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The process and product of community and site based connection
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Lead In

This thesis began as an investigation into the process of designing site sensitive architecture, and in the end led me to something intrinsically linked to site and place: a community. From early research studies and projects searching for how I as an architecture student could learn more about site through personal inquiry, to meetings with council members and community leaders in Marion, Indiana, I laid out the framework for how to develop a successful partnership with the site and the local culture. This process created a rewarding experience for me as a student, and set up a technique to aid in developing a more sensitive and thoughtful professional career as an architect. I wanted this thesis to be different; to extend the range of my thought through personal involvement in the issues. By getting out of the studio and engaging my surroundings I was able to bring a greater level of interaction and involvement to my project. This has resulted in my understanding the study and practice of architecture not as a static singular endeavour, but as a collective conversation between people. It takes a partnership of individuals who are sensitive to all of the factors that present themselves through the design to create sustainable and equitable architecture. I am very excited to be able to share this work because the experiences that I have had and the personal interaction that has come out of this has allowed me to grow as a professional.

"Behind every piece of worldly architecture there should be a series of conversations that have guided and shaped the design, a respect for the natural and man-made forces that effect the site, a process that exposes characteristics within the site and local culture from which to draw from for inspiration, a community of concerned individuals who have been invited to take part in the design, a body of research concerning all the aspects of the design, a network of involved individuals with true concern for the process and final product, a group of designers who listen, react, and have a genuine concern for circumstances within the site and community, an understanding that the design is for all of us, excitement that inspires individuals to dream, a respect for what has been, and a vision for a better tomorrow" — Zachary Hilleson

Enjoy.
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Project 1

Reflecting on your past design projects, readings, writings, observations and thoughts, articulate up to 3 areas of interest for your thesis year.

The first exercise began by investigating how the inception of projects happens and the relationship between the design and the designer.

The idea for this first construct revolves around the premise that what we create as designers is an extension of our collective experiences infused with forces found or within the design problem. The large cube, the designer, is connected to the smaller cube, the design, through the extension of forces that revolve around and through the design. This example begins to illustrate the process of moving from personal expression to the product.

The next two constructs explored the relationship between the figure and ground, or design and site, and questioned the different ways that connection is made.

In the second construct the figure is given a passive role and the ground an active. The construct was an attempt to visualize the merging of the built environment with the landscape. It explored varying degrees of coverage and interaction between the two.
The final construct developed into a dialogue about the characteristics found within a site and how they can be expressed in varying degrees within the final product.

Some of the ideas that were exposed in the first project influenced the development of the following 4 projects:
- The variety of characteristics found on site and their interaction through the design process.
- The design process dealing with the site, architecture methodology, and the architect's role.
- The experiences of the designer brought to the design.
- Merging of architecture and landscape into a symbiotic whole.
Intro into site

My involvement with the World Tour 2004 has had a dramatic effect on my thinking as I have approached this thesis. While traveling the globe to places as distant as the Great Wall of China and the pyramids of Giza, it became clear how diverse this world is. To fully appreciate any specific location I had to develop my sense of perception of site and place, and begin to interact with the local culture. This interest in an understanding of site and culture that leads to a better appreciation of place, has become the founding thought for my thesis topic.

At the heart of this topic is also a desire to effectively create place. Not sterile spaces that can be anywhere in the world, but places that are experienced as a continuum of site, people, and architecture. Buildings like typical McDonalds, Wal-Mart, and office park buildings are not interested in place and do not consider the site. The result is a complete disjunction with the place; often termed “anywhere.” “Anywhere USA” is a collection of these “site-less” buildings becoming situated in our towns and cities. It is the intent of this thesis to argue the significance of site and community involvement in the design process.

A place is a collection of experiences that are fixed to an exact location at a precise time; experiences that are perceived with the entire body. Through this phenomenological understanding of a site a foundation can be laid for the inspiration and creation of an architectural project.

Q's

Is the implementation of an investigation of site characteristics enough to generate an engaging and meaningful spatial experience for the user? If so, how is this understanding accomplished, and how is it employed? Can this site investigation be structured through the implementation of a systematic process? The idea that a process can form the understanding and reaction to site through architecture has become a focus for the next projects.
The site is an inevitable force that must be dealt with in the creation of any architecture. In ancient history the site had direct impact on the techniques used to create vernacular buildings, and the materials used in the structures. Neolithic villages had to harness and understand the sites possibilities and attributes to accomplish any habitation.

As humans have evolved we have developed technologies and techniques that have allowed us to bring building practices from anywhere in the world to any other place. The site no longer needs to have a direct impact on the design. Sites can be cleared of their topography and vegetation; architecture that does not respond to the place can be created. This is the situation in many locations around the globe where irresponsible acts of building are occurring.

For architects the site has had a primarily fixed position within the design process. Site analysis is brought into design thought early, usually at the beginning when initial conceptual work is being produced. Different architectural professionals use the site in different ways, some go no further than this primary investigation and others find emphasis in the site for other design considerations such as environmental design or urban planning.

Q’s
When looking at either of these circumstances, what is a best way to approach site? Is there a more thorough way that this process and methodology can develop that will result in a better site understanding, and therefore, in more appropriate and significant architecture?

On the next pages - Project 2 attempts to understand how to begin.

"I consider site as the first material, the foundation stone, the frame on which to project our architectural thought. And yet a site is more than a simple frame; it also provides the clues to the correct direction for the process of building."

— Raphael Moneo
The second exercise looked specifically at a site and the way a better perception of site could be achieved. It was an attempt to allow the site to make an impact on the senses and experiences of the observer. A series of sites were chosen and visited. A phenomenological approach was used to structure the observation and facilitate an understanding of these sites. Through perception and inquiry the site’s traits were collected and documented. At this point, guidelines were created to help in the collection of the sites’ characteristics.

