UNDERGRADUATE ARCHITECTURE THESIS
College of Architecture and Planning
Ball State University
© 2004

Natalie B. Pohlman

Professor Andrea Swartz
Architectural thesis studio instructor

Professor Arijit Sen
Architectural thesis advisor
CONTENTS

Introduction .04
Thesis Topic: Issues and Positions .05
Conceptual Foundations .07
  Project 1 .07
  Project 2 .09
  Procedure .13
Conceptual Design .15
  Conceptual Design Review .16
  Remembering .17
Site Description .19
Thesis Design .21
  Project Description .22
  Conceptual Development .23
  Design Development .25
Connection to Place [Site] .27
Design Resolution .31
Reflection .39
Acknowledgements .41
Bibliography .43
Is your art therapy working?
I believe that a work of art reaches a level of perfection when it conveys serenity and serenity. - Luis Barragan
INTRODUCTION TO THE THESIS PROJECT

This thesis pursues the idea of creating memory, both individually and collectively. Desiring a memorable architecture pushed me to make a design “of the place” (to instill strong positive memories of the place). This was done through the sensual/visceral experience of the body, considering how the multiple senses can heighten or enhance our experience of place and connect us to that experience. Also, this was done with the idea of “being there,” as opposed to using symbols, artistic extravagance, or a mediated experience. The architecture that has integrity and confidence has its own power without the need of such characteristics. It can be felt and experienced by just being what it is. The result of looking at these issues successfully in design creates a memorable, meaningful architecture. This type of architecture gives those who experience it something they can connect with and even take pride in. Meaningful architecture with a spirit of place is a place of identity and serves as a memorable piece of the city’s past, present and future.
THESIS TOPIC: ISSUES AND POSITIONS

We have an innate and passionate need for memory in our lives. We keep photos and diaries, visit graves of our ancestors, take family vacations to see Plymouth Rock, and build memorials and statues in our towns and cities. Memory is very important to us both individually and communally. "It locates us as part of something bigger than our individual existences, perhaps makes us seem less insignificant.... Memory locates us." It causes us to feel like we are part of a family, part of a place, part of a history. Possessing memories gives us our identity. "The past dwells in us and gives us our sense of continuity, anchoring us even as we move on." Memories of our lives are embedded into places "investing them with meaning and significance." It is important to create meaningful places in our growing cities today as we are renewing and changing those areas which are aging and decaying. Public space can be utilized to help nourish a sense of belonging through memory.

"People make attachments to places that are critical to their well-being or distress." Architect James Cutler, student to Louis Kehn, argues that one reason why people make attachments to places like a public market is because it allows people to make an "emotional connection." It causes people to respond viscerally because it reveals the true nature of the market giving a more direct social, visual, and sensual experience. It is real, emotional responses that make people simply "feel more" there. This "true" experience creates a memorable response. People long for moments such as this and sometimes travel to larger cities where experiences like this are more common. However, we shouldn't have to always be tourists to find those feelings of attachment to each other, to place, and to time in our everyday lives.

That gift of being able to feel emotion and see beauty is a part of what makes us human. "These emotional responses connect us strongly to the world, and in this memorable way they open the doors for us to feel and love, in essence, reminding us of the gift of being cognitive." Architecture that reveals the uniqueness of place has the power to create an emotional response within us, creating memories of that place, thus connecting us to it.
Architecture needs more than ever to play a role in connecting people to each other and the places they live. One contribution to this detachment from 'real' experiences is due to what some call our 'experience economy' in which places, products, and services are all becoming themed for entertainment value to compete in our capitalist society. Consequently, new buildings, especially those used for commercial purposes, tend to be more anonymous and disposable. Additionally, James Russell calls out the current American culture that doesn't ask much of architecture, and because of this low standard many of our buildings are becoming "indistinguishable." We need to put more value into our public places as a way to remedy this disconnection between people and places.

The 'capitalist space' of our current economy is made up of similar places, and although they are essential, they have cultural costs in terms of identity, history, and meaning if they make up the majority of our urban landscape. We are losing "a healthy balance between what is real in life and what is not—between what is authentic and what is not..." The simplified meaning of a 'sense of place' is when the identity of the place is recognizable. Also, a place's identity that has continuity gives people a 'sense of reality.'

