

“THE IMPACT OF ASTROLOGY AND VASTU SHASTRA ON ARCHITECTURE”

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Abstract

The paper deals with the study how nav graha have regulated the architectural design and how they come together to achieve some common goal and giving an understanding about the astronomical aspect in architecture. It also includes the study of examples related to earliest surviving astronomical architecture. Rather than exploring them in detail it is limited to the overview of such observations. The study also extends to relevance of Vaastu which is stated as the indirect relation between architecture and astronomy. The study is directed towards the understanding of relevance of Vastu with time and place rather than exploring vaastu or its principles. The heritage of ancient knowledge lost its originality and grip on people's life in the mist of the opportunistic trends and consequent anarchy on the sociopolitical and even religious fronts. The luxurious and lavish lifestyles of the foreign rulers adversely influenced the architectural designs as well. In lieu of the disciplines of Vaastu Shastra, the focus then shifted to gorgeous appearance, huge structures, artificial decoration, creature comforts and excessive possession of land. Gradually increasing influence of western culture, the greed of builders and contractors, space constraints coupled with growing populations (especially, in the metro cities) have practically ruined the meaning and vital relevance of Vaastu Shastra in the modern times.

IndexTerms Architecture; Ancient observatories; Vaastu ;Astrology

I. INTRODUCTION

This paper revolves around the study of direct relationship with astronomy as well as indirect relationship that is vastu. The system of Vastu is an admixture of science, astronomy of astrology; it is covered with the influence of the sun, moonlight and heat, the earth's atmosphere, wind direction, magnetic field and gravitation force on human beings. It gives practical guidelines on site selection, its contouring level, and orientation of the building in relation to climatology and micro weather, arrangements of areas/rooms in relation to the different activities of the proposed building, the proportions as well as rituals for successive stages of house building.

Astronomy is one of the oldest sciences. Before tools such as the telescope were invented, early study of the stars was conducted using the naked eye. As civilizations developed, most notably in Mesopotamia, Greece, India, China, Egypt, and Central America, astronomical observatories were assembled, and ideas on the nature of the universe began to be explored. Most of early astronomy actually consisted of mapping the positions of the stars and planets, a science now referred to as astrometry. The early civilizations in recorded history, such as the Babylonians, Greeks, Indians, Egyptians, Nubians, Iranians, Chinese, and Maya performed methodical observations of the night sky. However, the invention of the telescope was required before astronomy was able to develop into a modern science. Historically, astronomy has included disciplines as diverse as astrometry, celestial navigation, observational astronomy and the making of calendars, but professional astronomy is nowadays often considered to be synonymous with astrophysics.

In architecture both the disciplines that is astrology and climatology, leads to a concept known as Vastu.

II. Relation between Architecture and Astronomy (Astronomical Structures):

The Maya built observatories at many of their cities, and aligned important structures with the movements of celestial bodies. Architecture such as the Caracol at Chichén Itzá was also aligned with the appearance of celestial bodies such as the Pleiades and Venus.

Maya calendars, mythology and astrology were integrated into a single system of belief. The Maya observed the sky and calendars to predict solar and lunar eclipses, the cycles of the planet Venus, and the movements of the constellations. These occurrences were far more than mere mechanical movements of the heavens, and were believed to be the activities of gods replaying mythical events from the time of Creation.

2.1El Castillo Temple of Kukulkan

Built between the 9th and 12th centuries A.D., total height 30 meters (98 feet). Other features of El Castillo suggest astronomical understanding and intent on the part of the Mayan builders. The structure as a whole seems to be aligned with an important astronomical axis: The west plane of the pyramid faces the zenith passage sunset. Meanwhile, each of the four (exceedingly steep) stairways that climb the pyramid has 91 steps, with a final step at the top making a total of 365, the number of days in a solar year. Ninety-one is also the number of days that separate each of the four phases of the annual solar cycle: winter solstice, spring equinox, summer solstice, and fall equinox.

Using the patterns of light and shadow appearing on El Castillo throughout the year, the Maya could easily have tracked the seasons and marked these four annual solar events—the two solstices and two equinoxes. And so it seems the ancient Maya may have used this structure as, among other things, a calendar to signal appropriate times to plant, harvest, and perform ceremonies.

It is believed that this New Wonder of the Modern World, is linked to the Mayan Calendar. The structure has four sides with 91 steps each, and one more step for the temple platform, when added it makes a total of 365 steps, one for each day of the (Haab) solar year, made up of 18 months of 20 days each, plus an additional period of 5 days called “Wayeb”. All this is also represented in the pyramid.



