

FRANK LLOYD WRIGHT'S LATER WORK

Wright's significant residential work did not stop with the Prairie school houses. It continued in an even stronger personal style, showing further experimentation and growth on his part. (For a more detailed listing, see Hitchcock's *In the Nature of Materials*.)

American System Plans (1913-16)

This was Wright's first attempt at a low-cost house for the average American. It involved ready-cut and partially prefabricated units that could be assembled in different ways to build modest single-family, duplex or apartment houses. They were designed for the Richards Brothers of Milwaukee, but Wright broke with the firm and withdrew from the project. Some were eventually built without his supervision and never realized the full potential of the concept.

Textile Block Houses (1923-1930)

In this system, concrete blocks are cast with integral patterns and laid up with vertical and horizontal reinforcing rods like the warp and woof of a fabric - hence the name Textile block. The first house built using this block was the Millard House in Pasadena. With its flat roof it is quite different from the Prairie house, but follows the same principles; it rises from the edge of a ravine (not a prairie) so the entrance comes in at the second floor, and the deep textured surfaces are particularly suited to the brilliant sunlight. Interior wall surfaces are the same plain and textured block used on the exterior. It is a spacial solution for a different site. (See Alice Millard house).

USONIAN HOUSES

Wright used the term "Usonian" to label what he planned as the ideal, low-cost house for the average American. These houses, which used common materials and a standard grid system, became as significant in Wright's later career as the Prairie houses were to his years in Oak Park. The first Usonian house was designed in 1936 and realized as the Jacobs I house the following year. Between 1936 and 1959, Wright designed approximately 170 Usonian houses, of which 140 were actually built.

Wright attributed the term "Usonian", his name for the United States, to Samuel Butler's novel *Erewhon* where, in fact, it does not appear. In a 1961 paper on Broadacre City, George Collins suggests that Wright derived the name from talk in Europe during his 1910 trip of calling the United States "Usonia" to avoid confusion with the new Union of South Africa. Usonian came to represent the new reformed American society Wright envisioned and tried to create during the last 25 years of his career.

Usonian houses include common brick walls exposed both inside and outside. Wood walls of horizontal board and batten are screwed to a wooden core, forming both interior and exterior wall finishes. This eliminated the need for plastering and wall decoration. Rows of glazed floor to ceiling doors and bands of casement windows form several of the walls. Floors are integrally red-colored concrete with heating pipes imbedded in gravel below.

Unlike a conventional house, the Usonian house has no basement and no attic. Roofs are usually flat (as on the Jacobs I house) or if pitched, the ceilings follow the slope of the roofs. There are no gutters or downspouts. There is no garage -- the carport was invented by Wright as an extension of the roof providing adequate shelter for the modern car. To save space, bedrooms, baths, and kitchens are minimal and efficient, allowing the living/dining area to be quite spacious. On the rear of the house, tall glazed doors extend the living/dining area and the bedrooms to exterior concrete terraces and the garden beyond. High clerestory windows on the street side of the house provide cross light and ventilation without sacrificing privacy.

Lighting fixtures are incorporated into the architecture by ways of indirect light shining up on the ceiling from lower "decks" or by recessed lights shining down through patterned boards. Any heating fixtures are done away with because the whole floor becomes a radiant panel via the steam or hot water pipes below the slab.

Both the design and the execution is based on a standard grid or unit system (a 2' x 2' square, a 2' x 4' rectangle, a hexagon, or a triangle grid). This leads to standardization and economy in designing and building. Many parts can be prefabricated in a shop or on the site. The grid is inscribed in the concrete mat both as an aid to the workmen and to give a sense of proportion of part to whole.

There are few solid corners -- openings to other rooms or mitred glass corner window dissolve the sense of confinement without losing the sense of shelter provided by the wide overhanging roof. No room is a simple box. The living area, dining area, and kitchen all flow together as one space with breaks in the wall, alcoves, brick piers, and built-in furniture providing the visual privacy without interrupting the flow of space. Even in the small bedrooms, built-in furniture, walls that jog, and different ceiling levels help the space to break out of a box-like confinement. (See Herbert Jacobs I house).

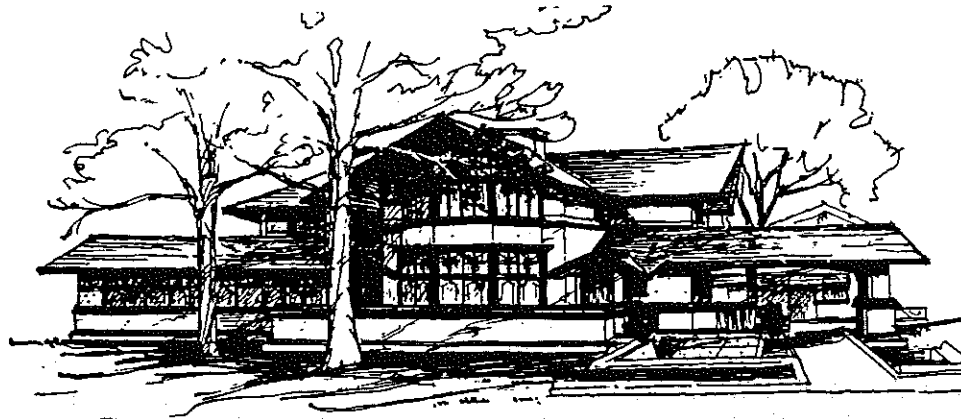
Writings and Projects (1929-59)

