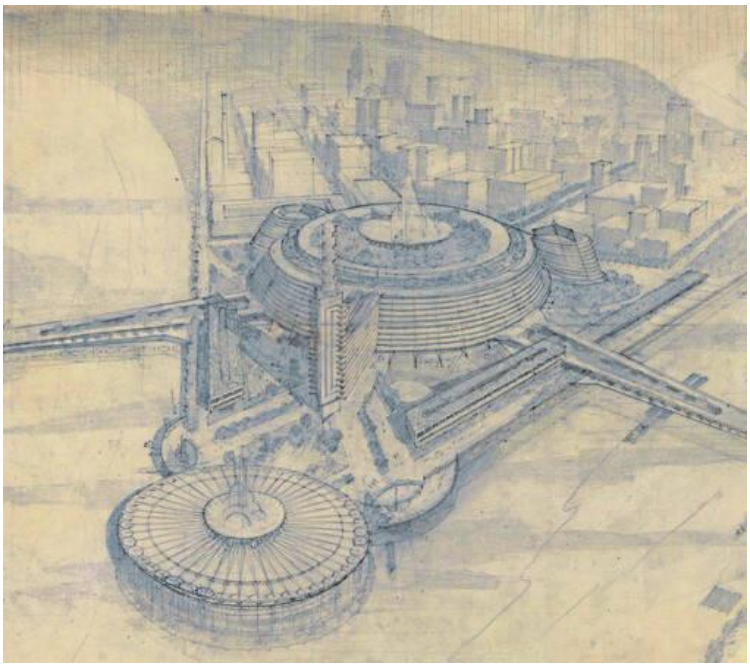
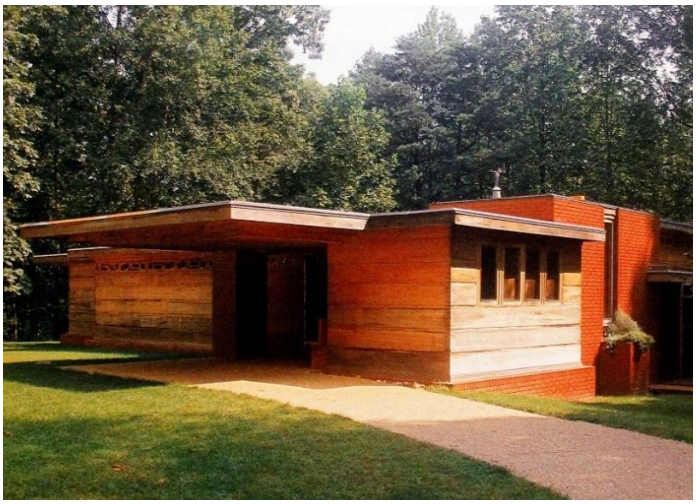
Heritage and Innovation:
Historic Homes from the 19th and 20th Centuries

A Smithsonian Associates Tour - - March 9, 2025

Study Leader Bill Keene



Pittsburgh Civic Center Concept - 1947
by Frank Lloyd Wright



Pope-Leighey – 1941 - Frank Lloyd Wright

Woodlawn Plantation - 1805

Hollin Hills: A Mid Century Community

Examining Connections Between Frank Lloyd Wright and Mid-Century Modern

Mid-Century Modern a term that evokes visions of millions of detached, single – family suburban homes designed, built, and marketed across the country during the roughly quarter-century between the end of World War II and the early 1970's. The spread of mid-century architecture was propelled by the explosive growth of suburban development during the period. Bolstered by favorable government policies such as the G.I. Bill, enabled by expanded industrial capacity developed to meet the demands of war production, and enthusiastically embraced by consumers indulging pent-up demand as they emerged from years economic depression and world war. Mid-Century Modern ranged far beyond architecture to embrace consumer products from toasters and tableware to washing machines and cigarette packaging and further to include industrial designs from automobiles and planes to power plants, bridges and dams

The origins of the architectural style began earlier and extended well beyond the suburban ranch house or the 1940s and later, factors influencing the style extend even beyond the beginning of the 20th Century and include such disparate elements as the Vienna Secessionists formed at the very end of the 19th century and later the Bauhaus movement which began in Germany in the 1920s. Later, in the 1930s, Art Deco and Streamline Moderne were in some respects precursors to mid-century designs. In architecture, practitioners in Europe, the United States, Scandinavia, Brazil, and Japan all played a role in the evolution of mid-century developments. Major figures included: Mies van der Rohe, Walter Gropius, Corbusier, Alvar Aalto, Marcel Breuer, Oscar Niemeyer and Frank Lloyd Wright.

