MASTER

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a modern pasticcio

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A MODERN PASTICCIO RICK VAN GERVEN
MUSEUM OF THE MODERN MOVEMENT

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Recollection is the name of one of the Graduation Studios at the Technical University of Eindhoven in the year 2014-2015. This studio is focusing on collections and housing these collections. How can there be dealt with the design of a space that houses a specific collection?

The graduating process at the TU/e in the Architectural Design and Engineering Chair, consists of two parts. First of all there is a group research and second there is an individual design project. This piece of literature is the result of my individual research in the graduation studio Recollection.

The topic of the group part was the Architect John Soane. He altered and expanded his entire house to create a museum for his private collection. John Soane is an 18th century architect, who was quite modern in his designs for his time. During his life he created a vast collection of paintings, drawings, busts, vases and casts of plaster, bronze, terra-cotta and other materials. Soane’s house is an example of how to design a space for a specific collection.

With the research to John Soane as a starting point, I started to design a museum of ‘the modernists’, this theme comes from my personal interest about the modern movement. Over the years my own collection of architecture books was growing. Most of these books are about ‘the modernists’ or architects who are influenced by ‘the modernists’. This is why designing a museum of ‘the modernists’ suits me well.
First I would like to thank Jan Schevers, throughout my graduation process he has been an excellent mentor and teacher. He truly understands what hard work and dedication can bring. I admire his passion about architecture and making scale models. I would like to thank Sergio Figueiredo for his knowledge about museum architecture and his ideas to improve my design. I would also like to express gratitude toward Noor Mens who helped me with the setup of my research and gave me tips for the M3 book about Sir John Soane. Also thanks to Juliette Bekkering who supervised my graduation. I will always owe a great deal of gratitude toward these professors. Thanks to all my friends for sharing my enthusiasm when starting this project and following with encouragement when my social life had to suffer under the pressure of my graduation. Also thanks to my fellow students from the ReCollection studio for the help and support. Last but not least I will thank my father mother and brother whom supported me last year. A special thank to my mother who was willing to take a few days of to help me with making the scale model.
The roots of the Modern Movement can be traced back to the social and technological changes at the end of the 19th century and the beginning of the twentieth. Cities were expanding, this urbanization called for a new approach to buildings new technologies would have to be embraced. Offering cheaper, more efficient means of satisfying a larger population and a growing industrialization.

Clean lines, health, hygiene, sunlight, openness and fresh air are keywords for modern architecture between the two World Wars. hospitals, sanatorium buildings and schools were built with these principles while the domestic houses were dark and overcrowded.

Sun balconies or sun terraces leading directly to the bedroom or bathroom and were a feature of the modern house of the late 1930s. Architects introduced balconies and terraces for a formal and symbolic effect but also for health and hygiene. In the twentieth century the growing preoccupation with health, hygiene and sunlight and fresh air had led architects to give priority to orientation towards the best light and maximum sunshine in designs for housing. Modernist architects frequently used this as an underlying criteria for the design.

The Modern Movement brought a change in thinking about spaces, a way which breaks with the traditional past. Mies was always searching for new solutions with appropriate architectural expressions. Frank Lloyd Wright was the first architect with a flowing space concept, conventional walls were only used in bedrooms and bathrooms to form a space. All the other spaces were open and flowing rather than closed and cellular. in the 1920's Mies was adopting this concept to his designs. the idea of interconnecting spaces in Mies's designs from about 1920 onwards changed the way in which architects thought. The brick country house was the first project where the flowing space concept is notable. These walls do not for a conventional room, based on the artwork of 'de stijl' a composition of walls were made out of L- or T junctions. the interior space was flowing through the overlapping walls.

Adolf Loos was also an architect who break up with the conventional way of thinking, most people know Adolf Loos from the 'raumplan' a term introduced by one of his pupils. the 'raumplan' has no exact definition, it is a container concept. raumplan consist of three patterns: space, living and material.

1. raumplan – 'space plan' the manner in which a sort of 3-dimensional or vertical space is ordered. in which is compounded:
2. 'Living plan' the way a ground plan, a sort of 2-dimensional or horizontal space is ordered.
3. 'Material plan' the way various building and surfacing materials are employed, to give texture and thus sensation and atmosphere.

The designs of Loos consist mostly out of one building volume, these volumes are marked by a maximum of three dimensional compactness.

Le Corbusier and Pierre Jeanneret came up with five important points which they incorporate in their designs. These points are evolved out of many years of building experience.

These points are:
1. the column
2. the roof garden
3. the free plan
4. the ribbon window
5. the free façade.

Villa Savoye is one of the best examples within the work of Le Corbusier which shows the principles of all the five points. Villa Savoye is a white box lifted from the ground by pillars. Due to the pillar construction every level is flexible in its layout. Also the façade doesn't have a supporting role which allows ribbon windows and a free façade which gives no clue to the functions or floor level behind it. This makes the façade a canvas for aesthetic treatment.

The Case Study House Program was set up by John Entenza from the magazine Art & architecture to stimulate all these new ideas about living. A lot of famous architects designed houses which were cheap and fast to build. Many companies sponsored new surface materials and other equipment, but no revolutionary new materials or techniques in house construction were provided, as had been announced or intended. In fact the result showed costly solutions and techniques that would never be popular for an average consumer. Solutions for brick properties were not the best choice for a typical small lot with neighbors. In these cases the abundant use of glass did create privacy concerns. Entenza and his architect certainly built effective houses which deserved international attention but Julius Shulman thinks that Entenza failed in his mission to produce low-cost housing. The broader public reacted with comments like 'too much glass' or 'not enough privacy'.
Despite all the successes the Modern Movement had also downsides and eventually died in 1973. The Illinois Institute of Technology campus in Chicago is a collection of varied functions and a perfect example of inarticulate buildings. On this campus the building that seems a factory is a classroom, the cathedral is a boiler house and the boiler house is a chapel. Of course Mies didn’t intend these propositions, but his commitment to reductive formal values inadvertently betrays them. Contradictions between statement and result have reached impressive proportions in Modern Architecture, and one can now speak of a ‘credibility gap’ that parallels the loss of trust in politicians.

The root causes of this era, I believe, based on the nature of architecture as a language. It is radically schizophrenic by necessity, partly rooted in tradition, in the past – indeed in everyone’s childhood experience of crawling around on flat floors and perceiving such normal architectural elements as vertical doors. And it is partly rooted in a fast-changing society, with its new functional tasks, new materials, new technologies and ideologies. In the one hand, architecture is as slow-changing as spoken language, and on the other hand, as fast-changing and esoteric as Modern art and science.

The best way of exhibiting architecture is to keep as much elements / senses as possible from the original. In the way I designed my museum, as an eclectic pasticcio, most of the senses from the original design are kept in the design. Of course some senses like the surroundings are lost in my design but when the visitor is in the Adolf Loos part of the pasticcio the atmosphere will be pretty close to the original design. In my opinion this is the only way of exhibiting architecture which get the feeling as close as possible to the feeling intended by the architect.
First of all, let’s start with the question why I should build a museum for the modernists, and why in the Netherlands?

Every architecture student around the world is educated with the famous works of Le Corbusier, Walter Gropius, Mies van der Rohe, Frank Lloyd Wright etc. Beside these international architects some Dutch architects had made their name international as well, some examples are: Brinkman & van der Vlugt, Berlage, J.J.P. Oud, Piet Hal and Dudok.

