

The Extent and Relevance of Aesthetics in Architecture

Manohar Balasubramaniam

Professor.D.Y.Patil college of Architecture, Nerul, Navi-Mumbai Email: manoharbalan61@gmail.com

Abstract. Aesthetics has always been perceived as being one of the keystones off any architectural output. The role of an architect has generally been that of an individual who infuses some kind of visual relief in a mundane functional solution. This in turn reduces the architect to someone whose talent, skill and enterprise is cosmetic in nature. Architecture is not cosmetic but cosmic and aesthetics is a key component in this endeavor. Aesthetics may be subjective, intangible and non cognitive yet it shapes the perceptions, quality and definition of any space. A paradigm shift in the approach to aesthetics is proposed.

Keywords. : Aesthetics, cosmetic, cosmic, intangible, non-cognitive, and perception.

Introduction.

Aesthetics has always been perceived as being one of the keystones off any architectural output. The role of an architect has generally been that of an individual who infuses some kind of visual relief in what would otherwise be a mundane functional solution. This in turn reduces the architect to someone whose talent, skill and enterprise is cosmetic in nature. Architecture is not cosmetic but cosmic and aesthetics is a key component in this endeavor. Aesthetics may be subjective, intangible and non cognitive yet it shapes the perceptions, quality and definition of any space. This treatise attempts to closely define what exactly aesthetics is in an architectural context. It seeks to explore the various nuances of aesthetics in relation to architecture and proposes a matrix of qualitative and quantitative factors to scientifically, logically and rationally assess, evaluate and define the role and extent of aesthetics in an architectural expression. It also proposes the relevance, need and importance of environmental aesthetics. This treatise concludes by stating that all aesthetical solutions proposed should be eco-friendly, sustainable and have the least impact on the environment. A paradigm shift in the approach to aesthetics in architecture is proposed.

Aesthetics has always been the cornerstone of any architectural expression. It has been the main force, cause and reason for any architecture to happen. But the fact is architecture is not about aesthetics. Aesthetics is a component of architecture and not the component. The cosmetic aspect of aesthetics has been overemphasized. Aesthetics should not only be visual. It should be experienced and appreciated. This appreciation should evolve and manifest itself over a period of time. The experiences may be both-tangible and intangible. The nature of these experiences is what will elevate it to a cosmic level.

Etymology.

The word "aesthetics" is an amalgamation and comprises of two words-"Aesthetikos" which in Latin means "feelings" and "ics" which in Latin means "the science of". Feelings mainly encompass the five human senses –touch, feel, smell, sight and hearing. These five senses individually or collectively define the feeling of a space.

Aspects

Aesthetics to a large extent is governed by two main aspects – temporal and spatial. The human perception of a space may vary with the following parameters.

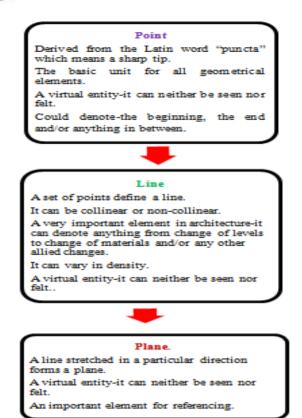
- 1. **Human age.** The human perception of aesthetics can vary with age. The various stages of a human life can broadly be defined as –infancy, childhood, teenage, adulthood, middle age and old age. What will appeal and endear to a child will not appeal to an adult and vice-versa.
- 2. **Gender.** Response to stimuli is also gender specific. Men and woman tend to vary in their perception of spaces.
- 3. Various times of the day, year and month. The relative position of the earth with respect to the sun and the moon can also affect the perception of a space.
- 4. **Colors**. Colors play an important role in shaping the conception, moods and perception of various spaces. Color is visual and expressive. It therefore plays an important role in defining aesthetics.
- 5. **Various human moods.** Humans are not creatures of logic. They are creatures of emotion. Their emotional state also affects their ability to perceive and respond to spaces.
- 6. **Extraneous circumstances.** Extreme heat and/or cold, pollution levels, congestion and all other allied factors do affect our sense of space.
- 7. **Built environment.** The environs of a space also shape the perceptions of the space. Influence of nature in the form of water bodies, flora and fauna create a friendly microclimate which in turn enhances the positive vibrations of a space.
- 8. **All other allied factors.** Over and above the above mentioned various factors which come about due to an interface of any or all of the other factors can also affect the perceptions of a space.

