

RIBA JOURNAL



addition/identity

object/frame



Paul Rudolph's Art and Architecture building at Yale has risen from the ashes of fire, critical opprobrium and botched alterations to reveal itself as one of brutalism's highest achievements. **By Bill Millard. Photographs: Richard Barnes**

Magnificent brute



Has any major academic structure ever sustained as much abuse, both rhetorical and physical, as Paul Rudolph's 1963 Art and Architecture Building at Yale University? Presumably, a building that has endured critical pummellings, programmatic distortions, chronic complaints, a fire (possibly set, legend has it, by its own users), and four decades of alterations that blurred the distinction between renovation and vandalism would eventually be put out of its misery.

Instead, Yale has resisted the temptation of the wrecking ball and given Rudolph's work the respect it arguably always deserved. A two-part effort by New York firm Gwathmey Siegel, comprising a renovation largely adhering to Rudolph's original ideas and the design of a new companion building to house the art history department, is breathing new life into Rudolph's building – and, by extension, into the entire tradition he represents.

Now renamed the Paul Rudolph Building (after alumnus Sid R Bass urged Yale to commemorate its architect, not himself as its chief benefactor), the seven-storey, 37-level 'A&A' is the centrepiece of a masterplan to reorganise Yale's arts infrastructure. The Rudolph is joined by the new Jeffrey H Loria Center for the History of Art, reserving Rudolph's building, free of overcrowding at last, for the architecture school. A new library serving both architecture and art history, the Robert B Haas Family Arts Library, bridges the two buildings at ground level where the A&A's north courtyard once lay. The complex officially opens this month.

The old A&A's travails impose a formidable burden on an architect, since the building is both an object of incessant cultural debate and a functioning facility, needing crucial tweaks to accommodate the drastic changes in architectural education since 1963. Yale School of Architecture alumnus Charles Gwathmey, ▶



Left: a new library serves both the Rudolph building and the Loria Center.

Below: the studio at the centre of the A&A Building housed the architecture students while numerous departments were shoehorned in alongside.

Bottom: lobby to new building

Right: seventh-floor roof terrace, Loria Center.

Far right: bushhammered concrete of the 60s is still going strong.



► who worked on the original building as a student draftsman, has brought rare qualities to both the renovation and the new components: a scrupulous respect for history and a willingness to focus his own inventiveness on technical challenges, ceding the aesthetic limelight to the Rudolph Building. The university is about to discover whether the required functional adaptations can coexist with the restraint that lets the Rudolph shine.

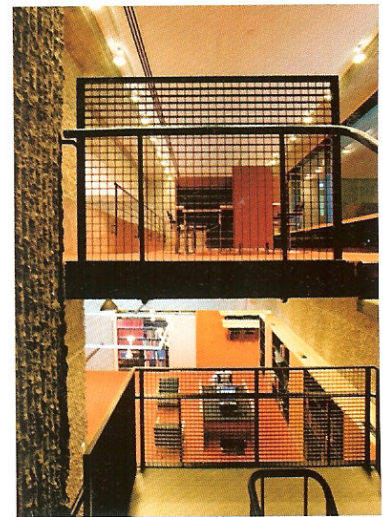
Four decades of neglect

The A&A has a knack for rubbing some people up the wrong way. But Gwathmey, School of Architecture dean Robert A M Stern, and others involved in the project point to the many opinion leaders who have praised the building, including Bauhaus alumnus Josef Albers (then Yale's design chairman), critic Ada Louise Huxtable, and even – surprisingly, and apologetically after earlier condemnations of Rudolph's 'heroic' work – Robert Venturi.

Yet ill will haunted the A&A as early as its

inaugural reception, long before the damage began. Yale's architecture department had strong ties to England: Rudolph, who chaired it from 1958 to 1965, brought James Stirling over to teach there, part of a transatlantic parade including Colin St John Wilson, the Smithsons, Richard Rogers, Norman Foster, and Eldred Evans. The dedicatory address by Sir Nikolaus Pevsner was eagerly anticipated. But Pevsner's talk was so heavy on functionalist prescriptions, and so conspicuously light on respect for the A&A's forms, Stern recalls, that Rudolph 'went beet red'. No one present had expected a prominent historian to lob something unpleasant into Yale's punchbowl.

