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## Influence of the Hinduism Religion on Architectural Identity of Hindu Temple

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### Abstract

Architecture is a process, result of design and conception of needs and means. Chronicles demonstrate religious architecture has been beginning many centuries ago. Religion indirect ways impact every single part of the supporters' architecture life. In Hinduism , devotee has natural connection to the divine, so Hindu architecture temples are based on this standard, have constant plan from existence which is called mandala diagram , made of one square divided into eighty-one smaller squares, describes environmental negative and positive energy and God is middle of big square, each part of God shows different energy and related to the special architectural space, and elements position which is effect on circulation space of the temple , Aim of this paper tries to figure out effect of Hinduism religion on architectural identity of Hindu temple. The study will show how Hindu temples are shaped by Hinduism God from architectural point of view.

Keywords: Religion, Hinduism, Architectural Identity, Temple, Hindu, Mandala.

### 1. Introduction

History shows that architecture of Hindu temples in India comes from more than 2000 years with noble architecture. Hindu temple has various forms and sizes such as rectangular, octagonal, and semicircular with special styles of domes and gates. Temples in all over India have different style (Amerlinck, Mari-Jose, 2001). Therefore, the Hindu temples architecture, have similar basic elements in common. Such as mandala diagram as a basic plan for each Hindu temple, Sikhara, Garbhagriha and etc.

Hinduism has regularly been known as polytheistic, that means, there are numerous Gods. But all believed that there is a humblest one genuine God in Hinduism, known as the Brahman (Vidya Dehejia 1997), (Geertz, Clifford, 1973). The Brahman can appear itself in numerous forms, which includes human. In Hindu architecture of temple most important part is focus on connecting positive energy so the best idea was built temple base on God structure as human shape to understand how and where they can connect positive energy so they created Mandala diagram and god in middle of it (Amerlinck, Mari-Jose, 2001). The square divided in to the small squares and every parts have different energies and meaning. mandala is a cosmic diagram based on moon, sun, and nature to connected with universe.

The Upanishad (Hindu philosophy) defined temple as an area at the heart of this ordinary world. Most Hindu people love to have alters in their houses and at temples. Family use alters every day for pray (Gavin Flood, 1996). Hindu temples are artificial altitudes as gadget which prayers built it and decorated with picture of a delegated gods. Hindu temple architecture combines harmony and symmetry with an excessive amount of outer decoration. Elements are designed to have accurate proportions and exert an amusing and impact on their surroundings. Temple Structure is so stunning in such way that, the small information harmonizes and combine with the massive architecture (Susan L. Huntington elc, 1985). The ancient science of Sthapatya Veda illustrates great expertise about existence of construction, design and principles. It was believed that a suitable designed temple will rise higher physical health, Thus Sthapatya Veda method is the expertise of setting up a relationship among the devotees, human body, temple structure and the cosmic order (Geertz, Clifford, 1973). In the area of historical temple construction, there may be sufficient proof of sizeable utilizing of Sthapatya Veda's design, principles which is body structure of God. In addition to the spiritual activities at those temples, there are specific mathematical and astrological calculations, proportions of building plan, unique orientation of physical health in temple which inducts the sense of wellbeing.

### 2. Methodology

This research is based on understanding god in Hindu and how they used god as architectural plan for temple. Methodology used secondary data collection from books journals which were related to Hindu art and religion and temple architecture, books and journals were important for this research I can mention Vidya Dehejia Indian art book which is philosophy of Hindu thinking background of gods and art, also Michell G , Hindu temple book which described Hindu temples foundation structure and journal of Deli,E, Hindu culture, religion and history of the Hindu god. For

understanding energy and universe connect with a yoga and meditation center in Coimbatore in India based on the information they gave, I found articles related with cosmic and universe such as Rian, Fractal Geometry as The Synthon Sis of Hindu, and Richard Maurice bucke, cosmic consciousness, a study in the evolution of human mind, all data for this paper collected, help to understand cosmic in Hinduism and role of god in architecture temple plan to connected universe and nature is part of Hindu believes.

