Course Overview for External Evaluators

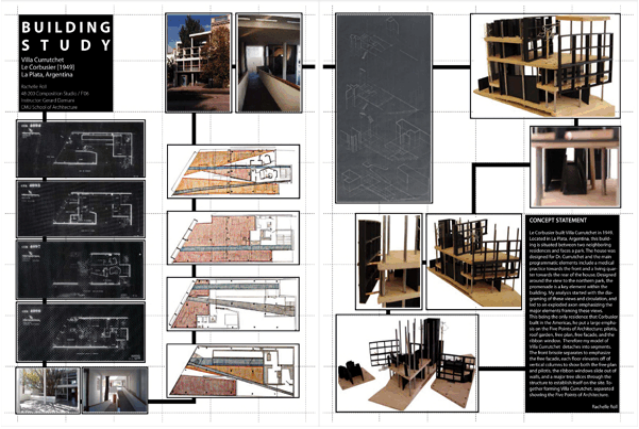
"Architecture Design Studio: Composition" (48-200)
Coordinator: F02, F04, F05, F06, F07, F09
Taught as Instructor: F99, F00, F01
2nd Year, Architectural Design Studio
18 units, required course for all majors
Course Website: http://www.andrew.cmu.edu/course/48-200/

The 2nd Year Fall Studio is an introduction to architectural design stressing the use of research, analysis, and precedent as a means of developing a rich design *process* that creates evocative spatial *experiences* through architecture. Building on the explorations of form and space in the 1st year, the 2nd year students investigate in greater depth the role that program, context, and the physical "elements of architecture" play in creating meaningful architecture. This studio grapples with understanding the design principles underlying the buildings of the past and present, from the broadly theoretical and conceptual, to the real implications of tectonics and sustainability, in order to apply these ideas with intent and significance. The studio programs focus on developing a student's ability to create meaningful, fitting, and poetic architectural ideas, building details, and techniques of communication while dealing with programs that have meaning to the world around us.

The semester includes four projects: Project 1: a short, group "research" project exploring the "elements of architecture" using the shop to create a large-scale "installation"; Project 2: a small, personal space in a natural setting; Project 3: an in-depth, all-semester "building analysis" project, simultaneously with design projects; Project 4: a "Light Museum" annex to the Carnegie Museum of Art with a detailed program.

I have coordinated both semesters of the required 2nd year studios for six years. Each year I help hire and coordinate 4-5 adjunct instructors who are practicing architects from the area. Over the years I have shifted the pedagogy of the studio from one where each instructor created their own projects and we all lectured on favorite topics, to one where I had write the projects in consultation with the instructors, and I present the studio lectures as a series of planned and connected themes. This has had the effect of creating much more cohesion to the content and expectations within the entire 2nd year studio sequence.

I am including in this packet several of the project statements that I have generated over the years, along with examples of student work, all of which is achieved under my close supervision as a "floating critic" for each of the separate studios. The student work (always with a black square in the upper left) is presented in its original format, unedited by me, as the students submit it to the department using a standard "template" or "framework," with black can range from square at the top left. These templates help the students create portfolios, give a shared identity to the 2nd year studio, and facilitate the departments efforts to promote the school and the students. I initiated these templates in the 2nd year in 2003, and the program has now been adopted by all studios at CMU.



For other materials, including examples of student work, and class handouts, please refer both the course website listed above, as well as my professional website: www.andrew.cmu.edu/user/gutschow/

Architecture Studio: 2nd Year Fall

Fall 2009, CMU, Arch #48-200, M/W/F 1:30-4:20
Class Website: www.andrew.cmu.edu/course/48-200

Coordinator: Kai Gutschow
Email: gutschow@andrew.cmu.edu
Off. Hr: M/F 12:00-1:00pm & by appt. in MM202

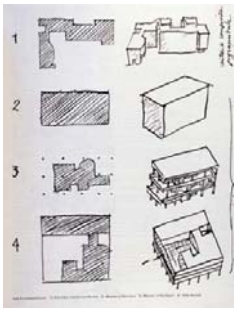
(7/4/09)

F'09 Syllabus

OVERVIEW: This studio is an introduction to architectural design stressing the use of research, analysis, and precedent as a means of developing a rich design *process* that creates evocative spatial *experiences* through architecture. Building on the explorations of form and space in the 1st year, we investigate in greater depth the role that program, context, and the physical "elements of architecture" play in creating meaningful architecture. We seek to understand design principles underlying the buildings of the past and present, from the broadly theoretical and conceptual, to the real implications of tectonics and sustainability, and apply these ideas with intent and significance. We will focus on developing challenging architectural ideas, profound building details, and effective ways of communicating them in order to explore architecture's potential for creating poetic expressions, appropriate shelter, or exalted experiences, as well as its ability to embody ideas and impart meaning to the world around us.

Key concepts and terms include:

COMPOSITION: "the planned arrangement of parts to form a whole." Architects compose concepts, spaces, contexts, functions, programs, experiences, elements, structures, materials, drawings and much more. Related to "composition" in graphics, music and all the art, in chemistry...
ELEMENTS OF ARCHITECTURE: composition can only take place by a deep understanding the elemental parts of architecture: roof, wall, structure, window, threshold, room, foundation, facade...
ANALYSIS / PRECEDENT / BUILDING STUDY / DIAGRAM: The single best way to study architecture, is through architecture. The 2nd year will emphasize the study and analysis of existing architecture as a tool to understand and create a richer architecture for the future.
CONCEPT: "A concept brings together ideas, precepts, and affects that create experiential forms." See also idea, theory, meaning, intent...
CONTEXT: "the interrelated circumstances, objects, or conditions in which something exists or occurs," physically and intellectually. We will focus especially on the effect of SITE on the design process, including the natural landscape, the built environment, and global ecology.
SPACE: we build with physical materials, but architecture arises only when we design the spaces around these materials. Through space, we orchestrate human EXPERIENCE.
PROGRAM: architecture is distinguished from the other arts by the fact that it must serve a FUNCTION, often related to well-established building TYPES. A program outlines required functions, but all architects need to interpret programs such that they provide inspiration and specific intent.
RESEARCH: as part of the quest for more robust process, we will engage in traditional research "about" architecture, and more profoundly attempt to see the architectural design process itself as a kind of "research," requiring a sound hypothesis, sustained investigation, and results that must be communicated in a convincing manner to peers.
COMMUNICATION / DRAWINGS/ CLARITY: since architects do not usually build what they design, their work is about communicating ideas to others clearly, effectively, and provocatively. We will focus both on understanding established drawing types and methods (especially the "section"), and but also develop innovative tools to communicate intent.



PROJECTS: The semester will include four projects:
Project 1: a group "research" project exploring the "elements of architecture" using the shop to create a large-scale "installation"
Project 2: a small observation structure for interacting with nature in multiple ways at the edge of a local park
Project 3: a "building analysis" project to be run simultaneously with design projects, unique to each studio
Project 4: a "Light Museum" annex to the Carnegie Museum of Art.

Architecture Studio: 2nd Year Fall

Fall 2007, CMU, Arch #48-200

Coordinator: Kai Gutschow
Email: gutschow@cmu.edu

(11/7/07)

F'07 Schedule (Subject to Revision: see www.andrew.cmu.edu/course/48-200/)

Week / End	Monday	Wed.	Friday Lec. MM103, 1:30-2:20
#1	**Aug.** 27 Convocation 1:30-2:30 (UC) Meet on CFA front Porch Rtn. to MMCH studios **DUE**: Summer Building Study	29 Shop Lectures: AL,CM: 1:30-2:20 LC,SW,JG: 3:30-4:20	31 Lec: Intro. Proj. 1(MM103) MID-REVIEW 1 - Installation I Scream, 4:30, CFA214
#2 Shop open Library Closed	**Sept.** 03 LABOR DAY Shop open; Library Closed	05 Lec.: Library Intro. (MM103) **DUE**: Proj.1 Section (hall)	07 Lec. Site / Context & Proj.2
#3 **Sophomore Brunch**	10 **REVIEW Proj.1** CFA front porch	12 **DUE**: Cleanup of Proj.1	14 Lec: Building Analysis & Proj.3 ← Rosh Hashana / Ramadan
#4	17 **DUE**: Proj.2 Plan OR Section (hall) **DUE**: Proj.1 Documentation	19 Documentation Workshop (9/20) →	21
#5 *CmoA Hall of Architecture Exhibit opens*	24 **MID-REVIEW Proj. 2** LC & SW; CM & JG; AL & Guest **DUE**: Proj.2 Plan OR Section (hall)	26 **DUE**: Proj.1 Documentation Rev.	28 Lec. Seven Senses ← **DUE: Drawing** Portfolio (9/27) *Lec: Mona Hatoum, 7pm*
#6 *Rachel Carson Conference*	**Oct.** 01	03	05 ← **DUE: Statics** Exam (10/4)
#7 **Proj.2 DUE Sun. 10pm**	08 **FINAL REVIEW PROJ.2** *Lec: Greg Lynn, 6:30pm* / 09 **FINAL REVIEW** 6:30-9:30pm / 10 **FINAL REVIEW**		12 Lec. Intro. Proj.4 "Light Museum" & Massing Models
#8	15 **Lec.** Museum Program (MM103) **DUE**: Museum Massing Analysis + Site Analysis	17 **DUE**: Program Massing Model **DUE**: Proj.2 Documentation	19 Mid-Semester break
#9 Mid-sem. Break	22 **DUE**: Program Massing Model #2 *Lec: Andrew Burke, TBA*	24 **DUE**: Light / Artist Study	26 Homecoming →
#10 **Homecoming**	29 **MID-REVIEW #1 Proj.4** LC& JG; AL&CM; SW & Guest	31 School Advisory Board	**Nov.** 02 Lec: Museum Lighting ← **DUE: Drawing** Portfolio (11/1) ← **DUE: Statics** Exam (11/1)
#11 **Family Wk'end**	05 **DUE**: "Light Manifesto" *Lec: Hank Dittmar, 6:30, CMoA*	07 ← *Lec: Rachel Whiteread (11/6)*	09 Lec. Louis Kahn
#12	12 **MID-REVIEW #2 Proj.4** AL&LC; SW& JG; CM& Guest	14	16
#13	19 **DUE**: Final Proj.3 "Building Study"	21 Thanksgiving	23 Thanksgiving
#14	26 Work on Presentations	28 Work on Presentations TA Workshop	30 Work on Presentations ** **DUE**: Computer plotting deadline
#15 **Proj.4 DUE Sun. 10:00pm**	**Dec.** 03 **FINAL REVIEW PROJ.4** TBA	05	07 ← **Drawing** Portfolio due (12/6)

Architectural History Exams: Weekly quizzes
Drawing Assignments/Portfolios Due: Sept. 27, Nov. 11, Dec. 6
Statics: Recitations Tue. 6:30-8:50pm; Exams Oct. 4, Nov. 1

Rosh Hashana Sept. 13-14; Yom Kippur Sept. 22
Ramandan Sept.13 - Oct. 13

Chicago Studio Trip

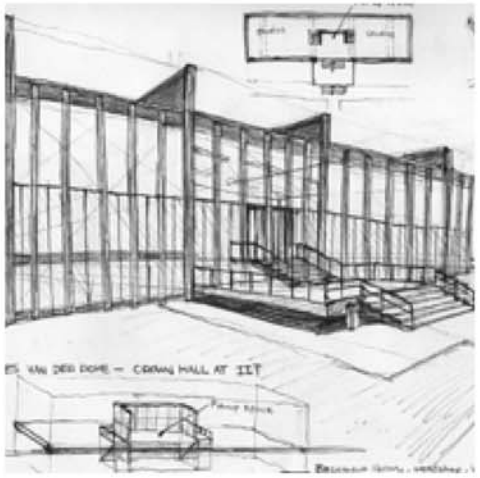
Studio 48-200
School of Architecture
Carnegie Mellon University

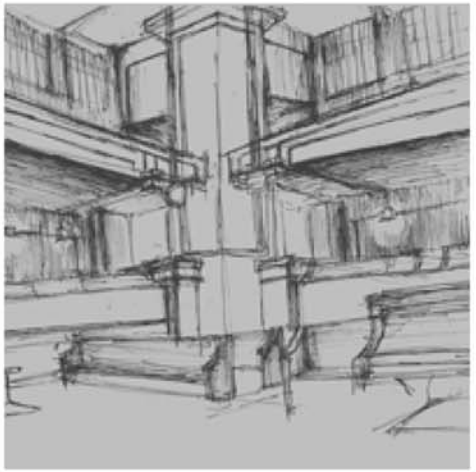
Fall 2006

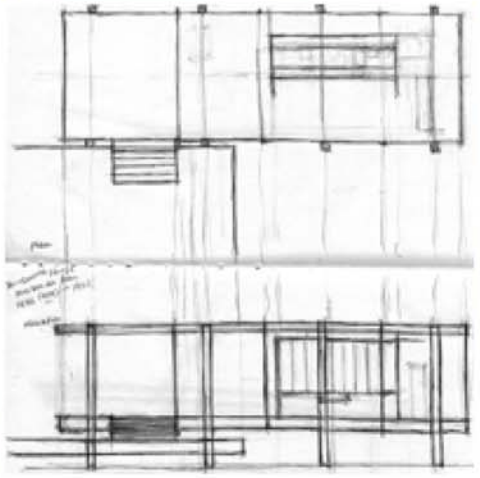
[gallery]










Architecture Studio: 2nd Year
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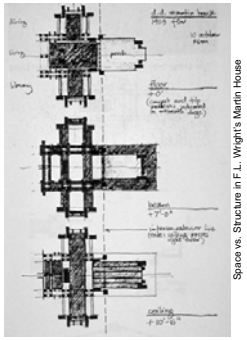
(6/22/09)

BUILDING STUDIES: SPACE & STRUCTURE: SUMMER 2009

MINDSET

The single most important source, and tool, for learning about architecture, is architecture. Experiencing and analyzing (good) buildings in person, and over an extended period of time, remains the best way to understand the complex art we call architecture. When travel is not possible, acquiring deep understanding through drawings, photos, and text becomes an essential skill for all architects. The goal of this assignment is to build on your skills from 1st year, and to help prepare you for the upcoming 2nd year "Composition" studio by expanding your ability to analyze and understand iconic works of modern architecture. Your mission is to discover and expose the underlying compositions and resultant experiences of assigned buildings so that they become part of your "visual library" of ideas.

Particular emphasis will be placed on the relationship between solid and void, between space, structure, enclosure, and mass as the basis for composition. For each building, you should ask: how does the structural system help shape the space, sensual experience, and movement through the building? How does space help reveal and clarify structure and enclosure? Seek to understand *WHAT* the architect intended with the overall design and each detail, and *WHY* the architect "composed" it that way.



Space vs. Structure in F.L. Wright's Martin House

YOUR WORK & PROCESS

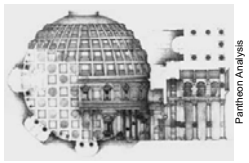
Research the three modern architects listed on the next page, and select five buildings according to the directions provided. Then use any resources you can locate about your buildings, including internet, libraries, and bookstores, and take LOTS of (visual) notes in the form of sketches (avoid words).

Think about, analyze, and seek to understand the design and composition of these 5 building, particularly the relationship of space and structure. Investigate your buildings at different scales, from construction details and materials, to major axes and site context. Imagine yourself walking through the building, and how your senses would be stimulated by both the space and the material structure. This process takes time, effort, and focus: start early, work iteratively, over time.

Search for compositional "principles" in order to discover the architectural "language," and the arrangement of important spaces and architectural elements (entry, walls, thresholds, openings, geometry of spaces, circulation, poche, etc). Then go beyond, by focusing on the materiality of the architecture that creates spaces and experiences through structure and mass. What is the primary structural system? Is the structural system visible? Why? What is it made of? Is it a "load-bearing wall" made by piling up materials, or a "skeletal" system made of inter-connected vertical posts and horizontal beams? Is it "assembled" or "poured"? What is the relationship of the structural system to the "skin" and planes that define space? How does the geometric configuration of the structural system affect spatial experiences and movement through the building? What effect does the material, mass, and opacity of the enclosure system have on experience? Why?

Sketch the architecture, diagram separately the major structural and enclosure systems, draw important building elements, transitions, and details. Compare buildings by the same architect, and seek to find underlying design principles or "research agenda," but also differences between buildings.

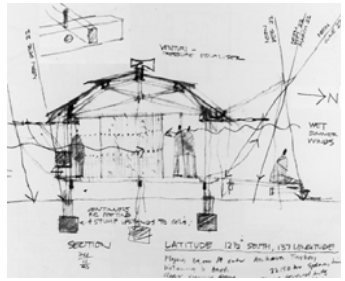
Schematic model of Renzo Piano's AIC addition.



Pantheon Analysis

ASSIGNMENT: DUE: Mon. Aug. 24, 2009, 1:30pm

1) Choose from your sketch notes, and determine the clearest way of representing the unique composition and architectural intent with regard to the relationship of space and structure underlying each of your 5 buildings.
2) Using a soft but sharp wood pencil, create *freehand, but precise* drawings of: the main *plan(s)*, major *section(s)*, the *structural system*, the *enclosure system*, ingenious *details*, and how they relate to each other. Avoid simple "views" or perspectives; choose instead a variety of "architectural drawings" (esp. sections and axos!!) and diagrams of the physical elements of the architecture. Feel free to borrow from any photos, existing drawings or analytical diagrams you can find that present the most significant design qualities of each building; or create your own interpretations, being sure your representation reinforce the ideas.
3) Carefully select, edit, and *compose* the most informative drawings (plan & section & structural system req'd) of each building on a separate, landscape-oriented, 8.5"x11" page
4) Create a cover sheet with your name.
5) Scan all six pages (5 buildings + cover) and create a single medium-resolution pdf file named: "lastname_summer study".
6) Submit to archpcserver 2nd Year Studio Documentation folder: \\Archpcserver.andrew.ad.cmu.edu\studio documentation\Second Year Studios\48-200 Fall 2009\Summer Building Study F09
7) Submit high quality hard copy of all 6 pages (stapled!) to the 2nd year coordinator on the first day of classes, Mon. 8/24/09.



