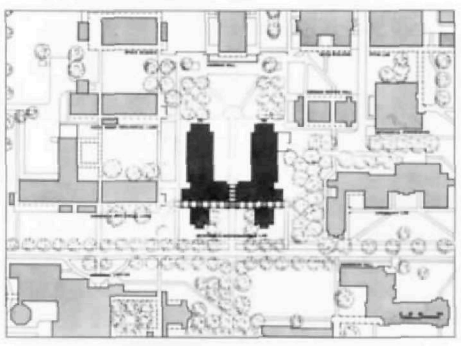
Bio Mass

Cambridge Seven's Recombinant Addition to the Rice Campus

Stephen Fox

In September, Rice University made public the schematic design for the second new campus building to be announced in 1988, a three-story, 107,000-square-foot laboratory and classroom building for the Institute of Biosciences and Bioengineering, to be called George R. Brown Hall. Designed by Cambridge Seven Associates with RWS Architects, associate architects, and Earl Walls Associates, laboratory consultants, the building is estimated to cost $24 million. Construction is to begin this summer and is scheduled to be completed in the winter of 1990. CHP and Associates are mechanical engineers, Walter P. Moore and Associates are structural engineers, and H. A. Lott Company is general contractor.

For guidance on the situation and configuration of the building, Charles Redmon, managing principal of Cambridge Seven Associates, and Dana Miller Baker, project architect, followed the well-trod path of James Stirling and Michael Wilford and of Cesar Pelli & Associates by consulting Cram, Goodhue & Ferguson's General Plan of 1910.[1] Since the mid-1970s, when a biochemistry research building was first proposed, the favored site for its construction has been a broad lawn between the Chemistry Building (1925, William Ward Watkin and Cram & Ferguson) and M.D. Anderson Biological Laboratories (1958, George Pierce–Abel B. Pierce). The lawn is flanked on the east by a dense grove of live oaks and by Herman Brown Hall, on the west by the narrow end elevations of the biology building and the Keith-Wiess Geological Laboratories, and on the north by the front elevation of Hamman Hall, a 500-seat auditorium, all designed by George Pierce–Abel B. Pierce. To the south lies a street that also passes in front of the biology and chemistry buildings. What makes this site critical in terms of the campus plan is that it lies at the head of one of the cross axes that project northward from Main Street and intersect the main, east-west axis of the campus, defining a line of sight and pedestrian movement that is reinforced by an allée of mature cedar elms and live oaks. This cross axis now stops at Hamman Hall. But the relatively small size and pavilionlike character of Hamman Hall render it unsatisfactory as an architectural terminus and insufficient to define spatially the deep, wide greensward it faces.



Cambridge Seven Associates

Site plan, George R. Brown Hall, Rice University, Cambridge Seven Associates, architects, RWS Architects, associate architects.

