

The Effects of Cubist Design Theory on Modernism and Post Modernism

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ABSTRACT

The main aim of this study is to present design theories since 1900s and their evaluation for 2000s. For this reason the basic manifesto; “Modernism” which gives its signs and principles to the identity of 20th century is held as beginning point. The modern movement in architecture in order to fully express 20th century, possessed the “faith in science and technology”, “rationalism and romantic faith in speed” or “the roar of machines”. And also it was treated as a series of discrete art movements like Futurism, Cubism, Constructivism, Dadaism, Surrealism. But one of them; “Cubism” is pointed out to be the first movement of “Purism” that built “Modernism”. To emphasise the general idea of design theories in 1900s, Cubism is chosen as a point of view and the aim is required to put forward some ideas by criticising cubist design theory and putting some principles about the effects of cubist design theory on modernism and post modernism (trends and periods after modernism). The method of “Conceptualisation”, one of the most important system to begin a design is used while making analysis. In this content, the paper involves five main parts. In the first and second parts, the introduction to Cubism and First Machine Age are explained. The third part consists of Cubism as an art of painting. In the fourth part cubist design theory and the cubist conceptions are posed. The last part of the survey gives the findings and conclusions aiming to put forward estimations for further designs in the future.

1 AN INTRODUCTION TO CUBISM

In the Autumn of 1908, the selection board for the Autumn Salon rejected two of six paintings presented by Braque. These were six landscapes that he had brought back from his stay at l'Estaque and which simplified the natural motifs translating them into geometric forms. Matisse exclaimed; “But they’re only little cubes!” while the art critic Vauxcelles wrote in Gil Blas on 14 November 1908; “Monsieur Braque is a very audacious young man... He constructs deformed, metallic little fellows that are dreadfully simplified. He despises form, reduces everything views, figures, houses to geometric diagrams, to cubes”, (Kuspit 1989).

Consequently, the word “cube” was used for the first time by an art critic and a new revolution was started to be born in arts. Named as “Cubism”, a new theory was settled to look from another perspective to the world and the cubists tried to explain this new perspective with mathematics, geometry and psychoanalysis: “All that is nothing but words”.

But what caused these artists to be scientific, physical, optical and instinctive? What was the reason in 1900s to act like scientists and also artists? To find true answers to these questions and to understand the reasons of the new birth of the revolution, the social, political, cultural, philosophical and industrial conditions of the period must be put forward.

2 AN INTRODUCTION TO THE FIRST MACHINE AGE

The ages as notions, mark great developments in culture. In this content, 20th century's first machine age pointed out the developments in technology not only in western history but in human culture. According to Gehlen, this industrial revolution put humanbeing in a world full of artificial machines far from land and sea. Millions of people walked not on the land but on asphalt, glass, vinyl, asbestos... Because of the very real advances like steam-engine, X-ray, cameras, being made in science and engineering, there grew up a belief that reason and analysis were preeminent human activities. Carried far enough, this belief suggested that science and technology would inevitably solve all the problems of humanity. Rational planning would extend these benefits to all human beings. Machines would relieve individuals of all burdensome labor. Change and speed were thus inherently beneficial and good, (Crouch 1985).

Appearing like an earthquake and replacing as a middle-world between human and life, the ideas were reformed by workmen, employers, managers, economists, architects, engineers, scientists in unity. But beside these brain workers, especially the artists had the great role to build new life styles, in the new industrial world. 20th century's artists like Picasso, Mondrian, Gropius who would use technologic utilities for humanbeing became the leaders of new world's builder, as Leonardo, Bramante had done during Renaissance. So the new age qualified as "modern" was born to be fully expressive of the 20th century and possessed the "faith in science and technology", "rationalism and romantic faith in speed" or "the roar of machines", (Thackara 1988). And also it was treated as a series of discrete art movements like Futurism, Cubism, Constructivism, Dadaism, Surrealism. But one of them; Cubism is pointed out to be the starting point of Modernism.

