

National College of Art and Design Faculty of Design Department of Industrial Design

The future of Berlin architecture

by

Neil Cormican

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INTRODUCTION

The reason for the choice of the subject matter of this thesis is as a result of working in Berlin for a period of 2 months after a 3 month Erasmus exchange at the Hochschule der Kunst in the city. The aim of this thesis is to analyse future possibilities of architecture in Berlin. It will examine the implications of the turmoil since the 1920s. It questions why the city has remained as two cities after five years of unification. Geographically and politically it is one city but it functions as two. The thesis explores why the city needs a new boost in town planning and architecture to pull it back together again. It also looks at two young architects presently working in the city, their work and how it could help to reunite the city.

Houses will be shorter lived than we, each generation will have to build its own city

> Antonio Sant Elia (Gossel- 1991- Pg.319)

This statement may not apply for many cites, but it definitely sums up the history of Berlin and it's architecture. The city has had the life of a child's toy town. It has been bombed, burned, torn apart, rebuilt and then thrown back together again, but it has survived through all this turmoil and is destined to become one of Europe's most exciting cities again. There is much excitement in the city at the moment, the momentous social changes taking place in Europe and Germany can be experienced at first hand. This situation has aroused much interest world wide. Of course the fall of the Berlin Wall has aroused the majority of this interest as it has opened up Eastern Europe for business and tourism.



Previous to all this Berlin acted as an attraction for many musicians, artists and film makers, Wem Wenders' film <u>Wings of Desire</u>, was filmed by the wall. David Bowie remembers, standing by the wall in his album <u>Heroes</u>. Lou Reed recorded his album <u>Berlin</u> in the city. The most recent addition to this collection is U2. Their recording of the album <u>Achtung Baby</u> at the Hansa studios was one of the biggest selling albums of 1992. The video for the song <u>Stay</u> makes much visual reference to Wenders' film <u>Wings of Desire</u>.

Since the early 1970s many artists from England, Germany and Europe have flocked into the city. They set up squats in many of the derelict buildings in the East and West of the city. One of the better examples of the squats is Tachales. This old shopping centre in the former east was claimed by a group of artists. At the moment there is a cafe, bar, gallery, studios and a disco in the building and, because of its derelict state is one of the most popular night spots in the city.



1. Tachales- The old shopping centre claimed by artists



Since the early 1970s many Turkish families have moved into the city to find work. Berlin has a population of about 300,000 Turks, which makes it the second largest Turkish city in the world. The city has also been a huge attraction for many designers and architects. The fact that 92% of the city's housing, shops and industry were bombed meant that they had the prime opportunity to do a lot of work in the rebuilding of the city.

Berlin has never been happy with itself architecturally, even though there have been many attempts to rectify it, few have succeeded. It was first attempted by Hitler during his reign, he had visions of the future of Berlin being a beautiful city. In 1957, the Interbau competition attempted to rebuild it again. The most interesting entries coming from: Le Corbusier and Hans Scharoun. Le Corbusier planned on placing forty H-block sky scrapers in the city centre. Scharoun's idea, like Hitler's took a more historical slant. He looked at ancient Rome for inspiration. Fortunately the erection of the wall prevented any of this from happening. Again in 1988, J.P. Kliehaus attempted to rebuild it with the International BauAustellung (I.B.A.) competition. This competition accepted entries from all over the world, but the competition resulted in creating more problems than it resolved. The biggest and most obvious being that it created suburbs along the wall. These suburbs ran very close to the city centre. When the wall came down, it resulted in having city centre suburbs. The thesis examines each of the competitions in detail in chapter 1 and evaluates the results of them. Chapter 2 looks at a new approach to architecture, this new approach provided suggestions, not solutions to solve the city's problems. The exhibition in 1991 titled

Berlin Tomorrow was held by the Deutches Architektur Museum and the <u>Frankfurter Allgemiene Zeitung</u>, invited 25 of the worlds most renowned architects to submit concepts as to how they would develop the city into a utopian place. The exhibition was to inspire local architects to look at problem solving in a new light. The chapter examines the exhibition and asks if there is any architectural values in it, could the exhibition inspire the architects in any way. As the process of designing to constructing a building takes a great deal of time, there can be little results yet.

Chapter 3 looks at an architecture office in Berlin which did look at the exhibition, the architects Armand Gruntuch and Almut Ernst have entered many competitions and projects since the opening of their office in 1992. This chapter looks at their background, influences and the philosophies behind their work. One of their more important works, the Reichstag competition entry is evaluated against the winners of the competition.

Chapter 4 looks at 3 projects which were undertaken by the architects in 1993, these projects the house, the hotel canopy and the business centre are discussed in detail. The works are assessed to find common characteristics, perhaps a style. It is interesting to see if their work is inspired in any way by the Berlin tomorrow exhibition and if not is their any common themes in both works.

