



Frank Lloyd Wright's Guggenheim Museum: A Historian's Report

Author(s): Jack Quinan

Source: *Journal of the Society of Architectural Historians*, Vol. 52, No. 4 (Dec., 1993), pp. 466-482

Published by: [University of California Press](#) on behalf of the [Society of Architectural Historians](#)

Stable URL: <http://www.jstor.org/stable/990869>

Accessed: 25-04-2015 23:13 UTC

REFERENCES

Linked references are available on JSTOR for this article:

http://www.jstor.org/stable/990869?seq=1&cid=pdf-reference#references_tab_contents

You may need to log in to JSTOR to access the linked references.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



University of California Press and Society of Architectural Historians are collaborating with JSTOR to digitize, preserve and extend access to *Journal of the Society of Architectural Historians*.

<http://www.jstor.org>

Frank Lloyd Wright's Guggenheim Museum: A Historian's Report

JACK QUINAN State University of New York at Buffalo

EDITOR'S NOTE: This is the first of a series of occasional reports that will focus on special problems related to major works of world architecture. In these reports, scholar-experts will be asked to give an account of the state of a work of architecture or a historical problem. In this report, Jack Quinan views Frank Lloyd Wright's Guggenheim Museum in relation to the new addition by Gwathmey Siegel and in the context of Wright's career as a whole. Quinan shows how the spiral was rooted within Wright's consciousness from his earliest education in Unitarianism and transcendentalism. The spiral represented the geometric shape of utmost importance to Wright, one which he frequently tried to include in his architectural designs. Quinan argues that the Gwathmey Siegel slab represents an unsympathetic response to Wright's greatest spiraling form, the Guggenheim Museum.

FOLLOWING A TWO-YEAR period of renovation and expansion, the Solomon R. Guggenheim Museum reopened in the summer of 1992 to widespread attention in the popular press. Most critics praised the brightened interior and the refurbished surfaces but were less sanguine about the exterior of the museum.¹ Martin Filler stood alone in roundly condemning the project as "cultural cannibalism" and "a thoroughgoing desecration of Wright's masterpiece."² This article seeks to introduce a deeper historical perspective to the discussion by examining the building's current refurbishment in light of Frank Lloyd Wright's original ideas and intentions, and in view of the significance of Wright's building to the history of architecture.³

1. See for example Peter Lemos, "Diminished Outside, Dazzling Inside," *Art News* 91 (1992): 93; Robert Campbell, "New Guggenheim is a Hit from Within," *The Boston Globe*, 26 June 1992; Carter Wiseman, "Guggenheim-go-Round," *Architectural Record* 180 (1992): 102–3.

2. Martin Filler, "Wright Wronged," *House & Garden* 158 (1986): 42–48; *idem*, "Growing Pains," *Art in America* 75 (1987): 14–19; and *idem*, "Back into the Box," *Design Quarterly* 156 (1992): 6–9.

3. The Guggenheim and its distinguished patron warrant a fuller study than is possible here. For a discussion of Solomon R. Guggenheim's role as patron, see John Coolidge, *Patrons and Architects: Designing Art Museums in the Twentieth Century* (Fort Worth, 1989), 40–48, hereafter cited as Coolidge, *Patrons and Architects*. Milton Lomask's *Seed Money: The Guggenheim Story* (New York, 1964), includes two well-researched and informative chapters on Solomon Guggenheim's art collection and on the museum, but fails to fully unravel the role of patronage performed by

Sometime during 1958 Wright prepared a series of large-scale perspective drawings to demonstrate to the board of trustees of the Solomon R. Guggenheim Museum how the ramps and walls of the museum would accommodate paintings of various sizes. In one, "The Masterpiece" (Fig. 1), a small girl leans on the interior parapet wall and looks down into the rotunda space. Moments before meeting with the trustees, Wright took out his pencil and deftly added the yo-yo that hangs from the girl's hand, saying to his apprentices, "Boys, we must never lose sight of our sense of humor."⁴ Indeed, Wright would need a sense of humor to see this project through.

The history of the Guggenheim Museum began in 1926 when Solomon Guggenheim, a man of vast wealth made in mining and minerals, fell under the influence of Hilla Rebay, a thirty-six-year-old painter and enthusiast of twentieth-century European abstract art. During the following decade, Guggenheim collected avidly and in 1937 established the Solomon R. Guggenheim Foundation, an institution by which his collection was made available to the public. Beginning in 1939, the collection of 700 paintings was exhibited at the Museum of Non-Objective Painting at 24 East Fifty-fourth Street. In June 1943, Hilla Rebay, who had become the curator of the collection, approached Frank Lloyd Wright about the design of a museum for the collection.⁵ Wright readily accepted despite the fact that a site had not been purchased and construction was unlikely during World War II.

Solomon R. Guggenheim and his successors, the Earl of Castle Stewart, and Harry Guggenheim.

4. This anecdote was related to the author on 6 March 1991 by Bruce Brooks Pfeiffer, who joined the Taliesin Fellowship in 1947.

5. The principal bibliographic sources for the Guggenheim are William Jordy's chapter, "The Encompassing Environment of Free-Form Architecture: Frank Lloyd Wright's Guggenheim Museum," in *American Buildings and their Architects: The Impact of European Modernism in the Mid-Twentieth Century* (New York, 1972), 279–359, hereafter cited as Jordy, *American Buildings*; Bruce Brooks Pfeiffer, ed., *Frank Lloyd Wright: The Guggenheim Correspondence* (Carbondale, Illinois, 1986), hereafter cited as Pfeiffer, *Guggenheim Correspondence*; and Lewis Mumford's perceptive review in "The Sky Line: What Wright Hath Wrought," *The New Yorker*, 5 December 1959, 105–30. See also Joan M. Lukach, *Hilla Rebay: In Search of the Spirit in Art* (New York, 1983), especially Chapter 22, "Frank Lloyd Wright 1943–1959," 182–201.

Fig. 1. Frank Lloyd Wright, Solomon R. Guggenheim Museum. Interior perspective drawing, "The Masterpiece," 1958. (TAL4305.016 ©FLWRIGHT FDN)

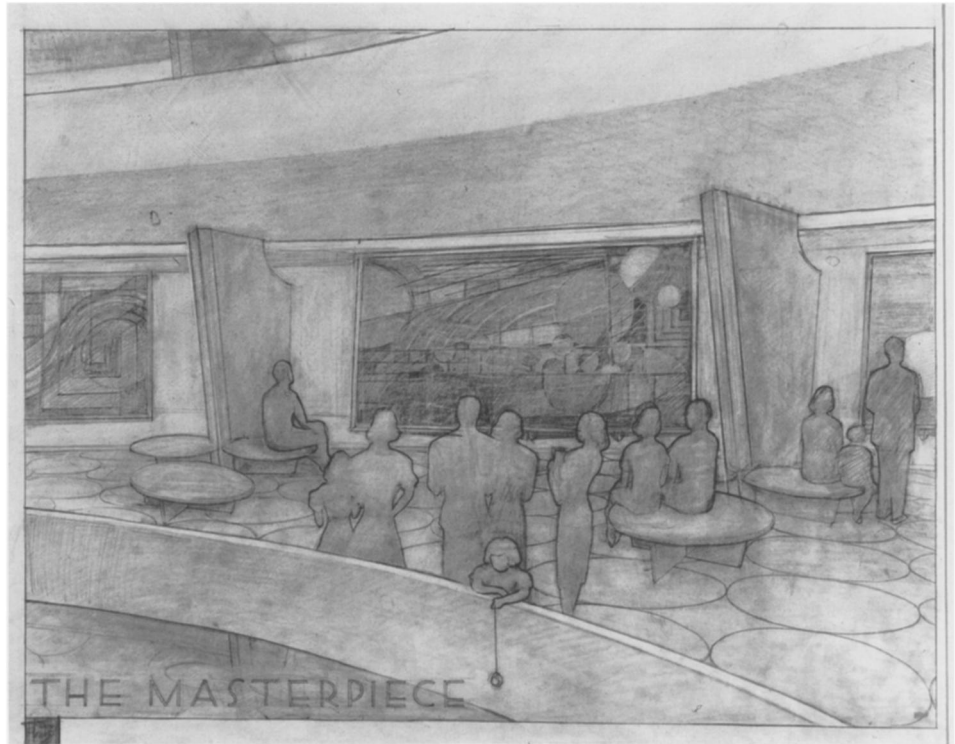
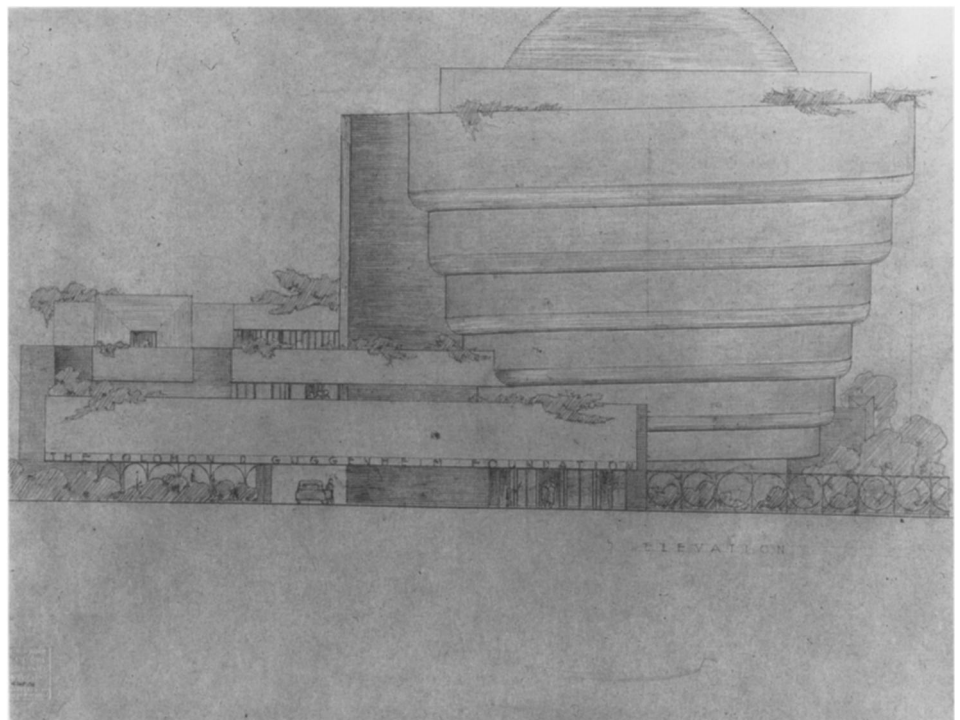


Fig. 2. Frank Lloyd Wright, Solomon R. Guggenheim Museum. Preliminary exterior elevation drawing, 1943. (TAL4305.004 ©FLWRIGHT FDN)



Letters indicate that he initially envisioned a low, sprawling building but changed to a vertical orientation given the constricted nature of the sites available in Manhattan. The spiral solution (Fig. 2) seems to have occurred to him sometime late in 1943. The northern half of the present site on Fifth Avenue at

Eighty-ninth Street was purchased in March 1944, and on 27 July 1944 Solomon Guggenheim accepted Wright's sketches for a spiral-formed building and authorized him to proceed with detailed drawings. These drawings were fifteen months in preparation, during which time Wright found it necessary to have



Fig. 3. (From the left) Frank Lloyd Wright, Hilla Rebay, and Solomon R. Guggenheim with Wright's second model of the Guggenheim Museum, ca. 1947. (TAL6805.002 ©FLWRIGHT FDN)

a model of the building constructed to further edify his patron and Hilla Rebay. The southern, or Eighty-eighth Street, portion of the present site was purchased in July 1945.⁶

During the years immediately following World War II, Solomon Guggenheim delayed the start of construction of the museum in the belief that costs would drop significantly, but in fact costs doubled by 1946, causing Wright to ask for a revised contract. Plans by Hilla Rebay and Solomon Guggenheim to erect a temporary exhibition structure on the Eighty-eighth Street portion of the site prompted Wright to design a permanent annex, which in turn led him to completely redesign the commission as a binucleated scheme similar to his earlier Larkin Administration, Unity Temple, and Johnson's Wax buildings. A second model (Fig. 3) was built as well, and the plans were ready by September 1947.

