Strong Space, Thick Space
Towards An Architectural Motive

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Dedicated to my wife, Erica
my teachers Robert Corser
Nicole Huber
and Robert Hutchison
In memory of Professor Humberto Ricalde
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While working in the studio at the University of Texas’ Summer Academy, I noticed a perceptual shift that occurred with each project. Prior to the shift, thoughts about the approach to and design of the solution swam without pattern. When suddenly these isolated thoughts solidified into the form of a central concept, henceforth all new thoughts became interpretations — not thoughts individual and whole but thoughts in relation to the parti. Once the parti formed, it became impossible for me to see the project in any other way.

I learned a valuable lesson regarding not the limiting power, which comes from a central idea or concept, but with when the forming occurs, and specifically, the experience prior to the forming. After thinking further on the topic after returning home from the studio, I found an area of architecture that stirs my passion. While people may agree that architecture profoundly influences human living, few probably agree on the genesis that makes architecture nourish human life, join us together and celebrate human feeling. I believe part of the answer lies in our ability to see without preconceived notion, to see before we design.

Although the topic is likely thoroughly explored already, for me the idea is new and holds great possibility. What I imagine extends far beyond site analysis and design charrettes. It involves a deep sensitivity to people and the ability to get down to their deepest feelings. I dare say it may involve a new paradigm of temporal space. I hope to explore the idea further in my studio projects, in discussions with faculty and peers and throughout school. Sure much of school is devoted to teaching design; but why not learn deeper sensitivities too?

Written January 6, 2010
My entrance essay tells the beginning of the story that stirred my imagination for all of my graduate school experience. Rob Hutchison describes the experience as finding a personal motive. Motive has the power to drive an individual’s architectural practice for many years. It is an unanswerable question or an opening to new and unknown worlds. Two critical ideas underly the thoughts within the essay. The first describes finding a way of working. By questioning the process of forming a central idea, I began the process of self-critique, of examining the way in which I work. The second describes finding a way of thinking, or said another way, finding a framework for understanding architectural experience. My thesis is both an end and a beginning to the work started here.

In order to understand my final work, it is necessary to tell the story that led there because it shares the critical insights that lay the foundation for my current work. The story is setup within a simple framework borrowed from developmental psychology. There are five significant steps preceding adulthood, named as follows: infant, toddler, child, adolescent and emerging adult.

The infant looks to the parent for mirroring and validation. The phrase “gristle to Gerber’s” describes a process whereby parents make things easier for the infant to metabolize. While psychological and physical holding is almost constant for the infant, it becomes less so for the toddler. The toddler enjoys more freedom for self-discovery, however the parent is always close at hand for checking in. The child has even more freedom, of which making mistakes is critical. By making mistakes, the child learns to tolerate disappointments and failure. By providing a secure base, the parent creates the space necessary for a child to learn the twin skills of self-soothing and self-discovery. The process of finding a particular voice begins here. Whereas the child relies upon the parental base, the adolescent rebels or pushes back against it. Forming ego strength and resisting the identity of others allows the adolescent to form a unique identity. Finding peers or one’s tribe becomes critical. The emerging adult consciously begins the journey towards individuation, calling and vocation. While the description is linear, the process is not. In my experience, the process is a spiral.

Speaking metaphorically, I was an infant during my first year. During my first studio, Jennifer Dee and Charles Anderson’s metabolizing of Kenneth Frampton’s tectonic and stereometric dialectic and subsequent design lessons exposed me to my first way of thinking spatially. Like an infant, I mirrored the
Self-critique and A New Awareness

I thought, “This is where the views are.” Naively there is where I placed the glass.

These experiences and reflections challenged my fundamental assumption that transparency alone reveals content. And after considerable thought, I doubted the efficacy of using transparency to establish community. I did not believe that the method fails entirely, only that its effect was far less potent than I initially imagined.

Moving from connection to crossing, glass walls profoundly alter the experience of moving from street to interior. In many instances, moving through the wall precipitates an abrupt shift of scale with little sense of transition or intended sequence. Without threshold, the experience of arriving feels as if I simply appear within. Said another way, my understanding of the interior being distinct from the street, of being a proper place, feels more conceptual than phenomenal. I found the feeling awkward and disorienting.

Moving back to my own work, I see that my projects exhibited a naive, almost simplistic understanding of glass, wall thickness and other fundamental principles. Inspired, I began an investigation into the fundamentals that underly our most basic spatial awareness. From that summer onward, I re-imagined these fundamentals through my projects and travels not only to challenge them, but to find my own particular position and voice. In Marcel Duchamp’s The Large Glass I found the first alternative.
Marcel Duchamp’s *The Large Glass* provides a language for understanding glass in its full range of complexity, dynamism, and depth.

