ARCHITECTURAL PRACTICES ACCORDING TO VASTU SHASTRA IN INDIA

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ABSTRACT

Vastu Shastra is ancient Indian Vedic (scriptures of religious importance) and shastra's (scriptures) knowledge for construction area to achieve balance, harmony between Gods, nature and people thereby paving the way for peace, prosperity, health, happiness and to avoid troubles. Vastu Shastra - meaning theories of planning for buildings, colonies, neighborhood townships and also for interiors. These had been laid down, formulated and used to be practiced centuries back. In recent years an attempt to bring out, rejuvenate, revitalize and adopt this knowledge has been made. These recommendations incorporated with present practice of planning, construction and design may enhance the quality of life. I am trying an attempt to give an idea what Vastu Shastra says and its technical aspects. So that the recommendations and practice for residential building of present world can be compared with principles and practices of vastu shastra writtern in our vedic books.

KEYWORDS: Architectural Practices, Vastu Shastra, Vastu Purush Mandala, Panchbhoot

Vastu intends to abide and Vidya implies learning. Thus, Vastu Vidya is the holy science identified with planning and building houses. Vastu is established in Vedic rationality, which rose around 4500 years prior. Vastu intends to adjust between the home and the universe, bringing wellbeing, riches and satisfaction. As indicated by Vastu, the outer and the inner are interchangable, for the hidden energies that administer the elements, for example, wind or fire, are the equivalent as those that control the organs of the human body. Anyway as of late, the basic association between the two has been overlooked, present day mankind having separated itself from the key powers that administer the universe. As an outcome the general public has turned out to be scattered and eager, estranged from the normal world. The disarray in and demolition of the world's sensitive eco-framework and the fast eradication of species are appearances of this polarity.

In Vastu, it is comprehended that vitality lines run like a huge lattice over the earth, from north to south and from east to west. Situating living and working spaces utilizing a compass as per these space headings impacts the occupants. This electromagnetic field influences the human body at a vibratory level, as each single cell in the body demonstrations like a reciever. Human consciousness likewise reacts intuitively to the cardinal bearings: the east is the course from which the sun rises, introducing new day, in this manner speaking to the substance everything being equal; the west shows the inverse, for as the sun we are helped to remember endings, the obscure and haziness; north is the heading of polar star, the settled point in the sky that indicates dependability and security; the south speaks

to the past and our parentage. The cardinal structures speak to the earth and the ground shake, from which every one of the structures rise.

AIM

To develop an intellect to experience architecture through the practices of vastu shastra.

OBJECTIVES

- Basic concept of vastu purush mandala
- Practices used to investigate and selection of site
- Dimensional system used at older times
- Layout and planning of residential building

METHODOLOGY

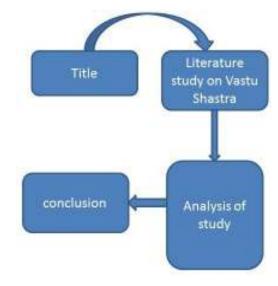


Figure 1 Methodology chart

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BASIC CONCEPT OF VASTU SHASTRA

Since the entire universe is a structure of five essential elements: Fire, Air, Space, Earth and Water. Through these, our body gets Internal Energies as Proteins, Carbohydrates, Fats and so on and External Energies as Heat, Light, Sound, Wind and on The essential standards of Vaastu empowers us to accomplish balance among these; giving greater adaptability of body and psyche for a superior life. At the point when the congruity between these elements gets disturbed our energies get dispersed in various ways prompting pressure, strain and sick wellbeing and our genuine feelings of serenity is decimated. We at that point need to divert our Energies emotionally also equitably, in order to accomplish a balance between Internal/External Energies, to achieve a solid body and an upbeat personality prompting wellbeing, riches, bliss, thriving and achievement.

The water from the Earth dissipates into the environment (Space) because of the warmth in our Solar System (Sun). These beads of water collect to shape mists. The Air which moves the mists makes them discharge the overabundance water which returns to the Earth as Rain . In this way the Cycle , and in addition the harmony of the elements, is kept up on our planet.