BUILDING SELECTION

Study all four buildings by the architect assigned to your last name below, then select three buildings to analyze in depth. In addition, select one building from each of the other two architects listed below. This should lead to a total of FIVE buildings to research, analyze, and draw according to the directions on the previous page.

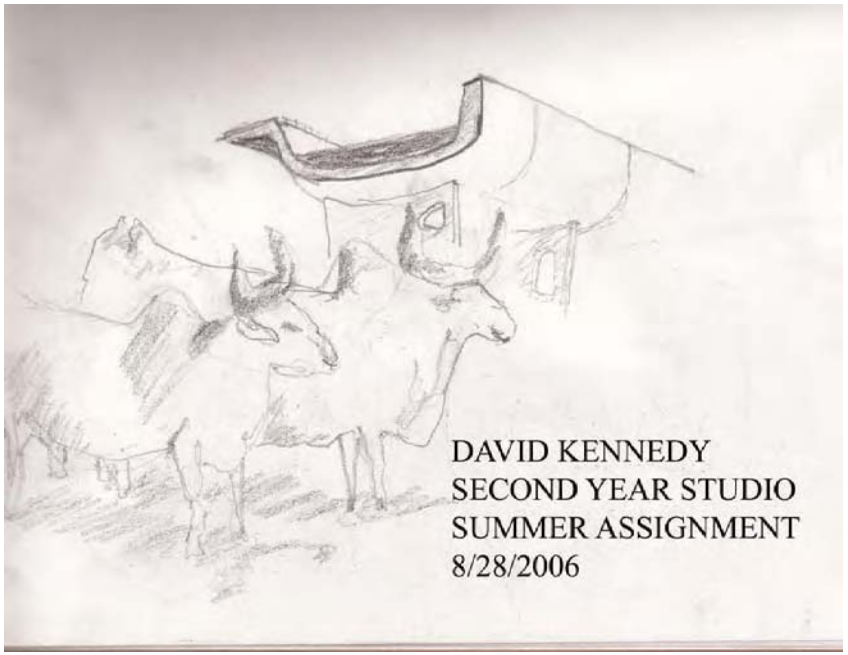
	Architect	Building Name	Location	Date
Students with last names A-G	Mies van der Rohe	Barcelona Pavilion	Barcelona, Spain	1929
	Ludwig	Farnsworth House	Plano, IL	1945
		Lake Shore Drive Apts.	Chicago, IL	1948-51
		New National Gallery	Berlin, Germany	1962-68
Students with last names H-M	Le Corbusier	Villa Stein at Garches	Garches, France	1929
	(C.E. Jeanneret)	Millowner's Association	Ahmedabad, India	1951
		Villa Sarabhai, Ahmedabad OR	Maisons Jaoul, Paris	1953
		La Tourrette Monastery	Eaveux, France	1957
Students with last names N-Z	Kahn, Louis	Trenton Bath House	Trenton, NJ	1954-59
		Richard's Medical Center	Philadelphia, PA	1957-61
		Kimball Art Museum	Fort Worth, TX	1967-72
		Exeter Library	Exeter, NH	1967-72

BOOKS / BIBLIOGRAPHY / RESOURCES:

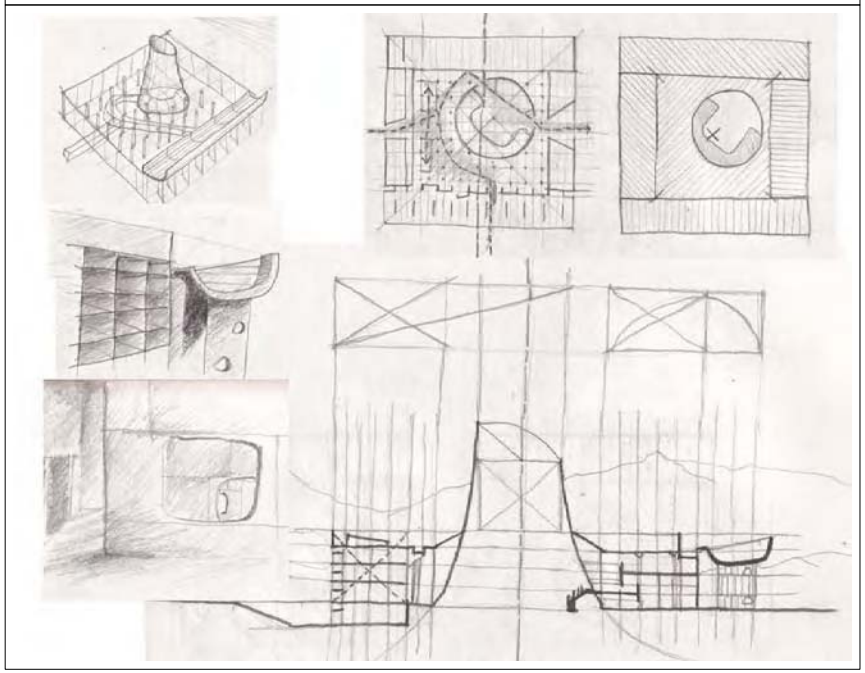
You should gather information from multiple reputable sources; no one source will have all the different kinds of information you need to "know" your building. As an aspiring architect, you should also begin to get in the habit of reading about, and collecting resources about architects and buildings that inspire you. It is thus highly recommended that you purchase AND READ three small books on these architects in the "Basic Architecture" series by Taschen (available at bookstores & online for less than $10 each, www.amazon.com; www.bn.com; www.taschen.com; www.bookfinder.com):
1) Rosa, J. Louis Kahn: Enlightened Space
2) Cohen, JL. Le Corbusier: the Lyricism of Arch.
3) Zimmerman, C. Mies v Rohe: Structure of Space

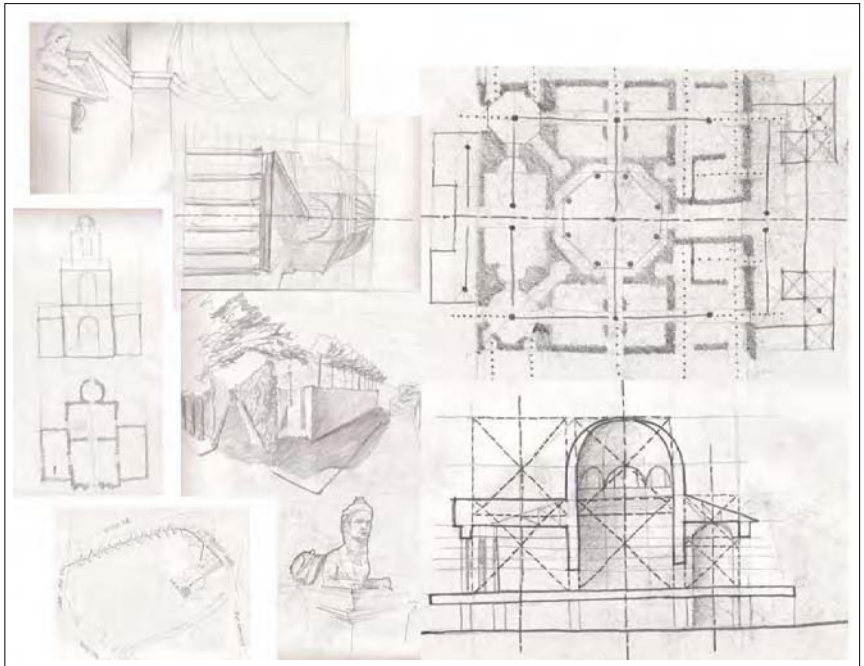
In addition, look for the following good sources:
- McCarter, R. Louis I. Kahn (2005)
- Gast, Louis Kahn: the Idea of Order (1998)
- Brownlee & De Long, Louis Kahn: In the Realm of Arch (1992)
- Le Corbusier, Oeuvre Complete 1910-1965 (1965)
- Curtis, W. Le Corbusier: Ideas & Forms (1986)
- Baker, G. Le Corbusier: an Analysis of Form (1984, 1996)
- Gast, Le Corbusier: Paris - Chandigarh (2000)
- Lambert: Mies in America (2001)
- Bergdoll & Riley, Mies in Berlin (2001)
- Wiseman, C. Mies v.d. Rohe at Work (1974, 1999)
- Blaser, W. Mies v.d. Rohe. The Art of Structure (1964, 1993)

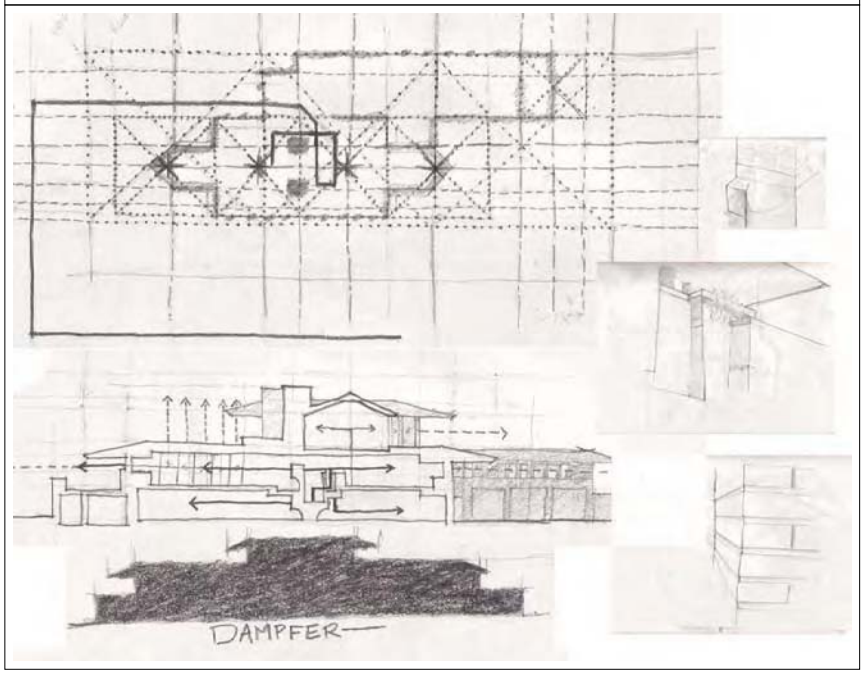
** Ching, Fr. Architecture: Form, Space, Order (1996)
** Eisenman, P. Ten Canonical Buildings 1950-2000 (2009)
http://andrew.cmu.edu/user/ma1f/48-200.html (research help)

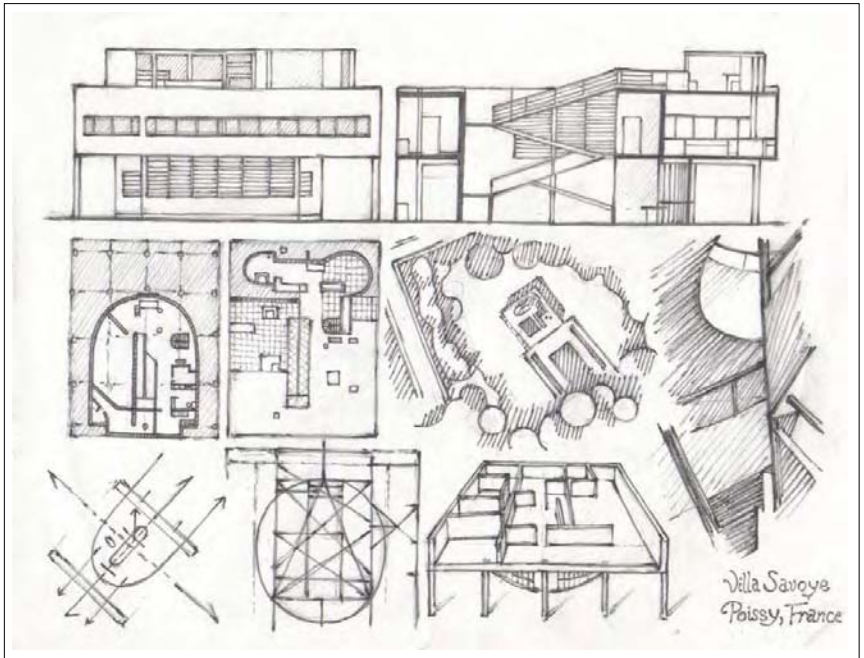


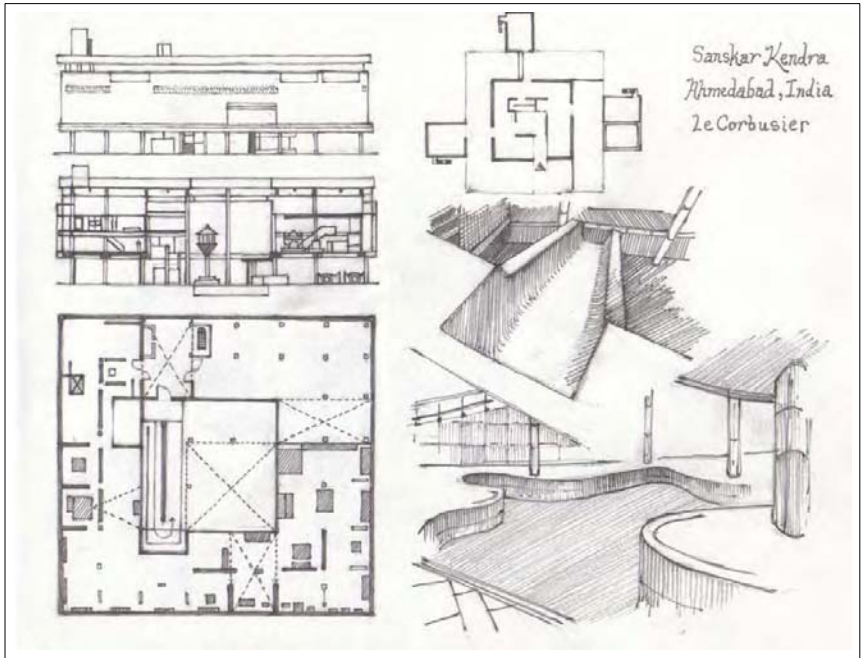
DAVID KENNEDY
SECOND YEAR STUDIO
SUMMER ASSIGNMENT
8/28/2006

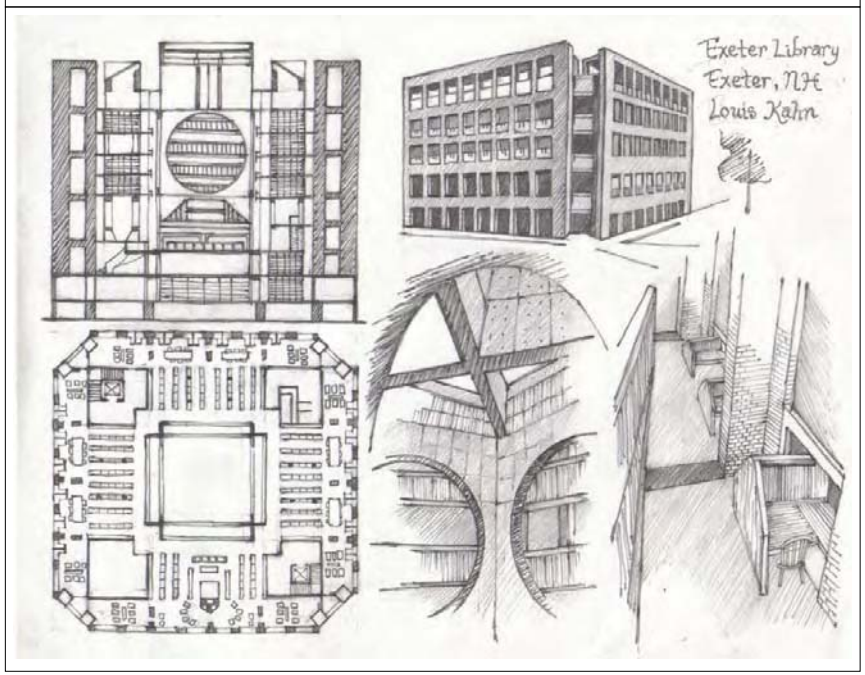


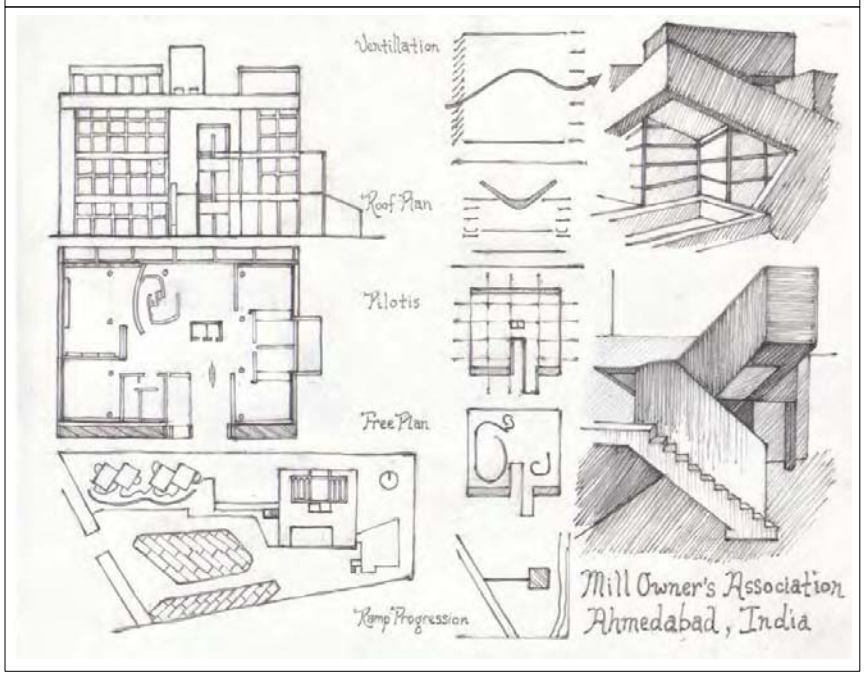





Villa Savoye
Poissy, France


Sanskar Kendra
Ahmedabad, India
Le Corbusier


Exeter Library
Exeter, NH
Louis Kahn


Ventilation
Roof Plan
Klotis
Free Plan
Ramp Progression
Mill Owner's Association
Ahmedabad, India

Architecture Studio: 2nd Year
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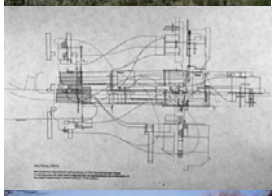
Off. Hr: M/W 12:30-1:30pm & by appt. in MM202

(9/7/07)

PROJECT 3 -- BUILDING ANALYSIS



MINDSET

This project is concerned with the HOW and WHY of architecture, leading to discussions on "WHAT is architecture?" It builds on your summer building study, firm in the conviction that the single most important source, and tool, for learning about architecture, is architecture. The goal is to discover a buildings' systems & principles, to expose the architectural intent, concept, and language used by the architect to shape that vision, to understand how architecture can express ideas and create experiences at many levels. Architects design and communicate with drawings & models; you should do the same in your analysis: create a way of understanding your building. *This is an architecture project.*

WORK PROCESS:

0) Depending on your studio instructor, each student will choose or be assigned one building to study over the course of the semester. The best links to the studio projects will be a 20th-century house, or a museum.

