

HUMANITIES INSTITUTE

NORTH AMERICAN ARCHITECTURE

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Overview Architecture has always been more than simply providing shelter from the elements or storage for one's chattels. The design, materials, and workmanship have attested to the diversity of human accomplishment, and they also reflect ingenuity and resourcefulness. Further, the sheer diversity of origins and the desire to maintain a connection to one's home country by means of the architecture has resulted in an often dizzying mélange or pastiche of competing cultures. Further, the tension between the "build to for permanence" vs "build for impermanence and perpetual change" is often jarring, particularly in late 20th-century suburbs and strip malls. In North America, as in other countries, architecture communicates a message (or messages) and provides the opportunity for a multi-faceted discussion of cultural contexts, the availability of resources, technology, tools, and the prevailing beliefs, values, and dreams. Architects design buildings and spaces in order to elicit certain desired responses in the people who use them, which sets up yet another fascinating area of study; that is, the psychological and sociological impact of architectural design on human behavior and beliefs. In America after the arrival of the Europeans, mythologies and dreams of infinite opportunities for self-actualization have abounded, and the prevailing notion that a person can actually reinvent himself or herself has been reflected in much of the architecture, often with stunning results.

PreHistory

Clovis culture (18,000 – 8,000 BC): The Clovis people inhabited caves which they decorated with cave paintings and carvings. The petroglyphs that remain today correspond to animals, people, and geometric shapes and spirals.

Classical

Southwest Pueblo (1200 BCE – 1300 AC): The Pueblo Indians constructed elaborate cliff dwellings as well as structures using adobe. The designs reflected a view of well-organized communal living and mutual support.

Eastern Woodlands (1000 BCE – 1000 AD): The civilizations of the Eastern Woodlands were known for creating towns consisting of log buildings which they called long houses. In the swampy parts of the southeast, they built houses on stilts. The long houses were often used for ceremonial purposes, while the storage and sleeping quarters were more informal.

Mississippian (800 – 1500 AD): The builders of vase mounds, low pyramids, and platforms were masters of large-scale structures along with elaborate drainage systems. For the most part, the designs incorporated straight lines and clear geometrical shapes such as in the structures known as Cahokia near St. Louis, Missouri. However, a dramatic exception occurs at the Serpent Mound in Ohio which takes the form of what appear to be sine waves, or, as is commonly believed, the shape of a snake.

Colonial (Early Modern)

Dutch Colonial: The Dutch settled in what is now New York, first along Long Island and then far up the Hudson and Mohawk Rivers. They built forts, trading / commercial centers that utilized a great deal of stone and brick, following models in Holland, Belgium, and Flanders.

Spanish Colonial: Consistency with Spain was very important to the early conquistadores and priests who settled the Spanish-dominated parts of North America. By incorporating the baroque style of the most impressive cathedrals of Spain, they were able to communicate a message of power, wealth, and an unassailable connection to the monarchy in Spain. Structures in the Spanish-controlled part of North America included missions, cathedrals, churches, governmental buildings, and homes.

French Colonial: For the French, it was a matter of deep importance to send the message that French culture, language, and way of life were in all ways superior to all others. While no French architects in America attempted to copy of Versailles in America, the French did leave a very unique style in New Orleans and also in Quebec. In the colonial era, the French built forts, trading centers, governmental centers, and churches which often echoed the chateau styles and also the Gothic cathedrals such as Notre Dame.

New England Colonial: The settlers constructed homes using oak frames and clapboard siding which were copied from English country and town houses. The fact that the settlers opted for the familiar rather than inventing new forms certainly suggests a lingering sense of affiliation if not outright nostalgia for one's origins. At the same time, the American colonial styles began incorporating Neoclassical elements which suggests a break from tradition and a need to legitimize this grand new experiment.

