

ARCHITECTURE AND MAN AT YALE

By VINCENT SCULLY

YALE probably possesses no single building so delightful as Le Corbusier's effortless sketch at Harvard, the Carpenter Center for the Visual Arts. Yet almost all the many buildings that have been constructed at Yale during the past decade are of more than parochial interest. They were designed by some of the best architects available in America, each of whom was given maximum freedom to develop his ideas. The results offer a wide, representative range of America's architectural styles today.

The freedom given the designers, problematical as all potentially creative methods are, was fostered and sustained by the late president, A. Whitney Griswold, patron of the enterprise as a whole. Because of him, Yale now has buildings by Louis I. Kahn, Paul Rudolph, the late Eero Saarinen, Paul Schweikher, Philip Johnson, and Skidmore, Owings and Merrill. Naturally, not all their efforts clearly succeeded.

It is more significant that the variety of forms that inevitably resulted from that potpourri of designers given *carte blanche* now seems to have developed consistently. The first and last buildings of the group, Kahn's Art Gallery of 1951-53 and Rudolph's Art and Architecture Building of 1961-63, are not only the closest to each other in conception, but are also perhaps the most significant buildings of the group historically.

The two architects in question are those most closely connected with Yale's Department of Architecture: Kahn as its chief critic for many years, Rudolph as chairman since 1957. Indeed, if one were to consider the other buildings, a similar correlation between quality and degree of connection with the school would be likely to appear. The development of Yale's Department of Architecture relates directly to that of Yale's new buildings.

The buildings themselves offer, among other things, 1) some instructive contrasts between their architects' methods of design, 2) the clear indication of a general architectural move-

ment of the Fifties toward monumental mass and force, with the rise and decay of a neo-neo-classicism reposing as a sub-theme within it, 3) a capsule demonstration of the fundamental problems of urban design, wherein new buildings must be related to their sites and to pre-existing structures. The last is probably the most significant, involving one of civilization's major current problems: the proper control of its urban environment.

Here again, the first and last buildings, set across York Street from each other, make the point best, as the closed mass of the first is received by the open gesture of the second. For once, the cause of architecture as a whole, which goes far beyond the design of single buildings, is generously served.

The first building, Kahn's pioneering effort, remains the best loved of them all in New Haven, despite its obvious lack of integration and the various remodelings it has since received. Kahn conceived it with the late George Howe, then chairman of the Department of Architecture, as a simple loft structure organized around a central service core, permitting maximum flexibility of floor use. In Kahn's opinion, that very flexibility proved the building's undoing, insofar as it unduly encouraged the unsympathetic rearrangement that has occurred since. But the concept did create a monumental, voluminous shape that was simple and clear in mass and decisive in profile: firm on Chapel Street, noble toward Weir Court behind it.

The effect of the Kahn building, still striking in 1963, recalled that of Renaissance architecture. It was in sharp contrast to the asymmetrical, light, pictorial, antimonumental trend of the International Style of the previous three decades, of which the Graduate Center at Harvard (1950) had been a recent, rather tired example. Kahn's volumetric order also recalled that which Mies Van der Rohe had already reinstituted at the Illinois Institute of Technology, but the Art Gallery, toughly clad in brick on the street side and varied in levels on the other, also employed a massive structural weight that Mies avoided. The insistent tetrahedrons of its reinforced concrete slab created an interior where-

