Plan for a New Temple

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Introduction

Very few original Hindu temples, reflecting harmony between the astronomical, the social, and the spiritual aspects of reality, have been constructed in the past few centuries. This is no doubt due to a break with the tradition that took place in India due to unsettled conditions for about half a millennium. The break in this tradition was more severe in north India.

With the efforts of scholars, we are again getting to understand the logic of the Hindu temple. In particular, the harmony of the temple architecture with other aspects of creative expression which form part of temple activities (such as dance, sculpture, painting, music) have been well described by Kapila Vatsyayan who says: "In the context of Indian architecture and sculpture, the basic geometrical motifs, the fundamental concept of Man-Nature relationship, along with the common vocabulary of myth and legend, find a place in every constituent part of the Indian temple."

The temple represents the cosmos, both at the level of the physical universe and the subject. The architecture reflects the connections between the two. The most impressive aspect of the architecture is that it represents the universe in a recursive fashion, mirroring the Vedic idea of the microcosm symbolizing the macrocosm at various levels of expression. This is done not only in the domain of numbers and directions, but also using appropriate mythological themes, and historical incidents. The mythological scenes skillfully use the oppositions and complementarities between the gods, goddesses, asuras, and humans defined over ordinary and sacred time and space. This is seen most clearly in the architectural plan of the Angkor Wat temple.
The temple is considered in the image of the Cosmic Puruṣa, on whose body is displayed all creation in its materiality and movement. Paradoxically, the space of the Puruṣa is (Ṛgveda 10.90), in the sanctuary only ten fingers wide, although he pervades the earth.

In this paper I present the ground plan for a new temple, that I recently saw in my mind. I was inspired in part by the Padmanābha temple in Thiruvananthapuram, but the plan has features that I have reflected on for several years. These features emerge from my personal study of the Vedic altars. The ground plan of the proposed temple reflects several astronomical numbers from the Vedas.

The broad structure of the temple is given in arbitrary units: the rectangular structure (A) $45 \times 90$ represents the earth (Figure 1). In a variant the rectangular is replaced by circular within the square (Figure 2). The square structure on the right (B) represents the atmosphere and the sun (garbhagṛha). The rectangular structure A is a Devi temple, whereas B is a temple to Harihara or Vishnu and Shiva combined. This structure has basic dimensions of $90 \times 90$ which are augmented by extensions to $100 \times 100$. The width of each extension is 20. The area of the central extensions is thus 100, and that of the corner extensions is 175. The entry to the temple is through the doorway to the west. The plan could also be inverted by switching the east-west coordinates.

The distance from the inner passageway to the garbhagṛha is 27. If this passage is flanked by two rows of pillars on either side, the total count of the pillars will be 108, which is the distance between the earth and the sun in sun-diameter units.

The garbhagṛha is $16 \times 16$ units. Flanking it are two rectangular spaces for meditation and instruction, that have areas of 338 each. There is a walkway around the perimeter of width 10 units, and extensions augment this to larger spaces where an individual might sit down and meditate. The three courtyards have floors of sand, brick, and wood, respectively.

Notes on the Hindu Temple

The temple construction begins with the Vāstupuruṣa maṇḍala, which is a yantra, mostly divided into 64 ($8 \times 8$) or 81 ($9 \times 9$) squares, which are the seats of 45 divinities. Brahmā is at the centre, around him 12 squares represent the Ādityas, and in the outer circle are 28 squares that represent the nakṣatras. The Vāstumaṇḍala
Figure 1: The basic temple plan
Figure 2: A variant of the basic temple plan
with its border is the place where the motions of the sun and the moon and the planets are reconciled. It is the Vāstu in which the decrepit, old Ćayava of the Rgveda 1.116.10 asks his sons to put him down so that he would become young again. Ćayava is the moon and Śukaniya, whom he desires, is the sun.

In the basic Vedic scheme the circle represents the earth and the square represents the heavens or the deity. But the altar or the temple, as a representation of the dynamism of the universe, requires a breaking of the symmetry of the square. As seen clearly in the agnicayana and other altar constructions, this is done in a variety of ways. Although the main altar might be square or its derivative, the overall sacred area is taken to be a departure from this shape. In particular, the temples to the goddess are drawn on a rectangular plan. In Śiva or Viṣṇu temples, which are square, change is represented by a play of diagonal lines. These diagonals are essentially kinetic and are therefore representative of movement and stress. They embody the time-factor in a composition.

