

History Topics:

- Gothic Architecture - 1100 – 1300:
 - Popular for religious structures
 - Featured the development of the pointed arch
 - Exerts less thrust than a rounded arch of similar size
 - Allows for vaults to be constructed over bays which were square, rectangular or oddly shaped
 - Use of flying buttresses allowed exterior walls to be thinner & larger glass
 - Ribbed vault is comprised of three arches oriented diagonally, transversely and longitudinally
- Symmetry – major design principle used to represent formality
- Zeitgeist – intellectual, cultural & artistic culture of a time and place; “the spirit of the time”
- Mies
- Le Corbusier
 - “a house is a machine for living in”
 - theory of modern architecture that spaces should be functional like a machine
 - distanced himself from the past; based designs on functionality w/o ornament
- Buckminster Fuller
- [Walter Gropius](#) in Internationale Architektur, and [Ludwig Hilberseimer](#) in Internationale neue Baukunst.
- international style:
 - as such blossomed in [1920s](#) Western Europe. Researchers find significant contemporary common ground among the [Dutch de Stijl](#) movement, the work of visionary French/Swiss architect [Le Corbusier](#) and various [German](#) efforts to industrialize craft traditions, which resulted in the formation of the [Deutscher Werkbund](#), large civic worker-housing projects in Frankfurt and Stuttgart, and, most famously, the [Bauhaus](#). The Bauhaus was one of a number of European schools and associations concerned with reconciling craft tradition and industrial technology.
 - By the 1920s the most important figures in modern architecture had established their reputations. The big three are commonly recognized as [Le Corbusier](#) in France, and [Ludwig Mies van der Rohe](#) and [Walter Gropius](#) in Germany
- piazza Saint Peter:
 - The open space which lies before the basilica was redesigned by Gian Lorenzo Bernini from 1656 to 1667, under the direction of Pope Alexander VII, as an appropriate forecourt, designed "so that the greatest number of people could see the Pope give his blessing, either from the middle of the facade of the church or from a window in the Vatican Palace". Bernini had been working on the interior of St. Peter's for decades; now he gave order to the space with his renowned colonnades, using the Tuscan form of Doric, the simplest order in the classical vocabulary, not to compete with the palace-like facade by Carlo Maderno, but he employed it on an unprecedented colossal scale to suit the space and evoke emotions of awe
- Charles Mckim(Mckim, mead, and white): American academy in rome, boston public library, Morgan Library, NY herald building, Penn station
- Philip Johnson: glass building, At&t building, seagram building with mies van der rohe, NY state theater at Lincoln center, etc.
- **Beaux Arts architecture**
 - denotes the academic classical architectural style that was taught at the Ecole des Beaux Arts in Paris. The style "Beaux Arts" is above all the cumulative product of two and a half centuries of instruction under the authority, first of the Academie royale d'architecture, then, following the Revolution, of the Architecture section of the Academie des Beaux-Arts. The organization under the Ancien Regime of the competition for the Grand Prix de Rome in architecture, offering a chance to study in Rome, imprinted its codes and esthetic on the course of instruction, which culminated during the Second Empire (1850-1870) and the Third Republic that followed. The style of instruction that produced Beaux-Arts architecture continued without a major renovation until 1968

- **Beaux-Arts in the United States**

- The first American architect to attend the Ecole des Beaux-Arts was Richard Morris Hunt, followed by Charles Follen McKim. They were followed by an entire generation. Henry Hobson Richardson absorbed Beaux-Arts lessons in massing and spatial planning, then applied them to Romanesque architectural models that were not characteristic of the Beaux-Arts repertory. His Beaux-Arts training taught him to transcend slavish copying and recreate in the essential, fully digested and idiomatic manner of his models. Richardson evolved a highly personal style (Richardsonian Romanesque) freed of historicism that was influential in early Modernism
- The "White City" of the World's Columbian Exposition of 1893 in Chicago was a triumph of the movement and a major impetus for the short-lived City Beautiful movement

City Beautiful movement:

- was a Progressive reform movement in North American architecture and urban planning that flourished in the 1890s and 1900s with the intent of using beautification and monumental grandeur in cities to counteract the
- perceived moral decay of poverty-stricken urban environments. The movement, which was originally most closely associated with Chicago, Detroit, and Washington, D.C., did not seek beauty for its own sake, but rather as a social control device for creating moral and civic virtue among urban populations.[1] Advocates of the movement believed that such beautification could thus provide a harmonious social order that would improve
- the lives of the inner-city poor.

