Module IV

21st Century Architecture

Deconstructivism

- Deconstructivism, or Deconstruction, is an approach to building design that attempts to view architecture in bits and pieces. The basic elements of architecture are dismantled. Deconstructivist buildings may seem to have no visual logic. They may appear to be made up of unrelated, disharmonious abstract forms.
- Deconstructivism in architecture, also called deconstruction, is a development of postmodern architecture that began in the late 1980s.
- It is characterized by ideas of fragmentation, an interest in manipulating ideas of a structure's surface or skin, non-rectilinear shapes which serve to distort and dislocate some of the elements of architecture, such as structure and envelope.
- The finished visual appearance of buildings that exhibit the many deconstructivist "styles" is characterized by a stimulating unpredictability and a controlled chaos.

Zaha Hadid

31 October 1950 – 31 March 2016

- Dame **Zaha Mohammad Hadid** (Born 31 October 1950 – 31 March 2016) was an Iraqi-British architect.
- She was the first woman to receive the Pritzker Architecture Prize, in 2004.
- She received the UK's most prestigious architectural award, the Stirling Prize, in 2010 and 2011.
- In 2012, she was made a Dame by Elizabeth II for services to architecture, and in 2015 she became the first and only woman to be awarded the Royal Gold Medal from the Royal Institute of British Architects.
- She was described by *The Guardian* of London as the "Queen of the curve", who "liberated architectural geometry, giving it a whole new expressive identity".
- Her major works include **The aquatic centre** for the London 2012 Olympics, **Michigan State University's Broad Art Museum** in the US, and the **Guangzhou Opera House** in China.
- Some of her designs have been presented posthumously, including the statuette for the 2017 Brit Awards, and several of her buildings were still under construction at the time of her death, including the **Al Wakrah Stadium in Qatar**, a venue for the 2022 FIFA World Cup.

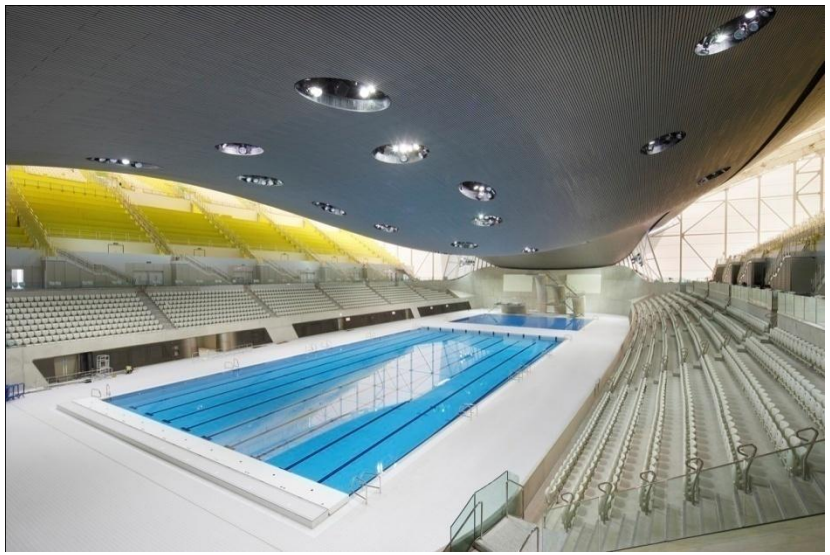
Style:

- The architectural style of Hadid is not easily categorised, and she did not describe herself as a follower of any one style or school. Nonetheless, before she had built a single major building, she was categorised by the Metropolitan Museum of Art as a major figure in architectural Deconstructivism.
- Her work was also described as an example of parametricism. An article profiling Hadid in the *New Yorker* magazine was titled "The Abstractionist".
- When she was awarded the Pritzker Prize in 2004, the jury chairman, Lord Rothschild, commented: "At the same time as her theoretical and academic work, as a practicing architect, Zaha Hadid has been unswerving in her commitment to modernism. Always inventive, she's moved away from existing typology, from high tech, and has shifted the geometry of buildings.
- The Design Museum described her work in 2016 as having "the highly expressive, sweeping fluid forms of multiple perspective points and fragmented geometry that evoke the chaos and flux of modern life".
- Hadid herself, who often used dense architectural jargon, could also describe the essence of her style very simply: "The idea is not to have any 90-degree angles. In the beginning, there was the diagonal. The diagonal comes from the idea of the explosion which 're-forms' the space. This was an important discovery."

