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# Investigating the effects of Persian architecture principals on traditional buildings and landscapes in Kashmir

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## **ABSTRACT**

North of the Punjab the land rises into the Himalayan foothills, towards the snows. Politically, the hills are divided between the states of Jammu and Kashmir. To the north, beyond the Banihal Pass, lies the Kashmir Valley, over 5000 feet above sea-level. The Vale and its fringes are rich in timber, which was and remains the primary building material. Tall houses lining the Jhelum River in Srinagar are wood-framed, as are more handsome mosques, which take a form unique to Kashmir. Persian influence on Indian Culture is a vast subject with many sides to it. This research is based on just one aspect of it, that is, the role of Persian architecture on Indian landscape architecture, and in particular Kashmir cultural architecture.

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#### Introduction

The Persian architecture in Kashmir flourished under the Muslims and Iranian rulers in 14th century; they invaded this province and established their rule, providing a new quality to the city, both in cultural and physical form. Wood since then played a major role in the architectural development of Kashmir. The wooden architectures found In Kashmir Indicate its ancient history. Due to the presence of wood In abundant amount, suitability to the climate, country, and the needs of the people, the wooden constructional method became in use, The technique therefore of the woodwork of Kashmir consisted in the elementary set-up of laying one log parallel on another, as in brickwork. They constructed not only the walls, but also on occasion the piers for the support of any superstructure; in the case of an ordinary pillar however, single tree trunks were generally employed. Mostly a variety of cedar tree or deodar tree is used for the wooden construction. Several of such log construction in the series of bridges or Kadals can be found around the river Jhelum at Srinagar.

## **Examining Kashmir Cultural Architecture**

The cultural architecture of Kashmir is characterized by its amazing woodwork influenced from Persian culture; it exhibits a generous array of stupendous constructional wonders. From the beautiful gardens and wonderful museums, to the holy mosques and shrines, each and every construction depicts the saga of magnificence of the past Kingdoms of the valley. The best illustrations of wooden architecture of Kashmir are Kadals, the wooden bridges and Ziarats, the wooden shrines respectively. Most of the wooden constructions in this province were done by deodar trees. Later In the period of 16th to 17th centuries, Mughals not only developed the specific wooden architecture of Kashmir, they also tried to revive the stone building art in that province. Some of the famous examples of wooden architectures of Kashmir are Jami Masjid at Srinagar constructed by Sikandar Butshlkan (1400 AD), Fort of Hali Parbat, Shah Hamdan in

Srinagar(Fig. 1,2), the Pattar Masjid (1623) and the Akhun Mulla Shah's mosque (1649).





Fig.1: The Shah Hamadan Mosque, besides the river Jhelum in Srinagar, Kashmir.

Source: Central Asian Art



Fig.2: Chehel sotoon Palace in Qazvin, Iran belonged to Safavid dynasty

Source: The Art & Architecture of Islam

The Indo Islamic architecture of Kashmir mostly occurred in the form of mosques and tombs, where the tombs are known as Ziarat in local language. These are composed with the same architectural elements; consisting of lower cubical structure of the building containing the hall or chamber, a pyramidal roof, often in rows and over the whole a slender tower. If the mosque is of larger variety, a fourth component constructed between the peak of the roof and the base of the tower. This forms a square shaped open pavilion, from which the muezzin makes his call to prayer. Several other external features such as small subsidiary

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shrine and a range of cloisters are added later. The greatest example of this kind of Indo Islamic architecture in Kashmir is the mosque of Shah Hamadan in Srinagar.

Shah Hamadan mosque is situated in the bank of the Jhelum River. It is an irregular masonry foundation composed of ancient temple materials. It is a square of 70 feet side, and is two storied in height. Above the construction, a low pyramidal roof is present, surmounted by an open spectator area for the muezzin, over which rises the tower with its finial.

The tower is 125 feet high from the ground whose lower portion of the wall is made up of logs, trimmed square and laid in alternate courses. The entire structure is a wooden structure. The pyramidal roof of the mosque projects in three tiers and are composed of beams that contains planks on the above covered with turf where roof garden exists.

Under the roof garden there are multiple layers of birch-bark, used as a water-proof layer resistant to rain or snow. The interior portion of the mosque does not posses any special structural features. It consists eight sided tapering pillars with foliated bases, the arched Mihrab, Its paneled walls stained to a rich brown, the painted ceiling and the many colored prayer carpets on the floor.

Whilst the commonest South Asian mosque plan is rectangular, with a long, blind wall, the qibla, facing Mecca wards, here the plan is square. Above a foundation of stone set in lime or mud mortar the walls are made of massive baulks of deodar set horizontally, alternating with brickwork or stone rubble set in mud. The timbers of one wall are sometimes arranged to alternate with those of its neighbors so that the corners consist entirely of beam ends. In larger vernacular mosques balconies become a decorative feature.

