

## Physical Order and Disorder in Expressionist Architecture Style

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**Abstract:** Expressionism, in word, has been translated as "expressive", "exciting", and "integration mode". Expressionism is a term for the way in which exaggerated colors and shapes are used in order for better expression of internal state. In other word, expressionism is a way free of naturalism which would like to reveal emotional states much brighter. Max Bense who is one of the founders of informative aesthetic believes that, order has three degrees: chaos, being structured and being shaped. When we consider complete chaos that there are no regulations for connection between different components. In this case the possibility of prediction equals zero and innovation in maximum. Definition of being structured is one organized order with a structure that might have different forms. Bense calls the third part of order as a "chaos or disorganize order". In all three factors above replacement of components affected by a general organization whatever the rate of order is more and this order is more complicated, the informative content is less. In this paper first we have introduced this style briefly, we described order and disorder in the architecture and we have analyzed Evidences of order and disorder in this style.

**Key words:** Physical order and disorder, Expressionism architecture style, Evidence

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### *Expressionist style:*

#### *Concept of Expressionist style:*

Expressionism, in word, has been translated as "expressive", "exciting", and "integration mode".

Main purposes of Expressionist artist are realm of humanitarian and mankind interests. Expressionism is a style in art which emphasizes neither on fact about nature nor on abstract notions based on that fact whereas it is struggling to portray emotions, affections, moods, and imaginations of artist.

Referring to the meaning of the term "expressionism" and with brief definition which mentioned of the sum, we can say this manner of expression is a way to release emotions, emotional pressures, and inner spiritual forces and to express artist's subjective perceptions of external conditions and environment. And it seems that expressionist artist often uses an exaggerated emphasis to liberate and evacuate his internal forces.

Expressionism is a term for the way in which exaggerated colors and shapes are used in order for better expression of internal state. In other word, expressionism is a way free of naturalism which would like to reveal emotional states much brighter.

Expressionism was aroused from a mutual reaction. One was the psychological aspect: exclusion and fear resulting from transformations during the war; war and misery prompted artists taking refuge in individualism and personal world.

The second reaction was a cultural aspect: Art after excluding and release elements of impressionism's period which were reflection of emotional space effects, now, was seeking to give immediate expressions to the artists' feelings.

Though an architect called "Erich Mendelsohn" did not create very important works in architecture, but is important as a person who added movements and principles of "Expressionism" in this field.

In 1919, Mendelsohn due to submit of his imaginable sketches at Paul Cassirer's gallery was recognized. His first sketches are inspired from "Wagner" and "Olbrich". These sketches which have been designed during war and immediately after that, have aggressive forces and vague symbolic characters which will take place well in the movement form of "contemporary expressionist".

In 1920, with the construction of "Einstein Tower Observatory" in "Potsdam", Mendelsohn would find first practical position to express his ideas. This work is considered to be one of the most possible direct forms of these "passing insights".

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In this construction, Mendelsohn considers a form which in first mutation, be recorded in a liquid mass. Naturally, suitable material is reinforced concrete which due to its own capability of, get shaped of its mould seems to be a means for architects to release from bound bases of right angles and the floors which have been correspondence.

Despite these facts, this term was true about an artist who did not follow principles of project balance and traditional concept of beauty to transfer his emotions directly. And this exaggeration in natural visions and paying attention to expressive possibilities of line, shape and color would be the characteristics of such an artist.

In this manner, artist, in an absolutely individualist way, looks outside world and by adapting it within him/her, offers his/her ideas, emotions, and affections with determination and exaggerating by color, shapes and design.

In this way, an artist uses pure colors and strong and bold lines in a way that he does not pay attention to intricacy of construction.

Social and cultural context in growth of expressionism was more available in Germany where lasted until Nazis' authority. Movement expressionism in German also got through in the arenas of literature, theatre, architecture, cinema and even music.

Expressionist architecture has different sources of inspiration that can be briefly stated as below:

- Alien architecture; as emerged in 19th century, plans which had influence on Art Nouveau ecstasies expressionists.
- Architectural designs based on Supernatural beliefs, with abstract religious forms of that time, were taken into consideration. In early stages, expressionists were eager about obvious and large initial architectural monuments of Egypt and later noticed the ancient temples of Asia and especially India. In any case, no specific element of construction was adopted, but a kind of comprehensive multiplicity emerged.
- More than a source of inspiration, Art Nouveau was the primary material of this movement. Many expressionists owe their basis and principle of work to Art Nouveau movements. And fundamentalist Art Nouveau architects like Antoni Gaudí, can be recognized as an expressionist.

