

FRANK LLOYD WRIGHT: CASE STUDY, KUNDERT MEDICAL BUILDING

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INTRODUCTION

Frank Lloyd Wright represents the architectural bridge between the Industrial Age and the Information Age. Moving from his birth in the craft era toward his death at the beginning of the information era, his life and life works are the bridge taking the architecturally initiated from one era to the other. In the almost 40 years since Wright's death, we have been exposed to his many built works and previously unrealized projects through the new construction and current research. While collectively we have been unable to view his work and life with any distance from our own space and time, most research concentrated on his early work of great distance chronologically and mentally from our own culture. New research reviews Wright's later work as it distances itself from our time. Reviewing the last two decades of his life, Wright's larger projects, the Guggenheim Museum and Marin County Civic Center, "sought to reaffirm the representational power of monumental public architecture in the face of growing corporate anonymity."¹ A small medical building in San Luis Obispo, California, suggests the oppositional forces at play. Just as craft conflicts with technology, Wright sought to reaffirm the home in the Kundert Medical Building instead of the business. The Medical Building represents a move away from both monumentality and corporate anonymity by relating the design to the home, medical care to home comfort, relative to the plan of Broadacre City and not to an urban environment.

As a figurative connection between the Industrial and Information Ages, Wright's life spanned the two. Born in 1867, he was a contemporary of traditionalists such as Lutyens and Pope, but the only architect of his generation to move into the Modernism of Corbu, b.1887, and Mies, b.1886. From his birth at the time of Morris and to his death at the time of IBM, Wright came of age in the era of craft but grew into the new century and modernism. His architecture is reflective of his growth from his Prairie beginnings into the renewed naturalness and representational directness of Fallingwater and finally into the monumentality of the Guggenheim. Wright's work moves from hand craft to the crafted detail of machine implementation.

This paper regards a project from the final decade of Wright's life and the apparent strife between craft and technology that accompanied its construction. From the raked brick of his early homes to the circuit panel of Broadacre City with its implication of craft at an infinitesimally small scale, Wright's designs move through the Industrial Age acquiring technology without rescinding craft.

The contradictions of craft and technology are apparent in the design and history of the Kundert Medical Building. The original design was representational of the humanizing

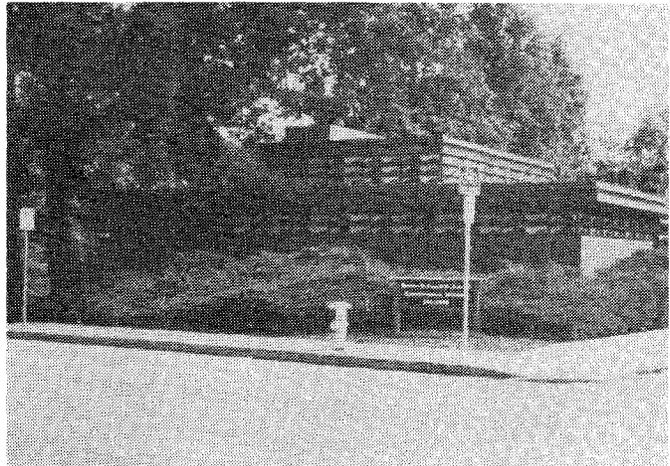


Figure 1: Kundert Medical Building, exterior, front

aesthetic of man/machine production as professed by Wright. The subsequent changes to the design reflect the financial ramifications of building in a modern society of mass production. Consequently the design changes, although accepted by Wright, resulted in a building which was not acknowledged by him.

Documented originally for local concerns and the relationship to the University, the case study of the Kundert Medical Building shows itself to be a bridge linking the progressive idea of a home-like work environment with craft and machine production. The building's history documents Wright's struggle with the production process, desiring a building built by hand and the necessity of a building built, in part, by machine.

