

Louis Sullivan's architectural motto was "form follows function," but one of his students, who never followed anyone, applied that belief with a twist:

"form and function are one." That's the thesis of *Frank Lloyd Wright: From Within Outward*, a new international traveling exhibit and companion catalog developed by the Solomon R. Guggenheim Museum with the Frank Lloyd

Wright Foundation on the museum's 50th anniversary. For Wright, inside and out were totally intertwined. Space and its purpose were always foremost during his 72-year

career, says Bruce Brooks Pfeiffer, director of the foundation's archives. "He wanted the city noise of hustle and bustle to be kept outside of the

Guggenheim and he wanted the work space at S.C. Johnson to be as inspiring as any cathedral to worship in," he says.

The exhibit, consisting of more than 200 drawings, photographs, and original material from 64 projects, along with models, animations, and murals, encompasses many projects that were never built. The architect had dreams

of a high-rise tower complex in Washington, DC, a mile-high skyscraper in Chicago, and a cultural center in Baghdad. Still, the show only presents a small

fraction of the 22,000 items in the foundation's collection. The call to memorialize the best of such a portfolio began early—even before

the National Historic Landmarks Program was established in 1960—when the American Institute of Architects and the National Trust for Historic Preservation

composed a list of 16 Wright sites in 1959 to "be preserved in their original form." The Frederick C. Robie House, the first to become

a national historic landmark, was followed by 24 other NHLs, with the Guggenheim joining the list last year. Here is a look at several landmarks featured in the exhibition.

LANDMARKED

wright

by Meghan Hogan

RIGHT: The Guggenheim.





LEFT, RIGHT: WALTER SMALLING, JR./NPS/HABS

THE UNITY TEMPLE, DESIGNED FOR THE UNITARIAN UNIVERSALIST CONGREGATION OF Oak Park, Illinois, “broke nearly every existing rule and convention for American and European religious architecture,” boasts its website. Wright, grandson of a Unitarian minister and nephew of a prominent Unitarian church leader, was himself an occasional attendee when lightning burned the congregation’s steepled Gothic edifice to the ground on the night of June 4, 1905. The pastor, Reverend Rodney F. Johonnot, had been preaching in hopes of a new structure just a month before. And luckily for Wright, his good friend, inventor Charles E. Roberts, was on the building committee. Johonnot, a liberal sort, was open to what Wright described as “a modern meeting house and a good-time place.”

Wright started with concrete, the cheapest material he could work with on a budget of \$45,000. Though perhaps not architecturally favored at the time, it was easy to mold. He devised a structure to encompass a square-shaped temple for worship and a rectangular building for classes and activities. Joined by a connecting lobby, the two sections symbolically form a Greek cross, with the temple the spiritual heart. It could hold 400 people, consisting of a central auditorium with a pulpit and pews and alcoves and balconies off to the side for additional seating. Light poured down from skylights in the concrete slab roof, as well as from a crown of windows wrapped around the walls of the upper gallery. Stained glass in an amber-colored geometric design gave off a soft glow and a sense of sunniness even on rainy days. The geometry repeats in the globe- and cube-shaped hanging lights.

As the exhibit catalog to *From Within Outward* notes, one of the most “ingenious” elements of the temple is its entrance and exit route. After entering the building, congregants walk into what Wright called “cloisters,” lowered spaces from which one can walk directly in the auditorium or, if services have already started, discreetly up staircases to the alcoves and balconies, located to the sides of the pulpit. And when leaving, instead of turning away from the pastor, congregants move towards him, since Wright considered that much friendlier.

Eschewing the requisite steeple, Wright ornamented the gray exterior with distinctive square columns, making the building look like an elegant sculpture. Wright, who called the edifice his “little jewel box,” reminisced years later that the project was one of the most significant in his

from day one. “Water is our nemesis,” Roth says. A Save America’s Treasures grant recipient, the church appeared on the National Trust for Historic Preservation’s 2009 11 Most Endangered List. In September 2008, a section of concrete and plaster crashed on top of the pulpit area. The restoration work includes repairing cracks in the exterior walls and in the magnesite flooring, and refinishing the modulated wood banding that accents its interior walls. All so it can remain open to the public as a thriving worship space and reception venue without par. “It’s so small inside that it is easiest to understand Wright’s vision when it is filled with people,” Roth says.

