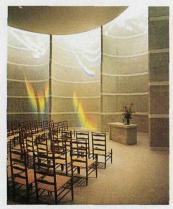
Three remarkable building projects at the Harvard Business School fulfill plans and promises made nearly seventy years ago.

## BUSINESS UNUSUAL



The sanctuary of the Class of 1959 Chapel, with its Shaker chairs. Prisms by artist Charles Ross create patterns of colored light that move over the walls.



Shad Hall exercise room. The facility also includes aerobic studios, squash courts, triple basketball courts, and a running track—not to mention a pub.



Morgan Hall. Staff space is organized around lightwells that allow daylight to penetrate the building. The skylight's efficiency is boosted by computerized rotating mirrors.

## by ELIZABETH S. PADJEN

he last time the Harvard Business School talked about building a chapel, local wags assert, was 1929—a line usually delivered with a nervous chuckle. While the value of the school's recently completed chapel as an economic indicator might be debated, it is true at least that religious humility has a history on the south bank of the Charles River.

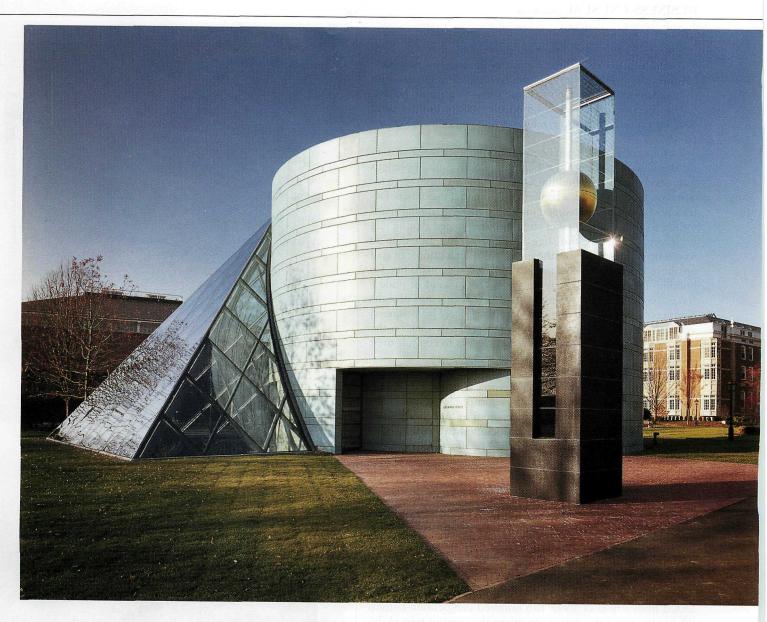
The Class of 1959 Chapel is the last of three recent projects (including the Shad Hall athletic building and the reconstruction of the Morgan Hall faculty offices) that together fulfill plans and promises made nearly seventy years ago, when the Soldiers Field campus of the Business School was first established. Major construction projects in historic environments are always risky, and the success with which the school's architects have met the daunting challenge of Harvard's famous neo-Georgian context is reason enough for the wider attention that these buildings deserve.

But few would think of the Business School building program as a veritable hotbed of architectural R & D, where buildings and materials are carefully researched, and where greater understanding of the relationship between human behavior

and the built environment is seen as a key to furthering the school's academic mission. The Business School builds with uncommon care and deliberation; among architects, it is considered a unique but demanding client.

The present campus occupies area that was once a malodorous marsh, subject to the tidal falls that made the undammed Charles River basin a miasmic nightmare. The University acquired the parcel through no great foresight of its own: President Eliot had repeatedly rejected the urgings of alumnus Henry Lee Higginson to set aside the property for future expansion, a suggestion that Eliot no doubt likened to the folly of purchasing Alaska. A man of no small conviction himself, Higginson nevertheless assembled a group of investors to buy the land and hold it in trust until the University came to its senses.

Only a decade later, Higginson's tenacity had paid off. It was the year following the First World War, and students were rushing back to the University, filling classes to record levels. The fledgling Graduate School of Business Administration, established on an experimental basis in 1908, suddenly doubled its pre-war enrollment, compounding the desperate need for dormitory space. Scheduling conflicts made it clear that the





Above: The Class of 1959 Chapel, with Shad and Morgan beyond. The "sunclock" in the foreground is inscribed with the names of all class members. The golden sphere marks noon at the top and midnight at the bottom.

