

## A Study of Architectural Features of Sadat Ali Complex, Lucknow

**Ar. Akanchha Jain**

Research Scholar, Department of Arts, Mangalayatan University, Beswan, Aligarh, Uttar Pradesh.

### Abstract

The Saadat Ali Complex is renowned for its striking architectural features, which include intricate carvings, grand archways, and ornate facades that showcase a blend of Mughal and Persian design elements. Saadat Ali Complex is one of the most beautiful buildings of historical importance during 1814. Its intricate design and craftsmanship fascinate visitors, displaying the art of the masters who do everything meticulously. The preservation of this place is not only an effort to preserve the physical integrity of the building but also an effort to preserve the spirit and essence of the past. preservation involves rigorous documentation, restoration, and maintenance of the property that defines this historic treasure. An integrated approach combines architectural expertise, historical research, and research to ensure the accuracy and integrity of the pathway. Despite challenges such as aging and climate-related issues, healthcare professionals, historians, architects, and advocacy organizations continue to address this problem.

**Keywords:** Architectural features, cultural significance, conservation, historic building

### 1. INTRODUCTION TO ARCHITECTURAL FEATURES OF SADAT ALI TOMB

The conservation of buildings, a captivating and nuanced field, entails a multitude of challenges while carrying immense significance in preserving our cultural heritage. This specialized area of expertise involves a detailed educational journey focused on the conservation, restoration, and maintenance of historic structures and architectural landmarks. A deep understanding of varied construction methods, materials, and design principles essential to the original edifices is imperative in this field (Rowland, 1953). Delving into the meticulous study of these architectural gems allows conservation architects to not only gain profound insights into the historical and cultural value these monuments hold but also foster a deep admiration for their enduring legacy. With this comprehensive knowledge, these professionals can craft unique conservation plans and architectural blueprints dedicated to preserving both the structural stability and historical essence of these iconic sites for future generations to cherish.

Mastering the realm of conservation architecture requires a blend of diverse skills and a broad knowledge base encompassing elements from architecture, history, scientific research, and cutting-edge conservation techniques. By harmoniously integrating these diverse disciplines, conservation architects play a crucial role in the overarching mission of safeguarding and perpetuating our shared heritage for the benefit and enlightenment of posterity (Brown, 1942). Ultimately, conservation architecture serves as a foundational pillar in the ongoing narrative of cultural preservation, linking the

past, present, and future through a tapestry of timeless architectural wonders that transcend boundaries, fostering a profound sense of continuity and legacy that resonates with the enduring human spirit through the ages.

### **1.1 SAADAT ALI COMPLEX AND ITS HISTORICAL BACKGROUND**

Saadat Khan founded the Kingdom of Awadh in 1732 AD, but it was annexed by the British in 1856 AD. Lucknow has one of the finest collections of buildings, including sarcophagi, mosques, palaces, and mausoleums, representing the transitional period of rich architecture. The tomb of Saadat Ail Khan and his wife Murshed Zadi was built in 1814 AD. Located in the northeast of Qaiserbagh Lucknow, these structures add a unique charm to Lucknow's skyline. Unfortunately, the prison and its surroundings were destroyed during the rebellion in 1857 AD, and modern architecture destroyed the traditional style of the area. The landscape no longer matches the elegance of the monuments and the park layout has lost the charm of the Mughal Garden. *(Fletcher, 1992)*

### **1.2 KING AND QUEEN TOMB**

The Tomb of Sadat Ali Khan has a massive black and white marble floor with beautifully carved openings on either side. The pedestal is octagonal and decorated with dark yellow stucco patterns. In the corner, there are stairs leading to the terrace above. The monument is topped by a large fluted dome with a fascinating chhatris and a tall tower. The tomb of Queen Mushir Zaidi is a square building with a tower and pavilion in the middle. It is entered from a basement and has a domed floor with vaulted sides. The gallery continues around the upper half of the vault, above which is the crowned upper vault with four chhatris. The dome rises above a square base with internal corners at each corner, forming the octagonal base of the dome. *(Rosie Llewellyn Jones, 2000)*

### **1.3 AIM**

This paper delves deeply into the intricate study of the Mughal tomb, an area of architecture that has received significant attention over the years. Despite numerous research endeavors focused on Mughal architectural marvels, there are still plentiful unexplored facets awaiting scholarly investigation. The primary aim of this study is to consolidate and synthesize the vast body of existing knowledge in this domain, intending to make a substantive contribution to the collective understanding through a meticulous structural examination of Mughal architectural designs.

Notably, this paper showcases a comprehensive exploration of the underlying philosophical and practical principles dictating the construction processes of Mughal edifices, particularly drawing attention to their profound impact on the evolution of tomb designs. By dissecting the intricate phases of temple construction and scrutinizing the varied construction methodologies employed throughout history, this study goes beyond mere archival research to engage in a thorough comparative analysis. Through an in-depth evaluation of these critical aspects and their contemporary significance in Mughal tomb construction practices, this paper sheds light on the rich tapestry of architectural evolution that continues to inspire modern architectural endeavors.

