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Changes in the physical environment of education are discussed. Topics include planning, flexibility in academic space, utilization of space, housing, science facilities, libraries, and new shapes and materials. (FPO)

# Facilities for the Future

HAROLD B. GORES

When your President asked me to speak to you about physical facilities, the matter with which our small foundation principally concerns itself, we set about to prepare a publication for you and your trustees which would describe in detail some of the lively new construction and equipment appearing on the American campus. Therefore, there will shortly come to you a substantial report entitled *Bricks and Mortarboards,* a 150-page, illustrated, state of the art compendium of what's going on in the major fields of capital expenditures: 1) campus planning; 2) college residence; 3) academic buildings; 4) science facilities; and 5) libraries. We had hoped to distribute the report at this meeting, but as is always the case with buildings, the project came in late. But within a few weeks, New York printers willing, you will be the first to receive the publication.

EFL, as has been said, has the *mission of helping schools and colleges* with their *physical problems*—the things of education—the buildings, the equipment, the environment, the total surround. We are a *laboratory* and therefore our *grants* give highest *priority* to studies which promise an advancement in the sheltering and accommodating of education. We regard our money as risk capital and we will risk it with you if your quest for quality in environment is experimental and scientific in spirit.

At the behest of Dr Eurich, Vice President of the Fund for the Advancement of Education, a somewhat larger "body of money surrounded by people who want it," we have brought together here a number of exhibits which illustrate physical principles of new products and equipment available to you on the open market. The demonstrators, some of whom normally are salesmen, have taken the pledge not to sully this meeting by crass commercialism. Please do not contribute to their delinquence by suggesting that they take an order. They are here only as instructors in their respective fields and should be permitted to leave the conference without a profit, a condition not foreign to education.

It is held in certain quarters that college presidents begrudge the time they spend on physical facilities. If true, it is understandable. After all, it is more exciting to deal with people and with ideas, both of which behave more explosively than do bricks and are therefore more likely to produce inflammation of the institution. Consider too that a standard brick is only eight inches long, yet it may be the largest concept completely graspable by an alumnus who has contrived to become rich—and, claims one disgruntled president, by the Federal Government.

But from my coign of vantage, what is held in these certain quarters is false. The college president *is* concerned about the things of education; it is just that bricks and mortar are not his first concern. People come first—a college is a faculty and a student body. And second comes the body of ideas, the curriculum, about which the people have chosen to assemble. And only last, but nevertheless, is a college also a place.

If the college president exhibits disdain for what he may call the nuts and bolts of education, and sloughs off decisions about environment to the maintenance department, it isn't because he doesn't care. More often it's because he doesn't know and he hasn't the time to find out.

My remarks this evening are aimed at bringing you information, which some of you might not otherwise come upon, about what is happening to physical environment in education. All of what I say will not be applicable to your particular campus because the 2,000 institutions of higher learning are so diverse in purpose, scope, size, physical location, age and aspiration.

For there is no such thing as *the* American college. It is 30,000 students in a cornfield. It is 86 students in a converted mountain resort hotel. It is 40,000 students, many of whom come out of the ground each morning to learn in high-rise steel and glass boxes and then disappear into the ground again to make way for even more students to come by subway at night. It is 1500 young men studying among the birds and the bees of exurbia, attending a prep-school college leading to a prestigious graduate school. It may be the richest repository of culture in the western world; or it may be a couple hundred students and their teachers bound together only by their missionary zeal and the anxiety of looming bankruptcy. The American college is all these things and, with organized religion, it is the social mechanism for governing the speed at which a free society will permit itself to change.

In the face of such diversity there are no all-purpose answers. About all I can do, particularly for those of you who are confronting the problems of physical expansion and rehabilitation for the first time, is to help you to threaten your institutions with the right questions. If I have listened correctly, these seven matters are regarded by the typical president in this narrow field of the physical as his seven stations to the cross.

I. *Planning*

Are you planning for now or for later? Do your trustees, do your alumni, do you, sense that what is built in 1963 will be standing in the year 2020; that if you build especially well, the structure may be only at its half-life in the year 2000? Remember, you preside over the hardiest perennial in our culture: nowadays colleges almost never die; and when one does fade away these days it is usually only to the comforting embrace of some state or municipal fisc.

