

Relevance of Vaastu Principles in Contemporary Architecture of India

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Abstract - In Architectural Practice, most clients demand their design of Buildings/Residences & other built environment to conform with Vaastu Principles and its dictates. By and large every budding and experienced architect looks for Vaastu tips on the internet immediately which normally is a statement without any explanation to it. This is an effort to Justify, highlight & present some of these Vaastu Principles logically and rationally highlighting its relevance to the Contemporary Architectural Practices in India.

Vaastu Shastra can be understood as an Ancient art & occult science of placement of objects concerning the cosmic energy which has a great effect on our lives. It has been observed and proved by many sages and modern architects that the structures which are planned and constructed according to Vaastu principles are more auspicious in which positive energy synergizes with mental, metaphysical & functional well – being and happiness of inhabitants.

The **Panchmahabhutas**, the five elements of nature explored and are taken as medium of Vaastu. The fundamental principles of Vaastu with scientific reasons are analyzed together with technical aspects in contemporary residences, apartments, commercial, institutional, and at the same time offering alternate affordable arrangements which are also in conformity with Vaastu. The merits in our present conventional method are highlighted and their Vaastu remedies for safe and pleasant living are suggested in this paper.

Key Words: Vaastu, Contemporary, Panchmahabhutas, Conventional

1. INTRODUCTION

Vaastu means to dwell and Vidya means science. So, Vaastu Vidya is the sacred science related to designing and building houses. Vaastu is rooted in Vedic philosophy, which emerged around 4500 years ago. Vaastu aims to balance between the home (the microcosm) and the cosmos (the macrocosm), bringing health, wealth, and happiness.

According to Vaastu, the external and the internal are interchangeable for the underlying energies that govern the elements, such as wind or fire, which are the same as those that control the organs of the human body. However in recent times, the essential connection between the two has been forgotten, modern humankind has dissociated itself from the fundamental forces that govern the universe. [1] As a consequence the society has become scattered and restless, alienated from the natural world. The chaos in and destruction of the earth’s delicate eco-system and the rapid extinction of species are manifestations of this dichotomy.

2. VAASTU PURUSHA

It is mentioned in Matsya Purana, (a Vaastu text) that one weird personality emerged from a drop of Lord Shiva’s sweat when he was fighting a war with Asuras (devils). This weird person was cruel and when he granted the boon of eating anything from the three worlds by lord Shiva. He devoured everything on his way, so all the deities were terrified and went to Lord Shiva. Lord Shiva got angry and pressed the weird person under his foot till the time war was over. The weird person when surrendered himself to Lord Shiva, he named him as Vaastu – Purusha. [3] He ordered him to go on earth and reside there in every place/ house and ordered him that he would bless every occupant with health, wealth, and prosperity and in return, the occupant would worship him and make and make him lie comfortably in the house.

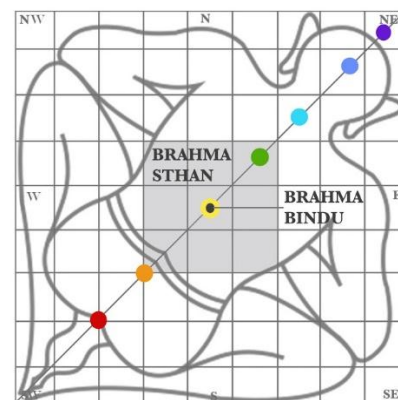


Fig - 1: Vaastu Purush

Source: www.bharatiyaVaastushashtra.com

2.1 Vaastu-Purusha-Mandala

The Vaastu-Purusha-mandala is the clearest model of the universe and provides the basis for architectural design.

Vaastu Purusha Mandala is an important factor in constructing the building. As a rule, its shape is square, which is the fundamental form of Hindu architecture. [1]

The grid-square form of Vaastu-Purusha can be converted into a triangle, hexagon, octagon, and circle of equal area and retain its symbolism. [8]

