USF Tampa Graduate Theses and Dissertations

USF Graduate Theses and Dissertations

11-13-2009

Memory - Ness: The Collaboration Between a Library and Museum

Kelsey Doughty
University of South Florida

Follow this and additional works at: https://digitalcommons.usf.edu/etd

Part of the American Studies Commons

Memory - Ness: The Collaboration Between a Library and Museum

by

Kelsey Doughty

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Architecture
School of Architecture and Community Design
College of The Arts
University of South Florida

Major Professor: Steven Cooke, M.Arch.
Ilene Frank, M.L.S., M.F.A.
Elizabeth Dunham, M.F.A.

Date of Approval:
November 13, 3009

Keywords: St. John's County, St. Augustine, Memory, Hybrid Building, Experience

Dedication

This is dedicated to Deborah and Kenneth Doughty, my parents.

I am forever grateful for the love and support you have given me and

helped push me every step of the way. I don't know what I would have

done if it weren't for your words of wisdom and encouragement. I

can't begin to thank you enough for everything you have done for me

financially, physically, and emotionally. Thank you!

Acknowledgements

I would like to thank all my friends and family for putting up with me during one of the toughest times I'll ever encounter. Without them, none of this would have been possible. My committee members Ilene Frank and Elizabeth Dunham, for sitting on my reviews and giving me great advice that helped improve my project. My friend Christine, who has been an inspiration to me! I am grateful to have met her and become such great friends! My friend Amy, who has been the best friend anyone could ask for. Thank you so much for all the support. MY friend Josh, who helped me with some problems in my design. My friend Tim, who has been there for me no matter what. You are a great person and a great friend and I am thankful to have met you! Most importantly my chair Steven Cooke, without his encouragement and his belief in me, I would have not succeeded in such a great project. Im grateful to have had him as a professor. Thank you all for such great memories!

Table of Contents

List of Figures

Memory – Ness:
The Collaboration Between a Library and Museum
Kelsey Doughty

ABSTRACT

Picture a historical library and a historical art museum coming together to challenge the interaction between each other to help experience, explore, and discover the past within the present. While it sounds like a good idea, it is rare to see a library and museum under one roof.

With the increasing population of tourists looking to visit places and buildings that reconnect with history, there is a higher demand for places to be able to 're-live the past' through art and literature. People enjoy visiting places where history was made and where it becomes part of a city's identity. With modern developments taking over, historical buildings are beginning to disappear. Designing a library and museum partnership is a solution to creating two institutions under one roof while preserving the space usually needed for both institutions if built separately.

In order to challenge the idea of a hybrid building within a historical city, there needs to be an element of culture and historical remembrance that creates a shield against that city's potential loss of identity. Memory has become a key element in our true identity, becoming a form of support against erasure. It is that sense of culture and historical remembrance that will create recognition of things past.

In order to address Florida's historical culture, the proposed site will be located in St. John's County, which includes America's oldest city St. Augustine. There are many different historical periods in St. Augustine that create its current

cultural atmosphere. It is important to choose an environment where historical events took place because it allows the memory process of a place to create past experiences to be shared with new experiences.

Through a methodology of the historical culture and conditions of the site, this thesis project will honor St. Augustine's culture by integrating the past with the present and creating a modern hybrid institution for the city. Furthermore, integrating the past with the present will allow users to enjoy St. Augustine as it used to be and as it currently is today.
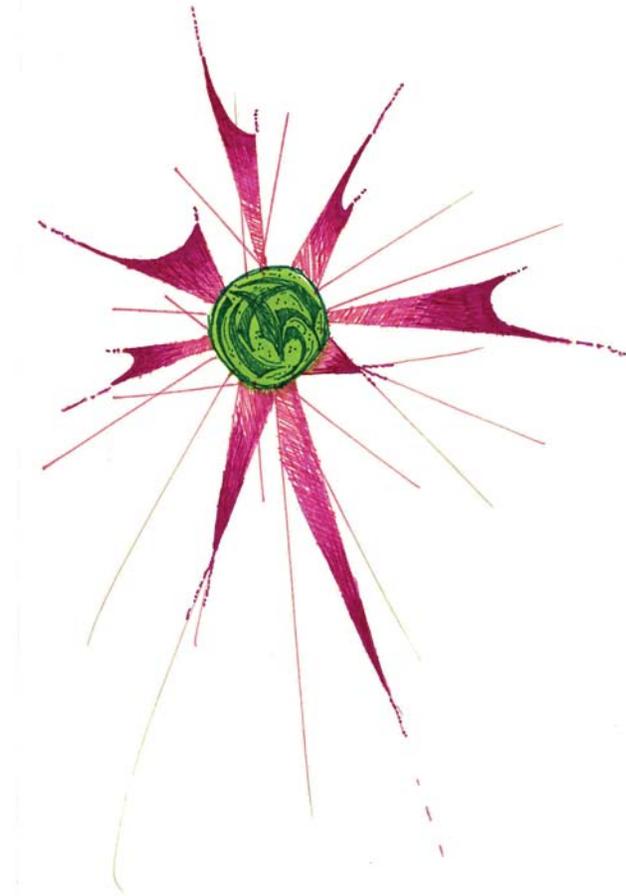
Figure 1. Diagram of the conceptual idea of memory

Introduction

"The bodies and the minds of individuals and the expressions of social life in the various cultures are the living records of the biological influences that have been constantly at work from the most distant past until the present time. Some of these influences have left their stamp on the genetic make-up of each individual person, others on the physical and mental characteristics he acquires during life, still others on his social structures. Humanity continues to grow by incarnating the past." [1]

Figure 2. Model of the concept of memory
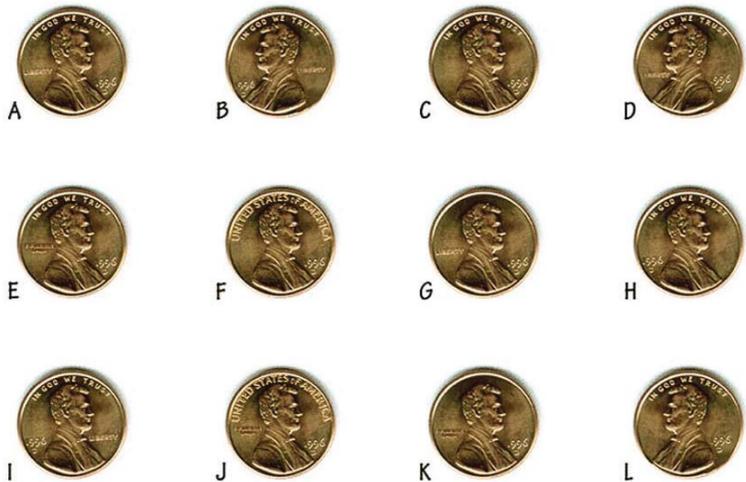
Figure 3. Memory exercise of pennies

To put into perspective, the word *memory-ness* is derived from *inner-ness*, and means that the thesis project is a unique design of a hybrid building. It is finding out what memory is and how it can be incorporated into the project. The concept of memory comes into play with the project by implementing on the history of libraries and museums and the many different memories people perceive of them.

Objects and photographs are a great way to remember something that connects to that specific moment in time. Figure 3 is a memory exercise that involves picking out the correct penny. There are twelve choices of pennies with only one correct choice of what a penny looks like. The idea behind this exercise is to show that most people do not usually remember every exact detail about everything. What people do remember is certain details like the penny is copper, smaller than a nickel but larger than a dime, and it has the face of Abraham Lincoln on the front of it. Most people do not need to remember everything, just enough to recognize an object when presented in front of them. If you chose option

There are many ways to remember things. Every person has their own way of recollecting past memories, whether they are good, bad, happy, or sad. Memories are what create the people we are today and also tie us to other people, cultures, and societies. The title of the thesis project is called "Memory-Ness: A Collaboration of a Library and Museum. The word *Memory-Ness* comes from a movie quote, 'Finding your inner-ness', from the movie *You, Me, and Depree*. Finding your *inner-ness* means that each person should truly be their own self, and not just follow the group or mimic the society.

2

Figure 4. Image of Michael Jackson

Figure 5. Image of haunting memory

Figure 6. Image of bitter memory

Figure 7. Image of horrible memory

Figure 8. Image of childhood memory

Figure 9. Image of first memory

A, you are correct. The exercise is from a memory exhibition from the Museum of Science, Art, and Human Perception in San Francisco, California.

There are several different kinds of memories. People can have some of the best and some of the worst memories and it only takes a little bit to for someone to reminisce on them. Some of the most common types of memories include: fondest, haunting, bitter, horrible, childhood, and first memories. Each of these types of memories will help when designing the thesis project which is a hybrid institution of a library and a museum.

Fondest memories are memories that make us feel like we are on top of the world and make us think we could not be any happier than that moment right there. These are the fondest of times. "They are just times when we were elated spiritually, when we didn't realize the float of time and the cruelty of reality, when we felt calm and restful, pure and limitlessly happy". [2] Figure 4 is an image of Michael Jackson to represent someone's fondest memory. He is the King of Pop and to some people, the fondest memory.

Haunting memories are memories that won't go away and are constantly there in the back of your mind. "They are sharp fragments of broken happiness that makes attempts to stay in our hearts for a long time". [3] Figure 5 is an image that represents a haunting memory. The image shows the skeletal remains of a tree in a backwater graveyard. The image implies

3

that the remains of the tree are represented as a bad memory that still remains after so many years.

"Bitter memories are memories that bring out some of the strongest negative emotions. These memories are either totally bad or bitter-sweet which makes them difficult to let go, for we know that so many blissful moments can be related to them". [4] Figure 6 is an image that represents the theory of bitter memories. In this image, the memory is really bad and is bringing out the most negative emotion.

Horrible memories are memories that remind us of horrible events or things that have happened. These kinds of memories remind people either in their dreams or visions. Figure 7 is an image of an apple that represents horrible memories. This apple is rotting and has fallen on the ground and brings back horrible memories that could represent deteriorating of life.

Childhood memories are memories that represent some of the happiest moments in our lives. "A person usually reminisces about his or her childhood with a nostalgic smile on the face and warmness inside. They are connected with people who surrounded us at those times – our parents, brothers and sisters, our childhood friends". [5] Figure 8 is an image of a child sitting on a washing machine with their stuffed animal. Maybe this child was sitting on top while they were watching their mom doing laundry. To this child, that could be quality time with their mom and something they enjoy doing.

The last memory is the first of memories. First memories are memories about something that is experienced for the first time. Like the saying, "there is always a first for everything". These kinds of memories are ones that will be remembered forever, whether they are good or bad first ones. Figure 9 is an image of a baby that represents a couple's first child together. This could be the best memory for the couple, while it is also the first.

While there are different types of memories, there are also different ways of expressing memory, as previously stated. Some of the many different ways of remembering are through a diary, photos, tattoos, love, dreams, art, and also

4

Figure 10. Images of expressing memory through tattoos, photos, diary, the five senses, and art

with the five senses. Expressing memories is not always an easy thing to do. It is not an easy thing to keep feelings and hid emotions nor is it good for emotions to be bottled up inside. "Expressing memories is not an exception, especially the ones which are just too bright to be kept inside". [6] "However, there are times when we can't express our memories to other people – either because of the delicately private character of the information or just because of our specific mood". [7] Figure 10 shows some images of the different ways of expressing memories. It is always healthy to express your feelings and emotions, no matter how ever you may come about it.

Historical events are important when remembering the past to be able to share and express those memories to others, if not to be kept to yourself. Culture is then brought out and expressed through art and architecture. "Cultural experiences may be expressed in the groups of preferred proportions, timbres, shapes, and the like that provide elements of familiarity by which cultural continuity is maintained". [8]

In conclusion, memory plays a very important role when designing a project. Remembering the past, living the present, and dreaming of the future is a great way to incorporate ideas into a design that create memorable buildings. It allows people to experience what memory is and how it ties into architecture.

5

Problem

With the current economy struggling, there is still one upside of it which is the increase in use of public libraries. Public libraries have had an increase in attendance due to people cutting back on household budgets. Most libraries do not charge an admission fee, or charge to check out books and media, but funding for libraries has increased because of the new trend of going to a library as a source of free entertainment. People are taking advantage of the free internet services available at libraries for creating job resumes, searching for jobs, and filing for unemployment benefits. In some cases, people are willing to wait outside before the library even opens just to claim a computer. Other
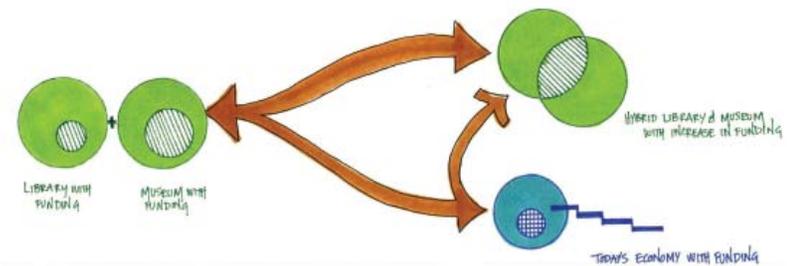
Figure 11. Diagram of the problem

free entertainment sources include CDs, DVDs, periodicals, and best seller collections. Patrons have not only cut back on renting movies, but they have also cut back on magazine subscriptions. With all these sources available to the public, it makes sense that libraries would be booming in today's economy.

Museums are also doing well in today's economy. Whether museums are free, like the Smithsonian Museums, or they charge admission, attendance has been the same as the previous years'. "High gas prices in 2008 may have had some impact, but overall our attendance was a bit higher than we had projected," said Nancy O'Shea, Public Relations Director at Chicago's Field Museum, which welcomed nearly 1.4 million visitors last year. [9] One of the leading factors of patrons visiting museums is the special exhibits that are on display for certain periods of time. A good example is the Museum of Science and Industry (MOSI) located in Tampa, Florida. Currently the museum is hosting the Body World's Exhibit: The Story of the Heart. This exhibit is also installed in many other museums and has attracted more than 26 million visitors worldwide. At the Cincinnati Museum Center, the Body's Exhibit brought in over 1.3 million people in 2008. According to Forbes Traveler, these special exhibits are not the only visitor magnets, buildings that contain world-class collections can actually attract about the same amount of visitors. "We call it the Bilbao effect," says Jason Hall, the director of government and media relations for The American Association of Museums, referring to the Frank Gehry-designed Guggenheim in Bilbao, Spain, which "everybody concedes has had an effect in turning around fortunes in that city". [10]

In addition to special exhibits and exhibits that obtain world-class collections, museums that gear towards children's attractions also remain very popular. These are typically categorized with the science museums. Children's science museums mostly have hands-on exhibits to allow the fullest learning potential while having fun. Children tend to demonstrate a stronger learning pattern when game-like activities are involved. This allows children to recall the activities and images and remember the information involved with these activities and images. "Most children's museums have spaces dedicated to early childhood audiences, and the new trend is to have multiple early-childhood spaces and exhibits," says Janet Rice Elman, the Executive Director for

the Association of Children's Museums. [11]

While libraries and museums are growing and doing well, the rest of the economy is not. Funding for libraries is usually with the same direct appropriations that fund their parent organizations. Museums are funded completely different. They are often independent non-profit organizations, but they are also funded by government appropriations as well as corporate grants and contracts, foundations, and self-generated revenue. "Such differences have a profound effect on the way these institutions operate and on the outlook of their leadership". [12] A museum or library must have an increase in attendance and also prove the essentialness of the institution for the building to receive funding by the government.

The Institute of Museum and Library Services (IMLS) is a federal government agency that provides grants for libraries and museums that collaborate together; a major reason why libraries and museums form partnerships. [13] There are many benefits to forming such partnerships as well as risks and concerns. "Usually collaborations are created with the intentions of eliminating existing problems within the cultural institutions and to affect society in a positive way". [14] "While trying to eliminate problems by merging, differences among the institutions can be profound". [15] The dialogue of a museum and library are so different. Museums have visitors and collections management systems. Libraries have users and catalogs. Museums rarely allow online exhibits that have information and images without some copyright security. "As a result, visitors to a museum or web site are guided through the collections, not simply given access to a catalog". [16] According to scholars, technology has always been a huge debate when it comes to libraries and museums because it allows people to access the exhibits over the internet rather than in person.

During a Tenth Annual ACRL National Conference in 2001, Nancy Allen and Liz Bishoff spoke about some important elements that could either lead to successful or problematic collaborations between libraries and museums. Some of the success factors include communication,

commitment, technology, organizational culture, and incentives. The problematic factors include knowledge-base, organizational culture, project complexity, and interpretation verses identification. As stated earlier, collaborations are usually created to hopefully eliminate the problems and help create a successful merger between two institutions. Merging both institutions involves the understanding of both. People usually go to libraries to read, look up information, do research, use the internet, and borrow books. All are very individualized experiences. People usually go to museums to see something or perhaps to learn something. Sometimes people may go with a friend or family member, or maybe are accompanied by a lecturer or tour guide. Museum visits tend to be interpersonal experiences. [17] According to IMLS, the reasoning behind the collaboration is because libraries and museums are both social agencies for public education so merging them only seems logical.

The Institute of Museum and Library Services funds this type of hybrid institution, along with various sponsors. According to IMLS, a partnership between the institutions is very beneficial for the institution itself and for the community. The benefits for the institution involve the staff members for both institutions learning new skills, by which a new dialogue can be established that allows the institutions to both understand each other's organization, allows an expansion of resources and programs to help reach out to the public, saves time and money when they both work together, and more money is brought in through the increase in attendance. When there is adequate funding and enhanced services, the museum or library is able to fulfill their missions of education, collecting, preserving, and providing more for the community. [18] The benefits for the community involve saving time and trouble of traveling when they are located in the same location. It also improves the quality of life of all members of society through the enriched exhibits and services. [19]

In conclusion, merging both a library and museum is a good idea because there is a possible increase in revenue for the institutions. Also, the IMLS offers grants to those

institutions that prove they are more than just an accessory to the community, but more thought of as a valuable asset within the community. Both institutions are educational facilities, so merging them together allows people to have the benefit of having the maximum learning experience. Designing a hybrid institution is the more economical choice in today's society. It is better for the institutions and better for the community.

Hypothesis
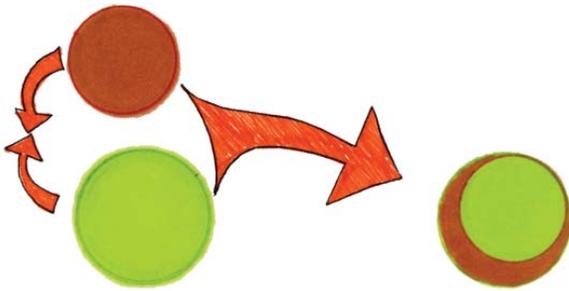
Figure 12. Diagram of the hypothesis: creating a hybrid institution

A hybrid building is the combination between two or more programmatic functions working together under the same roof. Understanding the problems of libraries and museums today, especially in today's economy, allows for innovative ideas in designing a hybrid facility. It is through this belief of creating such a building that will allow the two separate functions to communicate together. There are many goals that are involved to design the library-museum institution.

Creating a link between the proposed site and a historical landmark is important because it allows the users to visualize and clarify the sense of memory to its surrounding. The site is located in walking distance from downtown historic St. Augustine. Castillo de San Marcos, formally known as Fort Marion, is a historical landmark that acts as the city's anchor on the Matanzas River. The project will also act to anchor this city on the south side of The Bridge of Lions. People can walk from one anchor to the other and also enjoy a nice walk through the main historic district of St. Augustine. The fact

that people do not like to drive all over when their destination is just a couple hundred feet away is a great reason to have the project located just on the outskirts of the main tourist area.

