

Architects on Architecture

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Abstract

The architect does not work in a vacuum. His products are solutions to problems and situations coming from the environment. The situations are for instance made up of economic, political and social conditions; of cultural traditions; of physical conditions such as climate and topology. The situations are not static, but always changing; the political organization of the society changes, the economical conjunctures, and the climate hardly offers constant solutions. The architect is not the least of human beings who sees the environment in very different ways.

At present architects are designing beautiful buildings. Such designs are in every formal and technical way done with great integrity, but they can never transcend the limited social and political goals for which they were created. If architecture is to regain credibility, architects will have to acknowledge their responsibility in presenting and dramatizing their people's particular cultural values and not others.

Introduction

Architectural solutions are not brought forth by intellectual analysis alone. The architect is the one who gives form to the environment based upon clarification of the purpose and means of architecture. The nature of architecture can only be characterized by combining the answers to questions such as the organization of the means, seen independently of their effects and whether particular means correspond to aspects of architecture as a human product. That is, we study the conditions under which it appears.

Although the client's criticism of architects and their products is imprecise and subjective, we would not call it irrelevant. This shows that our present day architecture does not participate in a unified and ordered environment. We should remember however, that this criticism reflects political and economic theories. The subjective environmental needs of the public may also influence these theories, and the society confronts the architect with aesthetic and environmental problems although architecture above all means efficiency and economy.

In general architecture is a human product which should order and improve our relations with the environment. Architecture has not only an instrumental purpose, but also a psychological function. We do know that we have different experiences although the surroundings remain the same. We have to investigate how we really perceive the world around us and grasp what it means to experience architecture in the changing situations of daily life. The public also must learn to bridge the gap between the professional man and his client who wonders why a building from a particular period has a particular form. This is the central problem in architectural history as well as in architectural theory. We

do not intend that the study of history should lead to a new historicism based on a copying of the forms of the past. The information given by history should above all illustrate the relations between problems and solutions, and thus furnish an empirical basis for further work.

We have to develop a conceptual scheme which makes it possible to answer the question: what does architectural form mean? We should translate a practical - psychological - social - cultural situation into architecture, and the architecture into descriptive terms. The historical analysis orders our experiences and makes the judgment of solutions possible.

Architects have awareness of the phenomenal world through perception to judge and understand the things to make them serviceable to them. This is important to help make right decisions and act approximately without trying to classify or analyze their impressions. In fact, the works of art are generally very complex objects and therefore not easily accessible. Architects generally do not advance beyond the perceiving of secondary properties. It is a fundamental misunderstanding to believe that a good work of art is characterized by being easily perceived. They show tendency to abstract single properties and regard them as if they were the whole object. In fact, a certain phenomenon is mediating a particular object and through experience they discover the relations between the phenomena, and build up a world of objects. Curiously enough, the representing phenomena do not have the same importance for the object. Objects are built up through generalizations and ordering of experiences, but the same thing may change according to attitudes, and these attitudes directly determine the phenomena. Thus, changing the phenomena must be by changing the attitude.

There is no greater obstacle to the enjoyment of great works of art than our willingness to discard habits and prejudices. We outsiders usually worry about ideas about beauty and expression. We all know that there are beautiful buildings and that some of them are true works of art. But there is scarcely any building in the world which was not erected for a particular purpose. Those who use these buildings as places of worship or entertainment, or a dwelling, judge them by standards of utility. They may like or dislike the design or the proportion of the structure and appreciate the efforts of the good architect to make it not only practical but right.

From Classical Architecture to the Renaissance

The most important feature in Roman architecture is the use of arches. They can span the pillars of a bridge or of an increasingly bold design or by even making use of this device for constructing a vaulted roof. The most wonderful of these buildings is the Pantheon. It was converted into a church in the early Christian era and was therefore never allowed to fall into ruin.

In the East, styles lasted for thousands of years, and there seemed no reason why they should ever change. The West never knew this immobility. It was always restless, groping for new solutions and new ideas. The Romanesque style did not even outlast the

12th Century. The artist succeeded in vaulting their churches in a new manner, when a fresh idea made the Romanesque churches look obsolete. This new idea was from France. It was the principle of the Gothic style. The method of vaulting a church by means of crosswise arches could be developed much more consistently. This was in the second half of the 12th Century. To withstand the outward pressure strong frames were needed to keep the whole structure in shape. Flying buttresses helped scaffolding the Gothic vault.

