

Landmarks Preservation Commission  
August 14, 1990; Designation List 226  
LP-1775

GUGGENHEIM MUSEUM, GROUND LEVEL INTERIOR consisting of the entrance loggia (now the bookstore), the entrance vestibule, the main gallery space including the fountain, admission/information desk, and telephone alcove, and the coat room foyer; AUDITORIUM LEVEL INTERIOR consisting of the staircase in the triangular stairhall leading from the auditorium level to the ground level, the elevator foyer, the auditorium, the auditorium mezzanine, the stairs and areas providing access to the auditorium mezzanine, and the stage/platform; the GROUND LEVEL THROUGH SIXTH LEVEL INTERIORS, up to and including the glass dome, consisting of the continuous ramp; the space enclosed by the continuous ramp; the adjacent gallery spaces, among them the grand gallery at the first and second levels, including the fixed planters at the bottom and top of the first level, at the top of the second level, and at the top of the third level, and the skylights; the elevator foyers; and the elevator cabs; the GROUND LEVEL THROUGH FOURTH LEVEL INTERIORS consisting of the triangular stairhall and staircases which terminate at the top of the fourth level which is the beginning of the fifth level; the SECOND LEVEL INTERIOR consisting of the Justin K. Thannhauser Wing; the SIXTH LEVEL INTERIOR consisting of the triangular gallery adjacent to the elevator shaft; and the fixtures and interior components of these spaces, included but not limited to, floor surfaces, wall surfaces, ceiling surfaces, doors, windows, brass railings, triangular light fixtures, trough light fixtures, signs, and metal museum seal, 1071 Fifth Avenue, Manhattan. Frank Lloyd Wright, Architect. Built 1956-59.

Landmark Site: Borough of Manhattan Tax Map Block 1500, Lot 1.

On December 12, 1989, the Landmarks Preservation Commission held a public hearing on the proposed designation as an Interior Landmark of the Guggenheim Museum GROUND LEVEL INTERIOR consisting of the entrance loggia (now the bookstore), the entrance vestibule, the main gallery space including the fountain, admission/information desk, and telephone alcove, and the coat room foyer; AUDITORIUM LEVEL INTERIOR consisting of the staircase in the triangular stairhall leading from the auditorium level to the ground level, the elevator foyer, the auditorium, the auditorium mezzanine, the stairs and areas providing access to the auditorium mezzanine, and the stage/platform; the GROUND LEVEL THROUGH SIXTH LEVEL INTERIORS, up to and including the glass dome, consisting of the continuous ramp; the space enclosed by the continuous ramp; the adjacent gallery spaces, among them the grand gallery at the first and second levels, including the fixed planters at the bottom and top of the first level, at the top of the second level, and at the top of the third level, and the skylights; the elevator foyers; and the elevator cabs; the GROUND LEVEL THROUGH FOURTH LEVEL INTERIORS consisting of the triangular stairhall and staircases which terminate at the top of the fourth level which is the beginning of the fifth level; the SECOND LEVEL AND FOURTH LEVEL INTERIORS consisting of the Justin K. Thannhauser Wing and the Collection Galleries; the SIXTH LEVEL INTERIOR consisting of the triangular gallery adjacent to

the elevator shaft; and the fixtures and interior components of these spaces, included but not limited to, floor surfaces, wall surfaces, ceiling surfaces, doors, windows, brass railings, triangular light fixtures, trough light fixtures, signs, and metal museum seal; and the proposed designation of the Landmark Site (Item No. 39). The hearing had been duly advertised in accordance with the provisions of law. Twenty-seven witnesses, including three representatives of the Solomon R. Guggenheim Foundation and Museums, spoke in favor of designation. No witnesses spoke in opposition to designation. The Commission has received many letters supporting designation.

## DESCRIPTION AND ANALYSIS

### Summary

The interior of the Guggenheim Museum, internationally recognized as among the world's great twentieth-century spaces, is contained within one of New York's most memorable and architecturally important buildings. Located on prestigious Fifth Avenue, the museum is a link in that thoroughfare's highly regarded "Museum Mile." Founded by Solomon R. Guggenheim, it is the best known of the many institutions financed by the philanthropic efforts of the Guggenheim family, whose wealth and subsequent social prominence were derived primarily from its worldwide mining empire. Inspired and led by the painter and art patron Hilla Rebay, Guggenheim supported many avant-garde painters of "non-objective" art by purchasing their works and, in 1937, establishing a foundation to promote art and education in art and the enlightenment of the public. Rebay eventually convinced him to commission in 1943 America's most prominent architect, Frank Lloyd Wright, to design the museum. It would become in many critics' eyes the crowning achievement of the architect's later career -- manifesting his theory of an organic architecture in its inherent unity of building method, appearance, and use -- and Wright himself called the design "My Pantheon." The museum appropriately fulfills his goal of promoting a democratic society through its didactic and inspirational purposes. The museum was erected in 1956-59, its most prominent section taking on the form of a nautilus. The spiraling cantilevered ramp and spider-web dome of the Main Gallery define a dramatic interior. Unified through ivory-colored walls and ceilings and a circular patterned terrazzo floor, this monumental skylit space is enlivened by the ever-changing quality of light and by the contrast between illumination levels in the central atrium and in the adjacent exhibition alcoves. Joining the peripheral alcoves, illuminated, in part, by ribbons of skylights, the ramp also connects to other exhibition areas: the Grand Gallery and the Thannhauser Wing. Wright's envisioned atrium, with its continuous circulation and sweeping views, and the museum's subterranean auditorium, with its geometrically-derived space and details, survive intact and continue the institution's didactic purpose. While geometric shapes create the spatial character of this design, they are also used for details such as the lozenge- (or leaf-) shaped fountain, planters, and columns. The surprising spiraling space, with all its associations to the continuous creative force of nature, was made possible through the collaboration of innovative engineers and a resourceful builder, George N. Cohen. Completed under Solomon's nephew Harry F. Guggenheim and museum director James Johnson Sweeney, while New York reigned unchallenged as the world's cultural

capital, the museum immediately became a popular cultural magnet and remains so today. Wright's most visited building, it is that architect's only major commission in New York City.

### A Brief History of the Site<sup>1</sup>

At the turn of the century, the future site of the Guggenheim Museum contained five Beaux-Arts style edifices: (from south to north) two stone-fronted residences of five stories, two five-and-a-half-story residences (one brick, one stone), two empty lots, and a six-and-a-half-story brick-faced residential building. In 1955, after the properties had been acquired for the museum and construction was about to commence, the site was empty except for a vacant thirteen-story apartment building at 1070 Fifth Avenue and one of the previously mentioned stone-fronted structures, altered to six stories and temporarily housing the Guggenheim collection, at 1071 Fifth Avenue. These were demolished to create the site for the new museum.

### Solomon R. Guggenheim and Hilla Rebay<sup>2</sup>

The rise of the Guggenheim family from impoverished obscurity to unquestionable prominence as one of our country's wealthiest clans, and certainly among its most influential Jewish families, is a classic American rags-to-riches story. Leaving Lengnau, Switzerland, in 1847 to escape religious persecution, Meyer Guggenheim (1828-1905) settled in Philadelphia and began a long climb to a very successful career. Beginning as a peddler of stove polish, he soon opened a grocery store and sold spices wholesale. Subsequent endeavors included founding the American Concentrated Lye Company, investing in railroads, and importing laces and embroideries from Central Europe. He and his wife Barbara (nee Meyer, 1834-1900) eventually had seven sons and two daughters. Meyer drew his sons into a company called M. Guggenheim's Sons, training them in the relevant industries and instilling in them a sense of family unity. The fourth-born son, Solomon (1861-1949), was sent to Zurich to study German and business.

In 1881 the Guggenheims invested in mines in California and Colorado which would become the sources of their enormous wealth. The discovery of silver, copper, and gold heralded their worldwide mining empire; soon they shifted their business interests to mining and smelting alone. By 1889 this success prompted the family's move to New York; M. Guggenheim's Sons established offices at 30 Broad Street and soon thereafter at 2 Wall Street. When the company began mining in Mexico in 1890-91 (consequently developing the cities of Monterrey and Aguascalientes,) Solomon was put in charge. His daring and courage in this frontier environment helped the company become Mexico's foremost industrial power; upon the merger with Rockefeller's American Smelting and Refining Company, Solomon was made treasurer. Eventually the mining endeavors spread to Alaska, Africa, and South America. By exploiting inexpensive labor and raw materials abroad, M. Guggenheim's Sons was able to squelch its American competitors and was fabulously successful even before the unprecedented demand for copper wire brought about by World War I.

Solomon married Irene Rothschild (1868-1954), the daughter of a prosperous New York business family, and the couple had three daughters. Like Solomon's siblings -- who earned reputations as benefactors of humanity by financing such diverse causes as the American Women's Association, the Jewish Theological Seminary, the New York Botanical Gardens, research in aeronautics, and the Guggenheim Fellowship for scholars -- Solomon and Irene became philanthropists, but found their niche in supporting the arts, especially painting. From the mid-1890s, they began collecting Old Masters and American landscapes, then the French Barbizon School and primitives. Solomon eventually abandoned his interest in these representational artistic movements for the twentieth-century world of European non-representational, or "non-objective," art in particular. This shift in Solomon's aesthetic taste grew out of his association with Hilla Rebay, a young painter recently arrived in New York, whose first American show at Marie Sterner's gallery in 1927 had attracted Irene's attention.

Born in Strasbourg of artistic parents, Hilla Rebay<sup>3</sup> (1890-1967) studied art in Cologne, Paris, Munich, and Berlin and was attracted to the belief of theosophy taught by Rudolf Steiner. A system of esoteric and mystical speculation, theosophy provided a model for heightened states of perception beyond the traditional realism and Euclidean perspective that had defined painting since the Renaissance. Rebay's interests coalesced in her pursuit of non-objective art which she encountered through her friends and artistic colleagues in the German Der Sturm and Novembergruppe and Swiss Dada circles, particularly Jean Arp (1887-1966), and Expressionist architect Erich Mendelsohn (1887-1953). Deciding that her future lay in the United States, Rebay arrived in New York in 1927, worked briefly as a commercial artist and window designer, and taught sculptor Louise Nevelson (1899-1988).<sup>4</sup> On a crusade to make New York more receptive to modern art, she moved into a studio in Carnegie Hall and participated in exhibitions. At Marie Sterner's gallery she encountered Irene Guggenheim and, subsequently, Solomon.

Rebay became the Guggenheims' artistic advisor, escorting them on numerous European trips to purchase non-objective art, especially works by Vasily Kandinsky (1866-1944), Piet Mondrian (1872-1944), and Laszlo Moholy-Nagy (1895-1946).<sup>5</sup> During the years of the Depression, Rebay used Guggenheim's wealth to buy many paintings, thus concurrently supporting struggling artists (her friends, for the most part) through difficult times and substantially enlarging Solomon's collection with her aim of founding a museum of modern art.

Tireless in her quest to convert her benefactor's enthusiasm for non-objective art into a "temple" of non-objective art, Rebay envisioned an institution that would promote painting by providing studios as well as exhibition space. Meanwhile, in 1931 the Guggenheims' Plaza Hotel suite was redecorated for the installation of the growing collection. However, possibly influenced by the precedents of his peers -- Charles Lang Freer, Henry Clay Frick, Henry Edwards Huntington, and Andrew Mellon -- who had built or were building monuments to themselves in the form of art museums,<sup>6</sup> Solomon took a greater interest in Rebay's plans. By 1933 Wallace K. Harrison's proposed plans for Rockefeller Center included a Museum of Modern

Art, a Metropolitan Opera, and a "Guggenheim Museum."<sup>7</sup> Though this early scheme died in 1936 when the Rockefeller family abandoned its plan to acquire land for a cultural plaza, Guggenheim's collection began to gain exposure through shows in Charleston, South Carolina (1936), and Philadelphia (1937).

In the spring of 1937 Guggenheim established the Solomon R. Guggenheim Foundation for the "promotion and encouragement of art and education in art and the enlightenment of the public."<sup>8</sup> Rebay was named a trustee of the Foundation and the curator of the collection that was to form the core of a museum. As early as 1930 Rebay had consulted with several European architects regarding the design of a museum for modern art, among them Walter Gropius (1883-1969), Erich Mendelsohn, and Le Corbusier (1887-1965). By 1930, the year he met Rebay, Le Corbusier had formulated a scheme for a museum: an elevated cube, entered from below, in which rooms spin out in an endless spiral.<sup>9</sup> Her discussions with European architects about the design of a modern museum prompted Rebay's proposed plan for an art pavilion for New York's 1939 World's Fair: a circular one-story building with twelve wings (two intended for Guggenheim's collection) encircling a central garden. It was never realized; however, assisted by architect William Muschenheim (b. 1902),<sup>10</sup> Rebay was entrusted with converting a former automobile showroom into a home for the collection: two floors, a mezzanine, and a basement level at 24 East 54th Street. The Museum of Non-objective Painting opened on May 31, 1939, to favorable reviews with the exhibit "The Art of Tomorrow."

However, a permanent and compatible home for the collection was Rebay's goal and, accordingly, she began a search for a worthy architect. After considering several well-known European architects, including those mentioned above, she had to acknowledge that World War II made selecting any one of them a logistical obstacle and a political blunder. In 1943 she chose America's most celebrated architect, Frank Lloyd Wright, inspired by his theoretical writings. Wright's conception of an "organic" architecture, the translation of nature's own principles into buildable forms,<sup>11</sup> resembled Rebay's theosophical ideas for her planned temple.<sup>12</sup> Wright proposed a ziggurat-like building which thrilled Rebay, he established a mutual respect with Guggenheim, and consequently was given \$21,000 to begin designing even before a site had been acquired. The entire cost, including purchase of the site, was to have been \$1 million. In the spring of 1944, a portion of the present site was purchased and in August, 1945, a design was unveiled to the clients at a luncheon in the Plaza Hotel.

The high cost of construction following the war dissuaded Guggenheim from immediately spending the funds he had assigned for the building and the maintenance of the collection. On the other hand, Rebay convinced Guggenheim to greatly increase the sum.<sup>13</sup> In 1948 the site intended for the permanent museum was enlarged through the acquisition of another piece of the block. That same year, Rebay and Muschenheim remodeled the existing six-story building on the site at 1071 Fifth Avenue to house the collection. Late in 1949 Guggenheim died without seeing his plans for a museum realized. He was succeeded as head of the Foundation by his nephew Harry F. Guggenheim (1890-1971) -- former naval aviator, aeronautical pioneer, and ambassador<sup>14</sup>--

whose turbulent relationship with the difficult and demanding Rebay caused her to resign as museum director and relinquish her other positions. She was considered eccentric because of her theosophist interpretation of non-objective art, and was disliked as authoritarian. In poor health, Rebay nevertheless continued to collect art and lecture on the subject as she planned her own foundation to foster non-objective art.<sup>15</sup> She was replaced by James Johnson Sweeney (1900-1986) -- a Brooklyn native, former lecturer at New York University's Institute of Fine Arts, and former Director of the Department of Painting and Sculpture at the Museum of Modern Art -- whose ideas about museum architecture did not coincide with Wright's proposed design.<sup>16</sup> Thus Wright had two new clients for the latter stages of design development when, in 1952, Solomon's estate was settled and the funds for the museum transferred from his estate to the Foundation.

