

Style and Regional Differences Seljuk Minarets in Persia

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Introduction:

Under the Seljuk rule, Persia gained a period of economic and cultural prosperity. The innovative techniques of the Seljuk period and style in architecture and the arts had a strong influence on later artistic developments. Seljuk art is a fusion of Persian, Islamic, and Central Asian (Turkic) elements, and building masonry is probably the most eminent feature of the Seljuk contribution to Islamic Art and Architecture. In the Seljuk period, stone was the principal building material, though they also used bricks to construct small Masjids and Tomb Towers, as well as minarets. In the larger stone structures, brick was added for embellishment, predominantly placed in the upper structures and rarely in the interior. Since the 10th century CE, decorative brickwork has developed in two ways. Firstly, there are brick bonds that are constructive and laid during the structural process. Secondly, there are brick revetments, which are assembled from precast sections. The production and brick selection differ to a great extent between these two types of brickwork. However, both share a common aspect: dependence on geometry. With bonds, standard-shaped bricks are laid out in modular geometric patterns, whereas with revetments, the bricks are re-cut to fit into a unique design layout for each use. This article is a comparative analysis of the variations in the styles of the Seljuk era manars (minarets) including samples from those seen in Isfahan and four other Iranian regions. The following questions provided the guidelines for the research:

- 1- What are the contributions from the Seljuk era to the architecture of manars in Iran?
- 2- What are the salient architectural features of the manars of Isfahan in the Seljuk era?
- 3- What are the differences and the similarities in the style of manars between Isfahan and four other regions in Iran?

The development of style and design in Seljuk manars has had a significant effect on architecture across Iran, influencing several other structures like the tall and slender towers attached to mosques to make the *azan* (call to prayer).¹ In Iran, manars —one of the most characteristic features of the Iranian cityscape— are known for typically having a cylindrical brick shaft, which indicated the presence of nearby mosques or other religious buildings.

Although manars are now a common feature of Iranian religious architecture, early mosques in Iran had relatively low structures – the great domes and aivans (porticos) commonly seen today, were not instituted until c.1040-1157 CE. The characteristic cylindrical form of the mosque tower was found throughout Iran, Iraq, and the Hijaz well before the Seljuks arrived there in 1037 CE. Subsequently, the Seljuks and their successors brought the cylindrical-style brick tower, with its

octagonal shape, into the newly conquered lands of Afghanistan, India, Syria and Anatolia.² The surviving eleventh and twelfth century buildings in Iran indicate that this was a time of active building with the arrival of the Seljuk Turks. These tall brick towers no longer had to be placed next to the mosque, but were also built next to other types of religious buildings, and occasionally quite independent of any structure, religious or non-religious.

A few manars of this period had non liturgical functions. Some are located along major routes or at the edge of the desert (Khusraugird; Ziyar; Mil-I Nadiri), serving as signposts. Since much caravan travel was by night, a lamp at the top of a minaret would allow the building to serve as a lighthouse (familiar in Khurasan.). In a few cases the minaret is located on top of a hill where there is no room for a mosque.³

In addition to the Seljuks' contributions to the function and the style of the manars in Iran the Seljuk period introduced the pair manars. The idea further developed in the twelfth century, when paired manars were used to add extra importance to the entrance gate of buildings (Nakhchivan; Ardistan) as the pre-war excavations at the Sasanian city of Bishapur revealed (Nakhchivan Ardistan).⁴ Paired manars were later used in mosques to border the entrance to the sanctuary as well as to indicate direction. When the minaret was built as an integral component of the mosque, its entrance was not at the ground level but was from the roof of the mosque as the existing doorways high up the shaft of the now freestanding manars indicate.

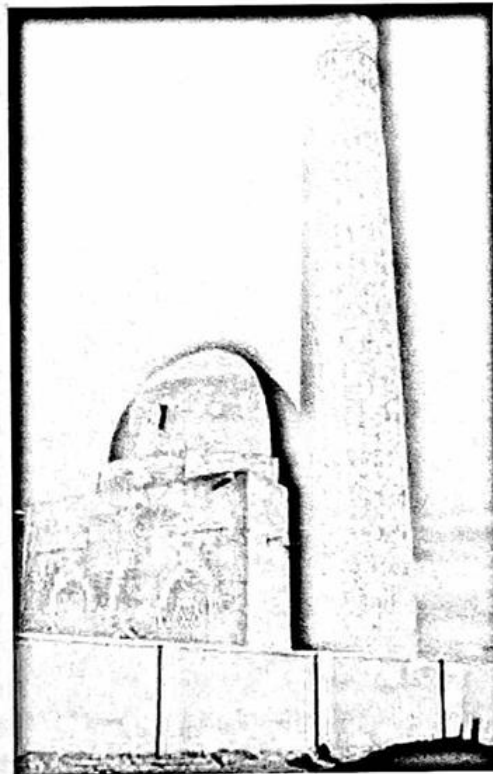
II- Study cases of the Seljuk manars in Isfahan:

Following is a survey of the literature on some of the important manars in Isfahan in the Seljuk era with an in depth analysis of their architectural design and style.

• Manar of Barsian, Friday mosque-Isfahan: 1097-98

The manar is a conical cylindrical shaft without a lot of decoration with a plain base, and a prolonged main zone. At the top there is a doubled collar under a slightly corbelled crown. The baked-brick manar was erected with the use of exterior scaffolds as can be seen from visible the boles. The facing bricks are not a revetment, but were laid up with, and bonded into, the wall. The shaft diaper has a slight twist, clockwise in plan. The ceiling is warped lintel of radiating, corbelled brick courses⁵.

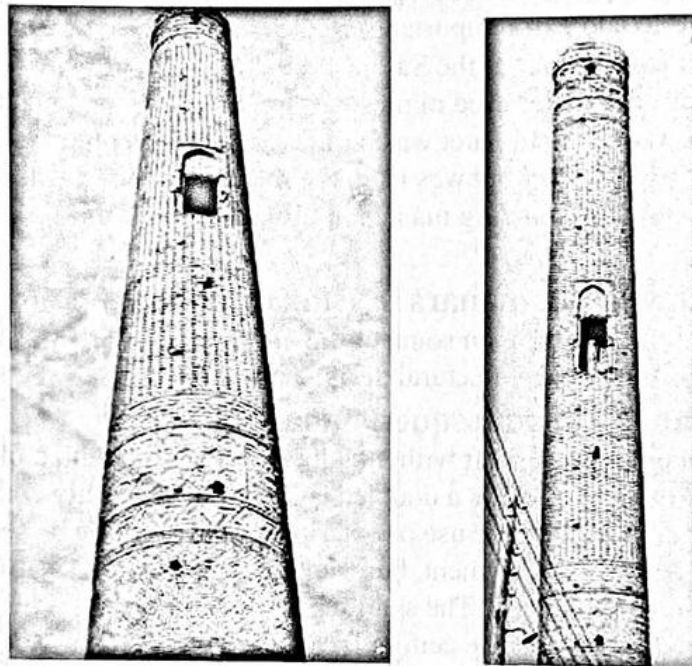
The photo shows the manar as attached to the mosque and is slightly tapered but not highly decorated except on the top where there exists a carved tier. The decoration is very simple with no inscriptions or tiles nor simple carved stucco. This is a plain manar in comparison to the lavishly decorated Seljuk manars. The photo supports Smith's detailed description of the manar as a conical-cylindrical shaft almost without ornament as a plain base, with a prolonged main zone, and a doubled collar under a slightly corbelled crown at the top. The baked-brick manar with the use of exterior scaffolds, and the boles can also be seen in the photo. Although this manar is similar to the manar of Chilhil Dukhtaran in the use of circular shaft and geometric patterns for ornamentation, however, the manar of Barsian is characterized by the use of double bands in the top and the manar of Chilhil Dukhtaran is characterized by several more bands on its shaft.



Exterior view from west with dome and minaret.

- **The manar of Chihil Dukhtaran, 1107-Isfahan**

The manar of Chihil Dukhtaran stands in a small alleyway within the maze like streets of the Jubareh quarter of Isfahan. Much like the many tomb towers in Iran, The manar of Chihil Dukhtaran stands in solitary grandeur, not part of any extant building complex. The Chihil Dukhtaran of Isfahan was built in 1107-8 by Abi Al Fath Nahuji and with its namesake in Damghan (1054-56)⁶. The manar is 21 meters high and consists primarily of a plain square plinth, an intermediate octagon and a circular shaft with varying horizontal sections of brick pattern and a decorative ornamental cornice band. There is a rectangular window surmounted by an arch, which could have served for the call to prayer, relieves the upper section of the shaft. The typical brick bond with wide rising joints alternates between bands of six-pointed stars, octagons and lozenge motifs is relieved by decorative terracotta tile panels of Kufic inscriptions.