1) The first step is to gather as much documentary evidence of the architecture of your building as possible, from the original design process to the life of the building since then, from the overall context to the detail level. Go to the library more than once: thorough research takes time. Check internet, books, journals, and especially foreign language sources. Check for reviews of the building after it was built, and see what theoreticians have written about the building since then. Find the graphic and visual analysis that already exists on the building, including those made by the architect during or after the design process. Write a letter to the building owner. Your instructor may send you back several times to look for images or drawings of relevant parts of the building, or ask you to draft to-scale plans from photos if unavailable.

2) Based on the evidence you collect, compose a large poster-sized exhibit documenting your building so that your whole studio can learn from it.

3) Then ask yourself, and discuss with your peers and instructor: "Why does the building look and feel the way it does"? Or: "What makes this building a great piece of architecture? What makes this a work of art?" Or: "What is creative and innovative about this architecture, what makes it extra-ordinary?" Try to be as specific as you can, on many levels. Work to go beyond the formal & spatial analysis you did last year. Consider looking at details more closely. Find the concepts or ideas behind the building's conception. Try to understand the experience beyond just traditional architectural drawings or photos.

4) In consultation with your instructor, choose one or a few related aspects of your building that intrigue YOU, and begin to address these questions. Attempt to communicate your ideas effectively through multiple and varied drawings and models. Drawings should become modes of research & inquiry. Much as in your design projects, this exploration MUST at first be done in multiple media: using the computer, the sharpened pencil, charcoal or watercolors, will each reveal different insights. A chipboard model will lead to different results than one in resin, wireframe, or hardwood. Investigate the basic orthographic projections (plan, section, elevation & axo): re-creating those can reveal volumes about how an architect worked, the intent they made visible.

5) After exploring several drawings and media, pick ONE, or combine several to create ONE drawing that most profoundly "captures" the insights you want people to understand about your building. This drawing must be on one large piece of paper. It can combine several types of drawings through overlays or collage, but it must be"one drawing," as defined by you and your instructor. Although this drawing will not represent your whole building, you should prepare many drafts and revise your drawing several times to be sure it has many layers of information and represents as much as possible. One drawing CAN communicate what makes a piece of architecture great! Try it.

6) Create a single model or 3D analysis according to the same principles.

7) The drawing and model are due to your instructor, and a scan of your drawing are to be submitted to Blackboard on Mon. Nov. 19. A 2pp. "Documentation" of the final work and the whole process using the 2nd year template must be submitted by Dec. 10.

BUILDING STUDY

Säynätsalo Town Hall/ 1948-1952/ Säynätsalo Finland
Alvar Aalto

Justin Rosenberry
48-200 Composition Studio / F07
Chris Minnerly
CMU School of Architecture


Aalto Plan

1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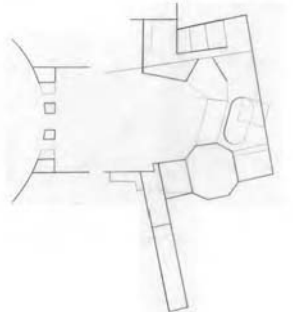

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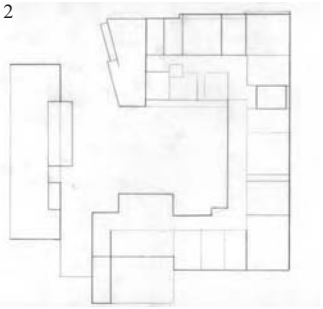

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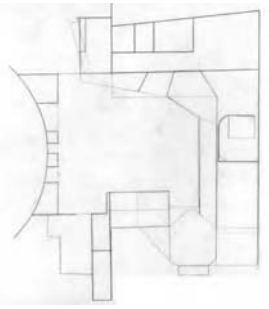

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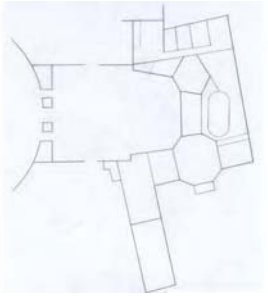

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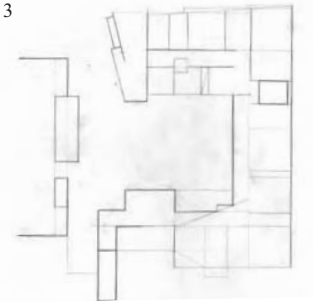

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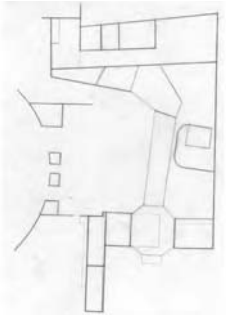
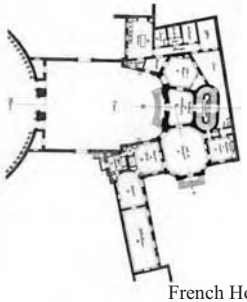
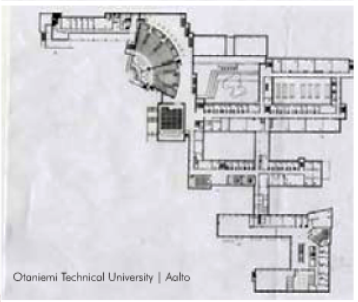


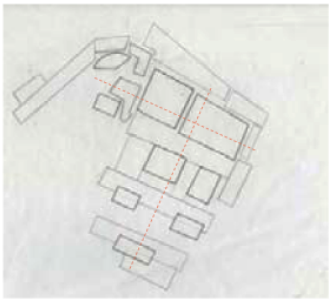

French Hotel

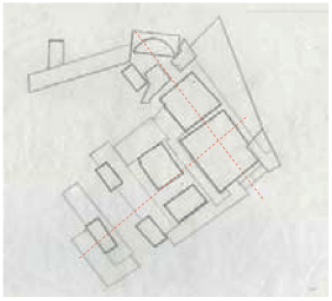
BUILDING STUDY

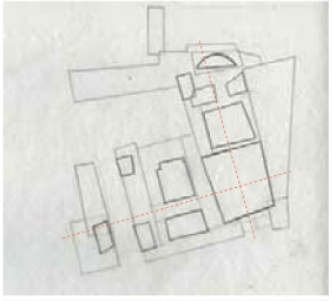
Otaniemi Technical University
Finland | 1964 | Alvar Aalto

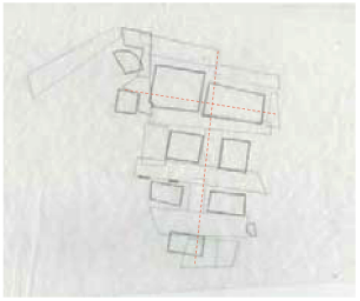
Matthew Z Huber
48-200 Composition Studio / F07
Instructor: Chris Minnerly
CMU School of Architecture

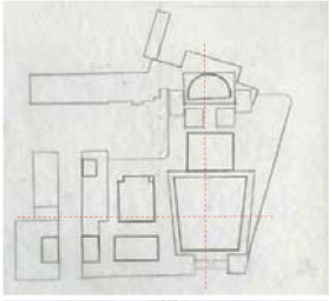

Otaniemi Technical University | Aalto

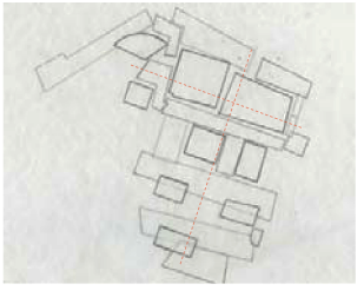


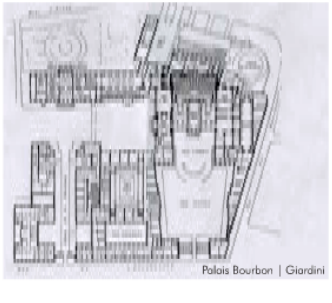


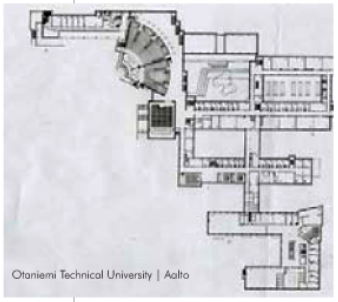


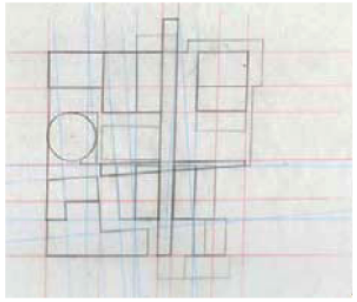


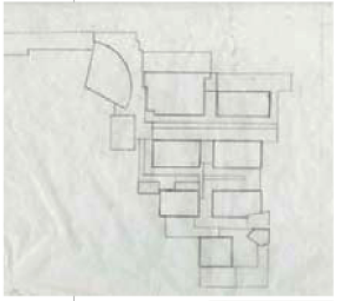


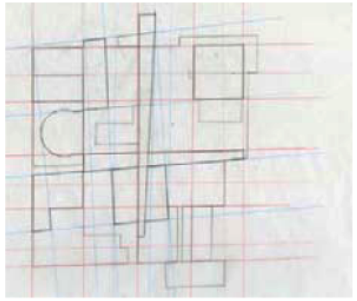


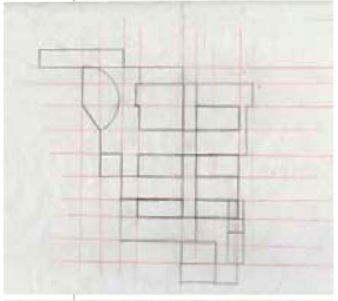

Palais Bourbon | Giardini

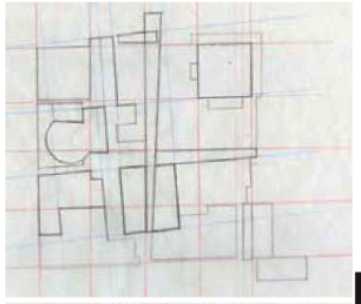

Otaniemi Technical University | Aalto

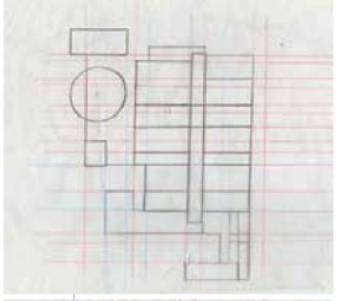


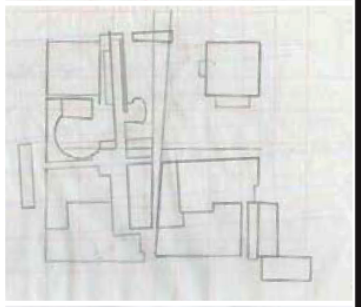


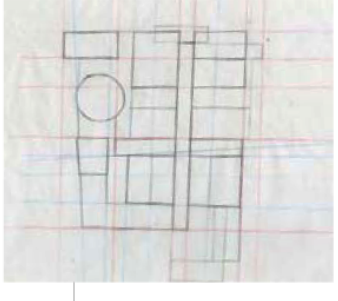


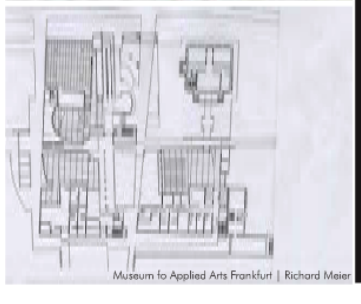











Museum fo Applied Arts Frankfurt | Richard Meier

STATEMENT

As per the assignment, I investigated the hybrid organizational strategy of an Alvar Aalto plan, the Otaniemi Technical University building, by juxtaposing transformations of two differing systems of organization: a French hotel plan and a Richard Meier plan. With the French hotel plan, I focused on interpreting Aalto's plan as a heterotopic system of discrete objects, each with its own unique formal devices. In particular, I treated the outdoor, courtyard spaces, the "voids" as objects in a solid field. In order to emphasize the individuality of each object, in drawing the intermediate steps, I deformed orthagonality, separating boundaries. Accommodating the two perpendicular axis of the hotel plan with the central linear circulation elements of the Aalto plan, I rotated the arrangement of objects as a whole. While maintaining adjacencies, I forced Aalto's hierarchically primary objects into axial alignment creating correspondence between the two plans.

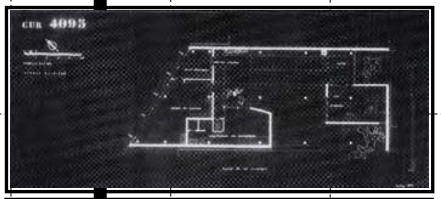
As Meier's work is much more characterized by comprehensive systems of organization, namely the grid, or in this instance, two shifted grids, I was forced to take a different approach to representing the Aalto plan. I used Aalto's regular placement of courtyards among the blocks of classrooms and circulation to generate an orthogonal system of organization.
In order to strengthen the system, I further regularized geometries. I then edited the proportions of the system to match Meier's grid and began to shift geometries, accommodating the secondary, intersecting grid. These two exercises depict the richness of organizational interstitially of the Aalto plan: it finds itself somewhere between heterotopy and uniformity, between the axis and the grid.

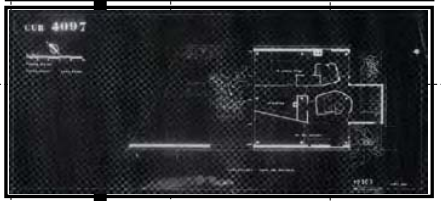
| Matthew Z Huber

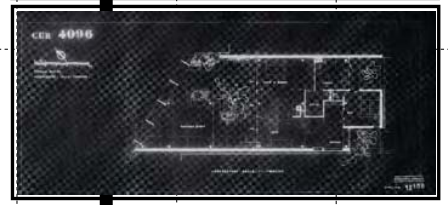
BUILDING STUDY

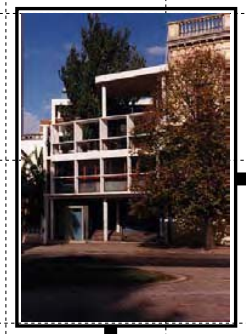
Villa Currutchet
Le Corbusier [1949]
La Plata, Argentina

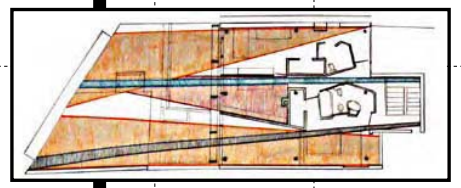
Rachelle Roll
48-200 Composition Studio / F'06
Instructor: Gerard Damiani
CMU School of Architecture

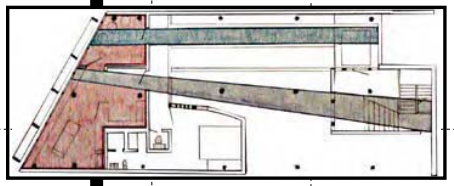


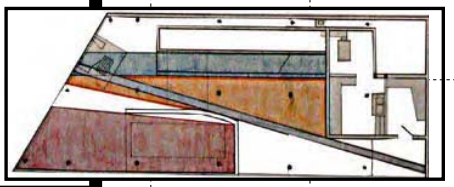


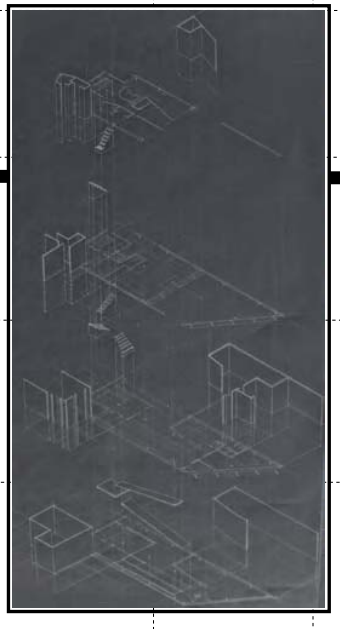


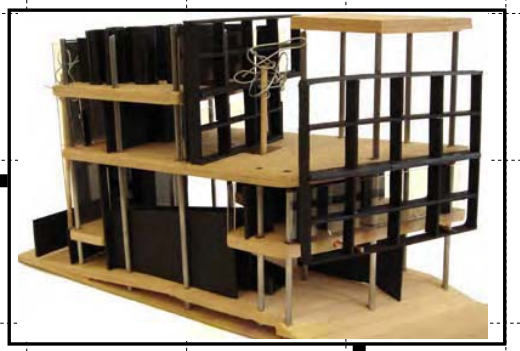


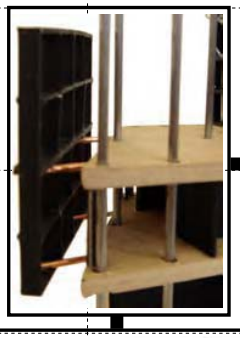












CONCEPT STATEMENT

Le Corbusier built Villa Currutchet in 1949. Located in La Plata, Argentina, this building is situated between two neighboring residences and faces a park. The house was designed for Dr. Currutchet and the main programmatic elements include a medical practice towards the front and a living quarter towards the rear of the house. Designed around the view to the northern park, the promenade is a key element within the building. My analysis started with the diagraming of these views and circulation, and led to an exploded axon emphasizing the major elements framing these views.
This being the only residence that Corbusier built in the Americas, he put a large emphasis on the Five Points of Architecture; pilotis, roof garden, free plan, free facade, and the ribbon window. Therefore my model of Villa Currutchet detaches into segments. The front brisole separates to emphasize the free facade, each floor elevates off of vertical columns to show both the free plan and pilotis, the ribbon windows slide out of walls, and a major tree slices through the structure to establish itself on the site. Together forming Villa Currutchet, separated showing the Five Points of Architecture.

