

Glimpses of Indian Traditional Architecture

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Abstract- This paper narrates an essay on the major distinctive styles of traditional architecture of India from its different regions which has acquired a lot of fame in the worldwide over decades. It's a matter of pride to all the Indians for getting such an opportunity to experience varieties of traditional architecture spread throughout their motherland as it has a huge asset of heritage and antiquity. A range of architectural varieties have developed in the parts of the country due to its diversified socio-cultural, traditional and religious background as well as most importantly climatic variations. Among all the aspects, the religious diversity has played a vital role in the development of distinctive architectural styles chronologically. It is the result of above-mentioned aspects which contributed towards the formation of a set of architectural assets within a single piece of land. There may be a lot of research works done in the field of traditional Indian architecture; still my study attempts partially to contribute in the existing body of literature through a documentation of major traditional architectural styles found across the different regions of India.

Key words - Traditional Architecture, Hindu temples, Indo-Islamic architecture, Rajput style.

1. Traditional Indian Architecture:

Historical evidence says that several famous historic civilizations were flourished in India along with their diversified cultural, religious and traditional features. Thus, the emergence and decay of different dynasties influenced the evolution of Indian architecture. Additionally, India was invaded several times by the great leaders from different region of world. They brought their own culture, religion and tradition along with them. Thus, external influences have also shaped the nature of Indian architecture [1]. Here are some glimpses of major distinctive styles of architecture developed in India.

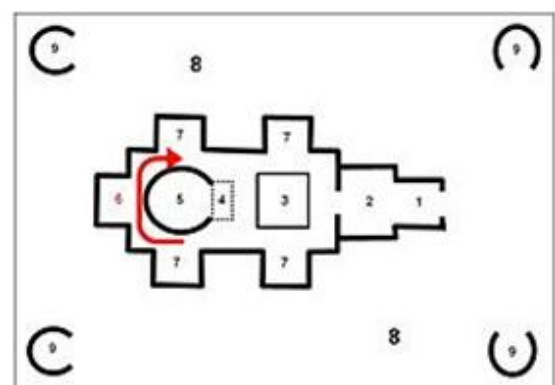
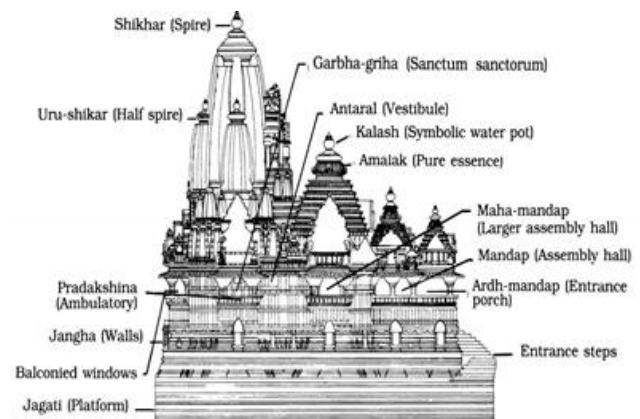
2. Hinduism and Hindu architecture:

Mainly the religion followed in India is Hinduism which has contributed in the development of huge number of temples. A temple in Hinduism is the abode of God that

means it is a structure allocated for religious activities such as prayer and sacrifice in front of deity. Here, some sort of offerings is made to the deity and other rituals are also performed [2]. A typical temple has a main building and a larger precinct, sometimes containing many other buildings related with temple activity too.

2.1. Temple Architecture:

The architecture of Hindu temples evolved since history with a great variety in it. Hindu temples are of different shapes and sizes— rectangular, octagonal and circular with different types of domes and gates.