One of the most characteristic buildings of the 14th Century is the Ducal Palace of Venice. It shows the later development of the Gothic style with its own effect of grandeur. Since the Italians blamed the Goths for the downfall of the Roman Empire, they began to speak of the art of this intervening period as Gothic, by which they meant barbaric.

Brunelleschi

It was in the first decades of the fifteenth century that a group of artists set to create a new art and to break with the ideas of the past. The leader of this group of Florentine artist was an architect, Filippo Brunelleschi (1377-1446). Brunelleschi completed the Gothic cathedral of Florence, where he mastered the technical inventions which formed parts of the Gothic tradition (both construction and design) with his knowledge of the Gothic method of vaulting. Brunelleschi was able to span the immense space between the pillars of the cathedral by a mighty dome by devising a method of accomplishing this.

When Brunelleschi was requested to design new churches or buildings, he discarded the traditional style and he went to Rome and measured the ruins of its temples and palaces making sketches of their forms and ornaments; aiming at creating forms of classical architecture to create new modes of harmony and beauty.

For five hundred years the architects of Europe and America followed his footsteps. It was only in the 20th Century that architects began to question Brunelleschi's program and to revolt against the Renaissance tradition in building, just he had revolted against the Gothic tradition. It was Brunelleschi who gave the artists the mathematical means of solving this problem. It is fascinating to mark how the generations after Brunelleschi, Donatello, and Masaccio tried to make use of their ideas and apply them to all the tasks.

Brunelleschi's idea had been to introduce the forms of classical buildings, the columns, pediments and cornices which he had copied from Roman ruins. He had used these forms in his churches. His successors were eager to emulate him in this. Leon Battista Alberti (1404-72), the Florentine architect, planned S. Andrea in Mantua where he conceived its façade as a gigantic triumphal arch in the Roman manner.

When Alberti built a palace for the Florentine merchant family of Rucellai, he designed an ordinary three-storied building. There is little similarity between this façade and any classical ruin. Although Alberti had given the old city palace a modern look by reverting to Roman forms, he did not break with Gothic tradition. Alberti has translated a Gothic

design with classical forms by smoothing out the pointed arch and using the elements of the classical order.

It was said of the Florentine Paolo Uccello (1397-1475) that the discovery of perspective had so impressed him that he spent nights and days drawing objects of new problems saying “what a sweet thing perspective is”. Brunelleschi had put an end to the Gothic style in Florence by introducing the Renaissance method of using classical motifs for his buildings.

Since the time of Brunelleschi the architect had to have some of the knowledge of classical scholar. He had to know the rules of the ancient orders, of the right proportions and measurements of the Doric; Ionic and Corinthian columns and entablatures. He had to measure ancient ruins, and to read the manuscripts of classical writers like Vitruvius, who had codified the conventions of the Greek and Roman architects, whose works contained many difficult passages, which challenged the ingenuity of Renaissance scholars.

The Pope Julius II in 1506 decided to pull down the Basilica of St. Peter, and to have it built anew by Donato Bramante (1444-1514). Bramante was determined to disregard the Western tradition of a thousand years, according to which a church of this kind should be an oblong hall with the worshipers looking eastwards towards the main altar, where mass is read. He designed a square church with chapels symmetrically arranged round a gigantic cross-shaped hall. This hall was to be crowned by a huge dome resting on arches. Bramante hoped to combine the effects of the largest ancient building, whose towering ruins still impressed the visitor to Rome, with that of the Pantheon.

Michelangelo

Michelangelo Buonarroti (1475-1564) was ordered by Pope Julius II to be present in Rome to erect a tomb for him that should be worthy of the overload of Christendom. With the Pope's permission, he immediately travelled to the famous marble quarries at Carrara, there to select the blocks from which to carve a gigantic mausoleum. Pope Julius II asked him to erect a chapel in the Vatican which had been built by Pope Sixtus (Sixtus IV) and was therefore called the Sistine Chapel. The walls of this chapel had been decorated by the most famous painters of the former generation, by Botticelli, Ghirlandajo and others. But the vault was still blank. The Pope suggested that Michelangelo should paint it. He started to work out of 12 apostles in niches and he shut himself up in the chapel, let no one come near him, and started to work alone on a plan which has indeed continued to amaze the whole world from the moment it was revealed. Michelangelo spent four years of lonely work on the scaffoldings of the papal chapel. He had to lie on his back and paint looking upwards. The chapel is a very large and high assembly hall, with a shallow vault. High up on the walls, there is a row of paintings of the stories of Moses and of Christ in the traditional manner of Michelangelo placing gigantic images of the old testament prophets who spoke to the Jews of the coming Messiah.

