SOLOMON R. GUGGENHEIM MUSEUM: A "NEW DECLARATION OF INDEPENDENCE"

Aliza Kathryn Minogue-Nachison

The Solomon R. Guggenheim Museum in New York City is a masterpiece in the oeuvre of Frank Lloyd Wright. It successfully demonstrates his principles of organic architecture by abstracting forms from nature and translating them into architectural design. It evokes awe from both outside and in. As a gallery, the architecture of the Guggenheim is a mark of pioneering genius in the way it brings the force of Nature, which Wright believed unites all living things, to the artwork inside; it is a "temple of non-objectivity" and also of the soul.[1] The spiraling rotunda allows the main gallery space to flow continuously and brings the works of art into the organic architecture by displaying them in ever-changing nuances of natural light and against a backwards slanting wall, the inside of the upwardly expanding structure seen from the outside. Of the slanting walls Wright said, "this is the chief characteristic of our building. This idea is new but sound."[2] The rotunda rejects the traditional format of display in favor of an unconventional one that harmoniously unites the visitor with the art and architecture. Thus Man, Art, and Architecture are united through Wright's exquisite spiral design in which Nature resounds.

The Guggenheim Museum is a building not only unique in the cityscape of Manhattan, but also in the scope of Wright's work as the only one of his spiral designs to be realized as a cultural center.[3] The spiral was a recurring theme in Wright's designs and seems to have held special significance for him. Although Wright claims to have been uninfluenced by outside forces, his reliance on observations of Nature informed his work, and later in life he even admitted that Friedrich Froebel "gifts" informed his interest in geometric patterns of nature.[4] He was perhaps also influenced by ancient architecture, as I shall explain. A staunch individualist, Wright sought to create not only unique designs, but also buildings wherein the individual could blossom. This individualism, this freedom was to Wright, the life force of American democracy, and he maintained that, "organic architecture meant more or less an organic society."[5] The purpose of this essay is to examine the ways in which the spiral design of the Guggenheim's rotunda demonstrates Wright's philosophy of art,

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[1] The history of the Guggenheim Museum is documented in letters collected in Pfeiffer 1986. Hilla Rebay affectionately called the building a "temple of non-objectivity" (Pfeiffer 1986, 28). In Rebay's first letter to Wright, requesting that he design the new museum for non-objective art, she declared that what she wanted was a "temple of spirit" (Pfeiffer 1986, 4).

[2] Pfeiffer 1991, 151.

[3] Although the spiral design seems to be fundamentally different than Wright's other architectural motifs, the principle of continuous space was at the heart of his previous designs too, beginning with the horizontality of his Prairie House concept. As the Guggenheim's floor levels increase in diameter they ascend into space suggesting both a vertical and horizontal growth. Therefore, the spiral is perhaps a more complex manifestation of Wright's established principle of organic growth.

[4] Friedrich Froebel (1782-1852) created a system of educational "gifts" with which children could learn principles of geometry and space through play. For a detailed investigation of Froebel's influence on Wright, see Rubin 1989.

[5] Pearson 2001, 29.

architecture, and Nature, and ultimately serves as a powerful social tool as it calls forth the Individual, enabling the creation of a true American society.

Wright believed that architecture had an important role to play in American society. In his monograph *A Testament*, Wright describes the grandeur of the founding ideals of America and declares that organic architecture can enable the manifestation of those ideals. "Social integrity as an individual" was paramount to Wright's ideas of democracy but he found that the tendency towards *taste* and *style* in typical American architecture destroyed the possibility of true individuality.[6] He held that organic architecture could create the "freedom for the human being to be his better self!"[7] By bringing people to Nature through organic architecture, Wright believed that they would recognize Nature within themselves and that out of this, perhaps subconscious recognition, the individual, now free from oppressive forces could come into being. Organic architecture therefore, could inspire a society of free individuals, united by the freedom given by Nature.[8] This was the function of Wright's organic architecture, carried out by the spiraling rotunda of the Guggenheim.[9]

