The role the expression theory on the clarity of architectural facades

[1]Dr. Maysoon Muhi Hilal

[1,2] Architecture Department /collage of Engineering / University of Samarra
maysoon.hilal@uosamarra.edu.iq

, [2]Taghreed Flayyih Hasan,

[1,2] Architecture Department /collage of Engineering / University of Samarra

ABSTRACT

Facades that envelope architectural buildings in many ways reflect the internal function of the structure (construction, building materials, cladding). The major goal of these techniques is to express the elements of the building's internal function. and to figure out what expressionist theory is because tastes are created by the self. Tastes vary throughout time, and so does one's perception of the world. in architecture, as well as its significance in transferring the building's architectural concept to other areas was the study problem in the presence of cognitive deficits in the relationship of expressive theory in reading urban facades the research adopted a descriptive-analytical method The materials used in the external construction and the perception of the expressiveness of the exterior façade Architectural facades in a street in the city of Samarra were addressed to study and analyze 35 repulsive facades in the same street according to a table that included the effective indicators in the theory of Expressionism and its application to those facades and extract the results .

Keywords: facades, expressionist theory, architectural buildings, internal function

1. Introduction

The architectural facade is a mirror that reflects the building's outward state and reveals its inside function in a suggestive manner. We can classify these interfaces as (artistic interfaces (fantasy) and expressive interfaces and symbolic interfaces of a philosophical character by researching the interfaces. Buildings have both external and internal characteristics. In the architectural aspects, a-external features are represented by: its opening like doors or windows (wide, narrow, transverse, or longitudinal) and mashrabiat with various types of columns used as building materials or for aesthetic purposes. types of arches (Amoy, Abbasid, Ottoman, European, Gothic) decoration (botanical or geometric) The facade's

historical period (Romanesque, Islamic, Gothic, Renaissance, Baroque, etc.) and architectural layout (vertical, linear, big blocks, small blocks, etc. and ceilings (free, inclined, dome, small area or vast area,

The concept of expression refers to the manifestation or disclosure of a subjective feeling in a person (as feelings or a specific idea). In artistic studies, the correlation of the idea of expression with the subjective side of the emitter, as well as the objective side of the depiction of incidents and situations, can be recognized. The expression is the relationship between the artist's or designer's idea (expressive object) and the

result (expressive object).The existence of a demand for both sides to be integrated and compatible]
[1]

The Expressionist movement in architecture relied on transparency in the output and on free organic lines and sculptural forms to reflect the idea of dynamism or to reflect the direct function of the building directly or indirectly (symbolically) has reflected the practical the formation of shapes according to the directions of expression is (creating shapes with a dynamic effect on the eye, direct expression of[Function, future expression, symbolic expression), [on the shelf, 2007, p. 10 In many ways (structure, building materials, cladding), this style of facade represents the building's inside purpose. These approaches are mostly used to express the components of the building's interior function. When looking at the Georges Pompidou Centre in France, the structure appears to be practical at first glance. Productivity (factory, production workshop, etc.) is a term used to describe how productive a business is. However,

the architects (Pompidou and Rogers piano) was able to convey the center's practical activities. Many factories have a large number of functions (which are not reflected in the factory's interfaces). In contrast to its internal operation, the factory's destinations are frequently straightforward. it's the degree of compatibility and proportionality between the designer's intent (the expression of his ideas and the user's response) and what is really achieved in the final product it has6 goals

1-Adopting a philosophy of self-idealism, by promoting self-individualism

2- carrying a slogan, he was able to express himself

3-expressing one's thoughts and opinions .regardless of family ties

4-the essence of the individual, freedom, feeling, .and conscience

5- provide feeling, conscience and emotion on the .mind, experience and experience

6- without self-perception is the objective world does not exist so there are- name of the symbolic for geometric figure in table(1-1)