"An authentic attitude to place is thus understood to be a direct and genuine experience of the entire complex of the identity of places—not mediated and distorted through a series of quite arbitrary social and intellectual fashions about how that experience should be, nor following stereotyped conventions. It comes from a full awareness of places for what they are as products of man's intentions and the meaningful settings for human activities..."

We must not forget the need for a more meaningful and memorable architecture in our lives. A stronger experience of place is enhanced by the awareness of the past and experience of the present. Our memories of these places become a part of our personal memory bank, contributing to our life's joy and richness.

*For footnotes see p.41
PROJECT 1: CONCEPTUAL FOUNDATIONS

How can architecture create a 'sense of place?'

This first project was intended to explore thesis issues and apply ideas generated from research towards making an architectural design. The design was inspired by the tradition of the kolonihavehus or "garden colony house" of Denmark. We were able to interpret the program and use of the garden house according to our thesis ideas, while keeping with the spirit and scale of what kolonihavehus are.

The site for the garden colony was along Muncie's Cardinal Greenway near the White River. Discovering the cultural and physical history of the site informed my design decisions and the experience of the place I wanted to create. There is a link to a sense of time and a sense of place in the design, so that people feel a connection to the architecture, the place, and to the context of humanity. It is humane because it responds to peoples' interaction and engagement with the architecture, for example, through tactile engagement. Ideas generated from research that became my conceptual underpinnings:

"The authentic project belongs to its setting, whether incised into the landscape or juxtaposed beside a preexisting fragment..." -Robert Ivy

- It cannot be mass-produced or copied for another place.
- It has an honest response to existing features, edges and boundaries of the site.
- It is responsive to the present needs and issues as well as reflective of past influences.
- "Perhaps, then, a greater authenticity can be found where there is no intervention, and the passage of time is allowed to make itself felt." -Peter Blundell Jones
- It marks its place in time or reflects its moment in time in the evolution of the site
- Marking time, whether it be human time, geological time, or time of day, can create strong memories of a place.
- Creating an awareness of history and time connects people more to place.
PROJECT 1: KOLONIHAVEHUS [GARDEN COLONY HOUSE]
The design defines a space that invites you to pause and reflect, while moving along the wall. On the east side of the wall is a steel sculpture that faces the White River. There is a backdrop of cor-ten steel, which becomes a folded layer over the existing levee wall. The graffiti wall is still observable through openings or 'windows' in the steel to keep evolution of time apparent. Stainless steel pieces are attached to the backdrop, which offer human interaction. The steel will show signs of use with some parts becoming shinier from repetitive touching, rubbing of hands, and sitting. The materials used reflect the industrial spirit of the place. The luster of the steel also offers a dynamic contrast to the dull concrete wall.

The project connects to a sense of place. On the west side of the wall, there is pattern of light through the overhang. The wall becomes a canvas on which the light's repetitive rhythm is similar to that of the train tracks of the old railroad bridge and the idea of the train itself. This pattern at times is interlaced with the shadows of the trees above, and washes over the graffiti that decorates the wall. The wall not only serves a supportive foundation but also an additional purpose, and it is connected to the design. There are also a series of elevated steps that grow out of the ground. They reach out closer to the trees in the middle, and come upon the old wooden tracks. The old wooden track remains are barely visible at first glance because their deteriorating dark brown fades into the camouflage of leaves, but the design causes the person become more aware of, and consequently connected to, his environment.
PROJECT 2: CONCEPTUAL FOUNDATIONS
PROJECT 2: SITE RESEARCH

two sad eyes stare out into the street, stripped of their body, part of their skeleton remains—fragile, solitary, isolated, its body was growing weak, collapsing, no longer having a purpose, abandoned, they tried to save its memory in vain, it becomes a monument to something that has been easily forgotten, the slate has been savagely wiped clean, history, memory, erased along with the problems that caused its downfall, the grave is paved over with asphalt, its backdrop is the raw skin of the brick building behind, its frame now exposed.

This site is located on the corner of Main St. and Walnut St. in downtown Muncie, Indiana. The old entry of the Wysor building was saved from demolition here in 1987. It is easy to overlook when passing the parking lot that it now sits in. I reflected on this site and tried to come to terms with how I would treat it if actually building on it.

