

Kanchi Parmar

## ***Ishaan: Our Planet's Sun***

### ***Ishaan: El sol de nuestro planeta***

### ***Ishaan: O sol do nosso planeta***

**Keywords | Palabras clave | Palavras chave**

Space, Prana, Vastu, Built forms, Geometry

Espacio, Prana, Vastu, Formas construidas, Geometría

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**Abstract | Resumen | Resumo**

Humans have been allegorists since time immemorial. Through this art of narrating, even the most mystical learning has been presented in accessible forms through scripture and doctrine. India too has left a trail of allegories, a metaphorical approach to the basis of creation, including *Vastu* – the art of spatial planning and geometry. *Vastu* is often blended with the jargon of mythology, but it is universal when put into practice rationally. This look at it is merely an illustrative introduction to an age-old indigenous architectural practice of Indian origin. The primitives are often mistakenly seen as too naive for today's world. The following is an attempt to connect the diverging threads of today's deconstructive intelligence and the enduring metaphysics of *Vastu*.

El ser humano ha utilizado la alegoría desde tiempo inmemorial. Mediante este arte narrativo, y a través de las escrituras y doctrinas, incluso el aprendizaje místico se ha presentado de manera accesible. En la India existe una larga tradición en el uso de la alegoría como acercamiento metafórico a la base de la creación; un ejemplo es el *vastu*, el arte de la planificación espacial y la geometría. El *vastu* suele combinarse con el vocabulario de la mitología, pero cuando se practica racionalmente, es universal. Esta mirada es tan solo una introducción ilustrativa a una práctica arquitectónica autóctona y ancestral de origen indio. A menudo, se considera erróneamente que los primitivos son demasiado ingenuos para el mundo moderno. Lo que se expone a continuación es un intento de conectar los senderos divergentes de la inteligencia deconstructiva actual y la metafísica perdurable del *vastu*.

O ser humano é alegorista desde tempos imemoriais. Através da arte da narrativa, mesmo a aprendizagem mais mística tem sido apresentada de formas acessíveis através das escrituras e da doutrina. A Índia também deixou um rasto de alegorias, uma abordagem metafórica à base da criação, incluindo o sistema *Vastu* – a arte do planeamento espacial e da geometria. O *Vastu* é frequentemente misturado com o dialeto da mitologia, mas é universal quando posto em prática de forma racional. Este olhar é apenas uma introdução ilustrativa a uma prática arquitetónica indígena milenar de origem indiana. Os primitivos são muitas vezes vistos, erradamente, como demasiado ingênuos para o mundo de hoje. O que se segue é uma tentativa de ligar os fios divergentes da inteligência desconstrutiva atual e a metafísica duradoura do *Vastu*.

## I. Inception

### Space

Our ancestors coined this word for two distant senses. One is interstellar, while the other is wherever you are, enclosed within four walls and a roof. Was this meant to connect the macro and the micro, or was it mere coincidence?

The human mind, always inquisitive, has often journeyed between the microscopic and the telescopic, giving rise to most of the Earth's inventions. Hence we admire photographs of twinkling lights on Earth brought to us by satellites. Here there are two vistas, one of the host of galaxies from Earth (Fig. 1) and another of the twinkling Earth from the satellite (Fig. 2). Matching primordial creation has indeed taken a lot of work. Yet while we celebrate our achievements, we know we are missing something.

### Prana – The Life-Giving Force

Even if there is no life out there, except for a few floating astronauts, the entire cosmic committee seems to mold us to suit its geometry. This art of the divine potter probably made us think the Earth was the center of the universe, and that the celestial bodies orbited us – even the sun. Then we realized that the reality of our solar system is not unique.

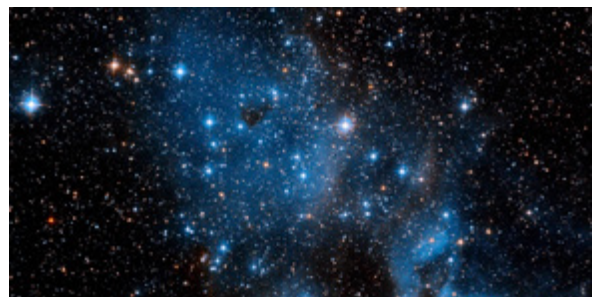
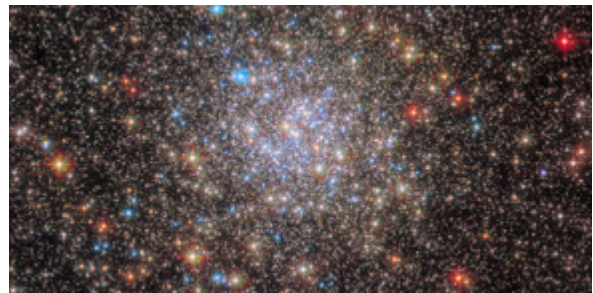


Figure 1: The host of galaxies (NASA Gallery)

If the sun is life-giving, must there be life in it too? Is that why we relate to the sun and revere it with different names – Apollo, Inti, Liza, Ra, Surya, etc.? Even though the stars lack faces, they are brimming with life. This life-giving force came into existence when the celestial bodies aligned optimally, creating a perfect geometry. In Sanskrit, the life



Figure 2: Our twinkling Earth (NASA Gallery)

force is termed *prana* (Svoboda 2020). When this universal force enters our atmosphere, it mingles with the elements available to us.