CALIFORNIA ROMANZA, OR “FREEDOM TO MAKE ONE’S OWN FORM,” WAS WHAT WRIGHT called the vision for his first house in Los Angeles. His client, Aline Barnsdall, was an oil heiress and theater buff with dreams of founding a grand performance enclave on the outskirts of the city. In 1919, when she purchased a 36-acre parcel on Olive Hill, Barnsdall envisioned a complex in-



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pursuit of organic design, “this eternal idea which is at the center and core of all true modern architecture . . . the space within the building is the reality of that building.”

THE CHURCH, A NATIONAL HISTORIC LANDMARK SINCE 1970, ATTRACTS 30,000 tourists each year, about half of them international. Part of the appeal is the surprise within. “It looks so strong and brutal on the exterior, but inside is something so beautifully delicate,” says Emily Roth, executive director of the Unity Temple Restoration Foundation, a nonprofit trying to raise money for a much needed restoration. While still functioning as a church, the building is over 100 years old, and the harsh winters have not been kind. The experimental choice of concrete has come back to haunt, since Wright didn’t know to add expansion joints during construction. The resulting cracks and leaks have been an issue almost

cluding a house for her, residences for principal associates and visiting directors, apartments for actors, and shops. Having met Wright in Chicago around 1915, she believed he was the man to build it.

“You will put your freest dreams into it, won’t you? For I believe so firmly in your genius that I want to make it the keynote of my work,” she wrote him shortly after. “Can’t you give it the grace of the Midway Gardens, with the added lift and color they never achieved?” It was a difficult project with much of Wright’s attention focused overseas on Tokyo’s Imperial Hotel. The two were never in California at the same time. Barnsdall felt neglected

LEFT AND ABOVE: *The Unity Temple.*

and Wright wondered why she even needed a house. To complicate matters, their headstrong personalities clashed. Barnsdall, a feminist and single mother, was ahead of her time; Wright preferred that outspoken clients simply stay out of his way. In the end, Wright constructed only her house and two smaller residences before she hired another architect in 1921.

WHAT WAS BUILT IS ONE OF HIS MOST RENOWNED STRUCTURES. THE 6,000-SQUARE-foot complex resembles a pre-Columbian temple with motifs of Barnsdall's favorite flower, the hollyhock, embellishing its concrete blocks. Outside the house are a series of connecting pools and an inner courtyard accessible from interior rooms. The 17-room, 7-bathroom interior includes a library, music room, and guest quarters. The star of the house is the living room, featuring one of the most unusual hearths Wright ever designed. An abstract bas-relief mural hangs above it, a shallow moat of water at its base, while a skylight overhead gives it a perpetual ray of light. With its incorporation of fire, earth, water, and air, architecture critic Ada Louise Huxtable called it the "ceremonial symbol for the life of the house." Author Meryle Secrest describes the design as "imposing, awe-inspiring, monumental, and forbidding . . . nothing, in short, could be more outré, more Hollywood-in-the-nineteen-twenties in its romantic symbolism."

However, many thought Wright was past his prime as an architect. And having recently left his first wife and six children for a neighbor's spouse, many did not want to hire him on moral grounds. Whatever the opinions at the time, Hollyhock was a "watershed moment" says its 2007 national historic landmark nomination, a clear transition away from the Prairie-style architecture of his earlier works. It is imbued with a reverent love of



THE STAR OF THE HOUSE IS THE LIVING ROOM, FEATURING ONE OF THE MOST UNUSUAL HEARTHES WRIGHT EVER DESIGNED.

nature, cultivated during summers on the Wright family farm in Wisconsin. "No other Wright domestic design more successfully blurs the boundary between interior and exterior space," notes the nomination.

Barnsdall, never truly happy with the design, only lived there a short while before gifting the house to the city in 1927, which really didn't want it. While it is open for tours today as part of the Barnsdall Art Park, which includes a gallery theater and a children's art center, it is another Wright property much in need of restoration. Leaks have been a problem over the years, and damage from the Northridge Earthquake in 1994 is still evident on the property. Recent grant awards from the Save America's Treasures Grant Program and the California Cultural Historical Endowment, however, should eventually have the place returned to good condition.

