

The Jacobs I House: Wright's Prescription for Modest Cost Housing Through the Elimination of the Insignificant

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Frank Lloyd Wright expounds on his design process for the Jacobs I house in his book, *The Natural House*, where he explains how he would provide for one of America's most pressing needs, a house of modest cost, through intelligent and inspired organic design. Achieving the goal of providing a home design that could be built for \$5,500 in 1937 (roughly \$90,000 in 2015) was no small challenge. Ostensibly, Wright's prescription for this new home was an application of the "elimination of the insignificant," a phrase he explained in some detail 25 years earlier in his book, *The Japanese Print: An Interpretation*. Wright's relentless pursuit of this principle in uncompromising architectural form involved strong sacrifices and an unconventional environment for its inhabitants. The purpose of this paper is to explore the Jacobs house from a material culture standpoint, extending E. McClung Fleming's model for artifact study, which was developed primarily for early American decorative arts but is being extended into architecture here.¹ I will explore the artifact (Jacobs house) first materially as it is physically expressed, review Wright's intentions in creating the structure of the home, and finally see how this spatial production influenced two of the residents of the home, drawing upon oral history as well as ideas from Henri Lefebvre's three modes of space (perceived, conceived, and lived) and Michel de Certeau's theory of strategy and tactics to determine how Wright's very deliberate conception of space intersected with the actual lived experience of the residents of the home.

¹ E. McClung Fleming, "Artifact Study: A Proposed Model." *Winterthur Portfolio*, 9 (1974): 154.

² Herbert Jacobs, *Building with Frank Lloyd Wright* (Carbondale: Southern Illinois University Press, 1986), 3. Note that

My thesis is that a material cultural examination of the Jacobs house reveals intentions in the design that are not clearly explained in Wright's written account of the home. Further, the owners of the home may unknowingly employ de Certeau's *tactics* while remaining fully satisfied with their lived environment, if in fact, that environment provides certain aesthetic compensation for adverse areas of *strategic* structure built into the home.

On a warm August afternoon in 1936, Herbert and Katherine Jacobs met Frank Lloyd Wright at Taliesin in Spring Green, Wisconsin and proposed to him the challenge of designing a "decent \$5,000 house" for them.² They were not sure whether this famous architect would bother with such a small commission, but were delighted to find that he accepted their challenge. Harold Wescott, an artist and cousin of Katherine who had spent a summer as a student at Taliesin, had suggested Frank Lloyd Wright to them, even though they hadn't had much familiarity with Wright's work previously. Herbert Jacobs had recently moved from Milwaukee to Madison, taking a job as a newspaperman at the Madison Capital Times making twenty dollars a week. Herbert and Katherine, recently married, had been dreaming about what their ideal house would look like, and had decided that a modified Dutch colonial with white-painted brick was their favorite style.³

Once their architect was on board, they realized he didn't have time to select a lot for them so they found one on the west side of Madison in the fairly new and undeveloped tract called Westmorland. There were only about twenty homes built here at the time. They settled on a lot on

² Herbert Jacobs, *Building with Frank Lloyd Wright* (Carbondale: Southern Illinois University Press, 1986), 3. Note that Wright's reply to them was that "Most people want a ten-thousand dollar house for five thousand dollars, and he asked if they would really be satisfied with a \$5,000 house.

³ Jacobs, *Building with Frank Lloyd Wright*, 4. Harold Wescott had sketched out a quick plan for them when suggesting FLW as a possible architect to give them an idea of what type of house he may design for them. Herbert was cold to the idea although Katherine seemed to like it.

Toepfer avenue that was 60' wide by 120' deep and cost \$800.⁴ When Wright first unveiled his design for them, they discovered he had designed the home to be exactly 60' wide, which would have left no room for side yard setbacks whatsoever. Instead of asking Wright to redesign the home to fit their lot, they reluctantly traded it in for a corner double lot (120'x126') across the street and paid twice as much for it. They hired Bert Grove to be their builder, and construction of the home started on June 2nd, 1937.

Wright designed the one-story home in an L-shape configuration but pulled the front corner of the house close to the street and to the north side where it presented mostly solid walls and only narrow, clerestory windows for privacy. The rear of the house then opens up to the rear yard, made larger by the house's location closer to the street (see figures 1 & 2). The living room opened up to the east while the bedroom wing opened up to the south view. There is no basement in the house other than a small area under the kitchen and bath that contains the heating equipment and a makeshift laundry area. The floor over this basement core is not the red-colored concrete that is seen in the rest of the house but a fairly close matching red vinyl tile floor over wood framing. The main floor is a concrete slab on grade with radiant steam piping buried under the concrete slab. The roof eliminates any attic space and is composed of flat roof planes at three different heights. Rather than a simple slab roof, however, the roof is composed of 2x4s built up in three tiers that give it a distinct stepped back edge on the overhangs, which further reduce the scale of the roof detail. The small scale of these 2x4 fascia edges belies the structural spans being required of them, especially over the great room. There is no garage, only a one-car attached carport formed by a large cantilevered flat roof, which also serves to shelter the main entry and "back" entry door to the home. Due to its

⁴ Jacobs, *Building with Frank Lloyd Wright*, 6. To their surprise the \$5,000 budget was not going to include the lot cost, but they had about \$1,600 saved already and used that to pay for the land. Wright had suggested to them not to buy a lot in the city but in the country, but they refused.

layout, it does require guests approaching either the front door or back door to walk past any cars parked underneath.

The home consists of 1,340sf of living area (fig. 3)⁵. The house contains three bedrooms, although the Jacobs originally said they could live with two bedrooms and then later added it. At the core of the house, which is the pivot point of the “L” shape, are the kitchen, bathroom, fireplace, and stairs to the small mechanical room beneath this area. This core further distinguishes itself by the brick walls encompassing it that rise higher than the main roof of the house. Other than the bedrooms and the bathroom, the other rooms follow an open plan arrangement with overlapping boundaries. The dining area is a projection from the main hall “gallery” and has a 2’ wide by 8’ long built in table with bench seating on the window side (fig. 4). In plan view it is easy to miss the perceived centrality of this gallery spine. But when one walks through the space, it becomes clear that this area serves as the hub of house and provides a commanding view down to the living room, into the kitchen dining areas, the back door and beginning of the hallway to the bedroom wing.

