Study of Sasanian Architectural Elements in the Mausoleum of Amir Ismail Samanid and their Connection with the Revival of Iranian Identity during 3rd – 5th Centuries A.H.

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Abstract
With the formation of local and national governments during the 3rd-5th centuries A.H. [9th - 11th A.D.], the circumstances were prepared for adaption and recreating cultural and artistic traditions of Sassanid period. In this regard, Samanid governors played a key role. Amir Ismail Samanid came up with a style which became a pattern for numerous mausoleums and on the other hand connected the architectural elements and designs of Sassanids with the Islamic era. The Mausoleum of Amir Ismail Samanid itself shows how the Sassanid architectural elements appear in a new format. Both the design and construction of this building appears to have been carried out objectively, and Amir Samanid had somehow intended to follow the Sassanid dynasty. Studying the architectural elements and features of the Ismail Samanids Mausoleum as well as adaptions from the Sassanid architecture, and also its historical and cultural contexts (the revival of Iranian identity and returning to the traditions of Sassanian, during the 3rd – 5th centuries A.H.) are the main objectives of the present paper.

Keywords: Continuity of Sassanid Architecture; Ismail Samanid Mausoleum; Revival; Architectural Design; Decoration.

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**Introduction**

With the formation of local and national governments (Saffarian, Samanids, Buyids, etc.) during the 3rd - 5th centuries A.H. [9th – 11th A.D.], the circumstances for adaption and recreating cultural and artistic traditions of Sassanid dynasty were prepared. All these adaptations and recreations are manifested in the Persian language, court mores, Iranian traditions, architecture and even Pahlavi scripts. The memorable magnificent epic of Ferdowsi could prove some sentiments existing throughout those periods. In fact, it is because of these sentiments that the expression “Iranian Renaissance1” is sometimes used for explaining the important evolutions and changes of this epoch. In this regard, Samanid governors had a key role. Their court in Bukhara paved the way for activities of scientists, litterateurs, artists and craftsmen as well as cultural and artistic achievements, according to the Iranian traditions and conventions. The attempts of this government not only revived the Iranian culture and made it develop, but also had a great influence on the ethnic Turk groups of the region2.

The renowned Amir of this dynasty (Ismail Samani) founded a style which became a pattern for numerous mausoleums on the one hand and connected the architectural elements and designs of the Sassanids with the Islamic era by designing and constructing his mausoleum on the other hand. Referral of the architects and tomb-builders to the Sassanid designs and architectural elements besides combining them with their modern elements and advancements was actually a part of cultural-artistic revitalization trend in Iran, which had just begun.

Assuming that evolution of Iranian architecture during the 3rd – 5th centuries A.H. [9th – 11th A.D.] is association with contemporary historical developments. Study of architectural elements and features of the Ismail Samanids Mausoleum as well as adaptions from the Sassanid architecture, and also its historical and cultural contexts have been

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1. This expression was first used in relation with the renewed pervasive appearance of Persian language on a national scale and in literary fields, but it is also considered suitable for describing other evolutions in the artistic and cultural fields (Michailidis, 2007:6).

2. For instance, the Turkic tribe of Kara-Khanid Khanate who took over after the Samanid and continued their customs and traditions.
attempted in the current paper. This study is based on library studies where description, comparison and analysis are used extensively.

**The Mausoleum of Amir Ismail Samanid**

This building is located on the western part of the old town of Bukhara (in the present Republic of Uzbekistan) in the middle of a park which used to be a cemetery.

The original design of Ismail Samanid Mausoleum is square in plan with a dome cover, 10 meters per side, which has a doorway on each side (Fig. 1-3). In its construction, bricks measuring 23x23x3 cm and 24x24x3.5 cm have been used (Michailidis, 2007:40). The mausoleum is classified as tomb with a dome and square plan, in which the four curved openings (in Sassanian buildings - čahārtaq / four-vault structure) were replaced by four doorways (Huff, 1987-88:403).