#### Pancha-Bhutas – The Five Elements

Mother Earth shields us with a comforting magnetic field, but *prana* finds hosts allowing it to thrive on our planet. This is not a notion confined to Indian philosophy but a common knowledge, as common as the understanding of all life on Earth as an amalgamation of five fundamental elements – earth, fire, water, air, and space (Sadhguru 2021) that support the life force.

Is it *prana* that seeks an expression through these five elements? Or is it the five elements that attract *prana*? If our Earth is a great magnet with two poles, are we mere iron filings sticking to its magnetic field? If the sun is the center of a system, why is it that people often find themselves as the center of all doings and undoings on Earth? Why is the Earth round and why did the apple fall? Every individual tries to apprehend the world around him as best one can, and the primitive sages of India understood this. They understood the curiosity of mankind and merged the desire “to know” with the inevitability of situations experienced throughout life.

#### Vedas

The ancient scholars of India meditated rather than researched, following a trail of burning questions. They often spoke of the stars, and then of basic human needs. The food we eat, the earth we sow, the songs we sing, the dances we dance – all had to connect with the stars. Otherwise what is the point? they may have thought.

Their wide range of research is concisely written in four volumes called Vedas, namely *Rig-Veda*<sup>1</sup>, *Yajur-Veda*<sup>2</sup>, *Sama-Veda*<sup>3</sup>, and *Athar-Veda*<sup>4</sup>. Each Veda has a supplement called *Upaveda*, respectively *Ayur-Veda*, *Danur-Veda*, *Gandhar-Veda*, and *Sthapatya Veda* (Vedic Studies 2022) (Fig. 3).

Vedas are not ordinary books but a stream of knowledge and enlightenment. In them is written how, at what time, and in what direction a tree should be felled, if it needs to

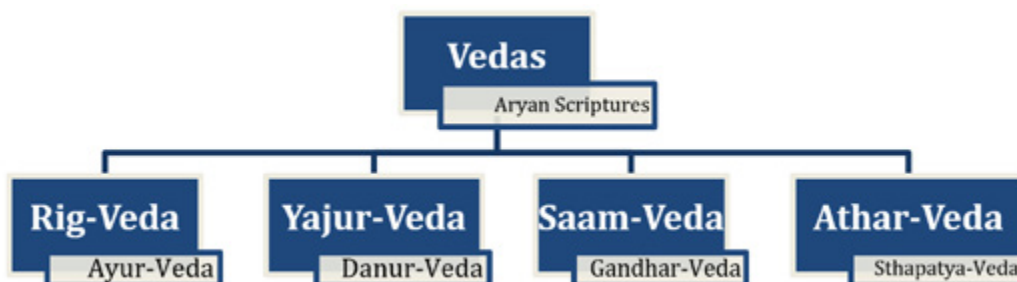


Figure 3: Vedas: The oldest literary works of human civilization (Maharishi School of Vedic Studies)



Figure 4: The Vedas and Puranas were dictated by sages (Devdutt Pattanaik)

be, for a tree harbors *prana*. What type of food is best for us, as dictated in *Ayur-Veda*, holds true even today, now that we know how food nourishes us. The poses and expressions of a dancer, and even how a man should hold weapons – all this is in the scriptures. Amongst all these details is a text on *Vastu Shastra*.

### Sthapatya Veda

*Sthapatya* means establishing, and *Veda* means knowledge. *Sthapatya Veda* means establishing a connection between the dweller, dwelling, and cosmos (Vedic Studies 2022). *Vastu Shastra*, the Vedic science of architecture and spatial geometry, has its origin in the *Sthapatya Veda*.

## 2. Approach

### Vastu

Every indigenous practice in India starts with the interstellar and ends with the domestic. So did the art of building with earth for accommodating humans. Even if today “home” to us is a compartment in a concrete tower block, the profundity of confined spaces remains. Many of us believe buildings are alive and are bearers of *prana*, the cosmic life force.

So does this mean we should build four walls and a roof with a door, let’s say, and windows and overhangs to

protect from rain, and ceramic flooring with plaster above, and heavy curtains against the sun and mirror-like finishes to make the room feel spacious? Will such tricks make an enclosed space feel like the cosmos? Our efforts are merely cosmetic, and we are often pseudo-creators, although many architects talk like gurus.