The living room is a fairly large area for a small home, measuring roughly 28’ by 18’ (fig. 5). Most of the east wall is composed of 9’-4” high floor to ceiling glass doors, including a corner door that opens up the far southeast corner of the living room to the exterior patio, itself an extension of the red concrete floor slab used in the house. The living room is not an undifferentiated volume, however, as nooks and niches surround the space, including a 4’x8’ built in desk at the far end of the living room, and a very narrow, vertical window in the brick end wall. The fireplace itself, made of the same brick used elsewhere in the house, is at the north end of the living room which situates it along the circulation path from the front entry door to the kitchen and bedroom wing and so precludes the ability to put any furniture around it as was often done with Wright’s earlier inglenook layouts.

⁵ Square footage calculation per John Seargents’s calculations in his book, *Frank Lloyd Wright’s Usonian Homes*, p 17.

In contrast to the large living area, the kitchen is very small, only 7'x8'. It does have an efficient U-shape plan, although the current owner, Jim Dennis, admits he would have liked more counter space. Wright worked out an interesting spatial organization here. Although there are no windows in the kitchen to take away from valuable cabinet storage space, the kitchen is open to the adjacent gallery and dining nook with its views to the rear yard. For the most part, the kitchen is closed off from view from the living room, tucked behind the dominant brick fireplace mass which itself establishes the size of the home's core and also places it in a central interior position in the home setting up the familiar metaphor of the supporting trunk of a tree from which the outspreading branches of shelter emanate. In such a scenario, the kitchen is sized in proportion to the core rather than to its own best function, although it must be admitted that a larger kitchen would proportionately cost more to build than general living area. Similarly the narrow dining table at only 2' wide is proportioned to the hall and nook space very elegantly, but does limit table settings on it. That the kitchen is not open to the living room as many of today's homes are is a positive factor says Jim Dennis, as it doesn't expose kitchen clutter to constant view from the living room.

The home from the street front presents a diminutive profile (fig. 6). This is partially due to how the house sits lower than the street and sidewalk in front of it.⁶ The flat roof and horizontal disposition gives a first impression of a wood box or fort sitting upon the ground, albeit a very elegantly proportioned and finely detailed one. The houses currently surrounding the home generally tower above its height, due to their two-story configuration and/or sloped roofs. The home's closed front is mostly windowless, and doesn't reveal an openness until one views it from the backyard where its glassy fenestration on both wings opens up to connect this partially contained garden space to the living and bedroom wings of the house.

The entire house is based on a modular grid of 2'x4' in plan which is reflected in the scored joints in the concrete floor. These joints, once in place, allowed the carpenters to keep their dimensions consistent across the home. Although in principle this may be simple, Wright's specifications indicated that "the unit lines become the joint lines of the concrete and this mat must be completed before the superstructure is commenced. In the preparation of this mat the accuracy of the unit layout is most important and the joints must be made to extend two-thirds of the way through the thickness of the mat."⁷ The joints also served the purpose of securing the thin wood walls via a zinc spline, which in the case of the exterior walls served as a water stop to keep exterior moisture out of the home. The floor slab is a floating slab, with only a downturned edge at the perimeter and no foundation or frost wall underneath it. The walls themselves are only 2 1/2" thick and composed of 3 layers of Pine boards on the inside and outside, a cheaper Pine in the middle, and two layers of tarpaper in between. Between the wider Pine boards were recessed "battens" using redwood, which gives the overall a patterned effect of alternating horizontal boards. Wright felt that this construction would provide adequate insulation and load-bearing strength for the roof above (fig. 7) The specifications further pointed out that there would be no painting, staining, or plastering of any kind in the building and that consequently "all joints be clean and workmanship good."⁸ The amount of drawings required for this modest home (around 70 pages of drawings) was also unusual for homes of almost any size.

Just as there is a 2'x4' grid for the horizontal plan, there is a vertical module used throughout as well. Each wood wall begins with a batten strip of redwood and ends at the top of the wall with a redwood batten strip that requires the board and batten assembly to come out even in construction

⁶ Note that Jim Dennis has clarified that the street and sidewalk were raised since the house was built, but even when constructed, the house was lower than the sidewalk, he says.

⁷ Jacobs, *Building with Frank Lloyd Wright*, 18.

without allowing any covering of inexact construction with wood trim such as crown molding. Likewise, brick wall masses had to be exactly 31 courses high. Overall, the home has a woven feel to it where horizontal and vertical lines precisely flow through the home and set up the elegant and precise intersections of form. Wright himself referred to this as the “warp and woof” of organic architecture. Although the home seems to be primarily a wood house with some brick from the outside, the builder indicated to Jacobs that there was as much brick in this house as there would be in a conventional house covered in brick veneer. This was due to the use of the brick on the inside as well as the outside, an expensive material for interior use.

After just under six months of construction, the home was completed in November 27, 1937. Although the Jacobs naively felt in the beginning that three months for construction would be reasonable, the fact that it actually was built in less than six months is remarkable since it was the first prototype Usonian home, the radiant in floor heating was untested, the builder was not familiar with Wright’s construction specifications, and there are customized details that occur throughout the house. For instance, the doors and windows were not purchased from a manufactured window company but were made from custom wood profiles drawn in Wright’s construction documents.

In examining the material culture of an artifact, the designer’s own words describing its creation are often not available. In the case of the Jacob’s house, however, we have a clear written directive from Wright that he said guided its process. This gives us another layer of evidence in the Jacobs house and the ability to examine the issue of intentionality. Even so, there remains a difference between the written intentions of the designer and the built artifact that needs to be considered.

