During the last decade, several abandoned industrial sites in Germany were transformed into spaces for various cultural purposes. The aim was to utilize the sites more economically and to prevent their demolition. Under German law, the destruction of old plants would necessarily involve the treatment of all poisonous materials, both in the buildings and in the soil.

These buildings are able to support historic exhibitions in another way than museums do. Like a film set, but filled with the aura of an original exhibit, a new way of synchronizing the objects with the galleries is to be found.

Europe's largest gas tank, situated in Oberhausen, in the Ruhr Valley, which was transformed into a public exhibition space/gallery in 1994. Since then, six exhibitions proved the viability of the 110 m high structure as an exhibition hall. The old power station at Vockerode, near Dessau, was also transformed into a temporary exhibition site in 1998. Another example illustrates this concept. The coke plant Zollverein, in Essen, was turned into historic exhibition, in both 1999 and 2000, where the culture and nature of energy was presented with the title "Sun Moon and Stars"

Other examples of »mises en scène« historic exhibitions, both temporary and permanent, will explain the methods of design, and show the dramaturgical, story-telling way of working in such projects.

# Historic Exhibitions in Former Industrial Plants and other Non Museum Like Environments



Thank you very much for the opportunity to be here amongst you in Rio de Janeiro.

First of all I would like to introduce myself. My name is Juerg Steiner; I am a professor at the University of Wuppertal, in the western part of Germany. I teach exhibition design at the School of Design. For the last twenty years I have also been running an architect office in Berlin. Our main focus and speciality is the transformation of industrial buildings into museums and spaces for cultural purposes. Originally I am from Switzerland, although I have been living in Germany for the past 30 years.

My theory is »conversion without renovation«. In our times, with difficulties finding money for cultural purposes, it is wiser to save money by leaving the structures as they have been found. Examples of this are the twelve coalbunkers of the former coke plant »Zollverein« in Essen, part of the renowned Ruhr Valley, Germany, that we transformed into an exhibition hall in 1999.



2 1. Introduction



The idea that I will be presenting here today is thisthat most of the unused buildings, when properly utilized, make better museums than the new. The ambiance of a used building tells its own story, along with that of the exhibition itself. Both form a symphony together, with several melodies playing at the same time. Not only buildings, but also, for example, ships can be used as exhibition rooms, with their rusty freight rooms, new roofs and windows. 1. Introduction

The bunkers had to stock thousand of tons of hard coal, so the walls were made of thick concrete. We only had to cut out openings without reinforcing the edges. A floor made of steel sheets had to be constructed, because the bunker's bottoms are funnel-shaped. So we got a new floor in the building, and created 12 exhibition rooms in different shapes and sizes.





My professional roots were founded in the theatre. During the 1970's I worked as a technician in the Schaubuehne in Berlin.

The scenery pictured on the left was built with light materials, and taken from a work by the Romantic painter Caspar David Friedrich. The background was formed joining thousands of coloured bulbs. I left this theatre 1980 in the position of Technical Director.

For Shakespeare's play »As You Like It« we re-modelled a film studio into different sections, turning the stage and auditorium into one. This photograph shows the first act of Shakespeare's play. In this scene, the audience, in sight of the small balconies, sat in a kind of »noble court« .The actors were only lit from the bottom-up.



## 4 2. Schaubuehne (Berlin)



In those days, this kind of theatre was real avantgarde in Germany, and also played in very special and eminent locations, like the Olympic Stadium in Berlin with a play by Hölderlin. The building in the foreground is a flat backdrop, made easy to construct because the pieces had to be dismantled every evening.

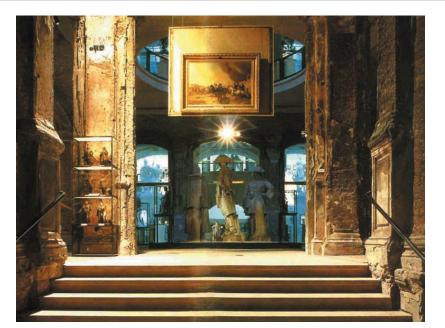


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At the beginning of the eighties I was asked to produce historic exhibitions in a theatrical way. The Central Hall of Exhibitions in Prussia, the Martin-Gropius-Building in Berlin, reminds one of the Paris World's Fair of 1867. Original pieces and decorative elements, like the Prussian cannon »fat Bertha« in the foreground, and the sculptures in plaster cast went along perfectly with the historical aspects of the building.

6 3. Martin-Gropius-Building (Berlin-West)



The building was bombed heavily and mostly destroyed during the Second World War, and survived only as a ruin until the beginning of this exhibition. The dramaturgical effect of the artificial light in the foreground against the daylight in the central hall in the background was easy to recognize. The building was not totally renovated at this time, which also supported the story-telling aspect of the exhibition.

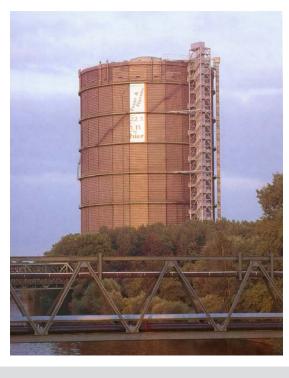
located in Oberhausen in the Ruhr Valley. The tank was built in 1929. In 1990 the coke plant, located nearby, stopped producing coke and gas. Only a few people were ready to re-think a new function for this giant building.

