat-i Jam, Iran	1442-5	Timurid	Type2,8(2 ivans)		
6	Mir Chaqmaq Mosque	Yazd, Iran	1437	Timurid	Type2(1 ivan)		
7	Ghiyathiyya mosque	Khargird, Iran	1438-1444	Timurid	Type8		
8	Masjid-i Shah of Mashad	Mashad, Iran	1451	Timurid	Туреб		
9	Masjid-i Mawlana	Taybad, Iran	1444-5	Timurid	Type1,8		
10	Ano mosque	Eshghabad, turkmenstan	1447-1457	Timurid	Type3,8		
11	Darb-i Imam mosque	Isfahan, Iran	1453, 1601,1670-71	Timurid ,safavid	Type1,8		
12	Masjid-i Kabud	Tabriz, Iran	1465	Timurid	Туре7		
13	Friday Mosque of varzaneh	Varzaneh, iran	1466,1721	Timurid, sfavid	Type2 (2 ivans)		
14	Masjid-i Maidan	Kashan, Iran	1468	Timurid	Туре3		
15	Friday Mosque of Ziyaratgah	Ziyaratgah, Afghanistan	1482-1485	Timurid	Type3		
16	Shah Vali Mosque	Taft, Iran	1468-1484	Timurid	Type1		
17	ChihilSutun Mosque	Ziyaratgah, Afghanistan	circa 1485	Timurid	*		
18	Kalyan Mosque	Bukhara, Uzbekistan	early 14th C., 1514	Shaybanid, Timurid	Туре3		
19	Friday Mosque of Neyshabur	Neyshabur ,Iran	1521, 1643	Timurid, sfavid	Type2 (2 ivans)		
20	Friday Mosque of Abrand	Abrand Abad, Iran	16 th	Timurid	Type2 (1 ivan1)		
21	Friday Mosque of Hendovalan	Birjand,Iran	16 th ,18 th	Timurid,safavid	Type1		

Domed *Ivan* mosque(kiosk mosque)
 mosque with one or two *Ivans*, court
 four *-ivan* mosque
 Ivan mosque without domes

5. The square many-bayedomnidomed mosque
6. Central domed chamber and omnidomed wings
7. Narthex-and-Noas or domed apsidal mosque
8. Mosque integrated to madrassa-tomb

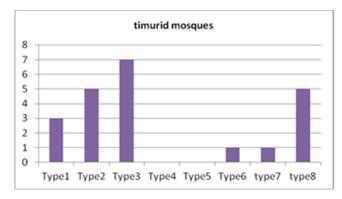


Figure 2, Diversity of Persian types of Timurid mosques (authors)

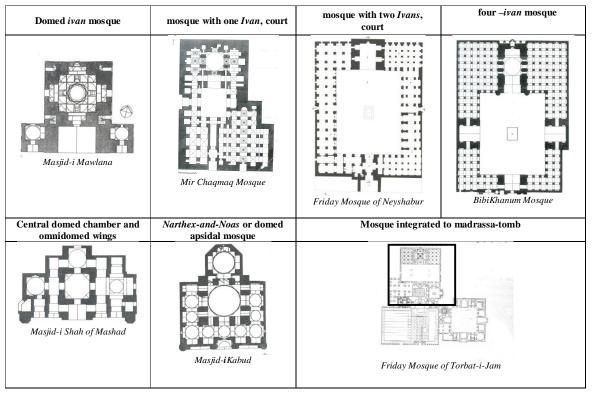


Table 3. Sample of Timurid Types of Mosque (Authors)

In conclusion, from the eight types of Persian mosques, all four basic types became widespread and prevalent; therefore this period can be named as notable and prominent time for diversity and variety of mosques. Similarly, this movement can be viewed for other Timurid buildings such as tombs and shrines. The results for main types of mosques include:

1. As the most significant alteration of the mosques -innovation of a four-Ivan plan mosque-occurred in Seljuk period, and this type became as most widespread type in Persian mosques[26]. In the Timurid period, this model was also continued as typical form especially for congregational mosques.

- 2. Another mosque-type- kiosk mosque- that introduced at Seljuk time couldn't prevail and was only used for small mosques particularly in Khorasan region.
- 3. In the east of Persia (Khorasan), architects designed mosques with one or two Ivans, court that was influenced from Khorasan local houses. Even though two Ivan types were more applied due to attendance to both entrance and gable side
- 4. One of the main innovations in Timurid era is the integration of the mosque with other religious functions such as tome, shrine, madrassa.

For two types, *Narthex-and-Noas mosque* and *mosque with Central domed chamber and omnidomed wings* only one sample exists. Firstly, *Narthex-and-Noas* or domed apsidal mosque (Masjid-i Kabud) combines Turkish-Persian architecture features with Timurid decorations. The prayer hall with large central dome rested on powerful piers buttressed by nine small domes. This feature which came from Byzantine models was copied by the Anatolian Turks[27].

Theother type, Central domed chamber and omnidomed wings (Masjid-i Shah of Mashad) is composed of a domed square central space surrounded by an ambulatory space on all sides. According to some historical references, however, the Masjid-i Shah was originally built as a tomb for the Malik Shah who died in 1426, one quarter of a century before the construction of the mosque[3]. In a special sample, Ghiyathiyya madrassa, the mosque is the special internal elements of religious school instead of integration with madrassa.

The other types like *ivan* mosque are without domes and the square many-bayedomnidomed mosque was not used in Timurid period.

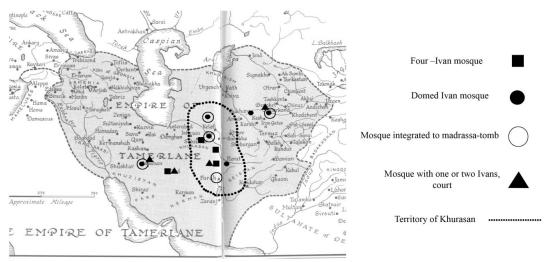


Figure 4, geographical distribution of Tmimurid mosques base on typology [2]

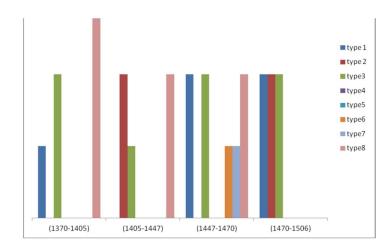


Figure 5, distibution of Timurid mosque base on typology and time (authors)

Based on geographical distribution (refer to *Figure* 4), most of the diversity of Timurid mosque belongs to firstly Khorasan region and secondly Central Iran because culmination of Timurid architecture happened in Khorasan according to the view of Golombek, L[3], O'Kane [15].

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Finally, the authors believe that there is no clear and certaion withness that show the stable flow for the relationship between time and type of Timurid mosque (refer to *Figure 5*). The only noted point of this relation is the diversity of mosque types can be seen in the late Timurid dynasty under Muhammad Baysongor (1447-1470) and Sultan HusaynBayqara (1470-1506). Even though, the masterpiece mosques such as the BibiKhanum mosque and Gohar Shad mosque built in the earlier periods. So this issue can conclude the lack of relationship between type and time of construction in Timurid period.

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