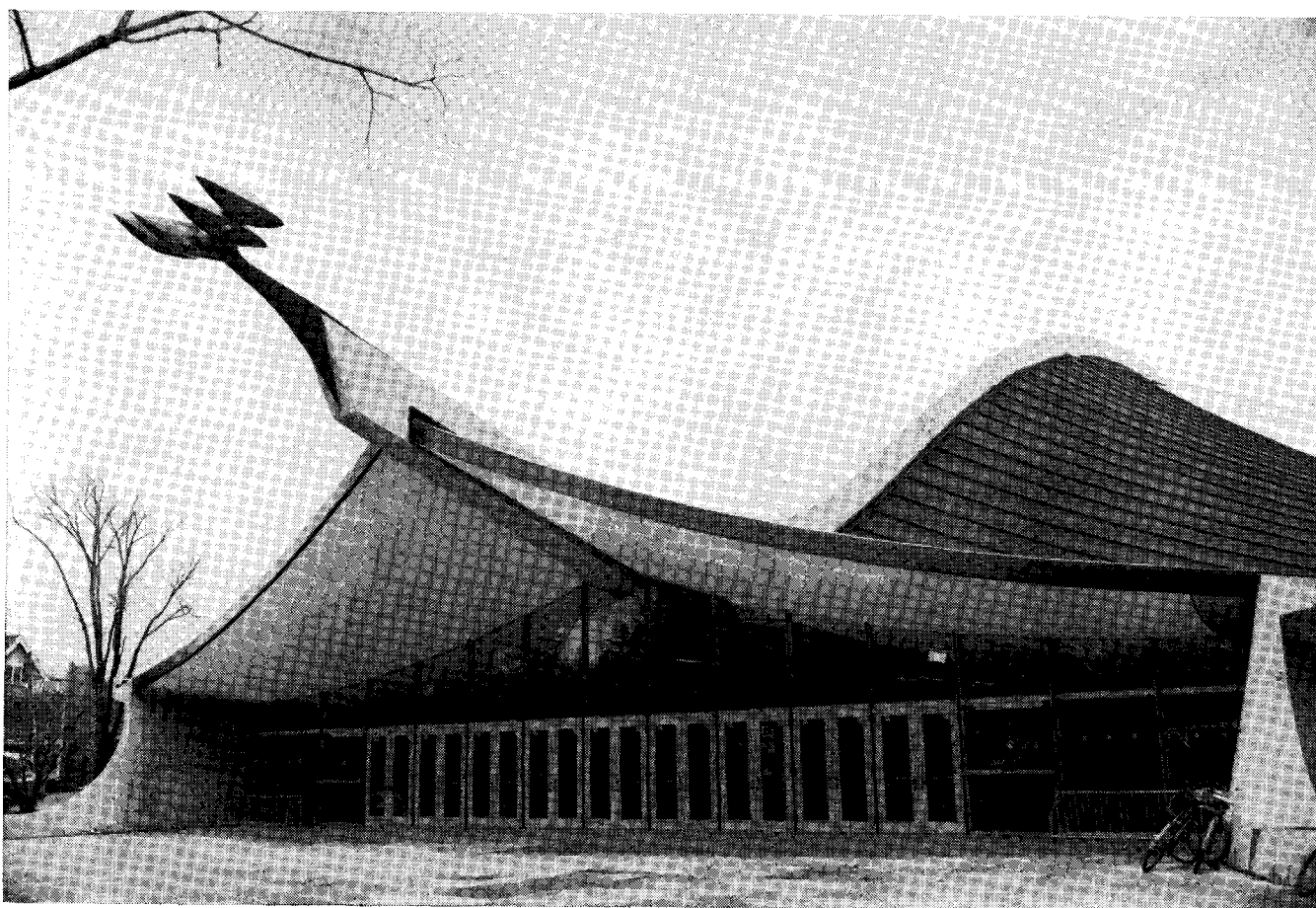
in the nature of the structural fabric can never be ignored.

The space of the Kahn building is defined by solid structure, not—as, for example, in the Museum of Modern Art—by weightless planes. It is true that Kahn has not fully integrated structural elements to the shape of the building, since the tetrahedrons “want,” in Kahn's own phrase, to make triangular spaces. But the principle of structural form-making is at least stated, and it has borne fruit throughout Kahn's subsequent, splendid career—none of which, unfortunately, has so far been pursued at Yale. His medical and biological laboratories at the University of Pennsylvania, of 1959-60 and 1962-63, are the clearest examples of this principle yet constructed. They, rather than any Yale building, must rank as the most significant university complex of recent years.

THE most influential architect at Yale during the Fifties was not Kahn but the late Eero Saarinen. His initial building in New Haven, the Ingalls Hockey Rink, is characteristic. First he proposed a rather startling shape that seemed to him poetically expressive of the building's function. In this case it was a fluid curve, fast-rising in elevation and spreading in plan, that might be taken as expressive of the swooping lunges of hockey. Next step: a unique structural system to dramatize the shape. Here it was a mammoth, single, central, concrete bent, with the roof suspended in tension from it.