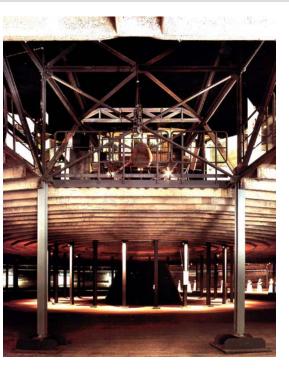
Pictured here is the largest gas tank in Europe,

The world's largest gas tank was made in Germany for the city of Sao Paulo. I could not find out if this world champion still exists or works, but it would be interesting to know.



Inside the gas tank a disc swims on gas. We had to cut the disc and fix it with supports in order to bring people and the exhibits to the top. During the first exhibition »Fire and Flame – 200 Years Ruhr Region« in 1994, the audience entered the gas tank on the ground floor. In the vast dark room under the disc, the Belgian video-artist Marie Jo Lafontaine presented her video sculpture »Every Angel is Terrible«.







The second installation of the theme, »Elements and Utopias« showcased the fathers of industrialization and other personalities who influenced the modern world, and was also located under the disc. The plaster cast of Immanuel Kant was shown in the forefront. At far left stood the bronze bust of Karl Marx. An important quote by that person was projected on to the floor in front of every pedestal.

The Ruhr Valley grew into the largest industrial region in Europe, in only 150 years. Before that it was a »flat heath« landscape. The section "At The Beginning It Was Heath" was constructed as a mirrorcabinet.

Mirrors, in order to convey multiplication, covered both the lateral walls and the floor. We so created an unreal, rural picture in endless repetition.

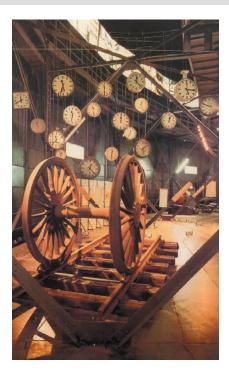


8 4. »Fire and Flame – 200 Years Ruhr Region« Gas Tank Oberhausen

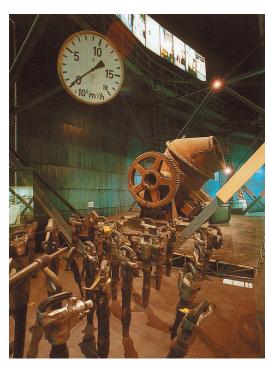


Reaching the top of the disc, one was able to see the immense construction of the polygonal structure, based on 24 corners. 24 radial framework beams are located above the disc, and meet one another in the centre. The framework supplied a natural exhibition showcase. No walls had to be constructed. Some glass panels, as shown in the foreground, were mounted in the framework.

In the middle of the 19th century, the need for the uniformity of time was recognized. Up until then, every town had its own time, which was no longer workable with the coming railway growth. The display we created brought rails, wheels and an axle together, along with many original train station clocks showing the differing times in the various cities of Germany.



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The display, »Great Industry«, was to demonstrate the new dimensions of industrialization. On one hand, the size and weight of a »Bessemer pear« for steel production, and on the other hand, the drill machines, which were presented in order to show the large numbers of items that were needed in the coal mines.

In the centre, a so-called circus ring was erected in which we displayed various objects as a reflection of the present. At first, this seemed a nearly impossible task, but we collected one significant object per week in the year leading up to the opening of the exhibition. Included were 50 television sets, which we placed on top of the shelves, so that all of the television programs that one could see in Oberhausen at this time could be shown simultaneously in real time.



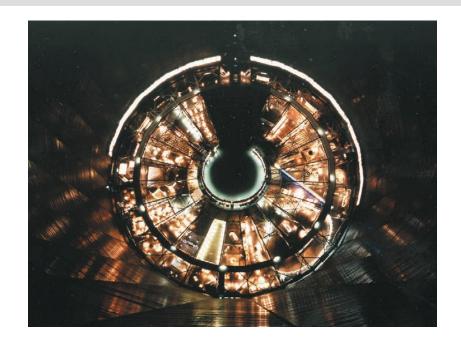
10 4. »Fire and Flame – 200 Years Ruhr Region« Gas Tank Oberhausen



»Abyss« was the name given to the section of the exhibition concerning the Ruhr Valley during the Second World War. The Jews were exterminated, and a lot of slave-labourers from the eastern countries had to work in the industries under inhuman conditions. Furthermore, the bombs of the Allies destroyed more than 50 % of all the houses. Following along the radial structure of the gas tank, we placed glass panels in a design that reminded the viewer of fences.

#### 5. »mittendrin«, Power Station Vockerode

A new 110 m panoramic lift allowed the audience to climb up inside the gas tank. Once at the top, one could see out to the actual panorama of the Ruhr Valley, and on the inside we provided the chance also for visitors to see the whole exhibition from above. The large room, 67 m in diameter, became small, and the steel walls of the gas tank, covered with dried, black oil, reflected the lights of the exhibition.





