

RESTORATION OF THE FORGOTTEN GLORY: SAMADHI OF BHAJI VASTI RAM, LAHORE

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Restoration of historic buildings is hard and requires skilled labour and good craftsmanship. The artisan who works in the restoration of old buildings and monuments learnt the skills and techniques from their ancestors. These skills are transferred from generation to generation since the time of the Mughuls (1524-1712) and Sikhs (1764-1849).

Pakistan has a variety of structures built in different eras that have importance in the architectural character of Pakistan. This paper describes the Decorative Architectural features of Samadhi of Bhai Vasti Ram, Causes of decay of Samadhi, its importance and architectural significance. Restoration of Samadhi mob was completed in 2018 after it suffered a massive mob attack due to Babri Mosque incident in 1992. The restoration of Samadhi has been done by the Department of Archaeology and Museums, Pakistan.

Keywords: Samadhi, Vasti Ram, Restoration, Lahore, Archaeology, Decay, Ornamentation.

Introduction

The Samadhi of Bhai Vasti Ram can be considered as an important monument of Lahore. It belongs to the monuments of the Sikh period. Bhai Vasti Ram dedicated himself to the study of medicine and his relationships with people caused him to be recognized as a deeply religious

man of his time. Maharaja Ranjit Singh highly appreciated him and considered him as a “Guru” a teacher or a mentor. Bhai Vasti Ram died in 1802 at the age of 94 years and his body was cremated at the spot where his samadhi now stands.¹ It is located on a green belt surrounding the northern defensive wall of Lahore Fort.

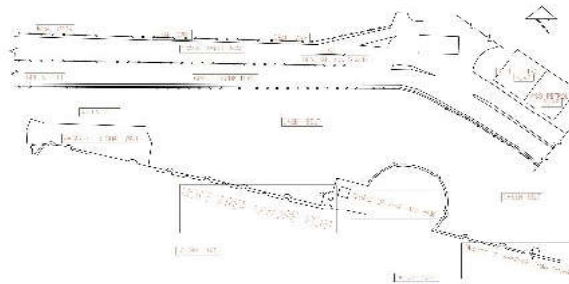


Fig 1:
Location Plan of Samadhi

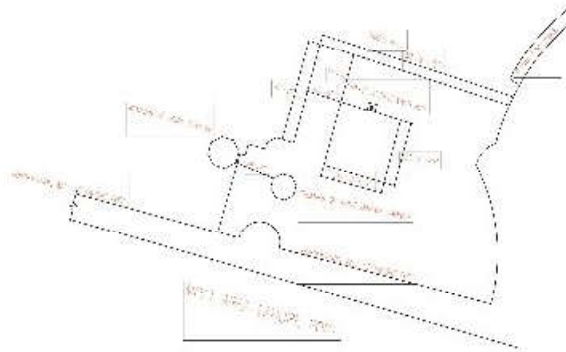


Fig 2:
Dimensional Master Plan
Source: Archaeology dept, Lahore.

Samadhi Bhai Vasti Ram is a combination of Hindu and Muslim architecture and it is an indication of the sophisticated flavor of the Sikh milieu. Despite its tiny appearance in the context of the enormous Lahore Fort, white marble feat on its outer surface draws attention, which was once encrusted with semi-precious multicolored stones in floral motifs. The main door facing north of the square structure is placed on a square podium. There was a tank with fountains right in front of the podium; however, it no longer exists.²

**Fig 3:**

Early Picture of Samadhi (1992), Lahore

Source: Archaeology department, Lahore

The Samadhi of Vasti Ram has suffered a great deal of vandalism by people who stripped off its ornamentation. Samadhi of Bhai Vasti Ram, like Jain Mandir in Lahore, suffered a massive attack in the demolition of the Babri Mosque in 1992. The Samadhi was severely damaged and its structure, ornaments and rich decorations were looted and fired brutally by the crowd. It was in poor condition until a year ago. Some parts of samadhi were collapsed and others were in ruins. There were scrappy bushes around it. Many local and international Sikh associations were disappointed by the condition of this Samadhi and had applied to the Department of Archeology, Punjab for its restoration. The samadhi was declared as the protected monument by the Archeology department.³

**Fig 4:**

South corner

**Fig 5:**

3D view of the building before restoration

Source: Archaeology department, Lahore

The building was originally constructed with bricks. The interior of the samadhi was made up of lime mud mixture (used in the form of binding agent) and the walls were decorated with colored paints. The

walls were inscribed by the picture of Gurus. The roof of the structure is curved and in the center, there is a magnificent dome placed. Inside the samadhi, the sarcophagus of Bhai Vasti Ram is centrally placed and is located on the raised platform (pediment) of marble (Sang-e-Marmar). Intricate decorative work in the form of floral motifs was carved in the marble with inscribed cornelian (reddish or white semiprecious stone) and of Sulemani stone. On the upper surface of the sarcophagus, there is a place of marble for placing Granth. The four sides of this marble platform are enclosed by four beautiful columns thus forming the base of the dome.