3 CUBISM AS AN ART, (CUBISM IN THE ART OF PAINTING)

As it was presented before, the quick changes in technology and industrial products in 1900s caused social crisis in communities. In this content, the modern artists had to act with basic traditional principles or help art to change, to renovate itself and to reflect the peculiarities and problems of the modern world. Being the opponents of the great forces, feeling as they were nothing, the modern artists shaped their own modern styles looking away from nature, but through themselves, their inner personal point of view. "Men fought with themselves about the meaning of events, identity and hope. This was the negative possibility implicit in the new relation of the self to the world. The life they experienced became a chaos within them", (Kuspit 1989). They became lost within themselves in this happy revolution which instated between the old suffering; the suffering of hopelessness and defeat, and the new suffering; the suffering of counterproduct and counterrevolution.

In this chaotic position, Cubism appeared to be the most important movement in plastic arts, especially in the art of painting. Looking from a social perspective, the function of cubist art was to give new meanings to the "ugly" industrial forms. In this way, it caused twisted or folded strings or mixed machine pieces to gain identity and quality of human labour. In other words, its aim was to transform the new visual classification of the factories and big cities' deserts into a story, (Gombrich 1960).

Cubism is widely regarded as the most innovative, most influential art style of the 20th century; “perhaps the most important and certainly the most complete and radical artistic revolution since the Renaissance” in John Golding’s words. “A new epoch was being born in which men were undergoing a transformation more radical than any other known within historical times” in Kahnweiler’s words, (Kahnweiler 1993).

Cubism, being a creative art of design not the art of imitation, differs from other movements. It shows its difference in three topics: The subjects, the materials and the ways of seeing that were used in paintings.

The subjects which were used in cubist art were chosen from daily life. The impressionist’s landscapes were rarely used. Besides few numbers of holiday views, portraits of poets, writers, musicians, clowns and women were painted. Especially, memorial buildings, ateliers, man made objects were chosen as subjects. Owing to it, they impressed to be ordinary. To consecrate the value of ordinary objects, the themes were chosen from the manufactural objects, which was never done before; tables, chairs, newspapers, bottles, glasses, ashtrays, letters, pipes, dices, violins and guitars, words belonging to music and drinks,... in short, an iconography of an atelier was drawn and the motifs of an artist’s life and bohemia could be seen in all.

The second difference on cubist paintings was in the use of materials. To be in the opposite of the art of bourgeoisie which made art invaluable and to provide freedom to the artists, cubists had preferred the kind of materials which were in harmony with their opinions. In this aim, not only new materials were put, but various techniques were used together in paintings. Instead of using paper and charcoal, oil and canvas, they used models to form letters and numbers. They had fastened papers, cartoons, oil-clothes, tins on painting planes. The almost abstract linear structures were combined with a technique of dabbed brushstrokes. Sometimes the artists had added sand to the oil paint for enriching and transforming the quality of the medium and exchanging the colours. They had used their skills as painters-decorators to imitate the wood of tables and violins, to do the lettering of the inscriptions and to vary the qualities of the materials and their textures. Also Pasted papers, linoleum, pieces of wood, string and scrap-iron, springs, saucepan lid, sieves, bolts and screws picked out with discernment from the rubbish heap, could mysteriously take their place in cubist constructions, wittily and convincingly coming to life with a new personality, (Read 1964).

The ways of seeing took the third step in cubist art and this point of view was more difficult to understand than using of materials and subjects. As it was mentioned before, the realism in the still life compositions were reflected by real elements, to make eyes see the ideas and forms directly in a pure, simple way. On the other hand, the aim of the portraits was not to give the physical existence of the humanbeing but to emphasise the complexity of the physic of the figure. Actually, the construction of the figure was certain and concrete like an urban architecture.

By the effects of Cezanne and impressionism, the cubists who had constructed the volume and the three dimension of the objects by geometric forms, which had already gained victory of their own by this way, purified from nature and local identities. Abstract, pure, simple forms are used which always gained new features and identities in each time.

As a result of these, Cubism broke the manners and procedures of the paintings that was occurred in Renaissance and built the new ones as a scientific construction in

a systematic way. Cubism had thrown away the rules of the traditional perspective, plastic body drawing, symmetric construction, the harmony of colour, shortly, destroyed the European aesthetic system which was used for centuries, (Wiegand 1981).

The soft, thin, motional and linear organisations in Japanese stumps, the concrete and strong geometries in Egyptian reliefs, the free ornaments in Crete vases, the white and pure brightness in Greek world, the unlimited descriptions in Negro and Indian masks, the harmony of line and colour uses in Eastern-Islamic miniatures, calligraphies and porcelains were put one by one into European paintings, moreover the beauty of humanbeing met in a new consciousness, (İppirođlu and Eyüböđlu 1972). In this content, it can be easily said that, Cubism includes international ideas in its own.