In 1996, we were asked to conceive a regional historic exhibition in Sachsen-Anhalt, a federal state in the former communist East Germany. As for the exact location, the regional administration had chosen an old power station, which was the largest brown coalburning plant in the GDR. The power station Vockerode is located on the Elbe River near Dessau, the Bauhaus city. The exhibition's name was "Mittendrin" which means "right in the middle".

In 1998 the machine hall was opened to the public. Steel girders reinforced the holes where machines once stood. Two »locomobiles« in the "Magdeburg style" showed the high standards of mechanization in agriculture in central Germany in the 19th century. The hall was not at all renovated; one could even still smell the power station!



12 5. »mittendrin – Saxony-Anhalt in History«, Power Station Vockerode



Upon beginning work, we realized that the old plant had to be dismantled totally. All metallic parts in the machine hall were sold. Not one turbine, or one generator remained. The hall was built in the thirties and was enlarged to double its original size in the fifties. The length of the hall is over 300 m, which is much longer than the well-known Tate modern museum in London. Even up until 1994, electricity was still being produced here.

Upon entering the boiler house, time seemed to have come to a standstill. Every thing was left exactly in its original place. In a corridor 300 m in length, we arranged 12 so-called "leading" objects, or groups of significant objects representing 1000 years of history in central Germany. The pair of 14th -Century statues pictured here, (probably of King Otto and his wife), can usually be seen in the Magdeburg Dome.



We transformed all of the 12 boilers into exhibition rooms. Each measured 8 meters long by 8 meters wide, and 30 meters high. The rusty tubes, in which water was once transformed into vapour, were used as an artificial wall. At the back was a brick wall, 1-meter thick, which once protected those on the outside from the heat. The Medieval documents and Roman-style architectural fragments depicted the highly developed culture of central Germany at that time

In the corridor in front of the sixth boiler, the period of the Enlightenment was shown. This époque was presented as a leitmotif by a plaster cast sculpture of the roman Venus Medici and a putto with garlands in sandstone. The electrical equipment was transformed into the pedestal of the putto. The lighting was, in fact, the only media of design, that costed any money.



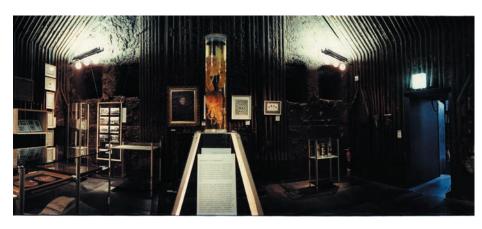
14 5. »mittendrin – Saxony-Anhalt in History«, Power Station Vockerode



In the fourth boiler we exhibited the history of the Reformation, very appropriate here because Martin Luther actually lived in Wittenberg, less than 20 kilometres from the exhibition's location. The boilers were still constructually safe, but nobody knew before the exhibition what the climate conditions would be like. So we built climate-protection showcases, even for the larger paintings like this one from Lucas Cranach, showing the Holy Communion of the Reformators.

For climatic reasons, a glasshouse was built inside the boiler housing »Applied Enlightenment«, and we named the room for the collected objects, the »Garden Empire of Dessau-Woerlitz«. In the 18th century, a well-educated prince transformed the rural life with new ideas. He re-created his area following then contemporary English models. Children had to go to school; teachers were not allowed to hit them.





It is a bit strange, to show an exhibition room with this plant in the centre in Brazil.

In the second half of the 18th century, a Prussian alchemist found out that the white mangold's root could be refined and produces the same product as sugar cane. The sugar beet proceeded a progress in agriculture and agricultural industry in the centre of Germany one hundred years later.

The coalmine »Zollverein« (in the background) and the coke plant with the same name (in the foreground) are situated in Essen, in the Ruhr Valley. The coke plant was the largest in Germany and closed its activities in 1995. Parts of this huge industrial site were chosen to be transformed for cultural purposes, starting with the east end of the hot melting house.

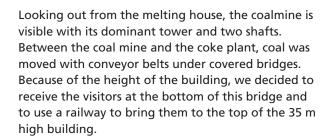


### 16 5. »mittendrin – Saxony-Anhalt in History« Power Station Vockerode



Another boiler in the former power station was dedicated to the Bauhaus, whose original location is only 15 kilometres away. The researchers were asked to find out, how the Bauhaus worked together with local enterprises. The best connection the Junkers had with the innovative school was its exhibition design teacher, Herbert Bayer, who invented the display system in three angle, that we reconstructed here.

#### 6. »Sun, Moon and Stars« Coke Plant Zollverein Essen







Two railway systems, each pulled by steel cables, could bring 4 wagons, 8 people in each, in one minute up to the exhibition. The inaugural exhibition was called »Sun, Moon and Stars – The Culture and The Nature of Energy«. The railway moved towards the sunlight that the Californian light-artist Peter Erskine split into different colours. The colours changed slightly as one moved through the exhibition.

On the top of the melting house, the visitors are treated to a great view. The 600 m long coke plant shows the ovens that were unified into 6 batteries on the right side. We designed the long pond as a mirror to enlarge the plant to the depth of the ground. There was also enough money to construct a big wheel, which was 37 m in diameter and led directly to the ovens.

