# The implications of the impact of visual knowledge on the design of residential facilities

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#### **Introduction:**

Visual knowledge is one of the means of transferring information from the designer to the recipient through his designs, for visual knowledge is one of the most important mechanisms and means of expressing the values of visual culture as an integrated design system of lines, symbols, shapes and formal relationships between the complementary elements of any design.

Visual knowledge as mechanisms of cultural expression through the influence of its connotations in interior design in general and the design of residential facilities in particular .. It carries the experiences of designers in general and interior designers and furniture in particular. The mechanisms for expressing aesthetic shapes and values in designs are cognitive information that consists of the elements surrounding us, so it is a balance, experiences, and societal accumulations.

Therefore, visual knowledge as a design culture in the specialization of interior design and furniture in general and the design of residential buildings in particular plays an important role in the formation of the interior designer and contributes to increasing awareness, developing knowledge and perception, as it effectively contributes to the growth of creative design ideas and solutions within the internal spaces of residential facilities that deal with the interior designer, it also helps in the process of determining options for interior design treatments for spaces, internal architectural spaces in residential facilities, as one of the tools for transferring information in a simple and fast way to the recipient .. It is also mainly related to the components and furnishing elements inside the spaces of the residential facility, including furniture and units of interior design supplements, including lighting, combinations of colors, surface textures, materials ... etc.

This visual culture in design as one of the tools of modern information technology contributes greatly to the development of design trends in general and the design of residential buildings in particular, as the interior design treatments for spaces and the design vocabulary of modern furniture elements can also contribute to the formation and development of the creative imagination of interior designers.

### **Key words:**

**Visual knowledge:** is the culture of the ability to understand and perceive the visual relationships in the design of both lines, shapes and symbols.

**Visual thinking:** It is an internal process that includes mental perception, while employing other processes related to the rest of the senses.

**Modern technology:** It is the practical application of the latest scientific findings in any field.

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#### Importance of research-\*

The importance of the research lies in the actual utilization of the values and connotations of the mechanisms of expressing visual knowledge as an integrated design system of lines, symbols, shapes and configurations.

#### - Research Problem \*

- The absence of a real mechanism that expresses the values and connotations of visual culture that can emerge from the relationship of lines, symbols, shapes and formations in the designs of the designers of the interior design and interior architecture specialization.
- Attempting to link the requirements of the interior design and the interior architecture of any interior architectural space with the values and connotations of visual knowledge that the interior designer can communicate to the recipient through the methodology of forming the creative imagination as a visual culture in his designs.

### **Research Objective-\***

- Enriching the creative imagination of interior design and interior architecture designers through the development of visual knowledge as a design culture as a gateway to developing the aesthetic taste and cultural awareness of the recipient of their designs as an applied product within the interior spaces of the residential complex.
- -- Access to an integrated system in designs through visual knowledge of lines, symbols, shapes and configurations of elements and components of interior design solutions inside the interior spaces of residential buildings.

#### : Research Methodology:

- The researcher follows the analytical descriptive approach to describe, analyze and check facts and information that he could obtain, through visual knowledge, which is one of the mechanisms for expressing visual culture within the internal spaces of residential buildings, which contributes to the formation of the creative imagination of the interior designer.

# 2- The concept of visual relations in residential building designs through the characteristics of visual culture:

The ability to understand and formulate visual relationships in design elements and components is the basic component of its visual culture, in other words it is the ability to read, interpret and understand design elements and components through lines, symbols, shapes and formal relationships between the different elements.

# 3- Designer's skills in communicating readings of visual shapes in design as a visual culture in residential facility designs:

The interior designer can communicate to the recipient of his design many connotations and information by expressing the shapes and symbols with their meanings and with the furnishing elements in the interior design with its various complements within the residential interior spaces, these meanings and drawings can convey what the interior designer wants to communicate through his design solutions inside the spaces of the residential building to the recipient in ease .. which is considered as a system, a cultural expression through those designs

that carry the expertise and experiences of designers in general and interior design designers and furniture in particular within the interior spaces of the residential spaces.

#### :3-1 The skill of defining the meanings of shapes in residential space designs



**Image No. (1).-**

The designer's skill in introducing the recipient to the meanings of the shapes in his design depends on the ability of the interior designer to determine the dimensions of the shapes presented within the space of a single residential architectural space. So we find the interior designer in **image No. (1):** He determined the flatness of the sitting and waiting area through

the dimensions of the furnishing elements that are inside the space .. In this model we find the waiting sofa and its external borders may be defined by the carpet that bears the same blue color as the sofa, and with the landing points of the units, lighting units are suspended from the ceiling as a form and color determinant of the same place, in addition to determining the movement corridors around the place of sitting in light color around the blue carpet.

)As shown in **Image No** (1.(

#### 3-2 Skill for visual linking of formal relationships in residential facility designs:

It is an attempt to find formal and intangible visual harmonies through their visual meanings between the surfaces and components of the interior design within the residential space, and by achieving the organic correlation mainly between the components and elements of furnishing, lighting units, color combinations, touches of surfaces and materials.



Image No. (2).

in Image **No. 2**: It shows the interconnectedness and harmony of the fabric the masonry between the circular bed as a furnishing element of the bedroom model described in front of us and between the design described in front of us and between the design idea

of the roof in a circular form above. The circular flatbed of the bed also, with an emphasis on the strength and unity of organic bonding between the surfaces as hangers in the design form among the circular bed and the ceiling, and the hanging ring,

- As well as the harmony and consistency of the brown color within the design components as a whole.

# 4- The influence of visual culture as a component of the creative imagination in residential facilities design solutions:

The visual culture plays an important role as an essential element in the formation of the creative imagination in the design process through the connotations of interior design treatments within the design as a whole, as these connotations are based primarily on the cognitive structure of the interior designer, which he reflects later as a process of introducing and understanding meanings, ideas and mental perceptions through symbols, shapes and elements of its design components.

