The Making of a Small House

by

Richard Adam Zimmerman

Thesis submitted to the Faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the degree of

Master of Architecture

Michael O'Brien, Chairman

William Galloway

Joseph Wang

1993 Blacksburg, VA

# Acknowledgements

I thank God for all the "little" miracles of life.

I would like to acknowledge my committee, whose personal commitment as educators allowed me to "trust in the whispers."

To my family, for their thoughts and words of wisdom.

This book is dedicated to your love, patience, and support has helped to make this work a reality.

Architecture is an expression of existence; it is the realization of a sense of place, a manifestation of a way-of-being in the world through built elements.

"I want to see things. I want to see, therefore I draw. I can see an image only if I draw it."

- Carlo Scarpa

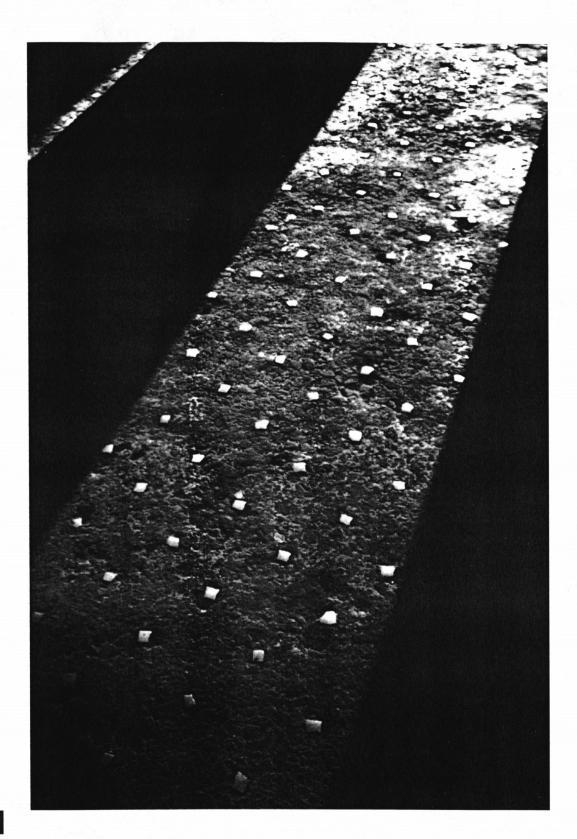
Carlo Scarpa expressed that he wanted to see, therefore he would draw, and draw incessantly. In that spirit, this thesis has been a search for what is authentic in my own work, based in a discovery through making.

The way of making indicates a way of seeing a world; the drawings and the way of drawing directly impact my thoughts. The drawings tend to be fragmentary, indicative of an architecture of parts.

The focus is on "the way to be" of the individual, and the way that individual is to the whole.

These relationships inform a sense of order and direct the parts towards a greater whole.

Those issues are explored in the making of a small house; it is one step toward a greater understanding.

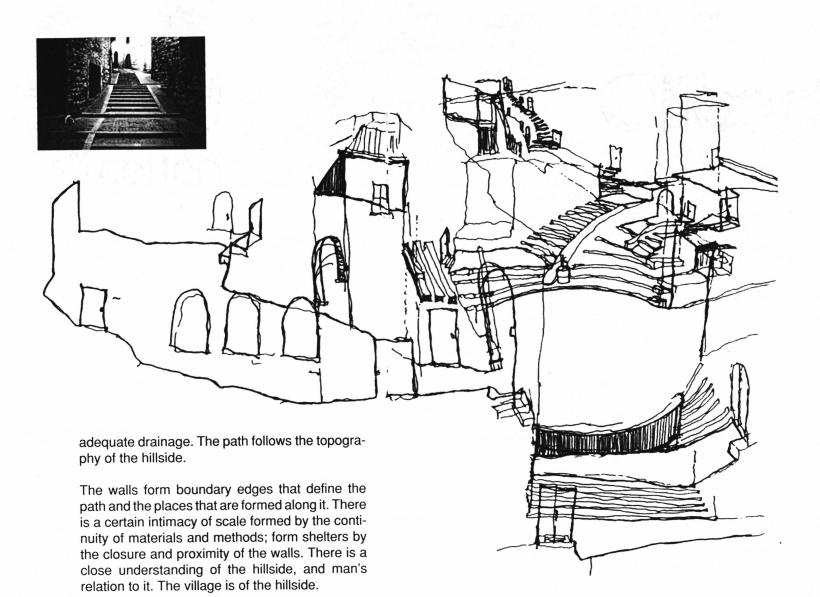


Different manifestations of order speak to me about different manifestations of life. Ways of being.

By examining various conditions, ways of doing things, and thoughts that appear different, we can learn a lot from architecture.

There is a strong sense of place in this hilltown near Lugano. We can speak of this place being ordered by the path. The elements along the path are structured by the relationships that occur between them. These relationships are multifaceted. They are as much an expression of a common thought about life as they are a necessity for





There are agreements of meeting and living as a collective, yet there are places for each individual. Windows are carved out of the mass, opposite to doorways, to engage the path by light. Thresholds never occur directly opposite of one another and are raised above by one or two steps. The path coincides with a common gathering place, here a well. It acknowledges the act of fetching water and the spiritual need of meeting.

Light and shadow, threshold and path establish a rhythm (cadence) that acknowledges this human need for an outdoor room for living. Seemingly inconsequential acts become major initiators of a way of ordering.

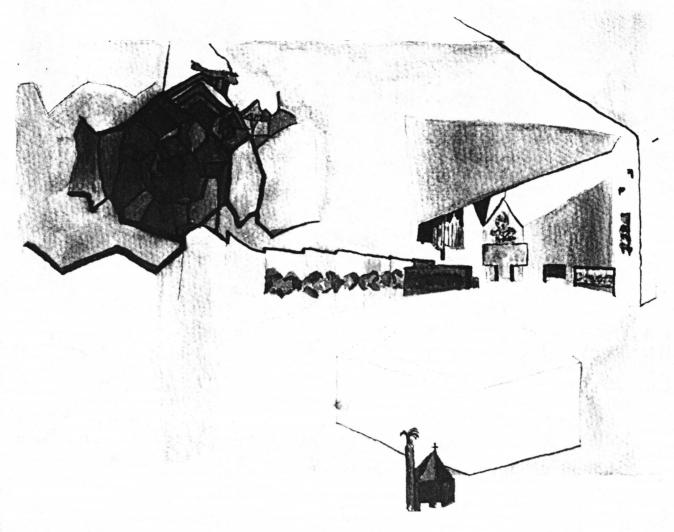
The Church is a physical manifestation of shared beliefs; the journey from birth to death to rebirth through salvation in built form.