While often thought of as having a unique style, not related to the mainstream of 20th century architecture, Frank Lloyd Wright's work informed and influenced 20th century architecture. From early in the 20th century Wright, more than any other American influenced the course of modern architecture. In 1909 he traveled to Germany to complete preparations for a monumental presentation of his work the Wasmuth Portfolio (Ausgeführte Bauten und Entwürfe von Frank Lloyd Wright). Published the following year, the Wasmuth had a tremendous influence on the emerging generation of young architects. According to Richard Neutra's son Raymond, "the Portfolio came as a bombshell to my father and his older comrade Rudolf Schindler …just as it did to Dutch architects (including those associated with the De Stijl group)"[1]. Similarly, there are reports that Le Corbusier, Ludwig Mies van der Rohe and Walter Gropius took time to pour over the portfolio when it arrived at the studio of Peter Behrens where they were working. Apart from Corbusier, all either came to the United States to meet and show their admiration for Wright or eventually to work for him[2].

While the publication of the Wasmuth made Wright known to many of those whose work became synonymous with what became Mid-Century Modern style, Wright's early work only hinted at what became his most direct contributions to mid-century design, the Usonian Houses. Usonians appeared shortly before World War II and include the Pope-Leighey house of 1940. (Usonian, from the term Usonia, an acronym coined by Wright, for the United States of North America with an added vowel to ease pronunciation.) Following the end of World War II in 1945, the number of Usonians grew rapidly with roughly 100 completed by Wright's death in 1959.

Wright's iconic Fallingwater while sharing many characteristics with mid-century styling including, the horizontal bands of windows looking out to the natural setting, the ample terraces, flat roof, and façade largely unadorned by ornamentation. Fallingwater reflects aspects of European modernism more than any other Wright design, it is unique in his body of work, it was designed to show his ability to take the European International Style and make it his own, it was not followed up by further designs. Instead, the Usonians while often differing considerably one from another share more with each other than they do with Fallingwater.

Wright's Usonian open floor plans coupled complex interwoven spaces with exposed beamed ceilings, delicate patterned clerestory windows complemented expansive walls of glass that blurred the boundary between interior spaces and nature on the private side of the dwelling. Often, this open to nature side contrasted sharply with the closed face presented to the street. This dual character was designed to maximize privacy from the street and to maximize openness and transparency to nature in the more private and intimate space

[1] Neutra, Raymond Richard. Cheap and Thin: Neutra and Frank Lloyd Wright (Kindle Locations 253-254). Kindle Edition.

[2] Feeling that Corbusier had copied his ideas, Wright refused to meet with him, despite repeated attempts by Corbusier to see Wright.

of the backyard. It reflected an arrangement of the technical, physical, and spatial elements of the structure that grew out of human activities occurring within as well as the demands imposed by the site. The facade emphasized horizontality, asymmetry, and clean lines composed of largely unadorned materials, wood, brick and stone. The structure hugged the ground and followed the natural contours of the site. Utilities were centralized for convenience and to reduce costs, radiant heating was imbedded in the concrete slab floor. The family-oriented rooms overlapped and interconnected forming more cohesive spaces, better integrating activities ranging from meal preparation, to dining and family entertaining, that reflected the changing nature of the post War family life.

The Usonian designs emerged from the core of Wright's vision of what modern life in America should be: single family homes on an acre of land, with ample amenities within a short drive by automobile. To Wright the automobile represented freedom for the average family, adding mobility, variety and choice while the infrastructure of roads and fast superhighways, coupled with electronic communications of telephone, radio and television enabled the system to function and thrive.

