# NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-900

USDI/NPS NRHP Registration Form (Rev. 8-86)

# JACOBS, HERBERT AND KATHERINE, FIRST HOUSE

OMB No. 1024-0018 Page 1

# United States Department of the Interior, National Park Service National Register of Historic Places Registration Form 1. NAME OF PROPERTY Historic Name: Jacobs, Herbert and Katherine, First House Other Name/Site Number:

# 2. LOCATION 441 Toepfer Avenue Street & Number: Not for publication:\_\_\_ City/Town: Madison Vicinity:\_\_\_ State: Wisconsin County: Dane Code: 025 Zip Code: 53711 3. CLASSIFICATION Ownership of Property Category of Property Private: Building(s): Public-Local: District: Public-State:\_\_\_ Site: Public-Federal:\_\_\_ Structure: Object: Number of Resources within Property Contributing Noncontributing buildings \_\_\_ sites \_\_\_ structures \_\_\_ objects

Total

Number of Contributing Resources Previously Listed in the National Register: 1

Name of Related Multiple Property Listing:

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# 4. STATE/FEDERAL AGENCY CERTIFICATION

As the designated authority under the National Historic Pres that this nomination request for determination of registering properties in the National Register of Historic Pla requirements set forth in 36 CFR Part 60. In my opinion, the National Register Criteria.	eligibility meets the documentation standards for aces and meets the procedural and professional
Signature of Certifying Official	Date
State or Federal Agency and Bureau	
In my opinion, the property meets does not meet	the National Register criteria.
Signature of Commenting or Other Official	Date
State or Federal Agency and Bureau	
5. NATIONAL PARK SERVICE CERTIFICATION	
I hereby certify that this property is:	
<ul> <li>Entered in the National Register</li> <li>Determined eligible for the National Register</li> <li>Determined not eligible for the National Register</li> <li>Removed from the National Register</li> <li>Other (explain):</li> </ul>	
Signature of Keeper	Date of Action

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# **6. FUNCTION OR USE**

Historic: Domestic Sub: Single Dwelling

Current: Domestic Sub: Single Dwelling

# 7. DESCRIPTION

Architectural Classification: Modern Movement: Wrightian

Materials

Foundation: Concrete

Walls: Wood and brick

Roof: Asphalt and Gravel Current: Rubber Membrane

Other:

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## **Describe Present and Historic Physical Appearance**

Frank Lloyd Wright's house for Herbert and Katherine Jacobs was built in 1937 on two lots in the Westmorland subdivision of Dane County, Wisconsin, just west of the city limits of Madison, the capital of Wisconsin. The subdivision, now engulfed by the City of Madison, is located on a ridge running southwest to northeast and sloping to the southeast toward Lake Wingra and the University of Wisconsin arboretum. Located in the northwest corner of a double lot on Toepfer Avenue, the small house of 1550 square feet has walls of boards in some places, solid brick in others and glass doors in others, the latter facing the rear of the property from the large living room and two modest sized bedrooms. The walls inside and out rest on a concrete pad laid over sand. The flat roof is layered above interior spaces that are respectively 7 feet 3 inches—bedrooms and associated halls, 9 feet 4 inches—living room and associated spaces and hallways, and 11 feet 7 inches—kitchen and bathroom. It is the first of a long series of residences designed by Wright for average persons of modest means that he called Usonian houses.

The Jacobses picked the Westmorland subdivision for its then rural character and the relatively inexpensive price of lots. Wright forced the young couple to give up a lot on the west side of Toepfer for two lots on the east side of the street, which gave the house a better orientation. The architect took full advantage of the site. From the rear of the lot there were then views to the east and south across open land southeast of the Jacobses' lots. Downtown Madison was an easy commute in those days, the capitol situated exactly three miles to the northwest.

Because of the southeast slope of the two lots, Wright had the contractor construct a platform of earth on which he located the house at the northwest corner of the lots. He envisioned the platform carried west and south from the house reflecting the L-shape of the house itself. Then he proposed a garden three feet lower than the house platform. Surrounding both level areas he called for stabilizing the slopes of the platforms with ground cover until the natural slope of the land was regained. What was actually built was only the L-shaped platform for the house. The Jacobses never got around to constructing the other features and left the rest of the sloping land in its native form. Wright had also suggested a board fence completely around the property but Herbert Jacobs never built more than a small section of it running south from the house.

The house was quite out of the ordinary for the period. Wright refused to follow the historic styles and insisted upon making it stylistically his own, which at this time is perhaps best described as an organic form of the kind of simplified, if not ascetic modernism that was gradually becoming established in Europe by the late 1930s. Wright's style, as revealed in the house, emphasized geometric forms—primarily rectilinear ones—which he had introduced in his own work as early as the middle of the first decade of the twentieth century, thus anticipating European interest in geometric modernism. Wright gave the house an organic touch by using natural materials—especially wood not disguised by paint—and by opening the building to nature. The latter he accomplished by specifying walls of glass on two sides at the rear of the house supported by a concrete pad, which begins as the floor inside the house and continues under the glass as a terrace outside. This effect was enhanced by also carrying the ceilings visually and actually beyond the glass walls in the form of wide soffits beneath the overhanging flat roofs.

There is no true basement nor are there foundations. The concrete pad that supports everything

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above it was poured over a tamped sand base. The heating system consisted of wrought iron pipe laid in the sand and welded together to form concentric circles of heating pipe warmed by steam. The heated pipes were to chase any frost from the sand and warm the house by heating the slab. This heated the air above the slab, which rose allowing cooler air to fall to the floor. Wright called this gravity heat because of the convection involved. To house the steam furnace there is a small basement under the kitchen and bathroom, and as a result, these are the only rooms to have wooden floors, originally covered by linoleum. A narrow staircase between the two rooms provides access to the basement. Overall the basement is approximately 6 feet by 17 feet. The concrete slab was troweled with straight lines producing a module of 2 feet by 4 feet. Wright called this method of subdividing the slab, a "unit system" which he claimed gave him control over scale and proportion. Otherwise the surface of the slab was a finely textured concrete intended only to be polished with wax. A border of row-lock brick, all of which is outside the house, goes entirely around the slab. In some places the slab stopped at the outside wall; in others it extended well beyond the wall to form walks and a terrace.

