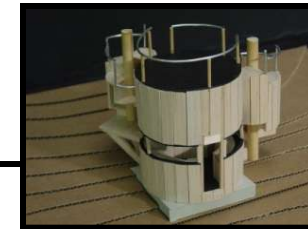
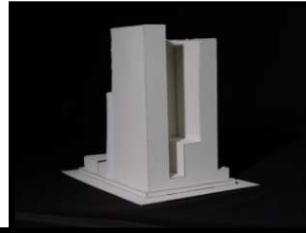


Morrisville State College Design Portfolio

Justin Cook

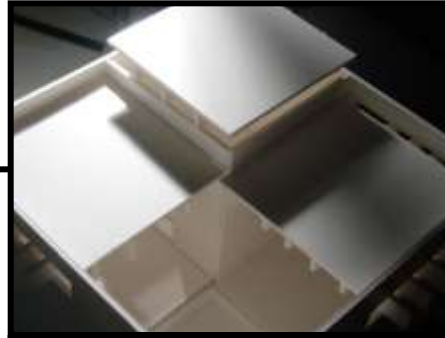


Design Projects



Observatorium

2nd Semester Design Project



You are to design an "Observatorium". Your first step will be to design a modular unit. This modular unit cannot be less than 14" x 7" x 1/2". These dimensions being x, y, and z axes, but not necessarily in that order or placed in that relationship. You will create the walls, floor and ceiling/roof with these modular units. The walls and ceiling/roof are to have an inside that is analogous to the outside. They can be rather thick or thin depending on your modular unit, the use of your modular unit, and your desired effect.

The structure will be inward looking. However you will create openings in the walls. These openings will be placed such that they do not allow the participant a view of the horizon. Therefore there are to be only clerestory windows, skylights and openness to the sky. (A clerestory is defined as a portion of an interior rising above adjacent rooftops, and having windows (known as clerestory windows) admitting daylight to the interior). Of course these openings must respect the modular unit.

There will also be only one door/opening to and from the outside.

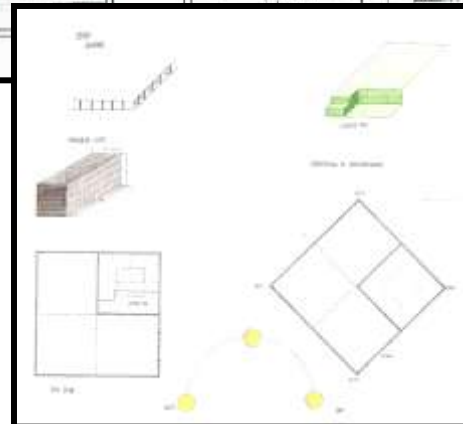
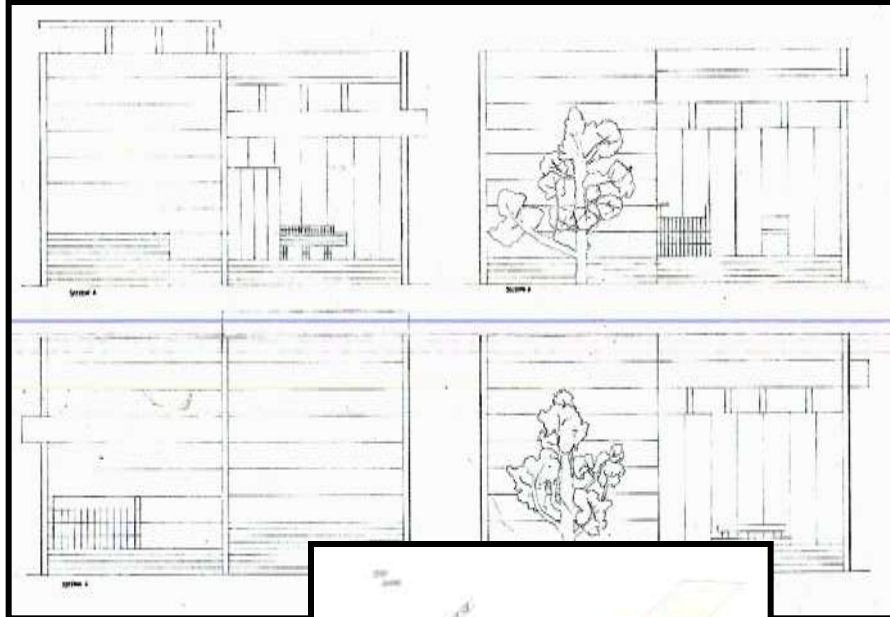
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PORTFOLIO



Observatorium

2nd Semester Design Project



- The structure is to be constructed of a modular unit that you will determine.
- Entry is through one solid door/opening.
- Ventilation and lighting are to be through the ceiling/roof and/or above eye level. Once inside one should not be able to see out along the horizon.
- The assembled structure is to measure in plan, 28 feet x 28 feet square, outside to outside.
- The design should include an interior courtyard that can be furnished with screened doors/openings for additional ventilation and light. The courtyard will not have any horizon view to the outside.
- The structure is to be made up of modular walls, a modular floor, and a modular ceiling/roof. The modular unit you define determines them all. This modular unit will thus create a proportional system, which will be maintained throughout the structure.
- Furniture in the "Observatorium" is to be made of square or rectangular blocks of foam, wood and/or plaster in various shapes and sizes that will serve as a table, chair, bed, latrine, refrigerator, and a sink.