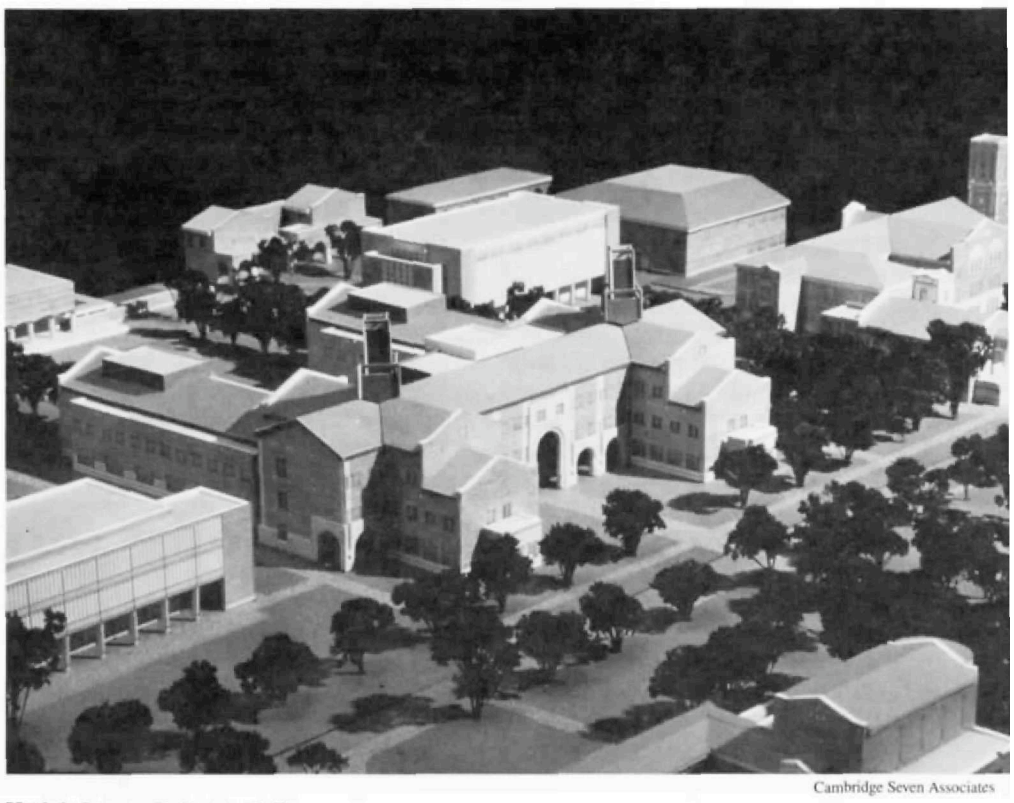
Cambridge Seven's site-planning approach – like Stirling & Wilford's and Pelli's – is remedial. They have sought to complete this sector of the campus in accord with the precepts of the General Plan, architecturally choreographing pedestrian movement and channeling it through a sequence of defined and varied outdoor spaces. For this portion of the campus the General Plan depicted a narrow, two-story slab, set parallel and close to the street. This building was to be bisected by a central passageway that carried the campus cross axis through it and into the first of two interlocking quadrangles, bordered on the west and east by two similarly long, narrow detached buildings. When, in the early 1940s, Cram & Ferguson and William Ward Watkin projected buildings on the site, each modified that arrangement, proposing instead a long central range set farther back from the street and framed by subordinate perpendicular wings that defined a shallow forecourt in front of the central range. The Master Plan for Growth, prepared by Cesar Pelli & Associates in 1983, responded to a directive to locate both a biochemistry/biochemical engineering building and a music school on the site. Pelli recommended setting two slabs parallel to the cross axis, each containing a bay adjacent to the street that was advanced forward to bracket the cross-axial approach. Pelli also suggested planting double rows of trees to enclose a smaller rectangular lawn between these two slabs and Hamman Hall.

Cambridge Seven has adapted the original General Plan configuration of a slender oblong bisected by a passageway. To its south-facing, street elevation they have appended transverse wings to frame the cross-axial approach, as was advocated in the 1940s, and they have projected these transverse wings back toward Hamman Hall on the north, as was done in the Pelli plan. Double rows of trees will bracket the lawn in front of Hamman Hall. The design for Brown Hall thus provides a more emphatic terminus to the cross axis than does Hamman Hall, without obstructing pedestrian movement or the vista of Hamman Hall. The new grove of live oaks between Brown Hall and Hamman Hall will define an outdoor space that is more inviting than at present and better scaled to the dimensions of the latter building. As was also recommended in the Pelli plan, a ground-level cloister will be tunneled through the south elevation of Brown Hall's central range, connecting the terrace walkway in front of the biology building to walkways in the grove of live oaks next to the Chemistry Building. This cloister will be ramped at its east and west ends to provide handicapped access to the building.

The plan configuration, massing, and detailed resolution of the elevations of Brown Hall reveal a close study of existing campus buildings. Internally, the H-shaped floor plates are organized with double-loaded corridors, independent of the cloister passages at ground level. The central range is treated as a three-story spine from which the projecting transverse wings step out and, in section, down to two stories. This was the organizational strategy used in the design of the Chemistry Building. The shallow-pitched, tile-surfaced ridge roofs are stopped on the transverse wings by extending the end walls up above the eaves to stone-capped triangular parapets, as on the Chemistry Building. Symmetrically placed exhaust hoods are metallic analogues of the Venetian Gothic tabernacles that served a similar purpose on Cram, Goodhue & Ferguson's Physics Building of 1914 and of the conical skylights of Stirling & Wilford's additions to the architecture building, Anderson Hall.