⁸ Jacobs, *Building with Frank Lloyd Wright*, 20.

As Jules Prown, noted American art historian, says, "Certain aspects of human activity or creation are more purely expressive of style than others, in inverse proportion to the extent to which they are consciously purposeful. Functional intention obscures style."⁹ When reading an architect's description of their own work, the question that arises is how much of the final form was derived by functional considerations as opposed to stylistic intentions. Within the twentieth century's Modernist period of architecture, a primary polemic has been that the architect is guided by purely functional considerations and the form (aesthetics and style) should emerge naturally (or the aesthetic taste itself needing to conform to) from adherence to functional considerations.

This is particularly relevant in this case with Wright's design. When we read the description of his design intentions, there is the implication that everything is being driven by functional considerations; only general mention is given to the aesthetic importance and no mention to compositional strategies. Still, the craft and care of the home are evidence of the priority and importance this had in Wright's mind. Prown's comment about functional intention obscuring style is true; the reality is that there is not a one to one correspondence between function and its formal solution. The architect chooses from many various ways to solve the functional program of requirements in a building. Since these don't stand in isolation but are related to other functional solutions, the way in which the various components of the building relate to each other visually become part of the aesthetic intention. Form doesn't follow function as Louis Sullivan said, but form and function are locked in an interdependent relationship, which the architect works to his or her own intentions.

Wright gives his most complete description of his intentions for the Jacobs house in his book, *The Natural House*, printed in 1954. This glimpse into his thought process behind the house provides an invaluable window into the architect's intentions for the home as well as his new Usonian concept.

⁹ Jules Prown, "Style as Evidence," *Winterthur Portfolio* 15 (1980): 198.

After beginning this section by stating that the house of moderate cost is one of the major problems for America and the most difficult challenge for her architects, and before presenting his solution, he states that the biggest obstacle standing in the way is that “our people do not really know how to live.”¹⁰ He goes on to say that the “culture lag” in America where people try to outdo the house next door to them, where they mistake their “idiosyncrasies to be their tastes” and their “ignorance their virtue” is preventing the person or thing from being simple and natural, nor allowing for any “beauty for living.”¹¹ He also points out that the commodification of the style industry has been a major factor in this problem. This commodification creates a condition where style and form are external affectations within the cultural landscape that serve to continue excess and bad taste rather than allowing for more organic and indigenous solutions arising that are more suited to the conditions at hand. In other words, because people don't know how to live simply they don't know how to create simple and elegantly appropriate buildings of real organic character.

In regards to providing a direction to the solution to the problem of moderate cost housing, he begins with the reasonable claim that reality will necessitate a simplification of the building process and that this simplification must include the elimination of much of the affectations of styles applied to buildings that have become part of the home building industry. He then states the need for a “super-commonsense” approach to be taken to this problem.

As he directs his language to the Jacobs house proper, he says that all complications of construction must be eliminated, the mill must be used to prefabricate as much as possible to reduce expensive on-site labor, and that the mechanical systems (heating, lighting, and plumbing) need to be consolidated and compacted to make them as efficient and economical as possible.¹² His nine-item

¹⁰ Frank Lloyd Wright, *The Natural House* (New York: Horizon Press, 1954), 79.

¹¹ Wright, *The Natural house*, 79-80.

¹² *Ibid.*, 81.

list of things to be eliminated include: the attic (a flat roof will do), the basement (a small one for the heating system and laundry only), the garage (a one-car carport instead), interior trim, radiators and light fixtures, furniture, pictures and bric-a-brac, painting, plastering, and gutters and downspouts. He says the reason for this prescription is “to achieve the sense of spaciousness and vista we desire in order to liberate the people living in the house.”¹³ Here, we get a glimpse into one of the purposes for the various design moves he is making and seems to answer the question why a more simple and compact configuration wouldn't be the obvious solution to solve the problem (fig.8). After all, a more cubical, compact volume with smaller foundation and smaller roof area should be less expensive per square foot than one that sprawls out on one level, which maximizes not only foundation and roof but also expensive exterior wall perimeter.

On one level, Wright's prescription for the moderate cost home seems severe in relation to then contemporary expectations, yet Wright seems to be using these economies in order to be able to buy other features that are not in themselves economical, such as the sprawling spaciousness and “beauty of living” in the home he alludes to. So at its most basic, we see here at certain points an elimination of ‘functional’ considerations (e.g. storage that a basement would provide) in order to ensure a certain aesthetic character of the home. Aesthetic quality is being placed on a par with the functional requirements, even if it is not verbalized as such.

He states that he is not designing for a “grand” scale in this home and that any pretensions to such would not be congruent with the purpose. However, to the extent that a horizontal extension in parallel to the ground plane occurs, this is to be encouraged. Further, a house of such careful design and planning is “not to be entrusted to a builder but is something that requires an architect”, he says. Furnishings and plantings must be done through the architect as well in order to maintain the

¹³ Ibid.

consistent vision for the home. What he accomplishes with this design direction is a new sense of space, freedom of movement, privacy, light, and beauty. Of the latter, he says, "Beauty is an ambiguous term concerning an affair of taste in the provinces of which our big cities are the largest."¹⁴ This downplaying of beauty is consistent even today among architects' descriptions of their work, yet that belies the effort and money put into its expression. One can infer that the expression of beauty is something central to the whole composition of the design. Even though Wright gives scant attention to the term in *The Natural House*, he gives insight into his thoughts on beauty in a previous book he wrote some 25 years prior in *The Japanese Print: An Interpretation*.

There is a connection with what Wright wrote in *The Natural House* book and what he wrote in 1912 in his book on the Japanese Print. In *The Natural House*, Wright describes what he eliminated in order to create the new Usonian home of modest cost, and yet he gives only general reasons for his doing so, such as to create a sense of spaciousness as well as beauty. In his often-neglected book on the Japanese Print he gives us his aesthetic theory and basis for organic architecture.