4 CUBISM AS A DESIGN THEORY

Looking back upon Cubism now, it must be understood that Cubism can not be defined as simply a matter of painting and sculpture. It was more than that. It has brought about a transformation of vision, in the same way that the invention of perspective had transformed man's vision five hundred years before. And by doing so, it has amounted to a transformation of the human intelligence and its representation of the world. The scientific perspective of Renaissance painting expressed the belief of white Western man that he stood fair to gain possession of the world order. Cubism corresponds to the discovery that this world order does not lie in visual appearances, that the laws of painting are independent of the painter's will, that art is a worldwide creation and not the peculiar achievement of white Western man alone. In this sense, Cubism has indeed been the birth certificate of 20th century art, (Daix 1982).

After this general description about the art of Cubism, cubist design theory must be put forward in details to make estimations for further designs in arts and architecture. As an analysing method; the method of "Conceptualisation", one of the most important way to begin a design, will be used. Actually, conceptions are used in every creative field to be the first step and to form original ideas while solving design problems. The conceptions of any artistic and architectural movement have the ability of generalising the meaning but examining the details. Furthermore, by this way, to make an analyse for cubist design theory will be very important, because the word "analysis" was introduced for the first time for Cubism and cubist artists... And Cubism was qualified with some conceptions for the first time like "intellectual, structural, architectonic, geometric, classical, logical, austere, calculated", (Robbins 1988).

In this content, some of the cubist conceptions in this study, which were common during 1900s in art and which are still in use and valid in architecture are; "Opposing Nature", "Reflection of the Essence", "Abstraction", "Formalisation", "Simplification", "Geometrisation", "Materialism", "Symbolism", "Distortion", "Fragmentation", "Fiction", "Illusionism/Contradiction", "Fourth Dimension", "Profundity", "Rhythm", "Exaggeration", "Completion"...etc., (Belgen 1996). But here, the basic principles will be given to describe the cubist theory and to put forward ideas for further designs.

4.1 The Conceptions of Cubist Design Theory

4.1.1 *Abstraction*

The word “abstract”, defined simply as the name of the existence accepted through thinking. On the other hand, “Abstraction” is to envisage something differently, which is by itself nothing at all, (Anonim 1974).

If the role and the importance of these two concepts are clarified in the study, it can be said that abstraction in art started with cubists, (Vpbrođlu and Vpbrođlu 1993). But in fact, Cubism should be seen not as the pioneer or the relative, but rather as a representative of “abstract art”. Through this point of view, Cubism can possibly be defined as a secondary abstraction. Unlike the sense of sight dominant in impressionists, cubists put forward the power of wisdom which ends up the mediation of senses. The universe, which wisdom comprehends, is now an abstract and rational universe. So, the universe that a cubist artist sees is abstract, but the system he perceives and establishes is the system of abstract forms, not of the naturalist objects. Cubism sees the space as a synthesis of lines, space elements and balance relations. Objects disappear in an abstract universe of forms leaving all its senses, the states of three-dimensions, relief characters and all its illusionist features behind, (Tunalý 1989).

4.1.2 *Formalisation*

The concept of form, which is basically equated with shape, is defined as an outward appearance and characteristic principle.

In art, formalisation is expressed as the description of objects through abstract geometrical forms disregarding their original appearances for decorative and symbolist anxieties, and for the same reasons as a reduction to their natural appearances. As a concept of art, formalisation has come into existence objecting to the fact that art is a means of description, expression or social development or it is used as a way of reality and data transferring or it is performed because of moral anxieties in the 20th century. Formalists whose tendency are mostly towards visual arts seek an organic completeness and in it some basic qualities such as complexity, variety and keeping the balance. In this sense, Cubism, as an art movement, took the first place that was especially interested and involved in the form and form qualities, (Judkin 1976).