The façade is richly decorated with patterned brickworks, particularly in the basket-weave brick patterns. Such a decoration had not been reported before in any other buildings, nonetheless, the richness and craftsmanship in decorating style indicate the gained experiences in using bricks (Hillenbrand, 2000-01:353-54). All four sides of the building have similar decorations and in the middle of each is an entrance with more noticeable decorations. In the basket-weave patterns, bricks are laid out horizontally and vertically in groups of three or four (Naji, 2007-08:388). Despite the fact that the brickwork of this building is so ornate and shows a long-time experience, no preceding pattern was found for it. However, there is a possibility that the tomb has no previous example – similar to the building of Gunbad-e Qābus – and has been formed only on the basis of the craftsmen and artists’ ingenuity. In addition, it is to state that the above mentioned brickwork is a part of building’s construction, not an additional shell.
On the upper parts of the walls, there is a row of decorative niches, and the ambulatory has been built. Doorways inside have analogous frames with the difference in that these ones have no geometric design on the spandrels. The designs of eastern and western doorways are nominally different from the northern and southern ones (Michailidis, 2007:42). The inside walls have basket-weave brick pattern on the lower parts beside rectangular patterns as well as pearl-like circles at the top. The pearl-like design has also been used like a strip on the drums (tholobates) and squinches (Figs. 6-7).

The square shape plan of this building turns into an octagonal using squinch and vault, and then there is a thin hexadecagon strip on it, which finally changes into a circular base for the tomb’s dome (Fig. 7). Each side of this hexadecagon, which must bridge to the angels, is held by a wide impost as well as a capital in the corner. The squinch has a quite apparent arch which is supported by a sturdy curved buttress starting vertically from its pinnacle. In other words, the propulsion of the dome breaks down by a tripod in the squinches (Schroder, 1977:946).

The squinches themselves have been divided into two triangular parts by a strip of vertical bricks (Fig. 6), which could have probably brought about Muqarnas divisions in the following eras. Both of these triangular parts have stucco work in the form of plant-like motifs and apertures for leading light in. The light is also directed into the mausoleum through the four net vaults under the dome. The vaults in the middle of the transitional parts have been separated by several semi-columns. The spandrel of all eight vaults is decorated by a plaster ball (Fig. 7), and each of their frames has pearl-like decoration as well (Michailidis, 2007:42; Ettinghausen and Grabar, 1999-2000:301).

The domed roof of the building has a semicircular form (Fig. 4), but this is not the original roof of the mausoleum; it has been reconstructed by the Russians over 1922-23. As Zasipkin writes, cupolas were also changed in either 11th or 12th A.D. As a result, neither the main dome nor the cupolas show the original form (Michailidis, 2007:44). Moreover, Pirnia points out that Shenge¹ could denote that

¹ A small column on the dome’s pinnacle on which the outer shell of the double-shell dome is built.
the main dome was a double-shell dome and the present one is the inner shell of the main dome (Pirnia, 2003-04:168). All the same, the plan of the building does not confirm that the dome was a double-shell one.

In the past, the interior parts of the building were covered with plaster which was removed during the process of restoration. Besides, there used to be several buildings and a cemetery around this mausoleum that all were destroyed in the course of renovation (Michilailidis, 2007:44).

**Dating**

The mausoleum has been a shrine related to Amir Ismail Samanid since very old times, but Olufsen was the first who published information related to the building in 1911 and determined that it belonged to Amir Ismail Samanid (Michailidis, 2007:43). Contrary to many other tombs, the building has no historical inscriptions, and it appears that no place had even been designated for an inscription in the original plan. The only written piece of the building is the wooden plate of the eastern doorway discovered in 1930 during an excavation. The name of “Nasr ibn-e Ahmad Samani” was read on this inscription, so the mausoleum has been considered as the constructions of the Nasr Ahmad II reign (301-331 A.H.).