### 3. Literature Review

Hindu temple plan is based on diagrams of the universe (mandala) which is part of geometric pattern and symbols. Mandala has special meaning in spiritual performance, is way the person focused on himself or herself to improve power of mind. (Gavin Flood, 1996). The Hindu design that attempts to reach the universe energies which called Vaastu Shastra, Vaastu a building or structure, according to this Hindu temple architecture is based on the structure body of the God which comes from the mandala (Vidya Dehejia 1997). It is connection between human, gods and universal in holy space. It represents the triple knowledge of the Vedic (ancient Hindu philosophy) image by illustration the relationships between the universe (Brahmana) and the cell (pinda) by a completely unique plan based on astronomical facts (Danielou Alain, 2001).

Hindu temples are based on God structure so always design in structure to make ensure will create peace, health, and prosperity in life also help people to find out their guidance without demolition other creature's life (Danielou Alain, 2001) this is basic of Hindu architecture A massive design of details (Kramrisch stella, 2002). In historic Indian text a temple recognized as holly place (Elgood Heather, 1999). All the cosmic fundamentals that create and continue lifestyle are present in a Hindu temple from fire to water, from images of nature to gads, from feminine to masculine, from fleeting to sound and incense smells to eternity and universality at the core of the temple (Kramrisch stella, 2002). Hindu temple architecture combines concord and balance with excessive point of external decoration. Elements of Hindu temple designed to have impeccable proportion and apply with excellent impact on their surrounding (Amerlinck Mari Jose, 2001). The fundamental form of the temple in India is a square cell, orientated to the four principals' instructions, having platform with image of the gods in center, a flat roof above, and entrance on the east side also with ten Major elements of temple and special architecture (Heidegger, Martin, 1997). In front of the entrance is porch covered by a roof sustained by columns in which worshippers accrue before approaching the God.

Several temples sit on top of a crossover platform, with a tall spire called sakhira or spires, the north over the sanctuary (Elgood Heather, 1999), broad gate towers, or gapers, leading into the temple grounds, inside the south. Multipart of temples have antechambers and galleries built off in the sanctuaries. Those are normally set on platforms with stairs and connecting distinctive levels. Huge temples sometimes have separate building for meditation halls, offices and different purposes, and intricate porches, an attempt made to make all of the of the structures balance and peace, with the Hindu universe (Setha M, 2003). A Hindu temple is combination of arts of dharma (Hindu religion mortal life), beliefs, values, and the way of lifestyle.

#### 3.1 Philosophical architecture of Hindu temple (Creation of Hindu God)

Universe is whole things which is include space all the properties of space and energy and human. The age of universe is 13.8 billion years old (National Aeronautics and Space Administration). Cosmology is science of source and development of universe and the study of cosmos started with the creation of mankind itself. Our ancestors started observing night and cosmology, slowly over long process of observation and made the structure of solar system came in to attention (Richard Maurice, 1901). India made huge helps which were further studied and applied in various theories in astrophysics. The everyday data observed from the wonder for the events that occur in the sky such as stars, moon, and sun were used in every part of the live of that period, they did not use science to understand where those come from, they used in religions to see astronomic bodies as gods in Paleolithic era (Richard Maurice, 1901) and used as cultural events like festivals to celebrate the harvesting of crops. etc. the most important elements for Hindu god creation were:

- Earth  
Earth was important because they (Hindu people) lived in it and has natural source for living and The other main effect on the life of earth can be seen in the change of season, Earth axis is tilted at an angle 23.4 causing changes in the season in north as well as south hemispheres, the northern hemisphere is tilted towards sun in June solstice causing summer in north hemisphere and southern hemisphere is winter time ( Deli.E, 2016) .
- Sun  
Ancient Indian theory of vastupursha mandala (diagram) has circulation which totally depends upon sun path of that particular district, sun rise from east so all the morning activities are east oriented so that the occupant of the building

can get maximum benefits from the sun's eastern rays, the morning sun has more light and less heat also body can get vitamin D and killing disease-causing bacteria (Deli, E, 2016),

