

Architecture, Design & Materials Studio

Spring 2005, CMU, Arch #48-205, M/W/F 1:30-4:20
Class Website: www.andrew.cmu.edu/course/48-205

Coordinator: Kai Gutschow

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Off. Hr: M/W 12:30-1:30pm & by appt. in MM307

(2/21/05)

PROJECT "2" – Auto Expo

"Materiality is more than a technical property of a building: it is a precondition that promotes ideas, creativity and pleasure in architecture, and it guides us to the loftiest aspirations in architecture." – Jorge Silvetti

"When the pressures of economics, commerce and industry are removed, the passion and love of creating should simply be explosive... [Exhibitions should be] a kind of folk festival, an eternal Sunday... something celebratory." – Adolf Behne

"The joint is the beginning of ornament" – Louis Kahn

MINDSET:

Building on ideas we've explored in the bike shed design, through the Hodgetts and studio lectures, and the M&A focus of the semester more generally, we seek to intensify our investigation of how materials and assembly methods can inform and inspire the very core of the architectural creation process. As a capstone to the 2nd year studio, we will expand the scale of our program slightly, move to a more overtly urban context, and extend the length of the project in order to allow for a more thoroughly detailed exploration of your design, both in terms of the nature of how the materials are used, and the final presentation.

PROBLEM:

Commissions for exhibition buildings have often enabled architects to escape the "pressures" of modern consumer culture in order to explore the fundamental principles and ideas of architecture, particularly those related to the experience of materials and assembly. The most remarkable pavilions have promoted new visions of architecture and helped transform our culture. The design of an exhibit pavilion for one of the core products of our consumer culture that has long fascinated architects—the automobile—will challenge us to explore how building at its most basic level can work through the many "pressures" and simultaneously create an innovative display that celebrates the very essence of architecture. Students will be evaluated on their ability to confront the "branded" identity of the car and to create a more profound architectural idea related to materials and assembly, as well as related issues such as the car's country and culture of origin, the role of the automobile in the 21st-century city, the urban context of Pittsburgh, or the problems of exhibitions and display.

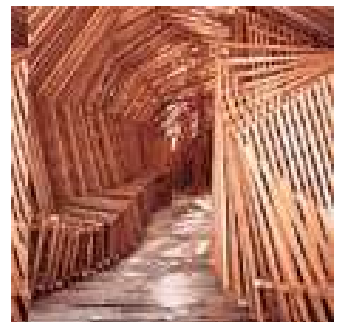
PROGRAM / PROJECT:

Your charge is to design a small, temporary exhibition space for a single automobile on a site near the convention center in downtown Pittsburgh. Each studio will represent a different auto brand name, though students can choose to display any single car from that brand. The pavilion design must focus on a single, primary exhibit space that is lockable and temperature controlled in the winter (though it can open during nice summer days). The pavilion is for display, information, education, and advertisement only, with no drive-through, other cars, repairs, parking or parts storage allowed on the site.

The main space must accommodate multiple functions including: 1) display of the automobile and related peripherals, 2) projection, 3) customer lounging, 4) sales desks, and 5) other exhibits.

Supporting subsidiary spaces must include: a) entry-lobby, b) manager's office, c) bathrooms, d) small storage space; e) mechanical and maintenance equipment.

Students are encouraged to challenge the nature and organization of the program elements, but not eliminate or change the basic program!

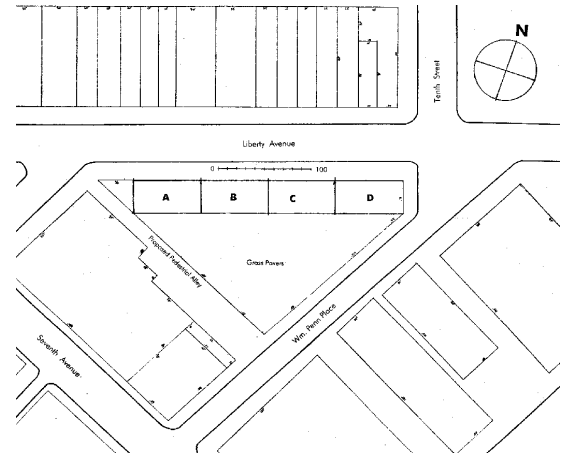


SITE:

The site on Liberty Avenue in downtown Pittsburgh lies at the *intersection* of several urban grids and neighborhoods, at the *edge* of Pittsburgh's cultural district, and with *easy access* from any place in Pittsburgh's Golden Triangle, particularly the convention center, bus and rail transportation nodes, and neighboring hotels. The site is being redeveloped, allowing for a temporary installation.