Collages were used to visualize this information and present it in the way it was understood by the designer.
A system of seven spheres was developed that catalogued natural and man-made conditions that all sites contain in one degree or another. From this database of information was pulled peculiarities that began to speak more specifically about the character of the site. This exercise became a trial to see if, through an expanding and subsequent narrowing of observation, a more specific understanding of the site and a broadening of perception could be achieved.

One process for organizing the traits and perceptions is by considering the “spheres” of the site. The seven spheres are: NATURAL SPHERES such as topo-sphere (land, earth, and topography), clima-sphere (climate, atmosphere), h2o-sphere (water table, drainage), bio-sphere (flora, fauna), and HUMAN- INFLUENCED SPHERES such as infra-sphere (infrastructure, culture, data, energy), culture-sphere (shared behaviors/traits-past and present), and built-sphere (context, meaning). These spheres are used to quantify the ratio of each sphere present on site. In the case of this thesis, the focus has been determined, through a series of experimental projects, to be the culture-sphere or cultural information and experiences found on site. These traits become the input, the beginning of design, and the foundation from which design decisions can be made.
Research

Research followed, with particular interest invested into the technique or methodology with which different architects and designers investigate site. The thought within this thesis has developed through two main areas. The first is research into the written and built work of designers with specific interests in site. All architects investigate site in one manner or another. The designers that were of interest for this thesis topic put great value on utilizing site in their designs and include Carme Pinos, Steven Holl, Rafael Moneo and Daniel Libeskind.

Written Research

The research into this thesis topic has focused on architects’ response to site, and the process that they undergo to create site specific architecture. A variety of material has been collected from a broad spectrum of architectural thought. This research parallels the views in this paper, and has acted as a foundation for dealing with the design assignments.

One architect that takes a particular interest in site is Carme Pinos from Barcelona, Spain. In her book, Carme Pinos: An architecture of Overlay, her work is described as deeply grounded in site response. Her architecture can be understood as a series of overlays that respond to site on a variety of different levels. It melds visual and intangible forces into an architectonic space. Her process is a very personal and ritualized occupation of site. She interprets the site by walking in lines, zigzags, and arches. Pinos confronts the place by “looking the ground in the eye.” Much of what has been gained by researching Carme Pinos work has to do with the process of site inspection.

In the book, ANYWHERE, which is a collection of essays about what separates somewhere from anywhere, Rafael Moneo explains the way his architectural thought deals with site. His designs understand the site as the inevitable first material for any construction, and therefore it acts as the foundation stone, or frame on which to project architectural thought. Moneo believes that, “Learning to listen to the murmur of the site is one of the most necessary experiences in an architectural education.” It is his conviction that architecture can claim the site from “anywhere.” The consideration of the site as the fundamental idea or initial act has had a great impact on this thesis.

The book, Drawing Building Text, features an article by Carol J. Burns titled, On Site: Architectural Preoccupations, that explains site as artifact or ruminant of human forces. The article also describes different ways in which architects have dealt with site. The idea of cleared versus constructed site were explained in this article as two opposite reactions to site. This reading has had a profound impact on the methodology of the investigation and construction of site.

Steven Holl’s book, Anchoring, provided a new understanding of phenomenological thought as it is understood through site and architecture. In this essay he describes the outer and inner perception and how they can be intertwined in the built environment using devices such as space, light and material. In this approach the concept merges with the sensation of place through the development of perceptive inquiry. The idea of architecture as a phenomenological reaction to site developed through an understanding of this article and the work of Steven Holl.
Precedent Studies

Designer’s buildings can be as important of a research aid as their writing. Through these built or hypothetical solutions a clearer representation of the designer’s process and thoughts becomes apparent. A series of designs from a variety of different designers have acted as a source of inspiration for this thesis.

One of which is the new Vienna Public Library located in Vienna Austria designed by Ernst Mayer of Vienna. This building boldly places its form in the middle of one of the ring roads that surround Vienna. This library is situated on a site that, before the library was created, appeared to be unusable. The library spaces hover over a metro system station that runs along its length following the railroad tracks. Through its program which engages the library and this transportation hub it connects with the existing infrastructure in a very innovative way. The scale of this facility and its orientation are guided directly by the site; as is the inclusion of light wells that collect day lighting, and direct it to all the levels of the library. This building becomes engaged by its site through the understanding and utilization of the forces that run through it.

Another very interesting design that was created with a thorough perception of site is the “Mourning” development of the former SS barracks of Sachsenhausen in Oranienburg, Berlin by Daniel Libeskind. The competition program proposed a housing scheme to be placed on this former concentration camp. After reviewing the program, Libeskind, horrified by the idea of creating homes on this site, designed a program and building that responded to the deeper memory and understanding of this very culturally significant site. The housing program completely hid or detached the design from the site. Libeskind’s idea of responding to the difficult past of this site was too radical to make him the winner, but he did receive an honorary prize, which illustrated the value of his design as a direct extrusion of site information.

Carne Pinos designed a Boarding School in Morella, Spain that draws its form and organization directly from the rocky hillside from which it is located. The material palette of the school is drawn from the local stone used in most of the architecture in the area. The edgy form of the building responds to the jagged outcropping of the Spanish hillside. The form also calls to mind the vernacular barns of the area in the way it utilizes a sloped roof. The building also maneuvers on site to connect with the climatic conditions and the city of Morella which it is adjacent. This building presents a dynamic yet formal solution that responds to the site and context in very literal and direct means.

The final precedent is taken from the Rural Studio organized by the late Samuel Mockbee. His students from Auburn University have been constructing architecture in the black belt of Alabama for the past decade. The architecture responds directly to the culture of the site and the needs of the client. The housing, built for some of the less fortunate in the area, responds not only to the site’s physical characteristics but also to the intangible forces that flow through the site. In Mockbee’s view, “The best way to make real architecture is by letting a building evolve out of the culture and place.”

