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The philosophy of visual perception of the external space Using the concept of biophilic design

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The research deals with the study of the integrated relationship between the elements of visual perceptions of the void and its interaction with the vital elements of it through the study and address the concept and philosophy of visual perceptions of the void and its development through the ages and the effect of these visual perceptions on the perception of life in the vacuum at its levels the three vitals It is the first level: belief in the existence of a life of visual formations and the sense of awareness of users in a dynamic interaction, and comes the second level: with regard to the mental and mental path of the user aware of these visual perceptions as physical elements with vital visions to convey the perception to the existence of real life and not Imagine it, level 3: The presence of the user in the scope of visual perceptions interactively with the characteristics of the formations that he realized between his mental perceptions and his inner feelings and his impression of the place and his human interaction towards it in the conscious and unconscious mind of his vital qualities surrounding the pulsating quality Life has vivid images that interact with the pulse of natural ingredients in the void The research has found that the interaction between human and visual perceptions in the void has exceeded the limits of time and space and has become more oriented towards biophilic design that enhances communication between nature and human, the architect has an important role in applying the concept of biophilic and expressing it to design elements space.

Key words: Quality of Life - biophilic Design - External space - Visual Perception

The problem of the study: The research problem lies in the loss of the population's dealing with the external space as a result of not feeling its belonging to it and benefiting from it and meeting their needs and feeling comfortable and gaining vital life energies from the design of this external space, which led to its neglect and neglect to its disappearance in some places and turn it into Bad or negative image. With human development, the environment around us is mostly made up of natural environments, but after the industrial revolution we find ourselves living and spending time in built environments, biophilic design translates the understanding of human convergence with natural systems and the so-called love of life into the design of the built environment. (According to the EPA, 90 of our days are spent at home EPA, 2004, rev2009), But as the world's population increases and urbanization expands as time is spent not in their homes in designed environments, research shows



that attachment to nature is not just something that makes us feel comfortable, but vital to our health and well-being, understanding the love of life and how it teaches us how to design our environments more The importance of. (W, Browning, Ryan and Clancy 2014).

The hypothesis of the study: Through the research problem of loss of communication between the user and visual perceptions in space and even the extreme neglect and loss of these perceptions, the research assumes that there is a relationship between real life and imaginary perceptions in the external space and it relates to the human senses and his vision of those perceptions until they reach the level of love, hate, habituation and ten easily or simple through which the existence of a relationship dialogue of the conscious mind and the formation of the aware in a certain and imaginary reality exists and does not exist with the aim of moving from the abstract visual perception to the perception The bio-visual is most connected, co-existing and spacious with the user achieving the ultimate goal of quality of life.

The objective of the study: 1 - try to understand the role that the biophilic design of the external space can play in enhancing communication between nature and users, which is to develop an understanding of the subject and how it is applied - intentionally or not - such as (external spaces in some hospitals which are nature-oriented spaces aimed at Providing recreational, therapeutic or rehabilitation possibilities (theoretical study).
2- How can this understanding reach new biophilic design methods or ways of thinking that can be general and specific to the project in accordance with the quality of life requirements of the external space (analytical study)?

The methodology of the study: - first Theoretical approach: By addressing the previous studies that are related to the case of studying the biological design of external spaces and what are the elements of bio-visual perception in the space and related to the needs of the user of the vacuum environment with the recognition of the extent to use them to achieve quality of life For users.

Second Analytical approach: Through the analysis of new biophilic design methods and the development of visions to redesign the space vision of biophilic design and biophilia to achieve the method of quality of life of the user, and use some international experiences to reach the results of guidance for the designer in the future.

Introduction: Man by nature tends to nature with its scenic views that give serenity and comfort to the human soul and also positively affect his health and for this research touched on the biophilic design of the space that constitutes the place of nature in human society, where there are mutual relations, respect and enrichment relationships at all levels should appear as a rule and not an exception. The research dealt with the concept of quality of life biophilic to achieve happiness and belonging, and emphasizing the need for life outside the building to be more compatible and integrated with the human being, and to achieve the approach of biophilia. The human attachment to the natural environment of the space around him also makes him affect it positively by taking care of it and maintaining it and his sense of belonging to it and therefore the importance of the external environment came with the concept of biophilic design for the needs of users.