## 1.4 OBJECTIVE

1. Recognize the fundamentals of Muslim architecture and how they relate to the Mughal tomb's design and construction.
2. Give an analysis of the idea of a tomb, how it has evolved, and how its architectural styles have changed.  
Determine and combine the tomb's geometrical and structural systems.
3. Research the properties of the materials, building methods, and procedures used in tomb construction.
4. Dimensional analysis of the tomb concerning the basic indexes for the structure's safety evaluation.

## 1.5 METHODOLOGY

There are several important steps in preserving and preserving the Sedat Ali complex. First, a comprehensive assessment of the current state of the complex and multifactorial causes of the destruction was made. This includes assessing its properties, the materials used, and any environmental or anthropogenic threats it may face.

When the evaluation is completed, a detailed savings plan will be created. The plan outlines specific activities needed to stabilize and repair the complex, including its historical and cultural significance. We strive to strike a balance between preserving the original structure of the complex and making appropriate interventions to ensure its sustainability in the long term. Collaboration with experts in architecture, archaeology, engineering, and conservation is an important part of the approach. These experts contribute their knowledge and skills to guide the conservation process to ensure best practices and techniques are used. We continue to monitor and evaluate complexity to identify emerging issues and initiate timely responses. In addition, social participation and public awareness play an important role in this approach. Local communities are involved in conservation conservation, developing a sense of ownership and pride in their cultural heritage. Educational programs, public presentations, and guided tours are designed to raise awareness of the historical significance of the Sadat Ali Complex and the importance of its preservation. Following this approach ensures that the conservation of the Sadat Ali Complex is effectively implemented and its historical and cultural significance is preserved for future generations to appreciate and enjoy.

## 2. A COMPREHENSIVE STUDY OF THE SAADAT ALI COMPLEX

To achieve the preservation goals effectively, it is crucial to implement a comprehensive conservation plan that addresses the specific needs of the Saadat Ali Complex. This historical site's significance warrants special attention, and the conservation efforts should encompass not only physical protection but also the promotion of awareness and appreciation among visitors and the local community. By prioritizing the maintenance and protection of this valuable heritage site, we can ensure that future generations can continue to benefit from its rich historical and cultural significance. Preserving the Saadat Ali Complex involves a multidisciplinary approach, integrating architectural conservation, historical research, and community engagement to safeguard its integrity and authenticity. The objective is not only to

prevent deterioration but also to create a sustainable framework for the ongoing preservation of this unique complex.

## 2.1 ARCHITECTURAL FEATURES

The building stands as a testament to the intricate fusion of architectural styles, showcasing stucco designs adorning its majestic arches embellished with delicate floral patterns. Above these arches, an entablature elegantly extends, featuring a canopy that gracefully crowns the cornice. The terraces are adorned with multifaceted arches that serve as parapets, and supporting cupolas that provide a unique touch to the structure. The craftsmanship of the Mughals is evident in the monuments they created, reflecting a blend of refined aesthetics and exceptional technical proficiency. In contrast, the Nawabs opted for a more economical approach, utilizing brick and rubble stucco to construct their impressive structures while managing to achieve architectural magnificence. The workmen responsible for these masterpieces displayed their expertise through the meticulous application of fine finishes in lime plaster, showcasing a high level of artisanal skill and dedication to their craft.



Fig1: Exterior WallDetail

## 2.2 MATERIALS USED

In the construction of this monumental edifice, a careful selection of materials was made to ensure both durability and aesthetic appeal. The flooring exudes luxury, with expensive marble meticulously laid to create a sense of opulence and grandeur. Sandstone, a versatile and sturdy material, was chosen for the foundation, walls, and various structural elements, adding a touch of warmth and solidity to the overall composition. The floors and terraces are ingeniously crafted atop vaulted roofs built with bricks and finely finished with lime plaster, highlighting a harmonious blend of functionality and beauty. Domes, a striking architectural feature, are meticulously constructed using bricks bonded with lime mortar, and adorned with brass finials that are elegantly secured in place by steel reinforcement, emphasizing both strength and elegance. Marble flooring adds a touch of sophistication, while the choice of sandstone for construction underlines the structural integrity and timelessness of the design. Mortise and tongue and groove joints serve to seamlessly interlock the stone slabs, ensuring structural stability and longevity, while the vaulted roofs on all floors, except the first, contribute to the structural integrity and visual appeal of the building.