Rachelle Roll

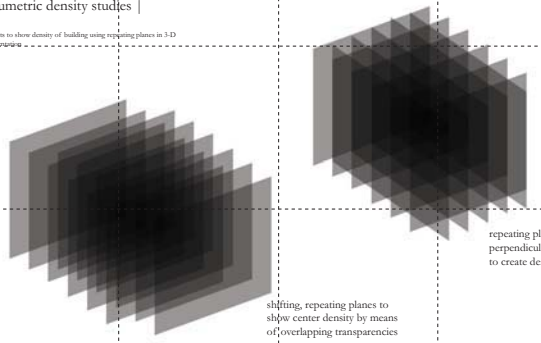
building analysis

farnsworth house

andrew n butchko
48-200 composition studio / F'06
Instructor: Spike Wolff
CMU School of Architecture

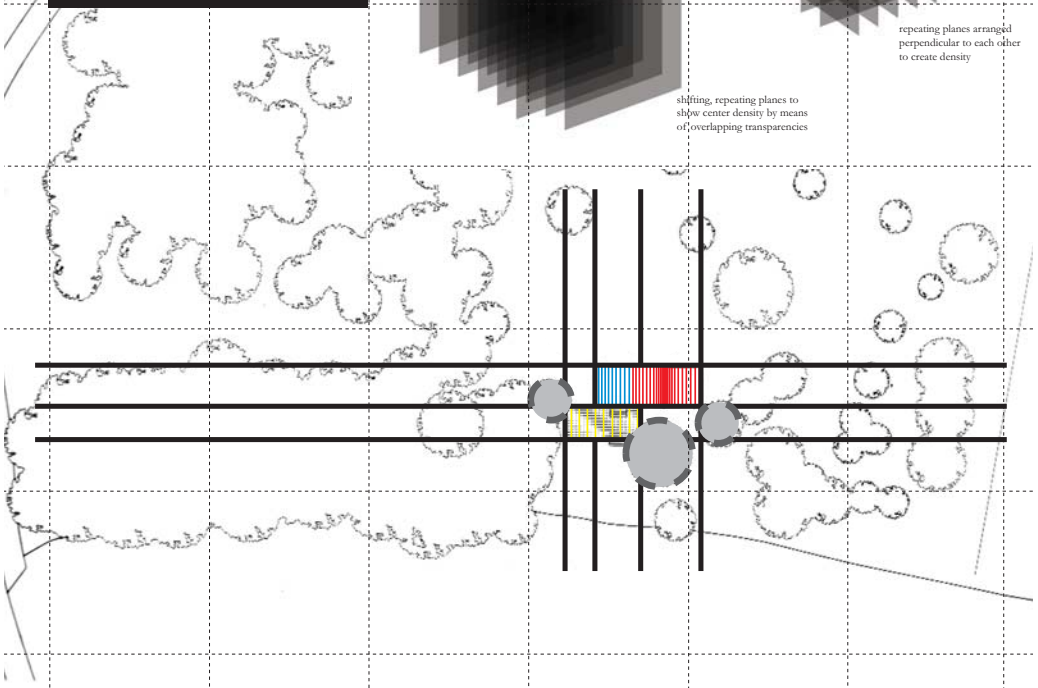
volumetric density studies |

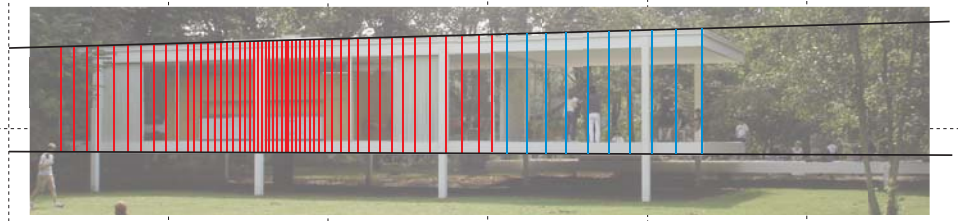
attempts to show density of building using repeating planes in 3-D



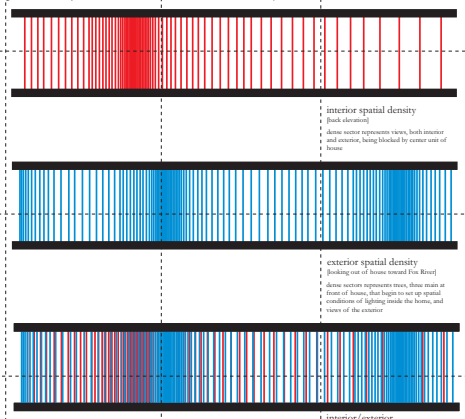
repeating planes arranged perpendicular to each other to create density

shifting, repeating planes to show center density by means of overlapping transparencies





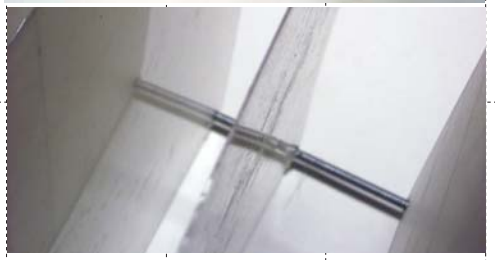
spatial density due to interior / exterior conditions |



interior spatial density
[back elevation]
dense sector represents views, both interior and exterior, being blocked by corner unit of house

exterior spatial density
[looking out of house toward Fox River]
dense sectors represents trees, three main at front of house, that begin to set up spatial conditions of lighting inside the home, and views of the exterior

interior / exterior
[overlay]
when both interior and exterior information is overlaid central density of core and density of trees begin to set up same spatial conditions



concept statement

the building analysis was a way for the individual to choose a building that he or she had been to within the last year. analysis of the building was described by experience. my analysis of the farnsworth house by mies van de rohe begins with the way mies manipulated both materials and light to set up a dance between spaces and volumes. my analysis starts with my 2-d reprsentation. here i use a series of vertical lines to show the density of the builidng. these vertical lines begin to set up a rythym, and thus describe the differentiation of the three main spaces of the home, the terrace, the porch, and the house. the 3-d representation takes this idea of a repetition of lines and turns it into a repetition of planes that create a volume. the volume is then augmented by a removal of material. this lack of material defines this space in a way that the juxtapostion of the the volumes of the farnsworth house did. the 3-d representation also shows the materiality of the house. by using a reflective condition on one side and a matte condition on the other, the differentiation of space that exists and at the same does not exist is present. this idea comes from the glass planes of the farnsworth and how they act both as a spatial definition, but also fade into the landscape.

andrew n butchko

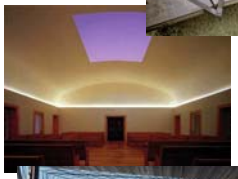
Architecture Studio: 2nd Year Fall

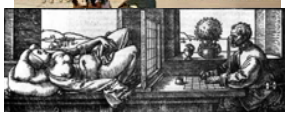
Coordinator: Kai Gutschow
Email: gutschow@cmu.edu
Off. Hr: M/F 12:00-1:00pm & by appt. in MM202

Fall 2007, CMU, Arch #48-200, M/W/F 1:30-4:20
Class Website: www.andrew.cmu.edu/course/48-200

(7/4/09)

PROJECT 1 – OBSERVATION / INSTALLATION





THE MINDSET

We will begin the semester with a high-intensity, group design project using the shop and a limited palette of materials to create an installation having to do with observation, and interaction with the environment around us. Think of it as "research" about how architecture filters or mediates between inside and outside, between you and the context around you. The project builds on your "Room" and "Surface" projects last year, particularly the scale of the human body interfacing with architecture, and the use of the shop as a design tool. The team approach should stimulate dialogue and encourage richer and more substantial results in a short spurt of time than is possible by yourself. It also reminds us that all architecture is collaborative and interactive.

THE PROJECT

Each team of students must design and construct a small installation on the front porch of CFA on the nature of "observation" and how we engage with the environment around us in one or more stimulating and evocative ways. Focus on one or all the bodily senses, how we observe and what we see, hear, feel, smell, etc. Explore how we interact with, modulate, control, or are transformed by one or all the elements of nature (light, wind, rain, sound, smells, etc.). Use your installation to raise awareness of what it means to "observe" and how we relate to the world around us.

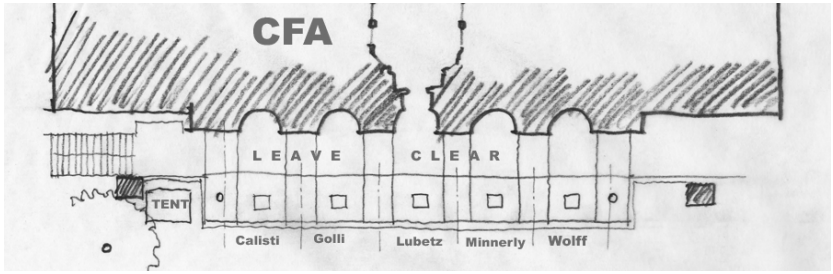
INSTALLATION SPECIFICATIONS

- Each studio will be divided into three teams of approx. 4 students.
- Each studio will be assigned to a small area on the CFA front porch (see diagram next page); the teams within a studio should negotiate so that they all fit
- Each team will be given two 4'x8' sheets of ½" plywood + six 8ft 2x4s for the primary armature of their installation. They can be cut or joined in any way.
- Each team will be allowed to add one more material (e.g. fabric, cardboard, glass, plastic, sheet metal, wire, mirrors, in a reasonable quantity, to amplify and complete their design intent, but not primarily to increase size.
- No paint or spray paint of any kind allowed.
- Each team may use as many fasteners as necessary
- Minimize waste; attempt to use all materials; work to recycle.
- Every installation must include an overhead component (roof) that shelters, controls or manipulates light, rainwater, views, and the sky
- Every installation must also include a vertical component (wall) that seeks to filter, block, focus, transmit, amplify or otherwise engage the surrounding context in a creative and provocative way
- The overhead and vertical components must be joined, and together should imply both an "interior" spatial condition, and an exterior form that strengthens the overall design intent and is interesting to look at.
- The size, scale, configuration, and mode of observation of your installation is limited only by what you can construct with your plywood and 2x4s
- Your installation must be independent, self-supporting, not leaning on, connected, or tethered to other structures or the ground.
- Although the primary focus should remain on "observation," and each team must design and buiold a single booth, consider how your installation "fits" alongside its adjacent neighbors on the porch.
- It must fit and "function" for a real viewer on a Sept. afternoon, rain or shine.
- Your design process should get to "full-scale" and "on-site" mock-ups (e.g. in cardboard) as soon as possible (perhaps by the first mid-review), so you can observe your installation under real conditions, and can modify the design at full-scale for best results. Build flexibility in your design and process. If you make a mistake, work with it, allow process to help drive the results.

TIMELINE

This is a two-week project. We will create the teams and start designing the first day of classes (8/27). A final review will take place rain or shine, on Mon. Sept. 10, on the front porch of CFA during studio.

continued...



PROCESS

The first week of studio will include a lecture by Scott Smith reintroducing you to the shop, and to the new materials, joinery, and safety techniques we'll use. On Fri. (8/31) there will be an all-studio lecture by the coordinator in Mm103, and a mid-review of proposed designs and models with your studio instructor: requirements will be set by the instructors. Major construction should begin only on Friday evening, proceed all of Labor Day weekend, and the following week. The team design process, the short charette schedule, and the full-scale building project will require you to explore, innovate, and change your designs during the construction process to take advantage of insights gained along the way.

DELIVERABLES

Each instructor will demand you explore and design in many different media and at many scales simultaneously during the design process. The final "deliverables" will be limited to 3 items:
1) the 3D installation your team constructs on the CFA front porch;
2) a large-scale (3"=1'-0") building section drawn through your installation showing how it "works" as an observation device with water, light, views...
3) a 2pp. "Documentation" using the 2nd year "template", featuring process work (sketches, models, and other drawings), photos of the completed installation, and your drawn section.

SHOP SPECIFICS:

- SAFETY: The architecture shop at CMU is a wonderful but dangerous resource. Our biggest concern is your SAFETY. Every year someone in the 2nd year gets hurt on one of the big machines: please be sure it's not you or those around you!! Please review all safety procedures, as well as all rules that have been set out by Scott Smith, Bruce Miller and the shop monitors. Failure to do so will lead to loss of shop privileges, grade reductions, or worse.
- CLEAN-UP: Among the most important "rules" of any shop is the need for everyone to clean up, and maintain a safe and neat working environment. Unlike the studio, a mess in the shop can be dangerous! Be sure the area underfoot and on your work table is clean before you start working, and be sure you clean up all scraps, sawdust, tools, and other objects before you leave. Doing so, will allow more people to use the shop efficiently, and will allow Scott and his staff to help you more on the projects. I have also instructed Scott to notify me about any student who fails to clean up or do their share of cleaning up after the whole group!
- COST: This initial shop project is new to the 2nd year. We will follow the same procedure as during your Freshman fall: the school will bill you a small "Shop Fee" to cover the plywood, 2x4s, screws, and a few special tools we'll make available for working outside the shop. Student teams will be responsible for purchasing all other materials they need for this project, as well as for all subsequent work.
- MINIMIZE WASTE: Minimize the material waste associated with this project in the following ways: **a)** mock up all design ideas in drawings, in small models, and at full-scale in cardboard before beginning to cut into your wood; **b)** design your projects to use ALL of the material provided. If you cut out holes, or cut off large corners, figure out an innovative way to use those scraps as part of your design. Your design process must acknowledge the materials you are starting with. This is especially important with non-orthogonal work; **c)** much of the wood we use MAY be recyclable, either through Construction Junction (all plywood 4ftx4ft or bigger; and all 2x4s over 6ft), or for children's craft projects (2x4 scraps and other softwoods).
- ASSEMBLY with SCREWS: In order to maximize recycling potential, and minimize the volume of waste, all work must be disassembled into component pieces after the final review, then separated into recyclable pieces, and dumpster waste. To facilitate disassembly, all projects should be constructed only with screws or other fasteners that can be removed, and NOT with glue or nails.
- CFA PORCH CARE: We have received special permission from the Dean to use the front porch of CFA as a site for our observation installations, and as a work space. It's a wonderful site, and will make our work accessible to the entire campus community. In return, we must take extreme care to protect the site: **a)** follow all rules with respect to the boundaries and limitations of the site, being sure it remains accessible to the rest of the college; **b)** the stone floor surface cannot be manipulated; no paint anywhere on the project; no glue or caulk can be used outside on the porch; if necessary we will put down a protective tarp or building paper to protect the stone floor; **c)** the public nature of the site will require us to be vigilant with tools and materials, as well as to clean up more thoroughly while working, as well as before you leave for the day; **d)** there will be a white tent set up on the front porch to store our work after hours and keep it dry.



