Adding VALUES in Architectural Design of Built Environment

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ABSTRACT: Understanding and valuing the connection between Nature, Human being and Architecture is prerequisite to create a built environment for peaceful coexistence and happiness. Built environment influences its users. It may provoke, trigger emotions, wake up desires and pacify the ill feelings or aggression. Aim of this paper is to sensitize the people about values, to reconsider the term of architecture in a different way, free from its commercial value only and to initiate discussion about the architecture as the 'Value Adding Device' controlling over human emotions and experience. This paper discusses the need of practicing 'Value Oriented Architectural Design' while indicating the values to be considered in architectural design with the quest to develop an approach to the design of built environment that accounts for human values in a principled and comprehensive manner throughout the design process.

Keywords: Human Values, Architectural Values, Social Architecture, Environmental Values

I. INTRODUCTION

Values are principles, qualities, characteristics and standards to guide our actions & judgments. Values not only give direction and consistency to behavior but set the direction of our life. Values establish a relationship between us and our surroundings, which comprises our family, society, nature and the world. Life is a universal objective value. We might take this point for granted in architectural design, but we all have the life value or we would not be alive. We value our own life and the life of others.

People are more productive in well designed offices. Layout and design of classrooms may improve children's education & learning in a school. The design and detailing of hospitals may lead to speedy recovery of patients. A well designed departmental store may have an impact on turnover. Urban streets may affect psychological state of people and may lead to reduction or increase of crime rate. All of the examples quoted here indicate that design matters because our lives are connected through our common built environment. When we invest in the built environment, we must consider the impact of design on the life of occupants and the places in which they are located. Building's cost and benefit analysis should also be expressed in terms of the life values and impact upon the life of occupiers, users and visitors. Understanding the different values and underlying defining goals can also help organizations to better motivate staff in an increasingly global workforce and organizational structure.

Architects are responsible to create built environment in which people live, work, play, entertain, study, manufacture, research & worship. The design decisions of architects can be helpful in maintaining harmony among the members of a community or may lead to conflicts among occupants of a building. In the wanton race after modernization, values are often loosing importance in our thoughts, words & actions and accordingly repercussions are being observed in loosing harmony in communities and society. Every human action becomes dangerous when it is deprived of human feelings and values. When our thoughts are executed with feelings and respect for human values, all activities become constructive. This is the spirit what is exactly desired from every architect while taking architectural design decisions.

In the era of fast changing technological advancements and changing scenario of functional requirements of built environment, still following values are to be considered by building professionals in all their decisions;

a) Human Values
b) Environmental Values
c) Socio Economic & Cultural Values

II. HUMAN VALUES

Human values are the basis of establishing peace and protecting society. Examples of human values include love, kindness, justice, peace, honesty, respect, openness, loyalty and equality. Human values are universal and are important considerations to take into account, while interacting with the people and living in the society. These universal human values help to create and strengthen bonding between people of different nationalities, race, religious beliefs and cultures.

A person should be willing to do to others what one expects other people to do to him or her. Ideally, trust and respect are considered the most basic values from which all other social standards are derived. In architectural design, following human values are to be considered by architects while creating built environment;

a) Beauty
b) Caring
c) Comfort
d) Convenience
e) Equality
f) Flexibility
g) Friendliness
h) Health
i) Privacy
j) Quality
k) Respect
l) Safety

Though many of the architects do consider incorporating and reflecting some of the human values in architectural design, however, there is a need to practice inculcating values in architectural design; not be the way of enforcement by building codes and regulations but by the way of self willingness and choice. Building codes and byelaws focus on some of the human values, still much more is required to be considered in architectural design.

All architects should feel their social responsibility and must be instrumental in maintaining human values in our society because architecture is as well an expression of the strengths of the society as well as their technological progress. Architecture is a form of visual art that creates irrevocable works. Humans value this art so much because it's a permanent expression of the society's values, desires, ways of thinking and ideals, ideology and many other things at a particular point of time. It is like a reflection in the mirror, a way in which values are observed in the society as well as how it sees the environment, nature and finally, this world.

III. ENVIRONMENTAL VALUES

The creation of built environment impacts on nature and it is the major contributor to the environmental issues like climate change, resources depletion, waste generation, degradation of human health and other significant problems at various levels. The best route to approaching a sustainable future is to make the built environment in a way so that it has less or zero adverse impact on natural environment with an environmental management plan to counter the adverse effect during construction and operation phase of built environment.

Construction and operation phase of built environment affect climate change by using natural resources and producing waste. Urban development is carried out in a sustainable manner can help us live within the limits of environmental resources and slow down demand for energy and materials through efficiency measures and recycling. These aspects can also have effect on life quality by constructing a well considered urban design with an ecological footprint. All these elements may have initial high capital cost, but the benefit they provide to human life by adding value to it, can be easily compared to the costs. However if the values are ignored in the projects, it can lead to an increase in environmental pollution and may widen social and economic inequalities.