#### Frank Lloyd Wright (1867-1959)

So much has been written regarding America's preeminent architect that this account will be limited to Wright's connection to New York City and to his projects and ideas which relate to the Guggenheim commission.

While a vociferous belittler of New York City's architecture -- "New York has reproduced much and produced nothing"<sup>17</sup> -- and a critic of the city's detrimental effect on his ideal of American democracy, Wright visited New York several times,<sup>18</sup> designed a number of projects intended for the city,<sup>19</sup> and eventually established a makeshift office in 1954 in his Plaza Hotel suite (christened "Taliesin the Third" by some and "Taliesin East" by others,<sup>20</sup> as a play upon the names of Wright's settlements in Wisconsin and Arizona). These designs demonstrated his ideas about the aesthetic possibilities of concrete and of steel and glass, the form of high-rise apartment buildings, the age of the automobile, mass-produced housing, the renovation of interior spaces, and the modern art museum. Among them are: the Universal Portland Cement Company exhibit (1910, now demolished) for a show at Madison Square Garden; a "Steel Cathedral including Minor Cathedrals for a Million People" (1926, unexecuted); St. Mark's Apartment Tower (1928-29, built in 1952 in a modified form as the Price Company Tower in Bartlesville, Oklahoma) for St. Mark's-in-the-Bowery Church; a pavilion and Usonian House (1953) erected as a traveling exhibit entitled "Sixty Years of Living Architecture: The Work of Frank Lloyd Wright" on the future site of the Guggenheim Museum; the Hoffman Jaguar Automobile Showroom (1954, partially intact as a Mercedes-Benz showroom) at 430 Park Avenue; renovation of the Wrights' suite (1954, demolished in 1968) at the Plaza Hotel; the U.S. Rubber Company's two-room inflatable "Air House" (1957) for the International Home Show at the New York Coliseum; "The Crimson Beech" (the William and Catherine Cass House) designed in 1956 and erected in 1958-59) on Staten Island; a project for the Manhattan Sports Pavilion (1959); and the Guggenheim Museum (erected 1956-59).<sup>21</sup>

From the beginning of his career, Wright fought architectural eclecticism, championing instead an "organic" architecture, that is, the translation of nature's principles into buildable forms, an approach based in part on the organically-inspired ornament produced by his employer, Louis H. Sullivan (1856-1924). Wright sought an integrity in his designs through

the simplification of natural forms into simple geometric shapes, the circle among them, due to its connotations of life cycles and perfection. As early as his windows for the Coonley House (1908-09) in Riverside, Illinois, circles are a dominant motif in his work. Many later residences by Wright feature circular motifs, increasingly used for the shape of rooms, or even partial circles for the overall layout of a house.<sup>22</sup> Some of the best known are houses for Herbert Jacobs in Middleton, Wisconsin (1947), David Lloyd Wright in Phoenix (1950), and Robert Llewellyn Wright in Bethesda, Maryland (1954). He advanced the symbolic impact of geometry to a higher level by employing spirals, the non-Euclidean version of the circle. Circles and spiral ramps were employed by Wright in designs for non-residential projects: the Automobile Objective (Planetarium and Resort) for Gordon Strong at Sugarloaf Mountain, Maryland (1925, unexecuted)<sup>23</sup>; two projects for Edgar Kaufmann in Pittsburgh, a parking garage and a Community Center at Point Park (both 1947, both unexecuted); the V.C. Morris Gift Shop (1948) in San Francisco; the aforementioned Hoffman Jaguar Automobile Showroom in New York; and others.<sup>24</sup>

While those schemes may be considered precursors of or were contemporary to his masterpiece spiral design for the Guggenheim Museum, Wright continued in this vein after the museum, but with less outstanding results. Among these designs were the Annunciation Greek Orthodox Church (1956) in Wauwatosa, Wisconsin, and the Gammage Memorial Auditorium (1959) at Arizona State University in Tempe.

### Design and Construction

In the sixteen years between Wright's first involvement with the Guggenheim project and the museum's opening, several designs were proposed, progressing from a vague evocation of an appropriate atmosphere to the executed structure.

#### The Early Designs of 1943-45

When Rebay first approached Wright in 1943, the architect responded that he had never seen a properly designed museum building. He posited that a museum should have a clear atmosphere of light from above, to provide a sympathetic atmosphere for the art, and a well designed circulation system, to facilitate a logical and enjoyable path through the exhibits. Presumably the two agreed on a circular building supported without columns and with no visible entrance.<sup>25</sup> In this early stage of development, the program included a gallery, a small auditorium, offices, a penthouse apartment for Director Rebay, study rooms, and studios for visiting artists.<sup>26</sup> Wright's earliest designs reveal a rotunda variously articulated on the exterior as a ziggurat-like spiral,<sup>27</sup> an inverted ziggurat-like spiral, and a stack of hexagonal rings (see figs 2-4). In each, the rotunda is divided by continuous bands of skylights, silhouetted against several slablike masses at the rear, and united to a smaller volume to the north by a broad cantilevered band which spans a driveway. Greenery is profuse at the rooftop gardens as well as at grade.<sup>28</sup>

During this phase of design, Wright and Rebay disagreed on many

features of the proposed interior. He envisioned a wall system wherein the paintings were displayed on prepared easel-like bases.<sup>29</sup> She insisted on more traditional flexible exhibitions.

Wright unveiled the preliminary scheme in August, 1945 (see fig. 6). In this version, the rotunda, containing the Main Gallery, is shifted to the north side of the site. It is capped by a dome of translucent tubes (like that at the Johnson Wax Building) that is encircled by a ring of miniature domed skylights and juxtaposed to a smaller dome surmounting a vertical shaft. The spiral ramp, described as "logarithmic" in several contemporary accounts, is layered with continuous ribbon windows, also of translucent tubing, integrated with concealed artificial lighting, and is partially supported on a ring of slender columns with outer circlets of struts. Large cantilevered gardens adorn the interior of the rotunda and cork wall linings soundproof the space. Visitors would use self-propelled wheelchairs or watch ceiling-projected motion pictures from recliner lounges.<sup>30</sup> The museum's program had grown to include a highly innovative film laboratory and library as well as a cafe.

#### The Intermediate Designs of 1946-55<sup>31</sup>

In subsequent designs for the Guggenheim, Wright varied the motif of interpenetrating geometric forms. After the last piece of blockfront was acquired in 1951, he revised the arrangement of masses by placing the large rotunda on the southern portion of the site, reviving the smaller administration wing (the cylinder eventually called the monitor) for the northwestern corner, and adding a fifteen-story slab at the site's northeastern corner to be rented for studios and apartments (excluded from the final project, see fig. 7). Lozenge shapes, which in Wright's architectural vocabulary can be interpreted as abstracted leaves, are introduced as structural piers, the prominent staircase in the monitor, and smaller details such as the cantilevered gardens that adorn the interior of the atrium.

Another important change in this generation of schemes is the elimination of the awkward interior columns by designing the concrete shell as a gigantic spring coiled upward on an armature of steel reinforcing rods. This revision best embodies the engineering innovations associated with the Guggenheim design.<sup>32</sup> Considering that Wright's only formal academic training was in engineering and that he was a highly skillful collaborator who relied on others for the full realization of his buildings, it is not surprising that his oeuvre should include masterpieces of engineering such as the Imperial Hotel (Tokyo, built 1915-22, demolished) Wright called the design "My Pantheon." and the Guggenheim Museum. Wright's conception for the museum was based on a trigonometric spiral which created unsurmountable problems of structure and expense. A solution, however, was offered to the architect in 1946 by Jaroslav J. Polivka (1886/87-1960), a Czechoslovak-born civil engineer distinguished for his work in photo-elasticity, experimental stress analysis, and various kinds of reinforced and prestressed concrete structures.<sup>33</sup> Polivka's tests on a six-inch thick section indicated this system was sound because the curvature of the ramp gave the building the structural integrity of a shell, while the coved inner edge increased its



rigidity and bearing capacity; in addition, the two circular shafts further reinforced the ramp.

Eventually this solution was abandoned for one incorporating twelve concrete webs at thirty degree intervals around the ramped interior, acting as partitions in the space and thus giving it a rhythmic character. The dome was redesigned with ribs, thus more closely resembling the final version.

#### The Final Design (1956) and Significance in Wright's Oeuvre

Wright's final design for the museum -- which he preferred calling the "Archeseum," by which he meant "a building in which to see the highest"<sup>34</sup>-- culminates his quest for a form of interpenetrating geometric shapes. Interlocked cones determine the opposed pitches of the main gallery's exterior walls and the inside edge of its ramp (see fig. 5). Other intersecting shapes, experienced primarily on the interior, are the circular monitor and its lozenge-shaped staircase and the circular Main Gallery plan and its triangular staircase.

Along the one-quarter-mile long ramp, which spirals up in ever-widening loops, the visitor can follow an artist's or movement's chronological development, gain perspective by turning toward the central atrium, or leave at midpoint by way of the elevator or triangular stairhall. (The museum was designed to accommodate approximately 1000 visitors in all.)<sup>35</sup> This human movement is the final part of a trio of corresponding features of the spiral design: continuous, or fluid, movement in structure, space, and human circulation. In other words, Wright skillfully unifies the method of construction, the building's appearance, and its use.

The reinforced concrete structure was to be painted light tan on both interior and exterior.<sup>36</sup> A drive-through entrance loggia (enclosed during renovations in the 1970s) separates the monitor and adjacent sculpture garden from the Main Gallery. Beneath the gallery, the commodious circular auditorium is characterized by its curved seating arrangement, circular piers, and other curved details. The Main Gallery itself is dominated by the spider-web glazed dome above and by the continuous ramp which begins at a lozenge-shaped fountain and then switches back near the broad entrance to the first-level Grand Gallery before continuing to ascend toward the dome, uniting increasingly deep exhibition alcoves, and providing small, leaf-contoured seats.<sup>37</sup> The unusual sloping walls, meant to display paintings and justified by Wright as duplicating the angle of an easel, are illuminated from above by bands of skylights (see fig. 8). Services are located in circular and semi-circular shafts that spear the ramp's rings at the east side and seem to anchor the spiraling gallery.

When the building opened, at the ground story, the Main Gallery was supplemented by a coatroom, telephone vestibule, cafe and kitchen, information booth, and sales desk; the monitor's ground level was used as a reception area (see fig. 9). The first and second levels contained the Grand Gallery, a guard room, caretaker's apartment, terrace, and visitors' lounge; the corresponding levels in the monitor contained offices, staff lounge, print room, and library. The third level of the monitor housed offices; its

fourth level had a reception area, trustees' lounge, and director's lounge.<sup>38</sup>

Calling the Guggenheim Museum "My Pantheon,"<sup>39</sup> in reference to the seminal Roman monument characterized by its rotunda and oculus, Wright believed the museum climaxed and summarized his career. Critics and historians have agreed.<sup>40</sup> Though most often associated with his inspired residential designs, Wright also captured the public imagination with his structural and spatial solutions for two large-scale non-residential projects: the Johnson Wax Headquarters and the Guggenheim Museum. As a synthesis of his ideas about an organic architecture, the museum combines features characteristic of his earlier designs: prairie-house cantilevers become a projecting balcony; interlocking volumes, first found in the "Romeo and Juliet" windmill (1896) at Taliesin, are reborn as described above; the lack of windows excludes the surrounding environment as at the Unity Temple, the Larkin Building, and the Morris Gift Shop; the entrance drive and original dome design, which connect the building to earth and sky, derive from the Johnson Wax Building. The spiral form, an obsession with Wright since the 1920s, provided him with the solution in his lifelong attempt to liberate space.<sup>41</sup> In terms of use, the museum fit into the architect's vision of a democracy, saying "It is fortunate that this advanced work appears on the Avenue as a temple of adult education and not as a profit-seeking business-venture."<sup>42</sup>

#### Construction and Contemporary Reactions

The realization of this project faced formidable challenges beginning with Solomon's reluctance to build in the post-war economy. Upon his death and the transferral of the funds to the Foundation, Wright was faced with trustees, who were ambivalent at best about the innovative design, and Rebay's successor Sweeney, who envisioned a much more conservative design than the one developed by the determined architect. Lastly, Wright was faced with New York's building code and zoning ordinance, which he claimed were ill-prepared to handle his unusual design.

In their dealings with the municipal authorities, Wright and the Foundation were assisted by Holden, McLaughlin & Associates, a well-respected New York architectural firm, led by Wright's friend Arthur Holden, which made floor-by-floor space computations, supplied other detailed data, and prepared and filed a fifty-sheet roll of plans.<sup>43</sup> When the plans first reached municipal authorities in 1952 they received objections to thirty-two building regulations.<sup>44</sup> When the number of objections had been reduced to approximately fifteen, the plans were forwarded to the Board of Standards and Appeals (hereafter referred to as BSA) for the needed variances. After a protracted period of design revisions, the BSA approved the plans and in 1956 the Department of Housing and Buildings issued a permit.

Another challenge: no builder could be found to handle the unusual project. Edgar Tafel, a New York architect and former Taliesin apprentice, is credited with introducing Wright to George N. Cohen (1905/06-1972), head of the Euclid Contracting Corporation, in August, 1954.<sup>45</sup> Together Wright and Cohen were able to settle on an inexpensive method of constructing the

curved design which also satisfied the municipal authorities. The floor slab of the ramp was formed in poured reinforced concrete, with a plaster parapet hung from its edge instead of the originally planned coved inner edge. However, the outer wall was achieved by spraying layers of concrete from within the building, through the steel reinforcement, against plywood forms. Besides Wright, Cohen, and Sweeney, other collaborators on the project included: William Wesley Peters (Wright's son-in-law and a member of Taliesin, supervising design and the execution of details), Professor Mendel Glickman (engineer, succeeding Jacob Feld), William H. Short (clerk of the works, from Holden's office), Charles W. Spero (contractor's supervisor), and Charles Middleleer (landscape architect).<sup>46</sup> Upon Wright's death, his successor firm, Taliesin Associated Architects, continued to work on the project.