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Process



Observatorium

The final design of the observatorium incorporated the seasons and how the sun effects each season and feelings one gets during each season. The entrance to the observatorium that I created represented the season of spring and was aligned on the eastern axis of a site. The interior courtyard represented the season of summer and was accordingly placed on the southern axis of the site. The sun is at its peak when rising to the south. The tree was inserted to represent the rebirth of nature that spring has essentially created. The fall sector of the observatorium represented a "settle down" approach to the design. As so the sun sets in the west which is where I located the room. Finally the last sector of the observatorium, winter, represents the sleeping quarters. It is placed on the northern axis of the site to provide the least amount of sunlight during the days' time. The sleeping quarters has a lowered bed. I lowered the bed to maximize comfort and induce sleep.

2nd Semester Design Project



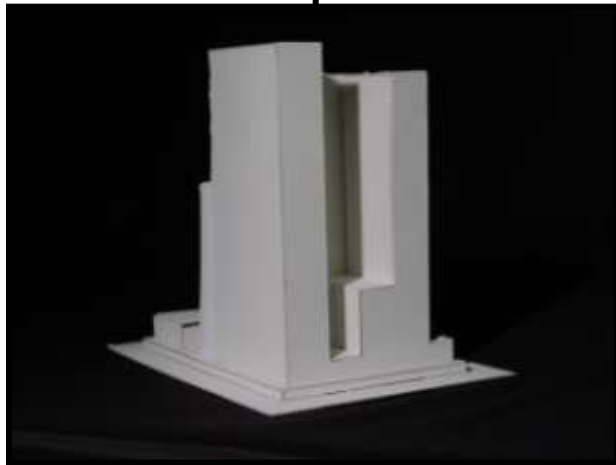
Final Design

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Cubism

2nd Semester Design Project



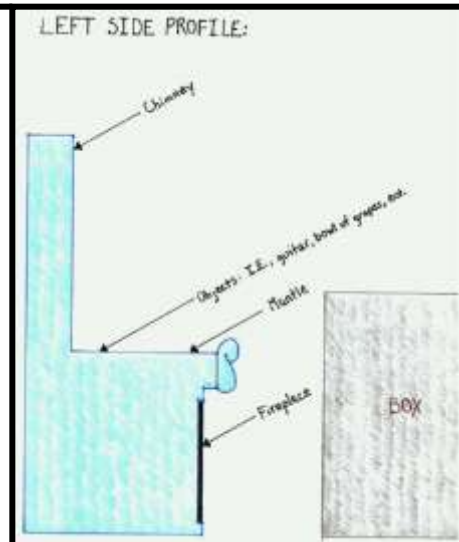
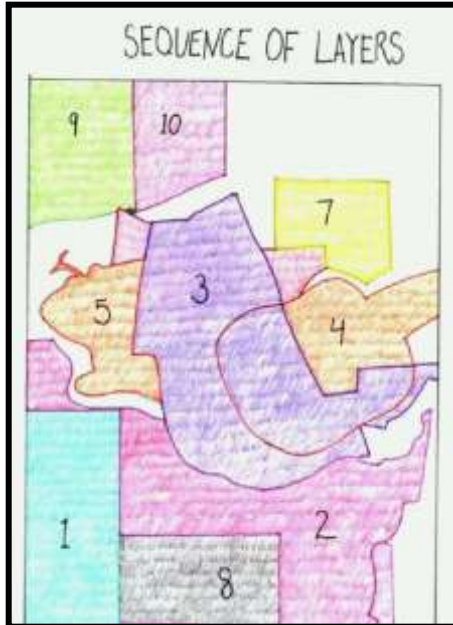
You will be given a Cubist or Purist painting. You are to analyze the space represented in the composition. The Cubists and Purists, as stated before, were playing with the representation of three dimensions--often they depicted a fourth dimension by incorporating the idea of movement (showing more than one view of the same object). Often the dimensional representation or placement of objects in space is ambiguous. You are supposed to be able to at one moment view the objects in a certain relationship, and the next moment to be able to discern another (contradictory) relationship. This is one aspect that makes the project interesting. You get to make decisions about how you want to represent the painting in three dimensions.

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Cubism

2nd Semester Design Project



To produce a three-dimensional spatial analysis of a two-dimensional composition you will compose an arrangement of three-dimensional volumes based on the implied spatial relationships existing in a two-dimensional composition, a Cubist painting. The painting chosen will be developed with multiple layers of trace that show the depths and placement of objects. With the trace, an underlying grid will be developed.

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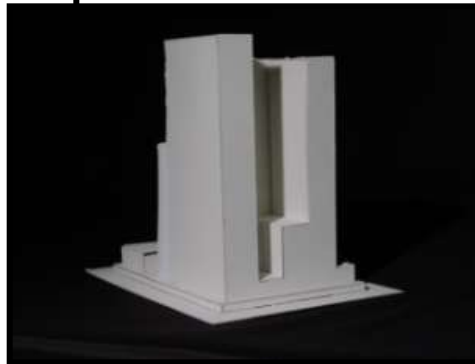
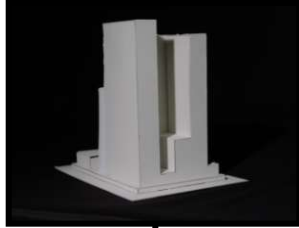
Process



Cubism

In the final design I made a grid based on the painting and then devised a method to determine how many layers there were in this particular painting. I first placed the grid in plan to determine where the objects would be located. I then placed the grid vertically and extruded each layer, using the grid to determine the height. This made an interesting effect, sometimes making the project appear very building-like.

