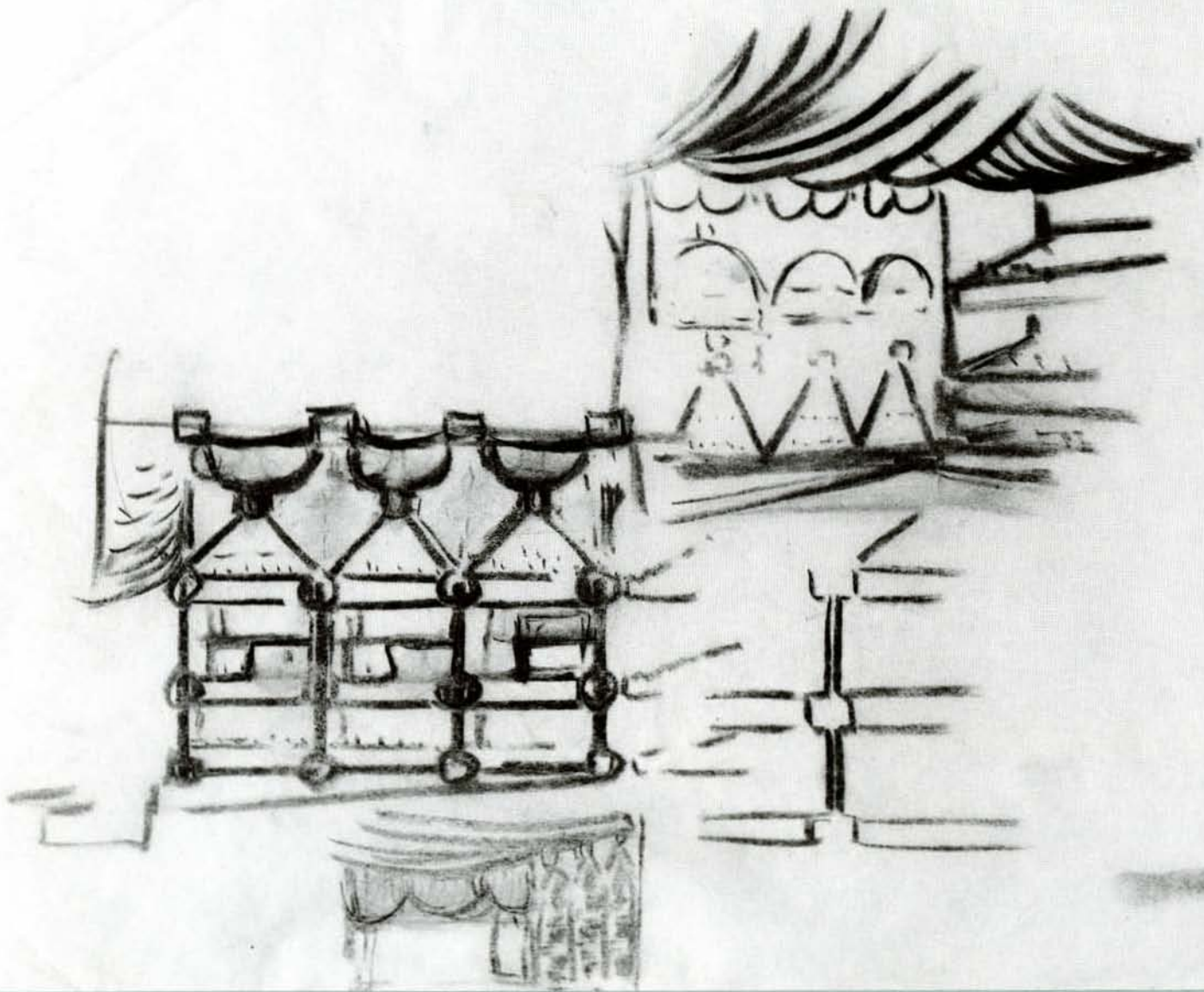


Architecture in Context

Louis Kahn in the Midwest



Acknowledgments

This catalogue records the sixth exhibition in The Art Institute of Chicago's *Architecture in Context* series. The purpose of these projects has been to highlight aspects of architecture in this region that have received relatively little attention. It is appropriate, then, that we have chosen to focus on Louis I. Kahn's work in nearby Fort Wayne, Indiana. Kahn's architecture is always worthy of discussion and analysis, and it is regrettable that only one of his projects was completed in the Midwest. The Department of Architecture is fortunate to have purchased in 1986 a selection of Kahn's drawings from his daughter Sue Ann Kahn. Most of these drawings were part of his designs for an entire cultural complex in Fort Wayne, especially for his only realized building there, the theater now known as the Performing Arts Center, completed in 1973. These Kahn sketches, now a part of the Art Institute's permanent collection, were acquired with funds from a variety of sources: first of all, with proceeds from the sale of balusters designed by Louis H. Sullivan for the Schlesinger and Mayer Company Store, which were originally donated by Carson Pirie Scott and Company; with further proceeds from the sale of duplicate fragments from Adler and Sullivan's Chicago Stock Exchange Trading Room that were the gift of Three Oaks Wrecking Company. In addition, we are extremely grateful to the following for restricted gifts applied toward the purchase of these drawings: F.M.C. Corporation; First National Bank of Chicago; Norman Freehling; Mr. and Mrs. Bruce J. Graham; I.C. Industries; Mr. and Mrs. Chandra Jha; Lawrence F. Levy; Mr. and Mrs. Dirk Lohan; Mayer, Brown and Platt; Lee Miglin; Peter Palumbo; Seymour Persky; Gordon Lee Pollock; Mr. and Mrs. Jay A. Pritzker; Harold Schiff; Skidmore, Owings and Merrill; Mr. and Mrs. Helmut

Strauss; Mr. and Mrs. Williams C. Tippens; Tishman Speyer Properties; U.S. Equities Realty, Inc.; Paul F. Walter; and Mr. and Mrs. Stanley M. Warsaw. Finally, we wish to thank Director James N. Wood, who enthusiastically supported our access to the Centennial Fund for further assistance in purchasing the collection.

This publication and the exhibition it accompanies were made possible through the support of the Architecture Society Fellows, who also provided funding for the concurrent installation of "Transformations: Louis I. Kahn's Library Projects," an exhibition organized by the Louis I. Kahn Collection, University of Pennsylvania, and the Pennsylvania Historical and Museum Commission. At the Art Institute itself, a number of people deserve special acknowledgment: Jack Perry Brown, Executive Director of the Ryerson and Burnham Libraries, for his fine essay for this catalogue; Robert V. Sharp, Associate Editor, and Peter Junker, Assistant Editor, for editing and overseeing production; Mary Solt, Associate Registrar, who managed the receipt of objects on loan; Luigi Mumford, Technical Assistant in the Department of Architecture, who catalogued and prepared the drawings for exhibition; the Department of Graphic Services for designing the exhibition's graphics and labels; and the Department of Art Installation for hanging this show. Michael Glass deserves our gratitude for his design of this handsome catalogue, and Robert Weinberg, of Graphic Conservation in Chicago, receives our sincere thanks for conservation of these fragile sketches.

John Zukowsky
Curator of Architecture
The Art Institute of Chicago

Exhibitions

Louis Kahn in the Midwest and Transformations:
Louis I. Kahn's Library Projects
February 15 – June 26, 1989
Galleries 9 and 10, The Art Institute of Chicago

Front cover: Design sketches of the interiors of a philharmonic hall and theater, Fort Wayne Fine Arts Center, Fort Wayne, Indiana, 1967. Pencil and charcoal pencil on yellow tracing paper, 30.7 x 49.6 cm. The Art Institute of Chicago (1986.160).

Back cover: Elevation sketch of the theater, early design phase, Fort Wayne Fine Arts Center, 1968. Charcoal pencil on yellow tracing paper, 30 x 54.5 cm. The Art Institute of Chicago (1986.159).

Architecture Society Fellows

Darcy Bonner	James L. Nagle
Laurence Booth	Seymour Persky
William Drake, Jr.	Gordon Lee Pollock
Lonn Frye	John Schlossman
Michael Glass	Kenneth Schroeder
Joseph Gonzalez	Patrick Shaw
Bruce Gregga	Stanley Tigerman
Marilyn and	Robert Weinberg
Wilbert Hasbrouck	Martin Zimmerman
Scott Himmel	
Helmut Jahn	

Louis Kahn in the Midwest

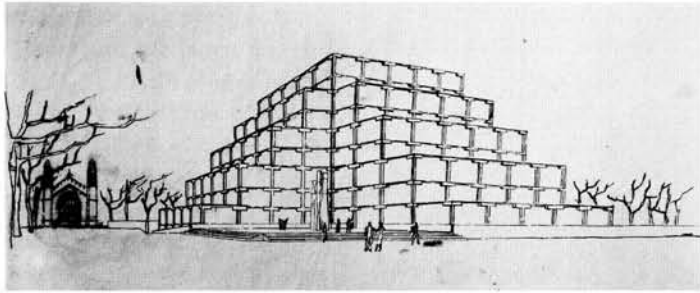


Fig. 1 Perspective view, Washington University Library Competition, St. Louis, Missouri, 1956. Copyright 1977, Louis I. Kahn Collection, University of Pennsylvania, and Pennsylvania Historical and Museum Commission.