The falling of the Berlin wall is one of the most important and memorable moments of modern history. The whole incident happened over night in November of 1989. Previous to this, many writers and



journalists had been writing about Berlin and the wall that separated the city. One journalist, Mary Pepchinski contemplated the outcome of the fall of the wall, she commented that "I like to imagine that if the wall were ever torn down, the two citys would flow together in an unexpected seamless whole" (Pepchinski, 1988 pp.84). However less than a year later, the wall did come down and the city never flowed together. After the fall of the wall, there were many articles published in magazines such as Blueprint, Domus and Metropolis which followed the quickly changing city. The language of post modern architecture by Charles Jenks and The architecture in the twentieth century by Peter Gossel provided useful information on the architecture of west Berlin during the wall years. Due to the newness of the of the subject, there are not many books published on it. One of the more interesting books in relation the citys architecture is Berlin tomorrow (supplement of Architectural Design), this book gives an account of the exhibition held by the Deutches Architektur Museum and Frankfurter Allgemiene Zeitung.

CHAPTER 1 RECENT HISTORY OF BERLIN ARCHITECTURE

On the 9th of November 1989, the world turned its eye on the city of Berlin. The removal of a 13 foot wall opened up Eastern Germany to the western world. It had been a dream for many Germans for 40 or so years. They thought that it would solve many social and economic problems and possibly make Germany an even bigger super power, but the country was soon to realise that this could not occur immediately. The Berlin wall may have pushed the country of Germany so far apart, but the removal of it may have forced it even further apart. The fact that the two halves were forced together has caused many social and economic problems.



2. Berlin wall- A section of the wall which still remains in the east of the city.



Germany was still rebuilding itself physically and mentally after World War two. The majority of the country was bombed including some of the most beautiful cites in Europe, Dresden, Cologne and Berlin being but a few. A lot of the country was under construction after the war (the 1957 Interbau in Berlin was one competition which was helping to reconstruct the city), but this construction was abandoned in 1962 when the Iron curtain was erected.

This curtain divided Europe, Germany and Berlin in to two halves. This devastated most German citizens as they realised that the wall would divide the country for a long time. Berlin, the capital at the time was divided by the infamous Berlin wall. It resulted in leaving the western sector of the city as an island in eastern Europe, it was totally isolated from western Europe. The great divide benefitted the west as it meant building only half the country. They rebuilt every thing, this was aided by the money which was supplied by the United States. Within 15 years, Germany had risen up to be one of the worlds super powers. It was renowned for its top exports in cars, electrical goods and even architecture.

During the wall years west Berlin was one of the most exciting citys in the world, it had a huge congregation of artists, musicians and film makers. The young people were exempt from conscription, there were no licensing laws on the sale of alcohol and there were great tax benefits. It had also become very popular with tourists. The city had built up a large community of foreigners, and it had different sectors to accommodate the different groups. The area of Kreuzberg, which was neatly tucked under the wall was home to a sizeable amount of Punks,

squatters and Turkish families. Berlin had adjusted to this situation very well and it had never considered becoming a part of a united Germany.

This all changed on November 9, 1989 when the wall came down. Primarily there was much hope at what had happened, the former east Germans were thrown in at the deep end of western culture, the city was swamped with people buying western goods and the <u>autobahns</u> were filled with the Trabants. The following two months resulted in one of the most exciting time in German history. Coca-Cola even set up a free drinks stand at the Brandenburg gate to promote itself in the east. At the start of 1990, the Germans settled down to the first decade of unification, people returned to work, children went back to school and families were reunited.

People soon realised that the process of reconstruction of the country would not be easy, even the children found it hard to draw the full map of the full country. The west was still in pretty good condition because it still had its factories and its environmental protection, but the east was still learning. Their main difficulty was that they were having to look after themselves in a capitalist world and they are still coming to terms with the changing circumstances in the country. The root of all their problems is that the unification happened at the start of a world recession. Before 1989, each east German mark was worth 1/8 of a Deutch mark, after unification each east German mark was honoured with a Deutch mark. This caused the price of goods to rise. By this time Germany's main export cars, had dropped in sales by 30%, even Sindelfingen, the home of the Mercedes was feeling the effects of this position, but Berlin was feeling this depression more than any other city.



One of the basic problems is the ownership of land in the east, the pre-1945 registrar had to be examined to find the rightful owners of certain pieces of land and because of the difficulty to decipher it, many delays resulted. These delays have allowed many developers to drop in to claim pieces of unclaimed land. Sony have plans to develop many parts of the city as they and many others see it as the gateway to Eastern Europe. Another reason for the interest is that Berlin will be the new capital of the country at some point in the near future. The original plans were to move it in 1995, but now a new date has been set for 1998 and some sceptics even say 2010, but the reality of the matter is that Berlin is not yet suitable to become a capital. Bonn, the present capital is getting 2 billion marks for construction in the city, this money was promised to it before the wall fell. Can the capital leave Bonn and let it become a ghost town?. With Berlin in debt for 42 billion marks, can they really afford to redevelop it to become the new capital which may cost up to 80 billion deutch marks.