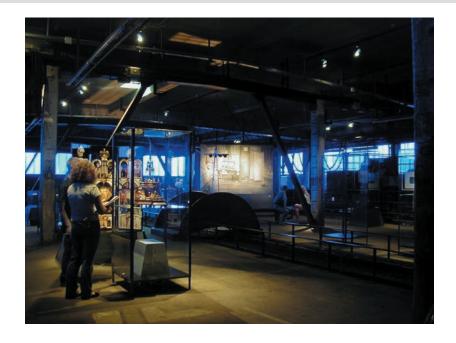


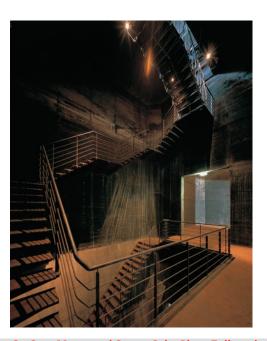
18 6. »Sun, Moon and Stars« Coke Plant Zollverein Essen



The top station was designed like one in a miniature hillside railway. The light work of Peter Erskine is still visible. »Sun, Moon and Stars« is an old German song for children which tells of light and the danger, that light might be, when it burns the little lantern. By moving people to the top of the building, the way further downstairs is easy. A lift gave additional easy access to all visitors.

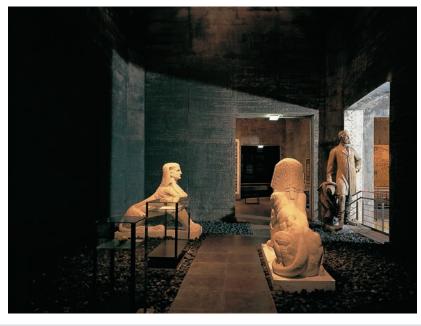
The upper floor was situated above the coalbunkers and was called »Stage of Heaven«. Myths, fairy tales and dreams of energy were shown in an artificial light. Dark-blue »sunglasses« covered the windows in order to avoid too much incoming sunlight and coloured the room with artificial colouring. In the showcase a golden decoration with brownies tells of producing energy without expenses.



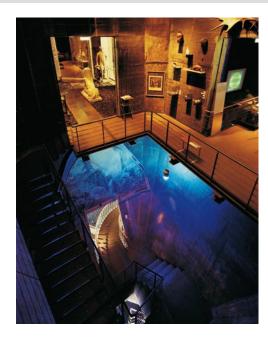


In one of the 12 bunkers we had to build a staircase. The top-stairs were hung; the others were fixed to the concrete walls. About 10 meters under the »Stage of Heaven« the »sun-bunkers« were located. Where once fossil energy was stored, now the history of the relationship between man and the sun was presented. The stairs and light were the only design-components introduced to the bunker.

The first bunker was designed to be a symbol of the Ruhr Valley. The sphinxes were decorations brought from the huge palace of the Krupp dynasty. The bronze statue of Alfred Krupp stood at the window. Coal covered the floor. The Multiple Capri-Battery of Joseph Beuys was lying in a showcase in the front. An artificial sun lights the bunkers from the centre of the melting house.



20 6. »Sun, Moon and Stars« Coke Plant Zollverein Essen



In the bunkers, the miners stored different types of hard coal in order to get the best mixture for a good coke. The staircase also became an exhibition room. We introduced the early research style of collecting all kinds of scientific goods in the natural cabinets to understand nature and the Cosmos. The Cabinet of Athanasius Kircher was an example for the theme »The Time of Astonishment«.

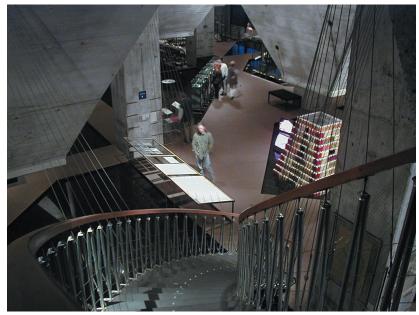
The third bunker told the story of the lack of light in German society. Well lit by the artificial sun, an oil painting »sun-prayer« of the pre-fascist area was mounted behind various types of »mountain sun«. They were created especially for the miners, who did not see the sun, neither in the mine, nor in the polluted sky outside. Hundreds of solarium-shop facades were unified in one tableau.





Only one balcony was installed in each bunker. The installation of an interactive scene was called »Iconology of the Energy«. All kinds of pictures related to energy were reproduced on screens. An electric bulb was placed behind the screens. The audience could light one screen - or a group of screens - that were related, but not necessarily placed together.

Leaving the »Bunker of the Sun« a hanging staircase led to the level under the tunnels of the coal-bunkers. »Ways of Light« was the name of the largest storey of the building, measuring 30 by 20 meters. Leaving the bunkers, the visitors descend by viewing other perspectives at every step, first between the funnels and then above each new area.



22 6. »Sun, Moon and Stars« Coke Plant Zollverein Essen



Marie Jo Lafontaine's splendid video art work is called »Ivre d'éternité, j'oublie la futilité de ce monde«. The projection on the aluminium disc with a diameter of 2.2 meters showed heavenly images and one could hear sounds of waves and birds. Does not a work of art in this environment develop much better than in the usual »white cubes« where this kind of art is usually exhibited?

