HISTORICAL SOCIETY

TECH TALK

Minnesota's Architecture • Part V



STYLES OF THE MODERN ERA: PRAIRIE SCHOOL, BUNGALOW, ART DECO, INTERNATIONAL & REVIVALS

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This is the last in a series of five Tech Talk articles on Minnesota's architectural styles.

The era of modern architecture as we know it began shortly after the beginning of the 20th century with early innovations in residential design by master architect Frank Lloyd Wright. These innovative designs became known as the Prairie School, which considered the integration of the building and its site to be of paramount importance. Rather than towering above its surroundings like the Victorians of the previous century, Prairie School buildings "hugged the ground" and emphasized this characteric through

broad expanses of hipped roofs with spreading eaves and horizontal bands of masonry and windows. The "anchor" of the house to the site was a massive chimney at its



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symbolizing the trunk of a tree, from which the rooms spread like branches. Wright's first fully developed Prairie School design was the Ward Willets House in Highland Park, Ill., built in 1902.

The Prairie School (or Prairie Style) was quick to gain popularity and a number of architects "hopped on the bandwagon" to promote it. Among these architects were George Grant Elmslie, who had been chief draftsman for Wright's mentor, Louis Sullivan, and William Gray Purcell. Their partnership attained national fame as the Midwest's most prominent Prairie

School architects.

Minnesota has a significant number of Prairie designs, ranging from residences to community buildings to libraries, though not all were designed by Purcell and Elmslie. In general, these buildings date from the second decade of the century, for the

popularity of the style began to wane after World War I. It has been ventured among architectural scholars that the "rambler" of the 1950s is a Prairie School resurgence in a simpler, mass-produced guise.

Characteristics of Prairie School design emphasize the horizontal and integration of the building site with its natural setting; residences are seldom more than two stories in height. The spatial emphasis is carried into the interior of the building, which is remarkable for its open plan with a variety of spaces interacting physically and visually with each other. The plan is comprised of rectangular or geometric spaces radiating out from a central point, usually designated by the chimney mass and hearth. Roofs in early versions are broad and hipped with wide sheltering eaves. In Wright's later "Usonian" houses of the 1930s and 1940s, the roof profile evolved from a hip to a flat slab. ("Usonian" was a term he coined to make the point that this style was directly suited to the "U.S. of A.")

Exteriors are constructed of wood or brick, often with upper areas or entire walls sheathed with stucco. The stucco often was pigmented or painted a tan or



The Willey House in Minneapolis, an example of a Usonian residence. Built in 1934, it is listed on the National Register of Historic Places. The architect was Frank Lloyd Wright.

built in 1913. An example of Prairie School architecture, it is listed on the National

Register of

Historic Places.

The E.S. Hoyt house in Red

Wing, Goodhue County, was

designed by

W.G. Purcell

Elmslie and

and G.G.

Editor's note:

TECH TALK is a bimonthly column offering technical assistance on management, preservation and conservation matters that affect historical societies and museums of all sizes and interests. Comments and suggestions for future topics are welcome.

light pink to blend with exposed wooden trim, which could either be stained or left in its natural state to weather. Much of the wooden trim found in these buildings was painted at a later time, which has detracted from its intended natural quality. When ornamental treatments are employed, they include: horizontal wood trimboards or banding; horizontal groupings of casement windows with a combination

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of leaded and stained glass in geometric patterns; and a distinctive treatment of brick courses, by raking horizontal joints—recessing them to give a horizontal shadow line—and using a pigmented mortar to finish vertical joints so they were flush with the surface.

The Bungalow Style

With its beginnings in the second decade of the 20th century, the Bungalow style is contemporaneous with the Prairie School and incorporates a similar affinity for simple design and natural materials. Inspiration for the bungalow is said to originate in India during the late 19th century, from the Hindi word for "house in the Bengal style."

Idealized as the efficient home for working-class

Americans, it remained popular until World War II, when it was superseded by the suburban tract house. Over the years the name "bungalow" has become synonymous with "small, comfortable home." Its earliest manifestation in America was in California, and from there it spread like wildfire throughout the country.



