Covering an entire city block and rising nine stories above the School of Medicine campus, the McDonnell Medical Sciences Building was completed this fall. The new structure, which houses five preclinical departments, permits a 32 per cent increase in student enrollment and provides greatly expanded facilities for medical research.
COVER: A bevy of balloons over Brookings, done in line conversion technique from a Ken MacSwan photograph of a "happy happening" staged by students in the Quadrangle.

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Photo credits: Ken MacSwan, cover; Dr. R. A. Suthers, page 3; J. J. McCue, page 6; Columbia Broadcasting System, page 42; all others, Herb Weitman.
"And every creeping thing that lieth is unclean unto you." Deuteronomy, 14:19. This and many other derogatory statements in literature have applied to bats, beclouding the extraordinary abilities of these little mammals. Myotis lucifugus, or the brown bat, for example, is shown on the opposite page hunting insects in the dark by a technique called "echo-location." Dr. Nobuo Suga, associate professor of biology, does highly refined experiments with brown bats to determine the mechanisms of the auditory nervous system which underlie this elegant talent.

"SEEING" WITH SOUND

By ROGER SIGNOR

If a bat swoops into a house at night, two reactions occur, especially if ladies are present: screams and panic. Despite the resultant pandemonium, the bat may be lucky enough to get out of the house, unscathed. When it is gone, people are simply relieved. After all, bats have received a terrible press for centuries and not much thought is given to the remarkable things they do.

Consider what Myotis lucifugus, the little brown bat, may have accomplished during a flight inside a house. It flew in and out of dark rooms without crashing into an obstacle. Then, after many intricate maneuvers, it gained freedom by locating and flying through a small opening in a cellar screen. Before that, it even avoided getting tangled up in a lady's hair—contrary to one of the popular old wives' tales about bats.

Extraordinarily, the bat is able to "see" with its ears. Only in the recent history of science were tests possible to study the phenomenon behind this uncanny ability. To detect objects with its ears, the bat emits bursts of high-pitched sound, many thousands of cycles above the limit of human hearing (a clicking noise which is the lowest component of these cries is all that a human ear can pick up). Numerous, feeble echoes reverberate to the bat. But the bat sorts out and analyzes the information in the echoes so rapidly that it can make flight adjustments in fractions of a second to avoid obstacles or to detect minute openings.

The bat is also dependent on this technique, called echo-location, when it hunts for food. Not only can its auditory system detect the difference between an insect and a tiny twig, but, in pursuing the insect, it times its strike to allow for the space travelled by the insect after the last echo was received. In developing these novel abilities, the bat has pushed auditory specialization to a tremendous degree.

Echo-location, however, isn't unique in bats. Porpoises also employ it and human beings have developed the ability to some extent. Blind people frequently put metal taps on their shoes and analyze the echoes from them. But the potential to echo-locate is much weaker in mammals other than bats and porpoises which navigate and hunt in darkness.

In animals, in general, the auditory system selectively filters all but those signals necessary for a given task. A man reading a book, for example, is not aware of the loud ticking of a clock in his room. With the same discrimination, a woman blocks out the noise of children playing nearby, but immediately becomes alert when her child cries out in pain.

A flood of information enters the outer auditory system constantly, but the brain picks up only the very important signals. If it allowed all the sound signals to be processed and acted on, total confusion would result.

Washington University neurophysiologist, Dr. Nobuo Suga, whose laboratory is in the Monsanto Laboratory for the Life Sciences, is one of several scientists on campus who are fascinated by the problem of how the brain analyzes the many forms of communication sound. For his neurophysiological studies, bats are advantageous because of their high level of auditory specialization.

Dr. Suga has received distinction among his colleagues
Professor Suga, whose experiments on bats are done in the Monsanto Laboratory of the Life Sciences, received his Ph.D. degree from Tokyo Metropolitan University. A former Harvard and University of California staff member, he teaches classes on sensory physiology.
In a soundproof room, research assistant Barbara Lavender prepares to measure electrical activity of a bat's nerve cell, or neuron. The neuron is activated by pulses from special frequency generators which approximate the frequency modulated sounds bats make.

for uncovering clues to the neural networks underlying the bat's extraordinary hearing capabilities. When he is not teaching his classes in sensory physiology to undergraduate and graduate students, Dr. Suga makes extremely delicate measurements of electrical pulses recorded from single auditory neurons in the bat's brain. He and his assistant, Mrs. Barbara Max Lavender (BS '69) study the little brown bat, which is Missouri's most common species of the bat. They obtain bats for research from a St. Louis University cave exploration club, which captures them while on trips to caves in Missouri.