Fig 6:

Interior view of Samadhi

Source: Author

Research Objectives

Many historical monuments are restored that serve as additional knowledge to the research scholars, academicians and students to establish awareness; hence provide a revolutionary approach for other historic monuments. This paper includes the causes of decay and the process of restoration of Samadhi Bhai Vasti Ram and systematic recording of it during restoration in 2018.



Fig 7:

North façade before restoration

Source: Archeology department, Lahore



Fig 8:

North façade after restoration

Source: Author

Methodology

This research is focused on the study and methods of conservation of samadhi. Site visits have been done to study the historical values and conservation values of the samadhi. Other sources like magazines, blogs, books are also considered for this study.

Results:

The exterior of samadhi was in a much-deteriorated state. This is the result of the attack on the Babri Mosque by the extremist Hindus in India. As a reaction, the Muslims of Pakistan also destroyed the samadhis as well as historically significant secular places of Hindus and Sikhs. This samadhi was also destroyed as a result of that incident. It is mentioned in figure 9 that samadhi is located on a marble platform raised from ground level but before restoration, there was no existing platform and the samadhi was standing all alone on a mound of grass. The residential quarters, as well as other buildings that are mentioned to be there in historical evidence, were also not there.

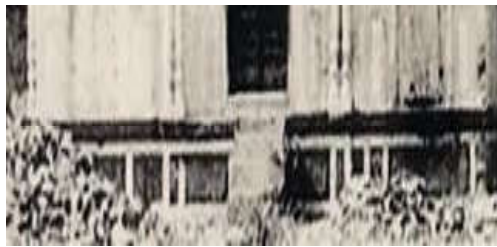


Fig 9:

Platform on north façade of samadhi

Source: Archaeology department, Lahore

The walls made up of lime mud mortar and bricks were cladded with marble having intricate detailing but before restoration, there were only a few patches of marble present on the façade. Bricks, as well as lime mortar, can be seen in figure 10 and figure 11.



Fig 10:

Dilapidated condition of north façade

Source: Archaeology department, Lahore



Fig 11:

3d view of samadhi

In the interior of the samadhi, whether on the walls or the roof, intricate detailing was observed which has been done in the form of floral motifs and floral design depicting Mughal style dominantly. The mezzanine floor also had a white-colored roof with detailed as well as beautiful artwork. To beautifully terminate the columns different styles of brackets were designed to give the interior everlasting effect. Bricks are also laid in the same manner to give an arch a perfect finishing. The bricks that were used in the construction of arches are molded curved form to provide the intricate detailing to the highest limit.



Fig 12:
Design of niches exposed brick on the north side
Source: Author

Inside the samadhi, the sarcophagus of Wasti Ram was placed centrally in between the four columns and was covered with the white marble decorated with a very intricate floral pattern. Before the restoration, the platform has been destroyed and it becomes difficult to even locate its original position in the samadhi.

The paintings on the wall are depicting the Sikhs either worshipping or paying homage to Vasti Ram as their devotees. Mostly color paints have been used for painting but in some of the places, beautiful stonework was also observed known as Pietra Dura work.



Fig 13:
Ornamentation work Fresco and gold
plating before restoration



Fig 14:
Pietra Dura stonework in
interior of samadhi

Source: ⁴

Decorative features of Samadhi:

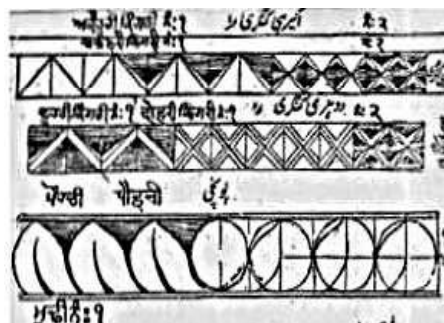


Fig 15:
Decorative motif Poncho on the base of samadhi
Source: ⁵



Fig 16:
Base of samadhi

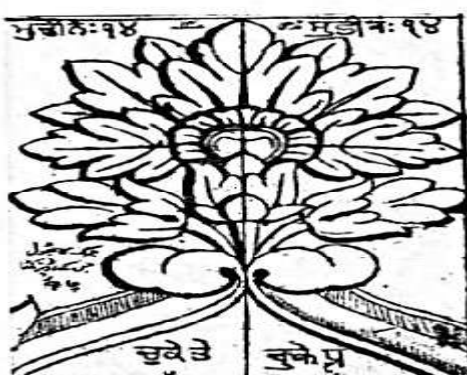


Fig 17:
Decorative motif Chukka on the exterior niches of samadhi
Source: ⁶



Fig 18:
Exterior facade of samadhi
Source: Author

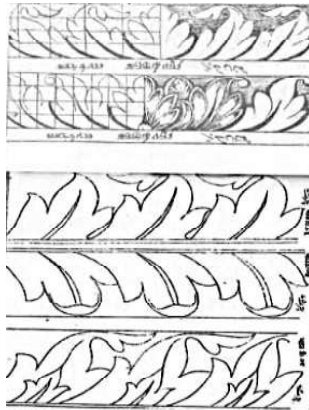


Fig 19:
Decorative motif Galat on the exterior niche door of samadhi
Source: ⁷

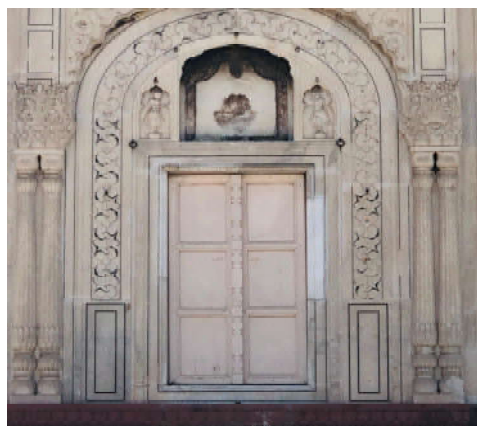


Fig 20:
Decorative motif Galat on the exterior niche door of samadhi
Source: Author



Fig 21:
Gateway Panels with decorative frames of Samadhi:
Source: Author

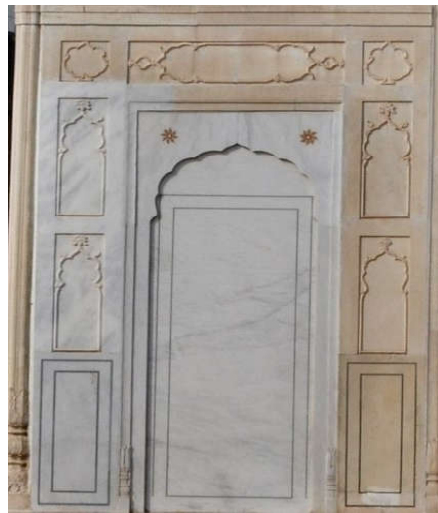


Fig 22:
Source: Author



Fig 23:
Lotus medallions
Source: Author



Fig 24:
Sunflower detailing:
Source: Author



Fig 25:
Columns on the exterior facade:
Source: Author

The building experienced wear and tear over a period that put forth a need for its preservation. Originally the building was constructed on a platform yet before restoration there was no platform yet the building stood on a mound of grass. The facades were deteriorated. Initially, there was a dome in the center of the roof of Samadhi but now it doesn't seem to even exist.

External causes of decay

Gravity

Gravity has played an important role in the destruction of samadhi, although the structure has withstood the fall of bricks and other building materials, with the time, different components of samadhi fell due to gravity.

Climatic causes

The sun has played its role in the fading color of decorated wall paintings exposed to direct sunlight. The rain has caused serious damage to the interior by penetrating the walls and arches, and some cracks are very visible due to the effect of rain on some parts of the samadhi.

Groundwater

As the Lahore fort is situated on the mound and is built upon the water underneath that is groundwater, so as the water is going lower in levels. It was causing serious damage to the foundation of samadhi. Reinforcements were required to sustain samadhi by strengthening its foundations.

Dust

Dust can be seen on the marble cladding exterior of samadhi and due to the layering of this dust the color of the pure white marble faded to that of a dull cream color. The dust also faded the color of the interior wall and pietra dura work on them.

Biological and botanical causes of decay

Insects

Beehives were seen on all corners of samadhi thus causing very serious damage to the structure. These were removed immediately to protect the color of the wall paintings as well as the beauty of the interior.

Trees and Plants

were grown on the niches of the 1st floor of the building. The roots of Plants was causing an extremely dangerous threat to the structure of samadhi.

Natural disasters***Earthquake***

The walls of samadhi are one foot and three inches thick but still as earthquake produced considerable vibrations causing damage to the foundations and walls of samadhi. Apart from the shaking of the foundations, there is a lot of deterioration observed in the internal walls like cracks.