You should *think* about your college in terms of a century, *plan* to the year 2000 and *budget* for ten years. If you find this notion unrealistic, I commend Fritz Baade's book, *The Race to the Year 2000,* for your bedside reading.

If you don't have a master plan for your college, you aren't the pilot, you're just a passenger. If you preside over a large college you are in truth presiding over a complex urban society which in miniature poses all of the problems of urban life. On the other hand, if your college is small you may be especially vulnerable. Under one of our grants, Professor Jamrich of Michigan State University, discovered that, of 124 small liberal arts colleges surveyed, only twelve had total studies projected into their foreseeable future. To be sure forty-four had enrolment projections, twenty-eight had curriculum studies, but only eleven had physical plant projections. Worse still, twenty-nine had no plans at all.

Similarly, a survey made by Booz, Allen and Hamilton, management consultants, of 831 responding colleges, revealed that less than half had plans reaching beyond five years. This situation lends credence to the U. S. Office of Education's discovery that the sum total of college and university plans to the year 1970, overlooks and fails to provide for one million students. Interestingly enough, publicly supported institutions tend to have better long-range plans than do private institutions, probably because private donors prefer instant immortality.

Suffice it to say here—and many examples of master planning are set forth in our forthcoming book, *Bricks and Mortarboards*—that master planning can be the best money you spend. The spectacle of

colleges buying back at inflated prices the land they once owned and sold, and colleges abandoning campuses already dotted with two-year-old buildings to move to more benign environments, is disconcerting.

II. *Flexibility in Academic Space*

Flexibility is a fighting word in educational planning. Architects quail before it when clients demand it without explaining it. Educators as a group have a vague feeling that flexibility is something they should be for, and should demand, if only somebody would describe it. It's an all-purpose word that shrouds the uncertainty of making decisions in uncertain times—a way of asking the question: "How do we act now and not regret it later?" This is a general yearning not confined to educational facilities, but because buildings have a way of being around for a century and their shape cannot be rescinded by taking a vote, decisions about buildings are especially haunting. And when decisions about environment are turned over to well meaning but non-reading janitorial types, a Procrustean bed is in the making.

A few of the wealthier institutions can be relieved of worrying much about flexibility. Happily for our culture, their mission can include the providing of a place for the great artist-architect to plant his personal expression of form and mass, and where a philosopher-president can dictate a design that memorializes the ways of our fathers. In such a setting, the pursuit of flexibility somehow smacks of the market place. When Woodrow Wilson said of his Princeton buildings: "Through these architectural lines we bought a thousand years of history," he was helping all of us to acknowledge and preserve our roots. And this legacy is to be cherished; though like the love of a good woman, it is expensive.

But to the great mass of burgeoning institutions—some just coming out of the ground, and all expected to take in and serve well the double wave of this decade's students, flexibility has special meaning. In simplest terms it means how to achieve high utilization of space by designing buildings that get out of the way.

Here are some ways to get flexibility:

Plan space that can be multiplied and divided by using partitions that can be arranged at the end of a term, over a week-end, or instantaneously. In the last two years the spectacular operable wall has been developed. Previously, operable partitions that would effectively stop sound were handcrafted and cost about $25 per square foot in place. There were cheaper partitions, a kind of accordion-folding screen often found in faculty clubs and guaranteeing that the jokes

and applause on one side of the wall could be heard and appreciated by persons attending a different meeting on the other side. These were nothing really but visual dividers and brought disrepute to the principle of operability. But today there are a dozen manufacturers of operable partitions that stop sound. For $25 a foot, operable at the turn of a switch, they will stop all the sound. For $10 a foot, mechanically operated, they will stop the sounds of conventional instruction. And for $5 a foot, manually operated, they will stop ordinary speech. This means you now have the opportunity to create smaller spaces out of larger spaces when desired, yet recover the large spaces when you want them back. It means you can divide an auditorium or large lecture hall into sub-spaces that can be used independently and simultaneously without acoustic interference among them. One college has currently on its boards a thousand-seat auditorium-theater which, according to the way it is divided at any one moment in time, will serve six different functions. It is in effect a poor man's Loeb Theater. Its economy is not to be gauged by the comparative cost of operable versus immovable walls but rather by the higher utilization of space it offers with consequent reduction in the total space that otherwise would have to be provided.

Conventionally, academic buildings are laid out in egg-crate design—equal-size classroom boxes arrayed along bowling-alley corridors. Though the owners of such buildings point with pride to the easily destructible, non-bearing partitions separating the rooms, claiming this is "flexibility," it is my observation that no one ever takes a hammer to the walls of academe.