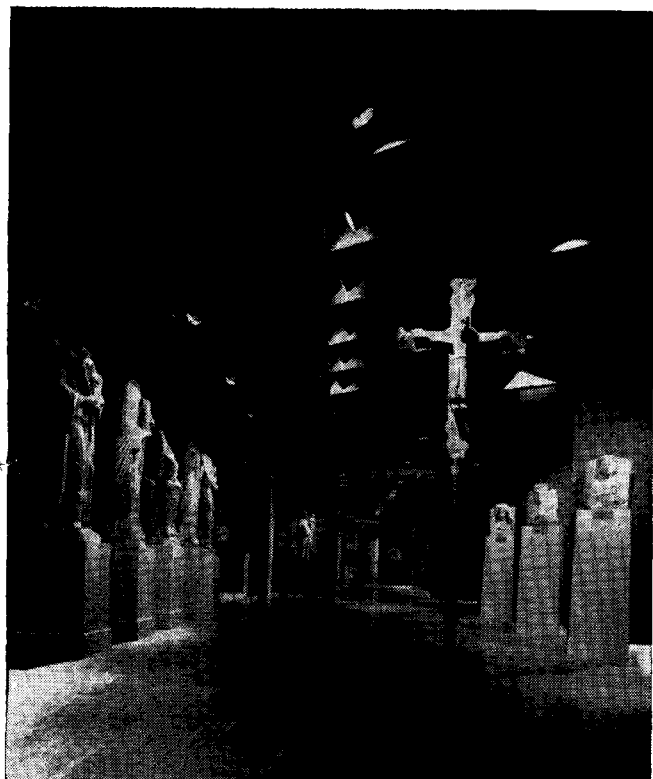
After this, everything else, one feels, was simply fitted in: air-conditioning units and their external vents, wind-bracing cables, and a flat plane of lights, which unfortunately kills the upward swoop of interior space. In consequence, the impression is of a constructed sketch, a kind of model, not an integrally developed building. One senses something impatient in the method.

Previously, in Saarinen's auditorium at MIT, all functions had been jammed under the continuous slab, with the entrances arbitrarily punched through glazed walls. In the rink, the entrance integrated the structure and

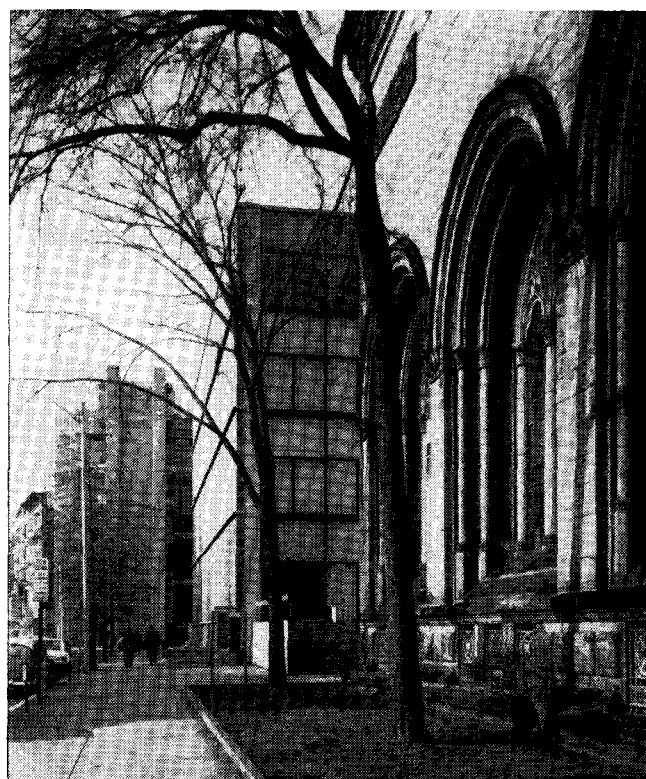


Ingalls Rink, by Eero Saarinen.

—Yale News Bureau.



—Photograph Collection Yale Art Library.
Yale Art Gallery Interior.



—Yugi Noga.
Old Art Gallery, Art Gallery, Art and Architecture Building.

interior space, but the site is disastrous. The street outside is destroyed, while the hill that rises above the building suggests impressions it cannot support: it "wants" to culminate a gentle mound. Not doing so, it is in fact arbitrarily and rather destructively sited—too sloped-back to define the street, too little up-standing for a mid-space monument.