Many people traveled these sidewalks for 85 to 90 years. The Wysor building was part of the heart of downtown around the old courthouse square. For 16 years it has been a parking lot. Should I recognize the footprint that was there for so many years? The parking lot is not what a city is meant to look like. How should it incorporate the building remnant- the old entrance no less? It cannot be ignored. It should not be added onto or resurrected. Can it help to make people aware of this place? Do I want to bring the memory back of what it was? Yes. In some way because memory connects us to place, reminds us of where we have been and connects us psychologically to where we are.
PROJECT 2: BOOKSTORE/INTERNET CAFE

HOW CAN ARCHITECTURE AFFECT HUMAN EXPERIENCE AND EMOTION?

This second project was meant to further explore new thesis considerations and questions generated by the initial design. The only design requirements were to keep the building design "small" [under 10,000 square feet]. Also, the building type could relate to our anticipated thesis project. I had been considering doing some sort of public building in a downtown area, like a library, so I decided on doing a bookstore combined with an internet cafe for this project. I explored human experience again in this design, but I focused on the contrast between the 'real' and virtual. I relied on programmatic interest after I failed to find inspiration in the site’s history.

This project explores social interaction, baring the nature of the function of the building, and enhancing the experience of it. The design combines two functions that are not normally put together: a bookstore and an internet café. They differ in their nature because the bookstore is about the tangible interaction of gathering information and knowledge through which face-to-face interaction with others can occur. The internet/computer station area is about a less tangible and more accessible and quicker way to gather information.
Putting these functions together gives opportunity for new ways of interaction that could not have existed otherwise. Instead of the person at the computer being completely isolated from his surrounding reality, he now can be in two places at once—his immediate reality (or virtual) in front of him on the screen and his surrounding reality of people engaged in their physical environment. Both the computer user and the book reader have the same purpose of finding information/entertainment but are going about it in a different way. They observe this difference and can become more aware of their own experience. This also plays with the notion of identity for the individual. The person at the computer can be anonymous while at the same time a best-friend of the person sitting next to him.

Also, the functions are displayed on the outside of the building so that someone on the outside is also fully aware of the function or activity taking place on the inside. In this way, the building is no longer anonymous, but shown as having a specific use. The function of the building could have been portrayed simply by using a graphic sign, but exhibiting the use and the people engaged in it creates more interest, enlivens the space, becomes more inviting, and causes a relationship between people and
HOW DO OTHERS TREAT PLACE AND MEMORY?
THESIS CONCEPTUAL DESIGN REVIEW

Abstract Model

[Pre-crit writing] Meaningful places are memorable. You can feel their history and what they are about. Buildings, like people, are each unique and should be treated that way. There is life that goes on inside them and is a part of them. Their uniqueness should be uncovered; too often this life and individuality is hidden. There are systems, networks of people [represented by the intertwined string] that flow in and out. The building [represented by the wooden framework], can be a catalyst for interaction. One way buildings are unique is their past. These histories can be uncovered and we can learn from their stories. The patchwork of copper and bronze [on the shell of the model] relates to the awareness of time/memory of the exterior, which relates to the site. Also, the dimensions of the framework that support the model are derived from the wooden beams of the ceiling, metaphorically representing the foundation of memory and site.

[Post-crit writing] The design should be about the place. It should be something that cannot be substituted or transplanted somewhere else. These characteristics should emerge in the design. The shell of the model could have been more about the place it was in. Further, because it was hanging in the hallway of the architecture building, the shell could relate to the activities or people that use that hallway. Also, there is a temporal dimension to the design. There are invisible parts of public memory. There are different levels of memory. Public memory vs. private/personal memory will be discussed further.