Man-made causes of decay***Vandalism***

Babri Mosque incident in India was a triggering impact in the destruction of the samadhi. When extremist Hindus destroyed Babri Mosque, Muslims were also raged the Samadhi was severely damaged by the angry crowd. Not only the structure other embellishments and ornamentations were viciously stolen by the reference crowd unchecked. The samadhi was in shambles until now as some parts of the Samadhi had collapsed. Sikh Associations (local and international) then requested the Department of Archaeology for its restoration.

Theft and Arson

During the war of independence in 1857 and after that war during the British period, the British soldiers destroyed the pietra dura work of this samadhi by extracting the semi-precious marble and stones from inlay works.

Fire and superstitious believes:

People were using samadhi to fulfill their superstitious desire and so as the skull of different animals and bottles filled with petrol was observed

in and around the samadhi. This whole activity destroyed the structure and left burnt prints of coal on the facades of the Samadhi.



Fig 26:
Precious stone From façade of samadhi



Fig 27:
Intricate exterior roof detail

Source: ⁸

Restoration of Samadhi

After a detailed analysis of the Samadhi restoration data, collected from the Archeology department Lahore, following are the components of the restoration process.

Interior

Special Anti Termite Treatment to wooden members ceilings etc has been done. Preservation /Consolidation of existing tile mosaic work including replacing the missing piece if any. Providing and laying 2" thick D.P.C with lime concrete 1:2:3/4 (1 fine kankar lime, 2 coarse kankar lime and 3/4 white lime cream). With waterproofing material as directed, curing, compacting, finishing in required level in alternate panels, formwork complete in all respect. Dismantling kankar lime plaster 2" thick average on walls and ceilings including cleaning of brick surface and removal of debris lead up to 5 km. First-class deodar wood terseem bandi as per existing design and layout including final painting fixing mirrors where required complete. Restoration of faded fresco painting and linning as per original design and colour. Providing and Fixing Red Sand Stone Horizontal posts size 2' 8"x5 1/2" x5 1/2" in octagonal design as per original and laid in white cement mortar including making necessary grooves when required. Underpinning with special size brick tiles 8"x4"x1-1/4" in kankar lime mortar 1:3. Providing and Laying Tera cotta tile flooring 1'x1'x2" with kankar lime mortar. Dismantling of old decayed

lime terraced flooring 3" thick an average. Restoring missing stucco tracery work on walls with 1-1/2" thick kankar lime plaster 1:2:3/4 (1 fine kankar lime, 2 coarse kankar lime, 3/4 white lime cream) strengthened with finishing coat 1/2" thick kankar lime mortar 3:1 (3 fine kanakr lime, 1 white lime cream) as a base coat for stucco tracery work as per existing design with lime, zinc oxide, marble powder, etc. complete in all respects (cusped arches and decorative panels). Tile Mosaic work (Kashi Kari) as per the original design and colors.

Exterior

Brick imitation work average 1/4" thick of white lime, marble powder 2:1 with red oxide @ 1 Kg per 100 cft complete including height up to 60 feet. Providing and laying brick tile ghulta (cornice) as per existing design with special size of brick tiles 8"x4"x1" laid in kankar lime mortar 3:1 (3 fine kankar lime, 1 white lime cream) including dismantling the decayed brick masonry in lime mortar, scaffolding and curing, etc. complete in all respect. Brick tiles on edge flooring (8"x4"x1-1/4") in a special design in 1:3 lime mortar over a bed of 3/4" thick lime mortar and joints finished with lime putty and red oxide as per original design. Brick tiles on edge flooring (8"x4"x1-1/4") in a special design in 1:3 lime mortar over a bed of 3/4" thick lime mortar and joints finished with lime putty and red oxide as per original design. Provision for cleaning algae and dust layer from the walls of the monument. Providing and Fixing Chain Nickle Plated. Restoration of fine cut and dressed bricks tiles facing 8" deep masonry with 1st class brick tile s/s 8"x4"x1" laid in kankar lime mortar 1:3 as per original design. Restoration of decoyed inlay work with variegated marble including sang-e-khatlu, sange-musa bhora, etc. as per original design complete. Excluding engraving of host slab. Providing and fixing in position deodar wood door and chowkat (5"x5") and planks 1-1/2" thick and battens 3"x1" thick as per Mughul design complete with locking arrangements. Dismantling of white marble floor with care and stacking properly up to 300 ft. Dismantling Old Gril (Jungla) including shifting up to 1000 ft lead inside Lahore Fort. Dismantling the old, decayed and damaged brick on edge pavement including lime concrete underfloor and removal of debris lead up to 5 km. Providing and Erection of Moveable MS Jungla (Grill) MS Gate prepared. Providing and Laying floor Special size 1st class brick tiles 8"x4"x1" on edge in similar geometrical patterns, exactly similar to original laid with kankar lime mortar 3:1 (3 fine kankar lime & 1 white lime cream) over a bed of 3/4" thick kankar lime mortar