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It was well-received as a solution to the dilemma of affordable housing suitable for communities experiencing the pressures of rapid population growth and a limited, and antiquated, housing stock, and as a solution for urban expansion into planned neighborhoods in suburbia. A great variety of designs was soon readily available through a proliferation of builders' catalogues, which depicted mass-produced elements that were available at local lumber yards everywhere. Entire neighborhoods of bungalows sprang up seemingly overnight.

A Bungalow style house, however, was well-constructed and durable. A typical bungalow relegated all living space to one floor, with a half-story designated on the building plans as an "expansion." The expansion allowed for the future construction of one or two additional rooms to accommodate a growing family. More space was provided by a full basement and a three-season porch that usually opened directly off the living room. Built-ins, such as buffets, sideboards, bookcases, cabinets and nooks, emphasized a conscientious use

of space, where everything was required to have utility rather than frivolity.

A premier feature of a bungalow was the fireplace, massive in appearance and faced in brick or stone with the characteristic wooden mantle; on the exterior of the house, the chimney provided a visual signature of the style. Woodwork in the principal rooms was hardwood, most often quarter-sawn oak or maple, with pine or fir in secondary rooms. A stained or natural varnished finish was used, paint being prescribed for walls and ceilings. A common wall and ceiling treatment was a textured plaster finish.

Characteristics of the Bungalow style include a simple rectangular plan and a massing of one to oneand-one-half stories. Bungalows usually have gable

> roofs, which either sweep from the ridge to the porch or form a series of repetitive gables, punctuated with dormers.

The exteriors are clad in wooden clapboards, shingles or stucco, sometimes with areas of rustic, wire-cut brick. Ornamental treatments include massive angular brackets and exposed rafter tails that support broad overhanging

eaves. The angularity of the brackets and supporting porch posts, as well as the extensive use of natural wood on the interiors, earned the Bungalow style its nickname as the "Craftsman Style." (The Bungalow style has experienced a recent surge of popularity. A number of publications have been written on the style and its care and preservation, and a "Bungalow Club" made up of bungalow owners and aficionados has been formed in Minnesota.)

Art Deco or Moderne

The Art Deco, or Moderne, style was introduced at the Exposition Internationale des Artes Decoratifs et Industriels Modernes held in Paris in 1929. At its onset, it was a decorative arts movement that "streamlined" the revival of Art Nouveau, which was popular at the turn of the century. It rapidly became a style of architecture as well, which by the late 1920s had reached the United States. It attained instant popularity and continued to influence the building industry into the 1950s.



Right: This

Bungalow style

house in Blue



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The Art Deco style (or Moderne, which is the term specific to the classification in architecture) experienced two distinct phases of development. The



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characterized the style during its emergence in America through the mid-1930s. It was labeled "Zig-Zag" Moderne for its profusion of geometric, angular forms. The second phase emerged in the mid-

first phase

Above: the Greyhound Bus Depot in Brainerd, Crow Wing County, built ca. 1950. It is a good example of the streamlining found in Art Moderne buildings.

1930s and incorporated curvilinear forms; it was labeled "Streamline" Moderne.

The Moderne style reached its zenith during the Great Depression of the 1930s and became closely associated with federal building projects often undertaken by the Works Progress Administration (WPA). A number of public buildings such as post offices, city halls and community centers were erected as a result of WPA programs.

For the most part, these buildings combine the decorative qualities of the Art Deco style with a restrained formalism reminiscent of the Classical. This can be seen in symmetrical facades, fluted columns or pilasters and low-relief sculptural panels. Another

product of federal assistance was a movement to revitalize commercial districts within communities, in which new buildings and developments adopted the Moderne style in order to make a statement of the quest for progress and prosperity.

In addition to its decorative qualities, the Moderne style is noted for innovation in building materials and technology. Poured and reinforced concrete, along with the steel skeletal frame, became the standard for the structural framework. Both in residences and in public buildings, common treatment for floors was

anels. Another a result of the chan entertainment. Son

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terrazzo (marble chips mixed with cement mortar, laid and polished). Exteriors (and in some instances, interiors) were clad in fine stone veneers and metal panels; stucco or split stone was also popular. Metal panels were either polished or matte-finished. Bronze and aluminum were extensively utilized for hardware, entrance portals and lighting fixtures.