Borromini

During the first half of the seventeenth Century new ideas for buildings and their decorations had gone on in Italy, and by the middle of the seventeenth century the style we call Baroque was fully developed. A typical Baroque church built by Francesco Borromini and Rainaldi in 1653 called Sta Agnese in Piazza Navona. In this church Borromini applied Renaissance forms, like della Porta, he used the form of a temple front to frame the central entrance. He doubled the pilasters on the side to gain a richer effect. But by comparison with Borromini's façade, della Porta's looks severe. Borromini was no longer content with decorating a wall with orders taken from classical architecture. He composed his church through grouping of different forms: the vast dome, the flanking towers and the façade. And this façade is curved as if it had been molded with clay. If we look at the detail we find even more surprising effects. The first story of the towers is square, but the second is round, and the relation between the two stories is brought about by a broken entablature. Borromini wanted a church to look festive and to be a building full of splendor and movement.

Bernini

This supreme art of theatrical decoration had mainly been developed by one artist, Lorenzo Bernini (1598-1680). This can be seen in his portrait "The Vision of St. Theresa, Altar Sta Maria della Vittoria, Rome erected between 1644 and 1647". Louis XIV of France invited Lorenzo Bernini to Paris to help with the designing of his Palace of Versailles, which was built around 1660-80. Versailles is Baroque. The main intent is on grouping the enormous masses of the building into clearly distinct wings, and giving each wing the appearance of mobility and grandeur. The middle of the main story is accentuated by a row of ionic columns carrying an entablature with rows of statues on top, and flanked this effective centerpiece with decorations of a similar kind with a simple combination of pure Renaissance forms. Every minor princeling in southern Germany wanted to have his Versailles, every small monastery in Austria or in Spain wanted to compete with the impressive splendor of Borromini's and Bernini's designs. Artists were given free rein to plan to their heart's content. In Austria Bohemia and southern Germany, the ideas of the Italian and French Baroque were fused into the boldest and most consistent style.

The period about 1700 had seen the culmination of the Baroque movement in Catholic Europe. The Protestant countries could not help being impressed by this all-pervading fashion but, nevertheless, they did not actually adopt it. During this period England had her architect Sir Christopher Wren (1632-1723) who was given the task of rebuilding London's churches after the fire of 1666. Wren was influenced by the Baroque architecture. Wren's cathedral consists of a central dome, flanking towers, and the suggestion of a temple façade to frame the main entrance.

The victory of Protestantism in England, and the Puritan hostility to images and to luxury, had dealt the tradition of art in England a severe blow. In France also, the Baroque grandeur of Versailles had gone out of fashion in the early eighteenth century in

favor of the more and delicate effects of Watteau's Rococo. Now this whole aristocratic dream-world began to recede. Artists began to look at the life of the ordinary men and women of their time. Chardin (1699-1779), an artist, liked the quiet glimpses of the life of ordinary people.

In France and England, the new interest for ordinary human beings rather for the trappings of power benefited the art of portraiture. When the French revolution of 1789 happened, it put an end to too many assumptions that had been taken for granted for thousands of years. Just as the great revolution has its roots in the Age of Reason, so have the changes of man's thinking about architecture. In former times, the style of the period was the way in which things were done; it was done because people thought it was the best way of achieving desired effects. In the Age of Reason, people began to become aware of styles.

The Industrial Revolution began to destroy tradition and this gave way to machine production, the workshop to the factory. The immediate results were reflected in Architecture, and the insistence on style and beauty were vanished. Because of the Industrial Revolution, the amount of buildings done in the nineteenth century exceeded all former periods taken together. Accordingly, the rules of thumb and the pattern books were discarded as being too simple and non-artistic.

However, the architect was commissioned to design the building's façade in the resemblance of the Gothic style, a Renaissance palace or even an oriental mosque. For theatres and opera houses the theatrical Baroque were considered most wanted while palaces and ministers were thought to look more descent in the form of Italian Renaissance, but the results were not happy. Architects designed buildings to become landmarks of the cities in which they stand. What made matters worse was that the Industrial Revolution and the decline of craftsmanship, the rise of a new middle class which often lacked tradition, and the production of cheap and shoddy artifacts, had caused a deterioration of people's taste.

