

Physical Order and Disorder in Organic Architecture Style

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Abstract: Organic architecture insight is rooted in Romantic philosophy romanticism is a literary , artistic and philosophical movement in the late 18 and 19 century in the northwest of Europe which transferred to other parts of America and Europe. This movement was reaction to rationalism of modern wisdom. In this opinion all natural forms are dynamic. Organic architecture can be defined in nine phrases: Nature, Organic, The function performance, Delicateness, Tradition, Decorating, Spirit, The third dimension and Space. In Wright's opinion, Organic means combining the whole assemblage and about Organic building believed: It is built by people from inside of the earth with consideration of their arrangements and with time. Place, environment and aim. 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, Organic architecture style, Evidence.

Organic Architecture Style:

Architecture is not only a sort of event of activity or series of handicrafts and even is not mere art. Architecture is for all basic and fundamental human affairs and has been created at the beginning of civilization because without that the possibility of creation of civilization and cultural was impossible. Architecture is inevitable, worldwide, timeless and basic needs. The amplitude of architecture from the most incipient form of habitation in the caves to the most complicated kinds of buildings involved.

In Ben Farmer's opinion, architecture is an art which cannot separate itself from surrounding circumstances, the condition that should be considered indispensable that each place has its own characteristics and needs the unique response. with the development of capital growth and wealth, the number of customers for architecture was increased and the issue of obtaining the mere characteristics in ethnic architecture was revealed with more intensity is spite of economical problem that finally put its effects on the subject architecture but the main source and effective transformation of ideas in architecture should be considered more philosophical.

Functionalism Ideals:

One of the most curious and out of reach phenomena in mid nineteenth century was the extended and insisted need for requiring of a modern architecture which was reached to the peak of itself in about 1890 when the extending of the steel and concrete has been developed remarkably. Need to answer to new demands such as the need for industrial buildings, railways, shopping centers, Prisons, banks, factories, town homes, worker's homes which was due to being industrial that mainly led to lines and forms which has no placement in our basic architecture.

Propagandist slike **James Ferguson** in theories go beyond from gradual change of medieval and classical forms. The East contemporary architecture due to consistent appearance in correspondence with a continuing tradition is sustained and what **Ferguson** and his followers wanted was transformation along with social and

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technical changes which in new civilization was about to happen and the ones who orders and the customers were the last people who were seeking a change. In nineteenth century architects and scholars in order to presenting new architecture got significant result and were compared architecture with different subjects which in which functional comparison were very important and that consists of :

1. Architecture analogy with organisms.
2. Biological analogy.
3. Architecture analogy with mechanical machine.
4. comparisons with biology

Frank Lloyd Wright in an article about the cause of architecture said: By organic architecture I mean an architecture that develops from within outward in harmony with the conditions of its being, as distinguished from one that is applied from without. Also from gradual evolution like a new thought could be utilize in comparison with biology. This gradual evolution utilize in architecture. As Rome architecture evolved from Greek architecture or post Christian architecture evolved from the eras before itself ,the evolution theory conforms the theory of school of function from formation and submits this theory that at first the forms were created and then functions and if transformation in forms happens.

It is because of disability of functional forms and the forms without function are not able to exist.

This comparison eventually ends to Organic architecture in nineteen century.

Organic Architecture:

Organic architecture insight is rooted in Romantic philosophy romanticism is a literary , artistic and philosophical movement in the late 18 and 19 century in the northwest of Europe which transferred to other parts of America and Europe. This movement was reaction to rationalism of modern wisdom. Romanticists like the classical thought followers, were believed the man's wisdom. But Romanticists were interested in that part of wisdom which was more about feelings a emotion. So that for classic philosophers the wise and logic has more importance. The important note is that the most of romanticist philosophers were poets and engaged in honor of nature, emotions and illusion whereas the most classical philosophers were mathematicians. For theoreticians of nineteenth century in America which they were looking for modern beauty, nature was only philosophy which considered correct, the artist should make a composition which was in the parallel with nature and showing the process of life, growth and development in the abstract form.

Ralph Waldo Emerson the American writer, poet and priest encouraged the artists inspiring from nature. He conducted the artists for understanding of connection between form and function in the nature. He writes: nature creates a system of forms and styles of creation which is directly complemented in the art. Also Viollet-le-Duc the well-known French Architecture encourage the Architecture to utilize the nature laws of creation like medieval sculptures who were studied the animals and plants in order to understand that how their forms showing one function or complement itself with traits of organism.

Organic architecture was formed by Frank Furness and Louis Sullivan in America in nineteen century. The bloom of this theory could be considered in Frank Lloyd Wright designs, first half of twentieth century. In Frank Furness 'opinion all natural forms are dynamic on the bases of Organic theory the forces and pressures which involved in the structure of an animal, stretching of muscles and joints when the animal moves, the growth pattern and extension which have observed in the shape of plants and oysters are illustrates of an alive form. If an artistic work wants to be expressing should be built in the shape of separate parts. But they should be combined in a dynamic and flexible system. Description in architecture should be accomplished in one organic body for solving Physical forces.