Berlin is a big city considering its population of 3.5 million people. It has a great number of parks and lakes, almost 1/3 of the city is green. To the south of the city is the old town of Potsdam, which was the summer home of the Prussian kings, to the north lies Lake Tegal. At the centre of the city is the Unter den Linden, once the main street of the old city. The erection of the wall forced the west to find its new centre at the Zoologischer Garten, the east abandoned the Unter den Linden and found the Alexanderplatz as their new centre. South of the Unter den Linden is the Leipziger-Potzdamer strasse, in this area lies a huge expanse of wasteland, this was once the dreaded no mans land which lay between the wall. At the moment this is the most valuable piece of land

in the city. There are three ideas for its development, the urban activists want to turn it into a park, this long stretch of park could be used for bike tracks. Their main argument is that it should be left as a garden of remembrance and a reminder of the walls devastation and interdiction. The urban ecology group argue that this area should be restored to its original condition, the third party Daimler Benz, who have already bought 60,000m sq of the site have plans to build offices (they may even change the name to Potzdaimlerplatz). Now that this area has been bought up, developers will have to scout else where. Many of them are moving east, this area is riddled with sites of wasteland, which can be picked up, areas such as Prenzleurberg and Lichtenburg have been left untouched since World War 2. Some developers argue that many of the buildings constructed during the communist era should be torn down to make more room for new construction, but is this a realistic solution, it must be accepted that in 40 years this style of architecture may be looked upon as a movement, maybe not a very exciting but an important one in European architecture.





3. Potzdamer platz- A sculpture on the no-mans land at Potzdamer platz.



The western sector provides a big contrast to that of the east. The rebuilding started when the wall went up, there were many competitions to rebuild the city, but probably the most famous was the International BauAustellung (IBA). This competition was set up in 1978 by Josef Paul Kliehaus, it did a lot of construction in the west. The ideas for this project were based on the fact that west Berlin was an island, and that the wall was a permanent one. The main aim of the IBA competition was to build social housing. There were 168 projects in all. Many architects from Germany, Europe and the USA entered the competition. The fact that there so many different nationalities working on different projects may be considered as a positive thing, but it actually caused more problems than it solved.

One example of this was a social housing project in the lake Tegal The contract was won by Canadian architect, Charles Moore. area. Moore built a series of 6 story buildings with pink, blue and yellow facades, the buildings seemed very lively and sunny, but they seemed too bright when seen against the gloomy skies of eastern Europe. Thev should have been built perhaps in California rather than 50 miles from the Polish border. Another problem which resulted from this project was the buildings did not cater for the majority of the people in the city. The housing was built for the traditional families of 2 parents and 2.5 children, but in fact 60% of German families do not comply to this. These non-traditional family of single parents, grandparents and adults who work at home have had to adjust to this situation. These are just two reasons why the IBA failed, but the primary reason why the IBA failed was that it had planed on a permanent wall. They had to build housing around the wall, when it came down these suburbs went through



the city centre of the city.

Another problem facing the city is that the population is increasing, at the moment it is at 3.5 million, but by the year 2000, a projected 5 million will live there. Also with the asylum seekers flocking to the city, the amount of homeless people is rising. The city of Berlin has bared the brunt of the German hardship of reunification and four years down the line they must ask themselves was it worth it?.



CHAPTER 2 BERLIN TOMORROW EXHIBITION

About a decade ago Leon Krier wrote "Modern architecture and town planing are incapable of creating localities of human dignity" (Papadalis 1991 pp.7). This philosophy was to be proved wrong by J.P.Kliehaus in the IBA competition, but due to reunification, he unfortunately proved Krier right, the fall of the wall had created a suburb along the no-mans land on the western side. This suburb ran through the cites new centre. Also the flats in the Tiergarten area came under much criticism from the non-traditional families which made up 60% of the cites population. In many cases the modern architecture and town planning already constructed in the city had not improved the living conditions or had not succeeded in lifting the face of the city.

A competition entitled "Berlin Tomorrow" held in 1991 by the Deutches Architektur Museum and the <u>Frankfurter Allgemiene Zeitung</u>, again tried to prove Krier wrong. The idea of this exhibition was to invite architects from all over the world to submit concepts which could help Berlin to become one of the worlds greatest cites again. The submissions are by no means meant to be finished or final solutions, it was an exhibition allowing Berlin architects to draw inspiration from it.

Twenty five of the worlds most renowned architects were asked to take part. These architects had been specifically selected for their previous work in the city or in a similar type of city. The mixture of different cultures and styles resulted in some very interesting concepts. The chosen architects were Mario Bellini, Coop Himmelblau, Peter



Eisenman, Norman Foster, Frank Gehry, Girgio Grassi, Vittorio Gregotti, Zaha Hadid, Jacques Herzog and Peter Hejduk, Stephen Holl, Josef Paul Kliehaus, Hans Kollhof, Rem Kodhaus, Daniel Libeskind, Rafael Monoe, Eduardo Souto de Mouro, Jean Nouvel, Alvoir Siza, Manuel de Sola Morales, Aldo Rossi, Osmond Matthias Ungers, Bernard Tschunmi, Robert Venturi and Denise Scott Browne.

The time scale of the project was very short, there was no money allocated and the information was quickly gathered, but the architects were given the chance to design something very radical and original.