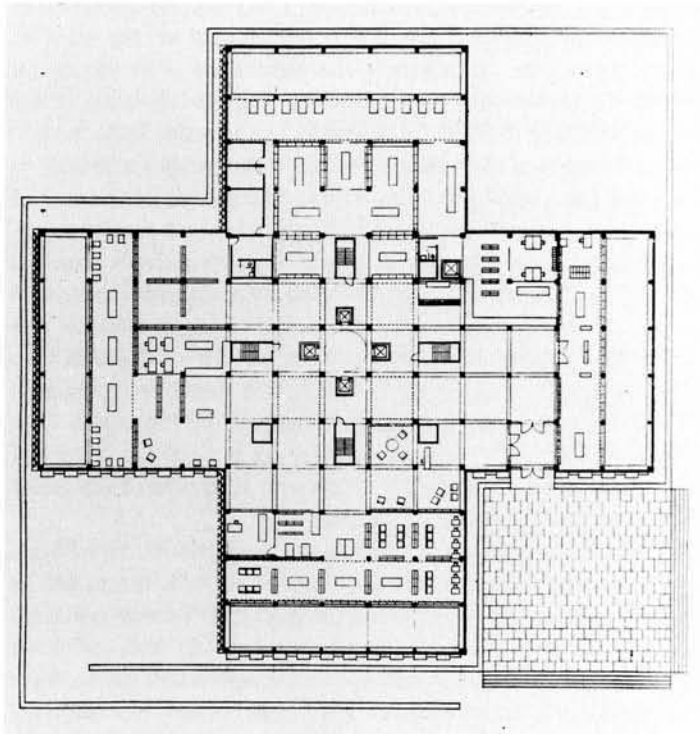


Fig. 2 Plan of entrance level, Washington University Library Competition, 1956. Copyright 1977, Louis I. Kahn Collection, University of Pennsylvania, and Pennsylvania Historical and Museum Commission.

Louis Kahn, in the last two decades before his death in 1974, created a number of buildings whose timeless greatness was readily apparent upon their completion. Kahn's architecture, highly reductive in forms and in materials, addresses basic questions of what it means to be human in time and in space. This essay will discuss Kahn's career and the ideas that were the basis for his works, and it will focus on his one completed commission in the Midwest, a theater at the Fort Wayne, Indiana, Fine Arts Center (1959–73; now called Performing Arts Center), which is typical of many of his commissions and is exemplary of many of his ideas.

Louis Isidore Kahn was born in Estonia in 1901. When he was four, his family moved to Philadelphia, where he attended public school, graduating first from Central High School and then in 1924 from the University of Pennsylvania with a degree in architecture. At Penn he received a Beaux-Arts education under the direction of Paul Philippe Cret (1876–1945), from whom, perhaps, Kahn received a predilection for public buildings, and for institutions as objects of his philosophical and architectural attentions. As Joseph Burton has shown, even in Kahn's first work as chief of design for the Philadelphia Sesquicentennial Exposition (1924–26) under the supervision of John Molitor, he demonstrated a Platonic concern for the ideal in concept and in form which remained a leitmotif in his fifty-year career.¹

Kahn traveled briefly in Europe before returning home to the Depression and its attendant decline in building activity. Over the next two decades he devoted himself to housing and planning projects for the city of Philadelphia, to small-scale residential and commercial commissions, and to teaching, first at Yale University and later at Penn. During this time Kahn was beginning to formulate questions about the nature of human beings, human society (particularly the city), and the meaning of architecture, the answers to which he attempted to articulate, rather delphically, in his writings and teaching, and rather more successfully, in his realized buildings.

Kahn's first great building was an extension to Egerton Swartwout's 1928 Romanesque Revival Yale University Art Gallery, in New Haven, Connecticut, completed in 1953. With the Richards Medical Research Building (1957–61) at the University of Pennsylvania, Kahn achieved worldwide recognition, and the so-called Philadelphia School became an alternative to the dominant modernism of the day. Increasingly, Kahn became involved in large-scale commissions: in Venice, in India and Pakistan, as well as in the United States. Although he did produce some commercial buildings (such as a factory for Olivetti and a newspaper plant, both in Pennsylvania) and one or two residences, Kahn's commissions in the 1960s and 1970s were mainly for social or

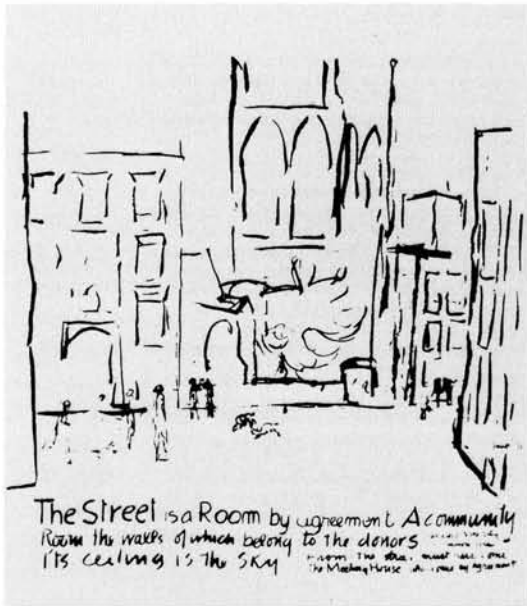


Fig. 3 "The Street is a Room," from A. Tyng, *Beginnings*, Louis I. Kahn's *Philosophy of Architecture* (New York: Wiley, 1984), p. 82.

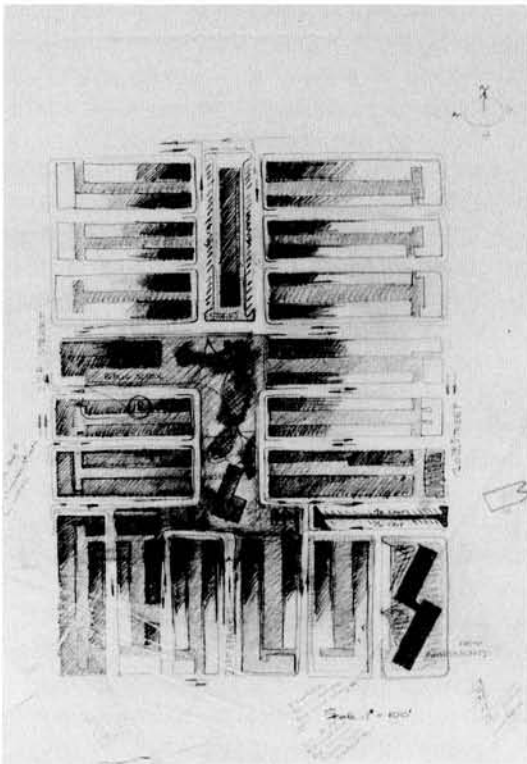


Fig. 4 Design sketch for the Philadelphia Redevelopment Project, midtown area; plan between 20th and 22nd streets, c. 1939. Black, green, and red pencil on tracing paper, 35 x 50.5 cm. The Art Institute of Chicago (1986.1052).

governmental institutions: libraries, museums, research centers, government buildings, and one theater.

Aside from the theater in Fort Wayne, Indiana, and the war-time industrial housing suburb of Willow Run, Michigan, near Detroit, designed in 1942 during his partnership with Oscar Stonorov, Kahn realized no other buildings in the Midwest. He was involved in Paul Cret's unsuccessful proposals for the 1933 Century of Progress Exposition in Chicago, a project for which his work on the Philadelphia Sesquicentennial may have stood him in good stead, but at this distance it is difficult to identify Kahn's work in it. In 1946 and 1947 Kahn worked on designs for the Jefferson National Expansion Memorial in St. Louis, a competition won by Eero Saarinen, and a decade later he submitted designs for a memorial to Enrico Fermi in Chicago, which was never built.

His only other efforts in the Midwest, while developed further than the memorial projects, were both unrealized: a library for Washington University in St. Louis in 1956, at the beginning of his maturity, and an office tower for Kansas City, which was worked on sporadically over the last eight years of his life. Kahn was invited to participate in the Washington University competition after Saarinen withdrew. His proposal for the 200,000-square-foot building, a cruciform pyramid of structural concrete, was rejected, and the design does not in fact capture the depth of theoretical thought shown in Kahn's comments on the work in "Space, Form, Use – A Library."² The dominance of the structural form in the perspective (fig. 1) and the Boullée-like scale of the section, recalling the famous monument to Newton, belie the humanist thoughts of the essay, in which Kahn related activities to space and light, and incorporated these relationships in form. The plan (fig. 2), however, shows a clarity of order and powerful regularity combined with an incipient state of Kahn's ideas of "served" and "servant" spaces, the reading areas near the light at the arms of the cross served by the central circulation space. The Kansas City project, a medium-sized tower for a full-block site, called forth Kahn's structural inventiveness when he proposed a poured-concrete building constructed from the top down. The project went through at least five revisions, including a change of site, before being eventually handed over to another firm under circumstances that are today unclear.

Unlike many other architectural movements, the Philadelphia School consisted not so much of stylistic forms, but of common philosophical questions: perhaps most famous is Kahn's query, "What does the building want to be?" By trial and error, Kahn elaborated his philosophy, relating space and place, arguing that space is an entity itself. For Kahn, "order" was the common bond of humanity, expressed through art; "form" was the potential for making spaces; and "design" became the practical, individual solution, the creation of particular form to express order. Technology and disconnected concerns about function thus become secondary. The vital questions are those of Platonic idealism: what is the nature of a school, a library, a museum, a theater? From intuitive responses to these questions can come not a teachable program but a felt expression of the ideal in built form. Kahn in college had selected architecture over music as a career, but much of his work shares the rigors of music; at the same time,