2nd Semester Design Project



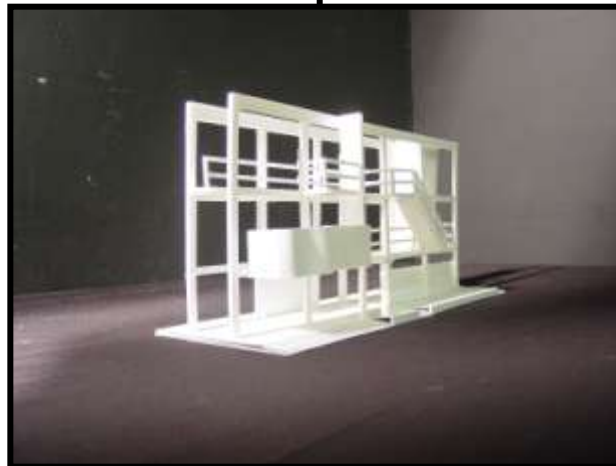
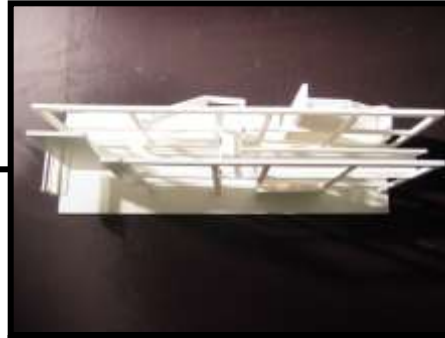
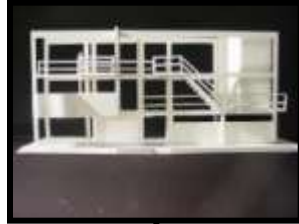
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Final Design



Façade Analysis

3rd Semester Design Project



Architecture exists in three dimensions. All three dimensions impact upon each other. Last year we worked primarily in developing the logic of the plan. This semester we will begin trying to understand how the plan affects and is affected by sectional and elevational concerns. The façade of a building tells us many things about the space with in. Windows for instance can indicate the number of stories within a building or perhaps the presence of a two-story space. Architects have often used the façade to give other clues about space within. This problem will allow you to investigate the composition of architecturally significant façades and to develop techniques of façade design.

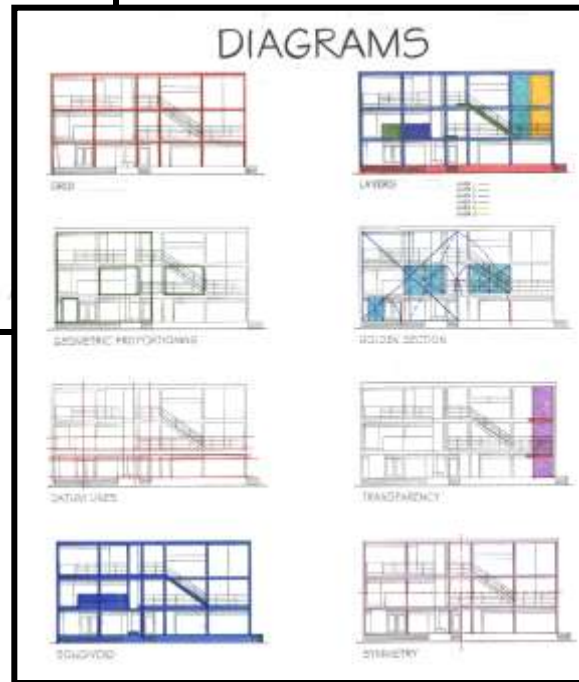
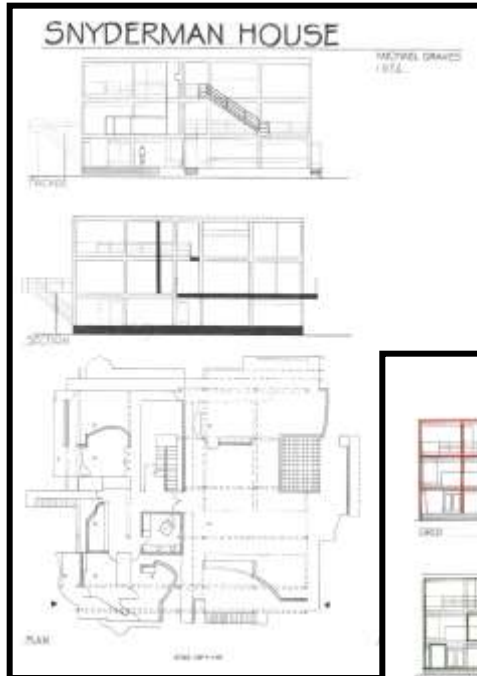
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Façade Analysis

3rd Semester Design Project



- To introduce the concept of the interconnectedness of three dimensions (plan, section and elevation) in architecture
- To develop research/investigative skill
- To develop an ability to observe and record and speculate about architectural phenomena
- To develop basic analytical abstract thinking
- To practice using diagrams as an aid to architectural thinking
- To encourage abstract thinking

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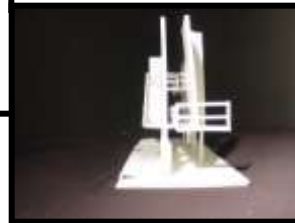
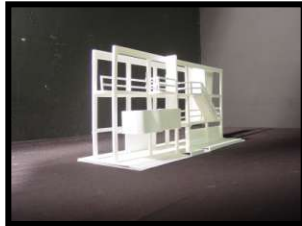
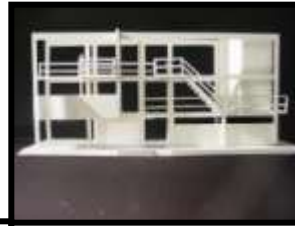
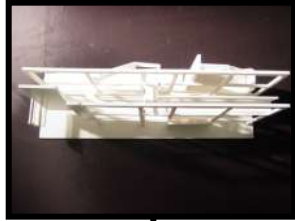
Process



Façade Analysis

In the final design of the façade analysis of the Snyderman house I tried to accurately create the façade and part of the interior with only a plan and elevation. There was a good amount that was learned about how and why the façade was created and the design elements behind it. With the analysis, the proportioning scheme used throughout had begun to develop. The proportioning had been directly related to the grid which was laid out within the elevation. The golden section was also evident within the façade. As the golden section was laid out I determined that it was used to place objects such as railings and the placement of walls. The grid contained aspects of symmetry yet the plan is entirely asymmetrical. This façade also displays phenomenal transparency, which also directly relates to the grid developed within the façade.

