

Beyond Stones: A Chronicle of Evolution in Islamic Tomb Architecture in India, Culminating in the Timeless Grandeur of the Taj Mahal

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Abstract - This research paper meticulously traces the evolution of Islamic tomb architecture in India, from its early manifestations to the zenith embodied by the Taj Mahal. Beginning with the construction of the Tomb of Nasir-ud-Din Muhammad (Sultan Ghari) in A.D. 1231, attributed to Shams-ud-Din Iltutmish, the paper unveils the genesis of tomb architecture in India, with distinct elements reflecting Hindu influence.

The exploration progresses to Iltutmish's innovative phase, exemplified by the Tomb of Shams-ud-Din Iltutmish (A.D. 1235), strategically positioned near the Quwwat-ul-Islam mosque. The introduction of the 'squinch' technique exemplifies a pioneering quest for dome construction techniques during this phase.

The Tughlaqs' experimental era, witnessed through Ghias ud Din Tughlaq and Firuz Shah Tughlaq's tombs, reveals challenges in achieving widespread appeal due to stunted domes. The Lodis then emerge as pioneers with Sikandar Lodi's Tomb, introducing typological differentiations with octagonal and square plans, catering to distinct societal strata.

Key innovations, such as the introduction of the double dome seen in Shihab-ud-din-Taj's tomb and Sikandar Lodi's tomb, become pivotal architectural features, addressing challenges of height and proportions. Regional variations, as seen in the Eklakhi Tomb in Bengal, Ibrahim Rauza reflecting Bahamani style, and Golgumbaz's remarkable square plan, underscore the impact of climatic considerations and regional aesthetics.

Culminating in the Taj Mahal, the paper meticulously dissects its architectural features, showcasing the intricate layout, translucent white marble, and innovative use of a double dome. This exploration provides a comprehensive understanding of the cultural, technological, and artistic tapestry that defines Islamic tomb architecture in India.

Key Words: Islamic Tomb Architecture, Taj Mahal, Double Dome, Regional Variations

1.INTRODUCTION

In the early stages of tomb architecture in India, the structures bore a striking resemblance to forts in their overall appearance. This architectural journey embarked with the tomb of Iltutmish, where masons grappled with the novel challenge of establishing a dome over a square base structure, marking the tentative exploration of construction techniques.

A significant leap in the evolution unfolded with the contributions of the Lodis, notably evident in the prototype manifested at Sikandar Lodi's tomb. This milestone represented a pivotal moment, showcasing the refinement of tomb architecture in India. As the tradition progressed, diverse typologies emerged at the provincial level, each region contributing its unique touch to the evolving architectural landscape.

However, the zenith of tomb architecture was achieved with the construction of the Taj Mahal. This unparalleled monument stands as a testament to meticulous planning, demonstrating utmost precision in proportions and advancements in ornamentation techniques. The Taj Mahal not only signifies a culmination of architectural achievements but also encapsulates the pinnacle of creativity and mastery within the realm of tomb construction in India.

2. Evolution of Islamic Tomb Architecture in India: A Comprehensive Journey

1. Early Manifestations: Fort-like Tombs

Tomb of Nasir-ud-Din Muhammad (Sultan Ghari): Constructed in A.D. 1231 near Delhi by Shams-ud-Din Iltutmish for his son, this tomb marked the first example of tomb architecture in India (Fig. 1). It featured a high plinth, a massive eastern portal, and a unique underground cenotaph chamber within a walled enclosure. The structure displayed circular bastions and an octagonal platform in the courtyard, showcasing elements of Hindu extraction.

2. Iltutmish's Innovative Endeavors: The Quest for Dome Construction Techniques

Tomb of Shams-ud-Din Iltutmish (A.D. 1235): Situated just outside the Quwwat-ul-Islam Mosque, this tomb displayed a compact square structure with rich interior decorations (Fig. 2). The introduction of the 'squinch' technique marked a significant innovation, utilizing small arches to transform the square room into an octagon, facilitating dome construction.

3. Tughlaqs' Experimental Phase: Ghias ud Din Tughlaq and Firuz Shah Tughlaq

Ghias ud Din Tughlaq's Tomb and Firuz Shah Tughlaq's Tomb: Despite attempts to continue the experiment with dome construction, these structures during the Tughlaq period did not achieve widespread appeal due to stunted domes (Fig. 3, 4).

4. Lodis' Milestone and Typological Differentiation

Sikandar Lodi's Tomb: A pivotal milestone in tomb architecture evolution, the Lodis introduced two distinct types: octagonal and square plan tombs. Key differences included the presence of an arched colonnade for octagonal plans and a lack of verandah for square plans. The prototype at Sikandar Lodi's tomb showcased these typological differentiations (Fig. 5).

Evolution of Octagonal and Square Plan Tombs:

Octagonal plans were designed for royal tombs, surrounded by an arched colonnade and projecting eave, surmounted by a single dome. Pillared kiosks rose above the parapet.

Square plans were designed for nobles and high-rank individuals, featuring 2 or 3 stories in height with no verandah. The dome was supported by pillars at each corner (Fig.6).

Tomb of Sikandar Lodi: Notable modifications included slight elevation changes, absence of kiosks, structural



alterations, and the introduction of a dome composed of inner and outer shells with a distinct space between.

