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SEEING THROUGH A WALL
Thesis submitted to the Graduate Faculty of Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of

MASTER OF ARCHITECTURE

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I owe special thanks to my family for their love and support
mom and dad
gregory
nancy
raymond
theresa
words cannot express my feelings for you all

and thank you to my teachers for their guidance and willingness to push me forward
joe mashburn
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At the core of architecture lies the will to express the value of human existence through the pursuit of the essential; far from all forms of mere stylistic and scenographic concerns and dramatic rhetoric, architecture roots itself as “the source of the structural part of this extraordinary human commitment.” It is an expression of humanity in the most concrete and lasting form... an expression through design - design being a tool for a better and more full understanding of reality, of one’s existence. Through the expression of the nature and demands of human existence, architecture becomes permanent, lasting and meaningful.

Through the celebration of building, the architect reveals “hidden” qualities that illuminate and heighten awareness of one’s existence.

Paul Valery in *The Architect* suggests, “If, then, the universe is the effect of some act; that act itself, the effect of a Being, and of a need, a thought, a knowledge, and a power which belongs to that Being, it is only by an act that you can rejoin the grand design, and undertake that imitation of that which has made all things. **Now, of all acts the most complete is that of constructing.**”

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The architect must build upon what is latent. Reveal. Hidden qualities exist within every place. Even though they remain unseen, they are always present. The architect must be the one to “see”...to see things as they are...to see things as they might otherwise be. Because these “hidden truths” of a place are revealed to the architect, the aim of the architect must be to make these absent qualities present - to re-present the essential, to re-present place or as W.G. Clark states, “Intensify place.”

“Architecture seeks not only the minimal ruin of the landscape but something more difficult: a replacement of what was lost with something that atones for that loss. In the best architecture, this replacement is through intensification of place, where it emerges no worse for human intervention, where culture’s shaping of the place to specific use results in a heightening of the beauty of the landscape. In these places, we seem worthy of existence.”

w.g.clark

The relationship between manmade structures and the natural world offers “the richest and most valuable physical and intellectual experience that architecture can show.” Each intervention is an act of man and in one way or another states how we are in this world. Good or bad, building defines who we are - individually, collectively and culturally. Consequently, the act of building holds both grave yet fruitful implications and holds with it an overwhelming amount of responsibility. in the words of Alvaro Siza,

“Architects transform reality.”
This transformation of reality, the reading of place, is determined by the architect's Making. The idea or concept drives the making and conversely the making drives the idea. It is a continual process that relies on the architect's ability to see. The act of seeing "is a conscious act that implies being aware of something, discovering it and analyzing it. To look at something, on the other hand, is to allow one's gaze to pass over it without regarding it."6

Luis Barragan’s reply to his students’ persistent questioning of the why in his architecture holds great value - “Don’t ask me about this or that building, don’t try to do what I do: see what I saw.”7

Seeing lies at the heart of the search for place, the elevation of the commonplace and ultimately ourselves. Seeing enables the architect to expose hidden potentials of the site, the place, and to form an idea full of meaning and intent. Unless the idea has meaning, the form of the building is empty and devoid of significance. There must be something there - something greater to be expressed. If the building is an event that takes place as a result of the interplay of aspects of life and existence, then it points out in form an active resistance of the place where it sits.
abstract

In an increasingly standardized world, how can architecture maintain, heighten or instill sense of place? How can the architect use the program to reveal something greater in the architecture? How can architecture truly re-present rather than degrade everyday life?
The project is situated in the southwestern Virginia town of Blacksburg within an expanding corporate research park. Blacksburg itself is a rapidly growing university town nestled on a plateau amidst the Alleghany Mountains. The beauty of the region is, stated simply, incredible. At first sight, the splendor of the area is undeniable and through inhabitation and over the accrual of time, this perception grows and becomes more profound.
The Virginia Tech Corporate Research Center (CRC), the site of the project, lies among the rolling and undulating hills that characterize the region. A drive through the CRC offers some spectacular views of the entire area and of the mountains beyond. In one instant the mountains are hidden from view and in the next, as one reaches the crest of a hill, they suddenly emerge.