Back in the day’s the modernists had visionary ideas which resulted in a complete new style of architecture, which was triggered by the introduction of new building materials. To improve the existing living quality, light, air and openness were the main themes for the new modernist architecture. This new architecture breaks completely with the traditional styles. The new materials made it possible to prefabricate building elements which resulted in a fast building time. Many famous architects made marvelous designs for the case study house program. ‘The Case Study House Program’ was set up for exploring the possibilities of the new materials for cheap and fast built houses. Especially after the world wars, when there was need for fast built houses the modernists had the answer to fulfill that need. Although it was relatively cheap and fast it never was a success for the domestic house, while corporate entities and institutional entities fully embraced modernism.

In this research I try to find an answer to the question why was modernism not successful at the scale of domestic houses while corporations fully embraced modernism? Despite all the new technologies and way of living the modern movement belongs now to the past. With this research I hope to get an answer to the question why does the modern movement belong to the past?
The goal of this research is to get an answer about the question: What does a museum of the Modern Movement look like? To give an answer to that question, first an underlying question must be answered: How can architecture exhibited in the best way? The following subquestions have to be answered in order to understand more about the Modern Movement:

- Why was the Modern Movement not successful at the scale of domestic housing while corporations fully embraced Modernism?
- Why does the modern movement belong to the past?
- What were the most important design ideas of the Modern Movement?

These answers will help me to make a design for the museum of the Modern Movement.
THE MODERN MOVEMENT
The roots of the Modern Movement can be traced back to the social and technological changes at the end of the 19th century and the beginning of the twentieth. Cities were expanding, this urbanization called for a new approach to buildings new technologies would have to be embraced. Offering cheaper, more efficient means of satisfying a larger population and a growing industrialization. In the United States, the cities of Chicago and New York had embraced tall metal-framed buildings in the second half of the 19th century.

Louis Sullivan, one of the most prominent members of the ‘Chicago School’ of architects, coined the phrase ‘form follows function’. Sullivan and his colleagues of the ‘Chicago School’ built new skyscrapers, which would soon be a feature of cities across the world.

In the early twentieth century, technological advances were changing western society fast. Road and rail networks were altering the face of modern countries, people were more mobile, goods and materials could be transported across the world easily.

Machines, in the form of cars, telephones, and ocean liners, captured the public imagination, and emphasized the positive force that technology could play in people’s lives. In 1921, Le Corbusier described a house as ‘a machine for living in’. Le Corbusier and others believed that houses should have the purity of form of a well-designed machine. The formal qualities of mass-produced cars and other machines were therefore of great interest to them. These changes appealed to many architects in Europe who felt that their profession had become trapped in the past. They believed that the new machine age demanded a new architecture.

In 1919, Walter Gropius started the Bauhaus School in Weimar, Germany, This academy of architecture and design established a reputation for its creative approach to architecture and design, a reputation that lives on to this day. Gropius idea, as refined in his book ‘Idee und Aufbau’, was that every craft should design in a way based on the machine production.

New thinking on minimalist design and creating space was pioneered by Gropius’ fellow German Ludwig Mies Van Der Rohe, who famously declared ‘less is more’, and put this into practice with his Barcelona Pavilion in 1929.

In 1928 a influential think-tank called the CIAM (the Congres Internationaux d’Architecture Moderne) sought for a set of rules which combined the various roots of Modernism. With the backing of CIAM, the Modernists began their mission to make architecture not simply about the building of buildings, but about the construction of a new way of living.

In 1937 a influential think-tank called the CIAM (the Congres Internationaux d’Architecture Moderne) sought for a set of rules which combined the various roots of Modernism. With the backing of CIAM, the Modernists began their mission to make architecture not simply about the building of buildings, but about the construction of a new way of living.
The Case Study House program initiated by Arts & Architecture magazine in 1945 in Los Angeles, remains one of America’s most significant contributions to architecture at the mid-century. Conceived as low-cost, experimental modern prototypes, thirty-six designs of were made between 1945 and by its end in 1966. Despite the fact that most designs were not built, the Case Study house had succeeded in the production of the periods most important works in residential architecture.

The director of Arts & Architecture, John Entenza was the creative mastermind behind the idea of the Case Study House. He managed to arrange some of the greatest architects of its time for the Case Study House. Designs were made by Richard Neutra, Eero Saarinen and Charles and Ray Eames.

John Entenza’s goal was to offer the building industry and the public models for low-cost housing in the Modern idiom, foreseeing the coming building boom during the depression and war years. The idea was to enable architects to design and build low-cost modern houses for actual clients, using donated materials from industry and manufacturers. It was not until the 1950’s that the Case Study Architects were able to fully embrace the ideal of experimentation with industrial materials and construction systems that underlay the thinking behind the program’s genesis. The Eames on Entenza houses, for instance, which had first been designed in 1945, were not able to complete until 1949. Most Case Study Houses were built in Los Angeles and in other cities in the region of Long Beach, Thousand Oaks, and La Jolla.

The best known Case Studies are the steel and glass houses by Charles and Ray Eames, Craig Ellwood, Pierre Koenig and Raphael Soriano. From among the program’s diverse examples, these are most closely to the spirit of International style modernism in their rigorous application of industrial construction methods and materials to residential architecture.

The first Case Study House presented in the February issue of the magazine Art & Architecture was a design by Julius Raphael Davidson, characterized by simple, industrial materials, a compact plan, and a informal disposition. While the published design was not built, a second redesigned version for a different site was constructed the following year. The built designs that followed over the next three years shared similar characteristics. All employed modular building components for constructional efficiency, utilized extensive walls of glass to achieve a relaxed, indoor-outdoor quality, and despite the modest size were designed for a maximum flexibility for the users.
We, on the other hand, have always held the opposite theory that before touching pencil to paper it was not only necessary to visit the site, but have a heart-to-heart talk with the client. According to our own little "survey" of post-war clients, individualism is still the ideal of the American homeowner.

Julius Shulman’s critique focuses on Entenza’s choice of architects, which was not at all representative of American designers involved with low-cost housing, his selection was often very subjective and furthermore only included architects who designed with strict post- and beam construction. Protests arose at the time because Entenza had failed to recognize Gregory Ain, who had devoted a great part of his career to low-cost housing. He should have been predestined for inclusion in the Case Study House Program. The same happened to Ralph Rapson, whose ‘Greenbelt House’ was one of the most innovative entries, but was rejected for personal reasons. Entenza also rejected the design of Smirnoff and Williams, because it was not an open-plan, even their modified version was a perfect example of the Case Study House.

Entenza was very proud of the international attention that was attracted by his program. Julius Shulman, a photographer who photographed 15 of the 24 realized Case Study Houses observed the public viewings of the ‘open houses’, unfortunately the responses were not very favorable. Art & Architecture insisted that these houses intended for the ‘average house owner’ would be successful. Many companies sponsored new surface materials and other equipment, but no revolutionary new materials or techniques in house construction were provided, as had been announced or intended. In fact the result showed costly solutions and techniques that would never be popular for an average consumer. Solutions for big properties were not the best choice for a typical small lot with neighbors. In these cases the abundant use of glass did create privacy concerns. Entenza and his architect certainly built effective houses which deserved international attention but Julius Shulman thinks that Entenza failed in his mission to produce low cost housing. The broader public reacted with comments like ‘too much glass’ or ‘not enough privacy’.