“Buildings are conceived as models of the cosmos – no less!” Charles Correa stated (2010).

Louis Kahn in conversation with his students spoke these words of wisdom: “Architecture is the language of God. Science finds what is already there, but the artist makes that which is not there... A man who does a work of architecture does it as an offering to the spirit of architecture. A spirit which knows no style, knows no techniques, no methods. It just waits for that which presents itself... There is architecture. And it is the embodiment of the immeasurable” (Ngo 1969).

Abdel-Wahed El-Wakil, an Egyptian architect, brings with him the ethics of Islamic architecture, according to which “buildings must connect to the Creator... Modern art boosts the ego of the individual; traditional art nourishes the spirit of the individual” (The Sunday Times 2018). To the three elements of form, function, and structure, he adds three others vital to architecture – number, geometry, and symbol, for buildings in themselves are sacred.

Architects from different backgrounds have their own jargon, as if representing a sect or religion. When the clouds of illusion are dispelled, what remains is common learning, the source of all that is rendered as His creation through us.

The architect and design theorist Christopher Alexander took three whole volumes to define this “quality without a name”. “To seek the timeless way,” he says, “we must first know the quality without a name... There is a central quality which is the root criterion of life and spirit in a man, a town, a building, or a wilderness. This quality is objective and precise, but it cannot be named” (Alexander 1979).

Architects are not bad theorists, but it is their enhanced perception and the belief they have through experience that “buildings are living too” which prompts a spiritual quest for the unseen. Probably it is sensitivity to geometry that touches the core of a creator. Those who have their ego-meter in check get close to the sun; others probably continue the search.

In any case, is it *prana* that they, and many others, are invoking? Certainly. But this brings me back to my question. Will a set of four walls and a roof give us a model of the cosmos? It is evident that we are not like iron filings on Earth’s magnetic field. We too, like our mother Earth, are composed of the five elements, and the fact that we are capable of motion makes us carry an energy field of our own. The movement of life within an enclosed structure,



the patterns we create, form cocoons of energy in constant interaction with our larger cosmic selves.

Alexander writes that “In order to define this quality in buildings and in towns, we must begin by understanding that every place is given its character by certain ‘patterns of events’ that keep on happening there” (Alexander 1977). The ancient occupants of India knew this well. This vocabulary of energy and spaces, human patterns, emotions, and relationships is developed in the ancient doctrine of *Vastu Shastra*. The true purpose of *Vastu Shastra* since ancient times, however, remains the transformation of human consciousness and discovering the true potential of human beings through building structures.

### Vastu Shastra

This universe is in precise order, moving with precise time through billions of years. The four cardinal directions (east, west, north, south) and sub-cardinal directions (northwest, northeast, southeast, southwest), the five fundamental elements, the Earth’s rotations about its own axis and around the sun, the direction of winds, the Earth’s gravitational force, the energy from the sun, the influence of the planets – all these factors form the basis of the principles of *Vastu Shastra* (Ahirrao and Ahirrao 2006). Hence *Vastu* pertains not only to the Hindus of India but to all who share the sun on this planet. *Vastu Shastra* is considered to be a purely technical subject and was confined to Vedic architects – *sthapatis* – and this knowledge was handed down to their heirs.



Figure 5: The world’s largest temple complex: Angkor Wat (Bodhikshetra)

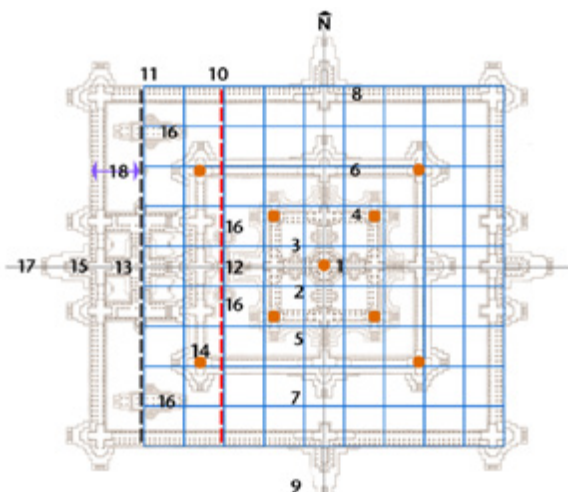


Figure 6: Angkor Wat – Padamandala,  $9 \times 9 = 81$  (Templemountains)