To understand the concepts proposed by the architects, it is necessary to explain the city plan of Berlin. The area around the Unter den Linden was once the centre of the old city and it will probably become the centre of the new city. It contains many of the historically famous sites of the old city such as the State library, Opera house, the Cathedral and Museum island. In this area, the Unter den Linden acts as the east-west axis, it runs from Heerstrasse, down the Strasse de 17 Juli, through the Brandenburg gate and to Alexanderplatz. To the east of this street is the Lust Garten and to the west is the Brandenburg gate, south of this is the parallel street of Leipziger strasse creates another main east-west axis, at the east of this street is the Spittle Markt and to the west is Potzdamerplatz. This leaves only one main street to create the north-south axis; Friedrich strasse, which stretches from the Orainenburger Tor down to the Merringplatz. From this central area created by the 5 axes, 5 roads can span southwards; Potzdamer strasse, Friedrich strasse, Willheim strasse, Markgrafen strasse and Jerusalemer strasse lead out of the city. The Parizerplatz, Potzdamerplatz and





City map of Berlin



Merringplatz were planned to act as geometric shapes, the square, the octagon and the circle. These shapes were to act as the centre of the old city. The axes along with these geometric shapes are to act as the centre of the new city. The biggest challenge for the architects is to mend the wounds created by the wall and by using these axes as threads to sew the east and west back together again.

One of the entrants Daniel Libeskinds project Uber den Linden suggested that a new architecture should be used in this new city. He talks about bringing the architecture into the dynamics of the 21st century and his disregarding of function, character and scale allows his concept to work as a city. He suggests building a dam between the east and west and this will allow the energies of the city flow back together and at one time balance out thus creating a new city. This concept is almost too utopian and the fact that reality plays no part in it make it difficult to assess it in architectural terms.



5. Daniel Libeskind- Uber den linden.



Another concept which reality plays no part in it is that by Jacques Herzog. His project is titled The Tiergarten as a geometric centre. Since the falling of the wall the tiergarten acts as the meeting point between the two centres of the east and west. It also acts as the midpoint between the two great lakes of the east and west. But the tiergarten does not express its importance, it looks like a district which is under developed. Herzog proposes that the Kurfurstendam will be joined to the Leipziger strasse, this will create secondary east-west axis along with the Strasse de 17 Juli. At 4 places on these axes; Zoo station, Lutzowplatz, Brandenburg gate and the Hamburger Gunterbanhof, buildings will be built. The form of the buildings will not be that which is given to them by the architect or the designer, the technician or the structural engineer, but it is the form which is given to it by the observer. This concept is similar to that of Daniel Libeskind as it reject the reality of scale, function or character, but by overlooking these factors, it allows the buildings to stand out as 4 compass points surrounding the Tiergarten area.



6. Jacques Herzog- The Tiergarten as a geometric centre.


The two concepts previously discussed work well in theory, but they cannot function architecturally. A very realistic concept was the one entered by Hans Kolhoff titled City limits. He makes the important point that the wall was beneficial in the fact that it contained the forces of urban expansion. Berlin is unique in that there is a definite border between the city and the countryside. He argues that the city limits should be quickly drawn up to stop any one from building anything too big on the out skirts of the city. If these limits are to be upheld, certain areas in the city will come under a lot of pressure. One such area, because of its traffic links is the Potzdamerplatz. A city of its increasing size needs service areas. He suggests that instead of building outwards, the city must build upwards. This cannot be achieved by any thing but american style sky scrapers, but in doing this, the sacred cow of Berlin architecture, the maximum roof height must be sacrificed. He claims that sky scrapers release an urban power, perhaps this is something that the city needs. He proposes building 6 sky scrapers of 70 floors, the ground floor acts as a public space which gives access to many shops. The This remainder of the floors can be used for thousands of offices. scheme would provide Dalmier benz with the 60,000m. sq of floor space that they need in Potzdamerplatz. The total floor space provided by the buildings would amount to 1.5 million m. sq, assuming to build 1 million m. sq under the old roof height of 22 meters, it would mean developing the whole area between the Tiergarten and the Landwerkanal. This suggestion seems very realistic and would result in creating vast quantities of floor space. As the name of the exhibition suggests a futurist suggestion, Hans Kolhoff refers to the historic factor of the city. These tower blocks almost appear as gates to the new city. City gates are not uncommon to Berlin, there is the Brandenburg gates at the east,

the Charlottenburg gates at the west, the Orainenburger gates at the north and these gates would fill the position as the southern gates. As the wall has fallen, and the city is set to expand again, upward expansion proposed by Hans Kolhoff should be strongly considered, it may preserve the city limits which are so unique to Berlin.



7. Hans Kolhoff- City limits.



The concept proposed by Robert Venturi and Denise Scott Browne also proved to be a very interesting concept. Their project was titled Berlin when the wall comes down. The architects from Philidelphia have had no previous experience with working in the city, it may seem as a disadvantage to them because they have never seen the sites in question and they have to use photographs and maps, this allowed them to over look small problems which would hinder other architects from They point out that the problems cannot be solved by city designing. planning but by city physics. The city of Berlin has grown on patterns and these patterns cause changes in the different parts of the city. The connection of rail and road links would alter these patterns and cause many stresses and strains, when the wall came down, huge changes in the city physics happened. People started to move between east and west and many rail and road links were opened and with future developments, further pressures will occur. It is therefore important to find out the areas where pressures will occur. In finding out these areas the architects made two diagrams, one for the hot and cold spots (areas where change is likely and unlikely respectively) and one for the hard and soft spots (areas where change would be difficult or hard and areas where change would be easy). When the diagrams were laid over a map of Berlin, the results were interesting. Unter den Linden is an area where large scale change would be hard but likely to happen, but it should be resisted. The area between Potzdamerplatz and Check point Charlie is vulnerable to change but due to its historic background, it should be resisted. The area south of the Tiergarten proves to be an area which is both likely to change and one where it should be easy to happen. This area can also act as a good link between east and west. in order to create this east-west link, they have suggested to develop the

Tiergarten strasse by joining it to the Kurfurstendam in the west and the Unter den Linden in the east. Along this boulevard there should be residential buildings facing the park. Along with this street, the Strasse de 17 Juli forms a double axis to join the east and west.