1-The concept and philosophy of visual perceptions of space and its evolution throughout the ages: The external space of the building block played a prominent role in human thought, as it was found in most human civilizations throughout history, taking into account the difference between the thought, the level of handling of each civilization, the extent of its development, the purpose and the role it played in achieving entertainment. **Tom Turner has known the space** as the planned place connected to the outside and organized the perceptions, the cultivation and enjoyment of plants and other natural formations and the combination of environmental natural and man-made materials, and its function is limited to aesthetics only. {1}

From the previous definition we have been looking at other definitions through successive civilizations so far, returning to the human cultural heritage we note that the external space is rooted (to the beginnings of the process of agriculture that paved the way for humans to begin to stabilize in the period of the Neditic Neothetic revolution). Revolution that accompanied the end of the Stone Age more than ten thousand years ago {2}. This vision of the outer space is evolving through various original civilizations, from ancient Egyptian civilization and Mesopotamian, Greek, Persian, Roman, Chinese and Japanese Far Eastern civilization to Islamic civilization and its acquisition of deeper dimensions than symbolism. Social and architectural different from its predecessors.

2- The effect of visual perceptions on the perception of life in space:

Through the philosophical follow-up of some influential thinkers in human and social development with regard to human life, moving towards the depths of human and urban interaction and addressing the conscious mind aware of the orientation towards dynamic architectural and urban horizons, Until we reach a more spacious horizon for the unconscious interaction between the user and around him to increase his sense and sense of humor towards visual perceptions within the external space.

- Intellectuals and philosophers on the biophilic space: Intellectuals and philosophers in general have a variety of opinions about the perception of life in the space through the ages, both in the East and the West, and the reciprocal relationship between matter and meaning as a special degree of subjects of perception, Some architects have been concerned with the handling of life forms in external spaces and the diversity in feeling them, and among them;-

In another opinion of Christopher Alexander{3}: For his collection of works (The nature of order, the phenomenon of life), in his dealings about the feelings that many have about life in the perception of the cosmological system in general and in urbanization in particular, Through his studies over twenty years of thought and writing, the product of these books was that 'the sense of life in things is not fully compatible with the clear and well-known methods of scientific research to prove them despite our sense of existence', and therefore the thinker turned to rooting the concept of life in nature. By taking examples to convey to the reader what he feels to inspire his heart and his sense of purpose "By learning from the composition of life in nature and the overlapping elements of life that he referred to in the centers to integrate with each other in the form of the harmony of the composition of the urban ", he reached his vision that architecture has lost elements of life which led to the dynamics of composition and superficial formation and that it followed contemporary thought and its mechanisms At the end of his studies, he listed fifteen properties for the coherence of composition by its formative standards, one of which was simplicity and inner calm as a single moral element. {3}

Through these views about bio visual awareness in the external space from a natural perspective characterized by the belief that there is environmental and architectural compatibility and that urbanization is integral in this compatibility, and with some ideas of architects of the creation of innovation and plastic creativity and its association with the thought of realizing life in urbanization between reality and imagination, and by studying our vision of the physical architectural components in the space must acquire the vitality between reality and imagination, existence and absence, and these are realized In three levels {4} :

- 1- The first level: the user feels that there is life in the perceived elements.
- 2- Level two: Visualize things in the imaginary and mental dimension of vitally inspired elements.
- 3- Level three: Expressive projection between the properties of these elements and the characteristics of the perceived user, to fall on some perceptions that stimulate the perceived feelings of the user.

2.1. The method of bio visual perceptions in space {4}

2.1.1. Method 1: Inference of the existence of life: It can be inferred to prove the existence of life in the elements of visual perceptions in the biological environment by analyzing the sensory inputs of these perceptions in the mind of the viewer be a doctrine of the occurrence of the thing in the mind, and prove the existence of life must differentiate between the degree of life represented by awareness and will and the degree of expression of life represented by the manifestations of life and the ability to change things, While every sane organism has the will and purpose, its expressions vary in its gradual strength from being human to other living beings, Accordingly, the elements of visual perceptions in a vacuum are characterized by life according to the noble verses "The seven heavens and the earth and whatever is in them exalt Him. And there is not a thing except that it exalts [Allah] by His praise, but you do not understand their [way of] exalting. Indeed, He is ever forbearing and forgiving." (44) From Surat Al-Isra.