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|------------------|-----------------------|
| 1. Ardha mandapa | 6. Pradakshina |
| 2. Mandapa | 7. Transepts |
| 3. Maha mandapa | 8. Jagati |
| 4. Antarala | 9. Subsidiary shrines |
| 5. Garba griha | |

Fig 1: Parts of Typical Indian temple

The steeple of the dome is called **Shikhara** that represents the mythological Meru or the highest mountain peak. The shape of the dome varies from region to region and the steeple is often in the form of the trident of Shiva. The inner chamber of the temple called **Garbhagriha** where the image or idol of the deity is kept. Most of the large temples have a hall for the audience to be gathered. This is called the **Nata-mandira** where previously women dancers or devadasis used to perform dance rituals. The hall is usually decorated with paintings of gods and goddesses. Most temples have a walkway around the walls of the inner chamber for circum-ambulation by devotees around the deity [2].

Temples of southern India have a different style than those of northern India [2]. The major and distinct features between the north Indian temple and the south Indian temple are their superstructures. In the north the beehive shaped tower is the most distinguished element called as the shikhara. The gateways are in the north and they are plain, simple and small. The plans of the north Indian temples are based on square, but the walls are sometimes broken at so many places that it gives an impression of temple being circular in plan. The tower is made up of miniature shikhara creating an amazing visual effect resembling mountain. In the south, the distinct features are the vimana and the gopurams. The **vimana** is a tall pyramidal tower consisting of several progressively smaller storeys, the peak of the vimana is called as shikhara in the south Indian temples. This stands on a square base. The temple complex consisting of the main shrine and other smaller shrines are enclosed by the outer wall called as the **prakara**. Along these outer walls are the intricate and marvelous gateways called as **gopurams**.



Fig 2: North Indian temple (Raja Rani Temple) & South Indian temple (Brihasdeswara temple)

A Hindu temple planning follows a geometrical design called **Vastu-Purusha-Mandala** [2]. The name is a composite Sanskrit word with three of the most important components of the plan. Mandala means circle, Purusha is universal essence at the core of Hindu tradition, while Vastu means the dwelling structure. The design lays out a

Hindu temple in a symmetrical and self-repeating structure derived from central beliefs, myths, cardinality and mathematical principles.

3. Islamic philosophy and Indo-Islamic architecture:

Indo-Islamic architecture refers to the architecture developed in the land of Indian subcontinent by the Islamic persons to fulfill their purposes. Islamic tradition started to flourish when Mohammed Ghorri occupied India at the end of the 12 century A.D. The Islamic features and techniques were incorporated in the new building form combining with local building tradition. Thus, a new style of architecture was flourished; called the **Indo-Islamic architecture** which is amalgamation of Islamic and Hindu Style [3]. Generally, as per Islamic philosophy, the worship is performed as congregational prayer in **mosques** and construction of **tomb** was also followed for burial purpose; while the fort and palaces were also part of this style of architecture.

3.1. Building Types:

Indo-Islamic style of Architecture may be categorized in the different forms of buildings like Secular, Religious, Military, Recreational structures. Secular architecture was flourished for the need of the great Islamic rulers for their living purpose like palaces, harem, ministerial quarters, stables, etc. Most constructed Religious structures may be divided into three typologies; namely **Mosque, Tomb and Idgah** [4]. Military architecture was developed mainly to fulfill the security of the rulers for example, forts and fortifications, watch towers, gateways etc. Recreational architecture arose out of the interest of the rulers in art, games etc. for seeking pleasure or for the leisure of the rulers. Examples are gardens, pavilions etc.