The Guggenheim Museum commission afforded Wright a special opportunity because of the nature of the building and the purpose of the art that it would house. From the time Wright was approached in 1943, he and Hilla Rebay, the museum's curator at the time, and lover of non-objective art,[10] wrote to each other extensively discussing uses, ideas, and principles of art and architecture. Although they were passionate about different arts, what they respectively saw in each of them was similar. In his book, Bruce B. Pfeiffer describes that Rebay felt that non-objective art "could heal, inspire, placate, deliver, and uplift."[11] Rebay's vision of non-objective art reflected Wright's ideas of the power of organic architecture to affect change individually and socially.[12] In one of his first letters to Rebay, dated July 20 1943, Wright says, "we could make here a true memorial to your vision as a pioneer, not only in material affairs, but in the vital affairs of human thought."[13] Because the client's ideas about non-objective art paralleled Wright's ideas of architecture, which were intrinsically tied to his philosophy of Nature and Life, the Guggenheim design would inherently and necessarily reveal Wright's architectural objective: to inspire freedom and

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[6] Wright 1957, 61.

[7] Ibid. 60.

[8] In his interview with Mike Wallace (Wright, Interview), Wright declared in no uncertain terms his belief in Nature "with a capital 'N'," and the importance of individuality, which he argued could be brought to life through architecture.

[9] See also Wright 1945.

[10] The works of Vasily Kandinsky, Max Ernst, Jean Arp, and Rudolph Bauer demonstrate what Rebay termed non-objective art.

[11] Pfeiffer 1986, 28.

[12] Pfeiffer 1986, 28 also explains that for Rebay, non-objective art was a "spiritual venture, not only of the mind and of the heart, but deep within the human soul," which indicates that the objective of both Rebay and Wright was to reach people on an essential level through both the architecture of the Guggenheim and the art within. Pfeiffer sees similarities in the way Froebel "gifts" encouraged Wright to see inherent principles of Nature and in the use of geometric forms in non-objective art. Although Pfeiffer indicates that Wright was inclined towards the Guggenheim commission because of these similarities, I would argue that for Wright, the similar language of the media was secondary to the shared vision of purpose of their respective arts that made the Wright-Rebay match so fruitful.

[13] Pfeiffer 1986, 10.

individuality.

Wright was aggressive in his fight for the realization of the Guggenheim and there are indications that its design had been important to him long before he received Rebay's first letter. Details of the Museum design changed a number of times during its development from 1943 until it opened in 1959.[14] However, the spiral of the rotunda was there in the very first drawings of 1943 as a "ziggurat."[15] Although the Guggenheim is the only spiral-based design that came to fruition in the public sphere, the idea of the spiral can be found in other Wright plans, most notably in the Gordon Strong Automobile Objective plan from 1924 (fig. 1 and 2). The Guggenheim's spiral motif was first conceived in the same orientation as the Automobile Objective (fig. 3), but within a year Wright inverted the orientation of the expanding spiral, creating the shape we see now (fig. 4). This inversion allows the art to hang at an angle, which Wright said would make for better for viewing. This upward expansion can also be seen as a more natural pattern, such as that of a tree or flower and was perhaps a way for Wright to overcome the gravity of the city grid and to suggest the idea of growth as seen in nature.

The intersecting circles of the Guggenheim floor plan (fig. 5) also bear a striking resemblance to Wright's plans for the Baghdad Opera House and Gammage Auditorium of 1957 and 1959 respectively (fig. 6 and 7).[16] All of these plans demonstrate Wright's use of multiple variations of one geometric form within a building, but these circular designs were to be set in cultural and public realms that his family homes and office buildings would not face. Perhaps Wright supposed that an all-encompassing circle would bring about a more united culture. In *The Japanese Print: An Interpretation*, Wright describes that geometric forms hold intrinsic meaning: "the circle, infinity… the spiral, organic process."[17] If we take the idea of "infinity" and recognize that with it comes the idea of unity (as each second, for example, is united in the concept of infinite time), it is then clear that the Guggenheim, which integrates the circle and the spiral could suggest infinite organic process and unity.

Wright also had an affinity for transcendental philosophies found in the writings and lectures of Ralph Waldo Emerson and Henry David Thoreau.[18] They, like Wright, believed that the current of Nature was present in all life. In his account of Transcendentalism's impact on Wright, Jack Quinan stresses that Emerson theorized about "the path of this

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[14] For a summary of major events in the planning phase, see Quinan 1993, 466-469.