From the siting to the close proximity of a major university and a major interstate, it had all the makings of an exceptional place to work and live. At the onset of the developmental plans for the research park, the planners seemed to have wanted to create a special place. Nature trails were to run throughout the park and a CRC headquarters was to be constructed. The headquarters would house the CRC offices, a small auditorium, an exercise facility and a daycare center. All in all, the planners were attempting to make a small “CRC” community amongst the larger of Blacksburg and the university.

Presently, though, this community does not exist and the setting itself is being systematically destroyed. The current rate of building is two buildings per year and judging from the last two this could have a terrible effect on the area. The new buildings are just decorated boxes placed on cut and filled sites with no outside reference other than the road and parking. They serve practical convenience only and nothing more. Meanwhile, the headquarters of the CRC has moved into one of these boxes and now the facilities of Virginia Tech serve the functions of the auditorium and exercise facilities. With the headquarters moving to share space with another organization and removal of any ammenities off site to be shared with 25,000 other people, this has become only a collection of buildings - a collection of buildings which could be built anywhere, any town, any corporate research center. Not only is the site stripped of its beauty and import, but through this, the architect, the users, the passersby and the community as a whole suffer a loss. The CRC is quickly becoming another corporate nonplace.
The proposed project is the CRC headquarters - the same program as originally planned and on the same site. The immediate site for the project is completely wooded bound on two sides by clearings and on two sides by roads. The site sits on the crest of a hill and offers the appearance of a wooded field. Because of its juxtaposition to such contrasting conditions, the clearings that surround it, the site seems almost as if it is an island of trees.

This book and project mark an effort to study the re-presentation of an “ordinary” program in an increasingly “ordinary” site as something special, as something that celebrates the wonder of everyday life. The goal has become seeing and the uncovering of what is already present either in the site, in buildings around the site or in what is brought to the site. It is about re-presenting place, site, nature, wall, clearing - architecture experienced through the senses, not only sight, but sound, texture, smell, time...to establish a unity between interior and exterior space and to reveal something present but hidden, something essential - essential not reactionary or romantic but dealing with what is given and what those capabilities are.
“Instead of an existentially grounded plastic and spatial experience, architecture has adopted the psychological strategy of advertising, of instant persuasion, and buildings turned into image products detached from existential sincerity.”

Juhan Pallasmaa

Architecture, in many cases, has degenerated into mere image, and in a world that increasingly relies on these images to convey meaning, become “real,” it is the architect who has the capability of reaching beyond and touching something innate in all - not something based on intellectualism, but something lived, perceived and experienced.
The idea is a clearing within a field of trees - an attempt to take what is an exceedingly prevalent condition and expose it as something unique. Through making, it becomes an effort to present the site, as a whole, in a way that evokes reconsideration...to see it in a new light...through a wall.
The wall - the presenter of the clearing, the trees, the topography, the site - becomes the built form of the idea. It is the constructed edge. Through it, the conditions of the site are presented anew, revealed... revealed as something fundamental about place.

While in a completely different environment, the city, Louis Kahn’s Yale Center for British Art provides an excellent example of the built form of the “architectural idea,” and revealing the essence of place. His idea of living and building within the city drives the making of this project. Kahn understands architecture to be “an embodiment of characters which are simultaneously human and natural, and their buildings give these characters material presence.” With this in mind, architecture by its very nature must in some way allow one to see one’s self in the built form, to see where one is and to see how one lives. Kahn builds order and, through this order attempts to expose and reveal the essential or authentic. Kahn considers “fundamental meaning so that he could create answers to ‘desires’ rather than merely ‘needs.’ Desire [is] not in the program. It is the architect’s intuitive sense of the ‘not yet made.’ Kahn responds through the revealing of place within the city and through building at a scale intimate to human experience.

Here, at the Yale Center for British Art, Kahn treats the street wall as an urban wall revealing only floor levels. Shops and cafes line the street level. They belong to the street, the public and the passersby while the collection areas belong to the whole. The building is much more than the sum of its parts but a whole within the city - an integral part of the cityscape.

The rigorous order of the facade and the expression of the structure further illustrate its place within this established framework. Kahn reveals the structural system even in the floor; therefore, it reads as much more than just column and beam. Also, by removing a one story bay at the corner and keeping the corner column, Kahn again emphasizes the order of the building, and marks the entrance to the museum. Not only does this set the entrance apart from entrances to the neighboring shops but it acts as a transition from the city into the museum. The movement from the outside, a four story “walled” space open to the sky through a comparatively low one story space and into another open-ended four story space, creates both an entrance to an entirely different world and, paradoxically, a link to from where one just came. The use of overhead natural light and the openness of the courts act as escapes from the city and at the same time a union. Kahn employs a clear expression of the order within the interior to make an inextricable link between city and museum.