The large triangular site will be cleared of all existing buildings and subdivided into four similar rectangular sites (each 36'x72'), one for each studio, with surrounding land to be landscaped open space for other outdoor exhibitions. Each student will be paired up with specific partner students from the other three studio sites (see chart below) and will be required to collaborate with teammates in their research, model building and design intentions. Students can share open spaces or connect interiors with neighbors. At a minimum, all students must accommodate the specifics of adjacent designs.

The long front on Liberty Avenue will encourage students to take a position regarding the facade and its relationship to the sidewalk in the urban setting, whether they are designing a "pavilion" or "urban showroom." There are no height or depth restrictions, though the exhibited car must be able to be rolled from the sidewalk into the building, and the final resting place of the car tires must be within 12ft of the current grade level (i.e you can lower it one story below grade, or lift it up one story for display purposes).



SITE A - Damiani	SITE B - Wolff	SITE C - Lubetz	SITE D - DRAKE
Ha, Wui-Joon (wha)	Waldron, David (dwaldron)	Eastridge, John (jeastrid)	Wu, Wanshu (wanshu/waz)
Tan, Ryan (xwt)	Cummings, Joshua (jwcummin)	Green, Nathaniel (nathanie)	Fok, Robin (rfok)
Scarlett, Matthew (mscarlet)	Knapp, Bill (wrk)	Kazazoglu, Basar (bkkazazo)	Cuellar, Gabriel (gac)
Shore, Rebecca (rshore)	Lackett, Adam (alackett)	Levine, Hannah (hmlevine)	Davison, Emma (edavison)
Kish, Brian (bkish)	Orenstein, Daniel (dto)	Chung, Cathy (chiajung)	Hammond, Megan (mhammond)
Langevin, Jared (jlangevi)	Roig, Wilma (wroig)	Lau, Ken (krlau)	Hartle, Zachary (zhartle)
Wolkovich, Leah (lwolkovi)	Schnell, Patrick (pschnell)	Yang, Yoonsun (yoonsuny)	Chu, Stephanie (sfone)
Zhang, Chang (changzha)	Gonzalez, Tom (tgonzale)	Chi, Angela (ahchi)	Debolski, Nikki (nde bolsk)
Lennox, Elin (eel)	Horton, Laura (lhorton)	Magin, Meredith (mmagin)	Ip, Siu Him Kenneth (ship)
Takeda, Akiko (atakeda)	Lynch, Christina (clynych)	Restrepo, Francisco (fjr)	Rosier, Matthew (mrosier)
Lopez, Michelle (melopez)	Saks, Benjamin (bsaks)	McKinney, Brian (bmckinne)	Fenaughty, Kellen (kfenaugh)
Kim, Yooli (yurik)			

PROCESS:

In order to promote a synthetic and integrated design process that constantly works at multiple scales (from the site plan to the construction detail), as well as in multiple modes of representation (model, plan, section, perspective), and strives to integrate conceptual ideas with physical construction, students will be asked to come to an early resolution about their basic exhibition concept, building parti, and materials selection. After adequate site, materials, automobile, and other research, all students must prepare and submit a "Design Summary" of their designs as part of the first mid-review at the end of the third week of the project (Mar. 21, 2005). The 2pp. "Design summary" should be distributed to coordinator, instructor, and site team-members and include: a) footprint of building on site; b) abstract massing of the building shown in perspective or axo, c) parti of plan and section; d) a sketch of a significant building detail, and e) a 100 word statement about the central concept of the exhibit pavilion, especially the use and meaning of the materials and assembly, and the nature of the display.

The rest of the semester will be spent flushing out, intensifying, detailing and communicating designs with ever greater clarity, depth and creativity. Students should be aware that substantial deviations from the first "Design Summary" will impact design partners and the depth to which you can carry out your design intentions. You should work to create a memorable presentation of your design that represents the culmination of the 2nd year studio experience, in the amount of effort, in the composition, in the amount of knowledge about M&A, and in the creativity and inspiration of your work. In parallel with this second stage, all students enrolled in Prof. Steve Lee's "M&A" class will be required to prepare a separate set of mock construction documents of their studio design, including detailed information about the structure and construction process.

FINAL REQUIREMENTS: (minimum for all studios, preliminary list):

- 1) Site model showing any interaction with neighboring sites (1/16"=1'-0")
- 2) Building Plan (1/4"=1'-0")
- 5) Liberty Avenue Elevation (1/4"=1'-0")
- 3) Cross Section(s) (1/2"=1'-0")
- 4) Detail Wall Section (1 1/2 " =1'-0")
- 6) Exploded Axonometric of components (1/8"=1'-0" minimum)
- 7) Perspective(s) of building interior with display of automobile
- 8) Presentation model (1/4"=1'-0")
- 9) Large-scale material and joinery mock-up
- 10) Diagrams, sketches, process work to help communicate the design intent
- 11) Copies of Construction Documents submitted to "M&A" course
- 12) Project Documentation for review, website and portfolio