More than fifteen years after Rebay first approached Wright about the design, construction began. In May, 1956, demolition started on the two buildings still standing on the site, a vacant thirteen-story structure at 1070 Fifth Avenue and the six-story temporary home of the Guggenheim collection at 1071 Fifth Avenue.<sup>47</sup> Construction began in October and continual progress reports in local newspapers and professional journals attest to the heightened interest among New Yorkers: the scaffolding was removed in August, 1958; the ivory-colored vinyl plastic coating was applied to the exterior in October. The first photographs of the nearly complete museum were much heralded and even minor problems with finishes and details were reported in the press.<sup>48</sup>

Amid significant fanfare, the opening was held in October, 1959; among the speakers were Foundation president Harry F. Guggenheim; U.S. ambassador to the United Nations, Henry Cabot Lodge; Solomon's eldest daughter, the Countess Castle Stewart; Mayor Robert F. Wagner; New York City Park Commissioner Robert Moses; and U.S. Secretary of Health, Education and Welfare Arthur S. Fleming. Wright had died earlier that year. Solomon Guggenheim had been dead for a decade. Rebay, as controversial as ever and exiled to Connecticut, did not attend. Four days later, on its first Sunday open to the public, the museum accommodated 16,039 visitors; during its first nine months, 750,000 people visited the museum.<sup>49</sup> The Architect's Letter of Substantial Completion was submitted in January, 1960, and the final Certificate of Occupancy issued in March.<sup>50</sup>

From the earliest days of its publication, Wright's plan for the museum elicited strong reactions; it was called the "the most controversial building ever to rise in New York."<sup>51</sup> Many architects were delighted with the design. In Asher B. Etker's 1958 "Seven Wonders of American Architecture," a survey among the nation's 500 top architectural firms, the Guggenheim Museum finished eighteenth, the only incomplete building to receive any votes.<sup>52</sup> The critic for the New York Times, Ada Louise Huxtable, wrote of a "luminous, soaring, unified space."<sup>53</sup> Such enthusiasm for the museum's spatial, structural, and symbolic qualities contrasted with others' reservations about its appropriateness as a museum. In 1956 twenty-one artists, including William de Kooning and Robert Motherwell, sent an open letter to the Foundation's trustees and to Director Sweeney complaining of the design's lack of sympathy for the display of painting and sculpture.<sup>54</sup>

Other criticisms -- dating back as early as Rebay's involvement during the 1940s -- revolved around the possibility of the architecture overwhelming the exhibits. Furthermore, respected urban historian Lewis Mumford judged the building unfavorably, noting the "architect's purely formal aesthetic choices. This is not architectural originality but academicism ...."<sup>55</sup> Yet many of the published evaluations were positive, some giving the credit to Sweeney's extensive changes, which included painting the interior white, using steel rods to project paintings from the walls, and introducing lighting troughs at the ceilings, all changes that made the art appear to "float."<sup>56</sup>

Description<sup>57</sup> (see figs. 10a-10j)

#### The Loggia and Vestibule

The present bookstore, originally part of the drive-through loggia, has a carpeted floor and white plastered ceiling with recessed light fixtures. The western wall is glazed with "Hope's" window sections and has a brass chair rail; the other walls are plastered and painted beige. None of the details or finishes in this space are original. The museum's vestibule is reached through the revolving doors or the adjacent paired doors; these glazed doors have aluminum frames and vertical brass handles. The circular plan of the vestibule is defined by the perimeter of its low, plastered ceiling, which is pierced by recessed light fixtures. Sets of concentric metal arcs decorate the floor, leaving space for a metal museum seal with the insignia "LET EACH MAN EXERCISE THE ART HE KNOWS. ARISTOPHANES."

#### The Main Gallery and Adjacent Spaces

Passing through a curved glazed wall with openings at either end and beyond the low ceiling of the vestibule, one enters the multi-story Main Gallery, unified by its speckled beige terrazzo floor embedded with a metal circular pattern, by its ivory-colored plastered walls and ceilings, and by the large glass dome. The continuously spiraling cantilevered ramp widens as it rises. The ramp, which bulges on the northern side appears to be covered into a low edge wall. It is anchored at the east by continuous vertical shafts housing services and, to a lesser extent, by twelve equally-spaced concrete ribs (acting as partition walls in the gallery alcoves) which are united at the top into six hair-pin "spokes" of the dome. The hair-pin "spokes" intersect a central circle at the summit of the dome.<sup>58</sup> Each glazed area is further divided into smaller panes by metal bars.

Throughout the Main Gallery there are standardized features, such as: white elevator doors, surmounted by metal letters saying "ELEVATOR" and the floor number and illuminated by metal swivel light fixtures; a metal elevator cab (now painted) with perforated bands; original triangular light fixtures, flush with the ceiling; original metal air circulation vents, flush with the ceiling; trough light fixtures, installed in a U-pattern in each alcove along the ramp and painted to match the ceiling; and ribbons of translucent skylights, divided into squarish panels of lexan and laminated glass, along the back edge of the alcoves where they provide both daylight and artificial illumination.

At the ground level of the Main Gallery, several other features appear. Adjacent to the vestibule is a wood admission/information desk and, in the same wood finish, a telephone alcove composed of three booths with seats and pivoting glazed doors and a service ledge opposite them. To the right of the telephone alcove is a pair of glass doors leading to the present conservation area (originally the cafe, this section is being restored to that use under the current building campaign and is not part of this designation); to the right beyond a low curved wall is another wall of four painted-over windows that will be restored to their original transparency. The exterior wall is opened up by large aluminum-framed windows (called "Hope's" sections) which are not original; the current alterations will replace them with units resembling the original. The central glazed bay has a planting area in the shape of a half-leaf and nestled in the beginning of the ramp's curve is a leaf-shaped fountain with a planter. The perimeter of this level is illuminated by one row of original recessed light fixtures and two rows of added swivel light fixtures. The elevator foyer at this level leads to the coatroom foyer.

The ramp ascends to the first level where it pivots at a leaf-shaped planter. It is here that four curved risers lead through a double-height arch into the Grand Gallery, paved in terrazzo. Continuing up the ramp, at each level one encounters the triangular staircase behind the semi-circular elevator shaft. Small planters in the shapes of segmental circles are located periodically along the path. At the second and fourth levels, entrances lead to other adjacent exhibition spaces (the adjacent space at the fourth level, formerly the Collection Galleries, is not part of this designation). At the sixth level, there is a triangular gallery (above the triangular staircase) that now has a parquet wood floor and recessed light fixtures. The base of the dome is surrounded by a ring of adjustable metal light fixtures.

Reached from the ramp through a wide, curved entrance, the Thannhauser Wing is located in the second level of the monitor. The space is currently undergoing extensive changes. Its curved northern end has fin-like ribs and lozenge-shaped columns surrounding an almost circular atrium that extends vertically from the ground story to the monitor's dome. The atrium is interrupted by the lozenge-shaped stairhall (the interior of which is not part of this designation). Three other lozenge-shaped columns are found in the southern portion of the wing.

#### The Auditorium

Beneath the Main Gallery, the triangular staircase and elevator lead to the mezzanine level of the auditorium, containing the foyer coatroom -- fitted with carpeting, ivory-colored walls and ceiling, and recessed light fixtures -- and the curved balcony. The balcony is separated from the foyer by a screen of panels with semi-circles cut out from the top. Descending the staircase further, one reaches the auditorium level proper, its circular piers defining a circular space, with a semi-circular wedge extending to the west. The white plastered ceiling contains hidden light fixtures in a circular cove, while recessed light fixtures line the room's periphery. The

white plastered walls reveal, on the western side, the pointed ends of lozenge-shaped piers, which separate semi-circular windows (only the curved pie-slice center section of each was transparent and these are currently covered with painted plywood). Divided into seating sections by brass railings, the upholstered seats have wooden armrests. The carpeted floor contains brass light fixtures. The seats are oriented toward a raised wooden stage platform at the southeastern side of the building. The seats and the carpeting are not part of this designation.

### Impact<sup>59</sup>

The opening of the Guggenheim Museum had a notable impact on contemporary America. President Eisenhower hailed the new museum as a symbol of a free society which welcomed new expressions of the human creative spirit. It has been also described as the capstone on the decades of the mid-twentieth century during which time New York was the world's unchallenged cultural capital due to the importance of the New York School of painters, the New York City Ballet and modern dance groups, Broadway shows, and a new tradition in urban fiction. While the Museum of Modern Art, Whitney and Guggenheim Museums exhibit works of twentieth-century modernism, they also support the growth of the American art market, an important sector in New York's economy.

Wright created a building, "his greatest, freest architectural concept,"<sup>60</sup> which simultaneously summarizes his own career and has become a landmark of the city's architecture; it is widely recognized both in America and abroad for its organic symbolism and sculptural presence. The museum is often cited as New York's "greatest," "most extraordinary and controversial," and "most memorable" building, a "national icon" and "wonderful jewel."<sup>61</sup> The museum is visited by many more people than Wright's other buildings, and its interior rotunda is regarded as among the "greatest Modern interiors in the world."<sup>62</sup> The American Institute of Architects bestowed its Twenty-Five-Year Award on the Guggenheim, claiming that it is "an architectural landmark and a monument to Wright's unique vision."<sup>63</sup>

Wright's designs based on circles and spirals anticipated similar works during the 1960s. However, his fellow architects limited their use of reinforced concrete to individual features of a building, unlike the integrated curves in plan, section, and detail found in the Guggenheim Museum.<sup>64</sup>

### Subsequent History

Soon after its opening, the museum building underwent several changes. In 1960 Sweeney was replaced as museum director by Thomas M. Messer (b. 1920), a Czech-born art historian, who undid several of his predecessor's alterations; Messer toned down the white walls, modulated the unvarying level of artificial light, and remounted most of the art onto cushioned brackets closer to the walls.<sup>65</sup> When Justin K. Thannhauser, son of the gallery owner who had sponsored the first Blaue Reiter show (Munich, 1911), made a permanent loan of seventy-five important Impressionist and Post-Impressionist paintings in 1963, the monitor's second level was remodeled by

William Wesley Peters, of Taliesin, to receive the collection. The library and archives were moved to the ground level of the rotunda, displacing the original cafe; the printroom curatorial offices and staff lounge were also moved. The lozenge-shaped concrete columns of the monitor's second level were enclosed within small triangular wing walls. Circular windows in the east wall were filled in for exhibition space; walls were covered in plywood with red brocade and the original vinyl floor was resurfaced in terrazzo. In the location of an extant curved bench, an arched opening was created as an entrance to the Thannhauser Wing from the Main Gallery. The wing opened in 1965.

The Foundation also retained Taliesin to plan an addition to expand space for administration and art conservation. Taliesin designed a six-story annex for the northeastern corner of the site based on Wright's ideas illustrated in the set of drawings presented to the Foundation in 1951; they also proposed a penthouse tearoom, never executed, which would have surmounted the dome. Erected under the supervision of Peters, the annex, which cantilevered over the driveway and housed storage and technical services, was completed in 1968. In the original section of the building, the fourth level of the monitor became the Conservation Department, allowing the top of the gallery ramp to be used as exhibition space.<sup>66</sup>

In the early 1970s, the modern art collection of Marguerite ("Peggy") Guggenheim (1898-1979) was willed to her uncle Solomon's Foundation, creating one of the largest private assemblages of modern art in the world. A friend and patron of many prominent artists, Peggy Guggenheim had run galleries in London and New York, played a seminal role in establishing the New York School of painters, and then founded a museum on Venice's Grand Canal. Though remaining in Venice, the newly-acquired collection, specializing in Dada and Surrealism, filled in several gaps in its New York counterpart; pieces have been united from both groups in many important exhibits.<sup>67</sup>

During the early 1970s, the museum was directed by Messer, while Peter O. Lawson-Johnston (b. 1927), Solomon's grandson, became the president of the Foundation. Architect Donald E. Freed designed further alterations, executed in 1973-74. The existing pass-through driveway was enclosed for a new tearoom/restaurant (this space is not included in the designation) and relocated bookstore (this space is included in the designation). The East 89th Street outlet of the driveway was converted into a service entrance, and a small outdoor dining terrace. The Fifth Avenue front was enclosed by glass storefront panels modelled on the original "Hope's" window sections used by Wright throughout the building and the revolving glass doors were modified to permit passage to the newly enclosed area. Also, the interior of the Thannhauser Wing was significantly altered with the addition of dark walnut flooring, the removal of fabrics and drapes, improvements in illumination, and the erection of a more restrained opening at the ramp. The Department of Public Affairs and Registrar's Office were moved to 1083 Fifth Avenue and the top section of the Main Gallery ramp was reopened for exhibits. In 1978 the Esther Simon Charitable Trust endowed a second-floor reading room, that was designed by Richard Meier (not part of this designation). Two years later the Director's office was moved from the

monitor's fourth story and this space was converted to the "Pioneers of 20th Century Art" gallery (not part of this designation). The Conservation Department was moved from the annex to the original cafe location while the top of the ramp was returned to storage use. The Registrar's and Public Affairs offices were returned to the caretaker's apartment and monitor's first level, respectively.<sup>68</sup>

In 1982 the Foundation retained the architectural firm of Gwathmey Siegel & Associates to prepare a study that resulted in a 1985 scheme to double the exhibition capacity, expand cramped facilities for library, administrative, and bookstore functions, and provide a rooftop sculpture terrace and a restaurant atop the monitor.<sup>69</sup> Among other changes, such as renovating the original fabric, a new annex was proposed. The Draft Environmental Impact Statement filed with the BSA application found that the proposal could significantly impair the character and quality of an important architectural resource and public reaction was generally negative.

In 1986 the project was submitted to the Department of Buildings and to the BSA, but was withdrawn before a decision was reached. The following year the architects submitted a revised scheme. The first several stories of the new annex were designed to contain exhibit space which was connected at various points to the spiral ramp in the original part of the building. The design reordered circulation patterns, opened up areas previously inaccessible to the public (such as the lozenge-shaped staff staircase), and provided for new viewing perspectives (such as viewing the triangular staircase from without). Other changes included enlarging the Thannhauser Gallery, installing terrazzo flooring in areas where it presently does not exist, adding ultraviolet filter glass in both domes, and resurfacing the exterior walls of the original building. The BSA approved the plans in October, 1987, and a Department of Buildings permit was issued in July, 1988.<sup>70</sup> In 1988 the museum and Foundation received a new director, Thomas Krens, professor of art history and former director of the Williams College Museum of Art, whose background includes art history, fine arts, and management.<sup>71</sup> Construction on the new annex is in progress.

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## NOTES

1. Atlas of the City of New York & Part of the Bronx (1885), pl. 20; Atlas of the City of New York (1898), pl. 30; Manhattan Lank Book of the City of New York (1955), pl. 114; New York Public Library, Photographic Views of New York, fiche 369a.
2. This section is based on: John H. Davis, The Guggenheims: 1848-1988, An American Epic (New York, 1988), passim; Joan M. Lukach, Hilla Rebay: In Search of the Spirit of Art (New York, 1983), passim; Frank Lloyd Wright: The Guggenheim Correspondence (Fresno, Calif., 1986), passim; Brendan Gill, Many Masks, A Life of Frank Lloyd Wright (New York, 1987), 430-33; and Frank Lloyd Wright, The Solomon R. Guggenheim Museum. Architect: Frank Lloyd Wright (New York, 1960), 8-9.
3. She was born Baroness Hildegard Anna Augusta Elisabeth Rebay von Ehrenwiesen.
4. An account of Nevelson's life is given in the Louise Nevelson obituary, NYT, Apr. 18, 1988, p. 1.
5. In addition to these non-objective artists, who were part of the Bauhaus school, Guggenheim bought works from Fernand Leger (1881-1955), Marc Chagall (1887-1985), Rudolf Bauer (Rebay's former lover, 1889-1954), and others.
6. See entries on Freer, Frick, and Huntington in the Dictionary of American Biography (New York, 1961) and on Mellon in The Columbia Encyclopedia, 2nd ed. (New York, 1959).
7. Gill, Many Masks, 432.
8. As quoted in Lukach, 98.
9. See Stanislas von Moos, Le Corbusier: Elements of the Synthesis (Cambridge, 1982), 100.
10. See American Architects Directory, 2nd ed. (New York, 1962), 505.
11. Wright, "In the Cause of Architecture," Wright on Architecture, 31-45.
12. While the Guggenheim family emphasizes Irene's role in recommending Wright, the most thoroughly documented accounts indicate that Rebay almost certainly deserves most, if not all, the credit. In 1951 Wright wrote to Rebay, "You are the spark-plug of the Museum." See Frank Lloyd Wright: The Guggenheim Correspondence, 151.
13. Solomon bequeathed \$2 million to the endeavor. Frank Lloyd Wright: The Guggenheim Correspondence, 128. William Short, in a conversation on August 7, 1990, indicated that the final cost was between \$2 million and \$3 million.