Kahn brings the institution of museum to the city and brings the city into the museum. He pulls the city inside the building in a powerful yet intimate way elucidating both the city and how one dwells within it. The “windows” to the interior court, the ever-present grid, the light above - one could still be outside. Kahn and his idea restore what already exists and allow one to see it again for the first time.
“I am constantly - almost without exception, indeed - faced with an obstacle difficult to surmount, a kind of ‘three in the morning’ feeling. The reason seems to be the complicated, heavy burden represented by the fact that architectural planning operates with innumerable elements which often conflict. Social, human, economical and technical demands...form a complex tangle which cannot be unravelled in a rational or mechanical way. The immense number of demands and component problems constitutes a barrier from behind which it is difficult for the basic architectural idea to emerge. I then proceed as follows - though not intentionally. I forget the entire mass of problems for a while, after the atmosphere of the job and the immeasurable different requirements have sunk into my subconscious, I then move on to a method of working which is very much like abstract art. I just draw by instinct, not architectural synthesis, but what are sometimes childlike compositions, and in this way, on this abstract basis, the main idea gradually takes shape, a kind of universal substance which helps me to bring the innumerable contradictory component problems into harmony.”

Alvar Aalto
controlling the horizon
At Las Arboledas, Luis Barragan constructs nature in the form of a “path” of water. He “builds” water, makes it solid and uses it as an architectural device. As part of the program, the path of water serves as a horse trough. As an architectural device, it extends a long axis that precedes it into the terminus of the white wall. But there is more here. Like Kahn, Barragan deals with more than needs; he toils in the realm of “the not yet made.” In this instance, he builds nature. This path is not merely about the emphasis of the axis nor the meeting of program requirements; it is about using nature, water, as a poignant re-presentation of itself and ultimately allowing one to see it as such.

Barragan uses the white wall in the same manner. The flatness and planar qualities of the wall heighten both the path and the axis. The wall serves as a presenter of the trees. It catches the trees’ shadows and puts them on display. Also, the white plane contrasts the comparatively thin, dark trunks and allows one to measure against it. At the same time, the thinness of the wall and the resulting verticality emphasize the wall’s likeness with the trees. Barragan reveals both wall and tree - and path, for this marks its beginning and end.

Through this dialogue, Barragan gives the water and the trees a new presence. He makes them visible in a different light and, in doing so, reaffirms what was already there. He taps the potentials that once lay hidden. Through the intervention of wall, water and path; the trees, and how one inhabits the place are continually re-presented. Barragan enables the viewer to “see.”
building a datum
The wall is a coalescence of the idea, the revealing of the authentic in the everyday. Through the wall, the place is given order and clarity. The wall reaches to the essence of the idea and expresses it in its simplest form. It is not about what is wall; it’s about what isn’t; for through the wall, one is able to see the trees, the topography, the edges... it is a slice of earth and what remained after the tool was removed. This re-presentation of the mundane is precisely what Luis Barragan accomplishes through another wall at Las Arboledas. Barragan's wall re-presents the boundary between earth and sky; he restores a condition everyone has come to know and allows us to see it in a completely different light.

The Red Wall on a programmatic level demarcates a subdivision’s entrance and hides the subdivision from the visitor’s view. It runs along the main road and through a grove of ash trees before disappearing over the horizon. Through this, Barragan constructs a work that exemplifies architecture’s quest to express and show the essential. The sheer length of the wall creates a revealing tension between foreground and what is beyond, between the earth and the sky, between the verticality of the trees and the horizontality of the wall itself. The wall seems almost as if the earth was folded upward to meet the sky. Barragan has re-presented the transitory space between the earth and the sky, this most common and fundamental aspect of daily existence, and presented it anew. Barragan’s wall does transform reality for never again can one look at the horizon without this memory.

Here Barragan strives for “emotional architecture,” not simply being satisfied with the fulfillment of the program’s requirements but, instead, making the program architectural. This is not simply a wall. It is a bridge between earth and sky, a unifier of what is here and beyond.