[15] In a letter dated January 20, 1944, before he had shown any drawings, and before a site had been purchased, Wright gave a somewhat cryptic description of what he thought a museum should be: "one extended well-proportioned floor space from bottom to top," Pfeiffer 1986, 40. In a letter dated January 26, 1944, Wright says, "I find that the antique Ziggurat has great possibilities for our building. You will see," Pfeiffer 1986, 42. These facts suggest that Wright was perhaps eagerly awaiting an opportunity to use his spiral design. He also says that it could be "top side down or down side top" which indicates that he had already developed the concept of an inverted ziggurat as a valuable architectural form, Pfeiffer 1986, 42.

[16] These designs could be inherited from Louis Sullivan's plan for the Chicago Auditorium Theater, 1886. However, it is also likely that Wright's awareness of the architecture and philosophy of Rudolf Steiner had an influence on his designs. Steiner's plan for the first Goetheanum (completed in 1919) features two inter-penetrating circles. The outside of Steiner's Goetheanum, like Wright's Guggenheim rotunda, is rounded whereas Sullivan's design is framed in a rectangle.

[17] Wright 1967, 16.

[18] See especially Emerson 1983, 259-282. 541-555.

current" being "a spiral."[19] Like the circle and spiral of the Guggenheim, that current of Nature is infinite and unites all life. This combination of patterns in Nature and essential connotation of geometric forms marks a culmination in Wright's quest to unite people in the space of Nature. It is quite easy then to understand why he fought so hard to have this design brought to life. In the presence of these forms people could commune with Nature and, in recognizing the beauty of that union, could begin to reject imposing forces that commonly interrupt the beauty of Nature.

To describe the experiential aspect of organic architecture, Wright used the recognition of beauty in a flower: "[the flower] is an embodiment and significant expression of that precious something in ourselves which we instinctively know to be Life…there vibrates in us a sympathetic chord struck mystically by the flower. Now, as it is with the flower, so is it with any work of art."[20] The architecture of the Guggenheim and the art within work together to create a recognition of Life, wherein we can experience the current of Nature that unites us. This experience is the experience of Beauty.[21]

This experience of Nature is made manifest in a revelation of individuality for the visitor to the Guggenheim. Wright felt that geometric forms had sociological implications, and that the experience of Nature in architecture could inform actions. In Richard Joncas' words, "Wright was explicit in his belief that form could determine human behavior."[22] Wright's awareness of the mimetic response that architecture (and non-objective art) evokes through geometry enabled him to create a dynamic space that can change patterns of thought and behavior by setting the visitor to the Guggenheim, like the artwork that hangs within, into a space of natural rhythm and form. This setting "vibrates in us" and induces behavior in harmony with Nature; and as people are individual parts of that chord of Nature, the instinctual mimetic response necessitates infinite variations of reactions, each one in step with Nature.

To create freedom Wright also employed the hexagon. Featured in the skylight of the Guggenheim rotunda (fig. 8), the hexagon, which he described as "the square modified by the triangle," is a form that Wright had used in the design of the Hanna House in the 1930's (qtd. in Joncas 312).[23] Of the hexagon, Wright said that it has a "more human rhythm" and that the "cross-section of honeycomb has more fertility and flexibility where human

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[19] Quinan 1993, 470.

[20] Wright 1967, 14.

[21] Wright believed that geometry is beautiful because it echoes Nature. Scully 1980, however, asserts that the underlying universality in the experience of geometric forms comes from Freud's Oedipus Complex. The circle and sphere, Scully explains, are innately feminine and speak to unconscious universal feelings. Through Freudian analysis of Wright's language of geometry, Scully arrives at the same idea of "fertility, birth and indeed resurrection" which Wright did through intellectual analysis of form. I would argue that these ideas do not discount each other, but perhaps explain each other as both Freud and Wright tapped into universal subconscious material.

[22] Joncas 1993, 307.