There is no garage. It is replaced in the Jacobs house with a roofed space open on two and onehalf sides, its floor gravel. Along its south side, Wright provided a solid brick wall, which serves to guide the visitor to the front door at the inner corner of the carport. The wall also supports one side of the carport roof, which is cantilevered northward from it. A thickened part of the wall holding down the south edge of the cantilevered roof is balanced on a fulcrum of metal and wood disguised as a screen on the north side of the entrance walk. Brick walls frame two sides of the bathroom and lend support to the carport roof and form part of the exterior wall of the house. In several other places there are pieces of brick wall separating inside from outside and giving support to the roof. The brick is laid according to a system that Wright invented early in the century. The horizontal joints are laid with ordinary cement mortar deeply raked. The vertical joints are stopped flush with the outer surface of the brick; the mortar colored to match the brick. Various authors believe that the reason Wright did this was to emphasize the horizontal character of his designs, even when there was nothing horizontal about them. Others believe that Wright's purpose was to emphasize the surface of the wall-textured to be sure by shadow lines in the raked joints-in order to render it visually a unified geometric mass, rectilinear in most cases as here.

Elsewhere the walls are mostly a composition of layered boards that Wright apparently invented. His aim was to eliminate traditional framing with its painted weather boards on the outside and lathing, plastering and painting on the inside. He also believed that the thin sandwich walls he invented would be cheaper and faster to erect than walls of standard balloon framing. Wright's walls consisted of interlocking pine boards standing on end, the side next to the floor grooved to fit into the upper edges of zinc strips let into the unit system grooves troweled into the concrete slab. This thin wall was then covered with building paper, and over it was applied on each side, a layer of 9½-inch wide boards arranged horizontally and held to the vertical boards by 3 1/4-inch redwood battens screwed to the center boards. The wall would be treated to several coats of linseed oil on the outside and waxed on the inside. The brick walls were treated similarly in that both sides were the same. The inside and outside of the walls, whether brick or wood, were identical—a "thoroughbred" as Wright put it. In the language of nineteenth century rationalism, the materials were revealed, not hidden. Most of the board walls that served both outside and inside had a band of narrow horizontal windows at their tops just under the ceiling and soffit.

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There are a few conventional windows in the house. Between two brick walls in the living room there is a vertical window wall subdivided into rectangular panes. Behind the dining alcove, there is a bay window with outward opening casement windows. For the outside walls of the living room and two main bedrooms, Wright designed floor-to-ceiling doors of plate glass set into narrow rectangular frames. These are nine feet high in the living room and seven feet high in the bedrooms. When opened in summer, the barrier between inside and out is dissolved and the two realms made one. The effect is enhanced because the floor of the slab inside and out is at the same level and thus is perceived as being continuous from inside to outside, which in fact it is. The same characteristic occurs where the ceiling is carried outside as the soffit of the boldly overhanging flat roof.

There are in fact three levels of flat roof. Over the primary wing of the house, which includes the living room, adjacent hall, entry walk and carport, the roof is approximately 10 feet above the slab. In the bedroom wing and over the bay window of the dining alcove the roof is about 8 feet above grade. Over the kitchen and bathroom, the roof reaches a height of nearly 13 feet. This considerable height permits windows high up in both the kitchen and bathroom for illumination and ventilation. It also contributes to the dramatic pile up of form as seen from the street. Also part of Wright's drama are the roof overhangs, which in some places are as much as 6 feet, scaling down in others—as along the north side of the house—to 1 foot. Some overhangs, such as the 2- and 3-foot wide ones along the south facing bedrooms, can be attributed to the need to block the summer sun, but elsewhere they are largely unjustified except in terms of aesthetic excitement. The most dramatic, of course, is the carport roof, which soars 9 feet into space, though it is not exactly an overhang, as it does not begin at the house proper but instead at the brick wall, which projects toward the street from the house. Wright got into an argument with Bert Grove, the contractor, when he realized that as seen from the street, the brick mass rising from the bathroom and kitchen also required a wide overhang for dramatic effect. He eventually gained his way with Grove by lowering the walls around the bathroom and kitchen by several courses, saving enough money that Grove consented to add a 3-foot overhang on the north side of the kitchen-bathroom block. Most spectacular of the true overhangs is the one at the southeast corner of the living room, which projects 8 feet. The 4-foot overhangs above the glass doors of the living room are also spatially effective, particularly at the southeast corner where the overhang reaches 6 feet from the corner. According to Wright, the deep overhangs also were intended to suggest the sheltering character of the house.

An interesting and experimental framing system was developed by Wright for the flat roof of the Jacobs house. Instead of using 2x12s to span the interior spaces, he specified that the narrow edges of three 2x4s be set one on top of the other to produce the same 12 inches of depth. Then he specified that each 2x4 in any group of three should end at a different distance beyond the outside walls. The result was an intriguing reverse stair step configuration. Wright also had wedges inserted between the 2x4s in the center of the roof to force water to run off the asphalt and gravel roof at its edge, where it would fall naturally without benefit of gutters and down spouts. This was possible because the wide eaves directed the overflow far from the house, and also because the water could not get into the foundations since there were none. This system is now almost standard in southern states where, because there is no danger of water freezing under the slab, nearly all houses are built on concrete slabs.

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The house is laid out in the form of an L. The living room wing parallels the street and is set back from the western property line exactly 30 feet. The bedroom wing parallels the north property line, its closest approach being 5 feet measured from the roof overhang. Inside the house, most of the north side of the bedroom wing is a hall that ends at the third bedroom, a room that—for unknown reasons—Wright insisted on calling a study. To avoid the monotony of a long straight hall, Wright introduced a double jog in the hall after the first bedroom. Although the hall then continues uninterrupted to the door of the "study," Wright widened the hall to 7 feet just before the study, partly to provide room for a door leading to the garden. This 7-foot square widening of the hall also gave him an excuse to label the area a "shop," although there is no evidence that Jacobs had asked for such a space in the house.

In an apparent effort to avoid rectangular rooms, Wright continually varied the position of the wooden and brick walls, though their positions were always regulated by his module, or as he preferred, "unit system." While generally the wooden walls were centered on the grid lines so that their bottoms could be fixed to the zinc strips in them, there were a few instances where this rigidity made no sense even to Wright. In these cases he allowed walls to be placed at half the module, as for example the back wall of the closet in the third bedroom or study. The result was to produce rooms of irregular shape. Even the first bedroom, which at first glance appears to be a 12 by 12-foot square, is actually irregular in shape because of the closet, which projects into the room from the wall next to the hall. Thus it becomes difficult to discuss in a meaningful way the dimensions of any room. For example, the living room appears to be 29 feet long by 18 feet wide, but in fact one corner, measuring 5 feet by 6 feet, is lost to a jog in the brick wall. In the opposite corner, 4 feet by 8 feet is lost to the dining alcove, itself 4 feet by 12 feet but somewhat larger because it uses part of the hall leading to the kitchen, bath and bedrooms. These irregular rooms, plus the absence of doors in the public part of the house, except for the bath and stairs to the basement, also contribute to a varied but integrated spatial continuity within the house.