One great example of this is the Harris (butterfly) House designed in 1997. This house responds to the environment by allowing the roof to be folded to capture wind and cool the spaces within during the summer, and still provide shade to the inhabitants. The porch, which became the focus of the design, provides a very important southern cultural space to its inhabitants. Through an intense understanding of the client and the site as well as the materials and resources available, these students create proud architecture for this rural part of Alabama.
This process is a vehicle for facilitating design and production, with specific inputs that result in specific outputs, allowing it to relate directly to the creation of a project. The input for this process becomes the "site artifact." The site artifact can be defined as an objectified collection of the site characteristics, both past and present, which influence what the site is today. The artifact is composed of tangible and intangible traits of natural and human origin as they become apparent to the viewer through perception and inquiry. This information that is perceived on site is collected and objectified in the site artifact.

The Process

The cultural characteristics found on site that are most closely tied to the creation of place deal with experience. The experience of a place with the senses ties in directly to the memory of that place. The observation of these site characteristics are made through a phenomenological or perceptual process approach. This allows the fundamental experience of a site to be directly communicated to the observer. The approach can be undertaken in a variety of different ways depending on the designer, but what is most important is the physical interaction with the site. A number of devices such as sketching, note taking, collecting site objects, walking lines, and sitting and observing can be used to quantify the site and generate the site artifact. The perception of a site varies as this understanding is cycled through. Once a detailed perception of site inventory has been accomplished, then a realization of the creative mechanism is needed. Through this mechanism there is recognition of how the architecture and the site artifact are related.

The site artifact influences the architecture in ways that are based largely on the thoughts and values of the designer. The question becomes "In what way do these cultural characteristics found in the site artifact influence the design of the project?" This relationship can be established in a variety of different ways. Some designers choose to mimic, extend, reproduce, or abstract the architecture based on site perception. The work of the Spanish architect Carme Pinós views this interaction between site and architecture as, "A dialogue linking human activities with traces of natural and cultural histories." Rafael Moneo considers the site as, "The first material, the foundation stone, the frame on which to project architectural thought." Whatever avenue of thought is chosen, the goal is to create design that responds to its cultural identity. This is when site and architecture become linked and places come into being.

Based on the designer's choice on how to respond to the site, a series of systems can be used to express the final product. Some of the possible connections can be made through views, orientation, materials, form, circulation, or structure. The appropriate of the system will be determined by the site. The greater variety of ways in which a project can coordinate site experience, the more that project has the possibility to connect with the user.

The agenda for this whole process connects back with the idea of place making. The intent is to provide a spatial experience that is based in a phenomenological understanding of site experiences, and extended to the user through the architecture. This creates a union between the architecture and the site that relates directly to human experience as it is measured with the body. The architectural artifact, an extension of the site artifact, acts as an intermediary between the site and the user. This tripartite relationship creates a cyclical response which reacts to site with an intellectual rigor that allows the project to be a meaningful place in the world. The final question becomes: Will the utilization of a facility designed with this process allow the user to better cultural understanding of the site, and therefore achieve a more thorough appreciation of place?
The next exercise was the first attempt to design a project solely based on site perception and the process developed after project 2. An appreciation of the thought from the first exercise, along with the guidelines set up in the second, directed the analysis of a site on the south side of downtown Muncie, Indiana. This site was chosen because of its exemplary need for aid and seemingly characterless position within the city. This condition necessitated an extraction of information from the site artifact because so little was evident upon a basic inspection. A thorough investigation, organized by the spheres, exposed a series of peculiarities to serve as the foundation of a design. Through exposing some of these peculiarities of site via the creation of a project it would allow visitors to appreciate the site through the design.
The agenda for this project became to reconnect this fragmented landscape back into the flow of the downtown Walnut corridor, and also to create an interest for people in the area to visit the site. No program was provided; rather an understanding of what the site wanted or needed was utilized to develop the project. This investigation began with a thorough immersion into site, and ended up being very closely related to the creation of place and event. This connection was made through the realization of people in the dialogue between the site, the tectonics of the architecture, and the programmed events between site and people.
Greenway Vision

As the “Crossroads of America” this Midwest state is frequented by people traveling cross-country. With the completion of the American Discovery Trail, the Hoosier landscape will become a part of the recreational infrastructure facilitating travel from California to Maryland and back on one stretch of roadways and trails. This newly proposed corridor will bring new traffic and an increased population of travelers and vacationers through heartland of this state.

The corridor for this development will include Lake Village to the north and west, Peru, Marion, Muncie, and Richmond to the southeast. These cities, along with all of the others that the trail will come into contact with, are facing changes in the next decade as this development begins to alter the landscape. Muncie and its surrounding areas will begin to see greater numbers of people visiting the city and touring its sights as this transportation route develops.

Along with this newly added transportation infrastructure and the people that will frequent it will be the facilities that service this population. As this nationwide development begins it will become even more important that Hoosiers retain their identity and work hard to sustain the natural Indiana culture and landscape. It could become easy, in the haste of development, to lose sight of distinctive Hoosier environments. As new design arrives to Indiana an emphasis in architecture and design that is linked to Hoosier culture and site will become increasingly important.
Greenway Site & Culture

The Greenway provides a unique linear collection of experiences and sites as it makes its way across Indiana. As it slices diagonally across the state from Lake Village to Richmond, it bisects fields, cities, and the infrastructure of Indiana. These different levels of intersection provide unique places that can only be experienced while on the Greenway. It also connects a varied cultural landscape including small rural towns, agricultural back lands, and to the downtowns of some Hoosier cities.