6 columns of concrete in the centre of the hall and 12 pilasters connected to the walls held up a beautiful ceiling. In this storey 6 conveyor belts were once installed to transport the coal to the ovens. Different kinds of coal fell on the belts and were melted. The two remaining ends of the conveyor belts still let the visitors »re-construct« its former function.



For the exhibition we covered the floor with water. This was to remind visitors, that life began in the water and from there went to the lands. A pyramid of fruit glasses and screens in the water showing the blossoming of plants in quick-motion welcomed the visitors. The water, the blossoms and the fruit symbolized the photosynthesis.

»Mass-movements« was the name given to the last display on this floor, foremost to be understood as the movement of big masses of material. A collection of all materials, which were transhipped to the Duisburg port, was hanged from the funnels. This theme relates to the next, when mass-movements were conveyed politically in the conflicts of the last two centuries.



24 6. »Sun, Moon and Stars« Coke Plant Zollverein Essen



Both showcases and pedestals stood in the water. The theme »The Great Food« meant the transformation of energy by eating meat. Animals devised means against being found or to escape, while others developed dangerous teeth and claws. The display was draped in daylight that entered from all sides through the original frosted glass windows, only slightly supported by halogen light.

The ground floor of the melting house was called »Open Ends«. On one side the different networks of the region like railway, streets, electricity, gas, fresh water and used water were presented with items typical to their use. Represented on the other side were energies with open ends, like the burning of fossil- fuels, which are specially related to a coke plant.



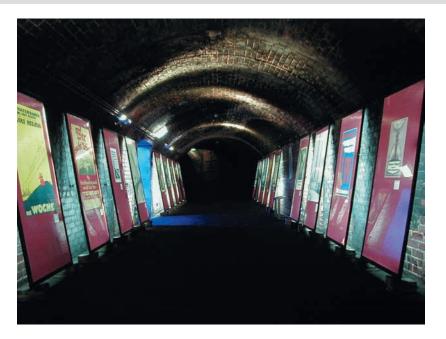


The artwork »World Processor« by Ingo Guenther was one of the exhibitions highlights. The artist depicts on globes different relations and events in a global context. He changes the size of the countries in relation to the population, or he shows only megacities or the location of fresh water sources in the oceans. What beautiful scenery for happy learning!

From the »fox« one could reach the bottom of a 110 m high smoke stack. What an unbelievable view! Everyone could feel what force this part of energy transformation that is not useful anymore once had, and had to be well distributed. The light that came from the top formed vertical shadows that are unknown in European countries.



26 6. »Sun, Moon and Stars« Coke Plant Zollverein Essen

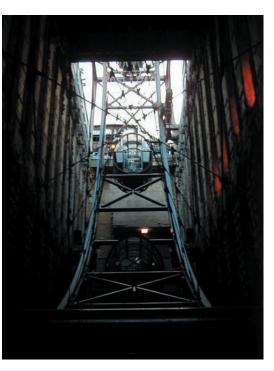


Under the surface, the visitors could enter in a so-called »fox«. While in production, the burnt fuel was let through this beautiful vault. Special frames that were furnished with an internal lighting system showed the »Iconology of the Smoke Stacks«. Smoke stacks were once symbols of progress and prosperity, and then later became symbols of pollution.

In a coke plant, coal glows at a temperature of 1200° for 20 hours without any contact to oxygen. All the liquid and gaseous parts of the coal are collected, cleaned and brought to the gas tank. The tars, sulphur, benzoil, and other derivatives are used in the chemical industry. In the oven remains the coke, which is needed to produce iron.





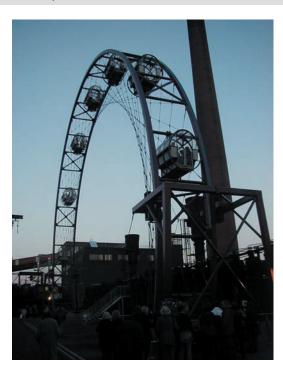


Following the way down into the once-used ovens, people could reach the bottom of the big wheel. It was important to us to have the big wheel showing not only in the air, but standing in the ovens as well. Red lights showed where coal once was glowing. The wheel had 14 cages. Every cage was able to transport 6 persons, who could enter at 4 different stops.

It is a big pleasure to see people standing at the door, waiting to enter. The railway at the beginning of the trip was on automatic control, in order not to overcrowd the space. The entrance building, the covered bridge and the melting house attracted 350,000 people. The show was a great success and helped us to get other »challenges« (work).

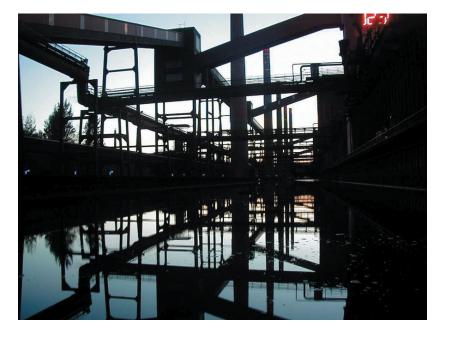


28 6. »Sun, Moon and Stars« Coke Plant Zollverein Essen



The big wheel was called »The Sun Wheel« and became the main symbol of the exhibition. The exhibition was shown twice, in 1999 and 2000. Now the location is used for a contemporary art exhibition. The sun-wheel is the first big wheel built without a hub and without an axle. It rests on several rubber wheels and is propelled by two electric motors.