Cezanne, the pioneer of the impressionists who influenced Cubism very much says; “Work the nature as globe, cone and cylinder and form the objects like globe, cone and cylinder”, (Lynton 1980). In this content, impressionists aimed to put the sensory and visual orders which were discovered in nature into a cubic form and finally carry out as visual. So, with the isolation and analysis of the objects’ sensory appearances, there occurred only the forms behind. In Cubism, from now on, artist’s interest has not been the subject but the form. Cubists wanted to create a form language that will provide visuality to contemporary thinking. Not subjective but objective and simple geometrical forms which everybody can easily accept, are wanted to set up this new form language basis, (Berger 1966). So, in Cubism an architecture of forms were set up until the time the group of “De Stijl” artists had pure architecture in them, and artists such as Picasso, Braque, Matisse, Modigliani, Feininger, Leger, Duty, Derain, Gromaire, Gris, Delaunay took their places in these “formalist artists”.

4.1.3 *Geometrisation*

Geometry is described as the branch of Mathematics considering the space as line, volume, and surface, and also as the study of the features of forms and measures, (Hasol 1988).

If the relation between Cubism and geometry is to be discussed, it is seen that usual concepts have changed a lot; for, art, in Cubism mentality seeks the traces of creation which are dominant in a torn world and finds them in pure object forms that express the inner order of absolute, (Tunalý 1989). As time goes, these pure object forms appear as geometrical forms. The geometrical orders on a canvas can describe the nature, man, or object, but what should be seen, in fact, is the nature's being a means or a slave of geometrical order. To take more interest in the subject, it can be understood that creating the inner side of the object and existence, and the objective legal order took Cubism to both geometry and metaphysics. As a result, Cubism is not only an abstract form but also an abstract geometrical art, (Wiegand 1981). The artist puts in geometry the line, the plastic, the colour, and the surface which doesn't belong to objects. So, the essence of picture expresses a geometrical order, and a prepared geometrical order expresses the transfer of the feeling to art.

As Janneau stated, the cubists before World War I tended to attract our attention to the rules of non-euclidian geometry. This tendency continued to remain not only in the years before the war, but also in Gris's pictures on which compositions from the nature and geometrical structural texture embraced, (Bektaş 1992). Gris's own thesis about geometrical skeleton in his pictures is that the depicted elements joined in the work at the last stage. Gris, first of all, planned a strict architectural structure by using proportions of gold cuttings and then set up this work in this envisaged scheme. If examined, it is easy to see that all of his works include simple geometrical schemes depending upon grid system and a standard of 45-45-90, 30-60-90 proportions. The pure geometrical orders and principles in his works have been a source of reference for the architects both of that era and today. William La Riche claims that the passages in Gris's pictures can easily be seen in Le Corbusier's planning schemes and this is confirmed by the authorities today. Gris's techniques in using colour surface, marble, wooden and curly grains can also be seen in post-modernism, (Dunnet 1987).

4.1.4 *Simplification*

The concept "Simplification" with the simplest definition is described as the state of being not compound or complex. It is equated with pureness. The word "Simplification" in Cubism aimed to be clear and easy enough for people to understand the thought and expression, and so the features which are not metaphysics have been given preference to. Cubist artists managed to do this by reducing the forms to the composition of cups, cylinder, and some time later they did the same thing by reducing them into the planes and surfaces whose boundaries are clearly defined, (Berger 1966). The concept had appeared to set up the most complicated view of reality that hadn't been tried until that time. The thought's transferring, not with ornamentation but with the forms that acquired their certainty, has reached the result of expressing everything by the same language. Similar forms, when expressing the relations among the existences by the same common language, have created a pure expression.

4.1.5 *Symbolism*

Symbol expresses a sign that has a specific determined meaning. The same concept, also, is defined as a means of communication which represents a specific man, object or thought, only or a composition of these all.

In the history of art, one of the concepts which Cubism movement developed in parallel with social and economic tendencies is “Symbolism”, (Staller 1986). According to Kahnweiler, the cubist drawings, expressing the meaning of the objects, showed the accumulation of impression that objects have already reflected in mind. Those who looked at these drawings had to decipher the codes one by one, and then understand them. For instance, Picasso tried to express “chair” by attaching an oilcloth with a mat design on a canvas, or others gathered some papers representing wooden or marble together to make a visual form and a common meaning. Leger’s men are the forms of thick colour pipes. Leger, styled his human figures and his objects in form of simple graphical signs which can easily be understood in international areas, took his place among the symbolist painters in his era with also his plane-painted colour plans, urban motifs and sharp-edged drawings of machine pieces.