A church in Palermo and a church by Gottfried Bohm in Stuttgart use archetypal figures, such as a tower and a great hall to order one's experience and speak to us on a shared level. The tower rises from the earth to the sky, defying the laws of nature. It demarcates the threshold of the path in which a transformation occurs. We enter a place of shared agreement, the meanings of which are gathered in the great hall.

Palermo's church embodies a powerful presence. It rests firmly on the earth upon a massive base that elevates the church nearly fifteen feet above the street level. The base clearly establishes its presence in the life of the street, by forming the backdrop to a great outdoor room; the base, being of the church, is part of the community. The base creates a plane on which the sanctity of the church can exist above the profane below, establishing it as an oasis; a reinterpretation of place. The tower clearly marks the path by which the faithful must journey. There is a separation of the sacred and the profane and yet the church must rest firmly upon its foundations, a touch of poignancy when one stops to think that the base contains catacombs.

Bohm's church also relies upon the use of path, tower and hall to establish a powerful means of ordering. It consists of parts that are planar; one can feel the structure of the plan in the rosettes of the stained glass windows. The great strengh is within the individual pieces and the relationship of one to another giving rise to a greater whole. These parts are manifested as the types - tower, hall, path, which give

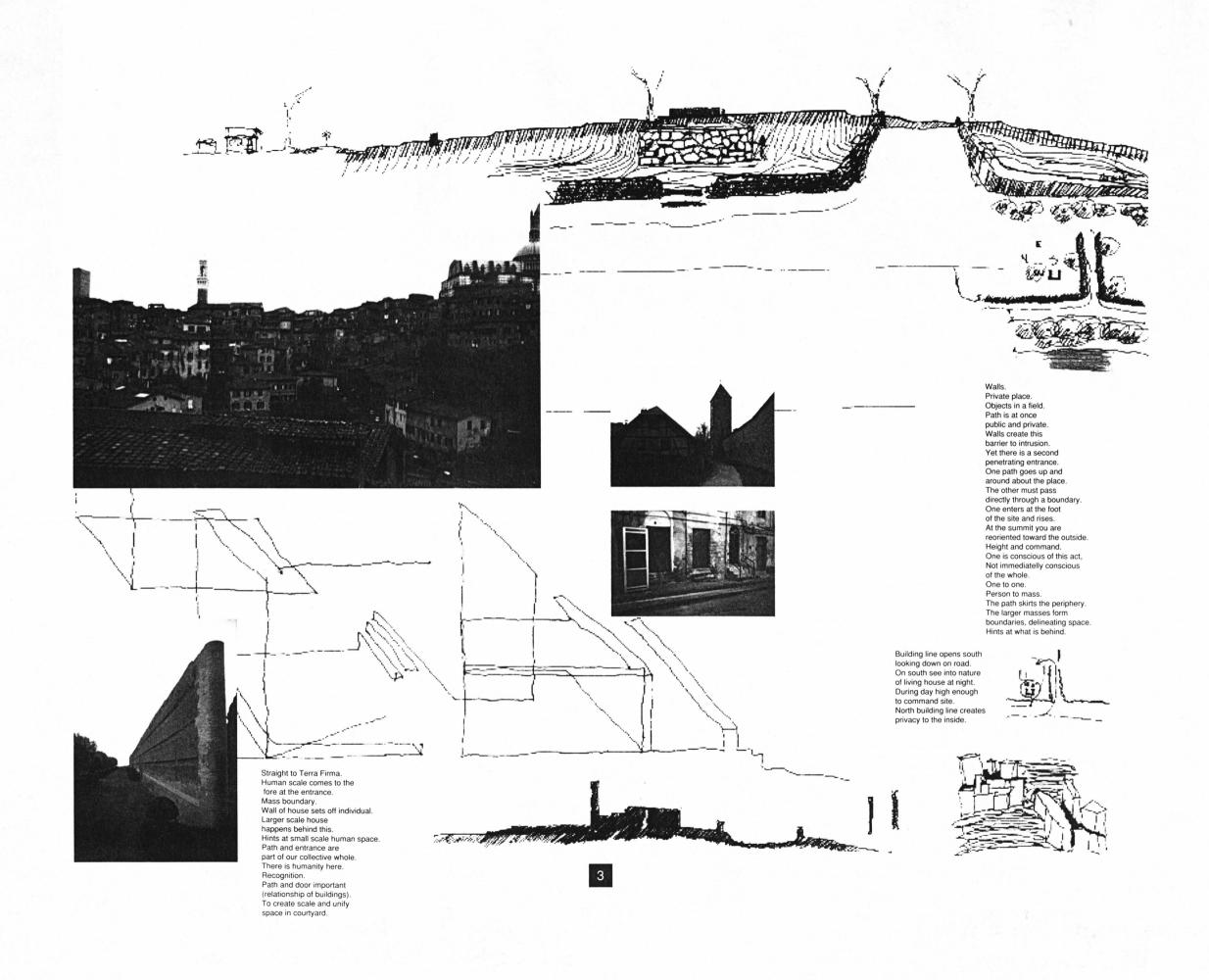


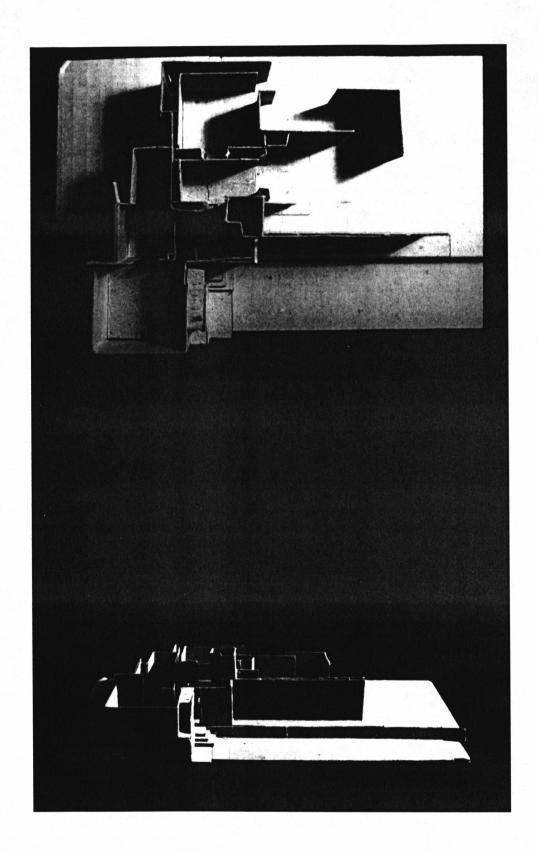


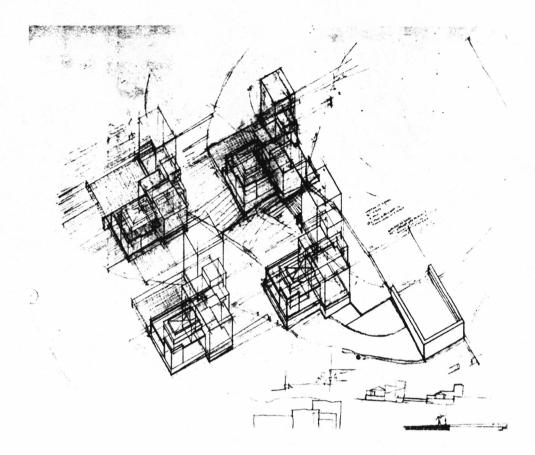