The former use of this trail as a railroad has also created a situation where unique artifacts such as buildings and machinery can be found within close proximity to the trail. These artifacts, as well as the site were they are located, create very unique places. It will be the emphasis of this next thesis exercise to engage that uniqueness and extend it through the architecture to the user. The architecture will also have the ability and responsibility to illustrate an understanding of the local culture and physicality of the place, and allow visitors to gain a better appreciation of the site’s culture through the use of the facility.

This thesis has at its core a concern for a direct and personal engagement with physical and cultural context found in a site. It allows the experiences and perceptions that take place while getting to know the site to be extended to the architecture through a systematic process of site utilization. By allowing this interaction to take place a bond is created between the site and the architecture. This relationship has the ability to reinforce the appreciation of place for the user. The connection between the user, site, and architecture strengthens the uniqueness of a specific place. The physicality of the site will be directly approached and understood through a constant presence on the site.
Further explore your ideas using a public project of your choosing.

This experiment continued the in-depth look at a site and also at a site's users. Experiencing the site, in both its present condition and known past, became a way to structure the design to allow people to become more connected to the place. The goal became to provide an experience that is based in cultural analysis of the site and extended to the user through the architecture using devices such as form, material, and orientation and their influence of space, light, and ultimately experience.

The understanding of the site and the users hinted at a more elaborate shelter program. This shelter facility combines program elements originally on site, such as a bathroom and interpretive area, with those that become influenced by the perception of what the site needed. An example would be the need for space that provides experiences offering perceptions and giving new perspectives of the site. The emphasis of the process now turned to the perception of site characteristics.

The primary view of the site began with an inquiry into the tangibles characteristics found on site. The day to day reality of this Greenway site made themselves apparent through site visits. Again the agenda was to react to site based experiences and extend them to the user through the architecture. The site is made up of the pond to the south, the grassy plot of land where the existing trail head is located, and the infrastructure of the Greenway and the country road to the north and east. The orientation of the facility was manipulated to facilitate a linear connection to each of these site conditions. The form of the shelter facilitated the experience of each of these site conditions. The extension of the dock into the pond provides for two connections to be made. It allows people to get to the Greenway from the south residential area, which would increase this site’s exposure to a new population. It also allows people the unique experience of being able to walk from one end of the pond, through the middle, to the other side. The form of the facility respects the horizontality of the site, but allows people to walk up and onto the roof to take in views of the site and landscape that are different from any other. The form of the shelter also responds to the mound like quality of the earthworks created on site to keep the Greenway and road out of the flood plane. The third element, the tower, which is designed to be a lookout, allows views over the surrounding scenery including the Greenway to help the visitor get a better overall understanding of the sites place in the countryside. From this vantage an understanding of the way the pattern of the facility’s skylights relate to that of a crop field can also occur.
THE SITE
The design began with an investigation of the site. The existing depot at the crossing of 400 S and the Cardinal Greenway just north of Union Park. This overall view shows the site on Oct 24 2004 at 2:00pm.

THE PERCEPTION
This shows the site broken into identifiable parts. By narrowing the perception of site it allows these more influential elements to be focused on and understood. The tangible traits make a direct impact on the understanding of this place.

THE RELATIONSHIPS
These elements of the site are then grouped to show their relativity and ratio to other elements. By gathering these similar elements it allows for stronger relationships to be understood. And gives emphasis to certain groups.

THE INTANGIBLES
The inclusion of intangible forces of history and culture, that may not be felt when dealing with the site directly, allow the final resolution to be connected not only to the sites present, but also its past.

Continued on next page.
THE SITE ARTIFACT

These intangible and tangible characteristics that are perceived from approaching a site are then gathered together again and organized to create the SITE ARTIFACT. This re-generation allows for these seemingly separate conditions to relate directly to one another.

THE RE-COLLECTION

This site artifact is then related back to the site and becomes influential on the resolution of the design. Elements of the tangible and intangible become expressed through this process.
While the tangible traits were being understood, other insights were being made into the intangibles of this site. History, stemming from its native forested and agrarian past, began to make an impact on the perceptions of this site. Its recent history, which would have included fields, barns, and farm equipment, became immediately evident by looking at the surrounding landscape. The rhythms and patterns of such histories based in the plantings and building types of this site's recent history began to be extended into the project. These were expressed through the structure and orientation of this facility. The pattern of fields and the experience of being in a field were articulated through the skylights and light quality as well as in the organized rows of columns. More remote histories referencing native Indian cultural artifacts, such as the longhouse that once inhabited this landscape, became a research-based perception of the site. This realization took on a formal expression based on an experience. The experience of being inside one of these local native dwellings was extended into the facility by creating a long interior space that uses devices such as structural order and building scale to connect with this remote past.
The intention was to create a better understanding of site by allowing these intangible and tangible site perceptions to become extended to the user through the architecture. The creation of this facility presents new perspectives to the user, and allows a viewing and appreciation of the site from new vantages.
I am interested in exploring a site located along the Cardinal Greenway between Marion and Richmond, Indiana. This investigation will be the final in the series of projects that have helped to develop a process and methodology for approaching site. Even as they increased in scale and detail, the site has acted as the core concept and inspiration for these different explorations. This last inquiry will provide the greatest level of detail and development of this series of investigations, and will test the effectiveness of the methodology and process of my technique of site understanding.

The site will be chosen after the full extent of the Greenway between Marion and Richmond has been looked at and rated. From that point forward the perception of what the site has been is today, and can be in the future, will guide the design of the project.

The project will be a reaction to a definitive understanding of site. The evolution of the design will develop by using site artifacts as fundamental pieces of inspiration for the project. The program of this design will be extracted directly from the understanding of the site’s needs. Appropriateness of the spaces and uses will be guided by the perceptions that are gained while being on site. This procedure will necessitate a fully phenomenological and empirical approach.

