

A M E R I C A N A R C H I T E C T U R E



American architecture is the amalgamation of many disparate and sometimes contradictory transplanted cultures: from northern, central and southern Europe, from Africa, from Latin America and from the Orient.

Four periods of development are distinguished in the history of American architecture:

- The colonial period: 1500 – 1783;
- Nationhood and after: 1783 – 1815;
- Innovation and tradition: 1890 – 1920;
- The modern movement: 1920s – 1970s.

The Colonial Period: 1500 to 1783

Each group of colonists erected buildings reminiscent of those in their homeland, resulting in a highly regional architecture based on the *vernacular* building traditions (those of the common people) of Spain, France, Sweden, The Netherlands, and England. Moreover, two separate regional English colonial architectures resulted from the difference in social, economic, and religious objectives of English settlers of the northern coastal colonies and English settlers of the southern coastal colonies.

During the colonial period, America lacked the kind of architecturally educated patrons who might sponsor the grand and formal styles of architecture then current in European countries. It also lacked the money to make that architecture possible.

By the start of the 18th century, all the colonies along the Atlantic seaboard had come under English control and a more uniform culture began to develop.

Architecture in the English colonies also underwent a dramatic change, moving away from ethnic vernacular traditions toward a stylish emulation of the fashionable architectural details used for public buildings and country houses in Britain in the late 1700s.

It made possible the use of sophisticated classical ornament in England and the ornament that began to appear in the colonies. This classically based architecture of the 18th century is called Georgian, in reference to the successive British monarch named George who reigned from 1714 to 1830. Hundreds of Georgian houses survive in Philadelphia. In New England, Puritan restraint still influenced Georgian architecture, as in the simpler *Jonathan Trumbull House* (1740) in Lebanon, Connecticut.

Nationhood and after: 1783 to 1815

The years from about 1780 to 1820 are often called the Federal period and the architecture of this time Federal or Federalist, signifying that a conscious search took place for new forms that would mark a break with English influences. Some architectural designers made a moderate break from England, whereas others argued for radical change.

Charles Bulfinch (1763 – 1844). He is considered to be one of the main representatives of that period. Bulfinch designed State House, Boston; Capitol, Washington, D.C. His early travels in Europe influenced his style toward the classical architecture of France and Italy. He designed churches in New England; the State House at Hartford, and the Massachusetts State House on Beacon Hill.

Bulfinch influenced New England domestic architecture – he was the first to use curved staircases. He took over as architect of the Capitol, Washington, D.C. *Capitol* – the largest building in Washington, D.C., in which the United States Congress meets. The Capitol dominates the skyline of the city of Washington; only the Washington Monument is higher.

Thomas Jefferson(1743 – 1826).

Founding Father Jefferson of Virginia took a very different view, however; he detested Georgian architecture, which he associated with colonial rule.

Jefferson heavily criticized the magisterial buildings of Williamsburg, Virginia, formerly the colonial capital.

The Roman architecture possessed a clarity and mathematical precision in its proportions that appealed to Jefferson's logical and practical mind. Jefferson felt architecture exerted a powerful social and educational influence on its users, so when he began to design the *University of Virginia* in Charlottesville in 1817, he turned to Roman forms. For each of the university's ten instructional subject areas, he designed a separate pavilion, patterned after a Roman temple. Each pavilion used a different architectural style or order (the classical system that governed the shape of columns and other building parts).

In that period *James Hoban* (1762 – 1831) made a valuable contribution to the history of American architecture. In 1792, when the federal capital was being laid out in the District of Columbia, he submitted the winning design for the presidential mansion, which later came to be called the *White House*. White House is the mansion of the president of the USA in Washington, D.C., a white building in America colonial style. It contains reception and dining rooms, living quarters for the president, the president's Oval Office, and offices for the presidential staff.

Two interconnected processes influenced the development of American architecture in the beginning of 19th century: *the Greek Revival* and *the Gothic Revival*.