Since that dissonant opening, a litany of complaints about the A&A's spatial limitations, air quality, easily stained carpets in bright 'paprika' orange, and other discomforts has resonated with the sort of commentators who reflexively equate *béton brut* and stark, futuristic volumes with civic carbuncles. That most of the flaws stemmed not from Rudolph's design





but from administrative decisions to shoehorn multiple departments into the building (allocating prominent top-floor space to art students, burying printmakers in windowless rooms and sculptors in the basement, and assigning architecture students a double-height studio space that they proceeded to chop and clutter up into what Stern, another alumnus, gently describes as ‘favela-like conditions’) did little to immunise Rudolph, or more broadly the brutalism now associated with him, from attacks. Around Yale, where the tensions between the gothic spires of the Old Campus and the modernist experiments developed under president A Whitney Griswold have long fostered vigorous self-criticism, the A&A remained a love-it-or-hate-it building for decades. Admirers see it as a daring icon; to detractors, it represents modern architects’ obliviousness to function and comfort.

With those detractors well represented inside the school, that disdain was not limited to commentary. The 1969 fire has never been

definitively explained; theories include accident, mischief by New Haven teenagers, a Vietnam-era protest gesture that metastasised into an all-purpose attack on any symbol of authority (heavy concrete would do), and even deliberate sabotage by disgruntled architecture students. Dedicated conspiracists can read some form of culpability on the part of Rudolph, the department, or the building itself into at least some of these theories – perhaps even the accident hypothesis, since contributory factors included flammable materials stored in studios with minimal ventilation.

After the fire, Rudolph’s successor Charles W Moore initiated or tolerated renovations (major and minor, official and student-initiated) that essentially obliterated his design. Open space was subdivided into locked cubicles, allowing studio privacy but blocking natural light and views as well as eroding Albers’ Bauhaus ideal of collective work. The university removed Rudolph’s sprayed-asbestos ceilings in 1974 after recognising the material’s

carcinogenic properties, but put nothing in their place, exposing more concrete and dulling the acoustics. Skimpy 70s budgets mandated lax maintenance and bad fluorescent lights. In 1994, replacing aged windows with high-performance glass was a positive step, but the glass was unavailable in the US in adequate sizes; the new smaller windows were a stopgap decision, mangling the building’s scale. Around the same time, precast concrete caps intended to retard spalling accelerated it instead, admitting water and rusting exposed rebar. Long after leaving Yale, Rudolph found the building’s condition too painful to discuss, but he bore the brunt of criticism for errors he had little to do with. Few people now alive have known the A&A as it was meant to be known.

The tide turns

Stern dates the tidal reversal of prevailing opinion about the A&A to 2000, when the School of Art (now, like Architecture, a separate school) moved across the street to the ▶

Below left: view into Paul Rudolph hall from the new Loria Center.

Below right: a new composition – Rudolph to the left, Gwathmey (in quite different materials) to the right.

Yale roll-call

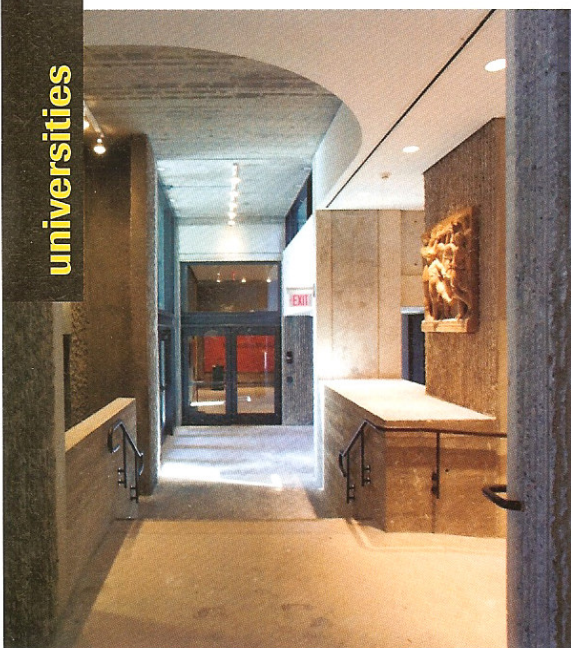
Yale University in New Haven, on the east coast of the US, has a legacy of pieces by famous architects. Best known are the Ingalls Rink by Eero Saarinen, and Louis Kahn's Yale Center for British Art and Yale University Art Gallery, of which the latter was renovated two years ago.

More recent investments include a new sculpture building and gallery, finished last year. This building by Kiernan Timberlake was used to house the school of architecture while the Art and Architecture building was being refurbished.

Coming up to completion is Hopkins Architects' Yale School of Forestry and Environmental Studies, which will be the university's

greenest building – it should achieve a platinum rating under LEED, the American environmental assessment system. Meanwhile Foster and Partners is designing a 230,000ft² building for Yale School of Management.

