Architecture Studio: 2nd Year

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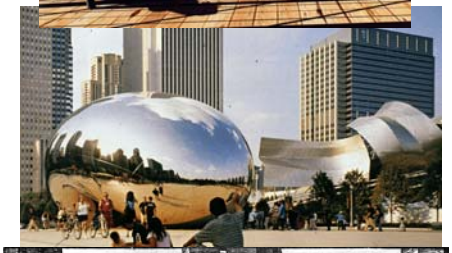
Off. Hr: M/F 12:00-1:00pm & by appt. in MM202

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

(8/23/07)

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.

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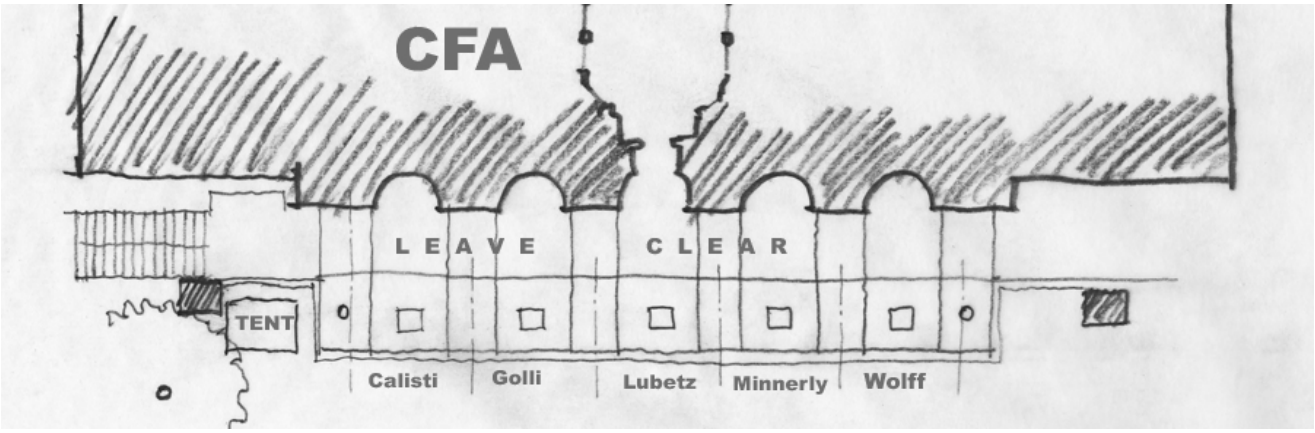

PROCESS

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.