The mosque roof is four-sloped with a square turret rising at its centre surmounted by a steep spire and projecting dormer windows. The roof and tower are supported by massive pillars, each fashioned from a whole deodar trunk set in a stone base.

Mosque and town house alike used to be roofed by a framework of rafters on which a skin of birch bark was laid to support a tick layer of mud mixed wit cow- dung and buroza grass. One dried this was waterproof and provided very good insulation in a climate of extreme temperatures. Householders even used to grow flowers in their roofing. Until the 1930s the Jama Masjid, the principal mosque, had such a roof until there, as elsewhere, galvanized iron sheets replaced it. Oddly, the traveler William Moorcoft, who visited Srinagar around 1820, describes the house are being roofed with stone slates. Mud roofs survive occasionally outside the city, easily spotted by the crop of grass covering them. One little Srinagar mosque, that of Madin Sahib, still has its roof of mud and dung, complete with its grass. It also incorporates fine colored tile work that reminds Persian Islamic decorations.



Fig.3: Shalimar Garden, Kashmir

Source: The Gardens of Mughul India



Fig.4: The Royal spring Garden (Cheshmeh Shahi), Kashmir

Source: The Gardens of Mughul India

Another important and most impressive mosque in Srinagar Is the Jami Masjid. It is the most important architectural building in a wooden style of Kashmir, which was founded by Sultan Sikandar Butshikan in 1400 AD and later enlarged by his son Zain-ul-Abidin. The attractions of the Masjid include beautiful Indo-Islamic architecture, a wonderful courtyard and its wooden pillars. It is a combination of brickwork with a large amount of timber work which is a unique feature of the Islamic period of that province. It is designed with all the essential architectural components of typical Kashmiri type of wooden building, approaching more nearly to that of the orthodox mosque plan. It consists a square courtyard of some 240 feet in diameter surrounded by four sides with wide steeple.



Fig.5: The aerial view from Shalimar Garden, Kashmir Source: Google Earth

# Influences of Traditional Persian Architecture on Kashmir

The middle of each side is makes a structural wooden configuration named as "Ziarat". Among these four "Ziarat" formations those on three sides resolve themselves into entrance halls, but that on the west, which is the larger and more predominant, denotes the position of the nave of the sanctuary. The nave is a fine open space contained within a double range of tall wooden pillars, with an arched mihrab occupying the Interior wall. But its greatest architecture is the manifold pillared aisles and cloisters. These lofty arcades extend around the entire building where they are composed to form several ranges of pillars, varying from 25 feet to nearly 50 feet in height. Its huge structure along with the orthodox Muslim design makes the building a memorable one. The indo Islamic architecture in Kashmir took a new turn In the Mughal period. The early Islamic architecture developed and introduced a separate style of building art in the Kashmir province. Mughals introduced the art of stone building to the province in the sixteenth and seventeenth century which became famous and dominating architecture of Mughal dynasty. There are three such buildings, the Fort of Hari Parbat, the Pattar or Stone Masjid, and the mosque of Akhun Mulla Shah. All these structures were executed in the grey limestone readily available in the valley. The Fort of Hail parbat, is the replacement of the original

Akbari citadel, but retains only the walls of the two gates, the *Kathi Darwaza* and the *Sangin Darwaza*. These are the constructions of the Mughal period, and represent the style in its simplest and most dignified aspect. The *Kathi Darwaza* appears to have been the main entrance; however, the *Sangin Darwaza* is more expensive and ornate. Its height consists of a well-proportioned arched recess containing the entrance gateway, and there are stylish oriel windows on each side.

The two other stone buildings of Mughal dynasty constructed later are the *Pattar Masjid* and the *Akhun Mulla Shah's mosque*. The Pattar Masjid was constructed In A.D. 1623 to the order of Nur Jahan the consort of the Emperor Jahangir, whereas the Akhun Mulla Shah's mosque was constructed In A.D. 1649. Both buildings imply their own methods regarding to their design, materials, and technique. These two mosques of Mughal dynasty are Similar In architectural quality to many of the productions in the capital cities of that empire; however, the architecture of the fortress of the province depicts the style In Its moderate manner. This moderate style of decoration was also used in the Akhun Mulla Shah's mosque that is situated on the scarp of the Hari Parbat Fort enclosure.