Frank Lloyd Wright and the Suburb

Wright first published his vision for the future in the Disappearing City in 1932. In this manifesto he decried current conditions in American cities dominated by tall buildings blocking light and air, cloaked in pollution form factories and clogged by traffic from the rising flood of cars and trucks. To Wright, the city was dead or dying and the future lay in spreading out development, emphasizing a return to greenery and single-family homes. While the automobile contributed to the problems of the city he held that it promised the freedom to break the chains of the city and enable the average worker, not just the wealthy the ability to live in the country. Coupled with the automobile the telephone, radio and television enabled all to hear the news of the world, attend concerts, theater, debates all while traveling in the car or without even leaving their living room.

As Wright's vision evolved it became Broadacre City and he continued to refine the ideas throughout the remainder of his life. By 1935 a large model began a national tour publicizing his vision. He continued working on the concept through the remainder of his life. It major features included emphasis on single family detached homes connected to schools, shop, services, and recreation all located within a convenient drive of a few minutes in any direction. His vision was essentially a suburban life style that would become commonplace by the 1950s.

Although the tremendous surge of home building that shaped the suburbs began in the mid 1940's following the end of World War II, nonetheless hundreds of thousands of homes were built during the 1930's and many even during the war years. Houses were built to help stimulate the economy and reduce unemployment in the 1930s, to house military personnel, and war workers and their families during the war years. Greenbelt Maryland was one example of the Federal Government efforts aimed in large measure to aid the construction industry, particularly hard hit by unemployment. Another approach was the Federal Housing Administration (FHA) was created in 1934 to aid in making housing more available by underwriting mortgages[3] . As a result of the New Deal efforts the number of housing units constructed rose dramatically prior to the onset of the War increasing from 93,000 in 1933 to 619,000 in 1941[4]. Later, new construction was pushed to meet the demand for new housing for workers in war industries, thousands of units were constructed, most were modest, often built to last only for the short-term to meet critical needs wherever the planes, tanks, and ships and manufacturing of the vast array of other war material was taking place. The volume of housing required for the war effort was significant. For the Manhattan Project the Army Corps of Engineers beginning in 1942, built three instant cities: Oak Ridge, Tennessee; Hanford/Richland, Washington; and Los Alamos, New Mexico, at their peak in 1945, they had a combined population of more than 125,000.

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[3] The stated purpose of the FHA was "to encourage improvement in housing standards and conditions, to facilitate sound home financing on reasonable terms, and to exert a stabilizing influence on the mortgage market." Therefore, it did not depend on government funding of building programs but instead on private enterprise to carry out actual construction projects. Jackson, Kenneth T., Crabgrass Frontier: The Suburbanization of the United States (Kindle Locations 3887-3893). Oxford University Press. Kindle Edition.

[4] Jackson, Kenneth T., Crabgrass Frontier: The Suburbanization of the United States (Kindle Locations 3926-3927). Oxford University Press. Kindle Edition.

The importance of the housing built for the workers during the war lies in the not in the style or presence or absence of modern design aspects but rather in the development of the systems that enabled the major post-war players in the housing market to readily adapt to working in the emerging civilian marketplace. Following the war, the merchant builders and developers readily adapted both the construction practices required by large-scale projects and adopted tactics to successfully navigate government regulations and requirements to obtain the permits and meet the FHA and other guidelines.

As the war ended in 1945, restrictions on building materials were lifted, and the severe housing shortage brought about by the privations the Depression and exacerbated by war-time restrictions and could be addressed. The need was critical, the housing shortage was estimated at three million units in 1944 and the flood of 13 million returning GIs swelled the demand for housing well beyond that. The Servicemen's Readjustment Act, known as the GI Bill of Rights, helped fill the need for quickly built, affordable modern housing.

Vast tracts of land were required to fill the demand for new housing. Land outside the core of cities suddenly became valuable and were soon being acquired for development. Not only the Levitt Brothers vast developments in New York, Pennsylvania and New Jersey, but thousands of houses by Eichler and Trousdale in California, by Haver in Phoenix, and in communities ranging from Arapaho Hills in Colorado, and Lakewood and Panorama City in California, and in the DC Metro area, Hollin Hills, Holmes Run Acres in Northern Virginia were constructed to meet the flood of demand.