Therefore, we cannot consider a strong boundary between expressionism and Art nouveau and in most cases expressionist architecture was the most emphatic confirmation of Art nouveau continuation.

Both of these aspects highlighted three-dimensional aspect and statue of building construction in which both color and glass played an important role, and their major purpose was to achieve unity in artistic works.

In expressionist architecture like art nouveau, could distinct two clarify two branches as below:

- The first branch was determined by employing shapeable circular elements (plastic) derived from human and biological structures. Fans of this branch knew Euclidean geometry as a despotic and unacceptable limit for manifestation of art. They were seeking a kind rational exuberance, freedom of fictional aspects of live forms, freedom in plurality of shapeable shapes, and freedom from any limiting category.
- Fans of The second branch were inspired by crystals in their works which enjoyed special importance in the movement of expressionism. Because in terms of semantic, not only was it offering geometric perfection and relationship among cosmic mysteries but also, in terms of structure, its realization was requiring the use of glass. In addition, its purity, clarity, transparency, and even its "refining effect" and "power of release" were constantly about to praise.

#### ***Physical Order and Disorder in Architecture:***

The architecture is composed of different part. The connection between these components has been organized. It means that all these components are subsystem of an organism. This system or organism might be very simple or complicated. Max Bense who is one of the founders of informative aesthetic believes that, order has three degrees: chaos, being structured and being shaped. When we consider complete chaos that there are no regulations for connection between different components. In this case the possibility of prediction equals zero and innovation in maximum. Definition of being structured is one organized order with a structure that might have different forms. Bense calls the third part of order as a "chaos or disorganize order". When we talk about this order that in which all materials have been replaced that displaying the choices have been picked up freely and in united system.

In all three factors above replacement of components affected by a general organization whatever the rate of order is more and this order is more complicated, the informative content is less .But we should not think that more complication equals chaos automatically. This order couldn't be recognize easily and could even cause mistake. More order equals less innovation .In complete chaos the probability of all components are equal, so squandering information equals zero and in consequence the possibility of new combination or maximum creation is possible.

Continuing of a style is in connection with order and squandering information and not to be with innovation. The contrast of styles comes from the difference of its components and its dominated order. In this case they have been more or less complicated and by means of that they have been connected by viewer or user. For example in Indian temples in India there is an order that they are not identifiable at the first glance because their components are almost complicated.

Order means obligation automatically. Whatever this order is severe the open space is less so it could be remained for the variety of components. And each part should obey these rules more and more. In a case that some these parts couldn't even do their main task and in reverse a kind of complicated order creates more freedom and this freedom creates more open space for forming the components and causing opacity. The two kinds of orders, of course, have some exceptions just in a condition that the main factors of organism stay stable and without changing.

Buildings which are in order and are not flexible give us less freedom. In the other word changing one factor in this system could hardly possible. But in the opposite, these architectures give us their messages very clear and straight and nothing for personal interpretation for buildings with complicated order the issue is something else. Here in this case, we are completely free to act. Personal interpretation and opacity are possible. Such building expects us to be more active. We ourselves should discover the order of that and also search for its system. We can compare this building with Picasso's painting named Guernica. In there also this is viewer wants to comprehend the painting and this is also the viewer who is obliged to search about the organism and thoughts, problems which lay behind of the painting.

Architectural styles of Mies van der Rohe and Venturi are eventually the same (Spectrum). The contrast between the two even influenced the choice of materials. But which one of these two styles is better or more beautiful?

For answering this question it would impossible find a definite answer. As we will see the value of aesthetic of objects could be measured or adjusted. This value equals with the consequence of the division of order by complication. Whatever a building is more complicated its organism should be more expanded that we will be able to find a measurement for its aesthetic.

Buildings with severe order like many of Mies van der Rohe's works, either gives no opportunity to complication or it ends to chaos. In the other words, the Robert Venturi's open order needs complication that wouldn't be naively.