In it he writes, "...the first and supreme principle of Japanese aesthetics consists in stringent simplification by elimination of the insignificant, and a consequent emphasis on reality."¹⁵ This is in immediate reference to the Japanese woodblock print and its form of art that was figural but not an attempt at realism. Wright's stance against realism relates to his conception of simplicity, in fact. As he states, "To dramatize is always to conventionalize; to conventionalize is to simplify; so these drawings are all conventional patterns subtly geometrical, imbued at the same time with symbolic value which is built upon a mathematical basis, as the woof of the weave is built upon the warp. It has little in common with the literal. Fleshly shade and materialistic shadow are unnecessary to it, for in itself it is

¹⁴ Ibid., 80.

¹⁵ Frank Lloyd Wright, *The Japanese Print: An Interpretation* (New York: Horizon Press, 1967), 19.

no more than pure living sentiment.”¹⁶ Here, from a design standpoint, the process of elimination and simplification work to dramatize the end result. All the accidental and dissonant occurrences are eliminated to leave in place just the right lines and forms.

Wright further accentuates the importance of Japanese art to his own work in 1954 in one of his taped Sunday talks: “I have never confided to you the extent to which the Japanese print per se as such has inspired me. I never got over my first experience with it and I shall never probably recover. I hope I shan't. It was the great gospel of simplification that came over, the elimination of all that was insignificant.”¹⁷

He also admitted to taking cues from the Japanese house in his Autobiography:

I saw the native home in Japan as a supreme study in elimination—not only of dirt but the elimination of the insignificant. So the Japanese house naturally fascinated me and I would spend hours taking it all to pieces and putting it together again. I saw nothing meaningless in the Japanese home and could find very little added in the way of ornament because all ornament as we call it, they get out of the way the necessary things are done or by bringing out and polishing the beauty of the simple materials they used in making the building. Again, you see, a kind of cleanliness.¹⁸

Wright presumably built his idea of organic architecture around the idea of simplicity, which he repeated throughout his career. Yet, the architecture of Wright is not at all simple. The Dutch architect Oud said that one of Wright's most obvious traits was his “romantic love of complexity.”¹⁹ Clearly the simplicity Wright speaks of is not synonymous with minimalism but rather an ethical term of one in harmony with the inner principles of nature in a more Hegelian sense of the Ideal expressed in embodied form, or the idea of the reality just beneath aspect mentioned above.

When Wright spoke of the elimination of the insignificant in *The Natural House* book, he was speaking of a concept he felt was essential to Japanese art and architecture as well as to his own work.

¹⁶ Ibid., 21.

¹⁷ Bruce Pfeiffer, *Frank Lloyd Wright: his living voice* (Fresno: Press at California State University, 1987), 32.

¹⁸ Frank Lloyd Wright, *An Autobiography* (Petaluma: Pomegranate, 2005), 196.

As Wright said, the elimination of the insignificant and “the consequent emphasis on reality” was a process he saw in Japanese art that he applied for the purpose of aesthetic beauty. And to synthesize these conceptual threads, simplicity and the elimination of the insignificant is for the purpose of “seizing upon” the essence of the artist’s creative idea, uncovering it so to speak from the accidental and the encumbrances that keep it from being expressed. The accidental and superfluous elements are in many cases the insistence upon realism, which runs counter-productive to the expression of the ideal embodied in material form. This also explains one of his more opaque phrases, the “reality that lies beneath aspect.” Wright’s aesthetic theory was based on an underlying structure symbolically and geometrically based and not on external imitation or literalism. The geometric pattern and order evident in the Jacobs house requires strict discipline in order to bring to the surface this idea so it does not get lost in more trivial and accidental details.

Wright saw no contradiction between the simplicity he espoused and the complexity evident in his actual work. His simplicity was not a minimalism as often conceived of in European modernism, but more of a continuity and coherence of principle, which may or may not be externally simple in form. His idea of the elimination of the insignificant puts the priority on the word “insignificant.” A work may be complex as long as anything not essential or insignificant to his overall idea or concept is involved.

Another important item can be gleaned from this: Wright went to Japan and cultivated his own design aesthetic using key principles of Japanese art and architecture. While the Midwest saw other modest-cost housing projects in the mid-twentieth century based upon the European International Style of architecture, he was designing a globally aware architecture in Madison, Wisconsin which drew upon Asian characteristics which he felt was more sympathetic to the local environment. To

¹⁹ Norris Kelly Smith, *A Study in Architectural Content* (Englewood Cliffs: Prentice-Hall, 1966), 31.

Wright, the Jacobs house was both an indigenous Midwest solution while yet informed with principles halfway around the world. An anecdotal footnote to this is Wright's gift to the Jacobs once the house was complete. He gave them a Japanese woodblock print by Hiroshige (fig. 9) which has remained with the home ever since.²⁰

Wright's "destruction of the box" and his spatial construction has been extensively written about. While not neglecting the importance of the physical manipulation of his spaces, here I want to focus primarily on what Henri Lefebvre calls the production of space and its relation to the first residents (Herbert and Katherine Jacobs) and the last and current resident (Jim Dennis). In his book, *The Production of Space*, Lefebvre develops his conceptual triad of the epistemology of spatial production.²¹ These consist of perceived space (spatial practice), conceived space (representations of space), and lived space (representational space). These give us a way to understand how the creation of space interacts with lived experience within it. In general, Lefebvre relates conceived space as that created by planners and designers who through abstract and neo-Cartesian logic produce the physical geometries that structure our built environment. And yet how we actually live in space, the lived space, is not based upon such abstract Cartesian conceptions. Lefebvre says that spatiality is not reducible to the mental realm and that even post-structuralist theoreticians such as Jacques Derrida and Roland Barthes, although having recognized the slippage of meaning in the semiotic connection to form, still have "fetishized" the mental realm, which they allow to envelope the social and physical realms.²²

Lefebvre asks the question of what will intervene or occupy the disconnect between the conceived space and the lived space? He says that it would be more useful if it could be shown that

²⁰ Hiroshige's *Myosin Shrine* from his *Toto Meisho* series (Famous Places in the Eastern Capital), ca 1835.