- Moon

The moon is celestial body orbiting earth and is the planet's natural satellite. Moon is not an actual satellite of the earth but the gravitational pull is the reason of the high and low tide in the oceans and sea, the highest tide happens in full moon. Human body is made of 70% of water so the moon gravity has an effect on the earth's fluids it may also have an effect on human body (Richard Maurice Bucke, 1901).

Hindu people used those elements to create plan for temple. The primary plan of a Hindu temple is holy geometry where the temple is imagined as a grand mandala. By sacred geometry, which means it is the reasons that the temple floor plan is basic guidelines and heavens (Rao, 1997. Susan, 1985). Typically, a mandala is a holy form so used square as symbol of heaven. The Hindu philosophy is the first to describe the human as the basis, In Hindu philosophy, the form of Purusha (god with human body) body was made to suit imperceptible concept in square (figure 1), as perfect geometric form (Groover, 1980).

The Vastupurusha mandala (figure 2) is resulting from three separate words each having specific meaning where Vastu mentions to the physical environment, Purusha refers to energy, power or cosmic being, and mandala is the diagram or chart (Rian, 2007). The first form of the vastupurusha mandala is square because they believe is holy shape so it is the important and perfect geometric form in Hindu philosophy, which indicates the earth. All the essential forms like that triangle, hexagon, octagon, and circle can be copied from the square. Every side of the square symbolizes four fundamental guidelines also symbols of limitless life and the perfectness of life and death (Michell, 1988). According to Hindu belief, man's life everyday ruled by the number four (exoticindiaart, 2003). Typically the mandala is a square split into slighter squares in the shape of a grid with each square part obviously making the areas of particular Gods (Michell, 1988).



Figure 1. The diagram of Vastupurusha mandala, with the god body ( www.gosai.com)

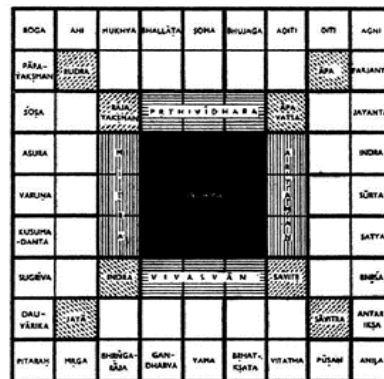


Figure 2 .The Vastupurusha mandala (Temple Tech A Book)

The Vastupurusha mandala, have all of the geometrical, cosmic, and human residences so use them as the foundation of the ground floor plan for all Hindu temples. The fundamental shape developed by the temple plan is the outside square of mandala forms and the width of the walls of the main shrine (Grover, 1980). The important four squares get the place of the main God and internal twelve squares forms and the walls of the garbhagriha (table 1, element 2) and the next sixteen to twenty-eight shape in the pradakshina patha (table 1, element 3).

Squares had many changes and combinations in the base, the structures of the temple, based on the shape of plans temple squares of mandala divided into thousand squares which almost forming a graph paper for architects (figure 3) to help them to add item at one part and setting back at the other (Grover, 1980).

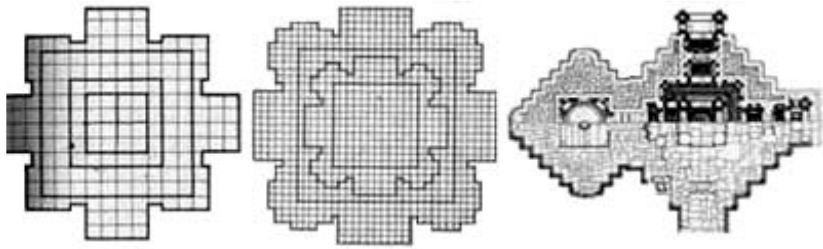


Figure 3. The vastupurashamandala architectural plan (Grover, 1980.)

