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Urban Fabric as a Catalyst for Architectural Awareness: Center for Architectural Research

Bernard C. Wilhelm
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Urban Fabric as a Catalyst for Architectural Awareness:

Center for Architectural Research

by

Bernard C. Wilhelm III

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Architecture
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To Roxy, for all your unconditional support, for the sacrifices you made and never losing faith in my abilities to accomplish my goals, for this I owe much thanks and love.
# Table of Contents

List of Figures ................................................................. iii 
Abstract ........................................................................... vi 
Chapter One: Introduction .................................................... 1 
Chapter Two: Case Studies 
  Survey the Public ............................................................. 8 
  Netherlands Architecture Institute ...................................... 17 
  Architecture Exhibits ....................................................... 24 
Chapter Three: The Site 
  Site Selection .................................................................. 27 
  City Analysis-Macro Scale ............................................... 30 
  Site Analysis-Micro Scale ................................................ 38 
  Urban Living Rooms ....................................................... 43 
Chapter Four: Program Study 
  Project Program ................................................................ 50 
Chapter Five: Schematic Studies 
  Schematic Design ............................................................ 57 
Chapter Six: Design Development 
  Design Solutions ............................................................ 66 
  Catalyst for Awareness .................................................... 73 
  Conclusion .................................................................... 83 
References ........................................................................ 84 
Bibliography ...................................................................... 86
## List of Figures

<table>
<thead>
<tr>
<th>Figure 1.1</th>
<th>Current state of architecture</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1.2</td>
<td>Good awareness diagram</td>
<td>2</td>
</tr>
<tr>
<td>Figure 1.3</td>
<td>Connect user with streetscape</td>
<td>5</td>
</tr>
<tr>
<td>Figure 1.4</td>
<td>Path of inquiry</td>
<td>6</td>
</tr>
<tr>
<td>Figure 1.5</td>
<td>Interaction</td>
<td>7</td>
</tr>
<tr>
<td>Figure 2.1</td>
<td>Demographic results</td>
<td>9</td>
</tr>
<tr>
<td>Figure 2.2</td>
<td>Overall results</td>
<td>10</td>
</tr>
<tr>
<td>Figure 2.3</td>
<td>Favorite buildings</td>
<td>11</td>
</tr>
<tr>
<td>Figure 2.4</td>
<td>Favorite public spaces</td>
<td>11</td>
</tr>
<tr>
<td>Figure 2.5</td>
<td>Preference of house dwelling</td>
<td>12</td>
</tr>
<tr>
<td>Figure 2.6</td>
<td>Result variation #2</td>
<td>14</td>
</tr>
<tr>
<td>Figure 2.7</td>
<td>Results variation #3</td>
<td>15</td>
</tr>
<tr>
<td>Figure 2.8</td>
<td>Architects known</td>
<td>16</td>
</tr>
<tr>
<td>Figure 2.9</td>
<td>NAi-Rotterdam</td>
<td>17</td>
</tr>
<tr>
<td>Figure 2.10</td>
<td>NAi-Site plan</td>
<td>18</td>
</tr>
<tr>
<td>Figure 2.11</td>
<td>Site Diagram</td>
<td>19</td>
</tr>
<tr>
<td>Figure 2.12</td>
<td>NAi-Axonometric drawing</td>
<td>21</td>
</tr>
<tr>
<td>Figure 2.13</td>
<td>Massing study</td>
<td>21</td>
</tr>
<tr>
<td>Figure 2.14</td>
<td>NAi-Section drawing</td>
<td>22</td>
</tr>
<tr>
<td>Figure 2.15</td>
<td>NAi-Section diagram</td>
<td>22</td>
</tr>
</tbody>
</table>
Figure 2.16  Daniel Libeskin exhibit  
Figure 2.17  Garden party installation  
Figure 2.18  Exhibit at Architecture League of New York  
Figure 2.19  Exhibit at Van Alen Institute  
Figure 3.1  St. Petersburg Skyline  
Figure 3.2  City aerial  
Figure 3.3  Site aerial  
Figure 3.4  Zoning-Land use map  
Figure 3.5  Figure-Ground density map  
Figure 3.6  Approach at macro scale  
Figure 3.7  Park space and parking map  
Figure 3.8  Destination points  
Figure 3.9  Day activity  
Figure 3.10  Night activity  
Figure 3.11  Current city flow  
Figure 3.12  Proposed city flow  
Figure 3.13  Cross section through Central Ave.  
Figure 3.14  Cross-section through 1st Ave. S  
Figure 3.15  Approaches to site  
Figure 3.16  Diagram of views in  
Figure 3.17  Views towards the site  
Figure 3.18  Diagram of views out  
Figure 3.19  Views from the site
Figure 3.20  Site along 1st Ave N  43
Figure 3.21  Diagrammatic section  43
Figure 3.22  Site section analysis  44
Figure 3.23  Jannus Landing Corner  45
Figure 3.24  Typical corner  46
Figure 3.25  Streetscape plan  46
Figure 3.26  St. Petersburg existing corner  47
Figure 3.27  From passive to active  48
Figure 3.28  Tram Stops, Hanover, Germany  49
Figure 3.29  Four corner plan  50
Figure 3.30  Urban Living Rooms in context  50
Figure 3.31  Urban living room examples  51
Figure 4.1  Program list  56
Figure 4.2  Program adjacency diagram  57
Figure 4.3  Program schemes  58
Figure 5.1  Connecting spaces  60
Figure 5.2  Connecting views  60
Figure 5.3  Connecting the ground  60
Figure 5.4  Schematic sketches  61
Figure 5.5  Column design study  62
Figure 5.6  Canopy design study  63
Figure 5.7  Section sketches between the two sites  64
Figure 5.8  Cross section sketch  65
Urban Fabric as a Catalyst for Architectural Awareness:
Center for Architectural Research

Bernard C. Wilhelm III

ABSTRACT

Architects throughout have been forced to practice design surrounded by a society that generally lacks of architectural awareness and interest. A growing trend to transition from a relatively isolated profession into a field that promotes stronger public involvement is critical for architecture to evolve. Within the past 10 years, the growth of architectural centers have begun to dissolve the barrier between the profession and the general public in that their primary function regardless of what form they represent, is to introduce and educate issues of architecture that are an inescapable part of our built environment.

