

## Has the Modern Movement any Meaning for Tomorrow?

Let me briefly talk about our eldest son Nicolaas who is 21 years old. After a year travelling through South America he is now a student in business management at the Erasmus University of Rotterdam. At this university he is taught to think globally and surf the World Wide Web in order to make maximum use of the colossal quantities of information hidden in the deepest depots of Internet and available in a splitsecond by a click of his computer mouse. His sense of space and time is permanently further condensed and eroded. His professors introduce him into the latest chaos theories and the inescapability of coincidence.

In his research he is confronted with the ever growing reduction of work available due to the change from mechanical production of the industrial society to the electronic production of the information society. In the neighbourhood where the lives he is faced with a vast migration gulf, started in the nineteenth century from Europe to the New World, that has now reversed from the underdeveloped to the developed countries.

Did we think in the sixties and seventies that our welfare state of equality, solidarity and care would have erased poverty for ever, we are now witnessing a new division in society and the rapid emergence of a new underclass. But I hasten to say that both, my son and I are proper exponents of the current consumer society. We have portable phones, computers, CD and video players, TV sets, cars, bicycles, etc. Yet we seem to be rather ordinary in our behaviour, we learned two months ago. My wife and I decided to treat ourselves to a Christmas holiday in South America. Not one single chair was vacant on any aircraft in Germany, the Netherlands or Belgium to any destination in that continent in December or January. The Americas, Europe and Australia are on the move during the Christmas holidays, just for the fun of it, so the only way left for us is to escape in virtual reality. The same day I received this disillusion, our newspaper informed me that in twenty years time the average yearly temperature will rise 1° C due to our behaviour. At the same time the world population will have doubled to over 8 billion people.

In developing countries the urban population increases with 150,000 people per day at this moment, which means that in 2015 over 2/3 of the world population will live in cities. These cities can serve as centres of innovation, employment and culture, but they can also form a threat for the quality of life and bring about the almost total disappearance of natural resources.

I am sure, most of this sounds rather familiar for most of you since we live in the same geopolitical, cultural and

professional environment. Now my question is how will we, as architects and urban designers, cope with these phenomena. Looking at most neighbourhoods and buildings, designed and constructed in the last fifteen years, I have to conclude that many of us – confused by experiences of failing revolutions and disappointing results of social and cultural experiments of the fifties and sixties, reject any form of social commitment and retreat to a nihilistic and fashionable approach in which form triumphs over content. And the result is that the user of the building is left in a confusing and meaningless environment.

When you look back in history you will notice, that many of the phenomena we are confronted with today, have their predecessors in the 18th, 19th and early 20th century. Therefore it might well be that the intentions and innovations of our colleagues of the early Modern Movement might be of use to us today, although the conditions of today are often totally different from those in their time.

First I like to show you some of the roots of the Modern Movement. Philosophers like Spinoza and Descartes were developing and teaching their theories in the city of Leiden. God no longer was the only answer to all the unexplainable phenomena in nature, as he was in the Middle Ages. Mankind's rational brain should one day be able to understand and conquer the universe. Descartes said: "I think so I am."

At about the same time, in 1671, Louis XIV dictated to Colbert, his minister of finance, that more money was needed to realise his ambitious plans for the Louvre and Versailles. In order to get more financial control over the building trade Colbert in turn established the Académie Royale d'Architecture, which transformed architecture from a customary trade into an academic subject. Academic learning now gradually supplanted practical experience. This meant the end of the powerful guilds and as a consequence the gradual disappearance of the craftsmen.

The Teylers Museum in Haarlem which we recently restored and extended was founded in 1781 and is the oldest museum in the Netherlands. It is a typical institution of the period of the enlightenment, not only designed as a museum to inform the people of Haarlem about scientific and technological developments, but also as a laboratory where important technological experiments were done. The idea was that increase in empirically gathered knowledge would help to create a fair and equal society.

Let us now enter the architect's office of Sir John Soane in London, who was active at the end of the 18th and the

beginning of the 19th century. Sir John was very concerned with innovation, employing well advanced construction techniques and materials. However, he was also interested in the durability of the past. To his clients, the trustees of the Bank of England, he presented this drawing, executed by his Indian draughtsman (ill. 1). It shows the Bank how it might look in a thousand years time. It would not be completely in use any longer, but a beautifully designed ruin. His concepts correspond to the traditional concepts of authority, status, security, durability and stability.