Part of the involved spatial character begins outside the house, where the walk from the street passes under the carport roof, then turns right and opens into a three-foot-wide hall leading to the living room. This restricted entryway then suddenly explodes spatially as the visitor passes the chimney mass and finds a great room revealed on his left, its wall of glass pulling his vision toward the light and space of the outdoors beyond the wall. Entering a room in this way, along one side of the room, was a standard device used by Wright to dramatize the entry into his larger rooms and can be traced in his work back to 1900, if not earlier. Its origins go back to his first teacher, Joseph Silsbee, a master of the picturesque massing and spatial complexity in residential buildings. From Silsbee, Wright also learned to avoid central entrances into rooms and other devices of architectural classicism, which tended to rationalize architecture and diminish its mystery and romanticism. As a result, even the small Jacobs house is full of tantalizing diagonal glimpses and full-blown spatial assaults on the visitor as he moves through its complexly organized spaces.

The kitchen, 7 feet by 8 feet, has no windows except the ones in the clerestory high above. It is not totally enclosed, however, for it lacks a wall on the side facing the dining area, and through this opening and the bay window behind the dining nook the cook can glimpse the garden. The kitchen was efficiently arranged with cabinets, counters, sink, refrigerator and stove. At

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Wright's insistence, the bath was treated to an expensive corner tub, apparently intended to visually enhance the otherwise small rectangular room. Opposite the bath was a 6-foot long, 7-foot high, 2-foot deep closet for linens, dishes and storage. At its end the Jacobs built a phone booth for private conversations, an idea that Wright may have suggested for his plan of the unbuilt C. R. Hoult house, from which the Jacobs house is derived, since it shows a phone booth in the same closet. The bedrooms, of varied shape in plan, consist of a first bedroom with three glass doors facing the garden and a second larger bedroom with 6 glass doors. The second bedroom has an interesting arrangement of the closets, which stand on either side of a 4-foot by 6-foot alcove with window on the east side of the room. The last bedroom, about 8 feet by 12 feet, though irregular in shape, was intended to contain only one bed and a built-in desk at its eastern end, a fully glazed door opening onto the garden and three high windows on the north side.

Although Wright did not provide a detailed landscape plan-and never did except when Walter Burley Griffin made landscape plans for his houses between 1902 and 1906-he was always careful to site the house and outbuildings, if any; to provide the residents with the best views across the property and beyond; to block less desirable views; to relate the house properly to the sun and prevailing winds; and to provide proper drainage. The natural place for the Jacobs house, which was to face east and south across the rear of the lot, was to locate it as close to the northwest corner of the property as feasible, thus giving the glass walls eastern and southern exposures across the longest dimensions of the property. This arrangement also prevented the cold west winds of winter from impacting the glass while allowing the winter sun to reach well into the house in the morning and early afternoon. At the same time the deep overhangs of the roof prevented the hot summer sun from shining directly on the glass walls. By locating the house on the northwest corner of the property, the highest point on the lots, Wright also assured excellent drainage. Considering the sizeable tract of land the Jacobses had acquired, 120 feet by 126 feet, Wright nonetheless provided almost no buffer between it and the property to the north, locating the north wall of the Jacobs house exactly six feet from the property line. On the street side he set the west wall of the living room thirty feet from the line, no doubt a distance required by the developer. Because the land was sloping to the southeast, Wright built an L-shaped earthen platform for the house to rest on and suggested leveling the land inside the L at a level three feet lower than the house platform and planting a garden there. Beyond both the L-shaped platform and the garden that it partly enclosed, Wright suggested the slope be planted with a ground cover. Overall it was a logical though not especially exciting plan for use of the land, one that the Jacobses seem not to have carried out except for planting the banks around the house, building a few sets of brick steps linking the upper and lower levels and planting a garden on the lower portions of the property.

Allowed to deteriorate over the years, the house eventually was purchased by its present owner, James Dennis, a professor of American Art at the University of Wisconsin, with the intention of restoring and living in it. By then the exterior board walls were black from an inadvisable treatment of creosote, or similar product; the roof leaked, and the overhangs were sagging, among other problems. Assisted by Chicago restoration architect John Eiffler, a Wisconsin native, the house was not only restored to its original condition but in many ways was much improved. The bay window of the dining alcove had begun to sag shortly after the house was built because Wright failed to provide adequate support for it. To solve the problem, Wright had

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some Taliesin fellows build two brick piers under it. Eiffler sufficiently strengthened the supporting structure of the bay window to permit removal of the brick supports. Wright's system of supporting the roof with beams of three loose 2x4s, while interesting, never functioned well and gradually the edges of the roof sagged. By inserting steel beams here and there while correcting the sagging edges, the roof has been returned to its near horizontal character, and, according to Eiffler, will never again sag. When the heating system failed during restoration and the pipes froze, it was replaced with more modern piping and the floor was poured with the color Cherokee Red in the mix, a color that Wright used over and over in floors of the houses that followed the Jacobs. The wooden walls were cleaned, repaired and returned to their original vibrant contrasting colors. Except for renewing kitchen appliances and the heating unit, covering the roofs with continuous rubber membranes, and extending and improving the electrical system, the house is now exactly as built. The wall south of the living wing that Jacobs built but which later deteriorated has also been renewed. James Dennis has added a similar wooden wall at the end of the third bedroom.

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## 8. STATEMENT OF SIGNIFICANCE

Certifying official has considered the significance of this property in relation to other properties: Nationally: X Statewide: Locally:

Applicable National

Register Criteria: A\_B\_C\_D\_

Criteria Considerations

(Exceptions): A\_B\_C\_D\_E\_F\_G\_

NHL Criteria: 4

NHL Theme(s): III. Expressing Cultural Values

5. architecture, landscape architecture, and urban design

Areas of Significance: Architecture

Period(s) of Significance: 1936-42

Significant Dates: 1936-37

Significant Person(s):

Cultural Affiliation:

Architect/Builder: Wright, Frank Lloyd

Historic Contexts: XVI. Architecture

S. Wrightian

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State Significance of Property, and Justify Criteria, Criteria Considerations, and Areas and Periods of Significance Noted Above.

#### Significance and Justification

As Herbert Jacobs makes abundantly clear in his book, *Building with Frank Lloyd Wright*, the two Jacobs houses were not simply casual works by the great architect Wright. They were, in fact, products of Wright's genuine interest in and increasing friendship with the Jacobses and their children, from the time he was called upon in 1936 to design for them a modest house costing \$5,000, until his death in 1959. This friendship is partly to be explained by the chances the Jacobses took in building the two unusual and exceptional houses Wright designed for them, the building of which they participated in both mentally and physically, qualities that Wright admired in Herbert and Katherine. It helped, of course, that the Jacobses were physically close to Wright's Taliesin, the only one existing when they built their first house. This permitted them to visit Taliesin often so that they become warm friends of Wright and the fellowship, thereby losing their status as mere clients. Indeed, their daughter Susan eventually married into the Taliesin family and went to live in the Wright compounds in Wisconsin and Arizona. Conversely the proximity to Madison allowed Wright to visit the Jacobses from time to time–usually unannounced–and to use their houses to promote his architecture by bringing prospective clients and important persons to see them.