Many secondary schools and some colleges are today arranging classrooms in clusters rather than in seried array. Where the climate is benign, corridor space can thus be reduced, and if someday, as seems likely, there should be other arrangements than one faculty member presiding over a standard class of students, the cluster will consent to the change with least expense.

This is especially important to universities which choose not to organize themselves as super-high schools. In this connection, I recently asked Frank Keppel, now U. S. Commissioner of Education, how his proposed new building for the Harvard Graduate School of Education was coming along. "Fine," he replied. "It will be a huge loft space put in a medieval shell." An admirable solution! The loft space can be divided by partitions which can be snapped in or out through the years as needs change, and the medieval shell will update the neighborhood.

If you are integrating two or more of the disciplines, especially in science, plan also to integrate the space. We are working currently with a number of colleges which are attempting to design multi use space and equipment that can be used effectively in more than one subject field. One university has invented, at least to its own satisfaction, a single laboratory station that satisfies the departments of physics, chemistry and biology. And if you are planning a lecture-demonstration hall, consider well the *rotating* stage which allows out-of-sight make-up and knock-down of apparatus while the hall is in use. The rotating stage also helps the facility to bridge a number of subject fields thought heretofore to be incompatible.

In sum, look favorably on interior space that is mutable, malleable and easily alterable. The initial cost may be a little more, but in the long run savings will accrue as the inevitable alterations are made easier. That buildings may sit for 100 years in a stream of change; help it to get out of the way.

## III. *Utilization of Space*

In the last few years higher education has had cause to be concerned about the utilization of classroom, laboratory and related academic spaces. Last year even Congress got into the act.

It is difficult to generalize for the whole range of institutions. Some colleges regard the conspicuous consumption of space as a necessary part of their character. Others, under the press of rising enrolments, look to higher utilization to ease their economic problems. An EFL study of space utilization in small colleges revealed that, on the average, classrooms were utilized 17.6 hours of the week and laboratories 10.8 hours. It appeared that utilization was more a function of cultural habit than of administrative management. On one campus I visited in the last year to talk about physical expansion, I found that enrolment could be doubled without buying a brick. To be sure, this was an unusual case in that the college was committed to very small classes in the belief that intimacy of instruction was the same as quality.

But these are extremes and are dangerous to reason from. Many a well-meaning politician, both state and federal, has jumped to the conclusion that if utilization is, say, forty per cent in a certain facility, it takes only the waving of an administrative wand to achieve eighty per cent utilization. And, as you know, that just isn't so. A substantial change in utilization can result in a substantial change in the character of the institution. Maybe its character should change—but that is a different question. A sharp rise in utilization of space can be like

increasing the speed of colliding molecules of air in a bottle. The bottle heats up and so will the institution. I am not referring to the heat generated as departments are encouraged to share their facilities with strangers, or schedule classes more evenly over the day and week, threatening as these reasonable acts are to the early settlers on the faculty. I am referring only to friction with the environment and not with the mores. With higher utilization will come less tolerance for low quality space. If few persons use a space, and only infrequently, no one complains that the space is not first-rate. The student and faculty attitude is that though the room isn't very good, at least it's theirs. But when there is a sense of competition for space, people notice whether the space is really worth competing for. And then come the complaints.

I have one suggestion for reducing this inflammation and that is to carpet the space. This may upset your department of buildings and grounds, and maybe a trustee or two, but the facts are clear. Acoustic, insulative floor covering, otherwise known as carpeting, will bring peace and quiet and dignity, as well as lower maintenance costs and, believe it or not, lower heating costs. Libraries are being carpeted quite generally now without a sense of guilt and it is only a matter of time before lifting the tone and performance of other spaces will become routine and respectable. As soon as the word gets around that you also will save money, the cultural guilt associated with carpeting in colleges will rapidly disappear. This has ever been the history of what happens when economics and culture collide.

In sum, higher utilization of space is not just a problem in arithmetic: it's a problem of institutional habit and mores, and the villain is people, not space. But when you do raise the utilization of space, raise its quality as well. One of your institution's objectives is to speed the students' rate of maturity. A mature environment will suggest by its amenity that the college regards its students as sensitive adults and therefore that the students are expected to act that way.