Some of the environmental values are being enlisted here for review and better understanding of all building professionals.

a) Respect of life in all forms on our planet.
b) A sense of humanity regarding the humans.
c) Survival of all species in the global ecosystem with peaceful coexistence.
d) A global perspective of environment rather than a nationalist or regionalist view.
e) No interruption or minimal disturbance to biological and physical processes taking place within the environment.
f) No wasteful use of materials & resources.

Environmental values and related aspects involve much more than just expressing our concern to preserve attractive flora and fauna. The core values of environment, if taken seriously, challenge nothing less than how we organize our society and how we lead our lives. We must relook into our aspirations, desires and must differentiate between 'Need' and 'Greed'. Sustainability sets the opportunities for utilization of resources with ecological balance for future generations on the same ethical level as those of present generations. We must establish sustainable pattern of use of natural resources with the understanding that now is the time to acknowledge that resources on earth are finite.

Humans and other animals are now competing for their space. This competition has largely been resolved in favor of the human species. Leopards and bears have started intruding to areas of human habitat in view of lack of food and space for them in the forests. Now wild habitat of many of the animals is threatened like the elephants, the rhino, the panther and the tiger together with a long list of other creatures. Yet here is the dilemma: both the animals and humans now need the same land. Who will decide what to do and who can predict what will happen?

Energy is a major concern which contributes to environmental issues during its production from various resources like hydro and thermal.

Electrical utility pattern including its demand and supply management is also a concern. Demand management often fell between the cracks as neither builders nor building managers were concerned about electricity bills because they did not pay them but the users did. Many building users are still unconcerned about electrical efficiency. Obtaining energy from renewable resources is now getting pace in view of increased awareness among building professionals about energy and environmental issues.

Considering environmental problems and addressing all associated challenges, is important to the planning, design, construction, and preservation of the built environment. It helps these activities reflect multiple values and considerations. In fact, the art and science of the built environment have traditionally integrated values and fostered creative expression, capabilities that can and should lead the sustainability movement as society seeks for ways to live in balance with its own diverse needs and the nature.

Planning for sustainability in the built environment requires us to go beyond our individual disciplines to consider the variety of economic, social, and environmental impacts of our decisions in the long-term. A decision to build a green residential development in an isolated location may pass some of tests of sustainability through its reduction in storm water runoff, energy-efficiency, and ecological sustainability in the building but it may fail to be sustainable from other perspectives like consumption of fuel in transportation.

Natural environments are a source of physical materials, which can be transported out of the environment and used in various ways. These materials may be of value when directly consumed, or they may be used to manufacture products that people value. A person can experience the value of owning and living in a house without stopping to think that some of the materials to build the house and its furnishings came from trees and other plants harvested from a natural environment which might have adversely affected the habitat of other species on our planet.

The concept of ecological balance makes an important contribution to environmental design and management by increasing awareness of certain ways in which nature contributes to well being of all creatures including humans. By keeping our thinking broad minded and consideration of broad range of concepts for environmental values we may be better able to understand and represent environmental values in architectural design and management of built environment.

IV. SOCIO ECONOMIC & CULTURAL VALUES

Society is known as a group of persons regarded as forming a single community, esp. as forming a distinct social, intellectual or economic class. The system or condition of living together as a community in such a group is based on VALUES, which are observed by all people collectively and regarded as constituting values of a community of related, interdependent likeminded people. Though 'Protection or Order and Harmony in Relations' is the core social value to be considered in any development, however, following Social values must be considered in architectural design of built environment.

1. Mutual Trust & Cooperation
2. Culture of Caring
3. Harmony in Relationships
4. Cohesiveness
5. Community Welfare
6. Equality
7. Justice to All
8. Sharing of Resources
9. Health & Safety
10. Family Benefit
11. Quality of Life
12. Teamwork
13. Protection of Heritage
14. Prevention of Crime
15. Tolerance

Culture is the general term to express development, improvement, or refinement of the intellect, emotions, interests, manners, and taste thus as a result of this; refined ways of thinking, talking, and acting of a group of people. The ideas, customs, skills, arts, etc. of a people or group, that are transferred, communicated, or passed along, as in or to succeeding generations to a particular people or group in a particular period; civilization imbibe the values those are experienced by the people.

Culture is linked to meaning, knowledge, talents, festivals, industries, civilization and values. The objective of the discussion is to have a better understanding of the influence of culture on creativity and its power of economic and social innovation. Culture and value based creativity of built environment helps to promote well-being of all concerned, to promote healthy lifestyle among its members and to stimulate strength in communities as well as sustainability & cohesion in society.