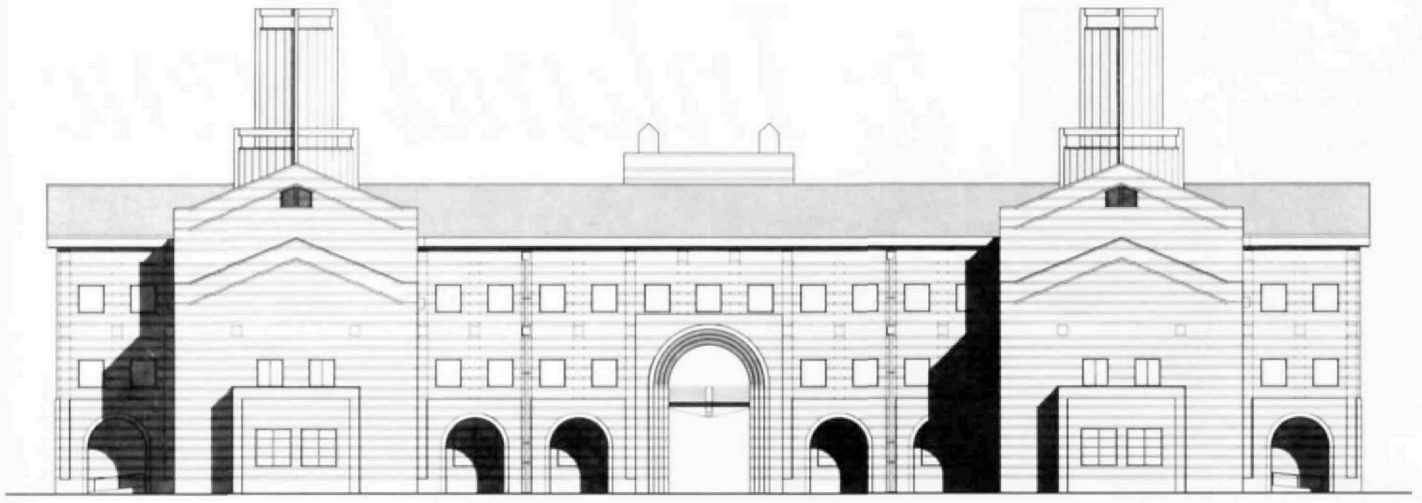
Stirling & Wilford's influence is most literally evident in the detailing of the brick-banded limestone panels that frame the cloister arches of Brown Hall, which project forward from the brick wall surface in an extruded reveal. The square-proportioned windows, with glazing bars aligned on the brick banding courses, and the decorative glazed bricks and tile keys that denote the structural armature of columns and beams behind the masonry curtain walls were appropriated from Pelli's Herring Hall. However, Cambridge Seven's most brazen steal is from Cram's administration building, Lovett Hall. Its Sallyport – the vaulted passage, 16 feet wide and 35 feet high, that Cram broke through the center of the Administration Building on line with the main campus axis – is reproduced as the architectural centerpiece of Brown Hall in order to maintain the cross-axial vista of Hamman Hall. Unfortunately for Cambridge Seven, the internal organization of Brown Hall appears to require that the central corridor on the second floor be continuous, so that it must bridge the double-height passage, fracturing its volumetric integrity.

As minor as it may seem in relation to the entire design, this one incident calls into question the glib contextual eclecticism