Georgian: The primary function of the early use for the Georgian style during Colonial times was to indicate class and connections to wealth, titles, and property in England. The incorporation of the Georgian styles also reflects an admiration for George III who was a champion of progressive architecture, focusing on labor-saving hygienic innovations. The Baroque followed the examples of Sir Christopher Wren. The Palladian was typified by balance and symmetry, as in the works of Renaissance architect Andrea Palladio. The most famous example is The White House in Washington, D. C.

Nineteenth Century

Neoclassical: Federal Style: The new nation was eager to use architecture to express its idealistic vision. Used primarily for government buildings, the Neoclassical Federal Style suggested planning, symmetry, and grandeur of vision. The connection to the Greek and Roman foundations of Western civilization were expressed in form that communicated the idealistic visions expressed in Plato's Republic and Aristotle's Nicomachean Ethics. Charles Bullfinch and William Thornton designed many of the buildings in Washington, D.C., most notably the U.S. Capitol Building and the Massachusetts State House. In addition to symmetrical buildings, they also contributed to the design of the streets, drainage systems, and thoroughfares of the nation's capitol.

Neoclassical: Greek Revival: Thomas Jefferson and Benjamin Latrobe were advocates of the Greek Revival Neoclassical style which liberally adopted many of the artistic elements of the temples and buildings of ancient Greece. Most notable were domes, pillars, and the proportions of the rooms, doors, and windows. Monticello is an example of the Greek Revival style.

Carpenter Gothic: Taking advantage of lumber and the abundance of skilled labor, along with a prevailing philosophy that used decoration and adornments to communicate an optimistic view of life, and the celebrate one's personal achievements and material success, architects developed a uniquely American style, the Carpenter Gothic. Highly stylized wooden ornamentation took the form of "gingerbread" (wood filigree) which was created using the "scroll saw." The design is considered a naïve style which incorporated some of what people believed to be characteristics of Gothic style, including elaborate trim, turrets, spires, and pointed arches.



Carpenter Gothic

Late Gothic Revival: Revivals of older styles are often a response to modernity and a pulling back from some of the more disturbing aspects of industrialization. The Gothic Revival in architecture celebrates prosperity and the ability to achieve self-expression. Yet, at the same time, it represents the desire to establish continuity with a Romantic, medieval, mysterious time (as opposed to the positivistic rationalism of the new nation (reflected in Federalist Neoclassicism). Gothic is romantic, expressive, irrational, and asymmetrical. Hallmarks of the style include diamond panes, oriel windows, steep roofs, Gothic decorative motifs (cusps, arches, trefoils), and an abundance of “gingerbread.”



Gothic Revival

<https://architecturestyles.org/gothic-revival/>

Second Empire: Popular during the middle part of the 19th century, “Second Empire” adopted French architectural details such as the mansard roof. The message communicated by the design was that of a connection to the cultural values of the French, and an assumed sophistication. In addition to the use of mansard roofs and rounded windows, there was a great deal of wrought iron.



Sharon House, Davenport, Iowa

http://www.livingplaces.com/architecturalstyles/li/Second_Empire-540x405.jpg

Frontier Architecture: The Homestead Act, which deeded 160 acres to people who constructed a home on the property, resulted in a boom in functional homes that would serve as shelter, and which took full use of local building materials, which ranged from field stone to adobe and logs. Frontier designs were principally functional, but they also made the gesture to communicate the goal of claiming as their own the American frontier. Thus, it was often the case that buildings were designed to look many times their actual size by means of false fronts. Perhaps the most important building in the frontier towns (besides the jail) was the train station, which was positioned in the middle of the country’s vascular system through which the life blood of commerce flowed.

Twentieth Century

Skyscrapers: (Early): People both embraced and resisted industrialization and the thrust toward modernism and all its attendant philosophical notions. Technology made new accomplishments possible, and where the tallest building in the town was typically a spire of a church or cathedral, in the new city, the churches were supplanted by the skyscrapers, the new “Cathedrals of Commerce.” The early skyscrapers were very functional, and had as a goal to lead the eye skyward.