Glass is a layering of elements distinguished most broadly between what is seen through and what is seen on the surface. There are properties of the glass, and there are properties that act upon the glass. In the former category, **FIGURE, GLASS** and **FRAME** provide the composition for *The Large Glass*. The figure is a series of oil painted forms outlined with lead wire. The glass is two transparent panels; each is partially shattered. The frame is metal with a wood base. The glass is acted upon by **EXTERIOR SPACE**, that which is beyond and is seen through the glass, the **INTERIOR SPACE** as reflected on the glass surface, and the reflection of the **SPECTATOR**. In its current home at the Philadelphia Museum of Art, one iteration of exterior-interior-spectator is as follows: exterior is a door-shaped window framing a fountain beyond, interior is the foreground gallery and spectator is the museum patron. Figure-glass-frame are static; exterior-interior-spectator are in flux. Layer reads separately and together. Consequently unstable readings of *The Large Glass* oscillate between figure and ground.

Participation drives the layered elements’ dynamic quality. *The Large Glass* invites a spectator to frame the landscape according to her personal desires. In this way, Duchamp avoids framing the landscape according to his artistic vision. The experience is open ended and unfixed. Moreover it invites spectacle. The work invites spying on others, these others spy upon the spectator and so the spectator becomes performer. While Duchamp avoids the traditional artist’s conceit, his role cannot be understated. Because the figural element and frame read so strongly, they read as ground and figure, not ground alone. The strong reading invites consciousness around the act of seeing. *The Large Glass* floats in a state of readiness awaiting participation.

By fully exploiting the dual and contradictory nature of glass, Duchamp creates a depth of experience similar to that of actual space. The simultaneous reading of what is looked at and what is looked through sets up the following dualities: surface and space, division and link, stability and mobility. By suspending the piece, Duchamp accentuates these divisions thereby negating the actual transparency of the glass. The landscape beyond becomes flattened and framed. Said another way, the landscape is no more privileged than the spectator’s reflection or the painted figure. Layer reads as laminated views. As the spectator moves, the laminated views move in kind. *The Large Glass* engages the spectator with a power that matches an inhabited landscape.

*Written December 10, 2011*
In the Fall of my second year, I began deeply sensing the spatial character of the walls of my surrounding world. What began as a loose inquiry developed into a series of questions: What is the relationship, communication and interface between the contained (enclosed) and the beyond (non-enclosed)? Does the wall invite us to cross from one side to the other? What is the experience of passing through? Is the space in-between also a space to occupy? Beyond these questions, I explored how our treatment of walls reveal much about how we relate to ourselves and to one another. A recurring uneasiness with the curtain wall and more generally the wall of transparent glass emerged. Inquiry revealed the source of my anxiety: the ubiquity of the curtain wall and subsequent over transparency.

I spent the quarter exploring the spatial complexities of glass and subsequently developed a framework for understanding its nuanced use beyond simple view and display, which include four methods: MASK, IDENTITY, EXPRESSED FRAME, and RHETORIC.

The mask employs a subtle play of concealment and exposure. One manner of masking uses a method similar to the cinematic edit, which hides elements only to reveal them later for maximum emotional effect. The Maison de Verre by Pierre Chareau is an example of the cinematic mask. In contrast, a veiled mask partially reveals the interior rather than giving it all away.

Identity makes the act of seeing conscious for the observer. MVRDV’s Villa VPRO is an example. Beneath the ordinarily subconscious act is a distinct recognition, “I am standing here looking out.”

The expressed frame articulates the panel structure for poetic expression. The Idea Store Whitechapel by David Adjaye is an example. The exterior, the wall as a space to occupy, and the interior are all experienced as distinct layers.

Rhetoric mediates content through the use of iconography. Herzog & De Meuron’s Ricola Building is an example. The tapestry of leaves, combined with the translucent and reflective properties of glass, speaks beyond texture and color. It sets up a direct dialogue between the natural setting and the production of herbal sweets.

Upon finishing the quarter, I felt that I touched upon something great. It was the first moment that I experienced the mystery and depth inherent in the wall.
Wall as Living Place

Imaginal Transparency and the Living Wall

CINEMATIC MASK Maison de Verre

EXPRESSED FRAME Idea Store Whitechapel

IDENTITY Villa VPRO

RHE T ORIC Ricola Building
Next quarter with Rob Corser, I was tasked with designing a performance and movement studio for persons without sight. Using Gottfried Semper’s weaving and Rowe’s phenomenal transparency as a framework for investigating the wall’s tectonic qualities, I proposed a diffuse, habitable wall made of felt. Together, we discovered that felt was a charged word: it referred to a particular material and texture and at the same time, the significance of the act to feel. Given the enveloping nature, the walls evoked felt thickness. I call this quality THE LIVING WALL.

That Spring, Rob Hutchison and I traveled to Mexico City. Beyond literal and felt thickness, Mexico taught me something entirely different. Sure, there is a considerable amount of literal thickness within the city. And there is no denying the strength and power of the street wall that pervades nearly every neighborhood. The street wall contains and shapes free space into informal outdoor rooms. Subsequently a vitality and street life springs forth from these spaces. Between street wall and interior, there exists an intimacy and participation gradient that is both thoughtful and functional. I filled three sketchbooks in only two weeks.