The Jacobs house is distinctive because it was the first house to be built, among the many that followed, which Wright termed "Usonian," by which he meant an *artistic* house of low cost for an average citizen of the United States of North America. Wright even referred to the Jacobs house as Usonia No. 1. After successfully completing it, Wright went on to design over 300 Usonian houses before his death in 1959.

Furthermore, it was in the Jacobs house that Wright tried out various ideas, some for the first time, that he hoped would enable him to achieve the goal of providing artistic homes—the only kind Wright was capable of designing-at modest cost. These features included building on a concrete slab laid over sand—in the case of the Jacobs house—and later gravel with the heating system a series of pipes—warmed in the Jacobs house by steam but in later houses by hot water-laid in the sand or gravel under the slab. This saved the cost of foundations, basements, flooring and floor joists, and radiators. Wright also invented a simple thin sandwich wall for the Usonian house, much used by him in later Usonian houses. These walls were exactly the same on both sides, inside and out. In the Jacobs house it consisted of pine boards laid horizontally over a core of vertical boards and fixed to those boards by redwood battens, thus producing a thin but colorful wall. Where Wright used brick, the interior surface was also the same as the exterior. In this way Wright eliminated siding, painting, plastering and wallpapering. Wherever possible he specified built-in and free standing furniture of simple design, often made by the owners or by amateurs in order to hold down cost while assuring that the furniture would echo visually the style of his architecture. The owners also got a flat roof, usually several layers of them, that drained simply by elevating the center section of each roof and letting rain run off the edges. By using flat roofs in this fashion, Wright eliminated the complex framing of pitched roofs and also did away with gutters and down spouts. Finally, the architect sought to save money by eliminating several walls of the enclosed garage and thereby inventing the "carport."

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In thus attempting to reduce costs by eliminating various trades and mechanical systems, Wright was able to use the savings achieved to pay for more expensive artistic features that required either hand labor or hand operated machinery. In this way he was able to afford windows and doors of his own design, many of the doors fitted with glass, made by special order at a planing mill. Also, the savings enabled him to treat his clients to large areas of brick in their houses, a material that is more expensive than wood and which must be laid slowly by hand.

Because Wright was able to make the resulting elements of the house visually attractive, he began to specify slab floors, sandwich walls, flat roofs and glass walls not only in Usonian houses but in the more expensive houses he designed as well, residences which because of their cost cannot truly be considered Usonian houses. One was Wingspread (NHL, 1989), which he designed for Herbert Johnson shortly after the Jacobs house.<sup>1</sup>

Other interesting elements not used for the first time at the Jacobs house, nor introduced to contain costs, have nonetheless come to be associated with Usonian houses. Among these are Wright's unit system for laying out his architecture. It was a modular system Wright used to achieve consistency in scale, a system that can be traced back to 1902 in his work. Beginning with the Jacobs house, Wright began to thoroughly incorporate the system into each house by scoring the module into its concrete pad. As a result, the unit system has become indelibly associated with Wright's work from the Jacobs house forward.

Wright's efforts, beginning in earnest with the Jacobs house, to erase the distinction between outside and inside by extensively using glass in walls, designing floor slabs that continue beyond the walls of the house, and ceilings that also continue outside as the soffits of broadly overhanging roofs, became characteristics of his later work. Related to this spacial interplay between outside and inside was Wright's emphasis within the house on the continuity of space. It was something he achieved by erasing the distinctions between rooms. At this time he also began to emphasize irregularity in planning which lent mystery to the unfolding drama of his plans. Of course Wright had done all of these things previously in one context or another, but now Wright integrated these effects as never before and applied them to very small houses, as he did so effectively in the Jacobs house.

In short, the Jacobs house stands out in Wright's work as a marvelous example of a low cost yet thoroughly aesthetic dwelling, one that marked a turning point in the evolution of Wright's residential work. Beyond that, it was and is a highly artistic and enchanting work of architecture in its own right.

<sup>&</sup>lt;sup>1</sup>It was a vast sprawling and very expensive house costing over \$250,000 built in 1937-38 near Racine, Wisconsin.

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#### History

Frank Lloyd Wright's clients were Herbert and Katherine Jacobs, a newly married couple who had recently moved from Milwaukee to Madison, Wisconsin, in the early summer of 1936. Herbert Jacobs, a newspaper reporter, had accepted a position with the *Capital Times* of Madison. He would gradually expand his writing to include a daily column in the newspaper, editorial assignments and some teaching at the University of Wisconsin. Meanwhile he began to write books, one of which tells about his experiences building two houses designed by Frank Lloyd Wright, the first just beyond the city limits of Madison, the capital of Wisconsin, and the other in rural Dane County of which Madison also serves as county seat. The hard-working and well-trained Jacobs would end up as a professor of journalism at the Berkeley campus of the University of California.

Jacobs was well-educated, having attended Harvard with the assistance of scholarships, followed by study at the Sorbonne and extended travel in Europe. His mother taught college English and his father, a Congregationalist minister, ran a settlement house in Milwaukee in a neighborhood of Polish factory workers. Herbert's wife, Katherine, was the sixth child of a farming family whose land lay in the area of glacial drift just west of Milwaukee known as the Kettle Moraine. She was able to attend Ripon College by commuting and with financial assistance from relatives. It was the very modest means from which each came combined with their belief in education and the joy of working hard and living simply that would make them the ideal clients of Frank Lloyd Wright at this stage in his life.

They arrived at Taliesin by prior arrangement at the suggestion of a relative who had spent a season at the school Wright founded in his ancestral valley near Spring Green, Wisconsin, about 50 miles northwest of Madison. It was late August 1936 when the Jacobses visited Wright and the Taliesin Fellowship, as the school was called. At this time Wright's practice, essentially moribund since the 1929 crash, was finally beginning to pick up. It began with a large vacation house in southwestern Pennsylvania, Fallingwater (NHL, 1976), for Edgar Kaufman, designed about August 1935. This was followed by a large residence for Paul Hanna at Palo Alto, California (NHL, 1989), designed about February 1936. Both were to be expensive undertakings, the Hanna house said to have cost more than \$30,000 and the Kaufman house over \$70,000. The next project was a non-residential building, an office building designed in August 1936 for the Johnson Wax company (NHL, 1976), also a very expensive structure by the time it was finished.