Creating a pedestrian link from the proposed site to the residential area is also a key factor in creating this project. Residents play an important part in the community they live in. Designing a new hybrid institution in an area that has a lot of history and is located near residential areas is crucial to have the surrounding community's support in the project.

Another goal is to create a place for people to come and experience, explore and discover a new way to learn with both institutions combined. Usually people go to libraries for different reasons then going to a museum. When the two institutions are combined into one institution, a language will be formed between them. People from each function will now be able to communicate with each other in the same vicinity.

Creating a great public space is a very important factor when designing a building. It is even more crucial in this case because you have two main institutions forming together to create one main atmosphere. There are many elements that can make a great public space and there are many elements that can contribute to a failed public space. There are four main elements that create a successful public space, which are accessibility, comfort, activities, and sociability. A public space has to be easily visible and easily accessible to become successful. Also, people have to feel comfortable and safe in a public space. If the public space seems any bit unsafe or uncomfortable, then the space will never be occupied. People usually return to areas where they feel most comfortable and relaxed. The use of activities in a public space brings in the excitement and life to the atmosphere. People enjoy seeing activities and enjoy participating in them as well. Last but not least, people enjoy other people. Going to a public space and socializing usually creates a comfortable, homey atmosphere. "When people see friends, meet and greet their neighbors, and feel comfortable interacting with strangers, they tend to feel a stronger sense of place or attachment to their community and to the place that fosters these types of social activities". [20]

Materiality is also very important because the memory process of this thesis is dealt through the different materials and spaces of the project. There are many different materials

that will be involved to incorporate the historical aspect of St. Augustine, but also introduce a modern look to the project. The idea is to create a building that represents the stability of the fort while incorporating a modernized building too. In other words the historical *stable* program, which is represented as the museum, is enveloping the more open modernized program, which is represented as the library. Materiality is further discussed later on in the section labeled *Materiality*.

Methodology

To begin the thesis project, the problem has to be recognized, analyzed, and solved. The methodology of the project is broken down into many different research methods. The first research method involves researching the culture of St. Augustine. By implementing a list of cultural factors to analyze and translate, archetypes are represented for existing conditions for St. Augustine. There are seven archetypes that were chosen to further understand the culture and help with designing the project. They are conditions that are found within the many cultures of St. Augustine, including the first Spanish period, the British period, the second Spanish period, the Colonial period, and the American period. The archetypes are the entry, courtyard, café, garden, activities, balcony, and water. These archetypes helped transform the program analysis and to further help understand St. Augustine and its culture.

The second research method is the study of the history of the buildings, meaning the history of the library and museum. Considering the thesis project is a collaboration of a library and museum, studying the history is an important method of research. The true definition of history is the "study of the past, focused on human activity and leading up to the present day". [21] Since history connects to the past, and the past connects to memories, then history has a connection with memories. Understanding the history of libraries and the history of museums will help distinguish between actual

traces of the past and just legends of the past. When and where was the first library and museum created? Did these buildings ever merge into one building before? Were they always considered public buildings? Were they always called 'libraries' or 'museums'? By researching the past and present history of libraries and museums, it will help focus on the important aspects when designing a library and museum, while also trying to collaborate them together.

The third research method is analyzing the site through qualitative research. It involves the observations of human behavior and how people behavior in a given atmosphere. Every site has its own uniqueness to it. Some are easy to design with, almost as if the building always belonged there, and some sites are difficult to work with, i.e. limitations, restrictions, public access, etc. By observing the typical crowd located at libraries and museums, and also the irregular crowd, it will allow an understanding between both kinds of crowds and what people look for and expect when visiting these buildings. There are many crucial factors involved when designing a building on a site, i.e. gender, age, race, residents/tourists, environment, safety, location, etc. Taking these factors into consideration can make a huge difference into the design and its community. According to some scholars, there are certain tactics used when observing a public space, which include behavior mapping, counting, tracing, trace measures, and interviews. Each of these factors defines and helps understand the human behavior within that site. By doing so, this will allow the project to work well with the chosen site.

The fourth research method is studying and analyzing specific case studies. It is important to look at different buildings and areas to help with the research of the thesis project. This type of research provides information about things that already exist and are a way of improving the thought process of the thesis project. The case studies that have been chosen are quite specific to the thesis project, which includes The Bibliotheca Alexandrina, The Museum of Science and Industry (MOSI), and the Castillo de San Marcos. All of these case studies incorporated some bit of information that became important when creating the conceptual phase and program analysis for the project.

The fifth and last research method involved is researching patterns of a building. Buildings have this certain

language about them. With each decision made and problems solved, a pattern of language is formed. Researching the fundamental patterns of a building and its context will help and improve past problems in this dialogue. Several fundamental patterns that will be studied are noise, recreation, urban design, and language of the building. Noise affects a site more than you think. A space that show excessive noise is perceived to be annoying, undesirable, and intrusive. Recreational activities have the potential to create a successful space and a memorable experience. Having activities in a space creates life to the building and its surrounding environment. Urban design of the environment describes the basic physical features of the site that help define the character of the city as a whole. It is the natural relationship between individuals and the environment. The language of a building has a lot to do with the decisions made by the architect. There are many elements to consider including the nightlife, creating intimate spaces, water access, paths, and the flow through spaces. Each fundamental pattern shows the difference between creating a design and creating a space. The purpose of researching fundamental patterns is to help shape the visual image of a city by a dialogue between the building and its users.

Case Studies

These case studies were chosen to research both libraries and museums partnering together. The first two case studies are on libraries and museums whereas the third case study is focusing on St. Augustine's National Monument and the material used. By looking at different factors, such as form, light, material, entry, and various other factors, it helps to better understand the functionality of these types of buildings and how they work together. Each case study played an important part in analyzing the site and the building type, in which created a more thorough analysis of how to accomplish the goal of creating both major functions under one roof.
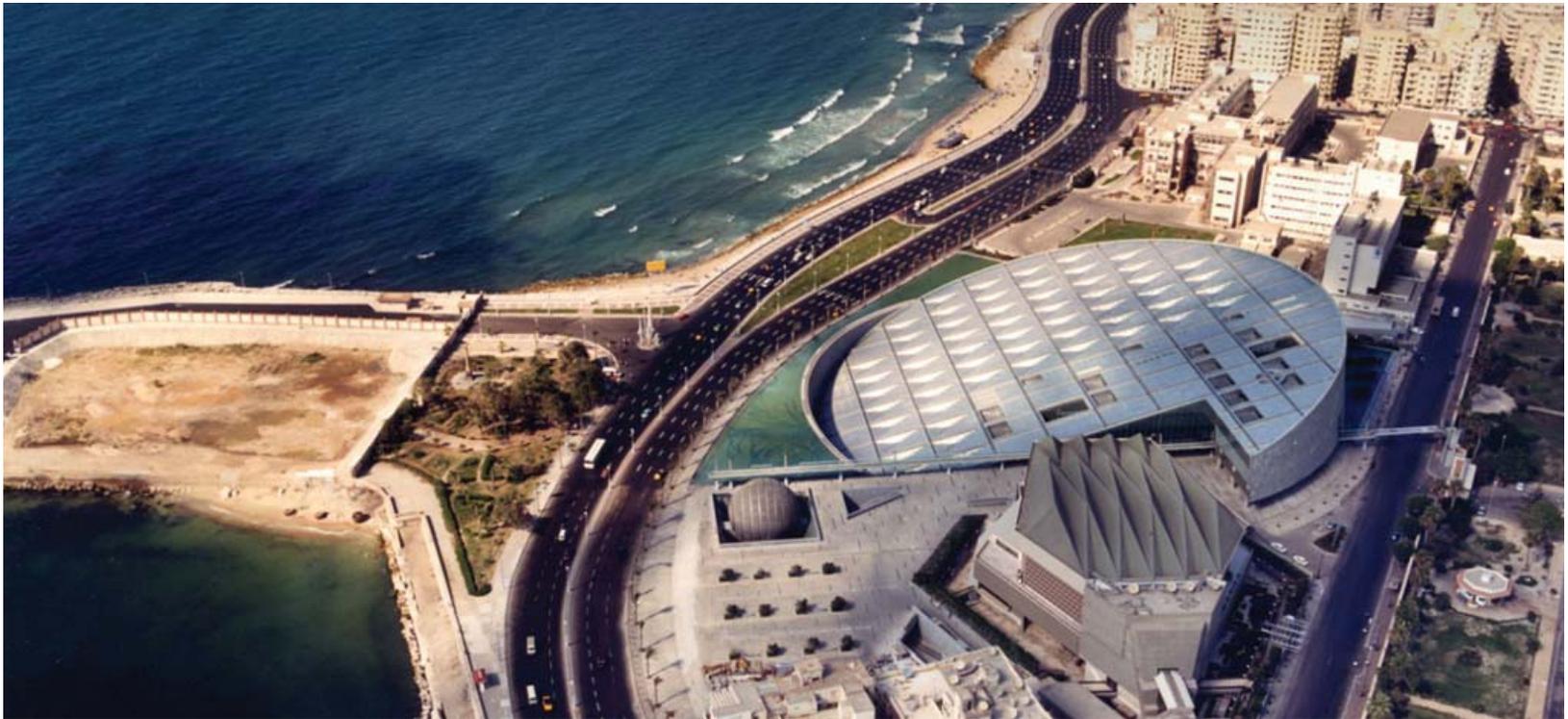
Case Study 1

Figure 13. Image of Bibliotheca Alexandrina

Bibliotheca Alexandrina: The Library of Alexandria

Alexandria, Egypt; 1994

Norwegian Firm Snøhetta

The Library of Alexandria is known to be one of the largest public library and museums established. It was founded in 288 BC by Ptolemy I (Soter) under the guidance of Demetrius of Phaleron (Hayes). The library was destroyed sometime around C.272 AD and redesigned and built between 1994 through 2002. The modern library was designed by a Norwegian Firm called Snøhetta. "The modern Bibliotheca Alexandrina is intended to recapture the spirit of the original Library of Alexandria as a center for learning, dialogue, and rationality". [22]
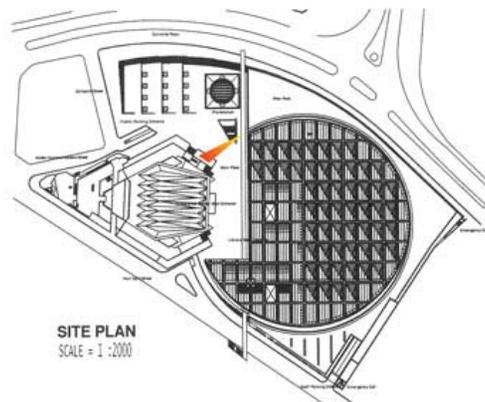

Figure 14. Site plan

Function

The modern Bibliotheca Alexandrina is located on the Mediterranean Sea to help make the dream of Alexander the Great possible. "The dream was that Alexandria would be the center of the most prominent civilizations of the time; the Egyptian, the Greek and the Middle Eastern civilizations" (InterCity Oz). The most significant spaces that construct the library and help recapture the spirit of the original library are: a main reading room, six specialized libraries, three museums, Planetarium, seven academic research centers, nine permanent exhibitions, four art galleries, Conference Center, public plaza, offices, and a cafeteria.

Form

'The design concept is a simple circle inclined towards the sea, partly submerged in a pool of water, the image of the Egyptian sun, which in contemporary terms will illuminate the world and human civilization'. [23] The building consists of four levels below ground and seven above ground. The form of the building is a strong symbolic feature and very iconic to the city of Alexandria. 'The building is surrounded by a wall clad with Aswan granite engraved with calligraphic letters

19

and representative inscriptions from the world civilizations'. [24]

Light

The library has many different spaces that provide natural lighting inside. The building was designed to symbolize the rising sun so natural lighting was important. The inclined circular building allows indirect daylight into the spaces below by using glazed panels on the roof which are in the shape of eyes and at a 90 degree angle to allow the maximum amount of light into the main reading room. 'Outside the windows, there are glass "eyelashes" which protect the "eyes" from rain accumulating on them'. [25] Also there are strips of light tubes
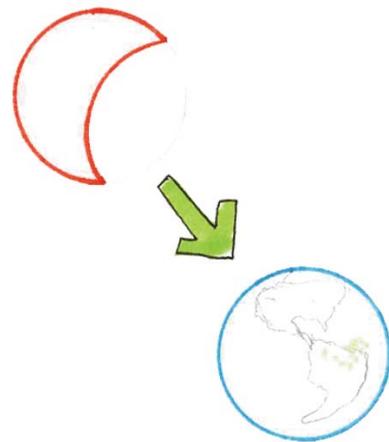

Figure 15. Diagram of the concept of the form of the building

placed vertically on all the bookcases in the main reading room to provide extra lighting, as shown in figure 17 on the next page. Furthermore, the History of Science Museum is located just below the Planetarium's theatre to follow the concept of the library, the rising sun of knowledge. The museum is surrounded by high granite walls and massive glass skylights that provide an atrium of natural lighting.

Entry

There are many ways to explore the Bibliotheca Alexandrina. There is a slender bridge that slopes down into the building and there are also many courtyards which can be enjoyed above ground. Also there is a public plaza that is connected to the Planetarium and Science Museum. 'All three are connected to the surroundings by a bridge coming from the university campus, piercing the library, passing over the planetarium itself, and spanning out over the ancient harbor and palisade'. [26] The actual main entry into the library consists of large broad doors that lead to a large glass-lined hall which leads to the heart of the building. [27] Through this glass hall is an internal balcony which gives the first glimpse into the library. 'Before us stands a vast panorama of light and

20

texture. All around us are slender columns beneath a sheet of diffuse light. The vast curving wall of the library's exterior is shown to us once again, this time as an enclosure'. [28]

Conclusion

This building is a true icon to Alexandria, Egypt. The strong points about this building include the many advantages of natural lighting within the main reading room. It also has natural lighting in the planetarium and throughout the building itself. The building and the site itself are a successful and popular place to visit. Many people come to sit in the courtyard even if they are not going inside the museum. There is one problem with the building, which really isn't a big problem, but the entry into the building could be grander. There are so many entrances into the building that it can be confusing. It
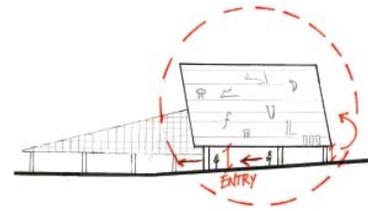

Figure 18. Diagram of the main entry

Figure 19. Image of the inscriptions on the granite wall

is not bad that there are so many entrances, but it is not good either because any building that is this popular and loved should have one grand main entry. People should know it is the entrance just by looking at it. This case study will help in the thesis project because it is an example of an icon to the city of Alexandria just as this thesis project will also be another icon to St. Augustine.
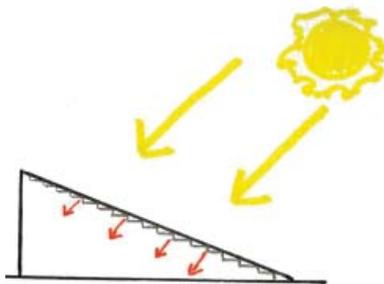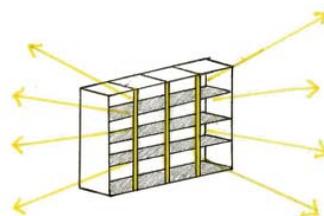

Figure 16. Diagram of natural sunlight

Figure 17. Diagram of bookshelf lighting

21

Case Study 2

Figure 20. Image of MOSI at night

Museum of Science and Industry (MOSI)

Tampa, Florida; 1978

Dwight Holmes of Rowe Holmes Associates of Tampa

The Museum of Science and Industry (MOSI) was designed for the purpose of understanding science, industry and technology. The building was designed by Dwight Holmes of Rowe Holmes Associates of Tampa in 1978. In 1995 Antoine Predock and Robbins Bell and Kuehlem Architects of Tampa designed a 135,000+ square foot addition to MOSI, known as the IMAX Theater, or the 'blue sphere'. "MOSI has provided public programs and exhibits which support its mission and seek to meet the identified needs of a growing and vibrant community". [29] MOSI is not only a science museum, but it also incorporates the Hillsborough County Science Library. It is believed to be the first library to be located inside a science museum. The library occupies the museum's Science Alcove which is an exhibit that features drawers filled with specimens such as fossils and butterflies. [30]

Function

The Museum of Science and Industry (MOSI) is located in North Tampa, near the University of South Florida. MOSI was designed to help users explore, discover, and experience science at first hand. There are many great features and important spaces that make up this unique science museum, which include: permanent gallery exhibits, visiting exhibits, traveling exhibits, IMAX Dome Theatre, Saunders Planetarium, Science Works Theater, Kids In Charge, multiple programs including family and youth programs, the science store, MOSI Café, Bio Works Butterfly Garden, Back Woods, and the Hillsborough County Public Library.
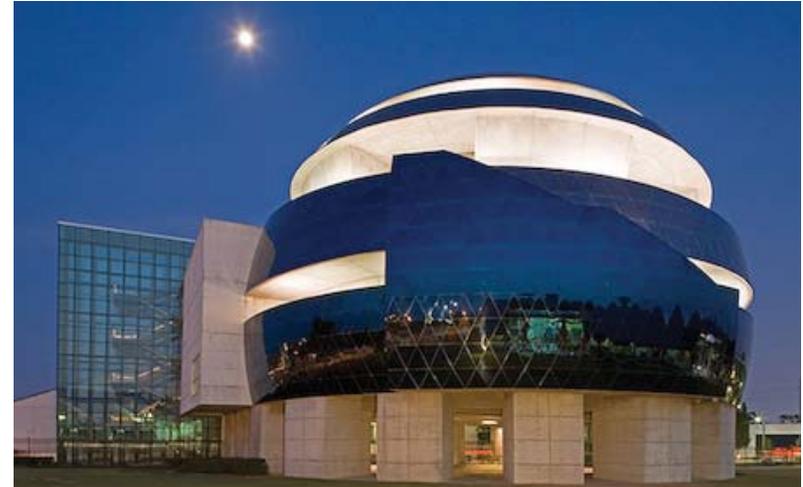

Figure 21. Image of the IMAX Dome Theatre

23

Form

According to Antoine Predock, this building has the sole purpose of science by the answering of questions and the exploring of the mysterious. People can experience the tubes that able you to look outside, the crushed scallop shells in the concrete of the sidewalks, and the lines in the concrete of the seating area under the dome designed to cast shadows from the columns during the summer and winter solstices, as shown in figure 24. A great way to recognize the MOSI building is by the big blue sphere. The Sphere is an addition to MOSI and is covered in polished blue steel panels. These panels are designed to reflect Florida's skies, waters, and rain. According to Predock, he got the idea for the sphere
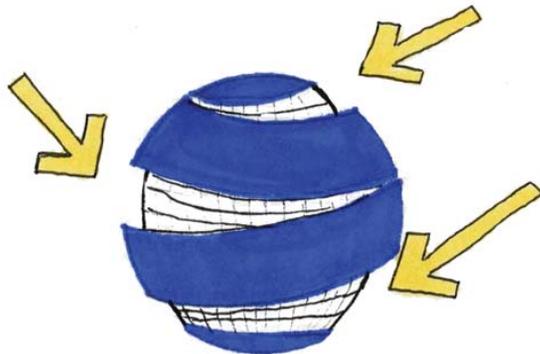

Figure 23. Diagram of the reveals in the wall
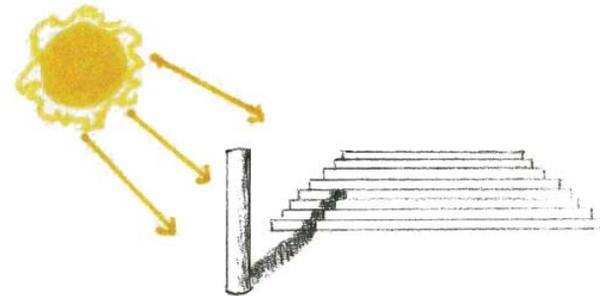
Figure 24. Diagram of the seating area under the dome

by a ramp circling the sphere while peeling an orange. "We didn't want to do just another sphere or geodesic dome. We wanted to express a sphere in a way that was very unusual. We kind of unpeeled it and we thought of a spherical Rubik's cube and kind of distorted it". [31]

Entry

There are many different features of this building that the architect designed for the purpose of excitement and adventure while passing through the entrance. The entrance

Figure 22. Diagram of the IMAX theatre lighting

passes through a walkway that connects the museum with the sphere and guides you to the Bio Works Butterfly Garden building. Also along with the butterfly garden is the Back Woods, a natural wooded forest area behind MOSI.