The coke plant »Zollverein« is one of the most impressive locations I ever saw. The pond helped enlarge the huge site and produced an image far from reality. For many people from the Ruhr Valley it was the first time to enter such an industrial plant, whose entrance was once only permitted to a small number of employees of the so-called Ruhr-coal industry.



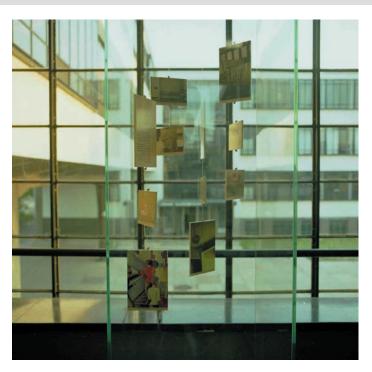


The famous Bauhaus in Dessau, 120 kilometres south of Berlin is not of industrial heritage. World famous architect Walter Gropius built it as a school in 1925. For an exhibition about the building, we intended to not disturb the building itself. The building was not to be transformed into a museum. Modest showcases led the visitors inside the building.

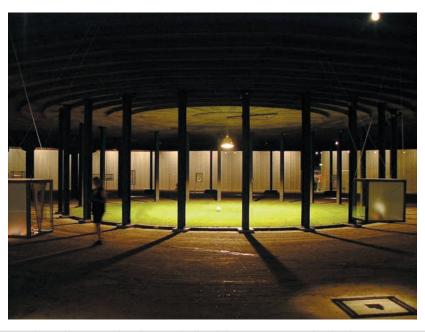
During the last years, several exhibitions were installed in the hall of the former joiner's workshop. The huge windows at both sides, did not allow the displaying of papers. For this reason, normally the windows were covered. We proposed to have the windows uncovered. For displaying plans, photos and other sensitive works we built a room within a room, following approximately the flow of the concrete structure.



**7. Bauhaus Dessau** 



The view of the famous main door of the Bauhaus is seen from the opposite side. On the left side is the bridge building part, where the office of the director was (and still is). In a showcase, copies of the famous works of art related to the staircase of the Bauhaus were hanging. Very well known is Oscar Schlemmer's painting that belongs to the Museum of Modern Art in New York.

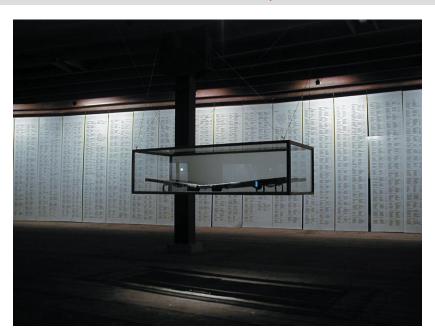


In the year 1900 the German Association of Football was founded. We were commissioned, to design a Centennial Exhibition in the gas tank in Oberhausen that I have already presented. The audience entered the room under the disc, and was greeted by a natural lawn with a football in the centre of the building.

The ball also dominated the view from the top of the gas tank. A partly covered steel construction with a diameter of 21 m formed the centre of the huge space above the disc. Projections in the ball were visible from both inside and outside. Soccer playing machines filled the room in the ball, sometimes used as a television studio.



32 8. »The Ball is Round – The Football Exhibition«, Gas Tank Oberhausen



Around the lawn showcases were suspended, in which elements of the game of football were represented. One showcase was constructed to display a stretcher. In the background an enormous backdrop showed 35,000 results of football matches of the last part of the 20th century held in Germany. About 1 Million people play football every week.

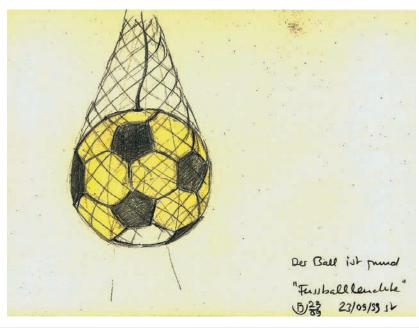
A part of the exhibition was dedicated to the different stadiums all over the world. We displayed a private collection of post cards in special casings that relate specifically to the design of stadiums. Only one projector lit the scenery, and helped give one the feeling, of being in a small stadium, surrounded by hundreds of stadiums both in colour, and black and white.





A circular display told the story of the first success of post-war Germany, when the Germans won the world championship in Bern (Switzerland), in 1954. Each player of the team got his own showcase. The ball of the final game versus Hungary was displayed in the centre. The modest gifts the players received after the championship were shown in the background.

We like to invent projectors that are related to the theme. For a football exhibition it was not too difficult to decide which. But it was not so easy to find a manufacturer who produced glass globes. And it was not so easy to fix a halogen bulb in the centre of the ball. In the end, different balls were able to furnish spotlights and floodlights.