London Aquatic Complex, 2012 Olympics

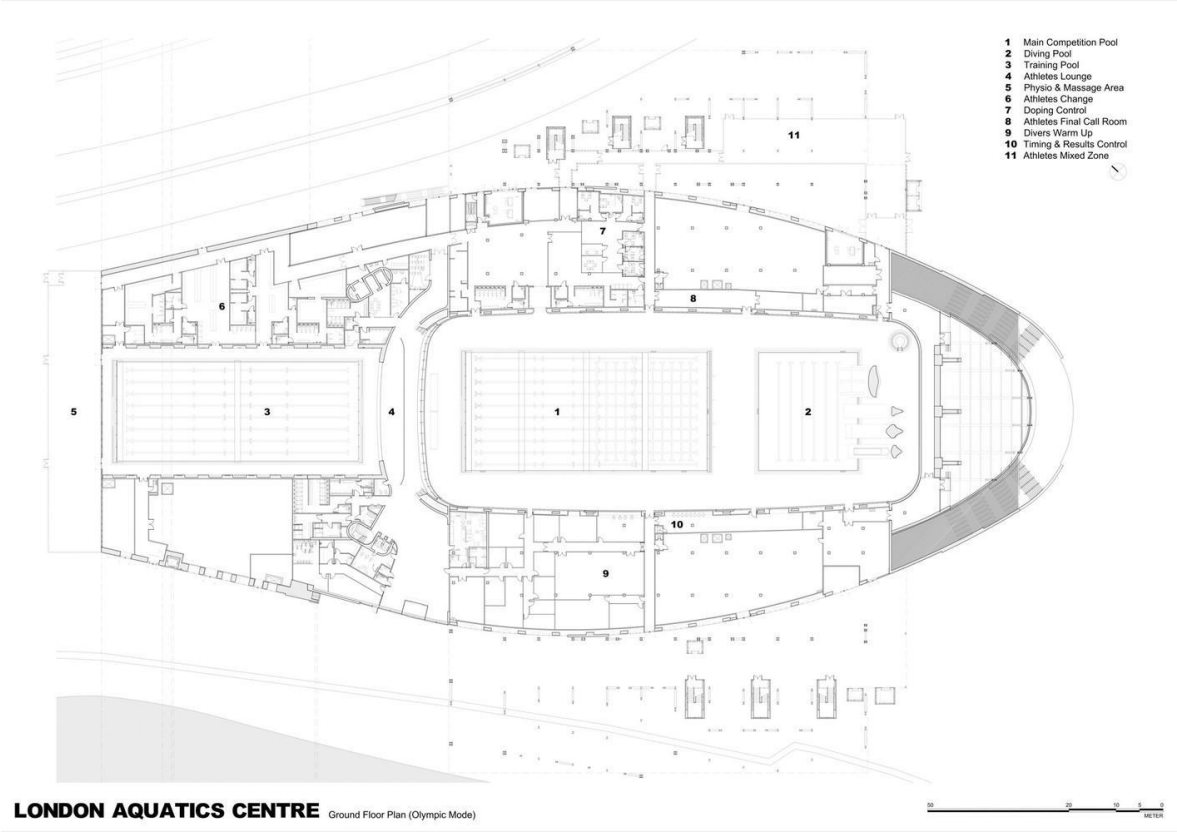
London Aquatic Complex, 2012 Olympics

- The architectural concept of the London Aquatic Centre is inspired by the fluid geometries of water in motion, creating spaces and a surrounding environment that reflect the riverside landscapes of the Olympic Park.
- An undulating roof sweeps up from the ground as a wave - enclosing the pools of the Centre with a unifying gesture of fluidity, while also describing the volume of the swimming and diving pools.
- The Aquatics Centre is designed with an inherent flexibility to accommodate 17,500 spectators for the London 2012 Games in 'Olympic' mode while also providing the optimum spectator capacity of 2000 for use in 'Legacy' mode after the Games.



London Aquatic Complex, 2012 Olympics

- The Aquatics Centre is planned on an orthogonal axis that is perpendicular to the Stratford City Bridge. All three pools are aligned on this axis. The training pool is located under the bridge with the competition and diving pools located within the large pool hall enclosed by the roof. The overall strategy is to frame the base of the pool hall as a podium connected to the Stratford City Bridge.
- This podium element contains of a variety of differentiated and cellular programmes within a single architectural volume which is seen to be completely assimilated with the bridge. The podium emerges from the bridge to cascade around the pool hall to the lower level of the canal.



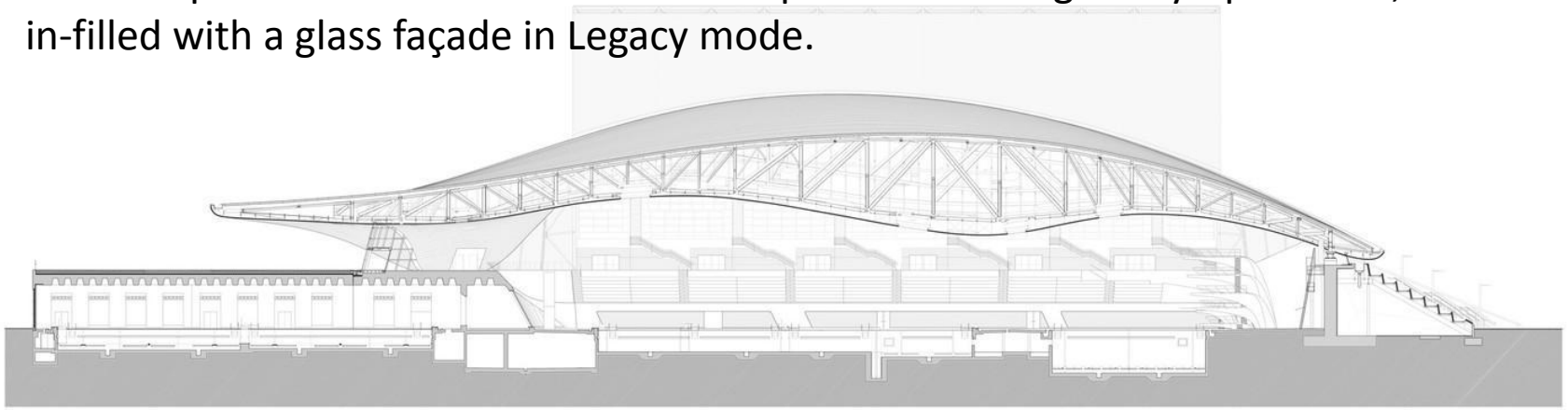
London Aquatic Complex, 2012 Olympics

The pool hall is expressed above the podium by a large roof which arches along the same axis as the pools. Its form is generated by the sightlines of the 17,500 spectators in its Olympic mode.

Double-curvature geometry has been used to generate a parabolic arch structure that creates the unique characteristics of the roof.

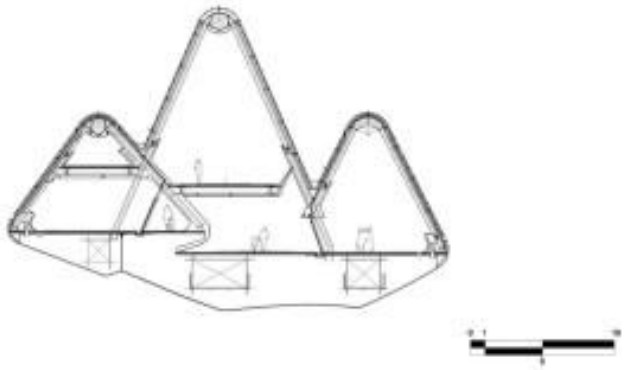
The roof undulates to differentiate between the volumes of competition pool and the diving pool. Projecting beyond the pool hall envelope, the roof extends to the external areas and to the main entrance on the bridge that will be the primary access in Legacy mode.

