

# Modern Architecture

## Antoni Gaudi



**Antoni Gaudi, "Church of the Holy Family"**  
Barcelona, Spain. 1882 to 1926.



He was a Spanish artist whose work has been categorized as **Art Nouveau**. But his adoption of biomorphic shapes rather than orthogonal lines put him in a category unto himself. His church of the Holy Family) has an almost hallucinatory power to it as a result of the integration of the arch, nature's organic shapes, and the almost fluidity of water that often appears in his designs.



**Louis Sullivan,**  
Carson, Pirie, Scott  
& Company, Chicago,  
1903-04.



## Louis Sullivan

He was an American architect known for his early steel-frame designs for skyscrapers and for his influential dictum "**Form follows function.**"

**Sullivan** developed a unique system of ornament, which he applied as the first architect to define a rational skyscraper aesthetic and bring bank design into the 20th century. He pioneered the attempt to remove historical reference from American architecture, the creation of which he saw as a social as opposed to an artistic act. **Sullivan** was the teacher of **Frank Lloyd Wright**, whom he employed for a time.

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Name: \_\_\_\_\_

1. Make a sketch of the exterior shape of Antoni Gaudi, Church of the Holy Family from Barcelona, Spain. What kind of mood/feeling do you get from it and why? (2)

mood/feeling:

why:

2. What was the modern architect Louis Sullivan's influential dictum? (1)

3. What kind of reference did architect Louis Sullivan attempt at removing from American architecture? (1)



Frank Lloyd Wright, E.J. Kaufmann house (Falling water) for E.J. Kaufmann at Mill Run, Pennsylvania, 1936.



## Frank Lloyd Wright

He is considered the most influential American architect of the 20th century. His legacy is an architectural style that departed from European influences to create a purely American form, including the idea that buildings can be in harmony with the **natural environment**.

The Falling water house was designed according to **Wright's** desire to place the occupants close to the natural surroundings, with a stream running under part of the building. The construction is a series of balconies and terraces, using stone for all verticals and concrete for the horizontals.

4. The architect Frank Lloyd Wright believed the idea that buildings could be in harmony with what? (1)

5. What runs under Wright's Falling-water house for E.J. Kaufmann? (1)

6. Look at Wright's Fallingwater house. What kind of mood/feeling do you get from it and why? (2)

mood/feeling:

why:



## Gerrit Rietveld

He was a Dutch designer, architect and cabinetmaker. In 1911, he started his own furniture factory, while studying architecture. **Rietveld** became a member of the '**De Stijl**' movement and in 1924 he designed the **Schroeder house**. The house is guided by geometric forms and is asymmetrical.

**Gerrit Rietveld,  
Schroeder House,  
Utrecht, Netherlands,  
1923-24.**

7. Look at Gerrit Rietveld's Schroeder House from 1923-24 and describe what kind of mood/feeling do you get from it and why? (2)

mood/feeling:

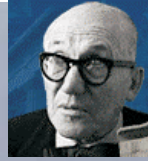
why:

# Modern Architecture

## Le Corbusier

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Name: \_\_\_\_\_



He was a Swiss-born French architect and writer. He was the most powerful advocate of the **modernist** school, he designed numerous functional concrete buildings.

**Le Corbusier** lifted the bulk of the structure off the ground, supporting it by reinforced concrete stilts. These stilts provided the structural support for the house, allowed him to have a free façade, meaning non-supporting walls that could be designed and an open floor plan, meaning that the floor space was free to be configured into rooms without concern for supporting walls.

1. Make a small sketch of Le Corbusier's Villa Savoye structure. (1)

2. Look at the exterior of Le Corbusier's Villa Savoye structure from 1926-30 and describe what architectural element does he use for the open air floor plan? (1)

**Le Corbusier, Villa Savoye, Paris, 1926-30.**



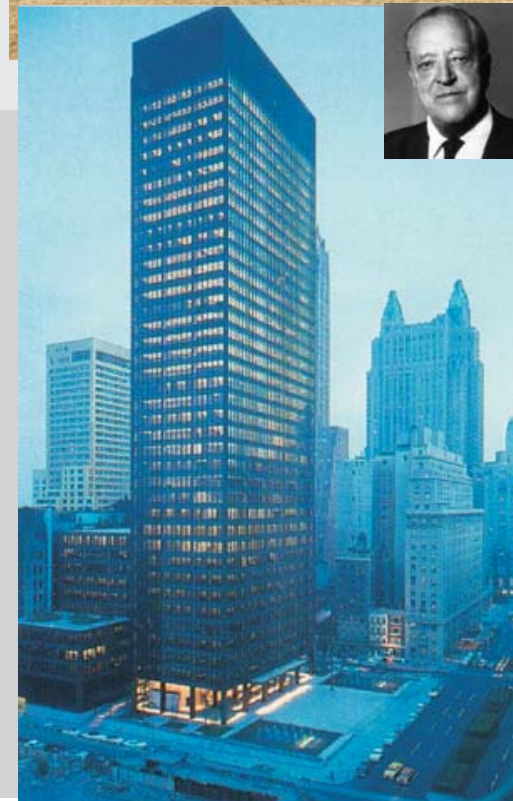
## Mies Van Der Rohe

He was a German-born American architect considered a founder of the **International Style**. His steel-frame and glass buildings include the **Seagram Building** in New York City.

**Van Der Rohe:** "Skyscrapers reveal their bold structural pattern during construction. Only then does the gigantic steel web seem impressive. We can see the new structural principles most clearly when we use glass in place of the outer walls, which is feasible today since in a skeleton building these outer walls do not carry weight. The use of glass imposes new solutions."

**Mies Van Der Rohe, Seagram Building, L. & Philip Johnson, New York City, 1958.**

3. What kind of material does the architect Mies Van Der Rohe use to create a bold structural pattern on the outer walls of his design for the Seagram Building in New York City? (1)



## Eero Saarinen

This is a highly distinctive building with colonnades of tipped and tapered columns on its two long facades, a gracefully curving roof hung between them, and a pagoda-like control tower nearby. **Saarinen** had a unique series of problems: he was designing a complete new airport. The main terminus is a single, compact structure, not entirely free from formalist tendencies. The final design concept arrived at was a suspended structure, 'high at the front, lower in the middle, slightly higher at the back', generated by a rectangular plan. The building is thus capable of lateral extension.

4. What architectural element does Eero Saarinen use to create a sense of movement in his design for the Dulles Airport in Virginia? (1)

5. How does Piano & Rogers create a sense of movement in their design for the exterior of the Centre Georges Pompidou in Paris? (1)

6. What traditional architectural form does I.M. Pei use in his design for the Louvre structure from 1989? (1)

7. Select one piece of modern architecture (from this handout) that you think is the most artistically successful and explain why. (2)

## Piano & Rogers

The "Centre Georges Pompidou" is a massive structural expressionist cast exoskeleton, "exterior" escalators enclosed in transparent tube. The construction system is entirely high-tech steel and glass and cost just \$100,000,000.

## I. M. Pei



He frequently works on a large scale and is renowned for his sharp, geometric designs. Spectacular in concept and form, they provide a startling reminder of the audacious ability of modern architects to invigorate and re-circulate traditional architectural forms. The main Pyramid is basically a complex inter-linked steel structure sheathed in reflective glass. The construction system is a series of glass and steel rods and cable.

Eero Saarinen, Dulles Airport: Virginia, 1960-61.