Most of the homes built in the period continued to be conservative, modest, and unassuming. Many were L-shaped or split-level ranches or even the "Cape Cod" of Levittown,[5] others resembled Georgian or Tudor or any number of traditional styles and designs. But others had a decidedly modern look, like the flat- or gable-roofed Joseph Eichler tracts in the San Francisco Bay area, or the butterfly roof houses in Palm Springs and Sarasota, Florida. These and innumerable others throughout the country came about beginning in the late 1940s and rapidly accelerated into the 1970s. By the end of 1972, FHA had helped nearly eleven million families to own houses and another twenty-two million families to improve their properties. It had also insured 1.8 million dwellings in multi-unit projects. And in those same years between 1934 and 1972, the percentage of American families living in owner-occupied dwellings rose from 44 percent to 63 percent[6].

While it is the case that most often the outward appearance of houses built following the Second World War did not resemble Wright's Usonian designs, or Mid Century Modern associated with Hollin Hills or Holmes Run Acres, nonetheless Wright's influence and that of other modernists is typically present in how the plans function, how the rooms interrelate, how the house was open to nature, and overall how the house met the changing needs of the contemporary life-style. Typical midcentury construction consisted of posts that supported beams, which in turn carried the roof load, allowing for both exterior walls of glass and non-load-bearing interior walls. Because of this, when Modernist ranch houses did have walls dividing the public space, they often stopped short of the ceiling—pony walls—or had large pass-throughs. This kept even a partially enclosed kitchen more open and allowed it to share light with adjoining rooms—an internal window, in effect[7]. The ranch style was an icon of the suburbs as regional styles began to give way. While many elements came together to form the ranch style, several aspects tie rather directly to Wright's Prairie style of the early 20th century with their low-pitched roofs, deep eaves, and pronounced horizontal lines.

Open plans, concrete slab floor, central utilities, radiant heat, a carport while not universal were commonplace. The needs of the growing communities required integration of the housing with schools, parks, and neighborhood shopping which the automobile fostered, and in turn made the car a requirement for living in the suburbs. Some builders did not confine themselves to the housing market only but like Haver in Phoenix and

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5 Brown, Jim. Atomic Ranch (NONE) (Kindle Locations 51-53 and 350-356). Gibbs Smith. Kindle Edition.

6 Jackson, Kenneth T., Crabgrass Frontier: The Suburbanization of the United States (Kindle Locations 3928-3931). Oxford University Press. Kindle Edition.

7 Brown, Jim. Atomic Ranch (NONE) (Kindle Locations 402-406). Gibbs Smith. Kindle Edition.

Truesdale in Los Angeles built commercial, institutional and other facilities as well, thus marking their communities with a Mid-Century stamp extending well beyond the ranch house.

Mid-Century Design

The rapid spread of Mid Century Modern was fostered expanding national and international media in advertising campaigns initially in magazines but increasing by newsreels, radio and eventually the ubiquity of television. Mid Century design extended far beyond the housing market to encompass all phases of design for example graphics, automobiles, appliances, and furniture (see the gallery for examples).

Hollin Hills featured in the Washington Post

Neighborhood profile: Hollin Hills
By Audrey Hoffer October 25, 2013

A deer sprinted across the footpath and disappeared in the shrubs as a solitary stroller approached one morning. This was a typical scene in Hollin Hills, a quiet, woodsy neighborhood south of Old Town Alexandria that resembles a summer community more than a close-in suburb.

There are very few fences between properties, so wildlife roams freely. “A herd of deer, including two bucks with huge antlers, wander among the houses all the time,” said Lee Braun, a real estate agent active in the community. “Everyone thinks of them as personal pets.”

The small community, built from the late 1940s to the early 1970s by developer Robert Davenport and architect Charles Goodman, came to prominence nearly as soon as it began to take shape. “No one else wanted this farmland, because it was hilly and required too much grading,” said Michael McGill, a resident since 2008 and chairman of the Design Review Committee.

But Davenport relished the landscape and told Goodman to keep as many trees as possible. Today there are 32 acres of wooded parkland maintained by the Hollin Hills Civic Association and an army of volunteers.

(Gene Thorp/The Washington Post)

The mid-century modern houses remain inspiring decades later. “The house styles integrate the outside and inside in a natural way,” said Tania Ryan, a 20-year resident who co-chaired the neighborhood house and garden tour, held in April 2012.

Each house was oriented individually into the hillside and toward the sunshine to provide privacy and vistas in all directions. As a result, they blend harmoniously with the landscape.

The community was added to the Virginia Landmarks Register in June and to the National Register of Historic Places in September.