What the Jacobses brought to Taliesin was the possibility of Wright producing a house design for the family of ordinary means. When they told him they could pay no more than \$5,000, the architect's latent interest in designing low cost housing was rekindled. It was a problem to which he had given his attention from time to time but never with any success. In order to keep the fellowship busy during the lean times of its formation between 1932 and 1936, Wright had come up with an idea for a truly American type of community, a kind of suburban town made possible by the automobile, which he called Broadacre City. The fellows had build a model of it that was then being shown in various locations around the country. Although Wright had included in the model suggestions for a few homes of modest cost, it now made sense to design an actual house of this type and here were the Jacobses asking for just such a house.

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Wright would soon be referring to his less costly designs for the average American as Usonian houses, standing quite simply for the "United States of North America" with several letters added to make it pronounceable. It was a way of distinguishing the citizens of the United States from those of other countries in the Americas. In the case of his low cost houses, Wright also apparently intended for the term to refer specifically to houses of his design intended for the average citizen of modest means. Thus it follows that his houses for the Kaufmanns and the Hannas, while designed for Usonians, were not Usonian houses. In fact, almost from the beginning, Wright began to refer to the Jacobs House as Usonia No. 1.

The idea of a house designed specifically for ordinary citizens of the United States, by an architect who rejected the European architectural styles for a "Usonian" style of his own making, proved sufficiently intriguing to thoughtful persons that commissions for this kind of house began to increase substantially in volume once the Jacobs house was announced and then built. According to Donald Kalec, "from 1936 to 1959, Wright designed 308 of these modest cost homes and saw 140 of them built all across the country." Of these, the Jacobs house was indeed the first built though it was not the first designed. Wright had designed two houses of the same kind in the late fall of 1935 or early winter of 1936, one for the Candid Hoults of Wichita, Kansas, the other for the Robert Lusks of Huron, South Dakota, but neither was built.

What Wright really meant by a low cost house for the average American was actually an *artistic* house of relatively low cost for the person of modest means. Wright's eye for design simply would not let him conceive a really low cost house, one that required an intensive use of prefabricated parts, because the result could not for him be artistic. These lower cost houses from Wright's pen required considerable labor, either by way of hand work on the job, or labor intensive machine work in the factory. For example, in the Jacobs house, brick--which is hand laid--was used extensively for structural masses, the great fireplace, and for edging the concrete slab. The house would contain no prefabricated doors or windows. The contractor couldn't buy them ready made at the lumber yard but had to have them specially made at a planing mill from Wright's designs, though Wright hoped that this kind of factory productions of doors, windows and perhaps even walls would result in cost reductions if spread over a large number of houses. Nonetheless, Wright racked his brain to figure out ways to save elsewhere in the construction of the house so that savings in places of no great aesthetic import would offset expensive artistic work elsewhere.

For the Jacobs house, he had a multitude of ideas, some of which he had experimented with before, some not. An ordinary frame wall is built by setting 2-inch by 4-inch studs between a sill at the bottom and a plate at the top, then covering the outside first with boards, then siding of some sort while the inside is covered with lath, then plaster, and after that both sides are painted, or the inside is sometimes wallpapered. It is usually about 6 inches thick. To replace these complicated walls, Wright invented for the Usonian house a sandwich wall that he believed could be cheaper and just as good. It consisted of interlocking boards standing upright and covered with moisture resistant building paper. On both sides of the upright boards, the carpenters would lay horizontal boards held by horizontal battens placed between them, then

<sup>&</sup>lt;sup>2</sup> Donald Kalec, "The Jacobs House I," in Paul Sprague, ed., Frank Lloyd Wright and Madison: Eight Decades of Artistic and Social Interaction (Madison, WI: Elvehjem Museum of Art, 1990), p. 91.

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screwed to the vertical boards. The wood Wright wanted to use for these sandwich walls was cypress, but for a house as low cost as the Jacobs would be, it was too expensive, though later he used cypress whenever its cost could be managed by clients. Having to use ordinary pine, Wright nevertheless came up with a scheme for giving life to the wall by adding color to it in the form of redwood battens. Outside and inside, the wood was given a natural treatment. Inside it was waxed and outside it was coated with linseed oil, both transparent finishes that protected the wood while allowing its organic character to be seen—as opposed to painted wood where the organic character is no longer evident. It was a kind of wall that Wright would use again and again in subsequent houses of this type though he never again sought the colorful result he achieved in the walls of the Jacobs house. Where he specified brick, both its inner and outer sides were treated exactly the same, just as were the board walls.

To support the board walls and provide floor surfaces throughout the house, Wright planned nothing more than a concrete slab laid on an earth base. In the Jacobs house, Wright used sand under the slab, but in most or all later houses, he specified crushed stone. Apparently the idea of incorporating color into the concrete slab had not occurred to Wright when he designed the Jacobs house, though for most or all houses after it, he called for the slab to be tinted a dark red color that he particularly favored, called Cherokee Red. For the Jacobses, Wright achieved a bit of color at floor level by edging the slab with a continuous row of bricks laid short side to the slab. This row-lock course occurs only outside of the house because the slab extended beyond the walls in most places.

Before pouring the slab, Wright installed a highly unusual heating system—gravity heat—an idea he got when working in Japan from Korean rooms attached to Japanese homes that were heated by hot air run through flues beneath the floor. For the Jacobses, he used wrought iron pipes laid in the sand, heated with steam from a boiler situated in a small partial basement. Several years later, when the system proved inadequate, the Jacobses converted it at Wright's suggestion from steam to hot water, which apparently cured the problem of insufficient heat in certain areas of the house.

Of course, the windows and doors, all made by machine at a planing mill, were fitted into frames made on the site by the carpenters, and the glass was also installed in the window and door frames at the site. In this way Wright eliminated basements—which he loathed because they elevated the house above the surrounding land and thus separated it from nature as if an alien thing. If ordinary foundations over a crawl space were required, the floor of the house had to be raised above grade in order to avoid dry rot in the floor joists and in the sills supporting the outside walls. Because the Jacobs house would have neither floor joists nor wall sills to protect, there was no need either for a basement or for traditional foundations. In this way Wright avoided digging footings and building basement walls, floor joists and adding rough and finish flooring. Furthermore, his sandwich walls got rid of exterior siding and painting, interior lathing and plastering, and wall paper. Finally, by using gravity heat, Wright banished the intrusive space-consuming and aesthetically undesirable radiators that had plagued him in his earlier houses, while saving something—he thought—on the cost of the heating system.