How different is the impression one gets from the sketches made by the Prussian architect Karl Friedrich Schinkel in 1826, when visiting the industrial mills of Manchester (ill. 2). His travel companion, the Minister of Commerce was equally impressed by "the plenty of factories of eight and nine stories with paper thin walls, iron columns and iron beams."

Thomas Carlisle wrote in 1829: "We are living in the age of the machine in every outward and inward sense of that word." And that machine age began to show characteristics very different from anything that had happened before. The ever growing demand to cut costs and at the same time increase the quality of products and services, resulted in the continuous increase in performance requirements of buildings and as a consequence in the rapid diversification of building typologies. And it seems to be a general rule that the more specific an object becomes, the faster its obsolescence will occur.

The concepts of durability and eternity were slowly replaced by the concept of transience, both in culture in general and in architecture in particular. Just to give you an example: in a small survey we did some years ago we counted seven different building types for university education in the eighteenth century, whereas for 1992 we counted over 220 different types of university buildings. Today we are confronted with offices, factories and shops, which become obsolete five to ten years after they were constructed, because the ever faster changing requirements don't fit the physical configuration of the building, specially designed to match these in the first place.

Since a year I am the architectural supervisor of Amsterdam Airport Schiphol where the only constant is change. As soon as you turn around, things are different. To my mind today's transience is rooted in the eighteenth and nineteenth century. Just think again about Sir John Soane's Bank of England and compare this to Crystal Palace by Joseph Paxton for the World Fair in London in 1851, by that time one of the biggest structures in the world. It was commissioned, designed, produced and assembled on site in only nine months. It was not meant for eternity either, both in reality and intentionally.

Apart from the totally changing concept of time, this building also demonstrates the increasing tendency in the nineteenth century to experiment and innovate in social, technical and aesthetic matters. In this respect two factors play an important role in the development of modern architec-

ture in the nineteenth century, which by the way have a certain ambiguity as well.

First there is the liberal scenario, searching for the right of the individual to decide for oneself and to express one's own deepest emotions and feelings. Then there is the collectivist scenario searching for solidarity, equality and care. It is particularly this concept of collectivism and emancipation that brought about the Modern Movement in architecture in the early 20th century.

There was not only progress in the 19th century, the Industrial Revolution had some nasty side effects. The macro economic changes from traditional agriculture to the mechanical production industry triggered a huge migration of country folk to the fast growing cities. Bad working conditions, poor housing, lack of health care and education became the norm for the new urban poor. By the beginning of the 20th century this had developed to such proportions that a growing number of artists and architects all over Europe felt increasingly concerned with this dire situation of the masses. Only the emergence of a radically new culture and therefore the radical rejection of the past would do for them. This totally new culture would be based upon rationality both in terms of social relationships and the optimum use of technology and material properties. The poetic qualities of form would be the logical result of economy, the organisation of function and the technologies applied.

For many architects therefore the Modern Movement was not so much an aesthetic principle or a style, but rather a method of working, a way of thinking about people and their environment. These buildings should primarily be considered as an utility. They were to be designed as economically as possible and should express the openness, transparency and accountability of the new culture, they should fulfill the ambitions of the emancipating masses, be hygienic and healthy, and they should be produced and assembled as efficiently as possible, making use of as little material as possible by employing the latest technological innovations. The Dutch architect Johannes Duiker called this attention to the essential, the reduction of the superfluous and the search for the necessary, "spiritual economy".

Many building types emerged from this new way of thinking to suit new functional requirements, such as facilities for education, entertainment, sport, transport, industry, healthcare and housing. As you can clearly see in these illustrations, the results express transparency, openness, lightness and transitoriness, as opposed to monumentality, heaviness, protection and durability. These buildings were not meant to be architectural icons or monuments. On the contrary they were meant to serve the ordinary, the requirements of the masses. Yet although this way of thinking and working was universally adopted by Modern Movement architects, it had its local interpretations, depending on local environmental, cultural and economic conditions and needs. And for a while its rationalistic roots appealed to political systems with totally opposite attitudes such as social democracy, facism and communism.

Apart from varying political points of view, one cannot deny that several crucial miscalculations were made by the innovative pioneers of the Modern Movement, which were later copied and multiplied to a huge scale, during the post-war building boom both in Europe and America (ill. 9). I just remind you of the drastic separation of functions, the autonomy of the solitary building, the denial of the traditional urban structure and the *tabula rasa* approach, the overkill of economy and rationality to the detriment of the emotional needs of the individual. The loss of communal and of individual protection in the drive for collective transparency, the lack of attention to the graceful aging of buildings, constructions and materials etc. All these were misinterpretations of very ordinary psychological needs, and Team X has rightly reacted against that.