However my thinking profoundly changed while walking Luis Barragan’s personal home and studio with his longtime friend and fellow architect, Humberto Ricalde. Using thin walls of contemporary construction, but with careful spatial composition, Barragan created an architectural work such that the world is mediated in an indirect way; by changing the rules, the confrontation between my body and the world becomes more potent. Light enters from an unknown source. There is mystery beyond the corner. I imagine the world just beyond the wall. And as I move, the experience of where I’ve been changes. In this way, the house has a living, breathing quality that responds to my movement. I call this experience imaginal transparency. It is the quality of sensing the world without direct sight.

In order to explain the experience of imaginal transparency, I share memories from my first walk through the living room, library and office. In execution, one room contains all three elements. Each is divided from the other by partition wall, turn of a corner or level change. While each element feels distinct, the room as a whole is equally felt. Because of this feeling, the room takes on a grandeur and monumentality such that using the word room seems inappropriate. Perhaps hall space is more appropriate.

I enter the room from the main vestibule via a zigzag in its thick wall.
into Barragan’s library. The unknown source of light is revealed. It is a large expanse of translucent glass set within a deep recess. The recess exposes the wall’s thickness; it is over half a meter thick. I sense the world beyond yet cannot see it. A shadow beyond the glass changes slightly; I imagine a tree swaying in a breeze and possibly workers standing beneath it. Humberto breaks my daydream with a secret. The recess is an illusion created by the exaggerated frame. In actuality, the wall is only a third of what it appears to be.

From the library, I walk up cantilevered stairs, past another low partition wall and into Barragan’s study. A paneled window casts a soft glow upon the work surfaces. The light forms a brilliant figure against the panels. The brilliant Mexican sun is at once accentuated, and at the same time, kept within limits. While I cannot see the street, I am aware of its presence.

Stepping back for a moment, I am struck by Barragan’s skillful manipulation of boundaries. By withdrawing direct sight and replacing it with other elements, such as sound, light and shadow, a clearing is made for imagination to take hold. Sight, while available, is limited to a specific minimum. Consider the false recessed window. Although I am unable to directly see the street beyond, I receive enough information from which my imagination fills in the gaps. Because the expected rules of engagement are changed, my body must confront the world in a more authentic manner.

There are five elements from the sequence that balance the withdrawal of sight with the play of imaginal transparency. In the order described, they are the deep recessed window, the zigzag, the partition wall, the false recessed window and the paneled window. The deep recessed window allows light while limiting view to specific locations within. The zigzag and partition wall limit sight while allowing other elements to come forth, such as sound, light and shadow. The false recessed window stands out because of its exaggerated frame, meanwhile the translucent panes obscure any immediate view. The paneled window calls attention to itself by way of frame and figure. Its active adjustment invites participation and subsequent awareness of presence. These elements reoccur throughout. The partition walls of the rooftop terrace deserve particular attention. About three meters tall, they remove any direct view of the city or garden. And yet, the sounds of the surrounding city boom forth. Awareness of the overhead sky is immediate.

Architectural elements always stand in relationship to others. Barragan highlights the special nature of the false recessed and paneled windows by contrasting them with standard ones in other parts of the house. It is interesting to note that the special windows stand at the boundary between interior and street, and the standard windows, between interior and garden. In a similar fashion, he contrasts zigzags with standard doors. Further still, there are features that accentuate elements instead of contrasting with them. Light from the deep recessed window reflects off a gold reflective painting. While looking at the zigzag entry from this window, a metallic sphere reflects a distorted view of the entire interior.

As I look back upon these quarters, the word toddler is particularly appropriate. The instructors created a safe container from which to do my work. At the same, I was profoundly influenced by each one. So while I enjoyed the new freedom of my developing critic and expanding set of skills, I admit that without their support and direct input, the work would not have been possible.
After letting go of our preoccupation with novelty, cleverness and all that is uniquely individual, and upon seeing the great works with fresh eyes, the traces of tradition not only become apparent within, but the positive relationship between tradition and great works becomes apparent throughout. Anything worth pursuing requires toil, and tradition is not different. The construction of architecture requires a consciousness of the past.

Mnemosyne, the Greek goddess of the Muses and oral memory, teaches us how to be conscious of the past. Understanding oral memory lies with understanding myth and subsequently mythic thought as well as subjective memory. Myth recounts that which repeats itself. While myth preserves memory in the form of a narrative, it also passes along meaning. It is not simply a remembering of what happened. It is a fundamental story outside of time which tells about something that has happened, is happening and will happen again, always different and always the same. Mythic thought resonates and weaves across time. It echoes. Similarly, subjective memory preserves remembrance. It tangles the real and the imaginary. It is fluid, allowing for modification and adjustment. Like myth, it is not simply a recording of the past. Subjective memory is constructive, evocative, and poignant. Moments push and pull, they draw closer and recede. Sometimes it recalls events of great intensity, whereas at other times it recalls seemingly unimportant events but with new significance and depth. It is a voice that speaks out. Sometimes memory is more potent than the experience lived. Revisiting my childhood home will never carry the same sense of wonder and feelings of being loved that lives within me. Our buildings must echo with poetic memory beyond description or recollection alone.