THE same cannot be said of Saarinen's Stiles and Morse Colleges. On the contrary, he designed these almost wholly to conform to the pre-existing environment. He saw Yale in general and that area in particular as a forest of towers. Possibly he was influenced in this direction by Kahn's recent use of towers in the laboratories at Pennsylvania. Certainly, like Kahn, he loved medieval Italian towns, especially San Gimignano in Tuscany; he said that it was an image like towered San Gimignano's that he hoped to create. Such an intention would have been anathema to some modern architects in the Thirties and Forties; but few would deplore it now.

The overtly eclectic method does lend the quality of a stage set to these otherwise highly efficient buildings. That character is encouraged by the treatment of the concrete, intended to simulate rugged Gothic masonry. It looks

like adobe instead. The buildings thus seem paradoxically unreal, crystalline in profile but mudlike in matter. Yet the towers do their best to bring the brutal mass of the gymnasium into scale and encourage vistas through and beyond their courtyards in several directions. They thus loosen the rigid, space-chopping kind of quadrangle into which Yale colleges had subsided during the Twenties. Whatever their faults—and those in my opinion seem less every day—Stiles and Morse were clearly designed with the place in mind.

The same claim cannot be made for the Computer Center, by Skidmore, Owings and Merrill. This elegant pavilion of steel and glass is a typically abstract classicizing cube that might have been placed anywhere with equally fatal results—except in an open park, like Philip Johnson's glass house in New Canaan (1949)—from which, of course, the Computer Center basically derives. Here it destroys the scale of the street, which, unlike the older buildings nearby, it is too low to define. The automobiles dominate it, as they do most American architecture; buildings like the Computer Center, hermetically constructed, are a large part of the reason why. The other building by Skidmore, Owings and Merrill at Yale now domi-

nates the administrative and ritual center of the university, placed as it is opposite Woodbridge and Woolsey Halls and in front of the War Memorial colonnade and Freshman Commons.

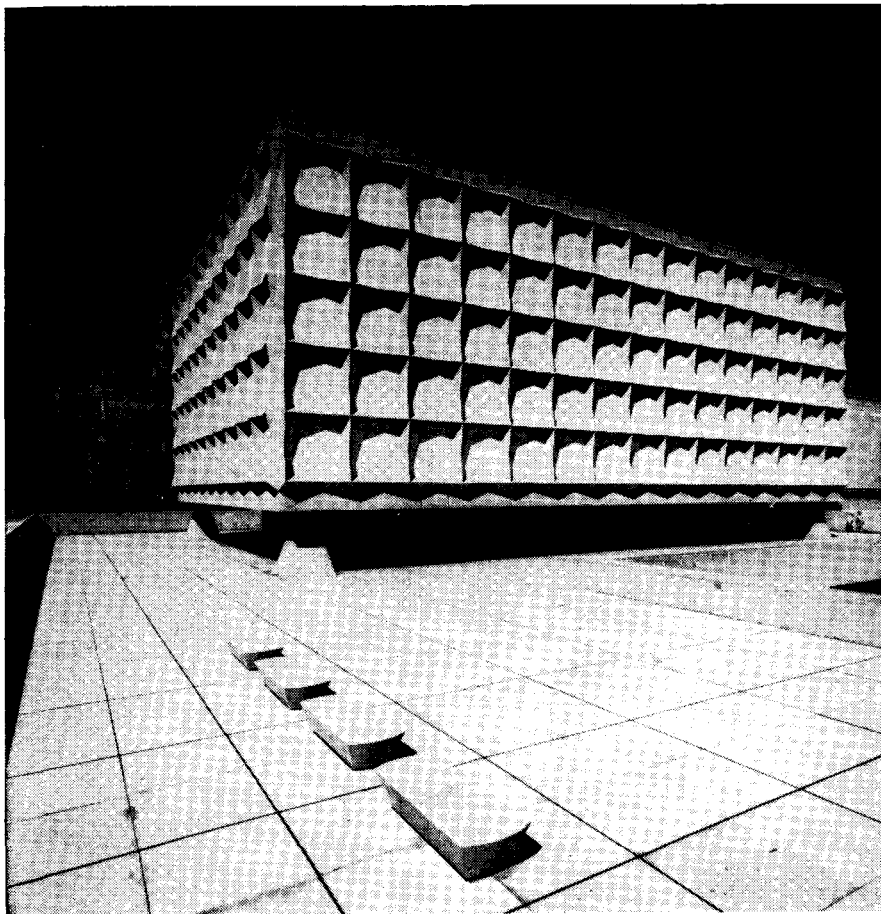
All these buildings are effectively swept out of existence by the Beinecke Rare Book Library, not through its strength but because of its plainness. Even more than Saarinen's rink, the Beinecke is like a vast model, a giant's toy. The Beinecke seems to reflect no sense of its relationship to men, because its conception was so abstract. The wall is only a screen, structurally separate from the tower of stacks that rises within. (Most of the people involved are below ground around a sunken court.)