3rd Semester Design Project



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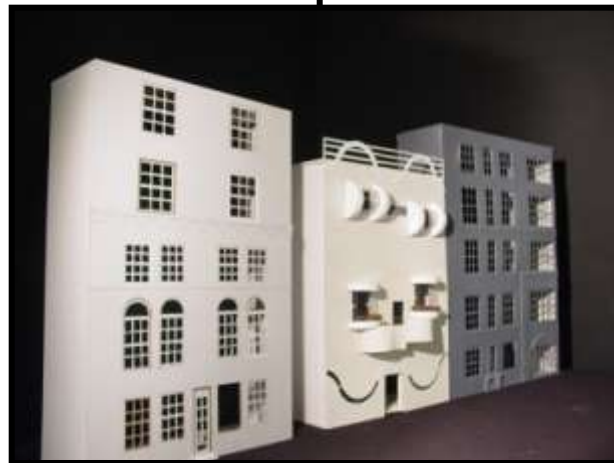
Final Design



Townhouse Facade

You are being given the documentation (*sans façade*) for a New York Townhouse designed by Robert A. M. Stern, newly appointed Dean at Yale University. You are to design a façade for the townhouse which takes into consideration the contextual cues and plan and sectional disposition of spaces. You will need to program the first floor space and relate your façade design to that program.

3rd Semester Design Project



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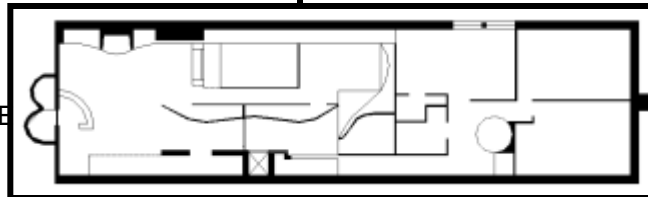
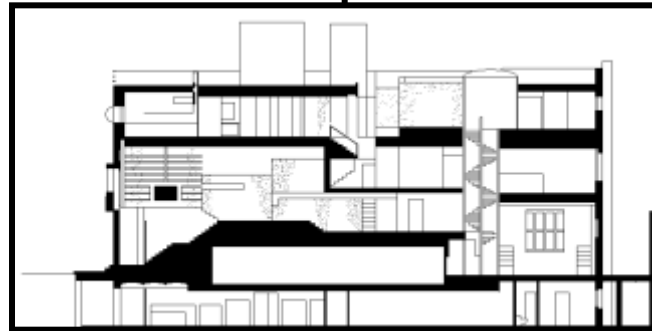
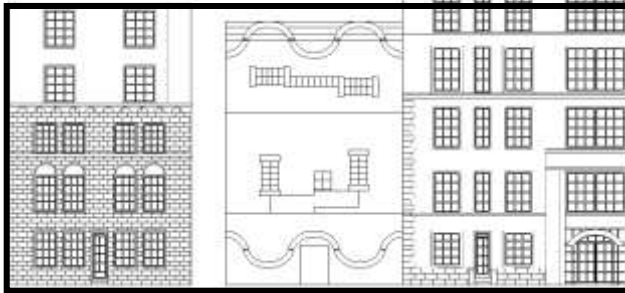
DESIGN
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Townhouse Facade

To design with an understanding of the relationship of façade to plan and section
To design with a fitting facade, utilizing principles derived from the historical precedents you have just finished analyzing.

3rd Semester Design Project



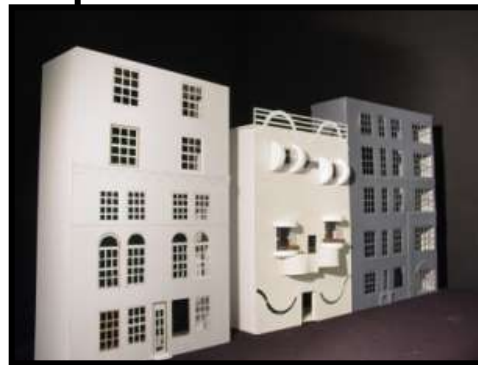
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Process



Townhouse Facade

3rd Semester Design Project



In the final design for the Robert A.M. Stern Townhouse façade project I was given the chance to redesign the façade of the existing townhouse. The newly designed façade had to make an outsider wonder what was going on inside the building, yet had to fit in the setting where the two existing buildings were located. So I decided to take elements from the context models and incorporate them into the redesigned façade. Elements from the interior of the Robert A.M. Stern Townhouse were also taken to redesign the façade. The windows that I had designed used the curve on the context model on the right above the entrance. I laid the curve down and made it a solid to create the sills on the windows. The balcony used the curve that was used in the interior of the townhouse.