Conclusion

In conclusion, there are many strong features about this building and not that many weaknesses. One of the strongest features is that not only is it a science museum, but it is a public library too. Many people that visit the museum do not realize there is a public library located in the back left of the box office. The weakness with the library located inside the museum is the location of it. It is tucked aside from the main entry where most people would not see it. On another note, the entry into the site is very unique and well planned out. The entry overpass provides a grand entrance into the site that doesn't over power the building and then leads you behind the building for parking and enjoying the scenery of the natural woods and gardens. The confusing part is the main entry into MOSI. There are two entrances into the building, one directly under the overpass and one on the opposite side, which is the main entrance. For such a popular, well known building, there should be only one main grand entry to show the importance of an entrance and to also to allow the public to explore the entire site with all the wonderful natural features.
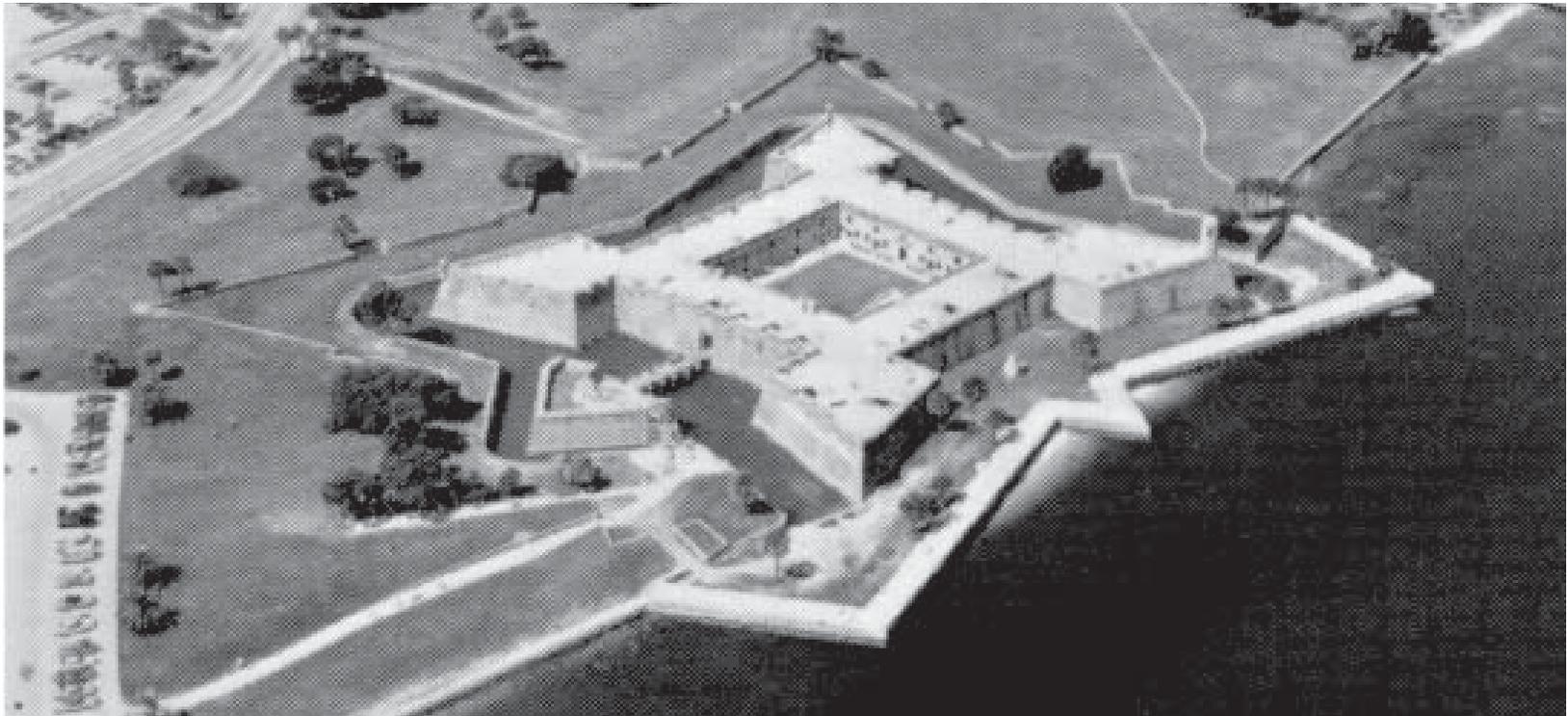
Case Study 3

Figure 25. Image of Castillo de San Marcos

Castillo de San Marcos

St. Augustine, Florida; 1672-1695

Manuel de Cendoya, governor of Florida

The city of St. Augustine was founded by the Spanish in 1565. The city had nine wooden forts for defense, but a much stronger material was needed to stay undefeated while under attack. Queen Regent of Spain decided that in order to protect the city, a masonry fort should be constructed. Manuel de Cendoya and his men sailed to St. Augustine to start the construction of the fort. The construction lasted for 23 years, during 1672 through 1695, and was built with a stone called coquina. "The Castillo de San Marcos is unique in North American architecture. As the only extant 17th century military construction in the country and the oldest masonry fortress in the United States it is a prime example of the "bastion system" of fortification, the culmination of hundreds of years of military defense engineering". [32] Inside the fort were many spaces and features for the town to be protected while under attack or through a big storm. These features consisted of a powder magazine room, shot furnace, chapel, British rooms (during the British period), storage rooms, guard rooms, the Ravelin (unfinished) and the moat. All of these spaces were very important and helped create one of the strongest fortresses today.

Form

'A monument not only of stone and mortar but of human determination and endurance, the Castillo de San Marcos symbolizes the clash between cultures which ultimately resulted in our uniquely unified nation. Still resonant with the struggles of an earlier time, these original walls provide
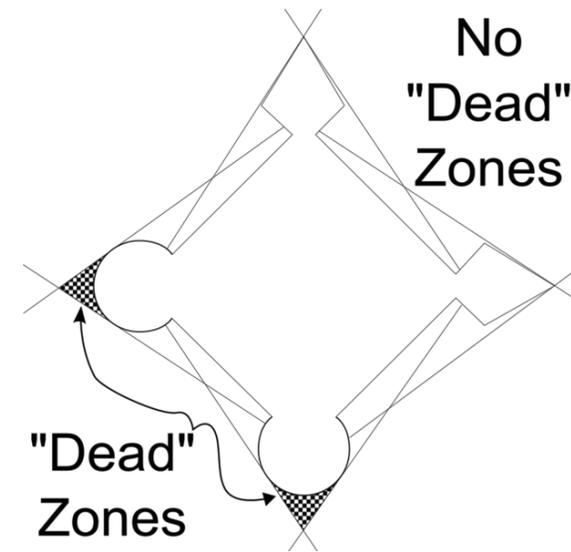

Figure 26. Diagram of the form

27

tangible evidence of America's grim but remarkable history'. [33] The fort is a masonry star shape that was developed during the use of black powder, also known as gunpowder. The shape is designed to withstand and avoid the impact of cannons hitting the fort. 'Of the major architectural variations the "bastion system," named for the projecting diamond or angle shaped formations added onto the fort walls, was the most commonly and effectively used'. [34] 'Castillo is an enduring legacy of the craftsmanship and skill of the engineers, artisans and laborers who built it'. [35] Also, this shape allowed for most of the rooms inside to connect to each other for more protection from the storms and attacks, without having to go into the open courtyard.

History of Materiality

'The Castillo is one of only two fortifications in the world built out of a semi-rare form of limestone called coquina (The other is Fort Matanzas National Monument 14 miles south)'. [36] The coquina, a shell stone that is soft enough to be dug up with a pick and axe but also would harden over time in exposed air. The shells are more durable to cannons whereas if the

Figure 27. Image of the material 'coquina'

fort were made out of brick or cement, the walls could crack or shatter from the impact of the cannon. 'Cendoya recruited Indians for his labor force, and set them to work on nearby Anastasia Island where the unusual stone was located, which underlay much of the island'. [37]
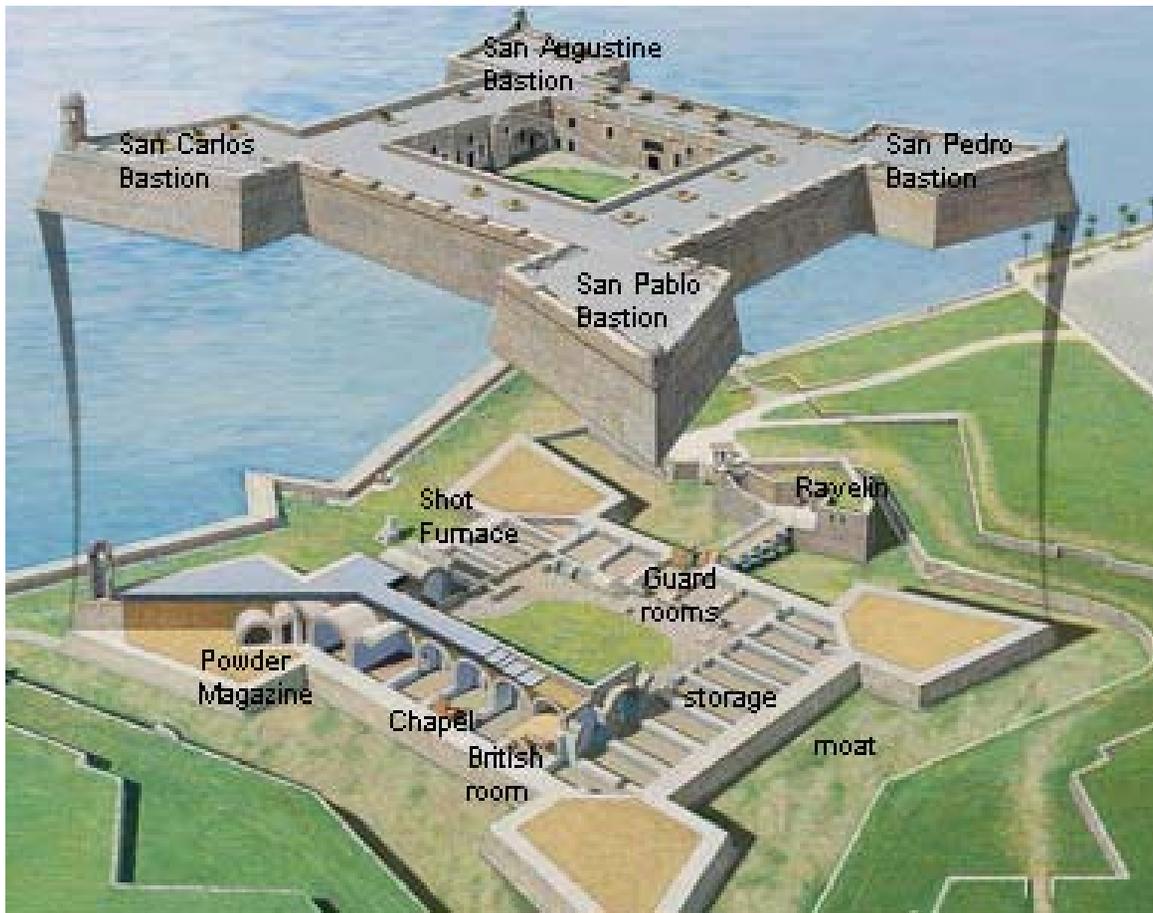
Conclusion

The Castillo de San Marcos is an excellent case study because it is such a historic building and also a very iconic building to St. Augustine. The thesis project is an iconic anchor building on the south side of the bridge, so analyzing the fort was helpful in the aspect of creating the institution. The type of material used to build the fort was also used to build some houses in St. Augustine. Analyzing the material, where it came from, and how it is used will help when choosing the materials for the thesis project while also trying to preserve historical materials. The fort is a very strong structure and has many strong factors within those walls. The construction was well thought out for impact from cannons and any other source of attack.
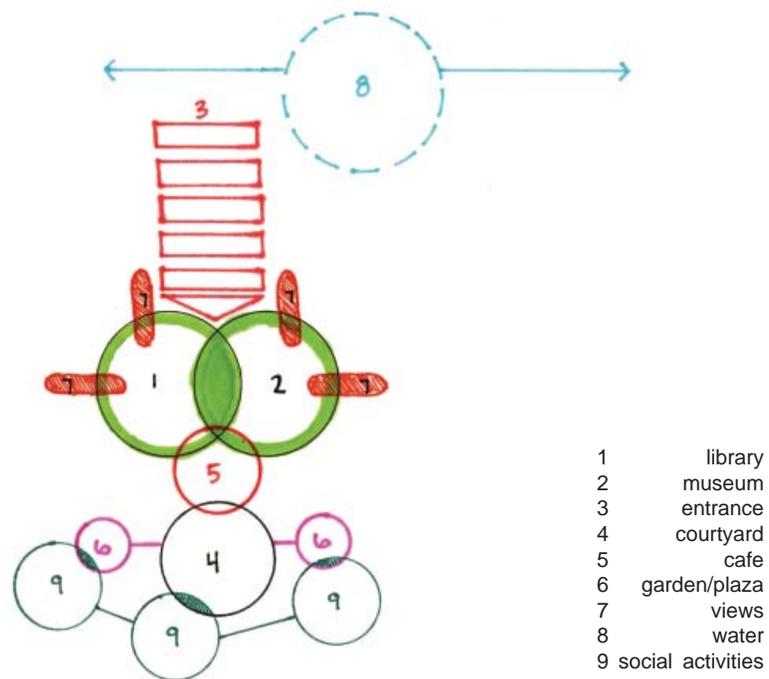

Figure 28. Exploded image of the fort

Program Analysis

Figure 29. Diagram of programmatic spaces

1	library
2	museum
3	entrance
4	courtyard
5	cafe
6	garden/plaza
7	views
8	water
9	social activities

The program for the thesis project consists of both library and museum needs. First there are the typical library spaces that are required and important for the building to function. Secondly, there are the typical museum spaces that are required and important for the museum to function properly. Programmatic elements such as outdoor spaces, library spaces, museum spaces, shared spaces, and support must be looked at and studied carefully in order to create an institution that joins both library and museum functions. Figure 29 is a conceptual diagram that shows the relationship between the required and public spaces. The shaded green space between the library and museum spaces represents the merger between both programs with a café located in

30

both spaces and in the public spaces. The thesis project will embody an adequate amount of public spaces to absorb the feeling of comfort and relaxation, not like the traditional library or museum. Traditional libraries and museums are very quiet, have little intimate space, usually have a tiny food vendor, and can be quite boring for young people. The thesis project will have a large cafe that supports both the library and museum, many intimate spaces for relaxation or reading, and will have activities on the lower levels so the people in the upper levels can study, read, etc.

It is important to create a lot of open public spaces within the thesis project to help incorporate the surrounding cultural atmosphere within the programmatic spaces. By incorporating the cultural surrounding with the project, it allows the user to see and feel St. Augustine's many different historical periods within the city. Figure 30 shows the relationship of programmatic spaces within a library and figure 31 shows the relationship of programmatic spaces within a museum. By
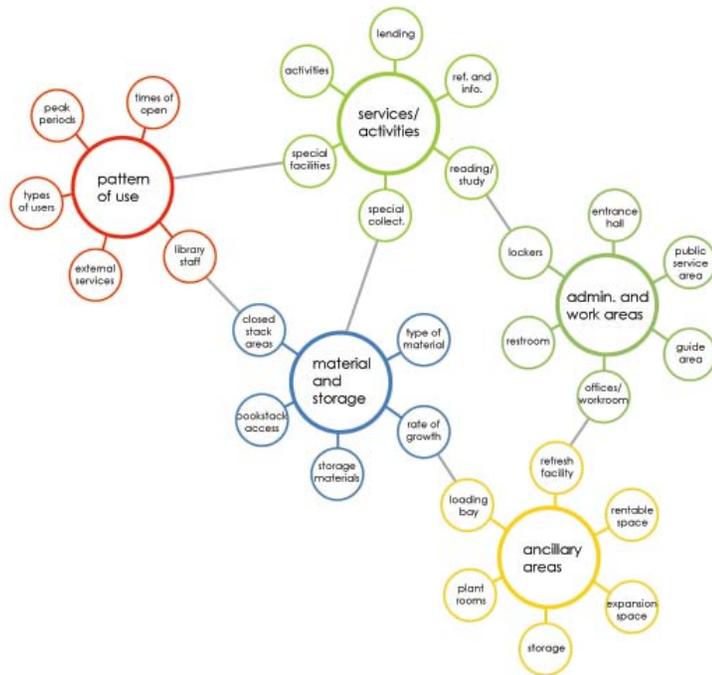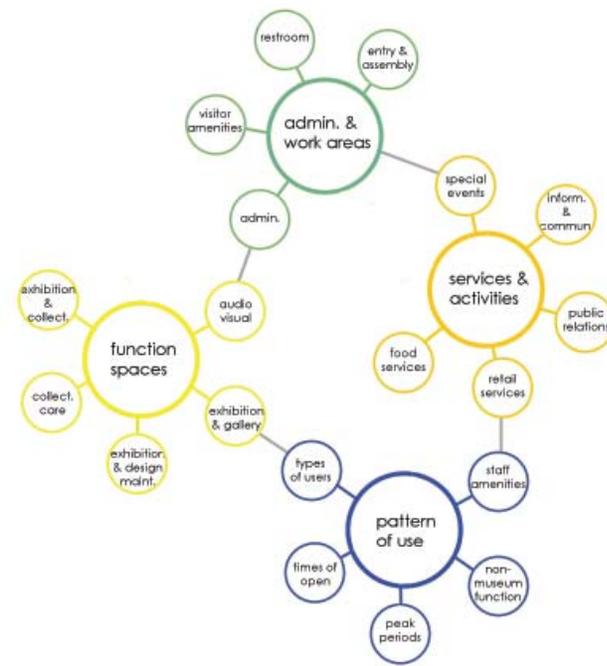

Figure 30. Diagram of library spaces

Figure 31. Diagram of museum spaces

Library Spaces	S.F.	Museum Spaces	S.F.	Shared Spaces	Square Footage
reading rooms	1600	admin. Areas	1200	café	600
special collections	600	meeting rooms	800 total	store	600
admin. Areas	850	exhibition and gallery	4000	restrooms	600 total
book stacks	2700	traveling exhibits	1500	entry/lobby	2000
seating spaces	2000	audio visual	600	information/ref.	1200
work stations	800	special events	600	auditorium	1200
meeting rooms	800 total	loading bay	2000	storage	1500
circulation desk	400	conference room	500		
restroom	800 total	art education	450		
periodicals	800	converstaion lab	450		
rare books collection	600	classrooms	1200 total		
childrens area	1000	theatres	1500 total		
reference desk	250			**Support**	
slide collection	300			maintenance	
instruct. Lab	350	museum director	350	mechanical	
media viewing	350	library director	350	shipping/recieveing	
audio visual	350	assist. Museum direct.	250	elevators (if needed)	
physical processing	250	assist. Library direct.	250	fire stairs	
theatre	300	library specialist	250	processing	
classrooms	800 total	museum specialist	250	acquistions dept.	
printer area	1000				
Net S.F.	**16900**	**Net S.F.**	**14800**		
Circulation	**5633**	**Circulation**	**4933**		
Gross S.F.	**22533**	**Gross S.F.**	**19733**		

Figure 32. Program Chart

32

studying the spaces required for each institution, there was an understanding of how the two different functions could collaborate together to create a unique hybrid institution.