order to the spiritual events that occur along the journey and have significant latent meanings for the members of the church community. They serve to reinforce the understanding of one's relationship to the church, with his fellow man, and with God. In this church the phenomena of the path takes the form of physically leaving the outside world. All events are interrelated: on the first step of the journey we are met by the baptismal font; this is a place to be welcomed by the congregation and shed aside the profanity of the earth (metaphorically one must be baptized to enter God's kingdom); the next step takes us in an ascending and spiriling stair that reorients us in the church (the disconnection with the outside world is complete) and then we cross

by the virgin tower (we prepare ourselves through her love and compassion) to reach the altar - redemption.

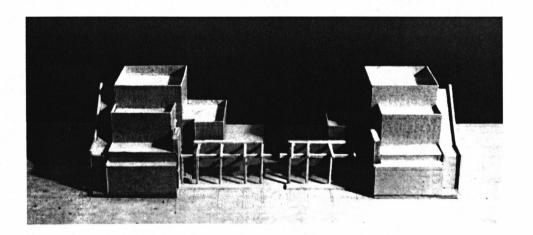
These two churches use order in a conscious way to manifest a vision of life on this earth and of an afterlife removed from it. They represent an institutional agreement of peoples. The archetypal figures order one's experience on a shared subconscious level. While both churches symbollically represent the path to salvation, the perceived experiences we encounter and the relationships of church to society and individual to whole are reveled to us differently by the ordering and articulation of the parts. The events give structure to our experience.

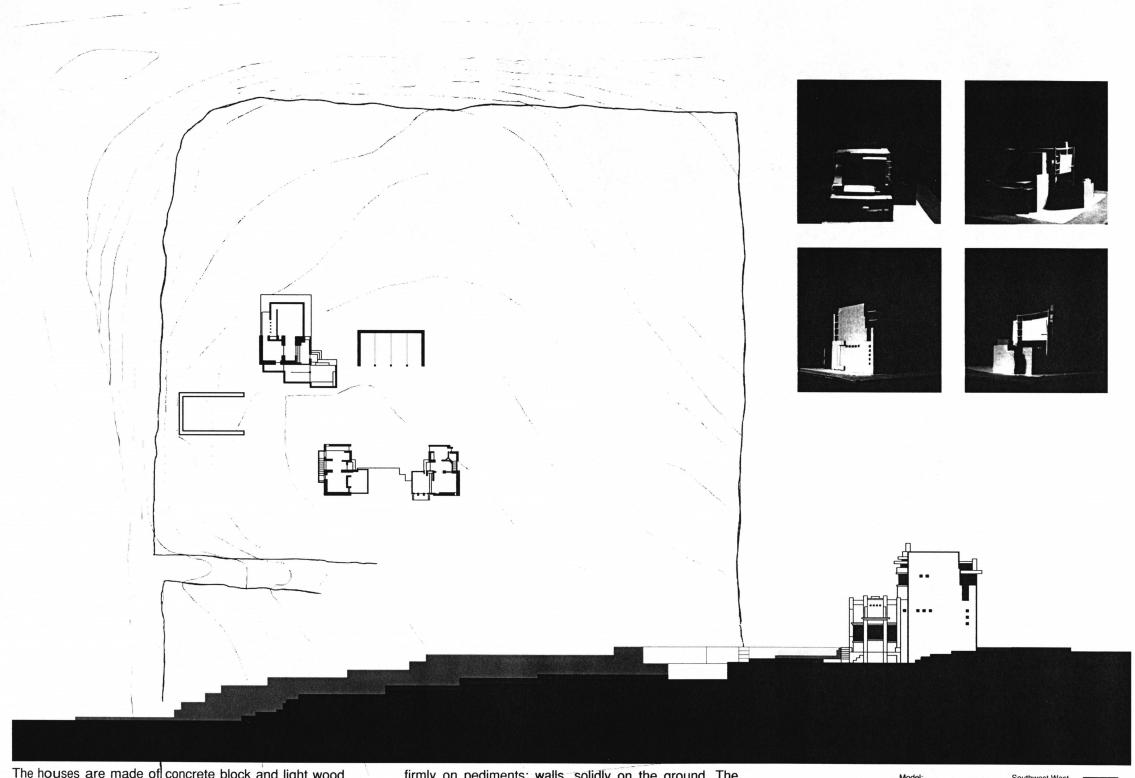






The small house is part of a larger whole that forms a village-type cluster. While the members have distinct characters and appear different (as individuals), the underlying structure makes them part of a definite group.





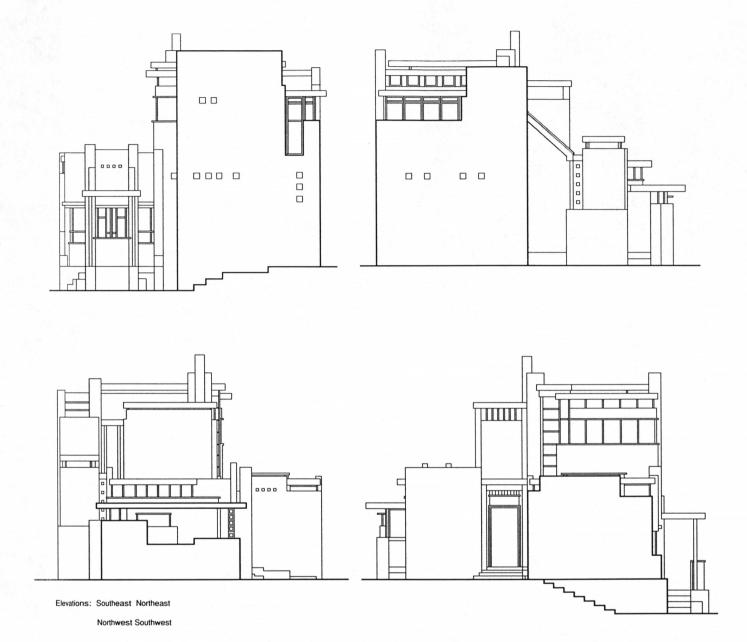
The houses are made of concrete block and light wood frame construction. All loads are gravity fed, thus reinforcing the integrity of the pieces as place definers. Piers rest

firmly on pediments; walls, solidly on the ground. The elements differentiate the held and the holder. These things are indicative of man's relation to earth and sky.