When a bat is echo-locating it lets out cries in the form of series of short tone pulses at a rate ranging between five and 200 pulses per second. Within each tone pulse, frequency of sound always decreases over about one octave, e.g., from 100 to 50 kilocycles or 50 to 25 kilocycles. In other words, these echo-locating sounds are frequency-modulated, and are much higher than the uppermost frequency limit of human hearing.

Dr. Suga has shown that certain nerve cells in the bat's midbrain, making up an auditory center called the inferior colliculus, do the essential processing for echo-location. The bat's midbrain is quite large in proportion to the rest of its nervous system. This is not to say that Dr. Suga is dealing with a large mass of tissue. All of the bat's echo-locating equipment weighs only about .2 gram.

In the bat's inferior colliculus, he has detected and classified many neurons into several types in terms of their electrical activities. Some of these neurons respond only to a frequency modulated sound similar to the bat's orientation sound, or are specialized for the measurement of a distance between the bat and a target. After having established the behavior of such highly specialized neurons, Professor Suga works backward from the bat's midbrain to its lower auditory nuclei in order to construct models of networks of neurons to account for the neural mechanism for acoustic information processing.

While the nervous system is awesome enough in its complexity, sound itself is a complex phenomenon. Artist Saul Steinberg's fanciful caricatures of speech come closer to the truth of sound complexity than a simple one-line sine wave on a TV repairman's oscilloscope. There are three basic elements in human speech sound—constant frequency (pure tone), frequency-modulated, and noise components. This is true also for communication sounds used by many animals. It would be difficult to understand human communication sound without the frequency-modulated (FM) component. "Humans should have neurons specialized for the analysis of FM sounds such as the bats do," Dr. Suga said. "The mechanisms found in bats should be applicable in the analysis of higher mammalian hearing. The basic system may be very similar." He hopes to study monkeys in the near future, to determine, among other problems, whether they possess these specialized neurons.

So-called "logical devices" of the nervous system to help explain behavior strike an emotional chord in some scientists. They accuse neurophysiologists of not understanding the nuances of how an animal behaves in its environment. But the truth is that before they undertake research at the neurophysiological level, scientists of Professor Suga's calibre are acutely aware of an animal's behavior in nature. Their goal is to relate intricate subtleties of the nervous system to the behavior of a given animal. At present, models of neuron activity are theoretical, but important first steps in gaining a more complete understanding of behavior.

In the late 18th Century, many scientists got very uptight indeed when a pioneering physiologist was the first to show that bats used an unknown process, associated with hearing, to avoid obstacles in the dark. The controversial researcher, Lazzaro Spallanzani, had written with some trepidation, "The experiments of Professor Louis JURINE, confirming by many examples those which I have done, and varied in many ways, establish without doubt the influence of the ear in the flight of blinded bats." This
The many species of bats include the South American fish-catching bat. In this picture by Dr. R. A. Suthers of Indiana University, the bat is about to scoop a fish from an enclosed laboratory pond.
work was dismissed as unbelievable by the scientific establishment, including the renowned naturalist, Georges Cuvier, whose curt reply to these findings was, "The organs of touch seem sufficient to explain all the phenomena which bats exhibit." Others were much more caustic in their criticisms of Spallanzani's observations, which were largely disregarded for more than a century.

In the late 1930's, a Harvard University senior, Donald R. Griffin, was at last able to record the data that proved Spallanzani's theories were correct. He and another undergraduate, Robert Galambos, made use of newly developed "ultrasonic-detectors" to show that bats had used echo-location eons before man invented sonar. The young men measured the bat's high frequency cries and found them to have wave-lengths of a fraction of an inch, just right for bouncing echoes off mosquitoes and moths. Dr. Griffin, now a Rockefeller University professor, has always been careful in his research reports to cite the original work of Spallanzani, whose observations of the bat's behavior were simply too controversial for the 18th century. (Dr. Suga studied with Dr. Griffin from 1963 to 1965 at Harvard.)