The program for the thesis project is large, considering it involves two full size institutions under one roof. There are some spaces that will be shared between the library and museum, but mostly the institutions will have their own separate spaces. When a space from one function intercepts with a space from the other function, a dialogue will be shared among the users allowing interaction between them.

Figure 32 is a program chart that shows the required programmatic spaces that will be linked into the thesis project. The seven archetypes that were mentioned in the methodology section, which are entry, balcony, cafe, activities, garden, courtyard, and water, are incorporated into the program to understand the different cultural periods within St. Augustine and to also share an interaction with the community. During the conceptual phase of the project, the program spaces and cultural spaces may change to filter the needs to the residents, visitors, and the city itself.
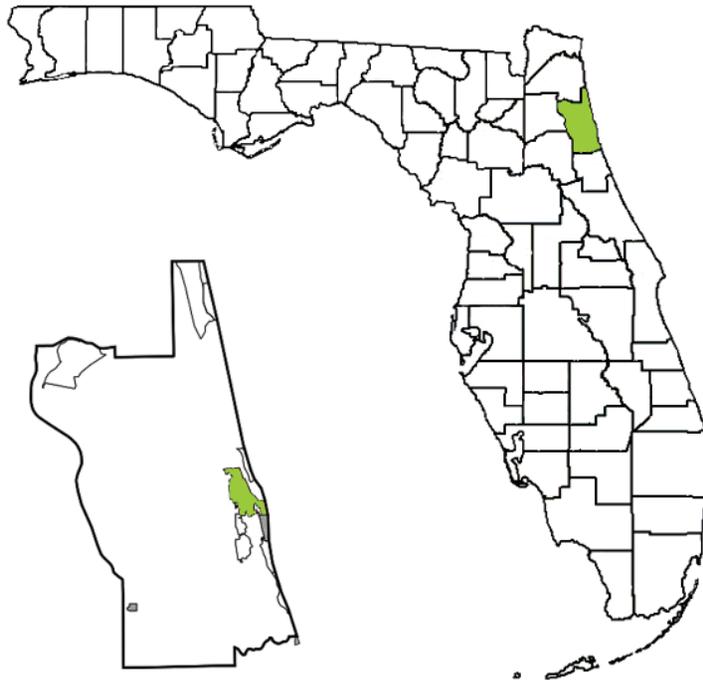
Site Analysis

Figure 33. Map of Florida in relation to St. John's County (enlarged) with St. Augustine highlighted

The proposed site will be located in St. John's County, Florida. Within St. John's County, there is St. Augustine, the oldest city in the United States. The first settlement was established by Admiral Pedro Menendez de Aviles on September 8, 1565. That was the beginning of the first Spanish Period.

While choosing a location for the project, it was important to pick a site with a historical background. Deciding that the thesis project is a library and museum collaboration, institutions that both have history behind them that dates back to nearly 288 BC, it was imperative to select a site location with the same historical context as a museum and library. In order to fully understand the context of St. Augustine and

its culture, it was important to visit the site and analyze it thoroughly. Figure 34 shows the city limits, Figure 35 shows the neighborhood districts, and Figure 36 shows the historic district for St. Augustine, all in which are important in the final site selection.

There were many possible sites in mind in St. Augustine, which included a site located on Anastasia Island, on the water overlooking the historic district. This location also acted as an anchor to the east side of the bridge, whereas Fort Marion is the anchor for the west side of the bridge. Another possible site location was the renovation of Proctor Library at Flagler College, while also incorporating a museum in it. Finally, the last possible site location is on the south side of the bridge between the roads of Cadiz Street and Bridge street. It is on a waterfront and also on the main pedestrian road of Avenida Menendez. This site would also allow the building to act as an anchor to the south side, whereas the fort is the north side anchor. All of these sites were documented and analyzed for consideration. The purpose of analyzing all these site locations was to determine which location offered the best views, accessibility, sociability, and public interest in

Figure 34. Image of the boundaries of St. Augustine

1_Nelmar Terrace
2_Magnolia
3_Uptown
4_San Sebastian
5_Flaglers Model Land
6_Spanish Quarter
7_Oldtown
8_Lincolnville
9_Old City
10_North Davis Shores
11_South Davis Shores
12_Lighthouse Park

Figure 35. Image of the neighborhoods in St. Augustine

the building.

After studying St. Augustine at a macro level, zooming into the surrounding site selection was important. Also analyzing three types of site plans that show the existing conditions was very important. The first graphic shown, Figure 37, represents the vehicular traffic flow, the second shown represents the relationship between the existing buildings within the city context, or figure ground, which is shown in Figure 38, and the last graphic represents some points

Figure 36. Image of the historic districts in St. Augustine

36

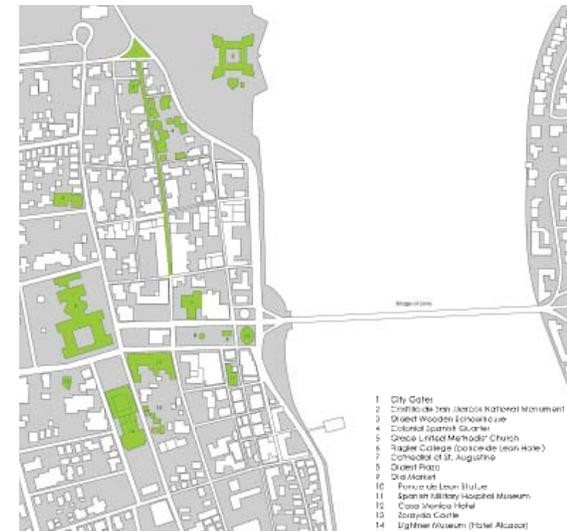Figure 37. Vehicular

Figure 38. Figure Ground

Figure 39. Points of Interest

of interest relevant to the site, shown in Figure 39. These diagrams were created to fully understand St. Augustine's existing context that surrounds the site.

After spending a week in St. Augustine and visiting the selected sites that were stated previously, it was important to narrow down to one site. With thorough documentation and analysis of all three sites and the surrounding city context, the final site selection was narrowed down to the third choice, the site located between the streets of Cadiz and Bridge Street. This site is also located on Avenida Menendez, which runs along the Matanzas River. The site was chosen because it

seemed to be the best location due to the factors of views, accessibility, sociability, and public interest in the building that was also stated previously. This location has a great opportunity for views and since it is located on a main pedestrian road, it has great access to it. This site is also located within walking distance from the 'Pedestrian Mall', which is on St. George Street, where the street is dedicated to pedestrians only. Figure 40 outlines the exact site selection. Figure 41 represents the existing site conditions. Currently there is a restaurant located on the river, which will be relocated to another location. The thesis project will have some cafes incorporated into it, so it

Figure 40. Aerial Image of the site

The site selected complies to all historical connections: Fort Marion, the plaza, and the river. It is important for the site to have a connection with all three because the whole purpose for choosing St. Augustine for the site was based on the history and culture. The fort was the oldest masonry fortress in the US and one of the only forts built with coquina. The Plaza de la Constitución is the oldest public space in the US and was laid out by the Spanish Royal Ordinances. Matanzas River, which means 'killings' or 'slaughters' in Spanish, was a shield against most attacks on St. Augustine. It was also called the 'back door' to St. Augustine. [38] Having a connection with

seemed unnecessary to have the restaurant located there. Also, currently on the site there are three lodging facilities and three residential homes. These inns and hotels are not of any historical importance therefore proposing to tear or relocate the ones on the site seems relevant for the size of the thesis project.

There were some other major factors that needed to be considered when choosing this site, which involved the connection to specific historic locations in St. Augustine.

Figure 41. Existing site and building conditions

Figure 42. Model showing the main connections in green and secondary connections in orange

Figure 43. Plan showing the distance of the site

these three main points of interest is important and crucial when designing the thesis project. These connections all have history behind them, in which they all tell a story about St. Augustine. Figure 42 shows the three main connections, in relation to the site, in green and the secondary connections in orange.

The thesis is such a large project that it needs sufficient amount of space in order for users to feel comfortable and relaxed while visiting the institution. Figure 43 is a diagram of how large the site is, which is 315,487 square feet. Measuring roughly north to south, the site is 500 feet and 639 feet measuring west to east. The measurements come to a calculation of 2.86 minutes to walk from north to south of the site and 3.65 minutes to walk from west to east of the site. That amount of time to walk across the site allows users to enjoy the length of the walk without it being a burden to walk too long in the blistering Florida heat.

Figures 44 through 46 are models that represent the site analysis through the connections, the site edges, and the entry into the site. Figure 44 is a model that is referencing the plaza, the fort, and the river and how it is all connecting

Figure 44. Model showing the three connections

Figure 45. Model showing the site edges

Figure 46. Model showing entry

back to the site. Figure 45 is a model of the site edges, shown in blue, and how the water and roads can affect the site. The orange is representing the main pedestrian roads, King Street, which runs horizontally with the site and Avenida Menendez, which runs parallel to the entry of the site. Figure 46 is a model of the entry points into the site. In this model the orange lines are representing St. George Street, parallel to Avenida Menendez and the main pedestrian mall road, and King Street which turns into the Bridge of Lions. The light blue lines are showing the secondary entrances into the site

from St. George Street and the main road Avenida Menendez. Studying the three sketch models of the site conditions was important when designing the public spaces and entrances into the site.

40

Materiality

Figure 47. Transparent concrete

Figure 48. Light shafts

Figure 49. Light shafts

Figure 50. Glass curtain wall
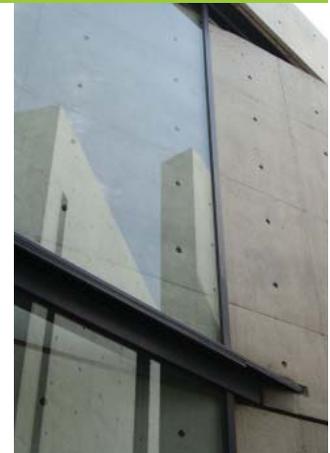
Figure 51. Glass connection with wall

"Material selection is one of the most significant decisions an architect must make, yet it is often not addressed at the beginning of the design process. Likewise, students are typically taught about material and design as if they were unrelated. With the advent of integrated design/build programs, however, the relationship between a project's aesthetics and its materiality has never been more important." [39]

41

The materiality of a building is very important in the remembrance process of the project. During the conceptual phase of this project, many different materials were studied and analyzed. St. Augustine has some Spanish culture within the town so adding color to the project and also balcony spaces seemed adequate. The use of different kinds of concrete is important when showing the uniqueness of certain parts of the building to help establish the memorable experiences. Figure 52 through figure 54 are images of an experiment done on transparent concrete. The transparent concrete would
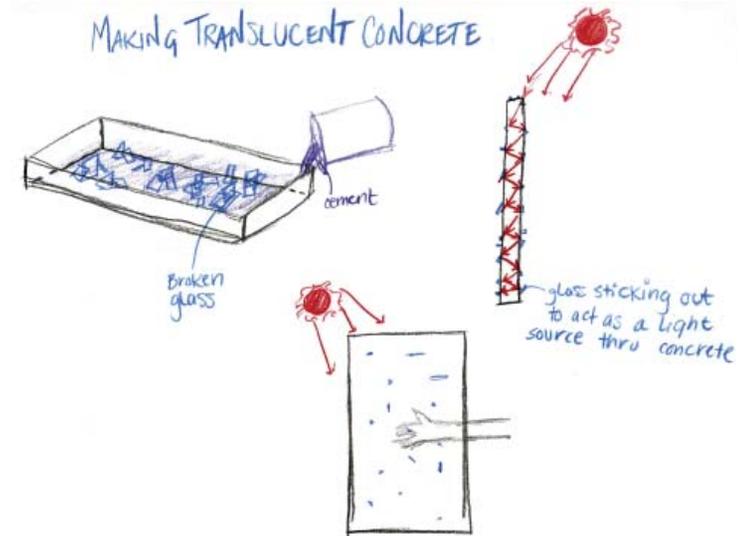
Figure 54. Diagrams of how its made

Figure 52. Model of transparent concrete (the exterior view)

Figure 53. Model of transparent concrete with the lights off

Figure 55. Model of transparent concrete (the interior view)

be used for the exterior wall of the museum that faces the parking lot on the west side of the site. The purpose for the transparent concrete in the museum is because the museum is represented as such a stable, permanent structure that integrating a more light and pure material will create a more friendly and unique approach to applying a solid concrete wall and to still be able to interact with the outside.

Another material that was studied is panels of glass that are embedded into a steel frame structure to create a roof system. This roof system is used for the roof of the museum and library store. The store is open to the four story atrium space, but still needed a roof. Figure 56 is a model of an experiment of what the roof system could be that still allowed interaction within the atrium space without completely creating a solid roofing structure. The material is a steel tube frame structure with colored panels of glass embedded within the structure to allow the light to shine through into the store and onto the merchandise. Figure 57 is a 3-dimensional computer model that shows the colors being shone through the structure.

As stated on the previous page, materiality is a very

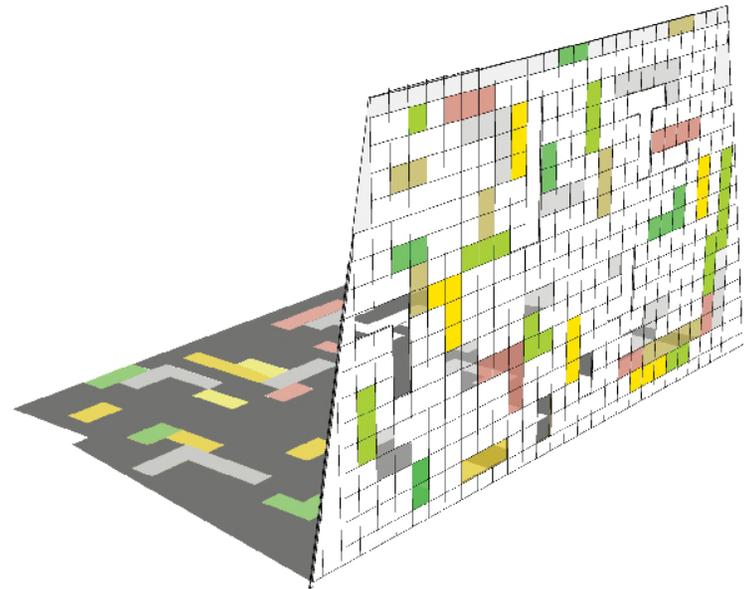Figure 56. Model of the experimental roof system

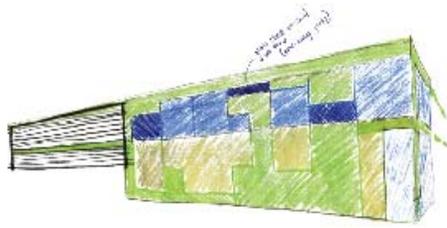Figure 57. 3-Dimensional computer model of the experimental roof system
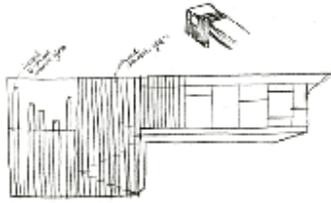
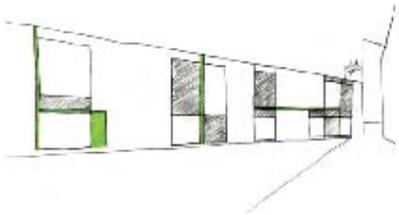Figure 59. Channel glass

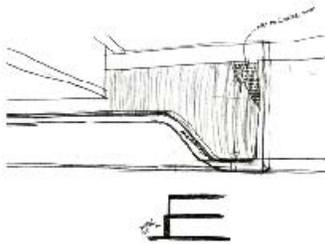Figure 60. Perforated steel sheets

Figure 61. Water plants

Figure 62. Colored tile

Figure 58. Diagrams of materiality throughout the project

important factor to help envoke memories of the building. Figure 58 are diagrams of the different materials, colors, styles, etc that were studied and analyzed to reach the final design. There were many different ideas on how to achieve the memorable experience that is trying to be created. Figures 59 through figures 62 are some of the materials used in the final design. Figure 59 is U-shaped channel glass that is used for the secondary entrance into the building, facing the street and river. Figure 60 is perforated steel sheets that are used for the auditorium exterior walls to create unique shadows in the courtyard. The panels are placed at different distances from the wall to create playful shadows. Figure 61 are plants and trees that live in the water. These plants are located in the retention ponds near the main entrance, along the walkway. Figure 62 are colored tiles that are located, in the project, embedded in the concrete walls of the museum. This design idea was inspired by the Spanish culture that already exists in St. Augustine, on the Flagler College building, where there are colored tiles on the corners of the building. All of these materials, and many more, help establish the experience that is trying to be incorporated into the memory of the user.
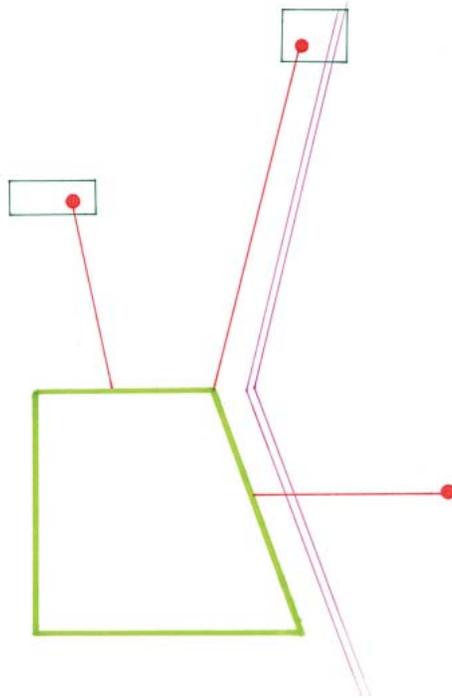
Project Schematics

Figure 63. Diagram of the parti of the site in connection to the fort, plaza, and river

The schematic stage in the project begins after thorough program and site analysis. This stage is the beginning process of possible building schemes, called concept designs. The concepts are derived from the existing site conditions and the specific program requirements. As previously stated in the site analysis section, the site implies a connection to the fort, the plaza, and the river. Also, the site was chosen because of the main key components of obtaining the best views, accessibility, sociability, and public interest. With all these key components and main factors in mind, the beginning concept designs are created.