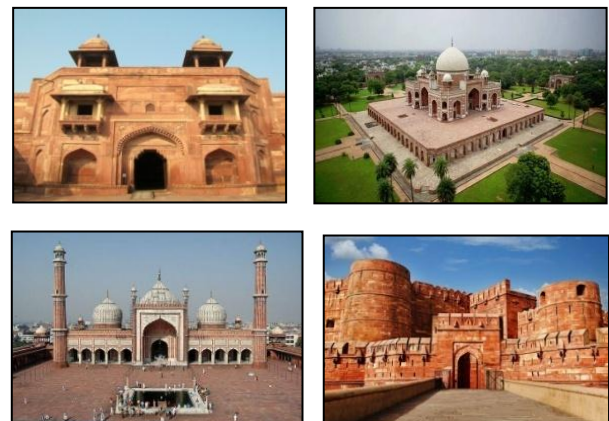


Fig 3: Jodh Bai's Palace, Humayun's Tomb, Jama Mosque and Agra Fort respectively

The word **Masjid** refers to a place of worship and Masjid Jami is a congregational mosque dedicated to Friday prayers. In a Mosque, there are some typical parts [5] like a spacious courtyard with a large prayer hall which is pointed towards Mecca, that is, to the West of India. The main entrance to a mosque is placed to the opposite of the prayer hall that is towards the east. At the center of the rear wall of the prayer hall, a recess or alcove called **Mihrab** is constructed which indicates the direction of prayer (Qibla). A pulpit called **Mimber** at its right is constructed for the imam who leads the prayer. A tower or **Minaret** is provided which was intended for the muezzin to call which became an architectural character afterwards. A water tank is provided for ablutions usually in the courtyard of a Mosque. The sides are enclosed by cloisters called **Liwan**s. The sketch below shows the typical parts of a mosque:

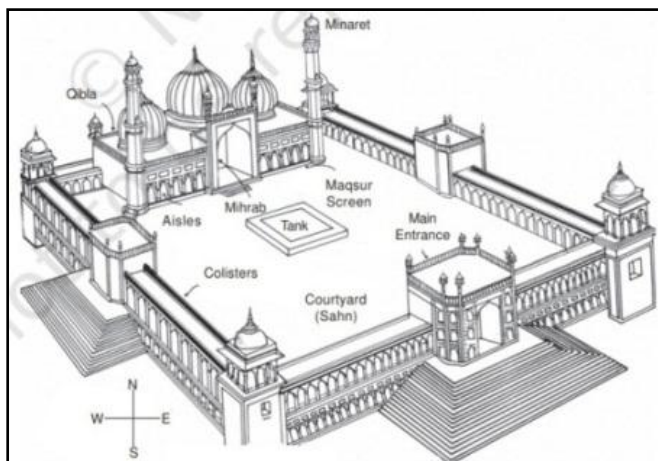


Fig 4: Typical parts of a Mosque

Monumental structures over graves called tomb was a common feature of Islamic architecture. In a tomb there is a chamber containing a mihrab in the western wall and the real grave (Qabr) lies in an underground chamber. The tomb is placed within a paradisiacal element such as a garden or near a body of water or both, which follows the Charbagh style.

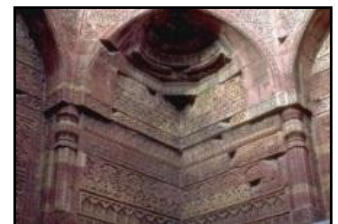
3.2. Features of Indo-Islamic Architecture:

In case of Indo-Islamic Style of architecture, the construction technique was based mainly on **arches, vaults and domes**. Decoration and ornamentation were formed an essential part of Islamic architecture in India [5]. Those were achieved through **arabesques** or geometrics, **calligraphies**, floral patterns as motifs and design, painting, glass-mosaic, glazed tiling, **inlay work** etc. **Dome** was a prominent part which was constructed over the mosque and a tomb to show the supremacy of the Almighty. The most prominent form of opening was

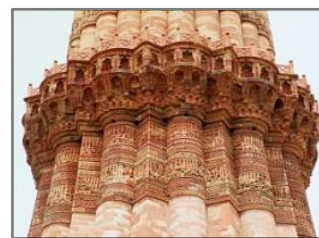
Arches like, pointed, cusped, foliated & ogee. A **Squinch** is a wedge-shaped arch that fits on the top corners of a square space. At the point where the dome's bottom edge meets the room's upper horizontal edges, four triangular like wedges are placed in the corners. The four squinches turn the square into an octagon which enables a dome to rest on top of it. **Muqarnas** design is a honeycomb motif, basically, it is a group of small arched cells one on the other. The domes of the building are crowned with **Finials** which is made of masonry, marble or metal showing Purna-kalasha, lotus etc. Arabesque is formed with interlacing stems, lines. Lines are curved, pointed, smooth, never isolated.



