**Physical Order and Disorder in Romanesque Architecture Style**

1Saeid Rahmatabadi and 2Reza Toushmalani

1Department of Architecture, Kangavar Branch, Islamic Azad University, Kangavar, Iran.
2Department of Physics, Kangavar Branch, Islamic Azad University, Kangavar, Iran.

**Abstract:** If a time should be presented for appearing the Romanesque architecture, we should mention a period of two hundred years (11th and 12th "centuries"). In Romanesque architecture the remarkable note is the religious and spiritual position of churches. If we express the most important characteristics of Romanesque architecture, using Rome arch also has been with sturdy piers. Other features of Romanesque architecture could be volumes of churches from the viewpoint of architecture that an of them have comprised with big, simple geometric volumes with right angle like cube, cube rectangle, cylinders and semi cylinder. Develop and promotion of style of Romanesque architecture in Europe is considerable in four countries: France, England, Germany and Spain. In each of these four countries Romanesque architectures with delicacy and special innovation connected the architecture of this time to conditions necessities and traits of country and this issue caused the special characteristics in Romanesque style to be remarkable in these countries. Max Benze 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. Benze 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, Romanesque architecture style, Evidence.

**Romanesque Architecture:**
Social circumstances before the middle Ages in Greek and Rome has caused the works of art, generally art of architecture reached to a remarkable growth, continuity and lasting. This situation lasted in Europe until several centuries, but as a result of wars and conflicts a kind of recessional arose. Consequently in this period of time the art and Romanesque styles come to being. Because in the era of the Carolingian and Ottonian imperial political stability was dominated which briefly being presented.

If a time should be presented for appearing the Romanesque architecture, we should mention a period of two hundred years (11th and 12th "centuries"). In Romanesque architecture the remarkable note is the religious and spiritual position of churches and also the different function of this building is for lectures, sermons and making decisions and gatherings and this caused a magnificent increase in construction activities. One of the monks in eleventh century named Rodulfus (or Ralph) Glaber about it has said, the world adorned itself into "white mantle of churches". This churches not only being created with larger number but mainly the medieval churches have been built bigger and more luxurious and especially most of them had Roman façade. Because nave of church despite of wooden ceiling had vault and its external wall in spite of early Christian, and Byzantine and Carolingian and Ottonian churches, have been decorated with sculpturing and architectural ornaments.

The geographically most buildings were created in Roman style in throughout Christendom. From North of Spain to the region of Rhine River and from Scotland and England border to central part of Italy. Among the best and the most diverse samples of local architecture and the boldest technical innovation has happened in France. If we express the most important characteristics of Romanesque architecture, using Rome arch also has been with sturdy piers.
The remarkable in Romanesque architecture is that extensive changes has happened to it and included many regional variations and this caused that architectural historians consider that style complete literally and don’t believe that, it had been an imperfect introductory for Gothic style. So that Romanesque architecture despite of it diverse, it is recognizable easily and the first real architecture belongs to the mid-centuries. Other features of Romanesque architecture could be volumes of churches from the viewpoint of architecture that an of them have comprised with big, simple geometric volumes with right angle like cube, cube rectangle, cylinders and semi cylinder. The main sections with putting walls with high columns in the frames has divided into smaller bricks has been external surface of decorating elements, this time to be considered as a reflection of how organizing of building.

Develop and promotion of style of Romanesque architecture in Europe is considerable in four countries: France, England, Germany and Spain. In each of these four countries Romanesque architectures with delicacy and special innovation connected the architecture of this time to conditions necessities and traits of country and this issue caused the special characteristics in Romanesque style to be remarkable in these countries. In each countries above-mentioned Romanesque architecture has been implemented in variety and different methods and in different regions of each country the method of Building construction in this style specially churches due to innovation of architectures has been distinguished.

Romanesque architecture styles: As was mentioned, Romanesque architecture had special characteristics in each of European countries and this caused that such styles in this architecture being created which briefly we will consider each of them. Of course in these styles some characteristics to be mentioned in which has been considered in architecture of each of these countries. But for recognition and distinguish of this styles a short description is necessary.