In order to construct buildings that echo with poetic memory, we must develop our “historical sense.” T.S. Eliot explains, “This historical sense, which is a sense of the timeless as well as of the temporal and of the timeless and of the temporal together, is what makes a writer traditional. And it is at the same time what makes a writer most acutely conscious of his place in time, of his own contemporaneity.” For Eliot, poetry is the living whole of all of the poetry that was ever written. Similarly, architecture is the living whole of all the architecture that was ever built.

I firmly realize that the architecture in Italy will remain as the inspirational source of the works of the future. Those who don’t see it that way ought to look again. Our stuff looks tiny compared to it and all the pure forms have been tried in all variations. What is necessary is the interpretation of the architecture of Italy as it relates to our knowledge of building and needs. I care little for the restorations (that kind of interpretation) but I see great personal value in reading one’s own approaches to the creation of space modified by the buildings around as the points of departure.1

Traveling Egypt, Greece and Italy stimulated the imagination of Louis Kahn in an immeasurable way. Upon returning from his second European sojourn, Kahn’s architecture shifted from the pursuit of tectonic lightness to the exploration of depth and stereometric thickness. In a similar fashion, my travel studio in Italy, with an extended stay in Spain and France, stimulated my imagination beyond words. I returned home thinking in thickness. Thick enclosure consumed my thoughts. While the seduction of thickness is evident, as my sketchbooks show, I step back and reflect upon why my reactions are so strong.

Born and raised on the West Coast, the new frontier shapes my architectural tradition. The past trip to Europe is my first. Never before have I felt the deep residue of history, as I did, when I shopped in the Campo di Fiore each day. I viscerally felt the presence of countless people, across time, who performed the same ritual of being in the market. Where I grew up is significant for two reasons. On one hand, my experience allows me to see traditional architecture anew, or said another way, to see it with fresh eyes. Furthermore my sense of place is shaped by my home’s lack of Western human history, which requires more subtle readings of the landscape and patterns of human settlement. On the other, my experience shapes my critique of modern architecture, from the high architecture of Los Angeles’ case study homes to the developer-driven modern architecture of the postwar boom.

1 Louis Kahn.
I return now to my experience from Rome. Within thickness, it is possible to make spaces unto themselves. The window nook of my studio is both of the room and distinct from the room. While not a proper room space, it is perfect for standing, leaning and other modes of just being without task. It is fitted with simple accoutrements, from opaque panels for each pane inboard to larger, sturdier panels beyond the glass. Adjusting the window according to the elements is a daily ritual. Morning, evening and through daily changes, the variety of permutations is surprising: closed for cold, both closed and open for rain, and open for warmth and light. Awareness of the world beyond becomes conscious through the simple act of adjustment. Still more fascinating is how the window nook changes the room. The distance from the outside world is felt by virtue of the space between, thereby strengthening the interior as a consequence.

Perhaps most important, the window cove sets up a dynamic relationship predicated on the position of my body. Despite the presence of an awesome view within the room, the view is largely limited to a sliver given the depth of the recess. In order to experience the view in fullness, I must stand within the cove or in alignment with it. Therefore the position of my body exists in dynamic tension. Within the room, near its center or while working at my desk, my attention focuses on the task at hand, upon my work. In the window cove, my attention focuses on something else. Beyond mere view, I am aware of the weather, my body and of being at rest. Being in the window cove changed the quality of being in work. Said another way, the presence of the window cove made studio work an absolute joy.

Stepping back and looking at the experience with logos, I see that I was beginning to sense the subtly of thickness. Rooms built with thickness have a strength of form. The volumetric quality and containment of the room are equally felt. Thickness creates a distance from the outside world; accordingly, the interior world feels set apart and in instances feels more important because of the separation. Just as thickness creates distance, its absence creates a proper space in between, a wall space. As a proper thing, the ability to mediate between the worlds both within and beyond expands. Spatial composition becomes more nuanced, more powerful.

My experiences of Roman architecture presented an alternative to the current practice of excessive thinness, thinness in everything. The power of strong spaces and thick walls is awesome. I dreamt of thick spaces and strong spaces every night. In order to understand the quality more fully, I needed a new way of thinking. I sought a reinterpretation of tradition, the ancient practice of thick building, within a modern framework.
Thinking in poche is born out of my reading of Aires Mateus’ drawings as a lens for understanding Borromini’s spatial operations in his churches. Before going further, it is worth exploring two precedents using poche as a method of analysis that precipitated Aires Mateus’ work. In Architecture as space; how to look at architecture, Bruno Zevi states that architectural representation fails to capture the experiential quality of space. He begins his argument with the plan drawing for Michaelangelo’s Saint Peter. Compared to the often referenced plan used by architectural books of the day, Zevi presents a series of plan drawings that both alter convention and bring forth subjectivity. The first two drawings render the interior and exterior spaces in poche, thereby highlighting the figural primacy of each. The subsequent drawings simply develop the interior figure further.