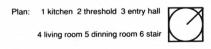
Small House:

Site Plan and Section

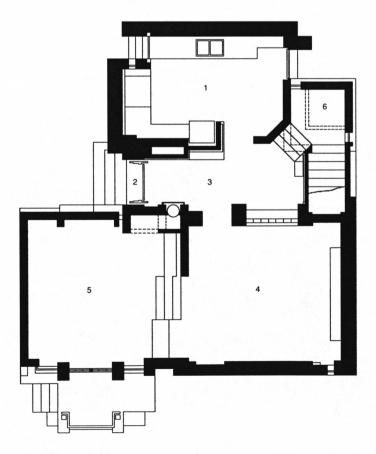




The small house is inwardly focused. The masonry shelters and holds the institutions of family. The walls create boundary edges that distinguish between public and private realms. The visual overlap of elements in space encourages a sense of discovery, and constantly frames ones experience. This layering of autonomous parts reveals a gradual understanding of the whole over time. There is a continual hint at the whole without seeing it. Portals and window embrasures create moments of light that establish the character and sense of space of each room.



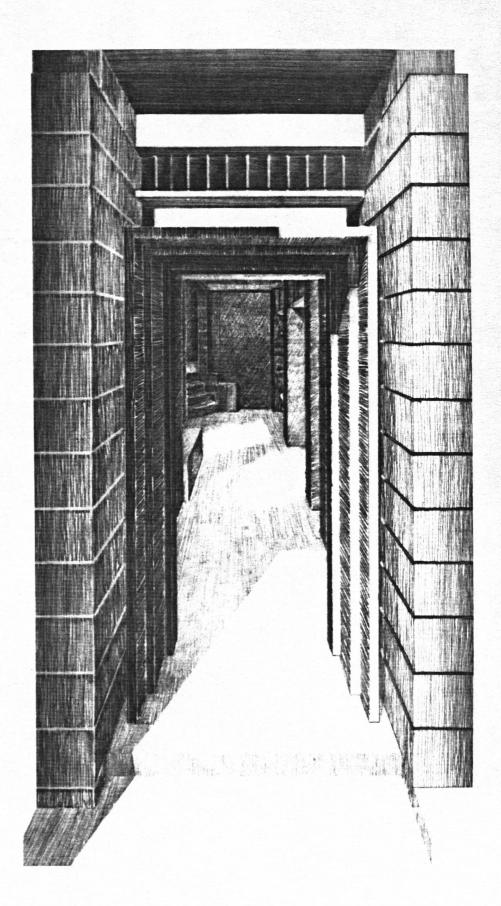
The house that comes to view defines the boundary edge of the private world of the community. The approach facade is a bastion wall; a smaller deeper addition offered up on a pedestal. Windows form embrasures and portals or protected lookouts. The vertical of the main block firmly grounds it. It's rising to meet the sky, clearly demarks the turning point to the site. As the visitor enters the path about the house, the faces of the house gradually become more particularized. Horizontal roof planes bring this side of the house down toward the human. Verticals part so as to give glimpses behind the facade. Deep protected windows peep toward the visitor. At the threshold of the house, one is greeted by gently rising steps and seats that lead to a deeply sheltered door. The threshold is bounded by a walled enclosure. Two stacks rise from behind it. There is the smell of sweet bread and burning timber in the air. The house rises two stories above the door enlivening and calling attention to the act of entry. We are watched over by the glass vertical. The house, although small, imposes itself on the visitor because of changes in scale.

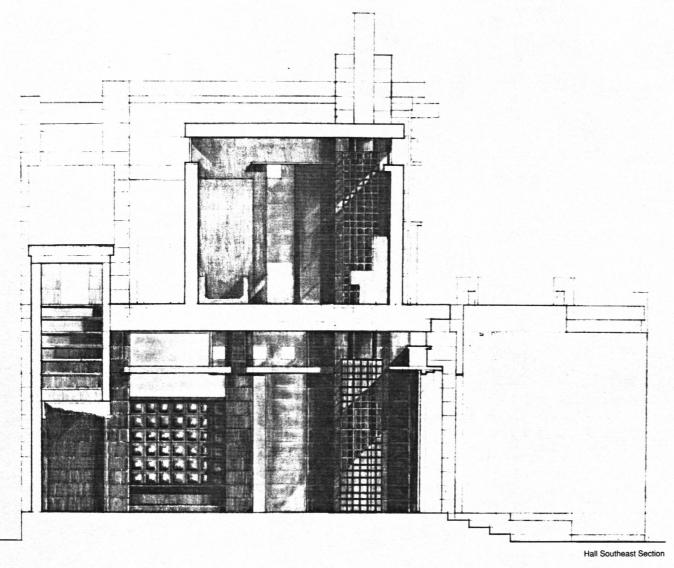


Upon entering, one notices the integrity of the door, standing firmly between the walls and guarding the passage it is meant to protect.

The light becomes dimmer here at first entry. The roof of the sky now compresses. But ahead is the soft glow of the late day sun sweeping across the wooden floor boards. Light beams and shadows scurrying across the crevices. But we are weary from our journey.

We see ahead the light, sifting from many unknown places. The floor lies between the walls shoulders, or paces clear overhead into the adjoining rooms. We are presented with different paths.

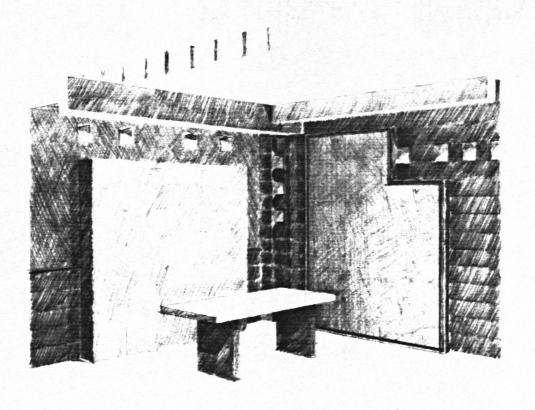




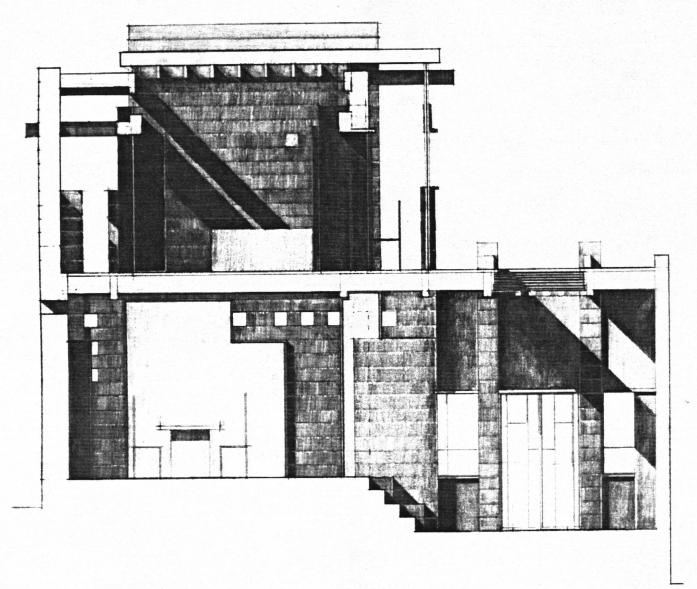
To the left, the wall falls away, and the hall becomes wider, anticipating our arrival. A wooden bench, sheltered against the wall, offers us a moment to pause, and rest our feet or take off our shoes and hang up our coats on pegs. A soft warmth catches us unawares as it emanates from a steel flue that rises from floor to ceiling, protected by a cast iron grill.