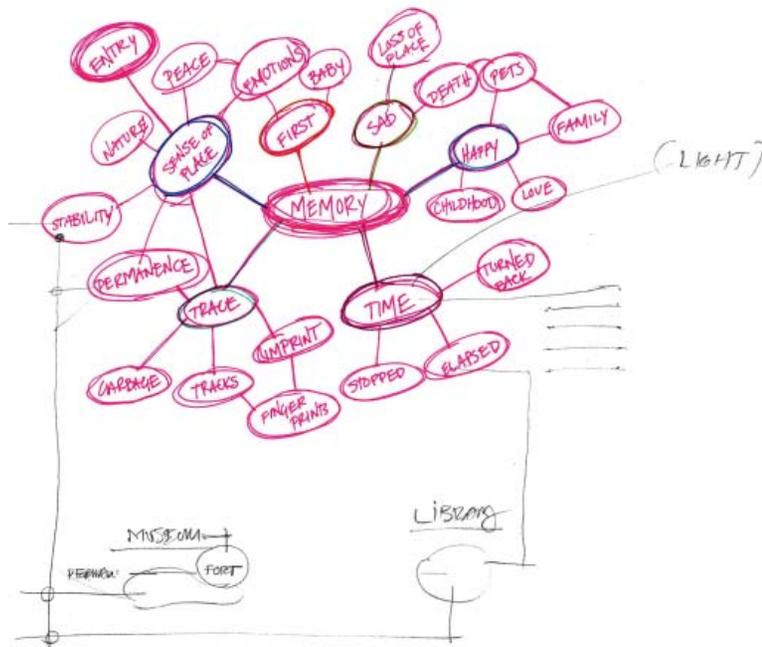Figure 63 is the main parti diagram showing the connection with the plaza, the fort, and the river. This diagram

Figure 64. Diagram of the word *Memory*

being the library. The library is represented more as a light material and is under the key word of *time*. The materiality of each programmatic function is represented in terms of this diagram: the museum being a more hard, stable, concrete material whereas the library being a more open, light, modern material. Figure 65 is a diagram of the circulation from the required programmatic spaces. The green circle represents the museum and the blue circle represents the library. The arrows in between the museum and library show that they are interacting with each other. Each program has a way of
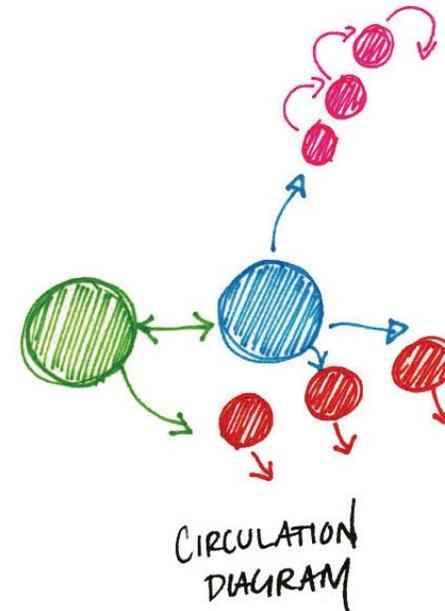
was the main driver when creating the conceptual designs during the thinking process of the project. Figure 64 is a diagram of the concept of memory. Some key words revolve around the word memory and have some connection with the word. These key words are then connected to other words that define the concept of memory, and so forth. The word stability is under the key words *sense of place* and represents the stability of the fort. The museum is represented as a stable part of the project in which it envelopes the less stable part,

Figure 65. Circulation diagram of the program

46

cafe

balcony

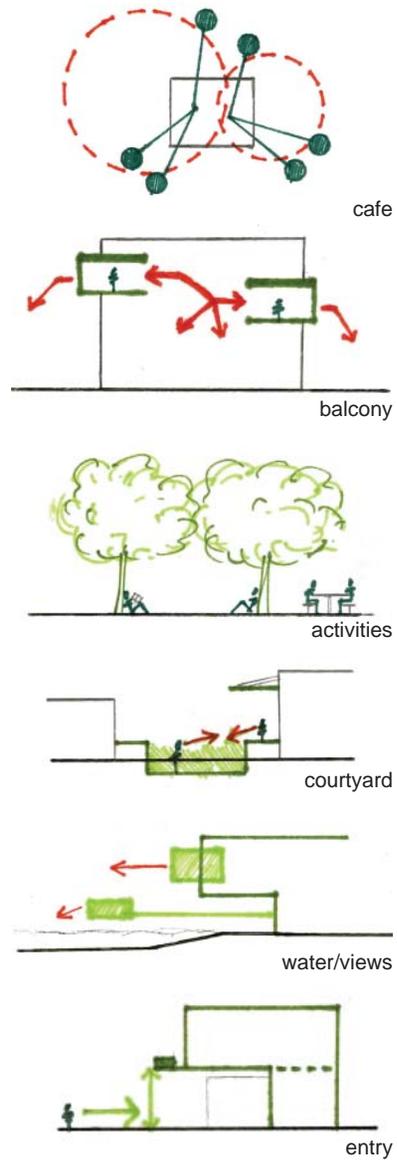activities

courtyard

water/views

entry

Figure 66. Diagrams of the archetypes

Figure 67. Model of the cafe

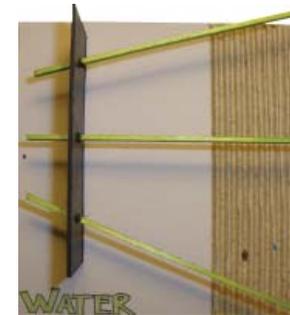Figure 68. Model of the activities

Figure 69. Model of the views to the river

47

Figure 70. Image of a balcony

Figure 72. Image of a courtyard

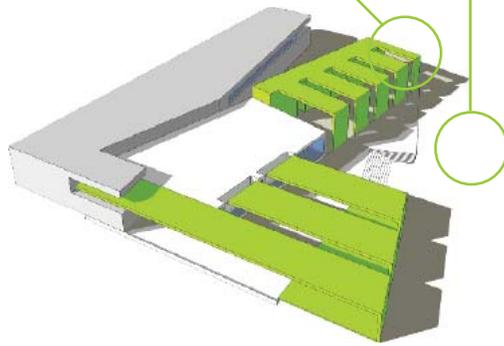Figure 74. Image of a glass atrium entrance
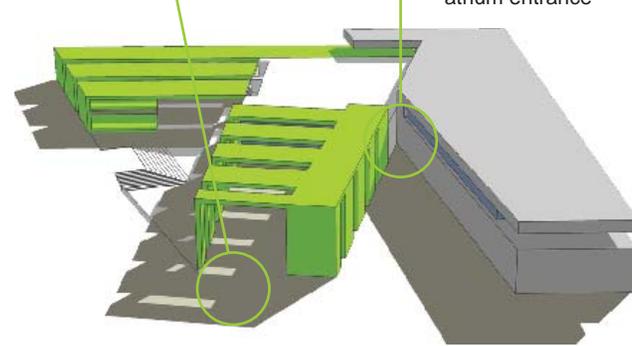

Figure 71. 3-D computer model of archetype spaces

Figure 73. 3-D computer model of archetype spaces

interacting with the other functions involved in the building, including the cafes, the courtyard space, and the intimate reading spaces. In order to understand the circulation pattern and the program spaces, certain archetypes were chosen to study. Figure 66 shows the following archetypes that were chosen, which include the cafe, balcony spaces, activities, courtyard spaces, views to the water, and the entry. Figure 67 through figure 69 are the conceptual models that represent the diagrams shown in figure 66. Figure 70, figure 72, and figure 74 are images of how the balcony spaces, the courtyard spaces, and the entry might look like or start to progress into something similar. The six different archetypes are different moments of the building that will help the user remember that specific aspect about the building. The entire thesis project is based off the idea of memory and how architecture can provoke certain memories for the user. In other words, by
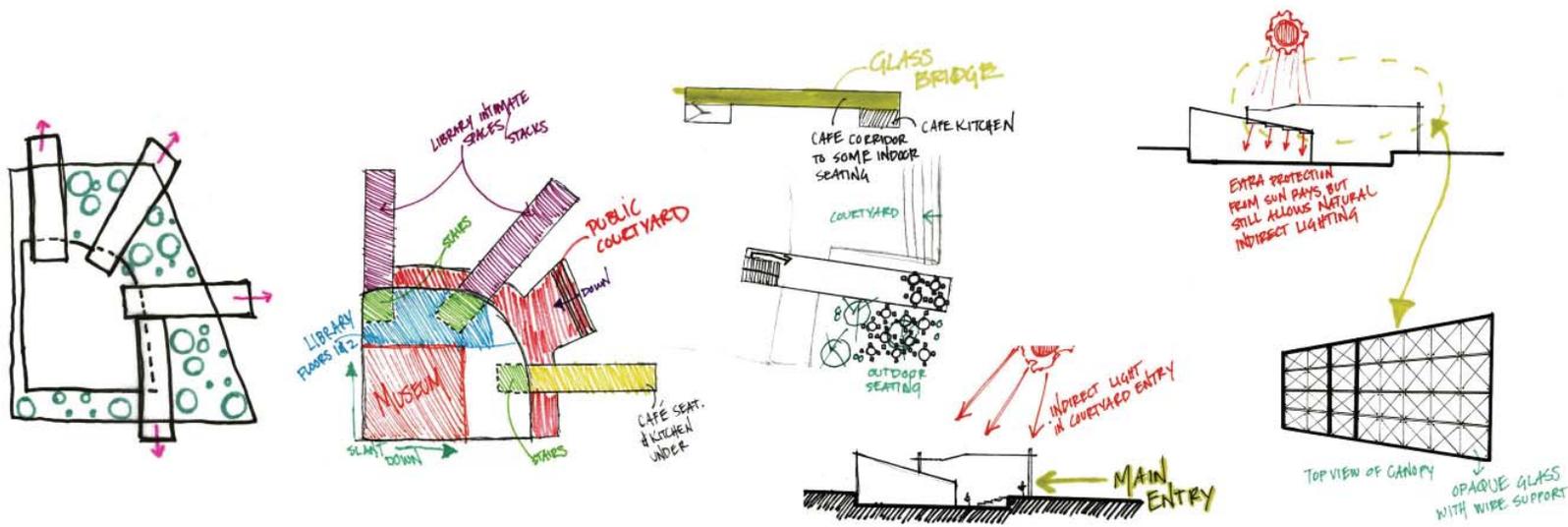
Figure 75. Scheme One diagrams

incorporating memorable spaces by the uniqueness of
the spaces. The conceptual schemes of the project were
established after thorough analysis of the six archetypes.
Figure 75 are some diagrams of the first conceptual design.
As shown in these diagrams, there are main components
that point in the direction of the plaza, fort, and river. These
components are representing the possible connections and
views toward the historic pedestrian areas. The courtyard
space is sunken below the ground by five feet to create a
hierarchical courtyard. The three components that reference
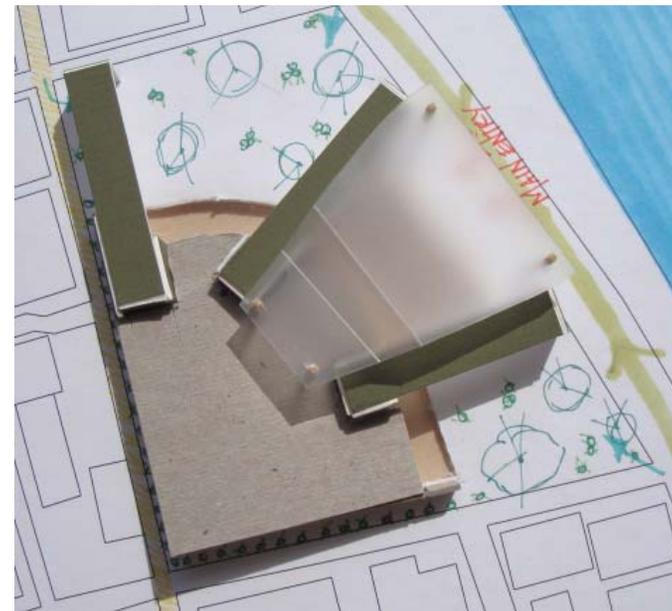the plaza, fort, and river are represented as glass bridges that

Figure 76. Model of scheme one

49

FINGER-LIKE FORMS THAT
ARE GRABBING
THE BUILDING TO IMPLY
THE SENSE OF TRYING TO BE A PART
OF ST. AUGUSTINE.

TO BE A PART OF
ST. AUGUSTINE'S IDENTITY
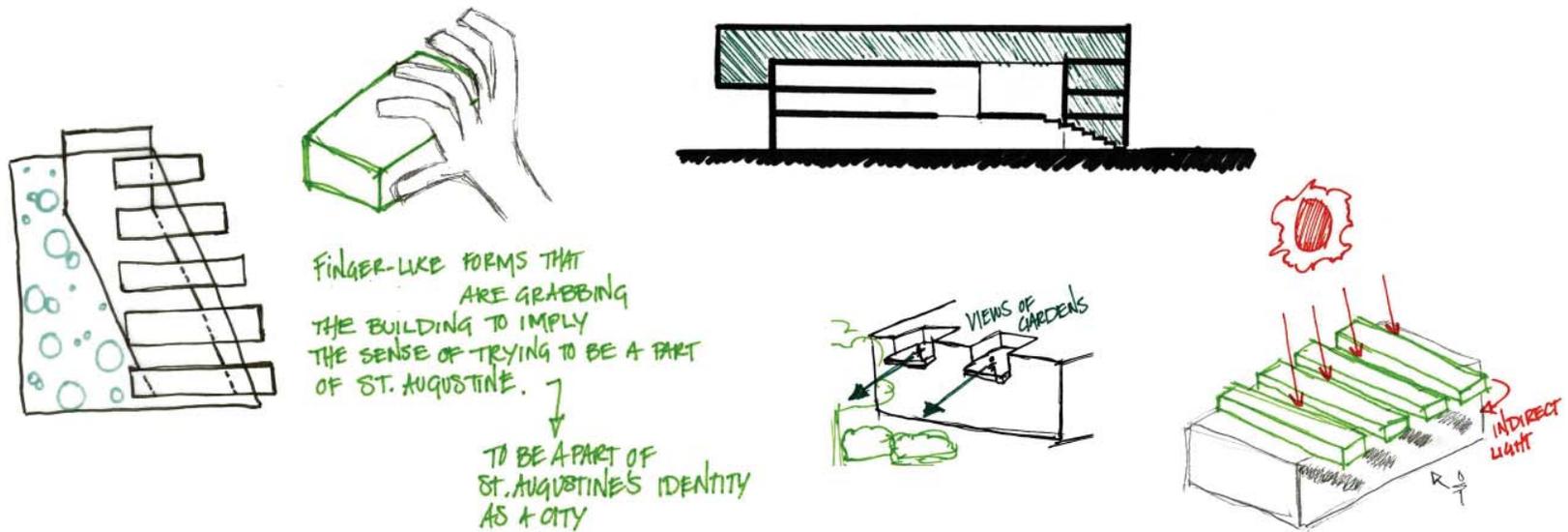AS A CITY

VIEWS OF GARDENS

INDIRECT LIGHT

Figure 77. Scheme Two diagrams

allow plenty of views of the river and downtown historic district. The canopy system would be made of a frosted transparent material that allowed indirect sunlight to shine through without intensifying the heat rays into the space. Figure 77 are some diagrams of the second conceptual design. Once again, there are components that point towards the river. These components are represented as finger-like forms to act as a hand that is grabbing the building from underneath to imply that the building is becoming a part of St. Augustine. This concept implies a raised courtyard to make it an elevated space overlooking the streetscape and river. Where the finger-like
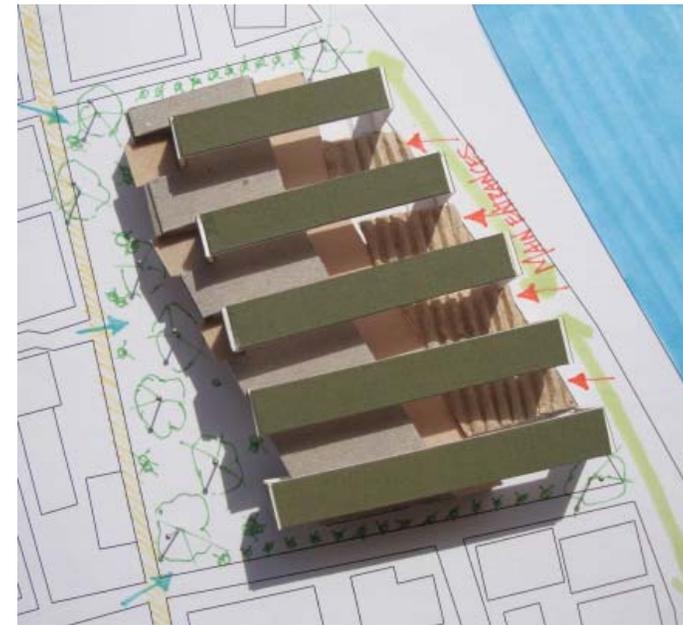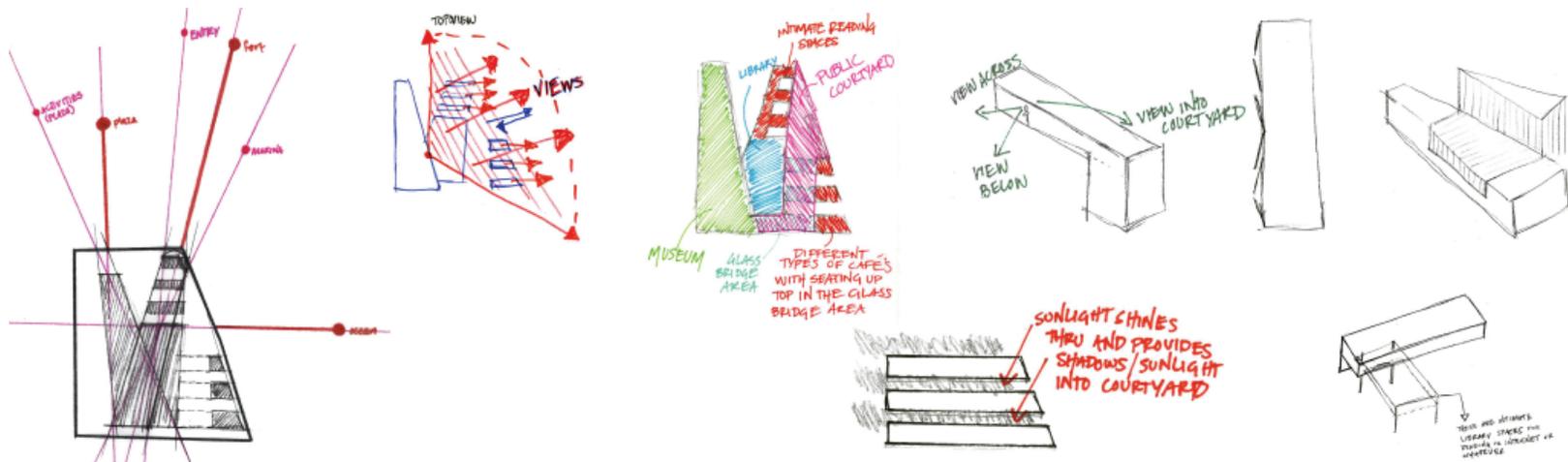

Figure 78. Model of scheme two

50

Figure 79. Scheme Three diagrams

forms meet with the main building, there is a void in the roof, also shown as balcony spaces for views of the gardens in the back. This is also a way for the users to feel like they are connected to the outside, which allows interaction between the users inside and the users outside.