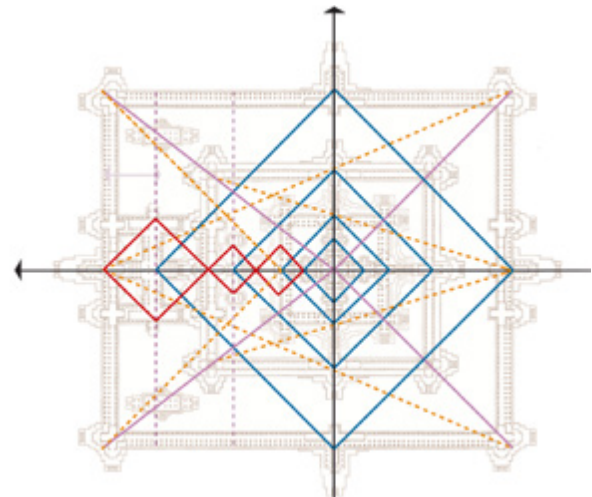


Figure 7: Diagonal alignments at Angkor Wat (Templemountains)

India's culture and architecture have always been referred to in relation to its influences, by virtue of foreign rulers. After the Vedic period, we received a series of invaders – Afghans, Mughals, Persians, Greek, Chinese, and British – under which India was reduced to servitude and to seeking means of self-defense. Today the scenario is no longer of invasions but rather of youth busy looking toward the west for a rising sun.

*If it be asked what inner riches India brings to aid in the realization of a civilization of the world, then, from the Indian standpoint, the answer must be found in her religions and her philosophy, and her constant application of abstract theory to practical life (Coomaraswamy 2014).*

Despite the influx of diverse cultures, ripples of Indian origins are found in scattered parts of Southeast Asia, such as Cambodia. The world's largest temple complex, Angkor Wat, built in the twelfth century, is well aligned with the greater geometry (Figs. 5 to 7). Angkor Wat was erected under the rule of Suryavarman II, a religious reformer who blended the mystical cults of Vishnu and Shiva, the supreme Hindu deities. Under the guidance of his guru, the powerful priest and *sthapati* Divakarapandita, Angkor Wat was built in accordance with the principles of Vastu.

### 3. Correspondence

#### Vastu-Purusha-Mandala

*Prana* is allegorically represented as a man whose head rests at the northeast corner of a built structure. His navel, attached to the source of *prana*, lies at the center of the grid/mandala (Fig. 8). This anthropomorphic approach is very much the Indian way of connecting with and exploring nature. We may have a thousand gods and goddesses for every life, every *prana*, but there is always an emphatic oneness, a common source.

Physics tells us that an atom is the smallest part of an element, and there is a nucleus at the center of each atom containing protons and neutrons, around which are electrons. These rotate in a rhythmic manner called simple harmonic motion<sup>5</sup> (Fig. 9). Vastu tells us that a structure shall preferably be a square or a rectangle so that the energy waves generated in *Vastu Purusha* move in perfect harmonic motion. This generates an excellent atmosphere in a building, and is beneficial in all respects. Yet due to design interventions or elevations, there is often a disruption in the quadrilateral Vastu form and as a result this harmonic motion is disturbed (Ahirrao and Ahirrao 2006) (Fig. 10).

*Vastu-purusha-mandala* is a perfect square, subdivided into identical squares, creating a series starting at 1 and going on to 4, 8, 9, 16, 25 ... up to 1024. In temple architecture, the most commonly used mandalas are of 64 and 81 squares,



Figure 8: Vastu Purusha mandala or the Cosmic Man (housing.com)

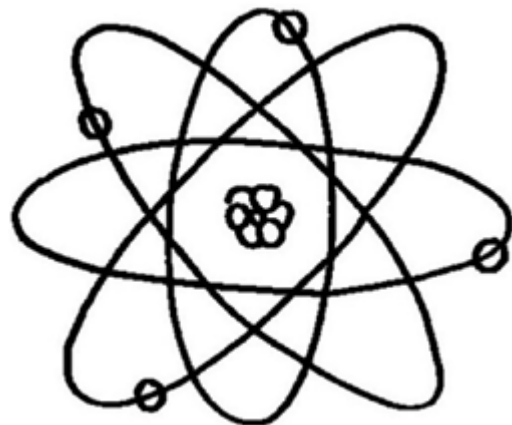


Figure 9: Simple harmonic motion (VastuShastra Education and Research Foundation, Ahirrao)



Figure 10: Break in the harmonic motion (VastuShastra Education and Research Foundation, Ahirrao)



