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Practical Application of Vastu Shastra in Indian Residential Building

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Abstract:

This paper presents various application of Vastu Shastra in Indian Residential Context this concept of Vastu has been given by ancient people for designing and planning the layout. This paper discussed the problems which current overpopulated cities are facing, the drawback which can be noticed as a failure in Indian architecture, Vastu balances the architecture, science and nature together, Vastu Shastra is also applied in Construction Engineering it not only has religious symbol but scientific importance too. Indian religious places such as temples, Forts and palaces are also built by vastu vedic principles as we know Architecture of India is connected with culture, religion and history but gradually with time its decreasing and loosing its importance. This paper explains various architectural method which are practiced in India incorporating modern values designing a place where person lives or work. There are certain rules and regulations which are to be followed for vastu principles further this paper discusses various principles which are also used, fundamental principles and vastu purusha mandla history is also discussed various scientific reasons are also given for practicing vastu principles.

Keywords: Vastu, Application, Material, Architecture, Indian Residential Buildings, ScientificReasons

Introduction

Vastu is an art of Astronomy, Astrology and Science. It is one of the ancient technique which is oriented from Indian civilization. It mainly deals with science of Architecture and tells how building should be planned to attract more positive energy [1][7]. We can bring prosperity, happiness, positive energy, peace and development by flowing the Vastu Shastra properly [1][5][16].

Vastu help us to make our life better and secure from the negative things. Vastu is the science of direction which combines five elements of the nature namely earth, water, fire, air and space. This balance them with man and material. [2][4][6][7]. This five elements are called as PaanchBhoota. So entire universe is made of these five elements and even a human body is made of with the same five elements. Our sages and ancient people knew the secret and their characteristics such as Magnetic field, gravitational field, velocity of wind, direction, UV rays, Infrared Rays and so on. [3][9][10]

Ancient people used to design city, temple and palaces according to Vastu creating the harmony where all elements are balanced with each other. Vastu is based on various energy such as earth energy, wind energy, and cosmic energy. Utilizing this energy best in construction will bring the fruitful result[11][12].

History of Vastu Shastra

This ancient Indian architectural knowledge is as old as the Vedas, which they belong to the time between 1500-1000 BC. In the Rig Veda, where the guardian of the house (Vastospati) is, the first textual evidence for VaastuShastra is found. [14] Most of the materials were produced in the sixth century BC to the sixth century AD was lost and only fragmentary sections remained in the sixth century AD. The Subsequent Works of Vaastu Vidya. Any of the currents Vaastu- Shastra, the Schools of Nagara and Dravida, imitate each other in Many fundamental features point to their common indigenous creation and point to their common Inside the Subcontinent of. The Famous Accordingly, the architectural practices of Vaastu-Shastra are found in western traditional practices. India-wide architecture.[15]

Among the Vedas, the principal source for Vaastu-Shastra is the Sthapatya Veda . Explicitly addressing architecture in subordination to the broader Atharva .

Veda. Vedic interpretation, such as that found inside the Vaastu, has been retained. By listening, memorizing, and the written texts themselves.

Importance of Five elements

- 1. Earth : Earth does not mean only planet but clay and other material also exist on it surface. The very first profession of human civilization such as agriculture took place because of this land. Earth is also called as Mother Earth because It also worship as deity. [17]
 - Before every construction work earth is worshiped for good fortune. All necessary construction work and martials are provide by the earth itself. Therefore proper care should be taken care of by selecting land or buying Land.
- 2. Water: it is necessary for all living things. We can not live without water. water is just used for the cooking purpose but also for washing clothes, taking bath and transportation. Modern city like Mumbai, Chennai, Kolkata, New York, London, Sydney are located near the shores of Sea. So Human should not face shortage of water where they live in. [17] In Vastu place of water should be selected in such a way so It should be getting ample amount of water. Once should select the place for the construction in such a way that water should be available without fail as No body can survive without it.
- **3. Air:** Human can not live without air . It is top most essentiality for human life. In form of breath we in heal air. Air cant be seen although we can feel them . We feel them through the nature by swaying of the planets and tree. It is also called as breeze when it flows with pressure and velocity.[17] We cant see them through our eyes but we can feel them around . Because of the air we can breath and live, Without the Air no body can survive at all. Oxygen is very important element of the air as we in hail it and ex hail the CO2. It is debatable to priories the elements of the air as every elements of it having their own importance. Care should be taken in house in allow pure air to let in [17] .