14. Davis, 31-32.

15. Lukach, 293-96. Another of Rebay's burdens was that she was accused of being a Nazi spy by her former lover, Bauer, and was subsequently imprisoned for a time until Guggenheim appealed to President Roosevelt for her release.

16. Sweeney's biography is attached to his article "Chambered Nautilus on Fifth Avenue," Museum News 38 (Jan., 1960), 14-16.

17. Wright, "The Nature of Materials," see Frank Lloyd Wright on Architecture: Selected Writings 1894-1940 (New York, 1941), 58-102.

18. On his first trip to New York, Wright was a fugitive from justice under the Mann Act of 1926. Herbert Muschamp, Man About Town: Frank Lloyd Wright: A Complete Catalogue (Cambridge, 1983), 2.

19. Muschamp, 8, 14, 47, 63, 88, 89, 99; Storrer, 163, 355, 380, 381, 400, 410. Muschamp, *passim*, makes a convincing argument that Wright was ambivalent about New York despite his negative criticisms.

20. William Allin Storrer, The Architecture of Frank Lloyd Wright: A Complete Catalogue (Cambridge, 1987), 381; and Muschamp, 74.

21. The living room of Wright's Francis Little Residence II (Wayzata, Minn., 1914) is now installed at the Metropolitan Museum of Art.

22. Edgar Kaufmann, Jr., "Centrality and Symmetry in Wright's Architecture," Architect's Year Book 9 (1960), 123-27; Peter Blake, The Master Builders: Le Corbusier, Mies van der Rohe, Frank Lloyd Wright (New York, 1961), 373-75; Gill, Many Masks, 437; Storrer, 310, 322, 358, 380, 399, 432; William H. Jordy, "The Encompassing Environment of Free-Form Architecture: Frank Lloyd Wright's Guggenheim Museum," American Buildings and Their Architects, Volume 4: The Impact of European Modernism in the Mid-Twentieth Century (Garden City, N.Y., 1972), 282-86; The Master Architect: Conversations with Frank Lloyd Wright (New York, 1984), 134; "Frank Lloyd Wright," Architectural Forum 110 (June, 1959), 115-46; "Wright, Frank Lloyd," Macmillan Encyclopedia of Architects, ed. Adolf K. Placzek, vol. 4 (New York, 1982), 447-48.

23. Commissioned to design a mountain-top commercial tourist attraction, Wright produced a design for a ziggurat-like spiral of stacked automobile ramps surrounding a central dome. There is evidence that this scheme may have been suggested by Erich Mendelsohn, who was visiting Taliesin while the project was on the boards. See Mark Reinberger, "The Sugarloaf Mountain Project of Frank Lloyd Wright," Journal of the Society of Architectural Historians 43, no. 1 (Mar., 1984), 38-52.

24. Other schemes incorporating spirals are those for the Elizabeth Arden Resort Hotel in Phoenix (1945), Benjamin Adelman's drive-in laundry in Milwaukee (1946), and the Huntington Hartford Play Resort in Hollywood Hills, California (1947).

25. Lukach, 185-87.
26. Lukach, 184.
27. As Robert C. Twombly, Frank Lloyd Wright: His Life and His Architecture (New York, 1979), 298, points out, this scheme is reminiscent of the Automobile Objective project for Sugarloaf Mountain (1925).
28. See especially Solomon R. Guggenheim Museum, "Scheme B" and "Scheme C," 1943, Elevations, published in Muschamp, 136-37.
29. "New York Discovers an Architect," Architectural Forum 80 (Apr., 1944), 70; "Monolithic Masterpiece," Architectural Forum 83 (Oct., 1945), 9.
30. Twombly, 298.
31. Frank Lloyd Wright: The Guggenheim Correspondence, passim; Frank Lloyd Wright Memorial Foundation, "Selected Frank Lloyd Wright Drawings and Letters: Solomon R. Guggenheim Museum" submission dated 1986, in LPC files; "Frank Lloyd Wright's Masterwork," Architectural Forum 96 (Apr., 1952), 142; Lukach, 206; Jordy, 313-16.
32. Jack Quinan, "L'ingegneria e gli ingegneri di Frank Lloyd Wright," Casabella 52, no. 545 (Apr., 1988), 44-51.
33. Polivka is also known for his designs for the Rotterdam Stock Exchange (now destroyed) and the Czechoslovak Pavilions at the Paris exposition of 1937 and New York World's Fair of 1939-40. See Jaroslav Polivka obituary, NYT, Feb. 11, 1960, p. 35.
34. Knox, "New Art Museum Opens on 5th Ave.," NYT Magazine, Oct. 21, 1959, p. 38.
35. Aline Saarinen, "Tour with Mr. Wright," New York Times Magazine Sept. 22, 1957, p. 69, says 900-1000 people. Sweeney, "Chambered Nautilus," 15, says 1200-1500.
36. "Guggenheim Museum Spirals toward Completion," Progressive Architecture 40 (July, 1959), 77.
37. "Two Masterpieces: The Guggenheim and The Four Seasons," Interiors 119 no. 5 (Dec., 1959), 176. Wright planned to have movable screens available to appropriately alter the alcoves when needed.
38. Many of the non-gallery spaces were later altered to accommodate other functions.
39. Jordy, 311.
40. See, among other sources: Thomas A. Heinz, Frank Lloyd Wright (New York, 1982), 6-7; Muschamp, 1; Jordy, 279, 329, 359; Blake, "The Guggenheim: museum or monument?," Architectural Forum 111 (Dec., 1959), 87.

41. Andrea Oppenheimer Dean, "Wright's Guggenheim Museum Receives A.I.A. 25-Year Award," Architecture (Mar., 1986), 16.
42. Wright, The Solomon R. Guggenheim Museum, 16.
43. "Frank Lloyd Wright's Masterwork," 141; Frank Lloyd Wright: The Guggenheim Correspondence, 96-97.
44. Aline B. Louchheim, "Museum Will File Plans for Building," NYT, Mar. 30, 1952, p. 63; "Art Museum Plan for 5th Ave. Filed," NYT, Apr. 4, 1952, p. 42; "Wright Retreats on Museum Plans," NYT, July 29, 1953, p. 21; "Wright Says Problems are Solved for the New Guggenheim Museum," NYT, July 22, 1954, p. 25; Knox, "Museum Designed by Wright to Rise," NYT, May 7, 1956, p. 29; NYC, Department of Buildings, Manhattan. Plans, Permits and Dockets, Block 1500, Lot 1. NB 27-1952. Jordy, 317.
45. Edgar Tafel, Years with Frank Lloyd Wright: Apprentice to Genius (New York, 1979), 208-10. Cohen was also involved in the New York Telephone Building at 811 Tenth Avenue, the New York State "Circarama" pavilion at the New York World's Fair, and the concrete deck for the Tappan Zee Bridge. George Cohen obituary, NYT, Oct. 6, 1972, p. 46.
46. Jordy, 317-21; "Two Masterpieces: The Guggenheim and The Four Seasons," 176.
47. Knox, "Museum Designed by Wright," p. 29. The collection was moved to 7 East 72nd Street for the duration of construction.
48. New York City, Department of Buildings, Manhattan. Plans, Permits and Dockets, Block 1500, Lot 1. NB 27-1952. "Guggenheim Museum in Progress," Architectural Record 123 (May, 1958), 185; "Guggenheim Museum Progresses," NYT, Aug. 31, 1958, sect. 8, p. 2; "Guggenheim Museum Gets a Plastic Coating," NYT, Oct. 19, 1958, sect. 8, p. 11; "Museum Color Wrong," NYT, Oct. 22, 1958, p. 69. For photographs, "Guggenheim Museum Spirals toward Completion," 75-77.
49. George McAuliffe, "The Guggenheim: great architecture, difficult installation," Industrial Design 6 (Nov., 1959), 66; Wright, The Solomon R. Guggenheim Museum, 10. Admission cost fifty cents per person. Knox, "New Museum Opens on 5th Ave.," NYT Magazine, Oct. 21, 1959, 38.
50. "The Solomon R. Guggenheim Museum: A History of Changes," submission to LPC, n.p. [1989].
51. See Knox, "New Art Museum," p. 1.
52. "Letters: 'Eighteenth Wonder,'" NYT, Nov. 2, 1958, sect. 6, p. 7. Three other Wright designs were included: the Robie House in Chicago, Kaufmann House ("Fallingwater") in Bear Run, Pennsylvania, and Johnson Wax Tower in Racine, Wisconsin. Other New York winners, now designated New York City Landmarks, were Lever House and Rockefeller Center.

53. Ada L. Huxtable, "That Museum: Wright or Wrong?," NYT Magazine, Oct. 25, 1959, p. 16.
54. Knox, "21 Artists Assail Museum Interior," NYT, Dec. 12, 1956, p. 46. This sentiment is repeated in other sources, such as "Guggenheim Museum Spirals toward Completion," 75.
55. Lewis Mumford, "Critical Opinion," Museum News 38 (Jan., 1960), 23.
56. Blake, "The Guggenheim: museum or monument?," 90; Alfred Frankenstein, "Critical Opinion," Museum News 38 (Jan., 1960), 18.
57. This section is based, in part, on comments by Thomas A. Sansone, Director of Architecture & Planning at the museum, during a private tour in June, 1990. Except where noted otherwise, walls and ceilings are finished in plaster, painted in an ivory hue.
58. For a non-technical description of the structural system, see "Guggenheim Museum Progresses," Architectural Record, 123 (May, 1958), 186-89.
59. New York, Culture Capital of the World 1940-1965, ed. Leonard Wallock (New York, 1988), 9-10, 135; Michael Sorkin, "Leaving Wright Enough Alone," Architectural Record 174 (Mar., 1986), 79; The Solomon R. Guggenheim Foundation, Opening Ceremonies of the Solomon R. Guggenheim Museum, 2.
60. "Wright, Frank Lloyd," Macmillan Encyclopedia of Architects, 446.
61. See, among others: Dean, 13, Sorkin, 79; Saarinen, 22; and the many letters received by the LPC regarding this building. In addition, the design assumes a privileged place in Wright's career by appearing in the background of the two-cent stamp which honors him. Designed by Taliesin apprentice Patricia Amarantides, with suggestions by Mrs. Wright and others, and issued in Spring Green, Wisconsin, on June 8, 1966, the stamp was the fifth item in the "Prominent Americans" series. See "The Guggenheim Backs Up Frank Lloyd Wright," Journal of the American Institute of Architects, 45 (June, 1966), 36.
62. Elliott Willensky & Norval White, A.I.A. Guide to New York City, 3rd ed. (New York, 1988), 382.
63. See Doralice D. Boles, "Update on the Guggenheim," Progressive Architecture (May, 1986), 34.
64. For example: Eero Saarinen's Kresge Auditorium (1950-51) at the Massachusetts Institute of Technology, Cambridge, and Ingalls Hockey Rink (1956-59) at Yale University, New Haven; and Minoru Yamasaki's Lambert Airport Terminal Building (1953-56) in St. Louis.
65. Messer, "The Growing Guggenheim, Editorial: Past and Future," Art in America 53 (June, 1965), 30; Davis, 476; Jordy, 335-36.

66. "The Solomon R. Guggenheim Museum: Changes," n.p.; "Justin K. Thannhauser Collection," Art in America (June, 1965), 33; "Squaring the Circle," Architectural Forum 127 (Dec., 1967), 46.
67. Davis, 12, 320-47; Lukach, 312.
68. "The Solomon R. Guggenheim Museum: Changes," n.p.
69. "The Solomon R. Guggenheim Museum: Changes," n.p.; Ziva Freiman, "Gwathmey Siegel's Guggenheim," Progressive Architecture 66 (Dec., 1985), 25; Sorokin, 79-82; "Guggenheim Museum Proposing Scaled-Down Design for Addition," NYT, Feb. 11, 1987, sect. 3, p. 19; "The Guggenheim Addition," and Kaufmann, "A Statement by Edgar Kaufmann, Jr.," Oculus, 47 no. 6 (Feb., 1986), 2-3, 19; Gill, "The Sky Line: Optimistic Ziggurat," The New Yorker, June 8, 1987, 50; "Guggenheim Plan Debated at Hearing," NYT, June 26, 1986, sect. 3, p. 17; "Museum Addition Approved," NYT, Oct. 21, 1987, sect. II, p. 2; NYC, Department of Buildings, Manhattan. Plans, Permits and Dockets, Block 1500, Lot 1. ALIT 447-1985.
70. Nesmith, "Guggenheim Unveils Modified Gwathmey Siegel Addition," Architecture: The A.I.A. Journal 76 (Mar., 1987), 40-42; "The Guggenheim Museum Addition: Scheme II," and The Guggenheim Museum, "The Guggenheim Museum Announces Revised Expansion Plans," Oculus 48 (Apr., 1987), 2-3. Consultants for the renovation of the Thannhauser Gallery and adjacent art storage room, completed during the first phase of the building campaign: Severud, Szegezdy (structural); Feld, Kaminetzky & Cohen (forensic and testing); John L. Altieri (mechanical); Charles B. Froom (museum lighting). See Mays, "Revealing Wright," Progressive Architecture 70 (Apr., 1989), 82-85.
71. Douglas C. McGill, "Guggenheim Names a New Director," NYT, Jan. 13, 1988, sect. III, p. 13.

## FINDINGS AND DESIGNATION

On the basis of a careful consideration of the history, the architecture and other features of this building, the Landmarks Preservation Commission finds that the Solomon R. Guggenheim Museum ground level interior consisting of the entrance loggia (now the bookstore), the entrance vestibule, the main gallery space including the fountain, admission/information desk, and telephone alcove, and the coat room foyer; auditorium level interior consisting of the staircase in the triangular stairhall leading from the auditorium level to the ground level, the elevator foyer, the auditorium, the auditorium mezzanine, the stairs and areas providing access to the auditorium mezzanine, and the stage/platform; the ground level through sixth level interiors, up to and including the glass dome, consisting of the continuous ramp; the space enclosed by the continuous ramp; the adjacent gallery spaces, among them the grand gallery at the first and second levels, including the fixed planters at the bottom and top of the first level, at the top of the second level, and at the top of the third level, and the skylights; the elevator foyers; and the elevator cabs; the ground level through fourth level interiors consisting of the triangular stairhall and staircases which terminate at the top of the fourth level which is the beginning of the fifth level; the second level interior consisting of the Justin K. Thannhauser Wing; the sixth level interior consisting of the triangular gallery adjacent to the elevator shaft; and the fixtures and interior components of these spaces, included but not limited to, floor surfaces, wall surfaces, ceiling surfaces, doors, windows, brass railings, triangular light fixtures, trough light fixtures, signs, and metal museum seal; has a special character, special historical and aesthetic interest and value as part of the development, heritage and cultural characteristics of New York City, and the Interior is one which is customarily open and accessible to the public, and to which the public is customarily invited.

