

Architecture: 2nd Year Studio

Fall 2010, 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

(9/3/10)

PROJECT 2 – PCA/FILMMAKERS LIVE-WORK

Mindset:

This project explores the idea of "Composition" and the "Elements of Architecture" on many levels, from the site planning and programming, to the level of how your structure is made and experienced. The act of making, and the visceral art of putting together physical elements in a creative and intent-laden manner, whether they are pieces of program, or materials, or systems, or drawings, or images, ought to be at the heart of all architecture.

Project:

The Pittsburgh Center for the Arts and its sister organization Pittsburgh Filmmakers have commissioned you to build a small live-work space for a visiting filmmaker or video artist on their Shadyside campus. Your charge is to create a structure to enclose: 1) a modest living space for a single visiting artist (primarily for sleeping); 2) and a work and teaching space that accommodates 10 people. The work space should be flexible, allowing for different kinds of activities related to film-making, film projection, video viewing, teaching, and discussion. Further details about the program (including service spaces such as bath and mechanical rooms) will be introduced after your initial explorations.

Site:

The historic nature of the PCA campus makes building new structures controversial (for a brief history see the Wikipedia article on the PCA). As a result, the PCA has decided to build the new live-work space on the site of an existing wooden, U-shaped outbuilding located under some trees to the East of the Marshall Building (the main yellow building housing the galleries). The existing building will be condemned and demolished, though the existing foundation walls may remain. The indoor, architectural portion of your project must fit within the rectangular site outlined by the four main corners of the existing building. All trees on the site must also remain, though your overall design should extend outward to embrace the landscaping and open space in and around your building. You are encouraged to revise and improve the existing approach and connection of the building to its surrounds, including the connection to the Marshall Building, and the relationship to the driveway above the building to the South through grade changes, garden walls, paths, and trellises. By considering your project as a combination of indoor space and closely related outdoor spaces (much as in the courtyard structures you studied this summer, as well as the president's house a year ago), the overall site will thus potentially extend beyond the existing building footprint.

Process:

In order to focus on the "Elements of Architecture," both on a large and a small scale, and to strengthen model-making and visceral approaches to making architecture, the working process for this project will be primarily in 3D physical models at 1/4" or larger scale. You are encouraged to sketch, draw, draft, and use the computer as needed in order to explore and understand overall or particular issues, but discussions with colleagues and presentation to instructors should take place primarily with detailed physical models. Great care should be taken to insure that ALL models (even initial ones) reveal ideas about materials, thickness, and assembly, with space delineated through structural components more so than planes and levels of transparency. Your models should reveal accurately how YOU might make the real building with real materials and construction systems that you have thoroughly researched, particularly in the case of complex or non-rectangular formal geometries. Final models will need to reveal all the primary physical "elements" of your building.



Kundig, Delta Shelter



Kieran/Timberlake, Loblolly Hse



PCA Sculpture Court



Burnette, Fallingwater Cabin



MLS Fallingwater Cabin



Italian Pavilion, Shanghai Expo



Wagstaff, Cabin



Assignment #1:

Over the long Labor Day weekend, you should visit the site (take buses down Fifth Ave., such as 71D) several times at various times of day, to experience how the sun works on the site, how people use the area around the site. Visit surrounding buildings and Mellon Park, absorb the atmosphere of the PCA, and document it all via sketches and photos.

The entire class should “self-organize” to create an overall, unified, accurately measured, scalable site plan with all important site measurements, including dimensions of the existing building, grade changes, tree-height, and building elevation details. Divide this work evenly, this part is a team project.

Student should pair up and each group make an initial site model at 1/4" scale that extends out from the building footprint approx. 5-10ft, and includes contouring of the hillside, the line of the existing foundation, and the extent of the tree canopies. This should be a “working model,” likely made of cardboard or foam-core. Consider painting it to create a neutral background. Show the existing foundation. Experiment with various abstracted representations for the tree canopies. Do NOT use fake grass or “real” materials.

Each student should carefully craft a series of 4-6 study or sketch models at 1/4"=1'-0" that begin to explore the primary “elements of architecture” and the important architectural issues you determine for this program, site, and project. Create iterative solutions for organizing the program, for dealing with issues of approach and solar orientation, for separating private & public, for relating interior, exteriors, courtyards, and porches, for how to make or construct the building with different kind of materials and assembly methods. Explore the idea and variations of wall, foundation, structure, skin, roof, threshold, window, etc.

At least three models in your series must be made exclusively out of wood as follows:

- 1) one must be made only of solid blocks of wood; blocks may be assembled out of 1/2" x 1/2" solid wood or similar, cut as needed (see Home Depot);
- 2) a second model must be made only of wood planes, e.g 1/8" thick bass wood (NOT balsa) sheets from art store, panels cut as needed.
- 3) a third must be made only from “sticks” or linear pieces; use small dimensioned bass wood from the art store, or bamboo skewers from the grocery store.

All connections can be notched or glued; a few additional parts can be used for connections: small rubber spacers to space apart segments of mass; string to bind together sticks; pins for pivots.

The other models can be made out of other materials, and can combine multiple materials, including wood, but can NOT include transparent or translucent plastics (use wire mesh or create wood mullions to show glazing). Avoid cardboard/chipboard.

Photograph each of your models from multiple angles on your own site model.

For Friday, read Gaston Bachelard's The Poetics of Space, esp. chapters 1-2 and 9-10.

Research PCA, Filmmakers, and Mellon Park.