Most of university's work is carried out by US practices such as the Polshek Partnership and Robert A M Stern, who is working on two new residential colleges. Stern is, of course, also dean of the Yale School of Architecture.



► former Jewish Community Center, renovated by Deborah Berke with a Louis Kahn facade. Removing the art students' temporary floors and plasterboard, Yale School of Architecture officials discovered impressive double-height spaces and open vistas that had long been hidden. 'No one between the fire of '69 and the year 2000 would have had any idea what that space was actually like,' says Stern, who made persuading the Yale Corporation to restore the A&A a high priority on assuming the deanship in 1998 – the year after Rudolph died of asbestosis. Faculty and students 'began to reappraise the positive qualities of the building'. Bass, a Texan financier, expressed his enthusiasm in the form of a \$20 million gift.

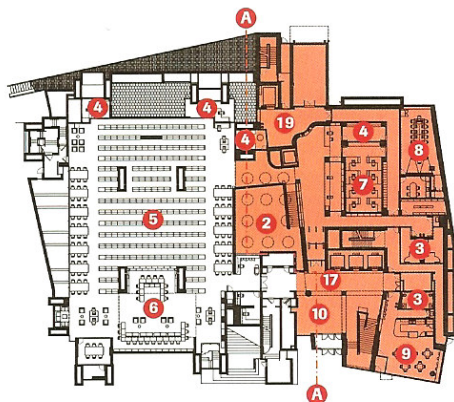
'More important,' adds Stern, 'what saved the building was that it was probably too expensive to tear down.' Perhaps changing expectations about life-cycle sustainability finally caught up with a design that was too far ahead of its time: the economic and energy

costs of demolishing a solid concrete building would be formidable, and 21st century materials could solve thermal problems that mid-20th century technologies couldn't touch. Yale invested in contemporary HVAC methods and high-performance glass, replacing the mis-sized 1994 windows with large-scale fenestration as Rudolph originally intended; consequently, the Rudolph no longer feels ovenlike even on a warm, muggy day.

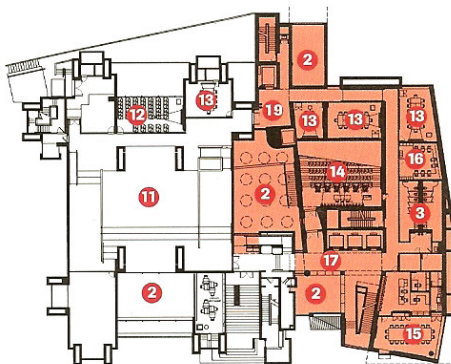
Changes in pedagogy since the 60s have also helped the building shed its reputation for inhospitality. Gwathmey notes that the A&A inclusion of the art and sculpture departments 'compromised Rudolph's spatial intention'. Crowding had worsened when abstract expressionism and other 60s tendencies called for much larger canvases, and hence studio-space and elevator requirements, than floorplans from an era of small, precise paintings had allowed. With the art students now gone, however, and today's architecture students no

longer spreading out large drawings, digital design technology makes the Rudolph's open studio areas more efficient. The cubicle era is past; the building's logic is fully expressed.

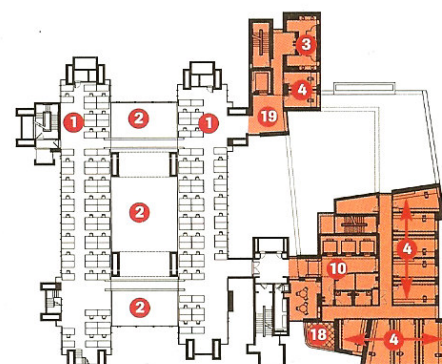
Rudolph's preliminary plan for a seven-storey central atrium fell foul of fire codes early on and was not considered for the renovation, but the two double-height spaces for exhibitions and juries are nonetheless dramatic. Surfaces interlock in myriad ways, with half-height landings and brief staircases abounding and surprise views appearing at every turn. Clerestory windows above studio areas and broad fenestration in upper-floor faculty rooms allow ample daylight through most of the working and social spaces. The A&A's cramped elevators, one feature not recaptured in the renovation, have been outsourced to the adjoining Loria Center. Weeks before the official opening, the restored rooftop terrace and penthouse were already attracting envy from other faculties.



Ground floor



First floor



Fourth floor

Collegiality restored

Circulation patterns through the Rudolph/Loria/Has complex create something of a learning curve for newcomers, but Gwathmey's new building does more than relieve the traffic. By bringing architecture and art-history scholars into constant contact, it helps restore the Bauhaus-style collegiality between the fields; Stern comments that it's healthy for a young architect emerging from a studio, convinced that a new project has 'reinvented the discipline', to meet immediately with a sceptical art historian leaving an elevator and offering the bracing comment, 'Oh, no, you haven't.'