Light and shadow also play a very role in defining the dynamics of a space. The interplay of light and shadow can create interesting drama in a given space.

Qualitative and quantitative aspects.

One of the challenges is to define the broad parameters for sensory perceptions which dictate the qualitative aspect of aesthetics. The further challenge is to quantify it in numerals to enable evaluation.

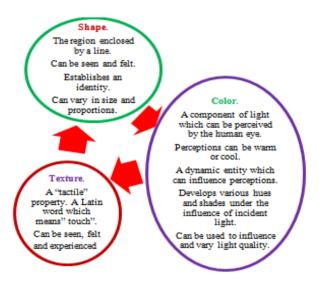
To establish the same it is prudent to understand the genesis of any composition as illustrated in flowchart -1. These three elements form the basic core of any formal composition.



Flow chart 1- A flow chart indicating the linear progression of the relationship of the three basic elements which form the core of any composition.

Source: The author.

In addition to the above the following elements form the outer core of any composition as illustrated in flowchart -2.



Flow chart 2- A flowchart indicating the cognitive interrelationship between the three basic elements which dictate the outer core of a composition.

Source: The author.

The following entities as illustrated in figure -1. Is the governing factor for all the above elements.

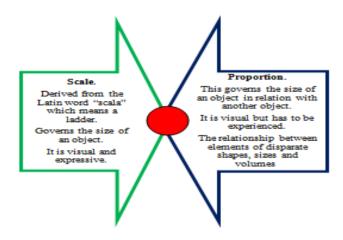


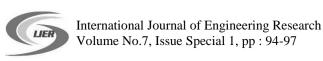
Figure 1 – A figure illustrating the non-cognitive convergence of two main elements in a composition.

Source: The author.

A combination of point, line and plane along with shape, color and texture in an appropriate scale and proportion creates a formal composition.

This formal composition in turn evokes the following stimuli as indicated in table 1.

r		
S.NO.	ELEMENT	ROLE IN A COMPOSITION.
1.	Patterns.	 The relative positions and configuration of one or more elements in space. It is visual and follows a certain order. The order could be regular, irregular or random. It appears more static than dynamic. It is visual but has to be experienced. It lends a certain amount of consistency to a composition.
2.	Rhythm.	 A pattern which is dynamic in nature. It is visual but has to be sensed. It follows a certain order which could be regular, irregular or random. It lends a certain amount of grace to a composition.
3.	Symmetry.	 A mirror image about an axis. Lends a certain amount of stability and balance to a composition. Enhances visual order. A key concept in geometry and physics.
4.	Balance.	 A visual sense of equilibrium. Invokes a sense of calmness and relief. The key component of any composition. It is intangible and has to be experienced.
5.	Contrast.	 An independent variable.



		 Creates interest, drama, definitions and segregation in a composition.
6.	Theme.	 A dependent variable. Based on culture, tradition and/or religion. Is endemic to a particular location.

Table 1 – A table indicating the virtual sensory elements and their role in a composition.

The two critical aspects of a formal composition are indicated in table 2.

S.NO.	ELEMENT	ROLE IN A COMPOSITION.
1.	Coherence.	 Can be defined as
		elements used in a logical,
		rational, orderly and
		systematic manner.
		 The elements can be
		sensory, formal, technical
		and expressive.
2.	Binding	 Can be visual or virtual.
	element.	A unifying element which
		controls disparity.

Table 2- A table indicating the vital non-cognitive elements and their role in a composition.

The quantitative aspects are governed by

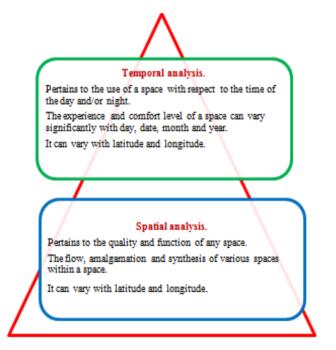


Figure 2- A figure indicating the two main idioms which govern the quality of a space.