Late nineteenth century search for standards

In the end of the nineteenth century, architects were increasingly dissatisfied with the styles that pleased the public, and saw the buildings of that period as lacking any relation to the purpose of the buildings. Large blocks of flats were charged with decorations, cornices and moldings, made in an atmosphere of declining craftsmanship caused by the Industrial Revolution and were made by machine imitations of ornament who had once had the meaning and nobility of its own.

Art Nouveau

Architects longed for a new art with the possibilities inherent in each of these new materials. Victor Horta (1861-1947), a Belgian architect, made an immediate hit by transposing this idea into iron structures that fulfilled the requirement of modern architecture by offering a new style which became identified as Art Nouveau. What we call modern art grew out of these feelings of dissatisfaction.

Belonging to the generation of impressionist masters, Paul Cezanne's (1839-1906) work ultimately led to Cubism, which originated in France. This was an attempt to escape from a deadlock in which the artists found themselves. We must mention of these artists, Van Gogh who was born in Holland in 1853 and founded Expressionism in Germany; Paul Gauguin (1848-1903) who led the movement and the various forms of Primitivism as another response to modern art movement.

Expressionism

The value of bold inventions and innovations in architecture are widely recognized. Structure and simplicity have been inherited from the three rebels, Van Gogh, Cezanne and Gauguin. Expressionism became a convenient label because it is easily remembered in contrast with Impressionism, and as a label it is quite useful. We know that we express ourselves in everything we do. Experiencing may also change according to our mood: happy or sad. Expressionists felt much about human suffering, poverty and violence that they think insistence on harmony and beauty in art was only born out of a refusal to be honest. The art of Raphael and Correggio seemed to them insincere. They wanted to express their compassion for the disinherited and the ugly. It became a point of honor to avoid anything which smelt of prettiness and polish. The Expressionists movement found its fertile soil in Germany, where it aroused the anger of the little man. When the National Socialists came to power in 1933, modern art was banned and the leaders of the movement were forbidden to work.

This leads us to think of modern art as a type of art which has completely broken with the traditions of the past. It was then that artists had become aware about style and began a new movement which raised a new "ism" as a battle cry. Modern Architecture was slow but its principles are now firmly established. Architects of the twentieth century decided to begin afresh and to rid themselves of this preoccupation with style or ornament, were it old or new. The most successful of these was Frank Lloyd Wright (1869-1959). He saw that what mattered in a house were the rooms, and not the façade. He has swept away all the moldings and cornices, and built the house entirely to suit the plan. He believed in "Organic Architecture". The whole systems of the classical orders since the time of Brunelleschi were brushed away.

The Bauhaus and Cubism

The Bauhaus in Dessau, a school of architecture founded by Walter Gropius (1883-1969) which was closed and abolished by the National Socialists in Germany, was built to prove that art and engineering need not remain estranged; on the contrary, each could benefit the other. Their theories are condensed in the slogan of functionalism – the belief that if something is only designed to fit its purpose we can let beauty look after itself.

The word "abstract" has been suggested instead. An increasing number of artists saw what matters in art is to find new solutions for what are called problems of "form". They thought that form always comes first and the subject second. The best description of this was explained by the Swiss painter and musician Paul Klee (1879-1940) who has been impressed by the Cubists which he knew in Paris 1912. To him the new experiments of

the Cubists showed not so much the way to new methods of representing reality as new possibilities of constructing forms. Klee began by relating lines, shades and colors to each other, adding a stress here, removing a weight there, to achieve the feeling of balance. He described how the forms emerge under his hands suggesting fantastic subject to his imagination and how he followed these hints which helped his harmonies by completing the image that he had found. It was his idea that this way of creating images was more true to nature. He argued that nature creates through the artist. Like Picasso, Klee enjoyed the variety of images that could be produced in this way.

The interest in structure aroused by Cubism raised the question among artists in Paris, Russia and soon also in Holland, whether painting could not be turned into construction like architecture. The Dutchman Piet Mondrian (1872-1944) wanted to build up his picture out of the simplest elements, straight lines and pure colors. He wanted his art to reveal immutable realities behind the ever-changing forms of subjective appearance.