This design will add a new level of interaction for the Greenway, and provide a new and unique experience based in the site. The intent of this project has dual purposes. First of all, it will provide a space for the local community to use. It will also provide the users of the Greenway with a new opportunity to learn about Indiana and the specific site where the project is located. This project will create a new attraction to the Greenway and the site by providing interesting and provocative design along this infrastructure that will eventually connect a large portion of the Indiana.

Through this project I hope to continue to develop a process, procedure, and methodology that I can bring to my future architectural endeavors. The goal of this thesis is to lay a foundation of thought from which I can begin to develop my professional career. The universal and empirical nature of this process will allow it to be applied to any site anywhere in the world. By developing this unique and personal approach to site I hope to be able to come to a better understanding of the process.
Search for a site

The choice was made to identify a site along the Cardinal Greenway for the creation of my final thesis project. A 30-40 minute driving radius limit from Muncie, Indiana was placed on the selection of the site to reduce the travel time that it would take to get to and from the site, and also to facilitate multiple site visits during the research and design phases. Within this area, there were two main stretches of Cardinal Greenway to pick from. The first was a 7.5 mile section of the Greenway from the north of Marion to the south of Junction, and the second was a 20 mile stretch of Greenway from east of Gaston to the south end of the Prairie Creek Reservoir. These two sections of the Greenway make up the largest completed trails in the Indiana portion of the National Discovery Trail master plan.

To gain a better appreciation for the Greenway, bike outings were organized to tour the entirety of the completed trails. No preconceptions were brought to this analysis. Only my camera, note pad, and memory were available to document the sites as they passed by. These trips took place over a week period at the end of November. I went out by myself and rode a 7.5 mile section of the Greenway in an afternoon. This process of site searching helped me understand the Greenway layout and interaction within the landscape, and also made it possible to meet Greenway users. I made it my mission to stop and talk with at least one person every time I was out on the Greenway. Through these meetings, I began to understand how they use and value the route.

There were a variety of sites that began to make an impact on my perception of the Greenway and its possibilities. Because the Greenway is not completed there are points where the Greenway pavement stops. These points referenced the future connection that will someday be created, and also the difficulty of getting support for such a grand endeavor. The rest stops and depots along the way have been placed in strategic locations, and because of this they stuck out as great possibilities for the development of a project. There were also very scenic landscapes that called out to be looked at and contemplated as possibilities for this final thesis project.
There was one site that stood out from the rest. It is a site located along the Cardinal Greenway as it makes its way through the city of Marion, Indiana, 40 minutes north and west of Muncie, Indiana. This site stood out because it is fundamentally different from the rest. It is located on an earthen platform a story and a half over the city streets of Marion. This section of Greenway slices through the orthogonal city grid at a diagonal, on the ground bed of the original tracks that were elevated over the streets to reduce the impact that the trains would make on the traffic patterns of the busy thoroughfares below. This elevated section of the Greenway lasts a mile and provides some of the most provocative uninterrupted spatial experiences available along the completed sections of the Cardinal Greenway. This raised situation starts to the south at the crossing of the Greenway and the 33rd Street, and continues through an industrial district, over the busy streets of Adams and Washington, and ends at Nebraska Street to the North.

The present condition of this section of trail creates an interesting interaction with the community it resides over. From street level it is the most apparent section of the Greenway in town because of its elevation, yet it is the most difficult section to get to. This situation is somewhat advantageous because the area that it is elevated over comprises some of the most dilapidated and lowest income areas along its Marion route. None the less, it misses an opportunity to make a neighborly connection to this community located at its base.

Along this site there exists a series of different experiences. From the Greenway the trail becomes disconnected because of this elevation change, and also because of the vegetation that surrounds and shields the view to the neighborhoods. There is a rhythm that exists because of the regular interval that the bridges are introduced into the trail to allow you to pass over the streets. These bridges narrow the path and change material which makes you increasingly aware of their presence. This rhythm is enhanced by the vegetation that lines the path between bridges. Together these create a cadence that grab your attention, and orient you with the grid of the city.

The majority of this raised area runs through residential neighborhoods. There is also an abandoned warehouse strip that you move through which exposes the user to the raw industry of a stove manufacturing plant, and the petty vandalism that has resulted from its abandonment. The route gives a surreal view of the city, and allows a person to glide over these main transportation arteries without being interrupted along the way.
John Selby
Marion Greenway Council President
"The Marion section of the Greenway has always been interested in the thought of a depot, or headquarters of operations."
Depot: Connect the site, the architecture and the user to the place

These two models were created as first reactions to the site. Issues:
- access
- identity
- activity

Combine access to the Greenway with a program that could provide spaces for the local neighborhood population as well as the Greenway users.
Prelim Spatial Ideas

- The upper volume of space acts as a beacon to achievements of Marion culture, service, and art.

- The depot which is located at the intersection of the upper and lower volume acts as the backbone to the building and provides offices and meeting spaces for Greenway employees and bike rental and gift shop space for visitors.

- The ramp located at the intersection of the two wings of the depot allows direct access from the street level to the Greenway.

- The roof of the upper and lower volumes could be used for gardens or lawns.

- The lower volume of space is provided for community use or retail development.
High Mile District Plan

The high mile district plan is an attempt to combine efforts and strategies from a local site scale into a larger vision for the entire city. Accessibility, activity, connectivity and density are issues that must be employed through collective strategic action plans at the Greenway level and the local community level.
The depot acts as the cornerstone to the development of the High Mile District Plan by setting up a language to spur on a creative dialogue and development in Morton, Indiana.
Time to set up meetings to discuss these issues in a larger venue.

Key Design Characteristics for Meeting Presentation

- The facility provides services for both the Greenway and local community.

- The boundary created by the rail earth bed is removed and replaced with a bridge and the depot which allows for movement and connection between the north and south neighborhoods.

- The vertical layering of the site informs spatial layering of the architecture.