Moreover, the Beinecke Library wall is actually a Vierendeel truss; it thus need be supported only at the four corners of the building. But the truss does not look structural to the eye, which therefore sees the building as small, since the span looks to be a little one. Yet the building is huge and therefore disorienting to the viewer. No doors, windows, and so on are visible. It all ends, I think, by creating an atmosphere of no place, nowhere, nobody, matched only by some of De Chirico's images of human estrangement and by a few similarly motivated Italian buildings of the Thirties and early Forties.

In a sense, the Beinecke Library might be taken as evidence of the rapid decadence of the classicizing method. This derived from that Renaissance design revival we hailed only ten years ago (as above, in Kahn's Art Gallery). At that time Philip Johnson was more influential than any other architect in the establishment of architectural classicizing. His architecture, despite some variants, has remained well within that mode to the present day. In the Kline Geology Laboratory, Johnson wraps a massively conceived shell of brick around formless yet flexible interior spaces, like an envelope that both permits and masks. Its recessed panels are sometimes windowed, sometimes not.

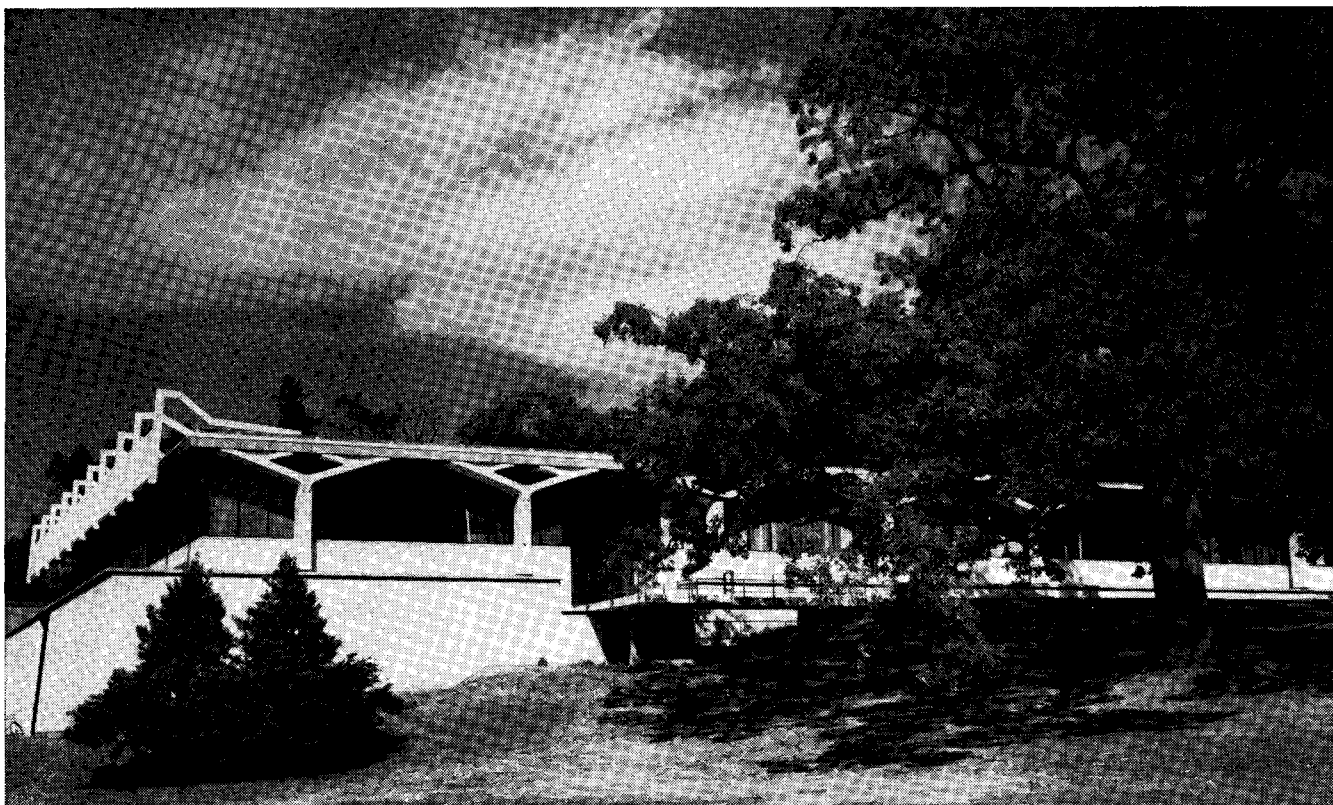
The only link between exterior and interior in the laboratory was a single skeletal stairway, gauzily weightless and lighted from above, intended to contrast with the massive entrance piers. Fire laws required, however, that the stairs be enclosed; the intended effect was thus severely compromised, without any new design being made. The glass-caged stair seems another indication of a tendency toward arbitrary and impatient decisions, the major weakness of the classicizing method. Its strength probably lies in the kind of exterior similarity it has to the existing science buildings.