They also point out that the Unter den Linden must be the only street in a European city that does not have a commercial element and they agree that it should stay that way.

The Brandenburg gate is the most symbolic site of the city for the removal of the wall, as it acts as the main gate way between the east and the west. Here the architects suggest that no other buildings should be built apart from the Brandenburg stair. It is a structure which bridges its way across the Brandenburg gate and opens a new gateway between east and west. They suggest that the gateway could act as a new, giant and beautiful monument equivalent to that of the Eiffel tower and as a symbol of the reunification of the city.



8. Robert Venturi and Denise Scott Browne - Berlin when the wall comes down.



So can these concepts be considered for food for thought, some examples such Daniel Libeskind and Hans Kerzog's cannot be considered for their architectural values, and can never be built as structures, but in looking at their theoretical values, they are interesting. The concept of a dam to allow the citys energies to slowly flow together is important because at the moment, the city has been thrown together and everybody is impatient about the speed of change. The city must allow its self to change slowly, but does Libeskind realise that this dam symbolises another wall and the balancing out effect of the city may happen too slow and leave an eternal division.

Jacques Herzogs concept of 4 buildings which surround the Tiergarten area cannot be considered for its architectural values either, as to construct buildings on this scale would be unthinkable. Even though they would provide a geometric centre, a focal point and a new heart to the new city, it appears that he wants the buildings to be so big and overpowering that the Berliners may not even notice the old city.

The entries by Hans Kolhoff and Robert Venturi and Denise Scott Browne present some feasible ideas. Kolhoff presents an option to the city planners, build up or out. He makes the good suggestion that the outer limits of the city should be saved, but is it possible to save a citys limits by building 6 Skyscrapers. Venturi and Scott Brown's suggestion of developing the Tiergarten in to an east-west axis would work well. The theory of the city physics would also work in Berlin because there are so many areas which need development. The intention of this exhibition was to invite 25 of the worlds most renowned architects to suggest ideas for the redevelopment of Berlin. The exhibition was presented in the Deutches Architektur Museum where it was viewed by thousands of people including the city architects, but have the architects benefitted from it, has it provided inspiration for them?. Obviously the results cannot be looked upon for their architectural values but it remains to be seen if any one gained any inspiration from it. There will not be many results as of yet as the exhibition is only two and a half years old, but there may be some traces in some architects later works.

CHAPTER 3 GRUNTUCH AND ERNST ARCHITECTURE OFFICE.

Berlin has always acted as a play ground for architects and designers, Le Corbusier and Mies Van der Rohe being two examples who used the city to test their prototypes and through the many other competitions and exhibitions previously discussed, other architects have had the chance to get their foot in the door of Berlin architecture. It is also a home for many architects who have chosen it to suit their needs. The city with its basic structure allows them to build around it, but with so many architects doing different projects in different areas of the city, can Berlin arise as a single city with a uniform style. This uniform style seems to be so important for the city planners as they have held many competitions to achieve it. The exhibition Berlin tomorrow which was discussed in the previous chapter showed many examples of how architects could develop both the east and the west to form one city. But did the citys architects actually study the exhibition and hope to draw any inspiration from it. One such office which did study it was the Gruntuch and Ernst architecture office.

Armand Gruntuch and Almut Ernst opened their office in May of 1992. The office employs 5 people and at the moment they run 4 autocad stations.

Armand Gruntuch was born in Riga, Lettland. He studied architecture at the University of Aachen, while studying there he took a DAAD scholarship at the Instituto Universitario in Venice. On leaving Aachen with a special diploma award, he started work with the Foster Associates in London. While in London he worked on Stansted airport. In 1989, he left London and then worked with a Professor Schurmann in Cologne on the new governmental building in Bonn. He moved to Berlin in 1992. Apart from his work in the office, he works at the Hochschule der Kunst (HdK) in Berlin. He teaches building construction as well as being the foreign relation officer in the architecture department. Other work includes Wohltemperierte Architektur (Well tempered architecture), this work shop offers students a new insight in to green architecture.

Almut Ernst was born in Stuttgard in 1966. She studied architecture and town planning at the University of Stuttgard. While studying she also took a DAAD scholarship, to the Architecture Associates in London. She then worked with Aslop and Lyall in London from 1988-89. Almut also works at the HdK as an assistant teacher in Visual communications and along with Armand she also teaches in the Wohltemperierte Architektur work shop. Since 1991 she has done some work with the <u>Arch+</u> magazine.

The fact that both architects have had the chance to work and study abroad has been of a great advantage to their work in the office. Working in London has allowed both of them to see different teachings and experience different styles of architecture. Their constant interaction with students in college allows them to see different points of view on different topics, they also give work experience to students which is necessary for all German architecture students. They also act as promoters for the well tempered architecture which they tutor in and Almuts experience in graphics is used in the presentation of projects.