- **4. Fire :** Fire provides heath and light but It also produce various energy like solar energy. Solar energy has made life easily in earth. Fire is used in cooking as well. It is considered as a symbol of purity and development. We have tradition of lighting the lamp in temple and other religious places . Fire is also worshiped as a God during Yagya and Hawan. It beings strength and courage in all human beings. Sometime it gives rice on the other hand too much quantity of it can be disasters . So it is important that fire elements prescribed in quantity [17].
- 5. Sky / Space: Formation of universe took place because of Space. These galaxy, starts and Planets are present due to Space. Space brings the life in the earth. It's very important part of the Punch Bhoota in Vastu. The space protects us from the harmful ray of sunlight which can cause the harm to us. Space brings the Rain, as well which is the source of the drinkable water. Rain is also important for the harvesting.[17]

Direction also play important role in Vastu Shastra. Because of the knowledge of the direction subject like Geography etc came to the picture. Direction are useful for human as well as animals too. Birds flies thousand of kilometer without loosing scene of direction. Birds and animals go to the various palaces and come back to their respective home with the help of the direction. [20] All these phenomena shows direction is very important in earth.

In Vastu there are eight direction out of which four are coordinal direction. This coordinal directions are [22]

- 1. East
- 2. West
- 3. North
- 4. South.

And rest four sub coordinal directions are formed by by these four directions.

- 1. North west
- 2. North east
- 3. South west
- 4. South east.

East Direction: It is auspicious direction. This direction belongs to God Indra. God Indra is symbol of prosperity. There should be more open space is east direction and blockage should be avoided. If that direction of house is hired It will reduce the flow of the energy so esteren side direction should be lower. Any blockage to this direction shall cause problems for male of the house. It may also stop birth of the male child. There for the residence of this house will face negativity. Other god of the Eastern direction are Eeash , Jayant , Suraya , Sataya , Agny etc . [22][23][24]

West Direction : West direction brings name and fame. Lord varuna rules this direction . Lords varuna brings rains and Rains always have positive impact on living being. In west direction most spaces are kept open. It is less higher then other direction. Failures of this direction will bring less name and fame for the residence . If west side is kept higher and heaver , success and prosperity will knock in and residence will raise and befitted in their industry[22][23][24]

North Direction: This directrion is of lord Kuber who rules prosperity and wealth. Northern part should be kept open and airy. If houses are facing north direction, North place will be given for verandah. Guest room can be places in the northern part of the house. [22][23][24]

South Direction: Lord yamraj rules this direction. Southern corner of the house should always be higher. Leaving min open space will bring auspicious result. Min door and windows should be kept in this direction. South direction is related to the ladies. Failure to this direction will create problems for lady owner of the house. Lord yamraj is God death and deconstruction. [22][23][24]

North East Direction: This direction iss called as eesarya. Lord of lord is owner of this direction. Effects of Lords Bramaha can be seen in this part. This part should be kept light, Toilet and store rooms should be avoided in this direction as we know eastern part is related with Water elements. Water storage is idle for this place. If north east corner s missing then It will invite Many demons and devil in the house. People will suffer from chronic illness, financial loss. [22][23][24]

South East Direction: This direction is Lord Agni Direction. Fire rules this direction. Fire related place like kitchen should be constructed here. As we know fire and water are opposite in nature, so if we place water in south east direction then It will Bering negative result. So water tank should not be kept in this area. If this side is larger than north east area it will cause robbery. Performing fire related prayer is best for this direction. [22][23][24]

South West Direction: This direction is placed between southern and western side. Pitra is lord of this direction. This direction is related to behavior, character, long life and quarrel. If this direction is kept open negative energy will enter. This direction should be heaviest and highest compared to other directions. [22][23][24]

North West: This angle is situated between north and west this directions belongs to air. As we know air is must for all living beings so this portion should be kept open and airy this direction is also related to business and mind if this place is planned accordingly then there will be mental peace and growth in business [22][23][24]

Vastu shastra has one more major element called **Vastu Purusha Mandla** which comes whenever we talk about vastu planning these is a fascinating story from ancient books of how this vastu purusha came, who is he, and how he became basis for VastuShastra [20]

So here is the fascinating story: Ones there was fight between Gods and Demons in this fight Lord Shiva represented the god and Andhaka Asur represented the Demons during war sweat drop of Lord Shiva fell on Earth from there this weird personality creature emerged. [15][18]

This creature was cruel and started destroying everything on Earth all deities were annoyed with this kind of his behaviour so they all went to Lord Shiva for the solution listening to whole story Lord Shiva got angry and pressed this creature on the ground by his foot till war got over

.This Creature then surrendered himself from then this creature was named as Vastu Purusha he was also ordered to go on earth and reside at every homes and bless the residents with health, wealth, luck and fortune and in return residents will also make him to lie comfortably in their house. [15]

Since then Vastu purusha is a scared geometry in square or circular form that represents graphically what exist graphically rather then what we really want to perceive .