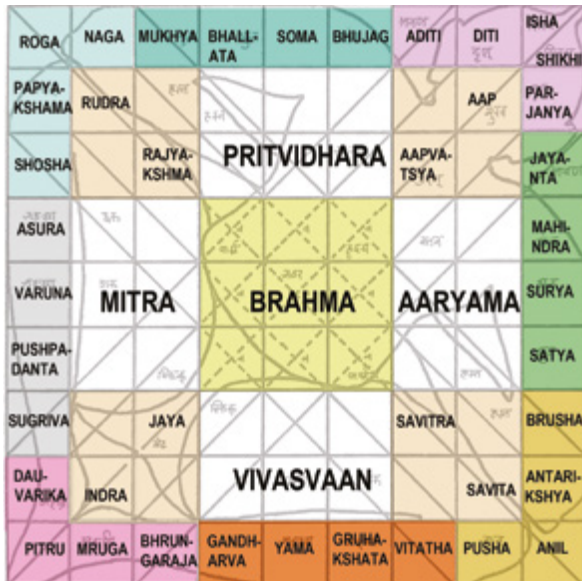


Figure 11: Various deities allocated in the square mandala (VastuShastra Education and Research Foundation, Ahirrao)

with the various deities being allocated places in accordance with their importance and their mythical qualities (Correa 2010) (Fig. 11).

Vastu prefers the rectangle as a floorplan for most secular buildings. The ancient texts mention rectangles with ratios of 1:2, 2:3, and 3:5, which not surprisingly happen to be the same as those derived from the Fibonacci series<sup>6</sup> (Svoboda 2020). A mandala is not a plan; it represents an energy field. Its center signifies both *shunya* (the absolute void) and *bindu* (the world seed and source of all energy). At this center in all mandalas is *Brahma*, the Supreme Principle (Correa 2010).

*Vastu Purusha* or cosmic man is believed to receive *prana* from his navel, the center of the grid, which is known as *brahmasthan*. Hence when Vastu is applied as a design principle, the central portion of the building or structure is kept strictly empty. This works in a way akin to our stomachs, for an uncongested digestive tract helps us

maintain our energy; thus an empty *brahmasthan* allows cosmic energy to penetrate an enclosed structure – and the courtyards of traditional buildings had good ingress of *prana*!

#### 4. Compatibility

##### Vastukala

Toilets, kitchens, bulky elements, water features, fireplaces, etc. are all placed in specific areas within the grid in order to balance the five elements governing the mandala. Hence *Vastu Shastra* has also been referred to as *Vastu Kala*, where *Kala* means art. A *sthapati*<sup>7</sup> or Vedic architect is no less than an artist, who knows how best to balance the elements of a built structure in accordance with its use and user. Rectifying a preexisting structure also comes within the scope of a *sthapati*: incorporating new portions or removing existing ones, to attain the desired equilibrium.

This art of town planning and construction considering various factors influencing built forms came to be known as *Vastukala*. *Vastukala* is seen as on a par with other art forms, for in India, fine arts have always been allied with spirituality.

As buildings evolved, Vastu evolved too, to suit contemporary dwellings. An expert group developed the *Vastu Disha Chakra* or wheel of directions (Fig. 14), which is now a sort of protractor for all working *sthapatis*. It is a highly efficient tool, useful for mapping, finding the ratio of the five elements, and accurate measurements. The colors in the chakra clearly show the cardinal directions, with 16 zones and 32 doors, highlighting the gods/goddesses looking after each zone.

Today, the “true” art of Vastu unfortunately lacks a canvas. Neither in India nor elsewhere do architects wish to know about what Vastu is and the truth it holds. Lack of awareness is rarely an issue in today’s world, where one keyword will lead you to knowledge. Some who lack any