Meanwhile, additional problems materialized. As designed, the building stood in violation of numerous New York City building codes (it lacked enclosed fire exits, for instance). Moreover, Hilla Rebay's initial enthusiasm for Wright and for the building had waned considerably since 1944. Nevertheless, Wright campaigned vigorously during 1947 and 1948 to get the annex built as a foot-in-the-door strategy. His efforts were further stalled, however, when Solomon Guggenheim fell seriously ill in 1948, causing the entire project to be put on hold for more than a year. On 3 November 1949, Solomon Guggenheim passed away at the age of 92, leaving no specific instructions for the disposition of the commission.

6. It is not clear how many of the paintings in the collection were to be hung at one time. There were about seventy available niches formed by the web walls in the building, which would contain anywhere from three to eight paintings each, depending upon their size, with additional space available on temporary panels on the main floor and on the walls of the High gallery room, thus providing a total accommodation of 250 to 600 paintings.

Undeterred, Wright sought out and cultivated Lord and Lady Castle Stewart, Solomon Guggenheim's son-in-law and daughter; Harry Guggenheim, Solomon's nephew (who was soon to be appointed chairman of the board of trustees of the Solomon R. Guggenheim Foundation); Harry's wife, Alicia, and others in the family and on the board. During the summer of 1950, Wright traveled to England to persuade the Castle Stewarts to purchase the final piece of the present site, whereupon Wright undertook completely to redesign the building for the third time (Fig. 4). With this design, the spiraling, expanding rotunda shifted to the southern portion of the site, with the annex (which was to include an apartment for Rebay), on the Eighty-ninth Street half, transformed into the present-day administrative monitor structure. Also added was a provisional, glazed, fifteen-story tower for offices and apartments as a buffer between the monitor and the neighboring buildings on Eighty-ninth Street. Wright's revised plans were approved by the board of trustees early in 1952, and he was awarded a new contract based on a revised cost estimate of two million dollars, a figure based solely on Wright's claim that this was the amount Guggenheim had quoted him shortly before his death.⁷

Early in 1953, Hilla Rebay was replaced as director by James Johnson Sweeney, a man of solid museum credentials whose vision for the museum was fundamentally at odds with the one Wright had earlier formulated in concert with Solomon Guggenheim and Hilla Rebay. Sweeney proved to be the greatest obstacle to the realization of the building as Wright and Solomon Guggenheim had envisioned it. Throughout 1953, Wright's representative, the New York architect Arthur Holden, prepared the way for the building with the New York Board of Standards and Appeals, but in December 1953 Wright halted the appeal process in order to revise and further simplify the building's structure. No sooner were these drawings completed than Sweeney presented a request for spaces that far exceeded the scope of the building as Wright had designed it. Operating within the now-authoritative figure of two million dollars—a figure more or less of his own creation—Wright requested bids from five contractors, the lowest of which, \$3,000,000, was that of George Cohen of the Euclid Construction Company. Wright negotiated Cohen's bid down to \$2,400,000, a figure that necessitated yet another seven-week redrawing of the structural system by Wright. Shortly after Cohen was awarded the contract, a raise in union rates drove the cost of construction up, forcing Wright to seek the higher ceiling of \$2,500,000 from the trustees.

7. In a letter to Harry Guggenheim of 14 May 1952, Wright wrote: "As for myself, my admiration and gratitude go to him [Solomon R. Guggenheim]. Several weeks before he died, dining with him as I had done so often during the years we had worked on the plans together (I did not then realize that he was dying) he said, 'Mr. Wright, will you promise me that you will build our museum as we have planned it for two million dollars if you make the changes you have suggested.' 'Yes, Mr. Guggenheim I can and I will,' I said. He seemed pleased and relieved. It was our last meeting. When his will was read he had ear-marked two million of his own dollars for 'our' building.'" (Pfeiffer, *Guggenheim Correspondence*, 170)

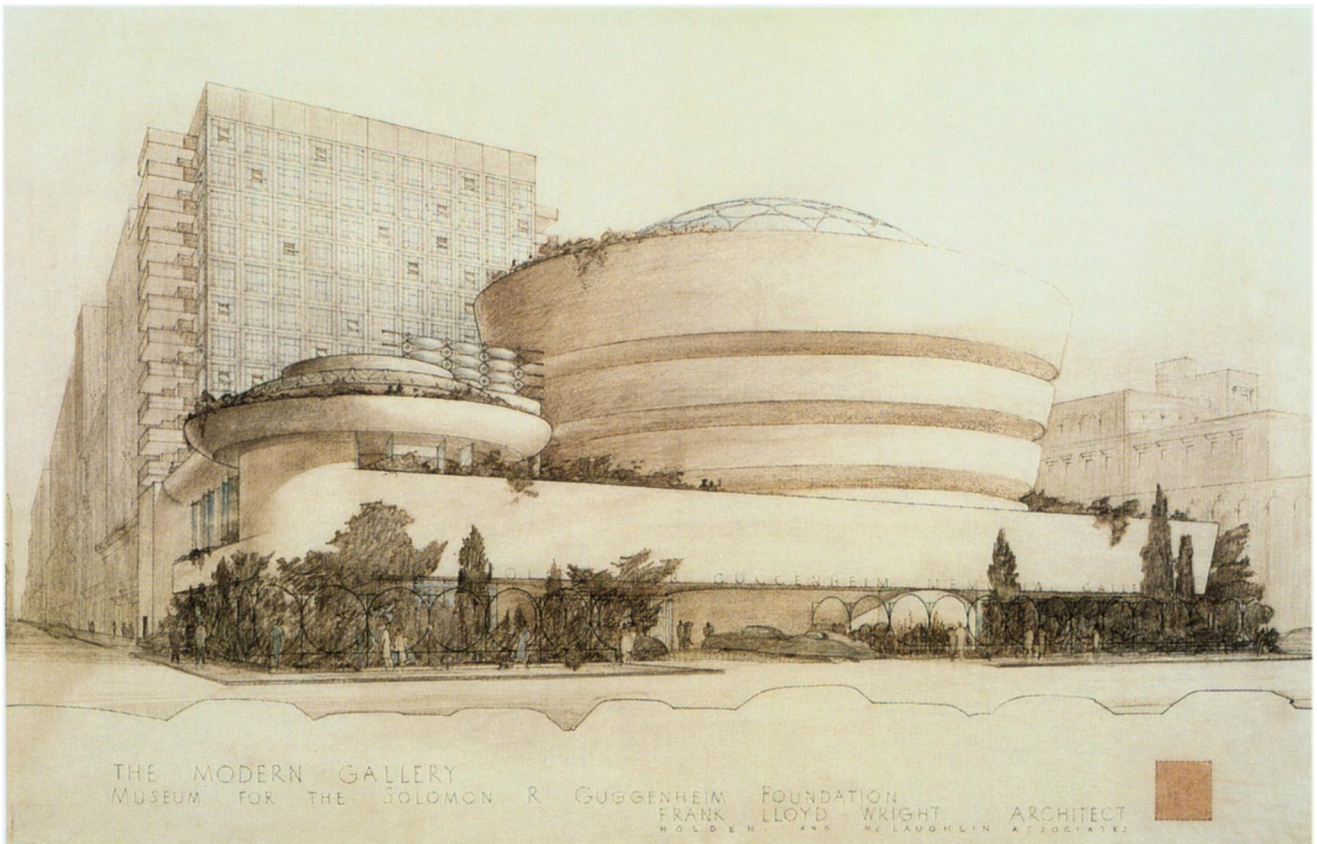


Fig. 4. Frank Lloyd Wright, Solomon R. Guggenheim Museum. Color pencil rendering of the Guggenheim Museum with the rotunda at the Eighty-eighth Street side of the site, the administrative monitor at the left, and a proposed office tower behind the administrative monitor, 1951. (TAL4305.017 ©FLWRIGHT FDN)

During late 1955 and early 1956, Wright was engaged in major alterations with Sweeney over Wright's proposed lighting system and over the relatively low number of people (about 350) that the museum could accommodate at any one time, something that had never been an issue before. Nevertheless, ground was broken on 16 August 1956 and construction began. During 1957, Wright was obliged to defend his museum against a petition from twenty-one prominent artists who argued that the curving, slanting walls of the building and its lighting were unsympathetic to the proper exhibition of paintings. In 1958, Wright continued to battle Sweeney over the problem of hanging pictures on the outwardly slanting walls, the color of the interior (Sweeney wanted white; Wright wanted an ivory), the lighting, and the need for more curatorial, storage, and exhibition spaces. Wright fought these battles in failing health throughout 1958 and died on 9 April 1959 at the age of 91. The museum opened six months later.

While this skeletal summary provides an indication of the major events and dates that mark the sixteen-year history of the design and construction of the Guggenheim Museum, it only hints at the extraordinary tenacity with which Wright pursued the commission. To be sure, Wright had overcome adversity in many previous commissions, most notably the Imperial Hotel in Tokyo, which occupied him for six years during a time when he

was often ill and beset by personal problems.⁸ Indeed, more than half of Wright's life work, including such large-scale projects as San Marcos-in-the-Desert resort near Phoenix (1929), the Pittsburgh Point Park Civic Center (1947), the Monona Terrace Civic Center for Madison, Wisconsin (1955), and the Cultural Center for Baghdad, Iraq (1957), were never built.

Wright's persistence with the Guggenheim project in the face of unprecedented opposition from every quarter, including his own failing health, suggests that this commission held a particular significance for him. But what was the nature of that significance? What was its magnitude and its origin in Wright's thought? How do these issues bear upon the stature of the building in the larger picture of architectural history? And how, in turn, does this stature bear upon an assessment of the recent alteration of the building?

It is characteristic of the organic nature of Wright's architecture that to raise such questions with regard to a single building is to engage the entire enterprise of his life and work. While there is no simple key to the understanding of Wright's work—he possessed exceptional powers of absorption and synthesis which he brought

8. Meryle Secrest gives a good account of the conditions of Wright's life and work in Tokyo in *Frank Lloyd Wright: a Biography* (New York, 1992), 270–78, hereafter cited as Secrest, *Frank Lloyd Wright*.

to bear upon a wide range of cultural, aesthetic, and spiritual resources in his quest for what he termed an organic architecture—two formative ingredients, his philosophy and his passion for geometry, are essential to an assessment of any part of his work.⁹

The basis of Wright's thought lay in the spiritual values of Unitarianism and transcendentalism. The Unitarians were a denomination newly established in nineteenth-century America, their liberal tenets—the denial of the doctrine of the Trinity in favor of the divinity of God alone, the advocacy of the free use of reason in religion, and the exaltation of the human soul—contrasted sharply with the austere views of the Calvinists as they were variously represented by Methodists, Baptists, and Congregationalists. Wright's maternal ancestors in Wales had a long tradition of defiant adherence to radical Unitarian beliefs which were perpetuated as religious liberalism in the nineteenth century among the clannish Lloyd Joneses in southern Wisconsin.¹⁰

Wright was steeped in Unitarianism by his mother, a former teacher and woman of strong religious convictions; his father, a Methodist minister who converted to Unitarianism when Wright was ten; his uncle, Jenkin Lloyd Jones, a leading Unitarian in the American Midwest, and others in and beyond the family circle.¹¹ The evidence suggests that Wright grew up in an atmosphere in which religion was an integral and formative aspect of daily life and functioned as a source of intense family pride, embodied in the family motto, "Truth Against the World."

