



Vidhyayana - ISSN 2454-8596

An International Multidisciplinary Peer-Reviewed E-Journal

www.j.vidhyayanaejournal.org

Indexed in: ROAD & Google Scholar

Cosmic Architecture in India

Bilal Ahmad sheikh

Research Scholar

Dr. Seema Parihar

Supervisor

CT University



Abstract

Every style of architecture construction reflects a clearly distinctive basic principle that represents a particular concept and logic. In this context the Indian cosmic architecture is not only the abode of Maharaja Jai Singh's great architectural works, but they are also the cradle of knowledge about the celestial and astronomical purpose. The emergence of this new style exists not only in present history but also in mediaeval time it has greatly changes the vision of the people about the theme and logic behind the architectural constructions. The evolution of new style of architecture in India is marked by a strict observance to the original ancient models that were derived from religious consideration of India as well as of many ancient prevailed nations like Arabs. This dissertation, intended to study the astronomical concept behind the architecture of Jaipur namely Jantar Mantar through literary works and theoretical investigation on medieval exposition and modern research works.

Key Words: construction, astronomical, Vāstu, stimulation, encounter, Azimuth, Equinox

History of cosmic architecture

The architecture which is unique in its appearance and based up on some scientific logic is the cosmic architecture. Cosmic architecture is the architecture which is based upon the astronomical concepts. Through the cosmic aspect we can introduce a practical touch to the history which is based up on the objectivity.

According to the Vāstu Shastra, the structure of the building reflects the emergence of cosmic order out of the primordial chaos through the act of measurement. The universe is mapped symbolically into a square that emphasizes the four cardinal directions viz. East, West, North and South. It is represented by the square vastu-mandala. This vastu-mandala, in its various forms, constitutes the basic plan for temples, houses and cites. Little research has been carried out on cosmic architecture (star based).as a result of this European servers tend to approach it with amazement rather than understanding Hindu temples escape trails to recognize the true shape behind logical figures and abstract symbolic sculptures. If we talk about the western vision, Muslim mosques, tombs and palaces seem like theatrical gatherings of pointed arches and onion towers built from precious stones and jewels, but their style is incomprehensible Apart from this the agents of imperial power European historians collected to India and set about classifying the Indians monumental remaining into style.in 19th century when both art and historians were committed on arrangement everything and establishing a comprehensive network of stylistic periods. There was a great interest in the wealth of forms discovered in India. Also, for western architects enamored of eclecticism, the country



provided a vast gateway to a world of magnificent new architectural forms. During this period people overlooked one of the great achievements of Indian architecture, the observatories built by Maharaja Jai Singh II of Jaipur (1686-1743) in Delhi, Banaras, Jaipur, Ujjain and Mathura. Known by the name of Jantar Mantar these escaped the notice of art experts because they did not appear to fit in anywhere, and they were ignored by the practitioners of eclectic architecture because their lack of decoration provided little stimulation to the imagination.² Even today westerners try to approach Indian architecture with prejudices, and consequently an encounter with Jai Singh's work comes as a wonderful surprise to begin with these monumental stone cubes with their shapes, together with the broad marble scales up which steps ascend, have nothing in common with the splendid architecture of the Mughal period. Furthermore, from the modern-day viewers these structures conjure up the curious image of brilliant 18th century architect playing vital games with architectural nations of form and function. Such a nation is nation is irrational, of course. And yet the fact these remote and isolated monuments, partly decayed beyond recognition, do not confirm to the manifesto and pre-convinced ideas of our age certainly provided food for thoughts. How did these excellent sculptures come to be built? Was there construction preceded by some particular development in architectural theory which was repeated 200 years later, leading to comparable forms?

An encounter with the amazing astronomical instruments of Jai Singh II prompts us to ask questions about the specific cultural conditions prevailing at the time of Jai Singh. Were they aware about small European and Arabian instruments with their accuracy? Jesuits on their travel brought these instruments to the court in Jaipur, and Jai Singh would doubtless test them out. Maharaja Jai Singh himself replied these questions in his text *Zig Muhammad Shahi*, it should be maintained that these instruments of the Europeans were not large and therefore the calculation and observation were somewhat inaccurate, since the atmospheric conditions had a strong influence on those instruments. With the benefit of reflection, his decision to use large fixed instruments without the sighting equipment appropriate to the current state of technology seems to us today have more to do with Hindu philosophy: portrayals of the cosmos and the world of gods confer on the expert knowledge of and power over this world far beyond the information they provide.

Maharaja was not merely commissioning his Hindu priests to design his new royal capital of Jaipur according to the geometric framework of Hindu mandala. Through these astronomical instruments or tools of a cosmic order which were visible from a 3-great distance, he was also underlining his claim to worldly power. Jai Singh decision to build a town as a mandala with the earth as its center, with the cosmos as a frame of reference were his answer to the late period of Mughal rule in India which was characterized with



wars and upheavals. At the beginning of 18th century the successors of great Mughal monarch Aurangzeb drove out and murdered one another in quick succession. European trade occurs with their own demand to rule. And the finally Persian ruler nadir shah conquered Mughal Empire in 1739. As prince of region jai Singh was directly involved in all kinds of ups and downs. His different plan for world marked of universal principles of order confirms his outstanding importance in the history of architecture and planning of towns in India. The desire to locate human behavior in a higher framework in all aspects is the mark of all cultures. In order to understand the path chosen by jai Singh; it is illuminating to study earlier examples of various cultures.

The pyramid of Egypt, the stone circles at Stonehenge, the temples of the Maya and the castles of the Dane Tycho Brahe are all characterized by the same desire to bring architecture and the cosmos into a comprehensible relationship by means of astronomy. Our very sketchy knowledge about the life and person of Jai Singh makes it possible for us to put forward conclusive thesis on the factors which are responsible to the planning and construction of the observatories in Jaipur mainly along with this this work throws a bit light on the observatories of Delhi, Mathura, Ujjain and Banaras. This is also an age of conflicts between princely Hindu states and great Mughal Muslims. Within the course of few years some monumental buildings were built which were free from the Islamic architectural style of the age and full of references of Hindu cosmology.

Finally the most amazing of all is the jantharmanthar of Jaipur with specialty of its 14 Yantra when we roughly talk about jantharmanthar of Jaipur, it was built during the time period of maharaja jai Singh 11 of Jaipur in year 1717-1734 on the task given by Mughal emperor to revising the calendar and astronomical years completed in year 1724. when we talk about its cosmology related or the star based architecture we are mostly going towards Samrat Yantra which is one of the instrument in JantharManthar meant to determine the local time along with this there are more yantra. This yantra is composed of five various with their unique specialization. Along with this there are various star based architecture designs mainly in India with their unique astronomical features the credit of establishing this type of art in India is probably Maharaja Jai Singh (1686-1743) In order to know much about the cosmic architecture in India we have to mostly through light on Maharaja Jai Singh 11, his observatories and connection with great Mughals of medieval India.



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