Wright spent much time during the Depression lecturing and writing. In 1932, he published "The Disappearing City", in which he prophesied what seems to be happening today. He turned his attention from individual houses to the whole environment in which people live and work. He prepared a model for his solution which he called "Broadacre City". Edgar J. Kaufmann provided funding, and the project was exhibited in New York in 1935. In 1933, the Taliesin fellowship was opened for tuition-paying apprentices, and the remodeling of the Hillside School buildings began to accommodate them. The apprentices worked on the remodeling and on the Broadacre City solution. It is interesting to see that some of the tower apartment houses shown in Broadacre City were based on a 1929 project that was never built. It had a central utility core with cantilevered floors that were considered fantastic then but have more than a little in common with Marina City Towers today.

SOME SIGNIFICANT BUILDINGS

B. HARLEY BRADLEY HOUSE Kankakee, Illinois, 1900

The Bradley house was the prototype model from which the mature Prairie house was developed. Together with the Warren Hickox house next door, the Bradley house was the first to have light-colored stucco walls bounded by dark wood trim, wide overhanging eaves for protection of window and wall, as well as windows grouped in long bands and around corners (tied into the facade composition by horizontal wood trim). The cross plan, too, is a model for later designs with the living room, dining room, entry, and kitchen each an open arm of the cross with a great central fireplace in the middle as a focus for the social space. For the first time in Wright's career, art glass was developed as a complex geometric composition that ran across two window openings. Here was the crisp, clear budding of the Prairie flower.



HILLSIDE HOME SCHOOL (now part of Taliesin) Spring Green, Wisconsin, 1902

This was the second school building Wright designed for his aunts' progressive school on the family land in Wisconsin. Rough limestone walls rise from the grassy lawn to form massive piers flanking tall casement windows (originally diamond-paned) that open out to the surrounding countryside. A series of broad hipped roofs, covered with red tile, shelter the various large spaces within: a two-story meeting room joined to a two-story gymnasium by a lower classroom link, and a separate building with science lab and art studio connected to the main building by an enclosed bridge over a roadway.

The two-story meeting room, with a surrounding balcony and a large, stone fireplace, is similar to Wright's Oak Park drafting room of 1898. The use of natural stone on the exterior and interior is unique at this point in Wright's work and prefigures the use of native limestone at Taliesin in 1911. Massive oak beams support the balcony and the ceilings conform with the line of the roofs over the principal rooms. The Hillside Home School expresses the timeless, rugged, monumentality of old barns and mills belonging to the rural landscape.



SUSAN L. DANA HOUSE (a State of Illinois property)
Springfield, Illinois, 1903

As the only surviving Prairie house with original furnishings, the Dana house provides a unique opportunity to experience a completely intact Prairie style interior. The client's unrestricted budget allowed Wright the freedom to design everything (furniture, art glass, sculpture, lighting fixtures) creating a totally unified environment. Two-story, barrel-vaulted ceilings (the only examples in Wright's work outside of the playroom in his Oak Park home) extend the dining room and gallery spatially. A third two-level space contains both an entry and a large reception hall. The art glass windows and lighting fixtures are among the most intricate that Wright ever designed. Almost every window has a unique design; some motifs are based on sumac and wisteria. The separate gallery (with library below) housed Dana's collections and was used for community artistic gatherings. It is connected to the main house by a skylit conservatory pergola.