Transcendentalism emerged from the strong mysticism of a small group of Unitarian thinkers in New England in the 1830s and was disseminated principally through the writings and

lectures of Ralph Waldo Emerson and Henry David Thoreau. It was not a religion, but rather, in the words of its principal historian, E. O. Frothingham, "a state of mind."¹² With its emphasis upon the value of intuition over experience, its romantic idealism, the centrality it gave to nature, its belief that God is in every man, and its buoyant optimism, transcendentalism was ideally suited to the needs and character of nineteenth-century America. Wright acknowledged that many of the ideas articulated in Emerson's essays, "Nature," "The Over-Soul," and "Self-Reliance," played a vital role in the formation of his architectural vision and in the utter self-confidence with which he pursued that vision.¹³

Definitions of transcendentalism have remained elusive, even to Emerson. Students concur that as a philosophical enterprise, one of its principal, defining characteristics is a current or energy which passes through and unifies all things in nature, including God, man, and the soul.¹⁴ Leading Emersonian scholars, reinforced by Emerson's own statements, hold that the path of this current is a spiral. Vivian C. Hopkins writes:

From Plotinus Emerson derives the conception which governs his view of art as of nature, that spirit is energy projected from intellect,

12. Octavius Brooks Frothingham, *Transcendentalism in New England: A History* (New York, 1959, originally published, New York, 1876).

13. Wright acknowledges the importance of Emerson in his autobiography, in his 1896 lecture "Architect, Architecture, and the Client;" in his 1900 lecture "A Philosophy of Fine Art;" and in the *Modern Architecture, Being the Kahn Lectures* of 1931 published by Bruce Brooks Pfeiffer, ed., in *Frank Lloyd Wright: Collected Writings*, 2 vols. (New York, 1992). Wright's sister, Maginel Wright Barney, gives insight into the pervasiveness of Emerson's influence in Wright's youth in *The Valley of the God-Almighty Joneses* (Spring Green, Wisconsin, 1965), 59–60: "Most impressive was the gleaming square piano at the end of the room. My brother always claimed that it was a Steinway, but I know very well that it was an Emerson, because I remember the awe and admiration I felt, believing a man of that name could build pianos and write books, too—books that one's mother, father aunts, and uncles were always quoting: 'As Mr. Emerson says . . .'" (italics added). For additional discussions of Wright's relationship to Emerson, see J. Quinan, *Frank Lloyd Wright's Larkin Building: Myth and Fact* (New York, 1987), 102–8; Raymond H. Geselbracht, "Transcendental Renaissance in the Arts: 1890–1920," *New England Quarterly* 48 (1975): 463–86; Robert M. Crunden, *Ministers of Reform: The Progressives' Achievement in American Civilization, 1889–1920* (New York, 1982), 116–62; and David Michael Hertz, *Angels of Reality: Emerson Unfoldings in Wright, Stevens, and Ives* (Carbondale, Illinois, 1993).

14. Emerson's well-known mystical passage from *Nature* (1836) is perhaps the best illustration of his concept of a universal energy. Its relationship to the transparent hemisphere atop the Guggenheim in Wright's earliest drawings may not be entirely coincidental: "Standing on the bare ground—my head bathed by the blithe air and uplifted into infinite space—all mean egoism vanishes. I become a transparent eyeball; I am nothing; I see all; the currents of the Universal Being circulate through me; I am part or parcel of God." Norman Miller writes, in "Emerson's 'Each and All' Concept: A Reexamination," in Robert Burkholder and Joel Myerson, eds., *Critical Essays on Ralph Waldo Emerson* (Boston, 1983), 346: "It seemed Emerson's ardent conviction that a fundamental essence runs through all things, and that the role of the universe, the law by which all nature is governed, could be found in every particular—the pebble, the drop, the spark—no matter how seemingly incidental."

9. There are other important ingredients in Wright's makeup, including music, nature, Japanese art, his experience with Adler & Sullivan, etc., but space does not allow for their consideration here.

10. Secrest, "The Black Spot," in *Frank Lloyd Wright*, 19–50, provides a detailed account of the history of the Lloyd Jones' involvement in Unitarianism from the late-sixteenth century in Wales until the mid-nineteenth century in Wisconsin.

11. Wright discusses his family's faith in *An Autobiography* (New York, 1943), 16–17, hereafter cited as Wright, *An Autobiography*: "The Unitarianism of the Lloyd-Joneses, a far richer thing, was an attempt to amplify in the confusion of the creeds of their day, the idea of life as a gift from the Divine Source, one God omnipotent, all things at one with Him."

UNITY was their watchword, the sign and symbol that thrilled them, the UNITY of all things! This mother sought it continually. Good and evil existed for her people still, however, and for her. The old names still confused their faith and defeated them when they came to apply it. But the salt and savor of faith they had, the essential thing, and there was a warmth in them for truth, cut where truth might! And cut, it did—this 'truth against the world.' Enough trouble in that for any one family—the beauty of TRUTH! . . ."

Wright's earliest experiences in architecture are all connected to the Unitarians—the design of Hillside Home School, a progressive private Unitarian school run by his aunts, Ellen and Jane Lloyd Jones, in 1887; his renderings of Unity Chapel in Spring Green, Wisconsin; a Unitarian Chapel for Sioux City, Iowa, both of 1887; and his employment with J. L. Silsbee, who was architect of two Unitarian churches for Wright's Uncle Jenkin: Unity Chapel in Spring Green and All Soul's Church in Chicago, of 1887. Wright also competed for the design of the Abraham Lincoln Center from 1895 until 1903. This was the ambitious centerpiece of his Uncle Jenkin Lloyd-Jones' Unitarianism in the Midwest.

constantly flowing through matter and rendering it more alive; and implicit in this Plotinian idea of "the flowing" is the concept of upward ascension (later made explicit by Emerson by the evolutionary theory of natural science). Thus Emerson's own term of "the spiral" admirably hits the combination of circular movement with upward progress which is the heart of his aesthetic.¹⁵

While Wright is nowhere explicit about what he derived from Emerson, it is difficult to imagine that the essential spiral that constituted the "heart of his [Emerson's] aesthetic" was not imbedded in Wright's psyche at an early age, only to emerge as the crowning statement of his architecture at the end of his career in the form of the Guggenheim Museum.

Along with transcendentalism as a basis for thought, geometry provided Wright with the means for giving form to architectural ideas. Much has been written about Wright's debt to the geometry-based kindergarten method of Friedrich Froebel, to which he was introduced at the age of nine,¹⁶ but little notice has been taken of the unusual depth of feeling that Wright held regarding geometry, feeling which erupted in an impassioned letter written by Wright in 1909: "I confess to a love for a clean arsis; the cube I find comforting; the sphere inspiring. In the opposition of the circle and the square I find motives for architectural themes with all the sentiment of Shakespeare's *Romeo and Juliet*. Combining these with the octagon I find sufficient materials for symphonic development."¹⁷ Wright's capacity to personalize inert geometric forms, to identify with them and to invest them with romantic potential, is a direct manifestation of his Unitarian transcendentalist beliefs, wherein it is understood that all things in nature, from inorganic matter to human thought, belong to a single, all-encompassing unity. Thus when Wright wrote of his childhood experience with the Froebel blocks, that "*form became feeling*," he was acknowledging the coalescence of geometry with his philosophical outlook.¹⁸

Given the circumstances of his family's deep involvement in Unitarianism and in transcendentalism, it appears that Wright brought to the practice of architecture, at the very outset, the conviction that architecture could be made transcendent. But how to do this was not immediately apparent. His early career from the family-sponsored projects of 1887 can be characterized as a search for transcendency in architecture, a striving for a freedom from the boxy enclosure and tired historicism of conventional architecture, toward the oneness of man with nature that permeates Emerson's writings.

15. Vivian C. Hopkins, *Spires of Form: A Study of Emerson's Aesthetic Theory* (New York, 1965), 2; see also Gay Wilson Allen, *Waldo Emerson* (New York, 1981).

16. For a summary of the writings on Froebel and Wright, see Jeanne S. Rubin, "The Froebel-Wright Kindergarten Connection: A New Perspective," *JSAH* 48 (1989): 24, n. 3.

17. See J. Quinan, "Frank Lloyd Wright's Reply to Russell Sturgis," *JSAH* 41 (1982): 238–44, hereafter cited as Quinan, "Wright's Reply."

18. Wright, *An Autobiography* (New York, 1943), 13.

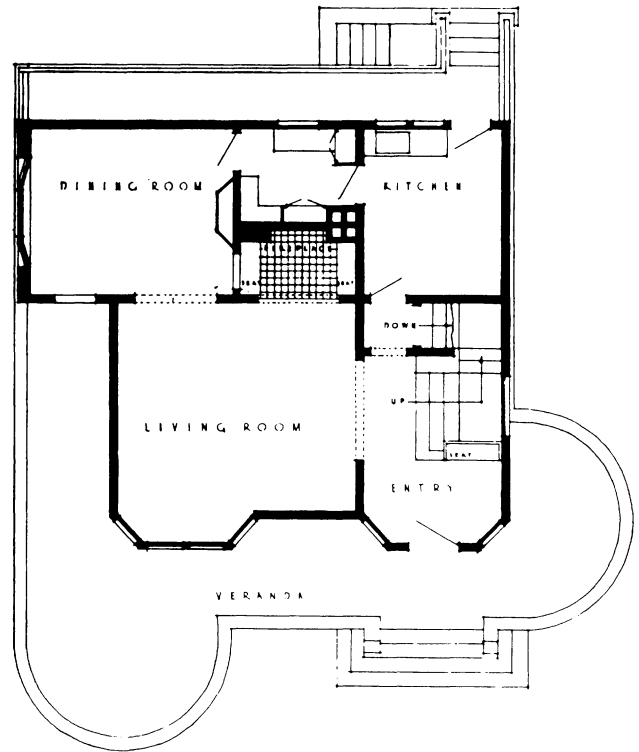


Fig. 5. Frank Lloyd Wright home. Plan of ground floor, Oak Park, Illinois, 1889. (Grant C. Manson, *Frank Lloyd Wright to 1910*)

Wright commenced his assault on conventional architecture in his first independent commission, his own home in Oak Park, Illinois, of 1889, a small, wood frame, shingle-sided cottage with a gabled roof. The plan of Wright's house (Fig. 5) consists of a nearly square core from which bays, veranda features, and stairs break away at each corner to suggest a pinwheel, thus transforming the modest cottage into a vortex of much larger pretensions. Wright subsequently went on to explore numerous other ways of transforming architecture but returned to the pinwheel at regular intervals: at St. Mark's-in-the-Bouwerie (1925), in which each floor is rotated forty-five degrees from the one below, thereby giving the pinwheel a third dimension; at Wingspread, the Herbert F. Johnson home (1938); and finally at the Guggenheim in which the medium of reinforced concrete enabled Wright to transform the pinwheel into a continuous spiral.¹⁹

During the 1890s, Wright experimented extensively with octagonal elements in his plans in an effort, possibly inspired by H. H. Richardson's frequent use of octagons, to expand the interior spaces of his houses beyond the confines of conventional rectilinear design. The octagon provided 135-degree angles rather than the more restrictive and often useless corner spaces found in square and rectangular plans. Wright deployed octagons in nearly every one of his commissions in the 1890s—free-standing

19. Wright's Anderton Court in Beverley Hills, California, of 1955, should also be included here as its central motif is a spiraling ramp in the shape of an elongated hexagon—another marriage of two geometries.