Photograph by Julius Shulman CSH # 21

Cover Art & Architecture Magazine by John Entenza
Clean lines, health, hygiene, sunlight, openness and fresh air are keywords for modern architecture between the two World Wars. Hospitals, Sanatorium buildings and schools were built with these principles while the domestic houses were dark and overcrowded. Sun-balconies or sun terraces leading directly to the bedroom or bathroom were a feature of the modern house of the late 1920s. Architects introduced balconies and terraces for a formal and symbolic effect but also for health and hygiene. The balcony for modern social housing wasn’t functional, it was hardly large enough for a pot or a chair. The Modern villa had a sanatorium kind of balcony where it was possible to lie out and take the sun or even sleep outside on a warm evening. The light and openness of the most luxury villas was taken to an extreme, with enormous sun decks terraces, roof gardens and built-in swimming pools. In the twentieth-century the growing preoccupation with health, hygiene and sunlight and fresh air had led architects to give priority to orientation towards the best light and maximum sunshine in designs for housing. Modernist architects frequently used this as an underlying criteria for the design, as in Oud’s description of his Weissenhof houses:

“A fundamental starting point for the creation of this type of house was, in first place, the situation of the houses in relation to the sun. The living areas should face the south and the service areas towards the north.”

In the late 1920s the obsession for an equal amount of sunlight for every dwelling led to increasingly rigid layouts for social housing. A large number of apartment buildings were aligned in parallel rows for a maximum orientation to the sun. These north – south orientation were laid out without regard to the topography. The parallel apartments give open ends on every block which allows the air to circulate. These apartments had a specific lay-out where people were thought of as concepts rather than living bodies, forcing them to go to bed facing east and eat facing west. Apartments were organized so that it was not possible to live any other way than that dictated way by the architects. Behne argued that housing should be integrated into the fabric of the city, not laid out in long lines. With this statement he attacked the hygienic approach arguing that “Medical research has shown that the inhabitants of houses which are considered to be unhygienic are healthier than the inhabitants of hygienic houses.” According to Behne true hygiene is a balance of factors, not strict rules or formulae, new architecture must secure its basis by the working class by transforming the rigid structure into an consumer product and demand. In fact the large gardens between the apartments which stimulates the circulation of fresh air had a big downside, the large distance between the blocks gives the inhabitant a feeling of alienation. And research shown that the orientation to the compass wasn’t that important, experience has shown that in practice rooms aren’t used for the purpose for which the architect intended them. In single family detached houses designed for the
Weissenhofsiedlung in 1927, both Scharoun and Adolf Rading, who were collaborators on the organization of the next German Werkbund model housing exhibition in Mannheim. In 1929, they emphasized the close relationship of the interior spaces with the gardens and ground floor terraces that extended directly from the large sliding windows and glass doors of the living rooms. In these prototype middle class dwellings, the quality of light, air and openness are apparent. Rading designed the living area so that they could be converted from three rooms to one and vice versa by folding partitions. He claimed that the whole house no longer feels like shut within ‘four walls’ and gives a feeling of a wide open space. Rading believed it was necessary to loosen up the house and bring it into relation with the garden. Even more built into the sun was the Weissenhof house designed by Scharoun. Balconies, external staircases and the sun terrace loop created a house that was more balcony than house.

The open-air school

 Till the end of 1920’s the majority of people lived in dark overcrowded houses. At this time the priority for educational buildings, hospitals and sanatorium buildings was light, air and openness. Schools were built with enormous glass facades allowing the light penetrating deep into the building. Special open schools were designed with outdoor classrooms so that children received the maximum amount of sunlight and fresh air. Some of these schools were specially designed for children who suffered from tuberculosis or similar diseases others were intended for healthy children. The most famous school is Jan Duiker’s Openlucht school voor het gezonde kind, Amsterdam (1927–1930). This primary school was very sophisticated, all the classrooms had two sides which could be opened fully and give access to a balcony. The concrete cantilevered floor slabs gave shade in the summer and gave protection from rain. In the floor slabs are radiation elements so that the classrooms could be opened to the terrace even during winter time. Duiker believed that healthy housing should be available for everyone and came up with the slogan ‘health rather than wealth’. Wiebenga, a Dutch structural engineer who had been responsible for one of the first concrete and glass modernist school buildings had the intention to ‘use architecture to express a new culture based on technology, hygiene and openness.’ But this new culture could have some downsides, this amount of glass can be a problem for the children to concentrate. A second downside is the risk of overheating in summer, this could be a problem for many modernist buildings. Today, most open air schools are fallen into disuse. This is because the unreliable summers and the deterioration of the buildings during the Second World War when there was not enough money for proper maintenance. The principles of healthy schools are still used in educational entities. However, in the early twenty-first century new school buildings have incorporated similar features to the modernist designs of the 1920’s and 1930’s, based on a more sophisticated and proven building technology.
In 1962, Berlin needed a new exhibition area for the city’s collection of Modern Art. Mies van der Rohe, who started his career in Berlin, was commissioned to design a new art gallery for this collection and for major touring exhibitions. The original design was changed in 1965, the Berlin art collection was merged with the Prussia Culture Heritage Foundation. The already conceptualized design was renamed ‘The New National Gallery’.

Since the 1920s Mies had certain key ideas which resulted in two ‘type-forms’, the skeletal framed building and the single-volume pavilion. The skeletal frame was a building type which was suitable for functions that are best in small cellular spaces, the single-volume pavilion is best for a large completely flexible space. The last building type is used for the New National Gallery.

In Mies’s design of the New National Gallery a large slab is floating above a podium, the volume between the podium and the slab would be completely transparent. In this space which is five times the height of a man, was proposed for the temporary exhibitions. The interior would be completely unobstructed, allowing a free arrangement of artwork. The permanent exhibitions would be located underneath the podium together with all the other functions. Mies was always searching for new solutions with appropriate architectural expressions. Frank Lloyd Wright was the first architect with a flowing space concept, conventional walls were only used in bathrooms and bathrooms to form a space. All the other spaces were open and flowing rather than closed and cellular. In the 1920s Mies was adapting this concept to his designs.

The idea of interconnecting spaces in Mies’s designs from about 1920 onwards changed the way in which architects thought. The Brick Country House was the first project where the flowing space concept is notable. These walls do not form a conventional room, based on the artwork of De Stijl a composition of walls were made out of L- or T-junctions. The interior space was flowing through the overlapping walls. This design of the Brick Country House was never built, despite its groundbreaking plan layout it probably lacked in domestic privacy. Furthermore this design was strong in its layout but in the outer elevation it was solid instead of transparent.

The Barcelona Pavilion was the result of the next step he had to make, breaking the outer elevation open for more transparency and abolishing the distinction between interior and exterior space. Practical walls were transformed into abstract planes of travertine, onyx, marble and glass. The traditional internal walls had two functions, load-bearing and defining rooms. The roof of the Barcelona Pavilion is supported by slender columns which makes the walls non-loadbearing and only screens demarcating space.
These walls were abstract forms, free from doors, windows and surface trims. According to Robin Evans, ‘transparency sandwiched between two horizontal planes’ was one of the very few really new ideas in architectural history. New technologies made it possible to create large spans which Mies in his own way transformed into architectural poetry. (2)

After the First World War, the industrialized production methods gave Mies van der Rohe the opportunity to achieve effects of lightness and transparency. The production of steel and glass gave a higher quality and eliminated hand labour in site. Mies, the founding father of transparency, respected the work of Louis Sullivan but, as he commented, ‘Sullivan still believed in the façade, it was still the old architecture. He did not consider that just the structure could be enough.’ (3)

In spite of the glass walls on all four sides the majestic high-ceiling hall give a somewhat dark impression owing to the black ceiling. The lower level houses the main galleries and the toilet and service areas. Two of these main galleries are laid out not as traditional rooms and corridors but as a flowing space as seen in the Brick Country House and the Barcelona pavilion. In these galleries there is barely a hint of daylight but electric light compensates, each picture is lit by an invisible ‘wall-washer’ in the ceiling above. Moving through this maze of interconnecting spaces glimpses of daylight is filtering between the partition walls which comes from a full length glass wall on the western side of the lower level. The columns which support the roof are fabricated from steel plates which are welded together along their entire lengths to create cruciform columns narrowing from base to top. This form is based on the need to resist horizontal structural stresses. The cruciform column is known from the Barcelona Pavilion project but the columns used in the New National Gallery are different in essence. The Columns used in the New National Gallery have substance and visual strength which appears to be capable of supporting the heavy roof structure. The columns in the Barcelona Pavilion have a mirror finished surface which achieve an opposite effect of being incapable of supporting the roof. This contradiction demonstrates a deeper shift that had occurred in Mies’s general attitude to design, an increasing sobriety and matter of factness.