The minaret of Chihil Dukhtaran

A close observation of the above photos shows a freestanding manar with three circular shafts. The brick pattern is what distinguishes the decoration of this manar with bands surrounding the circular shaft, in addition to the geometric patterns and panels with Kufic inscriptions.

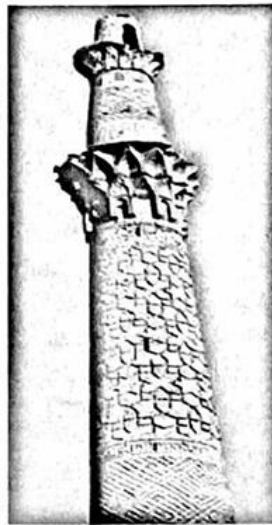
- **Sarban Minaret, 1130-55, Isfahan**

The manar of Sarban, meaning the manar of the Camel Driver, stands a few hundred meters away from the minaret of Chihil Dukhtaran, in the Jubareh quarter of Isfahan. Both manars are excellent examples of the twelfth century, free-standing, Central Iranian Seljuq brick manars. The Manar Sarban is 48 meters high and thus measures more than twice as tall though about two decades later than the manar of Chihil Dukhtaran. No inscriptions or records ascribe the Manar Sarban to a patron but architectural historians understand it to be possibly part of a mosque complex that does not exist now. The cylindrical shaft of the Manar Sarban (1130-55) is ornamented with varying brick patterns and tile inlays⁷. The manar consists primarily of a plain brick base and tiers of tapering cylindrical shafts with alternate bands of decorative brick and blue tile work in geometric patterns, and two girdles of stalactite ornament. The horizontal bands between the two cornices

consist of rectangular Kufic inscriptions in the Banai style or intricate geometrical motifs with hexagonal, octagonal and lozenge shaped patterns. The highly ornamented cornices are composed of lapis-lazuli tile work and elegant brick stalactite squinches supporting a small platform, which could be accessed by a spiral staircase within the minaret. The minaret today displays an obvious tilt to the west and a damage to its delicate cornices, raising preservation concerns⁸.

The photos show the free standing manar with its cylindrical shaft, and two cornices with stalactite decoration at the top and inscriptions below the cornices an arched

window over the upper cornice. Geometric stars pattern and Kufic inscription circle the shaft can also be observed. Hillenbrand pointed out the same features of the manar as consisting primarily of a plain brick base, tiers of tapering cylindrical shafts with alternate bands of decorative brick and blue tile work in geometric patterns, and two girdles of stalactite ornament, the horizontal bands between the two cornices with the rectangular Kufic inscriptions in the Banai style and intricate geometrical motifs as well as the highly ornamented cornices. This manar similar to manar of Vabkent as both are free standing manars with tapered circular shaft and the adorned mouqnas that gives us the same feeling of the lantern of Vabkent manar in Bukhara.



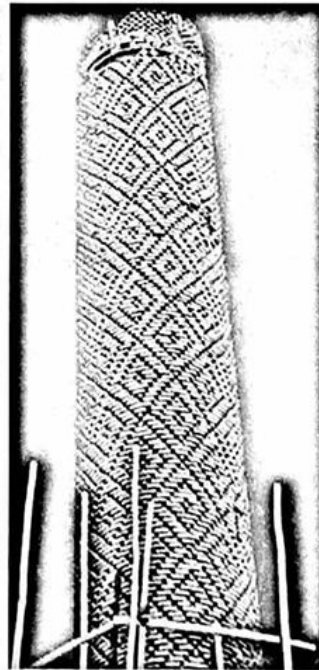
Upper section of shaft
Sarban Minaret



Detail of Lower balcony

• Manar of Friday Mosque of Sin, 1131- Isfahan

The high Sin manar which is attached to the mosque has square base and a one chamfered corner that supports a tall, tapering, octagonal plinth, from which rises a round, tapering shaft. Half way up this shaft, on the kibleh side, there is a large window, with the south-east face of the octagon. Slightly higher in the shaft, is a second entrance. The construction technique of this manar is identical with that at Gar. The shaft has buckled through settling at the window; otherwise the fabric is in good condition.⁹ At the top of the south-east of the square base there is an inscription panel of pre-cast brick-mosaic, containing four lines of plain Kufic. The shaft shows a long zone of decoration in a pattern of prone bricks with wide rising joints disposed in crossing spirals, which form and frame a 45degree of squares with accented centers. At the damaged top there is a plain Kofi inscription band of



