ex-centricity

Frank Huffman

Thesis submitted to the Faculty of Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of MASTER OF ARCHITECTURE.

Approved by: William Brown, Chair

William Galloway

James Jones

March 11, 2003
Blacksburg, Virginia
This book is dedicated with remembrance to Doris and Stanley Huffman.
Thank you:
to Kelli for everything you did to help make this possible.
to the rest of my family for all your support.
to Bill Brown, Bill Galloway and Jim Jones for being an excellent committee. Your patience, guidance and astute judgment were invaluable in making this project.
to Mike O’Brien, Hunter Pittman and Hans Rott for your contributions to my architectural education.
to my graduate colleagues for your friendship and collaboration.
abstract

Out of a dialog of order and building, the cruciform finds presence in the plan and section of a temporally significant house. This is a study of the dialectic between the ideal and the empirical in architecture.
This proposal for a house is a study in the emergence of architecture through a discourse of order and building. The project is drawn from the radially symmetric order of an offset cruciform, or pinwheel. This rotational order is the armature for the house. Through the dialectic of a universal order and the particulars of site and architectural type, a house emerged. The house is a result of a dialog between ideal order and empirical necessity.

The house was developed through the diagrammatic implications of the cruciform. An effort was made to work without premeditating the program, the style, or what the house might be like. The only initial intention was to accommodate temporal phenomena. The first intention, to make a place where the physical evidence of solar movement could be markedly noticed, led to the primary course of the study—the offset cruciform.
The investigation of pinwheel configurations began through a series of three-dimensional diagrams. These small models of red oak were compelling as objects, but they also seemed loaded with potential for inspiring architecture. As several configurations were modeled it became evident that opposing concentric pinwheels created opportunities for making vertical structure and articulating space. This realization presented the possibility of making every level of structure in the house an iteration of the pinwheel plan. This opportunity was pursued as a means of ordering the house.

By way of previous projects, a recurrent pattern of interest in radial symmetry and the offset cruciform was introduced to this project. The pinwheel came into this project only after consideration of temporal phenomena. Architecture is experienced through spatial change, which entails temporal passage. While temporal dynamics are inevitable in any building, to heighten the presence of this implicit reality is to enrich the experience of architecture.
An investigation of light cast through variations of a corner aperture into an interior space was undertaken to see how the trace of admitted sunlight would vary over time. The intention was to determine the houses’ form through light studies and the regulating lines of the solar cycle. Daily experience lends some familiarity to how, in a day, the sun courses across our vista. However, the behavior of a shard of light penetrating an interior space through an aperture is not as easily intuited. These studies allowed some understanding of how a beam of light might move across an interior wall or a room through the course of the day.

Three basic apertures (along with several variations) were explored. The three corner openings were: a horizontal opening at the top of the space, a vertical aperture along an entire corner, and a combination of both a horizontal and vertical aperture. A cylinder and two interlocking corners were also studied.
Study was also given to the site’s solar access. Bordering a farm, the site is on a cul-de-sac in a typical suburban neighborhood in Blacksburg, Virginia. Its virtue lay in its bucolic views and the availability of sunlight. The view eastward is into a rural valley and southward to farmland and beyond that a golf course. There is a substantial slope from west to east, running away from the cul-de-sac and a gentler slope southward. The slope’s ridge line, hides distant westward views (and thusly vibrant sunsets); however, to the east and south the vista is broad, offering solar access from sunrise to late afternoon throughout the year.

The light studies were influential in making this project. The examination of movements of light and shadow helped place the project in its cosmic context, and influenced the choice of how the house would be ordered. Instead of form evolving to a diagrammatic level out of the studies of light and time, a diagram was imposed by an intuitive response to these studies.
Considerations of solar access and context made the choice of a rotational order appropriate. Architecture inevitably stands under the “majestical roof fretted with golden fire”. It was by way of a study into this “orderly world of trajectories” and the “logical empire of the solar cycle” that the pinwheel became the armature of the house.

To find the universal in a particular condition is to conceptualize that condition. Symmetry exists as a physical attribute and as a transferable concept. Such concepts are frequently the armature of architecture—the parti to design. This project takes the universal of radially symmetric order—manifest in the offset cruciform, or pinwheel—and searches for a reasonable expression of its nature in the specifics of a house at a particular site. In *Toward a New Architecture*, Le Corbusier reasons that “to establish order is to begin to work” Rather than beginning with a specific response to solar geometry or topological evidence, the ordered diagram stood as an
established made form that would create a dialogue to impose limits and definition to the project.