The Commission further finds that, among its important qualities, the Guggenheim Museum Interior is internationally recognized as a seminal example of a twentieth-century interior space; that it was designed by Frank Lloyd Wright, America's preeminent architect, and is his most visited building and his only major commission in New York City; that in many critics' eyes the museum is the crowning achievement of the architect's later career and he himself called it "My Pantheon"; that the design, in its prominent spiraling form and its dramatic spatial qualities, manifests Wright's philosophy of an "organic" architecture, that is, buildings conceived and built according to the principles found in nature; that the design of the interior of the museum demonstrates the inherent unity of its construction method, spatial character, and use; that the museum appropriately fulfills his goal of promoting a democratic society through its didactic and inspirational purposes; that, unified through ivory-colored walls and ceilings and a circular patterned terrazzo floor, this monumental skylit space is enlivened by the ever-changing quality of light and by the contrast between illumination levels in the central atrium and in

the adjacent exhibition alcoves; that the ramp links the peripheral alcoves, illuminated, in part, by ribbons of skylights, and also connects to other exhibition areas: the Grand Gallery and the Thannhauser Wing; that the museum's subterranean auditorium, with its geometrically-derived space and details, complements the design aesthetic of the exhibition spaces; that while geometric shapes create the spatial character of this design, they are also used for details such as the lozenge-shaped fountain, planters, and columns; that the museum was financed by businessman and philanthropist Solomon R. Guggenheim; that Guggenheim acquired the core collection of the museum under the guidance of painter and art patron Hilla Rebay, who then induced him to create a permanent museum and to commission Wright; that through the ingenuity of Wright, builder George N. Cohen, and consulting engineers, the reinforced concrete structure was erected despite many challenges; that the largely intact Main Gallery, related spaces, and geometrically ordered below-ground auditorium are a popular magnet for tourists and art and architectural enthusiasts; and that the museum, a link in Fifth Avenue's famous "Museum Mile," houses a well-respected collection of modern art.

Accordingly, pursuant to the provisions of Chapter 74, Section 3020 (formerly Section 534 of Chapter 21), of the Charter of the City of New York and Chapter 3 of Title 25 of the Administrative Code of the City of New York, the Landmarks Preservation Commission designates as an Interior Landmark the Solomon R. Guggenheim Museum, ground level interior consisting of the entrance loggia (now the bookstore), the entrance vestibule, the main gallery space including the fountain, admission/information desk, and telephone alcove, and the coat room foyer; auditorium level interior consisting of the staircase in the triangular stairhall leading from the auditorium level to the ground level, the elevator foyer, the auditorium, the auditorium mezzanine, the stairs and areas providing access to the auditorium mezzanine, and the stage/platform; the ground level through sixth level interiors, up to and including the glass dome, consisting of the continuous ramp; the space enclosed by the continuous ramp; the adjacent gallery spaces, among them the grand gallery at the first and second levels, including the fixed planters at the bottom and top of the first level, at the top of the second level, and at the top of the third level, and the skylights; the elevator foyers; and the elevator cabs; the ground level through fourth level interiors consisting of the triangular stairhall and staircases which terminate at the top of the fourth level which is the beginning of the fifth level; the second level interior consisting of the Justin K. Thannhauser Wing; the sixth level interior consisting of the triangular gallery adjacent to the elevator shaft; and the fixtures and interior components of these spaces, included but not limited to, floor surfaces, wall surfaces, ceiling surfaces, doors, windows, brass railings, triangular light fixtures, trough light fixtures, signs, and metal museum seal; 1071 Fifth Avenue, Borough of Manhattan and designates as its Landmark Site Manhattan Tax Map Block 1500, Lot 1.



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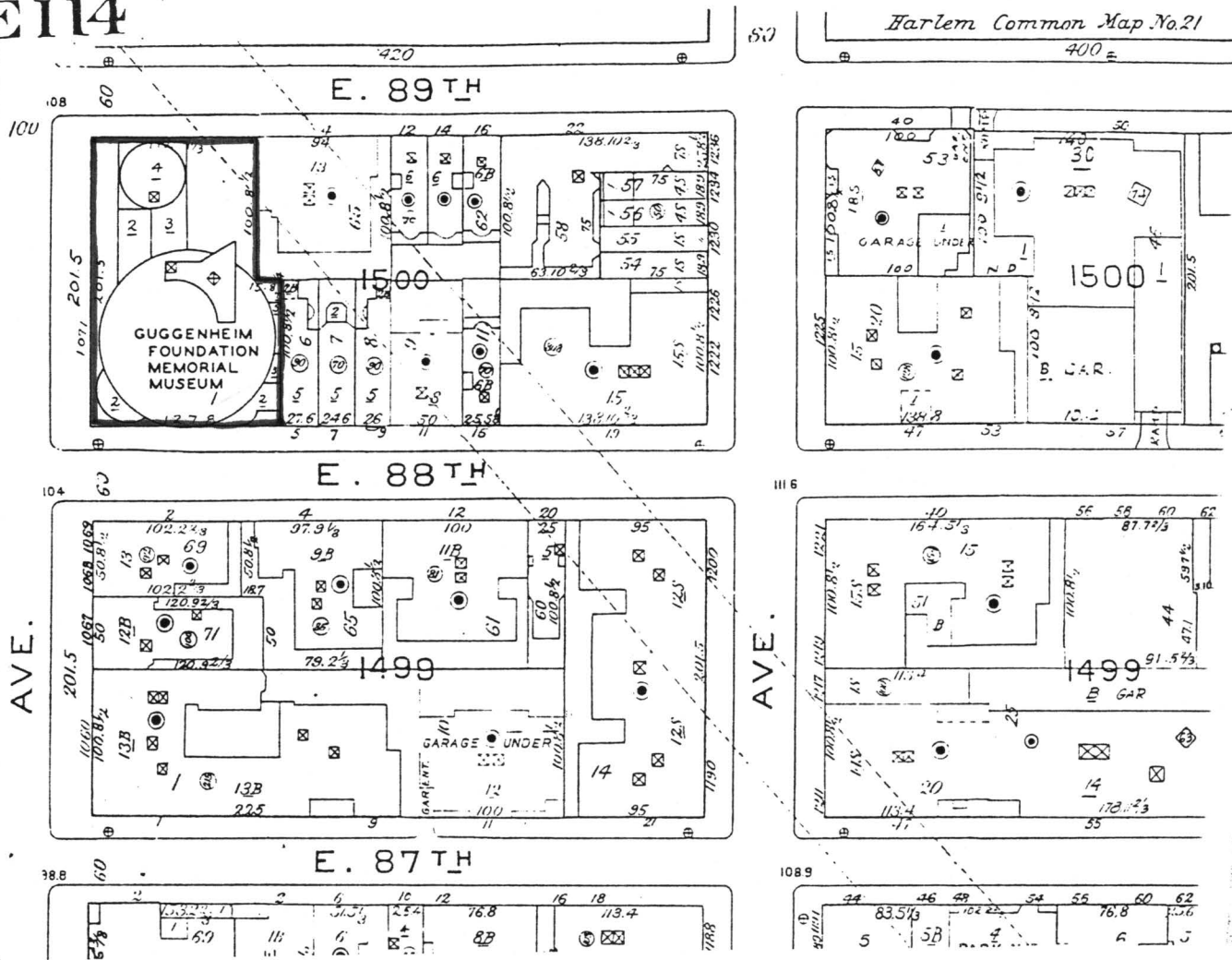
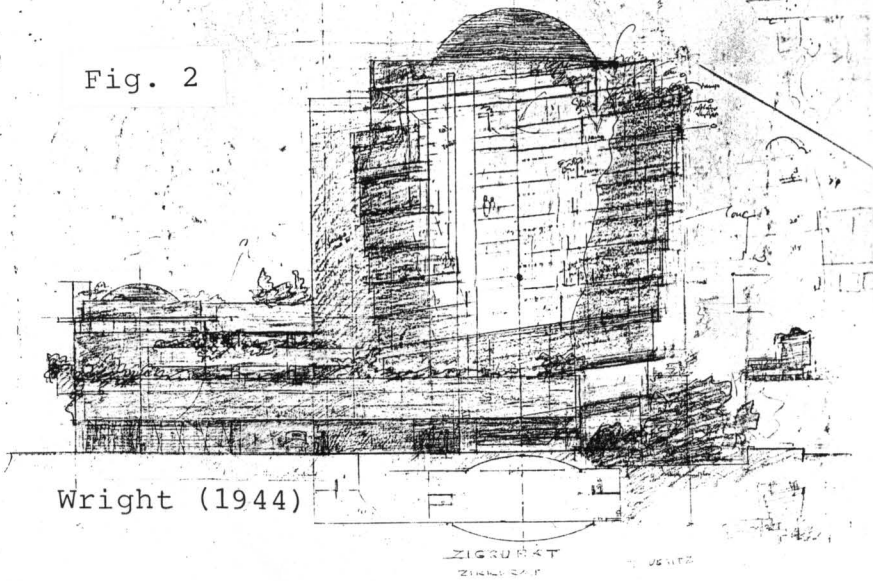


Fig. 1

SOLOMON R. GUGGENHEIM MUSEUM INTERIOR 1071 Fifth Avenue  
Source: Sanborn, Manhattan Land Book (1989-90), pl. 114

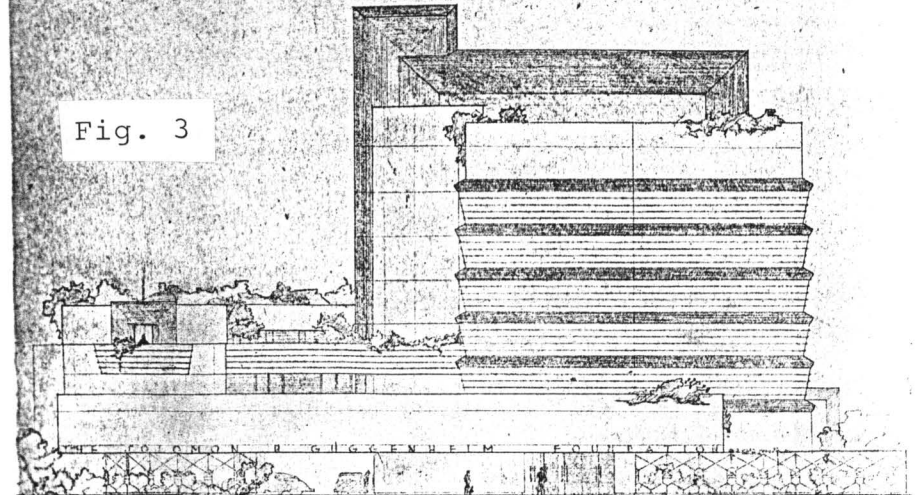
Fig. 2



Wright (1944)

ZIGURAT  
ZIGURAT

Fig. 3

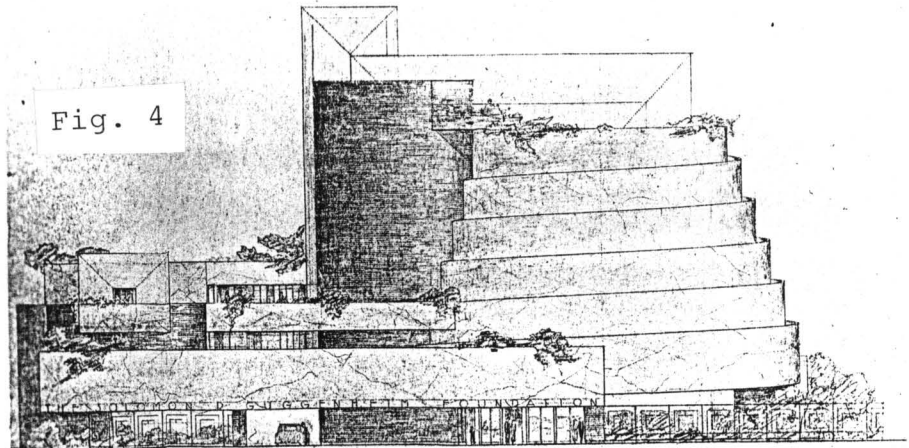


Wright (1944) Scheme C

SOLOMON R. GUGGENHEIM FOUNDATION — MUSEUM

Wright (1944) Scheme B

Fig. 4



ELEVATION

SOLOMON R. GUGGENHEIM FOUNDATION — MUSEUM

270

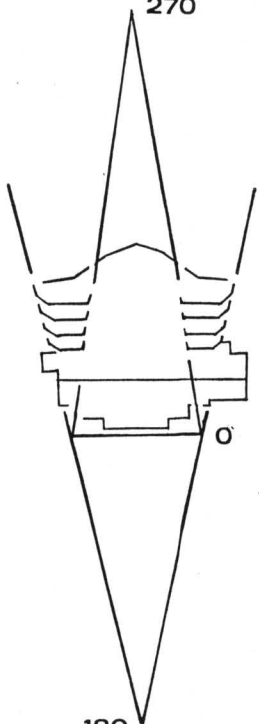


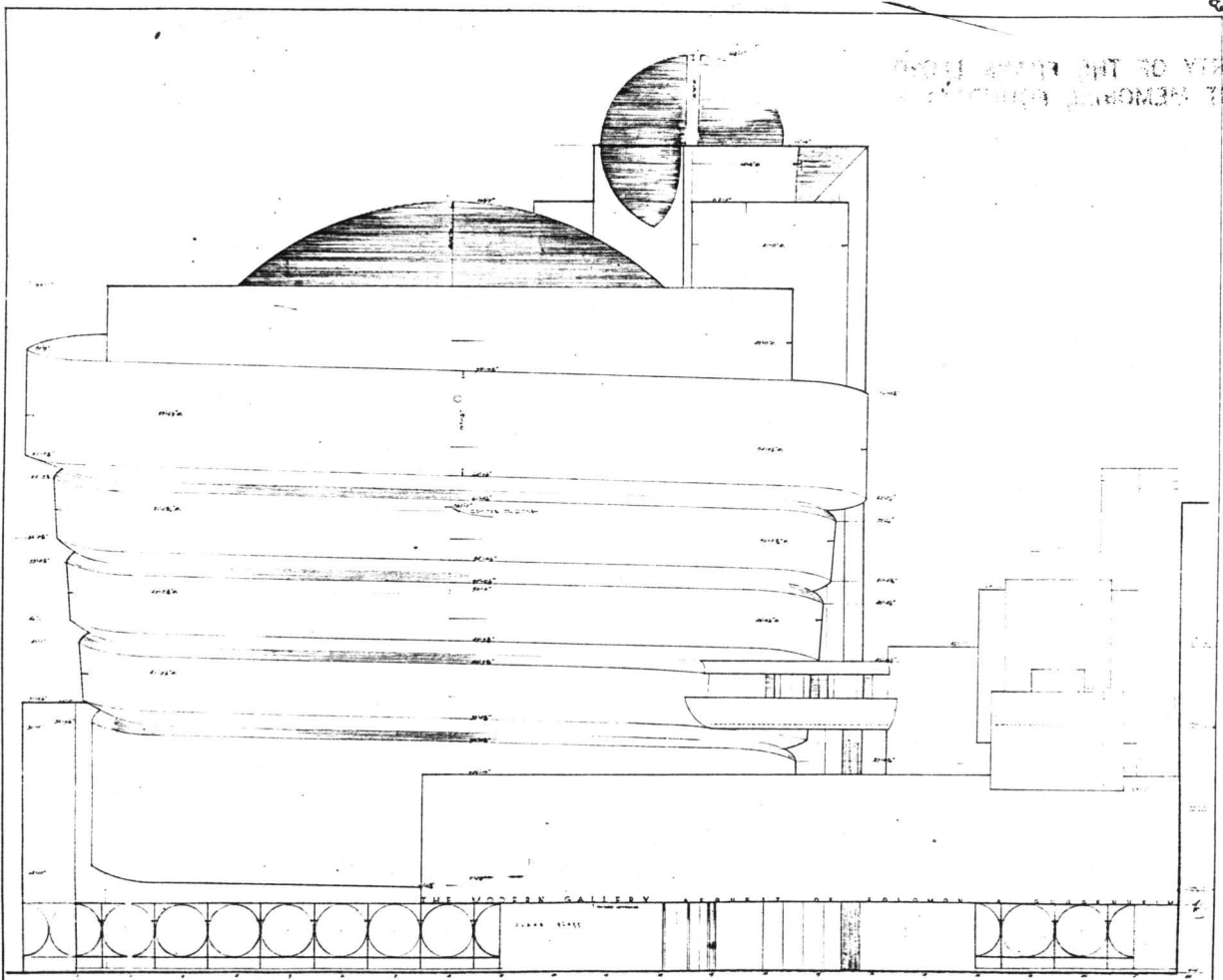
Fig. 5

Jordy (1972)

FIGURE 139. Solomon R. Guggenheim Museum. Cross-sectional diagram indicating the principle of the interlocked cones that determine the opposed pitches of the exterior walls and of the inside edge of the ramp.