Importance of Vastu Shastra

- 1. Harmonizing Nature's Energy: The source if the Harmonizing Nature's Energy are belowmentioned:
- Sun
- Moon
- Light
- Thermal
- Earth
- electric
- Magnetic
- And cosmic energy

these energies harmonized by Vastu and bring the development, positive energy, prosperity, perpetual properties etc[20].

- 2. Monetary Blessing: Correct way of using the Vastu principles at house can bring the wealth, financial happiness by unblocking your fate to great opportunity. Exponential monetary can bring growth in our life. We can get the financial dependence. We need to have these thingsimplemented properly. [25]
- 3. Growth in your chosen endeavor: Vastu Science can fix the issue like growth of the chosen endeavor. It's remove the obstacle of the path by bringing luck and positive energy at home.

 It can bring promotion or success in your job. If someone wants to go an extra mile on the academic pursuit. Horizon can be expand with the help of Vastu with development, success ingreat way in the chosen way.[25]
- 4. Keep Your Relationship bond always strong: Vastu can fix the issue of feded relationship through the positivity. It will help to reduce the negativity elements which causes the relationship in bad situation and bitterness. [25]
- 5. Bring Happiness: Home should be with positive energy and happiness. Wrong measurement can bring the bitterness in relationship and make the bond faded. It will become the reason for the quarrel and unhappiness. Once should avoid this issue by utilizing the correct Vastu at home. It will bring the positivity at home. People will feel happy and only happy people can bring the happiness. Hence, we can say that utilizing the Vastu in correct way can bring the happiness at home. [25]

Benefits Of Vastu Shastra

- 1. Relief from Discomfort: Vastu can bring the comfort. Discomfort can be the root cause of the failures. Failures can bring the unhappiness at home. It may bring the quarrel. Vastu supports to get the intellectual support. Only happy mind and happiness can bring prosperity. So Comfort plays very important role in one's life. [26]
- 2. Vastu Shastra can also really improve people's perception and interest in spirituality. It will help individuals understand the search for something deeper inside them, life, death, etc. These are the three pillars on which you have to rely when you strive to figure out what your inner self should be.[26]

- 3. You can also use Vastu with the people around you for a better life. Vastu encourages inner peace and calm and can also cultivate cooperative relationships between the residents who livewithin the system.[26]
- 4. Vastu can also significantly develop your mental skills by evoking the five elements and providing a living space that is clean and clutter free. A clutter-free and bright house is a symbol of an enlightened mind. It can cultivate the mind's peace and wellbeing. It can also increase the mind's sensitivity and ensure that individuals remain alert during the day.[26]
- 5. In addition to just agreeing on the best house to purchase, by selecting the perfect location of furniture in various rooms of the house, you can work to build a greatly compliant home. Square and rectangular shaped furniture can be used, but triangular or circular shaped furniture should not be opted. Not only that, it is best to refrain from using unusually shaped furniture. Often, you should make sure that the furniture [26]
- 6. Instead of indulging in the stuff of the past that are difficult to follow and who knows about their significance in the modern climate and setting, it would be easier for us to focus on the evolving aspects of this contemporary world and accept new creative and revolutionary things. Building earthquake-resistant houses in the eart is the only Vastu that is of prime importance intoday's India . [26]

There are some basic Principles of vastu shastra

- 1. Orientation
- 2. Site planning
- 3. Proportion
- 4. Dimension

1. Orientation

Orientation is first step of Vastu Shastra it help us to locate the site and make building harmonious to its surrounding vastu depends on orientation, layouts and other vastu principles, process of planning spaces in building is depends on orientation[27]. Site orientation also depends on cardinal directions as we know vastu is science so it is based on logic and reasoning. site orientation is defined by direction that is in front of the site i.e when you stand on site and face the road the direction you see is said to be sites orientation. [27]

2. Site Planning

Site has to be properly studied before constructing vastu has certain rules for selection of site, orientation, material and planning. We have already discussed about Vastu Purusha who was sent on Earth to reside at every homes so planning is done keeping vastu purusha in mind, it should not be displeased. [27]

3. Proportion

Vastu principles must be applied to get proportionate, aesthetic and beautifull construction with good measurement vastu principle called Maana – Proportions should be followed to have perfect ratio of height to breadth so as to look proportionate maana is mainly looked to get right proportion for building with right measurement.[27]

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4. Dimension

Vastu principle called Aayandi – Dimensions will help us to get proportionate, aesthetic and beautiful construction with good measurement it has total six formula to work with right proportion they are used to work with length, breadth, perimeter, area and height here outer measurements are length and breadth and bottom of base to topmost of building is called height where ever necessary Aayandi principle should be followed.

Vastu Tips: [30].

Living Room- This is the first thing we notice while getting into a residence any dissymmetry in this area will lead to sickness, lack of wealth , illness and many more problem .