[Thoughts about thesis site] Before narrowing the focus of this thesis to memory, the first site that I thought about using was one near the Evansville Art and Science Museum near the Ohio River edge of downtown. However, when asked about my own personal memories of downtown, I immediately thought of the Old Courthouse where I used to attend ballet class. I decided to look explore this area of downtown further to see if a site near there held more potential.
The Old Courthouse [1/7/04]
I remembered looking down to a lower level. I thought there was some kind of circular rotunda with stairs going around it. I must have mixed two memories together—the other memory was from a similar building. It was the Vermont State Capitol building in Montpelier, which had a central rotunda with a stair that encircled it. (I did have the main element correct, which was looking down into a central space.) Today I visited the court house and looked around the interior. At first I thought maybe I wasn't seeing the main central space of the building, so I went up to the second floor. There still was no central stair...The power of my memory [last time I was in this building was when I was eight years old] was so strong that I was convinced I was missing something. The picture I had in my head derived from my memory was different than the reality. But when I went to the central space on the second floor and looked down through the circular opening to the floor below, I remembered. I remembered when I was little [the railing was a little higher then] wanting to go up to the third floor right under
the dome to be able to look down upon the second and first floor. When I walked up the stairs, I remembered that same iron railing, the black marble steps, and the green marble wall. The building's distinct smell, sounds, and taste brought back the memory stronger as well. You can hear your shoes brush against the marble as you walk. The interior has a dry, dusty taste. I remember those big, heavy wooden doors. I looked through the windows of a few of them to see some of those tall rooms with the wood floors and white paint chipping off. They had huge windows...one of the large rooms on the top floor was used as a ballet studio when I was young. I tried out for the Nutcracker in one. They all have the same feel, though. Sparse rooms, tall ceilings, dusty wood floors, and white paint-chipped walls. Beautiful still to me. The building seems smaller now and not as grand as I remembered. I still think it is very beautiful, but at the time when I was eight, I thought it was the most magnificent building I had ever seen...I thought it was huge and it captivated me. I remember being so curious about what was behind all of the doors that were locked, too. I wanted to experience and explore all of what was inside this building.
Downtown Evansville, Indiana
is the context of this thesis project. Evansville is the third largest city in Indiana with a population of 121,000+ people. The downtown is along the banks of the Ohio River, and its condition has improved within the past several years with the development of the new river walk and the casino. Evansville's downtown has a rich and beautiful history, but unfortunately much of it has been overlooked in recent years.

The site is within a rich historical center of downtown, which still holds a few reminders of Evansville's past character and values. The specific site is located on the northwest corner of Court St. and 5th St. The site is adjacent to the Soldiers and Sailors Memorial Coliseum, which was built in 1916. The Coliseum used to be the venue for events such as concerts, conventions, plays, lectures, political rallies, etc. Today it is known for Wednesday night Wrestling and bingo. Across the street from the site is the Old Vanderburgh County Courthouse which was completed in 1890. It sits on what used to be a warehouse-ring basin of the Wabash and Erie Canal. It was meant to represent in Indiana limestone the wealth and power of Victorian Evansville. Since 1969, the Preservation Society has rented space in the Old Courthouse for antique stores, restaurants, dance troupes and theater companies, but it the Courthouse has mainly served as an office building. Recently, a few cultural functions are returning to the Courthouse, and it is currently being renovated and restored.
At a major point of exit out of the downtown, the site is on the northern edge of the downtown just before the Lloyd Expressway underpass. This is where the street grid also begins to shift to the north/south orientation, changing from the historic grid which is at a right angle to the river. Its central location is between various cultural, recreational and educational destinations in the downtown. To the west near the river is the new Casino Aztar [1]. Southwest from the site along the river is the Evansville Museum of Arts, History, and Science [2]. Also, to the North is the historic Willard Library and Evansville's Municipal Market [3]. Main St. [4] is only a few blocks south of the site, and southeast is the Evansville Auditorium and Convention Centre [5] (see red on site map).

One of my initial goals for the design was to begin to rejuvenate the fabric of the downtown, which will give more incentive to keep those historic monuments still standing and to encourage the use of those historic buildings to become part of a cultural arts district. Becoming a more vibrant part of the city center would create more incentive to keep and maintain those buildings that are unique to Evansville. The thesis design proposes a cultural center for Evansville which would anticipate the Old Courthouse and possibly the Memorial Coliseum becoming part of a new arts district/ hub for the downtown.
PROJECT DESCRIPTION

EVANSVILLE CULTURAL CENTER

There are special qualities and memories to every place, and these qualities can emerge through the design of a building specifically for that place. My project is a Cultural Center for Evansville, Indiana. It will include exhibits about local history, local art, meeting spaces, and art classrooms. The building will work to build a stronger connection to public memory for the people of Evansville and also create new memories to give a sense of identity and association to Evansville's downtown.