Detail of minaret,
showing top with
remanants of the tile
inscriptive band



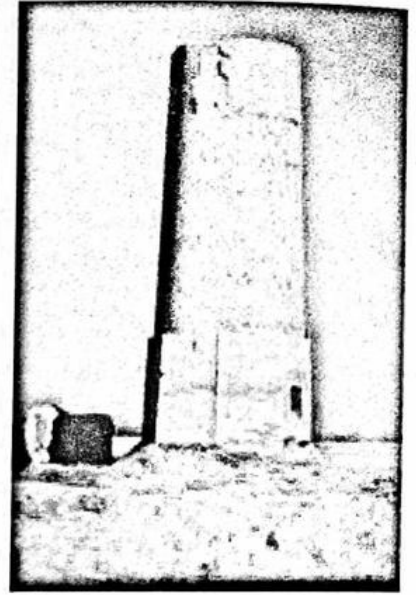
General view of
minaret during
restoartion

turquoise glazed brick-faience-mosaic, the glaze confined to the outer faces of the brick characters.¹⁰

In the photo the manar has an octagonal base and a slightly tapered circular decoration with brick patterns in geometric square shape and at the top decorated with Kufic inscription band in light blue tile. Although the shape of the shaft is similar to that manar of Friday mosque at Sava, the Sava manar is decorated with terracotta bands while the Sin manar is decorated with brick patterns.



Detail of minaret, Octagonal base

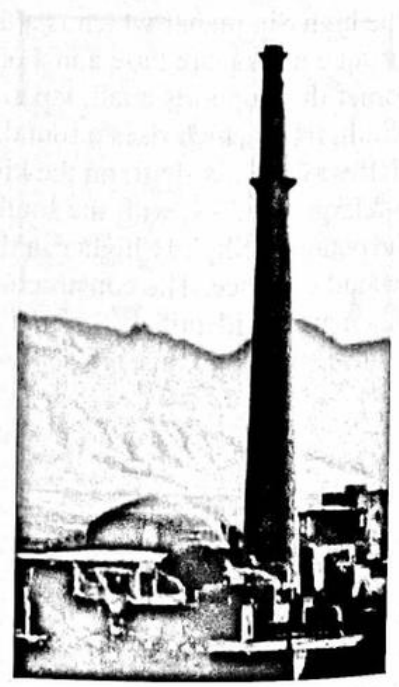
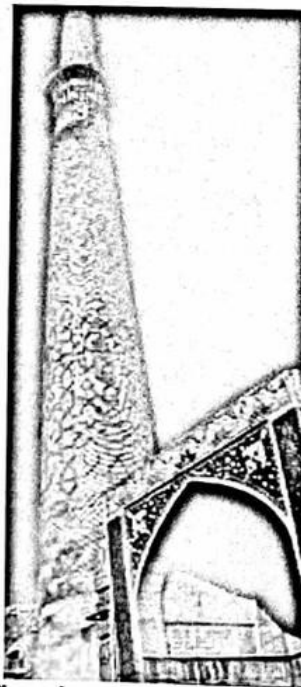


View of minaret in outer court

• Gar Minaret, Gar-Isfahan, 1121-22

According to Wilber the Gar minaret is an isolated, truncated round back brick shaft on an octagonal plinth. The rubble stone foundation, exposed 2 m, has a friable mortar of sand, pebbles, lime, and ashes. The slightly tapering plinth is 4.8 m high. The stairway, entered through the south-east face of the plinth just above the former ground level, is normal. The round shaft is 5.5m diameter at its base. At the top its diameter is 4.7m, where the shell is 0.74m thick. The total present height of the brick plinth and shaft is 21m. Just below the present top, and facing the kibleh there is a large window. This has a small balcony, pointed in plan, supported by a curved bracket, its elevation is a niche with pointed, arched profile. There is no faience. The mortar is gac and sand.¹¹ In relation to the Gar minaret decoration as described by Hillerbrand, there are four plinth faces at the top reading from north-east to east with a line of plain kufic, in brick-mosaic. Below this inscription, on two faces of the plinth, the wide rising brick joints, with tooled gac plugs depressed 0.005m, are disposed to form a 45degree diagonal diaper of rectangular naski. The remaining sides of the plinth are faced with carefully bonded plain brick, laid with minute rising joints. The corner brick are carefully cut to the angle. The shaft is decorated in a single zone by a revetment of brick laid prone in a 45 degree diaper of rectangular naski, the design being a widening of the rising joints.¹¹

The photos show tapered octagonal shaft followed by circular shaft. Both shafts are decorated with square Kufic



The minaret and the outlines of the major monuments of Isfahan
Ali Mosque and Minaret, Isfahan, Iran

in bricks patterns. At the top of the octagonal shaft there is an inscription band in Kufic . The lower octagonal shaft is similar to the one found in Kirat manar in Khursan, and The Friday Mosque of Golpayegan. This is an unpopular feature in Isfahan region.