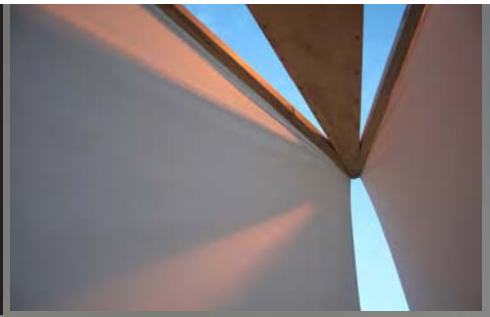


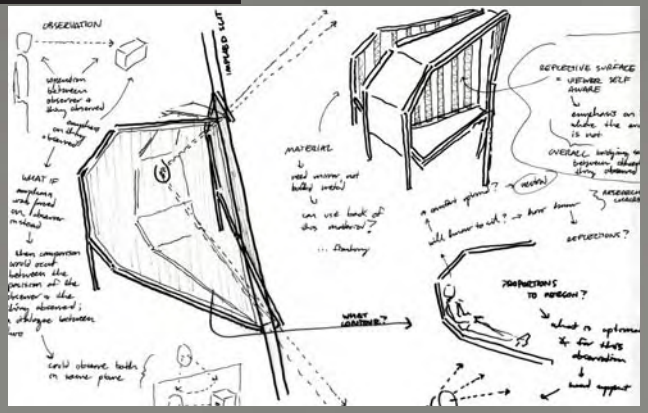


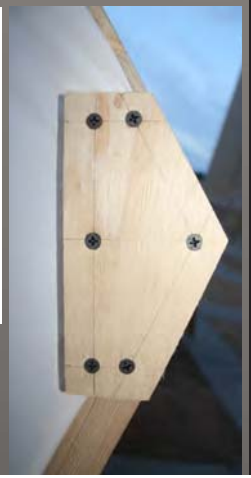


OBSERVATION INSTALLATION

Josh Marshman
Fil Agren
Steven Burton
Gabi Uribe
48-200 Composition Studio / F07
Lee Calisti
CMU School of Architecture







A restriction of view places emphasis on observation through a single vertical slit, which occurs at the moment where the architecture does not touch. The result is a play on public versus private positions of observation, as the observer can only partially view those outside the installation, while outside viewers can see the observer as an object for display - a shadow on the structure's stretched fabric. The formal gesture derived from the restriction of view is meant to cause new contemplation of the site as the everday act of observing occurs three feet lower than normal.

Josh Marshman

Architecture Studio: 2nd Year Fall

Coordinator: Kai Gutschow
Fall 2007, CMU, Arch #48-200, M/W/F 1:30-4:20 Email: gutschow@cmu.edu
Class Website: www.andrew.cmu.edu/course/48-200 Off. Hr: M/F 12:00-1:00pm & by appt. in MM202
(7/4/09)

PROJECT 2 – OBSERVATION / STRUCTURE








MINDSET:
In the first individual studio project we will build on the idea of "observation" and interacting with the environment around us. Here the focus will be on the primary "elements of architecture" and their potential to create rich experiences on many levels. The small scale and natural context of the project will allow you to work at several different scales, and to develop each architectural element fully both in itself, and as part of an integrated whole.

PROJECT
Your charge is to design a small observation structure along Outlook Drive at the top of Schenley Park to help users observe and engage nature, the surrounding landscape, and the views of Pittsburgh in multiple ways. Your project should operate on several levels: as a platform to celebrate views out into the landscape; as a modulating device to frame and filter the light, air, sounds, and water coming into your structure; as an instrument to study the concept of "observation"; as a dispenser of water, maps, information, and shade to the park visitor; as an armature to choreograph motion and experience through your spaces and into nature; as a fun and engaging place to be, for kids and adults. Although electricity and water will be available, this is to be a simple park structure, with minimal impact on the site, bound closely to the ecology of its context(s).

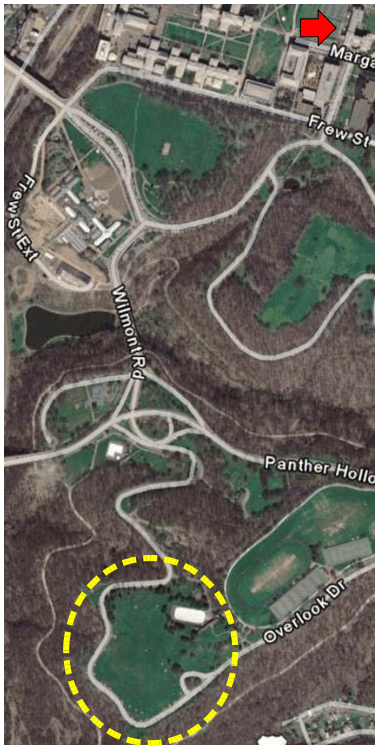
PROGRAM
The structure must contain three distinct spaces, each 80-100sf, plus minimal space for circulation. These can be arranged in any relationship to each other, and to the site, though they must be physically connected, either vertically or horizontally. The overall maximum height for the structure is 30ft, plus a roof. In order to minimize impact on the site, all spaces must be on or above ground level.

The programmatic requirements of the spaces are as follows:
1) one space must dispense water and information about the park and city;
2) one space must be enclosed and carefully modulate the elements of nature (light, air, water, sound) flowing through its walls in both directions to create a rich experience and enhance an understanding of the context, and about the nature of observation and how we observe;
3) one space must be a viewing platform open on at least three sides, with a place to sit;
4) there must be a roof or canopy covering the top of your structure.
5) one space must be accessible to a wheelchair from Overlook Drive.

THE SITE
The site of your observation structure can be anywhere on or near the large field alongside Overlook Drive at the top of Schenley Park (see the dotted line of the aerial view), and must be approved by your instructor. Pick your site carefully, including relationships to the slope, to views, to trees, to the street, and to the ice-rink, such that it reinforces your ideas on observation and how you want visitors to use your structure.
- The entire 2nd year should collaborate to agree on and create a long site section and/or an accurate topographic plan of the area.
- Each individual studio should document the site through photos, environmental data obtained through library and computer research, as well as studio-specific, "working models" of the site at the instructor's discretion
- Each student will be required to include an appropriate amount of the site in every drawing and every model that includes accurate dimensions for all slopes, trees, roads, buildings and other parts of the context.

continued....

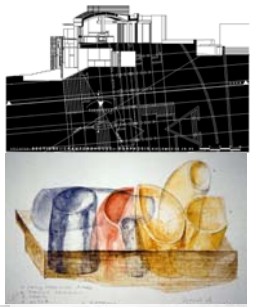
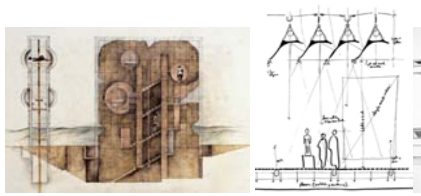
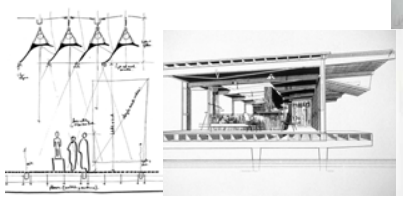
PROCESS
A major goal of the 2nd year studio is to keep developing a robust design process in each student. Over the course of the year we will work towards having longer design projects, less regulation of the design process, fewer imposed requirements, and a greater chance to explore the particular intent of your design. We will work towards this goal in several ways:
1) integrated research: you should integrate design and research, both in the form of smaller, exploratory design exercises, and through the parallel analysis of other buildings and related ideas, both by yourself and in groups
2) iterative design: your design process should be iterative, working to find alternate and multiple solutions at all points of the process, rarely bound to a single aspect, and always able to move forward with the ideas at hand, rather than needing to "start over."
3) synthesized elements: you should work simultaneously on the design of the whole, and the design of individual elements, at several different scales, and in different media, moving back and forth between the elements
4) quality process: your design process should include multiple drawing types, a variety of media, and a range of speeds, and all drawings should be done with intensity to achieve high quality results. At any point in the design process, you should have a "complete set" of high quality drawings available for feedback on your desk, rather than many incomplete fragments of process work, layers of poorly drawn plans, or lackluster sketches. Create drafts of all drawings earlier in the process; don't ever wait for the final presentation to draw something for the first time. Each drawing requires drafts.
5) effective communication: "deliverables" at mid-reviews and at the final review will be kept to a minimum, fewer than might ordinarily be needed to explain the full extent of your design, thus demanding that you maximize the content and impact of each presentation piece.



DELIVERABLES & FINAL REVIEW
Each instructor will have slightly different pedagogical methods regarding the design process. In order to share results from studio to studio, and to encourage a more robust design process, higher quality, and more comprehensive "process work," all students will be required to submit several pre-determined process drawings in the course of the project.

The primary tool for presenting your process work in this project will be building sections and plans. These will allow you to communicate clearly the horizontal layout and vertical composition of your building in relation to the landscape, as well as details about how the walls and roof allow the flow of light, air, and water in and out of your building.

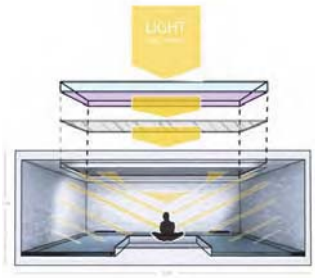
The final review will likely be limited to ONE INTEGRATED DRAWING, and ONE MODEL, requiring careful coordination of your idea with the specific drawing type: details to be announced at mid-review.

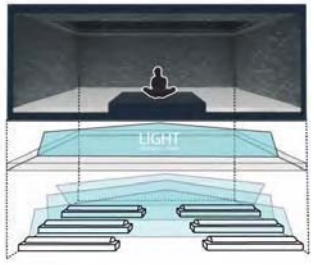




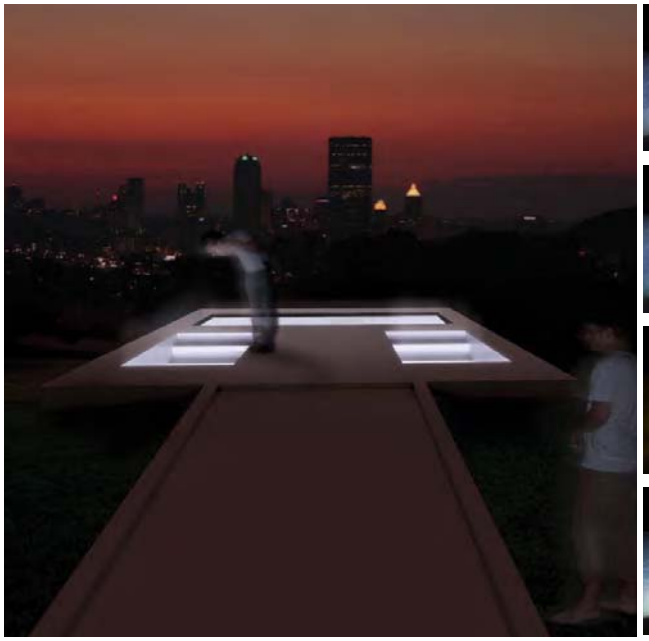

OBSERVATION STRUCTURE

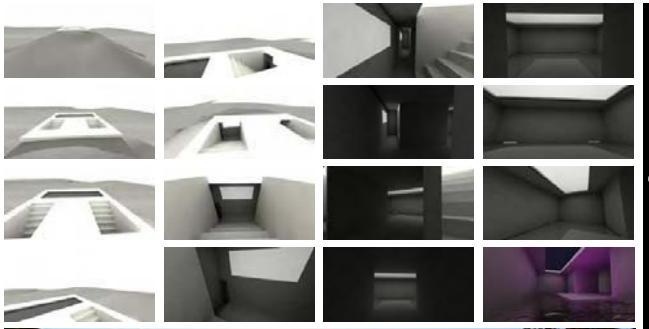
Pittsburgh, PA

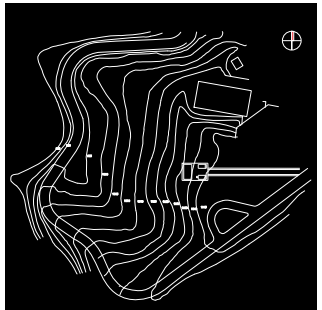
Max Arocena
48-200 Composition Studio / F07
Instructor: Spike Wolff
CMU School of Architecture











STATEMENT

To capture and amplify environmental light and color while creating a private experience of the site. Light filters into the pavilion and bounces off the water creating an interesting spacial condition, a condition that changes as time progresses, noon or sunset are two completely different experiences of the site, so is winter and summer.

Max Arocena

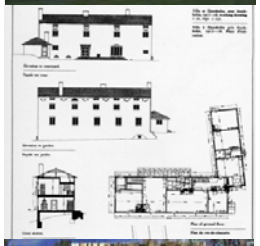
Architecture, Design & Composition Studio

Fall 2006, CMU, Arch #48-200, M/W/F 1:30-4:20
Class Website: www.andrew.cmu.edu/course/48-200

Coordinator: Kai Gutschow
Email: gutschow@cmu.edu
Off. Hr: M/F 12:00-1:00pm & by appt. in MM202

(7/24/07)

PROJECT 3 – HOUSE PROJECT



Mindset:

This project continues the exploration of "Composition" as the main theme of the semester. The "Museum Annex" project stressed the development of "Concept," (Idea) and attention to "Context" (Site), as well as "Content" (Program). Having begun to integrate these into your design process, this next project (as well as the Building Study) offers the chance to explore "Composition" on a more fundamental level, in relation to "Building Elements" and how they go together, as well as the development of spatial sequences on a more refined scale. By reducing the scale and complexity of the project, you have the opportunity to focus on each element more intensely, and through its relation to others, and to the whole, begin to create an architectural language that works from the smallest to the biggest scale. The challenge will be to create rich, intellectually challenging architecture that nonetheless is well developed.

Project:

Each studio will explore their own vision of a "house" program, with the common goal of creating a small space for a single person in a natural setting, as follows:

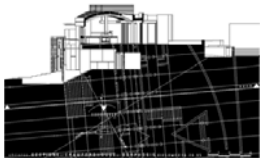
DAMIANI STUDIO - Towards a Design Process: Farnsworth House Visitor's Center
The project is to design a new visiting artist studio and visitor center for the Farnsworth House, which we visited earlier this semester on our Chicago fieldtrip. This project is to reconsider the role of the information center as a welcoming transition for tourists visiting the home. The programmatic elements are to be similar to that of the current information center with the addition of a modest live/ work studio for a visiting artist. This modest L/W space will also act as an occasional guest house.

CALISTI STUDIO - Visiting Archaeologist Live+Work Space
The University of Pittsburgh's internationally recognized Department of Anthropology and Department of History of Art and Architecture have commissioned you to design a SMALL living space to house an "archaeologist-in-residence" as well as a small work spacestudio.

LUBETZ STUDIO - Living Space/Studio for a Writer (Moya Studio)
Site: A tree covered site on Sampsonia Way, near the Mattress Factory. This writer is part of the City of Asylum/Pittsburgh Project. The City of Asylum was established by several Nobel Laureate writers to provide refuge and sustenance for writers who are being persecuted in their own countries. Requires spaces to write, sleep, eat/cook, bath, sit/relax.

MINNERLY STUDIO - "Director's House: Homewood Cemetary
The Homewood Cemetery has recently hired a new highly regarded director. As part of the compensation package the cemetery has agreed to provide her a small personal space of her own located with a relationship to Frick Park. For the director, you should provide a space to sleep, to cook, to eat, to bathe, to study, for guests, to hang 2 Picasso prints, and assure access and view of the park .

WOLFF STUDIO - "The American House"
In this second project, students are asked to question the existing model of the American house. The studio should become a laboratory of investigation through which to analyze, challenge and critique this existing paradigm. The objective of the project is for students to personally redefine the meaning of house in their culture and to reinvent a new type for the American house. Inspired by the spirit of Art and Architecture magazine's Case Study House program, the objective is to create a new vision of the American house, expressive of our current society and simultaneously theoretical, experimental and specific in nature.



Studio Damiani
CMU, Arch #48-200
Fall 2006, M/W/F 1:30-4:20 Office Hours: By appointment

Project Statement: Towards a Design Process

Visiting Artist Studio and Visitor Center for the Farnsworth House
http://www.farnsworthhouse.org/

Having visited the Farnsworth House this past September, you have viewed firsthand the Farnsworth House's spatial expression as well as the home's high level of material refinement. The qualities of this home and its unique relationship to its landscape act at both a physical and a sublime level to the visitor.

During this same visit you were able to view the arrival and pedestrian sequence to the home from the information center. This pedestrian sequence through the grounds of the estate provides a visual debriefing from the information center and parking area.

The Landmarks Preservation Council of Illinois, the owner of the Farnsworth House, is interested in preserving the visual qualities of the home while addressing the need to redesign the current information center.

This project is to reconsider the role of the information center as a welcoming transition for tourists visiting the home. The programmatic elements are to be similar to that of the current information center with the addition of a modest live/ work studio for a visiting artist. This modest L/W space will also act as an occasional guest house.

Program:
Having previously visited the information center, you should have a good sense of the spatial necessities of this facility. For your use listed below are the current square footages of the existing structure.

Gift Shop/ Ticketing: 400 sq. ft.
This area is to include display shelving and tables as well as a counter for merchandise sales and ticketing.

2 Unisex Restrooms: (2) @ 60 sq. ft.
Each restroom is to have a min. 3' x 3' shower area for guests.

Resource Center: 120 sq. ft.
This area is for visitors to review the construction documents of the home as well other items that pertain to the home and its architect.

Small projection area/ gallery/ lecture area with stackable seating: 400 sq. ft.
This area is for small receptions and exhibitions and to be a place to view a short film about the residence and the Landmarks Preservation Council of Illinois. This area can as well be used as a small lecture area for visiting artists and scholars.

Storage/ Mechanical Room: 120 sq. ft.

Live/ Work Studio: As required
This single space is to contain a modest working area, a compact sleeping area as well as a small kitchenette.