Structurally, the roof is grounded at 3 primary positions with the opening between the roof and podium used for the additional spectator seating in Olympic mode, then in-filled with a glass façade in Legacy mode.



Zaragoza Bridge Pavilion Spain

- Zaragoza Bridge is a project by Zaha Hadid architects that was constucted for the EXPO 2008 in the city of Zaragoza in Spain. The 280 metre long bridge connects the neighbourhood of La Almozara with the exhbition site over the river Erbo and thus becomes an entrance. The bridge is aimed to used both as a pedestrian area and an interactive exhibition place focusing on water sustainability (during the EXPO the pavillion hosted an exhibition called "*Water – a unique resource")*, related with a prgramme of activities within it. In particular, the exprerience of the exhibition is connected with the nature of path that the visitor choose to cross the bridge.
- Inspired from the plant gladiola, the bridge is diagonally located over the river and it is organized around 4 main objects, or "pods", that allow its weight to be distributed.



Zaragoza Bridge Pavilion Spain

- However, these “pods” are not only used as structural elements. They are also used for a natural differentiation of the interior spaces, as each pod is used to be a specific exhibition space.
- The diamond-shaped section, which have a static role, allows the distribution of the weights to the ground, redefining the interiors and connecting the pods. Finally, the envelope of the bridge is constructed by glass fibre reinforced concrete and it is colored with the shades of grey, creating a shark-skin facade that reflects the water of the river below and at the same time offers a protection from the local environmental conditions, such as the wind Cierzo.
- This shark skin is generated by a complex pattern of simple overlapping units. Some of these units can rotate around a pivot, allowing for temporary opening or closing of part of the façade.

Daniel Libeskind

Born 12 May 1946

Jewish Museum, Berlin

Jewish Museum, Berlin

- In 1987, the Berlin government organized an anonymous competition for an expansion to the original Jewish Museum in Berlin that opened in 1933. The program wished to bring a Jewish presence back to Berlin after WWII. In 1988, Daniel Libeskind was chosen as the winner among several other internationally renowned architects; his design was the only project that implemented a radical, formal design as a conceptually expressive tool to represent the Jewish lifestyle before, during, and after the Holocaust.
- For Libeskind, the extension to the Jewish Museum was much more than a competition/commission; it was about establishing and securing an identity within Berlin, which was lost during WWII.

Jewish Museum, Berlin

- Conceptually, Libeskind wanted to express feelings of absence, emptiness, and invisibility – expressions of disappearance of the Jewish Culture. It was the act of using architecture as a means of narrative and emotion providing visitors with an experience of the effects of the Holocaust on both the Jewish culture and the city of Berlin.
- The project begins to take its form from an abstracted Jewish Star of David that is stretched around the site and its context. The form is established through a process of connecting lines between locations of historical events that provide structure for the building resulting in a literal extrusion of those lines into a “zig-zag” building form.

Jewish Museum, Berlin

- Even though Libeskind's extension appears as its own separate building, there is no formal exterior entrance to the building. In order to enter the new museum extension one must enter from the original Baroque museum in an underground corridor. A visitor must endure the anxiety of hiding and losing the sense of direction before coming to a cross roads of three routes. The three routes present opportunities to witness the Jewish experience through the continuity with German history, emigration from Germany, and the Holocaust. Libeskind creates a promenade that follows the "zig-zag" formation of the building for visitors to walk through and experience the spaces within.

- From the exterior, the interior looks as if it will be similar to the exterior perimeter; however, the interior spaces are extremely complex. Libeskind's formulated promenade leads people through galleries, empty spaces, and dead ends. A significant portion o f the extension is void of windows and difference in materiality.

Jewish Museum, Berlin

- The interior is composed of reinforced concrete which reinforces the moments of the empty spaces and dead ends where only a sliver of light is entering the space. It is a symbolic gesture by Libeskind for visitors to experience what the Jewish people during WWII felt, such that even in the darkest moments where you feel like you will never escape, a small trace of light restores hope.
- One of the most emotional and powerful spaces in the building is a 66' tall void that runs through the entire building. The concrete walls add a cold, overwhelming atmosphere to the space where the only light emanates from a small slit at the top of the space. The ground is covered in 10,000 coarse iron faces. A symbol of those lost during the Holocaust; the building is less of a museum but an experience depicting what most cannot understand.
- Libeskind's extension leads out into the Garden of Exile where once again the visitors feel lost among 49 tall concrete pillars that are covered with plants. The overbearing pillars make one lost and confused, but once looking up to an open sky there is a moment of exaltation. Libeskind's Jewish Museum is an emotional journey through history. The architecture and the experience are a true testament to Daniel Libeskind's ability to translate human experience into an architectural composition.

