

The Effect of Green Architecture on Human Health

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ABSTRACT

Increasing urbanization and population influx into cities has increased congestion and thus increased non-normative construction in the urban environment. Increased construction leads to further degradation of the green environment, Gardens, and pristine spaces, which are the main respiratory source of the city's environment and urban people. This extensive environmental degradation Has increased the pollution of cities. The present study attempts to investigate the human need for green architecture and its effects on the modern human environment and the possibility of integrating green architecture with environmental psychology in order to more appropriately and accurately respond to mental and psychological needs.

Keywords : Green Architecture, Urban Environment, Physical Health, Organic Architecture

I. INTRODUCTION

Today, urban people form a large part of the inhabitants of the earth; hence, the population increase needs more housing. As a matter of fact, this increase in construction will lead to further degradation of the green environment and nature. The unpleasant subject which affect human life that mentally needs nature, and it leads him to a machine life style. In this context, more human effort to create a diverse environment often leads to more destruction of nature. In order to escape from its problems, it will inevitably move miles away from the urban environment and shelter into the original nature (Pariafsai, 2016).

This inevitable human need for nature increases the need for attention to green architecture and its recognition and application in urban buildings. In addition, green architecture enables the human being to prevent the degradation of environment and

achieve a better quality of life and improve it (Allen et al, 2015).

The present study attempts to investigate the human need for green architecture and its effects on the modern human environment and the possibility of integrating green architecture with environmental psychology in order to more appropriately and accurately respond to mental and psychological needs.

II. METHODS AND MATERIAL

Architecture and human needs

Man transforms the environment according to the needs, values and goals of the environment and is mutually influenced by the transformed environment, especially advanced technology makes human impact on the environment more intense and faster (Hill, 2005).

The best example that can be mentioned is the use of nature tools to protect humans from natural hazards, to achieve more prosperity and to mechanize modern

life, which is the same way back. Inevitably is destroying human life through audio, visual, and environmental pollution. Some of this rapid transformation of the environment is destructive and leads to the dissolution of the "environmental system" of the human environment, and emphasize that any major and profound changes in the natural environment must be made in the light of its long-term impact on humans and the prediction of its positive and negative effects. The rapid transformation of the environment is a fundamental feature of the recent era. Every day, cities, neighborhoods and new buildings are being built (Escamilla et al, 2018). These kinds of situations impose some form of behavioral patterns and new social roles on their inhabitants (Alcock and White, 2014).

Organic architecture

Organic architecture is nature-oriented architecture. The insight of organic architecture is rooted in romantic philosophy. Romanticism was a philosophical, artistic and literary movement in the late 18th and 19th centuries in the northwest of Europe. It was a reaction against modern rationalism. Classical or wisdom believes in the foundations of positive sciences such as physics, mathematics, wisdom, and logic, while romanticism or a sense of attitude feels imagination, emotion, emotion and affection. "Romanticism, unlike classics, does not seek to dominate nature but seek to admire it.

The organic thinking of art and architecture from nature's gate is an interactive, evolutionary, and intertwined look that sees nature as the inspirational element of art and the sign of its perfection. "The organic approach believes in the necessity of imitation of art from nature, in order to provide the basis for the transformation of non-living matter into a living creature." Violet Luduk urged architects to apply natural laws. It can thus be argued that "the European and American romantic views of nature,

along with the philosophy associated with biology, especially their views on nature and natural laws, form the basis of the intellectual architecture of organic architecture." This architecture was formed in the United States in the 19th century by Louis Sullivan and Frank Franz, and peaked in the 20th century at Wright's work.

Wright defines Organic Architecture in nine terms:
Nature: It does not just include outside environment such as clouds of trees and animals, but includes inside the building and its components and materials.
Organics: It means the integration of the components into the whole
Form follows function: Pure performance is not correct, but the combination of form and function, and the use of the invention and the power of human thinking in relation to performance is essential. Form and function are one.
Delicacy: Human thinking and imagination must form the building's hard structure in a pleasant and humane form.
Tradition: Subordination, not imitation of tradition, is the basis of organic architecture thinking.
Decorating: An integral part of architecture. The relation of decorating to architecture is like the flowers to the branches of the plant.
Soul is not something that is induced into the building, but it must exist within it and extend from inside to outside.
Third dimension: Contrary to popular belief, the third dimension is not width, but thickness and depth.
Space: An element that should be constantly expanding.