California-looking houses: The review panel, made up of residents, meets monthly to scrutinize proposals for construction and modification to house exteriors.

“All additions or changes must follow the spirit, intent and harmony of the original design concept,” said McGill, “to ensure that there won’t be changes to the feel of the community.”

“For example, you can’t buy a house, tear it down and build a Colonial,” said Steve Kistler, a resident since 2005.

“The houses are stunning in their simplicity and refinement and form a single cohesive mid-century modern neighborhood,” McGill said. “That’s what we want to keep.”

Hana Hirschfeld moved into a new one-level house in the neighborhood in 1963. She had three kids, and “when we first came here, I saw a tricycle abandoned in the middle of the road and thought this is a good place to raise children.”

They added a couple of rooms but eventually wanted more space and bought a bigger house on the last available lot in 1971. Now 81, she recently sold her house to Kistler and his wife, who have two children and have been living in a small Hollin Hills one-story.

Braun said the community features an even distribution of age groups but “I get many urban couples who live in the city and want to move to the suburbs yet don’t want the same house their parents had. They want the cool suburbs and Hollin Hills with its California-looking glass houses is it.”

Frank Lloyd Wright at the National Building Museum

Frank Lloyd Wright’s unrealized vision of a great city’s future

Skyline Ink Animators + Illustrators, designers, Project for Civic Center at Point Park for the Allegheny Conference, 1947. Digital illustration, 2021, made with material made available by the Frank Lloyd Wright Foundation. (Western Pennsylvania Conservancy)

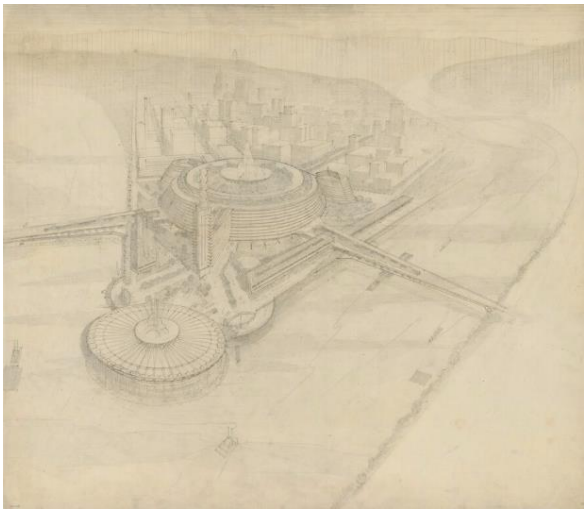
An exhibition at the National Building Museum visualizes how Wright’s grand projects would have transformed Pittsburgh and its surroundings.

January 29, 2025

Review by Maura Judkis

In an alternate architectural history, the heart of Pittsburgh would be a massive Frank Lloyd Wright civic center — a 10-story megastructure with an opera house, planetarium, zoo and aquarium, with two dramatic bridges as entrances. The building would have changed the urban character of a smoggy, industrial city reinventing itself in an era of postwar prosperity.

It didn’t happen, of course: too expensive, Wright was told, and out of scale. What Pittsburgh got, instead, was Point State Park — a lovely sliver of public green that places a towering, dramatic fountain on the triangle of land where the Monongahela and the Allegheny rivers converge into the Ohio River. It is a piece of public land that takes advantage of Pittsburgh’s dramatic landscape and preserves a green space for generations. It is, in many ways, the complete opposite of what Wright envisioned for the space.



Frank Lloyd Wright, architect, bird’s-eye view from Mount Washington, project, Civic Center at Point Park for the Allegheny Conference, 1947. Sepia ink and pencil on tracing paper. (Museum of Modern Art/Avery Architectural & Fine Arts Library)

I grew up going to that park. Anyone born and raised in Pittsburgh after 1974, when the park opened, would probably have difficulty envisioning downtown without it. But that’s what the National Building Museum does in its exhibition “Frank Lloyd Wright’s Southwestern Pennsylvania.” The show includes plans and artifacts for Wright’s completed projects in the region — the famous Fallingwater and Kentuck Knob — but his unbuilt projects are the more fascinating part of this exhibition.