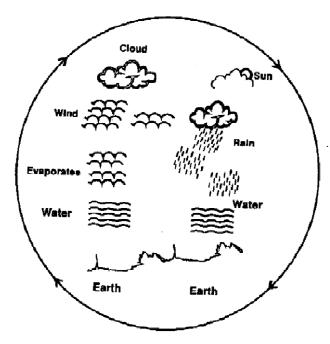


Figure 2: Concept of environment

To experience the above Cycle you require a mind and to have a mind you require life. In this way the 5 parts + Mind + Life transform into the explanation behind our world.

Right when the Life oblige leaves this cycle it meets with the Cosmic power. You are then no longer a bit of the Cycle you transform into the Cause. This merger of the Life propel with the Cosmic power is affected by partition/reflection.

The above Energy Cycle is radiation energies relating to a component.

This will be this position of all-inclusive elements in connection to the four foremost bearings For better outcomes, any action in your habitation or office ought to be enhanced by the grandiose position of the elements.

- The North-East (NE) is appointed to Water: Have a drag well, underground water tank in that position.
- The South-East (SE) is appointed to Fire: Have your kitchen, wash room, heater, kettle there.
- The North-West (NW) is appointed to Air: There have a visitor room bed space for unmarried young ladies or a store for completed merchandise.
- The South-West (SW) is appointed to Earth: It is the most steadiest of all things considered. Keep it substantial and this is the best place for ace Bed Room.
- The Center is alloted to Space: Have the slightest conceivable action around there.

How to completes a lopsidedness in these elements influence us? An unevenness in these elements in the characteristic cycle causes Floods, Typhoons, Volcanoes, Earthquakes etc.

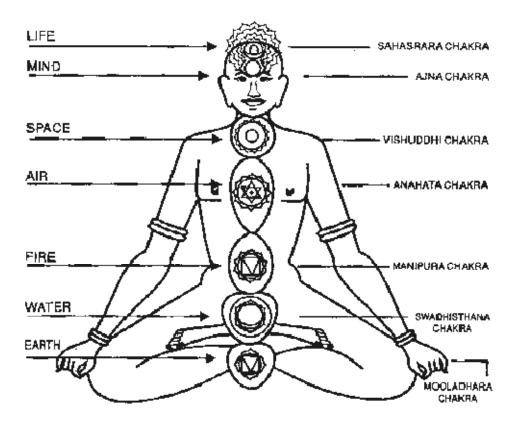


Figure 2: Position of elements in human body

DESIGN CONCEPT

The designing methodology which is adopted for any process of manifestation has its own rigour and logic. There is a strong relationship between the client, the designer, builder, specific site and the larger environ-ment. There are several concepts that have been identified by the tradition for application in the design process

It is stated that in all aspects of vaastu, yoga and ayurveda the personal serenity of the designer, teacher or healer is communicated in their work and through this it is possible to bring about a change in the consciousness of the other.

The order of the inner self manifests as the outer order and this in turn affects and shapes those who come in touch with it. Therefore, a design that is a manifestation of the inner order of an individual must influence those who come into contact with it. A house that has been built with a meditative response, out of a sensitive understanding of the environment and the inner order, will certainly sustain and

benefit the users in their own life. It is of utmost importance to remain attuned to the purity of the natural order for it enhances channels of creativity and brings about maximum joy and beauty to people. This is the basis of all art forms, be it preparation of food, making a garden, bringing up a child or any other. However strenuous or burdensome the path may be, the vaastu designer must be deeply meditative and offer the design out of an inherent understanding of the natural order.

Thus, the following aspects are of prime importance and the basis of a personal process.

Inner order of the designer-rigour, discipline, creativity are all parts of the personal endeavour.

Outer manifestation-a product which may be in the form of a theoretical concept or tangible form is manifested from the creative effort of the designer.

Harmony in the user-the product should be capable of evoking a harmonious response in the user. The pleasing nature of the manifested form should evoke a positive feeling in the user The basic commitment is that each of us, in our chosen mode of self-expression, brings out from within ourselves deep inward tranquillity and order. In the moment of expression the artist within us, in all seriousness, ponders and expands upon the quality of the creative impulse and attempts to give it a form that is as close as is possible to its pure origins. In architecture, the offering is for the enhancement of the collective consciousness, for the inspiration of the people who inhabit the built space, and the act of offering a thing of beauty to another becomes an act of sublimation and self-knowledge.