Position of Hall

- Entry should be near to entrance.
- North east is best direction of Hall for house facing north.
- Hall can be placed in North West direction for west facing house.
- South east position should also be preferred in South facing house.
- Living room shall be located in central position of house.
- Furniture shall be placed facing North or East.
- Furnitures should be avoided near column and pillars.
- If Aquarium is planned then it should be located in North, East and North East direction natural paintings like plants or aquatic animals can be hung in South or South West hall.
- Uniform distribution can be done in hall, low voltage lights can be provided to highlightcertain things.

Bedroom

- Bedroom shall be in South-West direction.
- Bedroom above parking should be avoided.
- ❖ Best direction for sleeping, keeping the head in South direction is Best it is good for health and gives us good sleep.
- ❖ Keeping head in East direction increases knowledge generally students are advised to keep their head in East direction.
- ❖ Keeping head in west direction is good for those people who do nor permanently reside in house this direction of sleeping may be good for unmarried daughers or guest
- Sleeping under beams should be avoided.
- Doors in North and East is preferred .
- Windows in east or west is preferred.
- East is best direction for bedroom television should be avoided inside bedroom as itbrings negativity.
- Mirror should not be avoided in opposite of bed.
- Larger windows shall be provided in east and north side where we receive morning light.

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Kitchen

- ❖ It is said that kitchen which is planned according to Vastu gives Happy Life .
- Southeastern is best for Kitchen placement.
- Toilets shouldnot be above or below it.
- Walls should not common or shared between kitchen and toilet
- * Kitchen should never face main door of house.
- Sunrays should reach the kitchen and ultraviolet rays will kill harmfull germs of overnight it also avoids small insect to get in .

Dining Room

- Dining room should be preferred in West .
- Direction while eating should be East or West.
- It should be square or rectangle in shape.
- Dining table should be placed at centre so that everyone can pull and push the chair.

Pooja Room

- ❖ If pooja room is kept clean vastu problem will not occur.
- Due to less space now a days no separate place is given for pooja room.
- A good pooja room which eliminate negative energy which enhances positivity.
- It should be built in North East position of house.

Toilet

- Toilets should be located in North West or West of building.
- South east is second best option for toilets.
- Bathroom in west will take benefits from sunrays coming from east.

Staircase

As we know staircase is heavy structure South or West part of building is Preferred.

Under Ground Water Tank

- ❖ Water tank should be provided in North , East or North Eastern portion of Plot .
- Best portion for digging water tank is North East .
- Planning this place according to vastu will lead to luxurious life .

Overhead water Tank

- It should be placed in west side .
- Placing this water tank in west will strengthen the building.
- Inside of tank should be painted in Light color and outside shall be painted in Dark colour for easy cleaning and maintainance.

Septic Tank

- West is best direction for placement of septic tank .
- Second best position is North West .

Vastu contribution in Sustainable Architecture

Ancient vastu have divided 24 hours into Eight parts depending on different activities of human being as we know there are 8 cardinal directions according to which human activities are planned opening of room is given in such a way to absorb useful rays of sun reducing use of artificial light vastu also helps to make house sustainable some reasons can be seen below .[31]

- As we know vastu says to keep centre part of house open as it belongs to sky element according to sustainable it must be kept open to maintain flow of air and ventilation .
- Vastu says to provide main door or lot of openings in North and East direction according to sustainable UV
 rays in morning will destroy bacteria that have occurred at night and this is also used in passive techniques
 decreasing electricity consumption .[31]
- Best direction for office is South sustainably sun in south direction is around 9am and this is best time to start work at office.
- South and west direction is given for store room and toilets sustainably these rooms are moist proof and intensity of light is high in these directions, these places also act as buffer space to reduce effect of light .[31]
- Tress are advised to plant in west direction sustainably west gets heated more compared to other directions because of suns direction at afternoon and due to re-reflection in west house gets heated up often .[31]
- Kitchen is given best place in south east direction sustainably this direction has sun from 7-9am and this time is best for preparing food sun in this direction kills germs which are present [31]
- Wardrobes or library units are adviced on South West direction as these places may become moist or insects may grow on it, this direction gets heat in maximum amount so it is adviced to keep in this direction. [31]
- According to sustainable between 3-6am in north east direction is suitable for cosmic energy so this
 direction is ideal for meditation or prayer room.

Vastu Tips for EAST Facing House [32][34]

- O House facing East will bring growth in life .
- O Main entrance will be provided at North East corner from where suns energy will moveinside of house.
- O Hall, pooja room should also be planned in North East corner or East corner.
- O Kitchen, bathroom should be located at South East Corner.
- Master bedroom can be located at South West Corner .
- North west corner should be given for children bedroom or Toilets.
- O Lockers or wardrobes shall be located in south west direction .
- Shelves shall be given in west side of hall.
- Master bedroom shall be placed at east side whereas children bedroom is located atsouth side.
- O Direction of sleeping must be at South side . With head at South direction .
- O Compound wall height is more at south west corner.
- Master bedroom should be bigger then other rooms.
- O Clockwise staircase should be provided anywhere in house.
- Overhead tank can be provided in corner especially in south west corner.