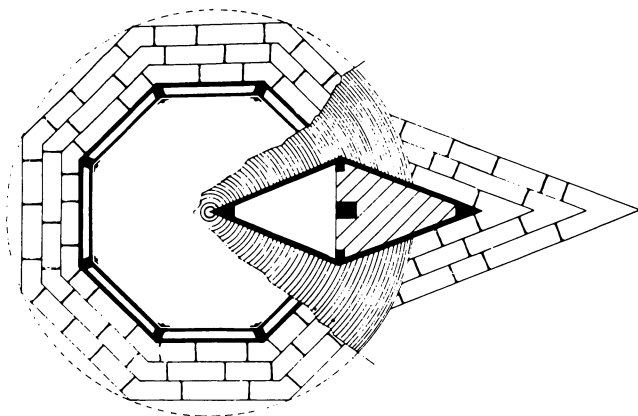


Fig. 6. Frank Lloyd Wright, "Romeo & Juliet," windmill. Plan, Spring Green, Wisconsin, 1895. (©FLWRIGHT FDN, 1957)

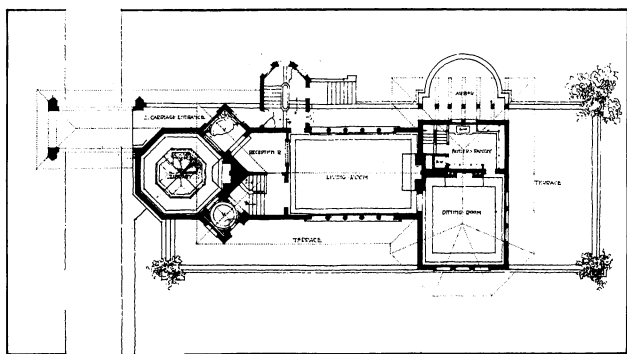


Fig. 7. Frank Lloyd Wright, McAfee House (project). Plan, ca. 1895. (Manson, *Frank Lloyd Wright to 1910*)

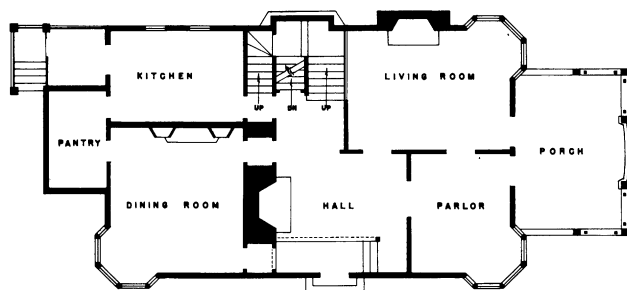


Fig. 8. Frank Lloyd Wright, Warren MacArthur House. Plan, Chicago, Illinois, 1892. (Manson, *Frank Lloyd Wright to 1910*)

octagons at "Romeo and Juliet;" the windmill at Spring Green, Wisconsin, 1895 (Fig. 6); in the plan of the Bagley House, Hinsdale, Illinois, of 1894; and in his own library at Oak Park of 1895. He also employed attached octagons in the McAfee (Fig. 7) and Devin House projects (1895), the George Furbeck House (1897), and the River Forest Golf Club (1899/1901). He used partial octagons in numerous commissions, including the Warren MacArthur House, Chicago, 1894 (Fig. 8); the Chauncey Williams (1892), and Isadore Husser (1899) houses. None of these

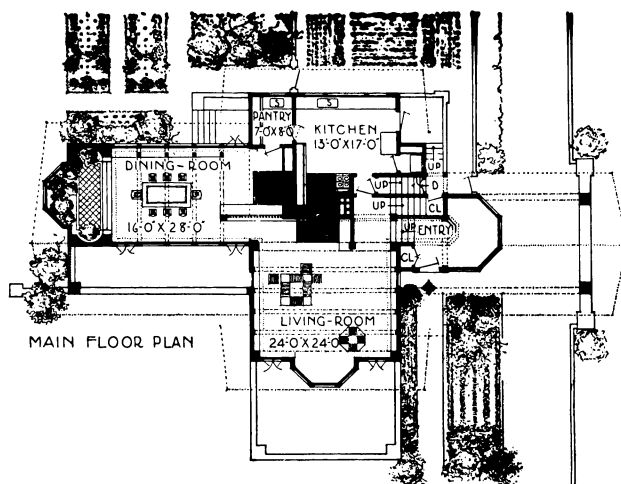


Fig. 9. Frank Lloyd Wright, plan for "A Small House with Lots of Room In It." (*Ladies Home Journal*, April 1901)

plans successfully opened the houses to nature, as Wright's Prairie houses would later do, owing to the tendency of the octagon to retain its formal integrity and to resist integration into the larger whole.²⁰ Indeed, the Warren MacArthur plan of ca. 1892, wherein octagons are affixed to three corners of an otherwise foursquare plan, is a singularly inept solution to the breaking of the box.

Vestigial octagons continue into the early Prairie period in the Hickox and Bradley houses in Kankakee, Illinois, of 1901, and in the two houses that Wright designed for the *Ladies Home Journal*, also in 1901 (Fig. 9).²¹ The octagons soon faded away as Wright developed a fresh design approach in which cross-axial planning (Fig. 10), a more rigorous adherence to a rectilinear design vocabulary, and the deployment of pier and cantilever construction as an integral structural solution to the problem of breaking the box, were each brought into play. In the interest of breaking down the boundaries between building interiors and the natural environment, Wright also began to attack the vertical or third-dimensional aspects of conventional domestic enclosure, that is, the top or lid of the box. In the Heurtley, Cheney, and Coonley (Fig. 11) houses, for example, he created tent-like living room spaces; in the Susan Dana House he used barrel vaults, and in the Martin and Robie (Fig. 12) houses he shifted ceiling heights within individual rooms as a means of shaping spaces and of suggesting the vertical expansion of space. The consequences of these changes were substantial—Wright *did* succeed in breaking the box of conventional architecture to an unprecedented degree; he was able to merge structure and decoration to near oneness. Above all, he was able to create buildings which approached a condition of transcendence. That is, he designed buildings in

20. In Wright's McAfee, Devin, George Furbeck, and Husser plans, for instance, the octagons remain as set pieces, expansive in themselves but distinct and hermetic within the total plan.

21. With one exception, the W. A. Glasner House, Glencoe, Illinois, of 1905.

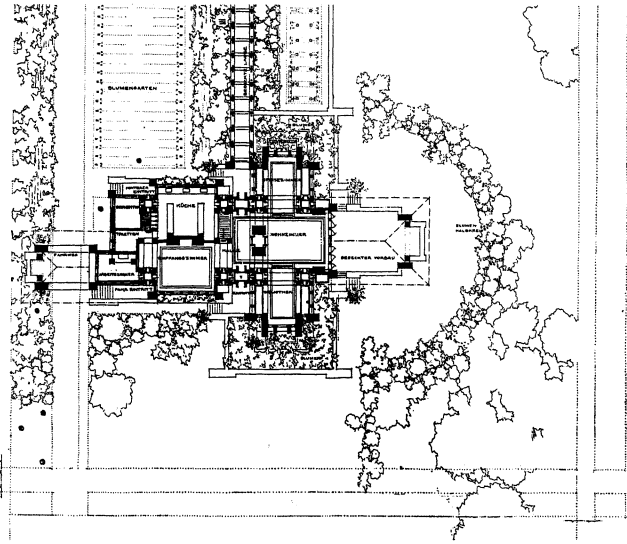


Fig. 10. Frank Lloyd Wright, plan of the Darwin D. Martin House. Buffalo, New York, 1903–6. (©FLWRIGHT FDN)

which the routine requirements of domestic architecture are reconciled to the beauty of the natural environment through Wright's control of access and direct or analogic uses of materials through proportion, space, light, and the site itself to produce symphonic effects.

Wright's lofty goals were significantly curtailed from the end of the Prairie period in 1910 until the mid-1930s owing to a series of personal problems, to negative publicity, to the economic slowdown caused by the Great Depression of the 1930s, and to the likelihood that he had exhausted the possibilities of the Prairie idiom in his frenetic burst of activity in which he produced sixty buildings between 1901 and 1910. Commissions were scarce. Neither Midway Gardens (1912–14), the Imperial Hotel (1916–22) (Fig. 13), nor the patterned concrete block houses in California (Millard, Ennis, Freeman, and Storer) of the early 1920s, though technically interesting, did much to further Wright's quest for the transcendental in architecture. From 1925 to 1935, Wright had almost no commissions. Nevertheless, it was during the early 1920s that Wright attempted his first spiral-formed building, the Gordon Strong Automobile Objective for Sugarloaf Mountain, Maryland, of 1922 (Fig. 14).²² Though never realized, the Strong commission is noteworthy because it is the first of the six spiral-formed buildings designed by Wright between 1922 and the 1950s, a series that would culminate with the Guggenheim. Moreover, the Strong design seems to represent an effort on Wright's part—during a period of uncharacteristically heavy surface decoration (as in the Nathan Moore House remodeling, Oak Park, Illinois, 1923; the Dorothy Foster House project for Buffalo of 1923; and the Imperial Hotel, Tokyo [Fig.

22. On the Gordon Strong commission, see Mark Reinberger, "The Sugarloaf Mountain Project and Frank Lloyd Wright's Vision of a New World," *JSAH* 43 (1984): 38–52.

13])—to turn to the spiral as a way to escape a period that was difficult on both artistic and personal levels.²³

Though Wright's resurgence into a second career in architecture in the late 1930s owes something to the stabilizing influences of his marriage to Olgivanna Milanof in 1928, to the establishment of the Taliesin Fellowship in 1932, and to the Depression-induced broadening of his social vision, his deepest impulses as an architect continued to be conditioned by Unitarian-transcendentalist thought manifested through geometry and tempered by nature. After 1935, Wright moved beyond the rectilinear constraints of the Prairie and post-Prairie years and began increasingly to mine the possibilities of circles, hexagons, and triangles as plan forms and as modules for plans for the nearly 200 commissions of his second career. Some of these plans, such as the Leigh Stevens (Fig. 15) and William Palmer houses, feature a single geometric form while others—the Sundt, Boomer, (Fig. 16) and Friedman houses, for example—employ two or more geometries in combination, recalling Wright's statement in 1909 that "combining these [the circle and square] with the octagon I found sufficient materials for symphonic development."²⁴ Thus, within the scaled-back ambitions of the post-Depression era Usonian house, Wright found a way to identify the essential geometric form of the house as its primary feature, and in the process he discovered not only a new creative vocabulary but a reaffirmation of his life-long commitment to geometry.²⁵

Nevertheless, these geometries were *two-dimensional* and therefore presented Wright with new variations on the old problem of breaking the box in the third, or vertical, dimension. Toward this end he created a variety of solutions which depended upon the nature of the geometry or geometries, the materials, the site, and the client involved. The Ralph Jester House (Figs. 17–18), for instance, is composed of six cylindrical units of various sizes, some of which project higher than others and all of which are terminated with flat roofs. At the hexagonally-moduled, L-shaped Hanna House, Wright again used varied roof and ceiling heights, but here the roofs are gabled, and clerestory lighting is introduced in several spaces. For the triangular Boomer House (Fig. 19), Wright angled the slope of the roof sharply downward so as to eliminate the (nearly useless) acute angle at the second floor level while simultaneously closing off the south elevation of the house to the hot desert sun. Wright's continued concern with breaking the box is proof of his continuing preoccupation with themes of unity and transcendency.