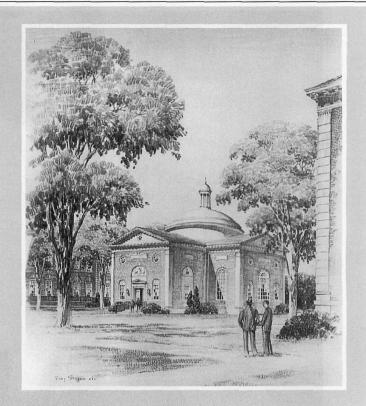
Left: The chapel water garden. Architect Moshe Safdie views it as an essential transition to the hidden sanctuary (opposite). The garden may be viewed from two levels. program was beginning to wear out its welcome in the academic quarters it shared with the Faculty of Arts and Sciences. Moreover, growing interest in undergraduate business studies across the country indicated that the expansion would be sustained. President Lowell assigned the task of building and funding a new home for the school to its second dean, Wallace Donham.

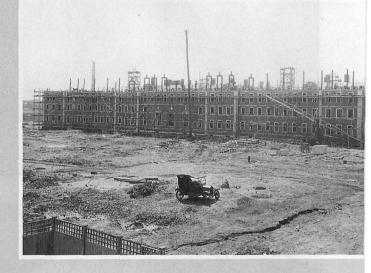
Paradoxically, money had been a continuing source of anxiety for the new school from the beginning. Some initial pledges were received for new buildings, but Donham's hopes were focused on George Baker, a banker and potential major benefactor whose long silence seemed to signal certain disappointment for the school. In 1924 Baker suddenly announced that he had no interest in giving the suggested \$1 million, but that he would be willing to pledge the entire \$5 million campaign goal on the condition that he could take sole responsibility for building the school. "It may not be the right kind of pride," Baker conceded, "but I should like to feel that my descendants could point to the Harvard Graduate School [of Business] and know that I had done it." Donham willingly took on the awkward task of persuading the other donors to commit their pledges to other University needs.

The twenties were an era when beauty was still a commonly accepted criterion for good architecture, and Lowell, Baker, and Donham firmly believed that a beautiful campus could enrich students' lives and even inspire them to higher purposes. The early planning of the campus included two essential ingredients that are even today critical to the success of the building program: extensive pre-design evaluation of needs, and the personal attention of the dean. Donham threw himself wholeheartedly into the problem, literally living with it on a daily basis as he set up an architectural studio at his summer house on Cape Cod. There he oversaw the development of basic modules for classrooms and dormitory suites, and the coordination of functional criteria for the library and other services—all while keeping an eye on what he already knew would be a tight budget.

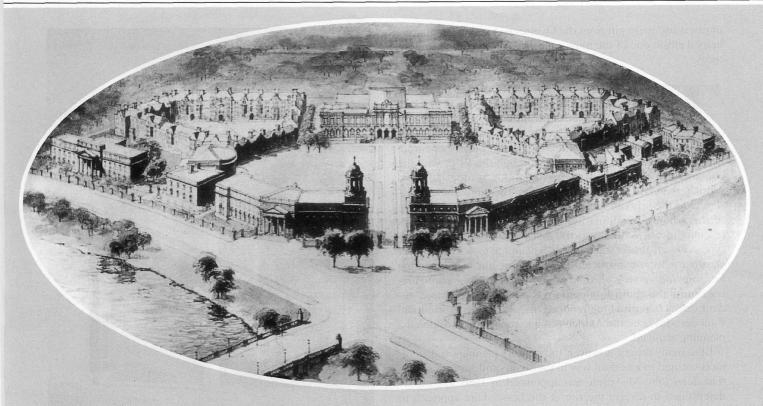
In 1925 a plan designed by McKim, Mead & White was selected from a field of about two hundred competition entries. The only one of the designs to orient the campus toward the river and the University beyond, the firm's plan established a hierarchy of lawns and courtyards, with buildings and pathways arcing subtly along the river as if a giant compass had been swung from a radius point located somewhere in what is now Eliot House across the river. Unlike the messy assembly of Harvard Yard, which was periodically subjected to plans to straighten things up, the Business School plan suggested an ideal unity, an academic village whose singular purpose was emphasized by the placement of the library at its center.