Figure 12: A graduate from architectural school

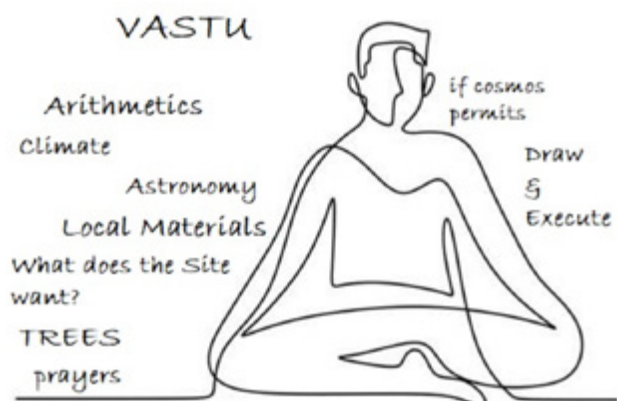


Figure 13: A *sthapati* from Vedic school

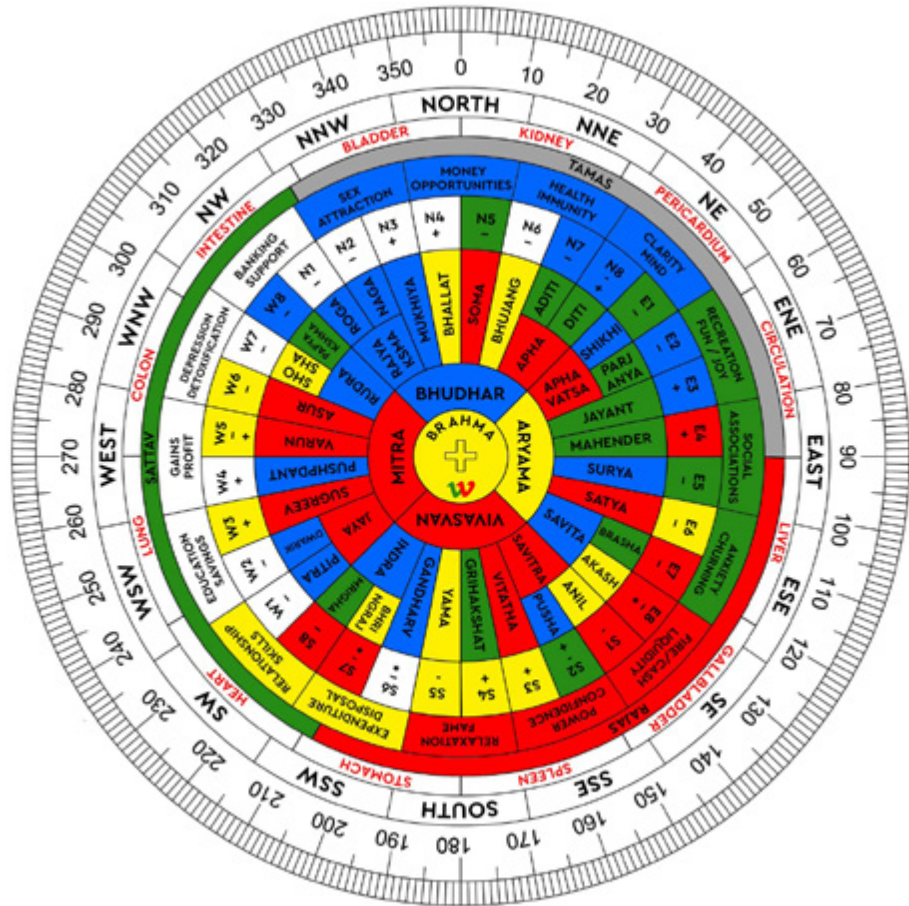


Figure 14: Vastu Chakra with the directions, five elements, color compatibility, body parts aligned with directions, 16 zones, and 32 doors, highlighting the gods and goddesses looking after each zone (VastuShastra Education and Research Foundation, Ahirrao)

understanding of built structures refer to themselves as *sthapatis*. Few infuse architecture and built forms with the principles of Vastu. The art has also been confined within individual building units, as a parcel of interior design, due to a selective interest in Vastu. So if not lack of awareness, what is it that prevents Vastu from serving as the design basis for built forms, given its validity in today's world?

It is, indeed, a question of intentions. The knowledge amassed by sages was not meant to serve our petty dreams, or for making money. For example, a man obsessed with money hires a Vastu consultant to bring comfort to his home. The Vastu consultant considers this need for money and adds more fire elements in the southeast direction (governed by the planet Venus, the starting point of the sun-path, responsible for zeal and spark in one's life). But what happens when more fire enters a cosmic model? The other elements burn. Take a look at the planet Mercury, next door but one to ours: too much fire makes it uninhabitable. Will more fire, more money, enhance our relationships and health?

The same applies to soft Indian ethics in contrast with the overpowering predominance of American culture. How can the prevailing contemporary culture stand strong without applying any such cosmic rules? Where is the balance? if I may ask. Depression, loneliness, and the attendant health

issues have all flourished in these days. Robert Svoboda, a Westerner who has delved into Indian culture and scripture, laments the ascendancy of materialism:

*There was a time when we in the West could feel the immanence of the unseen world in our daily lives, when we would never have dreamed of divorcing the material realm from that of the spirit. We constructed spaces in those days, buildings like the great cathedrals of Europe that cast in stone our ascendant quest towards the spiritual that is the human birthright. After we chose the primacy of matter over spirit, though, we dissected the spiritual out of our daily lives as we focused on wallowing in the mundane. For generations now, a substantial proportion of us have lived and died as materialists, denouncing the immaterial as being "immaterial", irrelevant to our lives. We have as a consequence permitted our vistas to become blighted with buildings of the coarsest, most uncouth variety – structures that pander to our basest drives and instincts (Svoboda 2020).*

Equilibrium is what life seeks. Again, Vastu and, for that matter, any ancient learning does not serve our petty dreams. Traditionally in India, a vigorous man, alive with *prana*, is considered to ride on four wheels. Every activity he performs should help bring balance to the wheels of his





Figure 15: An equilibrium is indeed a code of conduct (image from the holy Bhagavat Gita)

chariot. An imbalance would upset the geometry and topple the rider. The four wheels are symbolic of the four Hindu goals, namely *Dharma* (respect of universal law), *Artha* (making a living), *Kama* (enjoyment of sense pleasure), and *Moksha* (salvation). It is this balance which every art form, including Vastu, seeks to bring to human life.

