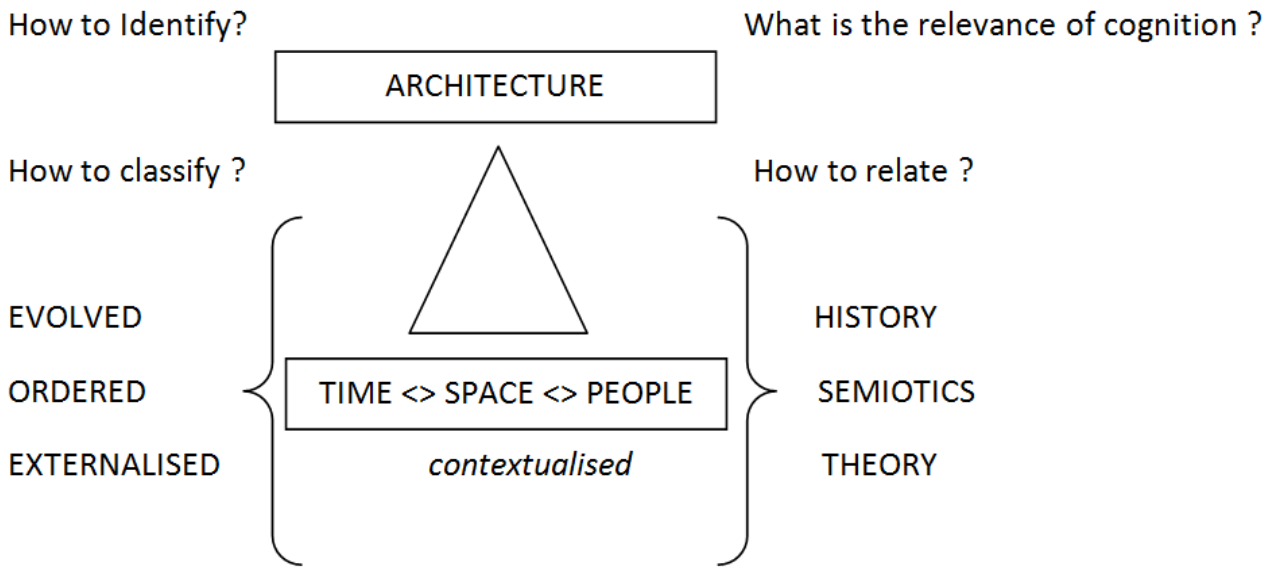
UNDERSTANDING ARCHITECTURE

Ar. Asif R Khan[1]
www.asifrkhan.in

[1]*Head of Department, Al Salama Institute of Architecture*
Perinthalmanna, Malappuram,Kerala,India.
www.alsalamaschools.in/architecture/

Fig. 1 Ideation Illustration 1



Source: Author

1 ARCHITECTURE

The question 'what is architecture?' may at one level seem obvious yet there has been, and continuous to be, considerable debate about what should be included in the term and we all have our own ideas and misconceptions (1 p. 9).

There are various approaches for defining architecture; the most popular approach has been through associating it with either the arts or sciences. In-depth review of architecture clearly indicates that architecture has a multi – disciplinary identity. Sociological, Cultural, Political, and Economical attributes of a community have always influenced the progression of architectural movements throughout the world.

Architecture mirrors the aspirations and achievements of a society. "Every Society is continuously changing. Culture and traditions impart continuity to changing society" (2 p. 1). Architecture provides the spatial envelope for these transitions; it could be rationally

correlated to the spatial imprinting of human behaviour in a way that persists as a form while allowing for further and more developed interactions.

To begin with this attempt, we know that architecture through historical retrospective has been a result of human behaviour. However we should also have proper cognition of the contextual factors and complexities associated with these built environments. This would help in providing a theoretical, graphical and decisive knowledge of socio – architecture influences on the foot prints of growth and development.

To understand the complexities of the built environment we need to know something about the decisions that led to building developments, the economic and political context of patronage, the role of developers and the social and cultural context of building use. Studying the past enables us to understand today more clearly (1 p. 1).

Whether at a micro-level constituted by divergent individual level commissions or at a macro-level were built environment is perceived as a major indicator of the aspirations and accomplishments of a society. Collectively micro as well as macro realms provide the morphological outlook to the contextual architectural character embedded in the built environment of a particular area. These statements affirm that the basic mannerism of experiencing architecture often elucidates the significance of totality. “Great architecture and ambitious architectural theory relates architectural progress with social progress” (3 p. 226).