In 1978, Collin Rowe and Fred Koetter wrote Collage City, which is partially based on Rowe’s earlier work with students in the Cornell University’s Urban Design Studio. Rowe calls attention to Nolli’s 1748 map of Rome and the use of open poche, a phrase which reveals the fluidity and analytic nature of the term. The interior spaces of private buildings are represented as ground; by contrast, the interior spaces of public buildings are represented as figure. The open poche reflects the experiential quality of the city, namely the primacy of public spaces, both interior and exterior, shaped by a dense, urban fabric made up of inaccessible and unknown interiors. Nolli’s use of poche reverses the figurative primacy of the building and lack of definition typically given to the gaps between buildings, a failing of modernism which Rowe sought to critique.

The most interesting aspect of Zevi and Rowe’s work are the figure-ground and poche concepts. With Rowe in particular, figure-ground and poche are an essential means of spatial configuration in architecture. As represented in plan and section, both are essential to analysis too. Whereas Rowe’s work focuses on the urban scale, Aires Mateus apply these methods to the scale of construction. Like Kahn, Aires Mateus clearly distinguish servant from served space, and they use interstitial space and habitable walls as containers for spaces with different hierarchies. In their plan and section drawings, two elements are significant. Servant space is rendered as ground, and served space, figure. Given the tension between servant and served space in Aires Mateus’ work, the wall reads as both figure and ground. The drawings elevate the figural primacy of the wall, and perhaps more important, they get at their experiential quality in the spirit of Zevi. Second, there is a second reading within the poche. Construction details traditionally not rendered in poche, such as material layers, are represented as...
In the subsequent quarters, my thinking developed further. The wall is fundamental to our sense of space and our experience of architecture. Our fundamental sense of an interior space derives from the demarcation between what is within that interior space and what remains beyond it. Further still, the quality of the interior experience derives from the identity of that demarcation and the subsequent relationship put forth between what is within and what is beyond. In other words, the quality of an interior experience derives from the quality of the enveloping wall. For example, a thick wall is felt differently than a thin one. A transparent wall is felt differently than an opaque one.

The way that we [build] our walls reveals much about our relationship with the dominant culture, both as culture influences us and as we respond in kind. I use brackets around the word build because the way of building is broader than we initially may imagine it. As I imagine it, it includes not only how the wall is constructed, but how it is represented (as lines, poche, and detail) and how we think about it sensually and conceptually. For example, ideas of self and relationship to the other, such as privacy in particular, are implicit in our thinking about the wall. Said another way, the built wall reflects both time and place; its spatiotemporal qualities make it a rich artifact for study (in addition to its inherent architectural qualities). How we think about the wall determines what it is allowed to do and correlates with its subsequent richness. If we have a limited view, then the wall has a limited capacity.
Over the last century, technology dismantled the wall into a system of heterogeneous, disparate parts each with a different practical purpose. One by-product of this process is a physical thinning of the wall. As the wall thins and becomes more malleable, emphasis shifts to the wall’s plastic qualities. As designers, the wall’s face, or the facade, dominates our thinking; significance of the wall’s depth recedes. Imagining of the wall dwells more on the two-dimensional, flat quality of the surface and less upon the wall’s spatial quality, its multi-dimensional character. When the demarcation between what is within and what is beyond becomes tenuous, the quality of interior space becomes phenomenally thin.

Returning to the developmental framework, the child is an appropriate metaphor. My playground expanded to include a richer, more diverse world. Further still, rebellion against my environment coincided with finding my own voice and unique way of working. I left the third year with strong convictions. The wall is a fundamental spatial entity. The quality of the wall derives from the quality of our thinking and currently, our thinking is limited.
The story of Prometheus gives further insight into what it means to tame. Seeing the world as an inhospitable place for humans, Prometheus bestows the ability to make order from chaos, to carve a place protected from the harsh realities of the world, to make fire and hearth. However the gift is not fire and imagination alone, or simply act and consequence. There is the intention. It is a gift of compassion. Further insight is gained in the distinction between bia and energia, two ancient Greek words for power. Whereas bia is a force acting upon, from without and external to, energia is one that works within, a force intrinsic to the object. Bia challenges and stands against, energia unfurls and brings forth. Heidegger warns us to the totalizing power within perceiving the world through use, through bia alone. Because usefulness is a way of revealing, everything may come to be seen in this way. Inherent in the act of architecture is the act of bia. Materials are ground, processed and consumed. However I believe that energia exists within architecture too. We must acknowledge the nature of bia and invite energia to the table.

How might we proclaim the sacred “Yes” through our architecture? In his later writings, Martin Heidegger explores gelassenheit as the essence of thinking, which is not a self-determining representing but a meditative thinking, a “letting all things be”. Robert Meager ties gelassenheit together with architectural practice: “This, of course, is a prescription for contemplation, not for techne; but a techne experienced in contemplation, riddled with the scruples of Adam, and inspired by the benevolence of Prometheus is at least likely to leave the world as inhabitable as it found it.” Meditative thinking thinks the truth of being, listens to being and belongs within being. Understanding gelassenheit requires radical introspection into the essence of who we are.