Green Building

In short, a building with the least inaccuracy and contrast with the natural environment around itself and in the wider area with the region and the world is called green building. The purpose of the design of these buildings is to reduce damage to the environment, energy sources and nature (Danesh et al, 2019). A green building is environmentally friendly

and does not have an adverse effect on the environment the surrounding (Danesh, 2018).

Green Architecture Relationships with Environmental Psychology

To prevent the destruction of nature as well as maintain and interact with nature and respond to Human mental and psychological needs Green architecture is considered and expanded with the advancement of science and technology.

According to the definitions of architecture, for designing buildings, architects are taking steps to meet human needs. Designers' aim is to create environments that meet human needs. In addition, Behaviors are introduced to meet the needs, and hence the recognition of human needs for environmental designers is of paramount importance. Also, Physical environments give a kind of meaning to human presence and Each physical environment is effective and affected by user behavior. Therefore, an architect in his design process consider factors, which are effective on users, to create a targeted space and respond to human physical and mental needs. To this end, a model of human needs is needed to form theoretical foundations of architecture and design frames to explain the complexities of behavioral behavior in a systematic manner (Purcell and Gero, 1998). Using environmental psychology in building a green building will lead to more dynamic and more responsive building to the needs and morale of the users.

The Importance and Effects of Peaceful Coexistence with Nature in Buildings

Considering the pollution caused by dust as well as the pollution caused by gasoline that has endangered the health of people in big cities, considering of the environmental effects and positive effects of green roofs is necessary. Because humans are always affecting and interacts with the environment. Urbanization and drowning in the life of a machine

creates a variety of environmental, acoustic, optical and psychological pollutants on the human environment (Mehdizadeh et al, 2014).

From the perspective of environmental psychology, noise pollution is one of the most influential factors on human body and soul. "Based on numerous and numerous studies conducted so far, it has been determined that the presence of disturbing sound and especially the noise pollution in the environment can cause physical illnesses such as hearing impairment, speech problems, weakening of the immune system, increased blood pressure Infertility, heart problems and stroke, as well as those that have adverse effects on human psyche, the most important of which are insomnia, increased stress, anxiety, mental fatigue, pruritus, weakening of morale and motivation, increased anger, restlessness, feeling Despair and lack of concentration and learning (Hammer et al, 2014).

The aforementioned set of injuries indicates the importance of controlling noise pollution in urban buildings, especially in residential buildings. Along with the usual solutions, such as the use of double-glazed windows and sound absorbent materials, the use of plants and green spaces and walls is also impressive, while also providing visual aesthetic to space. "The use of plants is effective in reducing the level of sound at high frequencies, the property of the diffusion of sound waves by vegetation is far more than their attraction and can form smaller enclosures inside the original space". The edges of the vegetation cover can also be combined with turrets and landscapes that encourage the presence and survival of people in space.

From another perspective, its beautiful nature has always inspired humans to create fresh and stylized works of her psyche and to escape from the universe of its outer and inner world. Research results show that connecting with nature and enjoying the beautiful landscape is a simple, but important, way to bring peace and relaxation to a person's soul, in which

the planting of flowers and plants can be more than Everything [Paul and Taylor, 2008]. Buying flowers, planting flowers and plants and generally looking at the flowers cause a feeling of happiness, calm and refreshing, positive thinking and away from sadness.

III. DISCUSSION AND CONCLUSION

Considering the progress of architecture to focus on mental and emotional needs of people, and given the many problems of urbanization and urbanization and the destruction of nature that has caused physical and psychological problems for urban people today, the need for attention the nature and reciprocal relationship of humans with nature and attention to green architecture are more than visible.

Human exposure to urban environments, including service buildings, offices, and especially residential buildings, has been damaging to nature and humans regardless of human psychological criteria. In the meantime, residential buildings are of particular importance with regard to the longest users' time. A home as a safe haven should also meet the needs of the users. For this reason, green architecture, in combination with environmental psychology, provides the possibility of creating a space that embraces physical needs along with psychological and aesthetic needs.

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