ABOVE AND RIGHT: Hollyhock House.







LEFT, RIGHT JACK E. BOUCHER/NPS/HABS

WRIGHT WAS A LOVER OF WATERFALLS, EVER SINCE TOTING BACK PHOTOGRAPHS AND postcards of them from his first trip to Japan in 1905. Fallingwater, as his most famous house is now known, was built for prosperous department store owner Edgar Kaufmann and his wife, Liliane, who wanted a mountain retreat near their home in Pittsburgh, once nicknamed “Smoky City.” The structure, landmarked in 1976, dramatically cantilevers over a waterfall in Mill Run, Pennsylvania.

Choosing a location was easy for the couple—along the stream where they had held a summer camp for store employees before the Depression hit. Their son, Edgar, Jr., was studying with Wright at Taliesin in Spring Green, Wisconsin. The couple met the architect during a visit, intrigued by his work.

Wright’s creation of the design is one of his career’s most famous moments. Several months after landing the commission, he told his client the plan was done without having put anything to paper. When Kaufmann, in nearby Milwaukee on business, called to say that he would be dropping by, Wright magically sketched out drawings in just a couple of hours. One made the cover of *Time*. His students were awed, but this was how he worked. “He would never put a design on paper until it was fully fixed in his mind,” Pfeiffer says. It wasn’t quite what the couple expected—a house on top of a waterfall, not with a view of it. Nevertheless, Kaufmann loved the scheme. “Don’t change a thing,” he said.

He did consult with an engineer on the safety of the concrete cantilevers. A smart move, since the cantilevers designed by Wright did not have adequate reinforcement. If they had been built without the extra steel that Kaufmann added, Fallingwater might have been Fallen Water. But the move angered the architect, the beginning of many squabbles throughout the construction of the main house (between 1936 and 1937), and its guesthouse (in 1939). It was another case of larger-than-life personality clash, says Clinton Piper, the site’s museum programs assistant. But the pair got past it, and Kaufmann commissioned Wright for several more projects. Part of the house’s mystique, the consulting engineer’s report is rumored to be buried in a house wall, an entombed reminder, if true, that Wright always believed himself to be right.

AS WITH ALL OF HIS PROJECTS, MONEY WAS AN ISSUE. WRIGHT WAS NOTORIOUS WITH finances—his own and his clients—his oft-quoted philosophy to “take care of the luxuries and let the necessities take care of themselves.” Kaufmann’s original budget, \$35,000, mushroomed to \$75,000, with the total reaching \$155,000 after additions. Though Wright was denied gold leaf for the walls, gold is featured in furnishings throughout, along with his favored Cherokee red. He designed the furniture in North Carolina black walnut.

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Wright had nature in mind when he made the house an extension of the cliff. He made the most of the other surroundings, too—a boulder used for picnics became the fireplace, built-in ledges imitated the landscape, and the extensive glass provided generous views of the wilderness. The entire structure was built with local sandstone. “The floors are actually coated in wax to look wet like the stream bed,” Piper says. And, although you can’t see it, you can hear the stream from everywhere inside; the effect is

that house and stream are joined. “You listen to Fallingwater the way you listen to the quiet of the country,” Wright later said. Now owned by the Western Pennsylvania Conservancy, Fallingwater, open daily, will see close to 160,000 tourists this year, the second of record visitorship. The site appeals to a lot of people, not just architects. “People are automatically inspired by his spaces,” Pfeiffer says. “He created buildings to relate to human scale . . . you feel comfortable in them.”

WHEN WRIGHT RECEIVED THE COMMISSION FOR THE JOHNSON WAX BUILDING, HE KNEW exactly what he wanted to do—a scheme of “great simplicity” envisioned years earlier for Salem, Oregon’s unrealized Capital Journal Building. Herbert F. Johnson, president of Racine, Wisconsin’s S.C. Johnson & Son, Inc., gave him the chance to build it. Johnson wanted something new and modern to replace the company’s outdated offices. As head of one of America’s first companies with perks like vacations and profit sharing, Johnson wanted to reflect the firm’s values and give employees the same work conditions as their employers. But he didn’t want anything too unconventional. Wright said that if he wanted conventional, to find someone else. The two weren’t friends and didn’t have much in common. Wright, desperate for work, practically insulted Johnson into giving him the job, even though he knew another architect had already been cho-



LEFT AND ABOVE: Fallingwater.