• Ali Mosque Manar, 1118-1157

The Seljuk manar rises immediately to the right of the mosque portal and is built entirely of bricks. It is about forty-eight meters tall and has a tapering cylindrical shaft interrupted by two balconies. The shaft below the balconies is decorated halfway with a pattern of interlocking stars in recess, changing into a finer diamond pattern in the upper half. The manar has four bands of Kufic inscriptions, three of which are highlighted with glazed tiles.¹²

Attached to Ali mosque the photos show the long tapered circular manar with two cornices in the top, and geometric patterns carved in brick inscription band below the cornice in blue tiles. The long elegant manar is similar to the manar of Sarban with it elongated shaft and the two circular cornice at the top although the cornice in Sarban is larger and is decorated with mouqnas.

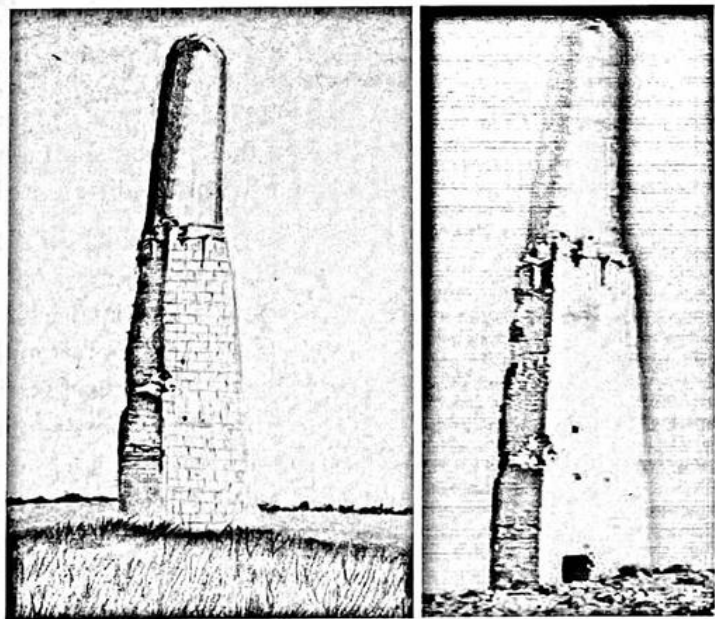
III- Study cases of the Seljuk manars in other Iranian regions:

Following are four cases of manars in different Iranian regions Khurasan, Mazandaran, Bukhara, and Shahrestan. These manars are randomly chosen for the comparative analysis.

• Kirat Minaret, 11th century,

This isolated minaret is a fine example of the Khursanian architectural tradition in manar building. It has a high octagonal base, which originally supports a balcony entered from the cylindrical shaft. The shaft, which now has a distinct lean towards the north, is unornamented, but the octagonal base has a number of pattern bands that link it to earlier manars in the area. The balcony was supported on corbelled brick columns with muqarnas vaulting, strengthened by wooden beams. A number of the patterns made use of a stucco infill, a technique common during the Seljuq period, but of which only a few traces remain .Despite its present isolation, the existence of a balcony indicates that the call for prayer was given from the manar. Its situation on the crest of a hill, however, indicates that it was also used as a lighthouse and a signal-tower, both to guide caravans traveling at night and to warn of coming dangers.¹³

A closer look to kirat manar shows that it is a free standing manar, with two shafts: the lower one is octagonal and the second is cylindrical. There is a balcony that separates the two shafts which is fairly decorated with panels in the octagonal shaft and maybe with stucco decoration, but the cylindrical shaft is left plain. Compared to other Seljuk manars, this manar is simply decorated with no inscriptions, tiles, nor carved stucco, just few mouqnas on the balcony. As observed by Blair this isolated minaret is a fine example of the Khursanian architectural tradition. It has a high octagonal base which originally supported a balcony entered from the cylindrical shaft. The shaft, which now has a distinct lean