Figure 79 are some diagrams of the third conceptual design. This concept was the main driver for the project. The form of this concept was driven from the location of the three main connection points mentioned previously as the plaza, the fort, and the river. Figure 80 shows the museum building in brown, the library in white and the cafe spaces and intimate reading spaces in green. The three green colored spaces
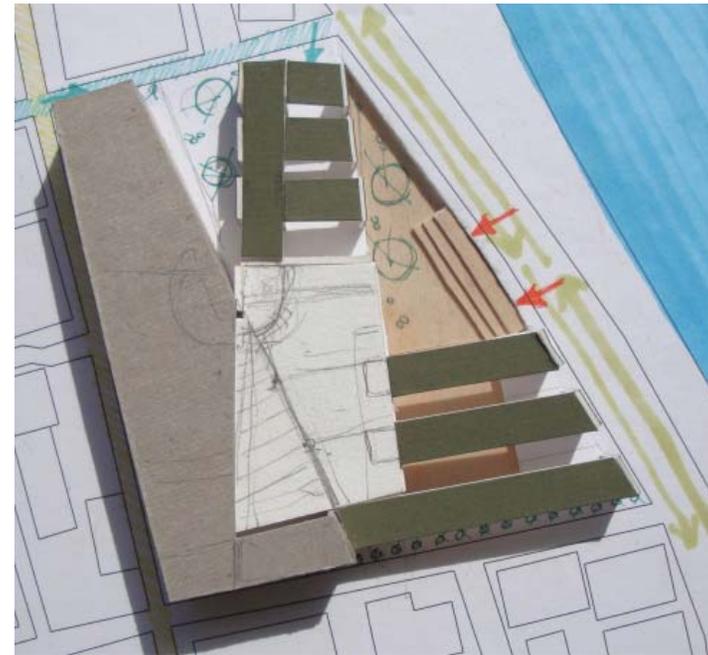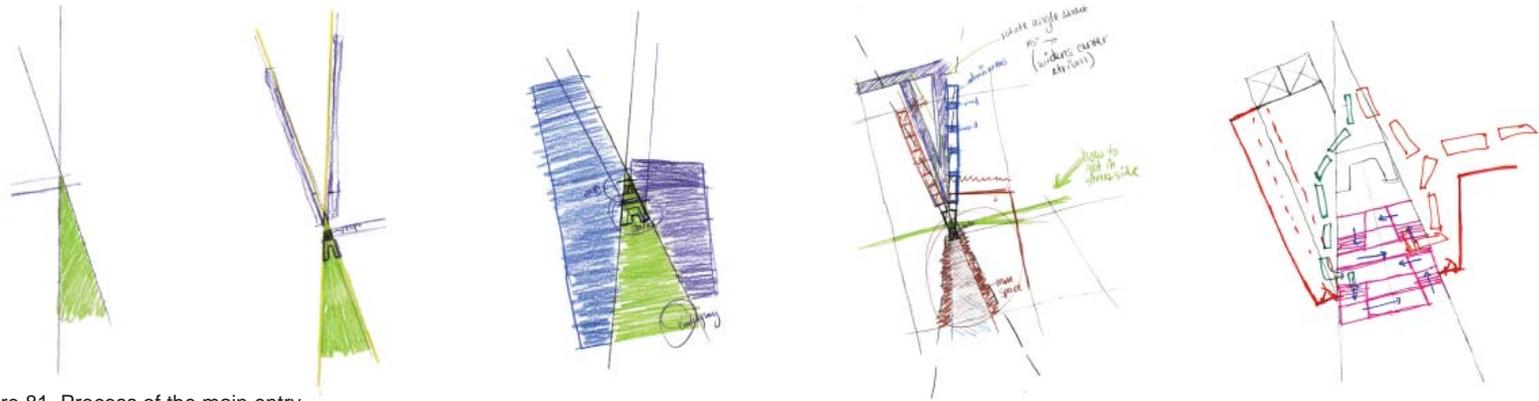

Figure 80. Model of scheme three

Figure 81. Process of the main entry

on the north side of the site are the intimate reading spaces, which are elevated to the second floor, to allow a partially covered space underneath for artwork. The three green colored spaces that are on the south side of the site are the cafe spaces, which are elevated five feet above ground and also with a second level seating to allow for maximum views. On the white portion of the model there is a triangle drawn on top, which represents the shared spaces between the museum and library. This space is the most important space of the project and is also the main entry into the building.

Figure 81 shows the process of the main triangular space that represents the shared spaces of both programmatic functions. In the second diagram, it begins to show the main entrance and some program spaces within the *V* shape. The third diagram begins to show the spaces broken up, with the museum in blue and the library in purple, and also the shared spaces in green. The fourth diagram begins to show the entrance walkway and again the administrative spaces that are created by the *V* shape. It also shows the thinking process of a second entrance located on the street side. The fifth diagram is a circulation diagram within the main triangular space: green representing the museum circulation and red representing the library circulation. These diagrams were very important because they helped with the design of the main triangular space that is the most important space. It was a difficult task to overcome the shape and requirements for that space, but it was accomplished through diagrams and strategies.

Final Design

After extensive research and analysis, the final design was beginning to develop. As shown previously, in the schematic design section, the form of the building was established and the program spaces were beginning to come together. In this stage of the thesis project, the technical aspects were being thought of when arranging the program spaces within the form. The shape of the building was not final at this point, to allow room for arranging and tweeking of the spaces.

Figure 82 is a diagram of how the courtyard spaces, parking, and entrances start to form. The retention ponds are shallow with pebbles to create a water feature with a purpose other than just to have water on the site. There are plants in it

to allow for a more welcoming approach to the building, while providing shade for the walkway. The green spaces that are shown in the diagram represent areas with grass and plants. It is also elevated up five feet to allow users to overlook onto the river while enjoying some food at the cafe areas.

The entry into the building was very important. The walkway into the building is a great place to experience because of the pavers that are placed there. The pavers for the entrance have engraved names and stories on every other paver to share the history of St. Augustine to the user as they pass through. This project has many spaces that can be shared as a whole, so creating a triangular atrium space that brought the shared spaces together would introduce a unique
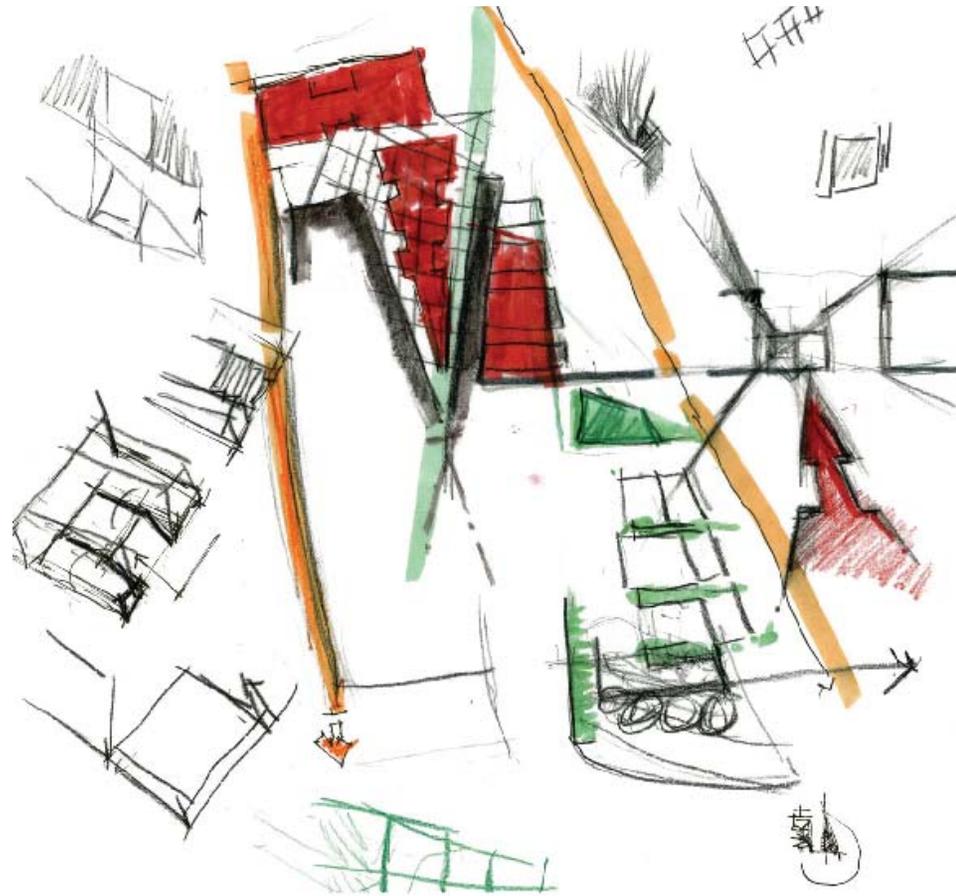
Figure 82. Diagram of project

approach to the entrance. The atrium space is four levels high and is completely open to both program functions.

This thesis project has many opportunities for views all around the building. This is to create the memorable experiences that have been mentioned in numerous sections.

The library has the most opportunities for views into the courtyard space and into the intimate reading spaces. The cafe spaces also have maximum view to the river and courtyard. This is to allow the users within the building to interact with the people outside.
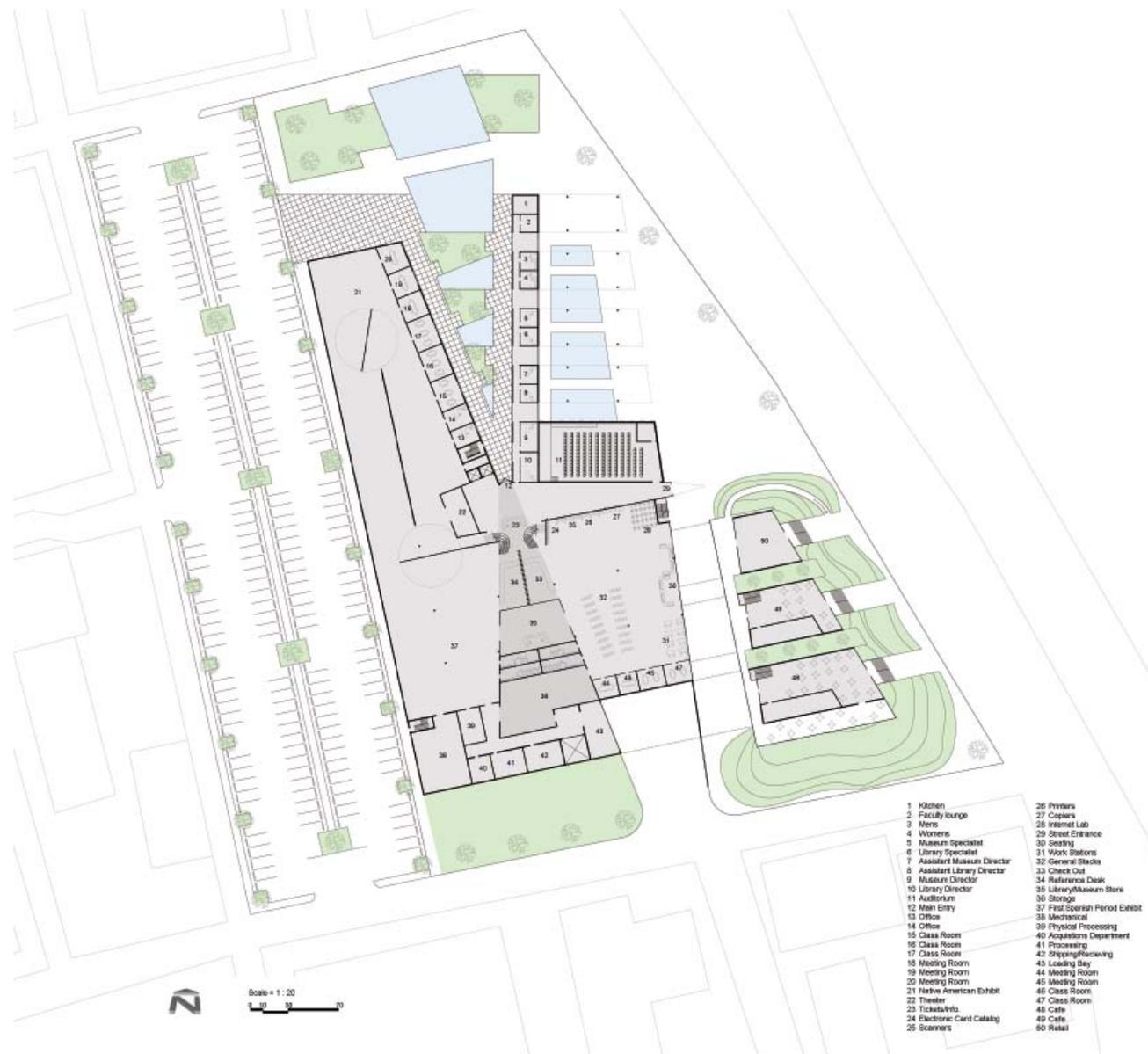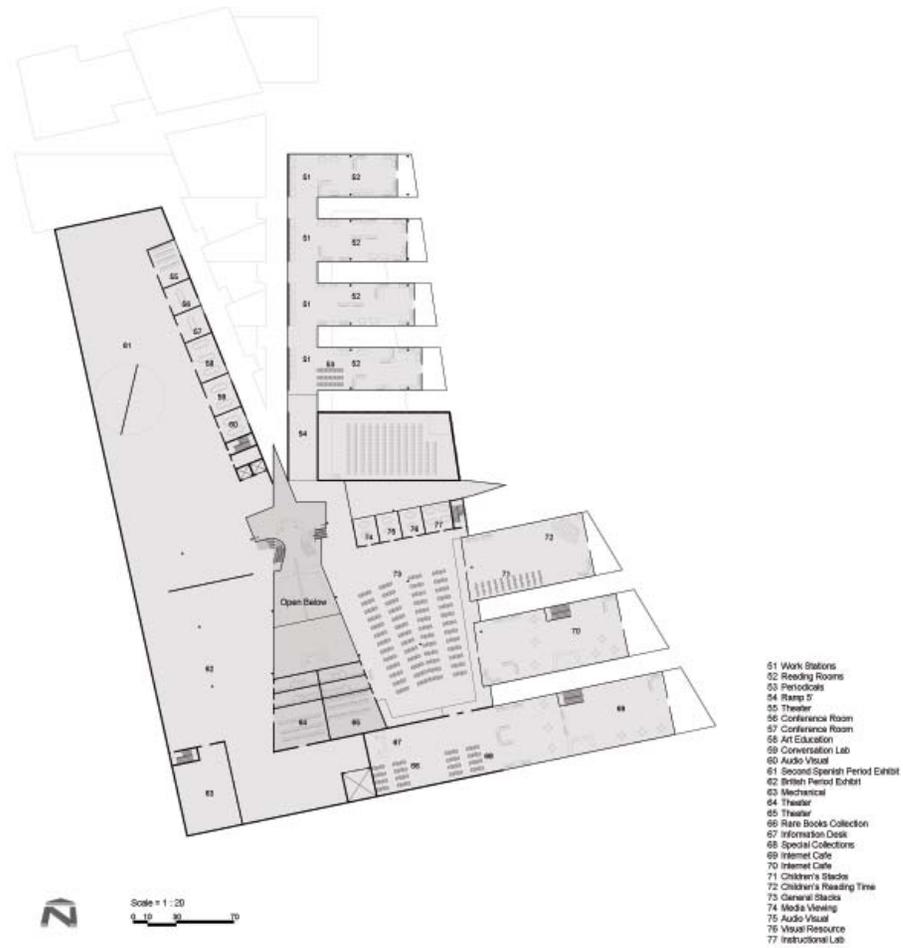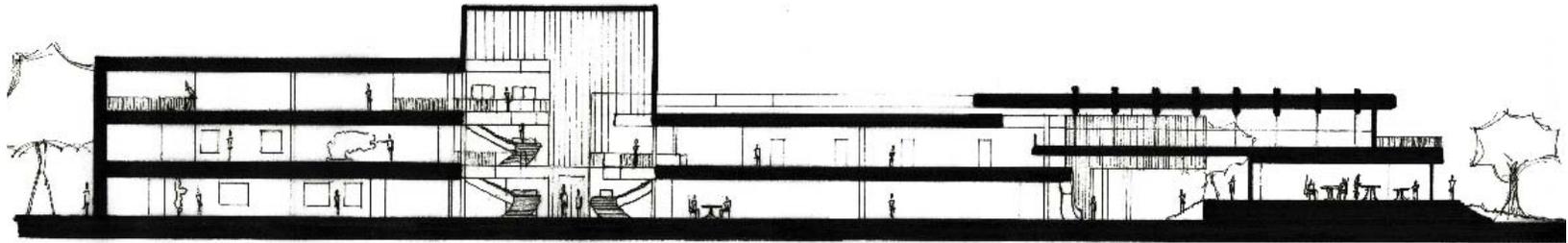
Figure 83. Site Plan

55

Figure 84. First Level

1	Kitchen	26	Printers
2	Faculty lounge	27	Copiers
3	Mens	28	Internet Lab
4	Womens	29	Street Entrance
5	Museum Specialist	30	Seating
6	Library Specialist	31	Work Stations
7	Assistant Museum Director	32	General Stacks
8	Assistant Library Director	33	Check Out
9	Museum Director	34	Reference Desk
10	Library Director	35	Library/Museum Store
11	Auditorium	36	Storage
12	Main Entry	37	First Spanish Period Exhibit
13	Office	38	Mechanical
14	Class Room	39	Physical Processing
15	Class Room	40	Acquisitions Department
16	Class Room	41	Processing
17	Class Room	42	Shipping/Receiving
18	Meeting Room	43	Loading Bay
19	Meeting Room	44	Meeting Room
20	Meeting Room	45	Meeting Room
21	Native American Exhibit	46	Class Room
22	Theater	47	Class Room
23	Tickets/Info.	48	Cafe
24	Electronic Card Catalog	49	Cafe
25	Scanners	50	Retail

Scale = 1 : 20

56

Figure 85. Second Level

51 Work Stations
52 Reading Rooms
53 Periodicals
54 Ramp 5
55 Theater
56 Conference Room
57 Conference Room
58 Art Education
59 Conversation Lab
60 Audio-Visual
61 Second Spanish Period Exhibit
62 British Period Exhibit
63 Mechanical
64 Theater
65 Theater
66 Rare Books Collection
67 Information Desk
68 Special Collections
69 Internet Cafe
70 Internet Cafe
71 Children's Stacks
72 Children's Reading Time
73 General Stacks
74 Media Viewing
75 Audio-Visual
76 Visual Resource
77 Instructional Lab

Scale = 1 : 20

57

Open Below

78 Outdoor Terrace
79 American Period Exhibit
80 Colonial Period Exhibit
81 Mechanical
82 Theater

Scale = 1 : 20

Figure 86. Third Level

58

Not To Scale

Figure 87. Section A
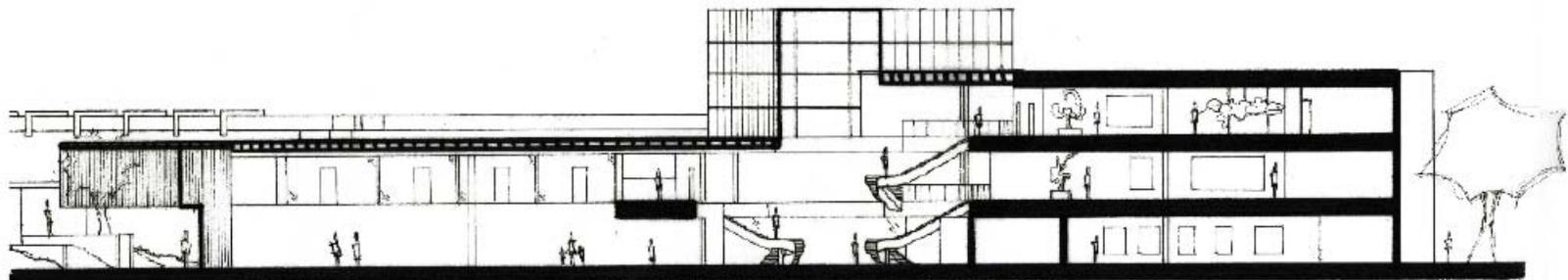
Not To Scale

Figure 88. Section B (Not to scale)

