

Roger Duffy of **SOM** weaves together art, architecture, and landscape in a crystalline new upper school at **GREENWICH ACADEMY**

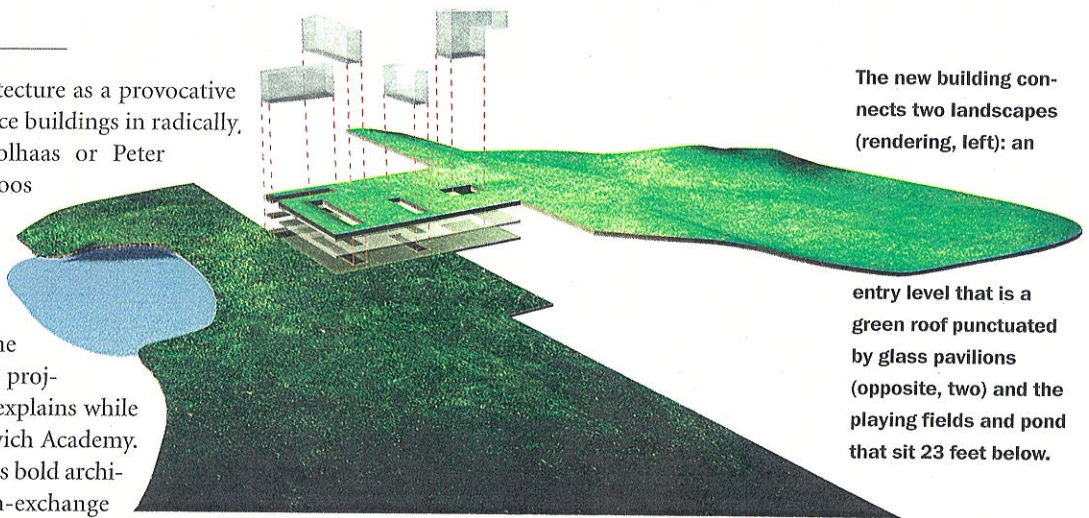
By Clifford A. Pearson

Some architects celebrate architecture as a provocative act, forcing people to experience buildings in radically new ways. (Think Rem Koolhaas or Peter Eisenman today or Adolf Loos 100 years ago.) Roger Duffy, AIA, a design partner in the New York office of Skidmore, Owings & Merrill (SOM), has a very different way of approaching his work, even though it too pushes the boundaries of architecture. “A lot of my projects are about resolving differences,” he explains while touring his new upper school at Greenwich Academy. Instead of the shock of the new, he delivers bold architecture with manners. Like a foreign-exchange student with great social skills, his buildings stand out but earn high grades for getting along well with others.

A 45,000-square-foot addition to a private girls’ school in one of the country’s most affluent communities, the new building at Greenwich Academy must fit between a nondescript middle and lower school from the 1970s to the north, a 1990s performing arts center and gymnasium to the south, and a Georgian mansion to the east that originally housed the entire school but now serves as its administrative center. In addition to this awkward mix of eras and structures, the new upper school had to negotiate a 23-foot drop from the campus’s entry level to that of its playing fields and pond to the west. “We decided to use our building to weave together the two topographies,” explains Duffy. “We saw the project as a landscape connecting the campus.”

Sharon Dietzel, the head of the upper school, admits that SOM was not an obvious choice to design the building, since the firm is better known for its large commercial work. But when the school asked several architects to propose ideas for renovating the existing upper school, SOM recommended tearing it down and building from scratch. “Although it was probably more expensive, we all knew that was the right approach,” Dietzel notes. During initial conversations with the school’s faculty and staff, Duffy and his team helped the client envision a facility quite different from anything already on the campus. “By talking about light and air, instead of square footage or style, they helped us think in a different way,” recalls Dietzel.