Another means of cutting cost was to use a flat roof, which was easy to frame compared with the sloping hip roofs Wright had favored in his early work. For ceilings, Wright used a cheap

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manufactured board called Nu-Wood, which came in 4-foot by 8-foot sheets. This was a mistake, however, for once installed the Nu-Wood looked to Wright just as cheap as it was. Soon after the house was finished, Wright encouraged Jacobs to replace it. Eventually Jacobs complied and installed boards and battens matching those in the sandwich walls in the ceilings of the rooms and soffits of the overhangs. He did the work himself and absorbed the \$500 that the materials cost him.

Wright also saved expense by eliminating gutters and down spouts by letting water fall away from the house over the edges of the wide overhangs of the flat roof. To help the water find the edges, the architect also came up with a curious system for supporting the roof: instead of using more expensive 2x12-inch lumber, he specified three 2x4s with their small dimensions resting upon each other. Wedges inserted between the 2x4s at the centers of the roofs encouraged rainfall to flow toward the edges where it ran over the very wide eaves, thus falling well beyond the outside walls of the house.<sup>3</sup>

Wright found other ways to keep the ultimate cost of the house down, unrelated to its design. The brick came from the S. C. Johnson and Sons Administration Building under construction at the same time in Racine, Wisconsin. What was used were culls, bricks rejected because of chips and other defects, obtained at a reduced price, though it is suspected that in their zeal to locate enough bricks for the Jacobs house, Wright's apprentices were not very careful in separating good from cull bricks, nor is it certain that all were properly paid for. In fact many of them proved to be bricks with one side curved, specially made for the rounded walls of the administration building. The plate glass used in windows and doors was cut from old store windows, the gold leaf and other lettering removed before installation.

By locating the kitchen and bathroom at the very center of the living area, Wright economized further by concentrating the plumbing in the approximately 7-foot by 14-foot area occupied by the kitchen, bathroom and stairs to the basement. There simply was no other plumbing in the house except that in the bathroom and kitchen. As for electrical service, there was hardly any. The plans show only a few outlets. The rooms were lit by the simple device of suspending U-shaped metal channels, two inches in width and open at the top, down the center of each room. Sockets holding bare bulbs were fitted to the sides and bottom of the channels in the living area where the ceiling was 9 feet 4 inches high, but only on the sides in the bedrooms where the ceilings were 7 feet 3 inches. The wiring was laid in the channels.

Wright also supplied his own earth moving machine when needed, along with apprentices to man it, and Jacobs often assisted the workmen when called upon. Therefore, the Jacobs house, while definitely low cost for the artistic house that it is, is likely to have cost more than has been publicly acknowledged. No doubt Wright absorbed some of the extra cost, for it was quite important to him to be able to say, and for the public to believe, that he really had designed this attractive small residence for only \$5,000. Repeat business would depend upon potential clients believing that by various economies, the famous architect would be able to satisfy their requirements at a price they could afford while giving them an artistic house like the one he

 $<sup>^{3}</sup>$  Exactly how these 2 x 4s were to be stabilized is unclear—the few drawings available suggest that they were nailed only at their ends to 2 x 4s running at right angles to them.

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designed for the Jacobses.

Actually it is known that the Jacobs house did cost more than originally proposed because of an addition asked for by the Jacobses and by Wright's omission of screens and his dislike of the Nu-Wood ceilings, once installed. After agreeing upon \$5,000 as the cost to the Jacobses of the house including the architect's fee, the Jacobses asked for a third bedroom, which raised the cost to \$5,500. Wright absorbed the \$125 cost of the screens and Jacobs paid the \$500 for the ceiling materials, which he installed. Thus the final cost of the house was about \$6,000, not counting Jacobs's labor, subsidized materials and write-offs by Wright.

Whatever the exact cost was in reality, the Jacobs nevertheless got an elegant artistic house for a bargain price. (Their next house, built after World War II, was not nearly so inexpensive.) In fact, after the Jacobs house, Wright gradually allowed his artistic expression to gain the upper hand and inflate the cost of subsequent houses. There are numerous examples of designs that did not go forward because bids were not only high but much too high. In addition, there are many other examples of houses that did go forward but which proved much more expensive than a modest house ought to cost, even if artistic.<sup>4</sup> For example, Richard Smith who built a Wright-designed house in Jefferson, Wisconsin, in 1950, has said that Mr. Wright "estimated the cost at \$35,000 and we stopped counting at \$100,000." Even if somewhat exaggerated, the story gives support to the conclusion that the Jacobs got a tremendous deal on their first house which, because Wright desperately needed good publicity at that moment, enabled him to build so elegantly at so reasonable a price.

Even with two large houses and the Johnson Administration Building under way, Wright remained sufficiently underemployed in 1936 that he was able to provide the Jacobses with preliminary drawings less than a month after they first visited Taliesin-later clients would wait a long time for plans. (The Jacobs waited over two years for the plans of their second house in the late 1940s.) Another reason why Wright was able to supply drawings so quickly was because he converted the plans he had prepared in late 1935 or early 1936 for the Hoults of Wichita, Kansas, who did not build, into the Jacobs house. To do so, he loped four feet off of the Hoult's long living room and completely removed a wing opposite the living room. The result was a house exactly 60 feet in width including overhangs on each side. (To make up for the four feet lost to the living room, Wright added four feet to the depth of the Jacobs living room compared to the Hoults.) After that he moved walls here and there by two feet, giving the Jacobses two main bedrooms, the one at 10 feet by 12 feet the same size as one of the Hoults, the other at 12 feet by 16 feet, a good bit larger than the Hoult's largest. When Wright had finished, it was still true that all of the basic ideas found in the Jacobs house had already been offered to the Hoults. There was nothing unusual about an architect resurrecting good ideas from a building not built and using them in another building, or even simply giving the old plan to a new client, modified to suit the new client's needs and building site, which is what Wright did here. What is wrong was for Wright to say in several places that he always designed each house for the specific client and site. Because the Jacobs house was so closely derived from the Hoult house, the conception of the first Usonian house dates to sometime between Mrs. Hoult's first letter to Wright of February 17, 1935, and the date when Wright sent the drawings to her on March 17, 1936. As suggested,

<sup>&</sup>lt;sup>4</sup> For examples see Frank Lloyd Wright and Madison.

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the date of design was probably late in 1935 or early in 1936. This makes the beginning of the Usonian house earlier than all of Wright's buildings of the latter half of the 1930s except for the Kaufmann house, Fallingwater, which slightly predates Wright's invention of the Usonian house.