The whole Kline laboratory area is



—Yale News Bureau.

Beinecke Rare Book Library, by Skidmore, Owings and Merrill.



Greeley Forestry Laboratory by Paul Rudolph

now under development, largely by Johnson. A tower will soon rise up to the left of a hilltop and just off the long rise up Hillhouse Avenue. That rise and summit can now be left open, as they should be, because of Paul Schweikher's careful choice of site for Gibbs Laboratory in 1954. A project by Saarinen had existed for a building in just the wrong place: across the rise and upon the crest. Schweikher, taking over the program, moved his building eastward and used it as a long slab that defined the summit area. This will now become, appropriately, an open court.

FROM the summit, East Rock is visible and, from any elevation, New Haven harbor to the south and West Rock. Both of Paul Rudolph's first buildings at Yale direct the eye across the great shapes of Winchester's factory-complex toward West Rock. The Greeley Forestry Laboratory (1957), with split columns like those of Rudolph's Blue Cross Building in Boston, steps out with perhaps rather mannered elegance from the slope.

Farther up the street the brick-and-concrete-surfaced cubes of the Graduate Students' Housing spill grandly down the hill and do their best to look as if they were actually built of brick-bearing walls and concrete lintels. Again, the urge of the Fifties toward a newly massive, structurally in-

tegral, vernacular architecture is at least reflected here.

Rudolph's Art and Architecture building clearly derives in part from the work of the architects he most admires: Le Corbusier and Louis I. Kahn. (In this way Kahn's towers at Pennsylvania may be said to rise at Yale across the street from his earlier Art Gallery.) But Rudolph's column clusters rise forcefully; here is the influence of Le Corbusier. Think especially of his monastery of La Tourette, where the piers dynamically hoist up the monks' cells like great beams, high above the hill slope, which falls steeply away below them. In Rudolph's building it is painters who are lifted, protesting, in the upper zones, detailed like massive entablatures, while sculptors skulk through the sub-basements, which are ingeniously lighted by story-height monitors, and a horde of architects expands through the middle floors.

THE Art Building also includes a spacious art library, which justifies the visual complexity of the building's mass. It has interlocking floor levels, where girders are supported on piersides, so that low trays of space may span like bridges in a kind of "pinwheel" movement around the center. The stairs are in separate corner towers. (This recalls the general organization of Wright's Larkin Building of 1904.)

Rudolph's determined attempt to integrate interior space with a structural system should be contrasted with the superficial, packaging method of design seen in Beinecke and Kline. The striation of the concrete, though tactilely dangerous, effectively enhances the height and decreases the weight of the structural masses. This aspect has brought criticisms of "exaggerated violence" to the building. However, as noted earlier, its flourishing shapes complement Kahn's tightly closed building across the way. Indeed, it most firmly climaxes and terminates the shapes of the whole range of Yale buildings that stretch eastward along Chapel Street and culminate by New Haven's green in the tower of Bingham Hall, re-echoed by Rudolph's tower.