3.2 Layout of Hindu temples

The Vastupurasha mandala is earliest drew on the planning sheets and mentioned the earth and energies in temple building site and constructed temple is based on cosmic energy achievement in positive way because of that selected square as main plan and elements of universe (Richard Maurice, 1901) which in pervious I referred them made a marvelous diagram (figure 4). Center of mandala generates energy to the physical words. The square of the mandala significantly involves the energy balance. Each side of square applies force to center and return to the sides this is calling balance (Rian. 2007). So increasing the number of the squares in the marvelous diagram supports to hold more energies and produce them out to physical world though the center. So, the center of mandala is the place for the main god in the temple.

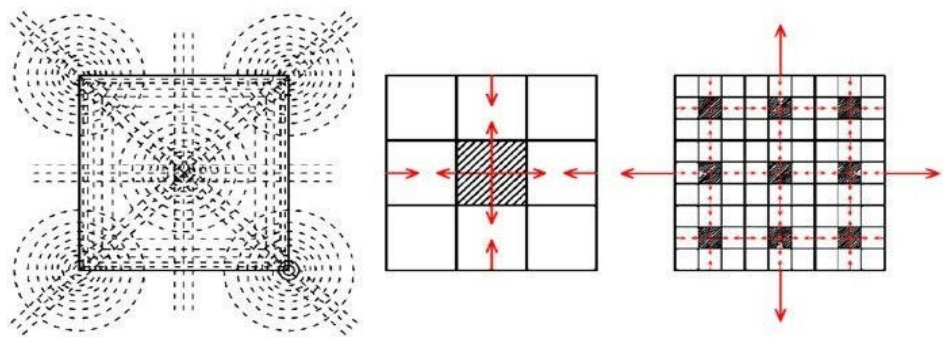


Figure 4. Fields of forces in the square, radiation of forces in square , energy from center going to side from side come back to center (Rian. 2007)

3.3 Elements of Hindu Temple

The structure of the temple impact on environment architecture styles and the material such as houses, markets and etc. The main shape and style of the Hindu temple comes from 600 to 800 AD. The architecture of temples has varied style around India, but indicators elements of temple are same because all elements represent god of Hindu, just the shape and scale are different. In the case of the architecture indicators elements (table 1) shows all elements of Hindu temple:

Table 1. Major elements of the Hindu temple identity (source: Fletcher, 1952)

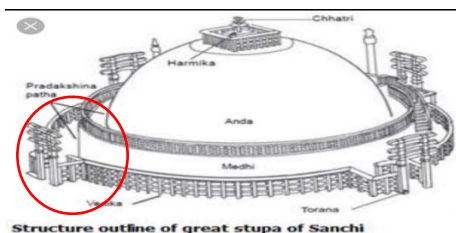
Number	Picture of Hindu temple elements	Elements of Hindu temple
1		ara: meaning is tower and shape like amidal and decorated with mythological. pe and size of the tower is depending on ons.
2		





bhargriha: meaning womb chamber, this is where the image of god is placed. This part mostly is in plan and entrance connect with small shrine on eastern part, the visitors cannot go to this place this place is for priests to perform the rituals.

3



Pradakshina patha: is a corridor for people walking around the gods' place meaning moving in a way for circumambulation. This place is found outside of the garbhagriha which devotees walk around and respect gods.

4



Mandapa: is the pillared hall in front of the garbhagriha for meeting visitors to pray, sit, meditation and watch the priests' performance ceremonies and sometimes is separated from the temples.

5







Prabhavali: meaning front porch or entrance which is connected to the mandapa.

6



Gopurams: is a monumental tower which tells about gods in the entrance of the temple.