As the project proceeded under a tight eighteen-month deadline, elements of the plan were jettisoned. The classroom and research building, recreation facility, and chapel were dropped, as was the model factory that had long been on the faculty's wish list—a building that the President and Fellows deemed "undesirable." The loss of the chapel was perhaps felt most keenly by Donham, who expressed hope for its eventual construction, "which would help focus ethical and idealistic forces in the school." Architectural ornaments such as urns and cupolas were scaled back, and some materials were substituted, seen most obviously in the unpainted concrete cornerstones that replaced the intended cut stone. Even the land-scape plan developed by Olmsted Brothers was postponed









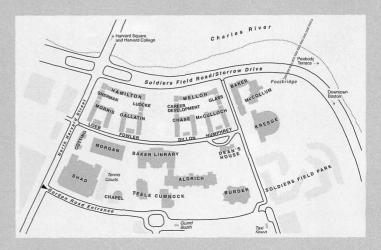


What might have been. Top, left: McKim, Mead & White's design for a chapel, part of the original plan for the school. It was not built, partly to save money and partly because, as Harvard's President Lowell said, "The Corporation was decidedly of opinion that building a special chapel for the school was not necessary or wise." Top, right: architect Egerton Swartwout, in this competition drawing, seems to have envisioned the school as a medieval walled city.

Center: The school was built between June 2, 1925, and October of 1926. Here construction is well along, with Baker Library yet to come, in the middle.

Left: benefactor George F. Baker (left), the "Sphinx of Wall Street," insisted on giving all the money needed to build the school. Dean Wallace Donham (right) was willing.

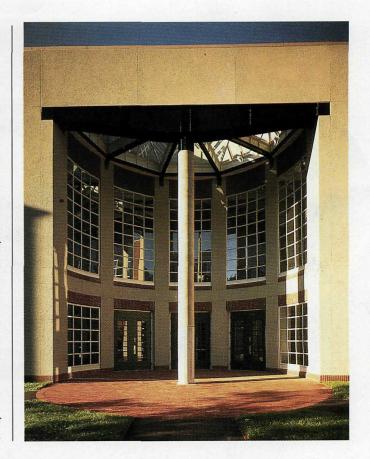
Right: The school as it stands today.



until a subsequent gift from the Overseers' Visiting Committee helped create one of the most appealing aspects of the campus today.

he great legacy of the McKim, Mead & White plan was twofold: it established sense of community as an essential foundation of the school's pedagogical philosophy, and it established strong architectural guidelines for the benefit of future designers. The legacy was honored through the 1950s with the construction of Kresge, the first common dining hall, and Aldrich, the classroom building housing the amphitheaters essential to the school's famous case study system. An example of the school's manipulation of its architecture to fulfill its teaching ideals, Aldrich was the first project to use test prototypes, now an almost standard HBS planning tool. Mock-ups of classrooms were constructed in a Quonset hut in the parking lot, showing varying class sizes and amphitheater configurations, until the optimal proportions were found to promote student interaction, teaching productivity, and personal attention. Four decades later, the Aldrich classrooms are still considered a planning standard.

Like many others, however, the school's planners and architects seemed to lose their way in the sixties and seventies. Current dean John McArthur was appointed in 1980, apparently determined to reverse the rise of the laissez-faire approach to campus planning. The architectural transgressions he inherited were minor problems compared with the combined threat of other concerns: aging facilities, inefficient infrastructure, a bur-