But this is not a place to linger long...

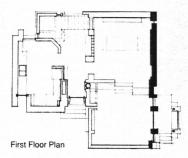


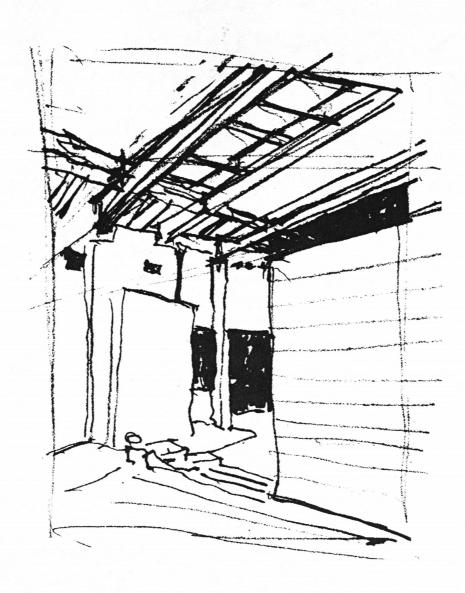


To the right of us a soft sparkle catches our attention, and draws us into a dimly lit room that is punctured by hazy light. The threshold to this room compresses us and releases us as we enter.

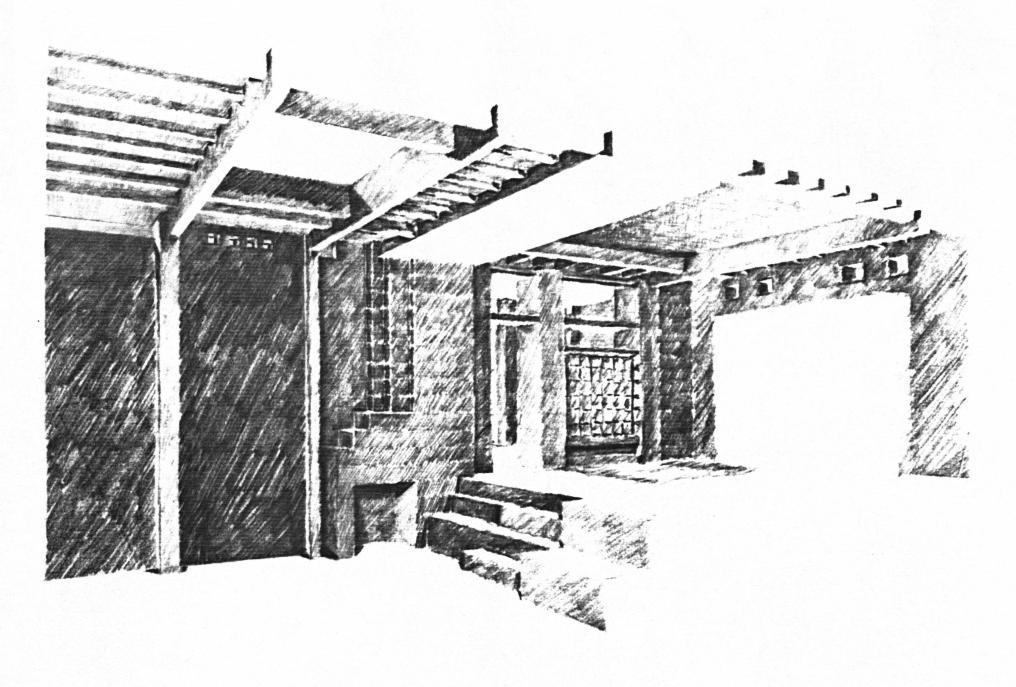


Dining and Living Rooms Southeast Section

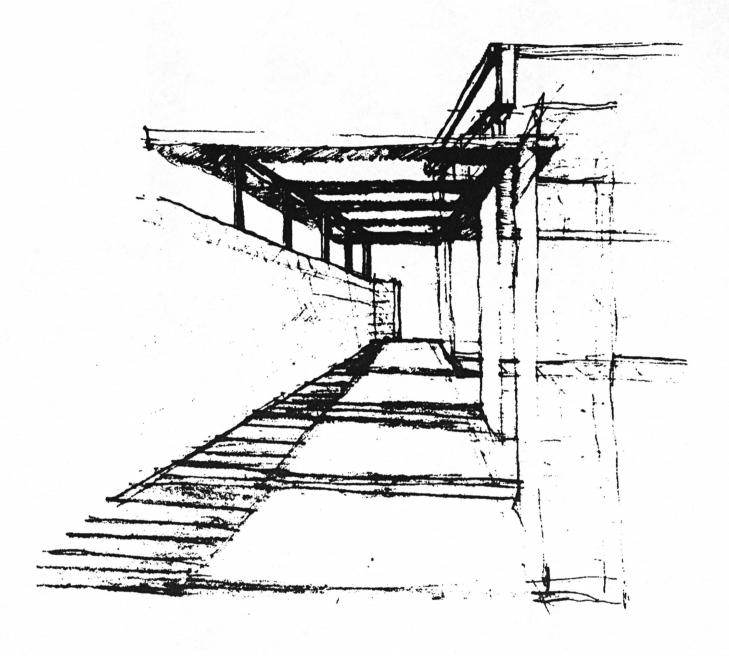




Directly ahead through the space we stand tall. Light from the sky above calls us with a glimpse to the outside world we have just left behind. It is a place to be part of a collective or be alone.