## IV. *Housing*

New trends in college housing can be traced to three simple facts: (a) students are students; (b) students are people; and (c) there are lots of students.

The first fact leads to efforts to make the dormitory an educational facility, thus narrowing the gap between what the student learns in class and what he does outside it, and incidentally helping to justify huge housing expenditures.

One approach is to create in the residence hall an intellectual climate which will complement the academic atmosphere of the classroom. For example, the house plan, which stresses informal contact between teachers and students, is no longer the exclusive property of the Ivy League, but has spread to schools from Maine (Bowdoin) to California (Stanford). And it is no longer rare to find good books, music, art—and even architecture—in the dormitory setting.

Another approach is shifting academic work from the classroom to the living room. The instruction may be formal, as at Stephens, where residents of one dormitory take virtually all their classes where they live, and Michigan State, where core courses are taught in a new dormitory complex. Or it may be informal, as at the University of Chicago, where students themselves initiate how-to-study sessions, seminars and lectures, held in the dorm lounges.

The trend toward the teaching dormitory is likely to gain impetus as new instructional techniques and mechanical teaching aids gain wider acceptance. Stephens already offers one required course via television, and other schools are gearing themselves to bring teleclasses into the dormitory lounges along with "Gunsmoke." The University of Michigan is experimenting with branch language laboratories in its residence halls, and a new dorm at Syracuse will bring an audio and video conduit to each student room in preparation for the day when the student will attend a lecture by simply tuning in his private TV set or dialing a selected tape.

In the meantime, the emphasis on independent study is leading to revolutionary changes in the student room and the dormitory as a whole. The student's desk is getting bigger, and he often has enough shelf space for books other than his texts. There may be a typing room or study room down the hall, or he may study in the dormitory library, where standard references and frequently assigned books are readily available.

The most striking changes in the typical dormitory, though, result from the college's recognition of the student's needs as a person. Asked what they thought the designers should consider in planning a new women's dorm, a group of Cornell coeds agreed that the new hall should avoid the institutional look—"rows and rows of anything"; should be subdivided for small groups; and should be a place where "a woman can be herself." Most colleges have taken the advice to heart. Almost all are trying to purge their new residence halls of institutional taint by breaking up the amorphous mass of students into manageable groups in which residents can find companionship

without being pressured to conform, and privacy without being isolated. Suite plans and similar arrangements are rapidly replacing the old cell-block pattern of two-student rooms lined up on both sides of a tunnel-like corridor.

Colleges are also finding that "luxuries"—air conditioning, which encourages year-round operation; semi-private baths, which reduce maintenance costs and make it easier to rent the dorm as convention and hotel-space during school recesses; carpets and drapes, which produce acoustical dividends; and quality finishes and furnishings, which last longer than more "economical" items—do, after all, have a place in the residence hall.

The principal stumbling-block in the college's progress toward better housing is the fact that there are lots of students—twice as many by 1970 as there were in 1960. This deluge means that most colleges must concentrate on building *more* housing—fast. And the staggering cost of the undertaking means that many colleges must concentrate on finding funds to pay for even minimal housing to meet their immediate needs.

Colleges are currently exploring two promising avenues out of the dilemma. One is the development of prefabricated units or component-systems, which might at the same time lower construction costs and increase construction speed. As yet, the available products are too low in quality and too high in cost, but the size of the potential market is spurring industry to further efforts in this direction.

The second possibility is private financing. Here again, the size of the market has already prompted private investors in some areas to build and operate, sometimes with the cooperation of the school that supplies the tenants, off-campus student housing units. One investment firm proposes to build standard units on a college campus and turn them over to the college at the end of a twelve-year lease. The units now being offered are not permanent, fireproof structures but conventional frame buildings, which might invite severe maintenance problems—especially after the twelve-year-old units became college property. But, the plan offers certain advantages to colleges whose shortage of capital and need for housing are particularly acute. Direct loans to colleges by private agencies are still rare, largely because college housing operations are notoriously unprofitable, but there is at least one exception to the rule. By making its existing dormitories pay for themselves and more, so that income from them can be used to secure loans for additional units, Parsons College has put itself in

the market for private capital to the tune of a $4.4 million revolving credit agreement with a major New York bank.