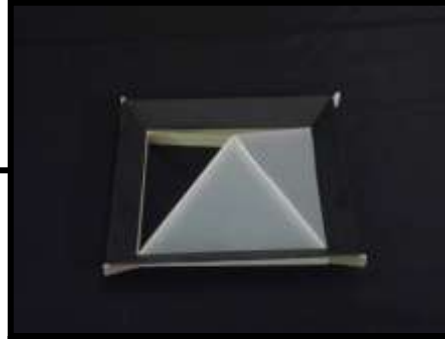
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Final Design

Hero's Pavilion

3rd Semester Design Project



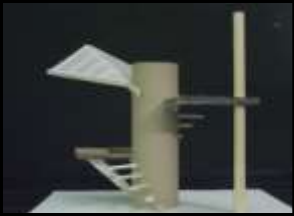
To design with a complete structure with an integration of principles explored through out this semester and previous semesters

To design with a structure that is fitting in consideration of form and detail to the given the visual repertoire of the chosen hero

To explore placing a building on a site, integrating approach, threshold, sequence

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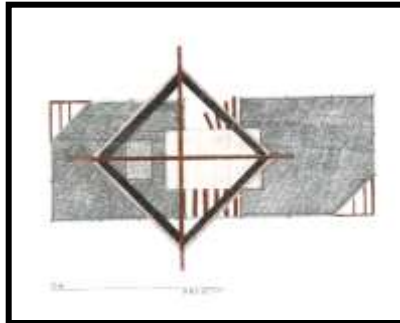
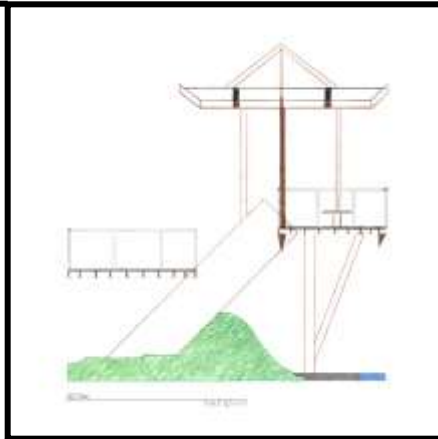
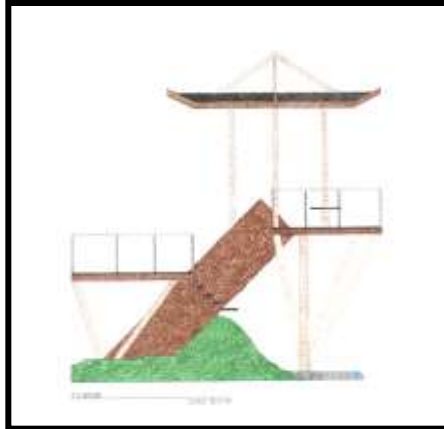
DESIGN
PORTFOLIO



Hero's Pavilion

You are to choose an architect or an artist of the 20th – 21st century in whose honor, or for whose use you will design a pavilion. In the design of the pavilion you will refer to your hero's repertoire of two- and/or three-dimensional images. You will be required to support your choice of this hero and articulate why your pavilion is appropriate to your hero based on their visual repertoire. You are to investigate issues of approach, threshold and sequence, light, view, etc. regarding the siting of your pavilion.

3rd Semester Design Project



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Process

Hero's Pavilion

In the final design of the "Hero's Pavilion" I focused on how Rob Wellington Quigley might go about designing a pavilion. The one quote from him that intrigued me the most was "to focus on the backyard, next door". This quote got me to think about the site of this project and how it would have an effect on my design. The site was plentiful with trees, which led me design it after a tree and each of it's coinciding pieces. So I developed a roof that would not only shelter a person but almost emulate a canopy to a tree. The main circular shaft that goes from ground level to the second floor level would resemble a "trunk". The "trunk" allowed circulation around the structure. The first and second levels resembled the levels within the branches of a tree. The structure as a whole fit in with the landscape without being unrecognizable.

3rd Semester Design Project



Final Design

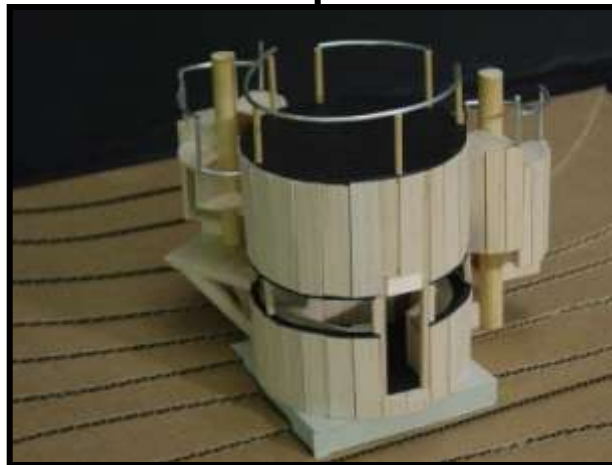
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Small Building - Autumn

You will design four small buildings. Each small building will be located somewhere on a given site. Each building will have a different site. Each site however is found on the same open country compound in Vermont. They may or may not be visible from each other. Your four small buildings will be developed as a pastoral quartet.

4th Semester Design Project



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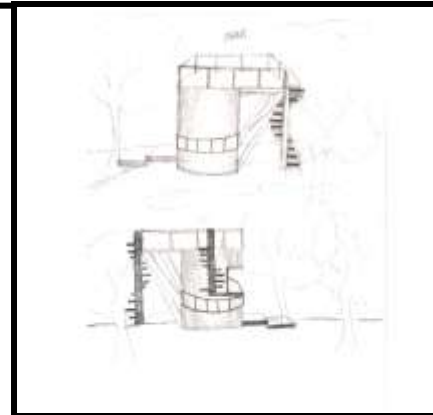
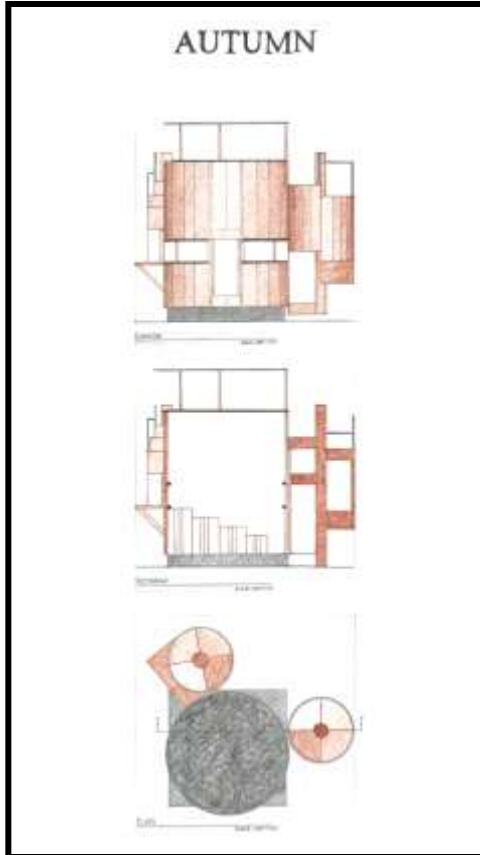
DESIGN
PORTFOLIO