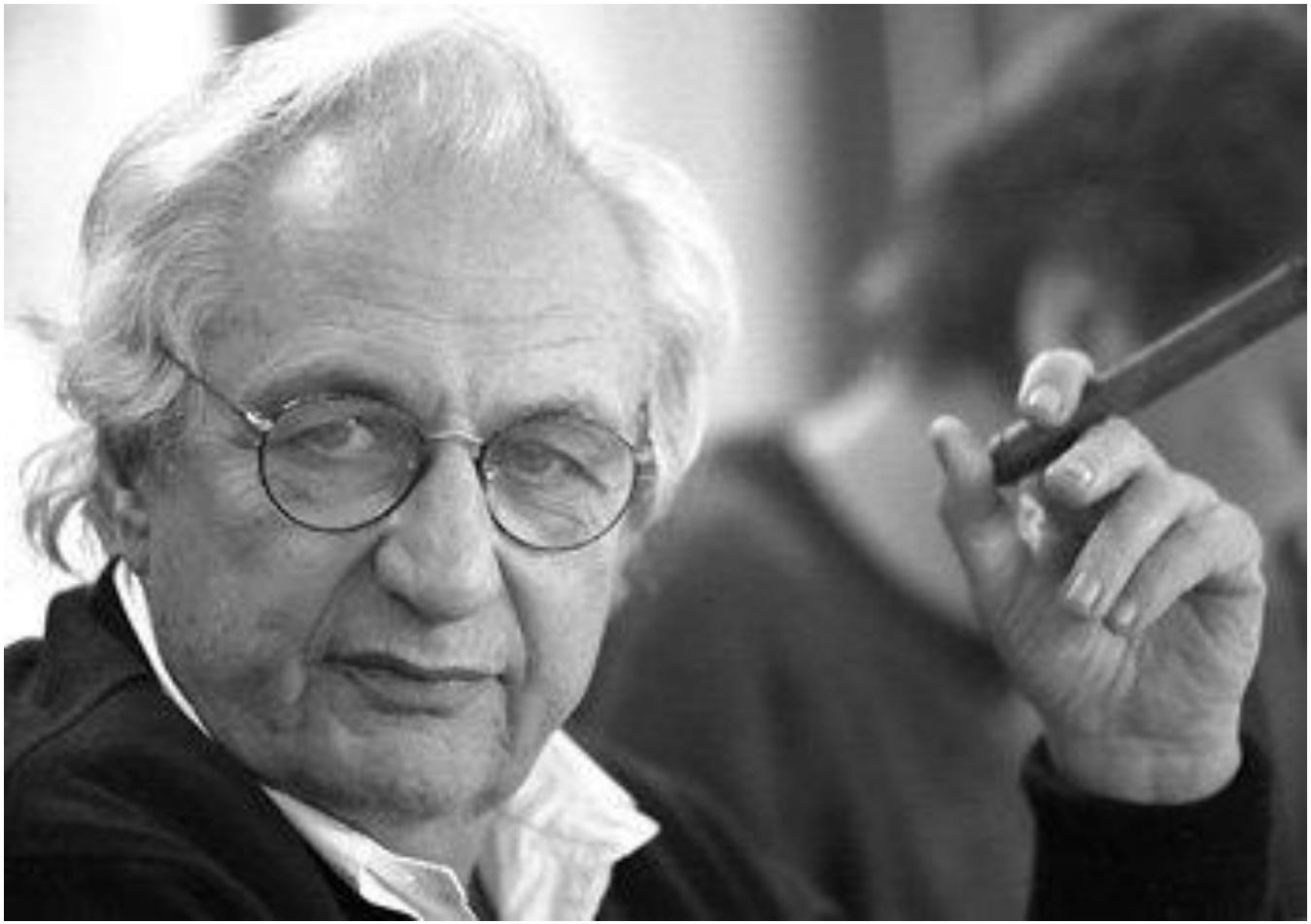
Jewish Museum, Berlin

World trade Centre, New York

World trade Centre, New York

- Studio Daniel Libeskind was selected to develop the master plan for the Ground Zero site in 2003, and since has been coordinating with NYC's numerous agencies and individual architects to rebuild the site. The project, in Libeskind's words, is a "healing of New York", a "site of memory" and "a space to witness the resilience of America".
- The master plan supplies the framework for the massing and location of the program elements of the site, building heights and size and relationship to one another. It includes guidelines for infrastructure, transportation, sustainability standards and security strategies. The 16-acre site includes 4 towers, a Transportation Hub, Visitors Pavilion, Memorial Museum, and Memorial each with its own architect, providing a collaborative agenda for the masterplan.

Frank Gehry
(born 28 February 1929)



- Frank Gehry, born in 1929, American architect, a leader in the later phases of the postmodern movement in architecture.
- Gehry's distinctive style emerged in the 1970s with his dramatic use of ordinary building materials, such as chain-link fencing, plywood, and corrugated metal.
- Gehry continued to experiment with industrial materials and bold sculptural forms as his work evolved.
- In 1989 he was awarded the Pritzker Architecture Prize, an international award recognizing professional excellence in architecture.

- Born Ephraim Goldberg in Toronto, Ontario, Canada, Gehry moved with his family to Los Angeles in 1947.
- There he studied architecture at the University of Southern California and worked for the architectural firm of Victor Gruen Associates.
- In 1956 Gehry studied urban planning at the Harvard School of Design and then returned to Los Angeles to work for Victor Gruen until 1960.
- After spending a year at the Paris office of French architect André Remondet, Gehry returned to Los Angeles where he opened his own practice in 1962.

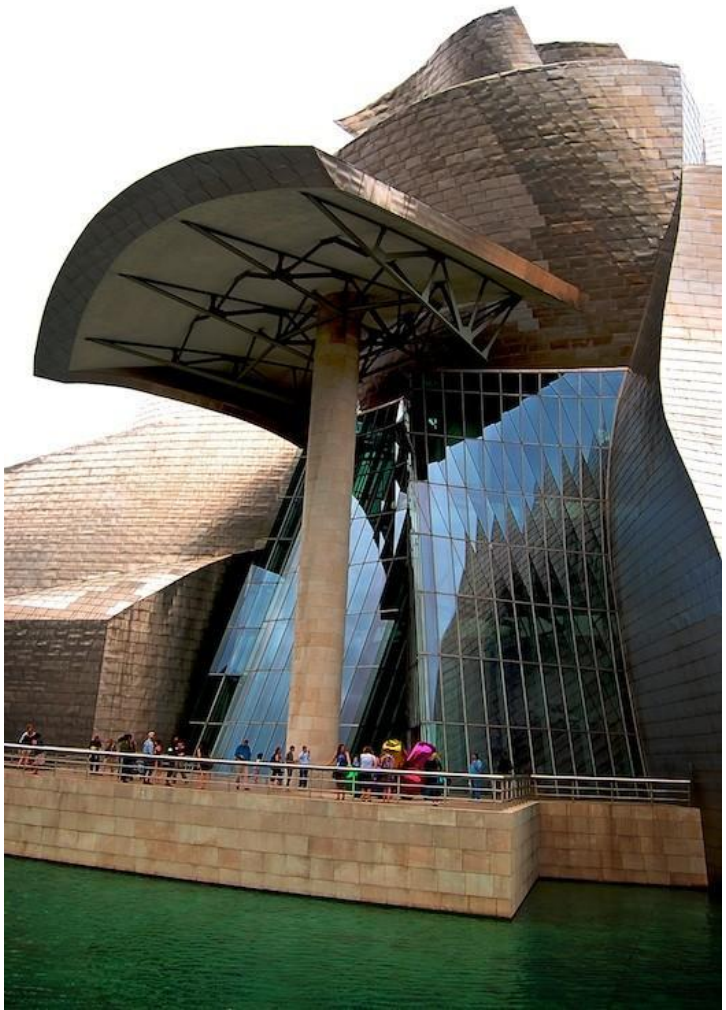
Influence and style:

- Gehry's earliest independent designs reveal the strong influence of Swiss French architect Le Corbusier. By 1972, however, he had begun to use nontraditional geometric forms in simple buildings constructed of corrugated metal and other ordinary materials.
- For example, the Ron Davis house in Malibu, California (1970-1972), has a trapezoid-shaped roof. Gehry's remodeling of his own house in Santa Monica, California, in 1979, became the focus of intense professional and journalistic attention.
- Gehry's new rooms were formed by sharp angular roofs sided with corrugated metal and decorated with angled panels of chain-link fence.
- He designed numerous private residences, each exploring the discordant possibilities of angled, colliding planes, bright colors, and ordinary industrial materials.

Guggenheim Museum, Bilbao, Spain

Guggenheim Museum, Bilbao, Spain

- Set on the edge of the Nervión River in Bilbao, Spain, the Guggenheim Museum is a fusion of complex, swirling forms and captivating materiality that responds to an intricate program and an industrial urban context.
- With over a hundred exhibitions and more than ten million visitors to its recognition, Frank Gehry's Guggenheim Museum Bilbao not only changed the way that architects and people think about museums, but also boosted Bilbao's economy with its astounding success.
- In fact, the phenomenon of a city's transformation following the construction of a significant piece of architecture is now referred to as the" Bilbao Effect "..



- The riverside site is on the northern edge of the city center. A road and railway line is to the south, the river to the north, and the concrete structure of the Salve Bridge to the east. Making a tangible physical connection with the city, the building circulates and extrudes around the Salve Bridge, creates a curved riverside promenade, and forms a generous new public plaza on the south side of the site where the city grid ends. The building alludes landscapes, such as the narrow passageway to the main entrance hall reminiscent of a gorge, or the curved walkway and water features in response to the Nervión River.
- Although the metallic form of the exterior looks almost floral from above, from the ground the building more closely resembles a boat, evoking the past industrial life of the port of Bilbao.

- Constructed of titanium, limestone, and glass, the seemingly random curves of the exterior are designed to catch the light and react to the sun and the weather. Fixing clips make a shallow central dent in each of the .38mm titanium tiles, making the surface appear to ripple in the changing light and giving an extraordinary iridescence to the overall composition.
- The building's walls and ceilings are load-bearing, containing an internal structure of metal rods that form grids with triangles.
- The large, light-filled atrium serves as the organizing center of the museum, distributing 11,000 square meters of exhibition space over nineteen galleries. Ten of these galleries follow a classic orthogonal plan that can be identified from the exterior by a limestone finish.
- The remaining nine galleries are identified from the outside by swirling organic forms clad in titanium. The largest gallery is 30 meters wide and 130 meters long and houses a permanent installation called" The Matter of Time "by Richard Serra.

Peter Eisenman
born 11 August 1932

Peter Eisenman

- Eisenman began his career as an architect. From the thesis in 1963 up until about 1980, Eisenman, was involved both with the professional world of architecture and with teaching.
- In 1980 he decided to focus more on his buildings and opened his professional practice: “Eisenman architects”. Since 1980, he has been involved in a number of large projects, from housing complexes in Berlin to high profile office buildings in Tokyo.
- Eisenman, while focusing more on building and his professional practice, still remains a highly theoretical architect.
- In 1999 he published the book “Diagram Diaries” which is both a summary of his works to date as well as an involved theoretical reflection on that work.

Cardinal Stadium, Arizona

Cardinal Stadium, Arizona

City of Culture of Galicia

- The program for the regional government's City of Culture of Galicia called for museum, library and performance spaces.
- The architect designed six buildings, conceived in three pairs: the Museum of Galicia and an International Art Center, the Galician Library and the Periodicals Archive, the Music Theater and the Center for Cultural Innovation.
- Four of these are complete and open and have already attracted more than three million visitors; the theater and art center are to be built when Spain's economy rebounds.
- In the history museum, library, and archive, spaces of vastly different scales are used for displaying art and artifacts, and flexible auditoria and general office and program areas can accommodate any number of programmatic needs.

- The hilltop site overlooks the medieval center of Santiago and required new links to the city through vehicular and pedestrian paths. The design of pedestrian caminos, or ways, on the site is derived from the city's historic street pattern. The caminos run between the buildings and lead to a multi-level plaza used for outdoor events. The forms of the buildings, related but different, seem to roll out of the landscape and echo the shape of the surrounding hills. The use of local stone, design of double roofs, and an on-site power plant contribute to its environmental sustainability. This long-term project began when they won the international invited design competition and reflects their ability to work with multiple parties, from contractors to client, including several changes in local political leadership.