Blair, however, believes that it belongs to Ismail Samanid reign (279-295 A.H.) owing to illegibility of the mentioned inscription (Blair, 1992:25). In addition, Russian researchers cite an endowment document from the 10th century in which a newly-dug grave belonging to Ahmad, Ismail’s father, was mentioned. Besides, excavations of the Russian expedition in 1920s unearthed three corpses from this tomb; so it is most likely that the founder of this building was Ismail Samanid, and the previously mentioned inscription was added to the tomb after the burial of Nasr Samanid II (Michailidis, 2007:43). And so, contrary to a number of Persian sources which relate the date of this building’s construction to a time period before 331 A.H. and the reign of Nasr II (Hillenbrand, 2000-01:349; Ettinghausen and Grabar, 1999-2000:p.301), as Pirnia had also mentioned, the mausoleum has probably been constructed in latter’s lifetime of Amir Ismail (in 295 A.H.).
Sassanid Elements and Features in Ismail Samanid Mausoleum

This tomb has adapted different elements from the Sassanid architecture which are going to be perused in the following paragraphs.

Architectural plan: the most important feature of the mausoleum which falls common with the Sassanid architecture is the four vault (čahārtāq) plan. As mentioned before, the mausoleum has a domed square plan that on each side of it is a doorway, and this is the same plan utilized for constructing central part of the fire temples over the Sassanid period. Domed four-vault building has also formed the main hall of some considerable Sassanid palaces such as the palace of Firouz Abad (Huff, 1988-9) and the palace of Shapur in Bishapour (Sarfaraz, 1987-88). Anyway, these independent four-vault buildings like Niasar (Godard, 1988-89:24-27) are a good match for the Amir Ismail mausoleum. This similarity is so much that Hillenbrand regards the Amir Ismail Samanid mausoleum as “a fire temple in Islamic era”: the square shape of its dome, the arched entrances on each side, lack of any emphasis on a particular direction and the existence of the upper corridor with corner cupolas are all Sassanid historical features and characteristics. In brief, this is a fire temple in Islamic wear (Hillenbrand, 2000-01:337, 349). The approach in constructing domes on a square or rectangular room by the use of squinch is a continuation of the Sassanid architecture.

Ettinghausen and Grabar suggest other possibilities for the origin of this mausoleum: the tombs of Christian Martyrs in Syria and Mediterranean, domed ossuaries in the Middle East non-religious buildings (Ettinghausen and Grabar, 1999-2000:.302-303). Nonetheless, on the account of the striking similarity between the mausoleum plan and the Sassanid four-vault structures, their suggestions could not be reviewed.

The application of the four-vault plan, which truly represents Sassanid religious architecture, became quite common for constructing many other tombs in the Middle East (like the tomb of Sang Bast in Iran) and during the 5th and 6th A.H. [11th and 12th A.D.] for building a great number of mosques (such as the mosque in Ardestan, the Congregational (Jameh)

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2. In regard with the four-vault plans (čahārtāq), see: Mollazadeh, 2008-09; Mollazadeh, 2011-12; Huff, 1987-881
mosques of Isfahan, Qazvin, etc.). It seems that using this plan for different buildings in Iran and the Middle East is the result of attempts by Buyid and Sassanid dynasties; actually, both of these had a leading role in recreating the Iranian traditions.

**Corner cupolas, corridors and vaults round dome:** one of the specific features of the tomb of Amir Ismail Samanid is a corridor which circulates round the dome and has decorative vaults on its façade. There are four cupolas right on the four corners of this corridor. Although these parts have been renovated several times, the original plan has been preserved. This particular form is seen neither in this nor in the following periods of time, but there is one Sassanid design which bears high resemblance with this form. The mentioned design is on a bronze Sassanid tray kept in the Museum of Berlin (Fig. 8). Based on the recreated design, the mentioned Sassanid building has similar decorative vaults, corner cupolas and probably a corridor. Accordingly, we can come to this conclusion that the Sassanid instances have been chosen for designing and constructing these particular elements. In this regard, Schroder states: “Such gallery, which remain characteristic of northeastern domes for centuries, and reappear in variation throughout Persia and throughout the Islamic period, have been explained in various ways. But the peculiar significance of this gallery at the tomb of Ismail resides in the four cupolas which surmount its corner (very inaccurately! They are set in too close to the base of the dome to correspond with the gallery). They are not an invention, they are not aesthetic in intention; they are a stylistic postulate with builders whose tradition derived from Sasanian constructions. They are vestigial versions of the four corner-cupolas, which we have just seen at Hazara in this very neighborhood. The Sasanian ancestors survive, in representing on the Berlin salver, and in ruins at Farrashband” (Schroeder, 1977:946).