[23] Ibid. 312. The geometric shape of the Guggenheim skylight is dominantly hexagonal, but twelve rays come out from it and are echoed in the bays along the spiral ramp. The rounded shapes that overlap the angles of the hexagon in the ceiling window also transform it into a dodecagon. This doubling can be seen as a 45-degree rotation of the hexagon. The skylight of the small tower is decidedly a hexagon, suggesting that the rotunda skylight should be seen as a double hexagon.

movement is concerned."[24] "Fertility and flexibility" suggest the principles of growth and freedom of movement, which Wright saw as being most natural, but diminished by the rigidity of oppressive box-like architecture.[25] The hexagon literally opens the angles and physically suggests expansion. The ceiling of the Guggenheim then is not just a skylight, but also a window towards freedom and growth for Man as seen in Nature. It lifts the imposition of the city grid, and in concert with the spiral and inter-penetrating circles of the rotunda, inspires the essence, the Nature of the individual to come to life. Just as Wright said it would, the architecture of the Guggenheim Museum creates a "beautiful symphony such as never existed in the World of Art before."[26]

It is important, however briefly, to discuss the visitors designated path *down* the spiral ramp. The inversion of the "ziggurat" suggests emphasis on the infinite growth of natural form and a shift that empathetically centers the visitor within himself. From the outside, the rotunda structure seems to ascend and expand, but the prescribed path of the visitor starts from the top (after a trip in the elevator from the ground floor) and winds down to the ground floor. On one side of the spiral ramp is the slanting wall and on the other a cylinder of open space. It is almost impossible for the visitor to determine which floor he is on because the ramp continuously whirls around and down. This is an unusual if not unsettling experience, and demands a certain trust in the path and the art that leads the way. As such, the experience of the Guggenheim is similar to that of a labyrinth. In Gothic cathedrals, labyrinths were included for a number of reasons, one of which was perhaps to guide people towards faith in the Catholic Church. As used in the Guggenheim though, the three-dimensional labyrinth does not turn the visitor to religion, but wraps him into the tide of Nature.

The path down is also inward. As the visitor descends, he is taken at last to the center of the geometric plan. The arrival at the center of the organic architectural design implicitly centers the visitor in himself, in Nature. At the end of this path where the spiral ramp meets the earth, the visitor, now stripped of all that inhibits the natural current of Life, can blossom as "his better self."[27] The spiral ramp prepares the visitor to go out into the world, giving him a new awareness of the current of Nature that unites art, architecture, and all living things. This new awareness, given by Wright's Guggenheim Museum design, is the

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[24] Ibid. 313.

[25] In his interview with Mike Wallace (Wright, Interview), Wright explains (among many other things) the social impact the Guggenheim could have in a city so congested and damaged by oppressive box-like architecture. Wright had been accused of imposing his architecture on the people of the city of New York, but his idea was actually to undo, or at least call attention to the oppressiveness of the grid of the architecture and plan of the city.

[26] Larkin – Pfeiffer 1997, 150.

[27] Wright himself referred to the shape of the building as a "ziggurat," but it seems that the concept of a ziggurat, which may have guided him in his design of the Automobile Objective and the early Guggenheim study was transformed – turned outside in and upside-down. The Guggenheim reaches, like a ziggurat, into the heavens, but also down, into the heart of Man on earth.

key principle for the creation of a thriving American society of free individuals. The Guggenheim is not just a museum; it is a "new Declaration of Independence."[28]

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[28] Pearson 2001, 29.