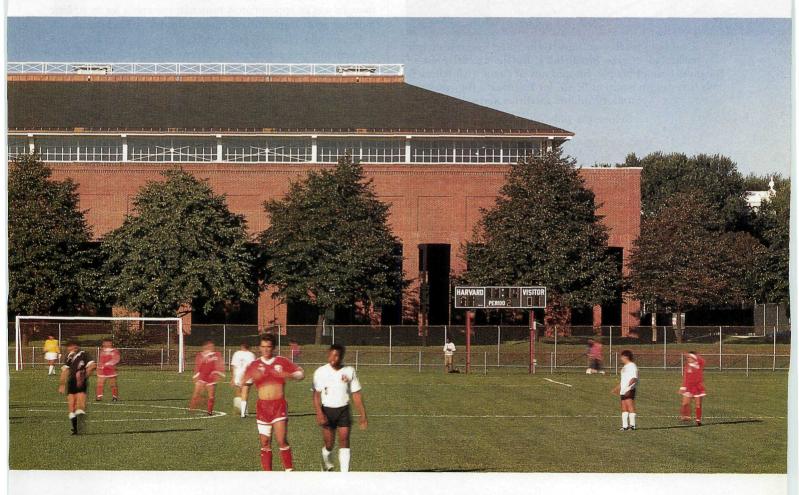
Above and below: Shad Hall won the prestigious Harleston Parker Medal, awarded annually to "the most beautiful building" in the metropolitan area. The south facade fronts University soccer fields.

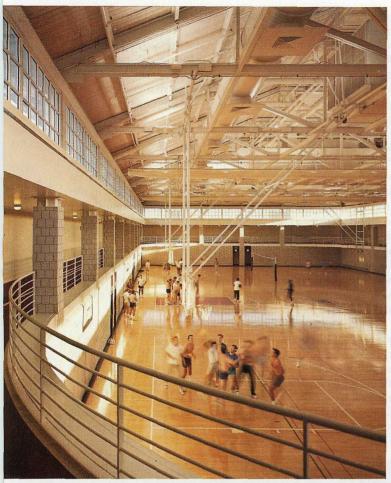
Above, left: Kallmann, McKinnell & Wood, Shad's architects, believe that a university's buildings are much like members of a family: you expect to see similarities, but you know they will have their own individuality. Shad's entry court abstracts the stucco walls of the original McKim, Mead & White faculty houses. The photograph was made prior to the gilding of the column capital.

geoning staff and faculty population, heavy auto traffic, and increased competition for faculty and students. A master plan, commissioned from Moshe Safdie Associates, established new development patterns oriented toward the south parking lot, making the approach of most visitors more inviting. Meanwhile, the faculty and administration began to investigate once again the ways by which the school's buildings might reinforce its academic objectives.

Baker Hall, home of the executive education program for people in mid-career, was one early beneficiary of the change. Professor Hugo Uyterhoeven, the faculty member charged with overseeing the building's renovation, resurrected the idea of the mock-up, constructing prototypical dorm rooms in the attic of Aldrich and outfitting them with cardboard furnishings to find dimensions large enough for comfort and function but small enough to discourage cocooning. The rooms are configured around lounge-study areas in clusters of eight (considered the ideal study-group size) in an atmosphere that resembles a hotel more than a dorm. The evocation of Hyatt and Marriott is deliberate, a device designed to ease the transition of executives who have forgotten the reality of dorm life.

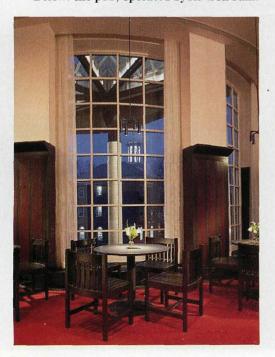
An architectural solution was also found for a problem vexing many institutions. Responding to the dean's challenge to examine itself, the faculty determined that its very senior members would retire voluntarily if the school could provide a means for their continuing participation in academic life on an informal basis. Thus was born the innovative Senior Faculty Center, on the upper floor of Cumnock Hall, where forty faculty members share nine offices and two support staff members





A running track (ten laps to the mile) encircles triple basketball courts. Shad Hall is for the exclusive use of Business School people. Should any of them wish (there is no free-weight room at Shad, for instance), they may use undergraduate facilities across the street.