An investigation of architectural research institute precedents, would allow for opportunities to understand how they have engaged professional knowledge with a growing educated public opinion. Promoting the idea of similar functions locally to a skeptic public has to be based on the importance of change, where new technologies are consistently transforming the way we approach design problems. Introducing a variety of techniques to display that go beyond any two dimensional format into a three or four dimensional, more tactile, interactive medium, allowing the observer to become engaged in what information, which
they are learning is important for individuals to establish meaning. The facility itself would be a catalyst for learning in which design issues are presented and solutions are viewed by the viewer in a multi-sensory way.

The ultimate goal would be able to establish a system of memory responses to allow the general public a better connection with architecture. Creating a center of information housed within a singular building would be a beneficial beginning but it is important to express that information beyond any static building into a contextual environment in which it can be further related with. Adding richness to public spaces that promote cases of good architectural design can be an example that would allow the absorption of concepts through participation. Eventually, the results would lead to more knowledgeable public input about how their built environment is viewed and encourage better design.
Chapter One

Introduction

Architects main focus is to introduce, and educate issues of architecture that are an essential part of our built environment. (Ford) Advocating architectural awareness to public will prove valuable if people demonstrate an interest and have the capability to express educated ideas and thoughts will provide the architect with a better client. Architecture is about designing for people, and successful architecture allows people to feel safe and enjoy the environment that they live in. The following studies will investigate how the architecture center has improve the profession of architecture and in turn the built environment around them and create a proposal for such a facility in St. Petersburg, Florida. There are architectural centers located throughout the world with only a few spread about the United States and currently none located within Florida.

The current established architectural centers throughout the world focus on variety of methods to showcase the ways architects can improve the built environment with the encouragement of the public input. Throughout Europe for example, there are a number of architectural

Figure 1.1. Current state of architecture
centers that have been funded by the government agencies as part of their budget to support the cultural movement, and to involve the community in the development of their own cities. The challenge locally is to introduce architecture as a fundamental part of our lives to a population that seems to completely ignore the built environment that they engage with on a daily basis. It is this challenge that will begin a thesis to question the how, what, and why of what should be done to discover and establish possibilities that can be prove as a valuable education tool to have a better designed and responsible environment, and a more informed public that can support positive changes.

To begin, it would be good to understand the role of what an architectural center is. As it was mentioned before, Europe is the home of many famous established architectural centers in the world. The purpose of these centers is generally simple; to promote architecture among the public enforcing education, responsibility and engagement to the environment and their community. It is amazing how each one could differ from the others in scale, style, technology used, applications, etc. Some are also web based, meaning that they are just to be access by computers without a physical presence. (Ford,23) These centers contain
their own identity and services such as, different types of resources from libraries, exhibition space, classroom, conference rooms, auditoriums, cafes and bookshops. Also, they provide a variety of use to their spaces from debates to lectures and workshops. Peter Luxton, the national Coordinator of the Architecture Centre Network out of the United Kingdom mentions that all architecture centers share a unmistakable belief in a common set of values that enable people to understand and influence the development of their “place”.

Throughout Europe, the government plays a very important role in funding the creation of these centers. In the Netherlands for example, NAi- The Netherlands Architecture Institute located in Rotterdam it is know as the golden child of the architecture centers not just holding a magnificent museum, but also for being an institute for research at the same time. Its financial source from the national government allow itself to have one of the largest architectural collections of information in the world, just be hide that of privately funded Canadian Arch Center in Montreal. The government’s involvement in architecture is an example on their concern for the safety and well being of their population, but mainly it shows their responsibility to preserve the culture and the environment for future generations. Its aim is to strengthen the relation between cultural history and modern architecture by taking the cultural heritage as a source of inspiration for spatial planning, while planning for conservation through development.(Ford,86).

The value of Architecture Centers is not just as stand alone element of architecture, the idea is to tackle topics of urban issues, planning, cultural activities, art, heritage, sustainability and social and economic activities, of which architects
themselves have to deal with when engaging a client with their design and vision (or at least try to when they are dealing with clients who just don’t understand what we understand). Their value is based on education, not just to the public, but also to professionals in the field which allow them to enrich their know-how to be able to handle design issues from all angles. With these facilities, the public is able to absorb the knowledge on how, why, and when materials and scale are used with common sense to create a functional design with meaning and purpose. On the other hand, it is a place where the architect can get updates in technology, materials, and applications to keep up with the new clients understanding their needs and providing responsible design products. As well as for the public, and the already professionals in the field, promoting architecture to young children as part of the school curriculum is another method to get youngsters to think three dimensional about their world. It’s the school aged children that need to be thought this way of thinking whether or not there want to pursued a career in any design field. Expanding the knowledge of architecture and the responsibility for the environment among children will help them mature a better sense of their built surroundings.

