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BRIDGING THE GAP

travelers traverse the tarmac at London's Gatwick

PLUS → A CONVERSATION WITH GUNNAR BIRKERTS → MACK SCOGIN AND MERRILL ELAM TEACH BY EXAMPLE → RECREATION BY RECLAMATION IN SAN MATEO

INSTRUCTIVE SPACES

Ohio State's new architecture school building, by Mack Scogin Merrill Elam Architects, has pedagogical ambitions. by Katie Gerfen | photographs by Timothy Hursley

An old proverb says that a little knowledge can be a dangerous thing. A cliché, perhaps, but something important to remember when designing an innovative building for troublesome critics: students who aspire to be the architectural innovators of tomorrow. Mack Scogin Merrill Elam Architects embraced this challenge in designing a new home for Ohio State University's Austin E. Knowlton School of Architecture, creating a marble-shingle–clad design laboratory where studios serve as examples of materials, form, and spatial relationships, as much as they serve as rooms for learning.

At the core of the design of the school, which opened last September, is Knowlton's teaching philosophy, "design education by distraction": the belief that students learn best by holistic observation of design in their surroundings. After several town-hall–style discussions among the architects, faculty, and student body, the design team echoed the philosophy literally. A program of ramps and connected volumes was developed to promote student interaction, both prescribed and spontaneous, with the building.

OUT IN THE OPEN

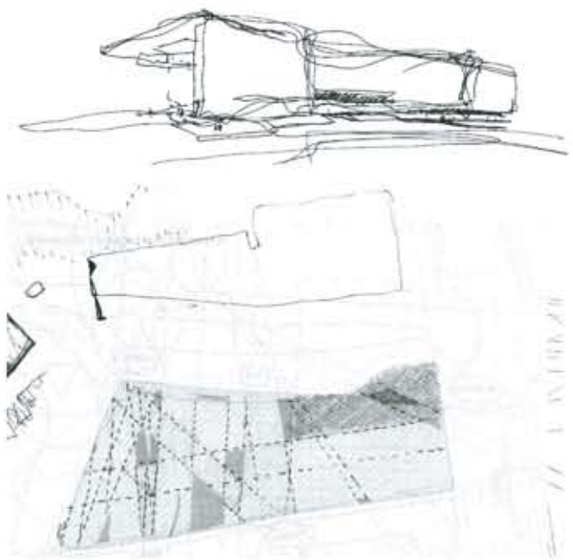
Students who enter the Knowlton school are confronted with double- and triple-height spaces, exposed concrete walls and ductwork, and ceiling-mounted custom light boxes of brushed metal and white polycarbonate in the studio spaces. Clear glass walls ensure that students can't help but absorb the building's form and function as they tackle their own designs. An expansive central hall, used for critiques and student-work displays, is flanked by a network of ramps leading to upper levels and a large concrete staircase at the east end that serves as a place for students to congregate. All of these elements, says Mack Scogin, aim to enrich the learning experience through proximity. "The exposed materials and the interplay of spaces, were all part of the idea that the building would instruct, that it would say, 'These are the things that it takes to put a building together.'"

Another quintessential element of the design was one that almost didn't happen: the library, situated on the top floor of the five-story building. Not included in the original scheme for funding reasons, the library has already won laurels from the architectural community and the American Library Association. The two-level, glass-enclosed book repository is suspended over studio spaces, coaxing another level of dialogue between students designing projects at their workstations below and those doing research or studying for exams above. The library rises a story above the roofline, where it is clad in frosted green glass that protects the books from harsh sunlight. When illuminated at night, the glowing box serves as a beacon from the ground and, perhaps more startlingly, as a point of reference for airplane passengers viewing the landscape on approach to the Columbus airport.