Kirat, Minaret

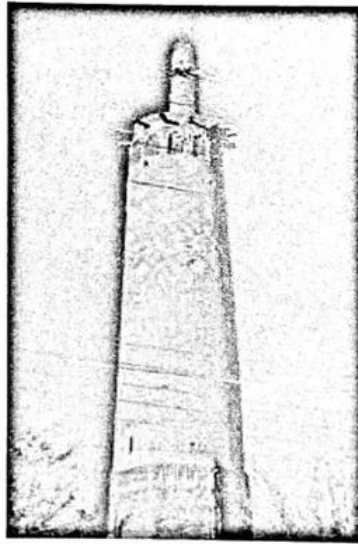
towards the north, is unornamented, but the octagonal base has a number of pattern bands that links it to earlier manars in the area. The balcony was supported on corbelled brick columns with muqarnas vaulting, strengthened by wooden beams. A number of the patterns made use of a stucco infill, a technique common during the Seljuq period, but of which only a few traces remain.

• **Minaret of Friday Mosque of Golpayegan, 1105-1118**

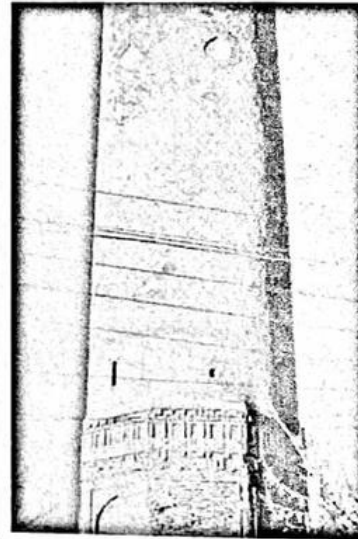
The Friday Mosque of Golpayegan was built by the Seljuk Sultan Muhammad Tapar I (1105-1118), son of Malik Shah I. Only the dome chamber remains from the Seljuk period mosque, which was integrated into a monumental four-iwan mosque during the Qajar period. The single minaret of the mosque is located outside the precinct, behind the qibla wall and also dates to the Seljuk period. Its octagonal base is joined by a tall cylindrical shaft, which is topped by a narrow turret placed off-center. The base is carved with shallow niches on each side. Simple brick patterns adorn the shaft, which displays remnants of turquoise tiles at the top.¹⁴



View of minaret, showing and turret upper shaft



View of minaret



View of minaret, showing octagonal base and lower shaft

The manar, located outside the mosque, has two shafts: a lower octagonal one and a cylindrical shaft which is longer than a galangal base. At the top there is a turret. Octagonal base has carved niches surrounding it. At the top of the circular shaft a blind arcade decorates the blue tiles. This manar is similar to the Karat manar with two different shaped shaft was used in an early period in The Seljuk architecture.

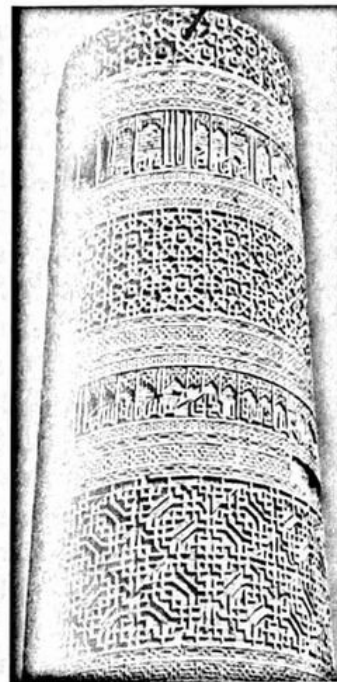
• **Sava, Minaret of Friday Mosque ,1110**

For elegance of composition and quality of decoration this is the finest remaining Seljuq minaret in Iran. It bears a number of pattern bands as well as inscription in kufic, and naskhi script. The lower section of the minaret has been restored, the upper section, including the balcony supports has now disappeared. The decoration of the remaining shaft is organized into three main zones, divided by inscriptions that are separated by a series of delicate guard hands in carved and moulded terracotta. The elements of the inscription bands are interspersed with a number of stucco plugs, many of which are carved with the name of Allah.¹⁵