Wright liked his clients of modest means to have sufficient land so that he could relate the house to its surroundings more easily and effectively—to blend the two into an organic embrace. In the case of the Jacobses, who purchased a lot in a new subdivision called Westmorland just outside of the city limits of Madison, Wright designed a house that was exactly the width of their 60 foot wide lot. The result was that the Jacobses had to return their lot and buy two lots across the street, which gave them a really good-sized city plot of 120 feet by 126 feet, just over a half acre. Of course the two lots cost twice as much as the single lot had and the purchase consumed their entire savings of \$1,600. Nonetheless they managed financially, as Wright knew they would, and got a piece of ground with a much better orientation that sloped more desirably from the street toward the southeast corner of the lot. Jacobs' analysis, many years later, was that "Wright was leading us, oh so gently but firmly, along the primrose path of education in house building." They received the working drawings and specifications at a formal contract signing ceremony at Taliesin on November 15, 1936.

After this rapid start, progress in getting the house built waned and winter set in. This gave the Jacobses time to study carefully their plans and reflect on other features of their house that were far from commonplace. Wright intended to face the major rooms toward what is normally considered the rear of the house. The walls, facing east for the living room and dining area, and south for the bedrooms, were to be filled largely with glass. The walls facing the street on the west and north were to be largely opaque, illuminated only by small but continuous windows just under wide overhanging eaves. The result was to be a house that essentially turned its back to the street; a house that presented basically a high wall on the street side and thus secured privacy from public view. On the other side, the house opened directly to nature through glass doors, nine feet high in the living room and seven feet high in the bedrooms. Thus Wright achieved in a house of modest cost a dramatic continuity between inside and outside. Nature became part of the living space. Inside became out and outside in, so to speak.

A second interesting element of the house—not to be explained simply in terms of economy—was Wright's elimination of the garage and his replacement of it with a "carport," as he termed it. The first example of the carport occurs in the Hoult house; the first built example in the Jacobs house. Wright sold the concept of the carport as a means to hold down the cost of the house—a garage without walls on two or three sides open to the elements. He also argued its logic in terms of the machine: "A car is not a horse, and it doesn't need a barn. Cars are built well enough now so that they do not need elaborate shelter." One may perhaps be excused from wondering, in light of the kinds of carports Wright designed for Jacobs and for later clients, if his real reason for pushing the concept was aesthetics rather than economy. Once Wright had turned the back of the Jacobs house to the street, the street elevation became rather dull in spite of Wright's efforts to enliven the Jacobs house with boards of contrasting color and overhanging roofs and masonry masses of a starkly geometric character. What better way to lend an exciting

<sup>&</sup>lt;sup>5</sup> Herbert Jacobs, Building with Frank Lloyd Wright: An Illustrated Memoir (San Francisco: Chronicle Books, 1978), p. 17.

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visual touch to so pedestrian a facade than to have the roof of the carport go sailing off into space with no visible support? This is what he did with the Jacobses' carport roof and many others that were to follow. The flat roof of the carport projects out from a brick mass into space with little apparent support and thus marks not only the resting place of the automobile, which makes suburban living possible, but the otherwise understated entrance to the house. Of course, in reality one edge of the roof is held firmly by the brick mass to the right of the entrance way and is balanced and supported by a minuscule fulcrum, treated as an open screen to the left of the entrance walk, so that the roof becomes a cantilever sheltering both visitors and automobiles.

Another expressive feature, though not nearly as dramatic as the cantilevered carport roof, was Wright's actual elimination of one corner of the living room. He would later write that this constituted part of his efforts to "break the box," by which he meant to integrate interior space and even to open up traditionally closed transitions between wall and ceiling and wall and wall. In the case of the Jacobs house, where the two walls of glass doors at the southeast corner of the living room join at right angles, Wright had the doors hung so that, when open, the corner disappears. That is, you can physically walk through the opening where normally there ought to be a corner supporting the roof. He had already provided a similar demonstration of the disappearing corner in the Kaufmann house, Fallingwater, where three stories of windows turn a corner and are hung so that when open, the corner disappears. Of course, both the cantilevered carport roof and the disappearing corners are essentially theatrical effects which Wright used to draw attention to himself and his architecture.

However, Wright did not stop with cantilevers and disappearing corners. In order to provide the client of modest means the kind of interior spatial drama that generally can only be obtained in quite expensive residences, Wright sought to minimize all subsidiary living spaces in order to maximize the major room where the family would gather-the living room. Impressed with the minimum dimensions of hallways and living spaces on the trains and ocean liners of his time, Wright decided that the ordinary person could make do with narrow hallways, small bedrooms (though curiously, as noted, two of the bedrooms in the Jacobs house are relatively large), tiny kitchens, a single small bathroom, and a dining alcove off of the living room. This is what Wright first offered the Hoults, then the Jacobses. The result was an impressive living room in the Jacobs house, 29 feet long, 18 feet wide and 9 feet 4 inches high, though it had one corner taken out of it measuring 5 feet by 6 feet, which served to make the room more interesting than it would have been if simply rectangular in plan. Furthermore, at one end there was a monumental mass of brick containing a large fireplace. In square feet the living room consumed one-third of the house, and more than that in terms of cubic volume, as the bedrooms and hallways had ceilings that were only 7 feet 3 inches. To achieve this spectacular room, the kitchen became a small room, 7 feet by 8 feet; the dining area reduced to only 6 feet by 12 feet, the width achieved by using part of a passage way for seating; the bath, 6 feet by 8 feet and the third bedroom, referred to on the plans as a study for unstated reasons, approximately 8 feet by 12 feet. The other two bedrooms, as noted, were 10 feet by 12 feet and 12 feet by 16 feet.

The Usonian house as exemplified by the Jacobs house possessed another characteristic that Wright had used before but which now became a standard feature of Wright's method of design, not only for Usonian houses. This was the modular system by which Wright developed his plans, which he termed the "unit system," a system that beginning with the Jacobs house he had

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the masons inscribe into the concrete floors of his houses and other buildings. On the Hoult and Jacobs plans, it was a rectangle measuring 2 feet by 4 feet. Wright saw the unit system as the means for achieving uniform scale, or proportion, throughout the building. By using the system, he said "divisions in spacing are thus brought into a certain texture in the result; ordered scale in detail is sure to follow." He also thought of it as a means to simplify construction. In the Jacobs house the unit system is inscribed on the slab and all vertical elements are related directly to it. Where walls were to stand, the lines troweled deeply into the concrete were to be fitted with a strip of zinc with part of it projecting above the floor to receive the slotted bottoms of the vertical boards which formed the centers of the sandwich walls. Outside walls, whether wooden or masonry, were also related directly to the modular lines. Openings also corresponded in width to modular dimensions. Thus hallways could be either two or four feet wide. The same was true for doorways. However, Wright did not follow the system with blind consistency. He allowed outside doors to be the standard three feet in width. The back hallway was three feet wide. Brick walls sometimes had their outside face on the modular line, sometimes their inner, depending apparently on whatever struck Wright as best. However much Wright promoted the system, it did have its downside. Widths of hallways and doors ended up being either a bit too large or two small for ordinary human beings. Wright advised persons simply to turn sideways when using too narrow doors and halls, as in a Pullman car. The Hannas, who were building a large house by Wright in California at the same time, seemed genuinely amused by the narrow dimensions of a twenty-inch wide hall in their house: "On the occasion of our housewarming, one friend organized a game to see which corpulent guests could negotiate the entire length of the hall without turning sideways."<sup>7</sup> Also contractors disliked the unit system, which was supposed to assist them in laying out the walls and other features of the house. They preferred instead to have dimensions shown on the drawings and objected to having to add up the units in order to determine where a vertical element belonged. In the Hanna house, Wright decided to employ an hexagonal unit system that only made matters worse, especially when he insisted that carpenters and masons leave their squares at home and instead follow the lines inscribed on the concrete pad when fitting walls to it.

