Apply The Holistic theory in Architecture and Interior design Prof. Ola Mohamed Samir

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The Summary

Application of the Holistic in architecture and interior design

The Holistic in Architecture and Interior Design: The Holistic obligates the designer in the design process to study the building from several aspects, the following figure shows it:

> How to test the Holistic theory in architectural design?

The Holistic of architectural design is tested by designing (space - building - containment) through:

- **Organized style**: that is, taking a specific style as a specific style in design and continuity to it until the end of the design, or using fixed proportions in the design, this is what is known among designers as (modules).

- **Relationships between blanks and some of them**: By linking between functions in order to define the final blanks and the forms of these blanks.

- **Clarity of all parts of the design**: clarity of the design goals for which the design arose, clarity of a solution to customer problems from a particular direction of design, and clarity of the details of each space to suit the activity assigned to it.

- **Design hierarchy**: The functional hierarchy of design spaces must be taken into account, as well as the technical hierarchy of point and line shapes, etc., as well as the hue of these shapes.

- **Define the space for each activity**: the private spaces are completely closed and have privacy and are free from noise and the number of users is small, such as the spaces of bedrooms and bathrooms, Contrary to the general voids, they must be made into attractive areas, to be active, to increase the number of formations, decorations, decoration and colored lighting, and to expand the spaces, so that these voids become open and comprehensive.

> The success of the holistic theory:

The completion of the holistic theory in architectural design requires success (ease of movement within a vacuum - less time spent during the activity) through:

- Facilitating approach and entry: by providing transportation corridors.

- Formation of the track and entry permits: to facilitate the movement and flow of roads.

- The space is designed continuously: from the most used to the least used, that is, the general spaces to the special spaces.

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- Light, vision, touch, hearing, and smell: by creating a space to match the safe and comfortable human use by applying ergonomics determinants to the architectural building internally and externally.

> How to achieve the determinants of the Holistic in design:

It is achieved by technology by maintaining:

- **Structure and Containment**: The design of the building is to take into account all requirements of users and each space gets its privacy.

- **Environmental protection and comfort**: providing physical comfort resulting from appropriate climatic conditions, as well as environmental protection to provide psychological and social comfort.

➤ Health, Safety and Welfare: The architectural designer must preserve the health of the users of the building by providing security in all its forms:

- **Structural Security**: These are the requirements for loads from the building's floors to its walls or structure, and from it to the load-bearing soil without causing collapses or cracks that endanger the safety of the beneficiaries.

- **Security against fire**: providing the capabilities of escaping from fire and means of combating it and preventing its spread to the rest of the building's voids by using fire-retardant materials and providing warning, extinguishing, control and rapid evacuation methods.

- Security against theft and intrusion: It is the provision of the necessary equipment to protect the building and its users from breaking into intruders and from acts of violence, burglary and vandalism, such as securing and protecting museums, banks, embassies and buildings of importance.

- Security against natural disasters: such as protecting buildings from floods, torrents and earthquakes, as well as from living organisms and biting insects that affect the structural elements of the building, such as termites.

- **Durability and sustainability**: It is an attempt by the architectural design to harmonize the nature without causing industrial damages to it, as well as the durability of the building, which prolongs the period of its use in years.

- The intellectual environment to achieve the total theory: It accommodates:

- User requirements, needs and aspirations: For example, areas in the site are divided so that parking lots are distributed near the entrances and their areas are calculated where they are sufficient for the expected number of users, and they are also taken into account in flat areas of the site.

- **Social and cultural factors**: The human comfort inside the building is complemented by meeting the requirements of social comfort, and it results from providing privacy for everyone in its appropriate field.

- **Legal restrictions**: Choosing the streets that meet the specifications stipulated in the planning and urban laws to achieve security for beneficiaries of different ages and cultures, such as the gradation of the roads surrounding the site from Sure to slow to pedestrian roads.

- **Historical traditions and precedents**: the architectural designer is attentive to what influences users' behavior with customs and traditions that have been deposited from the effects of previous civilizations throughout the ages.

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> Geographical environment to achieve the holistic theory:

- The holistic architectural design must be compatible with (the location):

- Location and environment: the nature of the surrounding area, whether it is green areas or buildings, their shapes and views that can be seen through the buildings, knowing the type of buildings to choose the appropriate location for them, on the overall national level for (all activities), it is preferable to choose the location outside the city, in relation to the city, the airport and the port by express transport links, easy access to the site.