Figure 1. Study for Gordon Strong Automobile Objective, 1924

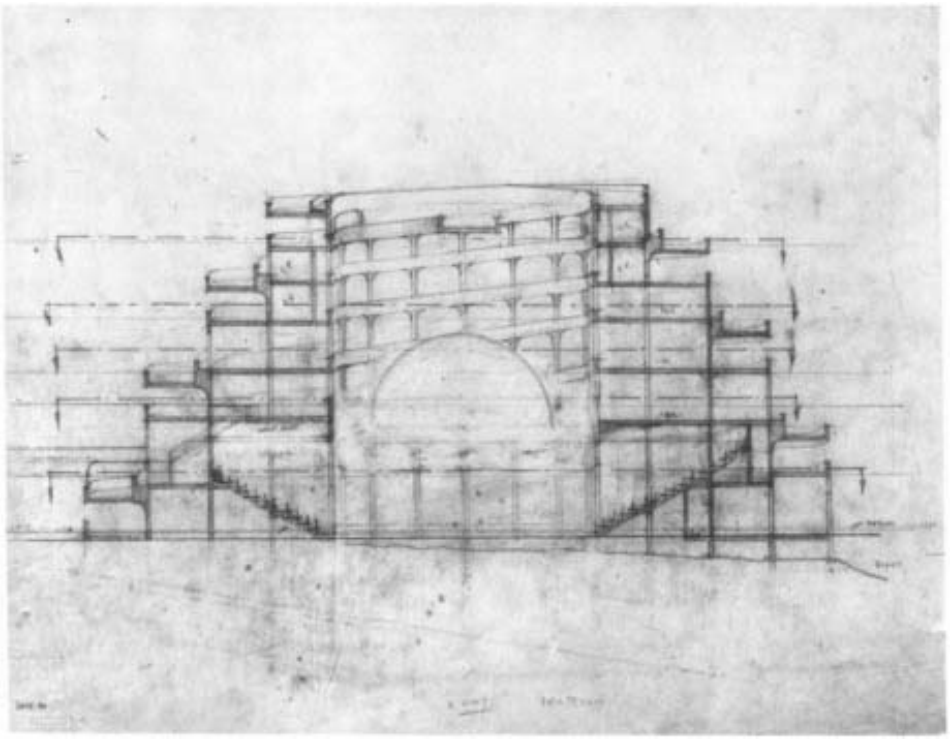

Figure 2. Study for Gordon Strong Automobile Objective, 1924

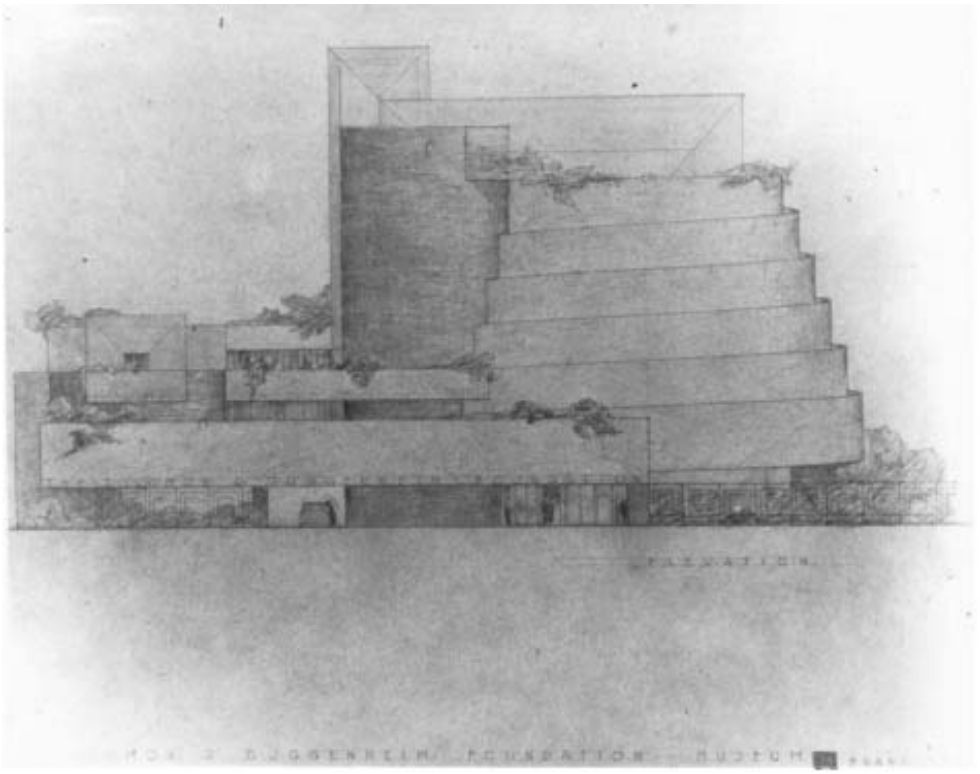