Applying semi-columns (engaged columns): in the mausoleum of Amir Ismail Samanid, the semi-columns have been used in different ways (Fig. 1) among which the most distinctive is the one in the form of Pillak, or sturdy pillars in the corners. Moreover, this element (semi-column) has also been used on sides of the entrances above the upper vaults, and in the middle of the vaults in transitional part of the dome (Fig. 6). Using semi-columns in Iran
dates back, at least, to the Parthian time; and different pictorial and architectural evidence denotes that it would have been broadly used over the Sassanid era. This could be proved with the façade of Tagh-i Kisra and designs of the bronze and silver Sassanid vessels (Figs. 8-9).

The technique of erecting domes and the oval archers of the corridors: the technique of erecting domes, by the use of corner making, in this mausoleum shows a great progress, but it is in fact the continuation of its previous technique and does not have a great difference. Lacks of height in the squinches together with the decorative archers of the corridors are two Sassanid characteristics (Schroeder, 1977:948).

Decorations of the building: although the main decoration of this mausoleum is brickwork, – which, based on the existing evidence, was very rare over the Sassanid period – pearl-like patterns, semi-columns, vertical brick bond and stuccos have also been applied, which are completely comparable with the Sassanid ones. One of the most common Sassanid motif used broadly in Iran and the Middle East on fabrics, metal handcrafts, stuccos, paintings and probably in the architectural decorations, and was still performed on the potteries of Neishabur Style, is a strip (band) of balls or pearl-like shapes (Michailidis, 2007:266; Porada, 2004-05:309 Figs. 116, 125, 325) semi-column is factored in as an important Sassanid decorative element. The vertical brick line which was used to form the semi-columns of the entrance doorways had been also reported before, in both Parthian (Ashur palace) and Sassanid (the Sassanid palace of Hessar Tepe) architecture as well as several early Islamic buildings (Tarikhaneh in Damghan). On the upper part of the vaulting and also the dome transitional part, stucco work has been restrictively applied, which is a continuation of the Sassanid style.

Clay decorations which are observed on the doorways’ façade as well as the interior parts are two other types of the tomb’s decorative elements similar to those of the Sassanids, at least in design and motif. The square designs of the spandrels of the doorway’s arch (Fig. 5) resemble the motifs of the stucco work of the Parthians, Palace of Ashur, or later examples of the Sassanid era. However, there are different in the fact that the Parthian and Sassanian instances are with plaster and the Samanid
ones are made of clay. There are so similar that give us the impression that the Samanid artists had seen the Parthian patterns before, in the ruins of Ashur Palace (Michailidis, 2007:265). Mehrdad Shokouhi mentions that the triangular decorations above the arches of each doorway (Fig. 5) are simplified design of Sassanian crowns. He backs up this claim by mentioning the analogous motifs of Bahmani Sultanate of Deccan which were used by them to show that they had descended from Sassanid (Shokoohi, 1994:65-77). Since these motifs are on the highest point of the doorways, we can conclude the Samanids were also trying to prove that they had been Sassanids’ successors.