Sullivan was the founder of Chicago school and modern architecture in America; he had strong beliefs to natural forms and Organic styles. Sullivan believed to a style which was similar process of creation in the nature. He expressed "Form Follows function". It means Sullivan considered the "Form Follows function "in the process of natural growth and movement. About materials Sullivan is saying: In organic building stone and mortar will be alive, the issue that Frank Lloyd Wright one of his students showed that in his buildings better than any other contemporary architecture. Although Wright didn't have any disagreement with modern technology but he consider that as an end and aim. In Wright's opinion technology is a means of reaching to a greater architecture which in his idea it was organic architecture. Organic architecture was defined the in nine phrases:

1. Nature: nature does not only include the outside environment like Clouds, animals and trees but consist of inside of building and its material and components.
2. Organic: means assimilation and integration of components to total and total to components.
3. The function performance: Mere function is not correct but the combination of form and function and the

use of innovation and power of thought in connection with function is necessary. Form and function are the same or (one single thing)

4. Elegance: the man's thought and imagination should shape the material and structure of a building to the pleasant and mankind forms. Likewise the cover completes the tree the shrubs complete the stem of them. Mechanic of building should be in authority of man and not vice versa.
5. Tradition: adherence but not imitating of tradition is the base thought organic architecture
6. Decorating: Decorating is the inseparable part of architecture. The integration of decorating to architecture is like the flowers to the stems.
7. Spirit: The spirit is not the thing to be inspired to building but it should be existence in the inside of that and expanded from inside to outside.
8. The third dimension: in spite of public opinion the third dimension is not a width but it is thickness and depth.
9. Space: The space is an element which should be expanding constantly. Space is a hidden Foundation which all the rhythms of the building should be originated forms that and flowing in that.

In Wright's opinion, Organic means combining the whole assemblage and about Organic building believed: It is built by people from inside of the earth with consideration of their arrangements and with time. Place, environment and aim.

Architectural masterpiece of Frank Lloyd Wright and Organic theory can be seen in cascade in Pennsylvania State in America. The designing and executive cases which Wright had considered for this villa could be summaries in eight following items:

1. Minimal interference in the natural environment.
2. Combining the volume of building with the natural environment so that each complements the other part.
3. Create spaces between buildings and natural environment.
4. Combine the space of inside with the outside.
5. Install nationwide windows and remove the room corners.
6. Utilize natural materials such as rocks and plants either inside the building or outside of it.
7. Display the materials as what it is, either stone, wood or bricks.
8. Continuous display of materials from the inside of building

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 complicate 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 sever 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:

Characteristics

- The design approach is inspired by nature & the built form grows out of the site, emerging like an organism from the seed of the nature.
- It is visually poetic, radical in design, multifaceted & surprising, distinctive but flexible & environmentally conscious.
- Organic architecture is said to be the mother of all architecture- sustainable or bio architecture, alternative architecture or any other.

Some examples of this movement are: Kaufman Residence 'Falling Water' (Pennsylvania), Sydney Opera House (Sydney), Casa Mila (Barcelona), Lotus Temple (New Delhi).

Approach

- A respect for natural materials (wood should look like wood)
- Blend into the surroundings (a house should look part of the hill, not perched on it)
- An honest expression of the function of the building (don't make a bank look like a Greek temple).

New age, architects have taken the concept of organic design to new heights by employing newer materials & technology in the application of natural shapes, rhythm & composition to their buildings. The re-emergence of organic design represents a new freedom of thought. This is affecting most fields of design- products,

furniture, lighting, textile design, architecture, landscape and interior design. More liberated and imaginative forms, unacceptable to major corporate clients a few years ago, are now being encouraged & accepted.

1. In organic architecture eleven principles are being discussed as follows:
2. Building is like a natural element and it is one complete component of environment which has been grown up from and all warm and colorful spectrums which have harmony with environment being utilized!
3. Building is like a particular element in a purpose that each architecture and construction in its location and individual and in connection with psychological needs of its owner and user has a unique situation and all these aspects should be considered in designing of building.
4. To building should be considering like a traditional element. Each building has its own special personality and not only has been built for him by house plan or individual personality but the connection with traditions of country which has in there the building being build.
5. be inspired by nature and be sustainable, healthy, conserving, and diverse.
6. unfold, like an organism, from the seed within.
7. exist in the "continuous present" and "begin again and again".
8. follow the flows and be flexible and adaptable.
9. satisfy social, physical, and spiritual needs.
10. "grow out of the site" and be unique.
11. celebrate the spirit of youth, play and surprise.
12. express the rhythm of music and the power of dance

Conclusion:

A house should look part of the hill, not perched on it and comes from nature, and belongs to that the hill and the house live together and happiness of each one depends on the existence of the other. Organic architecture can be defined in nine phrases: Nature, Organic, The function performance, Delicateness, Tradition, Decorating, Spirit, The third dimension and Space. In organic architecture three principles are being discussed as follows:

1. Building is like a natural element and it is one complete component of environment which has been grown up from and all warm and colorful spectrums which have harmony with environment being utilized!
 2. Building is like a particular element in a purpose that each architecture and construction in its location and individual and in connection with psychological needs of its owner and user has a unique situation and all these aspects should be considered in designing of building.
 3. To building should be considering like a traditional element. Each building has its own special personality and not only has been built for him by house plan or individual personality but the connection with traditions of country which has in there the building being build.
- Finally we can say that organic architecture trend to natural order.

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