1. Lombardy style: the northern part of Germany in the mid century was well-known to Lombardy. Could be mentioned among the famous churches of this style we can named Speyer Cathedral in Germany and Sant’ Ambrogio, Milan in Italy.

2. Normandy style: the south regions in Germany have been named Norman. The methods of Romanesque architecture which has been popular in these areas caused the other architecture works being created exactly in this style in countries like France and England. Of course, this style has finished its evolution period in France. After the Vikings turned to believe to Christianity, they settled down in north and almost suddenly showed that they are skill and deserving managers and rapidly learnt the mystery of architecture and they created some buildings in Romanesque architecture and with their innovation, they improve several style of Romanesque styles which later all these styles have been the main source of Gothic. The most important of these styles was Normandy style that creates a valuable Cathedral such as St Etienne's Cathedral, Caen in France.

3. Tuscan style: The other common style in Romanesque architecture is Tuscan which was started in a part of Italy and has named with this title. But architects of this style didn’t leave the characteristics of their traditional architecture and in fact they merge the traits of Romanesque architecture with it so that the buildings that have been built with this style a lot influenced Characteristic of Basilicas so as a result Romanesque of Tuscan style is well-known for conservative Romanesque.

4. Aquitaine style: Aquitaine is a region of southwestern France. In this area Romanesque architecture has some traits which makes it separable and distinct such as creating a dome on churches effected by Byzantine architecture and non-existence of side aisle, also the main roof of churches of these style have been wooden and dome has been implemented as primary and secondary coverage. Churches of this region and style from the viewpoint of height are shorter than the Churches located in France; one of the buildings in this style is Périgueux Cathedral which has been built in twelfth century. This Cathedral has a pretty tall transept which is the prominent feature of this Church and Aquitaine style.

5. Cluny style: The cathedral of St. Sernin at Toulouse in France is one of the buildings which has built in this style and has had all the conditions for creation of a stone roof using a barrel vault. Such churches has been built in most southern parts of France

**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:**

Romanesque art was created in continuation of Byzantine art and in fact it is an introductory on Gothic art and it is still in service on aims of church which the authority was in its hands. (Tend to evolution and creation of order)

In Romanesque architecture the remarkable note is the religious and spiritual position of churches and also the different function of this building is for lectures, sermons and making decisions and gatherings and this caused a magnificent increase in construction activities.

Other features of Romanesque architecture could be volumes of churches from the viewpoint of architecture that an of them have comprised with big, simple geometric volumes with right angle like cube, cube rectangle, cylinders and semi cylinder. The interior spaces of churches changed into spaces which consist of smaller spaces that were dependent to clear and distinct order.

In Romanesque man wants to bring God from the sky to the ground (God is near to mankind). Architectural historians consider that style complete literally. (Tend to evolution and creation of order)

The characteristic of Romanesque Architecture:

- Orderly and geometric plans building.
- Sculpture dependent to construction and not independent.
- External surfaces of walls are simple and decoration is very little.
- The appearance building like a block with a group of big, simple volumes and definable (pure) volumes in consequent e of creating a sort of order.
- 0Failure in provision of light inside of construction.

**Conclusion:**

Romanesque art was created in continuation of Byzantine art and in fact it is an introductory on Gothic art and it is still in service on aims of church which the authority was in its hands. (Tend to evolution and creation of order). The interior spaces of churches converted (changed) into spaces which consist of smaller spaces that were dependent to clear and distinct order.

In Romanesque man wants to bring God from the sky to the ground - God is near to mankind.

Architectural historians consider that style complete literally. (Tend to evolution and creation of order).

In this style the appearance building like a block with a group of big, simple volumes and pure volumes in consequent e of creating a sort of order and Orderly and geometric plans building.

**REFERENCES**

Field, D.M., The world’s greatest architecture past and present.
Fletcher, Bannister, A History of Architecture on the Comparative Method.