The important note is that in each style should be equivalent between complication and relevant order the comparison between two styles is impossible. We couldn't consider any style as the best in architecture absolutely.

But which or who make it clear that how the dominated order should be, simple or complicated?

In T. Munro's opinion that: the complication in an organism continuously being increased in an art till it makes studying harder occasionally. The consequence of this hardship is the general turning point and return to a more simplified organism. The trueness of this Munro's idea could be confirmed by informative theory.

Peter Smith proves that during architecture history, one phase with three steps is really recognition which has been repeated several times.

- A severe and distinct order dominates in first step. Coordination and simplicity has basic role in this era.
- The main characteristic of second step is tension.
- Lack of clarification and seduction are the main traits of third step. Order in here is that complicated which we are approaching to the maximum capacity of our conceptual.

There is a direct connection between the rate of regularity and division of information to semantic and aesthetics quota of semantic information and with the same ratio the effect of wisdom on emotion will be more and vice versa: when aesthetics information has had more quota or order is more complicated emotion dominates on wisdom.

An introvert person who is rationalist basically prefers the clear order and extrovert person is more emotionalists and prefers the complicated order more.

#### ***Evidences of Order and Disorder in this Style:***

This style according to architects' tend is based on immediate feeling of an artist so that according to second law of thermodynamic, all thermodynamic systems such as human's mind tends to entropy and increase disorder, this style will tend towards disorder increasingly so that even on a larger scale it isn't clear a special order in the works of this style and among the evidences of this claim can indicate as follows:

- In 1920, with the construction of "Einstein Tower Observatory" in "Potsdam", Mendelsohn would find first practical position to express his ideas. In this construction, Mendelsohn considers a form which in first mutation, be recorded in a liquid mass.

- Suitable material is reinforced concrete which due to its own capability of shapeable, seems to be a means for architects to release from bound bases of right angles and coinciding floors.

- Expressionist architects were influenced from a lot of factors which the expressionist painting could be indicated the Colors which were utilized by expressionist painters were mainly brilliant and irrelevant with the painting issue which had indicated their individual tendencies and manifestation.

- This style in history of art and art critic is known in style which in that contracts and traditions of naturalism set aside and more emphasis on making distortion and exaggeration in shape and color because of the immediate expression of artist's feeling.

- The diversity Forms in works of architects this style is very eye-catcher and this subject makes difficult the classification and study of this works.

- Mountains and mountain-like architecture and crystal forms are of other characteristic of expressionist design.

- Emphasis on sort of architecture and architects' rate of interest and thought liberty in designing are of the prominent characteristics of this style.

- In Structure of these buildings haven't use decorations because they believe that structure of one a form has decoration itself.

- Artist and architect in this style for creating more influence and excitement use an exaggerated emphasis.

### **Conclusion:**

This style according to architects' tend is based on immediate feeling of an artist so that according to second law of thermodynamic, all thermodynamic systems such as human's mind tends to entropy and increase disorder, this style will tend towards disorder increasingly so that even on a larger scale it isn't clear a special order in the works of this style. Mountains and mountain-like architecture and crystal forms are of other characteristic of expressionist design. Expressionist architects were influenced from a lot of factors which the expressionist painting could be indicated the Colors which were utilized by expressionist painters were mainly brilliant and irrelevant with the painting issue which had indicated their individual tendencies and manifestation.

### **REFERENCES**

- Field, D.M., The world's greatest architecture past and present.
- Gossel, Peter, Modern architecture, Book.
- Grutter, Jorg Kurt, 2008. *Asthetik der Architektur: Grundlagen der Architektur Wahrnehmung*, Fourth Translated Edition (Persian, Iran).
- Marian Moffett and et al. *A world History of Architecture*, 3rd edition.
- Oliver Stallybrass, and Alan Bullock (et al.) (1988) (Paperback). *The Fontana Dictionary of Modern Thought*. Fontana press.
- Pehnt, Wolfgang, 1973. *Expressionist Architecture*. Thames and Hudson.
- Sharp, Dennis (1966). *Modern Architecture and Expressionism*. George Braziller: New York.
- Shateriyan, Reza, 2008. *Acquaintance with Form and Space in Architecture*, First Edition.