In his early stage Mies used traditional interior trims, in his quest for greater abstraction he abandoned the traditional trims and adopted two different approaches for contrasting types of joints in the New National Gallery. When junctions from different materials are structurally separated or having other functions Mies try to express the joint. Mies leaves a neat open in which inaccuracies or
movement can occur. By leaving a neat open the visual effect of detaching contributes to tectonic clarity and matter of factness. But when separated pieces of steel structurally unified by welding, Mies does exact the opposite. Mies method was always to weld, never bolt or rivet, after welding the joint was polished until it becomes one. The first example of this can be seen in the X-joint of his ‘Barcelona Chair’ and after 1940 in all his work including the New National Gallery. This welding didnt stroke with his vision of structural honesty. Mies was always obsessed by technological perfection which erased all traces of reality, this was one of the defining characters of modernity. His drawings are abstract arrangements of straight lines and plane surfaces, rather than a representation of the world as we know it. The structures give the appearance of an idealized essence and the use of materials show no traces of the human hand but an industrial precision.

The Majestic exhibition space between the podium and the ‘floating’ slab has the height of five times a man, which makes it suitable for exhibiting large objects such as sculptures. The light coming in from the sides works well for these kind of objects but fails for small paintings. Three grey curtains partly solves this problem but takes away the glory of the museum, its transparency. A neutral and flexible space was the idea behind the pavilion. Ultimate flexibility seems good for an always changing exhibition, in reality this was not seen as important by the curators. Most would favour different types of space varying in scale or a sequence of spaces in a circuit.

A neutral and flexible space was the idea behind the pavilion. Ultimate flexibility seems good for an always changing exhibition, in reality this was not seen as important by the curators. Most would favour different types of space varying in scale or a sequence of spaces in a circuit.

It may be that spaces designed to suit all functions will not actually be particularly suitable for any function, and that the attempt is not worth making."

The New National Gallery as monument
The flexible exhibition space on the podium makes the New National Gallery not perfect but it succeeded as a work of art in itself. Mies made from structural necessities and new technologies architectural poetry. The over sailing roof provides a sense of refuge and at the same time reduces the structural height of the roof in terms of structure and material the gallery is an example of clarity and discipline, seeming to taking its form not from arbitrary preference but from fundamental principle. The structural frame of Mies’s pavilion comes close to actually being the architecture.

To slightly misquote Mies van der Rohe’s biographer Frits Naumeyer:
“When the world has grown tired of the ephemeral trickeries of post modernism, deconstructivism and those other fashions which compete for media attention, buildings such as this will refresh us by awakening all the more man’s deep desire for poetic serenity and structural honesty.”
Adolf Loos worked from the late nineteenth century till his death in 1933. He had the vision that good architecture can be described, drawings were not a good indicator for architectural quality in his opinion. Most people know Adolf Loos from the ‘Raumplan’ a term introduced by one of his pupils. The ‘Raumplan’ has no exact definition, it is a container concept. Raumplan consists of three patterns: space, living, and material.

1. Raumplan – ‘Space plan’ the manner in which a sort of 3-dimensional or vertical space is ordered. in which is compounded:
2. ‘Living plan’ the way a ground plan, a sort of 2-dimensional or horizontal space is ordered.
3. ‘Material plan’ the way various building and surfacing materials are employed, to give texture and thus sensation and atmosphere.

The designs of Loos consist mostly out of one building volume, these volumes are marked by a maximum of three-dimensional compactness. in contrast with Frank Lloyd Wright, Loos avoids wings annexes and separate outhouses. the compact design makes the internal contact maximized and the external contact minimized. The vertical structure of his town houses consist of four levels, the top and bottom level accommodates the secondary functions, while the middle two accommodate the living program. the living areas are situated on the first floor while the bathroom and the bedroom are situated on the second floor. the living areas are situated at the back of the house facing the private garden area, the difference between front and back is only significant on the living level. Unique is that Loos always bridge the difference between street level and living level beyond the front door, and is always upward. At the back of the town houses he does exactly the opposite here is the difference between the living level and the garden outside the backdoor in the form of a terrace.

A distinctive feature of Loos’ houses is the pronounced difference between left and right. Movement from front to back is no longer, as in classical architecture, via the central axis. Loos re-routes the movement along one of the sides, where he places a cloakroom with an outside view. Whether the cloakroom is on the left or the right depends on the orientation and hence on whether the movement has a left or right bias, combined with stair climbing this creates a spiral move. The side with the cloakroom is the living side, the other is the kitchen side. He shifts furniture to the sides leaving the middle of the room free, activity areas are now oriented toward the middle of the space.

The centrifugal pattern often creates alcove-like appendages to rooms. The commonest of these is the fireplace and the window recess. Various types of storage units can be built into these recesses. These recesses have lower ceilings than the main area of a room.

Stairs on the living level have open access to the living rooms and the space under staircases is sometimes used as a fireplace. These recesses and open stairs have a theatrical effect, highlighting the difference between ‘audience’ and ‘actor’. The living level is never in open contact to the bed- and bathroom level.

Typical to the rooms of Adolf Loos is the entrance of a room, doors are never placed in the center. This gives an approved view from the room because a route never splits a room in half. At the place of the front- and backdoor a symmetrical movement can be made which is in contrast with the spiral movement.

The external walls are always load bearing and made out of brick in the town houses of Loos. He sees the construction as a necessity which doesn’t play an architectural role in his work.

Every if all materials are of equal value to the artist, they are not equally suited to all his purposes. The requisite, durability, the necessary construction often demand materials that are not in harmony with the true purpose of the building. The architect’s general task is to provide a warm and livable space. Carpets are warm and livable. He decided for this reason to spread out one carpet on the floor and the tapestry on the wall require a structural frame to hold them in the correct place. To invent this frame is the architect’s second task. There are architects who do things differently, their imaginations create not spaces but sections of walls.
That which is left over around the walls then forms the rooms. And for those rooms some kind of cladding is subsequently chosen, whatever seems fitting to the architect.

Every material possesses its own language of forms, and none may lay claim for itself to the forms of another material. For forms have to be constituted out of the applicability and the methods of production of material.

But is the living space that has been constructed entirely out of rugs not an imitation? The walls are not really built out of Carpets! But these carpets are meant only to be carpets and not building stones. They were never meant to be taken as such, to imitate them in form or in color, but rather to reveal clearly their own meaning as a cladding for the wall surface. They fulfill their purpose according to the principles of cladding. The reason for cladding things are numerous. At times it is a protection against bad weather; oil-base paint, for example, on wood, iron, or stone at times there are hygienic reasons for it as in the case of enamelled tiles that cover the wall surfaces in the bathroom, at times it is the means to a specific effect, as in the color painting of statues, the tapestry on wood, the veneer on wood. The principle of cladding, which was first articulated by Semper, extends to nature as well. Man is covered with skin, a tree is covered with bark.