In order for the young architects to gain a reputation in Germany,

they must enter many competitions, these competitions take a lot of time and money, but good results ensures a good name. Often times these competitions are by invitation only, so it is quite difficult to establish ones name in the architecture circles. Once an office can establish their name, they become well recognised office and their work load increases.

Gruntuch and Ernst have entered many competition since the opening of their office. Their first success was gaining 4th prize for the swimming pool at Steigliz in Berlin. There were then invited to take part in a competition by the environmental authorities in Hamburg. Their first major success was gaining a merit for their entry for the reconstruction of the Reichstag competition. Ironically, one of the competitions winners was Armands old employer, Norman Foster. This had resulted in gaining much reputation for their work and had established them as two of Berlin's finer young architects. They have also worked on many projects since the opening of their office. They submitted a design proposal for the new American business centre at Check Point Charlie. This design earned them their first publication in the **Building Design** magazine that year. In 1993 they worked on the reconstruction of an old town house in Lichtenburg, a hotel canopy for the Hotel Konsul in Knesebeck strasse, a kindergarten for handicapped children and a private villa in Grunewald. These projects show great versatility in their work and it shows that they have great ability to design a vast range of architectural products.

The most innovative piece of work designed by Gruntuch and Ernst is the Reichstag competition entry. The competition was held in 1992, the brief was to design the Reichstag to rehouse the government of the united Germany. The building was destroyed by fire before the Nazis seized power and then during the war it was bombed to leave a shell. In the 1970s, it was rebuilt and it now houses a permanent exhibition on the history of the building.

There were hundreds of entries from all over the world. Gruntuch and Ernst spent a lot of time and money on the project, as it meant gaining recognition on submitting a good project. They decided on housing the parliament outside the Reichstag itself, in fact they put it on the doorstep allowing the ministers to look up at the building which they work in. It makes the Reichstag look very powerful and when considering that it will be the parliament of the country, power is very important. The parliament is recessed into the ground and is covered by a huge glass dome, entry is gained via a tunnel which leads under ground from the main building. With the parliament out of the main building, it leaves a lot of room inside the building for offices. They propose removing the inside of the building to reveal an open plan quadrangle, this quadrangle is then covered with glass. One very interesting point is that on plan view, the building reveals two geometric shapes, a rectangle and the circle. This could be an addition to the other geometric shapes, the square, the circle and the octagon which already exist in the city. Also on plan the Reichstag looks as if it is greeting the parliament with open arms. Over all the design proved to be a very original idea and it was awarded with a merit.

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9. Gruntuch and Ernst- Reichstag competition entry.



10. Gruntuch and Ernst- Plan view of the Reichstag.

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The three winning entries were submitted by Norman Foster, Santiago Calatraiva and Pi de Bruijn, the final design has yet to be selected from these three. Norman Foster proposed enclosing the building in an olympic sized glass box. The design looks very reminiscent of his stansted airport design, with its 25 uprights supporting the roof of the box. His impressive model and his name may have been a help in his winning, perhaps his entry would have been more appropriate in the Berlin tomorrow exhibition. Calatravias entry proposed roofing the building with a ribbed dome, resulting in the Reichstag looking like a cathedral rather than a house of parliament. The only winner which holds any stroke of reality is the entry by Pi de Bruijn. He proposed constructing a new geometric wing on the building, thus providing more room for the parliament. If the government are planning on spending up to 80 billion DM on the transfer of the capital, they should have planed to spend it on something better than these.



11. Norman Foster- Reichstag competition entry





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12. Santiago Calatraiva- Reichstag competition entry



13. Pi de Bruijn- Reichstag competition entry.



CHAPTER 4 GRUNTUCH AND ERNST ARCHITECTURAL PROJECTS

Since the opening of their office, Gruntuch and Ernst have been involved in many projects of varying sizes. This chapter looks at three different projects, the house, the hotel canopy and the business centre. Each project has been set under different circumstances, can a common theme be seen in this work?. They have developed their own style, this chapter looks at that style and looks for the influences in the work.

THE VILLA

It is against a white surface that one best appreciates the play of light and shadow, solids and voids, for this reason white has traditionally been seen as a symbol of purity and clarity and perfection... Goethe said 'Colour is the paint of life', whiteness is one of the characteristic qualities of my work; I use it to clarify architectural concepts and heighten the quality of visual power.

(Gossel, 1991, pp.281)

This is Richard Meiers explanation for his use of white in his work. He was one of 5 architects who held an exhibition in the New York Museum of Modern Art in 1969. Along with Peter Eisenmann, Charles Gwathmeys, John Hejuk and Michael Graves, they produced an architectural style called The Whites. There work used geometric and clean shapes and a lot of their work was based on mathematics. Each element of the building represented a mathematical element, the support, wall and space represented plane, line and volume. Through their use of simple forms and colours, they produced many magnificent buildings, it was perhaps this simplicity that attracted a Mr. Hans Muller to build such a building. Mr. Muller commissioned Gruntuch and Ernst to design his house in 1993. The client requested that the house must have a strong influence from the Whites.