Concepts

The abstract theories of vaastu can be applied in the building practice in a variety of ways. There are no finite limitations to the application and what is required today is an understanding of the concepts so that infinite ways of employing them in changing contexts may be experimented by designers and promoters. The critical criteria for the design of individual buildings, building clusters, interiors, landscape and art objects can be distilled as the following:

- Understanding of the function, aesthetics and spiritual well-being of the space, or response to built space.
- Comprehending, the connection between the designer, occupant, uncontained space and the building, or form and centre.
- Natural environment and symbols.
- Significance of orientation.
- The importance of cosmology in the life of a people.
- The importance of shape, colour and size of the built form.

Response to Built Space

In the field of vaastu, three principles of design have been put forth which cover the entire field of design be it a building, craft item or article of daily use.

 Bbogadyam: The designed product must be useful, lend itself to easy application. For example, a house must have ample space for storage of articles and facilities for cleaning. A vessel must be designed in such a way as to hold water and allow for pouring out without leaking or dripping.

- Suhba Darsham: The designed product, whether a building or a vessel, must be aesthetically pleasing. The proportions of the spaces and material shape should affect the viewer in a positive manner. This principle covers the exterior of a building (or vessel) as well as the interior. Ornamentation and colour is just one aspect of aesthetics. The proportions of windows and doors the size of rooms, the rhythm of projections and depressions play a critical role in creating the aesthetics of form.
- Ramya: The designed product, whether a building for human habitation, a vessel or fabric, must be capable of evoking a feeling of well-being and contentment in its user. The measurements employed in the design, considered to be sacred measures, are juxtaposed in such a way as to create harmony in all those who occupy the space or use the object. We can say that built form creates a sympathetic vibration in the occupant. To calculate the proportions in such a way as to enhance the positive response in the viewer or occupant is the strength of the traditional design.

Form and Centre

In yoga, there are several methods that are recommended to the seekers for attaining well-being and serenity. So also in vaastu there are multiple ways in which the designer and occupant can create a space for experience. Within the manifested form many foci must be established in a space meant for many people But if the space has a specific activity, then gathering all energies in a single centre proves to be very powerful. The latter would be suitable for a place of learning, worship, manufacture and research. But in a home, a hostel, or neighbourhood, several centres, or shiting centres is most inspiring and motivating. These centres can be in the form of open spaces, common gathering spaces filled with herbs, healing plants and sacred water, or a religious centre.

Contemporary Application

The classical interpretation of the above mentioned concept has only a few variations. It is possible for us in the contemporary context to adapt this principle in varieties of ways which would be suitable for present-day lifestyles.

- A square or circle for the cooking and eating zone.
- A square or rectangle for the preparation and storage of food and clothes.

- A square or rectangle for sleeping, washing, bathing and resting.
- A square, rectangle or octagon for studying, recording, mind expanding, analysing and so on.

Orientation

Much work has been done on the psychological ramifications of choice-making, be it professional or emotional, mundane or metaphysical. In the traditions of this country choice-making in matters such as postures, locations and directions is explained in a unique manner so as to foster both individual and collective harmony country.

When each of us finds a location to sit in, stand lean back, lie down, crouch, climb on to, we invariably do so 'spontaneously'. It is almost as though there is no time lag between a required location and the taking of it. It is only in rare instances that we hesitate before taking up a position-perhaps due to anxiety, fear, uncertainty and so on. Even in a normal, everyday situation if we take the time to examine and reflect upon our intuitive choice-making, we would be very supprising to find a variety of factors actually influencing our conscious mind in its final decision. As we become more tuned to the process, we can also feel the various Influences and the intuitive responses from our system.

