

Comparison of Vastu Shastra with Modern Building Science

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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. Technical aspects of this knowhow for residences have been illustrated in this paper. An attempt has been made to give an idea what Vastu Shastra says. The recommendations and practice for residential building of present world has been compared with principles of vastu shastra.

I. INTRODUCTION

Vastu Shastra, ancient knowledge regarding planning of buildings, interiors, colonies, neighborhood, settlements and townships is our heritage. These are principles and methods concerning construction of buildings for residence and other purposes. These are great concepts for selecting site and for planning, designing and construction of buildings, settlements and also for placement of objects. It is said that each direction has a dominating deity. Construction in that direction is good, auspicious, bad or inauspicious as suggested in vastu shastra. These are perfectly tuned to nature, surroundings and environment without any kind of trouble. The primary objective of Vastu Shastra is to bring perfect balance and

harmony between nature, people, their place of living and working, thereby paving the way for peace, prosperity, health and happiness to everyone.

Vastu Shastra has taken its origin from the science regarding construction which is a part of the Atharv Ved which is one of the famous four Vedas of ancient Indian scripture . There are some other ancient Shastras (scriptures) also such as Vishwakarma Prakash, Kashyap Shilpshastra, Yajurved, Matsya Puran, Narad Samhita etc.. Ancient books were written after sufficient experience, study and observing the effect of sun, moon, other planets and stars etc. on earth's atmosphere. It is said that these affect physical condition, atmosphere and climate of the earth definitely and these in turn have a positive or adverse effect upon human life. Astronomy and astrology have a deep relation with Vastu. Buildings must be constructed in a well planned manner keeping in view the effects of panch mahabhoot i.e. five basic elements earth, water, air, fire and space then life can be full of more happiness and prosperity. These have been fully taken care of in Vastu Shastra by which a residence can be made for a comfortable life and not merely for show. Principles and methods concerning construction of buildings for residences have been dealt with in this paper.

II. ILLUSTRATION

The comparison of various aspects of a residential building as given in vastu shastra and modern building science is as follows :

FOR RESIDENTIAL BUILDING

S. N.	Aspect	According to Vastu Shastra	According to modern building science of National Building code of India rules & practice
1.	Shape of Plot	Square and rectangular plots are the best. Rectangular plots with longer sides on east, west and shorter on north, south are better. Hexagonal and Octagonal plots are also good. Elliptical, Semi circular triangular and egg shaped plots are inauspicious. Only rectangular or square building is good on a circular plot.	Rectangular and square plots are common. Different shape is welcome as it breaks monotony. More sides mean more exposure to natural agencies, which is desirable.
2.	Shape of Building	Rectangular, square, circular, hexagonal and cow faced (Less broad in the front and more broad on the back side) are considered good. Triangular, long bar shaped, bow shaped & oval are considered bad.	Rectangular and square buildings are common. Different shape is welcome as it breaks monotony. More sides mean more exposure to natural agencies, which is

			desirable.
3.	Abutting Roads	A plot having roads on all sides is the best.	A plot having roads on all sides is the best as it allows enjoying of natural agencies more.
4.	Slope of land	Land having slope in east, north and north-east is considered good. The flow of rain water must be towards north-east. Land having slope in west and south is not considered good.	There are no such recommendations for direction. The land must have slope and must be connected to storm water drainage network.
5.	Projection of plot	Projection in north-east, north and east is good. Projection in any other direction is not auspicious.	Projections are good as in this case more area & part get exposed to natural agencies and more openings of door, window and ventilators get abutted to open space.
6.	Position of well, tube well, underground tank & septic tank	North-east is the most auspicious corner for underground tank. Water storage in east is also good. Well in south, east-south, south-west, west-north is very bad. North and east side are also good. South-west should be higher than north-east. septic tank should never be built adjacent or very close to the four boundary walls or walls of the home. There must be a gap of at least one foot. septic tank should be built in south-east & north-west. Water tank in the west is supposed to be the best.	No such recommendation are, there in current practices regarding well, tube well underground tank & septic tank.
7	Open spaces, set backs around the building.	The main buildings should be constructed such that more open space remains on north and east i.e. building should be constructed in south-west. The buildings in the middle are also good. There should not be any construction on the four corners of a plot.	National building code suggests that site should have minimum frontage of 6m. on any street, 5.5m. for row housing, front open space minimum 3m. No construction work to be done within 7.5m. from center line of road. Rear open space 3m at no place less than 1.8m. Side open space not less than 3m. these are for buildings not more than 10m height. However the criteria for these open spaces depend on plot size, locality, city. Local authorities fix these values irrespective of Vastu Shastra recommendations.
8.	Height of building	The height of the house must be equal to $1/16^{\text{th}}$ part of the breadth plus four hands (from elbow to finger which is approximately 18 inches). If house has 2 or more storey the height of the upper storey should be less by $1/12^{\text{th}}$ part than that of the lower storey.	The height and number of storeys for a building is related to floor area ratio and provisions of open spaces, which are based on occupancy classification and size of construction. If the building height is not covered by this then maximum height of building shall not exceed 1.5 times the width of abutting road plus the front open space. In city area where the construction is allowed to full area without margin, length, ventilation gets obstructed. To check this get a suitable angle from the edge of road on other side to height of building may be 45° or $63\frac{1}{2}^{\circ}$. Setback becomes necessary when the total height of building exceeds twice the width of road abutting the building.
According to vastu shastra, important main Gods dominate and control various main directions. It is according to the position of solar system, atmosphere, nature and beliefs. Different rooms should be built in recommended directions and in particular positions so that the deity dominating that area remains happy and is favorable to the owners and occupants.			
9.	Orientation and Laying of room	Refer Fig. 1 Longer side should be along east west irrespective of climate. The building should not face south.	Refer Fig. 2 In hot and arid zone longer side should be along north south or northeast –