People associate themselves with the buildings they use, and consequently, architecture can enhance a community's sense of pride and enrich their environment. The project promotes interaction with citizens of all types and visitors to Evansville as well. Also, this building will create memories for people and a sense of belonging over time. The project developed from looking at the needs of the site chosen. It also allowed for the opportunity to incorporate connections to the history of Evansville, and the flexibility of program gave me the ability to explore some of my thesis issues.
I began the design process by making small conceptual models at site scale. I took into consideration the context, respecting the urban edges, movement patterns, and view lines of the site such as views to the historic buildings and views from the vehicular and pedestrian traffic. The conceptual model that I explored further was the one that respected the urban edge but allowed for a dynamic design. It referenced the shifted grid from the historic grid of the downtown to the new north-south street grid of the new streets. This concept was influenced/inspired by looking at images like the tree stump (layers of time). I also thought about movement as an experience, so I saw an opportunity with the stairs and ramps. Stairs and ramps in the model relate to the urban edges. Also, the core corresponds with the historic grid. The layers rotate off of the core/foundation piece. The core symbolizes that support or that historical foundation, and the layers or floors rotate off of the core and are supported by it. People are able to see the layers and the earth carved out around the core. This concept was also inspired by the idea of the layers of the river changing over time and the river's change compared to the more frequent movement/turnover of people over the land.
DESIGN DEVELOPMENT

- the movement of people could affect the light one experiences in the space (visual)
- floor with could be sensitive to sound
- contrasting textures of matte (haptic) vs. tactual
- not whole picture; view seen; creates mystery, curiosity

HISTORY, VISUAL, URBAN, COLLECTIVE

WATER - SYMBOLIC
MEMORY IN MY DESIGN...
PUBLIC MEMORY

Public memory involves appreciating the history of the place, relies on a visual element or object, and is more related to an urban context. It also involves a larger cycle of time because it includes a collective group of people.

-The awareness of time and history contributes to a public identity and reveals the soul of the city. We can find memory through history. Making visible the layers of history enriches our reading of the city.
-People have the need to identify with their surroundings and relate to them, and a place that shows memory visually gives a 'continuity of place' and gives people a 'sense of reality.' It helps people orient themselves within the larger scheme of life.
-People want to preserve the landmarks of the past because they feel less rootless, and that visual connection gives them a sense of stability and belonging. It is important to think about how new architecture can recognize or celebrate the continuity of time.

-Sometimes we hear songs that stir up emotions and memories that have been buried inside us, and the same can be true when experiencing architecture. To design spaces that make people feel part of an 'us' can be touching and memorable.

PERSONAL MEMORY

Personal memory is temporal. It can be strengthened with the engagement of more personal senses such as taste, smell, and touch. What is not visible is personal. It involves the near environment of the user.

-[Experience] Use over time can create meaning for a place. Daily rituals such as walking up stairs, often mundane, can be celebrated and enhanced. Creating a moment can be done with sensual experiences through sound/silence, light/shadow, haptic and tactile qualities of materials, or contrasting materials.

-Powerful places cause people to become more aware of their present. "The present achieves a place where a person finds himself between reflection [memory] and anticipation [future]. That split second between the two creates the meaning of the present and also the meaning of place." -Joe Bettencourt
-This heightened state of awareness of one’s present self and one’s surroundings is important in creating a personal connection with place, which becomes a personal memory.
Approach from Ohio River
Approach from car
The entry ramp leads the visitor from the parking area up to the entrance. The journey up the ramp provides a dynamic view of the Old Courthouse, being on its central axis. The visitor is instantly aware of the significance of the historic area.
EMBRACING THE PUBLIC

The ramp and front stair converge at the outdoor entry area where they are met with a copper wall. The wall would be sculptural, with the imprint of the present downtown Evansville. The relief would be engaging to the visitor and invite the user to touch the relief of the map. Over time, the touch of multiple hands would leave their mark. The copper also relates to the copper-clad dome of the Old Courthouse across the street.