The geographical directions have played a very significant part in the design of individual buildings and aroup housing in the tracdition. Many mythological stories speak of ihe hero walking to the east to find a teacher, o running to the south to confront death, or setting oif toward the west in search of adventure, or walking withoue in any way interfering with the final choice to the north to become a healer. The physical environment affects human inhabitants in a direct manner The energies that exist in the environment, on the other hand, trigger the tribal memory patterns within each of us and create psychical pushes and pulls which operate subliminally. The influence of these subtle energy patterns is not felt immediately but has far reaching effects on the physical and spiritual health of a people.

Cosmology

Any given physical space can be perceived in its connections with primary energies. The eight directions the heavens above and the earth below are considered significant influences on the nature of growth and prosperity. The cosmology of the space depends a great deal on the dominant worldview of a people.

Mandala or Mandalam. The mandala is a representation of the cosmos through geometric forms whereby the living space is laid out in a variety of patterns. In the nodes and joints of the mandala, important locations are given for critical action within and without. The outer circle (or square) holds the gatekeepers, the inner the formless energies. This movement inward is a re-entry and rediscovery of the true spirit, and the outward movement a constant quest into the interface and relationship with the world outside, The inward is the timeless sublimation and the outer the conquest of kaala or the Lord of Time.

Fixed locations. When I walk into a space, where do locate myself? Is the consequence of my relationship with the room and its occupants dependent upon the location I take? Is there only one location available to me? Can I actually sense the location most suitable to me at different points of time, in different contexts? These are locations for the non-risk takers. But when the overall pattern of a space needs to be affected a much more comprehensive understanding has to be arrived at. What is the nature of the energy field that needs to be set up? Is it

- Human-collective specific or individual specific
- Task specific
- Result oriented
- Safeguarding wealth
- Expansion oriented
- Adventure, innovation based

The direction in which a building is facing, the configuration of movement, and the location of facilities can create infinite patterns for people to inhabit.

VASTU PURUSH MANDAL AND IT'S CONCEPT

Origin and Concept of Vastu Purush

In Shilpa Shastra the origin of Vaastu Purusha has many descriptions.

 Brihat Samita States that "the notion of Vaastu Purusha dates back to the Puranas when the battle between the gods and demons were going on and a Rakshasa was born, who became very powerful and began to harass the gods. The gods then joined forces, pushed him into the underworld (Patala) and sat on him, the Rakshasha then worshipped Lord Brahma, who was pleased with him and granted a boon, named him Vaastu Purusha and ordained that any project on earth would be proper only if Vaastu Purusha was appeased with prayers".

- Tantra Sara Sangraha says "In Varaha Avatar Vishnu's son is Vaastu"; therefore in this Vaastu is described as Deva.
- In Matsya Purana, Vaastu Purusha is specified as Rakhsasa. Vaastu Purusha, Vaastu Nara and Vaastu Rakshasa, all these are the different names of the same person.
- In Maanasara Vaastu Purusha is described as follows: Hunch back crooked in Vaastu Mandala covering all

the squares facing downwards to the east, right and left arms in south east and north east corner, right and left legs in south west and north west. The center part of the stomach was occupied by Lord Brahma.

The Concept of Vastu Purush Mandala

Mandala means a network, enclosure or a configuration. There are two types of Vastumandalas are important. Eighty-one, sixty-four columns are the main two types. hundred column Vastumandala is also there. Energy networks of desired objective are also expressed graphically in the matrix from in square, triangular, hexagonal, or octagonal grids. The square grid is the most common. Mandala is particular to time, place, person and purpose. It is a composite operative program chart of all necessary overlays.

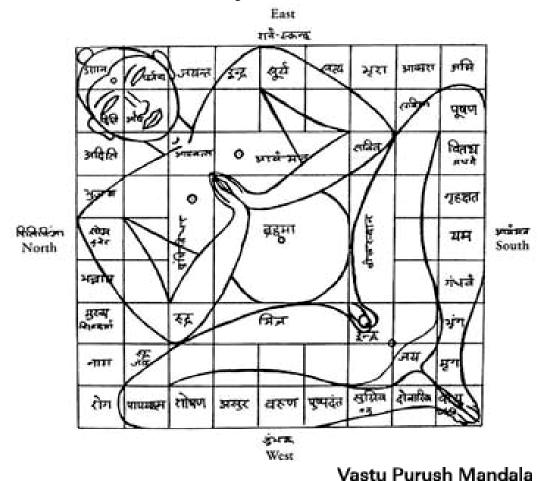


Figure 3: Vastu Purush Mandala

Applicablity of Vastu Purush Mandala (VPM) In Modern Time

Environmental Focus

Whereas the earth, as the surface of this world which supports the movements and the weight of our bodies, is round, the earth held in the embrace of the sky and subject to its laws is represented as fixed four-fold. The prithvimandala therefore, is a square mandala or chakra. I(Kramrisch, 1976, p. 29)