Yet I do think several principles of the Modern Movement can be of great benefit to us today. Clearly the Modern Movement is not just a fashionable style, a whim of the day, but a motivation, a way of thinking which is never normative but always enquiring and innovative. It is an ongoing project of civilisation with its roots firmly anchored in 18th and 19th century thinking, which as it is primarily socially orientated, is looked with disdain upon by many current architects. If you look at the rapidly emerging underclass which on a global scale is growing to mega proportions, one wonders how long we can maintain this arrogance. Just a week ago we could read in the Netherlandish newspapers that in our welfare state with 15 million inhabitants over 22,000 households i.e. approx. 60,000 people suffer from hunger because they cannot afford sufficient food. This social motivation of the Modern Movement is essentially community orientated. In our period, where individualism is often pushed to the extreme, more attention to solidarity and to collective goals and solutions might help to arrive at acceptable balances between the private and the communal.

The Modern Movement way of thinking also means doing more with less. Surely, in our era of rapidly declining natural resources, growing environmental pollution, global warming, as well as a massive increase in the world population, this Modern Movement essentialism makes a lot of sense, in our search for a sustainable future.

And last but not least we are living in an era of rapid globalisation and at the same time, or should I say, as a consequence of this, we are witnessing a renewed tendency of protectionism and nationalism, of creating borders. Perhaps the intention of openness, the will to innovate and investigate, the desire for transparency and accountability, the wish to look outward rather than inward, all could be of use as well. I am convinced that many ideas of the Modern Movement of the recent past, and that means both the positive and negative results of this way of thinking, are essential to keep for future generations. That is why we started seven years ago with the international organisation for the documentation and conservation of Modern Movement buildings and neighbourhoods, in short DOCOMOMO, with the intention to think global and act local. Today we have active working parties in 36 countries and an extensive network of approximately 1,200 associated architects, architectural historians and

conservationists world wide. In DOCOMOMO we discuss the essence of modernity and ways of keeping the results of the Modern Movement for the future.

You may rightly ask, whether the preservation of Modern Movement buildings isn't in total contradiction with the motivation of the original architect, who intentionally designed the building as a utility. Wasn't the rational of a building, that it suited its functions perfectly and that as soon as the requirements change it should be altered or demolished? Wasn't that the key idea of transitoriness? I think there are several reasons why it is perfectly acceptable to preserve these buildings today for future generations, apart from doing it just for the love of them. First, the prime function of an important Modern Movement building of the past has changed from its original utility purpose to what is considered as a monument now: a representation of a cultural meaning of the past.

Secondly, whereas from the twenties to the sixties, the idea to start from scratch – the *tabula rasa* approach – was a rational thing to do, today it is much more rational to re-use buildings and historic settings for social, economic and environmental reasons. And third, whereas in the first half of the century it was a revolutionary act to reject anything from the past, today it is revolutionary to reconstruct the ties with the past and act in accordance with the long term waves of civilisation rather than to worry too much about the short term waves of fashionable trends of the day.

But the preservation of 20th century buildings and neighbourhoods has some specific characteristics. In the last eighty years, more has been built than all buildings put together that have been produced ever before. Quite a number of these recent buildings are of social, technical and or aesthetic interest because of their particular innovations. Yet apart from economical constraints you could and would not like to keep them all. So in order to control this, one should make a hierarchy related to regional, national or international importance.

This is why in DOCOMOMO all the various countries have made national registers, documenting the most important MoMo buildings in their country. And making use of their register they have made proposals for the international MoMo selection. Some of these buildings are of such worldwide importance that one should strive to preserve and restore them as much as possible to their original state. A second category consists of buildings of national importance. Of course these should be kept as well, and as much as possible in the original state yet they may be restored in various degrees of pragmatism depending on the authentic meaning in relation to the requirements of re-use. And the largest category of buildings of historic interest should at least be documented systematically and after that they might be left to the economic and architectural whims of the day if no one is interested in renovating them. I have to add that proper documentation is often a very good solution, particularly for keeping buildings for the future that have been unwanted and unloved all along, but yet represent an important innovation all the same.

Now the re-use of MoMo buildings is a rather difficult affair, precisely because they have been designed to suit specific performance requirements and as a consequence have a short functional and technical life. In the case of MoMo buildings: if you don't find a new function that suits the old, you can easily get in trouble. Take for example Gooiland in Hilversum designed by Jan Duiker as a hotel in 1933. It was turned into a music school in the late 1980's and is now vacated already, because it was physically totally unfit for this function. For the Schröder House, designed by Rietveld in 1924, the restoration to its original state went alright because the house was turned into a museum. But of course, not all the relics of the past can become museums.