It wasn't until recent years that Dr. Thomas Sandel, now Washington University's psychology department chairman, helped to develop techniques in generating sequences of complex sound which make experiments such as Dr. Suga's possible. These sequences, produced in devices called signal generators are used to approximate the sounds made by bats. In Dr. Suga's laboratory, the generator is set up outside a soundproof room. Inside the room, an anesthetized bat is fixed to a device beneath a dissection microscope. Minute electrodes, which are filled with potassium chloride solution, are inserted into the bat's midbrain close enough to a neuron to pick up its electric signal. The neurons are about 1/2500th of an inch in diameter, the tips of the electrodes used to detect the neuronal electric signal are about 1/80,000th of an inch. The effects of the soundwaves on the neuron are recorded on powerful amplifiers outside the soundproofed room. Described in this oversimplified way, the procedure sounds rather routine.

Dr. Richard Coles, a specialist in vertebrate ecology who recently joined Washington University as Tyson Valley Research Center director, said, "A great deal of creativity is required to conceive and execute experiments as refined as this. Just as an individual without knowledge of abstract art would have trouble understanding the subtleties of a contemporary painting, so would a non-scientist be unaware of the high degree of creativity behind the calibre of experiments done by Dr. Suga."

Washington University is one of a select few institutions in the United States which has a large concentration of front-ranking scientists who work on various problems of the auditory nervous system. Dr. Hallowell Davis, research director emeritus of the Central Institute for the Deaf, Dr. James D. Miller, Dr. Donald H. Eldredge and their CID colleagues are nationally known for many studies. In addition to these faculty members at CID, other prominent auditory experts include Dr. Sandel of the psychology department, Dr. Russell Pfeiffer and Dr. Charles E. Molnar, who have joint appointments in the School of Medicine and the School of Engineering and Applied Science, and Dr. Joseph Ogura and his associates in the otolaryngology department of the School of Medicine. With their research associates, they form an informal institute on campus. They frequently get together to discuss their problems and seek new approaches.

In commenting on interactions among this company of scholars, Dr. Pfeiffer said, "Dr. Suga is certainly widely recognized for his work, but one fascinating thing to me is that he keeps up a constant flow of new ideas in interpreting his data."

In Dr. Pfeiffer's view, this is an especially valuable asset in a field of science, which only recently has had the benefit of highly sophisticated engineering tools. "While we've made tremendous strides in finding what's happening, we have a long way to go before knowing why."
Alumnus Al Parker's illustrations have appeared in leading national magazines for more than forty years. Presented here is a combination Parker profile and portfolio giving the highlights of his illustrious career and a few samples of his work. Three of the main themes in the Parker career are illustrated: a series of jazz pieces done for Lithopinion, the journal of Local One of the Amalgamated Lithographers of America; some impressions of the Monaco Grand Prix, done for Sports Illustrated; and one of the famous Parker sketches of pretty girls that graced the pages and covers of women's magazines for decades.

On this page are three of Parker's impressions of jazz history from a portfolio which appeared originally in the Fall, 1969, Lithopinion magazine. Top: "Blues Singer" and "Blues," at right, "Roots."
By FRANK O'BRIEN

ONE OF AL PARKER'S earliest childhood memories is of illustrating the lyrics on his mother's piano player rolls, a precocious project that foreshadowed his two main lifelong interests—art and music.

In the intervening years, Al Parker has won general recognition as one of the leading and most influential magazine illustrators in the nation. His work has appeared in dozens of leading national magazines for decades, he has profoundly influenced a whole generation of illustrators, and he has received nearly fifty prestigious awards and medals for his work. For more than forty years, too, he has maintained a lively interest in music, both as a performer and as an enthusiastic fan.

The Parkers lived in a rambling Victorian frame house in Clayton, Missouri, a few blocks from the Washington University campus, but Al was to live all over the St. Louis area, attending a half-dozen schools before he arrived on the University campus.

Almost before he could read, Al was drawing and painting. His piano roll portfolio was preceded by his clothes-pin period, when he painted clothes pins to resemble his favorite movie stars and fictional characters, from Tarzan and Huck Finn to Charlie Chaplin's leading lady, Edna Purviance.