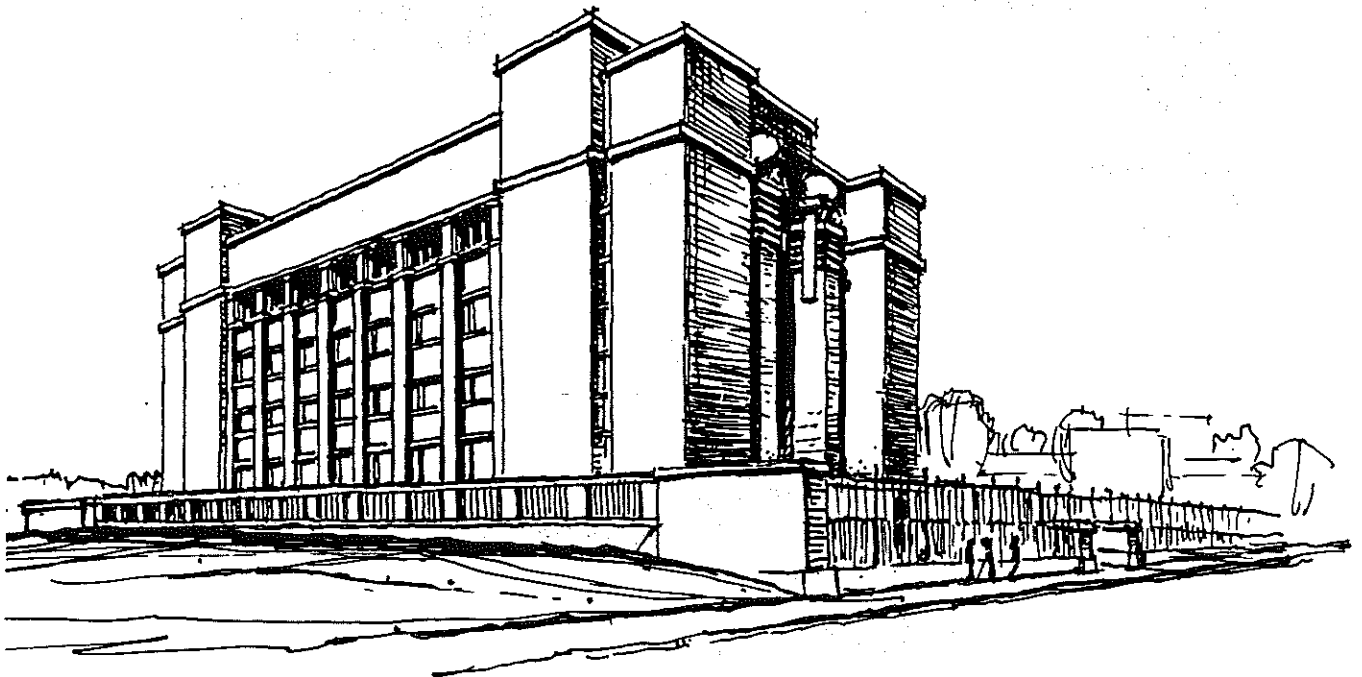


LARKIN BUILDING (demolished, 1950)
Buffalo, New York, 1904

Built for the Larkin Soap Company, the building housed the administrative staff of the soap premiums division. It was Wright's first commercial building, an "affirmative protestant" against the senseless ornamentation and misuse of materials prevalent at that time. A simple cliff of red brick, punctuated with horizontal rows of windows set deep between vertical brick piers and shafts, the building was sealed against the noise, smoke and soot of a railroad roundhouse next door. Fresh air was drawn in at roof level, filtered and distributed to the various floors, an early example of air conditioning although there was not cooling or humidity control. All intake and exhaust air shafts, water and waste pipes, and fire stairs were grouped and placed at the four outer corners in massive brick shafts. This left the entire center area free for working purposes.

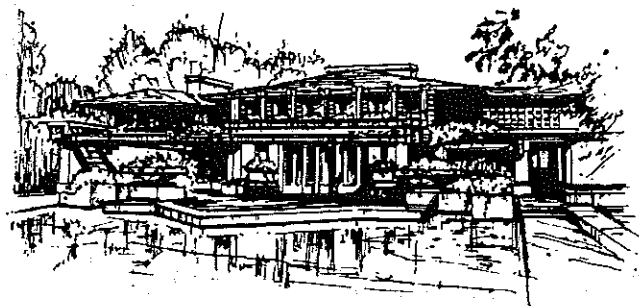
The interior was one great, open, vertical space rising some 75 feet to a large skylight and surrounded on all four sides by five stories of balconies, housing the various office functions. The top level, just under the skylight, was the employee dining room and conservatory. Built-in metal filing cabinets and metal office desks with attached chairs (for ease of floor sweeping) were additional Wright innovations.

The Larkin Building was, indeed, a commercial cathedral, a sanctified and inspiring work environment.



AVERY COONLEY HOUSE
Riverside, Illinois, 1908

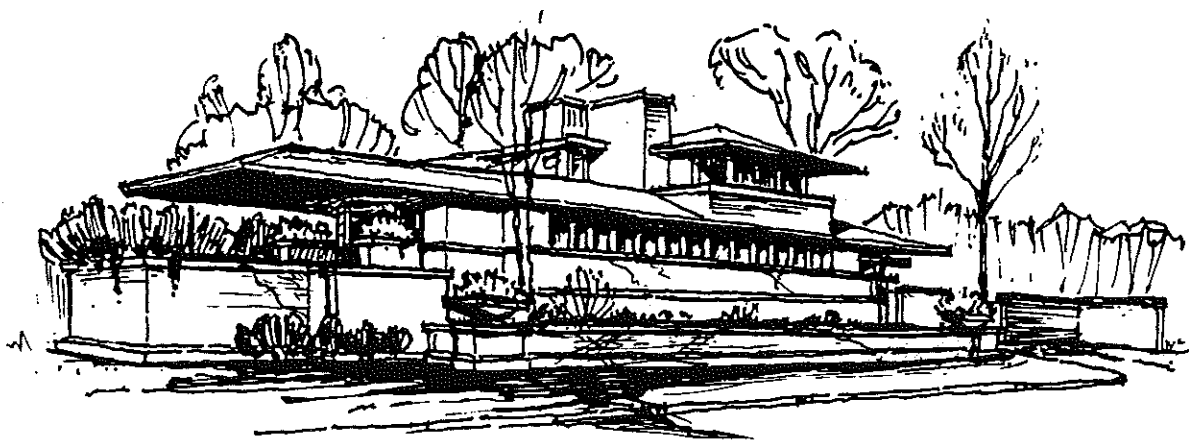
Situated by the Des Plaines River, the Avery Coonley house is one of the great Prairie houses that extends in different directions, seeming to reach across the landscape. It was planned to accommodate various home activities (living, playing, eating, and sleeping) in separate wings connected by galleries and bridges. The living and sleeping areas command a view of the river on the second level, while a ground-floor playroom opens to the pool and gardens. There is no basement; storage and service rooms are on the ground floor.