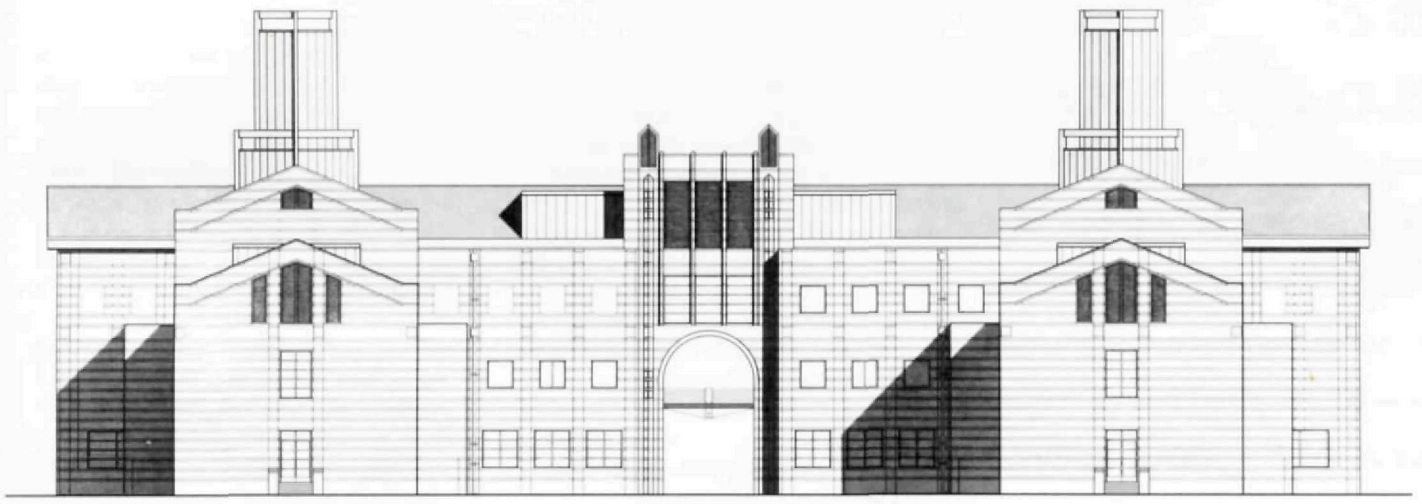


Cambridge Seven Associates

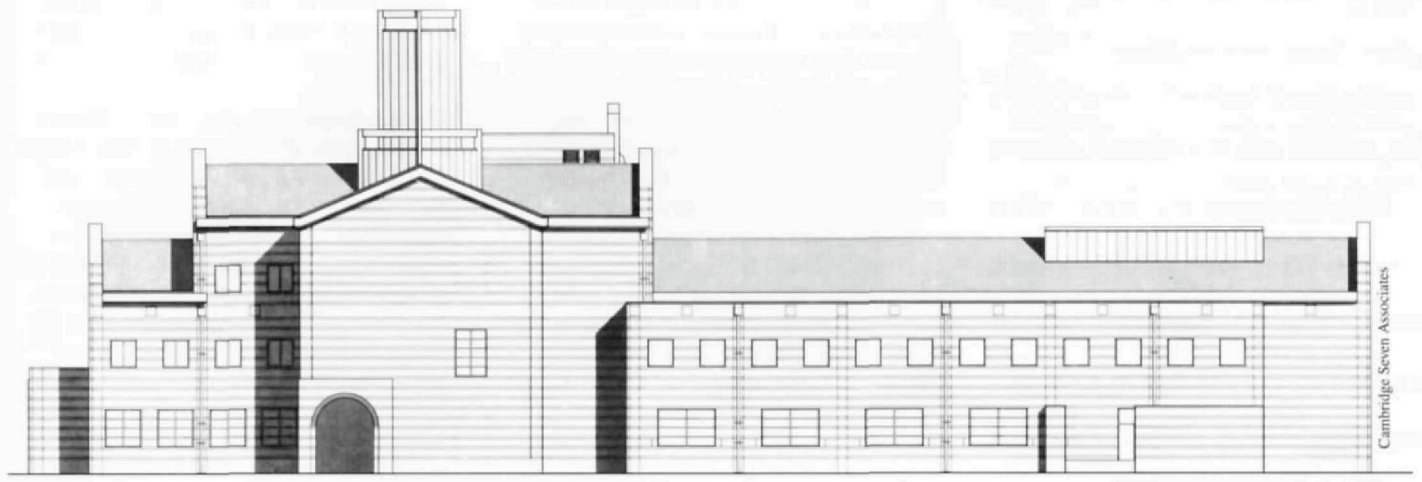
Model, George R. Brown Hall.



South elevation, George R. Brown Hall.



North elevation, George R. Brown Hall.

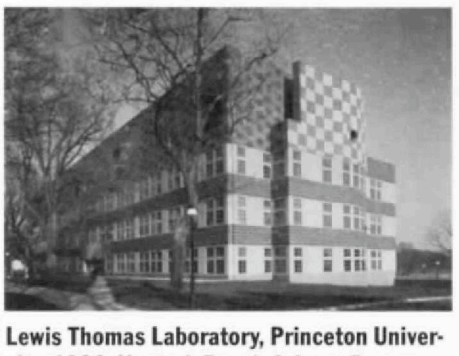


East elevation, George R. Brown Hall.

of Brown Hall. Stirling & Wilford, in their additions to the architecture building, and Pelli, in Herring Hall, certainly quoted and paraphrased existing architectural details at Rice. Yet each did so with critical acuity. For instance, the extruded reveals of Stirling & Wilford's stone detailing were deployed as ironic reversals of the shapes, materials, and compositional conventions of the building to which they were added. Their contextualism was subtle and ingenious; it slyly revealed the potential for delight latent in a building that no one had ever before thought very remarkable. The complex tapestry of masonry, tile, and glass with which Herring Hall is clad was born out of Pelli's ethical dilemma about how to make architecture that is simultaneously true to its place and its time. One might cite as well the brilliant work of Venturi, Rauch, and Scott Brown at Princeton University – Gordon Wu Hall and the Thomas Laboratory for Molecular Biology – as exemplary instances of new buildings in established places that make architecture out of the conflict inherent in this conjunction.