In the Śilpa Prakāśa 1.90-106, a 9th-12th century Orissan temple architecture text, Rāmacandra Kaulacāra describes the Yogin Yantra for the layout of the goddess temple. Alice Boner writes, “[the Devi temples] represent the creative expanding forces, and therefore could not be logically be represented by a square, which is an eminently static form. While the immanent supreme principle is represented by the number ONE, the first stir of creation initiates duality, which is the number TWO, and is the producer of THREE and FOUR and all subsequent numbers up to the infinite.” The dynamism is expressed by a doubling of the square to a rectangle or the ratio 1:2, where the garbhagrha is now built in the geometrical centre. For a three-dimensional structure, the basic symmetry-breaking ratio is 1:2:4, which can be continued further to another doubling.

The constructions of the Sarasvati-Sindhu culture (traced back to 8000 BC which had its flowering in the so-called Harappan phase in the 3rd millennium BC) appear to be according to the same principles. The dynamic ratio of 1:2:4 is the most commonly encountered size of rooms of houses, in the overall plan of houses and the construction of large public buildings. This ratio is also reflected in the overall plan of the large walled sector at Mohenjo-Daro called the citadel mound. It is even the most commonly encountered brick size.

There is evidence of temple structures in the Harappan period in addition to iconography that recalls the goddess. Structures dating to 2000 BC, built in the design of yantras, have been unearthed in northern Afghanistan. There is ample evidence for a continuity in the religious and artistic tradition of India from the Harappan times, if not earlier. These ideas and the astronomical basis continued in the architecture of the temples of the classical age. Kramrisch has argued that the number 25,920, the number of years in the precessional period of the earth, is
also reflected in the plan of the temple.

As a representation of the macrocosm, change in the temple is described in terms of the motions of the heavenly bodies. According to Alice Boner:

[T]he temple must, in its space-directions, be established in relation to the motion of the heavenly bodies. But inasmuch as it incorporates in a single synthesis the unequal courses of the sun, the moon and the planets, it also symbolizes all recurrent time sequences: the day, the month, the year and the wider cycles marked by the recurrence of a complete cycle of eclipses, when the sun and the moon are readjusted in their original positions, a new cycle of creation begins.

The Hindu temple, as a conception of the astronomical frame of the universe, serves the same purpose as the Vedic altar, which reconciled the motions of the sun and the moon. The progressive complexity of the classical temple was inevitable given an attempt to bring in the cycles of the planets and other ideas of the yugas into the scheme.

The Hindu temple further represents the inner cosmology of the subject. The devas reside within one’s consciousness, and the temple represents a spatial map of the architecture of the mind.

Our Temple

We present two different versions of the basic plan. The difference between the two is that one of them exchanges the rectangular plan for the left portion by a circular design (Figures 1 and 2).

The main dimensions of the temple are given in Figure 3. The two rectangular buildings within the courtyards are for meditation and other instructional purposes. It is nice that the areas of each of these buildings turns out to be 338, just one less than one-third the number of the Rgvedic hymns.

It is also remarkable that the dimensions of the rectangular halls add up as $2 \times (26 + 13) = 78$, which, as we know, is the Vedic altar number for atmosphere.

The three courtyards, which are open, have sand, brick, and wood, respectively, in my present visualization.

The elevation of the temple will be decided after various astronomical characteristics of the place where it is built have been ascertained. It will also depend on the actual scale to which the temple is built. The side A could be built to more than one story (say 3 stories), and it will house the facilities, the offices, and the library. The side B would be a single story.
Figure 3: The main dimensions of the temple
The temple will be built lightly, and it will make use of light and glass, extensively. The temple structure will be enclosed by a garden, with water on the southern side.

There will be an attempt to find harmony between the various elements through the conceptualization of sculpture, music, and dance of the Indian tradition.

The design’s main originality lies in the choice of the dimensions that are fundamental to Vedic ritual. Its plan has other points of departure from the traditional Nāgara temple. It will portray the astronomical characteristics in a rich manner. Its usage of building materials will be a departure from traditional designs.

The temple, if built in a temperate place, will be enclosed. If built in a tropical place, its hallways will be open.

Notes and References


4. See note 1, above.