An innovative building material for the period was glass block. It was used for walls, windows and decorative panels, which often incorporated concealed colored lights, and it was considered a "state of the art" building material for the times. Another innovation was neon lighting, used not only for signage, but also to accentuate architectural forms. One of the most popular technological innovations was a pigmented glass tile called Virtolite; it was most often used as an exterior cladding material, primarily on commercial buildings. Finally, many Moderne buildings incorporate sculptural treatments, in the form of low-relief panels with stylized figures, distinctive light standards, metal railings and fine millwork.

In residential construction, Midwesterners preferred traditional styles such as the Colonial/Georgian Revival and the Bungalow rather than the Moderne. As a result, few intact Moderne style residences remain in Minnesota. The style was extremely popular, however, in the realm of public and commercial architecture. Virtually every community had a Moderne commercial building, post office, city hall, park structure or theater. Of these, theaters have been subjected to the most alterations as a result of the changing tastes in preferences for entertainment. Some have experienced revitalization

as community performance theaters rather than movie houses, but the majority have been lost.

It also may be said that, until recently, Art Deco or Moderne architecture has been unrecognized as a candidate for preservation because of its relative "newness" in collective memory. Only within the last 10 years have the merits of this era been subjected to scholarly investigation. As a result, Art Deco has been popularized in art forms and interior design, which has fostered a new respect for its architecture.

Koochiching County, built ca 1935.

The stadium at

International

Falls,

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The International Style

During the years between World War I and World War II, there was a synthesis between industrial technology and architecture in Germany, France and Holland. The combination of these with art resulted in the formation of the *Bauhaus* in

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Weimar by Walter Gropius. As both a place and a movement, Bauhaus, which means "house of building," became a primary force in the development of the International style. Architects who

Architects who became the proponents of the style were Walter Gropius, Ludwig Meis van der Rohe, and Le Corbusier. With the advent of World War II, many architects and artisans trained in the Bauhaus school emigrated to the United

States. There they brought the International style to prominence, where it would remain through the decade of the 1970s.

The International style was intended to represent the architecture of the machine age. It was controlled by a strict recipe of design that dictated a lightweight frame and curtain-wall construction, open planning, standardized industrial materials, cubistic forms, a linear geometry of openings, asymmetrical composition, flat roofs, smooth continuous wall surfaces, and the rejection of all applied ornament. To summarize the design principle of the style, Meis van der Rohe coined the dictum, "less is more."

The characteristics of the International style include an emphasis on volume and proportion, flat roofs, thin membrane walls, large expanses of glass, and the absence of applied surface decoration. Exteriors are often sheathed with metal or plywood panels or stucco. Operable windows are either double-hung or casement; they are often set into groups that extend around corners. Non-residential buildings are often multi-story with exteriors that

Above: The headquarters building of General Mills in Golden Valley, Hennepin County, was built in 1959. It illustrates many of the design features of the International

style.

Right: The Lake Harriet pavilion in Minneapolis, built in 1990, typifies the variety in Modern Revival style buildings.

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present a flat, box-like appearance; patterns are created by relationships of individual wall panels of glass or metal.

Although popular for commercial and institutional buildings, the International style was never strongly supported by residential architects and builders. In particular, the flat roofs, membrane walls and broad expanses of glass were soon found to be problematic in Minnesota, where there was a strong preference for more traditional building types. As a result, many International style buildings have not stood the test of time. Further, machine-produced and synthetic building materials pose special challenges for preservation, as they are often costly and not candidates for the "do-it-yourself-er." The future of the International style in Minnesota is as yet uncertain.

Modern Revivals

Revivals of architectural styles can be likened to a pendulum. Upon introduction, the pendulum begins its swing to a zenith, or high point, of acceptance, after which the pendulum reverses its swing to a descent. The nadir, or lowest point, of the swing represents the demise of the style and its replacement with a new style. However, the pendulum continues to swing, and the process is repeated. After a number of swings, a revival takes shape and the earlier style again rises to a zenith, however with a new interpretation, new materials and new technology.

Today, a number of styles from various periods in history have again risen to popularity. These revivals are not pure replications of earlier work, but are innovative creations of images and qualities with historical precedents, coupled with a contemporary application of materials and technology. The resulting revivals are aesthetic revivals, rather than a return to the builder's craft of earlier generations. Such futuristic expressions of Victorian, Prairie and Art Deco styles will lead us well into the 21st century.



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