Dome and Arch



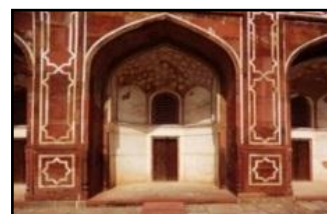
Squinch



Muqarnas



Finial



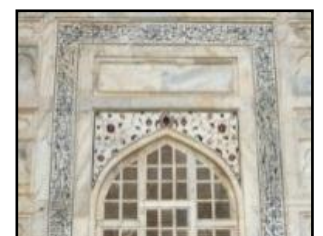
Geometric Design



Arabesque



Calligraphy



Calligraphy

Fig 5: Features of Indo-Islamic Architecture

Landscape Design is an important aspect of Islamic architecture. The plan of the Mughal gardens is worked out in a regular arrangement of squares, often

subdivided into smaller squares to form the figure of the **Charbagh**. Fountains, pools, basins, cascades and similar devices turn the whole into a very effective water garden. Paved pathways and water channels follow the shapes of these squares.



Fig 6: Landscape with water body in Mughal gardens

Symmetry in Islamic architecture is followed very extensively. Symmetry itself consists of two types: vertical and horizontal. Here is an example of Symmetrical design with the description of Taj Mahal, Agra.

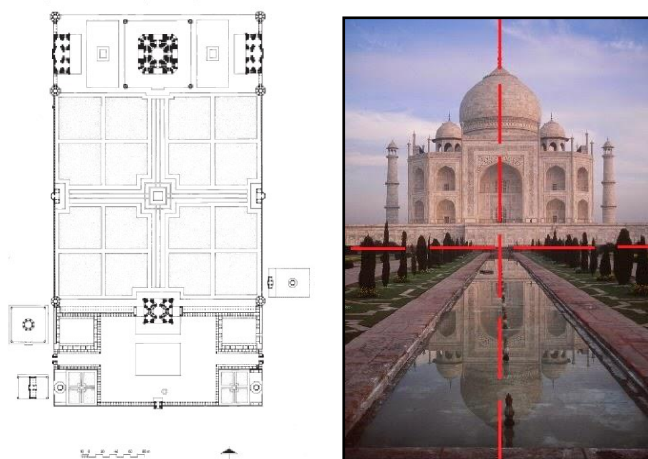


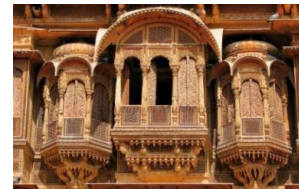
Fig 7: Char-Bagh and Symmetry in Indo-Islamic Architecture with reference to Taj Mahal, Agra

4. Rajput style of architecture:

The Rajput style of architecture mainly comprising a blend of Mughal and Hindu features showcases grand **havelis**, astonishing **forts** and exquisitely carved **temples**. The artists of Rajasthan established major architectural styles and elements [6] like-

- **Jharokhas** (a type of overhanging balcony),
- **Chhatris** (elevated and dome-shaped pavilions),

- **Chajjas** (projecting eaves supported on large carved brackets),
- **Jalis** (perforated stone or latticed screen used for ventilation as well as decoration),
- **Baodis** (step wells).



Jharokha



Chhatri



Jali

Fig 8: Features of Rajput Style of Architecture

4.1. Building types:

Haveli in Persia is 'hawli' which means an enclosed place [7]. The nucleus of these havelis was the courtyard; some havelis had two such courtyards – the outer one for the males and the inner secluded one for the females of the family. The courtyard served as a light well and was very effective for ventilation in such hot and dry climates.