The American Greek Revival began about 1818. As a result of a desire for allusions, such as Jefferson had made by modeling the *Virginia State Capitol* on a Roman temple, many government buildings, as well as banks and other commercial buildings, were based on classical models. The government of ancient Greece was felt to be a fitting symbol for the developing American democratic system. A Greek temple façade on the 19th-century banks and commercial buildings was intended to convey the trustworthy principles and the stability of the business.

The Greek Revival style soon received a challenge from the Gothic Revival, a romantic style of architecture that favored darkness and the suggested mystery of medieval times.

Landscape architect and writer *Andrew Jackson Downing* (1815 – 1852) promoted this approach to both building and landscape design in America, starting in the 1840s. Downing produced several highly influential books in which he presented model designs for houses based on picturesque medieval houses and early Renaissance Italian villas.

Another prominent architect of this period was *Alexander Jackson Davis* (1803 – 1892). He designed many buildings in the Greek Revival Style and in the earlier fanciful stage of the Gothic Revival Style. In the former style are the Sub Treasury, N.Y.C. (derived from the Pantheon), and the old state capitols at Springfield, Ill., and Indianapolis.

But in the beginning of the 19th century American architects faced the problem, which was inherent with references to the past in architecture: industrial development required new buildings for which no precedents existed. Architects had not been trained to systematically analyze new functional needs and create new building types arising from those functions.

Industrial development had two significant impacts on construction: mass production of new building materials such as iron, and railway shipment of those materials across the continent. Factories mass-produced a range of identical cast-iron parts that could be assembled into a finished building. By the 1850s, nearly identical buildings were going up in many large Eastern cities, their parts supplied by a handful of producers concentrated in New York, Baltimore, and other Eastern cities. Sections of precast iron were used even for the new dome of the U.S. Capitol (1851 – 1864) in Washington, D.C.

With the rapid development of new towns and cities in the Midwest, the traditional method of constructing small structures – for example, houses, churches, and business building – had become impossibly slow. With the mechanized production of iron nails, the method of wood-framed construction essentially replaced the traditional heavy timber frame. The new frames went up so fast that a house could be built in one day, and the frames appeared so light in weight that the term *balloon-frame construction* was soon coined. Historians associate Chicago, in particular, with the invention of the balloon frame.

The Brooklyn Bridge in New York City perhaps best demonstrates the scale of building made possible by the rapid expansion of American industry and by American ambition. Designed by John Augustus Roebling (1806 – 1869) in the 1850s and 1860s, the Brooklyn Bridge became the largest suspension bridge in the all world upon its completion in 1883.

All those changes in social and political life of the country caused an appearance of two new stylistic modes in architecture – *Second Empire* and *High Victorian Gothic*, which dominated in the two decades following the Civil War.

Architecture in the Second Empire Style, patterned after work at the time in Paris, represented classical design. This ornate style featured layers of classical columns and abundant figural sculpture. Buildings were capped by multiple Mansard roofs (roofs with four sloping sides). Excellent examples in the United States include the Renwick Gallery (1859 – 1874) in Washington, D.C., designed by James Renwick.

James Renwick (1818 – 1895) was chosen an architect for St. Patrick's Cathedral in 1853. In Washington he built the original Corcoran Gallery and the Smithsonian Institution.

High Victorian Gothic architecture, inspired by contemporary work in England and by the critical writing of John Ruskin, appealed to an American desire for more picturesque variety in building styles.

In connection with the rapid development of American architecture, it is also necessary to remember the achievements of Henry Richardson.

Henry Richardson (1838 – 1886) managed to assimilate various European influences and create a highly personal and individual style. He was a major representative of *romanticism* in American architecture and was noted for his revival of *Romanesque* design. *Trinity Church* in Boston (1872 – 1877) was his first monumental work, its French Romanesque design was a departure from the Gothic Revival that controlled contemporaneous American architecture. In it and in subsequent works Henry Richardson developed a free and strongly personal interpretation of Romanesque design – *Richardson Romanesque*, spread and won many followers, exerting a great influence upon the building arts of the period.