59
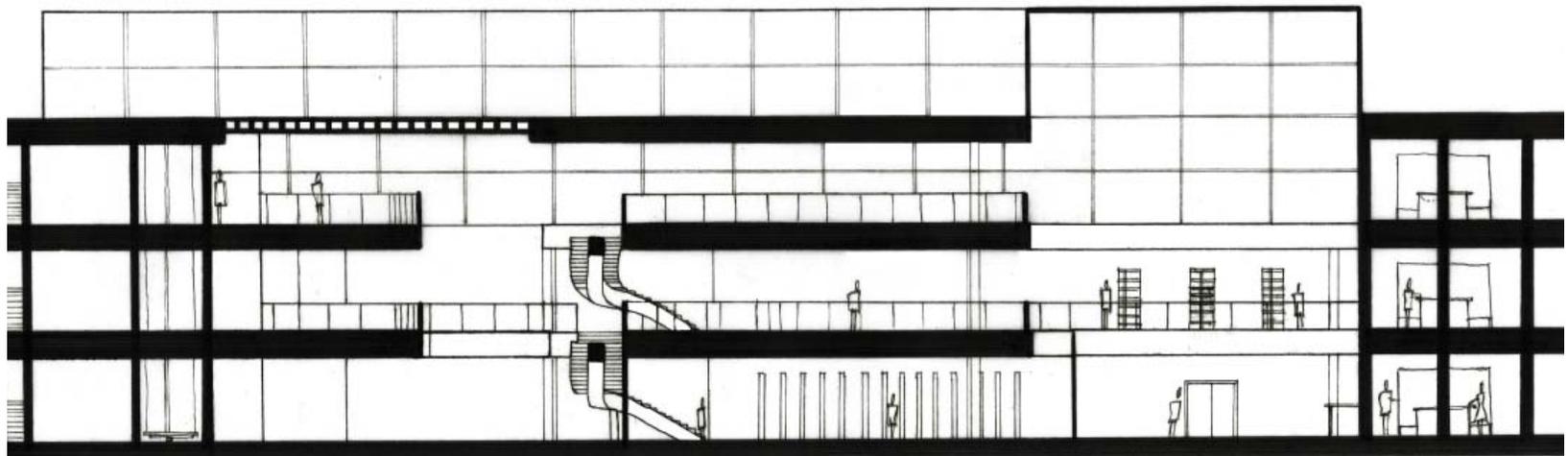
Not To Scale

Figure 89. Section C

Figure 90. Perspective

61
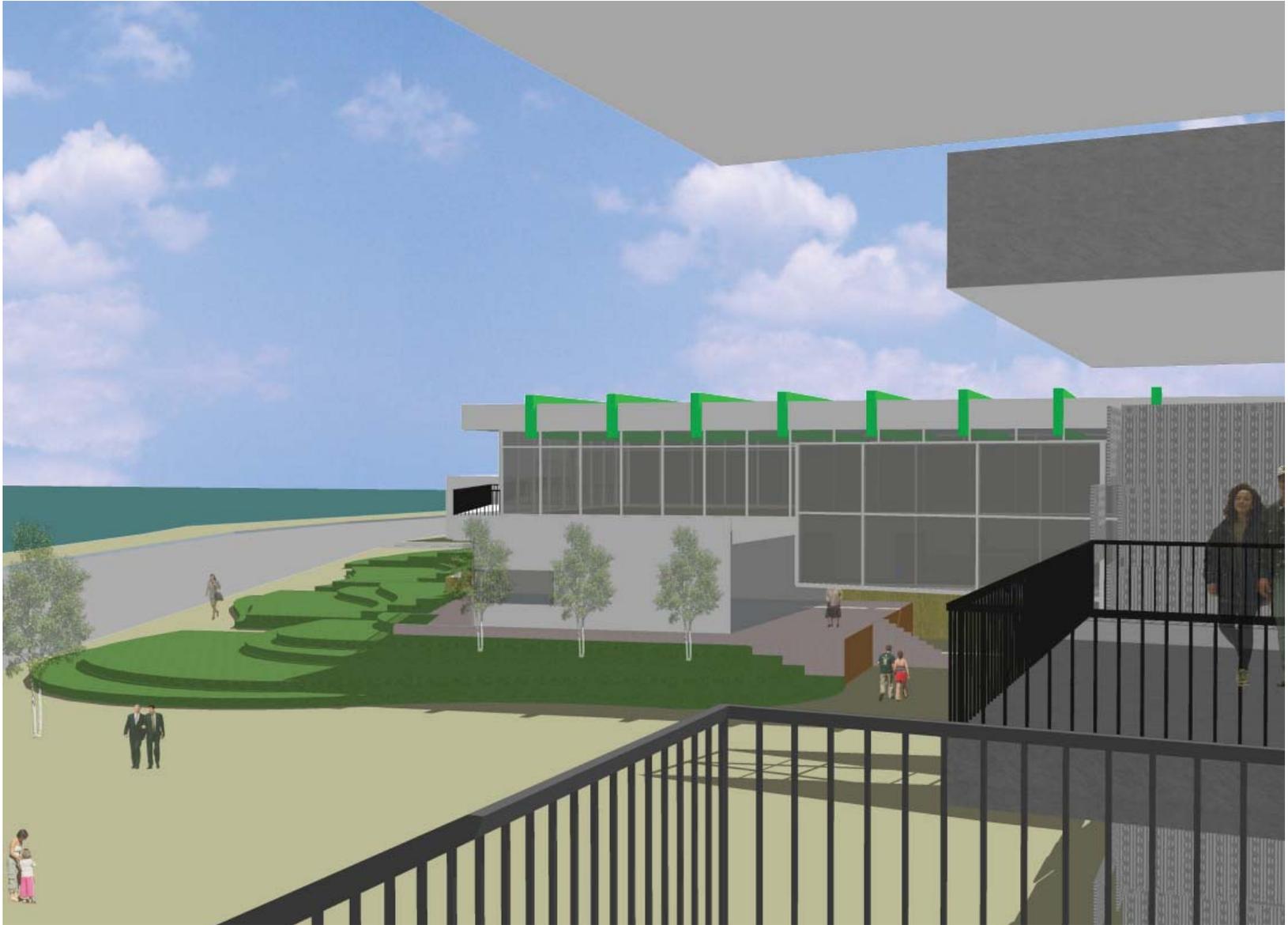
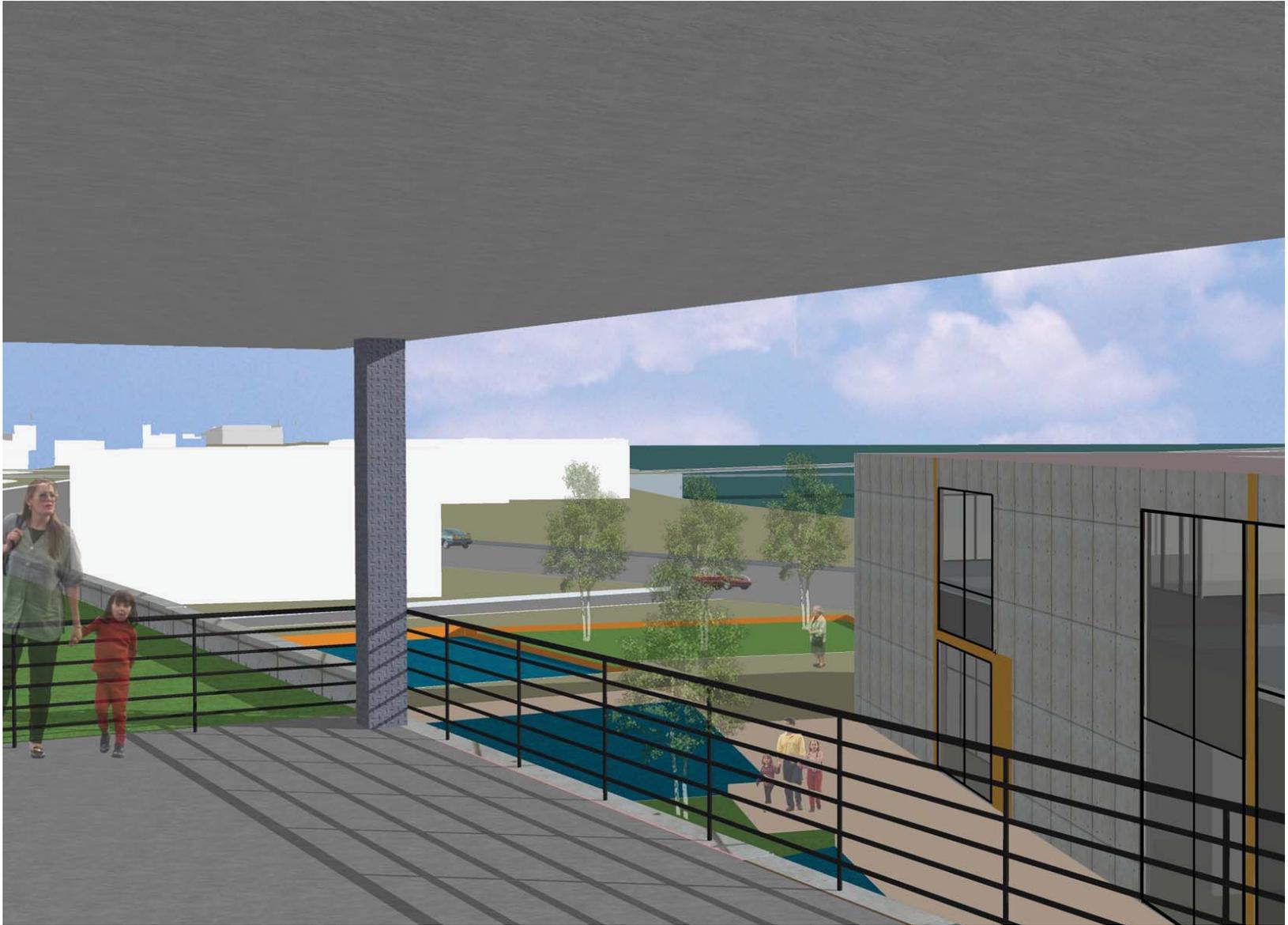Figure 91. Looking towards the cafe spaces
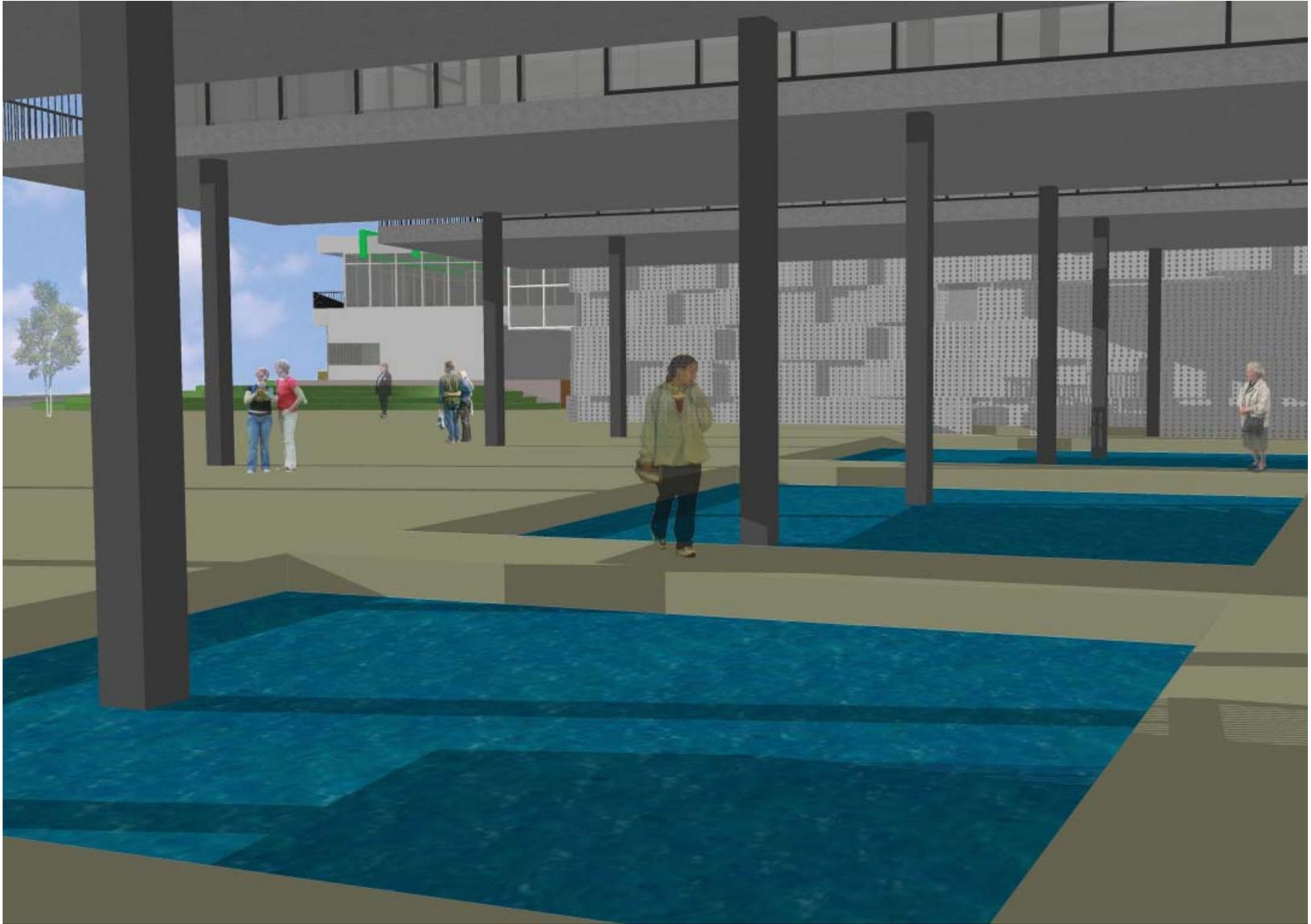
Figure 92. View from outdoor terrace

Figure 93. View from under intimate reading spaces

64

Figure 94. View of main entrance
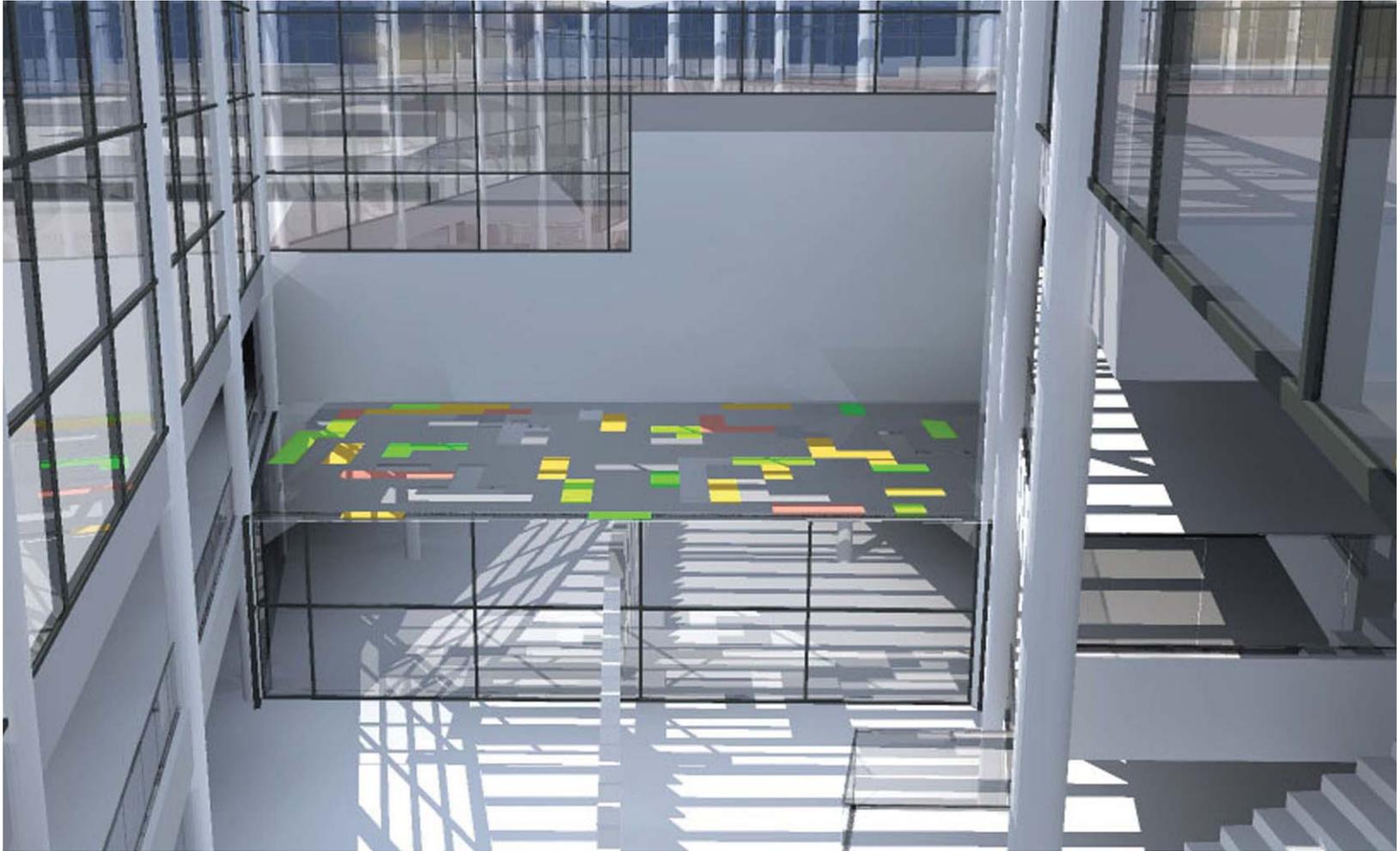
Figure 95. View of atrium space