Vastu Tips for WEST Facing House

- Guidelines which are mentioned for east facing house is same for west facing and NorthFacing House.
- o Main entrance of north facing house should be at North East corner.

Vastu Tips for SOUTH Facing House

- It is said that main door of house should not be facing south.
- South west should be avoided for main entrance because negative energy flows fromsouth to west.
- o If ever you want to place door in south direction then it should be planned in South East corner as positive energy travels from south to east.

DIMENSION OF DOOR AND WINDOW ACCORDING TO VASTU [33]

- Main door size can be 4 X 7 feet so as to allow furniture to let in.
- Window size should be 4 X 4 feet so as to allow good ventilation.
- Ventilator size should be around 1.5 X 1 feet for bathroom.
- Ventilator size should be 1X1 feet for kitchen.
- It will create cross ventilation if doors and windows are placed opposite to each other.
- Low roof height should be avoided.
- Even number of doors and windows should be planned.
- Atleast 2 doors shall be provided in each house back door should not be eliminated.

THINGS THAT MUST BE AVOIDED AS PER VAASTU [34]

- Medicines should not be kept at kitchen because kitchen is the place which provides healthly environment so keeping medicines will invite negative energy inside the house.
- We should never keep mirror in front of the bed because when we sleep we go into subconscious state sole moves out of body when we sleep and it comes back when we get in so if we see mirror in subconscious state it will lead to death.
- As we know plants produces carbondioxide so plants must be avoided in bedrooms.
- No demons or devils painting must be present in house as it brings negativity in house.
- Elements such as Broken mirror, painting of Mahabharat, painting of horse with one or two legs on air shall be avoided.
- Beams And pillar on centre of room should be avoided.
- Avoid Tv in bedrooms as it brings negativity.
- Do not keep mirror in kitchen.

THINGS THAT MUST BE DONE IN HOUSE AS PER VASTU [34]

- Mirror shall be placed in South wall it should not be kept in front of bed.
- After bed is placed in room it should have less space in South and West as compared to East and North.
- Vaastu is combination of five elements like water, air, fire, earth and space these elements are necessary to live healthy life.
- Vastu combines both nature and science together.
- We should always keep Buddha or Ganesha statue in front of main entrance.
- Face of idols should be on East for good result.

- Room should be in square or rectangle shape with 90degree wall on all sides.
- Have pet dogs at home, dogs stay at positive places.
- We should cook facing east it brings good health.
- We should keep water bodies or pot filled with water and flower on main entrance.
- For good results we should take decision sitting North .
- For good academic growth we should study facing east or north.
- Pooja room shall be planned in such a way that first sunlight emitting from sun should fall on idol which will provide more energy.
- South west walls should be kept higher then other direction .

SCIENTIFIC REASONS ARE ALSO AVAILABLE FOR VASTU: [35]

- ✓ Energy such as electromagnetic energy, infrared rays, ultrasonic energy and gravity will have direct impact on Earth so vastu balances all these energy so that we can live healthy life.
- ✓ Vastu also focuses on weight and it balances the weight according to nature.
- ✓ Energy arises from east to west in form of sunlight and we if block east side we wont be getting enough renewable lights , Vitamin D so we would be using more artificial light which will lead to more electrical consumption .
- ✓ Kitchen should have more then 600 LUX for light for this we require atleast 80-100watts of artificial bulb and also UV rays from sun in morning falls in our food making it more delicious with natural vitamins . .
- ✓ Human body and buildings are compared head is compared with roof, hands and middle portion is compared with beams and pillars, legs and feet is compared withbasement and foundations.
- ✓ Middle portion was referred as Bhrama Sthana which was kept empty which was compared with lungs , leaving this space empty brings good health and positivity this practice was even followed by romans .
- ✓ Vastu pressurizes on using green material by using these natural material it will utilize suns energy which is decrease power of consumption of artificial power.
- ✓ Vastu has been practiced since ages by looking into history we can see monuments like Egyptian pyramids, Roman colosium, Taj mahal is built according to vastu
- ✓ Even Mohanjadaro built houses in rectangular shapes even he kept cooking place at South East direction with open courtyard concept .
- ✓ As we said for master bedroom South west corner is preferred logical reason says there is lot of positive energy which is flowing from north east corner so opposite of northeast corner is South west corner so master bedroom should be kept to eliminate negative energy it is kept in that direction .
- ✓ Dining room is preferred for west corner as facing south while eating will create resetlessness since body will be affected by repelling force .
- ✓ Bathroom should be placed in Northwest direction as infrared rays comes in west direction so this side is hotter in evening so placing bathroom in this direction will blockwestern sun radiation keeping home cool .
 - By reading above facts its clear that vastu is not just mythology but it has scientific reasons too which effects planning and construction of structures like homes offices temples etc.