2.1.2. Method 2: Imaginary and mental level: The human mind, aware of the elements of emptiness in its imaginary and mental logic, realizes life in the perceptions around it to establish it in its conscious mind through feelings and sensations. But there remains a hypothesis related to the dependencies of these perceptions of the

fundamentals of life, like all creatures, and physiognomy is the link between the characteristics of life in its stereoscopic composition with features, that relationship is best known to Arabs for their ingenuity in imagination and perception about their analogy acquired the quality of life. The Arabs were like bending the branch of roses when wilted due to the emotional impact of the idea of weakness and bowing before death, To adapt and agree with it and come to mind an endless analogous picture that shares its formal vocabulary in nature with the emotional expression of the viewer like the palm of the palm, and the full moon's link in its illumination with the enlightening face, figure (1) shows a park bench in the shape of a human being with a dog, a children's play area with a human-shaped toy whose reputation is close to the ground to unleash children's imaginations, and the tree trunk on the ground formed to bear shape all these perceptions to unleash the user's imaginary and mental level.



Figure (1) - imaginary and mental level {10}

A case in point - the

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One of the most dazzling scientific places in Dubai Green Planet The Green Planet is a miniature tropical jungle inside a origami style glass building with a biological dome and this vital dome provides a complete tropical system that includes more than 3000 species of plants and animals and The building is composed of four floors, air-conditioned and at a moderate temperature, to adapt to the diverse animals and birds in it. You will definitely notice a 25-foot tree, the largest man-made tree in the world, and you will see trees and three artificial waterfalls to give an air of coolness to a few animals and birds to provide them with a suitable natural environment, figure (2).



Figure 2 - Green Planet Dubai tropical forest

2.1.3. Third Level - Expressive Projection The process of simulation between a person and the surrounding visual perceptions is a product that generates spontaneous thoughts and mental perceptions in which a person shares with other beings the characteristics of life such as motherhood, affection, dependency, and containment as figure (3) Games for children in the form of bird's nest, in addition to projecting life to skill vocabulary in its rigid forms to give ambiguity to an understanding of a kind of life in the architectural composition and show the imaginative ability of the viewer to suggest expressing meanings and vital gains as the following image Containing the building for the external space, and these expressions include the curves that can be made in the perceived elements of the space in the horizontal and vertical dimensions and the third dimension (temporal), These expressions are the product of nature's

simulation and its characteristics and transfer of designer experiences to the perceived mind seen through the kinematic behavior of these elements.



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space and its visual perceptions that achieve human well-being and interact with nature that was lost in modern societies as a result of urbanization Which prompted some philosophers, including architects, to integrate the biophilic philosophy of space with design, which is known as (biophilic design) In this research, we will address evidence that confirms that there is a strong relationship between visual perceptions in space and that they retain vital qualities, The trend towards lively design aims to interact between interior and exterior design in addition to the free interaction within the outer space and its connection to natural elements, Philosophical architects have dealt with dynamic design patterns from many different perspectives. In one of them, Terrapin Bright Green 2014 book published the fourteen models of dynamic design by classifying them into three types as follows:

1. Nature in space. 2- Natural Analogues 3- The nature of space.

3.1: - Nature in space: {5}

3.1.1. Visual connection with nature (visual perception): Interactions through this pattern are made by visual contact between the viewer and the external nature, to bring about complete feeling, visual attention, motivation, and the acquisition of perceptions and other vital elements, This can be seen through the view between the interior space and the outer space through the windows, as figure (4), and watching the natural elements from trees, water and sky In other words, realize the plant elements, flowers and greenery by watching natural murals outside.