And what about Sanatorium Zonnestraal in Hilversum designed by Jan Duiker in 1928 (ill. 11). Discussions have been going on for thirty years, what to do with this complex, varying from a hospital, an educational centre for the trade unions, to a conference or an AIDS centre. Two years ago a new initiative has been developed to establish a health care centre on the site, that will make use of the original sanatorium as well as additional new buildings. My colleague Wessel de Jonge and I have been appointed as the architects for this project, recently we finished the preliminary design.

Now you may have noticed, that the Zonnestraal buildings don't excel in proper detailing (ill. 12). To consider cement plaster and mesh a suitable solution for prefabricated external walls can not simply be attributed to ignorance or slender financial means. Research in building history has showed us that Duiker and his structural engineer Wiebinga were often very well aware of what they were doing in technical terms. Apparently, they didn't think it necessary to design for a longer technical lifespan than was functionally required. And because Duiker and the physicians of Zonnestraal expected tuberculosis to be exterminated within thirty years, due to their firm believe in the advancement of science and technology, to them it made perfect sense to design throw away buildings fitting Duikers ideas of "spiritual economy" and essentialism. So here we are today, restauring throw-away buildings for eternity.

Duiker designed the lightest construction possible with an absolute minimum of material (ill. 13). The dimensions of the concrete beams follow the moment diagram; the beams are haunched at their supports to take up the shear forces. The complicated and labour intensive carpentry was economic in a period of cheap labour and expensive materials. Duiker took the philosophy of "less is more" to the extreme though. As a consequence of reducing the material to a minimum, the narrow shuttering could only be filled by making the concrete more fluid than acceptable with a considerable amount of water. As a result, the compression strength in some columns is not more than that of wet sand. Besides the reduction in reinforcement steel in the beams is taken to such a level, that the structure can't take the lateral forces sufficiently. Recent calculations indicate that the frame of one of the pavilions has collapsed in theory and is being supported by partitions that were never meant for this purpose.

Now the big question, what will we do in order to preserve this pavilion? The first option is to demolish and reconstruct the building. New developments in concrete technology allow us to rebuild the pavilion in such a way that the original appearance of thinness, expressing Duikers ideas about the "spiritual economy", is completely as it was intended. In other words, the authenticity of the idea is secured in that option, yet the authentic material has disappeared. The opposite option is to keep the authentic material as much as possible. But that means that whether we like it or not, whatever we do, we have to add material and construction, be it by introducing wind bracings in the elevations, by increasing the beam height, or by introducing new stiff verticals in the elevation. In short, in this option the authenticity of material is secured, but the expression of the idea, in other words of that which has made the original building so special, will disappear. As the architect Aldo van Eyck once said: "You don't just add a millimeter to a line on a Mondrian painting. Doing that the painting won't be a Mondrian any longer, it will just become an ordinary painting. It is precisely the lack of that one millimeter, which creates its special meaning and experience." Besides, don't forget, since 20th century buildings are designed and constructed with rapid change in mind, very often a lot of its original materials and constructions have disappeared anyway due to renovation interventions.

If we restaure Duikers's pavilion (ill. 14) we adhere to the Charter of Venice and we comply with the international guidelines of the World Heritage List, because the authenticity of materials is a prerequisite for inclusion of a building on that list. If we don't adhere to these guidelines and reconstruct the building, we come closest to the original idea of the architect, but the building will not be acceptable for the WHL. Now I don't necessarily want to change the W.H.L.-guidelines drastically, but I do think it is important to alter its intention in such a way that buildings from the machine age, i.e. buildings of the Modern Movement can be included as well, although they might partly be reconstructed. Of course it is always scientifically and emotionally attractive to save as much authentic material as possible, but one should not forget that we are talking here about buildings assembled from machine made products, rather than about traditional constructions put together by craftsmen, showing their individual signature. As I said at the beginning, the Modern Movement is not a style but a way of thinking, of always inventing new social, technical and aesthetic solutions. Therefore it is the actual innovative idea that is most important to keep for future generations. And very often it is precisely the experience of such an innovation that can't be grasped by just documenting it, however sophisticated virtual reality might ever become.

In the end it is only reality which will do. And it is the reality of the useful ideas and inventions of the Modern Movement that is extremely important for the future of ourselves and that of our children. In our age of the digital revolution it is useful to remember a Modern Movement wisdom: "The future is not just something happening to you, it is something you build."