14. Gruntuch and Ernst- Villa

The site for the house is beside the lake Grunewald in West Berlin. Automatically the site worked to the architects advantage, it is surrounded by nature on 3 sides and a lake on the 4th. Much of Meiers work is based on nature and the isolation of the building in it. The house



was to be built on the top of a hill and it was to look down the slope on to the lake. The house is 15 meters by 23 meters and is two stories high with a penthouse on the top. The interior of the house is based on an open plan, the huge room on the ground floor opens upwards to reveal the bridge which connects the 2 parts of the upper floor. This is similar to Le Corbusiers later works as he abandoned the use of continuous ceilings and started to use open plan. The front of the house looks very unusual because of the lack of windows. There is one wide strip which stretches from the ground floor to the top of the house, it acts as the front door at the ground floor and a window at the top floor. Small strip windows are used at the sides of the house. The lack of glass at the front of the house is compensated by the huge glass wall at the back of the house which over looks the lake. This window which faces south allows a lot of sunlight to enter the house. Access to the penthouse at the top is gained by the elliptical shaped stair case or the circular lift. The stairwell shoots up form the ground floor as a single element and bursts through the roof, the effect created is similar to that which Charles Gwathmey uses in his work. He claims that the core of his designs is often a joint, where the horizontal and vertical meet, but Gruntuch and Ernst have taken this design element even further. The curves of the oddly shaped stairwell clash tremendously with the down sloping roof of the penthouse. This use of an almost organic joint breaks up the very geometric shape of the house. Another interesting point is that the house looks almost boat like, with its aerodynamically shaped roof and its funnel shooting upwards. This is quite significant when considering that the site borders a lake. The house is quite similar to the Douglas house in Michigan designed by Meier in 1971. The Gruntuch and Ernst house like Meier's stands isolated in the nature and appears very geometric and

manmade, but it is the fact that the house stands out from its background that makes it look so well. The house was only designed as a concept and it is unsure if the house will be built, but whether the house will be built or not, is not important because as Peter Eisenmann said "The design concept takes pride of place, the house actually built is ultimately just a complex form of its representation" (Gossel, 1991, pp.281).



15. Richard Meier- Douglas house, Michigan.



HOTEL CANOPY

On walking down Knesebeck Strasse in Berlin, one can see the sign for the sign for the Hotel Konsul. Underneath the sign is the long straight canopy of the hotel. Its timber uprights supporting the wooden roof structure looks very boring. Above the wooden structure is the corrugated perspex roofing which after its 20 or so years in service has turned green. The whole design of it including the flower pots which hang from the roof looks very reminiscent of the early 1970s. The hotels managerial staff felt that the canopy was of no attraction for the hotel and commissioned Gruntuch and Ernst to design a new one. On designing the canopy they took many things into consideration, first of all because it protruded on to the street its visual appearance was very important, it must appear welcoming to the people entering the hotel, it must blend in with nature as there are many trees on Knesebeck strasse, through its appearance it must reflect the affluency of the hotel and obviously it must shield the entrance from the weather. Many concepts were considered but it was decided on an open structure, perhaps Armands previous work with Norman foster could have been an influence here. The canopy protrudes outwards from the hotel with an upward angle of 5', this angle along with the false perspective created by the decreasing width of the canopy gives focus to the main entrance. The structure ties very well into nature with its tree like branches. From the 2 main supports, it has gradually broken itself into 100 small bolts, which supports the glass roof. The roof allows the incoming person to view the whole building from underneath the canopy, this is quite important when the canopy is

the same width as the front of the hotel. It is the composition of the steel and the glass and the attention to detailing that beautifies the structure. Planning permission was obtained for the canopy with difficulty and it will be built in April of 1994. When it is built, it will hopefully be a stepping stone for other architects to build such radical structures in the city.



18. Gruntuch and Ernst- Hotel canopy.



BUSINESS CENTRE

Check Point Charlie was probably one of the most famous and memorable places for many Berliners and visitors to the city during the wall years. It was the citys main checkpoint between east and west, it was the place where visas for travelling east were obtained. Since 1989 it has become one of the main tourist attractions in the city because of its historical significance, and there is now a museum at the site of the old checkpoint. Near the site is a sign declaring "You are now leaving the American sector", ironically beyond the sign is the site for the new American business centre. The new building will be built on a triangular site which will stand isolated from the surrounding buildings by the roads which run on 3 sides of it. Gruntuch and Ernst were asked to submit design proposals for the new centre, this project gave them the chance to design some thing radical which would stand out from the existing buildings. Their proposal was for a building consisting of a basement and 6 floors. The unusual feature of the building is that the floor space increases as the floors rise upwards, the architects made full use of the north wall for the service areas, such as the lifts, air conditioning and the stairs, thus leaving the remaining walls to allow maximum sunlight to enter the building. They propose putting natural vegetation inside the negative space created by the floors, the sunlight would be beneficial to the plants.

But would the sunlight only penetrate the building if the sun was low in the sky. On a sunny day when the sun is high in the sky, it may cause the upper floors to cast shadows on the lower ones. Another problem that may arise is that of vertigo, the windows of the floors are sloped slightly forward allowing the workers to see the ground directly below them. A similar situation occurred in London in the Ark. This building had windows which were sloped forward at a steep angle which gives the impression of an ark, it resulted in many problems and the people can only work on the 2 bottom floors.