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2.2 EL-CARACOL

El Caracol is sometimes referred to as “the observatory.” To modern eyes, the rounded dome of El Caracol—actually the decayed remains of what was a cylindrical structure—looks a lot like it could house a telescope. It doesn’t, of course, but there is plenty of evidence suggesting that El Caracol was used as a lookout on the heavens.

In particular, El Caracol seems to be carefully aligned with the motions of Venus. Venus had tremendous significance for the Maya; this bright planet was considered the sun’s twin and a war god. Mayan leaders used the changing position of Venus to plan appropriate times for raids and battles.

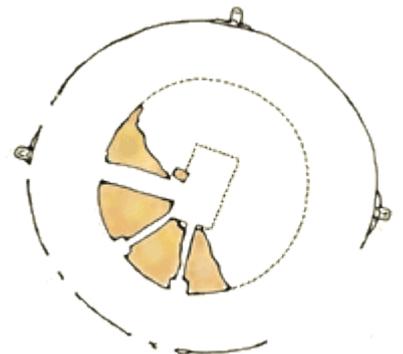
The grand staircase that marks the front of El Caracol faces 27.5 degrees north of west—out of line with the other buildings at the site, but an almost perfect match for the northern extreme of Venus, Venus’s most northerly position in the sky. Also, a diagonal formed by the northeast and southwest corners of the building aligns with both the summer solstice sunrise and the winter solstice sunset.

At the top of El Caracol’s grand staircase is a tower, now rounded by decay, but originally in the form of one smaller cylinder stacked on a larger one. (Imagine a double-decker wedding cake.) To gain access to the uppermost tower, you have to walk through a narrow winding staircase. It is this staircase that earns the structure its name; *El Caracol* means “snail.”

In the half-ruined higher tower of El Caracol, three openings survive. These three openings are small, narrow, and irregularly placed, suggesting that they are actually viewing shafts. It turns out that these windows do in fact align with important astronomical sightlines. Looking through these windows a thousand years ago, observers could have watched for Venus rising at its northern and southern extremes, as well as the equinox sunset. The three window shafts that remain in the upper tower of El Caracol seem to align with various celestial events on the horizon.

Another example of **Astronomical Structures:**

2.3 The Great Pyramid of Khufu is the largest of the pyramids of ancient Egypt, and was considered by the ancient Greeks to be one of the Seven Wonders of the World. Khufu (Cheops to the Greeks) came to power when the Old Kingdom of ancient Egypt was nearing a peak of prosperity and culture. His pyramid is remarkable for both its size and its mathematical precision.



The four sides of the Great Pyramid of Khufu are accurately oriented to the cardinal points of the compass. The base has sides 230 meters long, apparently with a difference between them of only a few centimeters. The pyramid was originally 146 meters high until it was robbed

of its outer casing and capstone. The structure contains approximately 2.3 million stone blocks. The Great Pyramid of Khufu is regarded as the most massive building ever erected in the world - a remarkable statistic for a construction feat achieved 4500 years ago.

There is some debate on whether or not the pyramid was built with an "eye on the stars." The following pictures will show you that there is a perfect alignment with the pyramids and the three stars of Orion's belt. In addition, the pyramid is perfectly aligned with North/South and East/West.

III. Relation between Astronomy and Vastu

Astrology, which uses the apparent positions of celestial objects as the basis for psychology, prediction of future events, is not a science and is typically defined as a form of divination. Climatology, the study of atmospheric science, is another extension coming out from Astronomy. In architecture from the ancient times, both the disciplines that is astrology and climatology, leads to a concept known as Vaastu. In this context our ancient Indians had evolved the methods or principles of living in harmony with nature or natural way of living with environment which could be conducive to pursue the maintenance of stream of consciousness and or to attain the state of super consciousness or State of Sat-Chit-Anand. THE VERY PROCESS OF LIVING WITH NATURE / OR PRINCIPLES OF NATURAL WAY OF LIVING WAS TERMED AS "VAASTU".

Vastu provides the knowledge of the principles to be adopted in building of temples, houses, corporate offices, industrial sheds, factories etc., so as to make the native happy, healthy and prosperous. Even in hindu temples, idols of navagrahas (9 planets) are placed facing the direction(s) which they rule in Vaastu. Sun is in center and faces east, Venus faces east, Mercury faces north-east, Jupiter faces north, Ketu faces north-west, Saturn faces west, Rahu faces south-west, Mars faces South and Moon faces South-East. Based on properties defined for these 9 planets, usage of these directions and corners is decided in vaastu. For example, mercury controls business, money flow, mathematics etc. So north-east direction is usually full of water, green plants etc. Rahu is the head of serpent, so heavy weights like overhead tanks, storage rooms etc are built in that direction to suppress its negative impact.