7

		a: is platform of the temple the other words base of temple.
8		Prabhavali : is common gateway of temple which is typically found in north India.
9		Kalasha: is stone placed on sikhara.
10		Antarala: meaning the hall or the middle hall. It connects the main sanctuary and pillared hall of temple.

#### 4. Architectural of Hindu Temples based on Mandala as Fundamental Plan in Every Century

Plan of the temple during different periods had changed but foundations (All of them built based on the mandala diagram) and elements didn't change except in architectural design and sizes which different governments influence on the design of the temples. In below compares three famous temples in 5<sup>th</sup>, 10<sup>th</sup> and 15<sup>th</sup> centuries. In temples in north style of India the characteristic temple plan were changed in 5<sup>th</sup> century, the temples consisted of all the basic elements; the Garbhagriha surrounded by an ambulatory pathway, an outside porch with columns in front, and a flat roof with stone. The temples in this era were so simple. Examples of this period can be Sanchi (figure 5) also the improvement of sikhara of these temples started in 8<sup>th</sup> century (Brown, 1942).



Figure 5. Sanchi temple view of temple in plan and outside ( [vedicfeed.com/dashavatara-temple/](http://vedicfeed.com/dashavatara-temple/))

A wonderful architecture style developed in the temples of Orissa (state in east of India) 7<sup>th</sup> to 11<sup>th</sup> century the elliptic arc of sikhara from the earlier periods improved and shape of tower converged near the peak. This period had special attention to the mandapa structure, the roof of mandapa was pyramidal shape on the top and lower than sikhara. The greatest example of this period is Kandaria Mhadeo (figure 6). temple khajuraho is famous for conical tower which made of piles of stone with organize miniature tower called sikhara (Grover, 1980), temple has porch in entrance hall of temple also the roof has different section and wonderful form, wall and roof both decorated with figures form of mythology and history. The greatest example is the Khandriya Mahadev temple.

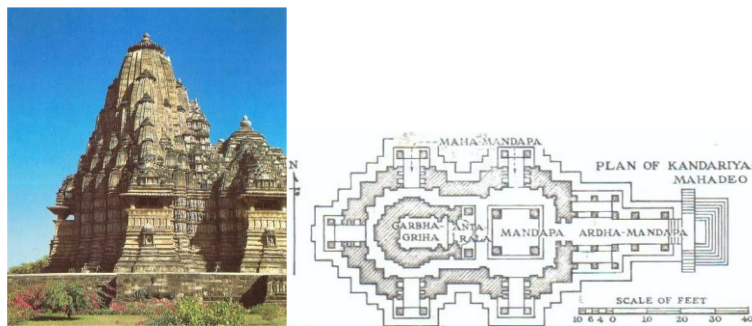


Figure 6. figures of the wall and Plan and view of the Kandariya Mahadeo Temple ( [www.indoarch.org](http://www.indoarch.org))

In 15<sup>th</sup> centuries the mandpa (the pillared hall) in temples started to change also different separated structure of this period, rectangular wall around temple with lower tombs at every corner. The most common examples of temple in this period can refer to the cluster of Jain (figure 7) which has Buddhist structure with square plan with arch roofs.

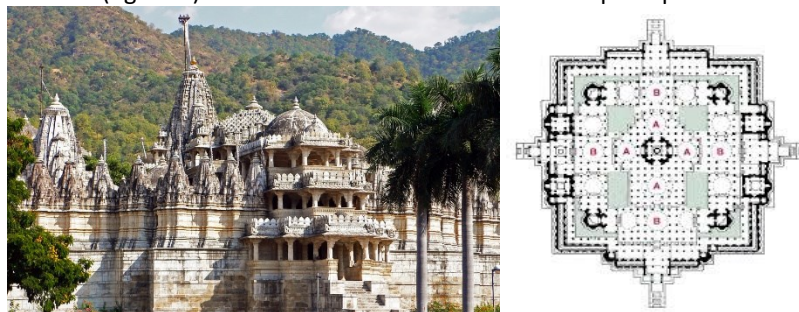


Figure 7. Jain temple plan and entrance view ([archi-monarch.com/jain-temple-architecture](http://archi-monarch.com/jain-temple-architecture))