5. Introduction of Double Dome and Regional Variation

First Application of Double Dome: Shihab-ud-din-Taj's tomb (AD 1501) and Sikandar Lodi's tomb (AD 1518) showcased the introduction of the double dome, resolving issues of height and proportions. This innovation became a pivotal architectural feature.

Regional Typologies:

Eklakhi Tomb (Bengal): Regional considerations incorporated climatic features in the elevation, including a concave profile cornice to deflect rainwater. Basalt and terracotta were prominently used for ornamentation (Fig. 7).

Ibrahim Rauza: Reflecting Bahamani style, Ibrahim Rauza was an example of square tomb architecture (Fig. 8).

Golgumbaz: A remarkable square tomb with the secondlargest dome supported on intersecting arches and a whispering gallery (Fig. 9).

6. Zenith of Tomb Architecture: Taj Mahal

Humayun's Tomb: A Mughal example of a square tomb, introducing Mughal gardens as the fundamental grid for tomb structures (Fig. 10).

The Taj Mahal: Representing the pinnacle of tomb architecture, the Taj Mahal's meticulous planning, proportions, and ornamentation techniques stand unrivaled. The garden layout, the Islamic Garden of Paradise concept, the translucent white marble, and the innovative use of a double dome all contribute to its unparalleled grandeur (Fig. 11).

Architectural Features of the Taj Mahal:

The central chamber surrounded by corner spaces, connected corridors for circumambulation.

Mumtaz and Shah Jahan's tomb markers at the groundentrance level, with actual burials in a crypt below.

The outer bulbous dome raised exceptionally high, creating a distinctive hierarchy of elements.

Clustering of elements to emphasize the centrality of the main dome, with chattris supporting the overall composition.

The Taj Mahal's ethereal appearance during different times of the day, emphasizing its timeless beauty.

This comprehensive exploration traces the evolution of Islamic tomb architecture in India, showcasing the diverse influences, innovations, and regional variations that culminated in the timeless splendor of the Taj Mahal.



Fig -1: Tomb of Nasir-ud-Din Muhammad (Sultan Ghari)



Fig -2: Tomb of Shams-ud-Din Iltutmish (A.D. 1235):



Fig - 3: Ghias ud Din Tughlaq's Tomb





Fig - 4: Firuz Shah Tughlaq's Tomb



Fig - 5: Sikander Lodi's Tomb



Fig - 6: Shish Gumbad



Fig - 7: Eklakhi tomb



Fig - 8: Tomb in the Ibrahim Rauza complex



Fig - 9: Golgumbaz, Bijapur





Fig - 10: Humayun's Tomb, New Delhi, India



Fig - 11: Taj Mahal, Agra, India

3. CONCLUSIONS - A Tapestry of Evolution in Islamic Tomb Architecture

In tracing the trajectory of Islamic tomb architecture in India, this comprehensive exploration has unraveled a rich tapestry of innovation, adaptation, and regional diversification. From the early manifestations of fort-like tombs to the zenith represented by the Taj Mahal, each phase has contributed to the unique identity and cultural amalgamation within the architectural landscape.

The journey began with the Tomb of Nasir-ud-Din Muhammad (Sultan Ghari), a structure that not only served as the first example of tomb architecture in India but also bore the influence of Hindu elements in its design. Iltutmish's innovative endeavors at the Tomb of Shams-ud-Din Iltutmish showcased a quest for dome construction techniques, marked by the introduction of the 'squinch' technique, which proved to be a significant leap forward.

The Tughlaqs' experimental phase, exemplified by Ghias ud Din Tughlaq's Tomb and Firuz Shah Tughlaq's Tomb, highlighted the challenges and limitations faced in achieving widespread appeal due to stunted domes. The Lodis emerged as pioneers, introducing typological differentiations with octagonal and square plan tombs. Sikandar Lodi's Tomb, a pivotal milestone, showcased modifications, including a distinct double dome.

The introduction of the double dome marked a transformative moment in tomb architecture, as seen in Shihab-ud-din-Taj's tomb and Sikandar Lodi's tomb. Regional typologies, such as the Eklakhi Tomb in Bengal, Ibrahim Rauza reflecting Bahamani style, and Golgumbaz with its remarkable square plan, demonstrated the diverse regional variations influenced by climatic considerations and stylistic preferences.

Culminating in the Taj Mahal, the zenith of tomb architecture, the Mughals further refined the art. Humayun's Tomb set the stage, introducing Mughal gardens as an integral grid. The Taj Mahal, with its meticulous planning, exquisite proportions, and innovative use of a double dome, stands as an unparalleled testament to architectural grandeur. Its central chamber, Mumtaz and Shah Jahan's tomb markers, and the strategic clustering of elements emphasize the centrality of the main dome.

In essence, this exploration has shed light on the evolution of Islamic tomb architecture in India, illustrating how each phase, each innovation, and each regional influence contributed to the rich mosaic that defines the architectural heritage of the region. From the early experiments to the pinnacle of the Taj Mahal, the journey reflects not just the evolution of structures but the cultural and artistic evolution embedded in every brick and arch, creating an enduring legacy that continues to captivate and inspire.

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