It is clear that vastu principles are adopted by many philosophers and practioners it made places in people mind by giving scientific reasons too and it makes easy to understand logical reasons behind that .

EFFECT OF ROADS IN VARIOUS DIRECTION: [37]

Road is primary source of transportation road is made to travel from one place to another during ancient times men has importance of roads and he properly developed them .

As per vastu road has impact on house , road near to house has negative impact. Effect of Road in various direction .

NORTH

In vastu north belongs to Kuber who is known as God of Wealth . North west is for vayu, God of Air.

North east is supreme God himself.

Hence road in North direction is not good at all, this side should be kept open and airy . if main entrance door is on North East this situation gives best results .

EAST

Road in east direction is also very auspicious.

In vastu East belongs to Lord Indra, god of prosperity. South east belongs to agni.

North east is supreme god himself.

WEST

Owner of this direction is varun, who is known as God of Rains.

Owner of south west direction is Neru who is known as god of evil power.

House with roads in west direction is best for business purpose as we can see god of this direction is owner of rain business will flourish and is good for commercial purpose.

SOUTH

Owner of this direction is Yama who is known as God of Death . Owner of south west is neru known as god of evil power .

Owner of south East is Agni known as God of Fire Road in this direction is best for commercial purpose.

VASTU GUIDELINES FOR COLOR SHADE [36][37]

According to vastu different color is chosen for different rooms every colour has different properties like green to remove anxiety, Yellow improves memory, pink erases tension, orange is for appetite.

Colors affects our mind and soul colors according to vastushastra plays a major role in balancing our body as well as mind .

Earlier times colors were obtained from flowers and vegetables even thoughts options were less but they were soothing to eyes most feature of human life is affected by color as per vastu colors brings prosperity, happiness and wealth. In nature we can see VIBGYOR.

Even for vastu fault colors can be used to correct them.

- Shiny white can be used if there is fault in East direction.
- Golden yellow can be used if there is fault in North East direction .
- Green color can be used if there is any fault in North direction .
- White color can be used in north west if there is any fault.
- Blue color is suggested for fault in west direction.
- Cream color is used for fault in South West direction .
- Red color will cure fault in south direction .
- Bright white can cure fault in south east direction.

If there is vastu fault in any direction room can be painted in that color if painting is not possible then that specific color bed sheet, pillows or curtain can be used to cure it.

WALL COLOUR FOR DIFFERENT ROOMS

✓ Living Room

Yellow, Blue, Green are suitable colors as light and bright colors are preferred in space from where guest enter. These color provide better relationship and healthy environment.

✓ Dining Room

Orange, pink ,blue and green are generally opted for dining room. Orange is most best color suitable for dining as it helps to improve appetite. Black and all dull colors should be avoided.

✓ Kitchen

White is best color for kitchen as we know white is color of purity and cleanliness. Blue color can also be used in kitchen. Red color symbolizes fire. It can be used in form of utensils and decoration .

✓ Pooja Room

Sandalwood, yellow, green and blue are usually preferred for pooja room. Yellow and sandalwood color are the best. Sober color are use to increase concentration and focus.

✓ Bed Room

Pink, Light Green, Light blue and Yellow can be opted for bedroom walls . These color promote sound sleep . Most preferred color for bedroom is pink . For old people Yellow can be used . Avoid dark color in bedroom interiors .

✓ Children's Bedroom

Green is preffered for children's bedroom. It promotes childrens activity like studying, playing and sleeping. Blue can be used for aggressive child.

✓ Bathroom

Black, white, gray and shades of pink can be applied in bathroom. White is best colorfor bathroom.

Importance of symbol can also be seen on in our home since ages these symbols have its own importance since vedic times people of all caste or religion have faith in them sometimes even symbol are used to represent our culture or religion .

- Some symbols which are related to vastu are discussed below
- > SWASTIK This Symbol is drawn before starting of any work so that work is completed without any complications swastik on both side of house entrance
 - protects from negative energy and provides positivity and happiness in house it is also known as symbol of Lord Ganesha .
- ➤ OM- Om is represented as Lord Brahma , even while meditation we chant om while receiting om mind becomes clear ,calm and improves concentration .
- ➤ KALASH Kalash is filled with water which is decorated with mango and banana leaves kalash at home brings peace happiness and prosperity as we know water is necessary for living so kalash is filled with water before installing even mango wood is used in havan even mango leaves are symbol of life and continuity coconut also has religious values coconut is used in all festival and religious belief kalash can also be seen in temples even kalash isalso drawn in walls of houses it brings happiness and prosperity .
- Fish- Fish is seen as good symbol many people look at fish before starting a new work or journey fish is said to be symbol of Kamdeva flag many people draw fish on both side of house entrance painting of fish at couple rooms brings happiness and good luck.