Below: the pub, operated by Au Bon Pain.



on a loose rotating basis; reserving an office for a few days or a few months, they arrive to find their file cabinets rolled into place and ready for their attention.

ut these and other such projects were largely renovations of existing facilities. Few visitors realized the extent of the building program until the construction of Shad Hall, when rumors of a sports palace for the exclusive use of the Business School began to circulate around the University, spurring a controversy that unfortunately cast a shadow on one of Harvard's best buildings, and one of its most thoughtful responses to the neo-Georgian tradition. Architect Michael McKinnell, of Kallmann McKinnell & Wood, a former longtime professor at the Graduate School of Design, sympathizes with the building's pedagogical purposes: "The dean realized that social intercourse is one of the primary generators of education at the graduate level. [The building] serves the purpose of surreptitiously bringing people together when they come to play." Indeed, the building program was expanded to include a small central atrium and a pub that could increase opportunities for such encounters.

Shad deftly modulates the large brick symmetrical volume of its gym, squash courts, and locker rooms behind an asymmetrical stucco and glass entry screen that responds directly to the architectural gestures of the original McKim, Mead & White buildings. (McKinnell's definition of sports: "Wildly asymmetrical activity on a symmetrical field.") An enormous lintel spans the entry, supported by a single column with an outrageously gilded capital, a "gilded fist" that the architects thought was an appropriately muscular metaphor for an athletic building on a campus where cupolas display "gilded crania."

Meanwhile, planning proceeded on a project meant to solve a potentially grave academic problem: the growing fragmentation of a faculty scattered through ten buildings. Researchers and doctoral students were similarly dispersed, and the relative inferiority of their facilities and those for junior faculty had a potentially serious effect on the school's ability to compete for top people. The Morgan Hall faculty office project is called a renovation, but it more closely resembles bionic surgery.

Peeling away all but three brick facades, architect Moshe Safdie inserted five floors where there had formerly been only four, changing the building's shape from a shallow "L" to a deeper rectangle, and thus doubling the total area. The deeper building meant that a key concern would be the availability of daylight, and lighting became the organizing principle of the final design. Two long lightwells divide the offices, research, and support spaces into academic clusters called "quadrants"; the effect of the skylights is boosted by computerized rotating mirrors that track the sun. A central skylit atrium provides orientation at the entry and clear views of the building's most dramatic feature: the Tethys Mosaic, a fourth-century mosaic originally installed in a public bath in Antioch. Acquired from Harvard's Hellenic Center at Dumbarton Oaks and restored, it is installed at floor level, like an island in a black pool so ingeniously designed and constructed that the water gives the effect of a highly polished black granite floor, an illusion rather wetly disproved by two individuals shortly after its installation. (Despite many stories to the contrary, there have been no broken legs.)

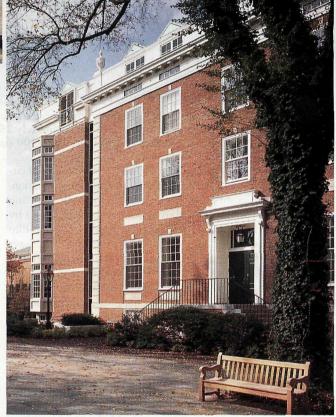
Morgan Hall's success as both a working environment and an extraordinarily sensitive addition to the historic campus



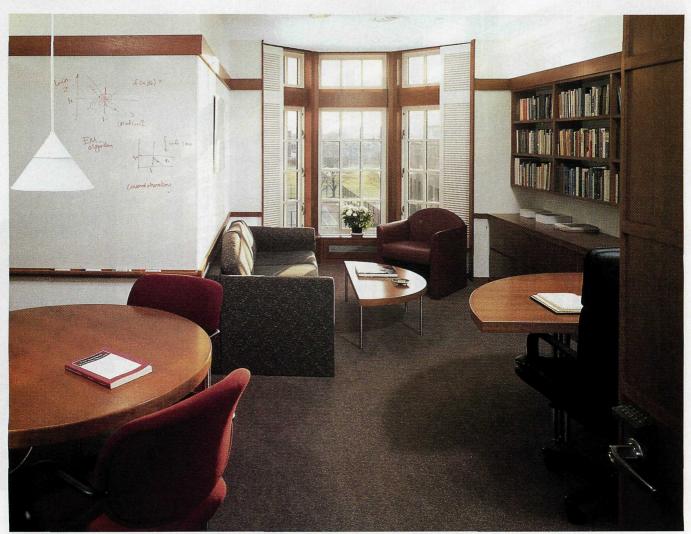
came from the skillful management of a complex planning process involving scores of people. Mock-ups were built and tested, staff members were surveyed, and-not insignificantlythe dean worked extensively with Professor Uyterhoeven to build faculty consensus, a process akin to herding eagles.