Small Building - Autumn

Architecturally, your small buildings should find their sources in American building archetypes, constructions that address elementary programs with simple forms, basic site relationships, and clear tectonics. Each small building will be concerned with a specific pair of activities, and a specific relationship with the earth. As a group their wood construction, the rural setting, and an overall seasonal theme unify the buildings.

4th Semester Design Project



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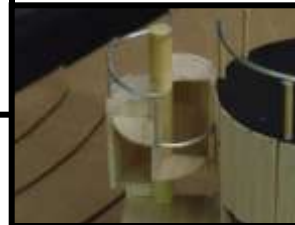
Process



Small Building - Autumn

In the final design of the small building project, autumn, I focused on the transition throughout the season. At the beginning of autumn in Vermont the “propellers” from the maple tree begin to fall, creating quite a site. I viewed this occurrence as almost carving out a spiral staircase. I have two spiral stairs in my design to suggest that both halves of the propeller leaf have fallen to the ground creating them. The inside represented the resting area you may feel when winter approaches, hence going down into this “den”.

4th Semester Design Project



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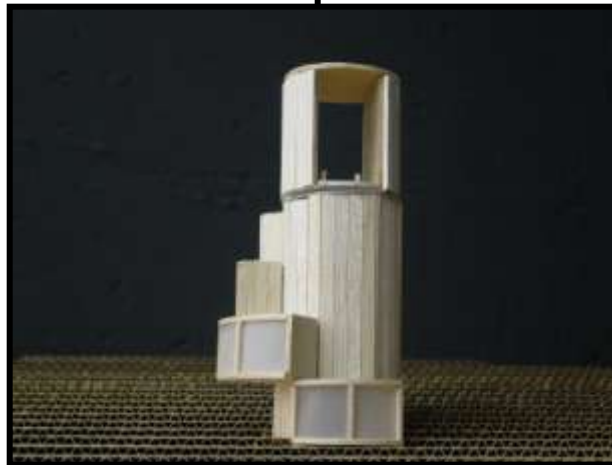
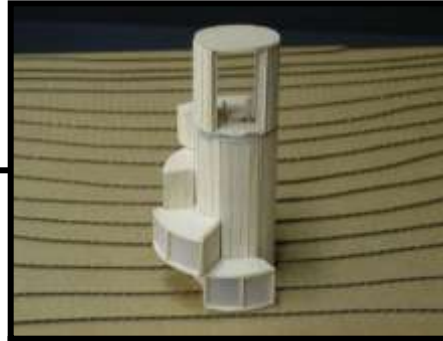
Final Design



Small Building - Winter

You will design four small buildings. Each small building will be located somewhere on a given site. Each building will have a different site. Each site however is found on the same open country compound in Vermont. They may or may not be visible from each other. Your four small buildings will be developed as a pastoral quartet.

4th Semester Design Project



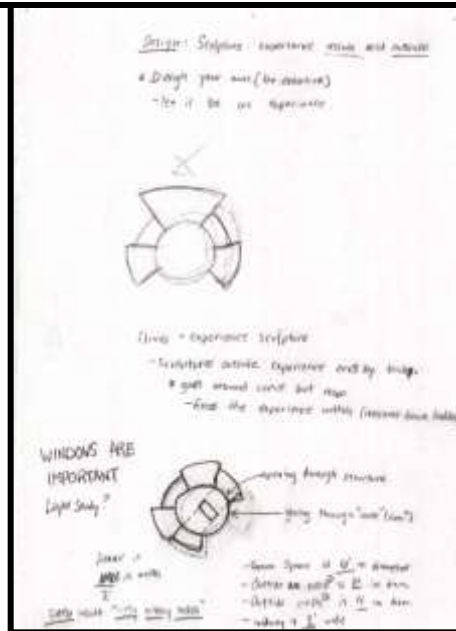
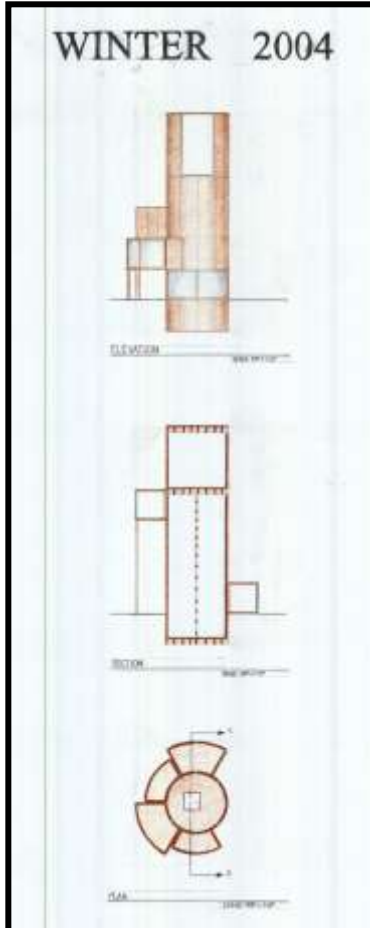
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Small Building - Winter

Architecturally, your small buildings should find their sources in American building archetypes, constructions that address elementary programs with simple forms, basic site relationships, and clear tectonics. Each small building will be concerned with a specific pair of activities, and a specific relationship with the earth. As a group their wood construction, the rural setting, and an overall seasonal theme unify the buildings.