This project became a search for a house with a readable coupling of the offset cruciform in plan and section with accommodations for the presence of temporal phenomena. Beyond this stated pursuit, the house was allowed to develop without premeditated program by way of an active interest in the implications begat by drawing and modeling. A dispassionate position was taken toward the resultant of making; however, every move is a decision and an opinion. Choices are made as to what to do and what to do next. Iteration comes from a process of selection and elimination—of judgment.

The offset cruciform plan has a substantial precedent in architecture. In his essay, “Academic Tradition and the Individual Talent”, Patrick Pinnell argues that the ordering of Frank Lloyd Wright’s prairie houses
falls into two basic types, “one plan is basically the centrifugal or dynamic . . . the other is centripetal or static”.

Pinnell argues that the cross axial plan emerged with the Joseph Husser House of 1899 and became the structure from which Wright developed his prairie houses. The offset cruciform can be found in the later projects of the Price Tower of 1952 and Wingspread of 1937, which Wright called his last prairie house.

Qualities were culled from the three-dimensional diagrams for what they might bring to the built environment. These conditions included a rotational
dynamic, the delimitation of space, the potential for a structured hierarchy, and a seemingly indescribable quality in the physical relations of both the interlocking pinwheels and the perpendicular pinwheels. The effort was not to literally transcribe any of the diagrammatic models into a building, but to make the qualities of the diagram present in the structure—not to the figurative letter, but to bring something of the form’s essential spirit to the building.

As the radially symmetric pinwheel was studied, consideration had to be given to how this structure would give rise to architecture. The possibility of a hierarchy within the cross axial order, as the red oak models had shown, lent itself to defining spaces within a house. Offsetting the secondary rotation of structure would allow for variation of space which could accommodate different spatial needs within a house. By contrast, a concentric order might allow for a stronger presence of the cruciform structure. How would the offset cruciform find its way into the
section of the house? Particularly intriguing: how might a structural order that weaves plan and section together be made and experienced? The structure would have to possess a singular quality if a relation of plan to section was to be presented to experience. Also necessary, would be a place from which to perceive the relationship. Trying to reasonably bring something from the relation of the interlocking and perpendicular pin-wheels to presence in the section of the house was a difficult challenge.
The study of how to transfer conditions and qualities of the cruciform to the built environment was continued through drawing. Through a mostly nonlinear series of abstract plans and sections, possibilities were entertained. Prospecting for a singularly resolved next step yielded a better understanding of the form, but no solution came screaming forth. These initial two-dimensional diagrams were conversations on how the form might make a house; they gave clues as to what might and what might not be reasonable.
Cumulatively, the work thus far had yielded a breadth of possibility, but also a depth of critical understanding as to how this house might come to be from a pinwheel diagram. As imagination was projected onto the diagrams, possibilities emerged. The models and three-dimensional drawings began to test those possibilities and reveal the challenges of making a building with the strong cross axial presence of the pinwheel diagrams. The diagramming had yielded progress and a better understanding of the form, but to continue to speculate at this level of engagement without considering the site and the nature of building would have stalled the project. When considered without context, the abstract diagram (both two and three dimensionally) lacks the substance to move much beyond itself. The process needed an element of friction to advance.

Two models were spun out of the many diagrams of plan and section. These models began to test the cycles of abstract two-dimensional speculation. Both models had a square ground floor with closed walls; the cruciform was
studied primarily on the second level and the interior. Both models retained the site's slope with their north and west walls, creating a subgrade condition. While a solution might have been hammered out of these initial proposals, there was some trepidation about the house being partially below grade. The desirability of this condition was questioned with regard to its temporal qualities, necessarily closed form and the implied asymmetry of its placement in a southeastern slope. While absolute rotational symmetry was not a prerequisite, there was an expectation to make
the cruciform present in the building. At this point a choice needed to be made as to how the house would relate to the site. The options were to nest the house into the slope, sit the structure on the site but not in it, or to contour the house to the slope. Drawing resumed with an open mind toward the latter two possibilities, and the added question of open versus closed structure. By remaining receptive to either option, a solution could be cultivated out of the process rather than ordained for the sake of expediency.