## 5. Knowledge

### Vastu-Vidya

Maharaja Sawai Jai Singh, a Rajput who founded Jaipur in 1727, was a *sthapati* himself. This planned city was built in keeping with learning in the fields of Vastu, astronomy, and art. In recent Indian history such learning has been put into practice felicitously by Charles Correa. His Jawahar Kala Kendra arts center in Jaipur is a classic example of the use of the traditional Vastu principles, nuanced for the contemporary world.

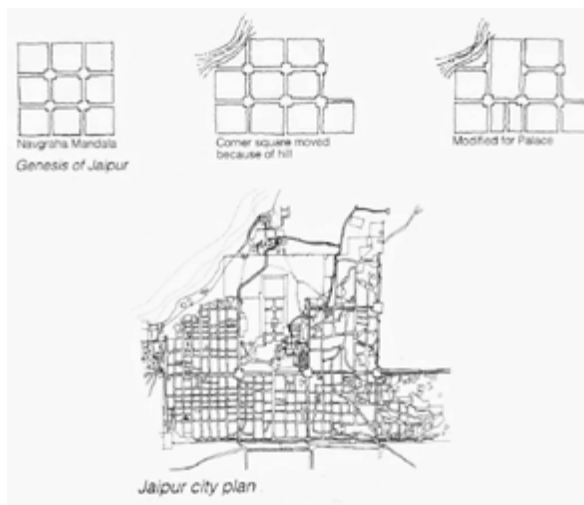


Figure 16: Inspiration drawn from the genesis of Jaipur in the design of Jawahar Kala Kendra (Hiddenarchitecture)

The materials were carefully selected to relate to and reflect on the nature of space. Through the use of local yellow sandstone, red sandstone, lime, red rubble, marble, terracotta, etc., narrow passages and wide courtyards, and frequent openings with connecting vistas, Correa shaped the spaces, breathing life into them.

Jawahar Kala Kendra came later in Correa's life, in 1986, when he was about 56 years old. After independence, in the 1950s, Charles Correa must have been 21 years old, an architecture student marveling at the bold concrete forms of Chandigarh.

Chandigarh – the dream city of India's first prime minister – was planned by the French architect Le Corbusier. He conceived the masterplan of Chandigarh as analogous to the human body, with a clearly defined head (the Capitol Complex, sector 1), heart (the city center, sector 17), lungs (the leisure valley), circulatory system (the network of roads, the 7 'V's'), and guts (the industrial area). The rough concrete assisted the architect's poetic mind.

At the same time, Laurie Baker emphatically rejected the international style that lingered so perniciously in India. In one of his essays, Baker speaks of his concern at the spread of standard materials across the globe for modern architecture, a child of the holy matrimony of cement and steel. He wrote: "Now, 'developed communications' has taken the 'wonder material' to all the corners of the earth and we have succumbed to it like children falling upon a dish of instant hot cakes. So, we all have identical pot-bellies and have forgotten 'mother's cooking' (Bhatia 1991).

The appointment of Le Corbusier was a subject of debate back then, amid which Vastu remained a theory and practice among small groups. It is indeed a matter of time,

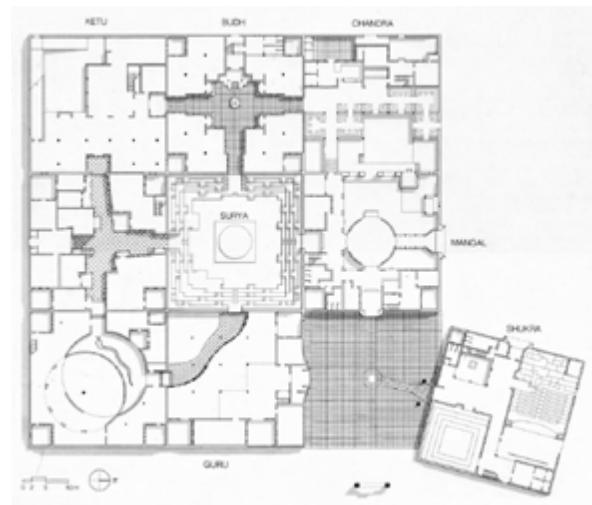


Figure 17: Plan of Jawahar Kala Kendra, Jaipur, Rajasthan (Hiddenarchitecture)



Figure 18: A modest courtyard in Jawahar Kala Kendra (Hiddenarchitecture)



Figure 19: Roughcast concrete of the secretariat building, Chandigarh (Archdaily)

allowing one to look back to what has been done and beyond to what can be done, with all that we have today. The demand for the Jawahar Kala Kendra project and Correa's research caught the attention of many architects and architecture students as the Vastu concept returned.