Unfortunately, architectural centers within the United States do not share the same success in number as compare to the ones in Europe, but they do share similar purpose and goals. The centers that we find in the US do not necessary hold a variety of applications or uses within a same location, some of them are just a dedicated facility for a particular service, or maybe just an exhibit center. In contrary to Europe, it is the lack of funding and promotion that creates
Figure 1.5. Interaction. (Model by Bernie Wilhelm)
Chapter Two: Case Studies

Survey the Public

Promoting architectural awareness among the public involves having people interested to learn and understand what it is all about. Minus a few exceptions, our built environment doesn’t make it a priority to advocate what good architecture is. Is that the fault of the architect, his association, the unwillingness of the public not caring or simply an ignorant public? Does the public really want better architecture and can they identify it if they experienced it?

To investigate this, surveying the public on those question and many others will begin to determine what they want or know already about architecture and the architect. For the purpose of this thesis, an online survey was conducted to see what a small public demographic knows about architecture and understand how many would like to have stronger movement towards improving their built environment. The survey was conducted on May 30-June 29, in that month’s time a total of 112 responses were recorded. After a review of all the answers it was determined that 94 of the 112 respondents showed to be valid to consider a proper analysis.

An initial thought before this survey was conducted is that the public would be unaware of what the true purpose of what an architects role is. According to Merriam-Webster dictionary, they define an architect as ‘a person who designs buildings and advises in their construction’, and its known that a building is an
enclosed sheltered space. It was decided that an architect’s purpose is to design spaces and design them well. It was assumed that this simple purpose would not be understood by many, leading more towards what a dictionary defines what an architect is.

Surveying questions related to a certain design style would result in a general idea of what people like in regards to architecture (Figure 3.8). Pictures of two different styles of house, a traditional and modern/contemporary style, where shown and each had to pick which one they like. Considered to be simply a subjective personal preference on which one to choose, it would be translated into chance to determine if people would accept the modern home verse the much more common traditional house. That would allow an opportunity to push architecture design into a more private sector- the house.

The following will illustrate the results of the survey conducted. The sequences follow by looking at the result collectively, and then formulating results based on how certain question were answered. This method of interpreting the results of the survey showed an opposite response compared to the overall. This triggered new thoughts and provided a clearer reason that architecture needs to be promoted stronger and a center for architectural research is important.

Figure 2.1. Demographic Results
Figure 2.2. Overall Results
Illustrated above are responses to two questions, name your favorite building and name a public space you like to spend time at. It was surprising of the results given, some individuals expressed liking to some very architectural famous structures (Figure 2.3). A few of the responses forced some research to understand the mentioned building selected since it was relatively unknown. It was unfortunate that approximately 1/3 of results had left these questions blank,
reasoning to believe they simply do not have a favorite building based on their limited interested of the environment they occupy.

Favorite places express a different attitude towards the question. (Figure 3.5). Again some of the responses were good, for example some of the best known public spaces like Grant Park in Chicago or Fairmount Park in Philadelphia were chosen. Even the corner café space is a great example, but some not so directly on cue like the movies or a local tennis court, not exactly public space in term of architectural awareness.

Figure 2.5. Preference of House Dwelling
When asked to choose between two different kinds of houses that they would prefer to live in, the results concluded an thought that was assumed (Figure 3.14). It was almost a split decision between the two choices with the slight majority going with the traditional house. Showing these two different houses were not meant that one architectural style is better than the other, both houses have exceptional qualities that make them both ideal places live in. The purpose is to see if people want to have more of a choice in dwelling based on a architectural thinking. With the traditional house the winner shows that people associate this kind of house has place to call “home”. Maybe those would see the modern home as an uninviting place, less homey feel. The traditional home style is so common its constructed all over the United States when in reality it was designed for possibly for a certain climate and may not function well in an environment that it wasn't initially designed for. This is a reason to advocate better design to the masses. The individuals who chose the modern house demonstrate the wanting of something different but unfortunately is not readily available at a reasonable cost. In conclusion for this question, the modern house displays ideas that perform better than the traditional when its based on its location and specific functions and the respondents who chose this house may understand that. The opposite chosen may need to become aware of this and may have a different perspective. Then again the results may have all to do with just aesthetics that is based on personal preferences of that person, but it is nice to see at least half like the contemporary house and would consider it a home.
The overall results revealed a strong support for architecture with most expressing interest to learn more by allowing the introduction of an Architecture Center. When the question regarding, ‘Do you know an architect’ was answered no, the remaining questions in general were answered opposite compared to the overall results. This indicated that these individuals show less interest in architecture, less support, did not fully understand the role of architects, and felt less strongly about it being a culture issue of society. Allowing to promote education of architecture related topic to school aged children was also not strongly supported. With these specific results, it indicated that their exposure to architecture has been limited to none and it is this group people that makes all the purpose of establishing a Center for Architecture readily available to the public. It would be important to educate them so they can understand the built environment they live in and engage the public as a client for better design.