²¹ Henri Lefebvre, *The Production of Space* (Oxford: Blackwell, 1991), 33.

²² *Ibid.*, 5.

today's practitioners worked for one side or the other.²³ Quite interestingly, he then mentions Frank Lloyd Wright and Le Corbusier:

"It is arguable, for instance, that Frank Lloyd Wright endorsed a communitarian representational space deriving from a biblical and Protestant tradition, whereas Le Corbusier was working towards a technician, scientific and intellectualized representation of space."²⁴ While not expanding on this argument, it is conceivable that he is thinking that Wright's conception of organic architecture was grounded in a humanist and viscerally material expression which engaged with human lived experience, whereas Le Corbusier's architecture was more abstracted from rational conception and less concerned with human engagement of the architecture in its lived experience.

It may come as a surprise that the home's first residents, Herbert and Katherine Jacobs, only lived in this home for five years.²⁵ Five other residents lived in the home between the Jacobs and the current resident, Jim Dennis, who purchased the home in 1982, restored it, and has now lived in it for thirty years. I will review their lived experiences in the home in relation to Wright's conceived structure.

Clearly, the Jacobs did not anticipate the type of design aesthetic that Wright presented to them, nor did Wright oblige their desire for anything close to their early dream of a Dutch colonial. Instead, he presented them with an unusual house that turned its back on the street, and in Herbert's words he didn't grasp "the full implications of this violent break with American middle-class housing concepts until years later."²⁶ Wright's logic of not wasting space and money on a front yard seemed to make sense to them, even if they didn't fully understand all the moves he was making with the design. The

²³ Ibid., 43.

²⁴ Ibid., 43.

²⁵ Note: this wasn't out of frustration with Wright's design but rather to move further out in the country where they commissioned Wright for a second home which also became famous as the "Solar Hemicycle."

²⁶ Jacobs, *Building with Frank Lloyd Wright*, 11.

more they reviewed the plans the less they wanted to change them. The only change they requested Wright to make was to eliminate the workshop on the end and instead put a third bedroom there. The Jacobs at the time were a young, newly married couple that never worked with an architect before; Wright was an older and “famous” architect. The tone of their book clearly reveals some trepidation in asserting their will on the design.

As described in the beginning of this paper, the Jacobs were willing to eliminate many things considered unnecessary by Wright, including basement, garage, dining room, and attic. They also ended up paying more than they wanted to on the lot and house, even though the fact that the house was built as close to the original budget is remarkable for a Wright home. Were these sacrifices they made worth it?

Michel de Certeau’s idea of strategy and tactics is a way to consider a potential “coping” mechanism of the residents. Here, *strategy* represents the designed form of the house prescribed by Wright. *Tactics*, like persons jay-walking outside of prescribed streets and walks, represent spontaneous means people make in resistance to structures of power in their environment. It is of interest to see what *tactical* moves both the Jacobs and Jim Dennis made that would indicate resistance to Wright’s built-in structure of *strategy*.

Katherine Jacobs, in speaking to a Madison women’s group said, “I am convinced that the housewife’s opinion cannot be regarded except as to a few basic needs of her family, if the architect is to have complete continuity of design throughout.”²⁷ And yet Katherine recounts how efficient and adequate the kitchen was, the bathroom, storage, even though there was no attic or large basement. The house was not hard to keep clean and she loved the in-floor heat, saying they could keep the temperature 10 degrees cooler than in a house with conventional heat. We don’t see evidence of

²⁷ Ibid., 48.

resistance to the determined form of the house but rather an appreciation for its design despite the rigorous aesthetic discipline that entailed.

Herbert recounts, “We did not feel deprived: just the opposite. Our friends envied us our luxurious life in that house. We just didn’t have much money to spend on other things...”²⁸

And also:

I have said little about the beauty of the house—a constant delight while living in it—since this is a matter of opinion; but perhaps one indicator will be helpful in understanding the subtleties Wright had created despite the bare minimums of low-cost construction. Both amateur and professional photographers had trouble deciding on just what portions of the house to include in a picture, especially for interior shots. . . . And indeed each segment seemed so well integrated with adjoining areas in Wright’s open plan that the eye tended to move along a continuous picture. . . . We soon came especially to enjoy the soft, even light which came by way of the narrow band of windows just under the roof. . . . The great riches in comfort and beauty that surrounded us made the few drawbacks that appeared seem insignificant. For example, the contrasting boards and battens of the walls furnished such strong emphasis that even the Hiroshige print (fig. 9) from Wright, hung on the wall above that eight-foot living room table, seemed a little uneasy there. I built an easel to display some pictures, but the framed views through the glass doors made pictures for decoration seem unnecessary.²⁹

In regards to pictures, after reviewing Wright’s design for them, an artist friend had told them that they would be “living right inside a beautiful picture.”³⁰ The irony in this is that Wright himself referred to the Japanese print as a primary source of inspiration in his conception of space and architectural aesthetics. Herbert does reveal some reticence, however when mentioning that appropriate furniture for the house was difficult to find and required very choice, expensive pieces to fit in with the design.

Although the Jacobs account is well known through the publication of their book, I also gathered oral history from the current resident, Jim Dennis, who has lived there for much longer than

²⁸ Ibid., 59.

²⁹ Ibid., 53.