Johnson's budget soared from \$250,000 to \$850,000. The cost included a trial column, since building commissioners would only approve after shown it could withstand a load of 12 tons (it held 60.) Despite the expense, Johnson loved the building, which earned rave reviews. "Spectacular as the showiest Hollywood set, it represents simply the result of creative genius applied to the problem of designing the most efficient and comfortable, as well as beautiful, place . . ." reported *Life* magazine. Although Wright took the penthouse offices and dendriform columns from his earlier Capital Journal Building, a newspaper plant, the result here reflected the 1930s vogue for streamline moderne. "The Johnson building's profile [is] that of a sinuous creature—its skin stretched over living organs," writes Jonathan Lipman in *Frank Lloyd Wright and the Johnson Wax Buildings*. "An intimate fit has been established between the building's interior spaces and its external form."

Wright returned to the form in 1943 when Johnson asked for research space to support an expanded product line. Johnson said, "Why not go up in the air, Frank?" With inspiration from another unrealized project—New York City's St. Mark's-in-the-Bouwerie Apartment Tower—Wright cantilevered each of the 14 stories, the exterior alternating between bands of brick and glass tubing. Despite the impressive design, the tower closed in 1982, never practical for research. Both structures were landmarked in 1976. The administration building, still in operation, gets around 25,000 tourists annually.

WRIGHT'S BETH SHOLOM SYNAGOGUE, LANDMARKED IN 2007, IS ANOTHER WORK rooted in an unbuilt design. His only synagogue, it was one of many erected during the postwar boom when conservative Jewish congregations left the cities for the suburbs. Beth Sholom, founded in 1919, had a

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sen. But Johnson, impressed with Wright's charisma—what *Time* once called "arrogant courage"—gave him a chance. "The Johnson administration building is not going to be what you expect," Wright told him. "But I can assure you of one thing—you'll like it when it is put up."

HE KEPT HIS PROMISE. ERECTED BETWEEN 1936 AND 1939, WRIGHT'S FIRST LARGE PROJECT in years, the three-story brick-clad building consists of a roofed carport, entrance lobby, semicircular 250-seat theater, dining room, and penthouse level executive offices. But the crowning glory was the Great Workroom, still used as office space today. The two-story expanse—228 by 228 feet—is dotted with slender white dendriform columns topped with lily pad platforms reaching up to the skylit ceiling. "The very essence of this room is light, a space like a forest of white birch trees with light filtering down from above," says the exhibit catalog. Below the room is a basement with restrooms and storage space, and above is a balcony leading to the executive offices. Panoramic elevators called "bird cages" run between the three floors.

From the bricks to the floors to the furniture, Wright's signature Cherokee red is featured throughout, along with cream, giving an earthy touch. His stamp is also on the more than 40 pieces of furniture, including desks and chairs, most still in use. There are no windows to the outside; Wright didn't think much of the view. Instead the building is lit by a system of glass Pyrex tubing.

building in north Philadelphia, but in 1953 decided to move to the northern suburb of Elkins Park where most of the members now lived. The synagogue's rabbi, Mortimer J. Cohen, hired Wright, likening his work to Michelangelo's dome at St. Peter's Basilica. Cohen wanted a monumental design of both past and present, to symbolize "the American spirit wedded to the ancient spirit of Israel." He sent Wright views of Mount Sinai, the ancient Solomon's Temple, and medieval European synagogues, along with his own sketches.

LEFT AND RIGHT: *The Johnson Wax Building.*

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LEFT © BALTHAZAR KORAB PHOTOGRAPHY LTD. RIGHT JACK E. BOUCHER/NPS/HABS

WRIGHT WORKED COHEN'S ELONGATED OCTAGON INTO AN IRREGULAR HEXAGON, extending upwards and outwards into a pyramidal tower, composed entirely of concrete, metal, and glazed glass, with a canopy jutting out above the main entrance. Inside, he arranged a sea of copper-colored seats, almost 1100 of them, to face the bimah, or reader's platform. Upon entering, visitor's eyes are irrevocably drawn to a stained-glass chandelier hanging from the center of the ceiling. The triangle-shaped light fixture's vibrant blend of red, yellow, blue, and green—each representing a different virtue—contrasts strikingly with the translucent background of glass panes. A gold and red seraphim-wing lamp, rising behind the bimah with the word “holy” spelled out in Hebrew above it, provides another flash of color.