Mies Van der Rohe 1886- 1969

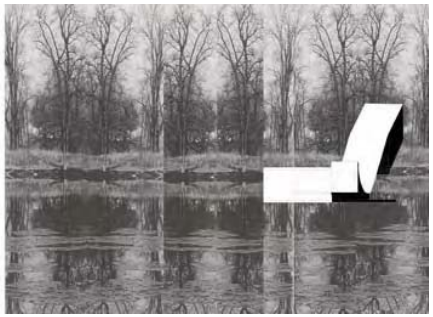
Farnsworth House, Plano IL. 1946-50

Dr. Farnsworth and MVDR

VISITOR'S CENTER

Plano, IL

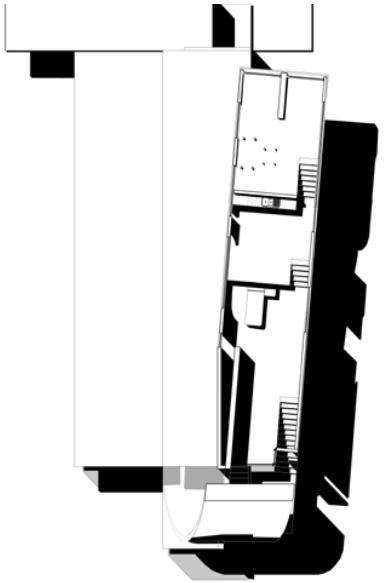
David Kennedy
48-200 Composition Studio / F'06
Instructor: Gerard Damiani
CMU School of Architecture

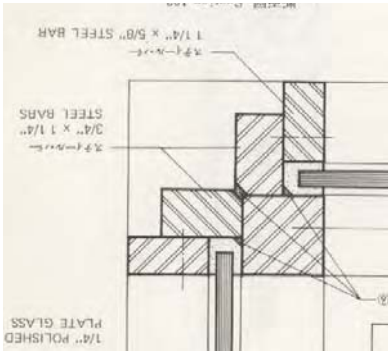


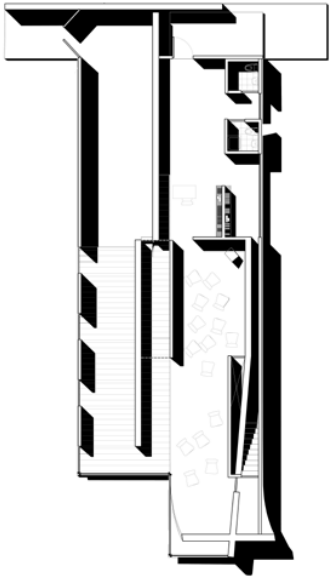
THE FIGURING OF ABSENCE

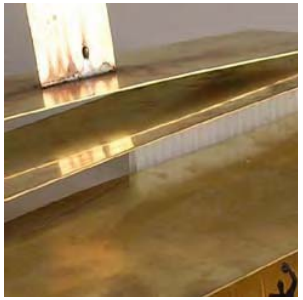
The design is an aid in understanding both the Farnsworth House and the ideas of Ludwig Mies van der Rohe. It introduces the visitor to Mies's structural vocabulary and examines details in detail.

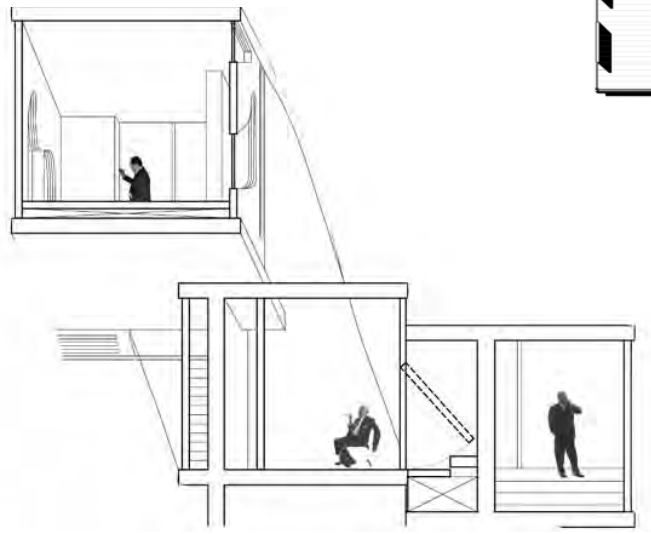
As structure grows in scale, it becomes inhabitable space. When occupied, the visitor is submersed in what Peter Eisenman called "the figuring of absence," where the voids in Mies's details become inhabitable space that is connected to its natural surroundings.

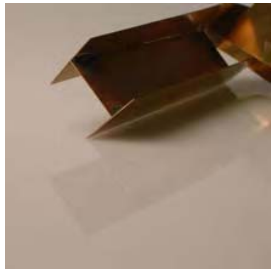








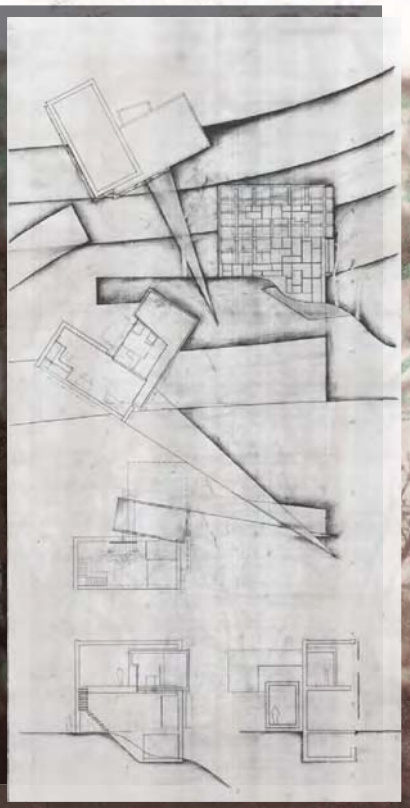


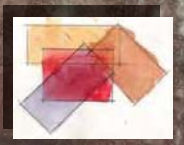


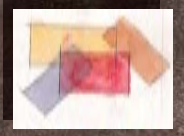
ARCHAEOLOGIST STUDIO

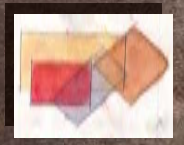
Pittsburgh, PA

Christopher Gallot
48-200 Composition Studio / F'06
Instructor: Lee Calisti
CMU School of Architecture









CONCEPT STATEMENT

The spatial and formal arrangement of the residence is derived from the layering and stacking of information found pertinent to the context as well as life of an Archaeologist. Discovery of the past would lead one to understand the details and process that made the residence a complete composition. The "crafted" thresholds, materials, joinery, and spaces would lead one to an understanding of formed architectural space and the simple archaeological elegance that drives the passion of their field.

-Christopher Gallot

Architecture Studio: 2nd Year Fall'07

Coordinator: Kai Gutschow
Email: gutschow@cmu.edu
Off. Hr: M/W 12:30-1:30pm & by appt. in MM307

Fall 2007, CMU, Arch #48-200, M/W/F 1:30-4:20
Class Website: www.andrew.cmu.edu/course/48-200

(7/4/09)

PROJECT 4 – LIGHT MUSEUM ANNEX

Mindset / Objectives / Agendas: In Project 4 we will move from the relatively quick design of a small, simple park structure, to an extended exploration of a larger, more complex cultural program dedicated to observation and the arts in a tight urban setting.

In addition to our general studio charge of creating rich and memorable spatial experiences, there will be three primary agendas in this project:

1) a focus on DAYLIGHT (or its absence), how to amplify and control light, and the effects it can have on observation and experience, particularly in a museum;

2) a focus on the role of PROGRAM and the process of determining the hierarchy, adjacency, and quality of each space as an integral part of the design & inspiration process;

3) a focus on the URBAN setting, the implications of context, and understanding the influences of architecture from and onto the surrounding city context.

It will be crucial to develop a rich and effective design process that will allow you to understand and synthesize solutions for a wide array of complex issues in a systematic, gradual, and progressive way, making and sticking to important decisions along the way. With such a complex program, you can't wait until the end to bring all the ideas together.

Project Brief: Based on the success of the Carnegie Museum's 2001 "Light!" exhibit, and the rich tradition and continued importance of "light" in modern and contemporary art, the museum has decided to expand its Oakland building complex with a "Light Museum," an annex across Forbes Ave. that will be purpose-built to explore light in art and architecture.

Your charge is to design a small but innovative exhibition and study center for a growing collection of modern and contemporary art that relates to "light" in a broad variety of ways. The building must enrich the visitor's and observer's understanding of light as central to how we see and understand all art, architecture, and the world around us.

The increasing use of digital and electronic technologies in the conception, design, realization, and experience of architecture today, combined with the mandate that architects marshal resources and energy-use in an increasingly responsible and sustainable way, makes the savvy use of light, and especially daylight in architecture, all the more urgent.

To encourage creative and in-depth explorations of daylight by young architects, the Velux Corp. will sponsor a small competition in our studio related to the theme of "Light in Architecture." With the help of personal research, discussions with your studio, as well as a series of studio lectures, you are expected to develop a sophisticated and detailed proposal about light in a "Light Museum" that will judged by invited critics and publicized by Velux.

The annex will require three primary programmatic elements with support spaces: 1) a series of linked exhibition spaces, each with specific light requirements, and some minimal support and staging areas; 2) a study and art storage center that will allow curators and a select public to study a greater array of art works more closely; 3) an entry space that facilitates access to these two spaces, but also conceptually and physically connects the "Light Museum" to the main museum, the street, and neighborhood. The annex will have access to all of the existing CMoA resources, support, and administrative spaces, but should serve as a relatively self-sustaining exhibit and work space. More detailed program requirements will be developed and released in the course of the project.

The annex should be created as part of larger and ongoing effort to improve the Oakland Cultural Corridor, and continue to reinforce the importance of culture and the arts for Pittsburgh more generally. It must thus strive to become an integral part of the street, neighborhood, and Pittsburgh region, to engage the urban context and the existing CMoA building in a manner that ties in closely to the concept and program.

Process: The design process will begin with research into existing museums, into the contingencies of the urban site, and the construction of programmatic massing models in order to shape the optimal adjacencies, opportunities for enhanced light conditions, open spaces, and exciting museum experiences. Further research will investigate the use of light, ideas, and space in the work of several important modern artists. After introducing very detailed program requirements, students will be expected to work methodically towards satisfying the primary agendas of the project while insuring memorable observations and spatial and light experiences.

Requirements & Due Date: All projects will be **DUE Sun. Dec. 2, 10:00pm**. Computer printouts will be due SEVERAL DAYS EARLIER! The overall presentation should be carefully composed of an integrated set of "technical" and "experiential" drawings, as well as computer & physical models, likely at 1/4" scale. All presentations will be on 44"x88" panels. A list of final presentation requirements will be distributed after the mid-review.

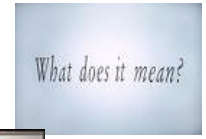
Architecture Studio: 2nd Year Fall

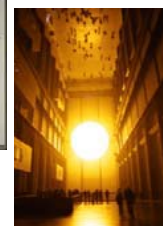
Coordinator: Kai Gutschow
Email: gutschow@cmu.edu
Off. Hr: M/F 12:00-1:00pm & by appt. in MM202

Fall 2007, CMU, Arch #48-200, M/W/F 1:30-4:20
Class Website: www.andrew.cmu.edu/course/48-200

(7/4/09)

PROJ. 4 – Artist Research & Presentation





Mindset: In this research project all students will be assigned to a group to do research on two (un-related) modern artists, and then present to the entire studio the significance of each artist, and how their concepts about light, space, form, perception, and experience might be of interest in the design of a "Light Museum." The intent it to uncover a range of ideas that reveal overlaps and common possible strategies between art and architecture.

This assignment is NOT about copying or using their forms or ideas, or about exhibiting their work in your museum, but rather about understanding the fundamental ideas and forms behind their art, asking about architectural equivalents or what might change when the ideas are translated into architectural design. Although your team will only study 2 artists, eventually, all students should know all artists and their associated ideas & works.

Artists & Student Groups

1. Larry Bell & Joseph Kosuth	Covington, Farrell, Hong, Kriegler, Kwan, Legrady, Marshman, Mingle, Noh, Sroub
2. Olafur Eliasson & Gordon Matta-Clark	Arocena, Branick, Bridgeman, Garrett, Kokoska, Korah, Smith (Eric), Smith (Randi), Tinari, Wang (Jerry)
3. Dan Flavin & Bruce Naumann	Abraham, Agren, Burton, Duray, Huber, Kim, Rosenberry, Soh, Tam, Wang
4. Dan Graham & Robert Morris	Doyle, Ichikawa, Mannion, Martini, Myung, Park, Schrantz, Wong (Eddie), Wong (Kevin), Yoon
5. Robert Irwin & Donald Judd	Amorosa, Branch, Carter, Day, Hur, Lehrer, Lightfoot, Miciunas, Podraza, Viray
6. Erwin Redl & Rachel Whiteread	Adams, Aviles, Chou, Gaur, Haskell, Himes, Hudock, Kong, Kuwahara, Uribe

Powerpoint Presentation: Collaborate with the other 9 students in your group to create an 8-10 minute PC-based Powerpoint presentation on the most significant aspects of your assigned artists to the entire studio on **Wed. Oct. 24** . Keep your presentation SHORT and TO THE POINT! Avoid biographical or too much factual info (place in handout instead)

Focus on the intellectual, theoretical, spatial and light-based concepts addressed by each of the two artists assigned to your group. What aspects or works by each artist might be of greatest interest to someone designing a "Light Museum." What relationship does the artist and their artwork have to architecture? Space? Light? Perception? Experience? Try to answer "WHY" the artists' work looks, and is experienced, the way it is. What are the most important pieces by the artist? Why?

In order to be more efficient about the research, you may divide the group to undertake various parts or the research, but the every member of the group should become well-versed in the ideas of BOTH assigned artists.

All presentations should be gathered, uploaded, and ready to present on a SINGLE PC at 1:30 on Wed. Oct.24. Please TEST all presentations BEFORE 1:30. In order to maximize time & efficiency, each group should designate someone to be sure the group's presentation is loaded and ready to present in the order listed above.

Informative Handout: Design an informative, double-sided, 8.5"x11" handout to summarize the research results (text + images) on each artist assigned to your group, according to the research criteria outlined above. Each group will thus produce two double-sided handouts. Consider adding more biographical information, and to discuss the artistic context, including associated artists, groups, style, era, geography, etc. Also include on each:

1) bibliography of most important theoretical writing BY the artist;
2) bibliography for FIVE best sources ABOUT your artist,
3) names of all 10 students in group.

** Prepare a pdf to be uploaded to Blackboard, and bring 6 copies of both handouts to class on **Fri. Oct. 26**. Be sure your pdf is no bigger then 1-2MB. "Flatten" your image, and "print to pdf", as Michelle advised.

Architecture Studio: 2nd Year F'07

Coordinator: Kai Gutschow
Email: gutschow@cmu.edu
Off. Hr: M/W 12:30-1:30pm & by appt. in MM307

Fall 2007, CMU, Arch #48-200, M/W/F 1:30-4:20
Class Website: www.andrew.cmu.edu/course/48-200

(7/4/09)

PROJ. 4 – PROGRAMMATIC MASSING MODELS - Assignment #1

Mindset: The basic intent of this assignment is to research an existing museum, and then "reverse engineer" and decipher the original, abstract, blocky, programmatic massing model that generated the final museum. **DUE: Mon. Oct. 15, 2007.** The work process:

1) **FIND** as much visual and text-based INFORMATION on the museum building that you have chosen (or been assigned) as you can in a brief period of time. You will need:
-- accurate floor plans to be enlarged -- sections to be enlarged -- orthographic 3D views such as axos -- diagrams or other visual devices used by the architect to explain the building's design & intent -- photos, perspectives, etc. -- statements by the architects and/or critics.

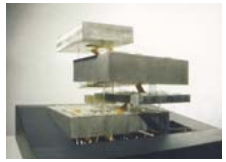
All of the buildings in the list I circulated are by very well-known architects. You should be able to find information in the following places:
-- monographs on your museums (only few museums have this) -- monographs on the architects -- books on museums -- more general books such as "Dutch Architecture" or "The New Generation in Germany" -- architecture magazines in ANY language (use Avery Index to find citations) -- the world-wide-web (useful for photos, but usually not for technical plans; remember to check "Google Images" but also websites that seem not to have much visual info)

You should be prepared that many books will be checked out. Ask around the studio for who is doing buildings by the same architects. You may need to rely exclusively on magazines if everything is checked out. If you have trouble finding enough info, email me and your instructor immediately.

2) **ANALYZE & INVENTORY** the plans, sections and other information you found. Locate and IDENTIFY the "primary programmatic components" of your museum design, as conceived by the architect. Work to find "categories" or "types" of programmatic elements, such as the following main categories:
1) all the main galleries, as well as specialty or subsidiary galleries (e.g dark vs light galleries) in a separate grouping
2) all the major non-gallery, public spaces such as auditoriums, cafes, bookstore
3) the major entry and circulation spaces, including lobby, main corridors, main stairs/escalators, roof-top terraces, elevators
4) the major agglomerations of "non-public" spaces such as staff offices, curatorial spaces, study spaces, art storage spaces, meeting rooms, etc;
5) where appropriate, also locate the main structural & mechanical components or spaces of your building, especially if they are clearly visible in your plans and their mass (even just thick posts) seem to come up in diagrams or as an organizing principle of your building.

The intent is to find all the "major" programmatic components, though not necessarily catalogue EVERY space. Your analysis will still LEAVE OUT many of the spaces in your museum such as public bathrooms, coat rooms, as well as a host of subsidiary functional components. This will lead to a certain POROSITY in your model.

Some reference sources will have more information on this than others, but in all cases YOU will need to INTERPRET the technical information you find. This analysis will require a good bit of guess-work, intuition, and creative thinking.



3) **ABSTRACT, REDUCE & ORGANIZE** the complexity and number of all the pieces and components down to the essential "blocky" components. GROUP them into the major categories listed above. Possibly subdivide the groups to indicate major differences of program, if it leads to a much clearer understanding.

Identify the ADJACENCIES intended by the architect, what pieces are located next to, or on top of which others. Understand WHY the architect arranged the pieces as s/he did, both in plan, and in section, as well as in SEQUENCE. What is the procession of major spaces experienced by the visitor? What are the major LIGHT conditions created by locating the space near an exterior wall or on top of the building? Are there separate major circulation systems for staff or for art works from loading docks into the galleries?