AT ABOUT the same time, Al's interest in jazz began to develop. The Parker family owned a furniture store that boasted a phonograph record department and young Al spent endless hours playing the store's stock of what were then called "race records," the uninhibited jazz played by the black musicians of the time.

At age fifteen, Al saw a movie in which Wallace Reid played the saxophone, with the sound coming from a hidden phonograph behind the silent screen. Al was so infatuated by the sinuous sound that he persuaded his parents to buy him a shiny silver C-melody saxophone.

The following summer saw him playing the sax and
leading his own band on the Mississippi riverboat “Cape Girardeau.” For the next five summers, he played on the river, appearing on the “Golden Eagle,” “The Belle of Calhoun,” and the other glamorous excursion steamers of the day.

“It was a vacation with pay,” Al recalls, for the two- and three-day excursion trips invariably included attractive young lady passengers who delighted in being sketched by Al between dance sets. “Besides,” he adds, “I had the opportunity to hear Louis Armstrong and the other great jazzmen who were playing at the same time on the other boats.”

Al’s river experiences were right in the family tradition, for his grandfather was the famous riverboat captain Charles J. Bender, who had been mate on the “Robert E. Lee” during her historic race with the “Natchez.” Grandpa Bender, whose handsome uniformed presence was slightly marred by a dent on his forehead resulting from a well aimed tomahawk thrown by an angry Indian, was upset by his grandson's obsession with “all that music foolishness,” and generously offered him a year’s tuition at the St. Louis School of Fine Arts at Washington University.

Al continued with his music during his University days, paying his way through school blowing a huge baritone sax in the band and playing for dances at country clubs, fraternity parties, and Polish weddings. Despite his extracurricular activities, Al buckled down to the study of art. “Fortunately,” he says, “one of my instructors was Fred Conway, who made buckling down a joy.”

There was one distraction at the school, a charming art student named Evelyn Buchroeder. “She was a petite and utterly feminine female,” Al says, “who threw noteworthy statements on canvas with the gusto of a stevedore.” When Evelyn won a scholarship to the Art Students League in New York, Al decided to quit school at once and marry her.

 luckily, Al was just finishing up four years of art school by this time and was ready to go out into the world. His first professional job was to do three murals to be used as backgrounds for window displays for a St. Louis department store. The only way Al could handle these huge renderings was to paint them on thin fabric attached to his mother's dining room walls. When the murals were done, a diluted version remained behind on the walls, much to Al's chagrin. With the first check he received as a profession, Al had the whole dining room repapered and bought a clarinet.

Wallace Bassford, who was then head of a leading St. Louis art studio, saw the window murals and invited Parker to join his staff. It was an important experience for a young artist, because at the agency he learned how to work on assignment, to meet deadlines, and to operate within the limits of graphic arts techniques. He learned soon to be fast on the draw, turning out in rapid succession a gushing Niagara Falls for a power company brochure and a delicate portrait for a fashion ad in one session at the drawing board.

Eventually, Al and his good friend Russell Viehman, who excelled in layout, design, and lettering, opened their own studio. But the timing was bad: the country was in the depths of the Depression. The first year was one long struggle. To make ends meet, Parker and Viehman rented space in their studios to Janet Lane, the fashion designer. From her, Al learned the subtleties of fashion design and how to portray chic clothes in his illustrations; from Viehman he learned the importance of graphic design, layout, and typography.

Shortly after Al and Evelyn were married and settled down in Overland, Missouri, Al entered a House Beautiful magazine cover contest and won both an honorable mention and a check for $250. It was the beginning of Al Parker’s long reign as king of the magazine cover artists.

Seeing his work on a national magazine cover whetted Al’s appetite for the big time. He sat down and did three simple colored pencil line drawings of girls’ heads and sent them to an agent in New York. Ladies’ Home Journal bought all three, and shortly after Woman’s Home Companion sent a fiction manuscript to Al for illustrations.

Soon, assignments began to pour in from other magazines: McCall’s, American Pictorial Review, Colliers, Good Housekeeping—all of the name magazines of the day.

The first thing Al did when his work began to sell was to buy a tan Packard phaeton. Then, after he had time to think it out, he realized that he would have to move to New York, if he wanted to stay in the big time. Packing the Packard with their treasured belongings and their first son, Jay, the Parkers headed for Manhattan.