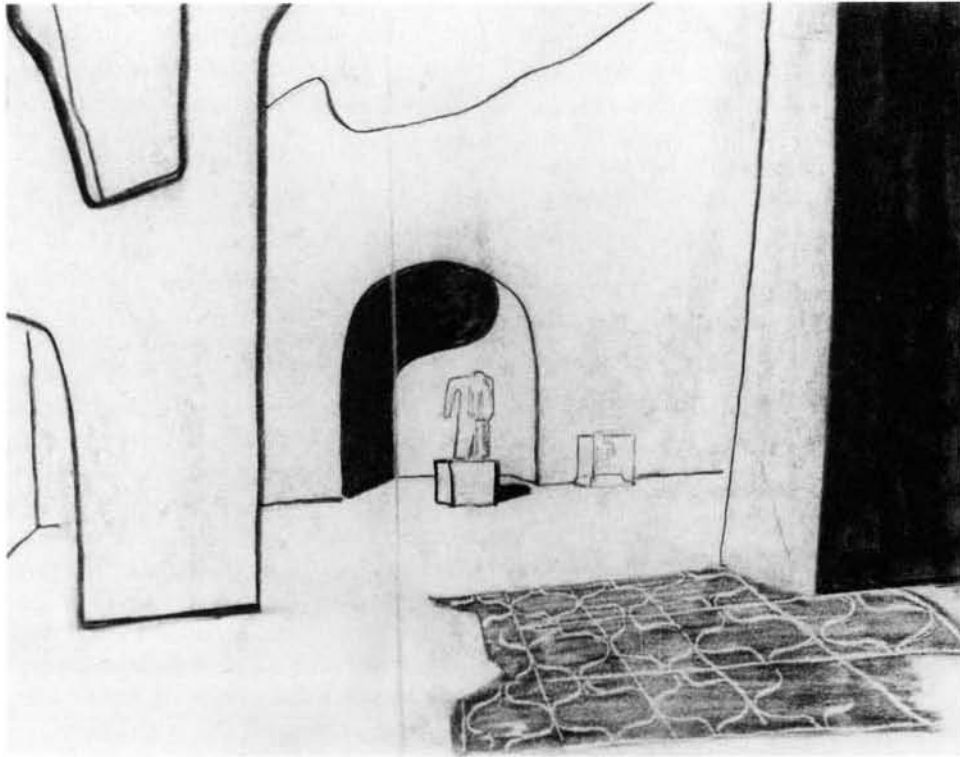


Fig. 5 Egyptian travel sketch, interior view with statue, 1951. Charcoal pencil on tracing paper; mounted on paper, 27.6 x 35.7 cm. The Art Institute of Chicago (1986.1055).

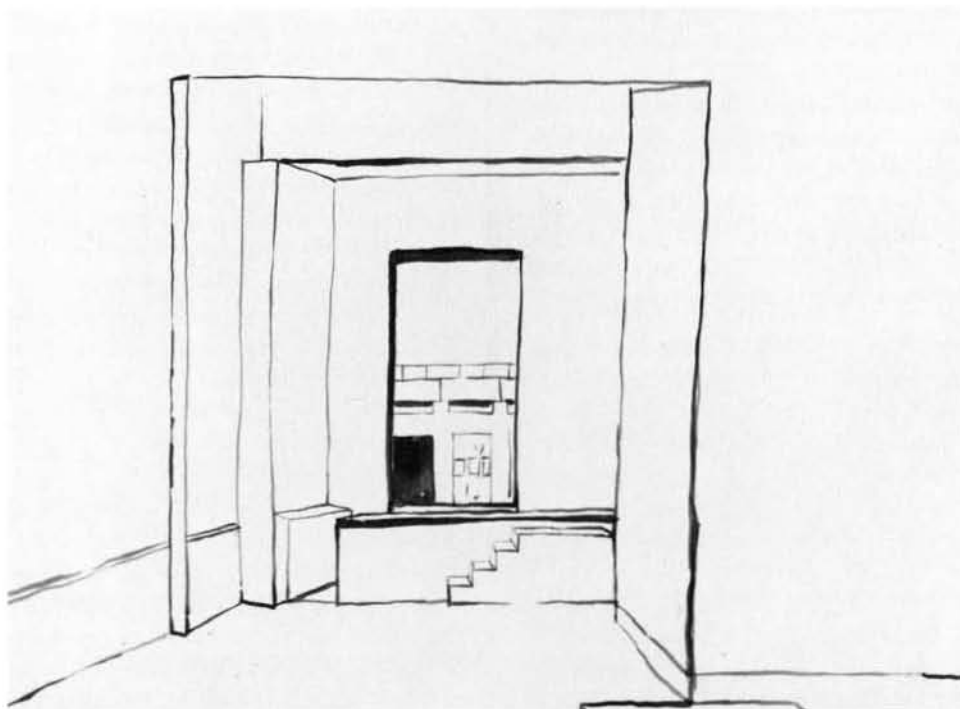


Fig. 6 Egyptian travel sketch, interior view, 1951. Ink or watercolor brushed on tablet paper, 32 x 43.8 cm. The Art Institute of Chicago (1986.1056).

like music, his buildings are ultimately more than the sum of their components.

Kahn's architecture embodied his intuitive feeling for human society and for space as the outgrowth of a "room." He was concerned about the connections of parts within his buildings and equally about the connections between the parts of a city, which he called a place of "assembled institutions" (fig. 3). Kahn's concept of "served" and "servant" spaces – applied to both the room and the city – led him to explore the relationships between parts. It is in the ability to give these relationships form that Kahn's uniqueness lies. Admittedly, many of his completed buildings do not, in fact, work very well. While some of the problems are due to design limits, and while Kahn would agree that other things are problems, he would argue (and his buildings argue more successfully than he) that the buildings, however flawed they may be, do answer the essential questions. All attempts to create the ideal are doomed to limited success: Kahn came very close to the ideal.

Kahn expressed his intuitions in aphorisms and in drawings. It was his facility in drawing that led him initially to architecture, and he is one of the superb architectural draftsmen of all time. Drawing for Kahn was as valid a means of expression as building. He wrote in 1931:

Drawing is a mode of representation. It makes no difference whether a watercolor is tight, loose or flabby; for if it discloses a purpose, it is of value, and the more we understand the purpose the more valuable our watercolor will become.³

Drawing was a tool with which one searched to "understand the intrinsic character and have respect for the individuality underlying even things that seem to create no feeling within us at first."⁴

Trained in the Beaux-Arts tradition first to produce an *esquisse*, which captured the essential nature of a program not from research but from intuition, and then to develop and elaborate that initial effort without violating its nature, Kahn extended the limits of the Beaux-Arts process by involving his assistants and clients in a drawn dialogue, testing form and detail in expression beyond words. To accommodate this method, Kahn developed his own drawing technique, as described by Marshall Meyers:

He rarely worked alone. He needed this dialogue, this testing of ideas: the question and reaction. The question might be general or specific, but always it signalled the never-ending search: "This or that?" or "What if?" or "Is this too big?" And his chosen drawing tools responded. The marks of the vine charcoal barely adhered to the smooth [roll of tracing] paper, sitting on the hard surface as black dust ready to be brushed away by his hand the moment a better thought arrived. He had invented this technique for himself: vine charcoal on the smooth yellow paper. Drawing and erasing became immediate and as rapid as his thoughts. He would smudge away one idea and follow it with another, leaving only a faint trace of the original sketch. The layers of charcoal left a translucent, animated image of the new ideas superimposed on the ghosts of the old.

He had no reason to overlay tracing paper on top of paper to record them all: too slow, too wasteful. Then, once he was satisfied and the search was done for the moment, a spray of fixative would seal up the final image with all the thoughts, ghosts, and smudges preserved.⁵

The drawings by Louis Kahn in The Art Institute of Chicago span his career and illuminate his use and technique of drawing; they also document the development of Kahn's one completed midwestern commission, the Fort Wayne Performing Arts Center. Taken as a whole, these drawings show Kahn's career-long concern with institutions, with relationships, and with history.

The earliest drawing (fig. 4), done about 1939, is a study for the redevelopment of a multiblock area in midtown Philadelphia, executed when Kahn was working for the Philadelphia Housing Authority. Themes that would occupy him in later, independent studies for the redevelopment of Philadelphia and for the Fort Wayne project – such as his concern with circulation, or the relationships between buildings, or the spatial interaction between individual buildings and the grid of the city – are all here in a rudimentary form. In what was an undifferentiated residential neighborhood, part of Philadelphia's rectangular grid system of row houses, Kahn attempts to project a larger order or relationship by breaking the grid line of 21st Street, adding new buildings set at an angle to the grid, and channeling circulation. At the same time, he provides urban spaces that impart the sense of progression or entrance so often found in his mature work and plans, and that focus on social institutions, here, a school and nursery. Surprisingly absent from this drawing is the devaluation of the automobile implicit in so much of Kahn's later work.

Kahn sought for essentials, for what he called "volume zero." The impact of modernism, which for two decades caused him to overlay (or deny) his classical training and his own inherent mysticism with Germanic rationality, began to dissipate rapidly in the late 1940s and early 1950s. He searched consciously for archetypes, empowered by a year spent at the American Academy in Rome in 1950-51. Kahn traveled not only in Italy, but also in Greece and Egypt; this exposure to classical architecture, ruins, and forms provided him the stimulus to grasp the archetypes, to develop them to meet programs, and to produce the architecture of his final two decades.

Kahn recorded his travels in charcoal and pastel sketches, or occasionally in pen and ink. In a sketch done in Egypt (fig. 5), which has surrealist overtones mindful of de Chirico, several recurrent themes appear. The first of these is silence; another is, certainly, light. Light creates space. It is impossible to tell if the scene is ancient Egypt, with monumental size, or more modern Arabic Egypt, with the decorative pattern of the flooring and the arch, brought to the East from Rome. Scale in this drawing is difficult to read, but the simplicity of form and the play of shadow and light make it a powerful, evocative image.