1:2:3/4 (1 fine kankar lime, 2 coarse kankar lime, 3/4 white lime cream) including surface treatment of visible joints with fine kankar lime, white lime cream (7:1) and finally rubbing of floor complete. Restoring Ghalib Kari work 3" thick an average in geometrical design on plaster base (3:1:4) consisting of 2 1/2" thick undercoat in two layers kankar lime, white lime and coarse kankar lime (Nodules) and 1/2" finishing layer of kankar lime plaster 3:1 (3 fine kankar lime and one white lime) mixed with chopped jute and finally coated with Pucca Qalai including making geometrical designs as per original. Providing and Grouting of surface joints of brick pavements with kankar lime mortar 3:1 (3 fine kankar lime, 1 white lime) after removing wild growth and rubbish from the surface, racking of joints up to 3/4" depth, washing and cleaning the surface with steel brushes, Dari brushes and clean water as directed complete in all respects. Restoration of ornamental brackets by using architecturally dressed special size brick tiles 8"x4"x1" in kankar lime mortar as per original design. Provision for an ornamental fountain with cistern as original design and layout by using white marble of special quality. Pucca Qalai, Glazed lime plaster an average 1/8" thick 2 parts white lime cream and 1 part marble powder finished with soap skier powder, complete. Providing and laying Red Sand Stone vertical posts (MUTTACCA) size 4'-4" x11"x5 1/2" in octagonal design as per original and laid in white cement. Preparing and fixing Red Sand Stone Chaukhat 9"x6". Preparing and fixing Red Sand Stone Chujja in simple design as per original patterns. The stained lime mortar will be used to match the adjoining surface. The copper or stone dowels will also be provided where found necessary. Preparing and fixing Red Sand Stone Dab Patti face Patti (6"x9") or (4"x6") as per the original pattern. Preparing and fixing Red Sand Stone Dasa in floral design laid in strained mortar including dismantling old red sandstone. Preparing and fixing red sandstone double jhumki set on the bracket. Washing RCC roof for bitumen coating.



Fig 28:
Craftsman working on exterior
façade



Fig 29:
Craftsman working on the exterior
decorative panels columns

Source: Archaeology department, Lahore

The restoration of historical monuments, like the original, is important and difficult since today it is difficult to achieve craftsmanship like the previous one. The artisan who works in the restoration of samadhi learnt the skills and techniques of their ancestors. These skills are transferred from generation to generation since the time of the Mughuls. Now, due to the low wages, this ability is reduced day by day. Some decorative elements in the restoration of samadhi are not carved. With the use of black paint, they tried to give samadhi an original look.

The most critical problem in restoration work is the use of Portland cement. No doubt, Portland cement is a magnificent material for modern structures, but it is not designed for use in historic buildings, because it is too strong in compression, adhesion and tension, so it lacks elasticity and plasticity compared to mortar lime. Cement also produces soluble salts. In setting, it can dissolve and damage porous materials. According to Bernard M. Feilden, "Portland cement should not be used for mortars or plasters in historic buildings, but as a last resort, a small proportion of white cement, you can not add more than 10% of the volume of lime."⁹. The use of Portland cement by the Department of Archeology to fix stone panels can further damage the structure of a building.

Recommendations

Restoration and conservation components as described in the paper reveal that the department of archaeology and museums Pakistan is trying to do work for the historic monuments by keeping in mind the historic importance of the building. Samadhi Bhai Vasti Ram was seeking attention for restoration and conservation since 1992.

The procedure adopted for the restoration is accurate but due to a shortage of good workmanship some wrong carving and inlay of stonework pointed out at different points of samadhi. Craftsmanship practice should be added to academics as a practicing studio for conservation. In a few years, restoration of old buildings would be hard without a skilled craftsman. There should be another important consideration to avoid the use of Portland cement in restoration work. In this sense, lime mortar and limestone should be used to maintain the original material and construction technique. Portland cement is very strong in compression, adhesion and tension, so it lacks flexibility and flexibility compared to lime mortar. Cement also produces soluble salts when mapped, resulting in the dissolution and destruction of porous materials. Therefore, further damage can damage the structure of the building. It should not be

recommended in the restoration and restoration work of the historic monument.¹⁰

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