Two diagrammatic models illustrated the nature of a more outward (open) thrust of rotation as opposed to a more closed (inward) direction. This was further recognized in the comparison of two drawings that speculated on the character of the house; one drawing was closed and centripetal the other open and centrifugal. From the comparison of these models and drawings, the open plan was chosen as the course of pursuit because of its potential for outward views and inward solar access.
While Patrick Pinell makes a distinction between the inward and outward focus of Wright’s prairie house plans, the diagrammatic study models that inspired this project seem (to varying degrees) to be both centrifugal and centripetal. This could also be said of Ludwig Mies van der Rohe’s Brick Country House of 1924. While Mies’ plan has a rotational character and presents a pinwheel dynamic, largely by the strength of the long walls extending into the landscape, it also possesses a flurry of asymmetric improvisation. Like Wright, Mies did not bind himself to a strict transference of rotational symmetry.

Mies’ Brick Country House.
The spirit and quality of the cruciform, so present in the diagrams, gained palpable existence when the drawings began to respond more directly to the site. In the *Philosophy of History*, G. W. F. Hegel states: “That which exists for itself only, is a possibility, a potentiality; but has not yet come into Existence. A second element must be introduced in order to produce actuality . . .”. The project came to a point of reasonable advance, when the plan, section and site where all brought into conversation. By finding a correspondence between the site and its prefigured armature—the pinwheel, architecture began to emerge out of the cycles of speculative diagramming.

By accepting the implications of a series of drawings as to how the house would sit on the land, the plan and section found a correspondence in a line that could extrude to a plane toward the end of becoming a retaining wall. The connection of lines that delineate the retaining wall—two of the four arms of the pinwheel and the
remainder of one broken arm—created a jog in the emergent retaining wall. This wall produced a centric split-level structure that responded directly to the topography of the site but remained tightly within the structure of the early cross axial diagrams.

While the retaining wall, with its fragment of the pinwheel, had offered some unity of plan and section (at least in spirit), the intent to more literally express the centricity of the house meant that the pinwheel had to be kept intact or its remnants held in a perceivable relationship. This imperative was pursued by diagramming the logic of the rotational order within the construction of the proposed retaining wall. The pinwheel was completed by placing two walls of similar dimension and material into the rotation. The four blades
(walls) of the pinwheel were sited to the four cardinal directions. This was both a response to the eastward slope that was to be retained and to reference the house's cosmic context. The cardinal orientation of the retaining walls aligned the rotational symmetry of the plan with the symmetry of the diurnal cycle that had intimated it. The direction of the apparent rotation was decided by orienting the jog to adapt naturally to the topography of the site and the best view. A podium was formed from which a view is afforded to the lower level of the house and out, east and south, into the landscape.

Out of the series of plans, and plan obliques—the most linear and purposeful study thus far in the project—a choice was made and a diagram was chosen as the basis for the development of the house. The diagram was made of three concentric pinwheels. The design was thought through hierarchically, from the center out—the primary pinwheel being the retaining wall(s), and the secondary and tertiary pinwheels delimiting and enclosing space.
The innermost pinwheel (the retaining walls) possesses an outward dynamic that is opposed by the inward rotation of the interior and exterior walls. The diagram has a quality that is both opened and closed. With their enclosing right-angles, the centripetal quality of the exterior walls is countered by the offset of the rotation, giving the house an openness.

The configuration of walls that would surround and enclose the retaining walls was informed by the red oak models. The pinwheel of the retaining walls was surrounded by a secondary array of four lines that formed an opposing pinwheel, creating what would become interior walls. This was followed by a tertiary array of right-
angled lines or closed corners that would form the exterior walls of the house. The need to delimit space was countered by the intention to make a house of singular wholeness. These competing interests were considered through drawing until a solution that offered both many and one was found. What emerged from this series was essentially the nine square plan—the basic plan of many architectural landmarks, including Palladio’s Villa Rotunda. This split level nine-square emerged from the consideration of site and order through drawing. The basic diagram of the house was refined further through larger scale plan obliques and a series of small chipboard models.

The primary element of order in the house is a retaining wall configured within a pinwheel arrangement. Charles Moore claims, a house must “be like something”. The likeness of this house—a place of rotational order with both a centrifugal and centripetal quality—came to be by bringing a pinwheeled plan and section into
correspondence as a response to the site. To build well demands that building not only take place but also make place. W. G. Clark asks architecture to give back for what it takes—to atone.\textsuperscript{12} This is advocacy for restraint and respect. It is not through an ad hoc process upon a tabula rasa of “real estate” that place is made. If order is to be brought to a site, with the intent of making place, it must be cultivated not
inflicted. By using an imposed order to define the retaining wall, the place of the house was defined. By making the lines of diagrammatic order something—a retaining wall—the diagram began to be transformed from universal to particular.