34 8. »The Ball is Round – The Football Exhibition«, Gas Tank Oberhausen



4 years later, in 1958, a time for a very new generation of football players began. Pelé and his colleagues created a light and athletic kind of game, and Europe's teams had no chance in Sweden. Fine backdrops showed pictures of the Brazilian team, covering showcases in which original objects from the games in 1958 were shown.

Original nets held the football-shaped glass globes. In the nets it was possible to turn the globes in order to adjust the direction of the light. The gas tank, with its framework, allowed the hanging of the nets wherever they were needed. At the end of the exhibition, a lot of people wanted to take the objects with them, so the exhibition created no unneeded material!





Today, a lot of information of the football game is no longer seen live, it is given to us through television. Many scenes are known only through television. Without film sequences, it seems impossible, to show a historic exhibition of the 20th century. The technical progress of reproducing images allows to exhibition to show films, for a reasonable price.

The castle of Altena is located in Westphalia, 50 kilometres south of Dortmund. The new director, Stephan Sensen asked us in 1998 to design a new permanent exhibition. A historical show should let people into the several different buildings that compose the castle. The whole story, from geological and natural history to human history up until our days is depicted. The exhibition started with the presentation of the local, indigenous stones.



#### 36 8. »The Ball is Round – The Football Exhibition«, Gas Tank Oberhausen



Outside the gas tank, people are waiting to get into the football exhibition. The number of visitors is not the important part of the success of a show, but it is an indication for the sweat put into the creation of, an historic exhibition. We honour the administrations and the sponsors who helped to save these special locations and to transform them without renovating them.

# 9. Altena Castle in South Westphalia

The same stones that we presented in the showcase were chosen to build the medieval parts of the castle. We took off the more recently made plaster wall surfaces. The way of joining the stones together in order to get a strong and stable fortress became visible. Along the way we discovered several chimneys in the same wall, telling now a story of the room that was before unknown.





A very small room was chosen to show the life of cave bears that lived here 2000 years ago. The skeleton of a bear and some hunter's instruments made of stone are shown in a kind of a theatre-decoration. The bear seems to have left its cave in the background. The opening of the cave is only half as big. The right part of the cave and the second bear on the right side are virtually affected by a mirror covering the right wall.

Altena castle provides an enormous and fine collection of arms and suits of armour. We tried to present these items in a certain »dialog« between them, but without being naturalistic. The audience can move in the middle of the action although the exhibits are protected due to the irregular design of the showcases made of glass with steel-frames, joined with wood



9. Altena Castle in South Westphalia



A huge room in the roof was largely transformed 30 years ago. We covered the wallpaper with blue canvas and created the impression of a tent. Expressions and proverbs in today's language, whose original medieval meaning is unknown to most of us, are written on the top. Inside the showcase, objects relating to the original meaning are shown.

The theme »hunting« is presented in a similar way. Weapons, traps and nets are used against animals. Beside this, weapons are mounted in a systematically order. Again it is possible, to »enter« this big showcase that covers large parts in the centre of the room. The original floor is left visible in order to avoid a naturalistic impression.



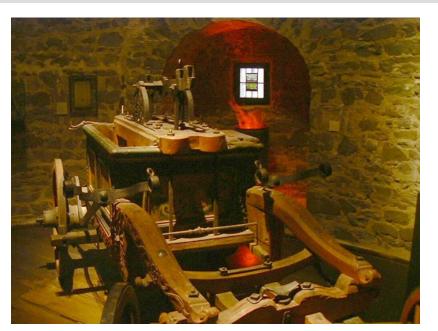


In a corridor between two parts of the castle, we placed the theme »Tournaments and Games«. A tent covers the room that lost its original surface. Due to the fact that the tent covers the back and the ceiling of the showcase and continues on the spectator's side, an impression of closeness was created, helping to understand the intended message.

Not only former industrial sites or fortresses are useful when converted into museums and exhibition spaces. We brought 4 ships to the harbour of Düsseldorf that also changed its function. It was called »Commercial Port«, now its name is »Mediaport«. We mounted a new storey on the ships made of steel sheets and were able to present the water-related history of the region.



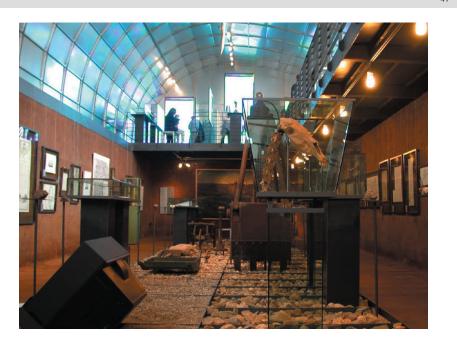
)



The Exhibition Area "Persecution of Jews, Pest and City Fires," found its place in the upper floor of the "Pulverturm". In order to achieve a feeling of exterior we changed the appearance of the room by revealing the walls made of domestic stone. Blazing "flames" and restless lights in the window areas were used to create a fearful atmosphere. In the centre of the room we placed the mechanic fire extinguisher of the 17th century.