Beaux-Arts city planning:

- with its Baroque insistence on vistas punctuated by symmetry, eye-catching monuments, axial avenues, uniform cornice heights, a harmonious "ensemble" and a somewhat theatrical nobility and accessible charm, embraced ideals that the ensuing Modernist movement decried or just dismissed
- The first US university to institute a Beaux-Arts curriculum was MIT in 1893, when the French architect, Constant-Désiré Despradelle was brought to MIT to teach. Subsequently the Beaux-Arts curriculum was begun at Columbia University, The University of Pennsylvania, and elsewhere
- The best known architectural firm specializing in Beaux-Arts style was McKim, Mead, and White
- Among universities designed in the Beaux-Arts style there are, most notably: Columbia University, (commissioned in 1896), designed by McKim, Mead, and White; the campus of MIT (commissioned in 1913), designed by William W. Bosworth, and the University of Texas (commissioned in 1931), designed by Paul Philippe Cre
- Two of the best American examples of the Beaux-Arts tradition stand within a few blocks of each other: Grand Central Terminal and the New York Public Library.

New Urbanism:

is an American urban design movement that arose in the early 1980s. Its goal is to reform all aspects of real estate development and urban planning, from urban retrofits to suburban infill. New urbanist neighborhoods are designed to contain a diverse range of housing and jobs, and to be walkable. New Urbanism is also known as traditional neighborhood design, neotraditional neighborhood design, and transit-oriented development. A more idealistic variant of New Urbanism, founded in 1999 by Michael E. Arth, is known as New Pedestrianism. The ideas of New Urbanism also are embraced by the European Urban Renaissance movement. In 1991, the Local Government Commission, a private nonprofit group in Sacramento, California, invited architects Peter Calthorpe, Michael Corbett, Andres Duany, Elizabeth Moule, Elizabeth Plater-Zyberk, Stefanos Polyzoides, and

Daniel Solomon to develop a set of community principles for land use planning. Named the Ahwahnee Principles (after Yosemite National Park's Ahwahnee Hotel), the commission presented the principles to about one hundred government officials in the fall of 1991, at its first Yosemite Conference for Local Elected Officials. New urbanists support regional planning for open space, appropriate architecture and planning, and the balanced development of jobs and housing. They believe their strategies are the best way to reduce traffic congestion, increase the supply of affordable housing, and rein in urban sprawl. The Charter of the New Urbanism also covers issues such as historic preservation, safe streets, green building, and the renovation of brownfield land

Lugi Nervi-the Olympic game building using fly buttress system

Palazzo Dello Sport by Pier Luigi Nervi

Facility: Palazzo Dello Sport -Great Sports Palace

Engineer: Pier Luigi Nervi

Description: 330' diameter with seating for 17,000. Ribbed reinforced concrete dome.

Location: Rome,Italy

Cost: 2 Billion Lire

Built in 1958 to 1960 for the 1960 Summer Olympic Games

Planning Influences:

- Industrial Revolution
 - Prompted a reform movement that lead to many ideas about planning
 - Influenced urban design in Europe & US
- Garnier's Cite Industrielle
 - Developed in response to the Industrial Revolution
 - First to use the idea of zoning
- L'Enfant's plan of Washington, DC
 - Baroque planning approach was never widely adopted
 - Widely praised and publicized as a major planning effort
- Ordinance of 1785
 - started the rectangular survey system
 - reinforced the idea of grid planning that began with the plan for Philadelphia
- 1893 Columbian Exposition
 - revived interest in city planning
 - showed desirable results could be achieved through organized efforts
 - prompted many cities to plan civic centers & parkways

Town Planning:

- Savannah, GA
 - Based on grid system
 - Wards of 40 houses are bounded by major streets with each section having a public square
- Washington, DC –
 - Example of Baroque planning approach
- Philadelphia
 - Based on grid system
- Paris
 - beginning in 1852, the [Baron Haussmann](#)'s urbanisation program involved leveling entire quarters to make way for wide avenues lined with neo-classical stone buildings of *bourgeoisie* standing
- London

- Letchworth
- Wlewyn Garden City
- Radburn, NJ
 - 1928 plan developed by Clarence Stein & Henry Wright
 - First plan to take on planning for pedestrians and automobiles
 - Use of underpasses to allow pedestrian traffic to pass under automobile traffic
 - Intended to prevent accidents and separate traffic types
 - Only one underpass constructed
- Reston, VA
 - Influenced by Radburn, NJ plan
 - Features a series of underpasses that promote travel on foot throughout the community
- Charleston, SC
 - 1931 - First city in the US to establish a “historic district” in 1931 as a response to attrition of aging building stock through theft, demolition & neglect
- Williamsburg, VA
 - Late 1920’s - 1930’s – part of city was acquired & restored, preserved, reconstructed by what is now the Colonial Williamsburg Foundation led by Rev. W.A.R. Goodwin & financed by John D. Rockefeller
- New Orleans
 - 1937 - Designated the Vieux Carre a historic district in 1937 adopting mechanisms from Charleston
- Seaside, FL