- The lower volume of the depot is organized to follow the rhythm and scale of the surrounding neighborhood.

- The spatial experience at the Greenway level is mirrored in the building to create a closer relationship between the building, site, and user.
Dave Homer

Marion Council Representative

“it had never occurred to me, before your presentation, that this type of collaboration between the Greenway efforts and local neighborhood efforts could provide the type of vision. You need to meet with the neighborhood associations near your site.”

Presentation at the Annual Greenway Council Meeting

Greenway plans progress

DREAMING BIG — Ball State University student Zach Hillerson, right, talks about his design for a depot for the Cardinal Greenway in Marion with long time resident Rex Maynard, left, and Greenway advisory board member Don Elliott. Hillerson, a fifth-year thesis architecture student, spoke Monday night during the annual meeting of Cardinal Greenway Inc. at the Old National Building.

Group working on new trail for Converse plan fund-raiser

BY PAUL MCKIBBEN

Officials hope to finish plans and acquire land this year to connect the Cardinal Greenway to the Sweeter Switch Trail the following year. The additional section would stretch the trail an extra six miles for a total distance of about 11 miles.

The Cardinal Greenway currently runs from Miller Avenue in Marion south to Old Street in Jonathon. While the Cardinal Greenway is connecting to Sweeter, other officials are working to build a trail from Converse to Sweeter. “The concept is that the longer the trail, the fewer people will come to travel it, and the bigger the system, the more the benefits,” said John Selby, co-chairman of the Cardinal Greenway’s Steering Committee. Selby also said construction would begin next year on the Greenway part of the project.

Planners received a boost last year when Irving Materials Inc. agreed to donate land for the trail in Converse, dubbed the Converse Junction. In 2014, officials were able to get a $150,000 federal grant for the Converse trail.

Currently, officials are raising $127,000 for the grant’s local match and finalizing the trail’s route, according to Jen Leason, president of the Converse Town Council. The goal is to have all the money raised this year and start construction in spring 2016. The trail will connect to the Sweeter Switch Trail at Grant County Road 700 West.

A fund-raiser is planned for 4:30 to 7 p.m. Feb. 9 at Borderman Gym. Converse. Fish and chicken strips will be available.

The new trails are in the immediate plans for officials, but also on Monday, they heard from Zach Hillerson, a Ball State University architecture student, who has a dream for the Cardinal Greenway.

Hillerson has designed plans for a depot on the Cardinal Greenway between Adams and Washington streets in central Marion. The two-story building would have such uses as offices, storage, bike rental space and a cultural gallery that can display local artifacts. There also could be retail space. Besides the building, there would be a ramp system onto the Cardinal Greenway.

“There are some possibilities and some problems with the configuration of the Greenway at this point that could be solved with some architecture, some design,” he said, later adding the access is a problem with the Greenway at that point.

“Other than that, I think the development of this depot could spur on other developments like residential development or park development or other greenway systems at the local level,” he said.

Selby said there are no immediate plans for the building, adding that the Greenway’s resources are being directed toward operations, maintenance and the Sweeter project.
Throughout the entire process I continued to visit and document the site and meet with people on or near the site. These were weekly.

Invited by Jenny Mitchell to attend the Presentation at the Grant Proposal Meeting for Neighborhood Revitalization

It was at this meeting where ideas about combining efforts between organizations such as the Parks and Recreation, Brownfield Redevelopment, Neighborhood Groups was first brought to my attention.

February 9, 2005
Muncie, Indiana / Public Library / Lower level
10am

Main issues of the Meeting
- Homes
  - Not up to code
  - Appearance / Upkeep
  - Abandonment of property
  - Demolition of property
  - Vandalism
- Streetscapes
  - No curbs
  - Parking on street
  - Abandonment of old cars
  - Vandalism
- How to deal with these issues
  - Police
  - Neighborhood board
  - Mayor
A collaboration between the Greenway, parks and recreation, streets, and transportation, and the local community is possible and could make a big effect on Marion.

Street Improvements
- replacement of curbs and pavement
- creation of bike lanes along Washington and Adams street to facilitate movement to the Greenway from the downtown Indiana Wesleyan University
- street lamp and street sign replacement for beautification

District Improvements
- creation of access ramps at strategic locations along high-mile district
- brownfield revitalization
- increasing density of housing along Greenway
- connection between depot site and revitalized industrial zone
This sketch illustrates the street improvements that could be implemented to improve the appearance and use of Washington and Adams Streets. Curb, shoulder and sidewalk reconstruction would be followed by a bike lane addition which would facilitate movement from destinations on Indiana University University to the Congregation depot. Additional lamp and vegetation would fill out the street elevation to create an enjoyable and safe place to navigate the streets.

This sketch illustrates the view from the Congregation looking north and east toward the depot site with the schematic site improvements including lane developments and patterns.
Local citizen

"I don't understand these drawings. Where is Washington Street and my home? How would I get to this place from my home? Wouldn't this configuration at the Greenway level in your building create a traffic jam?"

Local citizen

"How do we get people to care about what their property looks like?"

City council member

"This is what the people of Marion need, a vision. Like the bible says, without a vision we are nothing."

Lieutenant Gary

"You need to take these ideas to the top. Talk to the mayor."

Invited by Jenny Mitchell to attend the Presentation at the Presidents of the Neighborhood Associations Meeting

February 8, 2005
Marion, Indiana / City Hall Building / 2nd Level 6pm

Main Issues of the Meeting
- Property Values
  - Decrease in value
  - People moving out
  - Property being purchased from businesses out of state
- Neighborhood Meetings
  - City wide vs. neighborhoods
  - City festival
- Neighborhood Grant
  - Why one neighborhood and not another
  - Who gets the benefit
The process of designing and responding to community feedback allowed the designs to evolve into a group fit for the site and the community.