FREDERICK ROBIE HOUSE
Chicago, Illinois, 1909

The Robie House is a visual tour de force, situated on a narrow lot in Hyde Park. The second floor contains the main living area and includes a long living/dining space that terminates in sharp projections. Natural light enters from both sides via windows and glazed doors that open onto a balcony overlooking the Midway Plaisance. A broad Roman brick fireplace divides the living area and the dining area. Split flues allowed for the creation of an opening in the chimney above the mantel so space flows above, as well as around, the fireplace.

A playroom and billiard room on the ground floor provide direct access to a walled garden. Three bedrooms crown the house on the third floor. The service wing (kitchen and servants rooms atop a three-car garage) adjoins the main structure.



TALIESIN I, II, III

Spring Green, Wisconsin, 1911, 1914, 1925

Frank Lloyd Wright's second home was built amid the high, rolling hills and fertile valleys of farmland owned by his mother's family, the Lloyd Jones. Planned from the beginning as a combination home and studio, the building wraps a steep hilltop -- thus the Welsh name "Taliesin," shining brow. The building's cedar-shingled hip roofs echo the slopes of the nearby hillsides and extend out and around the hill crown. Their wide overhanging eaves shelter various rooms below. Great stone chimneys rise above the rooftops indicating a gathering place within.

The chimneys, lower house walls, pavements and garden walls are of native, yellow Wisconsin limestone, laid in horizontal strata like the natural outcroppings found in the nearby hills. The house walls are stuccoed, using sand from the Wisconsin River. It is a "natural house," true to the character of southern Wisconsin.

In addition to its function as a residence and studio, Taliesin was a working farm, allowing the complex to be as self-sustaining as possible. Shelter, food, clothing, entertainment and even electricity were made on the grounds. The farm buildings and stables are connected to the main house and studio via courts leading one to another around the hilltop.

On the inside, the walls are tawny, gold-colored plaster or exposed limestone. The floors are limestone or of wide cypress boards; and the tent-shaped ceilings, accentuated with bands of soft wood trim, follow the slope of the roof above. Extended rows of casement windows open out to the treetops and a view of the valley floor below, dotted with ponds and several dams.

Taliesin is a house designed for a northern climate. In the winter snow drifts cover the roof and icicles hang in rows from the eaves. Despite two devastating fires, Taliesin continued to be Wright's home for 48 years, and the complex is still used as the residence of the Taliesin Fellowship.



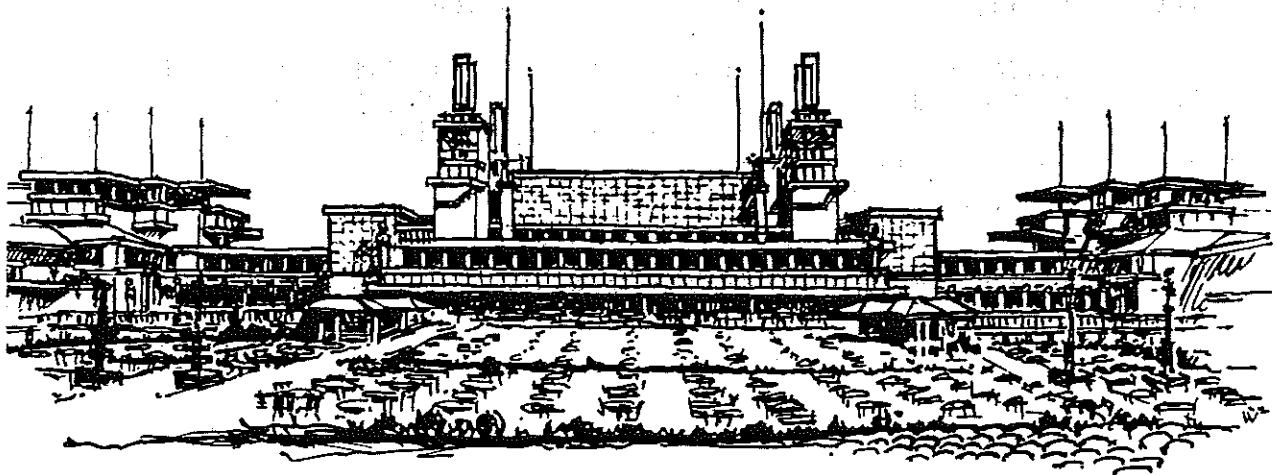
MIDWAY GARDENS

Chicago, Illinois, 1914 (demolished 1923)

Combining an indoor restaurant, outdoor restaurant, tavern, outdoor stage, and private club, Midway Gardens was a cabaret where Chicagoans could dine, drink, dance and enjoy top entertainment. During the summer these pleasures could be enjoyed out-of-doors in the summer garden of this remarkable complex.