If a person is effected by a malefic planet in his/her horoscope, then usually the problem comes from direction related to that planet and related corner in the house will cause frequent disturbances or repairs.

The Vastu science is founded upon the laws of nature. The equilibrium we observe in the nature is easily perceivable by us in all moving bodies, but unfortunately we are unable to note this equilibrium in static bodies. The basic source of energy of the whole world is stored at North and South Pole. It flows uninterruptedly from North Pole to South Pole in the form of magnetic waves. Therefore Southward portion of every building should be higher than the northward portion so that there may not be any hindrance to the flow of magnetic waves.

As our modern age has created a lifestyle crisis, many architects and designers are now turning to the ancient traditions of vastu for inspiration. Sadly this has led to a lot of exploitation and misinterpretation. We must understand that vastu shastra is a subtle science, not a material science.

The science of vastu is based on the concept of space as a dynamic element out of which all objects of nature come into existence and into which all disappear ultimately. The frequency of vibration of this energy, which is based on a particular rhythm or time measure, causes the birth and development of all objects of nature. So time is the causal element of all material forms. The main aim of vastu science is to create building spaces to live in harmony with subtle nature. The inner space of an individual and the outer space in the cosmos are vibrating at a particular frequency or rhythm. If a part of the vast space is isolated and enclosed by a four-walled structure, called a building, it becomes a living organism and the enclosed space starts vibrating at a particular frequency. The architect trained in the science and technology of vastu and vaastu designs the building in such a way that its vibrations are numerically equal to the vibrations of the occupants of the building which is determined by their birth stars. This is made possible by a special calculation maintained in vaastu technology.

Many difficulties or sufferings in various aspects of our lives are the direct result of vastu defects in our residential building or in our office and unfavorable planetary influences in our horoscopes. We might have used colors which are unfavorable to us as per our birth charts / horoscopes. We might be having a puja sthana / place of meditation in a wrong place; we might have a toilet where we should have place of meditation; we might be suffering from loss of sleep due to sleeping in wrong direction; we might be suffering from health problems due to wrong placements in our kitchen; we might be suffering due to faulty layout of our business premises or factory; we might be suffering due to having staircase in the wrong place; we might be suffering from stomach problems due to wrong sitting postures in WC / toilet; etc. The various planets during their planetary periods create different types of impact on the outlook of persons in matters of brightness and colors. These indeed change the overall effect of the dwelling unit. Why talk of the son and the grandson, a person may find the same dwelling unit inauspicious even for himself after a few ears. It is important to have maximum benefit of the dwelling unit, which is derived through natural inflow of the sunlight and air. The provision for these basic necessities can be made if a house is facing east and its doors and windows open in the southeast, southwest and western directions.

For example, once a gentleman contacted us about the inordinate delay in finalization of the marriage of his daughter. The visit to their house showed that though the house was east-facing, its openings were on the north-east, north-west and west side and he was using a pretty dark blue shade on the walls of his drawing room and navy-blue paint on his door panels. Our suggestion for change of shades on the walls and the door panels helped in early settlement of the marriage of his daughter. In another case, a medico who had set up an ultrasound diagnostic center was not getting clients, resulting in a loss by way of expenses on the maintenance of fixed assets. During the course of a visit to the clinic, it was found that the desired space was not provided for in the waiting lounge and instead of the mercury tube-lights, the lighting was done with incandescent bulbs. The lighting arrangement with bulbs makes the atmosphere a little gloomy and one cannot tolerate this atmosphere while waiting. Slight modifications of space in the waiting lounge and provision of tube lights resulted in a growing clientele.

CONCLUSION

Vaastu Shastra is a developed branch of Indian Astrology for building science / architecture. They are the indistinguishable part of each other. Vaastu inter related with astrology. While buying a land, or making a building, flat, office, we consider the 'Muhurat' (time to start a work), timings of starting of constructions, inauguration of house or commercial, educational and religious buildings. All these things also depends on the horoscope of owners of land and building. Set up the doors, and other concerned things also should be done accordingly. All such knowledge, we get from the astrology and all these information's are necessary for us to have a peaceful, happy, healthy and wealthy life. Vastu Shastra and Astrology has a great significance in our life and both shastras (knowledge) provide maximum benefit and safety to the nature and environment around us. The examples presented in this paper should be a motivation to investigate further inside the field of architecture, as many architectural designs have used metaphors from other disciplines. As far as vaastu is concerned it should be kept in mind that "to understand a concept before following it".

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