A great contribution to the architecture of the 19th century belonged to Robert Mills and Thomas Walter.

Thomas Ustick Walter (1804 – 1887) was an architect of the *US Capitol* at Washington. To the old building of Charles Bulfinch he added the two wings for the Senate and the House of Representatives. He rebuilt the western front and added the library.

Robert Mills (1781 – 1855) was a designer of the *Washington Monument* (1836) – a structure on the Washington Mall, over 500 feet tall, built in the 19th century in honor of George Washington. In shape it is an obelisk – four-sided shaft with a pyramid at the top.

Innovation and tradition: 1890 to 1920

American architecture in the years between 1890 and 1920 was dominated by academically trained architects, many of whom had studied in Europe. They tempered their interest in the past with an ability to design buildings that fully accommodated the needs of their time. They received commissions from industrialists who had amassed enormous fortunes before the institution of personal income tax in the United States in 1913. These **clients** built **sumptuous** residences, both in fashionable residential neighborhoods of industrial cities and in exclusive summer enclaves. These grand houses were objects to convey “conspicuous consumption”, as American economist Th. Veblen would soon call the **ostentatious** display of wealth at that time.

Public Buildings. The spirit of grandeur in building prompted many cities to erect grand public buildings as well. The *Boston Public Library* (1887 – 1895), designed by the New York architectural firm of *McKim, Mead, and White*, provided a model for this kind of public grandeur. Inspiration for the library's sumptuous entry staircase and voluminous upstairs reading room came from ancient Roman and Italian Renaissance sources. Although McKim, Mead, and White received many commissions for city townhouses and for summerhouses in the country, they specialized in major urban buildings.

One of their best was the spacious *Pennsylvania Station* (1902 – 1910) in New York City. The train station's soaring public spaces provided a majestic gateway to the city: it was demolished in 1963, however, to make room for Madison Square Garden.

Prairie Houses. Another entirely new American building type was the suburban, detached single-family residence. This building type became the focus of attention of *Frank Lloyd Wright.*

Frank Lloyd Wright (1867 – 1959) is widely considered the greatest American architect. He built a series of residences with low horizontal lines and strongly projecting eaves that echoed the rhythms of the surrounding landscape, it was termed his *prairie style*. Wright's approach to design was closely associated with that of the Arts and Crafts movement, in which the architect designed not only the house but also the interior detailing. He was the first architect in the USA to produce open planning in houses, in a break from the traditional closed volume.

Frank Lloyd Wright's prairie style work, published in Germany in 1911, had exerted a strong influence on the French and German architects who developed the International Style. Their modernism, in turn, influenced Wright himself, as demonstrated in portions of his best-known building *Fallingwater* (1935 – 1938), located near Pittsburgh, Pennsylvania.

Office Towers. An American business grew, the need for urban office space expanded. The invention of the skyscraper in America came as an answer to crowded city space and high land costs. It was engineered and invented by a succession of architects who realized that steel-framed buildings did not need to have one story piled atop another for support, but walls would be fitted onto a steel frame. The invention of structural steel made possible the skeleton steel frame, and together with the elevator, made possible the invention of the skyscraper.

The first modern steel-frame buildings were designed by *Louis Henry Sullivan*.

Louis Henry Sullivan (1856 – 1924) was a leading figure in the so-called *Chicago school* of architecture. His designs for skyscrapers mark him as the father of modernism in architecture. Among his designs is the *Gage Building*, Chicago.

During the 1920s New York skyscrapers reached their greatest heights: *the Chrysler buildings* (1929), 77 stories, and *the Empire State Building* (1930), 102 floors.

Besides the invention of skyscrapers, this period is famous for creation of *Golden Gate Bridge* – a long suspension bridge across the Golden Gate, a strait that connects San Francisco Bay with the Pacific Ocean; for decades after it was opened in the 1930s, it had the longest span of any suspension bridge in the world and *Lincoln Memorial*, which was built by Henry Bacon (1866 – 1924) in Washington, D.C. The memorial contains a statue of Lincoln seated, stone engravings of Lincoln's second **inaugural** address and his Gettysburg Address.