The building makes interesting use of form, from the plan view the building shows an isosceles triangle. From the ground floor the north wall looks like a spine which supports the ribcage (floors). The upward supports which surround the building give an equal vertical spacing, this is compensated by the horizontal spacing provided by the floor levels. Through all this interaction of geometric forms, the bulbous shape of the glass surrounding the floors can be seen. This organic shape continues through the building to form the roof at the top. The unusual shape created by the increasing floor level is knitted together by the cris-cross cabling which surrounds the floors. This cabling gives the impression of a piece of cut crystal glass, which is in an outer glass case, thus portraying the preciousness of the building.



17. Gruntuch and Ernst- Business centre



As mentioned earlier, Armand and Almut tutor in a workshop in the HdK. The intention of this workshop is to explore well tempered architecture and present concepts for a green office building. This new approach to architecture reduces the energy demand by two thirds and in turn increase the comfort for the workers. Armand's project Green corner was set to look at an office environment at a site near the Oraienburg gate. The final design was that of a building where its shape is optimised for low energy consumption and it creates a land mark for the entrance to the city. The building makes use of natural vegetation The advantage of this project is that it allowed the and daylight. architects to explore a new dimension in modern architecture. The building proposed for the Check Point Charlie also makes use of this well tempered architecture. Gruntuch and Ernst are not the pioneers of this type of architecture but this building is a good example of it. It stands out from so many of the closed concrete buildings that we see so many of in the city today. Its use of big open spaces and natural vegetation gives it an air of openness and freedom. It is a very appropriate building for the site which it is proposed for, Check Point Charlie was once the gateway between the east and the west, perhaps this building could be seen as a gateway to a new approach in modern architecture.

The three projects discussed above have been designed for different purposes, the villa was designed for private ownership and the architects were asked to design it with a particular influence in mind. The canopy was designed for a public area and the business centre for a public/private area, so is there a similarity in these works?.

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The most obvious similarity is that of nature or naturalness, first of all the house does look very manmade in its natural environment, being surrounded by trees on 3 sides and a lake on the 4th, but these allow the house to almost grow in its natural environment. The canopy with its tree like structure fits very well in to the tree lined street. It also looks very skeletal like, it appears as a huge dinosaur with its two feet firmly secured in the ground and its great rib cage hanging over the entrance to the hotel. The well tempered business centre makes use of natural vegetation, it also makes use of natural sunlight thus cutting down on the energy costs, considering that 36% of the energy consumed in Germany is used by buildings, it is an important factor when designing a building.

The architects seem to have adopted glass as one of their primary materials. The Reichstag design makes use of a vast amount of glass, allowing the people in the parliament to see the building and vice versa. The house has a full glass wall, the canopy has a glass roof and the business centre has two glass walls. This shows an element of pride behind their work, as it allows people to see their buildings from either side, it also shows that they have nothing to hide allowing people to see every detail of it. Gruntuch and Ernst have a style running through their work, it is a very natural one and the environment is at the forefront when designing.

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18. Welltempered architecture - Green corner

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CONCLUSION

Berlin has tried many times to succeed in becoming a city which is happy with its self architecturally. At the moment Berlin has many problems, both socially and economically and these are causing many stresses and strains on the city physics, but like a dam it will sort itself out.

Berlin has remained as two citys since the unification because of the great differences between the two halves. People in the city are very impatient about the speed of change. In the past, the fastest way to get a big scale change in the city was to hold a competition. It is important that Berliners realise that competitions cannot build cites, there have been few successes in the past and with all the commotion there will be few competition successes in the future. They made the same mistake as Le Corbusier in thinking that his machine city would sort out the problems, but machines cannot grow.

Berlin needs a new boost in town planning and architecture, this new approach came in the form as the exhibition Berlin Tomorrow where world renowned architects provided suggestions to develop the city. The exhibition was to provide inspiration for the local architects to design works which could link the east and west of the city.

There may not be many results as of yet as the competition is only two and a half years old, but it may be of some use on the future. Gruntuch and Ernst, the young architects who have worked in the city since 1992 studied this exhibition, but because of how recent the exhibition is, it is difficult to see any influence in their work from it, how ever there are a few similarities in both works. Hans Kolhoff's city limits project puts the environment at the forefront when designing, he argues that the countryside in Berlin is very important and unique and that the sacred cow of Berlin architecture should be sacrificed to save this. In there work Gruntuch and Ernst consider the environment as one of their primary factors when designing, their experience in tempered architecture is very beneficial to them in their work, this green architecture comes through in the business centre project. They make use of a vast amount of glass and natural vegetation in all their works, this use of glass means that the users of the building are in constant contact with the outside world.

Hans Kolhoff points out that his buildings can be seen as a land mark through the city. Gruntuch and Ernst have also designed city land marks, the shapes of the buildings tie into the existing geometric land marks of the city, along with the square at Parizerplatz, the circle at Merringplatz and the octagon at Potzdamerplatz, they have designed a circle at the Reichstag and a triangle at Check Point Charlie.

At last the future of Berlin architecture is on the right path, Berliners finally realise that the city cannot be built by competitions alone and that it must take a long time for the process of reconstruction to happen. The Berlin Tomorrow exhibition merely suggested rather than attempted to solve the cites architectural problems. The architects who work in the city like Gruntuch and Ernst are the only ones who can solve the problems, it may not be surprising if projects in the future completed by the citys architects and city planners will have a strong influence from the Berlin Tomorrow exhibition.



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