In 1995 Correa addressed the students of the New Delhi School of Architecture, distilling his experience for perennial students like us: "We don't know if a creative ability like poetry or painting or architecture can be taught. But we know it can be learnt" (Correa 2015).

Contemporary construction with Vastu as its design basis is rare. As we tend toward an artificial intelligence, we can only hope for the revival of an intelligence that is more benevolent.

## 6. The Beginning

Traditional ways of building in every corner of the world may have their own materials and techniques, but they all involve a dialogue with *prana* as protagonist. The notion that if you do tradition there is nothing new is illusory. It is not only new but there is challenge, there is

intelligence, mastery of geometry, and mastery of craft in the indigenous.

Yet why do we need aligned spaces? Why so much fuss over buildings, especially in times when slogans like "my life, my rules", as against cosmic rules, are so popular? We may not even need such external help if we are in equilibrium ourselves. The problem, unfortunately, is in the human mind. Have you noticed that every time you take a pair of wired earphones out of your bag, they are entangled? Such is my brain, such is yours. It takes no effort to entangle our brains. Aligning homes and workspaces probably saves us from the process of disentangling.

If you roam around with a compass in a modern building, you will always see the north flickering and unstable, because there is always some steel tugging at the needle. A building with a flickering north speaks differently to us. Furthermore, the word "yoga" means union. If meditation and *pranayama* is yoga for mind and body, Vastu is yoga for space. Once we align ourselves, nature recognizes the balance. If we get in sync with our mother earth, would she do her children any wrong? Once the mind, body, and space are aligned with cosmic geometry, may there be peace for all.

*There is dark with the star,  
Then the dark with your wall,  
He is up! was never too far,  
He is here, to light up, all in all,  
"Know"! when at its peak,  
Beware, Ishaan loves hide and seek!*

<sup>1</sup> *Rigveda* is regarded as the oldest of the four Vedas and contains the first reference to *Vastu Shastra*. *Rigveda* is a collection of verses termed *shlokas*, meaning mantras, or hymns for addressing and invoking God. It specifies the phonetic signs with the intensity, pitch, and tone for each word when reciting. Mantras recited in this way are effectively synchronized with proper respiratory rhythms, enabling controlled and even breathing during pronunciation and continuous recitation. *Ayurveda* is an *upaveda* or supplement to *Rigveda*.

<sup>2</sup> *Yajurveda* contains descriptions of various *yagnas*: religious rituals involving sacred offerings to a god through holy fire, performed by Brahmins or prominent scholars. *Dhanurveda* is an *upaveda* or supplement to *Yajurveda*.

<sup>3</sup> *Samaveda*, a portrayal of Indian culture and lifestyle. Daily chores and the triple prayers at dawn, midday, and dusk, collectively termed *trikaal sandhya*, are described with their significance and effects. *Gandharaveda* is an *upaveda* or supplement to *Samaveda*.

<sup>4</sup> *Atharvaveda* is a compilation of individual and social duties and responsibilities, dealing with righteousness and defining morality and immorality, including citizens' rights and duties to family, society, and country. *Sthapatya Veda* is an *upaveda* or supplement to *Atharvaveda*.

<sup>5</sup> Simple harmonic motion is part of Hooke's law of motion, defined as a periodic motion in which the restoring force is directly proportional to the displacement of a body from its mean position. The direction of this restoring force is always toward the mean position.

<sup>6</sup> The Fibonacci series was devised by the thirteenth-century mathematician Leonardo Fibonacci. Starting with zero and one, it is a steadily increasing series in which each number is equal to the sum of the preceding two, e.g. 0, 1, 1, 2, 3, 5, 8, 13, 21, etc., and gave rise to the golden ratio of 1.618.

<sup>7</sup> A *sthapati* was a master craftsman in the Vedic period who not only conceptualized, designed, and planned buildings but was also an expert in drawing, geometry, arithmetic, astronomy, and other sciences, including architecture. He supervised the entire project and was responsible for every aspect of construction, including location, style, technique, materials, etc.

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## Biography | Biografia | Biografia

### Kanchi Parmar

Kanchi, based in Mumbai, regards herself as a perennial student. Ever since her graduation she has been apprenticed to her father, also an architect, and this culture has allowed her to research and explore varied interests. While keeping up with the current construction scenarios in Mumbai, Kanchi allows her father's years of experience to seep through into her research. She presented her previous research paper at AYDA (Asia's Young Designer Awards) as a national finalist. Some of her reflection papers have appeared in India's Council of Architecture's monthly journal (*Architecture Time, Space and People*) and in online platforms like InsideEthos, Connected Indian, and Rethinking The Future.