Figure 3. Preliminary Study for Guggenheim Museum, 1943

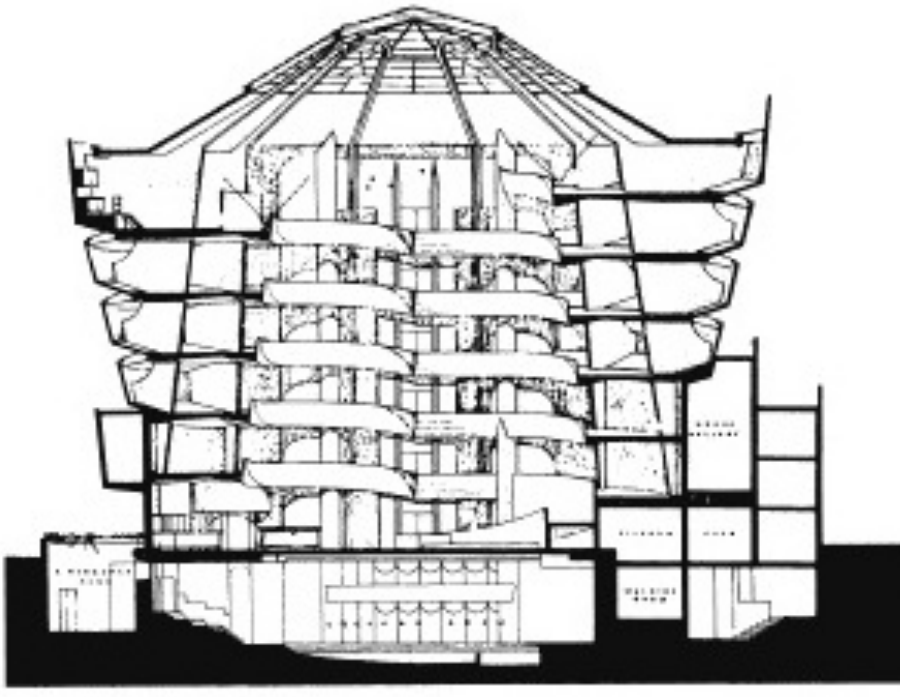

Figure 4. Guggenheim Museum, Section Through Rotunda

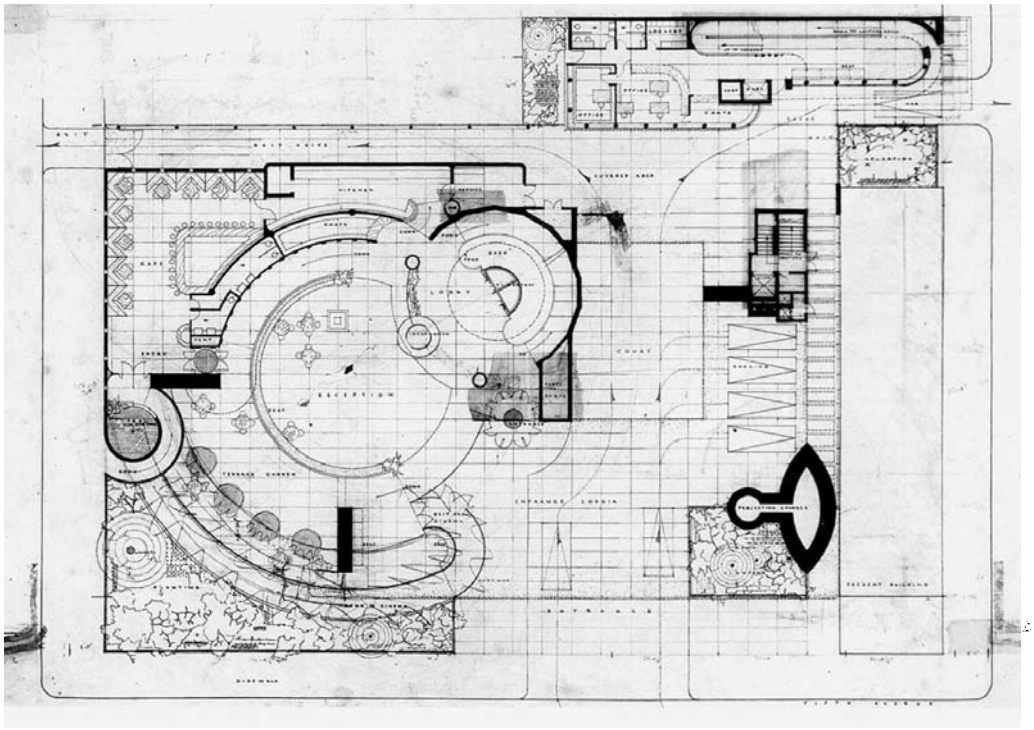

Figure 5. Guggenheim Museum, Original Sketch Plan, 1944