Figure 4 - Visual contact with nature with a view between the inner and outer spaces {5}

3-1-2 –Non-visual contact with nature (other senses): The interaction is through this pattern by hearing, such as the musical seat in figure (5), smelling, tasting and sensory feeling when touching and feeling things and other senses, To create a positive interaction with nature and its living systems through a sense of familiarity and comfort towards the perceived elements, their durability and balance, in addition to what it speaks of bird sounds and the scents of flowers and our feeling of being in a vital nature.



Figure 5: - Non-visual Communication with Nature {10}

3.1.3. Non-Rhythmic Sensory Stimuli: Interaction through this pattern is done by automatic, non-sensory communication, Through the rhythms nature occurs that can be perceived away from the senses, One of its characteristics is that it is suddenly aware and exciting and stimulates attention in a short time and always welcome, such as these interactions: - Kinetic rhythms that can be seen from different angles create an interactive design between the built mass and nature in space, and this is by the visual perceptions, Through other senses such as the rhythms of water fall or the buzzing of insects and the tweeting of birds as figure (6).



Figure 6: Non-Rhythmic Sensory Stimuli {5}

3.1.4. Thermal / Airflow Variability: This pattern is interacted by changing air currents loaded with temperatures and humidity between foreplay Collisions with the human body and surface temperatures that simulate the natural environment can be understood through a sense of freshness, activity, survival and freedom of movement Examples of this pattern include: air is interspersed with leaves and the rhythmic sounds that are visually recognizable as figure (7) The currents of the air approached the branches of the trees from each other form a bright heart and shaded on the rest of the corridor, and heard and felt through the rest of the senses.



3.1.5. Presence of Water: Interaction through this pattern variability is done by interacting with the 3D water visual perceptions and feeling of vision, hearing or touch The attraction, sound rhythm, stimulation, calmness, or both, through kinetic signal, such as: Dancing fountains or waterfalls, tranquil water pools and water murals as figure (8) are all reflected in the sky.



Figure 8: Presence of Water {5}

3.1.6. Dynamic and Diffused Light: Interaction through this pattern by providing variability diffuse light and the inter-distance of the observed elements in the biophilic space it is a movement and time, causing dramatic emotions, such as the spread of light and the creation of shadows on elements of visual perceptions outside the space Viewing them from several different angles creates visual cognitive multiplicity through the movement of the diffuse light that is reactive during the day as figure (9).



Figure 9: Dynamic and Diffused Light {5}

3.1.7. Connection to Natural Systems: Interaction through this pattern is done through visual and sensory communication with the conscious and unconscious natural environment system By summoning the relationship between the viewer to the visual perceptions of emptiness and elements of the natural living void, the life cycle of different seasons and its nostalgic and enlightening results, and the creation of depth and relaxation, Examples include: seating areas and celestial spaces added to buildings and their relationship to the biological environment, and elements of seasonal visual perceptions and their outcomes from the fall of leaves and flowers and their interaction with space and the creation of new visual perceptions as figure (10).



2.3. Natural Anal

of materials, colors and other patterns found in nature they appear in the form of perceptions of form and animated artwork and decorative elements of space in the form of the following patterns:

3.2.1 Biomorphic Forms and Patterns: - Interaction is achieved through this pattern by deriving symbolism from lines, textures, pluralism, autism and other forms embedded in the biological environment which makes us feel comfortable, twins, attractiveness and integration with visual perceptions of this space Examples include - devising the organic forms of the elements of visual perceptions in a vacuum, such as figure (11), the organic form of wood and lighting, and its harmonious, harmonious, and diverse plural colors in terms of shape and individuality of curves, refractions, and other geometric shapes.



3.2.2. Material Connection to Nature: The interaction is through this pattern by physical contact with the elements of visual perceptions in the space that are reflected through the environmental treatment of these elements. To create a distinct and dynamic sense that increases human interaction with the vacuum environment that creates a sense of either warmth or originality and stimulates and inspires the feelings and feelings buried and unconscious in the viewer. It affects the psychological and physical state of the user, and this pattern is reflected in the visual perceptions through the use of wood, clay, leather, stones, wools, natural fabrics and other elements of the bio-environment as figure (12).