³⁰ Ibid., 48.

the Jacobs did. His account was obtained by an interview I had with him in April of 2015.³¹ Jim purchased the home in 1982 and spent three years renovating it before moving in in 1985. As professor emeritus from UW Madison's Art History department, Jim's views are more theoretically informed than the average layperson. When asked generally about the success of Wright's intention to create "beauty for living," Jim said he thought he succeeded and said:

What I think is of premier significance in living is that opening up of the space extending the spatial experience out into the setting, so you can stand here in the gallery and look out, extend out. That is the genius; it isn't mathematical. And then when you go into the details, those three overlapping boards express the 2x4's. Even a detail like that is related to the whole. It isn't attached. I wrote an article on the subject published in '65 about an ornament that is not attached, is not applied, it becomes the building.

Jim then compared this to his experience visiting the Bauhaus in Dessau, Germany:

I looked at a house of Gropius, for example. I was very interested in them and wrote a master's thesis about them in college. They just don't express themselves individually as object and Wright's buildings do. They're not memorable. I think what they did was significant in that they rebelled against the Victorian attitude.

The size of the home was not an issue for Jim since he lives in the house by himself. When asked about storage needs or the lack of it because of there being no attic, garage, or basement (minimal), Jim did not consider that a problem of the house design at all. He rather agreed with Wright that the accumulation of extra stuff is a negative habit anyway and that a house such as this forces one to keep a balance on the essentials. He pointed out that Wright did build in smart storage such as the long row of closets off the dining alcove on the way to the bedroom wing and the front entry closet, which he uses to store car supplies since the carport does not have any storage itself. He also confessed to having an off-site storage rental unit, which he said was primarily due to his large collection of books and files from his years teaching at the University. Also, he mentioned building a small storage shed off the south end of the house for garden supplies.

³¹ Jim Dennis interview by Ken Dahlin, April 6, 2015.

Jim mentioned various technical issues with the home such as replacing the radiant in-floor heat in the main section of the house, installing insulation in the roof joists, and various other items. He mentioned that Wright had never provided any electrical outlets in the main living room area and the only power available there had to come down along the wall from the track light conduit running across the ceiling. When Jim restored the home, he had outlets placed in the floor. The home did not have, and still does not have, air conditioning, and it does get hot at times in the hot humid summers of Wisconsin. He said the passive cooling in the house would be enhanced if more of the upper clerestory windows opened. Jim replaced the boiler in the basement with a high-efficiency boiler, but the radiant in-floor tubing in the bedroom wing was not replaced as it he had done in the living area. So the bedroom wing has a hard time maintaining a comfortable temperature. When reviewing the technical deficiencies of the home, it is easy to forget that this home was built in 1937 at a time when the typical American home only had one bathroom, and only about 50% of the homes had hot piped in water, a tub, shower, or toilet.³²

In both of these examples, the residents recognized the 'sacrifices' their house would entail and yet were still grateful to live in the house on account of the sense of beauty and space it provided in return. In fact, they both seemed to agree with Wright that they needed to eliminate much of their "stuff" and that lack of storage wasn't a fault of the home design but rather of an over-materialistic American culture. Lefebvre's comment about Wright and Le Corbusier representing lived space and conceived space (respectively), seems to bear out in the small sampling this paper studies.

It is beyond the scope of this paper to examine the underlying design principles responsible for the aesthetic compensations the residents receive from living in this home. However, it is significant that there are aesthetic compensatory factors that are built into the home that seem to outweigh any

³² James Lutz, *Lest We Forget: A Short History of Housing in the United States* (Berkeley: Lawrence Berkeley National

limitations on tactical moves of the residents. In fact, the structured design serves as a life-enhancing factor in the lived experience of the home. Some of these tactical moves have been described by the residents (Jim Dennis's off-site storage locker for example), and others can be seen visually such as various items hanging on the walls and extra furniture and accessories that Wright would not have approved of. That there are tactical maneuvers taking place in the home seems clear. What is less clear is the degree to which the residents perceive these moves as running counter to the expressed structure Wright designed into the house and what bias might be there due to the home's perceived beauty and internationally recognized architectural value.

The story of the Jacobs house is filled with unlikely connections and seeming contradictions. The home was Wright's affordable home prescription for middle class America (whom he referred to as *Usonia*). This was a modest affordable home, yet the geometry is precise, even though the scale may be small. It says nothing about a simple vernacular, "folk" approach to building for the masses. It is elevated culturally and aesthetically. It is an elite response to the average home problem. Elite in the sense that the architect feels he has a solution that is better than the Jacobs themselves would choose. Wright wasn't giving them what they thought they wanted, he was giving them what he felt they needed. He had something to give them that they didn't already have, a sense of the life and aesthetic beauty that they needed to learn how to live out. This seems rather presumptuous today, and yet it seems clear that those who lived in the house feel privileged rather than burdened by the experience.

Many such utopian solutions turn out to be resisted by those they are meant to serve and become historical footnotes of failed schemes meant to better society. And so, I was somewhat surprised by the degree of satisfaction residents discussed in this paper expressed about living in this home. This

Laboratory, 2004), 1-189.

was an ambitious attempt to reinvent the modest American home from the ground up and at many points risked potentially failing. There were, indeed, areas where it did falter in some of its technical aspects, but the highly determined form of the house was in the end something appreciated by these residents, even to the point of sacrificing some creaturely comforts commonly expected in such a home. It questions the age-old “form follows function” mantra and asks if form may have some independent value from function. To these residents, it clearly was a place of connection to the world of nature and of aesthetic beauty, something they didn’t find in the average house. This quality also seems to obscure the acknowledgment of tactical maneuvers the owners made in living in the house, but clearly, to them, certain functional limitations were worth the cost in light of its aesthetic value.

There is significance here in finding a resonance in our environment with human sensibilities, and it is worth noting what Lefebvre stated in regards to the difference between Wright’s spaces connecting to lived space and Le Corbusier’s intellectualized representations of space not making the same connection to its users because it remains in the realm of concept rather than lived experience. It would seem, in this case, that if such an environment that enhances lived space is provided, it may not necessarily override the need for tactical maneuvers, to use de Certeau’s terminology, but will produce an overall satisfaction with the residents, even if it is highly structured. A key to this is design that does not remain “conceptual” and rational but also engages at the point of human experience materially and spatially.