It is essential to enrich our understanding about what constitutes architecture as a domain of creative pursuit and realisation? The basis of review starts by provoking thought with respect to architectural values embedded in a built environment.

What is the indispensable character of architecture?

This question relates to understanding architectural attributes and the resultant identity in relation with a built environment.

What are the factors that influence architecture?

This question relates to the contextual factors that influence evolution of ideation and its implementation at a tangible level.

Architecture as a creative activity is generative of function versus form or vice - versa based development process. These characteristics when intelligently superimposed paves way for a built environment having its own expressive and utilitarian qualities. The diverse typologies of built environment which collectively form the habitat design make the task of appraisal and explanation quite tedious. Architectural identity is an underlying quality rather than an inherent quality. It’s only upon identification that architectural expression of identity can manifest. These thoughts ratify that architectural attributes along with knowledge base of

an individual play a crucial role in exploring architecture. The underlying act behind the whole process could be associated with perception.

> When he looks at a building, an image falls on the retina of his eye. This image, which is a result of a process as mechanical as photography, has no meaning to him unless his mind has interpreted it, and his feelings or his emotions have responded to it. This response is bound to vary from person to person depending upon his receptivity and intelligence. The observer's consciousness of architecture is therefore, as personal a matter as the architect's intention(4 p. 94).

2 ARCHITECTURAL ATTRIBUTES

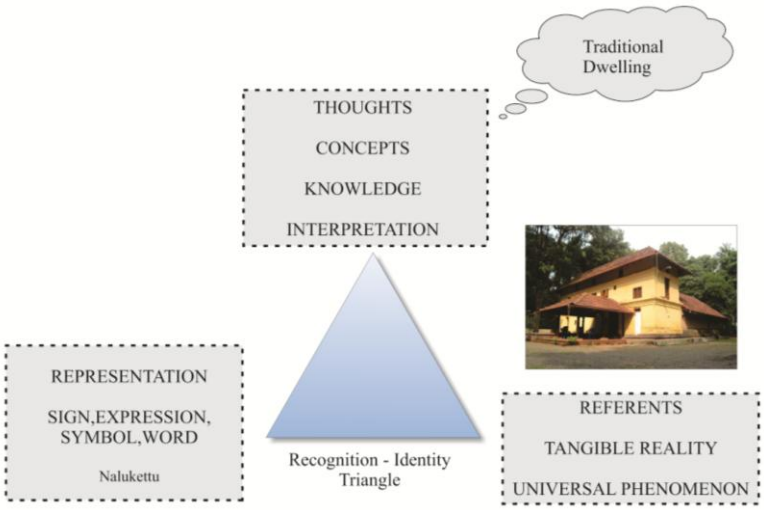
Often it is observed that an ordinary individual tries to associate himself with a piece of architecture by considering the aesthetic values as well as novelty of characteristics in the built environment under review. The ability of the built environment to engage in an evocative dialogue with the user and the observer alike often determines the measure of acceptability as well as level of success the designer has achieved in creating a good work of architecture. Expressiveness is a virtue that adds delight and communicates the rational characterization of the utilitarian social institution being conceived in a particular built environment. The overall perceptual identity thus evolved often gives rise to cognition of associated attributes being conveyed symbolically by a built form like morphological, sociological, anthropological, historical etc.

Architecture as a manifestation of our spatial needs in space emerges through a creative synergy of creative expertise, technical intelligence, scientific knowledge and psychological reflection, guiding the act of designing built environment. For a built environment to be identified as being a piece of architecture there should be some attributes that lead us to this interpretation. Attributes which convey meaningfulness to the structure while appraisal is being done. In order to achieve this objective the architect usually endows his work consciously with such properties that instantaneously aids in establishing a semiotic interact or interpretations: a meaningful imageability.

The act of recognition in a literally context was interpreted by C.K.Ogden and I.A. Richards in a book about semantics called The Meaning of Meaning. "Ogden and Richards present the symbolic nature of language as a triangle, the three points representing referent, thought, and symbol" (5 p. 667). The triangle represents the semantic process, the coming into being of meaning. This model could be used for explaining the process of initial

cognition in an observer in architecture realm also. Experiential possibilities and the process of cognition with respect to a traditional dwelling are illustrated.