Figure 12: Material Connection to Nature {10}

3.2.3. Complexity and Order: Interactions through this pattern are made by means of the visual information and spatial observations that are caused by the dynamic space like hierarchical, rural, serial, intertwined, embracing, simplified, and other forms of spontaneous nature, to create a feeling in the viewer with participation and balance between systemic and embracing visual perceptions. The right image shows a view looking up at a dense canopy of trees, with sunlight filtering through the leaves, creating a complex and ordered pattern.



Figure 13: Complexity and Order {5}

3.3. Nature of the space:

3.3.1. Prospect: The interaction is through this pattern by watching through depth, design, planning, opening and closing as figure (14) to gain the viewer a sense of security, control, familiarity and containment. Examples include visual perceptions on the floor of space and their orientation to depth, slopes, gradients, transparent elements, and scenes within sight and endless visual perceptions.



3.3.2. Refuge: Interaction through this pattern is carried out by escaping to the natural external environment and a place of resort to intimate compatibility with the elements of visual perceptions in space. To feel the twins and heal and gain positive energy and create separation and uniqueness with the ocean, for example: figure (15) of visual formations in the seating areas container such as pergolas and tree incubators, covered corridors and cultivated external terraces.



Figure 15: Refuge {5}

3.3.3. Mystery: The interaction is through this pattern by searching for more interactions with the vital external reality and devising concrete and intangible sensory depths to speak to the viewer, the visual perceived elements surprise, a kind of acquisition of ideas and elements of reward and exploration and penetration into the unknown. Examples of these perceptions figure (16) of winding paths and labyrinths, research behind unknown audio and hidden scenes in other dimensions.



Figure 16: Mystery {10}

3.3.4. Risk/ Peril: - Interactions through this pattern are made by the viewer feeling that the perceived elements have a reliable risk of sudden ups or downs, Suspended, oblique, and tight forms, to make the viewer feel the effects of excitement and potential threat rhythm, but positively, which helps to explore and search for safety and resistance. Examples of these elements - elevated formations, hanging passages, transparent barriers on heights as figure (17) and walking over water through transparent floors or the use of organic elements of their natural size posing a threat like spiders and snakes.



Figure17 Risk/ Peril {5}

4. Human interaction towards visual perceptions in the subconscious mind of the unconscious: {4} Figure (18) Life is the organizer of the elements of the vocabulary of the universe of humans, animals and inanimate objects, and that there is a relationship between these elements and life in terms of our awareness of consciousness and the unconscious. We notice that inanimate objects exist in life, but it does not realize awareness and the unconscious as for the animal, it realizes life with awareness only, so that man comes in a higher rank to realize the full aspects of life in the awareness of consciousness and the unconscious. This is what philosophers have dealt with about the concept of existence and life, and among them:

- **Reno Decartes (1650-1596)** where he discussed the dialectic correlation of reason and consciousness as a bilateral relationship on the basis that our awareness of things through the conscious mind and our own experiences what we realize with our conscious mind is nothing but the product of the contents of our minds and our cognitive experiences in the unconscious.

- **In another vision of Decartes**, he mentioned that every mental activity is by definition conscious activity and for the transition to a mindless subconscious that takes place through a self-contradiction in consciousness and subconscious.

- **In another opinion of the psychologist Freud**, the users realize things with the credibility of their existence and they realize other things with an unconscious conclusion of the true qualities of the things perceived in the unconscious, which confirms that the acquisition of life and the human qualities of visual perceptions take place in the Lao mind.