Figure 2.6. Result variation #2
Figure 2.7. Results variation #3.
These results are based on having no support for architecture related topics for school aged children, this set has similar results to the previous responses referring to not knowing an architect.
Figure 2.8. Architects known.
(a) the overall responses given to the listed architects
(b) responses based on not personally known an architect
(c) responses given by people who do not support architectural education for children.
The Netherlands Architecture Institute prides itself for being a leader in promoting architecture among the general public (Figure 3.4). Situated in the heart of Rotterdam on the northern edge of Museumpark, the NAi has named this location its home since 1993. Architect, Jo Coenen designed a facility that functions more than just a museum but as a cultural institution that is open to the public to educate architecture, urban design and spatial planning. The NAi specifically targets four areas. It aims to be a forum for discussion for the design community; a study center for teachers and students; a source of knowledge and ideas for those involved in the social process of which architecture and planning is a part; and a point of access to architecture and planning for the public at large (Coonan, 68-9)

The NAi houses important archives and collection, provides facilities for research and offers a platform for discussion while allowing access to the public. NAi possesses one of the largest architectural collections in the world: 15 kilometers of shelving containing such things as drawings, sketches, models, photographs, books and periodicals (Ford, 86). They are responsible for maintaining their extensive collections which dates back as

Figure 2.9. NAi– Rotterdam. (Brouwers, Ruud, and Jannes Linders. The Netherlands Architecture Institute. Rotterdam: Nai Publishers, 1998)
far as 1800 and permit access to when requested upon. The NAi Library, which is open to the public, contains more than 40,000 on architecture and related professional activities and an extensive range of architectural journals, both national and international. (Ford, 86)

One of the probable reasons for NAi’s success is the Dutch government’s role in how architecture should have a strong relation with cultural history. The institute is a major collaborator with other organizations, academic fields and artistic specialties that forms the vital importance of the NAi’s existence on the need to be aware of the built environment. Funding to support the daily operations and various research conducted is supplemented by the Dutch government along with its high attendance of visitors yearly. The NAi enjoys freedom of opinion, despite its state subsidy. ‘We must be able to put on critical exhibitions and publish critical books,’ states Ruud Brouwers (former director). The NAi is also independent of the architects’ professional organizations (Coonan, 69).

Along with the archives and specialty collections that are housed within the institute, the exhibits which are ever changing is the main force forward for the NAi. The architect, Jo Coenen designed a great exhibition hall that measures some 1000 square meters in area at 9 meters high with a 30 meter long glass wall that overlooks water (Brouwers, 11). Over the years, areas never intended for public access have been utilized to showcases their ever growing collections and demand for more display space. Even the exterior lawns that enclose two sides of the original exhibit space have been used to display various exhibitions.

It is one thing to understand how the NAi is successful by it countless ef-
forts in it various programs and exhibits offered but how much of that success is contributed by the building itself. As mentioned, the center has managed to adapt to increase it public space within without building additional space and after 15 years in the same building there hasn’t been a request to expand the original structure (Brouwers,11). Granted the center is a display of good architectural design both in the macro and micro scale but how?

After a study of the plans and sections related to the building, there are number of quite simple gestures the architect does to create a bold statement. One of the first qualities thought of was the architects reaction to the somewhat triangular site (Figure 2.10). The site plan is about the importance of the engagement of the building to the site (micro) and surrounding area (macro). The heav-

Figure 2.10. NAi– site plan.
ily traveled roadway to the north is expressed clearly as a solid boundary for the structure that acts as the hard edge of the site. To the south, where the Museum-park is located the openness created by the architect to the open space of the existing park invites a dialog between the two (Figure 2.11). The structure acts like a node and also allows for the sense of enclosure for the park. The southern side of the site along the park can be interpreted as the softer urban edge due to the lesser traveled street in between edged by the public green space.

The building in its simplest form is a combination of four shapes each representing a specific function (Figure 2.12). A long curved bunker on concrete legs, nicknamed ‘the banana’, provides 5000 m² of floor space for the archives and separates the park from the major road (Coonan,68). A tall block topped by a dramatic pergola that houses the library and reading room. This is a light-as-air glass, steel and corrugated-metal space- a clear box that seems to be floating on water (Lubell, 81) the massive block to he north side is main exhibition space
Figure 2.12. NAi– Axonometric drawing.

Figure 2.13. Massing study.
where as the block opposite houses the lecture hall and café. Each component is connected by the in-between space that consist of a combination of circulation, sitting/ waiting areas or patio spaces which allows for interaction as one passes through (Figure 2.13).

A section analysis continues to show the breakup of the major component elements but a closer look reveals another kind of programmatic separation (Figure 2.14). The plan section relation illustrates the degrees of public verses private spaces (Figure 2.15). For the most part the building is a public space but what little is needed to remain private is situated on the upper floors of the building. Semi-Public area occupies the mid section and the most public areas remain on the lower levels.
Through a section view, the in-between spaces show the separation of the levels of public-private area. Both in plan-axo view and section elevation there is a clear relation on the spaces created as a transition to one component to the next.

This study of how this building was designed and understanding of how each component within functions can be used to formulate the same fundamental thinking into a site and program for the purpose of this thesis or any project. It is not a matter of simply copying which is done way too often with failed results because each design project doesn’t have same the amount of thinking and effort needed for each to work.
Architecture Installations

The art of architecture is experienced through the senses of sight and touch but not in the way an art lover would appreciate a great work of art. People generally experience building without really paying much attention to them (Bonnemaison, 3). This is one of reason why architects turn to architecture installations to bring attention to issue in the built environment that otherwise may not be easily done through conventional architecture.

Whether displayed with a museum or installed outside, installations can engage in critical, often controversial, social and political aspects of architecture—the implicit effects of buildings. They can push the experimental edge of design in ways most architectural commission cannot, they differ in three ways: they are temporary, their function turns away from utility in favor of criticism and reflection on the built environment and the author/architect chooses the content (Bonnemaison, 3).