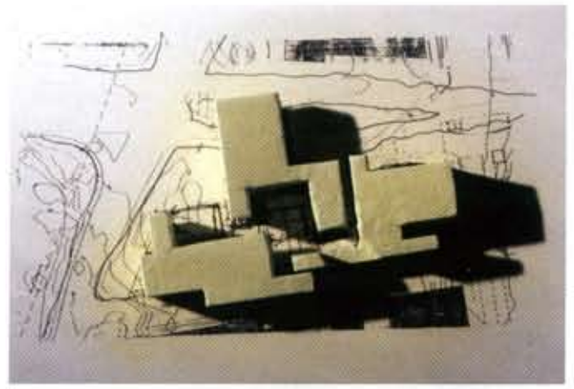
NOT JUST A PRETTY FACE

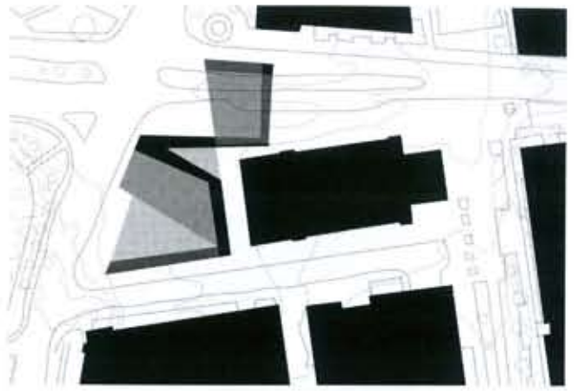
This is architecture that is treated not as an object but instead as an evolving space influenced by students. They can move temporary partitions (pin boards on casters), claim spaces with posters and drawings, and stage "interventions," as the school's director Robert Livesey calls them. "The design process is a messy process," notes the director. "It was important to create a space where the students could do whatever they want, and at the end of the year we could clear it out and start over."

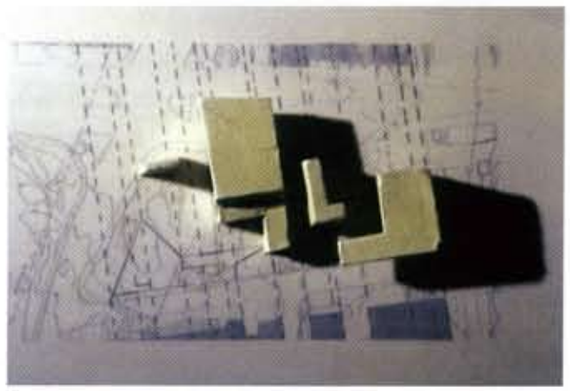
But does the concept of architectural teaching by distraction really work? "It is a different philosophy of design education, and to be honest, it's an experiment," admits Livesey. "But it is worth doing." The students tend to agree: "Seeing what level you can take a building to inspires you to push your own designs further," says Karen Gustafson, a graduate student, adding, "We have this great main space to have our reviews in, and people really look at each other's work." Others laud the building's interior transparency and say they purposefully use the ramps instead of the staircases because these allow them time to consider the scale and composition of the spaces. So far, the architects have passed muster with the in-house critics—but the true test is yet to come: Will a building based on pedagogical ideas remain useful as the teaching program inevitably evolves? Time will tell.