From the principle of cladding, however, I have derived a very precise law which I call the law of cladding. It is usually said that laws put an end to all progressive development. And indeed, the old masters got along perfectly well without Laws. When the materials used for cladding had not yet been imitated, there was no need for laws. But now it seems to me to be high time for them. The law goes like this: we must work in such a way that a confusion of the material clad with its cladding is impossible. That means for example, that wood may be painted any color except one, the color of wood. Applied to stuccowork, the principle of cladding would run like this: stucco can take any ornament with just one exception, rough brickwork. One would think the declaration of such a self-evident fact to be unnecessary, but just recently someone drew my attention to a building whose plaster walls are painted red and then seamed with white lines. Similarly, the types of decoration so beloved in kitchens, imitation stone squares belong in this category. In general, any and all materials used to cover walls, wallpaper, cloth, fabric, or tapestries ought not to aspire to represent squares of brick or stone. The cladding material can keep its natural color if the area to be covered happens to be of the same color. Thus, I can smear tar on black iron or cover wood with another wood, without having to color the covering wood; I can coat one metal with another by heating or galvanizing it. But the principle of cladding forbids the cladding material to imitate the coloration of the underlying material. Thus iron can be tarred, painted with oil colors, or galvanized, but it can never be camouflaged with a bronze color or any other metallic color.
Le Corbusier and Pierre Jeanneret came up with five important points which they incorporate in their designs. These points are evolved out of many years of building experience. These points are:

1. The column
2. The roof garden
3. The free plan
4. The ribbon window
5. The free façade.

Villa Savoye is one of the best examples within the work of Le Corbusier which shows the principles of all the five points. Villa Savoye is a white box lifted from the ground by pillars. Due to the pillar construction every level is flexible in its layout. Also the façade doesn’t have a supporting role which allows ribbon windows and a free façade which gives no clue to the functions or floor level behind it. This makes the façade a canvas for aesthetic treatment.

Maison Cook

Because Le Corbusier’s Maison Cook is lifted from the ground the entrance is no longer the starting point of the organization. In Maison Cook the entrance is in a dark area hidden under the building. The house is divided into four layers, the garden level is where the entrance is and where the garden passes from front to back. The bedrooms are situated on the first floor, the second floor houses the sitting dining and living room, all linked by the device of the double height ceiling. The third floor houses the library and the roof garden. Raising the house of the ground affects the vertical organization of the functions. With the garden on the roof and the bedrooms downstairs it is a reversed vertical organization of the traditional residence. The Free plan is most evident at the bedroom level, indoor walls are curved and don’t form a grid.

Villa Stein-de Monzie

The striking thing about the first design is that it occupies the entire width of the site. The two blind walls on the sides arouse the suggestion of a terraced house. In these designs a part of the garden passes under a raised section of the house from front to back. Le Corbusier had high hopes for the garden under the raised section. In Maison Cook it turned out that nothing grew in that part of the garden. He solved that problem in Villa Stein-de Monzie by a double-height area. The high columns echoing the nearby tree trunks. The sketches illustrate Le Corbusier’s most sweeping experiment of abstract sculpture. The modified design of 20th July 1937 re-emphasized the frontality of the façade, with the entrance now the most important symmetrical element. Because the raised part is no longer related to the entrance, it forfeits any function it may have in the composition and organization of the house. The house had to be clear from the site boundaries, in the final design the house was 25 meters wide instead of 27, 4 times a 5-meter bay. Because the entrance is in the middle there is no room for a column. For the proportion of the house the means: one 5-meter bay in the middle and on both sides a 7,5-meter bay which are divided in a 5-meter bay and a half bay of 2,5 meter.

Maison Domino & Maison Citrohan

The concept of the maison Domino was based on existing concrete technology, and envisaged a repeatable unit without a standardized living program, but keeping to the framework; a prefabricated skeleton in which various types could be realised. In the 1915 version, Domino is only feasible as a partywall structure. The well-known 1919 perspective shows one such variant. It is this drawing which in retrospect seems to contain the potential of the 5 points for a new architecture. The Maison Citrohan poses the problem of the mass produced, repeatable dwelling unit in a different way. This concept standardizes a particular form whose spatial organization not only derives from the artist’s studio but also refers to the closed concept of the car. Cooking, washing and sleeping are minimized in size and accommodated in one half of the building volume; the double-height living room is the other half of the building. This is not the only reference, like a car, the Citrohan house is basically a detached entity and can be envisaged in various situations. In later versions of the design this is emphasised still more by the introduction of a columnar structure. This independence of situation
emerges clearly in the only built version, in Weissenhofsiedlung in Stuttgart, where only the ground floor had to be designed.

Free plan versus free façade.

The design of villa Stein-de Monzie is ‘traditional’ in its programmatic organization, the façade can be deemed as ‘classical’ in the sense that the entrance governs its composition. Less attention has been paid to the vertical organization inside the villa. The many variants drawn in the design process demonstrates the problems that arose incorporating stairs and double-height spaces in the Domino frame. These were spaces that in essence no longer can be defined by walls, but rather obtained simply by puncturing the floor. These versions make explicit what the well-known perspective drawing of the dome frame only suggests: they confirm the unassailable nature of the floors by placing the stair outside the unit.

“Mass and surface are elements by which architecture manifests itself! Mass and surface are determined by the plan. The plan is the generator … the plan carries in itself the very essence of sensation.”

From this quotation it should become clear as to what position the plan occupied in the theoretical observation of Le Corbusier before he began investigating the potential of the Domino frame in the design of a house. Thus the plan generates not only the elevations, it ensures the spatial experience itself. And this in spite of the fact that its significance lies outside it: for the plan always comes wrapped in that other element – the volume. Should the internal verticality of the domino frame consist only of the layering of floors, there then remains the façade as the only continuous vertical element – as the free façade. This cannot, however, be interpreted as a section through the building, not being determined by its internal organization. Like the free plan the free façade is organized according to its own laws, its grid coordinated by the abstract system by regulating lines. ‘Freed’ by the frame, and bound by their own laws free plan and free façade are set against one another.

In the section of maison Citrohan the first step towards the cross section of the later Unité d’Habitation, where two dwellings units with double-height spaces on façade are ranged round a central corridor.
Modernism was a style which triumphed around the world, and now people have declared it dead. It was a victim of its own success. ‘Born in a fit of love, it grew to maturity all too quickly, was vulgarized, mass-produced and finally assigned to the scrap heap of history.’

The finishing of Michael Graves Portland building was seen as the day Modernism died. This occurred in 1982 and the Portland building was the beginning of the Post-Modern architecture. I took its failing pulse in the 1970s. As John Summerson later wrote of these diagnoses – ‘in the 1980’s it has become fashionable to declare the Modern Movement dead. As a serious statement this is arguable, but it is an interesting idea’

The idea of the death of Modernism was liberating for many people, since Modernism was ruling on the professions and academies from the late 1930s to the 1970s. Modernism was no longer a necessity and architecture could again be based on context, mood, culture, ornament or almost whatever mattered to the architect and client. The death of Post-Modernism produced a similar relief, for that also loosened the bonds of professional doctrine and tyrannical fashion, and increased the freedom of choice.

The death of Post-Modernism was not just about style; it was about freedom. Before the industrialization, traditional culture was the leading way of thought. During the industrial age Modernism became the most important episteme, while in the post-industrial period none of these competing cultures speaks for the majority of urban dwellers. What constitutes the new world view? Fundamentally it is the growing understanding that pluralism creates meaning. The world view isn’t constituted by one leading way of thought, but a variety of styles and habits. Traditionalists and Modernists have one thing in common, they dislike Pluralism.

What is Post-Modern architecture?