Cubist drawing symbolises the dominancy of man in nature. As a secondary characteristic, we can say that machine and its monumental constructions, which are the result of industry revolution in cubist movement, have already become symbols alone. The symbol of power, dynamism, speed and ideal thoughts of mechanical flow took their places in cubist art which is concerned with interaction, (Read 1965).

4.1.6 *Distortion*

Cubism was a kind of rebellion of art against impressionists or a kind of rebellion from sons to fathers, (Kahnweiler 1993). Cubism with its scientific rules changed the understanding which occurred in the Renaissance systematically. It also changed all the aesthetic systems that European drawing set up all through centuries, (Wiegand 1981). This way of thinking, peculiar to life, concreted as tearing the forms, destroying the objects, existence and their objective orders, and as a result, the order of existence lost its usual order and turned into a new form that deformed.

In the years after 1920, on a critical study about Cubism, Basler and Kunstler were describing Cubism as “the method of destroying the realistic forms”, Picasso and some other painters as “distorting painters”, (Robbins 1988). Distorting painters followed the way of destroying the essence and the structure of the material. They used imitation materials of wooden and marble and destroyed the materials by mixing oil paint with sand or wooden shavings.

4.1.7 *Fragmentation*

Piece consists of particles that constitutes the unit when they come together.

As an analysis art, Cubism aimed the analysis of the universe and all objects. As the first condition of abstracting and establishing common thought, mental analysis is the work of discriminating one thing with the basic components and characteristics. In the art of Cubism that depends on Cezanne’s theoretical thoughts, objects should be well-built and the ideal interests among the objects should be kept vivid. That’s why not only the old values but also the old forms should have been torn. The aim of an artist is that he should reveal not the existence itself but the essence of it. To do this, through cubist movement, all the objects including human body are torn into pieces like a

machine and its parts are rearranged with images reminding of appearances from top, side or depth.

4.1.8 *Fiction*

With a simple definition, fiction is the process of attaching the pieces to constitute the whole. There may be a theme connection; a meaning relation among the newly constituted pieces, or in fiction the pieces may come one after the other or be combined with complex forms to express the thoughts as vision.

The meaning of fiction in cubist movement is in parallel with the common meaning expressed above. As another feature “tearing concept” and “fiction concept” in the reason-result relation are equated with the collection of the universe torn in works, different colours, tissues and forms. So, cubist drawing is not an intentional distortion, but a construction art, setting up the pieces of the objects again, (Shiff 1991). In this sense, cubist drawing can be said to have a architectonic structure. As an example, Picasso, who is among the artists who are in the search of discovering the right and exact structural meaning of drawings, says; “I want to paint the objects in a way that, when they are finished, an engineer can build or set up them easily. Along with this thought, it is clearly seen in Picasso that he has the tendency of building the machine again, idealising and creating a symbolic icon of humanbeing and his objects. There may be a meaning relation among the objects the artist uses in his constructed compositions, or the same elements can reflect only the visual expressions of the artist’s thoughts. So, the construction of the pieces of a whole and the different objects in the composition with their forms can be concrete in two different ways.

4.1.9 *Illusionism / Contradiction*

Illusion is resulted from man’s perceiving the warning objects presented wrongly. Gombrich, in his work “Art and Illusion”, describes Cubism the most coherent attempt in getting rid of double-meaningfulness, making the spectators see the objects as only man-made and also as an attempt in the distribution of colours and forms on a canvas. By doing so, he wants to make up a contradiction on spectators in interpreting the concept of the truth regardless of illusion, (Gombrich 1960). This movement, regardless of the nature, has started a new artistic tradition and has taken much more interest in truth than it was done previously. This movement made the artist perceive reality as both sensory and intellectually. The cubist artists, who are in the search of reflecting the principle of truth with the aims given above, are also in the search of reflecting the same principle with different colours, forms and materials of objects. This attitude, first of all, is seen in using the real colours of objects. All the technical skills with regard to perspective, structure of materials and shading don’t seem to be harmonious, but they are seen as contradictions, for instance; “the light” in light-shadow technique has sometimes been seen as black spots. So, such an understanding tries to emphasise that what is tended to be created is not illusion but a scene.

The cubist artist, by playing with the colours, tries to persuade the spectator to think, and also he tries to create a contradiction on them. As another way, he combines the elements and some forms in contradiction with each other in his drawings. So, some objects such as guitar and bottle, lemon or book are sometimes represented as they exist, sometimes represented with their torn scenes. This creates a dilemma for

spectators to decide whether these envisaged pieces belong to a violin or a face. And even the forms that can be seen as a whole are playing hide-and-seek with us in a turbid commotion which includes contradiction and multi-meaningfulness.