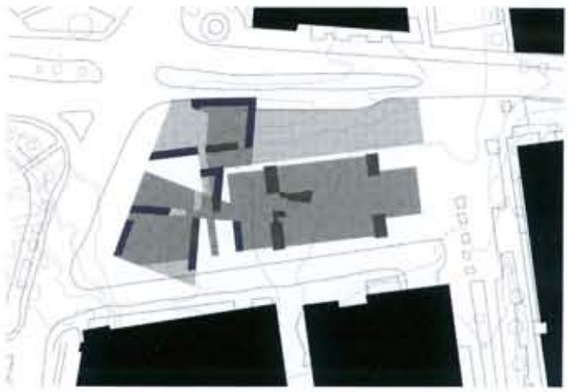


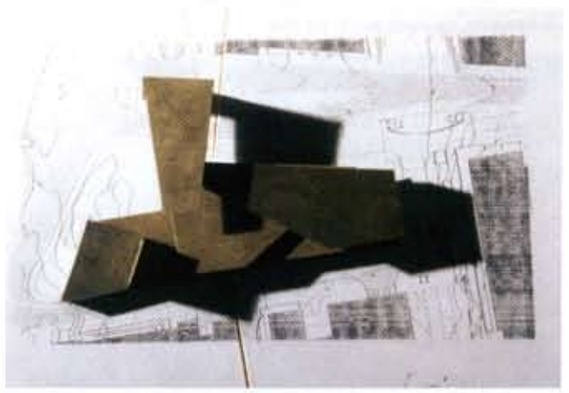
design studies

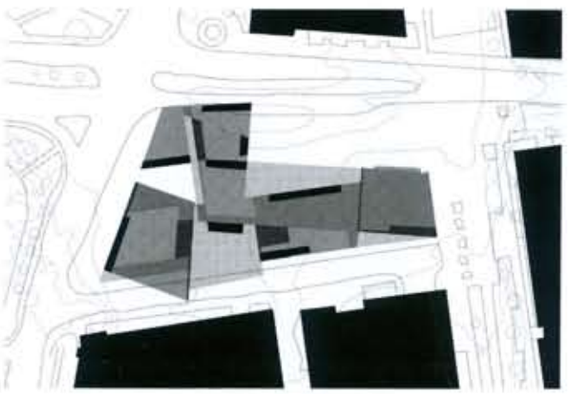


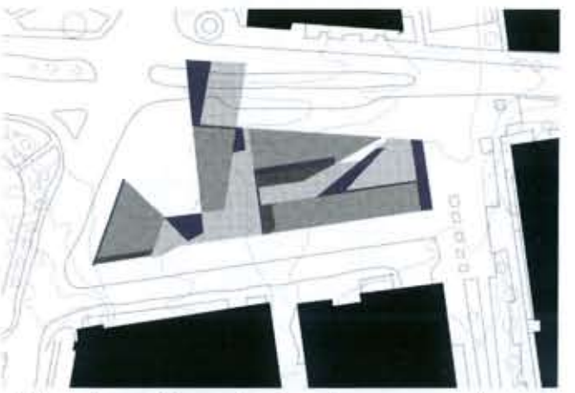








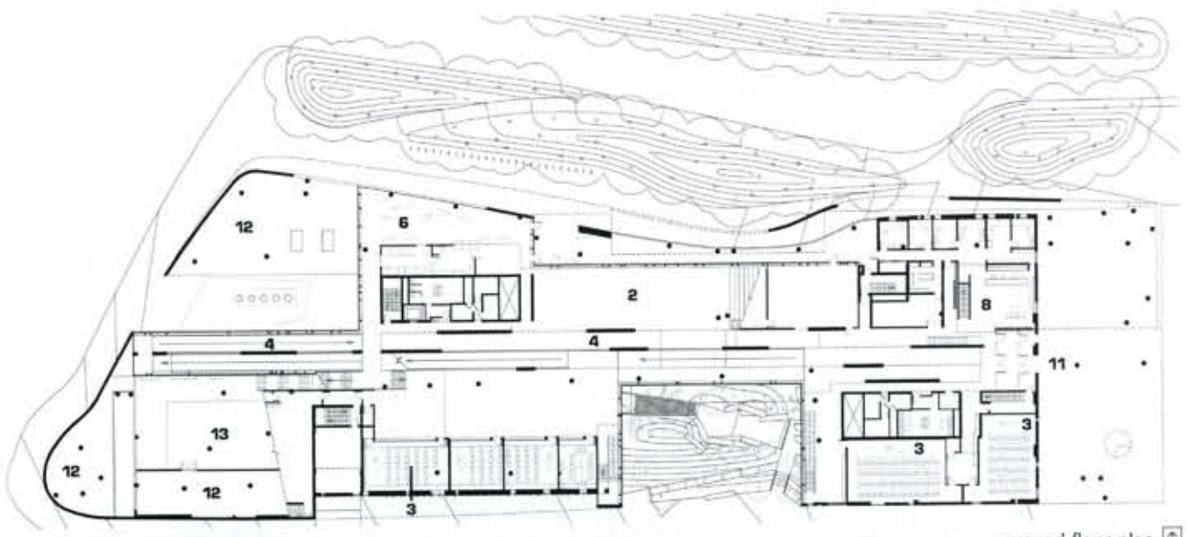




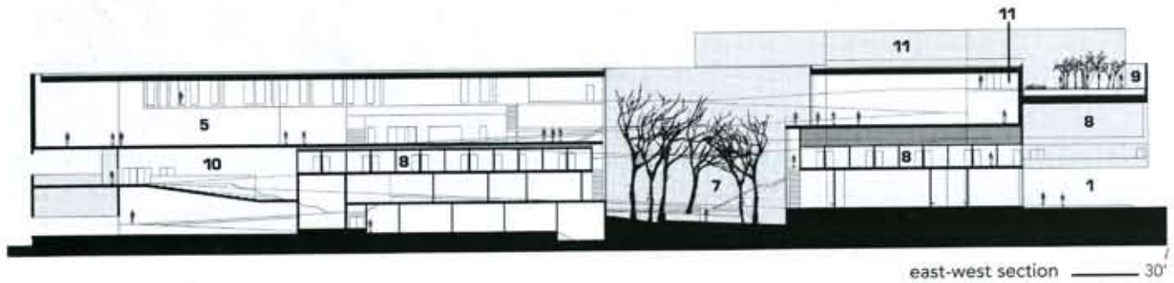
Unsure whether funding would allow for an entirely new building, the architects developed numerous schematic massing studies; some included the existing architecture building (top right and next below) and others explored the possibility of a cleared site. Ultimately, the school elected to demolish the old building and start fresh.

A monumental portico (above) invites students into the school's double- and triple-height spaces. The interiors promote occupant interaction by maximizing sightlines and visibility between spaces such as the library and the studio (below).