-**From our faith background to perceive life in things**, we derive from the Noble Qur'an. The Qur'an recognizes feelings for everything such as the weeping of heaven and earth {the heavens and the earth did not cry over them, and they were not seen.} (29) *Surah Al-Dukhan*, and the compassion of the earth, the sky, and the mountains, carry the faithfulness {Indeed, we offered the Trust to the heavens and the earth and the mountains, and they declined to bear it and feared it; but man [undertook to] bear it. Indeed, he was unjust and ignorant} (72) *Surat al-Ahzab* The reverence and rifting of the mountains of God fearing { If this Qur'an were revealed to us on a mountain, you would see him as submissive, rifting from the fear of God and those proverbs we give to people so that they may think} (21) *Surat Al-Hashr*, { Have you not seen that God worship him in the heavens and the earth, the sun, moon, stars, mountains, trees and animals and many of the people and many of the right to torment him and Lehne God He has no honor but God does what He wills} (Hajj 18) {You have never seen God be allowed to be in heaven, to be exposed, to the light and to fly. All his prays have been heard and allowed, and God is a day when they do} *El-Nour* 41{And from his signs that you see the earth as humbled, so when we descend upon the water on her, she is shaken, and she is raised, that the one who revives it to me} *Phosellat* 39, These are some Qur'an verses that give life everything, and this confirms the research hypothesis that it senses life in the rigid visual perceptions to create this consciousness with certainty of jealousy Feeling this effect and interacting with it on the psychological level despite its relative and stable variation in the subconscious mind affecting the visual

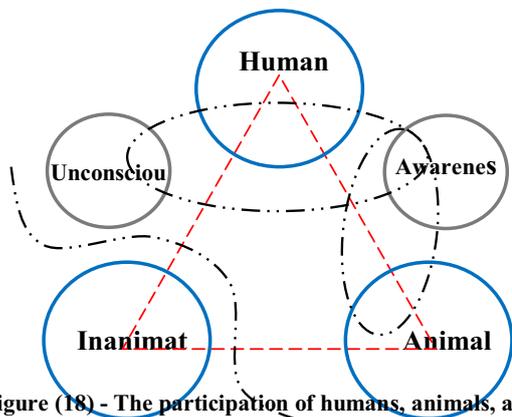


Figure (18) - The participation of humans, animals, and inanimate objects in the attribute of life with their difference in perception - Researcher Source

perception, and despite the difference between our awareness in the subconscious and the level of its expression in visual perceptions. Every living being has expressive intentions for its life and its administrative ability to act, graded in terms of strength and weakness between humans, animals, and inanimate objects. In light of this, the question arises whether each of the perceived elements is separate in its vital itself or is it in its comprehensive perspective within the space.

5- The vital characteristics of visual preceptors {6}

Visual perceptions in a vacuum have many characteristics that follow the mind map of the recipient, and through them we perceive these elements and explain them through human interaction towards these perceptions in the conscious mind of the unconscious and from these characteristics: The recipient's sense of its vitality due to his knowledge, observations, and experiences, and his ability to visualize, analyze, and produce, so that these characteristics range from being real to imaginary, from being to non-being, **Rapoport defined** properties in a vacuum with diversity and assimilation, according to specific laws, In Lironzaft's opinion, they are internal representations of the properties and relative locations of people and things in space, At a time when the viewer can see a house on the top of the mountain, at the edge of the river, or in the middle of the forest, he can transfer this image from the real reality to another imaginary reality and thus he has moved from being to non-existence and these characteristics have vital dimensions of it:

A - Bio-stability: where the mental image of visual perceptions interacts with any accident change due to the multiplicity of factors affecting this change and how to restore the true image with its vital characteristics.

B - Inaccuracy in symmetry: the visual perceptions are not the same in accuracy, but retain the subject figure (19).



C-Generaliza **Figure 19: Inaccuracy in symmetry in natural trees, unlike artificial trees {11}** mentioned differences and differences, which are sometimes clear and apparent, such as the composition or benches from tree wood and designing a general seat for a group and containing the trees as picture (19).



D- Biasing: Adopting the idea of designing visual perceptions in their vital form, because their owners are biased and fanatical of that quality to preserve their nature and communicate with the vital environment.

E- Skip time and space: This is done through visual perception of these elements in the spatial space in a time between the past and the future, and vice versa, the perception of time in a realistic and imaginary place.

W-Tradition and simulation: the visual elements in space are perceived by a direct and indirect method, as directness can imitate and perceive a vital element, and the indirect is the inspiration for this living formation in the form of figure (21, 22).