By contrast, Safdie's concurrent work on the Class of 1959 Chapel grew from a much more personal collaboration with Dean McArthur and Susan Rogers, chief planning officer for the school. News of a chapel at the Business School is often greeted with reactions ranging from humor to profound cynicism. But McArthur feels that the building completes the school's sense of community and thus completes the intentions of the school's founders. Through the chapel, the community recognizes the wholeness of its members' lives—people who may be grieving for a parent, or worried about their children, or in need of withdrawal from the pressure of work or study, or who wish to celebrate their religious traditions. The only construction project not funded directly from the school's operating budget, it is the gift of McArthur's own M.B.A. class, whose names are inscribed on a "sun clock" designed by German artist Karl Schlamminger.

The chapel is a sculpture in its own right, offering layers of mystery as an arcade leads the visitor through a water garden into the sanctuary. The glass-covered garden provides a visual connection to the rest of the campus and reinforces the new pattern of interior courtyards that complements the spatial organization of the original McKim, Mead & White plan. The



Architect Moshe Safdie peeled away all but three brick facades in his reconstruction of Morgan Hall, a faculty office building. Above: the east side, facing Baker Library, showing the addition of a new top floor and the intersection with the new south facade. Top: the south facade. Bays indicate locations of faculty offices.



Most faculty offices in Morgan are L-shaped, containing three discrete areas for informal discussion, working conferences, and desk tasks. The offices are approximately 250 square feet and correct former inequities in faculty offices that ranged from 100 square feet to more than 400 square feet.

sanctuary, however, is completely isolated, a scallop-edged circular space with no predetermined denominational orientation, although Safdie points out that the first cove is aligned due east. Daylight filters in from above, where prisms designed by artist Charles Ross throw colored light onto the walls, like shards of stained glass. "The laws of nature create the art," says Safdie, and Susan Rogers finds that even the disappointment of cloudy days serves its purpose. "It's a healthy reminder that we can't control everything, and that's an appropriate message for a chapel." Opened this fall, the chapel is a rare gift to the University. One recent visitor was a College freshman who said, "I discovered this when I was doing some exploring after a football game, and I keep coming back and bringing my friends. It's my favorite place on the entire campus."

Il who participate in the school's building program comment on the dean's personal interest in ensuring excellent work. McArthur himself is modest about his contribution, although he admits to a strong belief in the power of the physical environment to motivate and inspire people to achieve their greatest potential. "I spend all day, hour after hour, on quality—that's what your job is as dean. I don't think you can have mere pockets of excellence." With a background in forestry, McArthur came to the school as a graduate student who had also been accepted at MIT, an offer he rejected, he once sheepishly admitted to a Sloane School professor, on aesthetic grounds. And he is correct in his assumption that others are drawn to Harvard for similar reasons. Dale Abramson, a member of the staff who made the move to Morgan from one of the original houses, states it succinctly: "I came here and stay here because my environment is important to me."

Susan Rogers, now a veteran of several HBS building projects, believes she has discovered the secret of the school's success. "The dean really enjoys discovering excellence in what people do, and then empowering them to do more of it, whether they are architects, laborers, gardeners, faculty, or staff." As a master builder, John McArthur is clearly a worthy successor to Wallace Donham, with whom he shares the vision of an academic village. "No one pushed the dean to build the chapel," observes Rogers, "except maybe Dean Donham from the grave." Kindred spirits, indeed.

Elizabeth S. Padjen, M.Arch. '78, is president of Padjen Architects Inc. in Topsfield, Massachusetts, and is an appointed director of the Harvard Alumni Association.