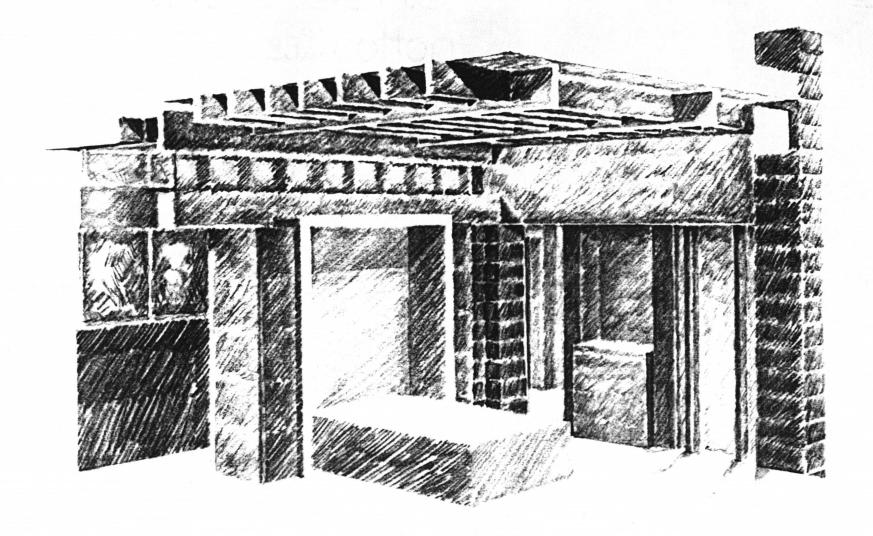


A large wooden table rests in the silence at one end. It is a place to share and gather. The walls rise above us, carrying a ceiling that places us in the room. The raw concrete block is indicative of the humble nature of the hollow place deep in the house. Plaster panels bring the scale of the room down to us, along with the cabinets. This makes us feel more sheltered in the space for sharing.

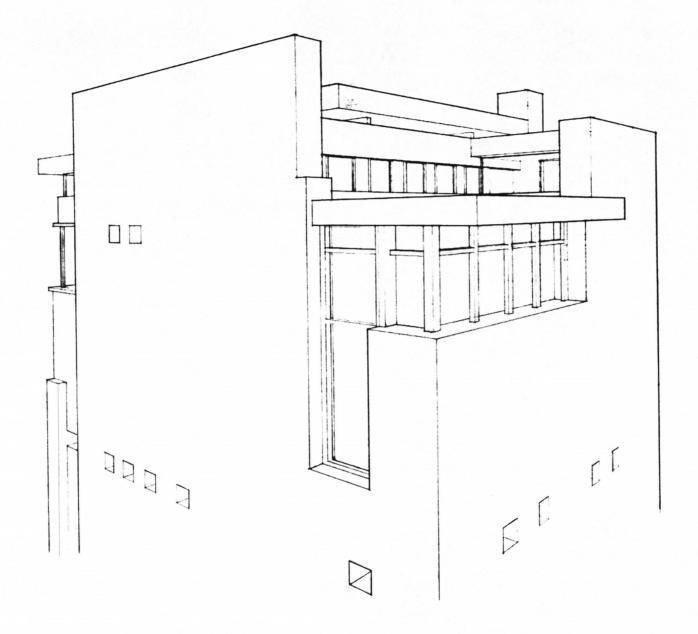


Ahead, we catch a glimpse of a stair tread, that is awash with a soft glow.

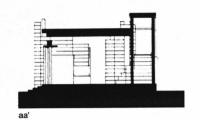
On entering the vertical passage to the second floor it is dimly lit. Light spills from the stair top. We pass from one horizontal to another.

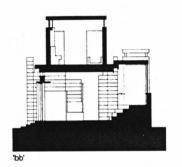


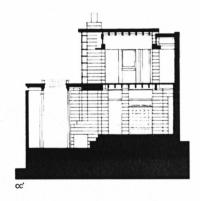
We walk on the wall edges on the second floor. Wall surfaces rise past the ceiling, which is supported between the walls by light frames of wood. Light seeps in around all its edges. We are cradled between the walls under the edge of the sky. The bed is nestled in a nook between two "pillars" of the room. From behind this screen, glimpses of the sky and countryside reveal a private sanctum that is sheltered under the overhanging edges.



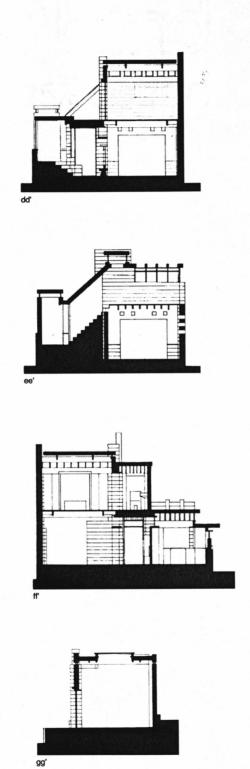
The hall at the stair top is the outer edge of the adjoining bedroom. The platform offers us once more to the outside, giving us a commanding view over the surrounding.