When creating a space to exhibit these installation it should be aware that the architecture exhibit wants something from the public not the other way around. It is the their aim and challenge to communicate a difficult subject, and the public's cooperation is needed (Feireiss, 9). The following selected installation exhibits demonstrate a variety of way to express issue of architecture. Some are displayed outside as some are installed inside a gallery setting.
The purpose in examining these different approaches to display architecture is to create a clearer understanding of how it can be done in a successful way. The architectural installations represent an opportunity to engage in design research and to contribute to public discussions about the built environment (Bonnemaison, 11).

Ten Shades of Green exhibition presented ten buildings from around the world exemplifying architectural innovations catalyzed by divergent approaches to sustainability. Each building was exhibited on a separate mobile table (Figure 2.18). The tables were composed of six, eight or ten 3’ x 2’ plywood modules. As a traveling exhibition, the modular components can be dismantled with a minimum of labor and the tables can be reconfigured according to the particular spatial restrictions of the respective exhibition venues. The exhibition’s adaptability is its sustainability (Lewis, 61)

Architecture + Water celebrates the design possibilities of these apparently contradictory elements (Figure 2.19). Although typically conceived as opposites - architecture is understood as fixed and stable, while water is seen as fluid and dynamic - the tension between architecture and water can provide the constraints and limitations through which imaginative architecture occurs (Lewis, 62).

The projects selected for this exhibit negotiate this contradiction as the catalyst for architectural invention. Each project occupied an 18’ wall wedged out for rear video projection (Lewis, 62). A continuous 1/2” hollow acrylic tube filled half way with water, formed a literal line around the gallery and used to

Chapter Three: The Site

Site Selection

The city for this proposed project will be located in Saint Petersburg, Florida. Known locally as St. Pete, it is a thriving city of approx. 250,000 people (Figure 3.1). The history of St. Petersburg dates back to 1875 when John C. Williams laid eyes on the land he purchased that is today downtown. It wasn't until Peter Demens arrived with his railroad in 1886 that the land purchased by Williams as a new settlement would be placed on the map. Peter Demens had won the bet between Williams to name the new town, St. Petersburg after his home in St Petersburg, Russia (Marth,3).

The city is a lively place both day and night. St. Pete is a popular destination among tourist mainly for its beaches that lie on west end of the city. The
Figure 3.2. City aerial. Proposed sites indicated in red. (Map provided by Google Earth).

Figure 3.3. Site Aerial. (Map produced by Google Earth)
downtown section itself has numerous attractions that make a great place to spend a day or two, especially during the fall and winter months with its cooler weather and plenty of annual festivals. The city has been on mission ever since the late 80’s to reinvent its downtown core due to its decline over the previous years. Efforts to bring in new businesses, cleaning and beautifying the streets and promoting mix use projects have been proven successful in how the city is today. Central Ave. has been since the time of its begin the core and life of the city and continues to be evident to this day. The streets character is strong by allowing space for café tables, tree lined for shading, decorative paving to walk and generously wide sidewalks.

A specific site was chosen along a busy one way corridor half a block from the popular Central Avenue (Figure 3.3). The two vacant sites along 1st Ave North with 5th Street North between them, will make an ideal location for this project considering that it is along south side of the street. This allows for north facing façades along the street to have the potential for more transparency. Besides selecting the site for its orientation qualities, the site location in reference to it surroundings had important factor as well. The physical surrounds of the site are composed of lower to middle rise building with more than half of them are consider historic. The functions of many of these buildings are public, a post office, county government facilities, a church and old historic apartment building (Figure 3.4). Contextual the area is not expected to change much so it will be important to consider the neighborhood as the design evolves. Additionally, the activity that occurs in the immediate area around the site is very active during the
daytime due to the county offices and continues to be active along Central half a block south in the evening hours with established cafes, bars and art galleries.

**City Analysis– Macro Scale**

After deciding the site, it would be critical to conduct an extensive analysis of the city (macro scale) in relation to the chosen site and then look at the site in more closely (micro scale) to begin a strong conceptual design proposal based on city and site conditions. The following pages illustrate a series of diagram that translates the analysis of city into graphic means (Figure 3.5-10). During the study of the city, it became clear that the city has put a major focus on its waterfront. This is for good reason since the city planners have allocated most of the land along the water to be public parks and almost everyone who lives in and visits the city enjoys them (Figure 3.11). Unfortunately, if you start from the waters edge and travel into downtown the life found along the water begins to taper off to a point where there is a dead zone in the geographic center of downtown. It is clear that the activity that makes the waterfront successful needs to be filter into the city core (Figure 3.12).
Figure 3.4 Zoning-Land Use Map
Proposed site indicated by the numbered black shapes in the center.
Figure 3.5. Figure Ground Density Map

Figure 3.6. Approaches at the Marco Scale
Figure 3.7. Park Space and Parking Map

Figure 3.8. Destination Points
Figure 3.9. Day Activity

Figure 3.10. Night Activity
Figure 3.11. Current City Flow

Figure 3.12. Proposed City Flow
Figure 3.13. Cross section through Central Avenue
(Photograph by Bernie Wilhelm)
Examining the city through section reveals a very consistent trait throughout the city. The rigid grid layout of the city is characterized differently from one street to the next. It was discovered that the right of way—the width of the public street between buildings is 100 feet for every street in the central downtown core (Figure 3.13). Central Avenue is a two lane two way street with pull in parking along the street edge where as 1st Avenue South and North have 3 lanes of one way traffic with parallel parking on each side (Figure 3.14). Central Avenue is more pedestrian friendly in contrast to the more car friendly 1st Ave but both are exactly the same width.