As the design of the house moved away from the abstractions of the early diagrams toward a more literal representation of a building, focus moved toward the building’s use and construction. A floor plan—showing the proposed use of each space was drawn; program was not the study of this project so the normative expectations of a suburban house became the layout. The plan was generous and didn’t require forcing any of the functions; once the layout of rooms seemed reasonable, it was not challenged in the project. The functions of the house were arranged with the public areas on the cross axes of the house and the private areas in the corner spaces. The exception is the kitchen which is located in the southwest corner. Because of the offset of
the cruciform, the open plan gives the kitchen direct access to sunrise and morning light. Bathrooms are located in the subdivided corner spaces. The mechanical functions of the house are planned for a utility room under the center space which is the “podium” in the retaining wall’s jog. The primary plan and section was established, but a wide range of secondary and tertiary possibilities remained—particularly in the section of the walls and their relation to the roof.

Because the development of the diagram had focused on an ordering of walls and the void formed by their array—there was no pin in this pinwheel. Frank Lloyd Wright's Wingspread has a pin, its mass of hearth and chimney help carry the roof. In this project, the interior walls would have to help bear the roof, but there were more options for holding its periphery; it was not essential that the exterior walls be load bearing. In this project, the logic of the radial plan implied a roof that was either radial in expression or directionally neutral.
Lacking a central core, the house needed its interior walls to be load bearing. The offset rotation of the exterior walls, created a broken or offset square that opened the plan and produced solar exposure in two directions. The offset of the exterior walls and the gaps between them created a perimeter that would not support a roof by a simple matter of course.

The investigation of the roof was carried out largely through model making. In the first model of the house, the ceiling was separated from the load bearing interior walls by the Wright’s Wingspread.
depth of its exposed structure. Systems of open web joists and wooden beams were both tested in the model. By extending the line of the tertiary walls (and thereby not adding an additional line), a frame system picks up the roof structure that cantilevers around the perimeter and rests free of the exterior walls. This line of frame also divided the corner spaces, providing an opportunity to make bathrooms. The roof was raised above the walls on the assumption that the wall's presence might hold better if they did not end buttressed to a ceiling.

As the house began to develop, questions of temporal affect reentered the dialog and informed the search for an elegant resolution of the project. By separating the roof from the exterior walls, a band of sun, light and air would circumvent the house, thus bringing the project's phenomenal and conceptual aspirations together. The
exposed structure—particularly the web joists—also offered a receptor of parallel light at sunrise.

With the roof raised and with temporal phenomena given passage, the design could have continued its linear progression toward completion; however, that was not the course of development. Design, at this point, took a lateral course of exploration into alternative roofs and variations in the exterior walls. This challenge to the first and second iterations of the house was spurred by trepidation over the roof
structure, and need to address egress. The models had shown that the exposed structural system that separated roof and ceiling did not strengthen the presence of the wall or ceiling. The total effect was too busy and drew the eye's attention away from the presence of the walls. The proposal was not, however, without virtue; the frame provided a certain elegance in being both fenestration/bathroom wall and roof support, while extending (and not adding) a line to the diagram.

The obvious next test would have been to hide the structure with ceiling and soffit, but an inclination toward testing more hierarchical solutions led to several lateral alternatives. These inquiries led to options that combined the hidden beams and purlins with exposed header beams. Load bearing piers and a rotational array of columns were also considered. These alternative systems challenged the project on a diagrammatic level. To add new elements to the structure defied the
logic and process of the project. The additive elements weakened the rotation of the walls and the clarity of space they defined.

In the course of resolving the roof, study was given to closing the gaps in the array of interior walls by joining the spanning portion at the corner of the rotation. This consideration would open the interior space, leaving it less delimited by plan and more subtlety delimited by section. A more articulated definition of the central space was investigated by sinking it to create a living space that mediated the upper and lower levels halfway—serving also as a stair landing. In this alternative, the cross axis was weakened as the north-south axis became more prominent in plan and the strength of the sectional change was somewhat diminished by the middle level. Affecting both plan and section, these studies (like some preceding studies) were of diagrammatic proportion, and more lateral than forward in the development of the project. Despite being tangential to the final proposal,
these experiments showed space could be defined through its section—even within a rigid structure—with comparable strength to its articulation in plan.