If the artist's feelings for forms and color are to be expressed, he needs a hard core on which he can bring his gift to bear. In the more distant past all works of art gained shape round a vital core be it a building or cathedrals or else, to admire the works of art which were once created to serve such end. This direction was taken in Hellenistic times and in the Renaissance. It was a matter of tradition rather than any necessity that art should produce nature. The importance of this demand in the history of art from the Florentine Giotto di Bondone (1266-1337) to the Impressionists does not lie in the fact that it is the essence of art to imitate the real world. This provided challenges to the artist's ingenuity to do the impossible with colors and forms, and cause change in the traditions in which each work refers to the past and points to the future, thus enabling a living chain of tradition to link the current art with that of the Pyramid age. Between 1917 and 1925 more creative movements sprang to life that was an explosive fission of the European spirit.

Modern Architecture

In Architecture, this happened also. After the hesitations of the nineteenth century modern architects knew what they wanted to do and the nations have begun to accept their work as a matter of course. The thread of tradition does not break and these remain opportunities for the architects to add to the precious heritage of the past.

The curtain wall became a non-supporting skin made up from window mullions and in-fill panels cantilevered from a frame structure such as found in the Lever Building in New York City designed by Skidmore, Owning and Merrill (1951-1952). This placing of architecture on a cosmic scale could be called the Metaphysical School of Architecture. Its major idea was the words of Louis Kahn "what the building wants to be". By the sixties this tradition had undergone a metamorphosis that changed its character and became a kind of movement called Art Nouveau which is based on attacking the dull industrial environment for its monotony. The technology contrasted with cultural artifacts and traditional values.

The Art Nouveau movement and the architecture of Gaudi and Van de Velde preached the artist's imagination with romantic socialism, the Bauhaus from 1919-1923 based on the Mutual Aid ideas which go back to the Anarcho-Syndicalism of Proudhon. Bruno Taut allied the new crystal architecture with the new community spirit. In his Utopia sketches, the community building would be a house of crystal as an expression of the latest technology. Also Frank Lloyd Wright's community workshop called Taliesin, and the ateliers of Le Corbusier and Alvar Alto. All these architects work with a strong central control in their offices. As a result, when Expressionism was reborn as Fantastic Architecture in the sixties, the political roots had corroded. Another approach termed Fantastic was of Morandi, Nervi and Gastiglione. They pushed structure to its expressive limits. For instance Frei Otto designed tension cables across a mountain to another holding up tent-like cities below them as seen in the German Pavilion, Expo 67, in Montreal. Also the German architect Hans Scharoun in his design of the Philharmonic Hall in Berlin, 1956-63, showed expressively this fantastic architecture in cascading forms which are appropriate to the spirit of musical performance. The convex and the broken interior shapes of the space diffuse the sounds around the surrounding seats.

The insistence on individual creativity can be seen in the design of Sydney Opera house designed by Jorn Utzon, in Australia 1957. The shell vaults, inefficient as structure, were to hold acoustic ceilings some distance below and were meant to recall the sail boats and waves of the harbor. It is a fantastic association both in terms of cost and appropriateness of the shell vaults with ceilings underneath, or to the function of opera houses for not relating either to the acoustic ceilings underneath, or to the function of opera houses.

In Japan, the architecture led by Kenzo Tange is an outgrowth of the Heroic Period and Le Corbusier's later work which is also similar to the Super sensualists. This can be seen in his design Theme Pavilion, Expo 70, Osaka, which is a giant mega structure with plug-in capsules, moving lighting booms and stage setting robots on telescoping arms. The performance robot carries people and partially movable seating. Many of the ideas which Archigram projected six years previously have been rationalized by the systematic design process.

Buckminster Fuller, designed a geodesic structure in 1958 with a diameter of 115.00 meters and a height of 34.80 meters. Fuller's principle of maximum efficiency as a by-product, a visually homogeneous and striking image in Louisiana. Pier Luigi Nervi was following the laws of nature which appears in his article entitled "Is Architecture Moving towards Unchanging Forms". His answer is that we have to obey them as an only method to bring their majestic eternity to the service of our goals. Nervi designed the Palazetto dello Sport in Rome (1958-59) using Pylons which support the central ceiling and seating area tapered in three dimensions following the complex structural forces.