4.1.10 *The Fourth Dimension (Illusionic Perspective)*

The concept of perspective, with its simplest definition, is a descriptive graphical method of the objects with three dimensions and of mutual place connections on a two-dimensional plane.

Cubism, as the work constituted by a radical alterative effort of Cezanne's on western picture, is a method of transferring a three-dimensioned reality to a level surfaced painting. Besides, in this method stated, various directions and movements of the object wholly became an image itself, devices such as perspective have variously been evaluated apart from the features appeared in its traditional picture, (Tansuð 1992). With the disappearance of one-centered perspective method by Cezanne, a newly concept has come into existence in Cubism. That is; the "simultaneity", resulted from the exhibition of an object with its breadth, length, height ; and namely resulted from the invisible surface as well.

On being the unreflectable objects and figures presented in various perspectives, the picture surface transformed into being as three-dimensioned surface instead of being a two-dimensioned, (Tunaly 1989). Making the picture surface three-dimension is to call to grasp them not only with a sudden view and their surfaces, on the contrary except the sudden superficiality, but also an object with its entire surfaces. In simultaneity, the objects in the style on existence have lost their own superficiality and have been material forms. Forces, such as; death-life, eternity-being limited, nature-technique, static-dynamic in universal formation exemplify concrete and abstract forces take place simultaneously. Furthermore, objects and sensorial surfaces, due to their successive connections, are analysed in simultaneous times so that they are formed.

Klee expresses his ideas with regard to this matter like this; "In simultaneous times devilry should integrate with divinity, shouldn't regard difference as the same and should make a united whole unifying them. That's why reality entails considering all the elements together, (Ýþiroðlu 1994). The true material does not contain the three-dimensioned picture: To attach the material completely, according to endless point of view, the material ought to be demonstrated with a great number of perspectives, for instance; a can needs demonstrating not only by its outer appearances but also in the form of uncovered, planned, and a blown up can. The optical expression of the object created by the linear perspective should be left in favour of conceptual expression, which means that the object, that is added to traditional three-dimensions, is the changing site of the view-point one after the other, (Antliff 1988). As a potential result of these attitudes, it might be stated that when the surfaces of the successive pieced size are paralleled with the picture surface, it includes either synchronic factor or time, the fourth dimension, constituted by the formation of the size over again after being broken up. From this way of thinking, it is seen that intellectual system is paralleled with "the theory of relativity" by Einstein. As Einstein put the fourth dimension into physical universe, the cubist artists have put it into practise for art as well, (Laporter 1988).

Regardless of all possible criticisms that have been directed to this kind of picture, the discover of the fourth dimension by cubists before World War I is of great importance. The fourth dimension is of an architectural value and certainty not because it transforms the cubist language into architectural terms but also it makes a scientific

criticism possible for the reason why pictured and constructive architecture are differentiated.

4.1.11 *Exaggeration*

Exaggeration means not to show something as it really is but to show it more than the truth. In Cubism, exaggeration is used in this sense; that is, this term is used not only to illustrate an object bigger or smaller than it really is but to present it in a more different way than it is distorting the relations between the objects. Along with a simple enlargement and reduction of the dimension of an object, the combination of the objects among which there exist no meaningful links, has been gathered in one place with the aim of mockery, imitation, drawing attention and occasionally of only formative interest.

5 RESULTS AND CONCLUSIONS

In the 20th century, to discuss the history of architecture and the architectural design theories is not simple. When Pevsner wrote his “Outline of European Architecture” in 1943, perhaps it was possible to believe that 1912s modern architecture had triumphed and the historical styles were dead, and truth and beauty were identical with the architecture of the international style. More recently, the ambiguities of the late 20th century world seemed to be mirrored more truly in the “Complexity and Contradiction in Architecture” that Venturi made us aware of. The replacement of simple conviction by cautions puzzlement is one theme of development in our times, (Crouch 1985).