Figure 3.14. Cross section through 1st Ave South. (Photograph by Bernie Wilhelm)
Site Analysis— Micro Scale

The approach taken to facilitate an understanding of the site and its relation contextually to the urban fabric were through section analysis. Other important information gathered about the site were the approaches to and from it (Figure 3.15). It is easily accessible by foot and car and situated along a commuter bus route and a downtown looper trolley service route. Taking into consideration the views to the site is critical for the visual prominence along the street edge for the purpose to attract people and views from the site were acknowledged as well (Figure 3.16-19). In section, the major concern was the levels of public verse private functions that might show the best relation within the site and to its neighboring site.

Figure 3.15. Approaches to the site.
Figure 3.16. Diagram of views in

Figure 3.17. View towards the site
(Photographs by Bernie Wilhelm)
Figure 3.18. Diagram of Views out

Figure 3.19 View out from the site
(Photographs by Bernie Wilhelm)
Figure 3.20. Site along 1st Ave N. (Photograph by Bernie Wilhelm)

Figure 3.21  Diagrammatic Section.
Figure 3.22. Site Sections Analysis
Urban Living Rooms

The corner of the street in any city has many distinct purposes, it is a meeting place, a place where decisions are made, a node or maybe or it's just the crossroad of another street. Conducting business on the corner makes it an ideal place due to the multiple directions of exposure and agreeing to meet a person at a corner has similar reasons. Every city has their own way of treating the street corner, St. Petersburg has made it a code within their city development regulation to make the corner an important space. The city in the early 1990’s, implemented a code for the street corners and other urban qualities named Plaza Parkway Design Guidelines. Focused on the corners, a neck-out of various lengths depending on its location within the downtown core would be installed to allow for greater space for the pedestrian (Figure 3.24). This design idea would
follow a pattern that would be repeated at every corner on each side of the street intersection (Figure 3.25). What has been completed so far allows for a better corner for the pedestrian but architecturally not as successful. The space is enhanced with benches and other urban furniture but remain passive, it lacks an important character, a sense of place (Figure 3.26).

The corners observed using the newer guidelines, sparked an idea on how to activate the corners. The corners with sitting elements had the appearance to be living room like, especially when people would utilize them to engage

Figure 3.24. Typical street corner design.

Figure 3.25. Streetscape plan
with each other. The space can be maximized by introducing architecture into them that can promote awareness of spatial conditions and materiality. These newly designed “urban living rooms” would now solidify a new purpose for the corners of the intersection by introducing new urban spaces that can be occupied with the sense of shelter and increase interaction with users and the streetscape, turning an once passive corner into an active place (Figure 3.27).

Challenges in designing these corners is what specific guideline should one follow that will bring architectural awareness within the space designated. The goal would promote awareness by combining a spatial condition that can lead to a sense of place, and the material relationship for that particular corner to the contexts of that intersection.

The City of Hanover, Germany built a series of tram stations that were to be easily mass-produced, with a standardized steel structure (Figure 3.28). They were to respond to individual locations using a variety of materials dressing the steel frames (Bell, 158). A similar condition can exist with the intersections, the
opportunity to develop urban rooms that have mass produced spatial configuration then skin them with different materials based on the theme of the corner they are placed. Thinking about the entire intersection where the four urban rooms are to allows for a dialog between each side of the street by its orientation, materials or visual connections (Figure 3.29). Another way to form a stronger awareness of architecture is through quantity of materials, where a set amount of material is given and then is constructed in various configurations at a certain intersection to demonstrate space making variations (Figure 3.31).

The success of such an plan for the urban corners architecturally sounds
solid, though the public would need to accept them to prove their value. Its impor-
tant that these rooms are designed by considering scale of the corner and user
along with what functions occupy the corner. Adding other elements such as ki-
osks can allow for greater use of the corner by promoting more activity– the sign
of successful urban architecture.

Figure 3.28. Tram Stops, Hanover, Germany. (Bell, Victoria, and Patrick Rand. Materials for Design. New York: Princeton Architectural Press, 2006)
Figure 3.29. Four corner plan.

Figure 3.30. Urban living rooms in context.
Figure 3.31. Urban living room examples. The different configurations have same quantity of material.
Chapter Four: Program Study

Project Program

It was establish from the beginning that the ideas for an architectural center would need to be combined with other elements to further establish it worth for the city. By just creating an architecture museum, to simply display artifacts of architects and the built world, would not be sufficient enough in the long term help sustain itself. Architecture is a complex subject, it doesn't focus on one certain element, neither does architecture deal with just one group of persons. It is essential to gather together all what make architecture work and mesh them together somehow to form a stronger dialog. This is where program comes into play (Figure 4.1).

As mention, architecture is a complex beast of many different issues and topics and the roles required to make the whole system work is numerous. It is one thing to be able to design a space that will be able to display to the public how architecture works and go so far as to enable users to interact with what is being shown but what happens when they have finished looking at the displays. When they leave, are they exposed any one thing they have just observed? Forcing ideas expressed within a museum, then being able to experience these conditions in the urban context will bring further connection to person.

The built environment that we occupy wasn't simply created by one single entity or one specific group, it’s the work of many dealing a wealth of issues and
complexities. With this known, it is important to house all together the groups and agencies that help create the physical world we live in. Architects deal with many that assist them to make the decisions for any given project. Engineers, City Planners, Code Enforcement, Fire Marshals, Building Department, and even lawyers and accounts are the short list of many that architecture consults with on a regular basis. Each of these groups have their own associations including the architect that govern the way they conduct business but very rarely do they engage with each other to see how they would be able to benefit one another.