This study also shows the significance of a material culture approach to examining architectural designs. Here it revealed the extent to which Wright prioritized the aesthetic composition of the home even though he did not clearly state that in his writings on the subject. In the end, I found that the Jacobs house is a very successful project, as long as one does not define success in a narrowly functionalist manner. While Wright foregrounded his polemic about meeting the functional

requirements of low-cost housing, it seems that the home found its more enduring value in those less tangible factors that were yet very important to the lives of its residents. This, in the end, is what actually gives grounding to Wright's claim above that it takes an architect to produce such a cohesive environment as they provide the "art" to unite with the "science" of building.

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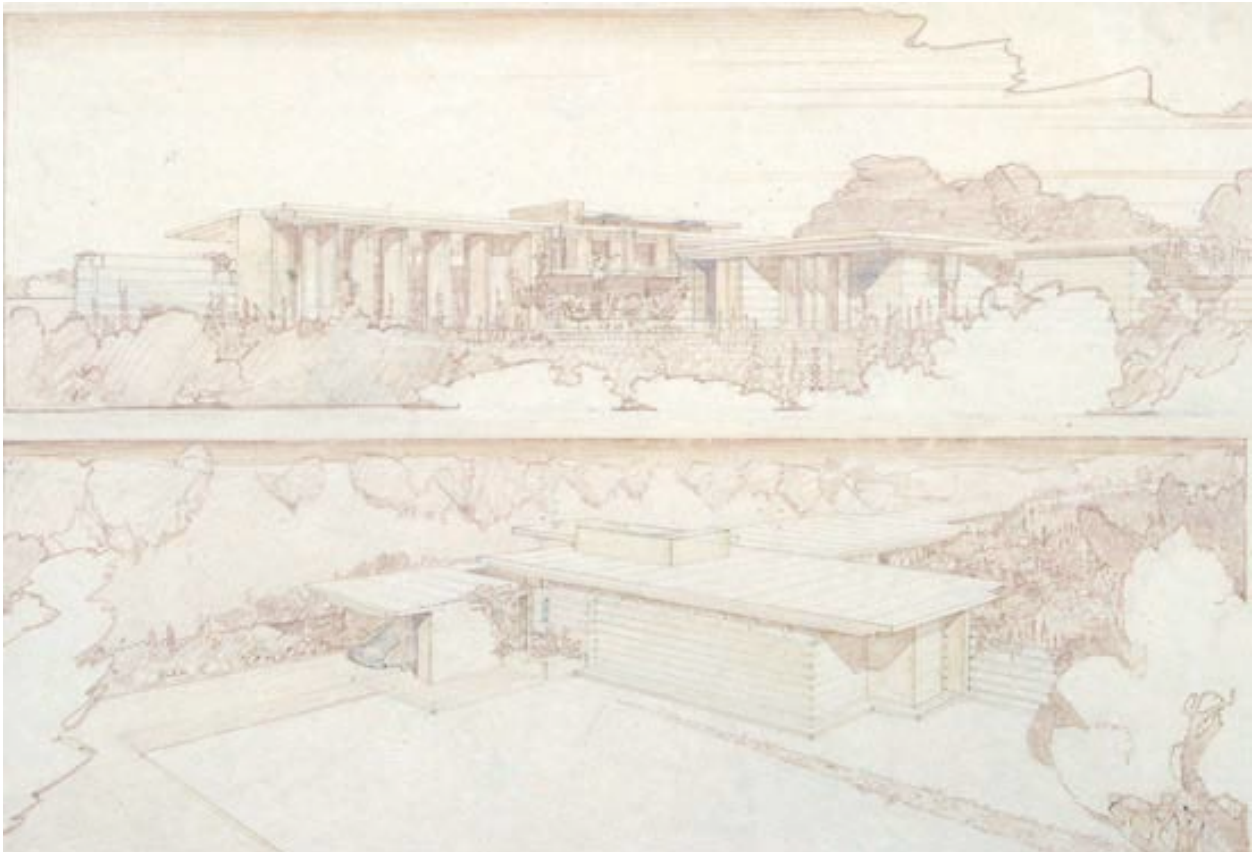
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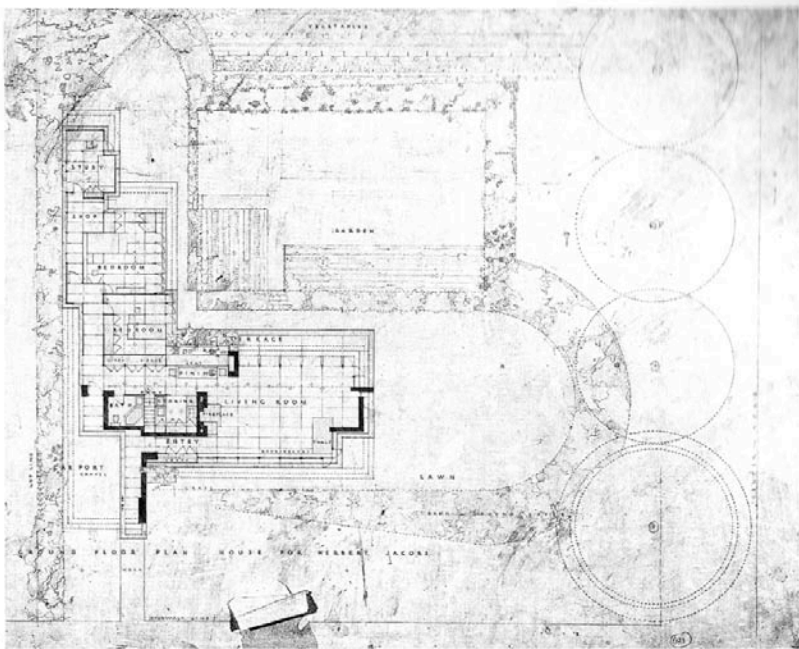
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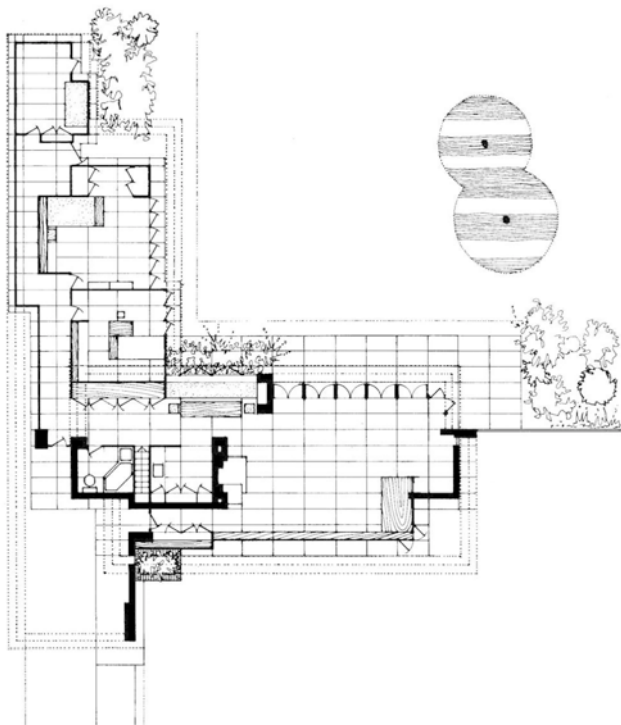
ILLUSTRATIONS