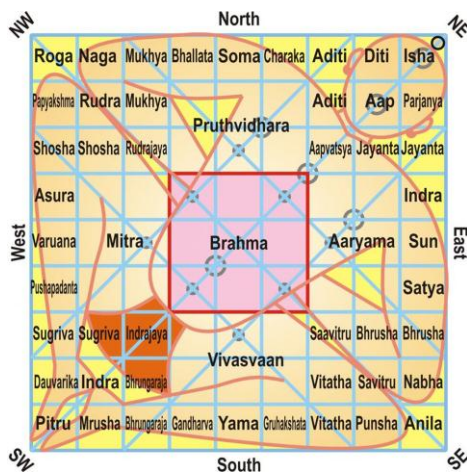


Fig - 2: Vaastu Purush Mandala & Nomenclature

Source: www.bharatiyaVaastushashtra.com

2.2. Personification of Vaastu Purusha

- NE - Head – Sensitive & Control Sun.
- N & E – Arms – Active & Live.
- S & W – Legs – Rest & Movement.
- SW- Feet – Bath & Excretion.
- SE – Knee & Elbow – Costume & Valuable.
- NW - Knee & Elbow – Grains & Eatables.
- Centre – Navel – O.T.S & Plantation.

3. THE CONCEPT OF PANCHAMAHABHUTHAS - (THE FIVE ELEMENTS OF NATURE)

The five elements of creation, known as the panchamahabhuthas. This level of alignment with nature enhances universal life-force energy, within a home or other building. Vaastu Shaastra emphasizes constructing buildings based on the principles of the Five Elements or Panchamahabhoothas and it is believed that each direction is guarded by a heavenly force as air, water, fire, earth, and space. Our life is affected by each of the above-mentioned components of life. [4]

- **Space:** Cosmic radiation
- **Fire:** Solar radiation

- **Air:** Wind energy
- **Water:** Gravitational attraction of the earth
- **Earth:** Magnetic field & gravitational force of the earth



Figure - 3: panchmahabhutas

Source: www.pinterest.com

Since the Ancient Indian principles of architecture and engineering are based on observation of nature, it can be considered as a fundamental or core principle. They can be applied in construction techniques of any era. Scientific knowledge of these principles and their application in modern construction can increase efficiency and give better results.

4. MERITS OF USING VAASTU SHASTRA IN SPACES

4.1. Relief from Discomfort: Vaastu-Shaastra can be used for better comfort. The discomforts owing to the failures and the consequent feelings can be managed by learning to feel comfort in the right way. Vaastu can surely provide people with the intellectual support and the comfort they need when they are trying to get over some ill health or difficult time.

4.2. Inner uneasiness: Existing things in a building can be modified by Vaastu Shaastra. one must experience to realize the positivities because of duly considered changes following Vaastu Shaastra. It is an acceptable and unique lesson that can teach people a lot about their inner strength and how the same can be raised to a different level. Adequate and proper outer spaces are needed to learn more about the inner space in one's life, and to have a pleasant & positive physical atmosphere.

4.3. The lift of inner power: Vaastu Shaastra is the unique and authentic science to ensure a comfortable life both by physical and mental health, for the living people inside a building or an enclosed space. Cases & circumstances where there is no synergy between the built and unbuilt spaces with inner space is reflected in the performances of people

who inhabit such places and even flora and fauna that exist there. The strength of the bodily and the spiritual world are dealt with in Vaastu Shastra, which one can learn and realize when adopted.[9]

4.4. Improve the relationship with people: The peacefulness inside a building improves the relationship among the people living inside and this is possible by Vaastu Shastra.

4.5. Enhancement of spiritual knowledge: The interest and therefore knowledge about the beginning and end of life and spirituality can be improved by proper employment of Vaastu Shastra principles/dictates.

4.6. Availability of Air and Light

The essential needs of the dwellers of the house are the ample amount of air, light, etc., inside the house.

4.7. Enhancement of spiritual knowledge: The interest and therefore knowledge about the beginning and end of life and spirituality can be improved by proper employment of Vaastu Shastra principles/dictates.

4.8. The Total peace: The peace of mind and consequently the peace of inner self is related to Vaastu which evokes the five elements. The energy needed for a day inside a dwelling house can be achieved by making some alertness to repel the negative thoughts. This can be achieved by implementing Vaastu Shastra inside a building. [9]

4.9. Simple in usage

The maximum flow of things which will give positive things in buildings can be achieved by designing according to Vaastu Shastra. This is the advantage of Vaastu Shastra. Hence the life inside a house for those who live does not have any tough time if Vaastu Shastra is adopted during the design of the building.