BACKGROUND

Having attended medical school in Madison, Wisconsin, Karl Kundert was familiar with Wright's work and sought to own a Wright design. Initially Wright refused the project on the grounds that the lot was an average city lot. With help from a local architect, Kundert had a sketch made of the site and photographs taken documenting its siting on a creek and the views of the surrounding mountains. Kundert sent the package to Wright noting, "I realize that there are many details which may be difficult to work out by mail but I certainly will do everything in my power to make it as uncomplicated as possible."² A month later a letter to Kundert confirmed Wright's desire to do the building based on the site, "I love sycamore trees. They are so democratic. They go every which way they want."³

Kundert was the original owner of the property, and



Figure 2: Kundert Medical Building, exterior, entry

Fogo, an ear, nose and throat specialist, was his tenant. Due to the technical nature of their practices, both men were involved in the design process with trips to Taliesin and many instances of private correspondence. In the summer of 1954, Kundert wrote to Masselink, Wright's secretary, at Taliesin in Spring Green, suggesting that he would be able to meet Wright there because he was planning a trip to New York in September, "If Mr. Wright has definitely decided to design the project I would like to see him at Spring Green if he is available at that time."⁴ The time frames of architectural projects of the time period were dependent on the schedules and travel times of the participants. Masselink replied on September 15th, apologizing that Wright had not had the opportunity to take up the problem, suggesting instead that Kundert come to Taliesin West after November 15th. The project originally suggested in 1952 was not designed for two years.

In the fall of 1954, Kundert and his tenant, traveled to Taliesin West to discuss the practical aspects of their separate practices in a seemingly programmatic discussion. Kundert fondly recalled Wright's reference to the two doctors as "the boys," while explaining his philosophy to them. No questions were asked regarding the nature of the doctors' practice or physical needs. When Kundert received the drawings by mail a short time later he was disconcerted to see that his tenant's office was in the main area of the building while his very small office was in the low, small wing. The original Usonian structure placed the main functions within and adjacent to the large main

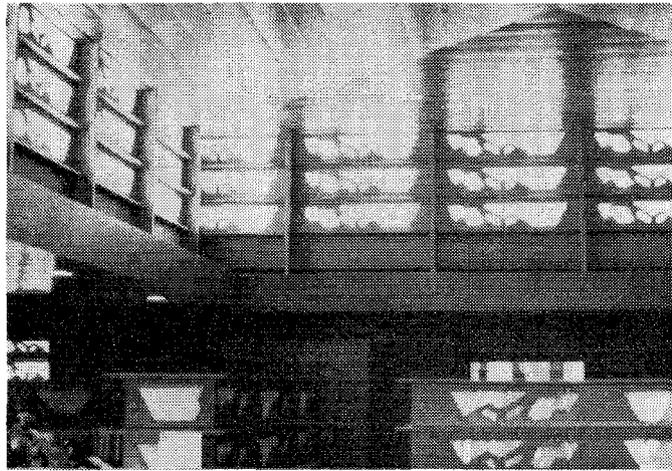


Figure 3: Kundert Medical Building, interior, waiting room

space. The small wing, as in the children's bedroom wing of the Usonian Automatic House, was meant to be occupied by ancillary uses. In addition the design had missed some important rooms for the ophthalmologist's practice. Kundert hired an architectural student to rearrange the rooms without changing the exterior or public area. Some months later the plans were revised by Wright exactly as the student had drawn. This example of remote architectural practice would have taken a short amount of time today with the use of modernized computer graphics, e-mail, fax and the internet allowing for more interaction between architect and client.

Wright designed a long, one-story clinic with the shared features of his Usonian houses; "a plan based on the unit system, a harmonious and consistent use of materials, and a merging of indoors and outdoors through the inclusion of glass doors and windows and a garden terrace."⁵ Originally conceived in Usonian Automatic blocks, the lack of construction facilities, craftsmen and high cost caused the material to be assessed for over a year. Correspondence via airmail went back and forth between Wright and Kundert concerning the conditions of the site and Kundert's design requirements. In a letter to Wright dated March 21, 1955 Kundert states;

*Could you give us some indication of about how long the working drawings will require. As I recall from a conversation with Mr. Masselink that you are to leave Phoenix on May First. If it is at all possible I would like to wind up the plans before you return to Wisconsin.*⁶

The drawings would not be complete for almost an entire year. Originally the structure was to have been 1800 square feet at a budget of \$35,000. The structure eventually cost \$55,000 to build and grew to 2500 square feet as recorded. Unknown to most involved, the building size was increased during construction with a few extra rows of brick.