23. For an account of Wright's life and work in the 1920s, see Secrest, *Frank Lloyd Wright*, 223–321.

24. See Quinan, "Wright's Reply," n. 15.

25. Wright's fascination with, and uses of, geometry are different from those of Boulée, for instance, who generally began with such large-scale, three-dimensional geometric forms as the sphere, the cylinder, and the cube. Wright worked in smaller increments, adding part to part, marrying together geometries in order to accommodate more functions and to achieve more flexibility.



Fig. 11. Frank Lloyd Wright, Avery Coonley House. Living room, Riverside, Illinois, 1908. (Frank Lloyd Wright, *The Early Work*)

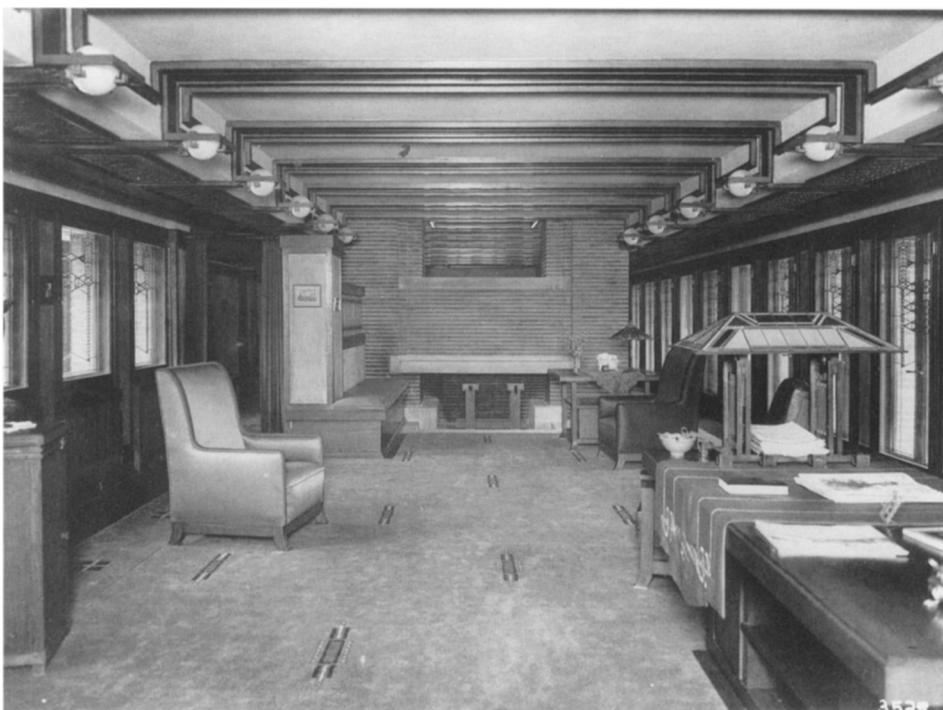


Fig. 12. Frank Lloyd Wright, Frederick C. Robie House. Living room, Chicago, Illinois, 1909. (University of Michigan)

Within the context of his late exploration of geometry, Wright's attraction to the spiral was powerfully overdetermined. In addition to its centrality in Emerson's aesthetic thought, the spiral offered an irresistible challenge to the architect: owing to the difficulty of its construction and the limitations of its usefulness (except as staircases), the spiral is an exceptionally rare form in the history of architecture.²⁶ It was also important to Wright that the

spiral occurs naturally as spirochetes, celestial nebulae, sea shells, tornadoes, whirlpools—forms that range in scale from the microscopic to the galactic, each its own special manifestation of nature's mysterious forces. Finally, the spiral is unique, even eccentric, among geometric forms—unlike the circle, the square,

26. A list of spiral-formed buildings in history includes the Tower of Babel, the Minaret of the Great Mosque at Samarra, the so-called Mayan Watch Tower at Oaxaca, Borromini's spire at Sant'Ivo alla Sapienza in

Rome, and Le Corbusier's unbuilt Mundaneum, or world cultural museum for Geneva, of 1929, which was a square spiral that diminished upwardly. See Le Corbusier's *Oeuvre Complète* I, 190–94; and Coolidge, *Patrons and Architects*, 49.



Fig. 13. Frank Lloyd Wright, Imperial Hotel. Exterior detail, Tokyo, Japan, 1916–22. (TAL1509.018 ©FLWRIGHT FDN)

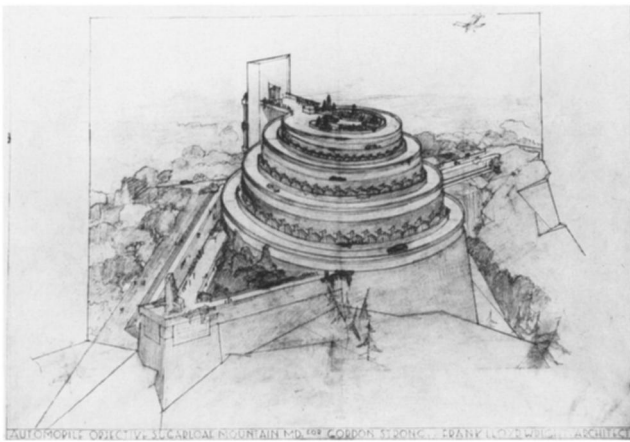


Fig. 14. Frank Lloyd Wright, Gordon Strong Automobile Objective (project). Elevation, Sugar Loaf Mountain, Maryland, 1922. (TAL2205.070 ©FLWRIGHT FDN)

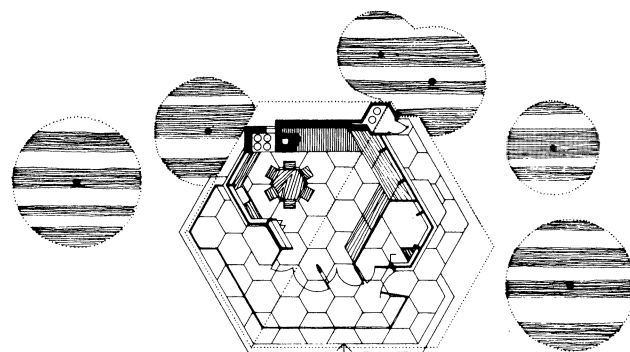


Fig. 15. Frank Lloyd Wright, C. Leigh Stevens House, “Auldbrass Plantation.” Plan, Yemassee, South Carolina, 1939. (John Sergeant, *Frank Lloyd Wright's Usonian Houses*)

and the triangle, it resists two-dimensional or planimetric forms of representation. The spiral is linear, but exists in three dimensions; it defines space without strictly containing it; whereas circles, squares, and triangles are stable and static, the spiral has

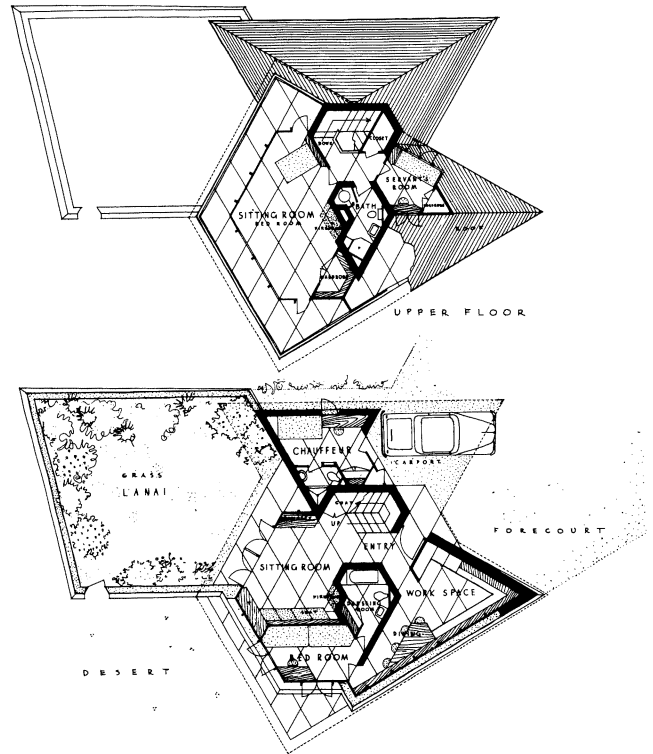


Fig. 16. Frank Lloyd Wright, Jorgine Boomer House. Plan, Phoenix, Arizona, 1953. (©FLWRIGHT FDN, 1954)

powerful connotations of movement.²⁷ In short, the spiral, vis-à-vis two-dimensional geometric forms, is a transcendent form, and furthermore, the spiral can serve as a symbol of transcendence. For each of these reasons the spiral would have appealed to Wright, and in view of his deeply empathetic view of geometry it is very likely that Wright would have recognized something of himself in the eccentric, transcendent nature of the spiral.

Three of Wright's six spiral-formed buildings, the Gordon Strong commission of 1922 (Fig. 14), the Pittsburgh Point Park Civic Center, 1946–47 (Fig. 20), and the Self Service Garage for Pittsburgh of 1949 (Fig. 21), were large-scale, automobile-accommodating structures, but none of these were realized. The remaining three, the V. C. Morris Gift Shop in San Francisco of 1948 (Fig. 22); a house for David, Wright's youngest son, near Phoenix of 1950; and the Guggenheim Museum (Fig. 23), were constructed and are still in use.²⁸ The V. C. Morris store is a small

27. Architectural forms can be broadly separated into those that invite contemplation, such as the Pyramids, the interior of the Pantheon, and Greek temples; and others, such as the naves of Gothic cathedrals and the façades of such baroque churches as Santa Maria della Pace, which invite participation. The Guggenheim takes participation to an unprecedented level of envelopment—the participant is swept into the experience of the spiral. There are no alternative ways of experiencing the building, no choices for movement.

28. All of the spirals, except the Gordon Strong, were created during the sixteen-year period that Wright worked on the Guggenheim and may be regarded as spin-offs from it.

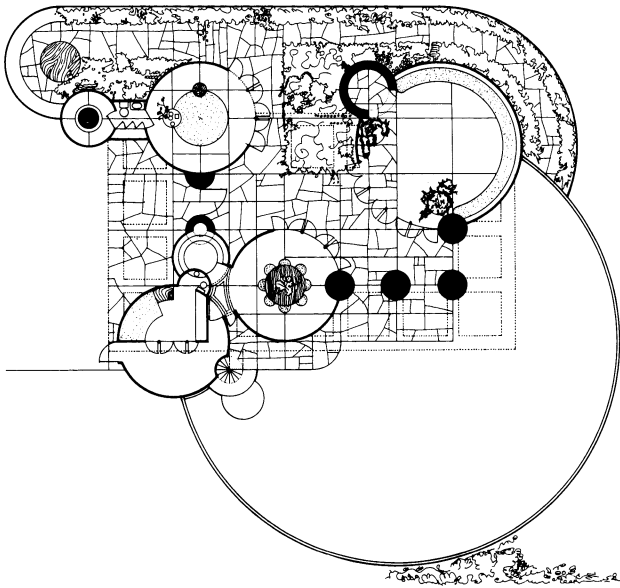


Fig. 17. Frank Lloyd Wright, Ralph Jester House (project). Plan, Pacific Palisades, California, 1938. (John Sergeant, *Frank Lloyd Wright's Usonian Houses*)

brick box containing a single-turn spiral ramp cantilevered from its inner walls—a spiral within a cube. The David Wright House is arc-shaped in plan with curved ramps pinwheeling from its elevated main living floor and a stairway spiraling around its kitchen cylinder. The David Wright House is not a pure spiral form, but its relationship to the original Wright home in Oak Park of 1889, where David was born, underscores the consistency and continuity that Wright was able to derive from a life-long adherence to Unitarian-transcendentalist principles and a geometric vocabulary.²⁹ Among Wright's six spiral designs, then, the Guggenheim Museum, a substantial cultural institution, represented his best opportunity to make a resounding, culminative statement.