Shukla (1996, pp. 195-200) analyzes crafted by Mankad(1950) on the imagery of the gods on VPM furthermore, draws out the attention on the yearly and every day impact of sun on earth. He relates the 9 divinities on eastern side to the morning range of sun which incorporates bright and infrared beams at the corners and seven hues of

VIBGYOR in the center. He at that point moves towards the inside and allocates the 5 gods on the east of Brahman to the qualities of sun on his voyage toward the west. Sun at noontime is spoken to by the inside god, Brahman. In like manner he deciphers the 5 gods on the west of Brahman as the evening characteristics of sun and completes with the 9 divinities on the west as properties of sun at nightfall and night. The introduction of the vastu purusha is appeared with his head in the east and legs in the west in previous renditions of the mandala (Kramrisch, 1976, p. 57). Figure 3 demonstrates the later form where he lies corner to corner from upper east to south-west. In spite of the fact that this position is said to be changeless, the vastu purusha turns consistently (Kramrisch, 1976, p. 62). The turn of vastu purusha compares to various lunar months and delineates distinctive seasons (Kumar, 2005, p. 8).

Table 1: Parallel guidelines between vastu purush mandala and the livablity guideline developed by CSD,Brisbane,
Australia

No	Criteria	Livability guideline	Vastu purusha mandala
01	Orientation	Orient buildings to cardinal directions for better control of solar access	Orient buildings to cardinal condition as a rule with respect to sun path
02	Living areas	Towards the north or east where possible and open to a terrace, verandah or garden area.	Towards north and east with lighter and open structure. North east to have water source
03	Floor plans	Narrower floor plans with long side facing north to maximize daylight and air flow	A complete plan is a square one with a courtyerd in the center. The four sides can also be detached and constructed as a house. Here the order of preference for facing the house is east, north, west and south
04	Thermal mass	Use materials with high thermal mass to construct walls to maintain cooler interiors	South west corner to be heavy and tall to reduce the harmful heat of sun.
05	Water harvesting	Mandatory inclusion of rainwater tank	Site to have a sloping gradient to north and east. The open well or pond to be located in north-east.

Panchbhuta or Five Elements

The philosophical and technological development of Vastushastra is based on the concept of Panchabhuta theory. Pancabhuta is the root of all movable and immovable objects in nature. Akasha, Agni, Jal, Vayu and Prithyi are Panchbhutas.

THE ROLE OF FIVE ELEMENTS IN LIFE

Creation by Five Elements it is only through the five elements that the physical reality is created. However, if there is no desire for Creation arising in the Anandmaya Kosh, the Vigyanmana Kosh, or the Manomaya Kosh, the five elements will just remain as they are. By themselves, they cannot create anything. Now, we are talking about the real manifestation and how it is done and how it is controlled. Suppose an architect wants to create a building. It is the desire of someone to create a building; so, there is a purpose. Everything in whole of existence has some

definite purpose. Therefore, with the desire coming from the Anandmaya Kosh, and filtering through the architect, it passes into his Vigyanmaya Kosh. He understands the purpose and outlines the building requirements. simultaneously gaining ideas about how the building and the built-up space will be created. This filters further into the Manomava Kosh for execution through the contemporary, available (existing) knowledge. Then, an Energy system (the building and construction management) settles down with management. The physical reality of construction, with bricks. steel, other structures and With so many gadgets, gets manifested. After the building is created with the help 5 elements. They get established in the building. Once established, they take charge. Let's understand how how 5 elements creates, destroy and balance themselves.