- The area of the site fits with the number of buildings and the expected audience: taking into account the internal and external spaces of the building, to avoid crowds and accidents.

- **Climate:** By examining the available requirements for the existence of a thermal environment suitable for different activities of humans and preferably naturally occurring as sun, wind, heat, and rain, and if this is not available then resort to mechanical technological means.

- **Geographical location**: (soil, topography, plants, and water); Examining the possibilities available on the site, both from the topographical point of view, works for the success of the design.

Achieving systems:

- **Physical systems**: Mass and vacuum, closed and open internally and externally, and are achieved through consideration of: Space, Construction, Containment, Equipment.

- **Cognitive systems**: In the sense of observing perception and sensory distinction of material elements by testing them sequentially in time, this is done through ease:

- Arrival and departure: Traffic safety, distributing comfort places from public seats, During the night pedestrian paths which are lit with intense or dim lighting, Separate transportation, the work of sub-domains, entry and exit: In the entrances, an adequate number of lanes must be provided with their distribution so that they do not lead to suffocation and shorten the waiting time of the user to a minimum, movement through halls.

- Functions and activities within the void, characteristics of light, color, texture, vision and sound.

- **Moral systems**: It is an understanding of the organized and unorganized relationships between building elements and systems, by taking into account the design: images, patterns, signs, symbols, and surroundings, and this appears in connection with nature.

- After completing all the requirements of the holistic theory test for architectural design internally and externally, it can be called (Architectural Kidney Design, Kidney Architectural Design, and Theory Interior Design).

The objectives of the overall design in architecture and interior design:

The overall design in architecture and interior design aims to achieve a set of goals that must be integrated and harmonized together.

- **Able Accessible**: concerns the building elements, heights and paths that are designed to meet the needs of the disabled.

- **Safe Security Objectives**: Are Specializes in providing natural protection for the residents of the building from natural and industrial hazards.

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- **Merging the functional:** Needs of the environment internally and externally with the body, mind and spirit of the occupants of space; this is one of the interesting relationships that arise between the different bodies in space and an orderly. These concepts are: (unity, scale, proportionality, balance, harmony, frequency, activity center (focus, shape, lines, texture, pattern, and color).

- **Cost Effective**: It is concerned with estimating the basic cost of construction as well as budget control, and these factors are:

Assembly of units.

- **The module**: The use of the model plays a major role in reducing the cost of implementation, standardization by excluding excess models or creating a new model without prejudice to the needs of the facilities and the desires of the users.

- **Utilitarian loss**: Utilitarian loss of the designed areas in the building affects the total cost, as the more surfaces exceed the required requirement, this leads to an increase in the cost of implementing the building without real benefit.

> Improving the quality of the environment:

- **Externally** represented by contacting nature: The connection may be visible as a beautiful panoramic view from the balcony, or materially, as it gives the user the opportunity to touch the surrounding natural elements, such as trees.

- **Internally**, it is represented in the interior design vocabulary: (ventilation, heat, and acoustics, lighting).

> Function Functional career goals:

- It specializes in performance in terms of durability, and efficient maintenance of building elements, and that every space meets its requirements.

> Sustainable goals:

- It specializes in the environmental performance of building elements, represented in what is called sustainability: it is an attempt for internal design to harmonize nature without causing industrial damages to it, including the sustainability of design in the highest quality for the largest possible period, and depends on: (Environment - Economy - Society); and that is through:

- Rationalizing the consumption of non-renewable energy in managing the built environment and using renewable energy sources.

- The most efficient land use.
- Preserving the natural resources used in construction.
- Preserving the natural resources and energy used in the manufacture of building materials.
- Expand the areas and cycle for reuse and recycling of building materials.

- Reducing the use of substances that cause environmental problems, such as chlorine, fluorine, carbon, lead, etc.

> Productive goals:

- Specializes in the condition of the residents of the building in terms of psychological and natural comfort, as a result of the good performance of the elements of the building such as the distribution of ventilation and lighting, work places, systems and technology.

> Historic goals:

- It is concerned with works that are within a historical area, or that affect a historic building, as these buildings are subject to four categories: repair / renewal / rebuilding.

Aesthetics Objectives:

- It specializes in the natural appearance of the building's shape and the image of its elements and spaces, in addition to the integrated design process is concerned with the sense of beauty in every detail of the interior design, and the psychological comfort of the user.

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