It is in these travel drawings that we can first see the power that Kahn attributed to light. Kahn says "Material is spent light"; using the most limited palette of materials – brick, concrete, tra-

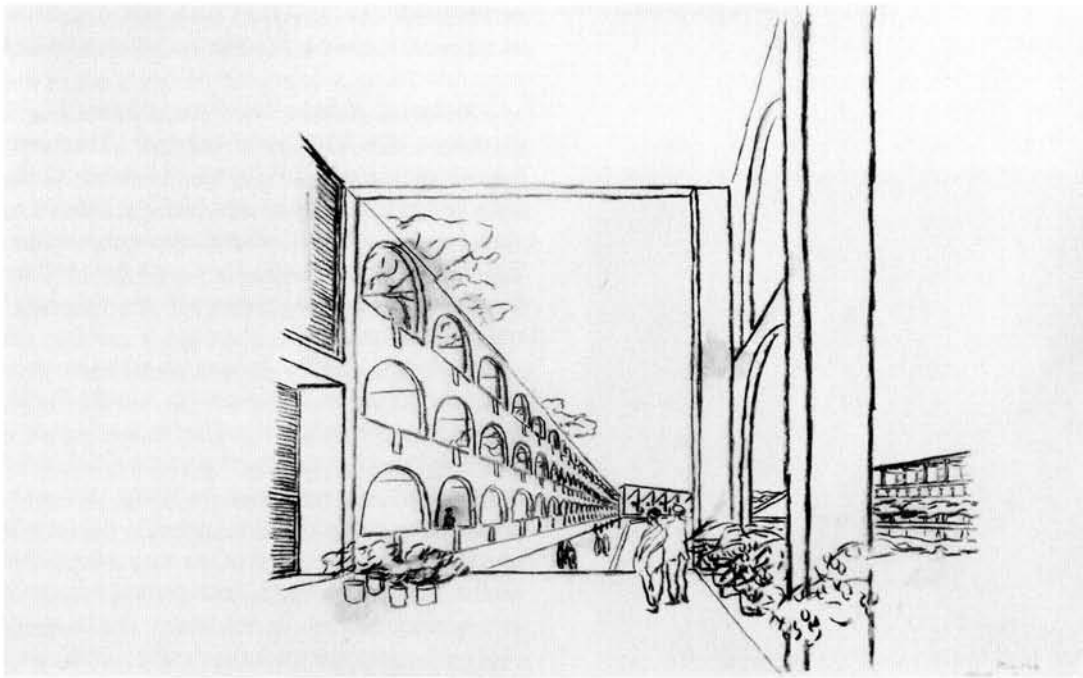


Fig. 7 Perspective view of Sher-E-Banglanagar, inner court, Dacca, Bangladesh, May 1963. Charcoal pencil on yellow tracing paper, 46 x 76 cm. The Art Institute of Chicago (1986.1053).

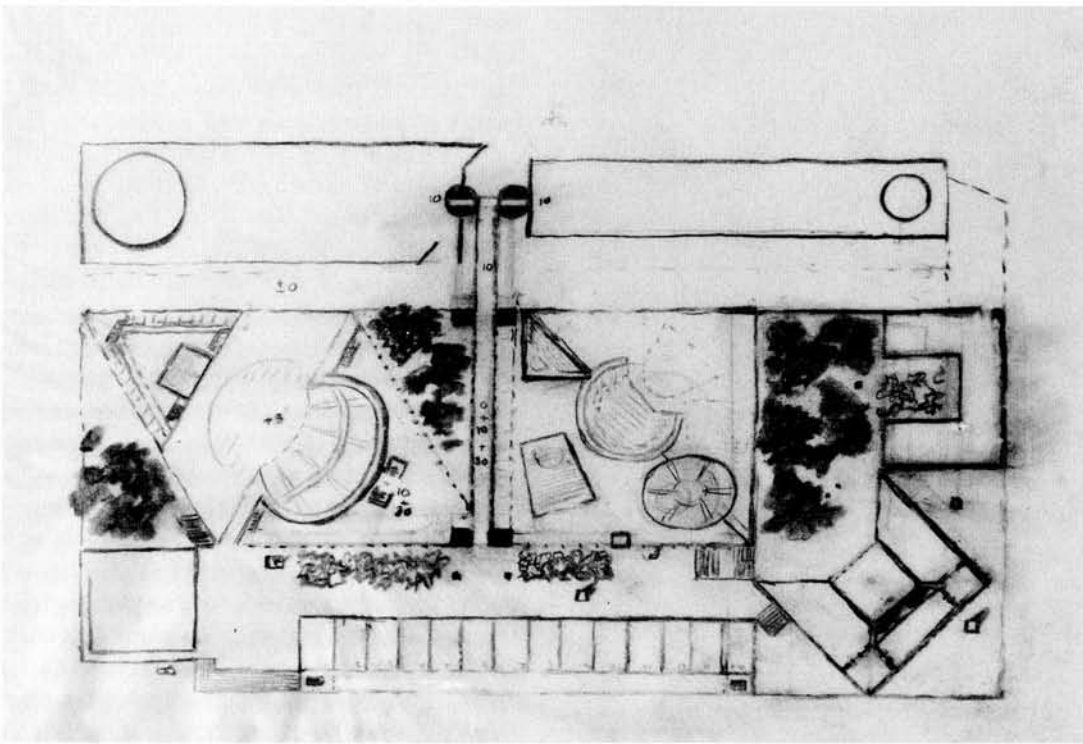


Fig. 8 Site plan, first design stage, Fort Wayne Fine Arts Center, Fort Wayne, Indiana, early 1963. Charcoal pencil on yellow tracing paper, approx. 30.5 x 51 cm. The Art Institute of Chicago (1986.1054).

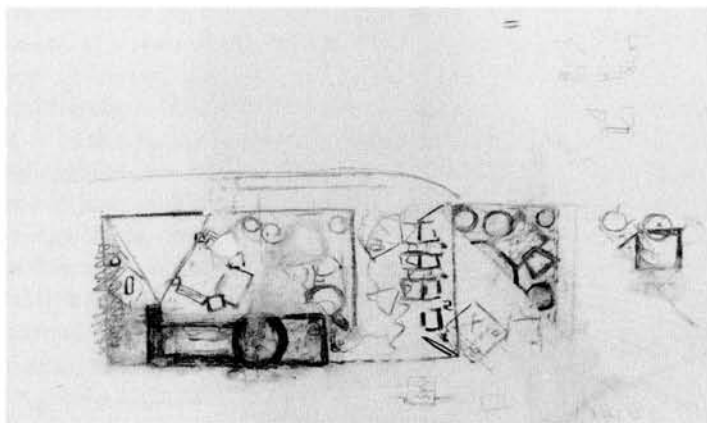


Fig. 9 Site plan, third design stage, Fort Wayne Fine Arts Center, Oct. 4, 1963. Pencil and charcoal pencil on yellow tracing paper, 27.7 x 44.7 cm. The Art Institute of Chicago (1986.1051).

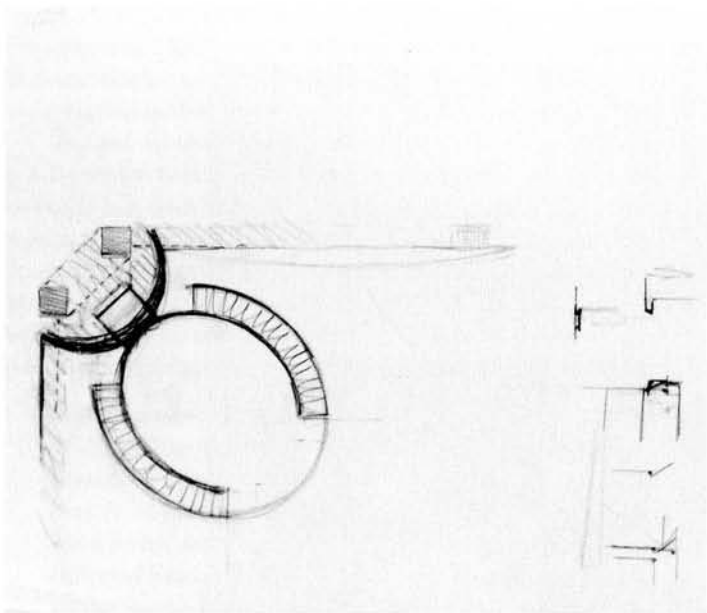


Fig. 10 Design sketch of the plan of a philharmonic hall, Fort Wayne Fine Arts Center, c. 1963. Charcoal pencil on yellow tracing paper, 42 x 44.7 cm. The Art Institute of Chicago (1986.161).

vertine, oak – he combined them with space to capture light and at the same time to touch the underlying order he felt to be present in all things.

A second sketch also done in Egypt (fig. 6) anticipates the essentials of a 1972 essay entitled “The room, the street, and human agreement.”⁶ Although the nature of the space is not totally apparent, the geometric rigidity and the view out the large void provide a frame for memory and relationship which make this a comfortable space, even with its oddities. The intensity of the light appears greater through the opening, here heavily surrounded by dark lines.

A sketch done a decade later shows these ideas of room, street, and human agreement in a more finished manner. This perspective sketch (fig. 7) of the inner court of one of the government buildings in Dacca, the new capital of East Pakistan (now Bangladesh), a commission on which Kahn worked for the last dozen years of his life, was probably traced over a hard-line perspective prepared in his office as a base to guide the freehand sketch. The figures in the nearground, who might at first glance be classical Romans in the forum, are in a room giving on to a place of congregation or assembly, defined by buildings for human purposes. The scale and power of the forms – arch succeeding arch, detail subordinated to the essence of the place and its purpose – make the important statement that the purpose of architecture is defined by human needs.

The largest group of drawings by Kahn in the Art Institute collections deals with his work in Fort Wayne, Indiana. The dozen drawings cover all phases of this long-term project and show several sides of Kahn the draftsman. The commission, which he received in 1961, was completed in vastly altered and reduced form in 1973. Over more than a decade, coinciding with Kahn’s period of greatest fame and productivity, there were times of activity followed by hiatus and resumption. The original commission was to create a cultural center housing a number of independent arts organizations – a fine arts museum, theater, art school, orchestra, historical museum – in a relational setting.

In discussions with the selection committee, Kahn was adamant that the location for this center be in the city, not on a suburban university campus, a financially attractive alternative. His arguments about the nature of the city as a place to meet and to interact fell on receptive ears. Fort Wayne, a manufacturing and agricultural town of 160,000 in 1960, faced problems common to most regional centers in the postwar era. The automobile had drawn shopping to the periphery, and the residential development of subdivisions and suburbs had left a void at the heart of the city. The hope of urban renewal appealed to the client committee, which had cast a wide net in seeking an architect. Nearly all the major architects were interviewed or contacted: Ludwig Mies van der Rohe, Minoru Yamasaki, Philip Johnson, Edward Durell Stone, Eero Saarinen. Johnson, who was too busy, suggested Kahn’s name to the committee, to whom he was previously unknown. After much debate, he was selected by the narrowest of margins over Stone as the architect for the center, and the brief was expanded to include studies of the downtown area. At this

time Kahn was working on planning for the Market Street area of Philadelphia, and his urban circulation plans for Fort Wayne have much in common with the work for Philadelphia.