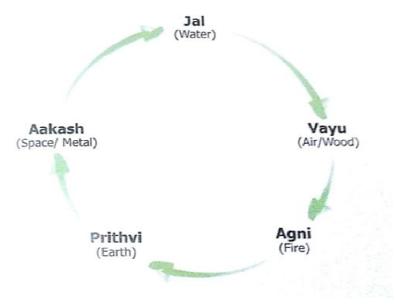


Figure 5: Panchbhoot

INVESTIGATION, SELECTION AND ANALYSIS OF SITE

Investigation and Selection

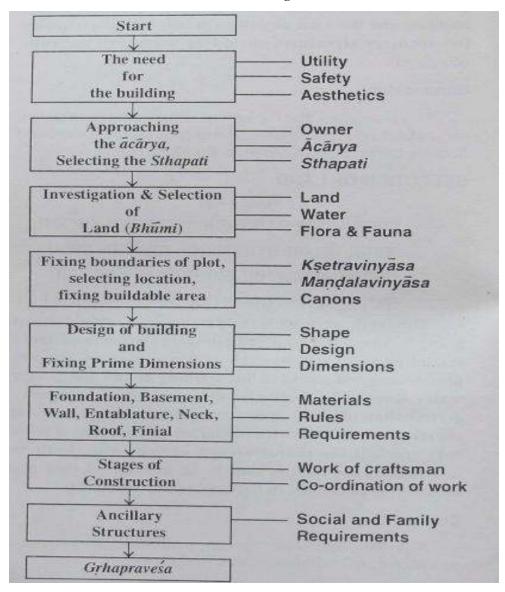
Prayer to Deities

In the very first stanza of manushalayacandrika, the author invokes the blessings of the presiding deities of the temples in and around his native place. This is a custom followed by all authors of Samskrt texts in the early days. The author was born at Tirumangalam near Trprangot temple in the present Tirur taluk of Malappuram district of Kerala State. Since he begins the narration with the invocation of the Supreme Being manifested as the twin deities of Narasimha and Krsna at the Rajarajamangala (now known as Rairamangala) temple, it is to be assumed that those two deities were his istadevatas (beloved Gods). The temples referred to in the second stanza are all near and around Tirumangala. Different deities like Siva, Mukunda, Hanuman are worshiped in these temples. The author gives equal reverence to all of them. Since it is customary to

invoke the blessings of Ganda (who clears all obstacles) at the beginning of any auspicious act, the author invokes the presiding deity (Ganega) of Tirumangala (fig.01.01). The statement that he is writing the book with purity of mind (itmagudhya) indicates that his objective is only to impart knowledge to the children (uninitiated) and not to gain glory. favour or wealth. In one version of the text, the word. itmabudhya. is used in place of 'atmasudhyd. In this case, it

can be interpreted that he is writing the book not in obedience to the direction of some patron (as was vogue in those days) but out of his own free will. Both versions mean that he has no selfish motive in writing the book. The book is written in the great and noble Indian tradition of giving knowledge for the welfare of the world without any selfish motive.

Logic Flow of Construction



Sites to Be Avoided

Odd shapes are not good. A rectangular shapes with south-north dimension greater than west-east dimension is preferred so that a square can be easily marked

from it for the site analysis based on padavinyasa or vithivinyasa described subsequently. The analysis of the plot is done generally on the basis of square grids (pada) or enveloping squares (vithr). The first method is called padavinyasa and the second one is known as vithiVinyisa. For this, the plot should be square. Plots which are not square can be analysed by these methods by taking a convenient square plot in it or, in the case of small plots, by taking the largest square that can be inscribed in the area. Thus it should be taken that the prescriptions with regard to the shape given in this stanza is only a general directive and not a strict condition.

The presence of ash, cinder, bones, hair etc. indicates the probability of the land having been used for sacrificial altars (yagabhurni) or as burial ground or as dumping ground. Vermins and anthills can cause trouble either due to the attack of vermins and termites or due to bad foundation conditions. Depression in the middle will cause stagnation of water. Cavities will make the foundation weak. Foul smell may be due to decaying of organic matter and indicates an unhealthy filled up area. So sites with all these characteristics are to be avoided (Ref.01.09). Since the building should face only one of the

cardinal directions, the sides of the plot should preferably be along the cardinal directions. Plots with sides oriented to corner directions (vidik) are not auspicious. Thus the detailed prescriptions given in this stanza are practical hints to avoid lands which cause problems in analysing and developing them.