Integrating landscape and architecture, Duffy and his team



The new building connects two landscapes (rendering, left): an

entry level that is a green roof punctuated by glass pavilions (opposite, two) and the playing fields and pond that sit 23 feet below.

created a grassy lawn on the building’s roof, which serves as the entry level. Glass pavilions (or “light chambers”) emerge from this artificial landscape, bringing daylight into the building, which tumbles down the hillside. As visitors enter the upper school through the largest light chamber, they see only grass, glass, and the woods beyond. Low stone walls, made from rock dug from the site, offer places to sit in good weather and help connect the new building to the earth and the old mansion’s stone base. The new snaps elegantly into place here.

The light chambers—clear glass boxes supported by exposed glue-laminated timbers 4 inches thick—organize the school into its four main components: math/sciences, art, humanities, and learning center (library). Classrooms, faculty offices, and other spaces for each discipline cluster around their particular light chamber, creating a critical mass of activity and a sense of identity. But common spaces flow

Project: Greenwich Academy Upper School, Greenwich, Connecticut

Architect: Skidmore, Owings & Merrill/New York—Roger F. Duffy, AIA, design partner; Peter Magill, AIA, managing partner; Walter P. Smith, AIA, education specialist; Scott Kirkham, senior designer; Christopher McCready, AIA, project manager; Marie-Christine

Bellon Manzi, Thibaut DeGryse, Nayareen Chapra, Jon Mark Capps, Javier Haddad Conde, project team

Collaborating artist: James Turrell
Engineers: DiBlasi (structural); Atkinson Koven Feinberg (mechanical)

Landscape: Brown and Sardina

General contractor: Turner Construction

smoothly into one another, so you get a sense of connections, not boundaries, as you walk through the building.

During design development, Duffy invited artist James Turrell to collaborate on the light chambers. "It increased the level of difficulty logarithmically," says the architect, "but was worth it." Turrell turned the four glass containers into colored-light boxes using a combination of fiber optics and light-emitting diodes (see sidebar, page 232). Turrell's role was much more than that of an artist adding an installation to a building project, states Duffy. "He was a true collaborator," helping the architects shape the glass pavilions and the experience of moving through the building. For example, the artist convinced the architects to torque the roof angle of the two light chambers visitors see as they enter the first chamber. "This way, you read the subsequent chambers as volumes, not just as planes," says Duffy.

Beyond the pavilions, the architects carved a series of outdoor rooms from the hillside site to bring daylight in from the north and south. The largest of these spaces—what Duffy calls the "learning center courtyard"—acts as a kind of campus piazza linking the upper school to the cafeteria and middle and lower schools to the north. "Before, we had a series of disconnected buildings," explains Dietzel. "Now we have an academic village."

Once upon a time, school architects tried to impress on students the importance of learning by designing buildings that harkened back to bygone eras or used heavy materials rooted in historical associations (Harvard brick or Neoclassical stone, for example). SOM tried a different

tack at Greenwich Academy, designing a building so light that it almost disappears in the landscape. To do this, the architects devised a steel-frame structure with a glazed curtain wall for the bulk of the building and glue-laminated timber frames for the light chambers. "The wooden members soften the sharp edges of the boxes," says Duffy. "We didn't want a hard Modernism."

All classrooms enjoy floor-to-ceiling glazing on the outside and daylight coming in from the light chambers on the inside. A translucent

"THE LIGHT HAS A PHYSICAL AND PSYCHOLOGICAL AFFECT ON PEOPLE; IT RELAXES THEM," SAYS THE SCHOOL'S HEAD.

glass floor on the upper level of the entry pavilion adds to the sense of light everywhere. Interior and exterior shades allow people to control sun coming in or views from interior common spaces.

The building's architecture has affected the way people behave in it, says Dietzel. "We have 150 adolescents here, but it's always quiet. All the light has a physical and psychological affect on people; it relaxes them." At the same time, the transparency of the architecture has made people less territorial, she notes. Teachers and students interact with each other all over the building, not just in the more formal settings of the classroom and teacher's office. She also reports that attendance is up, even for seniors who have the option of spending some time off-campus. "This building celebrates the potential of children, and so few schools ever do that."