As William Jordy has noted,³⁰ the Guggenheim summarizes and embodies the major themes of Wright's entire career—the cantilever, the great interpenetrated space, the binuclear plan, the controlled path of movement, the exploration of new materials and technologies, the relationship of form and function, and the exploration of unconventional geometries—but its principal significance is embodied in the transcendent form of the spiral. Wright's lifelong struggle to reconcile the two-dimensional geometry of his plans to the requirements of closure in the third dimension in the form of ceilings and roofs is obviated at the Guggenheim (Fig. 24) by the ramp that winds its way upward through a structure of dodecagonally-arranged web walls (an-

29. According to his biographers, Wright had considerable difficulties with his role as a father. The playroom attached to the Wright's Oak Park home, a puppet theatre, and the houses for David and Lewellyn Wright, suggest that Wright was best able to express his paternal feelings through architectural gifts.

30. Jordy, *American Buildings*, 279–359.

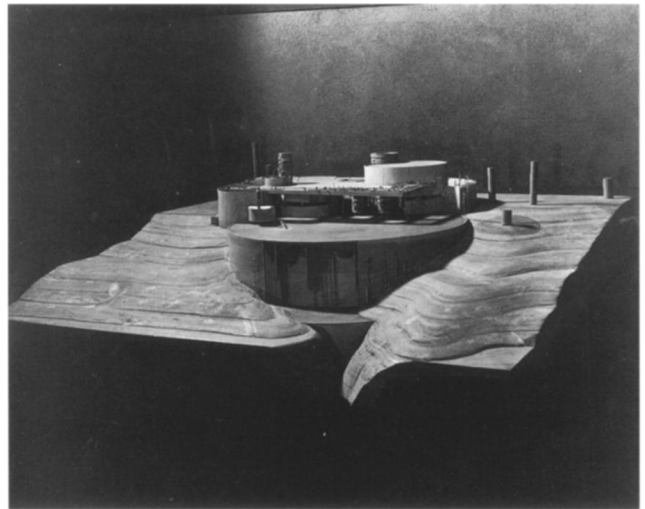


Fig. 18. Frank Lloyd Wright, Ralph Jester House (project). Model, Pacific Palisades, California, 1938. (©FLWRIGHT FDN)

other marriage of two geometries). All architectural conventions are set aside here. Every sectional view is different; no plan reveals a floor above the first; nothing is rectilinear; everything curves, and movement is everywhere implied. Wright has concluded his quest for transcendency in architecture with a building that is truly transcendent. Form and function are one; form, function, and symbolic content are also brought together into an unprecedented unity. It is a measure of Wright's achievement in the Guggenheim that in this culminative effort he produced a building that is unique in world architecture. Among the handful of spiral-formed buildings in history, the Guggenheim is the only expanding spiral ever constructed. As such, with its cornucopic embrace of the heavens, it transcends all other architecture.

In view of the Guggenheim's claim to such a lofty distinction in the history of architecture, why is it so rarely acknowledged? Why is the building so often perceived as an oddity?³¹ This perception is also overdetermined. Even as Wright struggled to convince the board of trustees to go ahead with the building, three of the icons of corporate modernism in America—Lever House, the United Nations Tower, and the Seagram Building—were being constructed in Manhattan. Owing to Wright's advanced age and deteriorating health, and the technical difficulties in building

31. According to "Wright's Startling Museum Spiral" in *Life*, 2 November 1959, 81: "The revolutionary art museum which he [Wright] designed for Solomon R. Guggenheim was finally opened to the public. While it was under construction, the museum was the constant butt of jokes. Its cylindrical exterior was likened to everything from a washing machine to a marshmallow." *Newsweek*, 1 August 1960, 72, ran an article entitled "Museum or a Cupcake?" and *Time*, 2 November 1959, 67, wrote: "When the actual structure began going up, its exterior proved too much for many critics as well, was dubbed 'the snail,' an 'indigestible hot cross bun,' a 'washing machine.' Robert Moses, New York City parks commissioner and Metropolitan Museum ex officio trustee, decided that it looked like 'an inverted oatmeal dish.' "

Fig. 19. Frank Lloyd Wright, Jorgine Boomer House. Elevation, Phoenix, Arizona, 1953. (©FLWRIGHT FDN)

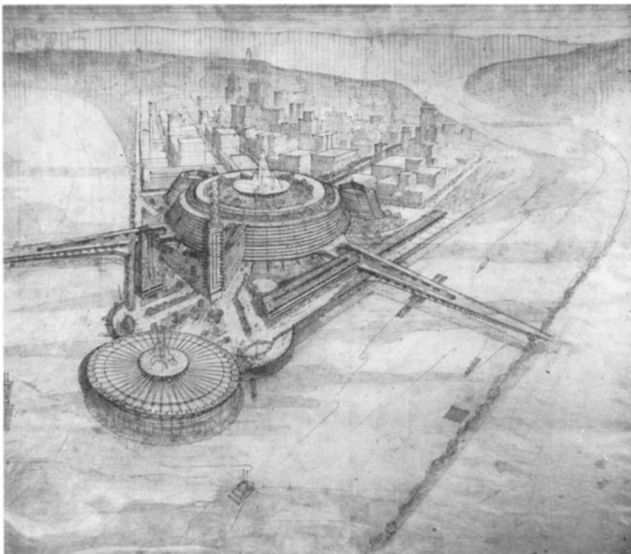
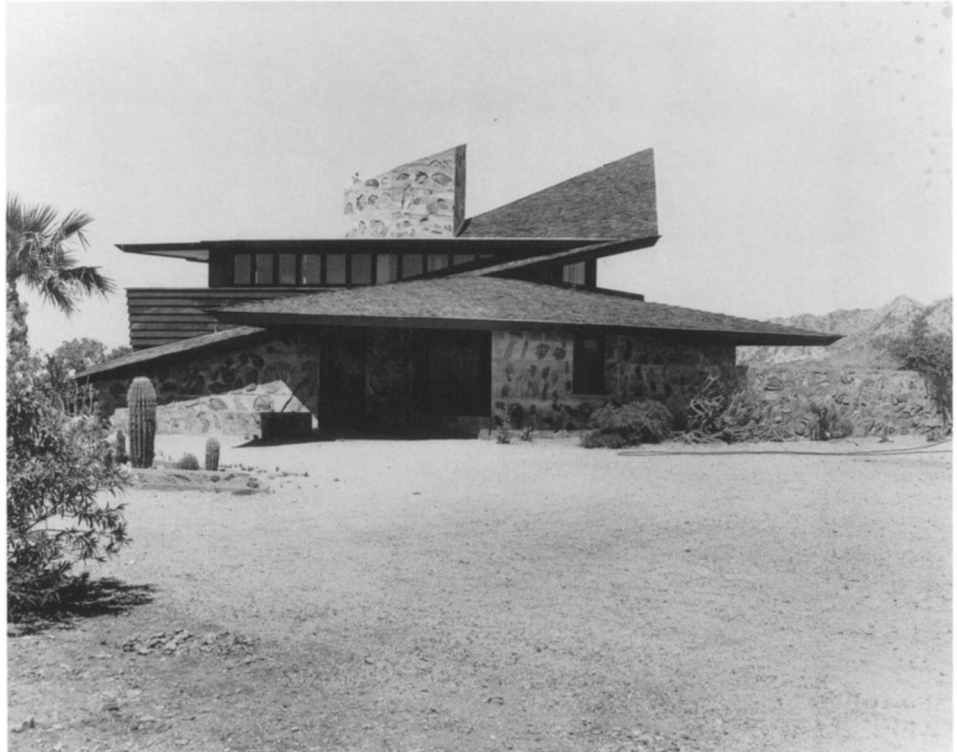


Fig. 20. Frank Lloyd Wright, Pittsburgh Point Civic Center. Perspective view, Pittsburgh, Pennsylvania, 1947. (TAL4821.004 ©FLWRIGHT FDN)

such an unprecedented structure, the Guggenheim was not realized with Wright's customary attention to details in form and finish. Against the crisply ordered grids of these new corporate towers Wright's slightly lumpy concrete spiral seemed willful and idiosyncratic. To make matters worse, Wright's frequent public invective against the practitioners of modernism, often in childish terms, only fueled the perception that his building was the work

of an aging eccentric.³² Finally, to museum-goers accustomed to the measured rhythms of the Beaux-Arts interior, Wright's spiral was excessively controlling.

The principal problem of Wright's design for the continuing viability of the building over time lay in its extreme specificity of purpose. Based upon preliminary discussions with Hilla Rebay and Solomon Guggenheim, Wright conceived of the building as an environment in which Guggenheim's collection of non-

32. John Knox Shear wrote an editorial in the *Architectural Record* 188 (1955): 132a–b, in which he took Wright to task for his public utterances against his fellow architects, especially Wright's appearance before the Subcommittee on Department of the Air Force Appropriations of the House of Representatives on 7 July 1955. Shear wrote: "There he [Wright] spoke at length of the incompetence of the design for the Air Force Academy, its architects and the architectural advisers to the Secretary of the Air Force. . . . Many will be saddened at the manner of the criticism and at the seeming irresponsibility in his deliberately disdainful evaluation of the architects and architectural advisers. Of architects Skidmore, Owings and Merrill he said, among other derisive things, 'I think they have five or six hundred draftsmen, and the two men at the head of it, what do they know about architecture?' In reply to a question about their stature as architects: 'I would not use that word stature in regard to them.' And later: 'If you want something that represents feeling, spirit, and the future, they have not got it.' Of the advisers he had this to say of architect Welton Becket: 'I do not know him but I know of him. I wish that something would happen to him soon. I would hate to see his things going as they are going now.' Of architect Eero Saarinen, only: 'His father wanted me to train him architecturally. That is the young boy.' Of architect Pietro Belluschi: 'He is a teacher. He has done some very nice little houses, but he has no experience as a builder.' When the foregoing were further identified to Mr. Wright as the consultants, he had this to say: 'I could not imagine anything that would make a bad matter worse.'"