The Fort Wayne commission was a typical one in many ways for Kahn. First of all, the cultural institutions held symbolic meanings as physical and emotional points of assembly. Second, the site was urban. The history of the job is long, with many starts and stops. And finally, only a small part of what was planned was achieved. In Fort Wayne, high cost estimates resulted first in delay, and then in scaling back. An idealist by nature, Kahn was undismayed by the realities. When his first scheme for the center was presented in 1965 and the client asked how much it would cost, he replied, "\$20 million and you should raise it!" The committee demurred. Kahn was willing to compromise, to build in stages, or to build in part, but he kept fighting for the vision of the whole, which he felt to be right. In the end, only one building, the theater, was built. Subsequently, an art museum (by Moake Sheldon Kratzat Thompson Dearing and Associates, with Walter Netsch as design consultant, 1984) was added to the site.

Detailed programs were provided for each of the organizations involved, because each independent entity had separate needs and requirements for each building. Kahn worked intensively on the commission from 1962 into early 1965, working out details for individual buildings and for the overall relationship among them on the large rectangular site. In his notebooks for 1963 Kahn wrote:

There is an entity present: the philharmonic is dependent upon the art school, the art school on the civic theater, the civic theater on the ballet, and so forth. And it is so: the plan is so made that you feel one building is dependent on the other. . . .

After all, what was the purpose of coming here? Was it to make a convenient arrangement, or was it to make something with an extra quality? I've found the extra quality, which makes the coming together more than what they are when the buildings are separated from each other.

In the first scheme (fig. 8) parking occupies the two long forms at the top of the drawing, shielding the site from the active railroad line that borders it. The philharmonic hall is to the left of the central north-south processional, while the theater (with several stages within a single envelope) is to the right. The museum and reception center lie to the east of the theater, the historical museum occupies the southwest corner of the site, and dormitory rooms form the south facade of the plan on Wayne Street. The buildings form interior pedestrian streets in an H-pattern, with additional court spaces between the buildings in the central band of the plan. One goal of this first plan, a common entrance to the varied activities – "an entrance doorway which is a garage," as Kahn called it – was the first casualty. Certainly, expense was a factor, but Kahn's lack of sympathy and understanding of the automobile indicate that he considered this no great loss.⁷

Between August and October 1963, the plan was revised extensively, as seen in another site plan (fig. 9). While the philhar-

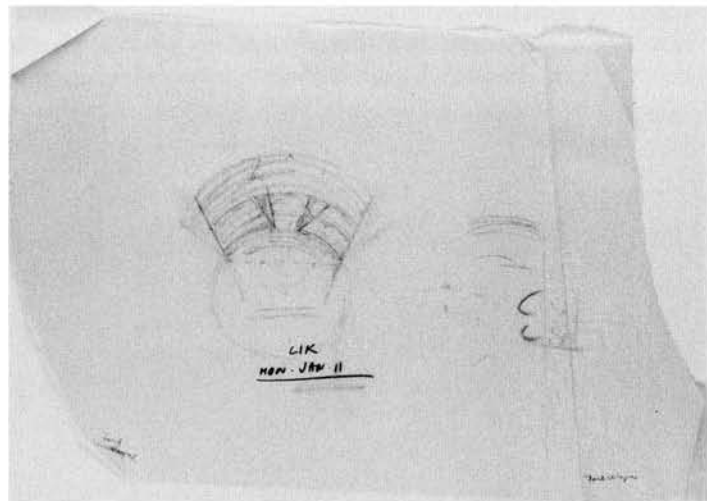


Fig. 11 Design sketches of the plan of a small theater, Fort Wayne Fine Arts Center, Monday, Jan. 11, 1965. Pencil on yellow tracing paper, 29.5 x 41.5 cm. The Art Institute of Chicago (1986.166).

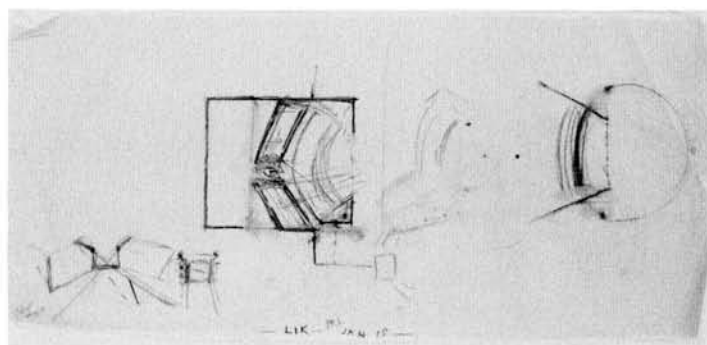


Fig. 12 Design sketches of the plan of a theater, Fort Wayne Fine Arts Center, Friday, Jan. 15, 1965. Charcoal pencil on yellow tracing paper, 30.2 x 65.7 cm. The Art Institute of Chicago (1986.165).

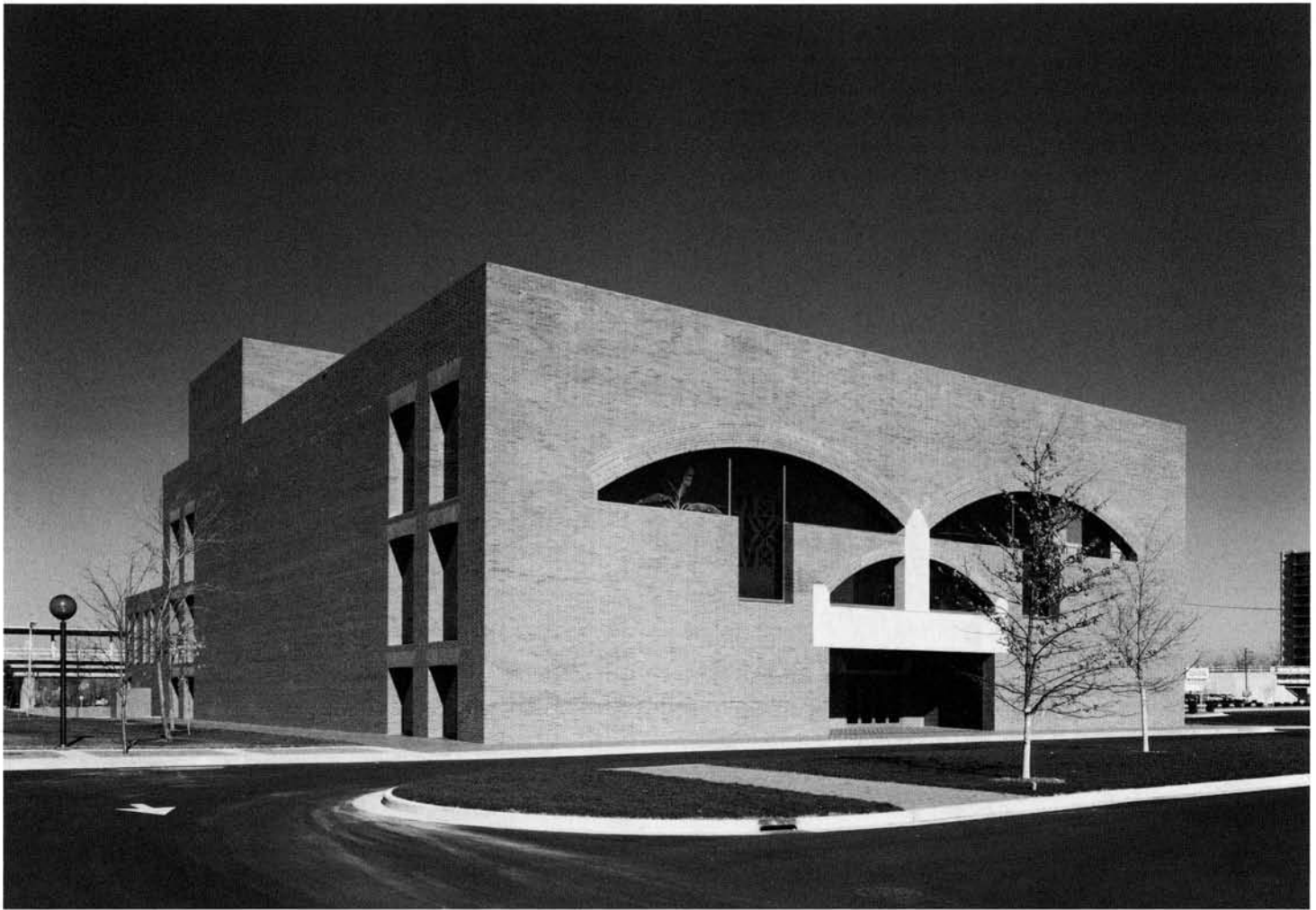


Fig. 13 Performing Arts Center, Fort Wayne, Indiana, 1973; view of the entrance, from the southwest. Photo: Craig Kuhner.

monic hall remains essentially as before, the theater (shown with several pentimenti to the right) has become much more directly related to it following the elimination of the central north-south walkway and the formation, thereby, of a central triangular plaza. The art gallery, reception center, and historical museum have been combined in the rectangular block along Wayne Street, while the entrance to the complex (now pedestrian) is newly located on the southwest corner, with a much more appropriate orientation to the center of the city. The art school has been separated from the buildings needing high public access and forms the eastern perimeter of the plan, now set off by a large rectangular plaza or garden.

Kahn was not able to inspire clients with the will to fund his unitary vision of the fine arts center. His initial proposal was nearly ten times the projected budget. Although the clients saw that the entity Kahn proposed was resonantly greater than the sum of its parts, ultimately the decision was made to proceed with selected buildings (the theater and the art school being the first ones), with hopes of completing the remainder over time.