Nietzsche’s parable is comprised of three characters: the camel, the lion and the child. In a similar fashion, while trying to make sense of our attitude towards technique and construction, I too found three archetypes: the engineer, the craftsman and the third which I have yet to name, a designer rooted as much in Nietzsche’s child as in the trickster. Herein child refers to both. The engineer’s method is deductive. His thinking is scientific and well thought out. Mathematics, physics and precision are his realm. These qualities are necessary so that our bridges hold and buildings stand. Instead of waiting for inspiration, the engineer calculates, measures and verifies; he sets to task immediately. However within the engineer’s technique, beyond scientific knowledge alone, lies a quality of domination over the natural world. Technique is technology. The craftsman’s attitude towards technique is one of patience, sustained effort and manual skill. The object of her creation is personal, the act of creation, joyous. Whereas the craftsman’s attitude lies within her steadfast commitment to technique, the attitude of the child lies within a restless imagination.

The technique of the child is intuitive and non-critical. There is plenty of room for play. It is opportunistic and grounded in openness, with the world as the opening. (Moving forward, all references to “the world” refer to Maurice Merleau-Ponty’s intersubjectivity.) It is precisely how the child looks at the world, at objects and at stories. The process of design is a period of creative play, not arising from a desire to dominate nor towards inventiveness for the sake of inventiveness, but a close connection to the world of objects. The child does not take himself too seriously. His technique is domestication versus the engineer’s dominion over. Every object communicates, every object has something to say. In this way domestication may be thought of as a taming, such that the qualities inherent in the object are appreciated and the dialogue continues.

1 Friedrich Nietzsche, “Thus Spoke Zarathustra: First Part”, The Portable Nietzsche, 139.
2 Martin Heidegger, Discourse on Thinking, 1966.
DESIGN PROJECT AND PROCESS
adolescent

HOUSE FOR A DIVORCED COUPLE Study Model from Summer
PROGRAM

The program is studios plus housing. It is not work or home in the usual sense, an "either or", but a third thing that is entirely different. It is a "both and". It is the blending of work and home and the coming together of a patchwork family.

The program begins with the coming together of two artists. One artist is a sculptor, a maker. There is an open workshop. The other artist is a photographer, an observer. There is a studio for photography and another for art and design. Their work, while different, is mutually supporting. The design investigates a quality of place particular to the artists’ way of working.

They are a couple. Their place of work is also their home. It is where they are allowed to be alone, come together and entertain. As they and their work move farther out into the world, it is their beacon. Knowing its existence allows each of them to venture forth in a way otherwise impossible.

Apprentices support both artists. The sculptor’s apprentices live on site for six months. They live in shared housing. The photographer’s apprentices live within for a year or more. Each lives in a separate apartment.
I chose this site because I am seduced by the character of the street and surrounding neighborhood, namely the memory that is still present. While the neighborhood maintains much of its character, it is undergoing a significant transformation as new housing replaces old buildings and fills in the gaps. Between these two extremes, there exist new opportunities. I am interested in urban infill because it is a condition that I hope to work with in the future and because of its challenging nature.
Wall as Living Place

**APPROACH**

**CONTAINER** The empty lot is contained on all sides by strong spatial boundaries. A party wall to the east, an informal “alley” and party wall to the north, a party wall to the west, and Ballard Avenue to the south.

**BOUNDARY** The first move introduces a boundary. While simple, introduces a complex and rich dialectic. Front and back. Alley and street. Masculine and feminine. Hidden and exposed. Private and public. Guest and resident. Informal and formal. The pairing is not binary but fluid. They invite being subverted and accentuated. In other words, it introduces two spaces qualitatively distinct and yet mutually dependent on the other.

**STRONG SPACE, THICK SPACE** The second move differentiates the two spaces further. Each space is a pairing of strong spaces and thick spaces. Strong spaces have a grandeur, purity and formality. While suited for a particular activity, their capacity is fluid. Thick spaces have an intimacy, granularity and informality. Thick spaces introduce variety.

**MARRIAGE WALL** I call the critical boundary the marriage wall. It allows each space to be made more particular while at the same time, bringing them together.
WORKSHOP

On the street side of the marriage wall, there is a workshop, tool area and private work area for the sculptor. The primary entry is here. The workshop is entered within from the marriage wall. There are two additional entries, allowing direct access from the street and a large movable door. There is a classroom above the tool space.

Strong spaces are not simply rooms but spaces of a particular quality. There is grandeur to their scale and form that sets them apart. At once, they have a capacity particular to a set of activities, such as working with tools, from metal to a camera to a canvas. There is a purity to their form and clear reading of the volumetric quality. And yet, there is a ruggedness in both materiality and use. The capacity is not fixed but fluid.