The central, collective space in the cultural center references Evansville’s connection to the river. Evansville’s beginnings and growth depended on the river for transportation and trading goods for example. The pool of water symbolizes a beginning, a seed of life that the city has grown from. The water under their feet is extruded vertically with glass. Images and text from Evansville’s history are etched in the glass and can be viewed at each level of the museum. Water runs down the inside of the glass, creating a dappled light effect at different times of day.
CONNECTING TO LIGHT. TO VIEWS

Visitors walk up the main stair along the front façade to reach the upper galleries. This normally mundane activity is enhanced by light/shadow play on the stairs from the curtain wall structure, which changes with different times of day and in different seasons. The silhouettes of people walking up the stairs also cause interest to the users of the lecture room on the other side of the translucent glass wall.

The contrasting materials of the wood stairs over the rough boulders underneath that emerge from the lower level create visual interest as the user feels the lightness of the wood underneath their feet.

The glass façade also allows for panoramic views of the city from this stair.

Moments are created with light and views in the galleries; these moments are framed by slits between the partitions.

There are glimpses to the central core from the galleries. Once in the central gallery of the upper levels, one can look down into the lower levels and see people and the architecture from a different perspective.
In the Earth, Touching the Water

Walking down the stairs to the lower level, the visitor gets a glimpse of the reflection space through a silt in the thick wall of the central core.

The rough stone of outer hallway walls around the core contrasts the smooth, polished stone of the core walls.

Visitors are invited to sit in the reflection space and touch the water of the open pool while experiencing a seamless view out into the plaza.

In the cafe, people can see the blurred silhouette of people outside walking over the stepping stones along the water wall.

In the library, natural light let through the stairs above highlights the rough outer foundation wall of stone.
REFLECTION

On the surface I usually appear pretty constructed, put together, and calm. In reality, when it comes to
design projects I am always the one who is designing up to the last minute and frantically trying to get
something put together. And true to form, this is the section of my book that I am working on at the
last minute. I have sometimes looked at my "slowness" as a downfall, but during my thesis I had
more time to be thoughtful about my design decisions. And even though there can always be more
time and more things to explore, I ended up with a project that is very meaningful to me.

One of the most difficult things about this project was narrowing my focus to what I wanted to explore.
I went through every possibility—researching about place and authenticity, which were very subjective
and inclusive topics. All along however, deep down I was interested in the provocative qualities of
memory and how it relates to people. It was difficult with memory being something very personal.
But the fact that it is not a black and white issue is what excited me about the topic.

Looking at the design, the ways that I used water to create memory could have been more playful.
With more time, I think this would have come about. When looking at precedence of designs that use
water, many are for very sacred buildings or monuments, and I think I was influenced by this. I would
want this building to be very inviting and interactive. I also would have liked to explore materials more
both on the exterior and interior of the building. Still, I feel my design process was effective using
mostly hand-drawing and model-making, while occasionally using a rough computer model to explore
quick form studies and light quality.

Through this thesis process I have realized that the power of architecture is what inspires me. Its
power to slow us down, to inspire us, to move us, and to make us aware of our present and our past
can hold a special place in our memory and enrich our lives.

This thesis is a production of my architectural ideas, values, and abilities at this point in my life. This
Photo Credits

[cover] San Cristobal Stables, Luis Barragan
[03] Thermal Bath Vals, Switzerland, Peter Zumthor
[05] Quincy Market, Boston, photo by author
[06] Near O'Hare Airport, Chicago; Caesars Forum Shops, Las Vegas
[18] Old Courthouse, Special Collections, Willard Library
[23] Detail, Peter Zumthor
[38] Regional History Museum, Bonn, Germany

Footnotes

2 Sandercock, 2.
3 Ibid.
4 Ibid.
7 Cutler.
8 Ibid.
11 Hayden, 19.
12 Ibid. Michael Benedikt, "Reality and Authenticity," 84.
14 E. Relph, 84.
ACKNOWLEDGEMENTS

Thank you to my family for always encouraging me and having confidence in me.

Thank you to my friends for your support, generosity, strength, and sense of humor.

Thank you to my professors for your guidance and brilliance. Thank you for your support and honesty while allowing me to follow my own path.
BIBLIOGRAPHY