Figure 96. View of roof system

67

Figure 97. View of streetside entrance

Figure 98. View of cafe spaces
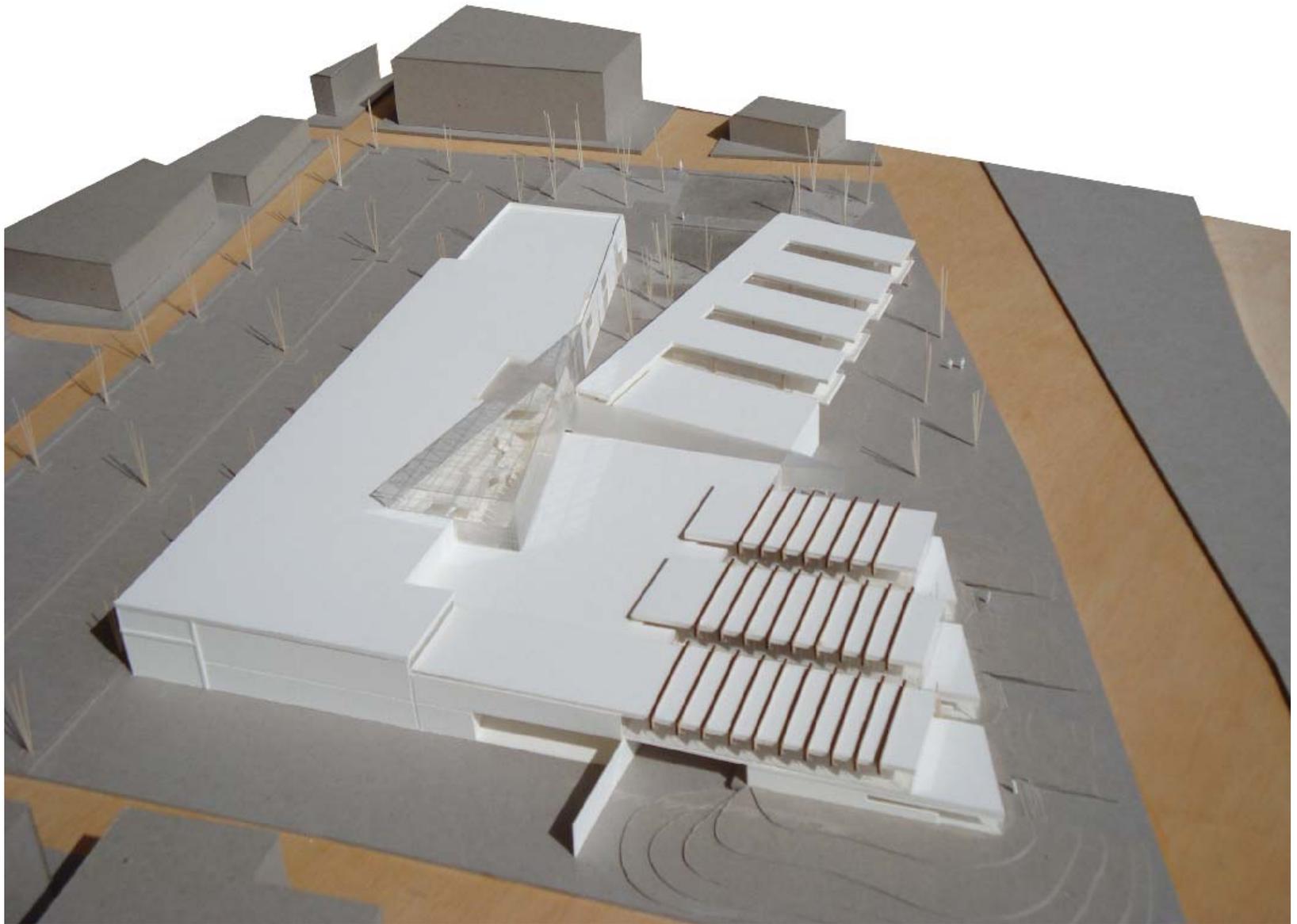
Figure 99. Final Site Model
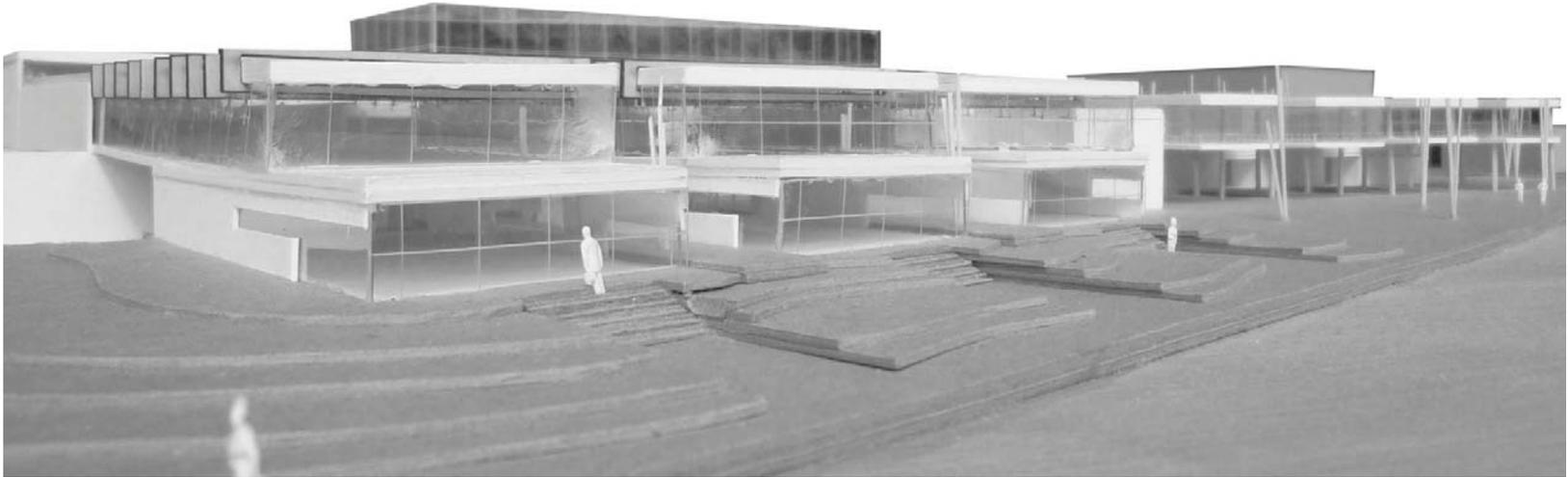
Figure 100. Final Site Model
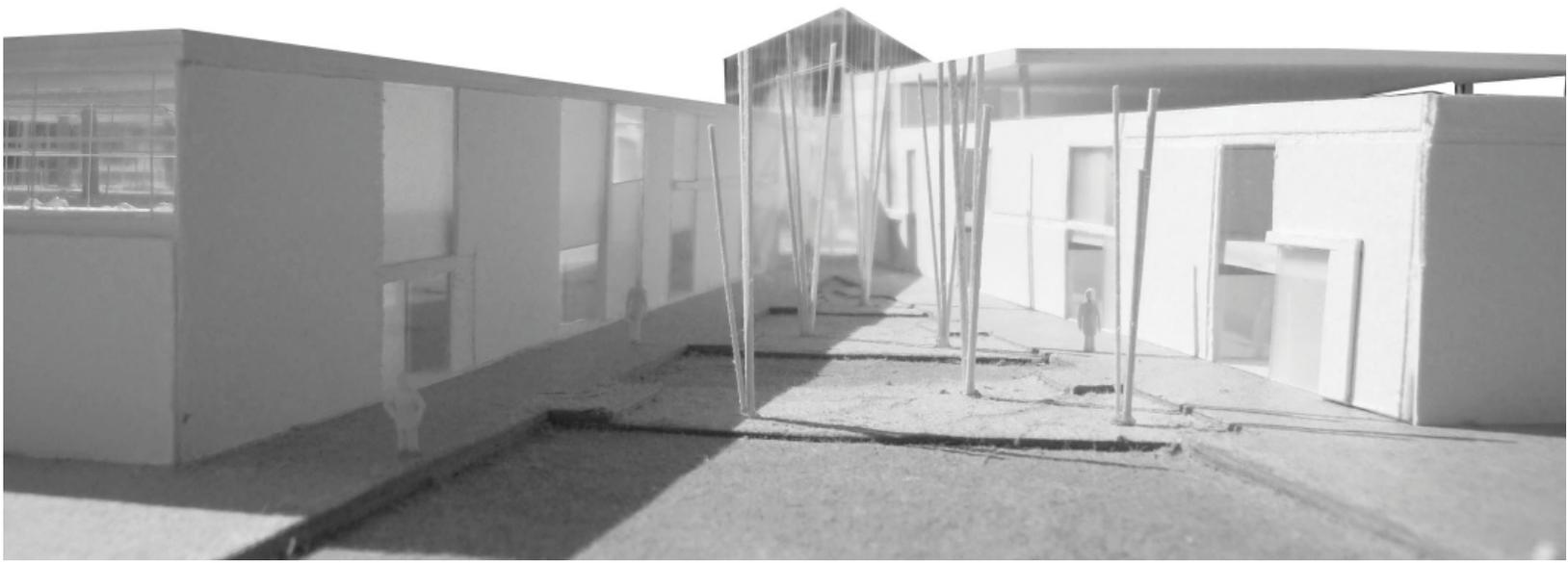
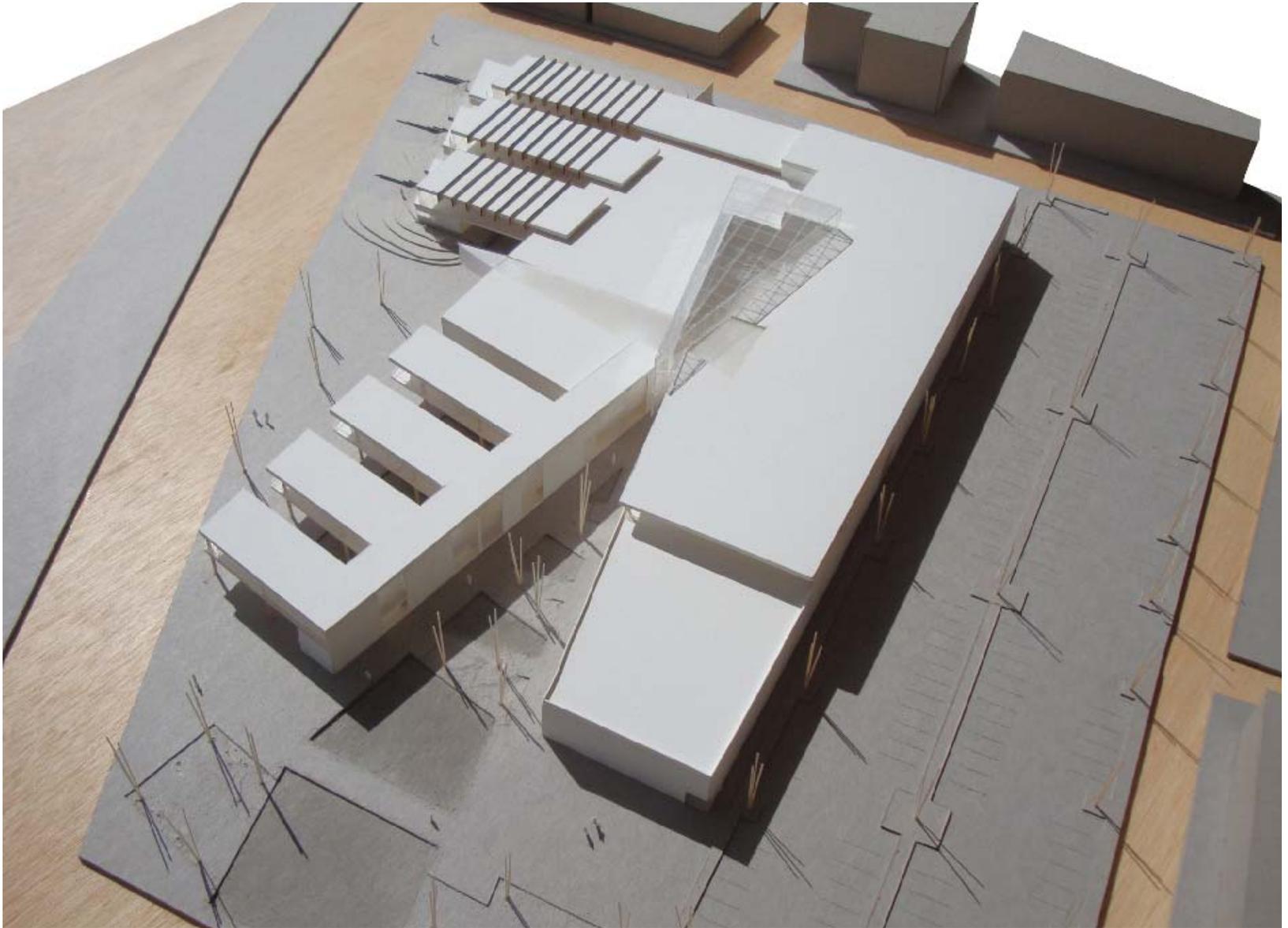Figure 101. Final Model

Figure 102. Cafe

Figure 103. Entrance

Figure 104. Final Model

Conclusion

This thesis project attempted to solve many issues with merging two program functions together under one roof. Typically a museum is its own building with a small collection of archives located inside and a library is its own building with a small size exhibit space or art display. Rarely is there a full size museum under the same roof with a full size library. Both programs are used as an educational function and both involve the surrounding communities participation in services. With the current economy still on a downwards spiral, collaborating both programs together is the perfect solution.

The thesis project was researched and analyzed for two semesters. Every decision was based on analysis, site visits, conceptual ideas and models, and time to re-study everything. With thorough research, the project became a large task to prove how memory can be incorporated into architecture. There are many different ways to remember an object, feeling, experience, journey, etc. This thesis project shows the many spaces involved in the museum and library that invoke certain memories and experiences as the user visits the building. Figure 81, on the next page, is an example of a space that is supposed to bring upon specific feelings to each user who passes through the atrium space. The height of the atrium space alone creates a feeling of being small is such a grand space, which creates a different experience to each user.

This thesis project was a challenge to overcome

the problems and issues that relate to museum uses and library uses. The staff for each program will be challenged to understand and operate one anothers functions. This gives the opportunity to save money and time for each of the program functions. Specific criticism was given during the design presentations, to allow time for change and undersanding of certain aspects of the project that may have not been thought of or discovered. Design decisions changed, program spaces moved, and a better understanding of how each function works was then approached and accomplished. Overall, with the given amount of time to research, analyze, and discover, the thesis project accomplished its goals of collaborating a museum and library under one roof.

Figure 105. The atrium space

End Notes

1. Dubos, 62

2. <http://www.1001memory.com/index.html>

3. <http://www.1001memory.com/index.html>

4. <http://www.1001memory.com/index.html>

5. <http://www.1001memory.com/index.html>

6. <http://www.1001memory.com/index.html>

7. <http://www.1001memory.com/index.html>

8. Greene, 37

9. <http://www.forbestraveler.com/best-lists/most-visited-museums-us-2009-story.html>

10. <http://www.forbestraveler.com/best-lists/most-visited-museums-us-2009-story.html>

11. <http://www.forbestraveler.com/best-lists/most-visited-museums-us-2009-story.html>

12. Martin, 83

13. <http://librariesandmuseums.blogspot.com/>

14. <http://librariesandmuseums.blogspot.com/>

15. Martin, 86

16. Martin, 81

17. Wythe, 54

18. <http://librariesandmuseums.blogspot.com/>

19. <http://librariesandmuseums.blogspot.com/>

20. Madden, 19

21. <http://en.wikipedia.org/wiki/History>

22. <http://www.sacred-destinations.com/egypt/alexandria-library-bibliotheca-alexandrina>

23. <http://www.touregypt.net/library/revival.htm>

24. <http://www.touregypt.net/library/revival.htm>

25. <http://theegyptexperience.blogspot.com/2009/03/bibliotheca-alexandrina.html>

26. <http://www.arcspace.com/architects/snoehetta/alexandria/>

27. <http://www.bibalex.org/English/aboutus/building/architecture.htm>

28. <http://www.bibalex.org/English/aboutus/building/architecture.htm>

29. <http://www.mosi.org/index.html>

30. <http://www.mosi.org/index.html>

31. <http://myfloridahistory.blogspot.com/2007/04/tampa-architecture-mosi.html>

32. <http://www.nps.gov/casa/index.htm>

33. <http://www.nps.gov/casa/index.htm>

34. <http://www.nps.gov/casa/index.htm>

35. <http://www.nps.gov/casa/index.htm>

36. <http://www.nps.gov/casa/index.htm>

37. Waterbury, 70

38. <http://en.wikipedia.org/wiki/Matanzas_River>

39. Bell, inside cover

Works Cited

Arcspace. "Snøhetta: Bibliotheca Alexandrina." 1999-2009. Arcspace. 10 July 2009

        <http://www.arcspace.com/architects/snoehetta/alexandria/>.

Baedeker, Rob. "America's 25 Most Visited Museums '09." 2009. Forbes.com LLC. 10 July 2009

        <http://www.forbestraveler.com/best-lists/most-visited-museums-us-2009-story.html>.

Bell, Victoria Ballard. *Materials For Design*. New York: Princeton Architectural Press, 2006.

Bibliotheca Alexandrina. "Architectural Design." Alexandria, Egypt. 07 July 2009

        <http://www.bibalex.org/English/aboutus/building/architecture.htm>.

"Castillo de San Marcos." 28 January 2008. National Park Service: US Department of the Interior. 27 July 2009

        <http://www.nps.gov/casa/index.htm>.

Dubos, René. *So Human an Animal*. New Brunswick, New Jersey: Transaction Publishers, 1998.

Exploratorium. "Memory Exhibition." The Museum of Science, Art, and Human Perception at the Palace of Fine Arts. San

     Francisco, California. 1998-1999. 07 July 2009

     <http://www.exploratorium.edu/memory/index.html>.

Greene, Herb. *Mind & Image: An Essay on Art and Architecture.* Kentucky: The University Press of Kentucky, 1976.

Hayes, Holly. "Bibliotheca Alexandrina, Alexandria." 2005-2009. Sacred Destinations. 17 July 2009

     <http://www.sacred-destinations.com/egypt/alexandria-library-bibliotheca-alexandrina>.

"History." Wikipedia: The Free Encyclopedia. 2009. 01 August 2009

     <http://en.wikipedia.org/wiki/History>.

Jones, Lucy D. "My Florida History." 26 April 2007. 10 July 2009

     <http://myfloridahistory.blogspot.com/2007/04/tampa-architecture-mosi.html>.

Kadis, Robyn. "The Egypt Experience: Bibliotheca Alexandrina." 29 March 2009. South Africa. 27 June 2009

     <http://theegyptexperience.blogspot.com/2009/03/bibliotheca-alexandrina.html>.

Kozak, Kathryn. "Museums and Libraries." 25 November 2005. New York. 4 July 2009

      <http://librariesandmuseums.blogspot.com/>.

Madden, Kathy, Project for Public Spaces, and Andy Wiley Schwartz. *How to Turn a Place Around : A Handbook for Creating*

      Successful Public Spaces. New York, NY: Project for Public Spaces, Inc., 2005.

Martin, Robert S. Association of College and Research Libraries. "RBM [Electronic Resource] : A Journal of Rare Books,

      Manuscripts, and Cultural Heritage." (2000-).

"Matanzas River." Wikipedia: The Free Encyclopedia. 2009. 01 August 2009.

      <http://en.wikipedia.org/wiki/Matanzas_River>.

"Memories: Diamonds or Rust?." 2008. 01 July 2009

      <http://www.1001memory.com/index.html>.

"Mosi is the Largest Science Center in the Southeastern U.S." 2008-2009. MOSI. 10 July 2009

      <http://www.mosi.org/index.html>.

"The Revival of the Ancient Library of Alexandria." 1996. InterCity Oz, Inc. 14 July 2009

      <http://www.touregypt.net/library/revival.htm>.

Waterbury, Jean Parker. "*The Oldest City: St. Augustine Saga of Survival.*" St. Augustine, Florida: The St. Augustine Historical Society, 1983.

Wythe, Deborah. Association of College and Research Libraries. "RBM [Electronic Resource] : A Journal of Rare Books, Manuscripts, and Cultural Heritage." (2000-).

Bibliography

Adams, William, R. *St. Augustine and St. Johns County: A Historical Guide*. Sarasota, Florida: Pineapple Press, Inc, 2009.

Alexander, Christopher, et al. *A Pattern Language : Towns, Buildings, Construction*. New York: Oxford University Press, 1977.

Bloomer, Kent C., et al. *Body, Memory, and Architecture*. New Haven: Yale University Press, 1977.

Council on Library and Information Resources, and Geoffrey T. Freeman. *Library as Place : Rethinking Roles, Rethinking Space.* Washington, D.C.: Council on Library and Information Resources, 2005.

Crane, Susan A. *Museums and Memory.* Stanford, California: Standford University Press, 2000.

De Kerckhove, Derrick. *The Architecture of Intelligence*. Basel: Boston; Birkhäuser, 2001.

Downing, Frances. *Remembrance and the Design of Place*. 1st ed. College Station, Tex: Texas A&M University Press, 2000.

Fenton, Joseph. *Hybrid Buildings*. New York, San Francisco: Pamphlet Architecture, Ltd., and William Stout Architectural
      Books, 1985.

Gonzalez, Xavier. "Portraits." *Magazine of Architecture + Technology* 2000: 2-11

Kavanagh, Gaynor. *Dream Spaces: Memory and the Museum*. London & New York: Leicester University Press, 2000.

Leyton, Michael. *Shape as Memory : A Geometric Theory of Architecture*. Basel, Switzerland ; Boston: Birkhäuser -
      Publishers for Architecture, 2006.

Tuan, Yi fu. *Space and Place : The Perspective of Experience*. Minneapolis: University of Minnesota Press, 1977.

Picture Credits