The era of looking at college residence as a problem of nocturnal storage is behind us. And, happily, so are the days when a dormitory was a big box filled with equal-sized little boxes, its ice-cube tray geometry consenting only to long, narrow, straight, surgical-tile corridors connecting interminable rows of cement-block cells with their bolt-of-lightning cracks. Cold and clammy to the touch, these ceramic vaults, relieved only by the vitreous enamel of the gang toilets, spoke to the student only of two matters: indestructibility and antisepsis. Any similarity to the purposes of the college, living or dead, was purely coincidental.

## V. *Science Facilities*

The major force affecting the design of laboratories is the reaching of scientists toward a higher level of generalization. At the same time there is substantial movement toward freeing the student from the tyranny of the standard group by providing time and facilities for independent study.

Accordingly we see these trends in science buildings:

The melding of the isolated one-discipline laboratory, precisely designed for a single function, into groupings of labs, offices and lounges so as to increase communication.

The rise of the multi-discipline lab bridging two or more sciences, thus encouraging a higher utilization than the conventional twenty-five per cent.

Greater use of portable snap-in equipment for small group and independent study.

The central location of heavy, costly or complex apparatus, as in a common toolbin, serving the surrounding cluster of labs.

The creating of large, open lab spaces with all service functions, stairs, utilities, toilets, etc., placed on the periphery. At Colorado College, for example, the solution has been described as a "grasshopper skeleton" because all the bones—the utilities, exhaust, plumbing—have been placed in the exterior skin of the building, leaving the interior free for maximum flexibility. At Rice University, in contrast, the utility skeleton is placed as a spine through the center of the building. In Boston, the Retina Foundation's new lab building is best described as an aircraft carrier flight deck with utilities placed in the superstructure.

Several colleges are tackling the inflexibility of the laboratory bench. One inventive solution is the suitcase system. which stores laboratory apparatus in a case apart from the bench.

And last, the trend toward increasing demonstration and decreasing time at the bench for students electing, but not majoring in, science. This has heightened the interest in lecture-demonstration halls and has placed a premium on closed-circuit television and the use of films and tapes. One of the most thoughtful uses of television in science occurs at Rensselaer Polytechnic Institute in the East and at St. Mary's on the West Coast, each using television as a means of magnifying and multiplying an image so that many can see simultaneously what one can see less well.

In sum, whether space for science is an exoskeleton, a sandwich or a flat-top, the object is to achieve *generalized* space made *specialized* by the kinds of equipment introduced from time to time through the years.

## VI. *Libraries*

Of all the facilities on the American campus, the library is most in agony, sitting as it does at the confluence of two forces: its historic archival function as a place for books; and the new demand that it be the locus of all media which carry information. In the lower schools it would appear that the newer media, the audio-visual, will set up their own establishment, leaving the librarian dusting her books. There are those who believe that this dichotomy is unforunate.

At the college level, books are more prestigious than hardware. Accordingly, the library has greater opportunity to add the mechanical carriers of information to its services. Some institutions are working toward a middle ground by erecting so-called communication centers, housing all the carriers. The only safe prediction is that the struggle will result in diverse solutions. On some campuses the book will remain central to the service rendered; on another campus books and records and tapes and films and television will be accepted as equal partners; and, alas, on some campuses the library and the book itself may come to be regarded as primitive relics giving way to the storing, retrieving and transmitting of information regardless of the substance on which it is stored.

As the battle lines are drawn, consider these facts:

That higher education will be buying new library buildings in this decade at the rate of nearly $100,000,000 a year, exclusive of the cost of the books;

That, whereas the typical college library in the past has seated about one sixth of the student body, many colleges are moving toward twenty-five per cent to fifty per cent of their student bodies;

That the current output of printed materials is becoming unmanageable. For example, consider the relatively minor matter of technical papers which, according to the *Wall Street Journal,* are being turned out around the globe at the rate of 60,000,000 pages annually. Cornell, for example, is cataloguing 80,000 new titles a year. Indeed, Cornell reports that, exclusive of reference books the typical student annually consults, in addition to his regular texts, more than eighty library books—a stack twelve to fifteen feet high.

In the face of this explosion of knowledge, something has got to give. Monumentality in the design of libraries has already gone by the board. To quote Ralph Ellsworth, librarian at the University of Colorado, "The monumentality of a library was accepted as a symbolic measure of respect for knowledge in the minds of the university community." When monumentality gets mixed up with function, you can expect that only seventy-five per cent of the facility will be usable for actual library functions; that the unchangeable rooms will become increasingly inefficient; and that alteration involving wiring, lighting and air conditioning will be expensive.