In three small sketches from the first planning campaign (figs. 10-12), Kahn's technique of thinking on paper is evident. The first of these, a detail of the philharmonic hall plan, shows an oval or horseshoe-shaped form, while the two plans for theaters, examples of many quick, small sketches, are concerned with sight-lines for the audience. Thoughts like these, perhaps done on site visits or in consultation with clients, record the essence of Kahn's questioning mind. The simple geometric shapes are deformed and reformed to meet the program, a process that continued even as the buildings were under construction. Kahn constantly revised and rethought, incorporating changing conditions and needs, trying to get ever closer to "volume zero," his shorthand name for the essence of form. The hiatus, reduction, and ultimate realization of only one part of the original program gave him additional insight:

At this moment I realize something I've never realized before: that there are actually two realities that an architect deals with: he deals with the reality of belief and the reality of means.

Work proceeded on the drawings for the theater and the art school in the late 1960s. At this time Kahn was involved in finishing the Kimbell Art Museum in Fort Worth, Texas; as well as with the ongoing work in Dacca; and with the preliminaries for what would be his last realized building, the Yale Center for British Art in New Haven. Construction of the theater began in July 1970, and was completed in September 1973 (fig. 13). The art school was not built.

Kahn's aphorism about the finished theater, "a violin in a violin-case," was first heard in reference to the philharmonic hall, but has brilliantly clear expression in the realized theater. The physical duplication of the exterior of the building was something Kahn had given great thought to in his work in India and Pakistan, where the need for sun protection achieved a monumental expressiveness. In Fort Wayne the need was not for solar in-

sulation but for auditory isolation from the adjacent railroad and street. The concrete body of the theater itself, the violin, is enclosed in a structurally separate brick encasement, the violin case, which holds servant spaces for reception, circulation, and offices (figs. 14, 15).

Many studies of the theater were done, frequently by Kahn's critical method of revising his assistants' trials and errors. Out of the office for extended periods of time, particularly on his trips to the Indian subcontinent, he left general instructions for the office staff to deal with problems. While the level of trust and discipline was high, ultimately a fail-safe system had to be established to meet job deadlines: plans and details done in the office were reviewed by Kahn if he were able; if not, they were passed, and accepted by him. Thus, responsibility for certain aspects of a project, even in a small, essentially one-man office, was diffuse. For example, two section drawings in the Art Institute's collection (figs. 16, 17) were done by the job captain.⁸ Like others executed by office staff, most of them students of his from Penn, steeped in Kahn's vocabulary and forms, these drawings can certainly be described as "Kahnian," but they lack the force of his hand and the direct grasp of his mind. As Marshall Meyers related, "There we were in the office, creating Architecture. Then this little guy with the white hair would come back [from India] and change it all around."⁹

Originally there were to have been two theaters within the building, one small stage and one large; when the plans were scaled back, only a single theater could be built; the house as built is a compromise in size (fig. 18). Consultants were involved for the theatrical needs (George Izenour, an old colleague of Kahn's from Yale) and for acoustics (Cyril Harris). But throughout the project, Kahn brought to this, his only commission for a theater, the perceptions of a theater-goer, not those of a practiced theater man. He viewed the audience as part of the theatrical experience, where the experience of entering and gathering were shared as much as the performance itself. In a drawing from the first planning process (see front cover), the interior of the philharmonic hall gives much of this feeling:

I thought further of the meaning of a place of assembly. . . . [T]he music is only partly important; décolleté is important; seeing a person and becoming entranced is also important. . . . But it's all part, is it not, of the nature of going to a concert? So is seeing the entire hall – not to be forced by its shape to look at it from under a balcony, not just to hear music, but to feel the entire chamber – because being in the chamber is like living in the violin. The chamber itself is an instrument. If you think a great deal about such a place, you can come to the realization that you are making a musical instrument containing people, one I'd describe as a place of gold and red that had to have a baldachino coming down over the players.

In this drawing the small perspective sketch at the lower left center is the essence of the later theater as finally built. The large charcoal sketch does capture the rich color ideas so movingly



Fig. 14 Performing Arts Center, 1973; interior view of the access corridor and stairway to theater seats and lobby. Photo: Craig Kuhner.

evoked. His success in reaching from the vision of what the building wants to be to its concrete and brick realization is testimony to Kahn's reading of volume zero.

The idea of a single entrance, so important for the complex as initially conceived, was no less so for the theater itself. The sketched entrance (fig. 19), which is close to what was actually built, shows the arched voids with the powerful concrete beam linking and absorbing the thrusts of the three interlocking brick arches in a dynamic interplay. The three arched windows have been seen as the openings of a theatrical mask (or more prosaically, by some, as a Halloween pumpkin). Kahn's intention was to provide a place of entrance, clearly delineated, and to reveal the life of the building within, the place of assembly on the second floor. The powerful arches of the facade have come to symbolize the building for many, and they became the relational motif selected for the later art museum by another hand, but the windows of the sides of the building are also subtly arched (as are those at Kahn's contemporaneous library at Exeter, New Hampshire), giving an almost imperceptibly felt power to the

large voids in the brick. "Ask the brick what it wants to be and it will reply, 'an arch.'" Arches are also used internally, as in a sketch possibly for the rehearsal rooms (fig. 20).

The resumption of work on the theater alone in the late 1960s produced many drawings and ultimately a finished building. In a side-elevation drawing (see back cover), Kahn is experimenting, working "just to indicate a possibility," as he says in one of his notations on the drawing. Another comment along the bottom of the sheet – "It would be better to make the bays 20' in concrete. This would lengthen the building by 24', but it would look more like concrete" – again reveals the *a priori* assumptions in Kahn's use of materials. Just as the architects of Gothic cathedrals used vault ribs that *look* structural though they are not so in fact, or just as Mies applied I-beams to the exterior of 860-880 Lake Shore Drive because the building did not look right without them, so Kahn was concerned with the conceptual appearance of his chosen medium, concrete, a medium with formal possibilities more elastic than any other. The building as completed differs totally from this "possibility"; what an additional twenty-four



Fig. 15 Performing Arts Center, 1973; interior view of stairway and side entrance. Photo: Craig Kuhner.

feet of length might have meant in terms of the program, the structure, the cost, is not clear. But Kahn's use of simple geometric forms – circle, triangle – and the feeling of what concrete structure *should* look like give this drawing power beyond its small scale.

The final design phase produced working drawings for both the theater and the art school, including, for the latter, a sheet in the Art Institute's collection that contains plan and elevation studies (fig. 21), one of several drawings done on the same day.¹⁰ This sort of quick visual reworking, most likely executed over an existing working drawing in a meeting with assistants or clients, is a good example of Kahn's use of drawing as a tool. The problem under study is the focus of activity; the whole is absent on this sheet, although it was visually present through the yellow trace at the time of creation, and always in mind.

In summary, then, the Fort Wayne Fine Arts Center was a typical project for Kahn. First, it was a commission for an institution (in this case actually a cluster of related institutions) with archetypal overtones in Kahn's mind: school, theater, museum, music hall. Second, the program went through many reductive design phases, largely due to cost projections, over a long period of time. Third, the one realized building relies on Kahn's standard vocabulary of brick, concrete, and oak, with common details reworked from other projects in the office at the time. Fortunately, the simple form finally arrived at reads and works clearly. In spite of the many reductions and compromises made over the course of the commission, Kahn's intuitive grasp of the essentials of theater produced a successful building for dramatic performance. One can only regret the loss of the full commission, with its rich, resonant relationships of room, street, and human agreement.

Notes

Help in the preparation of this paper has been given by many people. In Fort Wayne, invaluable assistance came from Jon K. Gossett, Janet McCaulay, Milford M. Miller, and, particularly, Mr. and Mrs. G. Irving Latz, 2nd. In Chicago, Cengiz Yetken provided valuable information. John Zukowsky, Curator of Architecture, whose idea this exhibition was, has been very supportive, backed up by Luigi Mumford, departmental preparator. Robert Sharp has edited the text with his usual care; all errors and opinions are my own.

Unless otherwise credited in the notes that follow, all quotations from Kahn cited in this paper are from one standard source: Heinz Ronner and Sharad Jhaveri, *Louis I. Kahn: Complete Work, 1935-1974*, 2nd. ed. (Boston: Birkhäuser, 1987).

1. Joseph Burton, "Louis Kahn and the architecture of democracy: The Philadelphia Sesquicentennial Exposition of 1926" (Paper presented at the Annual Meeting of the Society of Architectural Historians, Chicago, Ill., April 15, 1988).

2. Louis I. Kahn, "Space, Form, Use – A Library," *Pennsylvania Triangle* 43, no. 2 (Dec. 1956), pp. 43-47.

3. Louis I. Kahn, "The value and aim in sketching," *T-Square Club Journal* (Philadelphia) 1, no. 6 (May 1931), p. 19.

4. Ibid.

5. Marshall Meyers, "Louis Kahn and the act of drawing," in *The Louis I. Kahn Archive*, vol. 1 (New York: Garland, 1987), pp. xxv-xxxviii.

6. Louis I. Kahn, "The room, the street, and human agreement," *Arts in Society* 9, no. 1 (1972), pp. 110-118.

7. "I had to give up the idea. . . . it's not worth any more than 10 cents [to provide parking] because a parked car is a dead thing, and so to glorify it is, for me, like

glorifying nothing. . . . So that's why I gave it up, because I really couldn't believe in it." Consider also the dismal entrance to the Kimbell Art Museum (Fort Worth, Texas) for the vast majority of visitors who arrive by automobile.

8. Cengiz Yetkin, conversation with the author, 1988.

9. Marshall Meyers, conversation with the author, 1973.

10. Compare with figure 605.182 in *The Louis I. Kahn Archive*, vol. 2 (New York: Garland, 1987), p. 327.

Selected Bibliography

Giurgola, Romaldo, and Jaimini Mehta. *Louis I. Kahn*. Boulder, Colo.: Westview Press, 1975.