5. PRINCIPLES OF VAASTU – EXPLANATIONS AND PRACTICES IN CONTEMPORARY ARCHITECTURE

- **Vaastu** – Rituals – Blowing Caunch, Firing Camphor.
- **Bhumi Chayan** – Site Selection
- **Bhu Pariksha or Bhumi Parikshan** – Site Analysis & Reconnaissance Survey.
- **Bhumi Samgrah** –Soil Samples Collection & Examination.
- **Dwiknirnaya** – Site Orientation.
- **Dwar And Stambhas** – Estimation Of Doors, Windows & Pillars.
- **Taru Aharna** – Collection of Timber.
- **Vriksharoparna** – Plantation. (Landscape)
- **Padavinyasa** – Grid Determination and Site Planning.
- **Aya Nirnay** – Determination of Auspicious Time.
- **Chinha Nirupan** –Symbolism in Architecture.

(Bench Marks) [10]

- **Vastushilp Sutra** – Evolution of Concept.
- **Shala Nirupana** – Architecture Planning and Detailing.
- **Bhavan-Angas** - Structural and Services Component.
- **Shanku-Sthapana**- Calculation and Dialing Of Cardinal Points.
- **Hastalakshana** – Anthropometrics and Units of Measurement for Buildings.
- **Bhu-Khanan** – Excavation for Foundation.
- **Shilanyasa** – Structure.
- **Diknirnaya** – Site Orientation.
- **Maana** – Proportion of the Building.
- **Aayadi** – Dimensions of the Building.
- **Aayaadi Sadvarga** – Six Canons of Vedic Subject
- **Chanda** – Aesthetics of the Building.
- **Pataakaadi** – Sadschandas - The quality of the building, its aspect and prospect etc.

6. LOGICAL RATIONALE BEHIND VAASTU PRINCIPLES AND ITS RELEVANCE TO CONTEMPORARY ARCHITECTURAL PRACTICES

6.1. Site Selection and Sub Soil Exploration (Bhu - Pariksha)

The shape of the site should be rectangular and in proper proportion.

Logical Rationale:-It defines a good structural grid and provides a good aesthetic. It is very difficult to plan in a narrow site.

The location of the site should not be near the crematorium, temple, or near any public place.

Logical Rationale: - The site should be selected far from a public place to avoid conflict in day-to-day life.

6.2. Site Planning (Padavinyasa)

Each room should be positioned so that it faces the Sun at the time of the day when it is most likely to be used. The arrangement of components in the house is described by Vaastu Purusha Mandala.

Logical Rationale: Earth's energy field and the eight directions are synchronized to create an atmosphere beneficial to humans. It is derived from the movement of the sun and human activities and it is symbolically represented by presiding deities of each activity as described above.

6.3. Architectural Aspect (Shala Nirupana)

Height to Breadth ratio is important for the pleasant aesthetic of structure; guidelines related to it are given in Maana. When the Height to Breadth ratio is between 1.5 to 2 the structure will appear stable and aesthetically sound.

Logical Rationale: It is proven that the best ratio of length and width of the rectangle is 1.618 called the golden ratio. Moreover, Ayadi and Chanada provide some guidelines for measurement and aesthetics of structure as stated above.

The location of borehole should be in North-East or North-West direction. [2]

Logical Rationale: - As major construction should be done in South-East direction considering the movement of the Sun, boring in North-East or North-West direction will not affect the foundation of the major part of the building.

6.4. Construction Aspect

The direction of excavation should be from North-East to South-West (Return Monsoon).

Logical Rationale: The North-East is generally kept lower than the South-West at any time of the construction. This is to ensure a flow of light and wind at all times from the North-East the rest of the construction if the North-East is lower.

6.5. Strength and Earthquake Safety

The irregular shape of the building is prohibited.

Logical Rationale: - Asymmetric building plan may lead to twisting of building under lateral load effect. Irregular shapes of buildings are made regularly by the provision of a crumple section.

It is preferable to have 9 divisions (3×3) in plan building.

Logical Rationale:- Equal span concept provides symmetry in plan. In modern practice, if this concept is not possible to implement but the concept of symmetry of loading should be maintained to avoid torsional effect under seismic loading.

There should not be a large opening at the corners of the building.

Logical Rationale: Openings should be as small as possible and should be located centrally for load-bearing structure. Openings at the corners weaken the structure and make it susceptible to damage due to seismic loading forces.

The building must be firmly connected to the ground.

Logical Rationale: Construction of soft-story for parking cause sudden change in stiffness in a vertical direction. Building having soft-story will not perform better during an earthquake.

The location of the column should not be at Nabhi Sthana of Vaastu Purusha mandala.

Logical Rationale: - Nabhi Sthana is the center of gravity of Vaastu Purusha mandala. So, the column should not be erected at the center of gravity for better torsional rigidity of the structure.

The shape of the column should be square or circular.