Table (1-1) the symbolic names

No.	geometric figure	The name of the symbol
1	Point creator	Point creator
2	Straight line	thought
3	triangle	The soul
4	Square	material
5	Pentagram	The Nature
6	hexagons	human body
7	Sevenfold	The world or what it expresses
8	Octagon	sensory values
9	.circle	. universe

so are geometric shapes, starting from the point to the circle, which also have expressions and

symbols And we can read the architectural composition of the facades that carry, Character

of symbolism and by studying these facades the internal function of the building is expressed in a spiritual-philosophical form and examples of this type   From the study of interfaces many for example the library of Alexandria   Egypt The design came in the form of a disk to symbolize the sun and the light emanating from this disk is only   science   and knowledge

Methods and means of which followed by expressionist artists in their products such as (distortion, coding, exaggeration and the transformation, fragmentation, switching of shape and color)
exaggerations and changes in fonts and colors
1-
2-the deliberate neglect of the trend towards nature adopted by the influencers
3-idealistic works of art that are associated with the concepts of Expressionism and symbolism. [1]

2-Literature review: Building facades have been a large topic of development and research over time, with architects adopting and sometimes totally stripping them of their adornment The design of buildings used to be centered on the facades and interested in their adornment in ancient historical periods, but following the development of architectural education, the focus shifted to the areas first Modern architectural tendencies, i.e., from the turn of the twentieth century, have seen the facades stripped of their ornamentation, with the architectural view that solving various design challenges was more essential than the decoration of the facades prevailing. The focus was on the freedom of facades by eliminating their structural and environmental roles; facades were detached from the structural system and modern facades were built, including curtain wall facades and the use of current air conditioning and heating technology. The dependence on economic, technological, cultural, and environmental solutions for the design of facades has replaced the aesthetic evaluation of facades, which was based on artistic adornment, so that the exterior walls of buildings are no

longer recognized as facades but as the outer cover   of them

The spatial realization of interfaces for a large number of jobs at once is itself a successful economic   direction   such as

1-Protection against environmental disadvantages: this includes thermal and sound -insulation, wind, rain and various contaminants Interconnection or isolation between the interior and the exterior: it includes providing natural lighting, ventilation, outdoor views, living in the natural environment, communication between the residents and can provide visual and audio privacy when needed .[2
2-Express the function of the building: in - ancient history, the facades of buildings were similar despite the different functions, the designers paid attention to this problem and the facades began to express the function or functions of the building and the development of this trend so that today it is a basic requirement in   the design

3- Achieve the attraction factor: there are buildings that need to be in appearance or formations that attract the public to them, such as commercial, recreational or cultural buildings, such as the facades are completely transparent to allow to identify the inside of shops or entertainment or can be facades of public libraries or museums aimed at attracting passers-by and raising the level of knowledge .and culture of the population
4-Building distinction: there are buildings with - high or important functions such as religious buildings or national functions or that need to distinguish themselves in the area in which they are located or to be distinguished from the surrounding buildings are mirror the Expressionist style in architecture, the product was transparent, with free organic lines and .sculptural forms

The idea of dynamism, or directly or indirectly (symbolically) reflecting the direct function of the structure, has reflected the practical.

The term "expressive appropriateness" is defined as "the ability to express oneself in a

The degree of alignment and proportionality between the designer's goal (the expression of his ideas) and the recipient's response[3]

Dr. Louis Mumford's said in his study "expressive function in architecture" 1999 the mechanisms and purposes of achieving expression. dealt s with how to achieve the goal of the expressiveness of the building to form a suitable building through

communication between the recipient and

1- a architecture and the formation of a dialogue duality between them, through the representation of human and emotional values that have special connotations for the recipient

2-investigate the suggestive image associated with the mental ramifications and their impact on the formulation of the conversational language of architecture

3-achieving the spatial and temporal belonging of architecture considering " that each building according to civilization and personal goals in addition to requirements

Material (physical) and mechanical", the means (mechanisms) to achieve expressive appropriateness through the investment of symbols with meanings[4]

3- Relations between blocks such as equilibrium and symmetry: The symmetry and consistency of its components, which feels the observer to the interface stability and balance, is the study of the distribution of interface lines Time aspects must be either balanced or have this balance, which necessitates the usage of various blocks, such as a huge square block and smaller square blocks. - The common result of

symmetry is the fundamental equilibrium The study of the distribution of interface lines is concerned with the symmetry and consistency of its components, which alerts the observer to the interface's stability and balance Time faces must be balanced or have this balance, necessitating the use of a variety of blocks, such as a large square block and smaller square blocks [5]