• Vabkent minaret. Bukhara -1196-7

The manar of Vabkent today stands at 38.7 m above ground level, its sharply tapering shaft dominates the small town around it. The location of the manar is far from the nearby mosque by almost four meters. The inscription has a number of interesting features. The Vabkent inscription has a certain mannerism in its proportions, emphasized by exaggerating the height of the stems. We found stucco decoration on the two lowest tiers of stalactites. The pattern of the top on the lowest tier seems to have consisted of symmetrical vegetal elements. The panels on the second tier occur between each of the lower ones. The top tier of stalactites shows no signs having any stucco decoration. The lantern of Vabkent and Bukhara is part of the original structure.¹⁶

A closer look at the Vabkent manar shows characteristic of this free standing manar. This tapered shaft manar has inscription peculiar to itself in Kufic style with high Alef and Lam. The photos also support the observations of O'Kane on the inscriptions on the Vabkent manar as having certain characteristics emphasized by exaggerated height of the stems. There is stucco stalactites decoration on the two lowest tiers whereby the top of the lowest is ornamented with symmetrical vegetal elements and panels between the lower tiers and the top tier with no stalactites in addition to the elaborate lantern in comparison to that of the other manars in Iran.



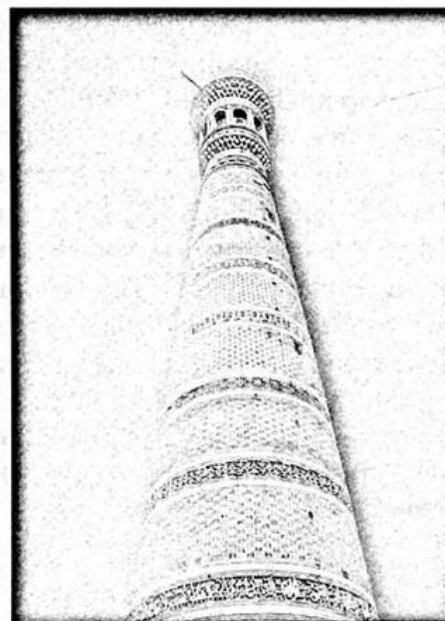
Sava minaret of the Friday mosque

V-Results of the comparison between the manars of Isfahan and the manars of four other Iranian regions:

The manars of Isfahan serve liturgical or non liturgical purposes. The manar of Barasian, the Friday mosque, the manar of the destroyed mosque of Sarban, the manar of the Friday mosque in Sin and the manar of Ali mosque are examples of manars with a liturgical function. These manars are attached to the mosque to sign for it as a religious building and are used to chant the call for prayer.

On the other hand, the minaret of Chihil Dukhtaran, the Gar minaret have secular purposes as lighthouses to guide travelers as these Minarates are not attached to mosques. In general the Shafts of the manars in Isfahan in the Seljuq era are built with baked bricks. These shafts stand on a circular base as in the case of the manar of Sarban, and the manar of the Friday mosque in Barasian, however, the manar of Chihil Dukhtaran has a square base and the manars of Gar and the Friday mosque in Sin have octagonal bases. On the other hand, the material used for building some bases is rubble stone.

Not all the manars of Isfahan have decorative crowns. For example, the Sarban manar has a crown with mouqnas underneath and the manar of Ali mosque has two balconies that crown the shaft. These crowns have bands below with inscriptions. On the other hand, the manars that have no crowns have only bands with geometric shapes made of bricks as in the manar of Barasian or inscriptions as in the manar of Chihil Dukhtaran which is made of terracotta or tile as in the manar of



The Minaret of Vabket

Sin. These inscriptions are mostly in Kufic or in both Kufic and naskhi as in the manar of Gar. The shaft is decorated with broad horizontal bands of geometric ornamentation, often separated by guard bands and inscriptions which display the full range of the brick-masons' talents as in the manars of Sarban and Chihil Dukhtaran. Then the colored decoration in glazed tile began to be added to the cut and moulded brick as in the manar of Sin. The shaft of all the manars is circular and tapered to make the manar more solid and stable in spite of its height which ranges between 21 meters as in the manar of Gar and 48 meters as in the manars of Sarban and Ali mosque. The brick patterns are used as decorative elements as well as for construction. The bricks are placed in geometrical shapes as in the manars of Gar, and Chihil Dukhtaran and the manars of Sin, Sarban and Ali mosque. In fact, these three last manars are distinguished by the use of blue glazed tiles.