CONFLICT OF CRAFT AND TECHNOLOGY: CONTRACTORS

Wright's dislike of contractors is well documented, having written, "...my lot was cast with an inebriate lot of criminals called builders; sinners hardened by habit against every human significance except one, vulgarity."⁷ While he suggested choosing a contractor by looking at his past work, he

noted that Adler, of Adler and Sullivan, said he would rather give the commission to a crook who knew how to build than to someone who did not know good work. His specific reaction to the proposed contractors on the Kundert Building was quite the opposite. In the summer of 1955, Kundert traveled to Taliesin bringing along the two contractors that were vying for the job, Charles Wiswell and Ted Maino. Wiswell remembered that, "His comment was that he didn't want the workmanship to interfere with his art," as opposed to "most architects, who are afraid your craftsmanship may not be up to their design."⁸ He continued that Wright disliked contractors so much that he suggested that Kundert hire illegal aliens to build the Medical Building. It was thought that Wright chose Wiswell to build the Medical Building due to his youth and lack of experience.

USONIAN PLAN

Contrary to his own ideas regarding the application of historic ideas and motifs to modern buildings, Wright did indeed use his own past to invoke designs for new commissions. Picking from the designs of his Usonian house plans, he created a design for the Medical Building much like that of the residential commissions on which he was working. The Gerald Sussman Usonian Automatic House design, of 1955, bore remarkable resemblance to the original Kundert Medical Building study. Both designs use the block construction to denote cliff-type structures resting above suggested views. In addition both designs built up to a raised, rectangular portion, denoting the central space, at odds with the triangular protrusion of the exterior decks. Reperitious block-sized windows to the ceilings completed both designs.

In 1954 Wright wrote about the requirements for the Usonian house which aptly describe the design of the Medical Building, "We must have as big a living room with as much vista and garden coming in as we can afford, with a fireplace in it, and open bookshelves, a dining table in the alcove, benches, and living-room tables built in; a quiet rug on the floor."⁹ He continues to define the Usonian house, "...made a single spacious, harmonious unit of living room, dining room and kitchen, with appropriate entry conveniences. The sleeping rooms were convenient to baths approached in a segregated, separate extended wing and the whole place was folded with sunlight from floor to ceiling with glass."¹⁰ The Medical Building was centrally defined around the main waiting area, with fireplace and custom seating. The kitchen of the Usonian house was translated as the reception and secretarial area adjacent to the entry door.

Per Wright's design the material of the exterior, block, moved freely to the interior as the material from the interior walls moved to the outside, establishing intimate harmony on the interior of the building and with its site. The place of the housewife in the Usonian house as the central figure, "more hostess 'officio,' operating in gracious relation to her own home, instead of being a kitchen-mechanic behind closed doors," was replaced in the Medical Building with the open receptionist office. Open to the waiting room and entry, the receptionist greeted and controlled the open areas as well as the private wing. "Consequently, in the Usonian plan the kitchen was called 'workspace' and identified largely with the living room,"¹¹ as is the relationship between receptionist and waiting room.