The Louis I. Kahn Archive. 7 vols. New York: Garland, 1987.

Matott, Arthur J. "The Violin and the Violin Case, Louis I. Kahn's first theatre, The Community Arts Center, Fort Wayne." *Indiana Architect* 16, no. 5 (Sept./Oct. 1973), pp. 5-13.

Prown, Jules David. *The Architecture of the Yale Center for British Art*. 2nd ed. New Haven: Yale University Press, 1982.

Ronner, Heinz, and Sharad Jhaveri. *Louis I. Kahn: Complete Work, 1935-1974*. 2nd ed. Boston: Birkhäuser, 1987.

Scully, Vincent J., Jr. *Louis I. Kahn*. New York: George Braziller, 1962.

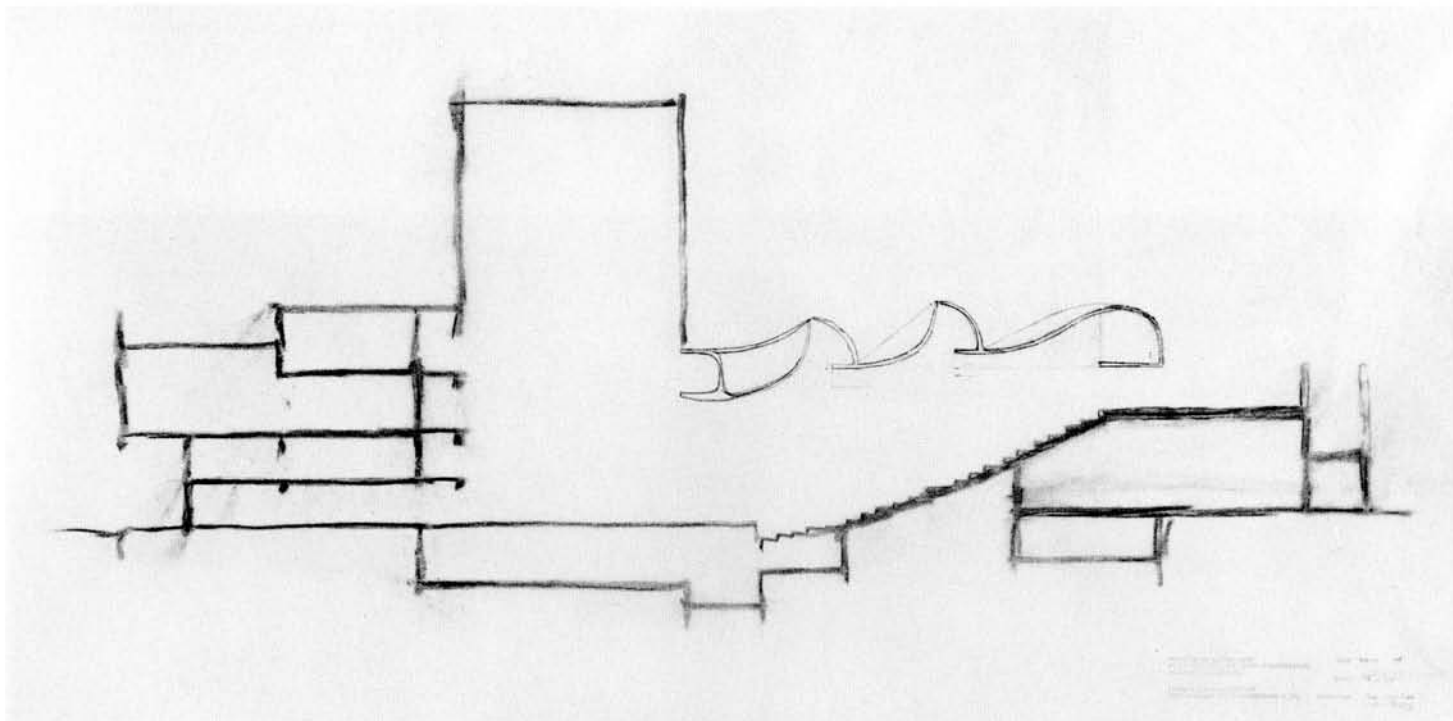


Fig. 16 Design sketch, "Violin Study," longitudinal section of a theater, Fort Wayne Fine Arts Center, April 1, 1968. Charcoal pencil on yellow tracing paper, 45.7 x 94 cm. The Art Institute of Chicago (1986.158).

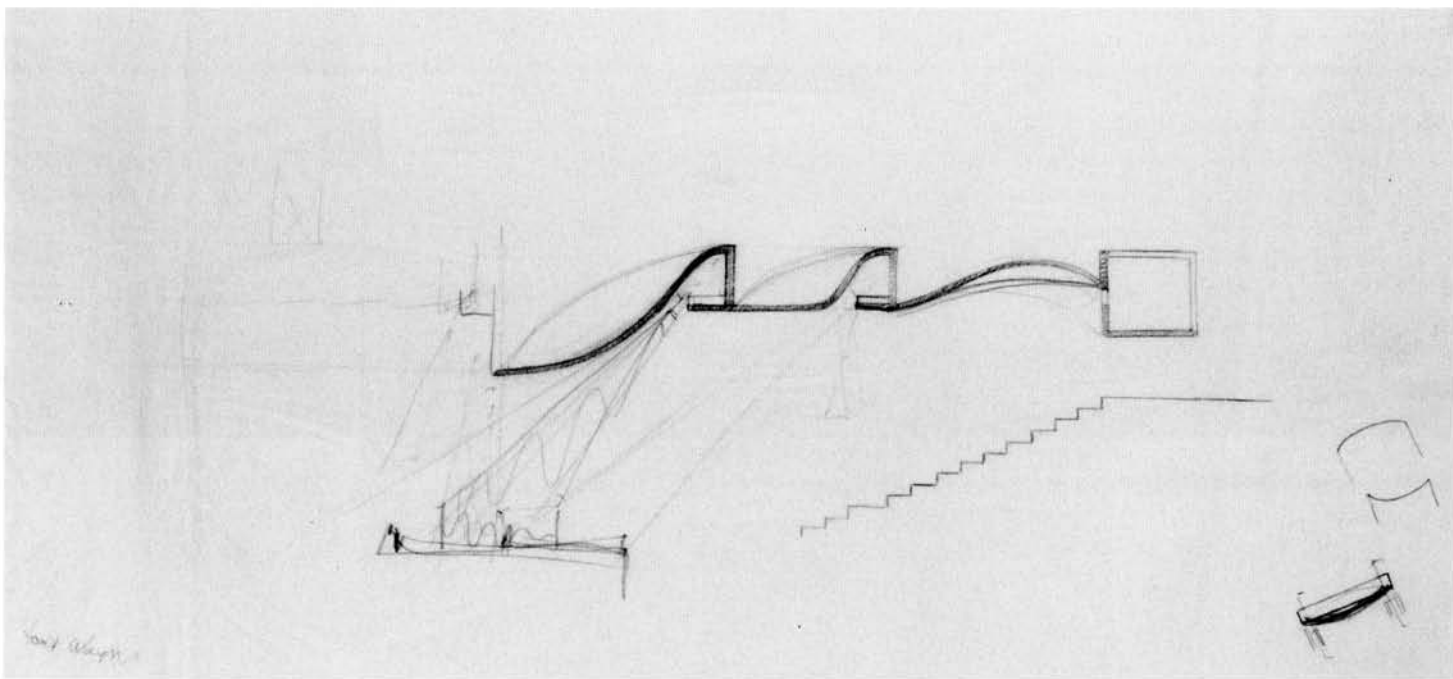


Fig. 17 Design sketch, "Violin Study," longitudinal section of a small theater, Fort Wayne Fine Arts Center, 1968. Pencil and charcoal pencil on yellow tracing paper, 30.3 x 64.8 cm. The Art Institute of Chicago (1986.162).