Historical and Cultural Contexts of Constructing the Mausoleum

The Samanids had descended from a prominent family, probably related to the Sassanian in the Middle East. They were apparently from Balkh or Termez (Frye, 2010-11:119). In 105-109 A.H., Saman converted to Islam and named his son “Asad”. Asad’s sons were appointed by Abbasid caliphs to rule Samarkand, Fergana, Tashkent and Herat (204 A.H.). Amir Ismail Samani (279-295 A.H.) defeated Saffarian (287 A.H.), then he developed his dominance all over Khorasan and Transoxiana and after that his realm stretched to Rey and Tabarestan (Ibid:121). Amir Ismail chose Bukhara as his capital and made it a place for assemblage of scientists, literatures, poets, craftsmen and merchants. His way of ruling earned him a reputation for justice; and after he passed, his mausoleum became a shrine for all Iranians as well as the Uzbeks. Ismail was loyal to the Caliph, nonetheless, there is no evidence informing us of whether any of Samaind Amirs had sent tribute or tax to Baghdad.

Ismail died in 295 A.H. and his son, Ahmad, became the ruler (295-301 A.H.) who was later killed by his own servants. A reason for this murder, as Hamdollah Mostofi writes, has apparently been that he returned the commands and notifications from Persian to Arabic, a fact which denotes Persian had been the official language. Anyway, this action of Amir Samanid could not win public support and consequently, the government had to annul it (Frye, 2010-11:126-127). After Ahmad’s death, his son “Nasr” took the throne when he was only 8 years old (301-331 A.H.).
His long-time period of kingdom is in fact the golden age of the Samanid dynasty. Nasr took benefit from the presence of some competent ministers such as Abu Abdollah Jeihani (302-310 A.H.) and Abul Fazl Balami (310-327 A.H.) who caused many advancements and progresses (Frye, 1996-97:218). This dynasty eventually fell in 395 A.H. with the demise of Ismail II al-Muntasir.

Samanids are known as a dynasty that played an important role in regenerating affairs in Iran. This regeneration does not mean an absolute return to the past; it actually was Islamic-Iranian regeneration. The Samanids, contrary to Saffarian, were from the noble class and would relate themselves to Bahram Choubin’s descendants (he was the commander of Hormoz IV, 579-590 A.D.). Bahram Choubin took power from Khosrow II (Khosrow Parviz) in 590 A.D. After a while, Khosrow could return to throne and make Bahram Choubin escape to Fergana. As said by the Samanids, Bahram Choubin married a Turksih woman and their marriage resulted in Samanids.

The Samanids were followers of Sunni Hanafi faith and would use the title “Amir”. Ismail began using Persian language as the official language. During this period, Persian was selected, used and supported as the language of literature as well as the official language of the government. Samanid court supported and nurtured well known poets such as Rudaki, Daghghi and Ferdowsi (list of the scientists, poets and scholars in the Samanid court includes a lot of names) (Frye, 1996-97:218). The Samanids also afforded translating various scientific and religious writings from Arabic to Persian, and it was apparently the first time that religious texts were translated into another language. Using Persian in bureaucracy was the main factor in relevance of Persian literature over Samanid dynasty (Ibid:223). The bureaucracy system itself was adapted from Iranian regulations as well.

In this epoch, the Sassanid descendants, the farmers and noblemen had a respectable position and posts (Naji, 2007-08:287). These classes of society were in fact the main support for the culture, language and traditions of Iran. During this period, the ancient Iranian traditions were as common and widespread as Islamic conventions. These Iranian traditions and ceremonies embraced ones like a specific ceremony connected to “the death of
Siavash” which would be performed in Bukhara (Ibid, p.294-299). The Samanids had an extended interrelation, and a lot of their coins have been found across the Eastern Europe and the Scandinavian regions (Frye, 1996-97:223).

Conclusion
On the account of what was said and discussed, the mausoleum of Amir Ismail Samanid was built in late Ismail’s reign, in a situation when cultural recreation of Iranian language was very common. As such, different Sassanian architectural elements were adapted while constructing this building; and all these became a decent pattern for the next building and structures in the Middle East and Iran. In its design and construction, this building appears to have been conducted objectively seemingly Amir Samanid had intended to follow the Sassanid dynasty.