			southwest.North & east facing are the best for hot & arid zone.
	Bed Room	Provide in South	In hot & arid zone South-west, south is the direction of breeze in summer hence bedrooms must be provided in this direction with veranda to avoid heating of bedroom walls.
	Kitchen	Provide in South-east	East or north east as morning sunrays falling on it are hygienic. It may be provided in south east.
	Veranda	Provide veranda in North and East. Provide Aagan (court yard which is open to sky) in the center.	Do not provide in north & east. Provide in south & west to avoid heating of walls, in hot & arid climate.
	W.C.	Provide in South, Southwest.	Do not provide in South West which is the direction of breeze.
	Bathroom	East as it is hygienic due to falling of morning sun rays.	Preferably not in south west.
	Pooja (Worship room)	Provide in North-East.	Provide in East.
	Dining Room	Provide in West.	Do not provide in north, north east, west- north west.
	Drawing room	Provide in North or North west.	Do not provide in north east and north west.
	Study Room	Provide in West or South west	Provide in North, North-east as there will be diffused light throughout the day.
	Store Room	Provide in South West or northeast.	Provide in North.
	Staircase	Provide in West or North	Provide in West
	Garrage	Provide in South east. Porch should be made in north or east. Porch should be 2 feet less in height than main building. Garage should not be in corner of the plot. Parking may be underground towards north or east. Covering corners of plots by constructing garrage is not good. Corners should be kept open.	Provide it in any direction. Prevalent common practice is to provide in corner of plot.
10.	Basement	The basement placed in North, East, North east is good 1/4 th . Height of basement should be kept above the ground level of plot. The height should not be less than 2.7m. It is not considered good to have basement under the whole building	The basement may be constructed under whole building with a part of height above ground level.
11.	Trees and Lawns	Garden and Lawns are good in east, west, north and north east. Neem, Mango, Ashok, Coconut, provide good results, whatever may be the direction.Banana,chameli & champa trees are auspicious. specific trees should be planted in specific direction. Babool, Ber are not good. Peepal, Banyan and Goolar should not be in east, west, north respectively.	Deciduous trees like sheesham, mahagony and teak should be planted. As the leaves of such trees fall in autumn & new leaves appear in spring which facilitates sun rays in winter and obstructs sun rays in summer.

NORTH				
WEST	Store		Drawing Room Staircase	
	Dining Room		Open to Sky	
	Staircase		Courtyard (Aagan)	
	Study Room	W.C.	Bedroom	Kitchen
SOUTH				
EAST				

Fig. 1 : Layout of Rooms as per Vastu Shastra

NORTH					
Toilet (W.C. & Bath)		Study Store		Kitchen	
Staircase			Pooja		
BedRoom		Drawing		Dinning	
Varandah					
SOUTH					

Fig. 2 : Layout of Rooms as per modern building science

III. CONCLUSION

All recommendations of vastu shastra do not match with modern building science recommendation. Vastu Shastra appears logical and scientific at some instances having valid and logical reasons to justify its recommendations. Some of these appear superstitious.

However, the final decision regarding each aspect of building construction entirely depends on owner of the property, whether he completely chooses Vastu Shastra recommendations or modern building science. One may adopt a mix of both Vastu shastra and modern building science. Some constraints like density of settlement, availability of infrastructure, availability of plot, rules, regulations of

authorities, cost of plot, construction, personal likes & beliefs affect the final decision.

The recommendations of vastu shastra incorporated with modern building science may enhance quality of life. Following vastu shastra recommendations may have positive psychological effect on the owners and users.

REFERENCES

- [1]. Dr. S.V. Deodhar Vastu Shastra and Valuation.
- [2]. S.K. Mehta, Vastu Shastra for Prosperity.
- [3]. Gurucharan Singh, Jagdish Singh, Building Planning, Designing and Scheduling.
- [4]. National Building Code, India.