This moderate style added diction to the prevailing Indo Islamic architecture In Kashmir. Interestingly, Akhun Mulla Shahs mosque is a mosque within a mosque, as the sanctuary forms a separate and detached building standing within a surrounding courtyard. The Akhun Mulla Shah mosque is a large rectangular enclosure containing a tank for ablutions which Is bounded by a range of compartments for the lodging of attendants and devotees. At the western end of this enclosure is the mosque sanctuary isolated from its surroundings. It consists a square building around a square open court, the front portion forming the entrance, the sides forming the aisles, and the western end as the prayer hall. The mosque is constructed with the famous grey granite slabs over a core of brickwork. The architectural style, the simplicity of its surface treatment and the proportions of this building are all admirable. This Mughal architecture is mainly famous for its plain, pointed or engrailed archways present In their curves. This structure represents an appropriate mosque composition. Apart from the fort and the two mosques, Mughals constructed several other famous structures in the valley, mainly in brick masonry. These still echoes the grandeur of Indo Islamic architecture in Kashmir. Some of these luxurious buildings were used as summer resorts by the rulers, such as the Pari Mahall or Fairy Palace, It is a garden founded by Dara Shiko, the eldest son of Mughal Emperor Shah Jehan. He constructed this garden for his Sufi teacher, Mulla Shah on the spur of a hill of Srinagar. On the hillside of the Dhal Lake, architecture of Mughal dynasty famous as Shalimar Bagh, or Garden of Bliss, depicts the glorious saga of Indo Islamic architecture. It was constructed by Emperor Jahangir for his loving wife Nur Jehan. It is a beautiful garden with extensive landscape and shallow terraces over the lake and has four porches, rising one above the other. It is a loggia of black stone pillars and sculptured brackets, with every part in pleasing proportion and most artistically executed. Its large bamdari or pavilion is a wonderful creation of Mughals. A canal with graceful stones and supplied with water runs through the center of the garden. During their regime, the fourth terrace was reserved for the royal ladies. Shalimar Bagh is the place for privacy and tranquility within the rows of wonderful fountains and lined Chinar trees of the snow dressed mountains. All the masonry buildings introduced in Kashmir province in an

indigenous style was mainly to satisfy the requirements of the rulers. Yet with their poise, immensity, grandeur and majesty boasts the tale of Indo Islamic architecture in Kashmir.

The great phase of Persian-building style began late the same century when Babur, one of Timur's family, conquered what is today Afghanistan, Pakistan, north of India and Kashmir. He set up what was called the 'Mughal' Empire, derived from 'Mongol'. The Mughals were Muslims. Babur was intensely keen on Islamic gardens and Persian Architecture and personally designed and built them. Three other Mughal Emperors were also extremely keen on creating Persian gardens. Between 1483 and 1658 CE these Mughal Emperors produced a golden age of garden-building in Kashmir. Some of the largest, boldest and most imaginative gardens in the Islamic world were created under their rule. Two of the most famous works — Shalamar Gardens and the Taj Mahal, were completed by Emperor Jahan in the middle of the 17th century CE(Fig 6-9).

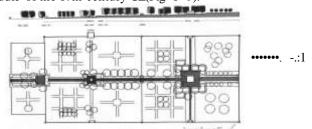


Fig.6: Plan and section from Shalimar Garden, Kashmir. The Persian garden principals can be clearly seen in this garden.

Source: The Gardens of Mughul India

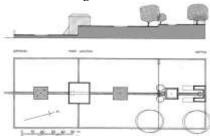


Fig. 7: The plan and section of Royal spring Garden (Cheshmeh Shahi), Kashmir

Source: The Gardens of Mughul India

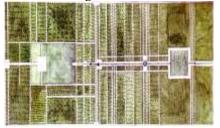
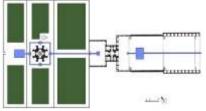


Fig. 8: The plan of Farah Abad Garden, Isfahan that completely based on Persian garden design.

Source: History of Art In Persia



**Fig. 9: The plan of Qadamgah Garden, Neyshabour, Iran.**Source: A Medieval Islamic City Reconsidered

### Conclusion

Architecture in Kashmir was first inspired by the Buddhist structures of neighboring Gandhara. Local artisans, however, adapted the foreign forms and developed a unique style with regional characteristics. In the early centuries of the Common Era a typical Kashmiri temple consisted of a tall, sturdy stone building, set upon a high plinth facing east. The temples often included Greco-Roman architectural elements including rounded arches, triangular pediments, and most notably Classical Greek fluted columns. Though only stone structures survive from early Kashmir, most early buildings were made of wood. No Buddhist structures have survived, although there is textual evidence of stupas in the region until the seventh century. Terra-cotta tiles excavated from the Buddhist site at Harwan are decorated with images of stupas.

The Persian islamic dynasties from the fourteenth to the nineteenth century introduced the dome to Kashmiri architecture. They also introduced structures such as tombs and mausoleums. The Islamic emperors created beautiful gardens according to Persian garden design that are still renowned today. Gardens held a special meaning in the Iranian understanding of paradise and emphasized the beauty of Kashmir's landscape.

As discussed in this article, many ideas and methods in Islamic architecture seem to originate from the Persians. By the middle of the 7th Century CE, the Muslim Arabs had conquered the Persians, converted them to Islam and began using crafts and skills developed by the Persians.

This research shows that a great number of architectural works and designs in Kashmir had been practiced firstly in Persian culture. These building are good guides for architects in art to appreciate the very high degree of cultural preciseness.

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