Things were rough in the big city at first, but soon Al was selling his work to national magazines as fast as he could turn it out. In 1938, he sold his first “mother and daughter” cover to Ladies’ Home Journal. It was an instant success and soon became an American institution, bringing both Al and the Journal sacks of fan mail.

Of great help to Al in New York was Lawrence Drake who went to work for him when Al first moved to New York and remained with him until 1960. One of the most notable fruits of the Parker-Drake association was a gigantic illustrator’s picture file, containing photographs and clippings of almost anything that an illustrator might be called upon to depict. Reputed to be the largest in the world, the Parker-Drake illustrator’s file eventually filled twenty-three four-drawer filing cabinets.

After their daughter, Susan, was born, the Parkers moved to Westport, Connecticut, around the beginning of World War II. It was then that Al began to devote more time to his second love—music. A group at the New York Society of Illustrators who played instruments formed a band and began entertaining servicemen at camps and in hospitals within a thousand-mile radius of
Study of three girls is typical of the many illustrations Al Parker has done for women's and fashion magazines through the years. Most influential were the many "mother and daughter" covers for *The Ladies Home Journal*. 
Monaco Grand Prix: view from the river.

Monaco Grand Prix: dawn of race.
Monaco Grand Prix: bad turn at railroad station.

Monaco Grand Prix: in the stretch.

New York. Al played drums with the band and made sketches of servicemen between sets.

The Parkers lived for seventeen years in Westport, where Al was one of the founders and is now on the guiding faculty of the Famous Artists School. Into Westport flowed celebrities of stage, screen, television, and of course, Madison Avenue. Al met most of them.

The constant pressure on the Westport scene and Al's congenital aversion to cold weather finally led him to the happy decision to move to California. Soon after, their youngest son, Kit, was born. Al is now settled down in Carmel Valley, where he has the peace and beauty of the countryside, but also where he can ship his work air express overnight to New York from the Monterey airport, just twenty minutes from his home.

At Carmel Valley, he works at his art and plays at his lifelong hobby of music. Jazz musicians who are old friends of Al's drop in now and then for informal jazz sessions, and Al keeps up-to-the-minute on the music scene in California. (Among his prized memories are an afternoon of drum duets with Buddy Rich and the time Benny Goodman dropped in with his clarinet.)

Al Parker made his name first in the twenties and thirties, but he's still doing new, exciting, and innovative things. He moves with the times, has a great rapport with young people, and is never afraid to experiment, to try something new. Al greets every new movement in art or music with enthusiasm, without at the same time losing his love for the good old things. Al feels that what he terms the "Now, Wow!" school of modern illustration is bringing new life and freedom to the field and he's all for it.

Recently, Al bought 840 acres of redwoods in northern California, where his son Jay, also an artist, is running a ranch. Al is tempted to settle down among the redwoods and just paint for fun, but he realizes that is exactly what he's been doing all his life anyway.

"Fun," Al declares, "is meeting a challenge in graphics while pleasing others in the process. I wouldn't know how to please myself alone."

This brings us to the other night in Carmel Valley, when Al borrowed an electric harpsichord and sat in with a local teenage rock group. "My foot-stomping played havoc with the volume pedal," Al remembers, "but it came out authentic raga rock anyway. I'd have been terribly dated if I had played my sax."
It's been a quiet revolution. No shots. No shouts. No songs.

Sweetly and softly, girls have come to engineering. This year Washington University School of Engineering and Applied Science has forty-four girls in the undergraduate program and nineteen girls doing graduate work. They are here because engineering has changed in the past decade and its change has afforded them opportunity.

"It's not just steel beams and gigantic wind tunnels," said one pretty coed. "It's mathematical models and computer consoles and tiny integrated circuits and test tubes and a whole lot of other woman-sized things."

"Above all," says another lovely engineer, "it's people, not just things. The most discouraging thing about engineering is that it hasn't found its humanistic philosophy, but it's there. Today's engineer can be as involved in solving humanistic problems as today's medical or social scientist."

"There are so many possible combinations in engineering," says Mary Wiedl, now a graduate student in biomedical engineering. "I'm combining biology and engineering, but that's just one possibility here. The girls I know are interested in the new areas of engineering like computer science and biomedical engineering, rather than civil or geological engineering."