180

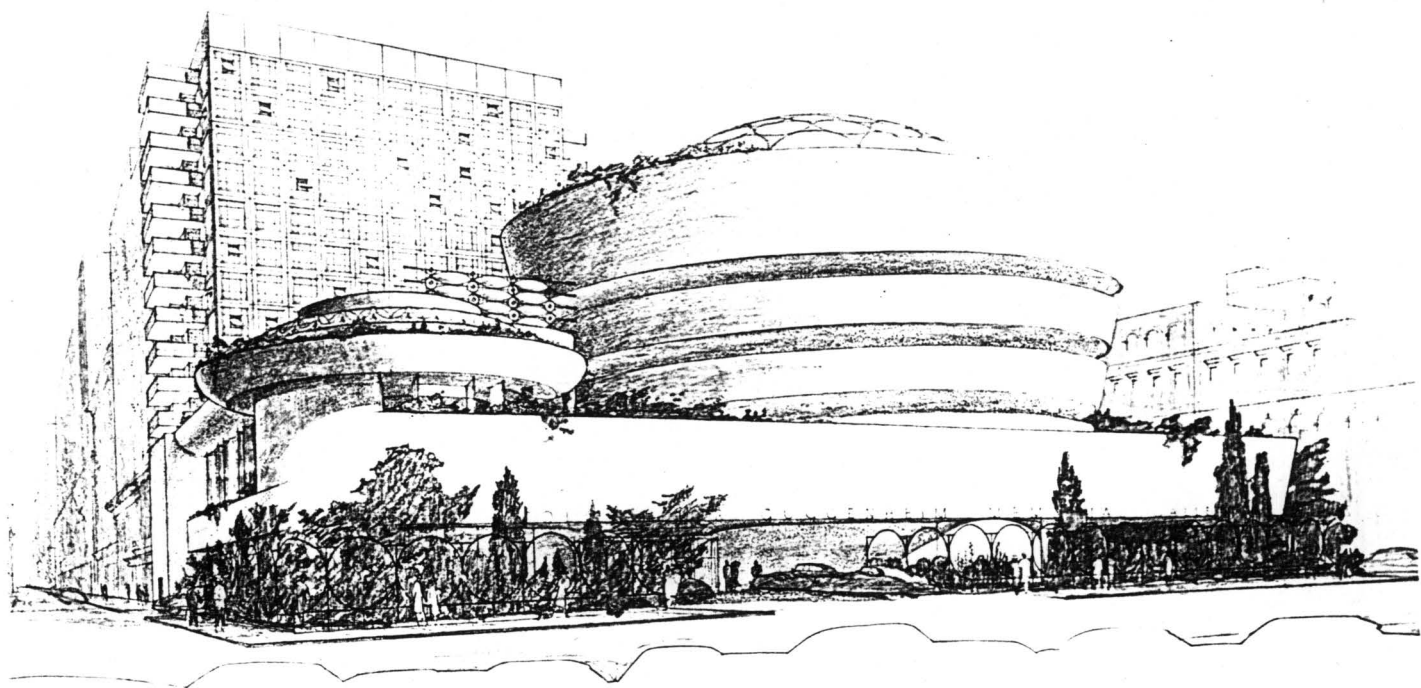
PROPERTY OF THE FRANK LLOYD WRIGHT FOUNDATION



SHEET No. 16 REVISIONS THE MODERN GALLERY MUSEUM FOR THE SOLOMON R. GUGGENHEIM FOUNDATION FIFTH AVENUE ELEVATION SHEET No. 16 SCALE 1/4" = 1'-0" ARCHITECT

Copyright (c) The Frank Lloyd Wright Foundation 1986

Fig. 6

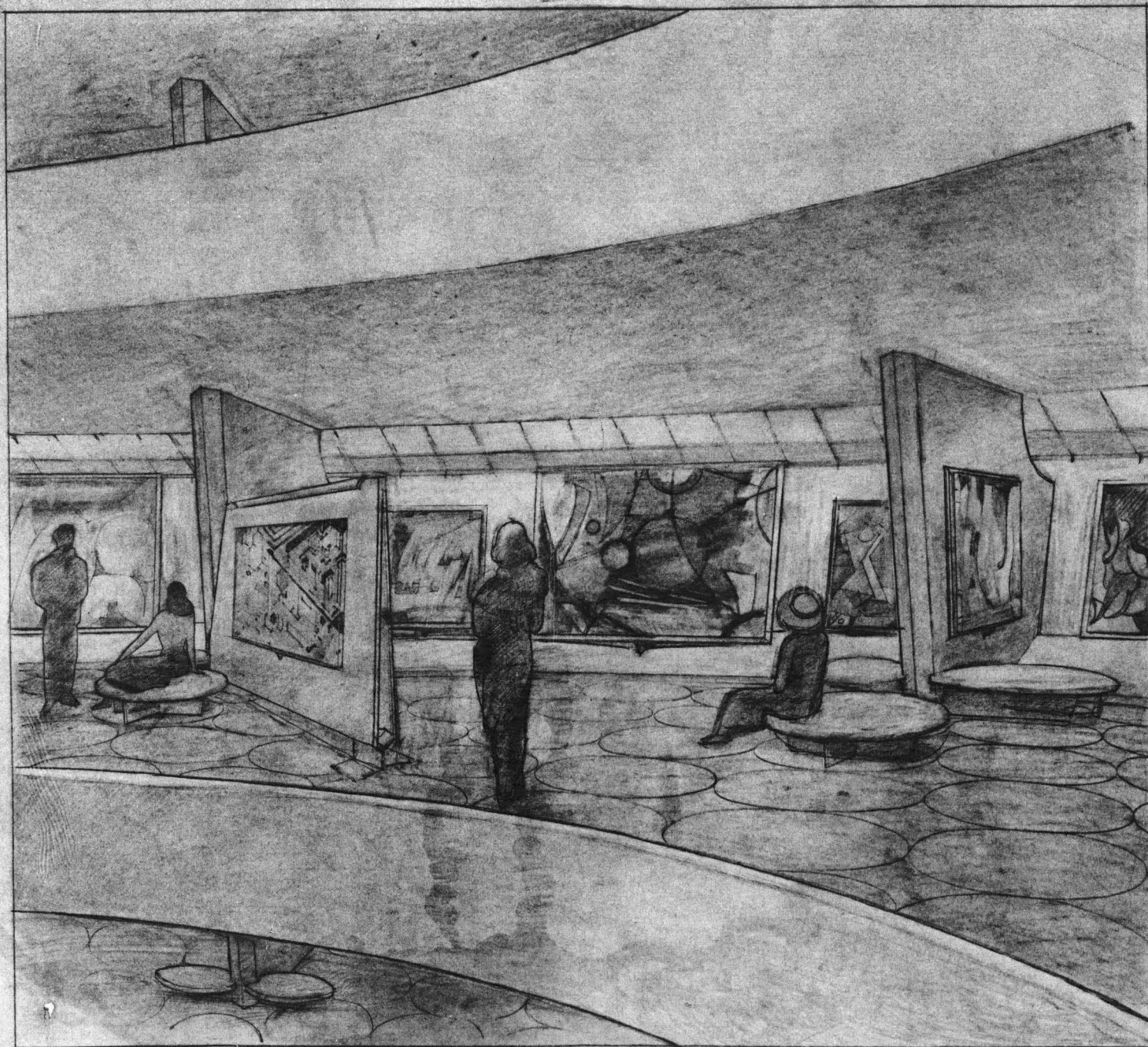


THE MODERN GALLERY MUSEUM FOR THE SOLOMON R. GUGGENHEIM FOUNDATION FRANK LLOYD WRIGHT ARCHITECT

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Fig. 7

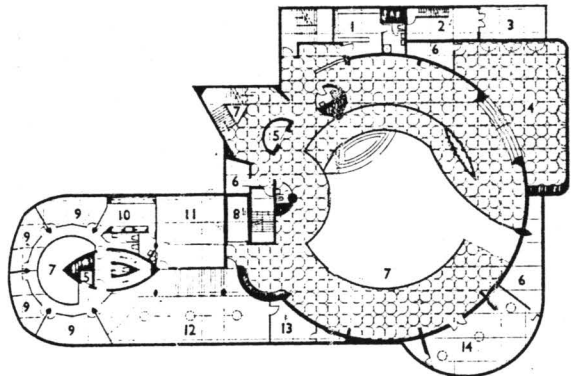




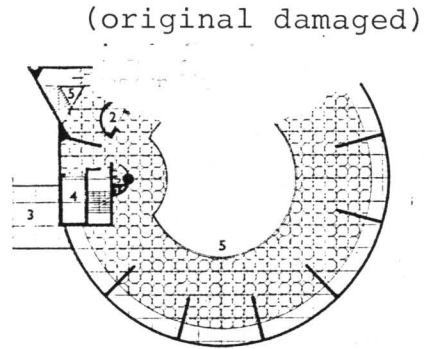
NOTE:  
CANVASES:  
10' X 12'  
5' X 5'  
5' X 4'  
4' X 4'

MIDDLE OF THE ROAD

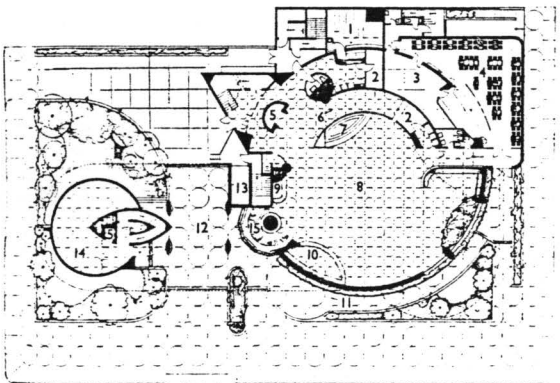
Wright (1958)



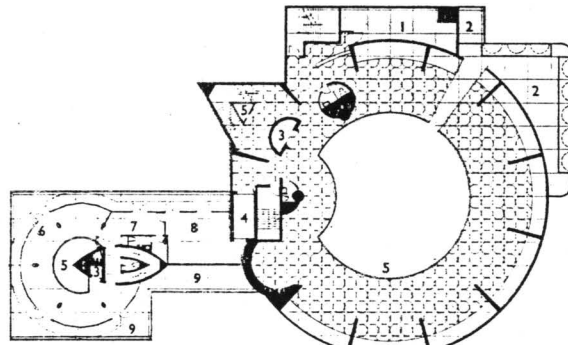
First floor plan. Key: 1 guard room 2 caretaker's apartment 3 terrace 4 grand gallery 5 lift 6 storage 7 void 8 service lift 9 office 10 staff lounge 11 print room 12 library 13 workroom 14 visitors' lounge



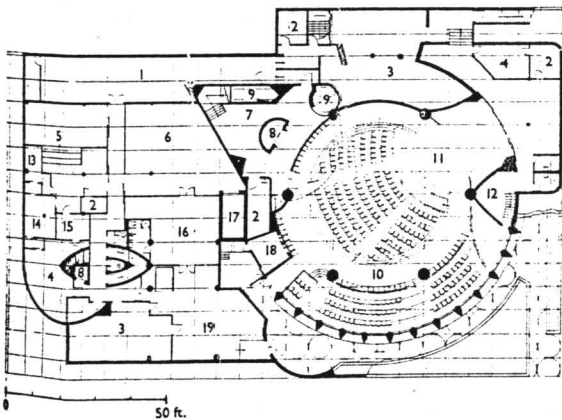
Fourth floor plan. Key: 1 storage 2 lift 3 roof 4 service lift 5 void



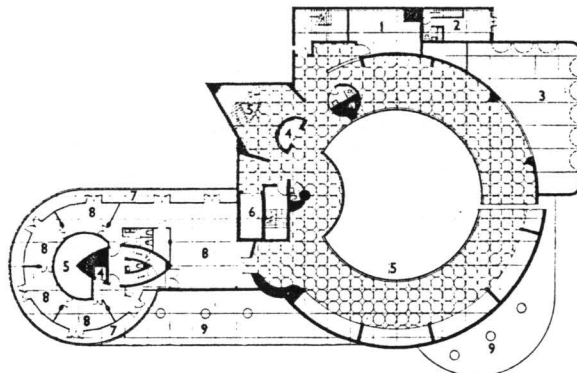
Ground floor plan. Key: 1 coats 2 storage 3 kitchen 4 café 5 lift 6 start of ramp 7 pool 8 main gallery 9 information booth 10 sales desk 11 down to lecture room 12 inggia 13 service lift 14 reception 15 vestibule



Third floor plan. Key: 1 storage 2 roof 3 lift 4 service lift 5 void 6 trustee's lounge 7 reception 8 director's lounge 9 terrace



Basement plan. Key: 1 mechanical equipment 2 storage 3 machine room 4 office 5 studio 6 receiving and shipping 7 foyer 8 lift 9 coats 10 lecture room 11 rostrum 12 green room 13 dark room 14 painting 15 finishing 16 inspection 17 service lift 18 projection booth 19 shop



Second floor plan. Key: 1 storage 2 caretaker's apartment 3 upper part of grand gallery 4 lift 5 void 6 service lift 7 terrace 8 office 9 roof

Fig. 9

GUGGENHEIM MUSEUM INTERIOR,  
Designated spaces

Plans taken from  
drawings of existing  
conditions, submitted  
to LPC by Gwathmey  
Siegel & Associates  
(1989)