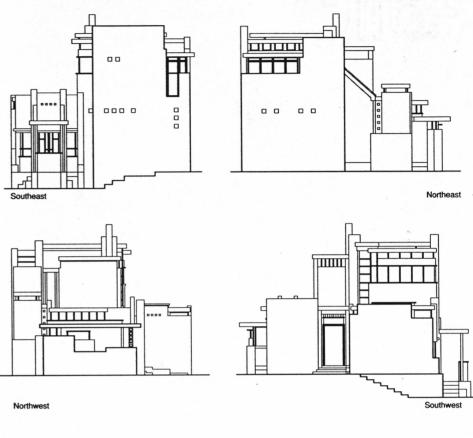


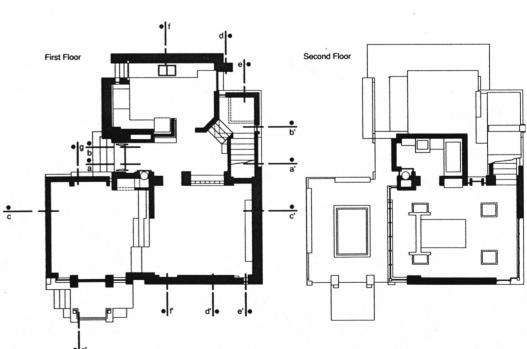


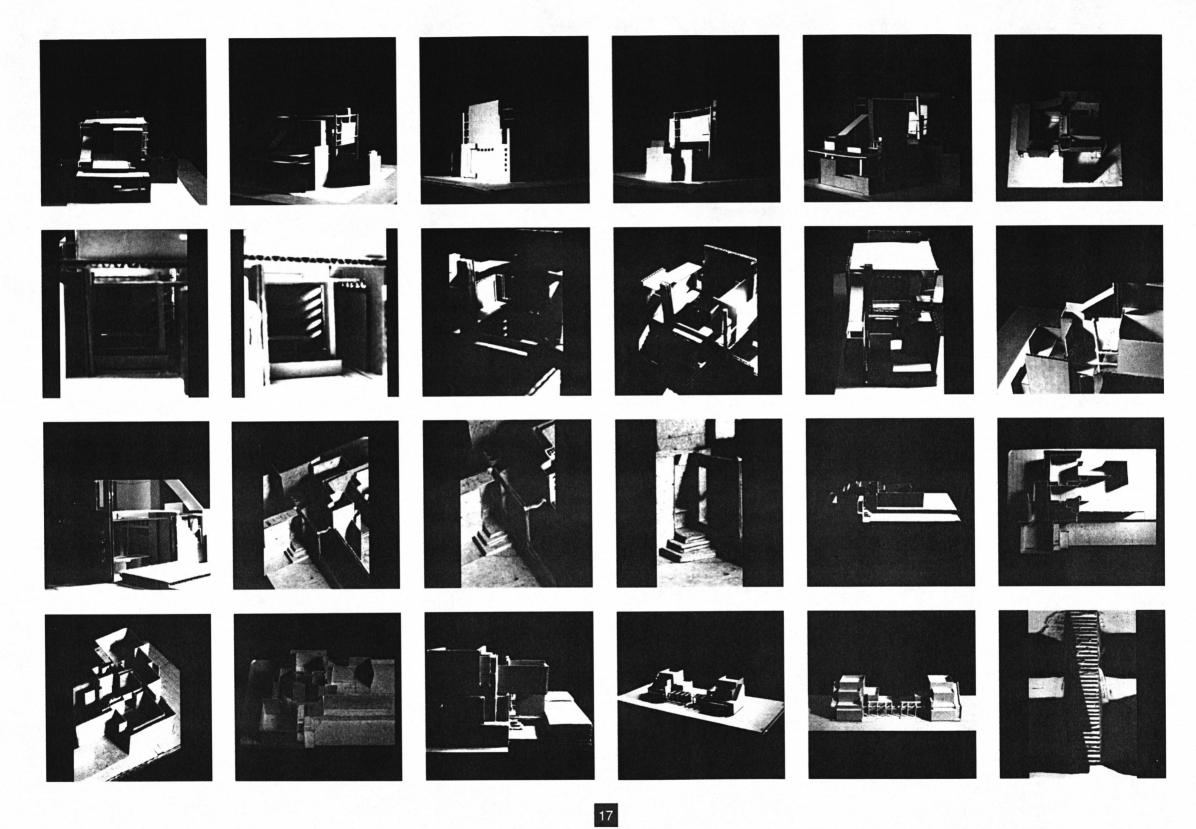


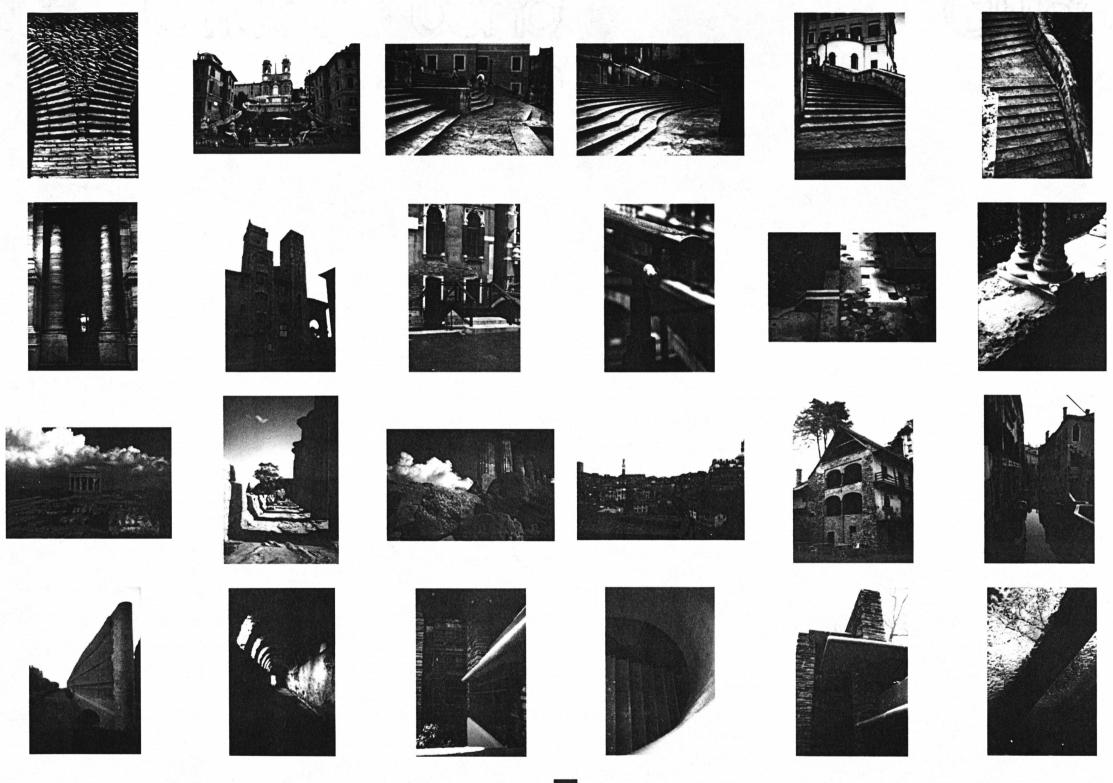










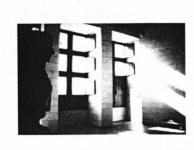
































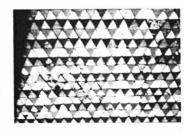




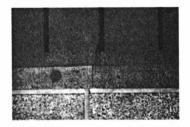














P	note	o Ci	redi	its
	100	<i>-</i>	Cu	

- Page i Floor, Pompeii, Italy.
- Page 1 Lugano, Switzerland.
- Page 2 Sketch, Church, Gottfried Bohm, Stuttgart. Church, Palermo.
- Page 3 Sketches of site, New Fairfield, CT.
  - 1. Siena, Italy.
  - 2. German town.
  - 3. Phone booth, Italy.
  - Wall, Hadrian's Villa, Italy.
- Page 4 Site Sketch.
  - 1. Study models of one house.
  - 2. Study model for two houses.
- Page 7 Interior perspective of entrance hall.
- Page 9 Interior perspective of dining room.
- Page 11 Interior perspective of living room entrance.

- Page 12 Interior perspective of living room.
- Page 13 Perspective of stair top.
- Page 14 Interior perspective bedroom.
- Page 15 Axon northeast corner.
- Page 17 Study Models.

### Page 18

- 1. Colosseum, Rome, Italy.
- 2-5. Spanish Stairs, Rome, Italy.
- 7. Campodoglio, Rome, Italy.
- 8. Tower, San Gimigniano, Italy.
- 9-11. Querini Stampalia, Carlo Scarpa, Venice, Italy.
  - 12. Monastery, Sicily.
- 13-14. Greek Temple, Agrigento, Sicily.
  - 15. Greek Temple, Selinute, Sicily.
  - 16. Siena, Italy.
  - 17. Vernacular dwelling, Ticino, Switzerland.
  - 18. Venice, Italy.
- 19-20. Hadrian's Villa, Italy.
- 21-24. Falling Water, Frank Lloyd Wright.