One pretty brunette explained why she selected Washington University to study engineering: "Here I felt people were encouraged to be experimental. We don't want to take over a man's job; we want to create our own places."
Anita Colombo
Sophomore

"I guess I'm a feminist. I think a woman can do anything a man can do. Realistically, however, she has to be obviously qualified. If she wants to work with science or mathematics, an engineering degree is an absolute must."
"We can still get by on the dumb blonde image to a certain extent, but who wants to! The boys seem to welcome the competition, and as long as we stay feminine they still act like gentlemen. Of course, if you want help in the laboratory or something, you don't have to look very hard."
"In Hong Kong it is easier for a woman to work than in the United States. We have large families—parents, grandparents, aunts, and uncles live together. There is always someone with much experience to care for children. Computer technicians will be much in demand as my country develops, and that is why I selected this field."
"The increase of women in engineering, I think, is a result of woman's changing concept of herself. Women have made their own places. The universities have accepted this and welcomed them, but there is still a long way to go in industry. Professionally it is still a fight."
"To use engineering as a tool to explore another subject opens so many exciting possibilities. The engineer brings a whole new viewpoint to research in biological problems. For instance, we are studying nerve phenomena as electrical phenomena by modeling it on engineering techniques and reducing it to the basic components."
WASHINGTON UNIVERSITY and the other private institutions of higher learning in Missouri—indeed, virtually every private educational institution in the nation—face serious financial problems which can be solved only by a combination of actions. These include continued and increased support by alumni, corporations, foundations, and other friends, as well as the full funding of the higher education programs of the federal government. The following article, prepared by the Independent Colleges and Universities of Missouri, suggests a way that state government can become an important part of this combination.

I have always argued that a strong system of higher education, including both the public and private sectors, is essential for Missouri. Toward this end, I believe that an effective state program of aid to Missouri students attending Missouri’s private institutions would be a most economical use of the taxpayers’ money. Such a program would help relieve pressures on the public institutions and fill available spaces in the private institutions. Both sectors of the system of higher education would benefit.

I commend the article to you as a stimulus to thought and action about effective assistance to the private sector through the state government. Such an undertaking by Missouri would be no panacea—every other source of funding for private higher education would still have to be developed to the fullest. But by acting to protect and foster a dual system of higher education, Missouri would make the institutions here more competitive with those in the many states which have already taken such action and brighten the prospects of having numerous excellent colleges and universities in this state.

Thomas H. Eliot
Chancellor
A casual reading of newspapers from around Missouri during the summer of 1970 would have revealed the following headlines: "COLLEGE DOORS CLOSING ON HOPEFUL YOUNGSTERS". . . "NO VACANCY" SIGN OUT AT MANY UNIVERSITIES AND COLLEGES". . . "COLLEGE ADMISSIONS CRUNCH BEING FELT". . . "MISSOURI U. INCREASES FEES". . . "MISSOURI U. TO OFFER LESS, CHARGE MORE."

The stories behind these headlines tell of the struggle Missouri's tax supported institutions of higher education face in their efforts to cope with spiraling costs and the constantly growing flood of students seeking admission. The stop-gap measures applied to meet these problems, as outlined in the stories... limiting enrollment, increasing student charges and eliminating vital educational programs... suggest that Missouri has taken the first step on the path that leads to educational mediocrity.

How can Missouri's taxpayers reconcile these "doomsday" headlines and stories with the fact that the state could provide for the post-secondary education of more than 10,000 additional students without building a single additional building on a public campus or without hiring any additional faculty? How can Missouri taxpayers allow the state to take a giant step to the rear when it could meet its educational responsibility to these students at a per student cost to the taxpayers of less than one-half the average cost for students enrolled at the University of Missouri and the state colleges?

"Assets in Being"
How did Missouri get into this seemingly paradoxical situation? The educational plight which now confronts the state is the direct result of a public policy which completely ignored the resources of private colleges and universities and insisted that the only way to meet the constantly increasing demand for higher education was to provide the tax funds necessary for unending expansion of the facilities, faculties and programs of tax supported institutions.

This policy has posed a serious threat to the vitality and in some cases the very existence of Missouri's private colleges and universities. The debilitating effect on the public institutions is documented in the headlines quoted above.