One of the goals of this project would be able take these agencies, not necessarily all of them but the most closely consulted and have them within the same building. Establishing an area of the center devoted to enhancing the built environment through the departments that regulate it and enforce it can have only positive effects. It would just make more sense to be able to have the building department within the same building has city planning or the AIA. Providing space to allow the many associations of engineers, architects, and or interior designers can allow for stronger communication between each other. In the end, having all these element together will benefit the way they conduct business but more so have a profound effect on how the built world is developed.

In addition to providing those departments space to interact, designing office space for general leasing so that specific businesses could set up shop would enhance the overall purpose of the center. These spaces would be meant for business related to architecture and construction like construction companies,
construction lawyers, or accountants that are specialized for architects and contractors needs.

One of the main important programmatic element of this entire project is the promoting the awareness of architecture to the public. This is actually not one particular item but a combination of many. Awareness means that one understands and by doing that they can be able to formulate educated decisions and opinions to help greater their surroundings. One the of the major ways of allowing for this to happen is provide adequate amount of gallery space to display information and concepts. The space would need to be designed in the way that they can be configured to house the possibly of numerous unique exhibits. Exterior space would also provide an opportunity for addition exhibit options.

The exhibit spaces would be the driver that would excite people to enter and learn and once in, the learning experience can be furthered by continuing with the educational component of the program. This would be the area where partnerships with universities locally, nationally or international could create programs that educate by a hands on approach. Satellite classes for the established schools of architecture can promote classes here. There would be continuing education for the professional to maintain licenses and for individuals who seek professional enhancement. Studio space would be provided to invite guest architects or professors to hold workshops or even practice. One of the most important groups to get into architecture are the school aged children. Here there can be classes that help them see there world three dimensionally and understand how it works. The number of possibilities for the educational program is
endless but is essential to be established within the center to better assist in promoting architecture.

The local American Institute of Architects (AIA) would certainly name this place its home and would also be in charge of it functions. A foundation would need to be created to handle this exciting experience working side by side with the AIA. Another important part of the center is to organize a program that will help emerging young architects to build their experience in the work force, by allowing office /studio space for these young architects. They will have access to the AIA for professional guidance for their first years and then be able to be on their own successfully.

To finalize on the program of the center, one additional element would be a grand auditorium space and event hall. The auditorium would have the intended purpose for open city planning meetings and hearings, along with utilizing the space for large lectures and allowing it to be rented out for private function—specifically related to architecture. The facility would also have the space for retail that ideally would cater to the theme of the center and available areas for cafes and a small restaurant.
Figure 4.1. Program List
Once a general program was finalized, it was important to determine how each of the program elements would fit into the whole scheme. An adjacency diagram began to bring together what program would fit best next to (Figure 4.2). There were some preconceived thoughts as to where certain program would be placed for example, it seems vital that the exhibit space be in close proximity to the street level with open spaces that relate to closely placed cafes or other retail components. Since the program was spread over two sites it was decided that the education program along with the event spaces would occupy the west site as the rest would be on the east site. Arranging the diagram to read as section, allowed the opportunity to understand the density of the project and see at what levels should certain program be placed at (Figure 4.3).
Figure 4.3. Program Schemes. Three Schemes were given to determine which would work best between the two sites. The project from this point followed the order represent in scheme one based on the location of the auditorium to work the best.
Chapter Five: Schematic Studies

Schematic Design

For the schematic design phase, the focus required to pay closer attention to the street level conditions along the street edge of the two sites and between them as well (Figure 5.1). The most challenging issue was to create a dialog between the sites that expresses a strong relationship, in other words, the project can not result in looking like two different architects designed it. It would be necessary to connect the sites by ways of visual connections through alignment of spaces and or materials (Figure 5.3). Making a literal connection by overhangs or canopies was an approach initially looked at but considered to be not the strongest solution (Figure 5.4). Designing in section made it possible to clearly create spaces within the scheme that bought about some of the elementary ideas to promote architectural awareness. Spaces focused on views, openness, and the in between spaces to establish a dialog with the user and architecture.

Investing different materials and unique ways to describe common architectural details like the column or over head canopy, can heighten the awareness of a certain space (Figure 5.4-5.5). Being able to express architectural details of connects and material relationships in exaggerated ways will facilitate the learning of the user and hopefully bring about awareness as well.
Figure 5.1. Connecting Spaces

Figure 5.2. Connecting Spaces

Figure 5.3. Connecting Spaces
Figure 5.4. Schematic Sketches
Figure 5.6. Canopy Design Study
Figure 5.7. Section Sketches between the two sites
Diagramming in section is a useful method to visualize how spaces can relate to each other at different levels. The section revealed how a dialog between the two sites can easily be understood (Figure 5.7) and whether it is successful or not. It also allows for the creation of openness within the scheme to allows voids for light or sight. The possibility of different levels of circulations that forms the path to various program elements and the connection it creates can allow for a strong interaction with others and the building. Interior gardens and rooftop plantings also promotes awareness to integrate the inside with the outside or occupy spaces otherwise not considered before (Figure 5.8).
Figure 5.9. Schematic ground floor plan. NTS.
Figure 5.10. Schematic first floor plan. NTS.
Chapter Six: Decisions

Design Solutions

Transitioning from a schematic perspective into more developed scheme began to reveal the some of the concepts that will express various degrees of architectural awareness. Having to understand from the onset that designing a program to develop on these sites required the use of sections at various scales. From site analysis to programming the section told how elements should come together and the many conditions expressed from them (Figure 6.1).