## Page 19

- 1-2. Asissi, Italy.
- 3. Bridge, Bassagno del Grappa, Italy.
- 4. Chateau D'Chambord, Loire Valley, France.
- 5. Chateau D'Chambord, Loire Valley, France.
- 6-7. Maison La Roche, Le Corbusier, Paris, France.
- 8. Parc Guel, Antonio Gaudi, Barcelona, Spain.
- 9. German Town near Stuttgart.
- 10. Stairs
- 11. Casa Heschel, Luigi Snozzi, Ticino, Switzerland.
- 12. Hilltown near Lugano, Switzerland.
- 13. Ecole d'Architecture, Lyon, France.
- 14. Madonna and Child, Barcelona, Spain.
- 15. Ulatrec.
- 16. Church, Palermo, Sicily.
- 17. Street, Sicily.
- 18. La Tourette, France.
- 19. Ville Savoy, Le Corbusier, Poissy-sur-Sienne, France.
- 20. Bath, Pompeii, Italy.
- 21. Floor, Pompeii, Italy.
- 22. Bowls, Richard Zimmerman.
- 23. Paving, Ulatrec.
- 24. Floor, Pompeii, Italy.

## Bibliography

Abercrombie, Stanley. *Architecture as Art.* New York, NY: Harper and Rowe, Inc., 1984.

Bachelard, Gaston. *The Poetics of Space*. Boston, MA: Beacon Press, 1969.

Benedikt, Michael. For an Architecture of Reality. New York, NY: Lumen Books, 1987.

Brown-Manrique, Gerardo. *The Ticino Guide*. New York, NY: Princeton Architectural Press, 1989.

Burns, Amy and Ken. *The Shakers - Hands to Work and Hearts to God.* New York, NY: Portland House.

Caldenby, Claes, and Olof Hultin. *Asplund*. New York, NY: Rizzoli International Publications, 1985.

Chang, Amos. *The Tao of Architecture*. Princeton, NJ: Princeton University Press, 1981.

Corbusier, Le. *Towards a New Architecture*. New York, NY: Dover Publications, Inc., 1986.

Cooper, Jackie Academy Editions. *Mackintosh Architecture*. New York, NY: St. Martin's Press, 1984.

Curtis, William. *Modern Architecture Since 1900*. New Jersey: Prentice Hall, Inc., 1983.

Eliade, Mircea. *The Sacred and the Profane - The Nature of Religion*. New York, NY: a Harvest/HBI Book, 1987.

Frampton, Kenneth. *Modern Architecture - a Critical History*. New York, NY: Thames and Hudson, Inc., 1987.

Giurgola, Romualdo. "The Aesthetic of Place" *Process Architecture* no 2 October 1977, pp. 36-37.

Gutheim, Frederick. *In the Cause of Architecture - Frank Lloyd Wright*. New York, NY: Architectural Record, a Mcgraw-Hill Publication, 1975.

Heidegger, Martin. *Poetry, Language, Thought*. New York, NY: Harper and Rowe, Inc., 1975

\_\_\_\_. Basic Writings. New York, NY: Harper and Rowe, Inc., 1977.

Heschong, Lisa. *Thermal Delight in Architecture*. Cambridge, MA: The MIT Press, 1985.

Hitchcock, Henry Russell. *In the Nature of Materials - The Buildings of Frank Lloyd Wright, 1887 - 1941.* New York, NY: Da Capo Press, Inc., 1942.

Hunziker, Rudy. *Rudy Hunziker Architetto - Opere e Progetti*. Westbury, NY: New York Institute of Technology, 1986.

Joedicke, Jurgen. Weissenhoft Siedlung Stuttgart, Stuttgart: Karl Kramer Verlag, 1989.

Kaufmann, Edgar, and Ben Raeburn. Frank Lloyd Wright: Writings and Buildings. New York, NY: Meridian Books, 1974.

Levi-Strauss, Claude. *Myth and Meaning*. New York, NY: Schocken Books, Inc., 1979.

\_\_\_\_\_. The Savage Mind. Chicago, IL: University of Chicago Press, 1967.

Lobell, John. Between Silence and Light. Boston, MA: Shambala Publications, Inc., 1979.

Moholy-Nagy, Sybil. Matrix of Man. New York, NY: Frederick A. Praeger, 1969.

Mikellides, Byron. Architecture for People. New York, NY: Holt, Rinehart and Winston, 1980.

Murphy, Richard. Carlo Scarpa and the Castle Vecchio. Butterworth Architech, Reed International, 1990.

Norberg-Schultz, Christian. *Genius Loci - Towards a Phenomenology of Architecture*. New York, NY: Rizolli International Publications, Inc., 1984.

\_\_\_\_\_. *Meaning in Western Architecture*. New York, NY: Rizolli International Publications, Inc., 1981.

\_\_\_\_. *The Concept of Dwelling*. New York, NY: Rizolli International Publications, Inc., 1985.

Peregrin Smith Book. *Charles Rennie Mackintosh*. Salt Lake City, UT: Bibb Smith Publishers, 1988.

Purcell, Edward. *The Shakers*. New York, NY: Crescent Books, 1991.

Rasmussen, Steen Eiler. *Experiencing Architecture*. Cambridge, MA: The MIT Press, 1980.

Rilke, Rainer Maria. *Letters to a Young Poet*. New York, NY: W. W. Norton and Company, 1962.

Rossi, Aldo. *The Architecture of the City*. New York, NY: Opposition Books, 1988.

Rowe, Colin. *The Mathematics of the Ideal Villa and Other Essays*. Cambridge, MA: The MIT Press, 1988.

Saarinen, Eliel. *The Search for Form in Art and Architecture*. New York, NY: Dover Publications, Inc., 1985.

Scully, Vincent. *Frank Lloyd Wright*. New York, NY: George Braziller, Inc., 1988.

St. Augustine. City of God. London: Penguin Books, 1984.

Sullivan, Louis. *Kindergarten Chats and Other Writings*. New York, NY: Dover Publications, Inc., 1979.

Tanizaki, Jun'ichiro. *In Praise of Shadows*. New Haven, CT: Leete's Island Books, Inc., 1977.

Venturi, Robert. *Complexity and Contradiction in Architecture*. New York, NY: The Museum of Modern Art Papers on Architecture, 1988.

Wrede, Stuart. *Mario Botta*. New Haven, CT: Eastern Press, Inc., 1987.

Wurman, Richard Saul. What Will Be Has Always Been. New York, NY: Accesspress Ltd. and Rizolli International Publications, Inc., 1990.

# The vita has been removed from the scanned document