Unrealized historical architectural models are always a piece of speculative fiction. But at the Building Museum, the artists of Skyline Ink Animators + Illustrators have visualized Wright’s in sweeping video representations of what they would look like in the context of the city — a much more immersive and cinematic way to consider the work than just

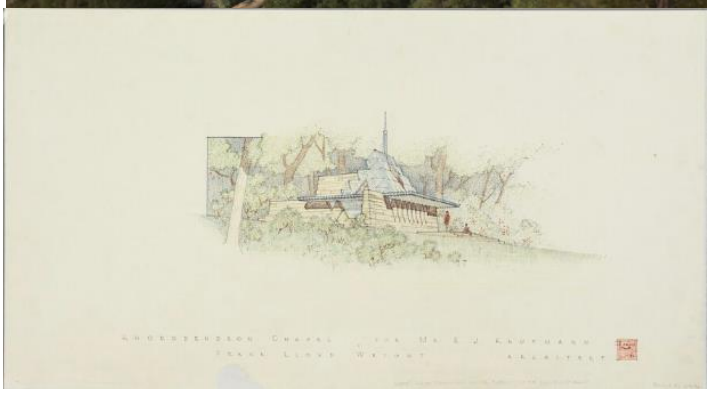
sketches. It's as if a drone flew over a Wrightified 1940s Pittsburgh (minus the smog), soaring over the Starship Enterprise-esque civic center as vintage cars drive up its winding ramps. Other cuts show some of Wright's additional unrealized projects, including an apartment building on a nearby hillside, and a spiral parking garage amid the skyscrapers of downtown.

Frank Lloyd Wright, architect, Point View Residences for the Edgar J. Kaufmann Charitable Trust (Scheme II), 1952. Ink, pencil and color pencil on tracing paper. (Museum of Modern Art/Avery Architectural & Fine Arts Library)

Wright's Pittsburgh-area projects are inextricably linked to the Kaufmann family, for whom Fallingwater was designed. Edgar J. Kaufmann, who owned a namesake department store downtown, also commissioned Wright to design his personal office (now in the collection of the Victoria and Albert Museum in London) and the aforementioned parking garage for his flagship store. (Its spiral structure would later be realized in Wright's design for the Guggenheim Museum in New York.)

Skyline Ink Animators + Illustrators, designers, Project for Point View Residences for the Edgar J. Kaufmann Charitable Trust. Digital illustration, 2023, made with material made available by the Frank Lloyd Wright Foundation. (Western Pennsylvania Conservancy)

The exhibition also includes additions to Fallingwater that were never built, like a cottage for a farm caretaker; a gate lodge for Kaufmann family guests; and the Rhododendron Chapel, an intimate but spectacular gathering space in shades of deep red and the aged turquoise of oxidized copper. Wright's involvement in the civic center came from a revitalization project led by the Allegheny Conference on Community Development, for which Kaufmann was a board member. (Alas, the Kaufmann's brand is no more — the company was sold to Macy's in 2005.)



Frank Lloyd Wright, architect; John H. Howe, delineator; perspective view of rear, project, Rhododendron Chapel for Mr. E.J. Kaufmann, 1952. Pencil, color pencil and ink on illustration board. (John H. Howe Collection/State Historical Society of Wisconsin)

Skyline Ink Animators + Illustrators, designers; Project for Rhododendron Chapel for Mr. E.J. Kaufmann, 1952. Digital illustration, 2021, created with material made available by the Frank Lloyd Wright Foundation. (Western Pennsylvania Conservancy)

What kind of city would Pittsburgh be now if its residents had parked their cars in this futuristic garage and patronized the arts in this ultramodern space? What would it mean for its art scene, its economy, its historic preservation? What kind of future would we have if we had constructed this particular past?

Even for someone who isn't connected to the western Pennsylvania region, it's a compelling thought exercise to imagine one's hometown completely reshaped by a central piece of transformative architecture. It's an alternate history that could have played out in the District, as well. Another one of Wright's unrealized plans — not explored in this exhibition but included in the 2011 show "Unbuilt Washington" — involved a megastructure called "Crystal Heights," an ahead-of-its-time mixed-use structure of 14 towers containing shops, a hotel, a theater and parking. Had it been constructed, it would have been his largest project, and would have changed the character of a city known for its Federal and brutalist architecture. Instead, it became the Washington Hilton.