The plans of temple are base Vastupurashamandala, the grids of the square in which the cella is two times the size of the walls of the cella (figure 8). the square grid has changed by extending two times on each side out and later in 11<sup>th</sup> (figure 9) and 15<sup>th</sup> (figure 10) century the Hindu temple got final form this time square changed by extending on each sides, the khandriya and Madhya and Jain temple are best examples of those periods. According below figures shows that all Hindu temples changed during centuries this because different



condition effect on them and changed structure of temples and design but all temples hold basic (structure of god in plan) plan and didn't changed.



Figure 6. Plan of Sanchi temple in India during 5<sup>th</sup> century with god structure (Rian, 2007)

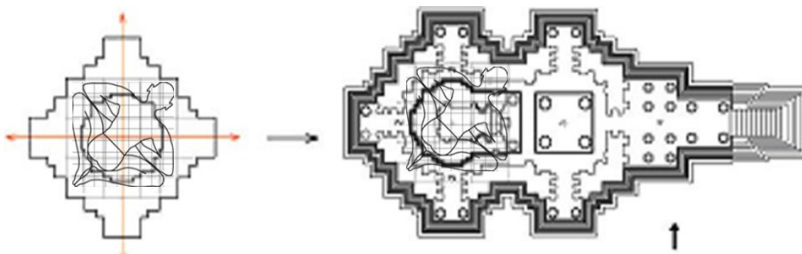


Figure 9. Plan of kandariya mahadeo temple during 11<sup>th</sup> Century ( Rian,2007)

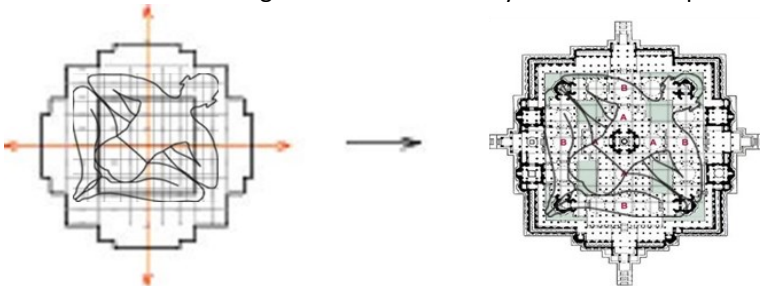


Figure 10. Plan of Jain temple during 15<sup>th</sup> century with god structure with god structure ( Rian, 2007)

## 5. Conclusion

Vastu Shastra offers the command principles concerning the construction of the building. Those principles explain and help the diagram which referred to the Vastu Purusha mandala. The shapes of temples assumed different forms depend on the functions of the buildings. The structures are numerous for different classes of building and to content different purpose) and identical. Hindu still live base on their religious and their believes is(consists of astronomy, astrology, grammar, mathematics, law, medicine, politics, diplomacy, war, love, architecture and many other branches of knowledge).in this way Hinduism is holistic and It is not just about theology. Hindu traditional inform us that there are positive energy and negative around us all the time same as Chinese system of Feng shui , which explain how we can reach positive energy and stay far from negative energy , This include temples too . In Hindu; religion believe that a temple brings god and human together, and giving them the opportunity to help others. Base on that they imaging God as human structure and use that to build their temples. To connect universe and positive energy and have an (ecofriendly connection with nature. The technology used for Hindu temples is special methods which is based on arts, science and philosophy. This study profoundly describes mandala diagram as constant plan of Hindu temple even if in during different century other features have been changed but basic plan staid unchanged.

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## Conflict of Interests

The authors declare no conflict of interest

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