Logical Rationale:- square and circular columns are strong about both axes. [4]

6.6 Lighting

Uniform distribution of light is suggested for a hall, together with the use of controlled lighting to illuminate focal areas in the lounge.

Logical Rationale:- Our Earth is pivoting on a slanted axis turning & revolving around the sun ever since the solar system came into existence, creating four seasons for almost all geographies requiring differential illumination within & outside the built spaces in different times of the year.

7. APPLICATION OF VAASTU IN ARCHITECTURAL PRACTICES

If the house is designed as per Vaastu, proper ventilation, lighting, and privacy would be ensured in the building. Vaastu is essential for improving the quality of our lives. Vaastu does not make any promises for a problem-free life but it provides the direction of possible relief. One's consciousness of direction gets baffled in daily life when one lives in a building with false positioning, not built according to Vaastu Shastra, resulting in expected physical, mental, and activity instabilities of all kinds and strain.

For residential buildings, Vaastu Shastra will blend the natural surroundings to the constructions and also creates a stress-free and supporting environment. The individuals in a house get positive effects by bodily, mentally, and divinely if that house is constructed Vaastu principles also. [9]

Vaastu principles are being inculcated in an architectural structure the energy flows in a usual way as it should otherwise without any fault. It combines with the elements of nature and cosmos to balance with the man and material.

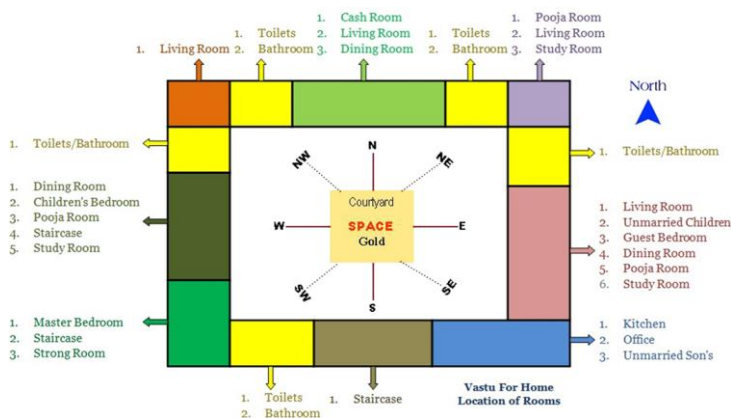


Figure 4. Application of Vaastu in Planning of Residence

8. ROLE OF CARDINAL DIRECTIONS AND PLACEMENTS ACCORDING TO VAASTU & LOGICAL RATIONALE BEHIND THEM

Cardinal Directions and orientations play an important in Vaastu. There are 8 Cardinal directions and each of these covers 45 degrees of area. These directions are dictated by sunrise and sunset or *Uttarayan* and *Dakshinayan*.

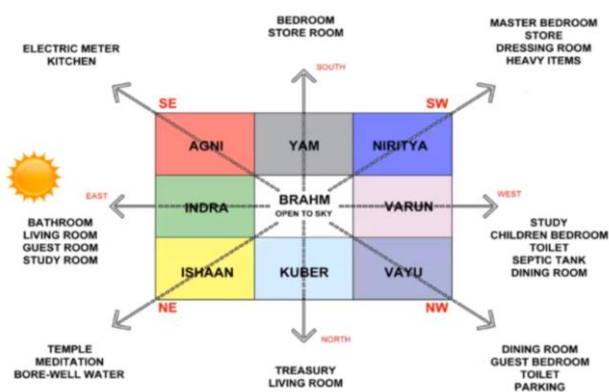


Figure 4. Role of Cardinal Directions in Vaastu

8.1 East Side – Entrance/Porch/Admin./Study Room

On the *eastern side*, it is advisable to construct the main entrance of the building, providing well, water-fountain, verandah, store-house, garden & basement, etc. This site must be kept at a lower level.

8.2 South-East Corner – Kitchen (SE)

In the *south-east corner* of the house, aagneyakona it is advisable to plan the kitchen. Adjacent to this corner activity connected to cooking can be planned. This site must be kept at a higher level.

Logical Rationale:- The sun's rays (cosmic rays) first reaches the east corner of the earth and the ultraviolet rays in it kills the germs collected in the kitchen overnight, keeps the food free from contamination and avoid small insects to grow inside the kitchen, hence kitchen is located in the South-East corner.