In a society, where quality of life is determined by affordability of individuals, time spent in commercial spaces or social status is defined mainly by items bought and used primarily to be consumed or to derive

satisfaction of possessing those items, values are vanishing day by day. Through our affordability and use of status symbols, such as cars, clothes, furniture, cultural and other costly articles, we define ourselves, our identities and our position in society. As a result the public spaces are being transformed into commercial spaces and loosing life values. Public parks, streets, plazas and centers are subject to transformation from open market space to indoor malls, galleries or shopping arcades to provide more available and comfortable space to facilitate materialistic living at the cost of loosing life values in the society.

From the economic point of view the built environment can be considered as a commodity that promotes for appearing in more tourists, potential inhabitants and investors. The commercial space may be treated as the object of demand and supply and it becomes an item of an economic value. The role of architect in such cases is considered to create architecture which facilitates marketing with commercial high value and in this process focus remain on commercial value of the given raw space and many times social, environmental and human value are compromised.

It is also felt that Cultural Heritage is also loosing Values and its management in the mainstream development planning, policies and programmes is currently missing. Necessity of maintaining cultural values indicates how valuable heritage management is and why it cannot be an isolated activity, and must be integrated in the regional development policies, programmes and projects for a holistic development outcome for a society. Historical, cultural and aesthetic values feature as strongly as economic, social and ecological values in understanding the importance of heritage of a place and need of its conservation. These values are the source of the place's significance and their assessment depends to a great extent on who is assessing them, and on the historical-geographical moment in which the value is articulated. If culture and heritage is lost, then values are lost and hence society or civilization may decline.

Building professionals need to consider technological advancements as well as environmentally, socially, and culturally responsible approach to create built environment. Time is to educate all building professionals to not only understand the advances in information technology, material sciences, and construction methods; but also critically evaluate their impacts on the architectural design, environment and the societies they cater. Mission is to lead the development of nation with the highest social, cultural, economic, environmental, and professional values.

Accepting these challenges has never been more critical than it is today, a time when we face severe environmental, economic, social, moral and political challenges. There may not be a single approach to address these challenges, but by considering fundamental values, methods, and practices of environmental design, coupled with the unprecedented opportunities afforded by 21st century technologies, one can begin to address them. Simultaneously, we need to create new knowledge that can add new dimensions to the art and science of architecture, planning and design, for the advancement of these disciplines and humanity.

Culture covers the aspirations and desires of people for a true and authentic happy life. Still, culture includes dreams and lifestyles as much as stories told by grandparents to the younger generations. Addressing cultural aspects in architectural design and cultural planning reflects how the community, neighborhood or city shall handle in future its cultural resources and will make use of them to host certain events while encouraging at the same time cultural developments to enrich the life of people living and working in the city, or else coming to the city for a visit. Cultural planning must be brought in relation to the overall urban planning and architectural design process. It is one way to address the issue of cultural sustainability which is necessary to sustain values imbibed in the culture.

Apart from Energy Modeling and Environmental Impact Assessment, building professionals should also analyze 'Cultural Impact Assessment' of their architectural design solutions through checklists and other appropriate tools in order to ensure addition of 'Life Values' to the built environment. Strengthening cultural values can facilitate in terms of tackling the increasing social problems, for which current approaches are deemed inadequate. Policy areas in which culture has successfully helped in this respect include urban regeneration, social cohesion, crime prevention, health, safety and the mission against pollution to prevent environment.

V. CONCLUSION

Architecture has to do with the space, creativity, structure, materials, purpose, context and function. It's everything together and we simply cannot separate ingredients of VALUES out of it. Architectural design decisions are more than just scientific and mathematical analysis, so far as interaction of humans with the built environment is concerned. Apart from Aesthetic or Economic values, there are some more indicators or values which are to be considered by all building professionals.

Building professionals must pay attention towards VALUES to be inculcated in the process of creating built environment and must consider means in which their efforts and design solutions can support the creation of appropriate places for people to use with a sense of community and civic pride. Beyond the limited goal of making Innovative and Bold aesthetic expressions, value based architectural design can help us in achieving solutions to many of today's concerns including environmental destruction and social welfare. Many factors affect the creation of built environment imbibing VALUES, and a next step would be to gain a better understanding of the full range of factors and to connect them with specific benefits. Interdisciplinary research must be conducted to explore further avenues with a proper criticism in order to set new dimensions in connecting life and nature with the built environment.

Architectural design must not be judged only from the artistic point of view. It should be understood as an integral part of a 'Value Oriented System' which may lead to the socio-economic and cultural harmony and changes if required.

REFERENCES

[My own understanding of the subject matter gathered during past two decades in academics and profession of architecture. On the basis of my desire to explore & learn further on this topic, I also understand that No Publications / Stuff is available on this Emerging Area.]