From the exploration of roofing options, it was determined that the presence of the rotation of the walls would not be diminished by joining them to the ceiling. In the process of materializing an abstraction, this was a point where restraint became a suitable response; a judgment was made that the exposed structure was too much. Less, would indeed, yield more. The roof was resolved by hiding all bearing responsibility within the walls. Four header beams, supported in the exterior walls, carry the perimeter of the roof’s structure. (The beams could be supported by placing a wide flange column or a reinforced concrete column in the wall). The roof structure above the central void in the house is carried by a beam cantilevered from the interior wall toward the center; by using a single beam, a band of the roof could be opened to a skylight without obstruction by a multitude of joists.
With all structural obligations contained within the walls of the house, the plan was free from the necessity of any element that was not present in the diagram that had emerged to become its catalyst. The subdivided space was now a completely optional consideration. This allowed the kitchen—which was slated for the southwest corner—to be unencumbered by structure and unhampered in its arrangement. The bathrooms were now accorded similar flexibility, but were largely unchanged. By obliging the roof’s support to the walls, Herman Hertzberger’s measure of a house’s “competence” was enhanced as it “allows the users to fill in the spaces according to their personal needs and desires.” This attribute enables the house, in the words of
Richard Padovan, “to extend generously through time as well as space.”

The walls of the house are brick masonry; its floor and ceiling are wood. In this project, the expectation of material is to receive light, shadow and weather to the end of making ephemeral time tactile. In the book *Weathering*, Leatherbarrow and Mostafavi point to the importance of foreseeing a building’s exposure to “the work of elements” as a process of “continuous metamorphosis”. The choice of material makes the difference between a building showing patina or decay. While materiality was a secondary concern in the search for a diagrammatic whole, it was viewed as essential to enriching the temporal quality of the house. The admittance and deflection of light by the building’s geometry is enhanced by the subtle shadows created by the texture of its material. Together, in the words of Martin Heidegger, they allow a light to fall “on the essence of the things that are locations and that we call buildings.”
The final resolution of the roof evolved in tandem with an investigation into the character of the exterior walls, which also received further study. The initial proposal for the walls left them whole and unpunctured, but there was a need for egress in the corner rooms (at least two were slated as bedrooms). The early light studies informed how this commodity might be provided. Both vertical and horizontal apertures were tested in models. The resultant compositions were considered though drawing, as were alternatives. Variations on the window positions were also looked at, namely a series of small windows—running horizontally, vertically or both.
In the end, the corner aperture was chosen and the exterior walls were elevated above the roof, eliminating one source of temporal experience in favor of another. The corner apertures in the light studies had shown that corner openings would allow light to graze the inside of the outer walls with near parallel light at some point each day. The light from the corner window would emit a sunbeam, that would move symmetrically across the corner spaces at an asymmetric level and angle of light; (asymmetry occurs because the 45-degree-off-south angle of the window’ axis). The choice of reducing access to the outdoors by building over the horizontal band of windows was made in combination with choices of
how to resolve the roof’s structure. Like the exposed ceiling, there was also a hunch that both horizontal and vertical apertures might have been too much. However, the outdoors have hardly been shut out of the building; each of the four outer rooms that sit on the cross axis of the house are fully glazed. To offer a more contrasted and sheltered space in the corners allows for a stronger differentiation within the house while maintaining the strength of the structure as a singular whole.
Another aperture was added to the corner rooms. A window was made on the side of the retaining walls that faces the corner space it helps to define. This was an opportunity to wash both sides of the retaining wall with light each day. Because of the cardinal orientation of the plan, the daily light on the retaining walls changes to a rhythm of a seasonal symmetry pivoted on the winter solstice.
The bathroom space, which had been made by the line of the framework that also supported the roof, remained unmoved after the support that had originally defined the space was eliminated. The corner window is the bathroom window in the eastern and northwestern corners of the house and the window adjacent to the retaining walls opens to the balance of the corner space in those rooms. The interior walls of the bathroom are frosted glass so that the light that enters the corner window is visibly transmitted through its surface and diffused into the rest of the corner space.