The Modern Movement: from 1920

From 1919 on, a small group of architects in Europe had developed an extremely lean and functionally efficient architecture, stripped of virtually all ornament.

Best known among them is Irving Gill (1870 – 1936). He was important for introducing a severe, geometric style of architecture in California and for his pioneering work in developing new construction technology. Gill evolved an architectural style based on simple geometric volumes of whitewashed reinforced concrete. He was among the first American architects to eliminate ornamentation from his structure (Wilson Action Hotel – 1908, Dodge House – 1916).

The building's lack of historical ornament, its smooth and polished stone surfaces, and its large planes of glass closely link it with the European modern movement, as do its upper offices in a tall, flat-topped slab with bands of windows. The first modern European movement to have a wide influence in America was *art deco*, with its simplified shapes and geometric ornament.

Functionalism became the most prevailing style of buildings during much of the 20th century. It is an approach to architecture that adopts the design of a building or other structure to its future use.

Functionalist buildings use steel frames, and glass and concrete, and simple forms. Louis Sullivan was a notable advocate of functionalism.

Postmodernism.

Postmodern architecture ranges from work that closely resembles the International Style, with its elimination of traditional ornament, to work that is based on ancient or Renaissance prototypes. Individual postmodern architects have not limited themselves to a single style. This period in the development of American architecture is famous for the works of Richard Meier (1934) – High Museum of Art, Atlanta, and I.M. Pei – National Gallery, Washington, D.C.

Deconstructivism.

Some architectural theorists developed the idea of deconstruction in architecture in the late 1970s. In theory and in early designs, deconstruction involved the dismantling of architectural elements and the rearrangement of their constituent parts. In these designs architects did not concern themselves with the physical laws of the real world, and most of their early proposals were unbuildable. Later on, actual buildings resulted from some of these ideas, and the architects had to address the realities of construction and the weight of materials. The resulting buildings were typically disjointed in form, and they dramatically contradicted standard conventions of design.

LIST OF TERMS

art deco (art moderne) – a style of design popular during the 1920s and 30s. It is characterized by long, thin forms, curving surfaces, and geometric patterning. The practitioners of the style attempted to describe the sleekness they thought expressive of the machine age. The style influenced all aspects of art and architecture, as well as the decorative, graphic, and industrial arts. Works executed in the art deco style range from skyscrapers and ocean liners to toasters and jewelry.

deconstructivism – involves the dismantling of architectural elements and the rearrangement of their constituent parts; most designs in this style contradicts the physical laws and unbuildable.

Georgian architecture – the various styles in the architecture, interior design, and decorative arts of Britain during the reigns of the first four members of the house of Hanover, between the accession of George I in 1714 and the death of George IV in 1830. The new generation of architects, theorists, and wealthy amateurs set out to reform architecture in accordance with the classical tenets of the Italian architect Andrea Palladio. The second important Georgian architectural style is Neoclassicism.

Neoclassicism – an influential movement that began in 1760s. It arose partly as a reaction against the sensuous and frivolously decorative Rococo style that had dominated European art from the 1720s on. But an even more profound stimulus was the new and more scientific interest in classical antiquity that arose in the 18th century.

International Style – rejection of historical styles and emphasizing establishing as the pure utilitarian functionalism. International Style architects favored enclosed spatial volumes over opaque enclosing materials, smooth industrial finishes (especially metals and glass), and open, nonsymmetrical plans without any dominant axis.

postmodern architecture – ranges from work that closely resembles the International Style, with its elimination of traditional ornament, to work that is based on ancient or Renaissance prototypes

Richardsonian Romanesque – a free and strongly personal interpretation of Romanesque design by Henry Hobson Richardson – famous American architect.

Second Empire Style – also called Napoleon III, Second Empire Baroque, or Beaux-Arts Style. It is an architectural style that was dominant internationally during the second half of the 19th century. The style was solidified into a recognizable compositional and decorative scheme by the extension designed for the Louvre in Paris.