Wright established a standard vocabulary of furniture designs which could be used in projects of a similar nature.¹² The

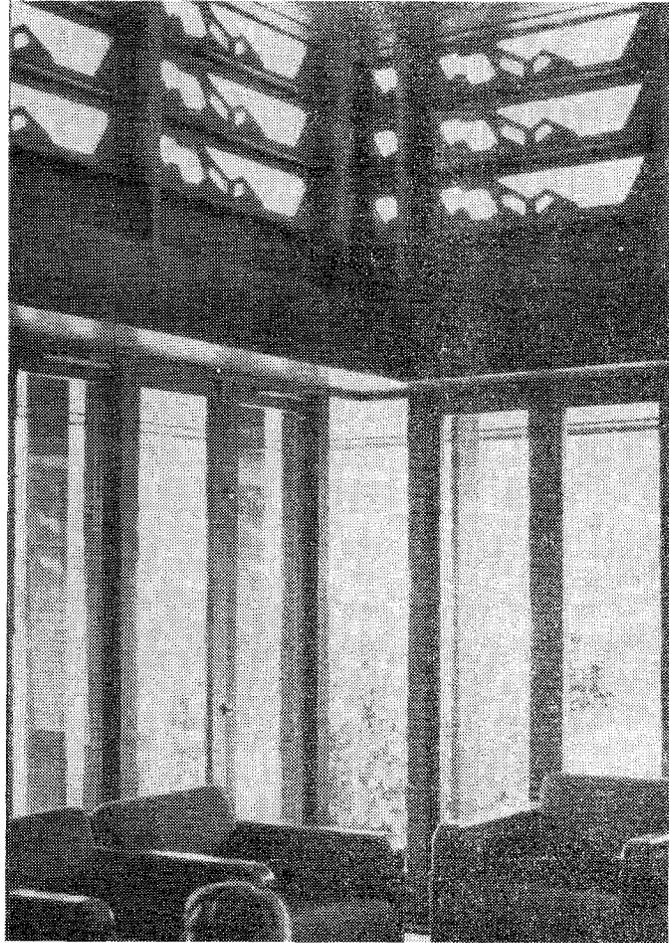


Figure 4: Kundert Medical Building, interior, waiting room

original seating system was individual leather and wood units that could be hooked together to form sofas. The accompanying hassocks could be moved to the small tables or alongside the sofas. All of the furniture and built-ins were of Philippine mahogany. The waiting room furniture while detailed by Aaron Green, Wright's representative in California, was the same as furniture pieces used in other Wright buildings of the time.

USONIAN AUTOMATIC BLOCKS

The Usonian Automatic block was designed by Wright as a building method of economy for the Usonian house. The block under development by Wright from 1949, by 1954 was already in effect in some houses that had been constructed. The block was to be molded on site and was meant to reduce the heavier construction costs, labor in particular. Local contractors advised Kundert against trying to manufacture Wright's blocks, and he proceeded to look for a machine made block that would be closest in specification to the Usonian Automatic block. A Mr. Dubbs devised a way, after receipt of the drawings to make the Usonian blocks by machine causing Kundert to write in a letter dated September 15, 1955:

Using the Usonian [sic] type block would prove to be excessive in cost. I have spent some time with Mr. Dubbs and if it is possible to use his type of block I feel that we could go ahead. Although \$49,500.00, is more than we anticipated, I feel that the result would be worth it

and I think I can make arrangements to finance the building at that cost. However that certainly is the top-side limit.¹³

On the 27th of that month Wright suggested that there was a:

*...conspiracy concerning the Dubbs block. Dubbs came to Phoenix with a scheme for making the Usonian block by machine. This is the first we have heard of him since after giving him drawings with which to experiment. But use his block if you approve it. I cannot say because I have not seen it.*¹⁴

Wright's suggestion of conspiracy indicates his own fear of the industrial production methods. The Dubbs block while similar to the Usonian Automatic block offered the client a way to circumvent his direct interaction with the construction process. While attractive to the client, the mass production blocks severed, for Wright, his ideals regarding the contact of the building with its natural site and the construction means intrinsic with the site.