Post-Modern architecture is more than just pluralism and complexity. The primary strategy architects have created to articulate the pluralism of culture is the ‘double-coding’ mixing in their own professional tastes and technical skills with those of their clients. Double coding exists in many periods, from an ancient temple to the Post-Modern classicism of James Stirling that contrasts monumental and high-tech codes. The dualities irrevocable contrast the local with the contemporary hence the label Post-Modern. Many contrasting combinations can be made, it is the concept of coding itself which is essential to this growing tradition.
Modern architects perceived and constructed the meanings they cared about in architecture while Post-Modern architects were unaware of the fact that architecture is a language perceived through codes, which offers in every culture. The characteristics of Post-Moderism come from its attempt to cut across the spectrum of tastes with a variety of styles. The commercial and production viruses which contaminated architecture corrupts all movements, and as long as architecture is produced on the run, in too great volume, it will suffer these problems of overproduction.

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problems of overproduction.
For the general aspect of an architecture created around one simplified value there is the term univalence. No doubt in terms of expression the architecture of Mies van der Rohe is the most univalent formal system we have, because it makes use of few materials and a single, right-angled geometry. Characteristically the reduced style was justified as rational (when it was uneconomical), and universal (when it fitted only a few functions). The glass and steel box has become the single most used form of Modern architecture, and it signifies throughout the world ‘office building’. Yet in the hands of Mies this impoverished system has become fetishized to the point where it overwhelms all other concerns and distracts him from larger concerns. Are i-beams and plate glass appropriate to housing? That is a question Mies would dismiss as irrelevant. A larger question didn’t arise: what if housing looked like offices or what if the two functions were indistinguishable? Clearly the result would be to diminish and compromise both functions by equating them; working and living would become interchangeable on the most banal, literal level. The psychic overtones to these two different activities would remain unexplored.

The Illinois Institute of Technology campus in Chicago is a collection of varied functions and a perfect example of inarticulate buildings. On this campus the building that seems a factory is a classroom, the cathedral is a boiler house and the boiler house is a chapel. Of course Mies didn’t intend these propositions, but his commitment to reductive formal values inadvertently betrays them. Contradictions between statement and result have reached impressive proportions in Modern Architecture, and one can now speak of a ‘credibility gap’ that parallels the loss of trust in politicians.

The root causes of this era, I believe, based on the nature of architecture as a language. It is radically schizophrenic by necessity, partly rooted in tradition. In the past — indeed in everyone’s childhood at experience of crawling around on flat floors and perceiving such normal architectural elements as vertical doors. And it is partly rooted in a fast-changing society, with its new functional tasks, new materials, new technologies and ideologies. In the one hand, architecture is as slow-changing as spoken language, and on the other hand, as fast-changing and esoteric as Modern art and science.

Put another way, we learn from the beginning the cultural signs which make any urban place particular to a social group, an economic class and real, historical people; whereas Modern architects spend their time unlearning all these particular signs in an attempt to design for universal man, or Mythic Modern Man. This 3-M monster of course doesn’t exist, except as a historical fiction. Mr. triple-M is no doubt a logical necessity for architects and others who want to generalize a statistical average. They try to provide Modern Man with a mythic consciousness, with consistent patterns reminiscent of tribal societies, refined in their purity, full of taste, ‘unlike in variety’ and other such geometric harmonies when in fact Modern Man doesn’t exist, and what he would want if he did would be realistic social signs. Modern architects aren’t trained in these codes, they don’t know how to get close to this reality, and so they go in pursuing a mythic integration of community.
MUSEUM OF THE MODERN MOVEMENT
The location for the museum of the Modern Movement has to make sense. The surroundings of the Swiss Alps play a different kind of atmosphere compared to the city center of Amsterdam. At least the potential location for the museum must have a strong connection with modernism. For the sake of my research I will scope to a location within the Netherlands because it is easier to visit the location several times during my graduation process.

After the First World War, a new movement in architecture emerged all over Europe. In the Netherlands one speaks of Dutch Functionalism, a popular name is modern architecture. But modern is also a term used meaning contemporary.

The Modern Movement coincides with 20th century modernisation in visual arts, like the abstract art of Cubism and De Stijl. The style of architecture has been made possible due to the new technical possibilities of the industrial revolution. Reinforced concrete and steel enable skeleton constructions which makes the use of glass as building cladding possible. Flat rooftops create the possibility of rooftop terraces. There’s a preference for white and primary colors and there’s a ban on ornaments.

The Netherlands play an important part in the development of the Modern Movement. As the Netherlands were neutral during the First World War, there was little war damage and cultural life did not come to a halt. Mondriaan and Van Doesburg are pioneers when it comes to abstract, modern art and they found De Stijl magazine. Also Stijl, J.J.P. Oud, Duiker, Dudok, Rietveld and Brekman & van der Vlugt were international famous architects with great works in the Netherlands. The map of the Netherlands gives an overview of the most important works of these architects sorted by color. By looking closer to the map it becomes clear that most of the works are situated in the Randstad: this is an area between Rotterdam, The Hague, Amsterdam and Utrecht. Interestingly is that Dudok’s work is concentrated in Hilversum and Brekman & van der Vlugt’s in Rotterdam. Amsterdam has the most diversity of modernists while in The Hague the works are scattered over a larger area. Because Hilversum has only modernist buildings from Dudok and The Hague’s modernists buildings are scattered over a large area I will focus on Amsterdam and Rotterdam.
In the city center of Amsterdam it is hard to find a plot for a museum. While the surroundings of the central station had made a big transformation during the last century one spot on banks of the river ‘het IJ’ remained untouched. This is a hundred year old pier, ‘het Stenen Hoofd’ which was used for the throughput of goods. This pier is special because its open character which is unique. Now it is used for some small cultural festivals during a couple of days a year. Because the pier is hundred years old and is funded on 11,000 wooden pillars the pier is in a bad state. The head of the pier is already taken away in the ’70’s which gives its special appearance, the ‘wet point’. ‘Het Stenen Hoofd’ is within a few minutes of walking distance from central station and the famous ‘Silodam’, an apartment complex from MVRDV.

Because of the bad state of the pier a new plan for this area will include a new foundation for the pier which makes it unattractive to build on. Furthermore the open character will be lost when there is a museum build on top of the pier. For this reason there are two different options for the museum. When building on top is not an option, it is possible to build aside the pier. The ‘Silodam’ from MVRDV is an example of a containership which is moored to the pier. This concept can be done in the same manner for the museum, but still it will take away some sightlines which will decrease its open character. A second option is to dig out the old pier, which is actually a huge sandpit funded on wooden pillars, and make the museum in the pier. In this cause the ‘roof’ of the museum will act as a public space like it does now. The public space on the roof is far from ideal because in most of the museums the light comes from the roof.

AMSTERDAM

5554
Rotterdam is the source of the Modern Movement in between the two world wars. It's a fast growing, dynamic city with ports and industries. Rotterdam does not have many important historical buildings. In cities like Amsterdam and Utrecht and in the country most beauty commissions aren’t charmed by this new and modern architecture and there’s a preference for traditional forms and materials like brick and reed. The Modern materials and techniques still have a few flaws to start out with: flat roofs are difficult in our climate, big glass facades are too hot in summer and too cold in winter. At the end of the thirties traditionalism wins back a bit of terrain. You can get a good idea of the competition between the Modern Movement and traditionalism at the Museumpark, where you can find the modern white villas’ built in the same era as the Boijmans museum, with its stately entrance, somber brick walls and non functional tower.

After the second world war, modernism quickly gained terrain. The building of the city simply asked for mass production and sober, functional architecture. With architects like Broek & Bakema, Maaskant and Groosman, Rotterdam architecture gains new impulses. At the end of the sixties modern architecture degenerates into cold comprehensive projects. With small scale and post modernism an opposite movement originates. In the eighties the Modern Movement experiences a remarkable revival. De Stijl colors and motives become very popular and architects tend to fall back on modernism: white plastered facades, primary colors and cubist shapes. This at one time purely functionally oriented form principles, are now mainly architecturally applied by again mainly Rotterdam-based neo-modernist architects.