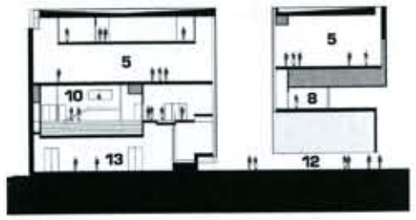
The undulating façade of white marble shingles (above) encloses a central hall where students can observe classwork and critiques from the large-scale stairs or from the corridors and ramps overhead (below).



ground-floor plan



east-west section 30'



north-south section 26'

site plan 500'

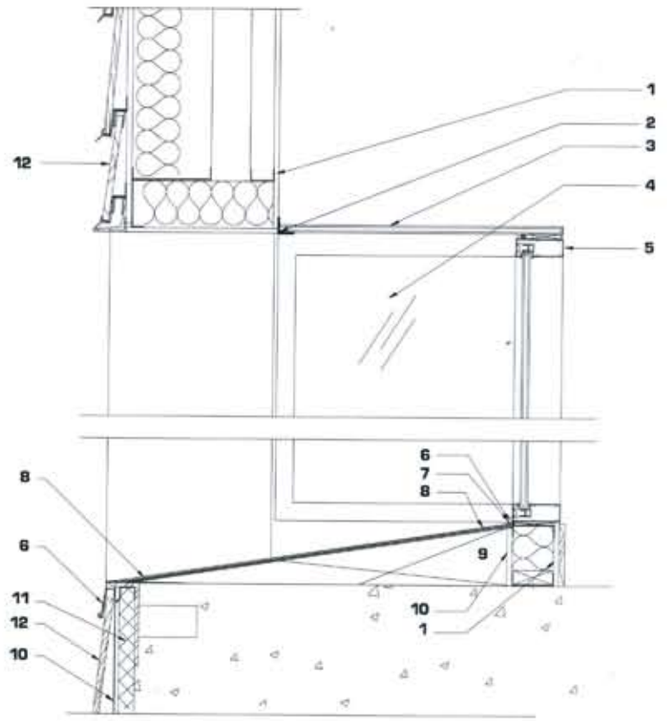
1 entrance
2 central hall
3 classroom
4 ramp
5 studio
6 café
7 courtyard garden
8 offices
9 rooftop garden
10 main lecture hall
11 library
12 outdoor court
13 wood shop

Austin E. Knowlton School of Architecture, Columbus, Ohio
client: Ohio State University **architect:** Mack Scogin Merrill Elam Architects, Atlanta—Mack Scogin, Merrill Elam (principals); David Yocum (project architect); Brian Bell, John Trefry, Penn Ruderman, Barnum Tiller, Cecila Tham, Jeffrey Collins, Kevin Gotsch, Margaret Fletcher (project team) **associate architect:** Wandel and Schnell Architects, Columbus, Ohio—Robert Wandel (principal); Cissy Wong (project architect); Alan Sulser, Ivan Amy, Lannetta Vader, Yanitza Brongers, Kristen Poldemann (project team) **engineers:** Lantz, Jones & Nebraska (structural); HAWA Consulting Engineers (M/E/P); Bird & Bull (civil) **consultants:** Michael Van Valkenburgh Associates (landscape); Ramon Luminance, Ramon Noya (lighting); Wiss, Janney, Elstner Associates (rainscreen) **general contractor:** P. J. Dick **area:** 175,400 square feet **cost:** $26 million

FINDING COMFORT IN AN UNEXPECTED SKIN

What happens when a patron drives a major design element? The white Vermont marble skin of the Knowlton School of Architecture was not Mack Scogin and Merrill Elam's idea; rather, it was a requirement of the building's largest donor, Austin E. Knowlton—an alumnus for whom the school was renamed in 1994—who considered the stone to be an appropriately noble material. The architects were skeptical. As Robert Livesey, the school's director, points out, "The last thing we wanted to do was create an honorific building." But the architects found a way to feel comfortable in their imposed skin, despite marble's challenging properties, such as an overall brittleness and fragility not found in other materials. The marble posed another problem, points out Scogin, in that it expands and contracts substantially with temperature changes, making it less than ideal for Ohio's notoriously hot summers and cold winters. The solution was to mill the marble into shingles, creating the outer layer of a rainscreen, each held in place by a series of extruded aluminum clips. The result not only created a visually interesting surface reminiscent of the slate shingles on Scogin and Elam's music library at the University of California at Berkeley (December 2004, page 74), but the cladding also serves as an example of a traditional material used in an uncommon way.

1 gypsum board
2 aluminum angle
3 1-inch insulated laminated glass
4 1-inch insulated glass
5 aluminum window system
6 flashing
7 sealant
8 aluminum sill on plywood
9 blocking
10 underlayment
11 rigid insulation
12 marble shingle



envelope detail at "reverse bay window," studio level 9"