ARCHITECTURE IN THE FIRST HALF OF THE TWENTIETH CENTURY IN THE UNITED STATES:

Chicago School – Commercial Style (1880-1890)
Louis Sullivan: Father of the Modern Architecture

Week 10.1

Chicago School (1880-1890)

Chicago's architecture is famous throughout the world and one style is referred to as the Chicago School. The style is also known as Commercial style.

In the history of architecture, the Chicago School was a school of architects active in Chicago at the turn of the 20th century. They were among:

• the first to promote the new technologies of steel-frame construction in commercial buildings, and

• they developed a spatial aesthetic which co-evolved with, and then came to influence, parallel developments in European Modernism.

Some of the distinguishing features of the Chicago School are the use of steel-frame buildings with masonry cladding (usually terra cotta), allowing large plate-glass window areas and the use of limited amounts of exterior ornament. Sometimes elements of Neoclassical architecture are used in Chicago School skyscrapers. Many Chicago School skyscrapers contain the three parts of a classical column.

• The first floor functions as the base,
• The middle stories, usually with little ornamental detail, act as the shaft of the column, and
• The last floor or so represent the capital, with more ornamental detail and capped with a cornice.
Home-insurance, 1885, (high building with steel)
William Le Baron Jenney (engineer)

First skyscraper in the world.
Cost: 1/3 of a stone building

Jenney is best known for designing the ten-story Home Insurance Building in Chicago. The building was the first fully metal-frame skyscraper, and is considered the first American skyscraper. It was built from 1884 to 1885, enlarged in 1891, and demolished in 1931.

In his designs, Jenney used metal columns and beams, instead of stone and brick to support the building's upper levels.
- The steel needed to support the Home Insurance Building weighed only one-third as much as a ten-story building made of heavy masonry.
- Using this method, the weight of the building was reduced, thus allowing the possibility to construct even taller structures.
- Later, he solved the problem of fireproof construction for tall buildings by using masonry, iron, and terra cotta flooring and partitions.
- He displayed his system in the Second Leiter Building, also built in Chicago between the years 1889 and 1891.

This was the first time a metal frame supported both walls and upper stories. It meant walls could be much thinner, pierced by ample windows. Buildings could be taller with more interior space. With the addition of the elevator in the 1880s, buildings grew from five to twenty stories.
The Chicago School of twentieth century commercial architecture launched a whole new building type:

utilitarian, functional, effective, multistorey buildings that express externally their skeletal frame and emphasize verticality.

There was a saying:

“All other things being equal, a building that sits is more pleasing than a building that stands.” (Henry James)

This was the challenge of Chicago School:

They tried to build “standing,” but at the same time aesthetically “pleasing,” buildings.
LOUIS SULLIVAN: Father of Modern Architecture

Sullivan and his partner, Dankmar Adler, were preeminent among Chicago School. Their buildings were not only functional examples of metal frame technology, but successful artistically in unifying a skyscraper’s repetitious components.

The Wainwright Building (1890) is a ten-story, steel-skeleton structure that emphasizes verticality with, for the first time, an aesthetically effective shell. A major landmark in American architectural history, the Wainwright building was hailed by Frank Lloyd Wright, as the first structure with “height triumphant.”

Sullivan influenced a generation of architects by designing the modern skyscraper as an organic whole. “Form ever follows function” was his credo. He said: “Whatever is beautiful rests on the foundation of the necessary.”

He delineated three major visible sections in his works:

- A strong base with broad windows for shops,
- A middle section for offices with vertical elements to dramatize height, and
- A capping cornice housing mechanical equipment.

The tripartite division corresponds to practical requirements.
The Guaranty Building (1895-96) with its giant arches, even more gracefully meets the challenge of imposing coherent visual organization on a tall tower. Here, Sullivan doubled the number of vertical piers (every other pier is not load bearing) to express not just function but as a design element forcing the eye to read the middle ten floors as one continuous, soaring unit. If buildings by other Chicago architects were a frank expression of their frame, Sullivan's were a revelation of function and ingenuity.

In Sullivan's treatment of Guaranty Building, the whole seems to grow organically. He clad its strong simple form in floral ornament, which he likened to “poetic imagery.” With a deft touch, Sullivan transformed pure structure and function into an aesthetic statement.

Although Sullivan studied at the famous Ecole des Beaux-Arts in Paris, he was believing in the necessity to create a national architecture. For him, for an American architecture, new forms should be invented, and new ornaments should be found that does not refer to any past period. Sullivan called for “a Democratic vista,” incorporating “the undreamed of, a versatility, a virtuosity, a plasticity as yet unknown!”

To create this bold new architecture, Sullivan drew on both the beauty of nature, and the dynamism of the new metropolis. Unlike his peers, he consciously avoided of European influence. He wrote:

“If American architecture ever succeeds in meaning anything, it will mean American life.”

He aspired to endow the tall commercial building with “sensibility and culture”.

Although the top 10 stories of the department store are sleek, with bare terracotta shingling, the bottom two floors, at the eye level, are richly decorated with coiling cast iron ribbons and flower parts. The twisting tendrils, designed by Sullivan, interlace around the building to provide visual interest and relief from the building's unadorned bulk.
Louis Sullivan's famous Credo:  
“Form follows function”

If we review the characteristics of Chicago Style, the most important items were as follows:

- Use of new material, new building techniques
- Elimination of historical ornaments
- Inventive and fresh surface decoration
- Expression of structure
- Use of three-part structure similar to that of a classical column
- Expression of building’s commercial purpose: FUNCTION

As a result, LOUIS SULLIVAN (1856-1924) is considered as the father of American Modern architecture.

He saw that the new vertical towers demanded wholly a new aesthetic. He was one of the earliest to use the steel frame, and he insisted on the necessity to express and recognize the inner grid, made of steel, through the form of exterior facade. Therefore, the exteriors of his designs echoed: not only the building’s function, but its interior skeleton. He was believing in the necessity to create a national architecture. For him, for an American architecture, new forms should be invented, and new ornaments should be found that does not refer to any past period. He rejected antique styles, and the 19th century European architecture, but did not avoid using ornamentation. He wrote:

“Ornament, when creative, spontaneous, is a perfume.”