A critical element of what sets these spaces apart is their relationship to adjacent thick spaces, whose quality is of a different sort. Thick spaces introduce variety. They are spaces for different kinds of work: less or more light, less or more noise. They are spaces for different kinds of encounters, such as space for one or for a few. They introduce an intimacy and informality by way of scale and enclosure.

In a strong space, the container is felt. The walls, ceiling, floor; the surrounding enclosure have a felt thickness, a distance between here and the space beyond. That separation turns the attention inward, to this moment. And just as the container is felt, its removal is equally felt. Solid walls give way to slivers, translucent walls to transparent ones, and roof to sky.
When an opening is thick, it has the added benefit of introducing depth. Depth is felt by movement. Depth is the experience whereby some elements are revealed, and others disappear. Using this duality, a gradation is introduced whereby the world is qualitatively different whether I am standing within or at the perimeter, or whether I am on the terrace or in the studio above. By superseding direct sight with other elements, such as sound, weather, light and shadow, imagination takes hold.
Each space relies on the other. The purity of the strong space is intensified by the granularity of the thick one. Differences continue, such as breadth with specificity, grandeur with intimacy, and formality with informality. These qualities are not differences in kind but of intensity. Said another way, the relationships unfold not from opposites but mutually supporting contrasts. These elements are further intensified with material and detailing. While thick may be in service to the strong, each is dependent on the other. They are equivalent.
### Marriage Wall

<table>
<thead>
<tr>
<th>Thick</th>
<th>Strong</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Couple’s Realm</td>
<td>Terrace</td>
</tr>
<tr>
<td>3 Kitchen, Guest</td>
<td>Workshop, Office, Entry</td>
</tr>
<tr>
<td>2 Classroom</td>
<td></td>
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<tr>
<td>1 Tool Area</td>
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</tbody>
</table>

### Strong

- 5 Light Studio
- 4 Shared Living
- 3 Dark Studio
- 2 Dark Studio
- 1 Garage

### Thick

- Work Area
- Sleeping
- Apartment
- Storage

**DARK STUDIO**

On the alley side of the marriage wall, there is a photography studio and housing for two photography apprentices. The photography studio supports the task of photography, shared work and collaboration. It also performs as an intimate gallery. The housing includes a living room with a small kitchen, a bedroom and patio. There is entry to the studio from the street and from the marriage wall.

At the point where the main entry, workshop and photography studio meet, there is an informal overlap space.

The scale of the strong space supports the scale of the work. At times, it is a proper studio. For installations and projects, the work may span the vertical or spread across the floor.

The wall between studio and alley is typically translucent, borrowing light while obscuring views into the space. At times, it becomes totally opaque allowing strict control of interior light. When the weather is nice, such as for a show, it may be totally opened allowing life to easily ebb in and out.

By comparison, the thick space of the apprentice’s home takes on an entirely different quality. It is a space for one or two, with gatherings of no more than six. It is a world within a world where total retreat is possible. Given the length of an apprentice’s stay, the interior is fitted to reflect the unique self: how artifacts are layered, what occupies the nook or window by the patio. While many meals are shared in the terrace kitchen, there is the option for cooking within. At times, it is hidden behind a wall. The living room may open onto the studio space, or it may remain closed and take a more inward stance.

The felt quality of intimacy, retreat and ownership is accentuated by the strong space beyond. Moreover, the purity (simplicity) and flexibility of the strong space is accentuated by the particular and personalized world within.
TERRACE

The space is entered here from the marriage wall. There is a terrace. There is a kitchen shared by all. It is large enough for events, but supports multiple cooking separately as well. There is a guest room, a shared bath and an entry to the couple’s realm.

The court is contained on four sides with the couple’s realm reaching over. The form of the space is felt. While sight is obscured, the sounds of the city below, weather, light and shadow are all available. The view opens only if you move to the perimeter.

When the kitchen boundary is closed, the interior feeling of containment is strong. The kitchen and table feel sturdy and integral. When outside, you may sense the world within, but only fragments.

The couple’s realm perches above the terrace. The purity of the primary living space is contrasted by the surrounding intimate spaces and artifacts. There is a library. A bedroom with a sky lit sitting closet. These informal spaces are separated by services and circulation.

As the space reaches above the party wall, the views begin to open up with views to the south from the bedroom, the avenue from the living space, and the north from the library.
SHARED HOUSING AND LIGHT STUDIO

Within the wall is a proper kitchen and two bathrooms. On the left, there are lounge areas, nook and outdoor patio. On the other, there are sleeping nooks with bed, desk, closet and view.

The openness of the shared living space is contrasted by the nook, which supports intimate conversation, reading, work or time alone. It is further contrasted by the granular and intimate quality of the sleeping spaces.

The contained patio is intensified by a lounge with full views above.