On December 5, 1955 Wiswell wrote to Wright regarding the use of standard block to replace glass inset block on the Northwest elevation. Green wrote to Wright on December 21st stating;

*...I am checking with a firm from here to provide them a bid on the precast block units with glass inserts and believe we can do that much more economically and efficiently if the 'grid' of glass units can be cast in large panels, approximately one wall at a time, considering the lantern above roof, and raised into place. It would then be one structural unit to support the roof. Would such a technique be satisfactory with you?*¹⁵

On January 14th Green noted in a letter to Wright:
*...I have taken a preliminary quotation on pre-casting the glazed block units in the 'lantern' and the corridor wall in large sections that could be raised into place. The quotation is \$3,800.00 delivered to San Luis Obispo. It seemed that there might be advantage particularly in the lantern units, that the large unit might better engineer as a beam over the glazed doors of the waiting room, and further that it might eliminate the masons and thereby be cheaper. The contractor felt that it would be a cheaper method. Would it be satisfactory to you?*¹⁶

Adjacent to this note was Wright's hand written large "NO." Wright responded vehemently to the use of a prefabricated panel because the idea was foreign to the idea of the Usonian block: the block was designed as a complete system of simplicity to be put together by a client; prefabricated elements were limited in the Usonian homes to the kitchen and bath units; the prefabricated lantern would have changed the structural integrity of the design as a whole. Being pushed to amend his design away from the hand initiated craft of the user/builder, Wright refused to support all use of tectonic means of simplification of construction. Due to this the building construction was delayed over a year by the inability of the client, architect and contractor to reach agreement on the means of construction and their structural integrity. Wright was unable to provide structural calculations for the Dubbs blocks as a replacement for the Usonian Automatic Blocks as indicated on the city's plans. He insisted that the blocks would support the structure. His word was not sufficient to the bureaucracy of the city or loaning banks

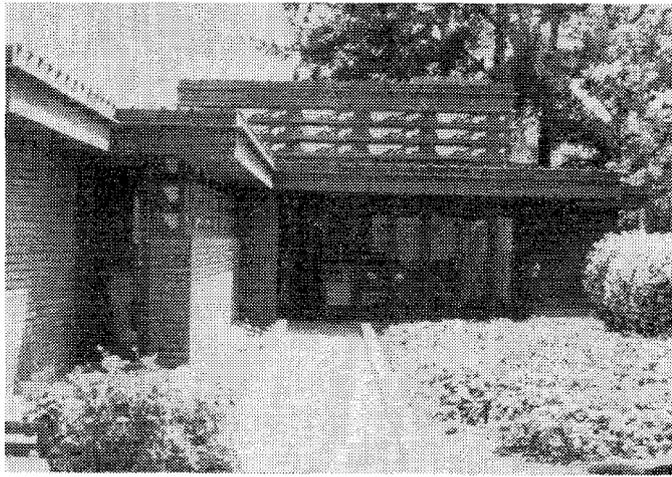


Figure 5: Kundert Medical Building, exterior, creekside

who would not divulge funds without a cost estimate.

On February 14, 1956 Kundert had still not received the engineering calculations and sent a telegram to Wright requesting them and additional sets of plans. Wright responded by saying the additional sets were in the mail and that "Computations will be sent soon,"¹⁷ although engineering calculations could not be computed on that particular design.

Sometime in the month of February, Wright made a significant change in the design of the building. Wiswell, the contractor, described the events of a meeting in San Francisco with Wright, Kundert and Green. Though Wright had been contacted repeatedly for calculations as required by the building department for the permit, his response had been that the building would stand up. Kundert arranged the meeting to work through the problems of the building material; lack of calculations based on the unknown structural qualities of the block and lack of a cost estimate based on the unknown cost of the block, the cost estimate being required by the bank. As they sat around a table Wright asked about the problem. As Wiswell stated the problem directly, Wright became visually upset. Finally Wiswell suggested that the building material be changed to a common material with known structural qualities and cost factors. At this point Wright stomped out of the room and down the stairs. Wiswell turned to Kundert and suggested that they leave, Green told them to relax, that Wright would return. In a few minutes Wright returned and sketched the amended design using red brick instead of Usonian block. As noted on other design projects from the office, "it was typical of Wright's pragmatic attitude to change the constructional system if that was the only way to realize the work."¹⁸ Wright eventually felt the finished building was not as he had designed and subsequently never visited the site or the finished building.¹⁹

Contrary to Judith Dunham's account regarding the change of building material from Usonian block to brick, "Wright declared the building would be much more effective in raked brick, which, he confided, had been his original choice."²⁰ Wright felt betrayal at the hands of industrial production methods and the bureaucracies that supported those means. The building was eventually constructed in raked brick in order to satisfy the bank and city. As this solution was not as he had conceived, Wright was unable to acknowledge the finished building as built and finished in red brick in 1956.