Instead of formulating an architecture that acknowledges the perhaps irreconcilable requirements of site, place, program, and construction, Cambridge Seven has deployed quotations from other buildings on the campus to simulate a contextual identity for Brown Hall that would elevate it to an architectural summation of Riceness. Harmless in itself, this combinatorial game has been played out to the point that it beguiled the architects into valuing the elegant paraphrase over architectural invention. In order to advertise symbolically the arch-representational role in which they aspired to cast Brown Hall, Cambridge Seven seems to have lost sight of the fact that what makes the buildings of Cram, Stirling & Wilford, and Pelli so provocative and stimulating is their inventiveness. Where Cambridge Seven has addressed building requirements directly, as in the zone above the north face of the central arch containing the third-floor windows of the institute lounge and the air-intake register of the mechanical penthouse, they demonstrate a capacity for critical acuity that requires no special pleading.

To judge from Cambridge Seven's existing work in Texas – Innova in Greenway Plaza and the alterations and additions to the San Antonio Museum of Art – the architectural detailing of Brown Hall's finished surfaces will be precise and polished, exhibiting a level of craftsmanship noteworthy in new Houston buildings. The attentive sit
coordination of ground-level circulation, and the shaping of outdoor spaces will contribute appreciably to the filling in of the campus. But one cannot evade the gnawing dissatisfaction that Cambridge Seven's eclecticism produces. It is too ingratiating and too lax conceptually. Cambridge Seven needs to rise above this level of coy winsomeness. ■



Lewis Thomas Laboratory, Princeton University, 1986, Venturi, Rauch & Scott Brown and Payette Associates, architects.

Notes

1 Cambridge Seven was asked to examine three potential sites for Brown Hall: the one selected (which was preferred by the Institute of Biosciences and Bioengineering), one west of Keith-Wiess Laboratories and the Space Science Building, and one west of Anderson Laboratories and north of the site of Alice Pratt Brown Hall, the new Shepherd School of Music building.

HouTech New labs for UH

As Rice prepares for the construction of its bioscience-bioengineering building, the University of Houston is proceeding with plans for a laboratory building of nearly identical size, to be called the Houston Science Center Addition. The building's 120,000 square feet, spread over four floors, will contain research laboratories and support facilities for the Texas Center for Superconductivity at the University of Houston and the Institute of Molecular Biology.

Designed by Houston Science Center Architects (comprising Golemon & Rolfe Associates with James S. Walker II in joint venture with the White Bud Van Ness Partnership and John S. Chase), the science center is prominently sited on Cullen Boulevard across from Hofheinz Pavilion, between the Science and Research Building II and the Communications Center. It is anticipated that a construction contract will be awarded this summer and that the building will be completed late in 1990.

Houston Science Center Architects were compelled by university officials to defer to the "context" all too evident in this sector of the campus – a surfeit of unarticulated brown brick sheathing applied with such relentless disregard for scale and texture as to induce acute environmental bland-out. Clearly visible in HSC Architects' correction of this depressing situation is the presence of Mario Bolullo of Harry Golemon Architects, designer of the George R. Brown Convention Center. Brown brick *is* used on the parapet and service-core screen walls that describe the building's basic shape. But, as at the Brown Convention Center, a spatial interpretation of the program results in a series of volumetric incursions and projections that bespeak differing internal uses and are reinforced by differences in surface treatments.

Color considerably enlivens the building. Floor levels in the projecting research bays, which are faced with white-painted steel panels, are denoted by charcoal-colored bands at window sill and parapet lines. Air-intake registers are faced with bright red grills, one set stacked vertically at the centers of the laboratory bays, another lined up in porthole openings alongside the principal entrance bays on the north and south sides of the building. Vertical reveals, marking the structural bay division, and horizontal reveals, keyed to the lines between inhabited and servicing spaces on each floor, divide the brown brick surfaces into panels, bestowing upon this abused material a sense of proportional clarity and order badly wanting in the Houston Science Center's neighbors.

Bolullo and Houston Science Center Architects have employed programmatic expression, volumetric composition, and technologically produced building components to give form to an intelligently conceived, articulately assembled design, one that avoids both the oppressive dumbness of the mediocre modern buildings that dominate the university's campus and the perfunctory figuration and exaggerated size that Johnson and Burgee used to give their Postmodern Architecture Building presence. The Houston Science Center Addition demonstrates that the choice is not confined to arbitrary image or anonymity: there is still a place for architecture.

Stephen Fox