Santiago Calatrava
(born 28 July 1951)

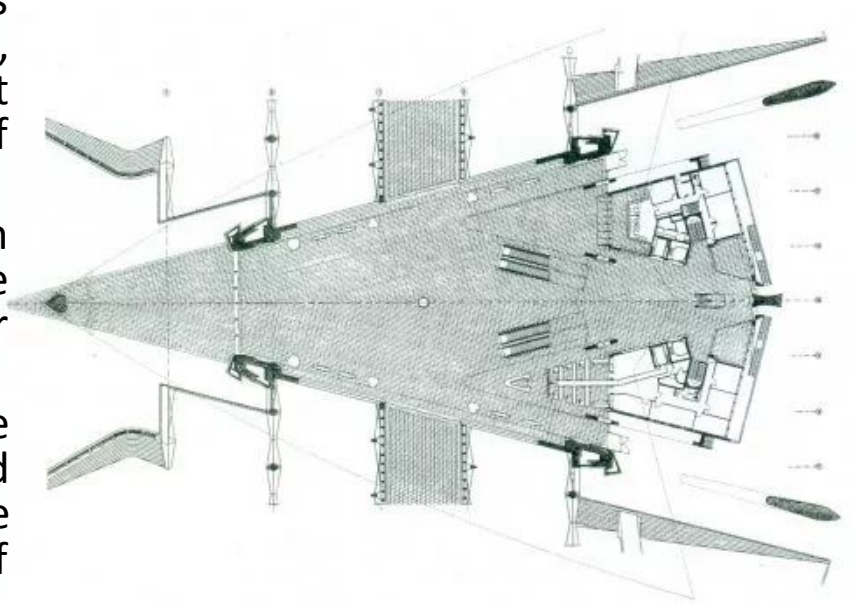
- He studied architecture at the Polytechnic University of Valencia and then structural engineering at the Swiss Federal Institute of Technology (ETH) in Zürich, where he established his first practice in 1981.
- His style has been described as distinctly neo-Futurist for its innovative use of materials and sleek, forward-thinking aesthetic.
- His commitment to building inspiring civic spaces—from bridges to train stations to cultural arenas—and his seamless integration of architectural design and structural engineering have earned him numerous awards.
- Some of his most famous creations include the Turning Torso in Malmö, the Museum of Tomorrow in Rio de Janiero Valencia's City of Arts and Sciences and Opera House.

Montjuïc Communications Tower, Barcelona (1989–92)

Lyon Satolas TGV Station, France

Lyon Satolas TGV Station, France

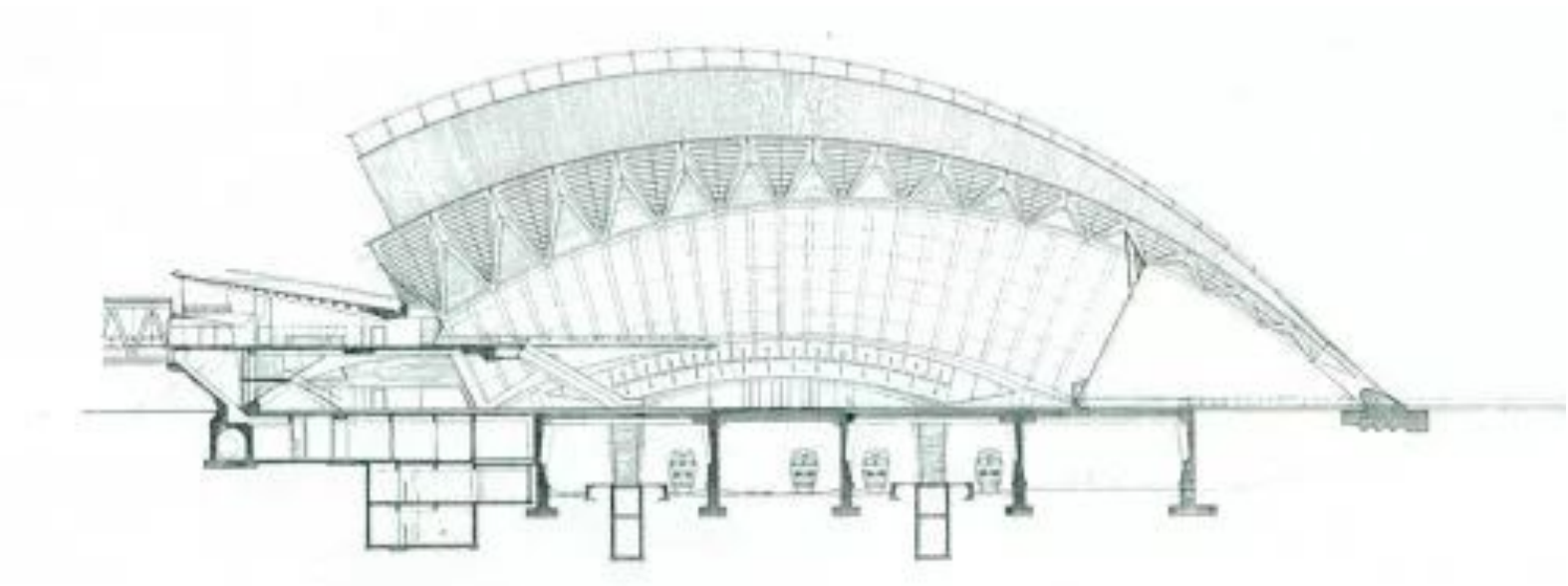
- The Lyon-Saint-Exupery, initially called Satolas station is the terminus of the TGV trains connecting the airport with the city of Lyon, 24 kilometers south, the first airport that connects directly to the European System of Trains High Speed.
- The structure of almost forty meters high steel and concrete is the metaphor of a huge bird that stretches out its wings, covering or protecting the railway.
- . As in other structures of the architect, the movement is present in the profile and arrangement of the elements of it, its shape also refers to many of the sculptures of Calatrava as “Bird” and “Bird II”.
- Arriving by car you enter the Main Hall through a “Gateway” formed by a concrete V-shaped abutment that join the ends of four steel arches. The center pair of arches follow the line of the roof to form a spine, the outer curved beams span over two glazed symmetrical concourse wings.