Marwa Magdi, speaking about her artistic work, said: In my style of sculpture known as biomorphic, the artist extends his imagination to the fullest extent to find a relationship with the forms of the plant and human features which are images or forms, and refers to living forms such as plant, animal or human body or conjure up and see in the work of the sculptor As a mysterious cavity and organic lines inspired by nature is an irregular lyrical form of a living being but not specific or distinctive that the recipient can see according to his earlier fantasies, experiences and feelings of his own .{7}



6- Due considerations in achieving the visual image and visual perceptions in architectural design

6-1- Achieving vibrant quality:

The visual perceptions of a vibrant space in order to achieve its goal must be a dominant force directed towards achieving the ability to live in a vibrant space, The vibrant elements are a spectrum of perceptions characterized by vitality, change and strengthening of the societal personality in the light of human interaction with them and achieving the concept of quality of life And that is by not directing the person to a feeling of happiness, love of life, and acceptance of the self-merging between personality, place and time in a harmonious and harmonious image that achieves the best ability to deal efficiently with the most severe conditions of life surrounding a person.



Figure 25: Accepting the self that is integrated between personality, time and space

6-2- Achieving vibrant quality visual perceptions :{ 8}

- 1- Integration, compatibility and overlap between functional elements in place and visual perceptions in a vibrant and dynamic approach.
- 2- Pictures of mixing the different activities of the population that gather throughout the day in an interactive environment, and the activities and visual perceptions in the void in a vibrant harmony.
- 3- Societal stability, despite its diversity and cultural and intellectual diversity, as a result of mixing and vital integration in the place and not feeling the difference and providing opportunities for interaction and awareness of the vibrant elements of emptiness.
- 4- A vibrant space has the potential and the ideals to exist despite differing self-interests and societal beliefs to achieve the dimensions of security, trust and belonging.
- 5- Space with vibrant perceived elements has the characteristic of sustainability as it can withstand the natural influences of sun, wind, rain and energy.

Results:-

- 1- The interaction between man and visual perceptions in a vacuum has transcended the boundaries of time and space, and these perceptions have become more oriented towards a dynamic design that strengthens the connection between nature and man.
- 2- The vitality and perceptions of the void must be preserved, the ability to attract attention, coexistence, and integration with the void and not be ignored.
- 3- The manufacture of biophilic space is a sequential process that starts from the use of space and then planning and then the stage of dynamic design and finally visualization of visual perceptions in the third dimension of space and its integration with the biological nature.
- 4- The human mind perceives life in visual perceptions with multiple images to give hidden emotion to it.
- 5- The unconscious mind, with its cultural and human background, and those who have an ideological background believe in life inanimate objects.
- 6- The study invites us to formulate the void with its visual perceptions on the basis of the interaction between the two parties, one of whom is alive and the human being and the other is the void with its vital components.
- 7- The architect has an important role in applying the concept of biophilic and expressing it to design elements of emptiness.
- 8- The process of coordinating visual perceptions can play a vital role in achieving environmental and physical balance.
- 9- Applying biophilic concept in the design of vacuum elements meets one of the requirements of quality of life.

Recommendations:-

- 1- The research recommends achieving a relationship between real and imaginary life in visual perceptions of the outer space.
- 2- The researcher recommends the transition from abstract visual perception to vital visual perception most relevant to the user.
- 3- The ultimate goal in voids must be achieved by achieving vital quality of life.
- 4- The necessity of fabricating innovation and visual creativity to achieve visual awareness that develops the imaginary and mental dimension of the viewer.
- 5- Visual effects and perceived elements must be created within the void to realize the concept of a natural life in the environment.
- 6- Ensuring the appearances of life and the ability to change in the perceptive elements of the viewer to form his belief that something happened in the mind.
- 7- The concept of biophilic is expected to transform as a developmental idea for the environment as a whole and the development of its various elements.
- 8- The architectural and urban designer must take advantage of the elements of the natural environment in its vital concept in the visual perceptions of space.

Recommendations for a future vision

- 1- The necessity of directing research on the concepts of residential quality of life and the biophilic design of spaces.
- 2- It is necessary to note the necessity of having a research center specialized in the field of biophilic-design in accordance with the foundations and standards of quality of life that contributes to housing decisions and serves as a house of expertise and has the authority to issue decisions according to new standards.

- 3- The necessity of communication between research centers and the residential community in order to develop renewed and continuous standards for the needs of society.

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