Louis Kahn started working on the performance of light, until it defines the space and structure. For him light is the generator of form and design. Because Louis Kahn felt that direct light would cause glare and obscure the transition between inner and outer space, he used a series of buttresses which would shield the windows from direct light and allow

it to reflect indirectly on the side of the wall between these buttresses as can be seen in his design of the First Unitarian Church, Rochester, New York 1964. There he placed window seats so that one could sit in an enclosed space and see the soft light fall upon the reveal. Kahn's church embodies a relation between space, structure and light.

Mies van der Rohe

The problem of Mies van der Rohe in architecture is that he demands a commitment to the Platonic world-view in his buildings. The Barcelona Pavilion and the Farnsworth House were his Platonic statements, but in the chapel at Illinois Institute of Technology or the townhouse at Lafayette Park, the purity of form leads to an inarticulate architecture which demands utter perfection. Mies' Farnsworth House, Fox River, Illinois (1945-50), is made up of two horizontal planes suspended from the ground by welded I-beams. The glass areas change in color with the seasonal foliage, a reciprocal acknowledgement of nature and culture. Lewis Mumford calls these sublime failures.

Mies used the facilities given by steel and glass. He gave his glass shells a crystalline purity of form with no relation to site, climate, function, or internal activity. His architecture is like poetry which cannot be understood in the literal level. Mies was against the slogan of "Form follows Function" and that it is not wise to topple down the building every time you change the function. However, Mies has been considered one of three great architects of the 20th Century, because his great "integrity of form and exploited the essence of modern technology". Sigfried Giedeon expressed Mies's architecture as the calm, crystalline interiors of the Dutch painter Hooch, who achieved the same clear quality of light and sharp outline. Mies has subdued all forms to the utmost purity. In his Seagram Building, in New York 1958, the curtain wall of regularly spaced I-beams is extended out a few centimeters from the column lines so that there is a rich articulation of angles at the corner. In the buildings of Mies you can do anything you wish in those buildings because the form and space were "universal". Strangest of all anyone could not date his buildings.

Frank Lloyd Wright

In the fifties the crisis of modern architecture turned towards formalism by both Walter Gropius and Frank Lloyd Wright by their statements which were directed against style and the divorce between function and form. Wright had put forward an organic architecture in which construction and aesthetic prove each other, while Gropius wanted to revive both futurist and functionalist ideas, and had also put forward the idea of an organic architecture unencumbered by lying facades and trickeries, adapted to our world of machines, and the motor cars whose function has a relation to its form. Gropius made a few good buildings such as the Fagus Works, the Bauhaus, the Chicago Tribune Tower and Total Theatre. The Bauhaus is an educational institute which meant to encourage individual development, variety and dissent, compelling the individual to solve profound architectural problems.

Wright claimed that organic architecture is the successful relation of the primary geometry with the function, as in the Unity church, in Oak Park, Illinois, 1906 with its

lighting fixture and balcony. The orthogonal geometry happens also to work well in the lighting and structure, a reinforced concrete two-way grid which lets indirect light through the ceiling also used in his design of Midway Gardens, Chicago, 1914-18. Already at this time the geometry has become a straitjacket. While ornament and historical allusion were a constant preoccupation of Wright throughout his life. Wright, basically starts his designs with a module of construction and then lets it repeat in many different rhythmic forms to set up the overall harmony of flowing space, structural wall planes and the functionally separate areas. In the Usonian Houses, Okemos, Michigan 1939, the most important area, the hearth, was both the intersection of the two functional wings (sleeping and living) and the point of most visual activity in terms of light and intersecting planes. The same is true of the circle which Wright first started using in a tenacious way during the forties. An example of this includes the Johnson Wax Buildings, 1936-39 which is 6.60 meters high columns pinned on brass shoes at the bottom and growing outward at the top support a ceiling of glistening Pyrex tubing. The circle became the last geometry with which Wright was preoccupied. Wright could use the circle to structural purpose as in the Johnson Wax building where the tapered columns were supported laterally at the sides and pinned at the bottom. These mushroom columns, actually serve to divide up the large office space and provide a contrast to the brilliant light which shimmers through the skylight from above. Without them the space would have been too monotonous and too glaring.