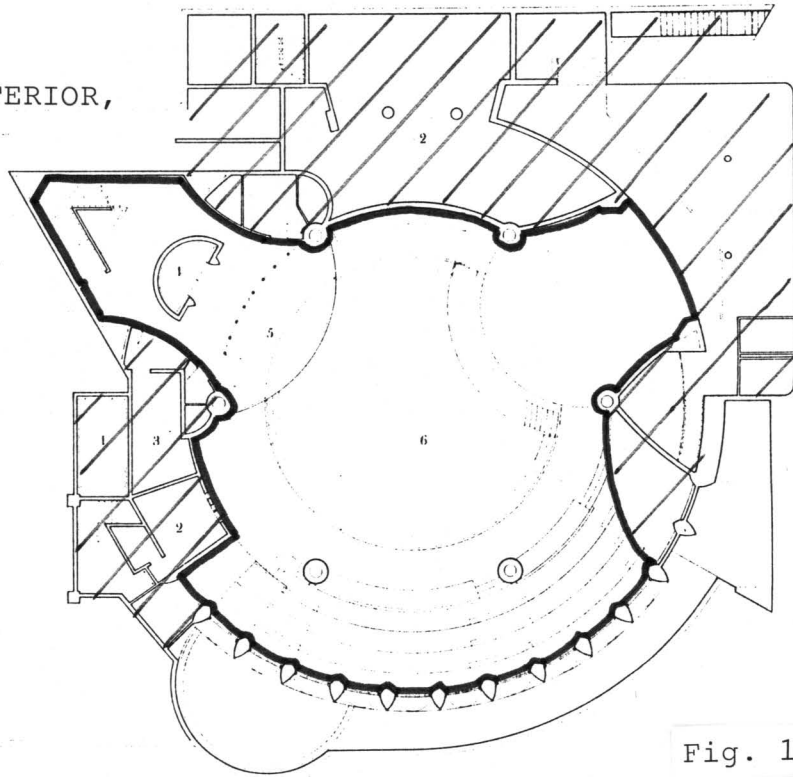
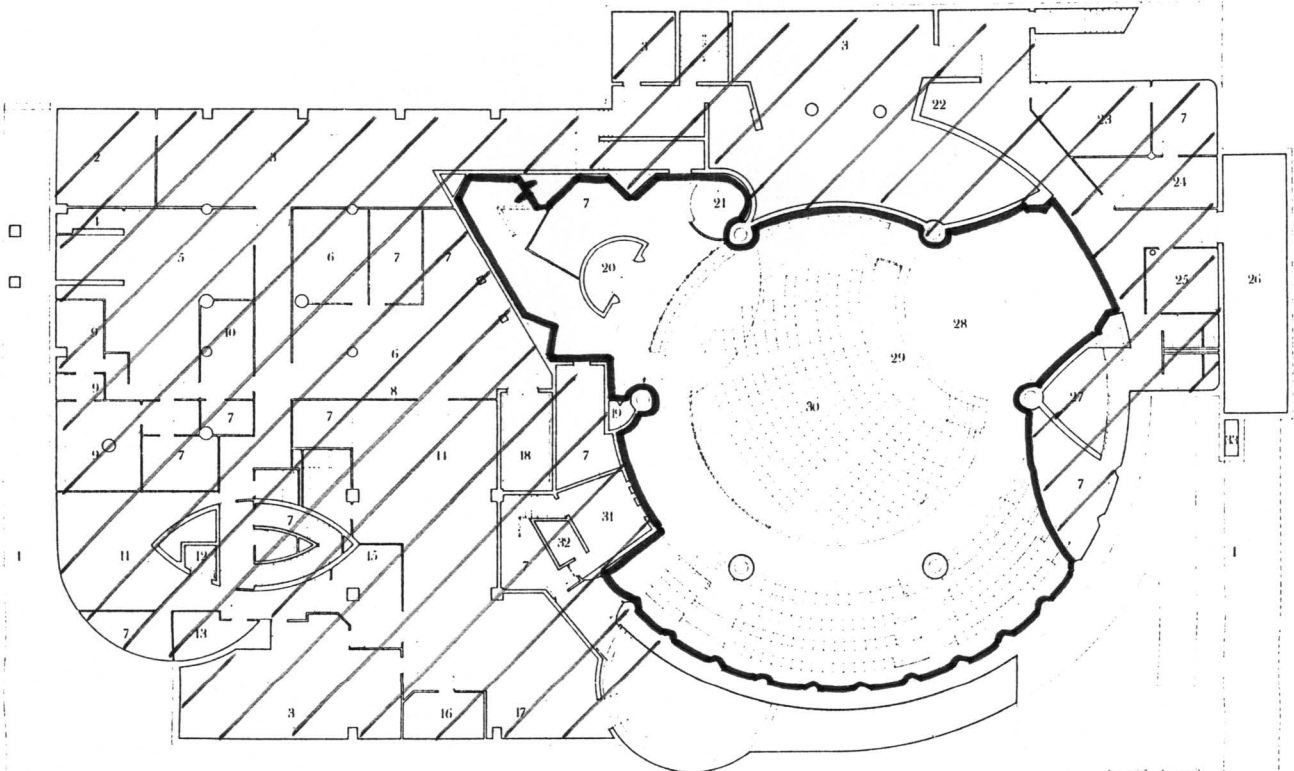