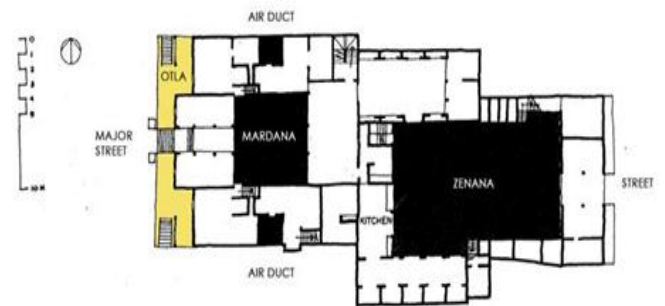


FIG: Ground Floor Plan of Nathmalji Haveli.



Fig 9: A Typical Haveli: example of Nathmalji's Haveli

No external surface of the haveli was left unarticulated. Such exquisite carving led to self-shading of the facade hence reducing overall heat gain of the building. Projections and recessions of jharokhas and jaalis not only induced an aesthetically pleasing building elevation but also, added to the climate responsiveness of the design. The plan of havelis was generally linear with shorter side along the road and longer side as its depth. The street section shows very closely spaced houses, again adding to the shading of streets, encouraging interaction and bonding among residents. The famous havelis of Rajasthan are Patwon ki Haveli, Nathmalji ki Haveli, Salim Singh ki Haveli and many others.



Fig 10: Jaisalmer Fort

Durg is the Indian term for 'fort', means 'difficult to trespass'; while signifying its importance of site strengthening with a strong wall and a moat to make it an impregnable bastion. The Rajputs were creative builders and erected some of the most grand and impressive forts and palaces. Some of them may be referred to Chittorgarh, Jaisalmer, Meharangarh, Amber, Jaigarh fort. Chittorgarh is the oldest surviving fort. The fort complex of **Chittorgarh** comprises 65 historic built structures like four palace complexes, nineteen main temples, four memorials and twenty functional water bodies. Such as the Kumbha Shyam, Mira Bai, Adi Varah and Shringar Chauri temples and the vijaya stambha (pillar of victory). It has been made in the shape of a large fish and its circumference is 13km. **Jaisalmer** is almost entirely a sandy waste, forming a part of the Thar desert (great Indian desert). The region experiences an arid climate through the year. Jaisalmer is named after its founder Rawal Jaisal. Jaisalmer means the Hill Fort of Jaisal. Jaisalmer is also called as the Golden city of India because the yellow sand gives a yellowish-golden touch to the city [8]. The architecture of these forts is a blend of Islamic, Persian and Indian styles of architecture. In its overall shape, Jaisalmer is an irregular polygon with a double line of fortification. It is a city within a city. The inner city is more protected with a stronger wall and is set on top of a hill about 100 meters higher than the surrounding area. The forts, palaces and religious shrines of Jaisalmer are exquisitely ornamented with fine and delicate works.

5. Conclusion:

There may be a lot of research works done on traditional Indian architecture; still my study attempts to contribute in the existing literature through a documentation of major traditional architectural styles found across the different regions of India. However, the



paper not only gives an idea about the traditional architecture of the India, but also depicts the society, culture, religion, especially for understanding of rituals and sacred practices in India. Detailed investigation about these distinctive styles may be further studied for more knowledge about Indian traditional architecture too.

REFERENCES

- [1] Mandal R., Yi Y. X., Yan W. M., Indian Architecture: With the Special Reference of Mughals, Interdisciplinary Journal of Contemporary Research, Vol. 4, No. 5, October-November 2017.
- [2] Vardia S., Building Science of Indian Temple Architecture, 2008.
- [3] Brown P., Indian Architecture (the Islamic Period), Read Books Design, 2010.
- [4] Burton-Page J., Indian Islamic Architecture: Forms and Typologies, Sites and Monuments (Michell G., Ed.). Leiden; Boston: Brill, 2008.
- [5] Sharma P. K., Indo-Islamic architecture (Delhi and Agra).
- [6]https://en.wikipedia.org/wiki/Architecture_of_Rajasthan
- [7] Jain S., The Havelis of Rajasthan: form and identity, 2002.
- [8]<http://www.tourism.rajasthan.gov.in/jaisalmer.html#jaisalmer-fort>.