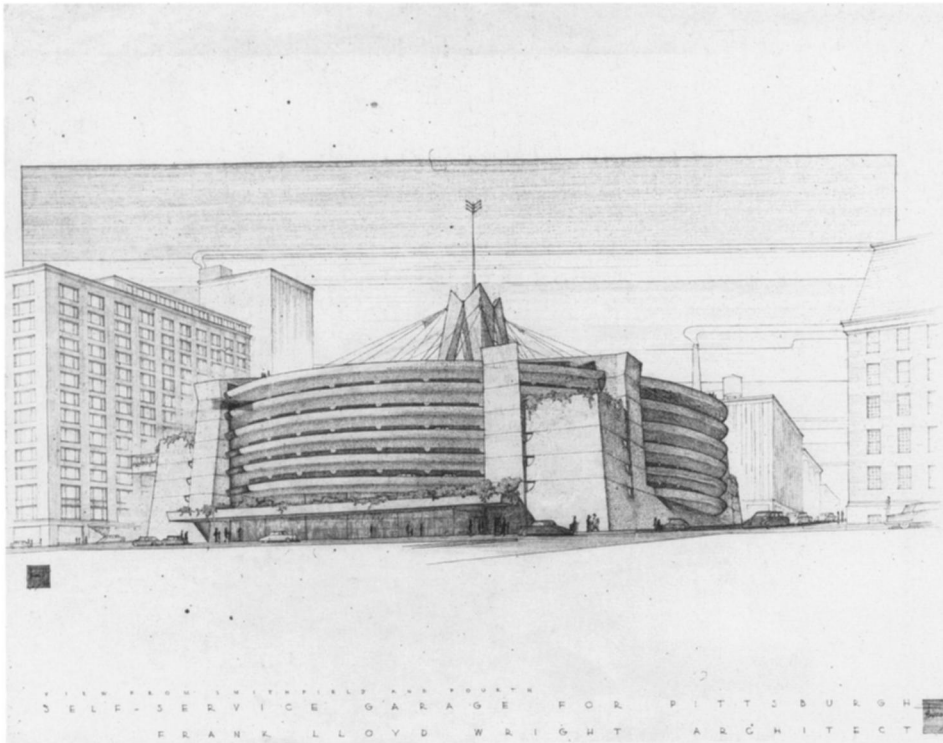


Fig. 21. Frank Lloyd Wright, Self-Service Garage (project). Perspective drawing, Pittsburgh, Pennsylvania, 1947. (TAL4923.093 ©FLWRIGHT FDN)

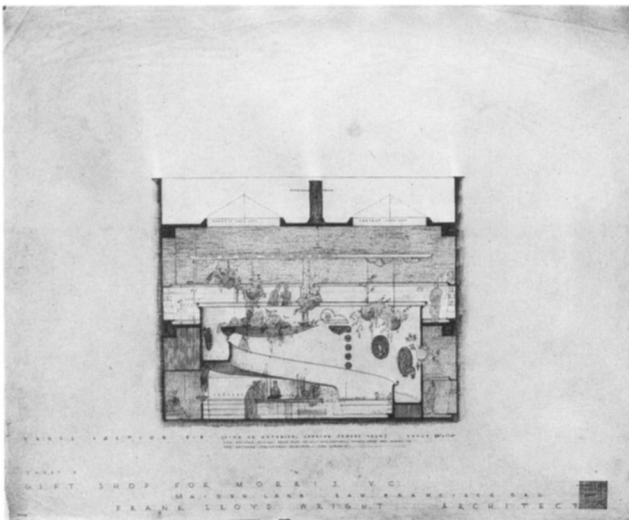


Fig. 22. Frank Lloyd Wright, V. C. Morris Gift Shop. Interior view, San Francisco, California, 1948. (©FLWRIGHT FDN)

objective paintings (works by Kandinsky, Arp, Miro, and others) would be exhibited on a permanent basis. No consideration was given to the acquisition of new art over time or the possibility of significant change in the nature of art. In that sense the Guggenheim was conceived to function somewhat like the Barnes Collection in Philadelphia. Wright's thinking about the nature of non-objective painting was influenced by Hilla Rebay, about whom Bruce Brooks Pfeiffer has written: "To her Non-objective painting was an exceedingly spiritual venture, not only of the

mind and of the heart, but deep within the human soul. She approached her art like a high priestess and as such was zealous in a missionary sense. . . ."³³ Rebay's vision, according to Pfeiffer, included an exhibition building which Wright was chosen to bring into existence: "She wanted the paintings to be seen in veritably 'consecrated' space, and to demonstrate her zeal frequently referred to the proposed building as 'a Temple of non-objectivity' . . . 'Non-objective painting,' she wrote, 'represents no object or subject known to us on earth. It is simply a beautiful organization arranged in rhythmic order of colors and forms to be enjoyed for beauty's sake.'"³⁴

Informed by Rebay's enthusiastic ideas and his own philosophical inclinations, Wright strove to create a unity between the building and the paintings, a unity in which the painted images, which often consist of free-floating lines and patches of color in a limitless spatial context, would float like apparitions along the spiraling, light-saturated path (Fig. 25). In short, the infinite nature of the paintings would be matched by the infinite qualities of the museum space. Toward this end, Wright insisted that the paintings be suspended without frames against the curving, outward-slanting walls to eliminate the picture-as-window effect and to heighten the identity of each painting as an autonomously created, non-representational entity.³⁵

33. Pfeiffer, *Guggenheim Correspondence*, 28.

34. Pfeiffer, *Guggenheim Correspondence*, 28.

35. In several letters to Hilla Rebay, Wright discusses the unification of the paintings with the architecture: "If non-objective painting is to have any great future it must be related to environment in due proportion as it pretty much is already, not to the high ceiling. And to flat background of

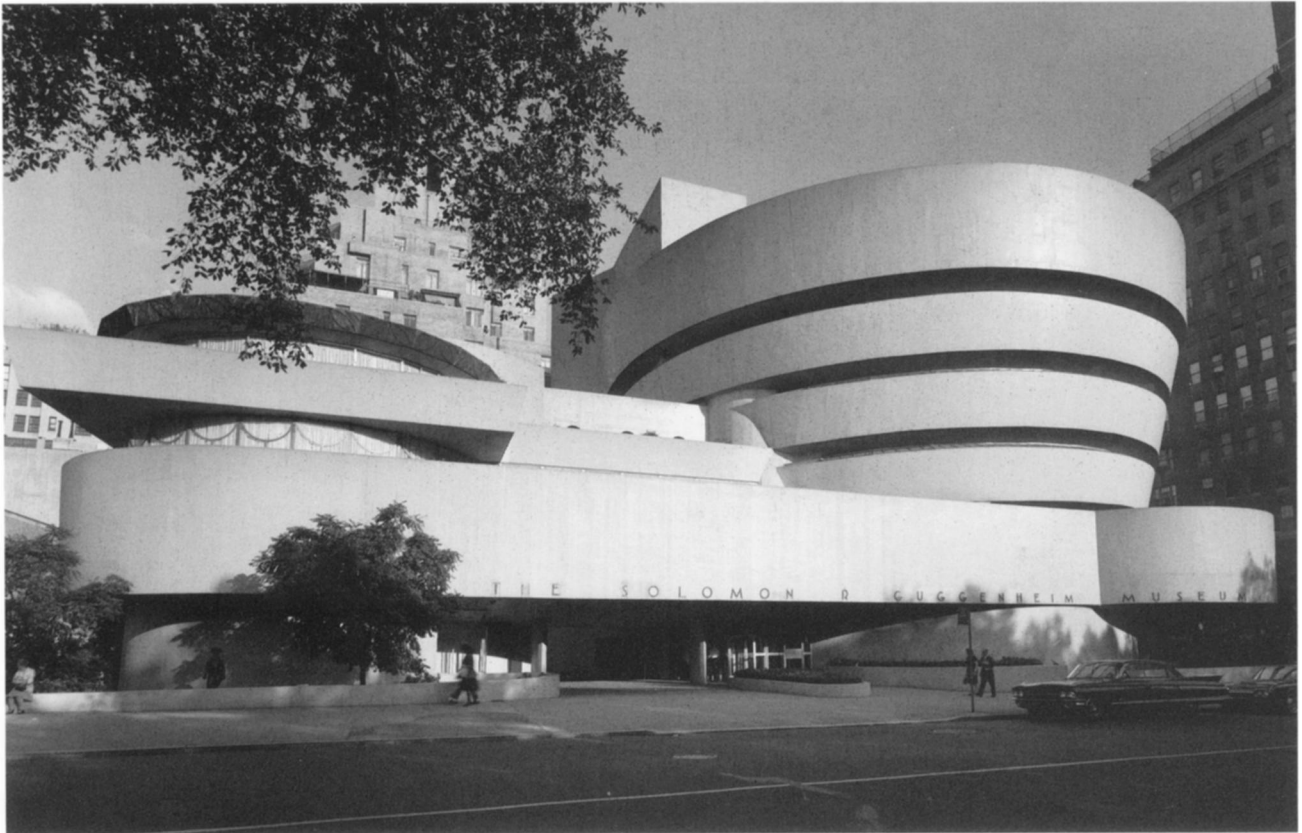


Fig. 23. Frank Lloyd Wright, Solomon R. Guggenheim Museum, New York City. Elevation from Fifth Avenue facing east, 1943–59. (The Solomon R. Guggenheim Museum)

The specificity of Wright's concept soon collided head-on with fundamental changes in the museum's outlook and mission in the post-Rebay/Solomon Guggenheim era, changes that began with James John Sweeney even before ground was broken for Wright's building. The results of the disjuncture between Wright's vision and the changing needs of the museum are recorded in a series of alterations that began in 1960, when the top turn of the museum ramp was closed off for storage and conservation spaces. The alterations continued in 1964 and 1965, when the ground-floor cafe was turned into a library, and the Thannhauser collection was given its own space within the administrative monitor building. In 1968 Wesley Peters, Wright's son-in-law, was commissioned to build a four-story annex for storage. In 1978 the driveway between the main rotunda and the monitor building was closed off to provide room for a bookstore and restaurant. The most

various tonalities suited to the paintings. The less texture in the background the better. A museum should have above all a clear atmosphere of light and sympathetic surface. Frames were always an expedient that segregated and masked the paintings off from environment to its own loss of relationship and proportion, etc., etc." (20 January 1944, in Pfeiffer, *Guggenheim Correspondence*, 40.)

And on 2 August 1945: "The building itself, of course, as anyone can see, creates an atmosphere congenial to the type of painting you are representing and provides a superior simplicity of operation in the handling and display of exhibits." (Pfeiffer, *Guggenheim Correspondence*, 66)

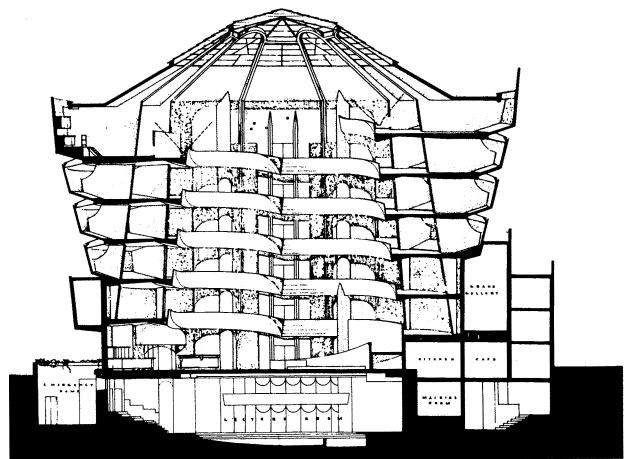


Fig. 24. Frank Lloyd Wright, Solomon R. Guggenheim Museum. Section through rotunda, 1943–59. (©FLWRIGHT FDN)

recent changes were initiated in 1985 and completed in 1992 by the architectural firm of Gwathmey Siegel.