In the light studio, thick and thin are almost joined. On the thick side, there are casual couches, artifacts and a working table. There are rooms for processing and digital work. On the strong side, there is ample space for painting, display and larger projects.
Wall as Living Place

Marriage Wall

<table>
<thead>
<tr>
<th>Strong</th>
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</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Light Studio Work Area</td>
</tr>
<tr>
<td>4</td>
<td>Shared Living Sleeping</td>
</tr>
<tr>
<td>3</td>
<td>Dark Studio Apartment</td>
</tr>
<tr>
<td>2</td>
<td>Dark Studio Apartment</td>
</tr>
<tr>
<td>1</td>
<td>Garage Storage</td>
</tr>
</tbody>
</table>

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<td>4</td>
<td>Couple's Realm Terrace</td>
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<td>3</td>
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</tr>
<tr>
<td>2</td>
<td>Classroom</td>
</tr>
<tr>
<td>1</td>
<td>Tool Area Workshop, Office, Entry</td>
</tr>
</tbody>
</table>

SECTION Alley Side

FIFTH FLOOR

SHARED LIVING

LIGHT STUDIO
The boundary also introduces a degree of depth, which is the dimension of closeness and distance. It is the way that the world extends out from the immediate—what I can reach with my eyes, hands and ears; to the purely visible—vague and far off shapes that I can see but cannot touch. The immediate of each strong space, such as a working sculpture, is given depth by experiencing it again from afar, from the landing above.
Questions of a deeply spatial nature captured my imagination early in school. Anything but commitment to answering the calling would dishonor my own process as well as my motive. My thinking about the living wall and phenomenal thickness needed development when I began. I required the singular-focus offered by a thesis quarter. My way of working needed serious development as well. Put simply, my purposes for thesis were two-fold: establish a way of thinking and a way of working. I experienced successes on both accounts, particularly with the former.

My way of thinking greatly changed from Spring through Fall. In many ways, it developed from a fragment into something whole. Although it is fundamental to our spatial awareness, the wall probably fails to hold the substance necessary to generate a complete architecture. However I must give the living wall a heartfelt thank you. The inspiration always spoke when I took pause to listen, and it buoyed my spirits in the times when I felt tired and beaten. The living wall help sustain my passion through school. The living wall led to finding my motive.

The act of design, with critical insight from studio peers, advisors and critics, brought about a shift. The focus of my thinking shifted from the quality of thickness to the quality of a particular space, a dynamic dialectic of strong and thick space. Without design, it is probable that the shift never occurred. My work in philosophy developed a powerful, albeit limited way of thinking. Here is a much needed lesson. By first making physical artifacts, for me models and perspective sketches work well, and then engaging them with a dialogue that involves a sensitivity to allowing things to speak for themselves, I learned my greatest lesson. Design is a way of being in the world.

The strong space and thick space dialectic changed the way in which I understand my own work and that of others. When revisiting Barragan’s house while writing the thesis, I understood his work in an entirely new way. Before moving forward, let me make one thing clear. The dialectic is but one way and not an effective approach for all situations. It simply speaks to a thing that I find beautiful which sometimes goes missing from the world.

The experience of finding a way of thinking was a success. While it is only the beginning, my thinking reached the maturity necessary from which to evolve a practice. However the experience of finding a way of working was mixed.

Previously, I had not worked with Nicole Huber in a studio setting. Early in Fall, I pinned a series of past projects for her to see. She walked the room and with perfect precision, she said, “I find your projects cold. I do not see your sense of beauty in them. What do you find beautiful?” After serious reflection, I found that I was neglecting my voice. I set out to develop a way of working that brought forth my sense of beauty. Moving towards midreview, I developed a series of perspective studies that blended hand-drawing, mixed-media and digital painting. To my surprise, these studies communicated my intentions quite clearly. Critics understood what I was working towards. The studies made it possible to test my intentions and receive critical validation and critique.

Herein was the seed to the second lesson. There is an inherent conflict in architecture between intention and what gets built. Intention is required to build architecture and to do so in a particular way; however once a work is built, the intention loses much of its power. Put simply, the work is evaluated as built, not as intentioned.

I made a choice early and avoided using drawings with any serious level of completion. By doing so, the way of working with perspective studies came forth. Yet at the end of the day, thinking generates built architecture. Yes, perspective studies made it possible to judge my intentions. However without completed drawings, it became difficult to judge the architectural moves that unfolded from these intentions. I made it difficult for the critics to give feedback. From the standpoint of process, I lost the design feedback that such drawings provide.

I believe that I made the right decision in hindsight. There is only so much time in the day, and with the circumstances given, I found a powerful way of thinking and working with perspective studies. The latter required a level of time, energy and slow development that with the added complexity of working drawings, likely the finding would not have been possible.

Construction is the layer of information missing from my work. It is a difficult if not impossible study in an academic setting. Study requires years of projects and apprenticing alongside masters. It is my charge to study construction and continue my thinking, so that one day, I am building an architecture of the strong and thick space dialectic.
Annotated Bibliography

Phenomenology

Place and Memory

Interiority and Space


The Wall – Tectonics, History, Culture

The Wall - Threshold
The Wall – Social Qualities

The Wall - Phenomenal Transparency

Louis Kahn

Aires Mateus

Pezo von Ellrichshausen

Representation

Additional Sources
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Where no source reference is given the illustration has been supplied by the author.

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