4th Semester Design Project



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Process



Small Building - Winter

In the final design of the small building project, winter, I focused on the events that occur during the winter time. So then I decided to primarily focus on "snow sculpture". With this I developed the idea of not only being able to experience the sculpture from the outside but also from within. As you would approach the small building on the site, most people would be curious and walk up to it and maybe view through the frosted over windows. With the curiosity still looming you might decide to climb up these "stairs". Once you reached the top you would see a ladder and an opening on the other side. You might go look to see if there are any other "stairs" beyond the opening. There aren't, the experience from the outside is over. So climbing down the latter, one might realize these openings that the "stairs" have created. The openings are meant to sleep in. If ones sleep in the bottom "cubby hole" is not efficient because of the sun waking them up then they could climb up to a different "cubby hole".

4th Semester Design Project



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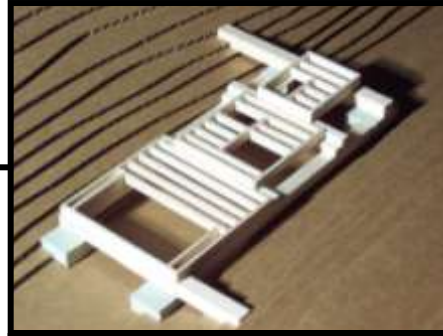
Final Design



Small Building - Spring

You will design four small buildings. Each small building will be located somewhere on a given site. Each building will have a different site. Each site however is found on the same open country compound in Vermont. They may or may not be visible from each other. Your four small buildings will be developed as a pastoral quartet.

4th Semester Design Project



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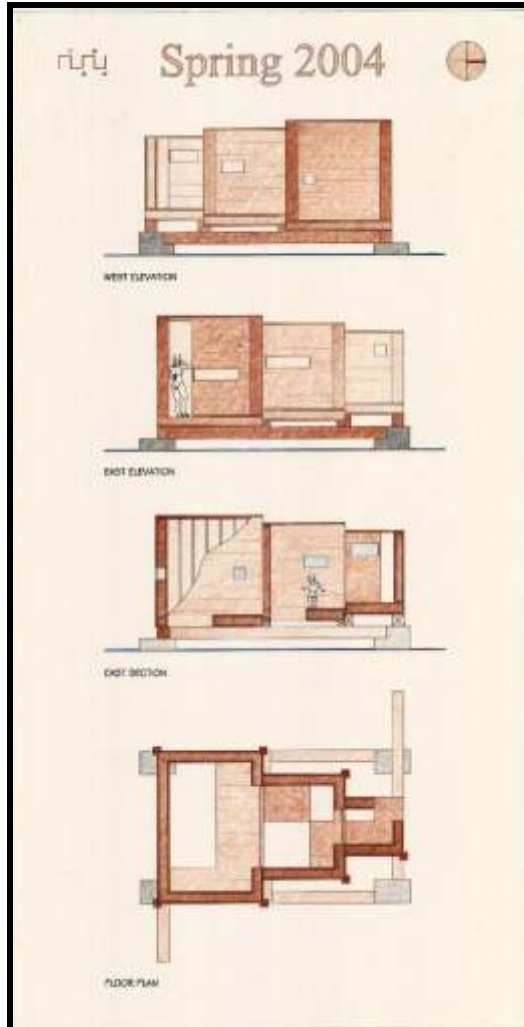
DESIGN
PORTFOLIO



Small Building - Spring

You will design four small buildings. Each small building will be located somewhere on a given site. Each building will have a different site. Each site however is found on the same open country compound in Vermont. They may or may not be visible from each other. Your four small buildings will be developed as a pastoral quartet.

4th Semester Design Project



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Process



Small Building - Spring

In the final design of the small building project, Spring, I designed the small building on the principle of transition. I essentially used the creek as the transition between winter and spring and how the building primarily represents the closing off of winter and the opening up of spring. To fulfill this concept I made windows on the winter side that went from more viewing area outside to virtually no viewing area outside. This was the closing off of winter. On the spring side I also did the same with the exception of the order being in reverse, almost welcoming spring. The entrance on the winter side was rather small, representing how winter is a time of enclosure. Through the transitional structure it opens up. This is the opening up into spring. The exit, on the spring side of the structure, is much larger than the entrance, making it a more welcoming experience. The floor is also arranged like the windows (openings), as the winter side closes off the spring side opens up. Ultimately at the very end of the building there is a very large opening above the creek where a person would be able to sit and experience the creek.