These most recent alterations and additions, driven primarily by the need for more exhibition space, have seriously compromised the Wright-designed building inside and out. The principal locus of exterior problems is the new 135-foot-high, limestone-clad tower which rises behind the administrative monitor on the

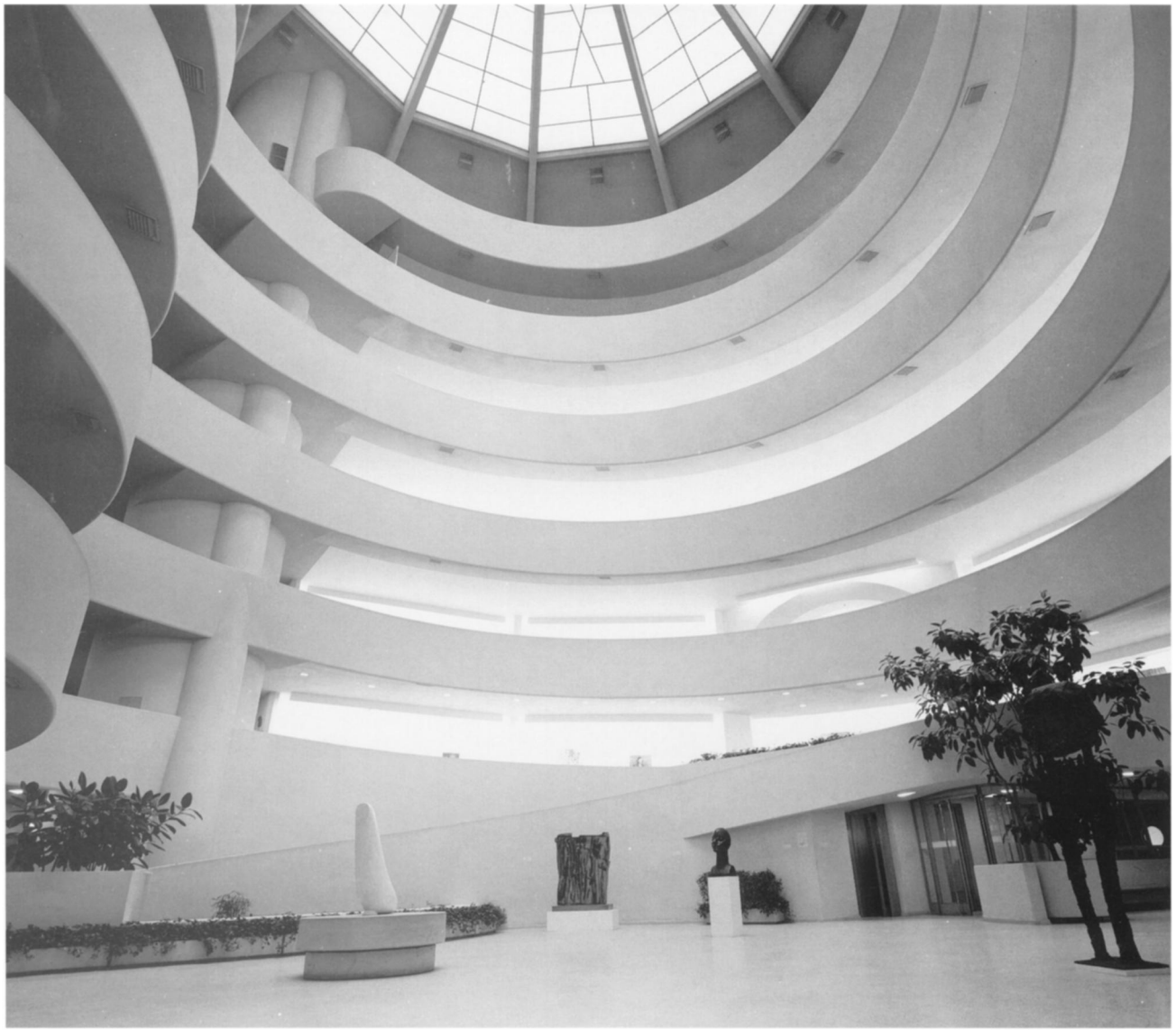


Fig. 25. Frank Lloyd Wright, Solomon R. Guggenheim Museum. Interior of rotunda, 1943–59. (The Solomon R. Guggenheim Museum)

Eighty-ninth Street side of the site (Fig. 26), which interrupts the spiraling movement implied in Wright's rotunda.³⁶ Its architect, Charles Gwathmey, has attempted to justify the tower and its incised tartan grid on the grounds that Wright proposed a similar

36. Wright's work is always informed by a close observation of nature. Whirlpools, tornadoes, and other fluid spirals in nature have no tolerance for interruption, they either move away from the intruding object, subsume it, or their flow is interrupted and the spiral is destroyed.

From the first plans of 1943, Wright was forced, by law, to include a secondary circulation tower that interrupted the flow of the main spiral. At first he planned a circular ramp (see Pfeiffer, *Guggenheim Correspondence*, 33) on the north-south axis of the building. But by 1952 (see Pfeiffer, *Guggenheim Correspondence*, 163), he shifted the circulation ramp forty-five degrees toward the northeast corner of the site, where it would be less visible from Fifth Avenue. In the final plans, this ramp was modified into a triangular prow, also at the northeast quadrant of the main rotunda, where it was inconspicuous.

buffer tower in a 1951 drawing (See Fig. 4).³⁷ But the differences between the two are striking: whereas the Gwathmey Siegel tower is slab-like, Wright's proposed tower appears to consist of subtly shifted planes, an illusion created by a stack of off-set balconies along the narrow ends of the building, which felicitously echo the relationship of the main rotunda and the smaller monitor building. Gwathmey Siegel's tower is clad in a veneer of limestone, Wright's is glazed. Gwathmey Siegel's grid is incised into the limestone veneer, Wright's is inherent in the nature of glazing. These differences have significant consequences for our perceptions of the building: Wright's drawing sets up a true counterpoint, in which the concrete mass of the rotunda appears to move into and through the diaphanous glazed backdrop,

37. Charles Gwathmey, "On Wright's Foundations," *Architectural Record* 10 (1992): 104–5.



Fig. 26. Frank Lloyd Wright, The Solomon R. Guggenheim Museum. Elevation from Fifth Avenue with additions and renovations by Gwathmey Siegel & Associates. (© Jeff Goldberg/Esto. All rights reserved.)

thereby allowing the life of the spiral to continue. The Gwathmey Siegel tower, on the other hand, is resolutely slab-like, a limestone stele into which the concrete rotunda collides with immense force, and stops. The deadening impact of the tower is further exacerbated by its incised tartan grid, an unfortunate choice of backdrop for a building long distinguished by its swirling defiance of the Manhattan street grid.

The external interruption of Wright's spiralling rotunda has corresponding repercussions for the building's interior. Wright often designed binuclear plans for large-scale, nondomestic commissions in order to establish a dynamic interplay of major functions as a way of heightening the unity of the larger whole. In the Larkin Administration Building, Wright created the intimately-scaled lounge, classroom, and library spaces of the annex as a counterpoint to the high-pressure atmosphere of the five-storied main workroom. For Unity Temple, Wright played the socio-cultural demands of Unity House, the space for secular activities, against the spiritual requirements of the principal religious space, Unity Temple proper. For the Johnson's Wax headquarters,

Wright used an entrance driveway to separate the great workroom from an adjacent parking garage, squash court, and recreation terrace. At the Guggenheim, the spiraling rotunda was designed for the public display of art, while the monitor building, also separated from the rotunda by a driveway, was intended for the private use of the administrative and curatorial staff.³⁸ In the new Gwathmey Siegel configuration (Figs. 27 and 28), the discrete nature of the two principal building units is compromised by the opening of several avenues of access leading from the spiral ramps of the rotunda into the trough-like exhibition spaces within the new tower, and by the creation of exhibition spaces throughout the monitor on its three upper levels. (Administrative and curatorial offices are now located atop the new buffer tower and in newly-excavated subterranean spaces.) In short, Wright's delicately-wrought dualism has been completely vitiated in favor

38. That Wright chose to add a *glazed* tower to his Guggenheim group suggests that he wished to interfere with the primary dualism of the concrete rotunda and monitor as little as possible.



Fig. 27. Frank Lloyd Wright, The Solomon R. Guggenheim Museum. Section through administrative monitor as altered by Gwathmey Siegel & Associates. (Gwathmey Siegel & Associates)

of additional exhibition spaces, and his insistence on a controlled path of movement has been violated.

There are, of course, both mitigating considerations and positive benefits to the alterations and additions to the building. With the skylight reopened, the final turn of the ramp again becomes exhibition space, and with the interior surfaces refurbished, the rotunda space more closely approximates Wright's intentions in 1959 than it has for many decades; the exterior surfaces of the rotunda are smoother than ever before. Gwathmey Siegel deserves some consideration, perhaps, for having taken on the commission—adding on to Wright's spiral may have been an impossible task.

Despite the pressure to expand and change, to accommodate new museum technologies, increased spatial needs, a larger museum staff, changes in art and the scope of collecting, and the deterioration of the building, I have argued in favor of recognizing and reaffirming Wright's original design in the light of its significance as the culminating work of his career and as a unique monument in the history of world architecture. While it is quixotic, at this point, to argue for an authentic restoration and a return to the building's function solely as a repository and exhibition space for Solomon Guggenheim's collection of non-

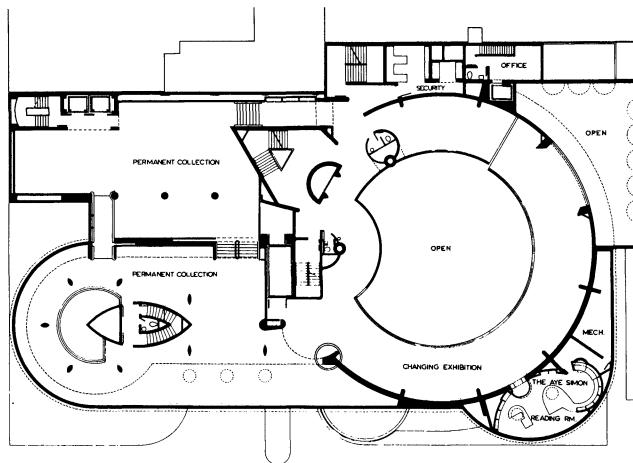


Fig. 28. Frank Lloyd Wright, The Solomon R. Guggenheim Museum. Plan of second floor as altered by Gwathmey Siegel & Associates. (Gwathmey Siegel & Associates)

objective paintings, it is clear that the recent alterations by Gwathmey Siegel have seriously compromised the essential spiritual qualities of Wright's design, that is to say, the transcendence of the spiraling rotunda.

The loss is neither total nor irreparable, but it is unfortunate that those entrusted with such an outstanding legacy of architecture and architectural patronage have not been more sensitive to its meaning, but have, in fact, authorized these changes in the name of additional space while simultaneously opening a second exhibition space in lower Manhattan and while planning additional new museums in Venice, Salzburg, and Bilbao.³⁹ If Americans have been painfully slow to understand and appreciate the magnitude of Frank Lloyd Wright's artistic vision, it is because of the failure of leading cultural institutions such as the Guggenheim to set an example by providing an open forum in which scholars, historians, critics, and other concerned members of the public might have had an opportunity to comment upon such massive alterations *before* the fact rather than afterwards.

39. The board of trustees and director of the Guggenheim Museum made certain that the work on the building was authorized in the year before the building was eligible for New York City Landmark status. Thomas Krens, director of the Guggenheim; Peter Lawson-Johnson, president of the Guggenheim Foundation; architect Charles Gwathmey, and several additional members of the Gwathmey Siegel firm appeared before the New York City Landmarks Preservation Commission on 12 December 1989 to assure the commissioners that their principal concern was with the preservation of the building. However, they explained that they wished to do it their way.