8.3 South-West Corner – Bed Room (SW)

At the *southern side* of the building, the master bedroom can be placed along with the bathroom placed in the *south-west*. This site must be kept at a higher level. The study room can be given on the *south-west side*.

Logical Rationale:- The master bedroom has to be in the South-West direction. As per science, the North-East corner is filled with a lot of positive energies, the opposite of North East is the southwest corner. So the positive energies flow from NE to SW corner where the master bedroom should be located for its inhabitants to harness this energy and keep an eye and control on the entire household as its also placed on the higher level of the entire residence.

8.4 West Corner – Dining Room (W)

To the *western end*, the dining room, wall, staircase & gardens are appropriate. This site must be kept at a higher level.

Logical Rationale:- Eating, facing the south will cause restlessness since the body will be affected by repelling forces. The height of the dining table has to be 2 ft. 8 inches so that all people used to sit and eat without any disturbances. The dining table has to be in the center of the room, away from the walls, so only everyone's chair be pulled out easily for sitting.

Logical Rationale:- Overhead water tank is the west side of the building.

This equalizes the strengths in the building. Overhead tanks can be painted inside with light colors and outside with dark colors for easy cleaning and for absorbing UV radiations respectively.

8.5 North-West Corner – Dining Room (NW)

At the *north-west side*, food storage, animal home, toilet, water-fountain can be provided. This site must be kept at a higher level.

Logical Rationale:- The Bathroom has to be in the North-West or West. The infra-red rays of the Sun get protruding in the West direction and so the Westside is hotter, especially in the evenings. Hence the bathroom in the West help to block the western sun radiation to other parts of the house, keeping them comparatively cool.

8.6 North Corner – Entrance/Living Area/ Treasury (N)

To the *northern side*, the main gate, verandah, staircase, well, water pump, water storage, property storage, garden, temple, store, the chest can be provided. This site must be kept at a lower level.

8.7 North East Corner – Temple/Worship Place (NE)

At the *north-eastern end*, the medicine store can be planned. Further, the temple, well, water storage, water pump, storage, and gardens can be placed. This site must be kept at a lower level.

Logical Rationale:- The North-East is the best directional location for an underground water tank. The morning sun makes sense to have the well and the reservoir nearer to each other in this corner.

8.8 Central Area - Brahmasthan (C)

The central segment, Brahmasthan is best kept vacant or lightly occupied. Care must be taken to ensure that no stale or dirty things are placed in this part of the house. [9]

9. MISINTERPRETATION OF VAASTU PRINCIPLES (MISCONCEPTION AND MISPRONOUNCE MENT)

- Fire False Hood.
- Generation Extinction – Alarm.
- Vaastu In Commercial – Unscrupulous Commerce.
- Entry And Layout Recommended For Multistoried
- Orient Beds Not The Room.
- Well Drawn Water V/S Terrace Tank Tap Water.

- Circular Bifurcated Stairs Movements.
- Disposition of Masses As Per Climate.
- Meet Modern Life Style Not Ancient Rudiments.
- Vaastu is not a style of Interior Design.
- Mirrors are not used in Vaastu.
- Vaastu is not the same as Feng Shui. [10]

10. OUTCOMES AND SUMMARY

The Vaastu Shastra principles are not just mythological but are also based on the various scientific reasons which affect the planning and construction of various structures like homes, offices, dwellings, etc.

Vaastu Shastra has over some time become more pragmatically oriented and this has caused it to also become more empirical.

It is clear that many of the principles and themes found within Vaastu Shastra resonant with those of many well known contemporary philosophers of Architecture Practice & technology. This paper is not just a profound analysis to ascertain the scientific reasons behind some of the Vaastu principles but also to understand and explain the logical reasons behind the mythological dictates.

Vaastu Shastra remains an available and powerful way to vet science and technology within the context of design to create environments for human beings that are in harmony with nature, cosmic forces, and the universe.

11. CONCLUSION

The Vaastu Shastra principles are not just mythological but also based on the various scientific reasons & logical rationales which affect the planning and construction of various structures like homes, offices, dwellings, etc. Vaastu-Shastra has over time become more pragmatically oriented and this has caused it to also become more empirical. It is clear that many of the principles and themes found within Vaastu-Shastra resonant with those of many well-known contemporary philosophers of Architecture Practice & technology. This study profound analysis only one can find the logical rationale behind some of the few principles of Vaastu-Shastra. Vaastu-Shastra remains available and powerful way to meld contemporary architecture within the context of design to create environments for human beings that are in harmony with nature, cosmic forces, and the universe.

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