More recently the pendulum has swung so totally away from monumentality and toward functional storage that some new libraries grace their campuses only as would a new warehouse.

Currently our newer libraries are modular, providing loft space that can easily be divided into sub-spaces. From the trend toward independent study is coming a higher proportion of space for carrels and individual seating. Keyes Metcalfe put in fifty per cent individual seating in Lamont Library at Harvard just after World War II. Today he says he would go to seventy-five per cent or eighty per cent individual seating—and this for undergraduates! Similarly, the library is getting away from standard sizes for everything. The library is coming to look less like a high-volume high school library, where everything is standard including the treatment of the students.

If one were to oversimplify the history of the library one might say that originally the building was designed as a cultural symbol, then it was designed around books, and next it was designed around people—which brings us to 1963. Query: Will it next be designed around machines of communication?

Whatever the answer, it is clear that some form of birth control for the storage of knowledge is required. Among the promising measures

is the voluntary clustering of institutions, each specializing in some aspect of knowledge that will not have to be duplicated by the others. This is a blow to the building trades, but it may just save some earnest institution from being smothered in its purchased words. And if the umbilical connection among the institutions is electronic, and if each institution has found ways by micro-reproduction and automated devices for acquisition and retrieval, these should be regarded as the new conditions for library operation, leading some day to great regional centers for the sharing of knowledge from a common bank. If I have any advice to you it is, "Get yourself a partner institution quick."

## VII. *New Forms, Shapes, and Materials*

As Kenneth Galbraith has pointed out, public and quasi-public architecture seldom lets itself go. Only in our airports, and occasionally in our schools, he says, do we show signs of doing something that flatters the public eye and nourishes the community pride. If this was true four years ago, it is no longer so with respect to higher education. With the possible exception of our churches, the American campus is providing the most architectural excitement today.

Consider the following:

Of the new shapes, note the vast number of buildings designed in the round, with roofs that are simply scoops of the sky, requiring no interior supports that must forever be walked around. Truly the circle and the curve are returning to grace. As these buildings depart from Cartesian geometry, at long last we've stopped putting Descartes before the horse.

Incidentally, a steel geodesic field house recently came in from bid at $2.37 per square foot less than the conventional box gymnasium against which it was bid in the open market. For urban universities, consider the principle of joint occupancy. Here is a way, by sharing facilities with a compatible rent-paying tenant, to amortize the building. Joint occupancy lends itself especially to urban renewal programs and becomes an economical way of expanding the downtown campus.

The proportion of glass in exterior walls is diminishing, due mostly to the need for reducing solar heat gain in air-conditioned buildings. At the same time, there has been a shift of attitude about windows and seeing until today there are those who say that a window bears the same relation to light that a fireplace does to heat. One college president tells me that, because his electricity bills are running $1,000 a week for five glassy buildings, he closes down one of them whenever

two of them are half occupied. "This," he sighs, "is administration by refrigeration."

But look out! It is oversimplification to say that glass must go out the window, for it is a rare architect who can design beauty, function and prophesy into a sightless box. Encourage your architect to design around the sun just as he designs around wind, rain and sound. Expect to see more sun screens, overhangs and eyebrows, and encourage the use of glass as interior partitions to introduce a sense of openness within. Some of the new glasses providing high acoustic separation make this use entirely feasible.

If you have the option, consider seriously the use of electricity as a fuel. It is the only source of energy that seems likely to drop in price during the life of the building.

And last, whether to renovate, convert or abandon an existing building is a perennial question on many a campus. The old rule of thumb, suggesting that you should renovate if the cost is less than fifty per cent of replacement, or some other mystic percentage, is falling into disfavor. A sounder principle seems to be that if the building is where it belongs, is structurally sound and has beauty, then renovate it. Conversely, if it stands in the way, or is a chambered nautilus with calcium skeleton lacing its interior, get rid of it. And speaking of conversion, one college is planning to superimpose an airplane hangar over the U-end of its 42,000-seat stadium, thereby securing a low-cost, year-round field house while not interfering with the five afternoons the stadium is serving its hallowed and autumnal function.

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At this point I return to where I began. A college is people, ideas, and a place—and in that order. A college aspiring to completeness in all things will somehow find a way to cast up a physical environment that supports and sustains its mission.