The four-vault plan, which was originated from Zoroastrian fire temples of Iran not from the Middle East, was not the only accessible plan for Amir Ismail Samanid. Over his birth place, the square and rectangular shape plans with one entrance on three sides as well as two door plans were used. Therefore, selecting four-vault plan – like choosing Persian language as the official language – indicates preferring and in turn replacing Iranian culture and language with Arabic and even local culture and languages. We can consequently regard such selection as Ismail’s volition and desire (Michailidis, 2007:260). In addition, albeit describing this mausoleum as “a fire temple in Islamic wear”, it is to mention that Samanid mausoleum is not a mere copy of a fire temple but it is a four-vault structure decorated with local decorative elements and used as a tomb. Contrary to the above mentioned tomb which has been richly decorated, Sassanian fire temples usually have neither interior nor exterior decorations and not even corridors or corner cupolas. On the other hand, this mausoleum does not have the ambulatory which almost every fire temple has, and the accessibility to it has been limited by doorways opposite to the Sassanid four-vault structures (Ibid:261-262).

References:


Yusef Majidzadeh, University of Tehran Press.


Fig. 1 General view of the mausoleum of Ismail the Samanid (Michailidis 2007)

Fig. 2 Plan of the first floor of the building (Pirnia 2003/04:168)

Fig. 3 Plan of the corridor and vaults round the dome (Ibid)

Fig. 4 Sketch and sections of the building (Ibid:168-170)
Fig. 5 A view of the western doorway of the building (Michailidis.2007)

Fig. 6 Interior view, squinch supporting the dome (Ibid)

Fig. 7. The interior drum (tholobate) and its decorations (Ibid)
Fig. 8. Sketch (up) and reconstruction (down) of the design on the Sassanian bronze tray, at the Museum of Berlin, that has a similar appearance in the shape of the plan, arched doorways, vaults, corner cupolas and engaged columns to the mausoleum of Ismail the

Fig. 9. Design of the silver plate, at the Armitage Museum, that is comparable with the mausoleum of Ismail the Samanid in the form of the engaged columns (semi-columns), vaults and decorations (Ibid:531)
مطالعه حضور عناصر معماری ساسانی در بنای آرامگاه امیر اسماعیل سامانی

و ارتباط آن با احیاء هواپیمایی در فاصله قرن 3 تا 5 هجری قمری

مريم محمدی 1، جواد نیستانی 2

تاريخ دریافت: 20/8/90
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در فاصله سده‌های 3 تا 5 هجری و قمری و با شکل‌گیری دولت‌های محلی و ملل، زمینه برای احیاء ست‌های فرهنگی و هنری دوره ساسانی فراهم آمد. در این ارتباط حاکمان سلسله ساسانی نشان کلیدی بر عهده داشتند، امیر اسماعیل سامانی در ساختمان آرامگاه خود طرحي را انتخاب کرد که الگوی تعداد بیشمار بنای‌های آرامگاهی بعدی شد و از طرف دیگر عناصر معماری دوره ساسانی را با معماری دوره اسلامی پیوند داد، بنای آرامگاه امیر اسماعیل سامانی نشان می‌دهد که چگونه عناصر معماری ساسانی در قابل جدید خود ظاهر می‌شدند، طراحی و هم اجرای آن با نشان از تلاش آگاهانی است که امیر اسماعیل سامانی در پیر در ست‌های دوره ساسانی ک بغره است، مطالعه عناصر معماری و وزیگ‌های آرامگاه امیر اسماعیل سامانی، اقتباس صورت گرفته از معماری دوره ساسانی و نیز تحولات تاریخی و فرهنگی هرمزکان بخشی از پژوهش حاضر است تا بر اساس آن بتوان فرضیه ارتباط تحولات معماری این دوره را با تحولات تاریخی و تجدید حیات ایرانی در فاصله قرن 3 تا 5 هجری قمری مورد تاپید قرار داد.

واژگان کلیدی: تداوم معماری ساسانی، آرامگاه امیر اسماعیل سامانی، احیا هواپیمایی، تزیینات معماری

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