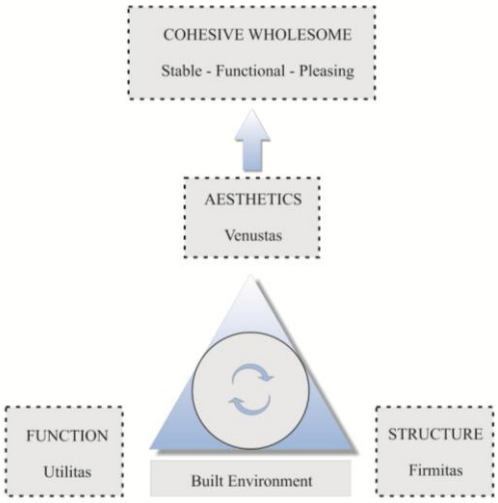
Fig. 2 Adaptation of Semantic Triangle



Source: Author

Vitruvius is famous for asserting in his book De architectura – The Ten Books of Architecture that a structure must exhibit the three qualities, firmitas, utilitas, venustas – that is, it must be firm, useful and beautiful. These are sometimes termed the Vitruvius virtues or the Vitruvian Triad. These traits are even relevant in present day scenario, the qualities that collectively make a built environment significant is often related to characteristics of structural stability, functionality and delightful characteristics embedded in a building. A sense of cohesive wholesome is experienced by the user when such qualities are present in a built environment under appraisal.

Fig. 3 Spatial Quality Index



Source: Author (Adaptation of the Vitruvian Triad)

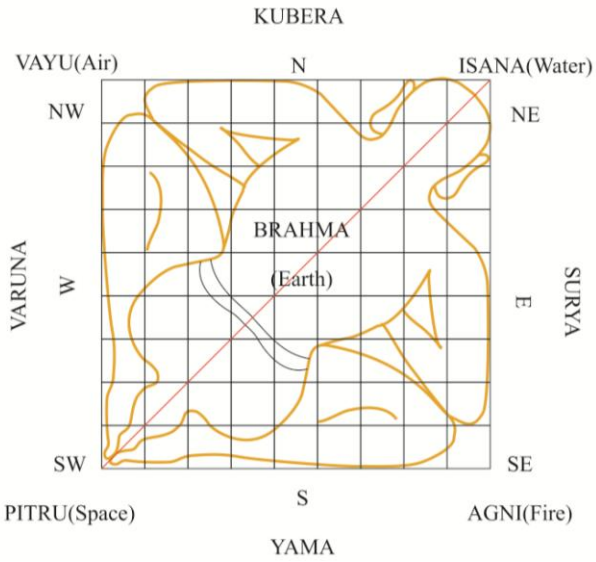
3 ARCHITECTURE AS PROGRESSIVE IMAGEABILITY

The concept of habitat design in our regional context has evolved from time immemorial, which highlights its uniqueness based on regional scriptures and preaching, treatises in ancient Indian Literature. Traditional regional architecture is vividly known for having its basis on Vaastu Shastra.

> Vasthushasthra is the theory of the traditional building science of India which was formulated and developed through centuries of observation and practice. In the process it adapted to regional influences, and these regional versions had a great degree of autonomy. Vasthushasthra is derived from the root 'vas' meaning 'to dwell' or 'to occupy(6).

Various scriptures like Tantrasamuchaya, Manushyalaya-Chandrika, Thatchushasthram and so on were testimonial to this. It could be generalised as a study of effective utilization of natural resources and harmonious zoning principles for design of built environment.