Once warm weather arrived in the spring of 1937, the Jacobs house began to take form, but slowly, for Wright had not held the contractor, P. Bert Grove, to a schedule because to do so would have meant a higher price for construction of the house. Thus he and his sub-contractors worked only when they had free time from better paying contracts with deadlines. It wasn't until June 2, 1937, that Grove removed the sod and topsoil from the site. The small basement was dug, then after July 1 sand for the concrete pad to rest on appeared. Two weeks later welders assembled the pipe that would rest in the compacted sand and supply heat to the concrete floor above them. Towards the end of August the pad had been poured and the construction of the masonry portion began. Yet the pace of building remained glacially slow and the frustrated Jacobses pushed the builder to at least have the house closed in before winter. In desperation, they moved into their unfinished house on November 27, 1937. It was not until after Christmas

<sup>&</sup>lt;sup>6</sup> Frank Lloyd Wright, "In the Cause of Architecture, 1. The Logic of the Plan," Architectural Record, 63 (January 1928), as reprinted in In the Cause of Architecture, Frederick Gutheim, ed. (New York: Architectural Record Books, 1975), p. 154

<sup>&</sup>lt;sup>7</sup> Paul and Jean Hanna, Frank Lloyd Wright's Hanna House: The Clients' Report (Cambridge, MA: MIT Press, 1982), p.

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that the house was finished—except for a few items. Wright had forgotten design screens, which as a result were not included in the contract, and the Jacobses had not realized the need for window coverings. Herb Jacobs took care of both items but subtracted the cost of the screens from money he still owed Wright. For window coverings, the architect recommended Aeroshades made in Waukesha, Wisconsin, by an acquaintance originally from Oak Park. These finely crafted wooden slats, which rolled up and down, enabled the Jacobses to close off the bedrooms. This was necessary because, almost from the beginning, the curious circled the house without asking while gawking at the unusual structure to the dismay of the Jacobses who, before the shades were installed, often had to dive for cover.

In addition to screens and window coverings, the Jacobses also needed furniture for the house. Wright had told them early on that the few pieces of furniture they already possessed would not be suitable for the house. Herb Jacobs arranged for a relative to design and construct the furniture: a built-in table in the living room and a dining table and chairs, though Wright retained the right to approve or disapprove their designs. For Wright, the object, of course, was to insure that the house was furnished in a style that complemented the architecture, something which Wright had insisted upon from early in the century whenever he could find amenable clients with sufficient means. Now he was willing to settle for simple furniture made by amateurs as a solution to the problem of having the furniture conform to the style of his architecture.

Having lived in their new home for almost exactly six years, the Jacobses moved out on November 13, 1942, to a 52-acre farm in the country six miles northwest of their Wright-designed house. Although the Jacobses had very much enjoyed living in their Madison home, which Jacobs describes in his book, *Building with Frank Lloyd Wright*, they had begun to think that the area where they lived, by then annexed to Madison, was becoming too built-up. Also they wanted their three children to experience farm life, which evidently they considered more wholesome than town life. From the beginning of their new life as part-time farmers, the Jacobses intended to build another house designed by Wright on their rural property just as soon as World War II ended.

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## 9. MAJOR BIBLIOGRAPHICAL REFERENCES

## The two most important published sources are:

Jacobs, Herbert. Building with Frank Lloyd Wright: An Illustrated Memoir. San Francisco: Chronicle Books, 1978.

Kalec, Donald. "The Jacobs House I." In Paul Sprague, ed., Frank Lloyd Wright and Madison: Eight Decades of Artistic and Social Interaction. Madison, WI: Elvehjem Museum of Art, 1990, pp. 91-100.

#### **Documents:**

The Frank Lloyd Wright Memorial Archives, Taliesin West. The Burnham Library, The Art Institute of Chicago.

# A book which ties all of the Usonian houses together is:

Sergeant, John. Frank Lloyd Wright's Usonian Houses: the Case for Organic
Architecture. New York, Watson-Guptill, 1984.

It suffers—through no fault of the author—by having been written before the archives at Taliesin West were opened to scholars.

#### For what Wright had to say about the Usonian house, the best sources are:

Frank Lloyd Wright: The Natural House, 1954 in Collected Writings, Vol. 5, pp. 77-127.

An Autobiography: Book Five, 1943 in Frank Lloyd Wright: Collected Writings, Bruce Brooks Pfeiffer, ed., New York: Rizzoli, 1994, Vol. 4, pp. 192-196.

"Frank Lloyd Wright," Architectural Forum 68 (January 1938), pp. 78-83.

#### For photographs and drawings:

Pfeiffer, Bruce Brooks. Frank Lloyd Wright Monograph 5: 1924-1936. Tokyo: A.S.A. Edita, 1985, pp. 228-233.

There are, of course, many other mentions of the Jacobses and their house in the enormous and growing literature on Wright.

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Previous documentation on f	ile (NPS):
X Previously Listed in the Previously Determined E Designated a National H Recorded by Historic An	Eligible by the National Register. istoric Landmark.
Primary Location of Additio	nal Data:
X State Historic Preservat	ion Office
X Other State Agency	(The State Historical Society of Wisconsin)
Federal Agency	
Local Government	
University	
X Other (Specify Reposito	ry): Burnham Library, The Art Institute of Chicago

# 10. GEOGRAPHICAL DATA

Acreage of Property: Less than one acre

UTM References: Zone Easting Northing

16 301040 4770000

Verbal Boundary Description: Westmorland Subdivision, Block 3, Lots 7 and 8.

Parcel Number: 0709-282-0512-3

# **Boundary Justification:**

The boundary includes the lots that Herbert and Katherine Jacobs purchased in 1936 that have historically been associated with their first Frank Lloyd Wright designed house.

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