Module for Deciding the Width of Vithi

The analysis of the site by concentric enveloping regions (vithivinyasa) is presented here, as distinct from the analysis of site by grids (padavinyasa). In vithivinyasa, the vastu-mandala is considered as a symbolic representation of the cosmos. The central region, called Brahmasthana, is the terrestrial space. It is surrounded by eight envelopes (vithis or avrttis) as explained further. The width of the vithi is one danda, which is a proportionate measurement or module. The width will depend upon the size of the plot. The unit for deciding danda is the height of the owner. For larger plots, the danda can be 8,9 or 10 times this unit.

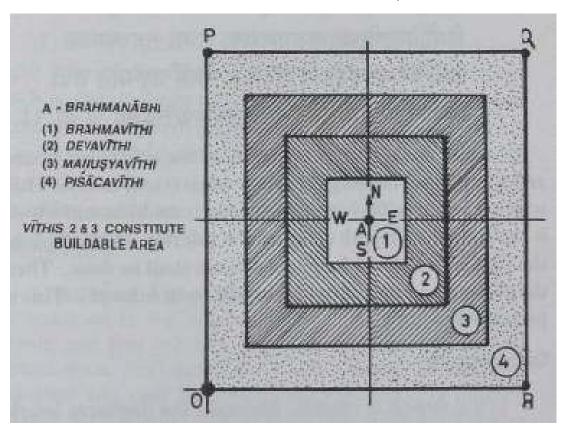


Figure 4 Constitution of buildable area

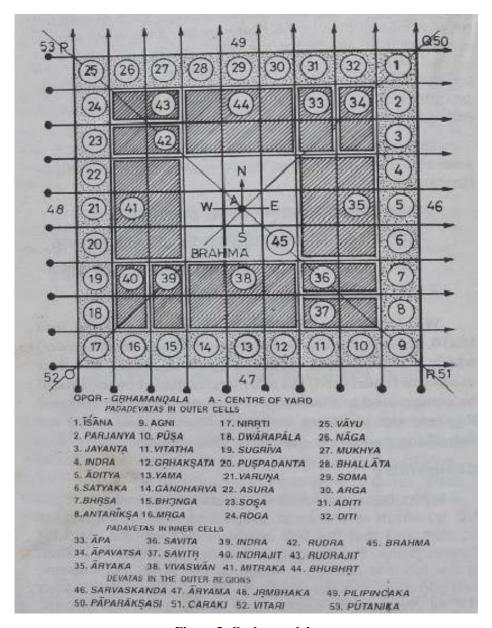


Figure 5: Grahamandala

CONCLUSION

Vastu shastra is not just a science of building but a huge subject which covers various aspects of nature. Practices and concepts which are explained in our ancient text, are writtern by some of the great Indian saints. They must have writtern them, after a long oberservation of nature. Practices described here would not be suitable for us, but they give us a way to reconnect with nature.

The method of dimensional system is very much different from us, but they are very much connected to nature. There are many principles in the Vastu Shastra science of architecture that are basically designed regarding the environmental features which through the lack of knowledge have considered symbolic or ritualistic by the later generations.

However the observation of natural phenomena by the ancient philosophers leading to the discovery of laws of nature and their impact on human health is the root cause of the application of the principles of Vastu and its similar systems of beliefs in other cultures as the sum knowledge, experienced by many generations. Since it is highly believed that the architectural forms have been proposed by the environment and as a response to its orders, which share similar patterns in regions with similar climatic configurations, the rules and principles of Vastu Shastra can be discovered and applied not merely as a superstitious symbolic guideline, rather as a proper example of using the architectural forms in the context of the environment. Although the technological advancements of today make it possible to warm and cool any area regardless of its climate, the proper use of architectural forms and patterns may lead to sustainable design which decreases the rate of energy consumption as well as making a proper micro climate compatible with human needs which can also stand in complete harmony with the surrounding environment.

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