On the other hand, the analysis of the manars of the other four Iranian regions: Khurasan, Mazandaran, Bukhara, and Shahrestan show some similarities and differences between the manars of these four regions on one hand and the manars of Isfahan on the other. The manars of the four groups, as well as the manars of Isfahan, serve liturgical and non-liturgical purposes, for example, there is the manar of Golpayegan in Shahrestan. Examples for manars that have secular purposes are the manars of Saba in Mazandaran and Vabkent in Bukhara which serve as lighthouses. However unlike the manars of Isfahan, there is an example of a double purpose manars, the Kirat in Khurasan, which although not attached to a mosque, yet its balcony indicates that the call for prayer was made from it. This manar is built on a hill which indicates an additional function to it as a lighthouse and a guide for travelers. Baked bricks are used in the building of the sampled manars of the four regions. However, wood was used in construction to strengthen the balcony as in the manar of Kirat or for decoration as in the manar of Golpayegan in Shahrestan.

In fact, sophisticated and lavish decorating styles are used in the manars of the four regions more than in the manars of Isfahan as the manars of Vabkent and Sava show. The manar of Vabkent is characterized by a lantern at its top with highly sophisticated mouqarnas above and under the lantern. Moreover, this manar is characterized by narrow bands of inscriptions all along the shaft with the use of symmetrical vegetal elements. There are three decoration zones in the manar of Sava separated by bands of inscription in Kufic and Naskhi. Moreover, some shafts have blind arcading on the top as in manar of Golpayegan.

Whereas the use of terracotta in building appears in the manar of Sava, the analyzed sample of other manars in Isfahan show no use of tiles. However, the manars of Isfahan are similar to the manars of other four regions in relation to base shape which is either circular as in the manars of Vabkent and Sava or octagonal as in the manars of Kirat and Golpayegan. In general, both the manars in Isfahan and in the other four regions have short lower octagonal shafts with the exception of the manar of Kirat. In this manar the shaft has two parts: ¹⁷the lower with a high octagonal base and the upper with a circular shaft separated by a balcony in the middle.

In conclusion, the manars of Isfahan are exemplary of the manars of the Seljuk period in ¹⁸relation to function, construction material and decoration style. Manars in Isfahan may serve religious and/or secular purposes. They are mainly built with baked bricks using a simple decoration style. On the other hand, the manars of the four other Iranian regions added the use of wood for more strength and clearly exhibit a tendency towards lavish decoration. These two features mostly distinguish the manars of these four regions from those of Isfahan however, the manars of both groups made good use of the solid building techniques of the Seljuk period which protected the manars from the dangers of the earthquakes.

- 1 -Hutt, & L. Harrow, *Islamic Architecture* (London: 1978) color plate 6 and 7.
- 2- D. N. Wilber, *The Architecture of Islamic Iran: Ilkhanid period* (Princeton: 1969)
- 3 -Ibid
- 4 -J.Bloom, *Minaret Symbol of Islam* (Oxford:1989) 157.
- 5- M. Smith, "Material for a Corpus of Early Iranian Islamic Architecture. ii. The Manārs and Masjed, Barsian (Isfahān)," *Ars Islamica* 1 (1936): 1-40.
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- 8- R. Hillenbrand, *Islamic Architecture* (Cairo: 2000) 154.
- 9 -O. Grabar, *The Great Mosque of Isfahan* (New York: 1990).
- 10- H. G. Ali. *Mimari-i Islami-i Iran dar dawrah-i Saljuqian* (Tehran: 2000) 107.
- 11- R. Hillerbrand, *Islamic Art and Architecture* (Cairo:2000)105-108.
- 12- W. Blunt, *Isfahan: Pearl of Asia* (London: 1966) 114
- 13 -R. Hillerbrand, *Islamic Art and Architecture* (Cairo:2000) 105-108
- 14 -S.Blair and J. Bloom, *The Art and Architecture of Islam* (Yale :1994)
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- 17-Kane, *Studies in Persian Art and Architecture* (Cairo:1995) 33-34

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10. Robert Hillenbrand, *Islamic Architecture: Form, Function and Meaning* (Cairo: 2000), 112-154
11. J. D. Hoag, *Islamic Architecture* (New York: 1977) 257, 330-338.
12. Hutt, and L. Harrow, *Islamic Architecture* (London: 1978) color plate 6 and 7, 1978. ?
13. George Michell, *Architecture of Islamic World* (London: 1978).
14. Bernard O'Kane, *Studies in Persian Art and Architecture, Manar of Vabkent* (Cairo: 1995) 33-34.
15. D. N. Wilber, *The Architecture of Islamic Iran: Ilkhanid period*, Princeton: 1969) 47