Lyon Satolas TGV Station, France

- In the triangular Main Hall the central spine is formed by three arches braced together by diagonal beams. Two large cantilevered balconies penetrate the space. The adjoining concrete service building is fitted with a steel and glass window wall that overlooks the Main Hall.
- The spine is supported by a concrete mass on the east and two supports, integrated with lift towers, on the west. The uppermost arch of the spine is a steel box of triangular section while the two lower arches are composed of steel tubes. The cross bracing members vary in size and are assembled four by four along the central tubes.
- From the Main Hall, where all the station's and airport services are positioned, two vaulted glass and steel concourse wings connect to the train platforms. Cast on site concrete elements support the platform roof and visually complement the roof modules in the main terminal area. The roof is either glazed or filled with prefabricated concrete sections.

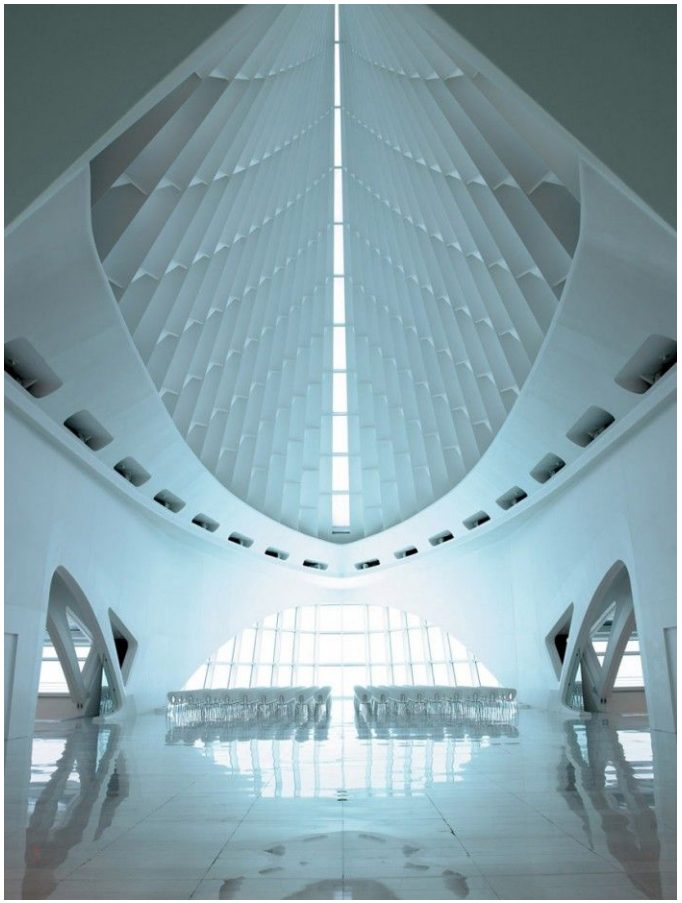
Lyon Satolas TGV Station, France



Milwaukee Art Museum, USA

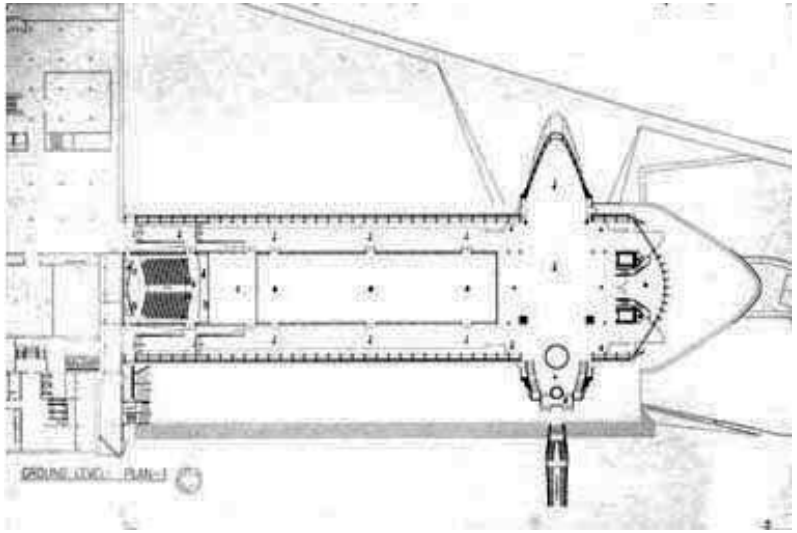
Milwaukee Art Museum, USA

- The Milwaukee Art Museum, which overlooks Lake Michigan, was partially housed in a building designed in 1957 by Eero Saarinen as a war memorial.
- Further exhibition space was created in 1975 by David Kahler's addition that extends to the water's edge and effectively creates a plinth on the axis of the Saarinen building.
- The brief stipulated a new grand entrance, a point of orientation for visitors, and a redefinition of the museum's identity through the creation of a strong image. Calatrava proposed a pavilion-like construction, on axis with Wisconsin Avenue, the main street of central Milwaukee. Conceived as an independent entity, the white steel-and-concrete form is reminiscent of a ship and contrasts the existing ensemble in both geometry and materials.
- Being linked directly to Wisconsin Avenue via a cable-stay footbridge, pedestrians may cross busy Lincoln Memorial Drive on the bridge and continue into the pavilion. Drivers enter via an underground vaulted parking garage where pairs of canted concrete columns extend down the center of the garage, forming a skeleton-like series of elements shaped like the letter "V."



Milwaukee Art Museum, USA

- The pavilion features a spectacular kinetic structure, a brise-soleil with louvers that open and close like the wings of a great bird.
- At shore level, the expansion houses the atrium, gallery space for temporary exhibitions, an education center with a 300 seat lecture hall, and a gift shop. The 100 seat restaurant, placed at the focal point of the pavilion, commands panoramic views onto the lake.
- The Milwaukee Art Museum expansion incorporates multiple elements inspired by the Museum's lakefront location. Among the many maritime elements in Calatrava's design are: movable steel louvers inspired by the wings of a bird; a cabled pedestrian bridge with a soaring mast inspired by the form of a sailboat and a curving single-story galleria reminiscent of a wave.