4- The proportion of silent open: The overall appearance of the facade is determined by the relationship of its parts' spaces, such as wall surfaces and window and door openings, and the balance of these factors is calculated by the balance of the facade's components, the materials used in its construction, the colors added to it, and the style of the façade[6]

5-Methodology: The researchers used a descriptive analytical technique to find the most effective expressive theory indicators, as well as Mechanisms for Achieving Expressive Objectives (Copying, Simulation, and defining the type of signal on which the systems are based). The results were applied to street facades in Samara, see Index (1) in the form of expressive (symbol, pointer, icon). The respondent's academic attainment, gender, and current line of work were all defined on the form, followed by the table of values, which represented the sample. According to the practical application, a group of 40 architects, including consultants, is made up of students. Females and males are equally represented in postgraduate studies and architecture graduates by using a Measuring method which contains:[7]

1-Analyzing and describing the selected elevations of many building in Samarra city and applying the selected vocabulary from the framework to them, according to the designer's opinion.

2-Conducting a questionnaire study to determine the goals and mechanisms achieved in the production and according to the opinion of the recipients through the adoption of the form

6. Conclusions

From the results of the practical application of elected elevations and according to a

questionnaire see (index1), it was found that the most investigated mechanisms in all the products are the coding mechanism that stood out with the highest percentage through the designer's design to give an idea through borrowed symbols ,From aspects of the historical, environmental conditions, outside the field of architecture and achieved (21%) followed by the borrowing mechanism19%, followed by a similar mechanism between an idea and a relationship between a part and a whole (17%), followed by a mechanism Copies by (15 %) while the rest of the instruments have varied rates of achievement and spirit from medium to few which is the paradox Interjection (9%)   , contrast (3%), duplication (2%), simulation (8%) and striation (8%) as for the mechanisms achieved in the output ,(4 and according to a re-designers found that the Usage and verification is 18%)most mechanism the coding mechanism (21%) followed by the borrowing mechanism (20 %) and the simulation mechanism (18%)   The same percentage (17 %) while the rest of the mechanisms have varied between the few to)the medium, which is the paradox (1%) and inconsistency (2%), (%2interjection duplication (10%), copying (1%) and nudity (8%).This is proof of The existence of a consensual relationship between the expressive goals of the designer in the production   and the mechanisms adopted to achieve them and the reader's reading of them

References

1- Bahnasy , Afif, "**Trends of Contemporary Plastic Arts**", Press of the Ministry of Culture and National Guidance, Riyadh University, Central Library. 1962.

2-Ponta, Juan Pablo, "**Architecture and its Interpretation: A Study of the Expressive System in Architecture**", translated by Suad Abd Ali, House of Cultural Affairs, General, Baghdad. 1996.

3-Tawfiq, Muhammad Saeed, **"The Metaphysics of Art for Schopenhauer"**, Beirut, Lebanon, Dar Al-Tawnier for Printing and Publishing, first edition.

4- Mayada Fahmy Al-Hayali "**Mechanisms of Expression for the Concept of Creativity in** Jordan. Design" Studies, ,2010**Interior** Engineering Sciences, Volume 37 , number 2

5-Mumford, Lewis, **"The Expressive Function in Architecture"**, translated by Hamandi, Mahmoud, Al-Ruwad Magazine, first issue, Baghdad,

6-Sondgrass.A.,"Time in Architecture Entry" Delhy.1990.

7-Eco, Umberto, "function and sign; the semiotics of architecture "in" signs ,symbols and architecture"   (Broadbent ,bunt ,Jencks);manchester,1980.

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NO.		Emage	active indicators											
			copying	the coding mechanism	historical,	environmental	inconsistency	employment	duplication	nudity(	interjection	contrast	simulation	(striation (
Elevation 1														
Elevation .2														
Elevation .3														

Elevation .4														
Elevation .5														
Elevation .6														
Elevation .7														
Elevation .8														
Elevation .9														
Elevation .10														