Midway Gardens presented Wright with his first opportunity to design or supervise the creation of architecture, sculpture, painting, music, dinnerware, ornamental glass, lighting fixtures and landscaping as an integrated whole. The structure boasted geometric art glass, richly abstracted concrete panels, sculpted "sprite" figures, suspended electrical spheres of various sizes and vertical lighting "needles," colorful murals, specially designed dinnerware, and tabletop lamps that appeared like miniature translucent tents.

Despite the delights of eating and drinking outdoors, listening to the Chicago Orchestra or watching Pavlova dance in the multi-leveled winter garden, failing patronage and Prohibition spelled doom for the pleasure palace, which was demolished in 1923.



IMPERIAL HOTEL

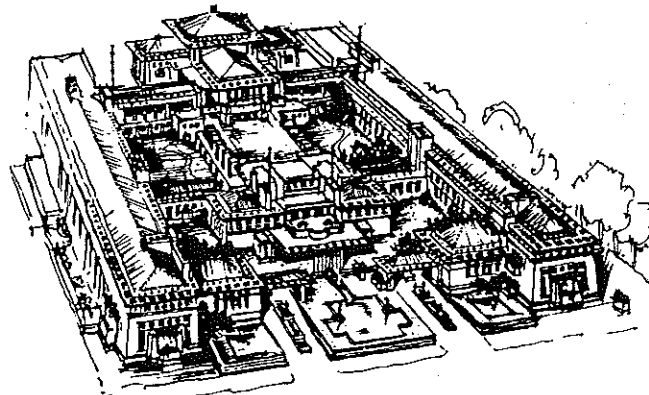
Tokyo, Japan, 1916 (demolished 1968)

The Imperial Hotel was a continuation of the integrated art and architecture of Midway Gardens. In addition to designing art glass, sculpture, painting (murals), and lighting fixtures, as he had at Midway Gardens, this Japanese project afforded Wright the opportunity to design furniture, rugs, bath fixtures and heating units.

Floating on a sea of mud atop short concrete pilings, the Imperial Hotel survived earthquakes that destroyed many other Tokyo buildings. Special joints between sections of the building allowed the structure to flex during the tremors and come together again once the shock waves passed. Ornamental pools provided water for fire protection when the 1923 quakes turned Tokyo into a sea of flame and broke all the city water mains. The whole building was designed to be as lightweight as possible using reinforced concrete floors, tapered concrete walls faced with brick, lightweight oya (lava) stone trim and ornament, and copper roof tiles.

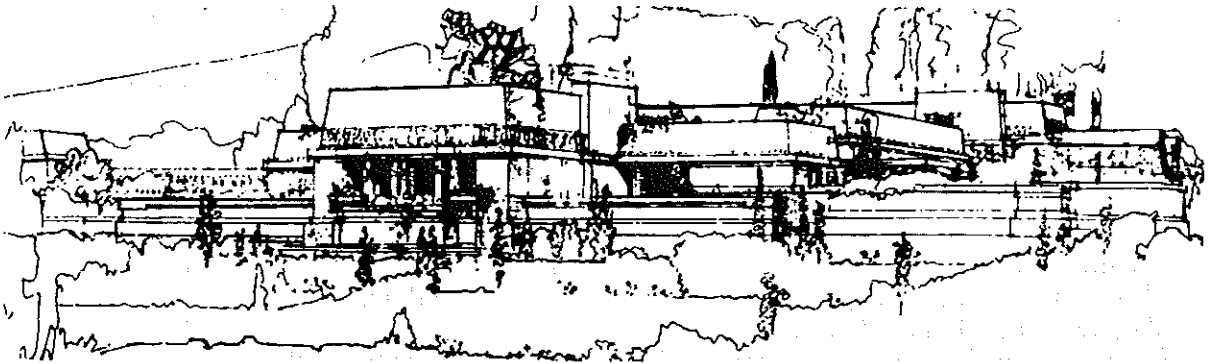
Arranged like a letter "H," the hotel had bedroom and bath suites laid out along the three-story side wings. Multi-storied public rooms were located in the center. Here, the multi-leveled entry lobby, two story dining room (opening to Japanese gardens on both sides), cabaret, theatre (with revolving stage), and various banquet rooms provided easy access to the guests and general public. Because the Japanese prefer not to entertain at home, the hotel served as a place for meetings, business dinners, weddings and receptions. It was also "the" hotel for Westerners until World War II. During the American occupation, the building was General Douglas McArthur's headquarters.

Frank Lloyd Wright wanted to create a building that was "Western" in the sense of mechanical equipment and efficiency, but true to the Japanese sensibility. Unfortunately, the hotel was damaged by bombs during the war and suffered from a management interested in a more "up-to-date" (i.e., more American-looking) hotel after the war. The building was allowed to deteriorate to the extent that major restoration work was needed. The hotel was torn down in 1968 despite worldwide protest, but the entrance lobby has been reconstructed in the Meiji-mura museum near Nagoya.



HOLLYHOCK HOUSE
Aline Barnsdall Projects (1917-22)

This commission was for an elaborate urban development in Los Angeles involving a house for the owner plus guest housing, a theatre, shops, rental apartments and houses. Only the famous Hollyhock house for the owner and two guest houses were built. The exterior makes a complete break with the Prairie style. The material is hollow tile, wood frame and stucco with concrete ornament. The roof is flat with no overhang. Leaded glass windows were used, and the decoration was cast in concrete similar to the design of Unity Temple.