SEISMIC DESIGNS ALSO RESEMBLES VASTUSHASTRA [36]

- Plan is divided into 9 equal divisions. Each division creates symmetry on both axis which helps us to avoid torsion during earthquake.
- Vastu says there should be no columns at centre of the building, placing a column at centre leads to torsional rigidity.
- Soil of constructing building should absorb no water. According to vastu soil that absorbs water is not good for construction. Scientifically, porus soil has low bearingcapacity which results in earthquake. [36]
- Soil which is boring is opted for north east direction as heavily loaded column is located in South west footing will not be disturbed by boring .
- Vastu prefers central opening which is same as thermodynamic current which increases circulation of wind improving torsional characteristics of building.
- Large opening at corner of building should be avoided according to Vastu Shastra. Scientifically openings should be made small and located far from the corners for load bearing, openings at corners weakens the structure. [36]
- According to vastu, lintel level of doors and windows must be of same height. Scientifically different lintel level will cause eccentric loading.
- Vastu Shastra says to have equal sloping roof in all directions. Technically, this balances the force and avoid eccentric load.
- Irregular shapes are avoided in Vastu Shastra . Now during modern times Irregular shapes are made regular by crumple section . [36]
- Bedrooms are not planned on hanging parts of building. Scientifically, cantilevers in building vibrates more during earthquake so it should be Avoided.

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- Ground and building should be connected firmly with each other according to vastu shastra whereas in modern building open parking at ground creates problem duringearthquake. [36]
- In Vastu shape of column is preferred square. Technically , in earthquake areas square and circular columns is used .
- Wider base is opted in vastu Shastra. Scientifically Wider base increases Stability.

LANDSCAPE ACCORDING TO VASTU [33]

There are simple rules which are followed while choosing a tree which is to be used inconstruction:

- Trees should be selected which do not get moist by water or moisture its quality, strength and density should not be changed.
- Trees which have strength can be used for making furnitures.
- Not too many type of wood should be used in constructing house, more then three qualities of wood should not be used, single quality of wood is considered not good two or three types are good for construction.
- Woods should not have knots which is used for construction.
- Pores wood should not be used .
- Thick stem trees should be used for construction thin stems trees are weak they cannot sustain the load of construction or furniture.
- Bend trees should be avoided straight trees should be opted. Auspicious trees According to Vastu are:
- 1. Sandlewood
- 2. Saal
- 3. Daisy
- 4. Mango
- Rosewood
- 6. Shirish
- 7. Kantak
- Trees Which secrete milk should be avoided according to vastu using such trees will affect motherhood and wealth.
- Trees with thorns should be avoided for construction purpose using such trees resultsin quarrels in family.
- Trees damaged by natural calamities like lightning, flood should be avoided.
- Trees where snake , ants live should not be used .

PLACE FOR LANDSCAPE ACCORDING TO VASTU SHASTRA

Garden should be made on north, north east or east direction is very good it will give fruitfull results it increases wealth and prosperity.

But garden made in South East, north west or north is not good . planting trees in such direction will affect the happiness .[37]

Vastu decides what type of trees are planted near the house vastu says shadow of tree should not fall on house especially in afternoon if shadow falls on house it gives sorrow and disease.

Ashoka , jasmine , coconut , saltree are good trees according to vastu Neem , jojoba, banana , lemon are

bad trees according to vastu shastra [37] According to direction trees can also be planted:

- East direction Banyan tree in this direction is best.
- South east presence of Banyan tree , cotton tree should be avoided while pomegranate tree in this direction is best .
- South pakar tree, mango tree should be avoided they bring loss of wealth but balsam tree is good for this
 direction
- South west presence of tamarind tree is good for this direction .
- West presence of banyan tree should be avoided but leaf fig tree is good for thisdirection.
- North west presence of daisy tree is good for this direction .
- North east Presence of mango tree is good for this direction .

EXAMPLE OF VASTU SHASTRA IN URBAN PLANNINGJAIPUR

Like many other historic town Jaipur is one of the town which is planned according vastu without loosing its historical importance. City was planned by Architect named VidhyadharBhattacharya [38].

Jaipur is considered as one of the best planned city according to many urbanist, when most of the Rajputs were busy in fighting with each other Jaipur's king maintained good relations with Mughals, king went through many books of architecture and architects before planning Jaipur. Jaipur was planned by Vidhyadhar Bhattacharya as per vastu principles [38].