The building also includes a sanctuary, lounges, and service space. True to Wright's love of geometry, a triangle theme is present from the sawtooth-patterned screens behind the pulpit to the light fixtures on the walls. The finished design, that of a crystal diamond like the one in the Divine Law, doesn't just symbolize the Jewish faith, but as Joseph Siry writes in *From Within Outward*, also Wright's belief, based on his Unitarian upbringing, of all religions as equal.

The synagogue, which opened four months after the architect died, was in many ways the fruit of Wright's 1926 design for New York City's Steel Cathedral for the Church of St. Mark's-in-the-Bouwerie, done for rector William Norman Guthrie, a fan and friend. Like Wright, he took a universalist approach to religion, holding Egyptian sun-god dances during sermons, to the dismay of the diocese. The cathedral “would hold a million people in numerous churches and chapels, all under one roof,” he said. Both Guthrie and Cohen “were supremely well informed about religious architecture . . . and concerned to create buildings that would embody their visions of modern, democratic worship,” Siry notes. Had the design been built—the project never got past sketches—it would have been a construction feat, with three entrances, a hexagon-shaped pool, spiral ramps, and 600-foot spires. At 2,100 feet high, it would have dwarfed the Eiffel Tower. Wright wrote in a letter to Guthrie, “It is too great a scheme to be dropped or lost.” And looking at Beth Sholom today, which like the Guggenheim is celebrating its 50th anniversary, in a way it never was.

WRIGHT WANTED HIS DESIGNS TO LOOK AS NEW 100 YEARS DOWN THE ROAD AS THEY did on the day they opened. The Guggenheim has never looked better. The cracks that plagued its granite-clad exterior almost from the start were finally repaired in 2008 after an extensive three-year renovation. And, in honor of its 50th birthday, it is being showered with attention.

Wealthy philanthropist Solomon Guggenheim had wanted a home for his foundation and ever-growing collection; at his side was the foundation's curator and fellow art enthusiast, Hilla Rebay, who wanted “a temple of spirit, a monument.” For Wright, it was a chance to create a ziggurat building, a circular shape that, Secrest notes, he had been experimenting with for years. “It was the final expression of his search for logical movement through space,” Secrest writes. For his famous concrete spiral, Wright drew up six sets of plans and 749 drawings. One drawing explores a polygonal shape. Peach, pink, and red facades were all considered. In the end, though, plain white was controversial enough. Critics, including museum director James Sweeney, weren't sure how well the space would work. Many feared it would take the spotlight away from the art. Wright's said his plan “was to make the building and the painting a beautiful symphony such as never existed in the world of Art before.”

ON OCTOBER 21, 1959, THOUSANDS LINED UP OUTSIDE. ALTHOUGH REVIEWS WERE MIXED—one critic called it a “ball of mud”—the Guggenheim was an instant landmark, not just a receptacle for art, but a destination by itself. “Almost every museum of our time is a child of the Guggenheim,” *New York Times* architecture critic Paul Goldberger has noted since. It was designated a national historic landmark just before turning 50. Wright did not live to see its success, passing on six months before the opening. Yet, says Pfeiffer, “he was convinced it was the right design . . . He was always right with the times—it's people who were behind.”

contact points web Frank Lloyd Wright Foundation www.franklloydwright.org
Guggenheim Museum www.guggenheim.org NPS National Historic Landmarks Program www.nps.gov/history/nhl/

Frank Lloyd Wright: *From Within Outward*, currently on view at the Guggenheim Bilbao Museum, is on tour until February 14, 2010.

LEFT AND BELOW: Beth Sholom Temple.



UPON ENTERING, VISITOR'S EYES ARE IRREVOCABLY DRAWN TO A STAINED-GLASS CHANDELIER HANGING FROM THE CENTER OF THE CEILING.