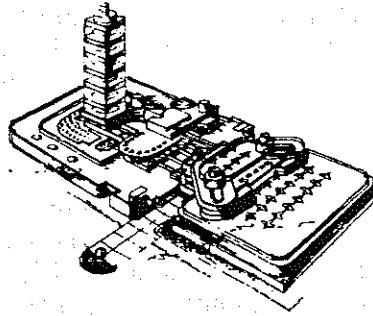
S. C. JOHNSON AND SON ADMINISTRATION BUILDING
Racine, Wisconsin, 1936

The design of this unique commercial space is a further development of the great top-lighted interior spaces of the studio (1898), Larkin Building (1904) and Unity Temple (1908). In a drab industrial setting, Wright shut out the offending views by designing continuous, solid brick walls and lighting the interior with rooftop skylights. Instead of a rabbit warren of tiny offices opening off a hallway, the building is virtually one, large, two-story workroom.

The main floor accommodates the general office staff; while on the second level balcony, which circles the room, administrators have semi-private offices. A third level contains executive offices and a conference room. The three levels are connected by broad circular stairs that wind around a circular elevator and air shaft.

In the great workroom, slender tapering columns 20 feet apart rise two stories and fan out at the top to form the giant "lily pads" of the ceiling. Between the circular ceiling forms, bands of pyrex tubing diffuse the light from the skylights. The exposed brick walls do not support the ceiling and so the juncture between the wall and ceiling (normally a dark area) is also banded with pyrex glass tubing.

In 1947 Wright designed a fifteen story research tower for Johnson's Wax. The circular and square reinforced floors cantilever out on all sides from a central shaft, which contains a round elevator and various utility ducts.



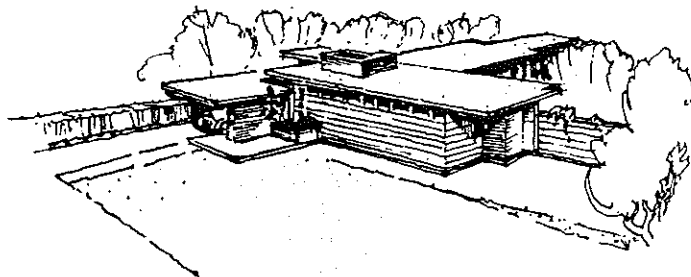
HERBERT JACOBS HOUSE #1
Madison, Wisconsin (1936)

In 1936 Wright designed his first Usonian house, which was completed the following year as a house for Herbert Jacobs in Madison, Wisconsin. The low-cost, 1500-square-foot house was built for \$5,500. The Jacobs I house (Wright designed a second house for the Jacobs in 1943) illustrates the major features of Usonian house design.

The structure was designed on a 2' x 4' module. This grid appears on the architect's drawings as well as on the concrete floor, providing reference for the builder. In later Usonian houses Wright worked with square, triangular, hexagonal and circular module systems.

Typical of many Usonian designs, the Jacobs house was designed according to an "L"-shaped plan, with a central core and two projecting wings: the living area in one wing, the bedrooms in the other, and the entrance and service core at the angle. The living rooms and bedrooms open with large French doors onto a garden court. The street and other facades are solid walls with high clerestory windows.

Basements and attics were eliminated in Usonian designs. The Jacobs house rests on concrete slabs and is heated by pipes placed in the floor. This method of heating was referred to as "radiant heat" by Wright. A flat roof replaced the hipped roofs of the Prairie school houses. The walls of the Jacobs house are pine board-and-batten in a 13-inch vertical module. The walls formed both interior and exterior wall finishes.



ALICE MILLARD HOUSE
Pasadena, California, 1923

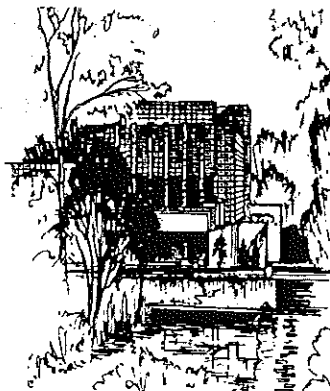
The Millard house was the first of four, patterned, concrete block houses built in and around Los Angeles (Millard, 1923; Storrer, 1924; Freeman, 1924; and Ennis, 1924). Many others were planned, but never built. While there were only four houses of this type built, the block houses were an important step in Wright's development of the American home.

Because the semi-desert climate of Los Angeles is different from that of the midwest, Wright responded with a completely different architecture. Since there was little rain, the hip roofs and wide overhangs of the Prairie house became flat roofs with no overhangs. The roofs also often served as terraces because the steep hillside lots had limited flat areas for outdoor living. Window and door openings were few and narrow to keep out the hot sun and dry, heated air. Because the lots were small and on steep hillsides, the houses were compact and vertical. The concrete block walls soak up the sun very slowly during the day, keeping the interiors cool, and then radiate their stored heat at night, providing warmth when the desert air cools rapidly after sunset. The thermal lag is aided by construction of the block walls, composed of two layers (exterior and interior) with an air space between.