Another circular geometry is the Solomon R. Guggenheim Museum in New York City (1943-59). Grotesque primitive curves plunge out onto Fifth Avenue taking up the motifs of the Cadillac's and contrasting with rectilinear walls. The image of a concrete pill-box with machine-gun slits is fortuitously appropriate to the place of art in New York's lives. In the interior, the spectacle of people and paintings against this background makes the art opening reminiscent of some ancient ritual. The ramps impel the viewer continuously downwards to view people moving in different groups. The question that will be always pondered is if there is a consistent fit between form and function in this circular drama?

Le Corbusier

Le Corbusier claims to be a scientist and a rationalist like his double identity, part peasant Jeanerette, part the urbanite Le Corbusier, and like his building, part geometric, part human. He attacked the empiricism in L'Esprit Nouveau as 'infinitely impure' and claimed that his design and writings is based on science and universal laws. Le Corbusier after the Second World War shifted his architecture from being the epitome of a Machine Age to be almost primitive; instead of being made up of right angles and straight lines, it was thought to be made up of curves and random shapes. The shift in direction was a turn to modern architecture. This is in contrast with the primary forms which was the subject of his buildings.

In his Ronchamp building, Le Corbusier calls it "Visual Acoustics" amounts to the embracing of external space and the domination of a white form on a green background. Critics thought Ronchamp the beginning of a return to the past and plasticity and as an

indication of the “Crisis of Rationalism” and a new departure for Le Corbusier because it did not appear to have right angles for discipline nor his Modular. It is possible that he did intend his building to depart from the “Modern Movement”.

In the Assembly Building at Chandigarh, Le Corbusier used an open plan where much of the space is for congregation and circulation which resulted in noisy environment. However, he has created the kind of interior which resembles the vast columnar hall at the Egyptian Karnak. The different masses of the buildings are arranged asymmetrically to create an intense rhythm and dominating effect.

The use of traditional forms

The point is that the architect used a traditional set of forms as he would speak a local language with national inflexions and certain built-in assumptions, and continue to avoid a solution just because it is traditional or just accepting it because it is traditional. Kenzo Tange used old traditional Japanese forms in his new buildings. The Italian architect Rogers asserted that the regionalism is nothing more than the decorative use of traditional elements, and that tradition can be developed by challenging its shortcomings. Kenzo Tange in his design of Kwashibi City Hall, Japan 1958-60, has used the traditional slight curve of the Torii Gate on the entrance canopy successfully; besides, he used an interlocking beam method and post and lintel construction of Japanese architecture. It is understandable that a form from the past has a wider spectrum of associations on which to call than an entirely new form. Team Ten’s call for a memorable image, because it reverberates with overtones of historical place without admitting them expressly nor does the architect.

There were clear cases of historicist regression, such as the Arab villages of Frank Lloyd Wright, the Neo-Gothic work of Minoru Yamasaki, in his building Consolidated Gas Building, Detroit, 1964. Here is the attempt to transform urban reality into a nostalgic dream of classical past. Some of this occurred in the middle fifties: cases as Brasilia 1956, Lucio Costa and Oscar Niemeyer’s Government Buildings, Brasilia, and the MIT work of Eero Saarinen – which were a modern idiom of essentially classical buildings. Bruno Zevi criticized these by saying that geometry prevails over psychology, abstraction over reality, symbols over men. Le Corbusier’s Romchamp stirred up the crisis of rationalism; followed by Utzon’s Sidney Opera House which confirmed the crisis and is attacked by Siegfried Giedeon as being “Playboy Architecture” for its irrelevancies.

Reyner Banham condemns any historicism that referred to classical styles. Banham wanted the revivals limited to periods which were culturally analogous to the present. These attacks culminated with deviations from the modern movement behind every façade. The earliest retreat was neo-accommodatory. Then there is neo-liberty, neo-Art Nouveau which includes neo-Gaudi, neo-De-Stijl, neo school of Amsterdam, neo-German Expressionism, and finally neo-Perret. It was a question then of how far one could go before place-making became “infantile regression”, and neo-this and neo-that!

Conclusion

At present architects are designing beautiful buildings. Such designs are in every formal and technical way done with great integrity, but they can never transcend the limited social and political goals for which they were created. When the content is so trivial, the brilliant form just drives the point in with further gusto. Well, we have the most inventive exciting architecture ever produced, with surely the most ridiculous content. If architecture is to regain credibility, architects will have to acknowledge their responsibility in presenting and dramatizing their people's particular cultural values and not others.