Art Nouveau: In many ways, art nouveau represented a resistance to industrialization and the materials of factories and machines. The antithesis of mechanical and linear, art nouveau was characterized by a highly decorative, organic feeling with shapes that borrowed from nature. Characteristic of art nouveau was the presence of plants, flowers, vines, in wrought iron and stained glass. Art nouveau contained a blend of geometric and flowing forms and was often incorporated in the Arts and Crafts movement.

Art Deco: Deeply influenced by modernist art and the philosophical writings of the Futurists (namely the Futurist Manifesto by Marinetti), the Art Deco movement broke from past aesthetics, namely Revival movements and embraced simple, clean, and high-performance materials such as chrome, brushed

aluminum, and leathers. It embraced air travel and the automobile, and many building designs incorporated symbols and motifs that looked like propellers, etc. The French government sponsored a show in 1925 in Paris that showcased the new design. Named the Exposition Internationale des Arts Decoratifs et Industriels Modernes (1925), the show gave rise to the name, Art Deco. Because of the fascination with technological innovation, skyscrapers were a perfect location to incorporate the principles of Art Deco. Perhaps the most famous example is the Chrysler Building in New York, designed by William van Alen.

The International Style: Another prominent show influenced a generation of architects, who embraced the underlying ideas which had first appeared in Europe. The show, the International Exhibition of Modern Architecture, was held in 1932 at the Museum of Modern Art (MOMA) in New York. The show included only the purest examples of modernist architectures and they had to adhere to a set of principles. The most prominent characteristics were: 1) no ornamentation; 2) functional and logical floor plans; 3) balance rather than symmetry; 4) the prominent use of glass for the façade and steel for exterior support, with concrete for interior supports and floors. Prominent architects included Mies van der Rohe, Eliel Saarinen, and Gropius.

Naturalism: (Falling Waters): Frank Lloyd Wright, whom most writers consider the greatest American architect, transformed architecture with his naturalistic view of design. Based in Chicago, Wright was deeply influenced by Japanese architecture, which he incorporated into a concept of “organic architecture” which focused on developing a harmonious relationship between the parts of the building and its natural setting. He developed the famous “prairie houses” in which one can easily see the elements of Japanese bath houses and homes in the sense that they have low, wide profiles, low sloping roofs with long projections, and bands of windows. As his style developed, Wright began to include more Japanese and pre-Columbian art influences. He continued to include the environment, especially peaceful pools of water, and also the incorporation of spirals and circles, not only in homes but also in corporate spaces. His masterpiece is Fallingwater, located in Bear Run, Pennsylvania.

Corporate Modernism: Growing from the International Style, Corporate Modernism came to dominate architecture in the last half of the twentieth-century to the point that it almost became almost the only acceptable option. Mies van der Rohe designed the first steel and glass skyscraper, New York’s Seagram Building (1954-58), which is notable for its stark verticality, the curtain wall of bronze and glass, and a grid pattern (windows). The base consists of green travertine columns, all in a very minimalist style. The architecture communicates a message of powerful vertical projection to connect with soaring ambitions and strength. Avoiding the echoes of religious architecture that one might see in the spire-like Chrysler Building, Mies’s Seagram Building, and other examples such as the United Nations Building (designed by Le Corbusier) and the Inland Steel Building in Chicago, projected power, strength, austerity, and an almost Sparta-type warrior adherence to corporate mission.

Decorative Formalism: Not everyone agreed with the almost aggressive austerity of Corporate Modernism, even as they did wish to project through architectural design core values that informed a positive, almost utopian embrace of progress for progress’s sake and innovative technology as the driver of human prosperity and happiness. The architects embraced curvilinear forms that resulted in a formal expressiveness, with the goal of being simultaneously calming and euphoria-producing. Examples include Saarinen’s TWA terminal at New York’s JFK International Airport and Louis Isadore Kahn’s the Yale University Art Gallery, New Haven (1951-53); the Richards Medical Research Laboratories at the University of Pennsylvania in Philadelphia (1957-65); the Salk Institute for Biological Studies at La Jolla, in California (1959-65); and the Kimbell Art Museum in Fort Worth (1966-72).