Rotterdam is known as the city of architecture 2012. Boijmans & van der Vlugt had built many buildings in and around Rotterdam. Beside this architecture office a lot of others built here in a modernistic style. The map of Rotterdam gives an overview of the modernistic works with a black dot. A clear structure is visible at the border of the old city. Within this area are several locations for the museum of modernism, Parkhaven, Schiehaven and Lloydkwartier.

Parkhaven was one of the main transport routes for the goods of the most famous modernistic building in the netherlands, the ‘Van Nelle Fabriek’ a grand design from Boijmans & van der Vlugt. Like ‘Het Steen Hof’ was this location suitable for building in the water beside the quay. A disadvantage is the amount of space available; some arcs are already situated at the quay and because of the harbor is still in use, it is not possible to go further than 30 meters into the harbor.

A second plot at the Parkhaven is under the shadow of the Erasmus tower, here is a large stroke of grass. This stroke is situated between two busy streets the Erasmus tower and the quay of the Parkhaven. Scale is a major issue here, the Erasmus tower is 180 meters high which makes it hard to design a museum that give some ‘counter weight’.
Schiehaven

Schiehaven is a pre-war harbor in the Lloydkwartier, Rotterdam-Delfshaven. This harbor is made between 1904 and 1909 designed to transfer goods. On the east side the Schiecentrale was situated; the coal import for the Schiecentrale was by boat. This power plant worked until 1990, and today it is the centre for audio and visual productions.

On the south side from the Schiehaven was the company Kühne & Nagel, here came the first English boats with food in 1945 for the hungry citizens. Also the Lloyd had an important role in the transport between the Netherlands and Nederland Indië.

The harbor closed in the '80s and in 2007 the first apartment building was erected. On the Schiehaven a shipyard is situated were a replica from the 18th century ‘Linieschip de Delft’ is built. At the end of the pier large apartment complexes are erected and a large piece of land remained unbuilt. The high rise apartment buildings set the tone for new plans for this plot. The context of this plot is not suitable for building a relatively small museum.

Schiehaven has a 90 by 170 meter square and some soccer fields near the quay. At the end of the square is the ‘Poortgebouw’ from the modernist Maaskant.

Huig Aart Maaskant (1907 - 1977) worked together with architect Willem van Tijen between 1937 and 1955. After a study trip to Chicago van Tijen and Maaskant designed a building which was inspired by American architecture ‘Het Groothandelsgebouw’ at Stationsplein built between 1949 and 1953. In 1955 van Tijen en Maaskant broke up. Maaskant had his focus on utility buildings, an important exception was the ‘Wibberls’ at the Velperplassen. Other famous projects in the Netherlands are, Euromast (1960), Pier Schieveringen (1961), Office Johnson-Wax (1964), studentcentres ‘De Buriks’ Eindhoven (1967 - 1969) and the ‘Provinciehuis’ ‘s-Hertogenbosch (1971).

The Square is a couple of times a year in use during some festivals and during the fair. At the North of the square is a small kiosk which separates the busy street from the harbor. On top of the dyke is a walkway and a bicycle lane. For all the plots in Rotterdam the Schiehaven is the best option for a museum, the location is large enough for a museum, it has a parking garage within 50 meters and the museum is a great possibility for upgrading the existing square which now is a kind of 90 by 170 meter wasteland.
What does a museum of the Modern Movement look like?

This question is very hard to answer, when you ask ten different architects to design a museum of the Modern Movement it will result in ten different designs which all have their own qualities. So it can’t be answered in terms of a specific design but maybe can in a more conceptual way. To give an answer in a more conceptual way an underlying question has to be answered, What does a museum of architecture look like?

In general most of the museums are built for housing multiple collections, they are flexible in space and this gives the opportunity to alternate exhibitions every now and then. To be flexible an exhibition space has to meet some requirements. For instance paintings need indirect sunlight, for larger pieces of art a height of 6 à 7 meters is ideal and the finish of the interior walls and floors must be as natural as possible.

For exhibiting just architecture all these requirements are different. Of course a painting still needs indirect sunlight but what makes a museum a museum of architecture is the kind of collection, and how the space around this collection is designed around it. A Museum full of paintings and drawing about architecture is a very weak concept, those paintings could also be changed for paintings about anything else without affecting the exhibition spaces. It becomes interesting when the exhibition consists of real architectural elements exhibited in spaces specially designed for those elements. The museum can be seen as a man-made suit which is specially made for a specific person. There is also the possibility to take it a step further, the museum itself could be a part of the exhibition.

A museum of the Modern Movement can be designed in three different conceptual ways. When the museum houses the exhibition and don’t interact with its exhibition it can be called a distantiation. When specific themes from the Modern Movement are integrated in the design, the museum is a contemporary interpretation of the Modern Movement. The third concept is the imitation and is exactly the opposite of the distantiation. Specific elements from the Modern Movement are literally put together to make a new design. This concept is very eclectic but gives the best feeling of the Modern Movement.

The topic of the group part was the architect John Soane. He altered and expanded his entire house to create a museum for his private collection. During his life he created a vast collection of paintings, drawings, busts, vases and casts of plaster, bronze, terra cotta and other materials. In the middle of his house is a little courtyard with a large ‘pasticcio’. The word pasticcio comes from pastiche. A pastiche is a work of visual art, literature or music that imitates the style or character of the work of one or more other

B: conceptual picture of John Soane’s Pasticcio and a Modern pasticcio

![The Colonade in Sir John Soane’s Museum, Lincoln’s Inn Fields, London.](image)

![Conceptual picture of John Soane’s Pasticcio and a Modern pasticcio.](image)
Artists. The word pastiche is a French cognate of the Italian noun pasticcio, which is a paté or pie filled with a mixed form of diverse ingredients. Metaphorically, pastiche and pasticcio describe works that are composed by several authors, or that incorporate stylistic elements of other artists’ work. Pastiche is an example of eclecticism in art.

Soane’s pasticcio inspired me for the design of the museum of the Modern Movement. Also this pasticcio is a perfect example of the third imitating concept as spoken before. The pasticcio was a column of architectural fragments from different styles which forms a four meter high sculpture.

Soane’s pasticcio gave me the idea to make a modern pasticcio built from elements of the Modern Movement, but instead of just a column with fragments I will use parts of famous buildings from different architects.

Now the concept is clear, a selection has to be made for what elements can be used for the pasticcio. For this selection I had to question myself, what are the most important elements from the Modern Movement? Major changes in the Modern Movement were standardization of building elements, the use of steel for making bigger spans and of course large windows, often from floor to ceiling. But the biggest change was in the way of thinking about space. On all the previous styles a building or a house was built out of enclosed rooms. At the beginning of the 20th century three architects—Mies van der Rohe, Adolf Loos and Le Corbusier—had groundbreaking ideas about floor plans and the quality of space as spoken before. In ‘What are the most important design ideas of the Modern Movement?’, their concepts, Flowing Space, Raumplan and Plan Libre will be integrated in the pasticcio. The pasticcio is built out of elements from the Barcelona pavilion, Villa Müller and Villa Stein de Monzie.