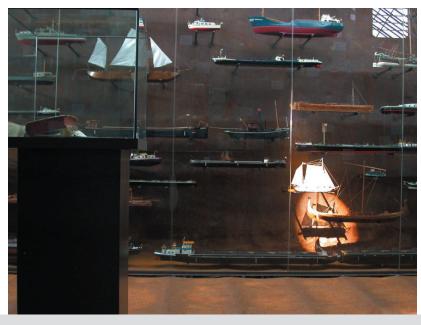
#### 10. »Water~falls. At Rhine and Maas«, Düsseldorf

The region is the lower Rhine region between the Rhine and Maas rivers. The first ship was called »Waterbed«. We displayed the material of the bed of a river and other themes related to canal building. The head of a horse was said to ward off drowning if mounted on a stick beside the river. The original ship remains untouched. The rusty surface seemed to open up a dialogue with the new, reflecting roof.



Many objects were of a minor value, like so often when comparing historic exhibitions with art shows. We presented the theme »Water-Professions« in floating showcases. Spectators could carry a showcase and pull it out to observe the objects and read the caption. Not only children liked this kind of museology with real interactivity.

Another interactive feature enabled people to play while visiting the exhibition. A touch screen invited people to touch a ship. By doing this, a caption appeared in the middle of the screen, giving the name of the ship and its specifications. After 15 seconds the information in the centre disappeared and a new ship could be chosen.



42 10. »Water~falls. At Rhine and Maas«, Düsseldorf



This showcase is 4 m high, 12 m long and 1 m deep. The objects were not very valuable and were supplied from museums, collectors and producers. It is the whole effect that creates the value. The principle of putting exhibits in a row is a simple, but important trick of the historic museum. 120 different ships that cruised on the Rhine and Maas rivers through the many years were showcased.

Related to the touch screen was a »light finger«. The light finger was a projector that was called a »scanner« in the language of show-light-people. The light point moved slightly to the ship that was chosen on the touch screen. So in the showcase one was able to see what ship the touch screen is displaying. The other ships were not totally in the dark, but the light finger lighted only one ship brilliantly.



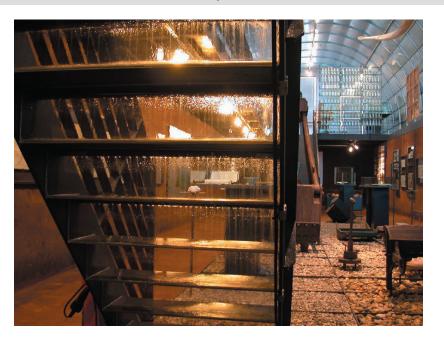
The third ship shows the relationship between rivers and nature. Three rows can be seen in this hull. In the centre dried plants in illuminated pedestals are presented in a systematical order. On the left side inside the ship, fishes are visible in glass tubes or aquariums filled with alcohol. On the narrow space in front of the wall, birds of the region overlook the scene.

Originally the exhibition was to be presented in a vacant steel production plant. Flooded up to a height of 50 centimetres the different themes would have been shown on islands, accessible through bridges or boats.

At the end, it was the organizer who decided to use cargo vessels instead. Having the disadvantage of a clearly minimized exhibition area (1200 sqm instead of 5000 sqm) the task and result remained exiting and demanding.



44 10. »Water~falls. At Rhine and Maas«, Düsseldorf



And there is water everywhere! The stairs, built for emergency reasons, became a waterfall. We welded screws to the walls; we exhibited water, stones and many other things that normally are not seen at a »white cube museum«. I am very unhappy with new or with well-renovated museums. Used, damaged and unimproved locations are the ones, where historic objects feel at ease.

Finally – as reminiscence to Brazilian design – Oscar Niemeyer influences this showcase.

As I was having the chance to visit the Cathedral of Brasilia a particular showcase, shaped like a reversed truncated pyramid catched my eye. Adapting Niemeyer's idea we only changed the presentation technology as well as the base of the display, which was originally marble. Through the angle of the glasses the exhibits gain more volume on the upper part of the showcase. Additionally reflections through the visitor or windows are prevented. Because of its shape, lighting spots can be easily positioned from outside without having shadows on the highlighted objects.



Prof. Juerg Steiner Architect BDA Lecture in the National Historic Museum, Rio de Janeiro, Brazil at October 10th, 2002

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Credits

Till Budde, Berlin: p.30 top and bottom, p. 31 top

Christiane Eisler, Leipzig: p.13 top and bottom, p.14 top and bottom, p.15: top and bottom, p.16: top and bottom

Werner J. Hannappel, Essen: p.3 bottom, p.19 top, p.20 top, p.21 top, p.23 bottom, p.24 bottom, p.27 top

Dagmar Jäger, Berlin: p.12 bottom

Peter Lippsmeier, Bochum: p.8 top, p.9 top, p.10 bottom

Margret Nissen, Berlin: p.6 top and bottom

Michael Rasche, Dortmund: p.7 top and bottom, p.8 bottom, p.9 bottom, p.10 top, p.11 top and bottom,p.21 bottom, p.22 top and bottom, p.26 top and bottom, p.32 top and bottom, p.33 top and bottom, p.34 top and bottom, p.36 top and bottom

Jens Nober, Essen: p.24 top

Joachim Schumacher, Essen: p.20 bottom

Ruth Walz, Berlin: p.4 top and bottom, p.5 top and bottom

all others: Steiner office, Berlin

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