As it is all known, by the end of the 1st World War, a new attitude was developed that was to dominate modern architecture until the 1970s. The new attitude was that machine-made objects should be simple and direct in form. Moreover, a world cognisant of the impact of machines on the environment and fascinated by speed would tend to favour architecture that was similarly simple in form, with smooth planes and no decoration. The built environment would be made of metal and glass and concrete, with some use of stucco and brick, all manufactured materials, the potentials of which were newly realised after the industrial revolution made them much less expensive to produce, (Crouch 1985). In this content, in the same dates and conditions, the cubist revolution appeared. Where the cubist revolution did make an early impact was in the applied arts and architecture. By way of the De Stijl group headed by Mondrian and Theo Van Doesburg, by way of the Bauhaus, of Italian Futurism and Russian Constructivism, Cubism entered into the architecture of 1920s. But apart from Le Corbusier, who considered himself a heretical cubist, the only architects to appeal to Cubism were Pavel Janák, Josef Gocár and Vilastislav Hofman in Prague, pioneer designers even before 1914, who prepared the way for the great achievements of the 1930s in Prague, like the Social Insurance Building of Josef Havlicek and Karen Honzik, (Daix 1982). Being in the relationship of futurist, constructivist, dadaist and surrealist movements in arts, Cubism is said to be the beginning point of Purism that built Modernism in architecture.

After 1970s, which dates approximately the death of Modernism, some movements and trends begun to appear in design theories. Many of the most significant and destructive modernist assumptions are built into those design movements which are commonly

described as “post modernist”. This nostalgic and reactionary movements consecrated the historical values.

The pipes and machines left their places to ducks and decorated sheds in post modern world. Architects like Jencks, Graves, Venturi, Stern accepted everything populist and eclectic. Complexity, contradiction, indefiniteness are used instead of clearness and certainty. The historic values, symbolic elements are used as quotations, (Jencks 1977). Some took modernist elitism and abstraction to an extreme and exaggerated already known motifs as collages in Cubism. Consequently, a new style which can be named as “The Battle of the Styles” and were active since the 19th century can be seen in everywhere in every field.

To turn to the main point, there appears two main results which emphasise the aim of the study after all. The first result puts forward the effects of design theories between arts and sciences. The architecture which states between arts and sciences shows this kind of influences in every periods of its history. The second result which directly relates the aim of the study is about the method. The chosen method to analyse Cubism and after, which is named as “Conceptualisation” brings out some brief conceptions. And the final conceptions of cubist design theory shows that there are close relationships between Cubism and other trends. First of all, conceptions like “Abstraction”, “Formalisation”, “Geometrisation”, “Simplification” were used during the modern period in rational and pragmatic way, parallel to the properties of the First Machine Age. This shows the relation between Cubism and Modernism. But besides these, conceptions like “Symbolism”, “Distortion”, “Fragmentation”, “Fiction”, “Illusionism/ Contradiction”, “Fourth Dimension” and “Exaggeration” can be seen especially after 1960s and 1980s. This emphasises the existence of the new movements like Post Modernism and Deconstructivism and the presence of cubist conceptions in these movements. Today, this western concepts can be seen in eastern architecture especially in Japanese World, especially in the works of Maki, Isozaki, Ando,...etc.

So, in the view of these datas, there are some questions which must be answered and find their true answers.

If concepts like “Symbolism”, “Distortion”, “Fragmentation”, “Fiction”, “Illusionism/Contradiction”, “Fourth Dimension” and “Exaggeration” can be seen in new movements after 1960s, after the death of cubist and modernist movement, which are named Post Modernism, Deconstructivism, Eclecticism...etc. and also appeared for being against Modernism, the questions like; “Why do the conceptions of 1900s are still being used in a new world which is against Modernism?”, “Is Modernism being born again, in these new revolutions?” or “Are the new forms of the new architectural movements reflecting a kind of modernist vocabulary?” must be answered.

To find out the answers to these questions does not aim to show that, the cubist movement is still living but it shows that the conceptions are still in use and valid. On the other hand, to take a look to the cubist concepts shows that Cubism; “The Beginning Point of Modernism”, not only effected Modernism but also Post Modernism. The cubist conceptions are especially used after 1980 in architecture, more than in 1910s. Similarly, this result is important to express the concepts of Cubism, for having the identity of 20th century in its own, are still common. Besides the advantages of the method of “Conceptualism” in analysing arts and architecture, the main result emphasises the importance of concepts of any thought or any consciousness in every movement for being constant and universal.

6 REFERENCES

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