A place was made for the presence of temporal phenomena in the doors of
the corner rooms which stand opposite and across from the windows that border the retaining walls in the corner spaces. By making the doors partially out of frosted glass, the temporal quality of the corner rooms is transmitted through the closed door and into the center of the house. This event is particularly strong in the southwest room at sunrise on the equinox, when parallel light grazes the retaining wall and hits the door with parallel light.
Glass is a prominent material in the house, and a specific study into the effects of dichroic glass was undertaken because of its temporal qualities. The light reflected and transmitted by dichroic glass changes with its angle of incidence. The glass can be used to signify the passage of time as daily and seasonal changes of light are transmitted and reflect from the glass. The small windows considered in the study of the exterior walls might have been a suitable place for the glass, however those options were not chosen in the final proposal. Dichroic glass was also considered for the skylight but the effect seemed more for novelty than an actual improvement in the quality of the space. While the properties of the glass are interesting, a place was not found to properly imbue its effects. Sometimes, the appropriate material choice is choosing not to use it, regardless of its captivating qualities.
The adaptable order of the cruciform is described by Bernard Hoesli as “an ambiguous form par excellence” 18, an argument well validated by the armature it provided Frank Lloyd Wright in the development of his prairie houses. Within the restraint of the established order there is still great possibility. This project did not stray far from its cruciform structure. In keeping with the pinwheel’s symmetry, decisions about the windows were applied to each side of the building. Consideration was given to variation at the tertiary level in response to the environmental and climatic conditions on each side of the house (for example, using less glass on the northern exterior). While this might have been an appropriate design decision, it was not pursued. In making each side as similar as the site’s section would allow, the differentiation of experience is affected more by nature and time than by variation in the building’s design. Counsel for this choice was taken in the rotational symmetry of Palladio’s Villa Rotunda.
Ralph Knowles points out in his book, *Sun Rhythm Form*, that the “when and where” of sunlight’s availability offers implicit reference to space-time by its presence or lack thereof. Different qualities of light are presented to each room of the house by the orientation of the wall and the altitude and azimuth of the sun. Though every side of the house is different because of its response to the site, the similarities of the exterior’s section and the interior’s plan provide a constancy through which differentiation of light over time is articulated against the polar array of walls. Staying close to the literal pale of rotational symmetry and avoiding improvisation offered limits that helped create a delimited space of singular presence. By way of a serpentine course, this study came to Le Corbusier’s conviction that the plan, an “austere abstraction . . . calls for the most severe discipline.”
The house was developed from an abstract order drawn quite far into the development of the house at a dematerialized level. This project was not, however, an effort to dematerialize architecture, but an effort to materialize a concept—an order—within the context of building. Beginning from an abstraction, this project developed toward materialization through making.

Like its intentioned process, the parti of this project evolved into a twofold effort: to allow for the presence of temporal phenomena and to bring a harmony of plan and section to this cross axial house. As the project progressed (particularly once the regulating diagram was established) it became less about a diagram, a pinwheel or astronomy and became more inherently about building; at this point the early light studies and diagram became a “palimpsest” that can go unnoticed but are essential to the delight of the building. As a design process, the dialog between the ideal and empirical seems rich with
potential, finding affinity with Emmanuel Kant’s conviction: “Two things fill the mind with ever new and increasing admiration and awe, the oftener and the more steadily we reflect on them: the starry heavens above and the moral law within.”

In his book *The Place of Houses*, Charles Moore says that “a good house is a single thing”, a sum greater than its parts—requiring that “one plus one must equal more than two.” Moore explains the necessity of “a conceptual leap from the individual components to a vision of the whole thing.” The development of this project has been a “leap” in the reverse direction; having begun with a conceptual premise, the challenge came in making the practical leap from an abstraction to an architectural proposal of inhabitability and phenomenal presence.

Architecture makes place through the delimitation and binding of space. Clark Blaise calls space the “only one visible analogue” of time. A place can be anticipated, recognized or
recollected spatially as where, or temporally as when. Memory is a record of this perception. Now is the sensed perception of an immediate correspondence between when and where—presence. Architecture is experienced through spatial change—movement, which both implies and requires temporal passage. To give this a priori experience a heightened presence creates an architecture that is greater than the fetish of its construct. Through the palpable presence of changes in light, a building has qualities of moment as well as object—architecture takes on a quality of when as well as its well-built where.
Notes:


4. Ibid. pp. 25.


7. Ibid. pp. 18-43.

8. Ibid. pp. 51.


16. Ibid. pp. 16.


24. Ibid. pp. 147.

bibliography