An active, complementary relationship of buildings across time is obviously the goal of all community architecture, so well achieved at Yale. Such an interrelationship of buildings gives dimension to human experience and a spurious but welcome sense of durability to human life. It is what makes a city, but surely is the quality most lacking in most work being done today, whose principles, if any, are anarchic and whose instincts are fundamentally nomadic and hence destructive to cities esthetically. But notice that Rudolph's building replaces a gas station and a parking lot. This reverses the usual procedure.

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Education on Their Minds

IF EDUCATION'S main job is to educate people in the importance of education, then there are few places on earth where this purpose is more dramatically visible than in the Philippines. No one has to persuade the Filipinos of the advantages in education. The big problem is to satisfy their demands for more schools on every level. The people of the Philippines, quite literally, have education on their minds.

In the course of an hour's drive in Manila, I counted eleven colleges and universities—apart from at least a dozen schools providing training in nursing, engineering, architecture, drafting, aviation, electronics, etc. Students who are unable because of overcrowding to enroll in the national university, or the private colleges and technological institutions, often turn to home correspondence courses. Even in the most remote areas in the Philippines, one finds adult education schools where the subjects range all the way from basic literacy to advanced English literature.

Education is more than a national obsession. It is a business. Filipinos buy stock in private colleges the way Americans invest in companies manufacturing automobiles or business machines. These education stocks are readily obtainable at the standard financial counters; some of them have had a substantial rise and pay dividends of ten per cent or more. One of the most active of these stocks is a medical school.

Next to education itself, the word

most commonly associated in the Western world with universities is the word deficit. American college presidents spend a large part of their time raising enough money to make up for the inadequacy of endowments and tuition fees. In the Philippines, the presidents of the private colleges and universities don't have to worry about deficits. Their problem is to find places for all the students willing to pay tuition fees that cover the basic cost of education with something to spare. These fees are somewhat higher than those charged at the national university, but they are not far out of line with tuition fees at professional schools in Europe or the United States.

The profit-making schools are more like business establishments than colleges. There is no "campus"; they generally operate out of office buildings. Many of them run double and triple shifts. What the student learns often depends less on the artistry of the teacher than on his own capacity to follow and work out of a syllabus and bibliography. If he doesn't find the books he needs in the compact school library, he goes to the public library. The medical schools have close working arrangements with the hospitals; very early in their course of study the students are brought into the wards and learn and work alongside the resident physicians, thus relieving the school of classroom pressure and corresponding expense.

This system is not particularly ad-

mired by many of the educationists in the Philippines but they recognize that until such time as demand and supply are brought into something resembling an equilibrium, improvised measures are inevitable. The University of the Philippines, of which Carlos P. Romulo is President, already has an enrollment of approximately 18,000 students at its six centers throughout the country. Even if the university and all its professional schools were to double in size within a year, this would still leave a large gap. Hence the best that can now be done is to insist that the profit-making schools maintain acceptable standards.

One of the problems represented by the educational explosion in the Philippines is that most of its beneficiaries remain in the cities. An infinitesimal percentage of doctors, dentists, engineers, chemists, teachers, and technicians make their skills available to the villages, even though eighty per cent of the Filipino people live in rural communities. This has resulted in a severe cultural and psychological gulf between the two main divisions of the national community. To be sure, both groups place high value on nationalism. The people in the cities, however, tend to be ceremonial about tradition, regarding it as something that serves to enhance independence; but their way of life and their ideas may have little direct connection with the substance of such tradition. The people in the villages are a continuing expression of the tradition, not quite comprehending the interests and outlook of their college-educated children who have left to live in the cities.

Tradition in the Philippines is not without its complications in view of the Spanish and American roles in the shaping of the national history. Some Filipino writers and thinkers regard this mixed heritage as an advantage. They see English as a prime asset and want it to continue as the national language. But the general rise of nationalism, understandable in the light of the new spirit of pride and independence sweeping through Asia, has created a desire in many people for their own language. A compromise seems to be emerging, with both the national Tagalog and English being taught in the schools. The affairs of government, however, are being conducted in English. The leading newspapers are also in English.

Even as some Filipino intellectuals assert their national traditions and proclaim their independence from the United States, they confess ambivalence in the matter. The kind of homes they live in, their intellectual interests, the books they read, their favorite music, their clothes, their food preferences—all these have been profoundly influenced by past and present ties to the United