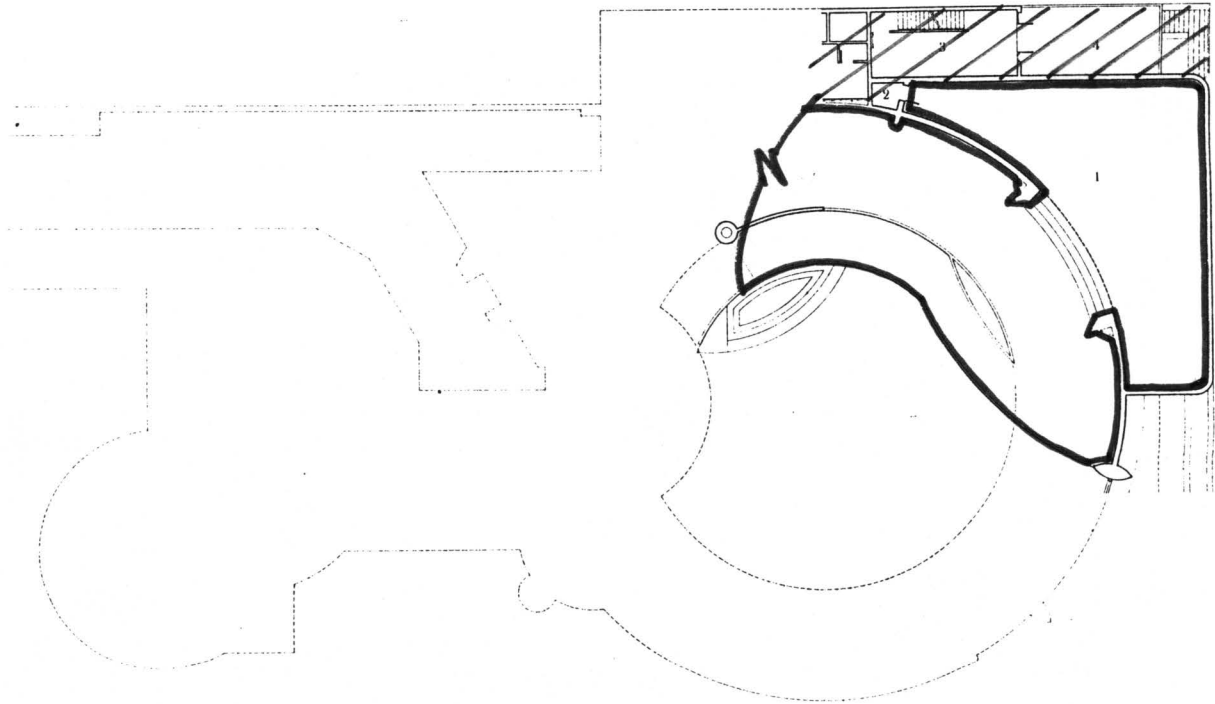
Fig. 10b

AUDITORIUM MEZZANINE, Designated spaces



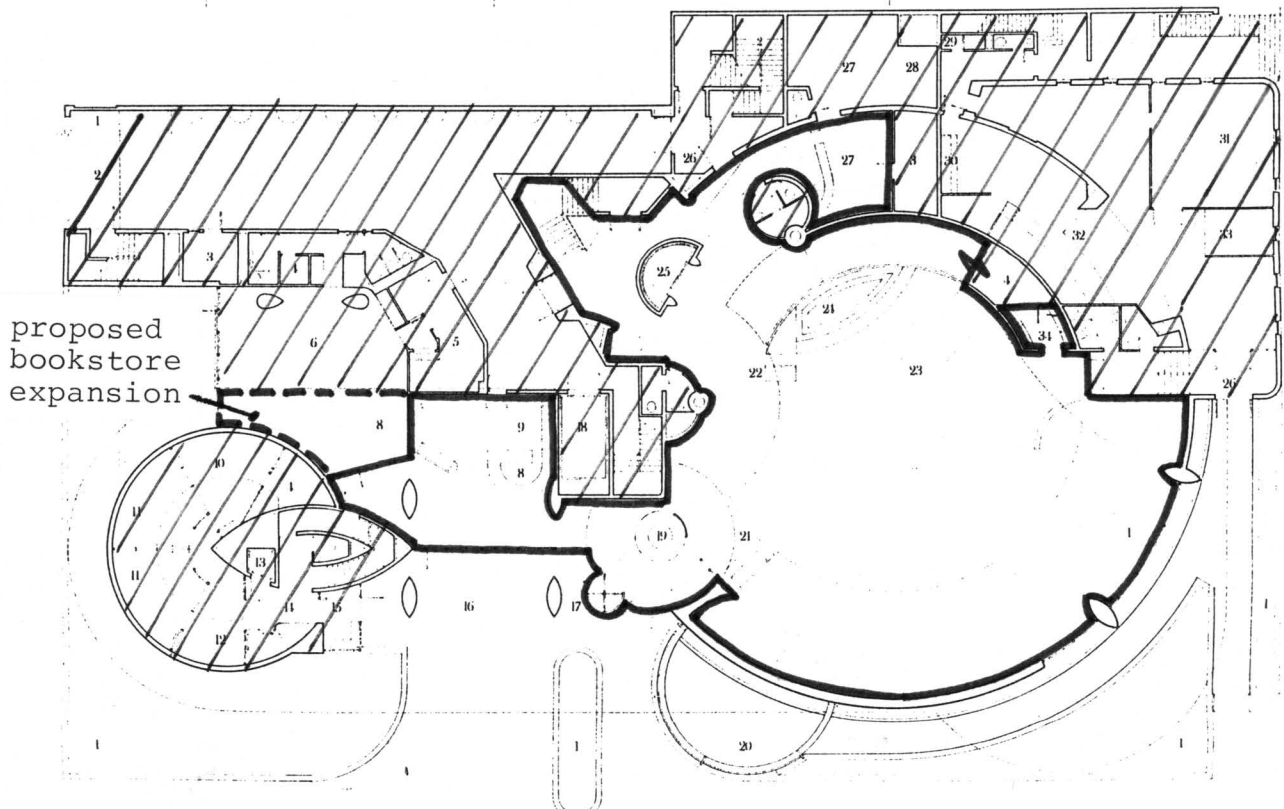
AUDITORIUM LEVEL, Designated spaces

Fig. 10a



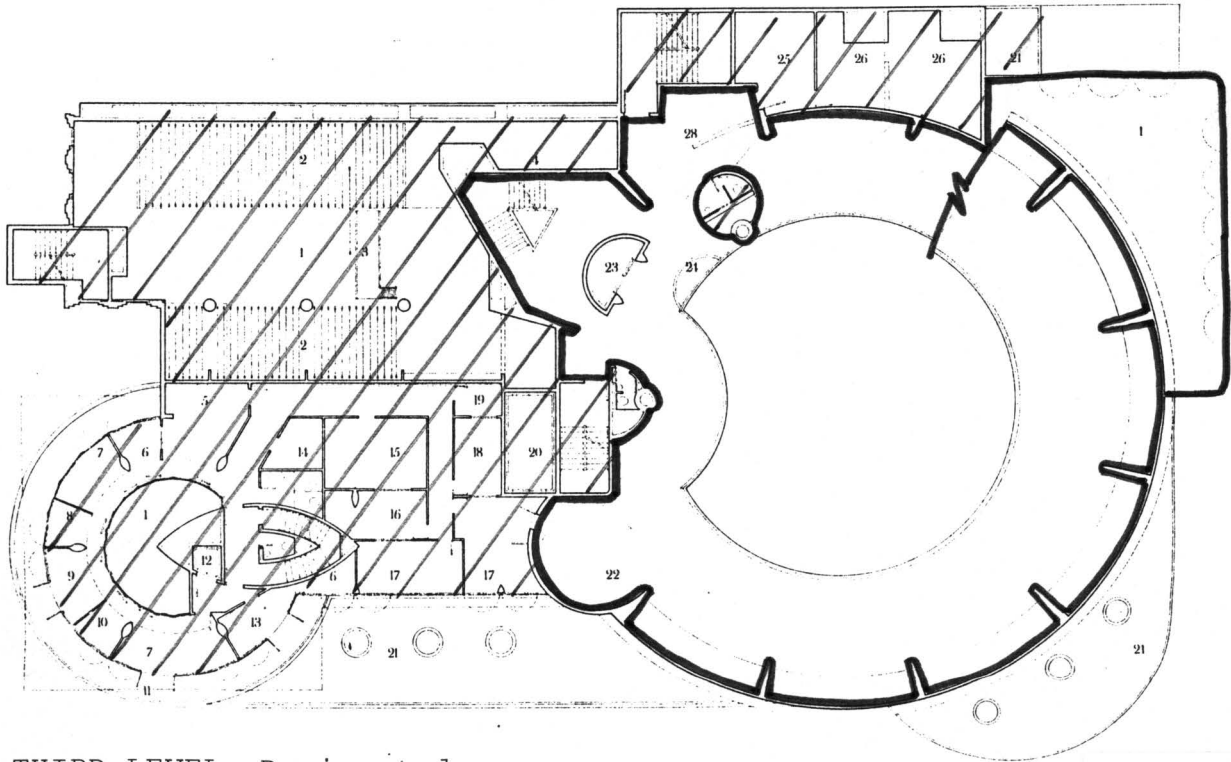
FIRST LEVEL, Designated spaces

Fig. 10d



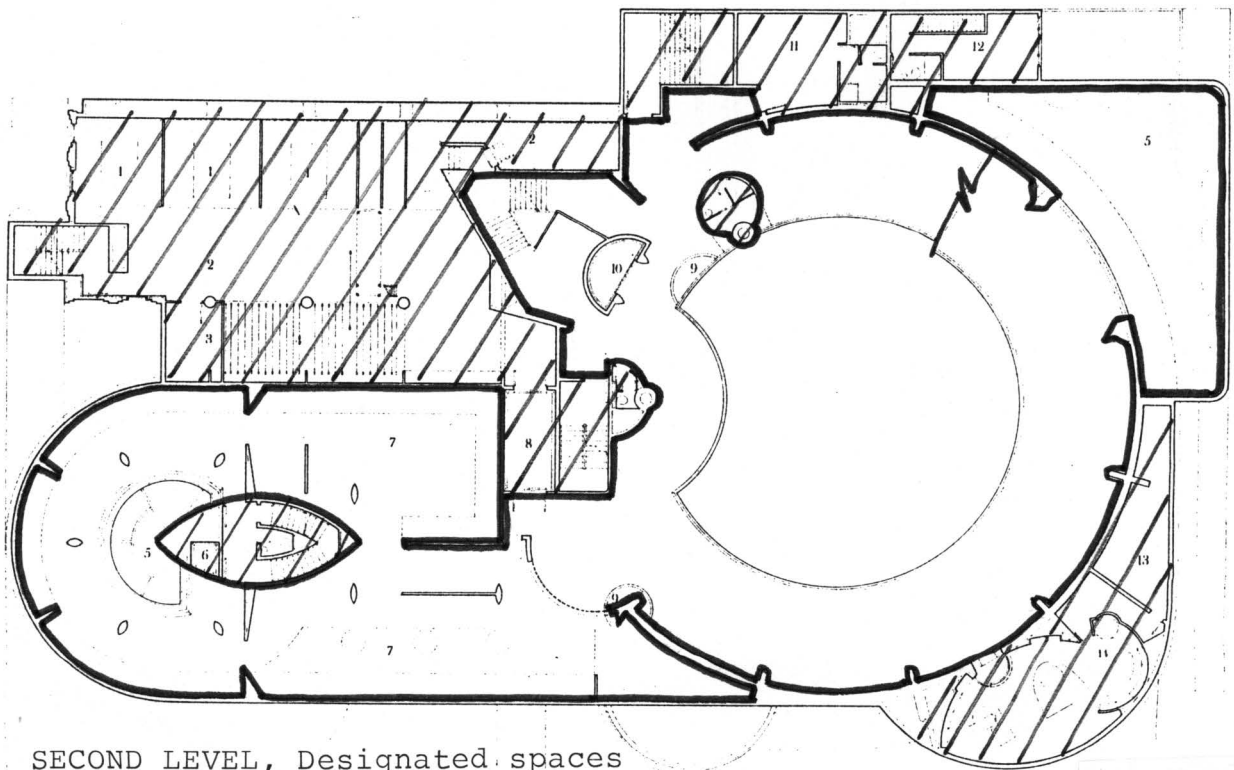
GROUND LEVEL, Designated spaces

Fig. 10c



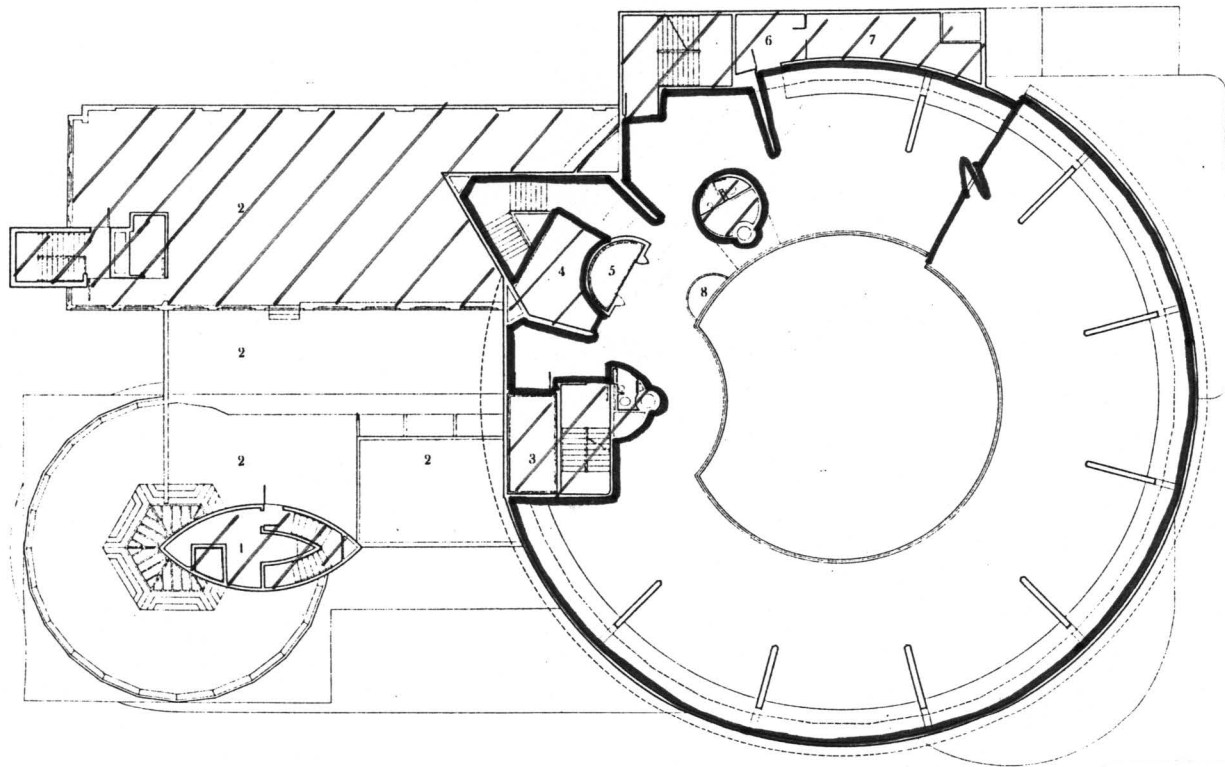
THIRD LEVEL, Designated spaces

Fig. 10f



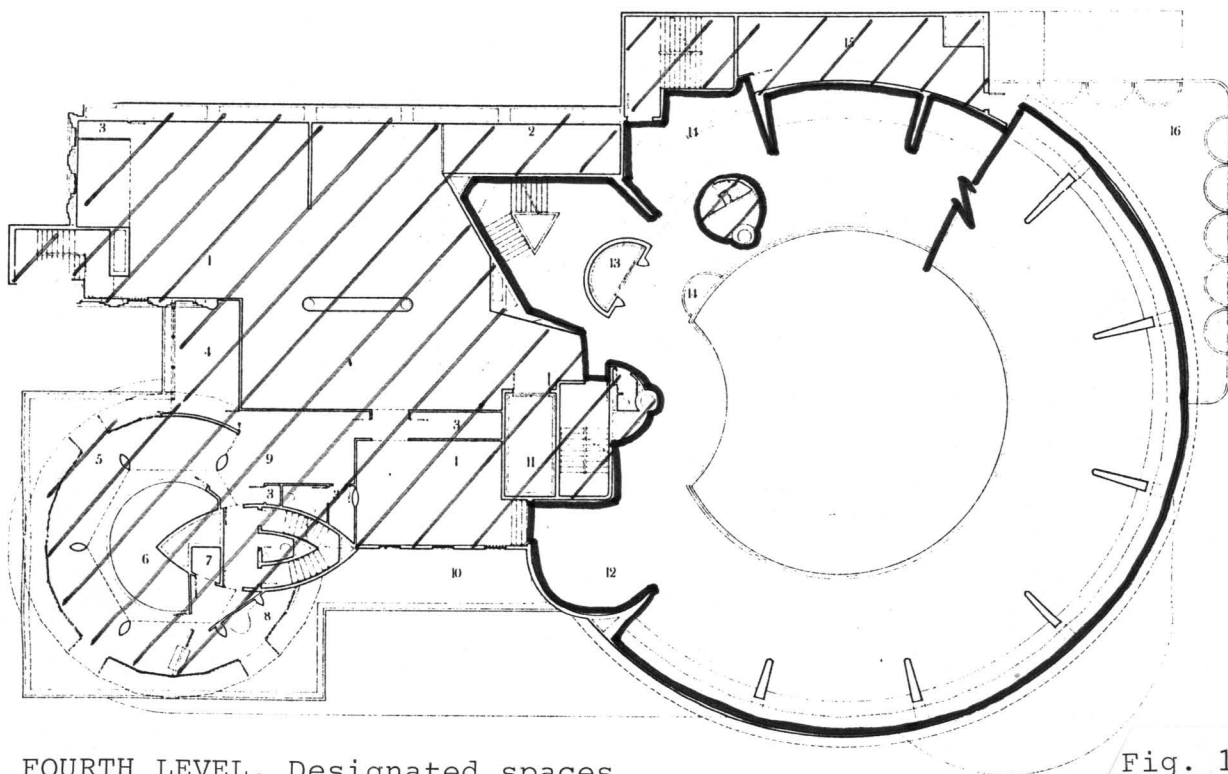
SECOND LEVEL, Designated spaces

Fig. 10e



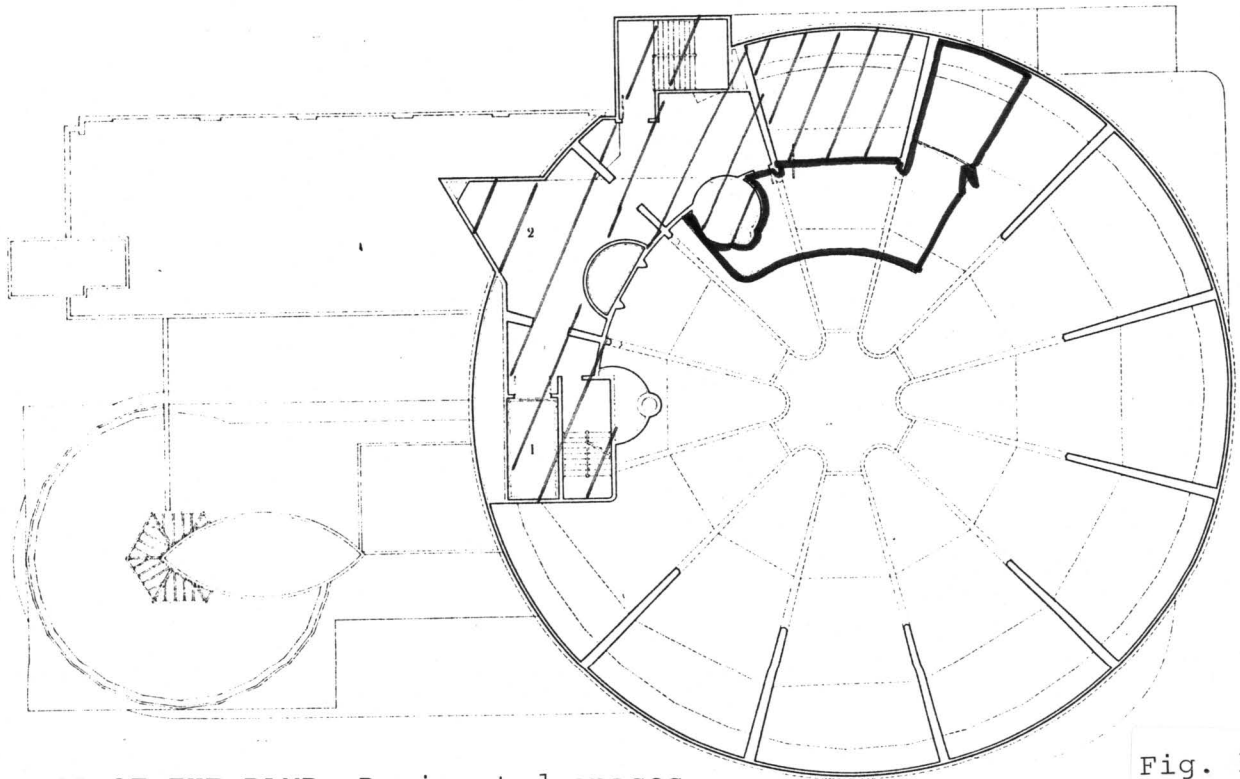
FIFTH LEVEL, Designated spaces

Fig. 10h



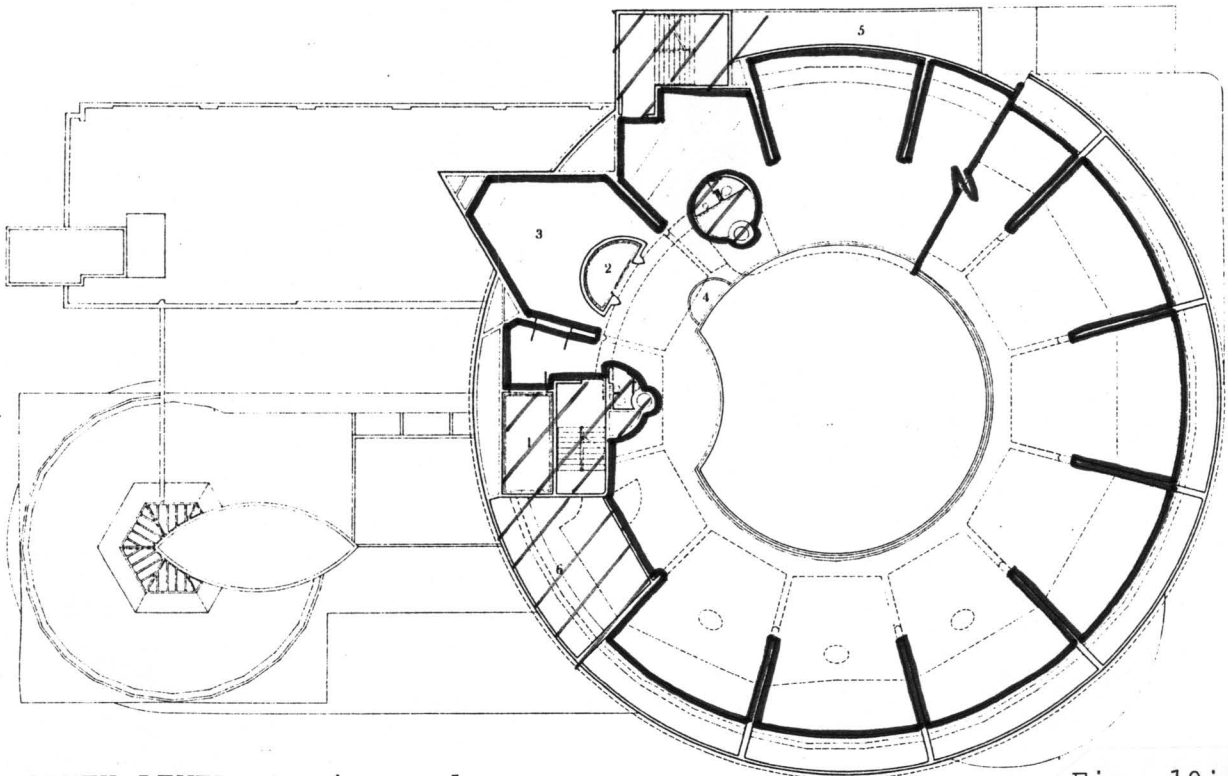
FOURTH LEVEL, Designated spaces

Fig. 10g



TOP OF THE RAMP, Designated spaces

Fig. 10j



SIXTH LEVEL, Designated spaces

Fig. 10i



MAIN GALLERY RAMP AND DOME Photo credit: C. Forster MAIN GALLERY RAMP AND ALCOVES Photo: C. Forster





MAIN GALLERY ALCOVES

Photo credit: C. Forster

AUDITORIUM, SOUTHERN PORTION

Photo credit: C. Forster





AUDITORIUM, NORTHWESTERN PORTION

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AUDITORIUM, VIEW TOWARD STAGE

Photo credit: C. Forster