You should look for CONFIGURATION, but NOT necessarily the SHAPES or FORMS used by the architect. Work to separate the "components" from the "envelopes." Reducing the complexity will necessarily leave out much of the major design and experiential aspects of the building, even such things as whether the building seems more "fluid," "curvy," "choppy," or "rectangular."

Cont'd...

ABSTRACT the building into a set of distinct "BLOCKY" component chunks. You will reach a greater level of abstraction, and likely a greater CLARITY of understanding and communication, and make your model construction EASIER and faster, if you reduce everything to a RECTANGULAR SOLID. Ideally, every piece should be a rectangular building block, each slightly different in dimension, proportion, and orientation only.

4) **ENLARGE** the technical information (plans, etc.) you found so that the massing model is approx. 18" in the longest direction (the "piles" of blocks that result should be of similar size for all buildings, no matter what the actual size of your building is).

5) **BUILD** a SOLID MASSING MODEL of the major programmatic spaces of your museum. Show the main PROGRAM BLOCKS, the void spaces and POROSITY, and make clear all the important ADJACENCIES.

The model can be any scale you want, though it must be "TO SCALE", which means that basic proportional and configurational aspects of the actual building should be reflected in your model. (e.g. a tall and skinny space should read that way in the model, a space that is on top of another one, should read that way).

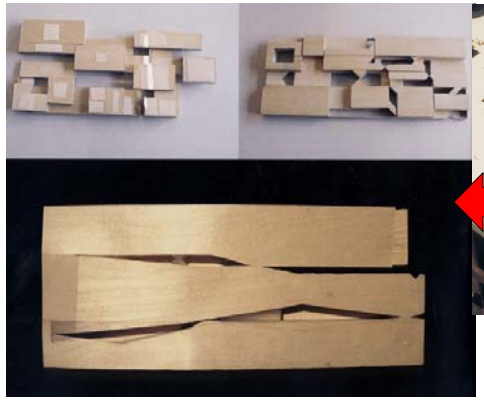
Find a method to IDENTIFY and DIFFERENTIATE the different components and groups of spaces. Consider using color, or variations in a material, or labels to make it clear which pieces correspond to which program elements (e.g. yellow blocks = galleries).

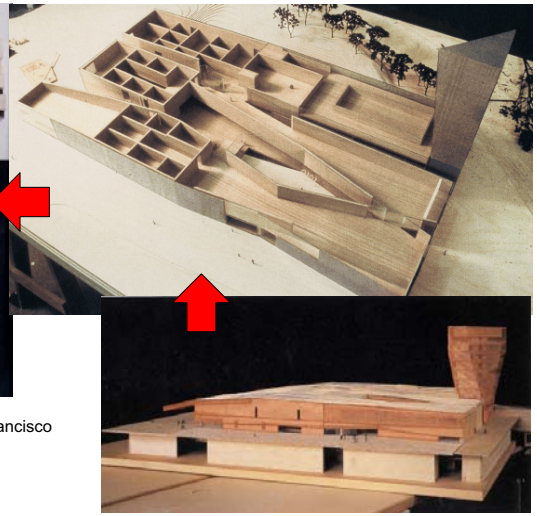
You must use SOLID modeling materials. Cut the component programmatic blocks out of solid wood (e.g. old 2x4ds) or insulating foam. Or consider stacking plywood or thick cardboard to create solid chunks that can be piled together. Wood (or plywood) models will likely be the most professional looking, so you'll need access to the bandsaw, etc. You are prohibited from using thin materials to create hollow volumes.

Think carefully about how to balance abstraction, the need for efficiency and speed of construction, with the need for clear communication. Avoid using more than one major type of material: make your model all wood, or all plywood, or all styrofoam, etc. When creating your blocks, us the "grain" or "direction" of the wood, plywood, or stacked cardboard to help orient your spaces, giving qualities to your massing model.

The wood shop will offer regular (but limited) hours this weekend. Please go EARLY to secure the necessary materials and tools.

6) **CREATE A DRAWING** that includes information about the QUALITATIVE aspects and LIGHT CONDITIONS in the main spaces, especially the entry lobby and gallery spaces. This is not just copying photographs, but ABSTRACTING the experiential essence. Does the space feel tall and skinny? Is it bathed in light from the side? Does it feel cold and intimidating? Consider using diagrams with words, or creating perspectives, especially with SOFT pencils or conte to convey information about LIGHT.





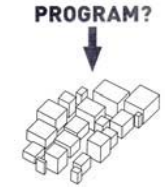
De Young Museum, Herzog & De Meuron, San Francisco

Architecture Studio: 2nd Year F'07

Coordinator: Kai Gutschow
Fall 2007, CMU, Arch #48-200, M/W/F 1:30-4:20 Email: gutschow@cmu.edu
Class Website: www.andrew.cmu.edu/course/48-200 Off. Hr: M/W 12:30-1:30pm & by appt. in MM307

(7/4/09)

PROJ. 4 – PROGRAMMATIC MASSING MODELS - Assignment #2



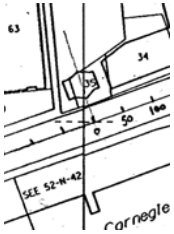
Mindset: The basic intent of this assignment is the reverse of the last one, working to create a first massing model for your "Light Museum" in the context of the Forbes Ave. site, ideas about light, and experiences for a museum visitor, using abstract, blocky program masses. **DUE: Wed. Oct. 17, 2007**. The suggested work process:

1) **READ** carefully the detailed program for your "Light Museum" on the back of this page. Note the larger categories (galleries, study center, entry, support). Note the number of detailed spaces described within each category. Note the different ways that each room has been defined in terms of size (some by square footage, some by number of people, some by furnishings), and the light conditions for each space. Consider how this museum compares to or differs from the museum you studied in Assignment #1.

2) **TRANSLATE & SKETCH** as you read the program, take VISUAL NOTES of ideas for each space that comes to your mind in terms of LIGHT conditions, LOCATION in relation to the street, roof, and other spaces, the SIZE in plan and in section, and perhaps the kind of ART you would like to see exhibited in each space.

Use some sort of system to chart relative sizes of each space. The simplest one is drawing a series of separate boxes with correct square-footages on paper or on the computer. Another way would be to start with a series of "volume blocks" (perhaps 100sf. X 12ft high each), and begin to group them, then pile them according to your ideas on spatial sequence, etc. Are there other ways to do this even more creatively? Try to include ideas about light (direction, amount), adjacency (what is next to what), and general spatial quality (long and skinny, tall, dark, welcoming, etc.) in your first sketches.

As you create each program space, keep coordinating it with the overall intent. How big is your whole museum footprint (2500sf max)? What is the overall sq. ft. of programmed space (ca. 7000sf + outdoor spaces)? How high is your building (3+ stories)? How "porous" (20%)?

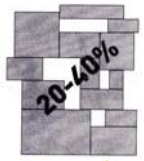


3) **ABSTRACT & ORGANIZE** the great complexity of the program, and the great number of separate rooms and spaces, into a smaller set of "blocky" masses that will begin to define your "Light Museum." Avoid merely duplicating the program groups: start to include your own more specific ideas for a Light Museum on Forbes Avenue. Should each gallery be its own "block? Why? How will each space be proportioned in your first sketch? Why?

As you abstract the groups of spaces, you should confirm a HIERARCHY (which is/are the most important? which is/are the biggest?), as well as SEQUENCE (which comes first, how does it lead to the next, where does it end, what is the "return trip" for the visitor), and the LIGHT conditions required and allowed in each space. Stay ABSTRACT.

Your process of reducing the complexity, abstracting the program, and organizing the pieces should eventually translate into a DIAGRAM of some of your spatial and programmatic thinking--hopefully more than just a bubble diagram.

4) **BUILD** a 3D programmatic massing model from your sketches that includes adequate "void" or "open" space to fit other subsidiary pieces of your program: build in a certain "POROSITY." As you "pile" the blocks, choreograph the kind of spatial and light experiences you want visitors to have. Remember: this is NOT about the SHAPE or FORMS.



This will require several attempts, several "drafts." You should devise a flexible 3D block system that you can rearrange several times. Consider working with small "chunks" of space (e.g. 100sf x 6 ft – using a 6ft height block may help relate it to (tall) human scale, and when doubled to 12ft will yield a good floor-to-floor height for support and study spaces, or when tripled to 18ft., starts to define a minimum height for a decent gallery space).

Work quickly and flexibly at first. The first 3D models can be done as sketches, or on the computer, but must at some point be translated into a physical model. Work without permanent glue at first (perhaps double-stick tape at first) so you can rearrange easily. Document or keep several of these "drafts," so you can remember your own creative process. You will be expected to create several updated versions of this massing model over the next few weeks, always revising existing ideas, beginning to incorporate more inspirations and constraints and produce a richer, more sophisticated set of spaces and experiences.

The model should follow the same guidelines as in Assignment #1, except that you should build it on an expanded version of the SITE PLAN. It must be solid, ideally of rectangular blocks, except for dimension, proportion, and orientation, and each of the main spaces should be identified through color, material (orientation of grain), or with words. .

5) **DRAW** a series of vignettes to describe the QUALITIES of each of the main programmatic spaces you have identified, much like in Assignment #1.

Program:
Your building MUST contain ALL of the following programmatic elements:

1) **GALLERIES**: A series of four flexible exhibition spaces for rotating installations dealing with light in art, architecture, and the world around us, according to the following criteria:

a) a 1000sf gallery that receives NO NATURAL LIGHT, and can be completely closed and dark, to be used for showing very sensitive drawings, or appropriate light art (e.g. neon), or video installations. The room must have an entry sequence that prevents all light from entering the space, using either two sets of doors, or a snaked entry space.

b) a 1000sf gallery that receives only INDIRECT LIGHT from ABOVE, some of which must be natural daylight that filters through a plenum space, or clerestories, screens, filters, or baffles.

c) a 1000sf gallery which has EXTENSIVE DAYLIGHT, and has direct access to exterior walls from at least two directions, through separate surfaces of the room (ceiling and wall, or two separate walls).

These three gallery spaces (a-c) must be a fully enclosed rooms, secure, and conditioned (heated, cooled, and humidity controlled) to exacting museum standards. The three indoor exhibit spaces should be flexible to allow a great variety of installation types, including plenty of tall wall surfaces for wall-mounted objects, and open space to place partitions, sculpture, or display cases.

In addition, these spaces should be clearly linked horizontally, vertically, or diagonally into a carefully choreographed sequence for the museum visitor. Where the above-mentioned light-requirements allow, they can be open to each other, or separated by a moveable partition, door, or short circulation space such as corridor, stair, or elevator. Although you have access to the loading dock and storage facilities of the main museum, you should consider how large artworks will enter your spaces. Will a large sculpture fit through your front door? If not, how else might it get in?

d) an OUTDOOR exhibit space, exposed to (some of) the elements, either on the roof or large balcony, or an open space partially nested in the "porous" building volume, but still outside. It must be secure, accessible only through the museum entry, and thus likely not at street level on our tight site. The outdoor space can be any size, though it should be large enough to hold a reception for 25 people alongside some art pieces.

2) **STUDY CENTER**: A series of four linked rooms that together make up a museum-quality study center for art and artifacts related to light in art, architecture, and the world around us, according to the following criteria:

a) a "reading room" for viewing art that includes: a) two large reading tables (each at least 5ft x 10ft) with accompanying chairs; a) a large vertical wall surface for hanging a painting; c) two computer stations. The room must receive indirect daylight, though the computer terminals must be screened from glare.

b) a room with no natural light to hold and access 6 large plan-file drawer cabinets, each 60" wide x 48" deep and 48" tall. Be sure to allow enough room to fully open the drawers and stand in front of them.

c) an art and artifact storage space with no natural light, to include 25 linear feet of shelving units, and appropriate racks to hold at least 25 large (at least 5ft x8ft) paintings in frames.

d) a curatorial office for at least two museum staff and requisite office desks and equipment.

3) **ENTRY HALL**: Access to the museum should be choreographed through a small but memorable museum entry hall, a node that connects the neighborhood and other Carnegie Museums to your gallery spaces, with the following criteria:

a) it should be no more than 500sf., a small, efficient space that leads to generous galleries.

b) include a ticket and information counter.

c) include open floor space for a group of 25 people (such as a group of school kids) to stand without restricting the accessibility of the counter, entry, or galleries.

d) clear entries to galleries and to all requisite support and circulation spaces (elevators, etc.)

e) the entry space must be primarily daylit, and must be able to be naturally ventilated or partially opened to the outdoors in a secure way on nice days. Because of the daylight and natural ventilation amenities of this space, access to the galleries must be through doors or an airlock system to prevent humid air and harmful light from reaching the art works.


Koolhaas, Ca' Musica Program

4) **SUPPORT SPACES**: Since the "Light Museum" has access to specialized support spaces in the main museum across the street, you will be able to keep these to a minimum. Nonetheless, you must include the following in your building:

a) a coat-room directly adjacent to the entry space with 10 linear feet of coat and bag racks and a desk for the entry hall staff.

b) at least one women's, and one men's handicap accessible toilet;

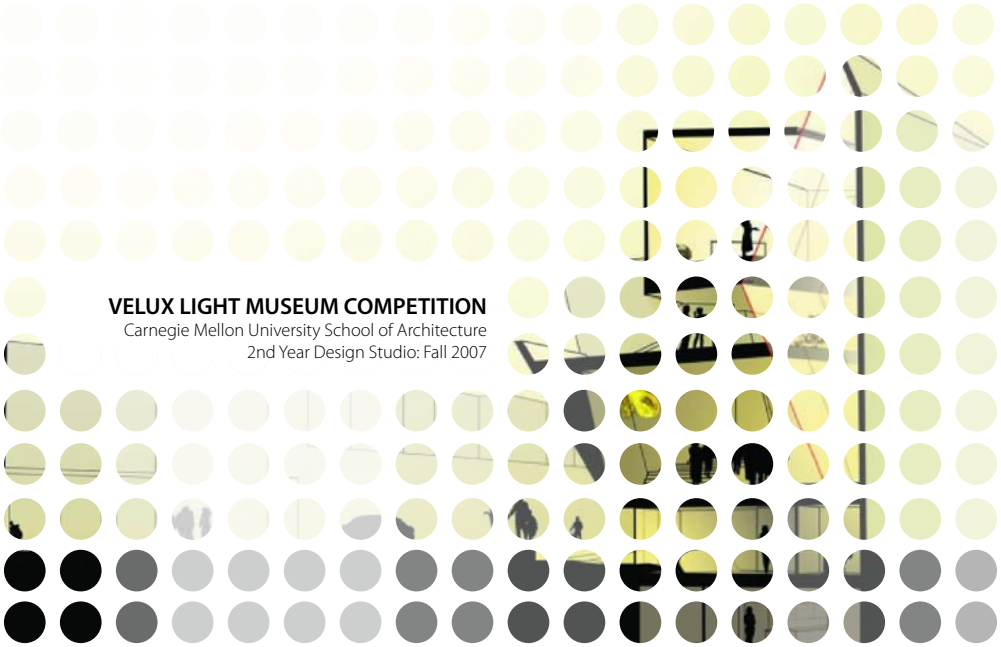
c) ADA accessible circulation space to ALL the main rooms and spaces in the museum, with vertical circulation either through an elevator, or ADA-approved ramps.[1]

d) mechanical spaces (a total of approx 400sf).

[1] "The Americans with Disabilities Act (ADA) guidelines recommend a slope no steeper than 1:12 - 1 ft. change in elevation for every 12 ft. of length. This means you need 1 ft. of run for every inch of rise. There's nothing to say that you can't make a ramp longer, with a more gradual slope. The degree of slope depends on the user's physical abilities. For example, if a person has a motorized wheelchair, the 1:12 slope might be fine. But if the user relies on his or her own power to wheel up or down a ramp or walk up with crutches or a walker, a more gradual slope is easier to negotiate, such as a 1:16 or 1:20 slope."

Ordinarily, a museum like this would be subject to many more code regulations, including having a fire stair or escape that ensures two means of egress from all primary floors of the museum. Because this is your first complex program, you are encouraged (but not required) to investigate and include all such architectural requirements in your building.

Part of a booklet made to document the 2007 Velux student competition



VELUX LIGHT MUSEUM COMPETITION

Carnegie Mellon University School of Architecture
2nd Year Design Studio: Fall 2007

SPONSORS

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School of Architecture
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Chris Minnerly, AIA, Studio Instructor
Spike Wolff, Studio Instructor
Jonathan Golli, Studio Instructor
Laura Lee, FAIA, Head of the School of Architecture

Booklet designed by Michelle Lopez

MINDSET

In this project, students moved from a relatively quick design of a small, simple park structure, to an extended exploration of a larger, more complex cultural program dedicated to observation and the arts in a tight urban setting.

In addition to the general studio charge of creating rich and memorable spatial experiences, there were three primary agendas in this project:

1) a focus on DAYLIGHT (or its absence), how to amplify and control light, and the effects it can have on observation and experience, particularly in a museum

2) a focus on the role of PROGRAM and the process of determining the hierarchy, adjacency, and quality of each space as an integral part of the design & inspiration process

3) a focus on the URBAN setting, the implications of context, and understanding the influences of architecture from and onto the surrounding city context.

PROCESS

The design process began with research into existing museums, into the contingencies of the urban site, and the construction of programmatic massing models in order to shape the optimal adjacencies, opportunities for enhanced light conditions, open spaces, and exciting museum experiences. Further research investigated the use of light, ideas, and space in the work of several important modern artists. After being introduced to very detailed program requirements, students were expected to work methodically towards satisfying the primary agendas of the project while insuring memorable observations and spatial and light experiences.