Also, through the possibility of recalling it from memory and displaying it in a form similar to the original perceptual experience, this creative imagination in interior design solutions in residential facilities becomes an original part after that of the cognitive construction of the recipient of those designs.

# The above can be clear to us through the following forms: First form:-

The concept of symbolic analogy in visual culture as a creative component in design aims, the interior designer by unleashing some kind of mental imaginations that each recipient can receive through the lines, materials and colors that the designer expresses through his designs in the place that he wishes to convey to the design user.



Image No. (3)

### - **Image No.** (3)

Shows a model for the reception area in a residential area, through it, the designer aims to convey the concept of symbolic similarity through imaginations of the mentality that can be achieved through a group of circles of different sizes and the colors, to reflect the meaning of the connotation of the requirements of the interior design of the walls floors, ceilings and curtains for the place as a whole.

#### **Second Model:-**

One of the influences of visual culture as a component of the creative imagination in the design process is the concept and effect of personal likeness, including the influence of personal likeness of the designer in his design of the first impressions that he wants to communicate and draw in the memory of the recipient of his design when he sees the design for the first time as a realistic application product.

The first impression carries with the recipient of this design a concept with specific connotations, and such connotations as a culture of visual knowledge are what the interior designer wants to be imprinted in the memory of the recipient of this design residential space.



Image No. (4).

### No. (4) Shows the design treatment inside the reception Image

Expressionism in one of the residential facilities, the interior designer tries through Semantics area

and a character of color... **MOOV** adapted as visual culture and speech language is similar of the moral connection of was repeated in pieces of furniture, curtains and ceilings to achieve unity

the place as a whole.

#### **5-Main Results**

- **5-1** The accurate analytical study of the elements and components of the visual knowledge of the interior designer produces a visual culture that the designer in turn transmits to the recipient through his designs as a result of experiences, and accumulations of knowledge and through the mechanisms of expressing aesthetic shapes and values, which are cognitive information that consists of the surrounding elements, which is a balance of experiences and accumulations. A community that effectively contributes with the modern information technology tools that the designer gets to the increase and growth of creative design ideas and solutions within the interior spaces of residential buildings.
- **5-2** The culture of freedom of visual expression in interior design is one of the most important means of artistic appreciation, and it reflects the cultural awareness of any interior designer, and it ranges between methods of direct rhetoric and between symbolism and suggestion in the design process, so creative interior architecture designers are the ones who choose one of their ideas for their ideas.

Those methods to facilitate the perception of it by the recipient (the recipient's culture).







- Image No. (5(

For example, we notice **in Image No.** (5) through the interior designer freely in his design solutions for a student's room, and we observe the culture of visual expression in symbol and suggestion through the interior designer's use of the symbols and elements of trees and their leaves that exist in forests, and with visual suggestion as one of the symbols of the creative imagination components of the atmosphere and nature of the forest by treating a mural with a picture of one of the walls of the room that shows a picture of a bear in the forest, we note that the rest of the walls were designed through the eloquent disclosure of the forest atmosphere through the symbols of weeds and flowers.

Also in Image No. (6) the interior designer freely unleashed his creative imagination from one of the areas of the dining and living rooms, and we also note in it that the interior designer used the culture of visual expression in symbolism through the stems of the bamboo plant as a culture of visual expression and as one of the IT tools for nature by not separating between the inner surface of the space for food and living to achieve eloquent design and direct disclosure of the identity of family bonding, and we note the suggestion of the softness in its use of bamboo stems, as well as the flexibility and its diversity in the formation of table legs and dining chairs. 5-3 The feedback of visual perceptions and knowledge that is presented visually and reaches the recipient through the culture of visual education in the design solutions provided by the interior designer in his designs may cause positive psychological and behavioral changes to the recipient of those design treatments, and this is related to the recipient's ability to read those perceptions and visual knowledge and gain information. Through information technology and its applications and its formation in his imagination as a result of the recipient's interaction with those perceptions and visual knowledge, that is, the matter requires the interaction process between the recipient and those vocabulary as visual cultural knowledge, which can be taken into account by the designer in the design stages with his design treatments, as well as when converting that design into an applied product. ... which is known as high-performance design.

#### **6- Recommendations**

1- The researcher recommends the necessity to increase the balance and experiences of designers' knowledge and cultural perceptions, as it is the one that develops their awareness of visual culture as an entrance to the development of aesthetic taste and the formation of creative imagination in their design treatments and also develops the cultural

awareness in its forms and design images, which are then transferred naturally to the recipient through the applied product design treatment.

2- The researcher emphasizes the importance of the designer's cognitive structure, as it is considered the origin of the process of introducing and assimilating meanings, ideas and solutions as a comprehensive design system in which the design lines, symbols, shapes and formal and formative relationships are integrated between the design elements and components, then an attempt to transfer that design system in its simplest form to the recipient of this design through the product and the application that is presented to him, whether it is related to the designs of residential buildings or buildings of various kinds.

#### 7- References:

- **1-** Abu Al-Makarem, Fouad Founded the Visual Perception of Movement, 2004, Arab House Book Library, Cairo, Egypt.
- **2-** Abdel Hamid, Shaker, Visual Arts and the Genius of Perception, The Egyptian General Book Authority, Cairo, Egypt. 2008.
- **3-** Weir, Francis, Mike, David Moore, Visual Culture and Visual Education, translated by Dr. Nabil Gad Azmi. 2007.
- **4-** Bois, Yve-Alain. Pierre Francastel,, *Architectural Design* On Methodology of Architectural History1991