1. Frank Lloyd Wright's exterior perspective drawings of Jacobs home, 1936
(<http://www.designboom.com/cms/images/new/lloyd05.jpg>)



2. Site plan of Jacobs property. (<http://sdrdesign.com/JacobsSitePlan.jpg>)



3. Floor plan of Jacobs house showing 2'x4' grid.
(<https://classconnection.s3.amazonaws.com/617/flashcards/986617/jpg/12a-141337039313398.jpg>)



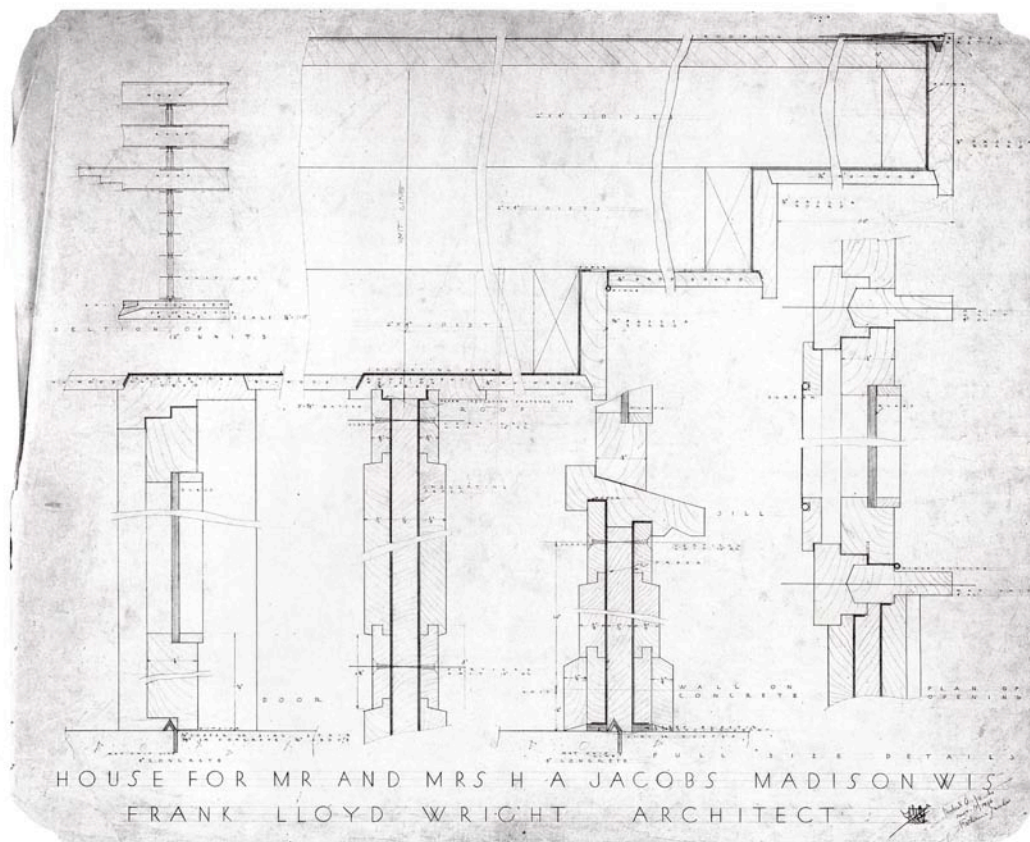
4. Jacobs Dining alcove. 1937 photo on left by Pedro E. Guerrero (Sprague, *Frank Lloyd Wright and Madison*, p.98) and photo on right in 2015 (photo by Ken Dahlin).



5. Living room interior photo 2015 (photo by Ken Dahlin)



6. Street view showing scale of Jacobs house in relation to surrounding context (photo by Ken Dahlin).



7. Construction details of Jacobs house showing built-up fascia edge, 2 1/2" thick wall construction, window and door details (Futagawa, *Frank Lloyd Wright Monograph* Vol 5, p. 231)



8. Exterior perspective photos: precisely and elegantly designed (<https://s-media-cache-ak0.pinimg.com/originals/b3/a4/65/b3a46520c094fc774841617b96ef203e.jpg>)



9. Wright's gift to the Jacobs: Hiroshige's Myosin Shrine from the series, "Famous Places in the Eastern Capital" (Toto Meisho) (www.ukiyo-e.org).