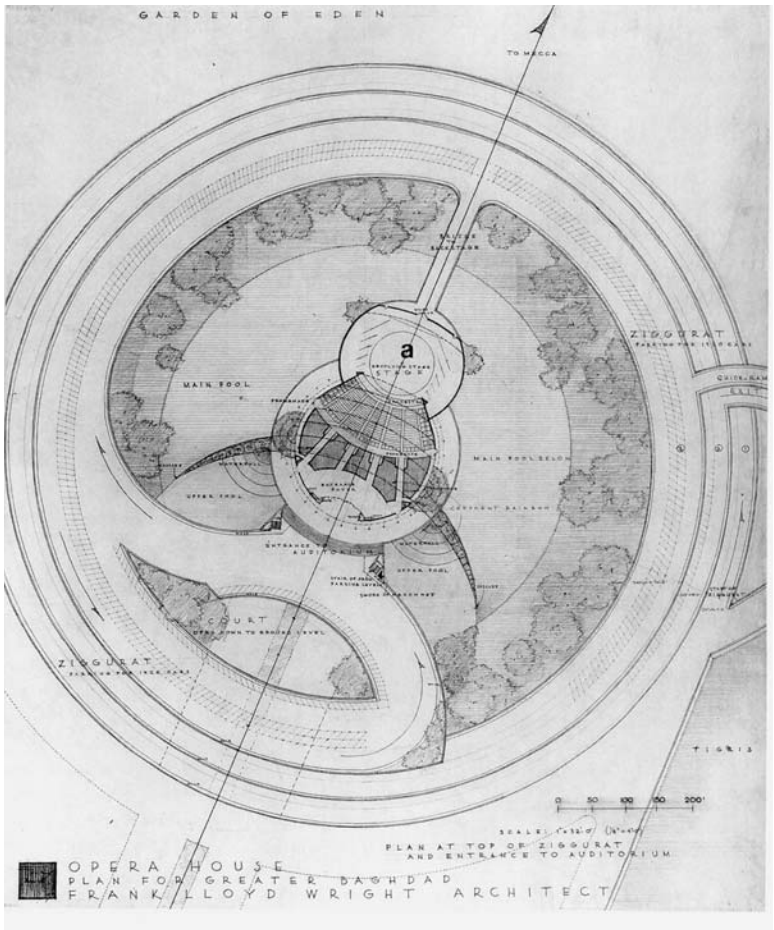

Figure 6. Baghdad Opera House Plan, 1957

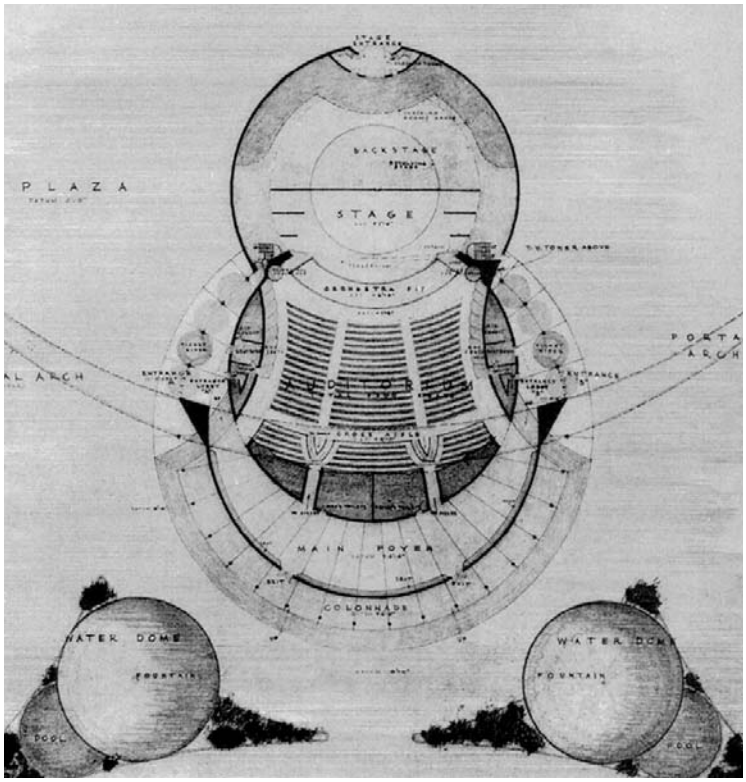

Figure 7. Gammage Auditorium Plan, 1959


Figure 8. Skylight Ceiling of Guggenheim Museum Rotunda