

The Basics of Landscape Design and Its Impact on the Environmental Comfort System of Interior Design

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Research Summary:

The coordination of the site addresses the study of the determinants of the green spaces of the outer space through its relation with the elements of furnishing it. Hence, it can be said that the process of furnishing the space is largely related to the function and needs of the user in harmony with the surrounding environment, in particular the emphasis on the relationship among furnished and non-furnished open areas, Close association with other closed areas to achieve environmental integration.

With the study of internal design criteria, we must take into account the environmental quality and functional quality, so they arise through the thoughtful integration among architectural design, interior design research and environmental research.

Therefore, environmental quality should be considered by responding to the natural effects of the climate on the interior design, while achieving environmental compatibility will lead to the natural comfort requirements and the positive impact of the user. The success of the interior designer is measured by his/her excellence in studying the vocabulary of the environment and calculating its surfaces and elements, ultimately to provide a functional and environmentally compatible internal environment.

One of the main objectives of the interior design is to provide maximum comfort to the users of the building in terms of temperature, humidity and ventilation, and this is known as this area of comfort in addition to an acceptable level of lighting and calmness inside the interior, so as to have physiological comfort.

This research aims

to highlight the role that the site coordination philosophy can play in creating and developing the interior design environment for maximum environmental comfort.

key words:

Landscape - Environmental Comfort System - Physiological Comfort.

The research problem:

The problems of the research are in the following questions:

How to take advantage of natural elements such as trees and plants? what are the foundations and functional values and aesthetic of the philosophy of coordination of the site affecting the interior design to achieve the environmental comfort system?

Search Goal:

Explain the importance of the coordination of the site and the aesthetic and functional foundations and its impact on achieving the system of environmental comfort of the interior design with an explanation of its impact on the user and physiological comfort.

search limits:

Objective Limits: The research focuses on clarifying the concept of coordination of the site and clarifying its effect on raising the efficiency of internal design and achieving the environmental comfort system.

Landscape planning:

The term Landscape means the process of planning and coordinating a place to be beautified, and the coordination of the sites aims to integrate the urban environment and its interdependence and coordination in order to serve the requirements and needs of humanity, which require a harmonious and balanced interaction together with nature in its various elements and to get out of the state of monotony in architecture and add excitement and beauty to the urban environment and to meet the desire of humans to approach the natural components of the environment.

Principles of landscaping design:

That there is a common design language its vocabulary is the measure, unity, coherence, proportionality, symmetrical and asymmetrical balance, simplicity, repetition, diversity, sequence, breadth, sovereignty, colors, degree of compatibility, lighting and shadow.

Garden axes:

Each park has its axes, which are imaginary axes, from which the main vertical axis and one or more horizontal or vertical axis are perpendicular to the main one and each axis has a beginning and an end.



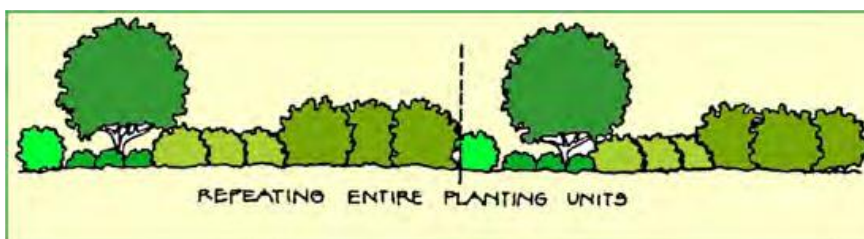


Figure (1) shows the use of main and secondary axes during garden coordination, and the repetition of elements of the garden to achieve unity.

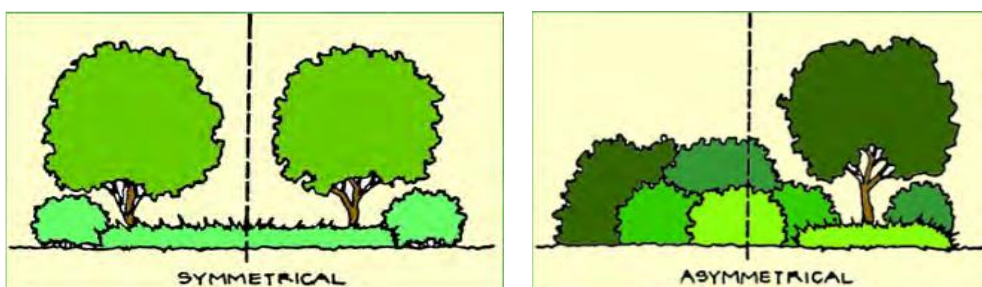


Figure (2): shows the symmetrical and asymmetrical balance of the elements of the garden.



Figure 3: shows the sequence in the stairs or in the design of the plants freely, or the movement of water at different heights and it is intended sequentially, elements of coordination of the site are arranged to be seen in a visual sequence in order to achieve the aesthetic format in one system.

Environmental Comfort System:

Environmental system is necessary to serve the activities. Different activities need different environments. A person also needs to control the internal environment and differentiate it from the external conditions, in order to reach his/her physical comfort resulting from the appropriate climatic conditions such as heat, ventilation, light and sound. Under the control of the building by natural or industrial methods, environmental control extends to provide psychological and social comfort.

Link building nature:

The psychological comfort and the need for security and safety are affected by nature and proximity, and the closer the person is to nature, the more psychologically stable, and vice versa, the more tension and discomfort, the horizontal extension of the buildings is more humane and closer to the psychological comfort than the vertical extension.



Figure (4) shows the Villa "Falling Water". The harmony created by Frank Lloyd Wright demonstrates the exterior design through superb configurations in the space and the nature surrounding the home.



Figure (5) shows the difference in the temperature emitted from the quality of each surface under different conditions when the temperature is 42 C. and it is noted that the lowest temperature of the green zone demonstrates the effect of tree planting on the streets to combat dust pollution.

Results:

- Attention to the principles and foundations of the coordination of the site helps to achieve aesthetic values through the use of balance and frequency and diversity of distance from boredom and monotony.
- The presence of plants and trees is an important factor in combating environmental pollution and absorbing undesirable gases from the atmosphere such as carbon dioxide and release of oxygen.
- Trees and plants reduce noise by absorbing high sound waves.
- A good indoor environment can be provided within the buildings by relying on the coordination of the site and its plants and trees to improve the internal air efficiency and achieve the environmental comfort system of interior design.

Recommendations:

- Utilization of the coordination of the site to improve air efficiency in the internal space.
- The importance of studying the new approaches and visions for the coordination of the site and the necessity of the presence of plants in the interior design or the outer space surrounding the building because of its important role in air purification and tempering the temperature.

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