- The plan of the facility underwent various changes over the course of the design. A variety of contextual simulations, programs, and orientations guided the development. While the orientation remained the same through the majority of the process, the layout and arrangement of the interior changed.

- The site design for this facility also changed drastically as the building evolved. Early ideas of clearing the earth and creating a bridge over the site were discarded. A new, more gradual slope that helped tie the site together with the environment was created.

- The ramp was reconfigured several times to suit the needs of the design. From a sculptural piece connected to a ramp integrated into the building, to finally a ramp that followed the top of the land and created a grand, terraced exposure. It also served as a visual threshold to the site when approached from the south.

Development of Site and Building Plan / Access to Greenway
Development of Elevation / Street Facade

The process of designing and responding to community feedback allowed the design to evolve into a great fit for the site and the community.

- The elevation of the building evolved from a simple massing into a composition that is a reaction to contextual and site characteristics. To fit in with the scale of the surrounding neighborhoods, the upper level faces down to the north and the second level was lowered to reduce the impact of the three-story building on the site.

- The design of the street facade started with the characteristics of the existing buildings. Porches became included in the design to help relate to the context and also to create a more personal connection with the neighborhood.
The process of developing a fit for the facility and site design was a result of understanding the culture of the area from discussions with community members. Through this ongoing dialogue, the design was molded into a final product that is a reaction to the circumstances present in Marion, Indiana.

Through models, sketches, collages, diagrams, and conversations, the design evolved and took shape. By linking proposed activities such as gardening, exercise, skating, biking, and social interactions to the greenway through the facility, a bond can be formed that gives the building and site design relevance as a place in Marion, Indiana.
The northern approach to Adams serves as a new entry to the upper level of the depot facility. It links together the three elements - the public space, the building and the station. The form is slim, with a north-south orientation and the height of the building varies to create a composition of forms and materials. The form pulls down to the south in a more appropriate response to the scale of the nearby housing. The form re-enters the building to be into the Community - a new access and activity to take place.

The northern entry connects the community level with the Greenway using a gently sloping entrance with a quadrant exposure that can be used for a number of purposes during all times of the year; even in the winter as a sledding hill. To the east of the entry are the formal community gardens. These can be divided up into plots for various uses to provide space for a variety of different gardening proficiency levels. In the case of the gardens terraced in the access ramp. This gently sloping ramp provides safe access to the Greenway from below as well as views over the plaintiffs and terraced gardens that flank it. From this view the majority of the depot is hidden by the bund and only the slender entrance level along a series of walkways can be seen.

The function of the northern portion of the depot building includes the Greenway, Community, Store, and Community Knife. The lower green roofed spaces are used for meeting and interior open space events. The second level entrance to the Greenway and the upper volume provides a view of the space, provides natural light. These three levels are connected with double and triple height spaces that provide interesting views and communication between each level.
Visions Level
The second level features a cultural gallery containing exhibitions of Maroon art, culture, and history as well as offices for Maroon officials. All of these spaces overlook the Greenspace and provide views of the surrounding area. Views to the north look over the city of Maroon, all of the way to the Atlantic Ocean. Views to the east and west overlook the Greenspace and beyond. The Greenspace is a place to relax, meet, and socialize, and it is surrounded by Maroon architecture. The vision level provides a place to reflect and enjoy the Maroon landscape and cultural heritage.

Greenspace Level
The second level provides spaces for Greenspace leisure, including spots for picnics and relaxing rooms with tables and chairs. The Greenspace is located to the north of the Greenspace, while the upper Greenspace is located just across the Greenspace in the south. Access to the lower and upper levels is via a staircase located to the north of the building near the entrance. The walls and roof elements of the Greenspace level reflect the Greenspace and are designed to integrate the Greenspace into the Greenspace environment. The ramp connects the Greenspace to the greenspace and provides access to the lower Greenspace level. The ramp can be accessed from the Greenspace to the Greenspace and from the Greenspace to the Greenspace. The greenspace and surrounding gardens are also visible from the ramp.
The structure of the Coventry bridge spans the building and views diagonally across the space, following the Coventry. The rhythm of the wooden slats from the bridge is continued with alternating glass panels, to allow light to filter into the community spaces below. The rhythm and rhythm along with the light and shadows that are cast into the space make a reminder of the rectangular houses, and sit one way on a Coventry.
The section of the design illustrates the interplay of the three volumes of space that define the double-height space. The green zone also denotes the location of light filters into the community space below.
The rooftops of the buildings are designed to provide a visual connection to the surrounding landscape and to create a sense of place within the Greenway.

The Greenway approach to the depot exposes the slanted roofs which are reminiscent of the local architectural style of the surrounding neighborhood. As you enter the building, you will notice the use of natural materials such as wood siding and brick. This design choice is intended to blend the depot seamlessly into the fabric of the community and to reinforce the connection to the Greenway.
Conclusions

This thesis has been as tremendous a learning and growth experience as I had hoped it would be for me this year. It allowed me to delve into subjects of my own choosing, and in-turn expose interests that I never knew I had. Not only this, but it has permitted me to express myself in a way that was conceived of and carried out on my own. Therefore the product is a very personal reaction to the guidelines set out for myself. Although much of the product was personal, the thoughts and ideas were guided by a group of individuals who were as excited about the experience of learning and growth as I was.

The thesis was not only a great scholastic learning experience, but it was a way to set up a way of thinking about architectural design to take to the profession. At the beginning of the year I was interested in using the thesis to guide my search for a voice in the profession. The thesis is the culmination of thought, the pinnacle of abilities, and the last project where one can set their own boundaries. From this point on it will be my duty to attempt to infuse the design work that I produce with the thought present in this thesis.