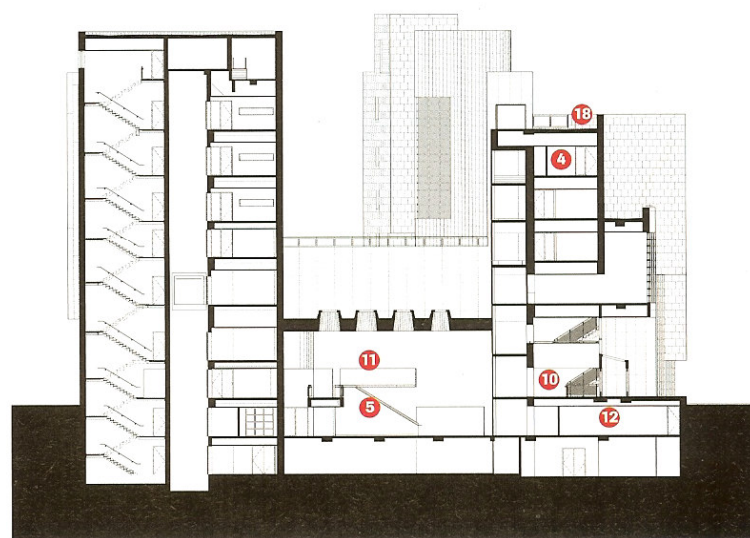
The Loria also provides much-needed modernisations in certain areas: a street-level public cafe, lecture halls in a range of sizes with state-of-the-art audiovisual gear, and an industrial-grade 3D fabrication shop in the sub-basement, including a seven-axis numerically controlled milling robot and a 2200mph water jet for cutting metal and marble.

Early critiques of the new building as too utilitarian, too modest in its forms alongside the Rudolph's boldness, appear both understandable and beside the point. Asked to define the relation between the renovated and new buildings, Gwathmey readily describes the Loria as deferring to the Rudolph while establishing counterpoint with it; it appears rightly content with its position, subordinate if not subservient. At the fourth floor's green roof and L-shaped terrace, the Loria actually becomes two separate structures containing faculty offices and lounges, connected only through the Rudolph's north studio trays, as if performing an act of self-sacrifice as it rises so that it can avoid blocking views either of or from the Rudolph.

'The most important thing for us was to understand that the History of Art building was not the same programme as the studio building, that it had very different kinds of spaces and privacy issues, and [that] we had to

Key

- 1 Studio tray
- 2 Void
- 3 WC
- 4 Office
- 5 Main reading room
- 6 Rudolph reading room
- 7 Work room
- 8 Teaching lab
- 9 Cafe
- 10 Lobby
- 11 Exhibition
- 12 Classroom
- 13 Seminar room
- 14 Lecture hall
- 15 Conference room
- 16 Computer room
- 17 Foyer
- 18 Terrace
- 19 Service



Section A

maintain with our building the integrity of Rudolph's north facade,' he says.

The Loria refrains from either aping or competing with the Rudolph, using different materials (zinc, limestone, and maple rather than concrete and oak) and presenting Caligari geometries at many points rather than its predecessor's proliferation of right angles. The one strategy it emulates is to generate large numbers of unexpected views through classrooms and halls, not only of the Rudolph itself – within the Loria, one is nearly always oriented in relation to the Rudolph – but of other campus attractions, particularly Kahn's work across the street.

The Loria is a wholly relational building and should be judged as such. This does not mean the Rudolph strives for utter independence. For all the originality of his design, Paul Rudolph knew that no version of modernism ought to pretend to exist in isolation, as if there could be a cultureless site or a revolutionary

Year Zero; he made his building's historical linkages explicit by embedding materials from other eras throughout its walls and spaces. Greco-Roman friezes, a statue of Minerva, Leonardo's Vitruvian Man, ornamentation from Louis Sullivan, and a Corbusian Modulor prominently engraved in the concrete all remind passing scholars of history's ongoing conversations.

Brutalism has never been easy to do well, but the Rudolph Building is among its highest achievements, and a Rudolph rendered once again habitable should put paid to the canard that the style is inherently antihuman. 'The shock of the new is a real thing,' Gwathmey says, grappling with the A&A's troubled reception. 'Certain buildings that are at that time avant-garde, adventuresome, or risk-taking, oftentimes require a generation to become accepted.' They may also require a generation to figure out how to operate and maintain. ■