CONCLUSION

Through the specific study of the Kundert Medical Building, one can view Wright's growth and pattern of development into the Information Age through modified use of technology through craft. Wright sought a technology system and standardization on a project by project basis. He desired from advanced technology the ability to standardize his own architectural vocabulary at a time when standardization conflicted with the individuality of his designs and the delivery of those same systems. Today the Information Age offers the possibilities of an individualized means of prefabricated vocabulary unavailable in Wright's time. While the technology is available to augment the expressive freedom sought by Wright, it is currently in use on only limited projects.

Reviewing the last decade of Wright's work, the large scale projects move away from the detail of craft into the realm of machine production. As representational of the power structure, their detail is reflective of their size. The Kundert Medical Building, as a small building, is a link to both the history of Wright's fascination with craft and his view to the future of machine production. Aptly, Wright questioned the knowledge and authority of the builder. Having chosen the contractor of least experience, he had to have been daunted by the strength of character shown by Wiswell when he questioned Wright's construction methodology. This young, inexperienced contractor changed the design of the building from technologically innovative to the craft of the turn of the century. Originally designed to be built by the labor of the hand, Wright accepted a manufactured block as a substitute for the craft of hand. Eventually the design fell back into the use of a material consistent with Wright's Prairie beginnings; brick. While an example illustrative of the conflict of Wright and machine production, the final design relies on Wright's early work in order to complete construction. While similar to a Usonian House in conception, the Kundert Medical Building is not only not a house, but the materials inherent in Wright's thought process for the Usonian House are not expressed and pieces of

the total were manufactured off-site. Unhappy with the resultant building design, less craft than he envisioned and less technology than he designed, Wright's failure to acknowledge the Kundert Medical Building illustrates his unease with the final product.

NOTES

1. Neil Levine, *The Architecture of Frank Lloyd Wright* (Princeton: Princeton University Press, 1996), xviii
2. Correspondence # K113B06, Frank Lloyd Wright Archives, Accession # 860202, Job # 5614, Getty Trust, Santa Monica.
3. Quote from George Hasslein. Undocumented in Getty Trust collection of correspondence related to the project. Original lost in a fire that consumed all of Kundert's correspondence.
4. Correspondence # K114B02
5. Judith Dunham, *Details of Frank Lloyd Wright: The California Work, 1909-1974* (San Francisco: Chronicle Books, 1994), 112
6. Correspondence # K118B07
7. Frank Lloyd Wright, "The Natural House," *Frank Lloyd Wright Collected Writings*, Volume 5, 1949-1959, Bruce Brooks Pfeiffer, Ed. (New York: Rizzoli International Publications, Inc., 1995), 79
8. Oral interview with Charles Wiswell, Contractor of the building, September, 1995
9. Wright, 105
10. *Ibid.*, 109
11. *Ibid.*, 117
12. Morrison Heckscher and Elizabeth G. Miller, *The Architect and His Client: Frank Lloyd Wright and Francis W. Little* (New York: The Metropolitan Museum of Art, 1973).
13. Correspondence # K120D04
14. Correspondence # K120E05
15. Correspondence # G158E07
16. Correspondence # K123A06.
17. Correspondence # K123C08
18. Kenneth Frampton, "Modernization and Mediation: Frank Lloyd Wright and the Impact of Technology," *Frank Lloyd Wright Architect*, Terence Riley, ed. (New York: The Museum of Modern Art, 1994) 62.
19. Oral interview with Charles Wiswell, Contractor of the building, September, 1995.
20. Dunham, 115.