## 2.3 DEFECTS IN BUILDING

To enhance the durability of arches, it is imperative to ensure the presence of stable abutments, deep visors shielding the structure, and thick masonry for added strength. Regular inspection of the mortar condition is crucial to monitor the integrity of the arches. During the rebuilding process, it is advisable to set up the structure in a dry

condition and document the progress through photographs for necessary approvals. Specifically tailored instructions are essential when dealing with ancient arches due to their unique characteristics and historical significance.



To deter bats from inhabiting buildings, a proactive approach involves installing metal screens on windows and other openings, alongside employing measures like burning sulfur inside while leaving doors open at night to prompt their exit. In instances where openings are numerous, resorting to piano wires or planting babul thorn bushes can effectively discourage both bats and birds from nesting. The inspection of beams should include thorough checks for signs of rot and termite damage, with the application of chemicals through small bore holes as

Fig2: Interior Wall Plaster

precautions like utilizing a course, anti-termite shields,

ends with copper boxes may be necessary to mitigate the risk of structural collapse and ensure long-term stability. When it comes to preservation efforts, it is advisable to exercise caution and avoid replacing fallen images unless there is certainty regarding their original placement. Refraining from attempting repairs on divine or human figures is paramount while embracing the practice of leaving empty niches untouched to maintain historical authenticity. In cases where broken images require attention, it is recommended to piece together the original portions rather than introducing new elements, with allowances made for reproducing geometric designs when appropriate. Carved stones or bricks discovered on ancient sites should be meticulously restored to their original positions where feasible to honor their historical context and significance.

a preventative measure. Employing copper damp-proof or enclosing beam

The process of safeguarding historic buildings involves meticulous observation and documentation of any cracks present, as they can serve as crucial indicators of structural integrity and potential risks. Understanding the nature and patterns of cracks, such as diagonal movements suggesting foundation shifts, vertical cracks signaling material weaknesses, or mid-section widening indicative of seismic events, can aid in formulating effective maintenance strategies. Furthermore, when undertaking the removal of modern lime or cement pointing from old joints and stone surfaces, utilizing precise tools and techniques is essential to avoid damaging the underlying structures and preserving the architectural heritage.

Creating doors, windows, and frames from premium quality teakwood without knots is essential for ensuring their longevity and structural stability. The installation process should include securely anchoring frames with multiple bolts for adequate support, by the recommended ratio based on the frame's height to prevent any potential structural issues in the future. Proper drainage systems



Fig3: Carving Detail

play a crucial role in protecting ancient monuments from flood-related damages, necessitating inconspicuous yet robust drains built on concrete foundations to minimize the need for frequent repairs and preserve the historical integrity of the sites.

### 3. CONCLUSION

The Saadat Ali Complex, an architectural masterpiece nestled in the heart of Lucknow, towers with a sense of pride and grandeur that pays homage to the city's centuries-old tradition of architectural brilliance. Adorned with intricate carvings that depict tales of the past, its walls serve as a poignant reminder of Lucknow's rich historical tapestry and vibrant cultural heritage. The majestic domes and splendid arches of this complex not only showcase its structural magnificence but also symbolize a powerful connection between the grandeur of yesteryears and the aspirations of today, embodying a living link that transcends time and instills in us a profound respect for the legacy it safeguards.

In a meticulously detailed narrative, the paper explores the pivotal role that the Saadat Ali Complex plays in the preservation of Lucknow's architectural heritage. It eloquently underscores the complex's significance as more than a mere physical manifestation of beauty, highlighting its role as a symbolic bridge that seamlessly connects the architectural ingenuity of the past with the admiration of the present. Through a comprehensive analysis, it becomes evident that this complex serves as a testament to the artistic excellence that defines Lucknow, showcasing a graceful transition of architectural prowess across generations.

### REFERENCES

- 1) Introductory Chapter: Heritage Conservation - Rehabilitation of Architectural and Urban Heritage Kabila Faris Hmood2019
- 2) Historic Preservation Education: Academic Preparation for Practice David G. Woodcock 1998
- 3) Conservation Approach as an Architectural Instrument to Reviving Historical Cities; Technical Analysis for International Cases Sabeeh Lafta Farhan, Haider I Alyasari, Hamed Hyab Samir, Salah L. Zubaidi, Khalid S. Hashim2021
- 4) Heritage Education for Heritage Conservation – A Teaching Approach (Contribution of Educational Codes to Study of Deterioration of Natural Building Stone in Historic Monuments)Anna Lobovikov-Katz Wiley-Blackwell, 2009
- 5) Culture & Heritage | District Lucknow, Government of Uttar Pradesh | India2018
- 6) Uttar Pradesh Tourism, Official Website of Government of Uttar Pradesh, India2010
- 7) The city of Nawabs has another royal connection | undefined News - Times of India2003
- 8) LUCKNOW – THEN AND NOW, Rosie Llewellyn Jones
- 9) M.Arch batch 2009 students work at Integral University, Lucknow