In addition to the climate-control aspects of the houses, Wright was interested in developing a low-cost system of building using an inexpensive building product (the concrete block) that could be erected with unskilled labor. To create visual interest on the bare California hillside, Wright cast some of the blocks with geometric patterns and some with openings allowing light patterns to enliven the interior spaces.

The Millard house sits in the bottom of a ravine, which was transformed into a sunken garden. The dining room opens to a balcony overlooking the garden and connects to the entry and garage. The third story was Mrs. Millard's bedroom with a balcony (overlooking the living room) that leads to an outdoor terrace atop the garage. The rooftop is another terrace for outdoor living.

While the California block houses had a short lifespan, they influenced some of Wright's later Usonian houses which used the same type of block. They demonstrate Wright's ability to respond to the California climate and landscape with a new and distinctive style of residential design while remaining true to the philosophy he developed in the Prairie house. One philosophy, many expressions.



FALLINGWATER

Bear Run, Pennsylvania, 1936

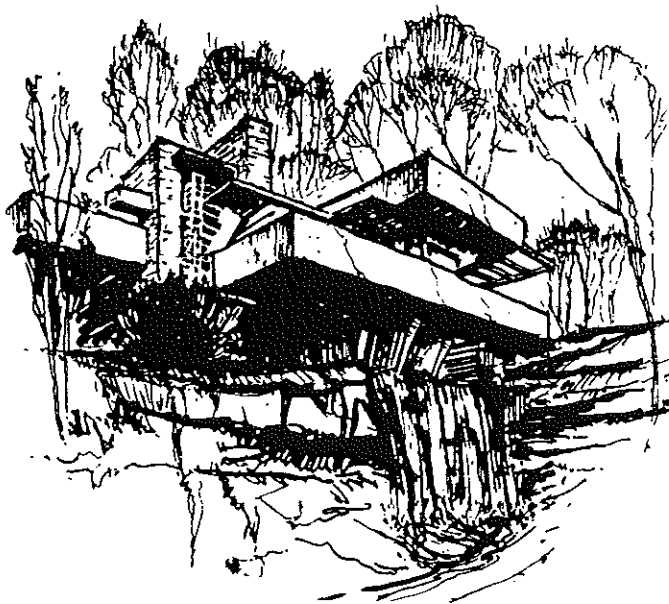
One of the most photographed houses of this century, Fallingwater sits above a waterfall in a densely wooded glen in rural, Southwestern Pennsylvania. This remarkable house comprises three levels of concrete "trays," floating one above another and separated only by continuous bands of glass, pivoting around a massive stone fireplace core. The main level is one great room for sitting and dining with a small separate kitchen. This main living area is connected to the stream below by a suspended stairway that comes up through the living room floor. Two exterior terraces provide ample room for outdoor living surrounded by trees and the sound of the waterfall below. The two upper levels are individual bedroom suites (four in all), each opening to its own terrace amid the treetops.

In this vacation house, Wright used reinforced concrete to cantilever three levels of the house from the native rock ledge that forms one of the sides of the stream bed. The smooth, cream-colored surfaces and rounded corners of the concrete parapet walls and overhangs contrast markedly with the massive jagged native limestone that was laid in horizontal strata to form the vertical accents of the fireplace core and retaining walls.

The interior space and the exterior terraces are continuous, separated only by glazed doors and windows framed by thin steel sections. Concrete parapet walls, limestone piers, and flagstone floors run unbroken from outside to inside so there is no visual division.

The great room on the main level is broken up into various nooks and alcoves (for sitting, dining and study) by limestone piers, built-in furniture and changes in ceiling level. Soft yellow and red cushions on the low, built-in couches and stools brighten the interior. All the interior trim, cabinetry and furniture is of American walnut.

Fallingwater is one of Wright's greatest designs. Here the site, structural system and interior space coalesce into an integrated whole.