The challenge was to work with a long narrow site with a program that seemed to grow daily to produce a scheme without creating a solid mass that would be possible if one followed the zero zoning set backs of the property. Some of the fundamental qualities that make good architecture is thinking about the user, allowing the user to engage with the architecture by not being timid about. Reactions on how to fill an urban void that has been created by demolition or poor planning will result in the healing of the streetscape when contextual relationships have been responded to correctly.

The study of NAi clearly showed a program that was separated to expressed by volumes and then connects and in-between spaces created is where the real architecture occurs. That concept was carried throughout the course of this project resulting a variety of spatial conditions that can promote awareness for architecture otherwise rarely designed for many urban projects.
Figure 6.2. Section A. Street edge condition and relation of the two sites. Layers in elevation express the setback from the street.

Figure 6.3. Section B. Creating voids as transition spaces.
Figure 6.4. Section C. Habitable roof spaces and elevated plazas.

Figure 6.5. Section D. Setback the tower to form a “social canyon” and allowing a buffer from the busy one way street
Each of the sections illustrated provide a clear communication of the various spaces designed. The voids and canyon like spaces express the transitions between the major volumes that provide opportunities of interaction. Rooftop terraces and elevated plazas provide areas of urban refuge at different levels. From the tower above the views of green roofs enhances the view below to the ground level. The spatial relationship between the two sites are represented by the pulling apart appearance of the two sites.

The plan development of this project never surpassed the first two levels keeping focus of the user scale with the street (Figure 6.7 and 6.8). In plan the relationship made to connect both side is expressed by form alignment and material continuity which has visual dominance from either side. The space which 5th Street runs through between the sites acts a spill over space when events occur and exterior café space along with urban element and furniture to accommodate the public.
Figure 6.7. Ground floor plan. NTS.
Architecture can be interpreted by the architect in one way but can be misunderstood and rejected if that meaning is not made clear. As the project concludes, its imperative to make sure the big concepts were understood. The series of perspective renderings to follow represent some of the conceptual moves that support awareness of architecture; reaction to the urban edge, creating voids, social canyons, folding of planes, unexpected public spaces, and relating two site along the same street edge. Perspective one represents the project as a re-

Figure 6.9. Perspective One
actions to the urban edge (Figure 6.9). The density created acts as a way to heal the void created by demolition or poor planning. An urban identity is created by placing hierarchy to materials mainly the folding element of the main tower, and how is corresponds to the opposite site and that itself has been set back to simulate layers of verticality. The verticality can be understood better in Figure 6.10, the street edge condition remains closely related to the human scale then as one looks beyond the vertical levels begin to rise in the distance. Allowing for large amounts of transparency will in effect make the building blend in with the sky. The levels of transparency are not inclusive to representing
glass, it also is the openness created with voids or exposed structural elements that allows for light and breezes to filter through.

The street edge conditions created along the exhibit areas have this language not commonly seen for most street levels, a structure that appears to be floating over a mote like pool of water (Figure 6.11). Just the sight of a structure of this can spark the question of how or why, and will force any one remotely interested to stop and observer. Along the street edge, an integrated canopy system that acts as a shelter component for the roof garden above, promotes different levels of cover to the pedestrian. The tree lined frontage acts a buffer to the busy street and enhances the enclosure of the walk way.
The exhibit gallery along the street edge act as a buffer to the entry court of the main building from the busy one way traveled street. The glass box allows for views through it to direct pedestrian travel into the man made canyon created that is part of the entrance. This social canyon is named so be cause of the sence of enclosure created by the tower and the gallery box along with the amount of people that can occupy and interact within this space.
Signifying the sense of entry is another element of awareness (Figure 6.13). The transparencies of the building base strengthens the massive solid construct canopy jetting out to express the entry. The same material travels across the street to follow its way up the elevated plaza area where it reveals the entry element to the auditorium (Figure 6.14).

Figure 6.13. Perspective Five
A sustainable way to design is provide green roofs but further make them a more habitable space other than just being planted roofs (Figure 6.15). The integrated canopy system that overhangs the street walk wraps itself up and over to form a trellis like cover over the roof garden atop the exhibit spaces. The roof garden acts a small retreat within the concrete urban world. Another usage for the roof is making a roof top lecture space to teach and show video displays. Protected overhead by the upper floors of the office tower giving the space a degree of shelter. (Figure 6.16)
Figure 6.15. Perspective Seven

Figure 6.16. Perspective Eight
Figure 6.17. Perspective Nine
Figure 6.18. Model Perspective One
Contextual view

Figure 6.19. Model Perspective Two
View looking east
Figure 6.20. Model Perspective Three
View towards the east expressing the urban edge

Figure 6.21. Model Perspective Four
Birds eye view looking south
Conclusion

Throughout the process of this thesis, focuses have shifted at various times to further explore some of the fundamental qualities that make architecture. The initial thoughts for this project were to establish a center for architecture to promote and educate the public and gain stronger involvement. This was just to consider designing one single structure to accomplish this idea but through studies and analysis it clearly changed to morph itself into something much bigger and better.

The bigger part created a challenge where time was limited to display a successful project for the purposes of a thesis study, so focus turned to strategies within the urban context of the site that would promote the case of good architecture. Some the results display are not necessarily the final answer to the concepts statements addressed, although they show a level of think that should be considered every time an architect designs any project.

In the end, architecture is about people. People occupy architecture and should do so with meaning and understanding of how they experience their built environment. Architecture can be an extremely subjective topic, as was quickly discovered as critics and suggestions started to form this project, but its just that principal to get more of the public involved so they too can be subjective in a educated way to further better the world that we live in.
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