Environmental Aesthetics

"The earth does not belong to us, we belong to the earth"

Architecture is not, cannot and should not be just about the built form. It should concern the built environment. Any

architectural intervention is bound to disturb the existing landscape in one way or the other. Environmental aesthetics is about reducing, controlling and monitoring this damage.

Environmental aesthetics broadly encompasses the following

- 1. **Seamless integration and amalgamation of indoor and outdoor spaces.** The indoor and outdoor spatial hierarchy is very regimentally designed in most architectural expressions. The litmus test for talent, skill and enterprise of an architect is how to achieve this balance and rhythm.
- 2. **Flora and fauna.** Manicured lawns, topiary and exotic plants are the leitmotif today for any landscape design. All these interventions need to be delicately and carefully nurtured, cultured and maintained. They also come at a huge economic and ecological cost. Flora and fauna are interdependent on each other. It is their synergy which culminates in an ecological balance. The endeavor should be to achieve the desired landscape expression with hardy native plants and not obstructing native fauna. The USP (unique selling proposition) of such a landscape is that it is static as well as dynamic.
- 3. **Biotic and abiotic elements.** The proposed architectural intervention should cause the bare minimum disruption to biotic elements like ecosystems and biomes and abiotic elements like air, water and earth. This minimum infringement is the basic leitmotif of aesthetics in a natural way.
- 4. **Envelopes as heat exchangers.** Trends, beauty and quest for aesthetics has ensured that most building envelopes do not perform their basic function –act as heat exchangers. This in turn gives rise to two issues –thermal comfort within the envelope has to be achieved by active interventions and the building itself becomes an impediment to the flow of natural light and ventilation. Designing building using sustainable materials, passive interventions and appropriate technologies is the key to achieving environmental aesthetics.

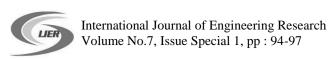
The approach to an architectural expression cannot be linearit has to be holistic. The inherent beauty of any architectural expression cannot be instant – it has to evolve and endear itself over a period of time. Aesthetics should not be seen as something cosmetic but as cosmic. In nature every size, shape, color, proportion and all other allied parameters look in perfect harmony with their settings-so too any architectural intervention should blend harmoniously with its environs.

Conclusion. The understanding, perception and definition of aesthetics in architecture need a paradigm shift. It is incumbent on any architectural expression to be true to its function and at the same time achieve the desired aesthetics in a manner which is sustainable, eco-friendly and has the least impact on the environment.

Acknowledgement.

I wish to thank the following people for helping me realize this paper.

a) The management at D.Y.Patil College of Architecture, Nerul, Navi-Mumbai for instilling the appropriate culture and ambience for academics and research work.



b) Architect Sanjay V. Choudhari (Principal –DYPCA.) for his complete encouragement, cooperation, motivation and support.

References.

Journal article.

- Indraneel Roy Choudhuri and Dr.Suchandra Bardhan, Evaluating water footprints of Building construction in India, ABACUS, volume-9, number-2.
- ii. Dr.Mahavir,Amartya Deb and Rajeev R.,10 Myths on Sustainable Development through an inclusive approach, SPACE volume.18, no.2,2014.p72
- iii. Dr.P.S.N.Rao, Affordable Housing for Low income groups in Urban India-A prognosis of policy and practice. SPACE volume.13, no.2,2008.p82.

Books.

- i. Francis D.K.Ching, Architecture –Form, Space and Order, 2ndedition, Van Nostrand Reinhold.
- ii. Francis D.K.Ching, A visual dictionary of Architecture, 2ndedition, Van Nostrand Reinhold.
- iii. Priya Choudhary, Human approach to Urban Planning. Copal Publishing.
- iv. Javier Senosiain, Bio-Architecture, Routledge-Taylor and Francis Group.
- v. Masanobu Fukuoka, The one stalk Revolution-other India press.
 - vi. Racheal Carson, The silent spring.

Conference proceedings.

vii. S.Satoh, K.Matssra and S.Asano "The study of urban form in Japan", Urban Morphology, Volume19, Number2, September 2015, p157.