Jaipur has many famous forts, lovely temples and palaces construction of city started in 1772 it took whole 4 years to complete palaces and roads city was built according to Shilpa shastra which is part of Indian architecture, huge walls were made along with seven gates, during that time architecture was very advanced in 1853 when prince of Wales was coming to Jaipur king ordered to paint all city pink to welcome him even today law has been made to retain homes in pink.

As experts say land was flat, layout of street was kept regular and their orientation allowed winds, sun to come inn to ensure purity of street the dimension and mandla form also affects natural features like hills, lakes etc [38].

Jaipur was divided into 9 squares, these were divided into neighbourhood which was group of cluster of houses, buildings were designed to built rooms around courtyard, where all activities were held, all individual units were linked to larger units by means of street and open spaces, these streets and open spaces made hierarchy of connecting with each other, according to some other vastu expert each individual god is given its own identity in mandla. [38]

Jaipur has unique and traditional elements like temple , palaces and city gateway which provides individuality in city fabric they not only served as landmark but also gave unique characterstic to them most of them were given religious importance so that they can be known till generations .

CHANDIGARH

Some traces of Vastushastra can also be seen on plans of Chandigarh

Industrial area is located in Southerneast belt, According to vastu southeast corner is for Agni which means fire and as we know even in industry maximum electricity, power and energy is consumed.[38]

Second thing which can be noticed is residential buildings are located in South west, south and west of the zones, according to vastu this direction is favourable for living purpose.

There are also various methods to Remove Vastu Dosh from house .[38]

- Bright light on main door should be avoided .
- Plants or water animals should not be kept in bedroom .
- Square or circle shape shall be formed while arranging furniture.
- Bathrooms doors shall be kept closed when not in use.
- All windows shall be kept opened mainly on outside .
- Family picture should be placed in hall or living room.
- House should avoid dried flowers, broken mirror, old jars, torn clothes.
- House shall be cleaned with salt water.
- Drinking water shall beplaced in Northeast wall of kitchen.
- Lord hanuman picture should be placed in Southeast wall it prevents fire hazard.
- Tall trees should be avoided on front of house.
- Tulsi is must for every house one tulsi plant should be kept in north east position.



- Landscape plants like climbers should be avoided .
- There are also many pooja which can be done to remove vastu dosh like Ganesh pooja, Navgrah pooja and pooja of Vastu purush.
- Grah shanti pooja is also good way of removing vastu dosh.
- Lighting a lamp on evening is must.
- No naked wall should be seen on entrance, either a picture of ganpati or budhha should be hung or painted there.
- Rooms should be airy and spacious.

CONCLUSION:

By above discussion we can see vastu has major role in our living and surrounding it is type is science which has specific and scientific study starting since foundation of house. Vastu shastra also involves mathematical calculations, proportions, dimensions and scale.[37][39][40]

Principal of vastu shastra also focuses not only on architecture but also on environment features making climate suitable for human beings and animals vastu also focuses on using sustainable materials there is specific construction techniques which are adopted while designing according to vastu shastra , home which is built according to vastu brings positivity and good luck in house . Following some basic principals of vastu shastra one can eliminate negative energy from entering the house and making future bright . [36] Current generations don't understand vastu importance Study and facts of vastushastra is a gift given by our ancient people but now a days people hardly see vastu in modern construction they feel its impossible to follow vastu in current situation and environment . Young people think its better to adapt for new ideas rather then opting old contemporary ideas role of air has been vanished in multi storey building even some people think vastu shastra is for rich people who are ready to change orientation and plan accorsing to vastu principles .[37] Now a days people opt for apartments and house which are close to aminities and are pocket friendly so concept of Vaastu becomes negligible also plot cost and purchasing house is also very high even small houses rates are very expensive making size of house difficult to follow vastu accurately making vastu irrevalent again.[37]

Also we know vastu is vedic knowledge and architectural technology is closely related to it many famous architects and philosophers also use principle of vastu making building hygenic and proper place to live in. From study we can see even ancient people were aware of structural, Climatology and construction technology that are even followed today. [37][38]

In short we can say vastu shastra in ancient technology which can be opted even in todays modern world only approach is different . [39]

Role of vastu can also be seen on sustainable architecture vastu shastra can also be studied in Veda ancient times homes were built according to vastu making relationship between humans and natures as rate of urbanization is increasing positive changes of modern architecture is also seen , which leads to increase in Sustainable Architecture which is combined with vastu principle to reduce negative impact on building and homes .Scientific principles can also be seen in vastu even various scientific analysis are also carried out by different case study such as Jaipur and chandigarh . Vastu is a scientific tool which should be known by common people tolive happy and peacefull life for present and future generation both .

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