It was crucial for students to develop a rich and effective design process that would allow them to understand and synthesize solutions for a wide array of complex issues in a systematic, gradual, and progressive way, making and sticking to important decisions along the way.

PROJECT BRIEF

Based on the success of the Carnegie Museum's 2001 "Light!" exhibit, and the rich tradition and continued importance of "light" in modern and contemporary art, the museum had decided to expand its Oakland building complex with a "Light Museum," an annex across Forbes Avenue that would be purpose-built to explore light in art and architecture. The students' charge was to design a small but innovative exhibition and study center for a growing collection of modern and contemporary art that relates to "light" in a broad variety of ways. The building was to enrich the visitor's and observer's understanding of light as central to how we see and understand all art, architecture, and the world around us.

The increasing use of digital and electronic technologies in the conception, design, realization, and experience of architecture today, combined with the mandate that architects marshal resources and energy-use in an increasingly responsible and sustainable way, makes the savvy use of light, and especially daylight in architecture, all the more urgent.

The annex required three primary programmatic elements with support spaces:

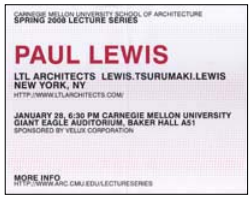
1) a series of linked exhibition spaces, each with specific light requirements, and some minimal support and staging areas
2) a study and art storage center that will allow curators and a select public to study a greater array of art works more closely
3) an entry space that facilitates access to these two spaces, but also conceptually and physically connects the "Light Museum" to the main museum, the street, and neighborhood.

The annex was to be designed as part of a larger and ongoing effort to improve the Oakland Cultural Corridor, and continue to reinforce the importance of culture and the arts for Pittsburgh more generally. It was to be designed as an integral part of the street and neighborhood, and Pittsburgh region, to engage the urban context and the existing CMoA building in a manner that ties in closely to the concept and program.

THE JURY

The Velux Corporation, the world leader in roof windows and skylights, has been running international student competitions for several years around the very broad theme of "Light in Architecture." The CMU competition was an in-house process based loosely on these competitions. On January 18, 2008, a distinguished jury of local architects and professors met to review, discuss, and decide on the winners of the 2007-2008 Velux Competition, held in the 2nd year studios of the CMU School of Architecture. The winning schemes and honorable mentions will be encouraged to submit their schemes to the Velux International Student Competition, due this May, with judging in June 2008 and a big awards ceremony in Turin in November 2008.

JURORS:
Gary Carlough, AIA, Principal, EDGE-Studio, Pittsburgh
Ed Shriver, AIA, Principal, STRADA Architects, Pittsburgh
Greg Galford, AIA, Rothschild-Doyno Architects
Khee Poh Lam, PhD, Professor of Architecture, CMU
Jeremy Ficca, AIA, Assistant Professor of Architecture, CMU
Charles Rosenblum, Adjunct Assistant Professor, CMU
Terry Lynch, Velux



AWARDS

CMU and VELUX announced a public lecture on January 28, 2008, featuring architect Paul Lewis of the award-winning New York City firm Lewis/Tsurumaki/Lewis, to cap off the VELUX student design competition. Lewis, the 1998 winner of the Mercedes T. Bass Rome Prize in Architecture from the American Academy in Rome, spoke on issues of light, materials and assembly in architecture—themes that students explored in the VELUX competition.

Professor Laura Lee, Head of the CMU School of Architecture, announced the winners, and handed out awards to the winning students at the end of the lecture. The awards were: Grand Prize ($750), 2nd Place ($500), 3rd Place ($250), and Honorable Mention. Speaking for VELUX, Lee noted: "We applaud the efforts of these aspiring architects in thinking about the way light in architecture can enhance a cultural experience, as well as our daily living experience."

AWARDED PROJECTS

1st Place	Roxanna Viray
2nd Place	Joshua Marshman
3rd Place	Hiroyuki Ichikawa
Honorable Mention	Judyta Podraza
Also Noted	Filip Agren
	Kaitlin Miciunas
	John Soh
	Bizhou Wang

1st Place: **ROXANNA VIRAY**

Insructor: Jonathan Golli

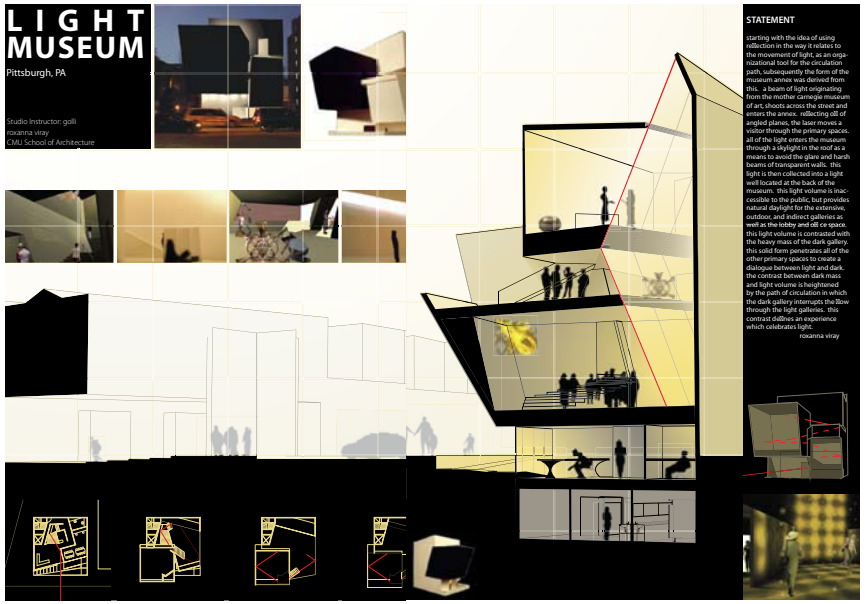
"This clear project is a mature and nuanced synthesis of form, experiences, and urbanism based on the unifying theme of subtly modlated light. While sculpturally adventurous, this design is also structurally practical and responsive to program. Its compelling presence in both day and nighttime conditions underscores the sensitivity to light throughout."

Light Manifesto

Contrast is the "juxtaposition of different forms, lines, or colors in a work of art to intensify each element's properties and produce a more dynamic expressiveness." (dictionary.com)

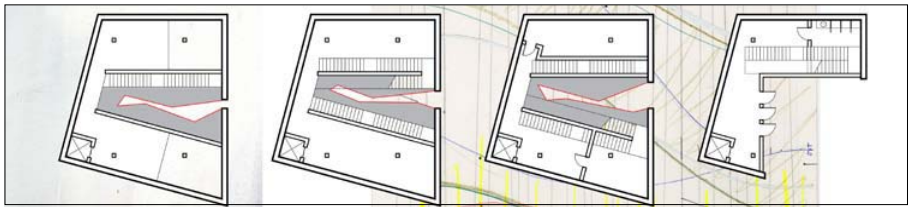
Natural light enters only from a skylight to filter into a light well, diffusing the harsh rays. This volume of light provides illumination for the extensive, outdoor and indirect galleries, lobby and office space. Inaccessible to the public, it is a display of light as an object from the aforementioned galleries. This light volume is contrasted by the heavy mass of the dark gallery. This negative gallery penetrates though the other public spaces to produce a dialogue between light volume and black mass. This disparity is further intensified in the journey through the galleries, following the path of a light beam reflecting off of oblique walls, where the dark space interrupts the flow through the day lit galleries.

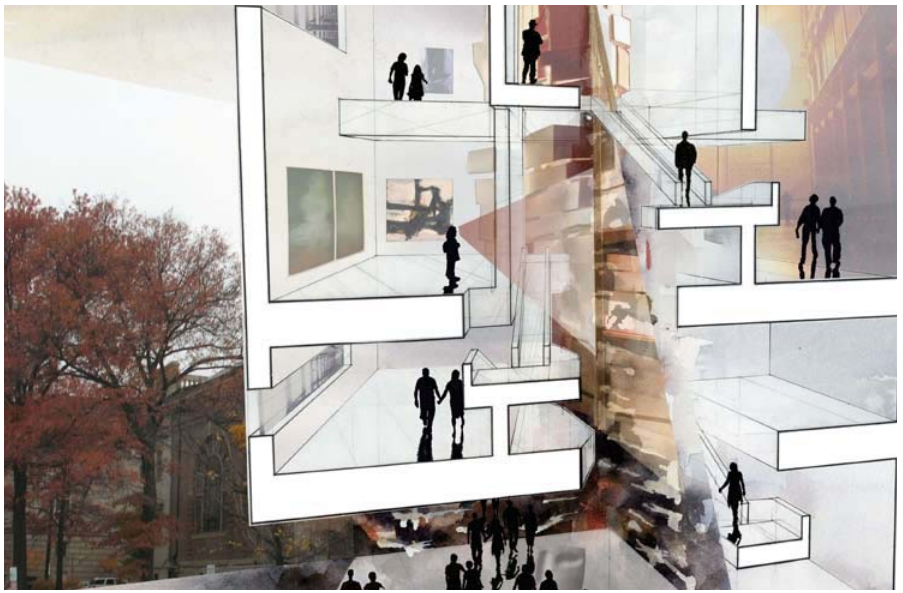
A museum is thought of as a meditative space, but yet it is a museum that commemorates a vibrant energy: light. By defining an experience of contrast, the museum becomes a celebration of light.



2nd Place: **Joshua Marshman**
Insructor: Lee Calisti

"This project has a vivid sense of how light can percolate through a building and animate the experience of space and art. A wide range of graphic skills gives energy to the rich concepts underlying the design."

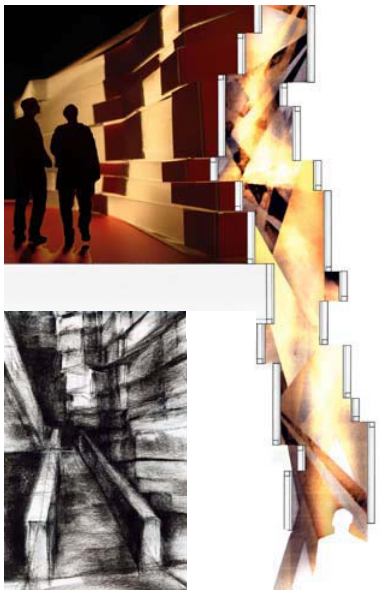




Light Manifesto

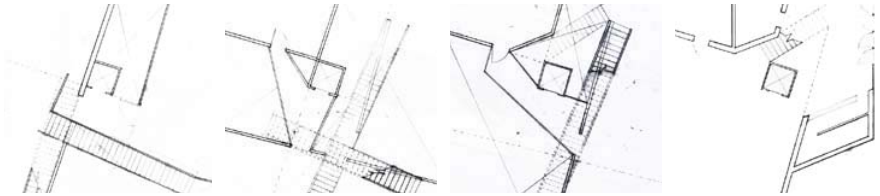
Light pours into the building through a central fissure that affords each gallery specific qualities of natural light through an interior skin. The exact nature of light in each space is informed by a central contrast in programmatic requirements: the indirect light gallery, where light is diffused and most dynamic, suggests an experience where the architecture has a profound and altering effect on the viewer's experience of art, while the natural and artificial light galleries remain as unimposing, highly modifiable spaces for the artist.

The architectural fissure occurs between the natural light and artificial light galleries, creating an indirect light gallery that circulates through the building about a central split. Light diffusing through the indirect light galleries defines a public entrance space, where views upward through the museum allow the building to become one massive object for the filtering of light.



3rd Place: **Hiroyuki Ichikawa**
Insructor: Chris Minnerly

"This highly experiential design is based on very practical plans that grow to richness and complexity in three dimensions. An especially dramatic perspective rendering gives heroic scale to a delicate palette of illumination."

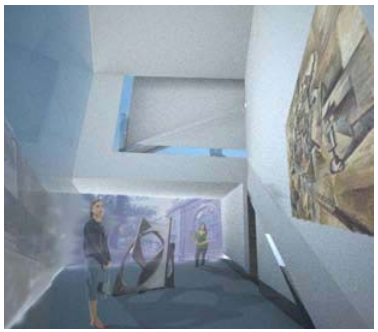


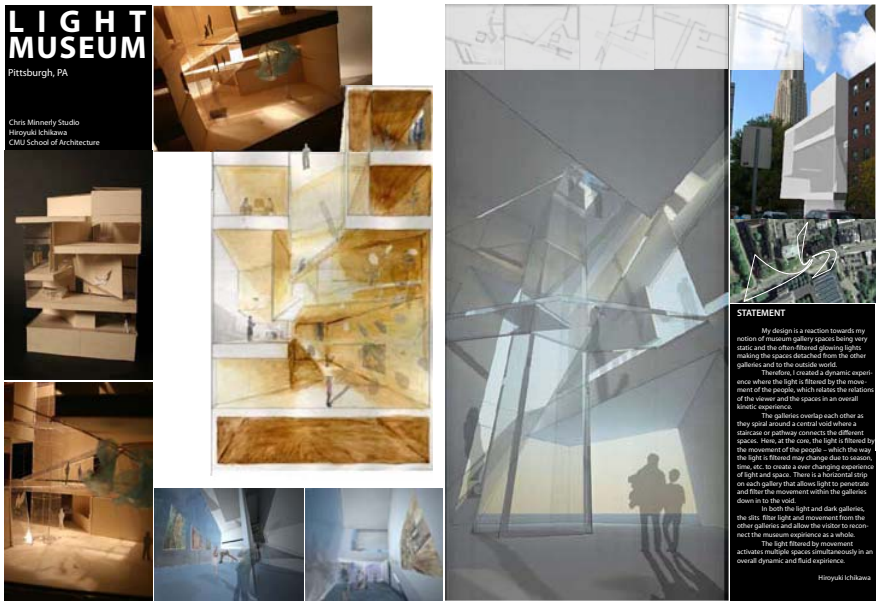
Light Manifesto

Museums are often static and detached in experience due to fragmented spaces and surreal glowing lightings. My design is a reaction to that notion; a dynamic experience where the movement of people filters the light like an ever-changing kaleidoscope.

The galleries overlap each as they spiral up around a central void. Slits at the intersection of galleries allow for light and movement to penetrate through multiple spaces and into the central void. Transparent paths that connect galleries puncture out into the void where light from the galleries and from the top of the museum are scattered like paints of light upon the visitor.

As the visitor is immersed in the kaleidoscope of light, one connects the once detached spaces into one unified, dynamic experience of light and shadow.

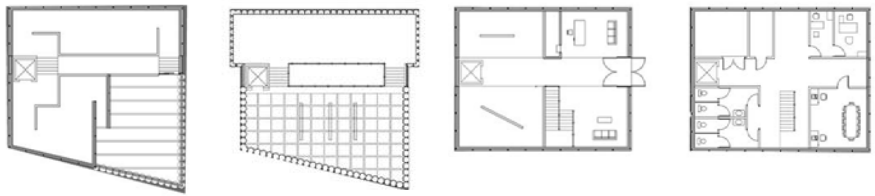


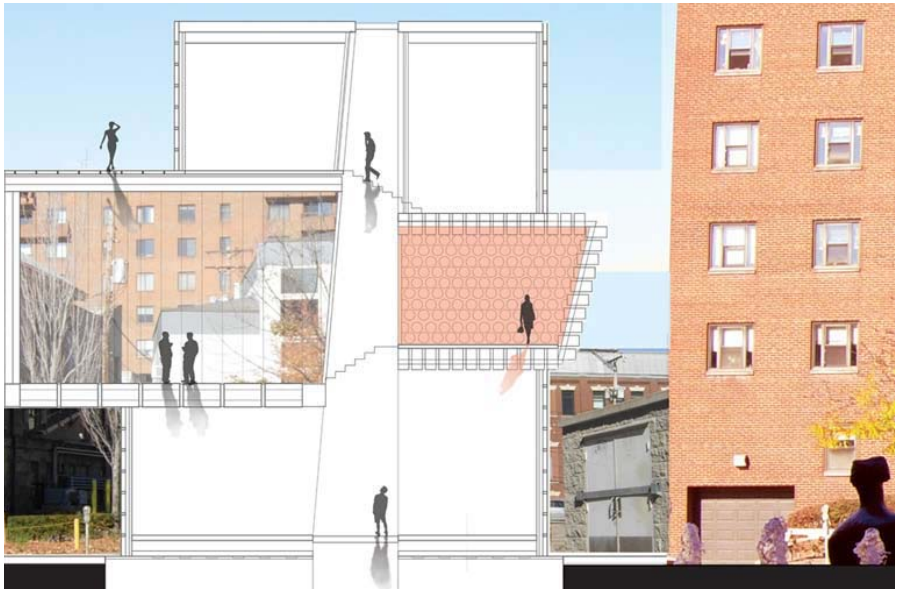


Honorable Mention: **Judyta Podraza**

Insructor: Spike Wolff

"A wonderfully believable scheme, with a well constructed sequence of spaces, and great attention to light filtering through a series of different screens."





Light Manifesto

A museum is a public space for viewing art. However, museum-goers tend to have a private interaction with the art, shutting off the distractions around them. Nevertheless, in the light museum, the public becomes more aware of their surroundings are they are forced to acknowledge the other museum patrons and the surrounding site. Each space in the museum filters light and shadow through the different materials causing changing lighting conditions.

The light entering the direct-light gallery causes people's shadows to affect the brightness of the lobby and indirect gallery space below. Similarly, this happens when people walk in the outdoor gallery space above. This is shown in the main rendering.

On the other side of the museum, the adjacent building's red brick wall gives off a red glow through the translucent walls, thus making the museum-goer aware of the context outside. Each room in the museum uses the changing conditions of light to create different experiences inside.