Although I was not able to explore every aspect of the built environment, I was able to concentrate on a select subject that lies very close to my core interests within the profession. The site's and the local culture's impact on an architectural design became the subject for my personal exploration. My interests are in people's relationship with architecture and also the site's relationship with architecture and I feel that the best architecture responds well to these factors. These are two very broad topics, but I do feel as if I was able to expose ideas of how setting up a process of inquiry into the site and culture can lead to products that grow from and are linked to them.

I would like to describe in more depth some of the information that I have learned about the process and product of community and site based connection.

Slowing Down the Process

Architectural design both within school and within the profession is beginning to reflect the fast-paced culture which surrounds it. Tools, techniques, and strategies are being utilized to produce products that in their haste lose connection with the place and the people for which they were built. Part of this thesis was a challenge to begin to combat this pace and begin to be more thoughtful and genuine in the understanding of the particularities of the situation. An area that is in many cases neglected is the early site research and cultural survey of a prospective site. It is my understanding that more time should be paid to this subject not only during the project's inception, where it is very important, but also throughout the remainder of the design. What this amounts to within the design of a project is taking time to understand the situation at the beginning of a design, and allowing time to absorb, listen, feel, and reflect on that knowledge throughout the remainder of the design. This way that preliminary information will not get buried and will remain fresh and powerful throughout the design.

Establishing a Process

Architectural design is a process, the creation of a building is a process, and the understanding and implementation of site into the final built project is a process. Much of the beginning of this thesis dealt with the establishment of a process to act as the generator for reactions and appropriate response to site. Through research many other architects were discovered who have specific personal ways of reacting to any given site. I have discovered after experimenting with a few techniques that I side with that of phenomenological thought, or
that stemming from personal inquiry that leads to a personal appreciation of the peculiarities of a specific situation. By becoming personally linked to the site through experiencing it with the mind and body, a mature reaction to the site can be formulated.

Coming to understand a community is also a process. For me, getting to know local people and listening to what they have to say about the area is the most powerful way to come to understand a place. Within this thesis, the people whom I would meet and the discussions with them continually exposed the possibilities for community development available through design. One personal interaction would lead to another and another until I had the information that I needed to move forward with design ideas. My thesis project was able to develop through my beginning interaction with local Muncie greenway officials, and continued through their contacts to expose my ideas to the specific people on whom this design would have its greatest effect.
The process of creating this network of connections provided the possibility for the thesis design to evolve into a great fit for the site and the community.

Tools for Effective Communication

The ways that I chose to react to site through collage, sketching, and writing were very personal expressions. Because of this, the development of these communication techniques had to evolve to become effective with the wide variety of people to whom this design was exposed. Architects do not always think like politicians or concerned community members. Therefore I had to experiment with new ways to communicate these early ideas such that a wider variety of people could interact with them.

It became evident at the beginning of my thesis that it would be nearly impossible to engage the entire community with this design process. I started with the families surrounding my site, and instead of going door to door with models and drawings I decided on sending out a letter to break the ice. Although I received very little feedback from the letter, I believe it created an awareness of what was going on and planted a seed of understanding.

I was able to expose my ideas to an even larger group of people through my presentation at the Annual Greenway Council meeting in Marion. At this venue I presented to Greenway enthusiasts as well as involved community members, and much to my delight, my presentation was the focus of an article published in the local paper which circulates citywide. For this initial community meeting and subsequent others, I developed a concise yet powerful set of presentation aids. I experimented with a variety of different communication techniques and decided in the end that it was the variety that was important. By presenting models, sketches, CAD line drawings, and collages I was usually able to find some type of graphic to help me communicate. This variety also allowed the presentations to remain conceptual yet tangible which was comfortable to most. Pamphlets were also a great way to communicate the basic ideas to individuals who I met in passing or to people who couldn't understand the presentation. Through letters, pamphlets, sketches, writing, models, drawings and collages I was able to effectively communicate my ideas to the interested people in Marion.

Group vs. Individual

Architectural design, at its best, is a collaborative effort because great design cannot happen on its own. This became particularly evident through my exploration of my thesis this year. The beginning of my thesis began in a very personal way. This personal inquiry established presumptions that were later tested in group settings. Because I was
not from the area for which I was designing there were many things that I didn't know. Some of this could be better understood through research. The remainder was understood through group interactions with people more closely related to the site or situation. This group dialogue became very helpful once designs were being produced. I was able to create a cyclical process similar to that of a studio where ideas are explored, suggestions are made, changes to the design are prepared, and those ideas are then explored once again. The development and fit of the design was very closely related to this process.

This process is not only beneficial to the design, it also is beneficial for the people who become involved. The empowerment that is created in collaborative design allows those involved to have a sense of ownership in the design. Everyone involved is able to feel that it is not just a product of a singular designer but a resultant of a group effort that included them. This personal understanding of the design creates mutual response and respect for the design and the ideas it represents.

I have found it to be very rewarding to work with a local group of people when designing and I believe that it is also rewarding for them. I found certain strengths in collective critique and discussion of my design ideas which allowed the design to be a better fit for the community and the site. Although it was difficult to discuss and try to respond to all of the suggestions and comments that would come up in the meetings, I do feel that I was able to respect many of their comments.

The breadth of knowledge that has been exposed this year is only the tip of the iceberg. I am proud of the work that I have been able to accomplish this year and hope that it will be of use to students interested in working with the site and community together to create a more appropriate and genuine architectural response.

Behind this architectural thesis was a series of conversations that guided and shaped the design, a respect for the natural and man-made forces that affected the site, a process that exposed characteristics within the site and local culture from which to draw for inspiration, a community of concerned individuals who were invited to take part in the design, a body of research concerning all the aspects of the design, a network of involved individuals with true concern for the process and final product, a designer who listened, reacted, and had a genuine concern for circumstances within the site and community, an understanding that the design is for all of us, excitement that inspired individuals to dream, a respect for what has been, and a vision for a better tomorrow.

Thank you.
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