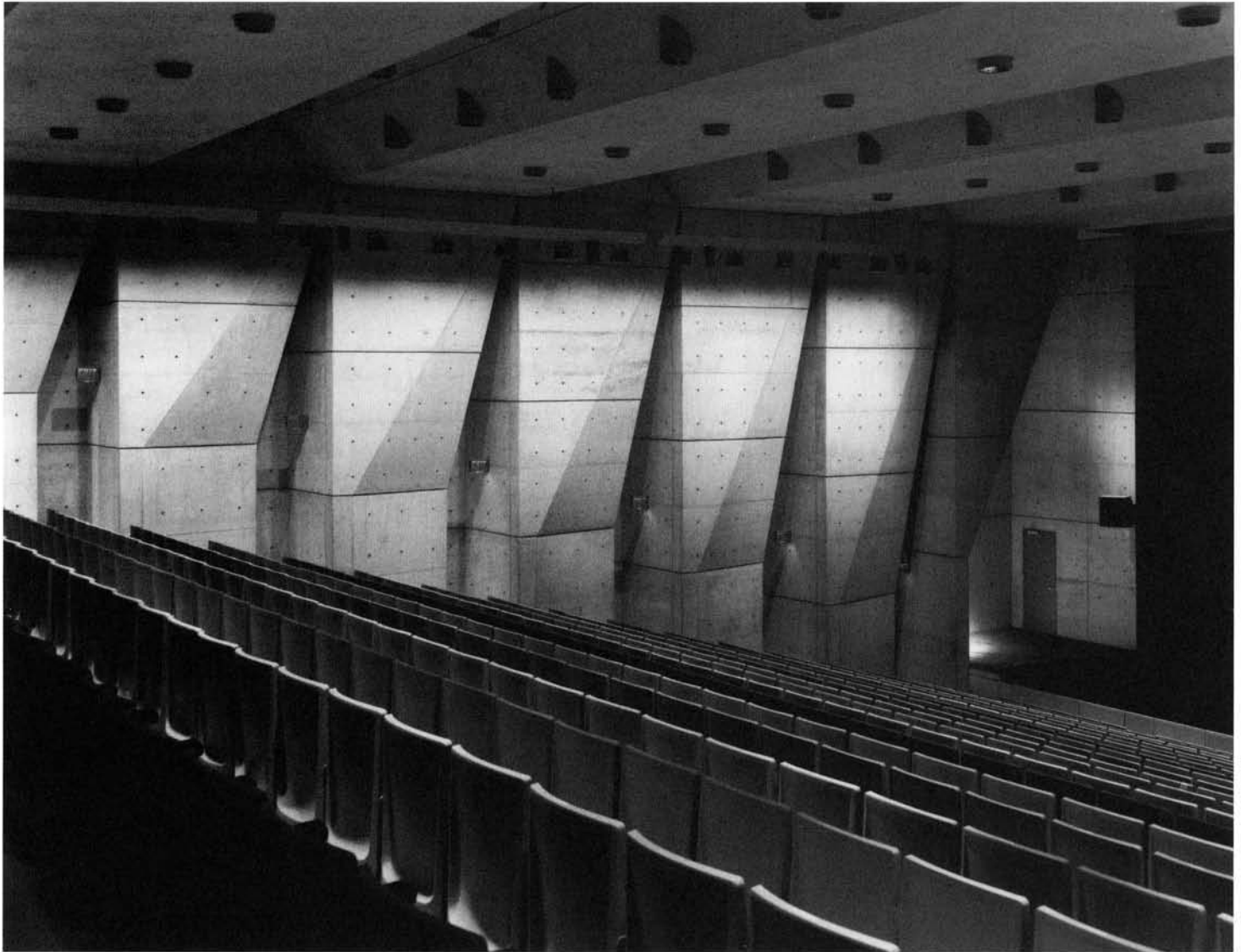


Fig. 18 Performing Arts Center, 1973; interior view of the theater. Photo: Craig Kuhner.

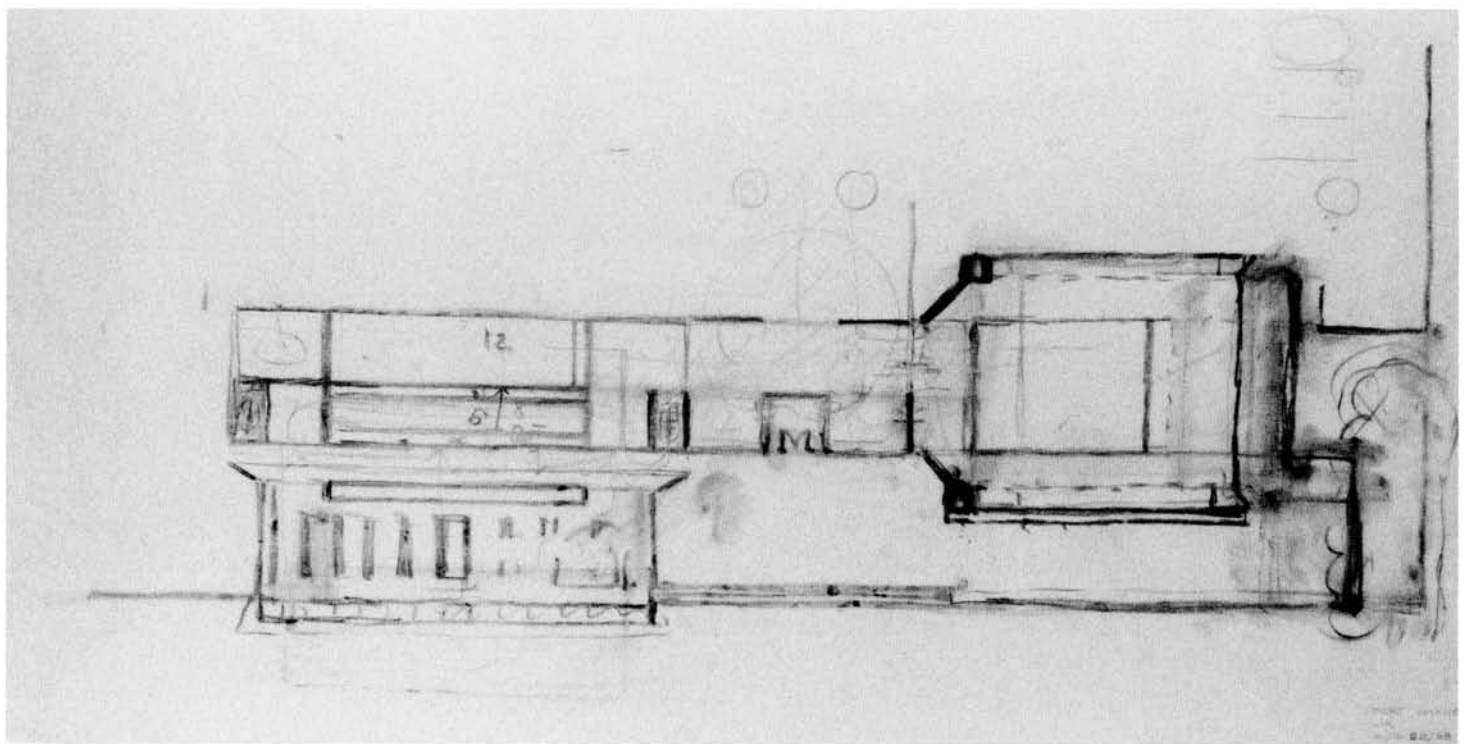


Fig. 21 Design sketch of the plan of an art school, with elevation study, Fort Wayne Fine Arts Center, Aug. 22, 1968. Charcoal pencil on yellow tracing paper, 45 x 88.4 cm. The Art Institute of Chicago (1986.163).

Trustees

Mrs. Walter Alexander
Mrs. James W. Alsdorf
Warren L. Batts
John H. Bryan, Jr.
Edward M. Cummings
Mrs. Robert O. Delaney
Mrs. Thomas H. Dittmer
Wesley M. Dixon, Jr.
Marshall Field
Stanley M. Freehling
R. Robert Funderburg
Michael Goodkin
Bruce Graham
Charles C. Haffner III
David C. Hilliard
Duane R. Kullberg
Lewis Manilow
H. George Mann
Philip B. Miller
John W. Moutoussamy
Thomas J. Pritzker
Joseph Regenstein, Jr.
Andrew M. Rosenfield
Arthur W. Schultz
Daniel C. Searle
Dr. William D. Shorey
Edward Byron Smith, Jr.
Barry F. Sullivan
Mrs. Thomas S. Tyler
Dr. Karl J. Weintraub

Life Trustees

Mrs. Ivan L. Albright
James W. Alsdorf
Mrs. Frederic C. Bartlett
Edward H. Bennett, Jr.
Mrs. Edwin A. Bergman
Bowen Blair
Mrs. Eugene A. Davidson
Mrs. Edwin J. DeCosta

William E. Hartmann
Neison Harris
John H. Johnson
Miss Louise Lutz
Mrs. Harold T. Martin
Mrs. Robert B. Mayer
Brooks McCormick
Andrew McNally III
William A. McSwain
Charles A. Meyer
Mrs. Paul Rosenbaum
Mrs. Wolfgang Schoenborn
Joseph R. Shapiro
Edward Byron Smith
Mrs. Theodore D. Tieken
Payson S. Wild
Arthur MacDougall Wood
William Wood Prince

Ex Officio Honorary Trustees

Eugene Sawyer
Acting Mayor, City of Chicago

Ronald D. Picur
Comptroller, City of Chicago

William Bartholomay
President, Chicago Park District

Jack Mathews
Treasurer, Chicago Park District

Ex Officio Trustees

James N. Wood
Director
The Art Institute of Chicago

Anthony Jones
President
The School of
The Art Institute of Chicago

Officers

Marshall Field
President of the Board of Trustees

Mrs. James W. Alsdorf
Stanley M. Freehling
R. Robert Funderburg
John H. Bryan, Jr.
Vice-Presidents of the Board of
Trustees and Treasurer

James N. Wood
Director

Anthony Jones
President
The School of
The Art Institute of Chicago

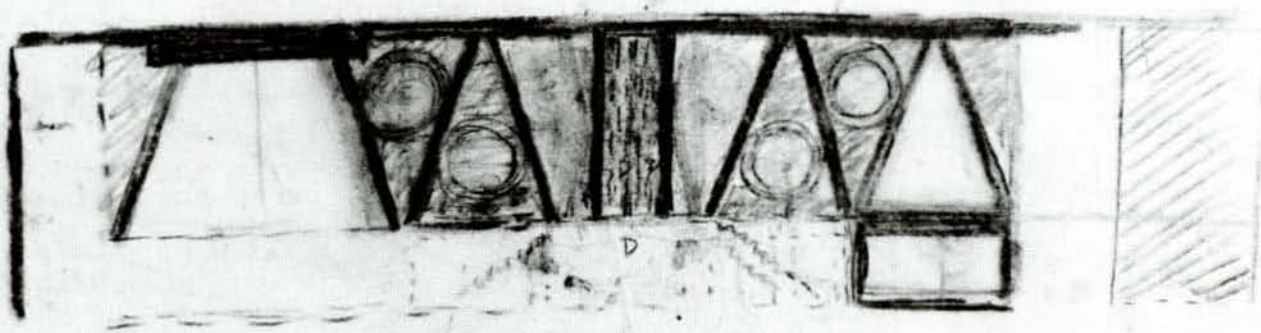
Robert E. Mars
Vice-President for Administrative Affairs

Larry Ter Molen
Vice-President for Development
and Public Affairs

Phyllis L. Robb
Secretary

©1989 The Art Institute of Chicago. All rights reserved.
Designed by Michael Glass Design, Chicago.
Printed by Rohner Printing Company, Chicago.

Photographs of the Fort Wayne Performing Arts Center ©Craig Kuhner.



Theatre below at Theatre E

L.L.

idea!
black is concrete
O is glass
D door

This is just to indicate
a possibility
concrete and glass
beam

It would be better to make the bays 20'
in length. This would simplify the building by 20'

but it would cost more