4th Semester Design Project



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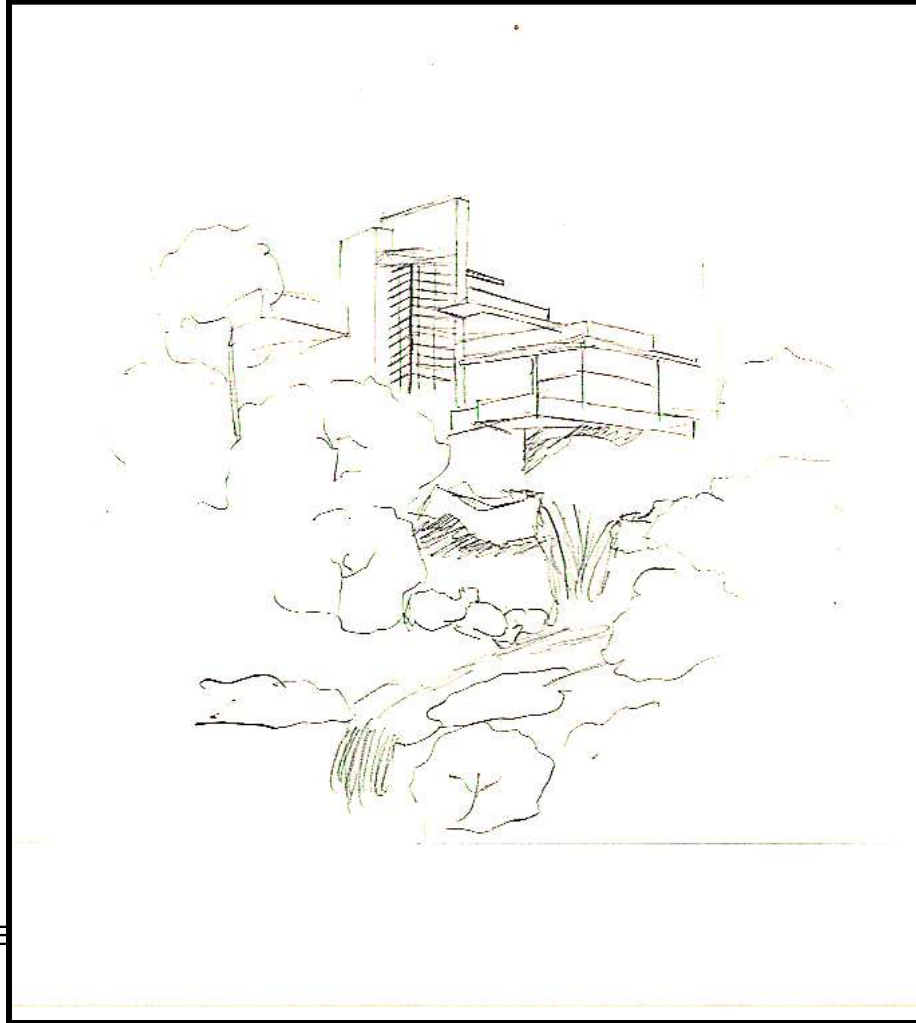
DESIGN
PORTFOLIO

Final Design



Free-hand Sketches

Fallingwater Trip



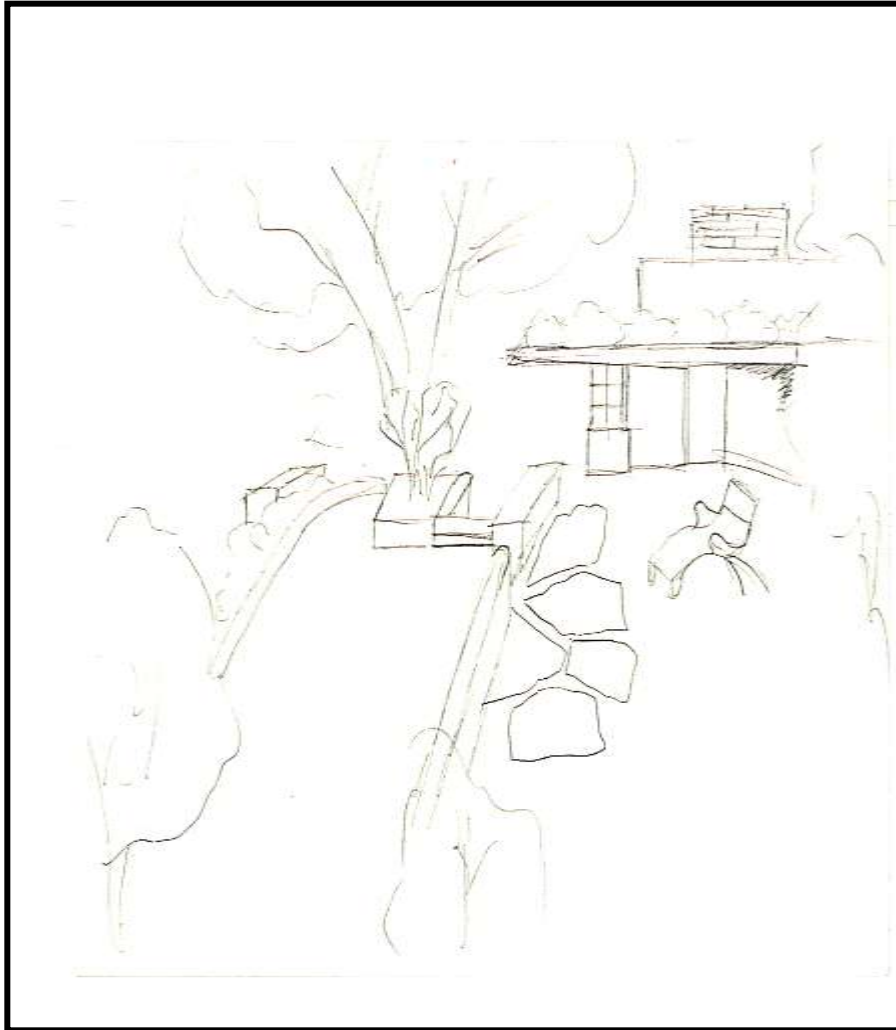
During the third semester at Morrisville State College the Architecture Club funded a trip to Fallingwater and also. I took my sketchbook along and sketched a few views of Fallingwater.

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Free-hand Sketches

Fallingwater Trip



During the third semester at Morrisville State College the Architecture Club funded a trip to Fallingwater and also. I took my sketchbook along and sketched a few views of Fallingwater.

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