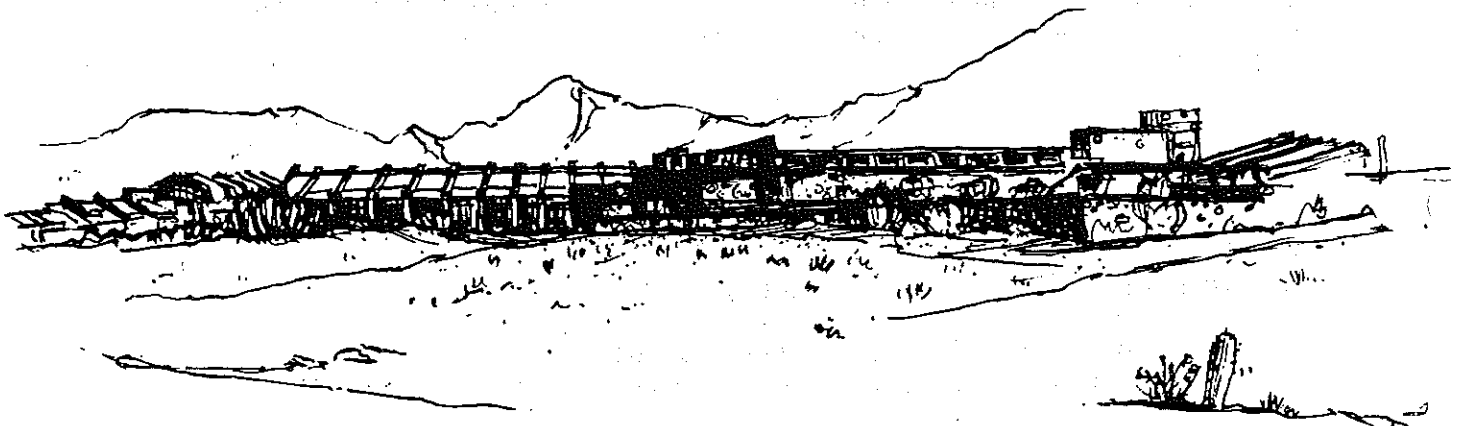


TALIESIN WEST

Scottsdale, Arizona, 1939

Wright built his third home in a strikingly different environment. Laid out in a long line paralleling the mountains behind, Taliesin West sits on a foothill slope that once overlooked miles of untouched desert. Today suburbia encroaches on its borders.

The desert floor itself forms the base for the buildings, and the same flat desert stones face the rubble concrete walls. Atop these massive canted walls, heavy redwood beams and canvas ceilings formed tent-like spaces for the office, drafting room and living room. The blinding sunlight, formerly diffused through white canvas, is now softened by more permanent fiberglass to give a shadowless glow to the main rooms. The rhythm of the wooden trusses, the prow-like protrusion of the terrace walls, and the various open canvas flaps and screens, inspired Wright to call Taliesin West "a ship of the desert."



HAROLD C. PRICE TOWER
Bartlesville, Oklahoma, 1956

While remembered chiefly as a residential architect, Wright served his apprenticeship (1887-1893) under Adler & Sullivan helping to design and construct some of the most advanced high-rise buildings in the world. During this period, Sullivan conceived the idea of the tall office building. Wright also designed many revolutionary office buildings, from the open facades for the Luxfer Prism company (1898) to the curtain-wall construction of the National Life Insurance Company planned for Water Tower Square in 1925.

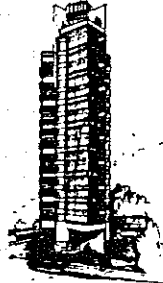
In 1929, he developed a new concept for tall buildings. Instead of using a steel cage, he designed a central concrete core containing the stairs, elevators and service ducts. On every story, the reinforced concrete floors were cantilevered out, eliminating the need for supports at their outer edges. This approach was more organic, Wright felt since it structurally echoed the growth pattern of plants and trees. The building skin (which could be lightweight metal stampings or glass) could thus "hang" on the outside as a weathershield, but would appear non-supporting. Wright developed this scheme for St. Mark's Tower in New York City, which was never executed, nor were any of his other designs based on this concept, including the 1956 Golden Beacon project for a 46-story apartment on North Avenue at Lincoln Park.

However, that same year, Harold Price, a gas contractor, approached Wright with a program for a three-story headquarters in Bartlesville, Oklahoma. The program kept growing and so did the building until Mr. Price had a 19-story tower, and Wright got his chance to build a highrise.

The Price Tower used to be the only skyscraper in town. From its windows the rolling Oklahoma hills could be seen extending miles in every direction. Wright called this building "the tree that escaped the crowded forest."

Constructed according to the principle of St. Mark's Tower, the Price Tower has a central core of reinforced concrete containing four elevator and service shafts that extend out via a thick wall to the building's edge. Each floor cantilevers out 20 feet from the four central supports and contains three offices and one apartment. The apartments have a kitchen and a two-story living/dining area on one floor and two bedrooms and a bath on a balcony level overlooking the upper part of the living room. The upper stories have an employees' lunchroom (with an outside terrace) and Harold Price's office.

Since the building faces in four directions, all with different sun conditions, the structure incorporates different sunbreaks on each side (unlike most high-rises, which have the same facade on all four sides). Vertical copper fins shield the apartments from the low western sun while horizontal louvers on the offices block the high southern sun. From every angle, the tower looks like a different building as the various components align themselves in different configurations.



SOLOMON R. GUGGENHIEM MUSEUM
New York City, New York, 1943-1959

First commissioned in 1943, the museum was not started until 1957 and completed after Wright's death in 1959. Despite the long design phase, the basic concept never changed. Wright felt museums had historically been designed as palaces for royalty, and were not only inappropriate for 20th-century life, but also inconsistent with a democratic society.

Developing his idea of a public building as a top-lit, multi-storied open space, Wright designed the museum as one vast, open, circular room wrapped by a ramp and lighted by a glass dome. Instead of winding their way through a maze of rooms, visitors experience the whole space at once, take an elevator to the top level, and then proceed down the gently spiraling, quarter-mile circular ramp, where art works are displayed on the outer walls. These walls angle out slightly at the ceiling level to introduce a continuous skylight, permitting diffuse natural light to illuminate the paintings.

Looking over the railing from any vantage point on the ramp, visitors can see where they have been and where they are going. The ground floor, lighted by the great glass dome above, offers a perfect setting for sculpture. In the Guggenheim museum, Wright eliminated parallel floor levels, and the multi-leveled space became one flowing plastic space from top to bottom.