Postmodernist Architecture: A backlash to the extreme forms of modernism which eschewed all ornamentation and was purely functional occurred in the 1970s, when the attempt to rehumanize public architecture occurred. It is useful to note that modernism in architecture tended to be utopian; for example, housing projects and large city projects were envisioned in an ultra-modern format, which would allow the maximum number of people to work, live, and interact in a very democratic way. Unfortunately, some public housing projects that were built using large modernist designs had the unfortunate destiny of becoming centers of crime and urban decay. One particularly notorious example was the 1955 Pruitt-Igoe

housing project in St. Louis, Missouri for which the architect, Minoru Yamasaki received awards. In just 20 years, the project (33 11-story slab apartment buildings) had become so crime-infested and poorly maintained that it was declared unfit for human habitation and demolished in 1975. As a result, architects tried to change the approach to urban design and to re-introduce green spaces, curves, ornamentation and “humanizing” elements. That included incorporating echoes of famous historical architectural styles of the past. Essentially, critics blamed the harsh lines of modernist architecture of the projects for inciting violence, crime, and drug addiction. Postmodernist design encouraged blending of motifs and an eclectic approach to create more harmonious environments. Examples include Robert Stern’s design for the Prospect Point and the Denver Public Library, designed by Michael Graves (1995).



Post-Modernist Architecture - Denver Public Library - <https://www.failedarchitecture.com/wp-content/uploads/2015/12/denver-830x587.jpg>



Modernist Architecture – the Pruitt-Igoe Public Housing Project, 1955.
<http://www.pruitt-igoe.com/YAMA/wp-content/uploads/2010/09/P-I99.jpg>

Deconstructivism: Pushing the limits of technological and structural possibilities, plus challenging existing aesthetics standards (essentially attributing aesthetics to taste enforced by the dominant culture), architects such as Gehry disassembled, disarmed, and deconstructed the forms, traditions, and conventions of traditional architecture. Frank O. Gehry, Daniel Libeskind, Rem Koolhaas, Peter Eisenman, Zaha Hadid, Bernard Tschumi and the Co-op Himmelblau group explored an architecture that was deliberately in opposition to the values of the past. They emphasized disharmony, irregularity, and seemingly impossible physical proportions.



The Dancing House (Frank O. Gehry), Prague

Discussion/Questions

1. Early architecture integrated itself with the landscape and the climate. The functions of the architecture tended to revolve around society-building ritual as well as providing shelter for families and the community. Describe how the early civilizations of the Americas developed designs that took advantage of local materials and explain how they decorated them in ways that reinforced the rituals and ceremonies held there.
2. Colonial era architecture represented rather contradictory feelings about their relationship with Europe. On the one hand, they established a connection to the elements of culture they wanted to affirm. They did that by imitating or modifying European examples. At the same time, there was a strong desire to break from the traditions of the past and establish a uniquely American identity. Please identify examples of colonial architecture that adopts European traditions. Then identify examples of architecture that makes a break from the past by using new materials and by focusing on functionalism.
3. In the 19th century, industrialization was simultaneously embraced and feared. Describe examples of architecture that embraced the Industrial Revolution by incorporating materials and design elements. Then, identify examples of architecture that romanticized the past, particularly medieval times, by incorporating elements from castles, cathedrals, etc.
4. Twentieth-century architecture has been described as extremely utopian in its design, but dystopian in its ultimate actualization or realization. Describe the optimism and sense of human potential embodied in modernist architecture and find examples. Then, describe how the modernist designs were accused of having a negative impact on the human spirit, and how postmodernist designs sought to ameliorate that impact.

Readings

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