The project consists of two different parts, the first is the 30 meter high pasticcio and the second part of the design is the backbone of the pasticcio. This is a 30 meter high wall which houses the stairs, an elevator, the ticket desk and a small restaurant at the top floor. The construction of the backbone consists of eight concrete frames which are able to transport the horizontal loads from the pasticcio to the ground. All the floors from the backbone are connected by bridges to the pasticcio. In the backbone are no special exhibition spaces, the backbone provides only specific views from the exterior of the pasticcio. The only things which are exhibited in the backbone are the scale models from the villas used for the pasticcio. Just before a visitor makes the crossing over the bridge he or she gets a view of the scale model of the villa. For instance the third floor in the pasticcio is a part of the Barcelona pavilion so on the third floor of the backbone is a scale model of the Barcelona pavilion. After seeing the total design the visitor makes the crossing over the bridge.
and then the visitor stands in a part of the Barcelona Pavilion. The backbone is designed as a solid volume, several of the windows are scaled according to the orientation and importance of the view framing the surrounding of the museum. On the south side of the backbone a 180 degree view is possible to see the harbor and boats passing by over the Maas River. The facades are fabricated in travertine ranging in tone from light grey to a bit dark grey, creating a lightly variegated pattern across the surface of the building. This grey pattern match perfect with the black and white from the pasticcio and the concrete used in the columns and beams from the backbone. The windows are in line with the travertine plates.
The backbone of the pasticcio acts as a long routing which guides the visitor through the museum. This routing begins already before the entrance of the museum. The pasticcio is facing towards the square and the backbone is very close to the sport park, this causes that people enter the plot of the museum from two sides, this is why the museum don’t have a clear front or backside. The gave me the option to make an entrance on two sides, a downside of two entrances is that there is no control over who has bought tickets and who did not. Of course this problem is easy to solve with some security gates but in the museum of the Modern Movement the spaces must be as clear as possible and a security gate don’t match with that principle. The backbone is situated between the backbone and the pasticcio. The long Mies van der Rohe walls guides the visitor to the entrance underneath the concrete beams between the pasticcio and the backbone. The entrance is extra accentuated by the concrete columns and beams.

When the visitor enters the backbone and bought a ticket the journey starts by taking the first stairs up to the first floor. On the first floor it is immediately noticeable that the floor slabs are more like a walkway then it is a normal floor which span the entire floor. The floor slabs are situated between the concrete frames which will never touch the interior walls from the façade, this combined with the voids used on every floor gives the visitor a feeling of one continuous routing instead of different floors connected by stairs and an elevator. On every floor the pasticcio can be entered by a bridge. Before entering the pasticcio a short introduction of that specific architect is made in the backbone by a scale model of the building the visitor is about to enter. Once in the pasticcio the quality and the feeling of the space intended by the architect is the collection of the museum. Because of the introduction is given in the backbone, the visitor can’t get from one level to the other within the pasticcio except for the levels which are from the same architect. In the Adolf Loos part, which consists of two levels stairs are situated because this is a major part of his design principles. For Le Corbusier the stairs are also an essential part of the design. His special way of designing a ramp or stairs can’t be refused in the pasticcio. The designs of Adolf Loos are turned into itself and don’t have large windows to connect the interior with the exterior, the backbone reacts on that with a closed façade on the Adolf Loos levels. By making use of voids these levels get also daylight from above. On the upper floor a small lunchroom is situated. After a journey through the museum the visitor gets a great view over the river Maas and the Euromast.
the pasticcio is the biggest part of the collection, the quality of the spaces intended by the architects makes this museum a one of a kind. Materialization is very important to achieve this same quality. For the interior of the Adolf Loos levels the green colored Marble and the wooden finish of the floors and walls are key in achieving this quality. The characteristics of the Mies van der Rohe levels are his famous aluminum covered cross columns and window frames and his Onyx marble walls with the mirrored patterns. These patterns appear when a thick block of marble is cut in the vein direction of the marble. After being polished these plates have the same pattern which can be mounted in a mirrored way.

For the exterior of the pasticcio a white stucco finish is used like the Villa Müller and Villa Stein de Monzie. I'm not sure if these colors of the villas are exactly the same but for the pasticcio this stucco finish is just one color. Using different shades of white can give an unpleasant effect because these colors maybe do not match. The window frames of the pasticcio are black except the window frames from Mies van der Rohe, these have an aluminum finish.

The finish of the backbone façade is very important in the design of the whole museum. The east side of the façade acts as a kind of backdrop for the pasticcio. The material and the color of the façade can make the pasticcio blend into the backbone or it can make it pop out. The façade of the backbone is made out of grey travertine, this grey color match good with the white stucco and the black window frames from the pasticcio and make it pop out in a delicate way. The two building volumes are designed in a different color and form so the pasticcio is a building on its own.

The grey travertine also match with the concrete frame structure. These frames are not only supporting the backbone but transfer the horizontal loads of the pasticcio as well. The constructive clearness of the Modern Movement is used as a foundation of the backbone design. This is why all the frames are visible and nothing is put behind a ceiling system. The finish of the floors and interior walls are natural white. The floor is made of anhydrite and the interior walls are finished with a fine white stucco. The window frames are in line with the travertine panels and have a reveal of 0.

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What does a museum of the Modern Movement look like?

Like said before, the question is very hard to answer about how a museum of the Modern Movement look like. Ten different architects design ten different museums which all have their own qualities and were no good or bad. It can’t be answered in terms of a specific design but each in a more conceptual way. There is a huge difference between a museum about stamps or a museum about architecture. The big difference is in emotion and in the way a stamp or a building is experienced. A stamp is an object which can be rare or attractive by the print on it, but I never becomes more than a rare object with or without an emotional value, the same is true for a lot of other objects.

Architecture is completely different. As we speak about architecture we talk about emotions and experience of a 3-dimensional space. Sizes, colors, materials, colors, scale, the amount of light, sound, textures, surroundings and many other elements determine how we experience a room or a building. When architecture has to be exhibited all these elements are gone when it is shown as for example stamps in a glass case. Most of these elements will be disconnected when a 3-dimensional space is exhibited in a 2-dimensional way. In my opinion architecture can only be exhibited in a 2-dimensional way as a portfolio from an architect or architecture style. A scale model can give good information about how a design looks like and how spaces are linked together but from all elements mentioned before a scale model can’t give the real experience. Things like sound, surroundings, scale and texture can’t be experienced with a scale model.

So it is very hard to exhibit architecture in a proper way. A trip to Krefeld in Germany gave me a clue about how architecture can be exhibited in a better way than small scale models and paintings.

More than 80 years ago, Ludwig Mies van der Rohe took part in a competition for the design of a club house for the newly founded Krefeld Golf Club. Due to the Great Depression, however, the house was never built. In 2013, Mies’ design was finally brought into practice under the artistic directorship of Belgian architect Paul Robbrecht at the initially planned site on the outskirts of Krefeld. The model was built according to the original plans as a walkable architecture model at a scale of 1:1, thus creating a highly exceptional architecture exhibition. Visitors were able to see and experience the basic design concepts of Mies van der Rohe. They got a hands-on look at Mies’ unique understanding of space as an open fabric of tension as well as his artful intertwining of architecture and nature.

The best way of exhibiting architecture is to keep as much elements / senses as possible from the original. In the way I designed my museum, as an eclectic pasticcio, most of the senses from the original design are kept in the design. Of course some senses like the surroundings are lost in my design but when the visitor is in the Adolf Loos part of the pasticcio the atmosphere will be pretty close to the original design. In my opinion this is the only way of exhibiting architecture which get the feeling as close as possible to the feeling intended by the architect.
DRAWINGS
1. Travertine facade panel
2. clip
3. suspension rail
4. vertical profile
5. wall bracket
6. insulation
7. window frame
8. black coated steel plate
9. concrete column
1. Travertine facade panel
2. clip
3. suspension rail
4. vertical profile
5. wall bracket
6. insulation
7. window frame
8. black coated steel plate
9. Concrete Column
10. DPC Foil

VERTICAL WINDOW DETAIL

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