Fig. 4 Vasthu – Purusha Mandala



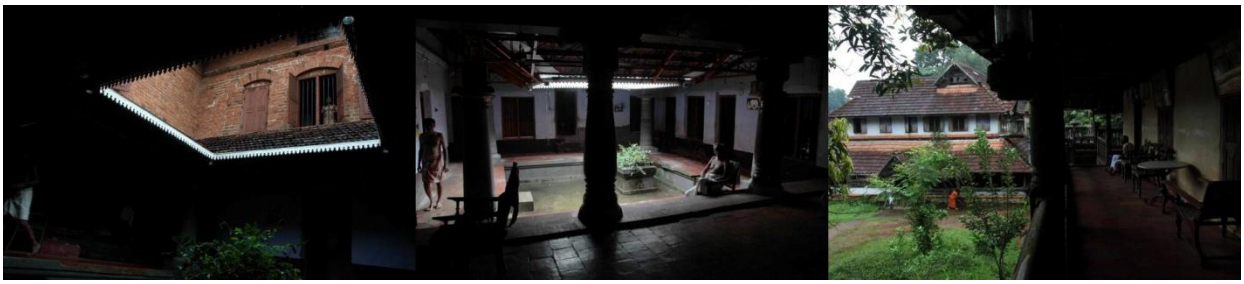
Source: Author (Graphical Representation based on Vernacular Literature)

"Vaastu-Purusha Mandalas are models of the cosmos. Used as the generating order for both sacred and secular buildings, each is a perfect square, sub-divided into identical squares, creating a series which starts from 1, 4, 9, 16, 25 ….. upto 1024" (7 p. 36). This particular approach is reflected in the design of dwelling in the form of a grid. Made up of a schematic diagram showing the cardinal direction on the four sides of a square and a man's figure drawn diagonally with his head in the North East. "An interesting fact about the grid is that it is not static; the man revolves around the square and completes a full circle in one year.

This diagram represents the non – static nature of the site itself and the movement of the earth around the sun" (8).

This planning theory is applied in the construction of a traditional dwelling in Kerala, commonly known as a Nalukettu, dwelling situated in a walled compound complimented by other supplementary structures. It was called Nalukettu because it was made up of four zones around a central courtyard, application of Mandala concept. The zones being: Vadakkini (facing north), Kizhakkini (facing east), Thekkini (facing south) and Padinjattini (facing west). It could also be interpreted on a rational manner as a form induced approach based on incorporation of tectonic principles of structural stability of a quadrangle induced form, the integration of passive climatic factors of natural ventilation, stack effect, water harvesting and sociological trait of joint families. Paving way for an intelligent additive – subtractive realisation of built form incorporating regional construction principles and materials. This iconic imageability of a dwelling is embodied with a sense of visual delight highlighting desirable qualities.

Fig. 5 Vernacular Spatial Expression



Umampalli Mana, Cherpu **Swarnathu Mana, Kochi**

Source: Photo - The Hindu – Mr. Thulasi Kakkat

The entry to the dwelling is through Padippura, gate house at the entrance of the plot. Positioned usually on the western or eastern side of the plot, the scale and complexity varies based on the caste and prosperity of the owner of the dwelling. A pathway leads to the Poomukhom, the living area of the main dwelling complex. Seating provisions made up of timber known as Chaarupadi is provided along the Poomukhom. This is complimented by a colonnade around the main house with deep overhanging eaves regionally recognized as Irayam. Further within is the core constituted by a courtyard and functional rooms located around it. This open to sky space is locally called Nadumuttam, the size of the opening is kept comparative to scale of the built form. Wooden stairs are normally provided to reach other floors and attic. The main structure is supplemented by auxiliary structures like Patthayappura (granary), Kulappura (Bathing Pond) etc.

Fig. 6 Spatial Perception - Archetypal Vernacular Dwelling

Source: Author

4 INFERENCE

Cognition of the character of built environment at micro as well as macro level forming the physical environment made up of people and space with time playing a contextually relevant catalyst is essential to evolve experiential knowledge about the architectural character of a place. Relevance of the aspect of characteristics is a critical component when comprehensive level appraisals are being done. It contributes relatively to realization of the aspect of diversity and continuity in built realm. As well as elucidates the relevance of integration of attributes like topography, climatology, construction technology and so on in providing functionality to the habitat design. The resultant architectural vocabulary highlighting a sense of order with accountability for continuum could often be treated as the base order with elements acting as indicators that bring about physical as well as visual linkages in the built realm.

The architectural vocabulary owing a perceptual sense of contextualism with accountability for continuum could often be treated as the basic indicator shaping the habitable space. Appraisal of habitat design requires cognition of attributes like user groups, historic lineage, progressive development dynamics, sustainability and built environment, science and technology, human behaviour and ecology and so on. Understanding the existing sphere of influence and relating it to a theory would enhance habitat design conceptualisation. Appraisal of theoretical discourses developed as part of theory building is significant for better cognition of the discipline under review.

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