Milwaukee Art Museum, USA

Norman Foster (born 1 June 1935)

- Born in 1935 in Manchester, England, Sir Norman Foster is an award-winning and prolific British architect known for sleek, modern designs of steel and glass with innovations in contouring and inner space management.
- He was part of the architectural group Team 4 before branching off on his own to form what would eventually be known as Foster + Partners.
- Foster earned acclaim for his design of the Willis Faber & Dumas headquarters in the early '70s and was later responsible for the updated Reichstag in Berlin after the reunification of Germany as well as the Hearst Tower in New York City.
- His design practice has overseen an array of heralded structures around the globe.

American Air Museum, Cambridge, UK

American Air Museum, Cambridge, UK

- The brief for the Air Museum sought to create a building that would commemorate the role of the American Air Force in World War II and the thousands of airmen who lost their lives. It was also to provide the optimum enclosure, in terms of humidity levels and UV protection, for the conservation of the B-52 and twenty other aircraft dating from World War I to the Gulf War.

- The dimensions of the B-52 (a 61m wingspan and 16m-high tail fin) established the buildings height and width, and provided the principle axis through which the Museum is entered.
- Enveloped by a single vaulted enclosure, the buildings drama comes from the arc of this roof - engineered to support suspended aircraft - and the sweep of the glazed southern wall overlooking the runway. In addition to this fully glazed elevation, a continuous strip of glass around the base of the vault washes the interior in daylight. The result is a light and open space, despite the fact that the structure is partly sunk into the ground.

Stansted Airport, London

Stansted Airport, London

- Stansted Airport challenged all the rules of airport terminal design. It went back to the roots of modern air travel and literally stood conventional wisdom on its head.
- The earliest airport buildings were very simple: on one side there was a road and on the other a field where aircraft landed into the wind. The route from landside to airside involved a walk from your car through the terminal and out to your plane, which was always in view.
- Stansted attempted to recapture the clarity of those early airfields, together with some of the lost romance of air travel.

Stansted Airport, London

- From the traveller's point of view, movement through the building is straightforward and direct - there are none of the level changes and orientation problems that characterise most airports.
- Passengers progress in a fluid movement from the set-down point through to the check-in area, passport control and departure lounges, where they can see the planes. From there, an automated tracked transit system takes them to satellite buildings to board their aircraft. This degree of clarity was achieved by turning the building 'upside down', banishing the heavy environmental services usually found at roof level to an undercroft that runs beneath the concourse. The undercroft also contains baggage handling and was able to accommodate a mainline railway station, which was integrated into the building late in the design process.

Stansted Airport, London

- Service distribution systems are contained within the 'trunks' of the structural 'trees' that rise from the undercroft through the concourse floor. These trees support a roof canopy that is freed simply to keep out the rain and let in light. Entirely daylit on all but the most overcast of days, the constantly changing play of light gives the concourse a poetic dimension and also has significant energy and economic advantages, leading to running costs that are half those of any other British terminal. Energy efficient, environmentally discreet within its rural setting, technologically advanced yet simple to use and experience, Stansted has become a model for airport planners and designers worldwide.

Stansted Airport, London

- By contrast, the roof of Stansted is unique."Its design is dedicated to natural light," explains Foster "with a proportion of the surface glazed to let sunlight in, and 'daylight reflectors' inside that bounce the light back up on to the sculptural shape of the ceiling. At night, artificial light achieves the same effect.“
- To achieve this, Foster turned the conventional terminal model upside down and placed all the heavy equipment underneath the main concourse."We were able to open up the roof to sunshine and light. The results were not just great savings in energy, but also a far more poetic spatial experience." He repeated this approach in later terminal projects, including the ones in Hong Kong or Beijing the roof lights played an integral role again.

Greg Lynn (born 1964)

Greg Lynn was born in 1964 in Ohio. He graduated from Miami University of Ohio with degrees in both architecture (Bachelor of Environmental Design) and philosophy (Bachelor of Philosophy) and later from Princeton University where he received a graduate degree in architecture (Master of Architecture).

Greg Lynn was an innovator in redefining the medium of design with digital technology as well as pioneering the fabrication and manufacture of complex functional and ergonomic forms using CNC (Computer Numerically Controlled) machinery.

The buildings, projects, publications, teachings and writings associated with his office have been influential in the acceptance and use of advanced materials and technologies for design and fabrication.

Embryological house, USA

- The dynamic forms of the Embryological House (1997–2001) comprise flowing and vector-based surfaces, sometimes referred to as “blob” architecture, made possible through animation software.
- Through the Embryological House Lynn rethinks the notion of the manufactured house, moving from the modernist idea of a form based on modules to a form based on potentially unlimited iterations derived from a basic form, or “primitive.”
- His goal is to design and manufacture houses that exhibit variety based on shared regulating principals—a “mass customization” to allow the mass production of individually unique products. Lynn expects the new capabilities of computer-aided design and computer-numerically-controlled (CNC) manufacturing to support this kind of design process.

Embryological house, USA

- *Embryological House* (1997-2002), a major work by American architect Greg Lynn, is a born-digital project. The artist set a number of goals for this conceptual work:
- • rethink the idea of house typology beyond the modernist "kit of parts" model to an organic, flexible, genetic/generic prototype from which an infinite number of iterations can be generated;
- • extend the interplay of "generic" and "variation" implied in this rethinking to notions of product "branding" and the satisfaction of individual desire through consumer-specific, unique versions of the product;
- • push the capabilities of existing automated manufacturing technologies for the production of non-standard architectural forms.
- The project was developed with geometrical modeling and character animation software (specifically MicroStation and Maya), as well as digitally-generated physical mock-ups. The use of multiple software applications to develop the work's forms is inherent to Lynn's creative process.
- The Canadian Centre for Architecture (CCA) houses the physical mock-ups and digital files associated with the project. And while a number of its iterations have been sufficiently developed to allow their construction potential to be tested to a certain extent, a constructed architectural version has yet to be built. *Embryological House* remains a conceptual project as originally designed—existing entirely in digital format.

References

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