“I believe in an ‘emotional architecture.’ It is very important for humankind that architecture should move by its beauty; if there are many equally valid technical solutions to a problem, the one which offers the user a message of beauty and emotion, that one is architecture.”

Luis Barragan
occupying the edge
The clearing side is one straight planar wall juxtaposed against the clearing. The tree side is layered through the use of a “screen wall,” a glass enclosure, reaching out into the trees.

In the same way that the wall is a presenter of the site, the screen wall is a presenter of the wall. It is through these juxtapositions of opposites, as it is throughout the entire project, that the reading of the wall becomes clear. The glass enclosure tells more about the wall than the wall itself. And strangely enough, it is this reading of the wall that enables one to see what is not wall, to see site and place...and to occupy the in-between. The wall acts as the transition space that is the point between seeing the reflection, upon entering, in the screen wall of from where you are coming and emerging from the wall back into the trees when one enters the offices. It is this stepping away that enables one to see the trees again.
The wall is a concretization of the edge. It acts as the transitory space between the trees and the clearing. The wall both separates and unites the two conditions and allows one to occupy both simultaneously. It is this in-between that enables the edge to exist. One could not be without the other. Where they come together is the place where one can begin to see where one is, where one is going and where one has come from.

Mies van der Rohe’s Farnsworth House hovers in space, suspended above the ground plane - an object in the landscape. The house is clearly separated from the earth and, at the same time, pays homage to it. Mies uses the terrace placed midway between the ground and floor planes to achieve a place that serves as the “in-between.” Visually, it reinforces the suspended effect by making it that much more pronounced. But, maybe more important, it serves as that point which allows one to be between two places. It is at this point that the two are tied together.
constructing links
“The tension between clarity and multiplicity, the interaction between form and content, the crystallization of a rich content of thought into a simplified form, is the basic question of architecture. ‘Things must be said as simply as possible, and no more,’ runs one of the crucial rules for good writing. ‘In regard to human construction, ugliness, “badness” as such, is not most feared, but emptiness, that is to say, lack of identity, lack of focus...’ writes Adrian Stokes.”

Built form / natural form / built nature... the three are inextricably tied and separated at the same time. Their union and corresponding disunion provide a more meaningful and full understanding of the landscape and how one dwells within. This re-presentation of the landscape and man in the landscape is clearly evident in the Mies’ Farnsworth House. He constructs a link between natural and built form which results in a provocative “seeing” of both the natural and built... and place.

There may be no better way to describe the Farnsworth House than as a “crystallization of a rich content of thought into a simplified form.” Through subtle yet rigorous moves, Mies attains a masterful expression of structure and space, of nature and architecture, of place.

As stated previously, this house floats as an object in the landscape. While the elevating of the house was necessary to safeguard from flooding, the effect is a clear expression of lightness and space. The land fully envelops the building and forms a complete union with nature. By moving the columns to the extreme periphery of the floor and ceiling planes, he creates a dual effect, as did Barragan with the wall of the horse trough. From the exterior, the planes are held in space. They are held as objects above the earth. From the interior, the ceiling and floor planes continue out into the landscape uninterrupted. They extend much beyond their physical limits. Nature becomes as much one with the house as one does with nature.

This re-presentation of architecture separated and fully integrated with nature simultaneously has a tremendous poetic effect. Here he has suspended one between earth and sky and again united the two in a way that clearly expresses the “nature and demands of human existence.”
This thesis and project mark the beginning of the study of an Architecture that reveals the poetic dimension of everyday life. The preceding work of Kahn, Barragan and Mies are testimonies of architecture's ability to evoke wonder in the everyday. What is “seen” here is the revealing of the common in a way that uncovers the essence of place and, ultimately, the essence of how one is in this world. From a horse trough to a museum to a house, all are able to ennoble our actions through the celebration of building. And, in each work, the program heightens the architectural experience. Here, the architects do not rely on image or scenography but instead on meaning and essence. This is not the flash of the new. It is a thoughtful and careful reconsideration of fundamentals and a re-presentation of those. They allow one to know a place again; to see it in a new way; to see it for the first time.
endnotes


photograph and illustration credits


6 ibid., 68.

7 ibid., 70-71.


10 ibid., cover page.
vita

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