Missouri can no longer afford such a shortsighted policy for higher education. Public policy must recognize the assets of the private colleges and universities. The state can neither afford to do without nor afford to replace their educational, economic or social resources. They are an irreplaceable asset.

As recently as ten years ago the majority of students attending college in Missouri were enrolled in a private college or university. However, over the past decade the unprecedented increase in the cost of providing higher education and the staggering increase in demand for post-secondary education have shifted the load of students to public institutions. During this period the costs of providing higher education increased at an annual rate of close to 8 percent as compared to an average increase in the general economy, if we exclude 1969, of 3 percent; student enrollment in Missouri colleges and universities more than doubled from 68,917 in 1961 to 145,581 in the fall of 1969.

Why then, in the face of phenomenal growth in higher education has enrollment at most private institutions decreased?

Private colleges and universities rely on tuition to provide from 60 to 90 percent of the instructional costs for students. In Missouri this figure averages about 68 percent. Because of greatly increased costs and because their other prime sources of income, i.e., endowment earnings and private gifts, have not grown at anywhere near the same rate as costs, private institutions have had to raise tuitions significantly. In most cases tuitions at private colleges and universities in Missouri have more than doubled in the past ten years.

State supported institutions, on the other hand, faced with the same rapidly rising costs, have kept student fees at a comparatively low level and relied on increased state subsidies to meet the costs of education. Tax support of these institutions has increased 288.2 percent from $29.6 million in 1961-62 to $117.7 million for the 1969-70 academic year.

The consequent difference between the necessarily high tuitions charged by the private colleges and universities and the modest fees charged by the state institutions has forced more and more students away from the private colleges and universities and into tax-supported state institutions. The result has been that state institutions have had to continually campaign for increased appropriations of tax funds for operating costs and new buildings to accommodate the tidal wave of students, while the private colleges and universities have unused educational...
capacity and consequently rapidly increasing deficits.

Although the relative size of the educational contribution made by the private colleges and universities in Missouri has decreased over the past decade they still play a significant role in meeting the overall educational job of the state. The 34 private institutions that make up the membership of the Independent Colleges & Universities of Missouri (ICUM)² enrolled over 25 percent of all the college and university students in the state during the 1969-70 academic year. Some 17.5 percent of these students were in graduate school, representing over a third of all the graduate students studying in the state.

For the academic year ending in June, 1969, these same institutions awarded 5,829 bachelor's degrees, 33.8 percent of the state total; more than the total for all four of the campuses of the University of Missouri and more than the total for the five state colleges and Lincoln University. During the same year these institutions awarded more than one-third of the master's degrees and almost half (46.1%) of the Ph.D. degrees.

The impact of these institutions is particularly important in the area of professional education. For the year ending in June, 1969, these schools awarded 68.3 percent of the M.D. degrees, 65.2 percent of the pharmacy degrees, 45.7 percent of the law degrees and 43.5 percent of the dental degrees.

Critics of private education generally respond to these statistics by asking: "Yes, but how many of these students are from Missouri?" To answer this question correctly, it is necessary to change the method of counting enrollment from a full-time equivalency basis used above to head count, where each student, whether full-time or part-time, counts as one. This change does not greatly affect the comparative validity of the figures because the percent of part-time students enrolled at both public and private institutions is roughly the same. Using head count figures, the enrollment in the 34 ICUM private colleges and universities was 45,626 in the fall of 1969; of these, 47.8 percent, or 21,822 students, were Missourians. This is larger than the head count enrollment of the Columbia campus of the University of Missouri, or, if you prefer, larger than the combined head count enrollment of Southeast Missouri State College, Southwest Missouri State College and Northeast Missouri State College. This comparison suggests what the loss of these institutions would mean to Missouri students and Missouri taxpayers.

Statistics suggest that many of these graduates remain in Missouri and contribute their skills to the welfare of the state. Of the more than 5,000 doctors who were practicing in Missouri in May, 1968, 2,244 were educated in Missouri. Of these, 2,012, or nearly 90 percent, were educated in one of the state's private medical schools. Of the more than 38,000 Missouri secondary and elementary school teachers who received their bachelor's degrees from a Missouri college or university, nearly 30 percent graduated from a private college or university.

Missouri's private colleges and universities offer a diversity of viewpoint and variety of educational programs that no state system could begin to match. Among the private institutions in the state are many famous men's, women's and coeducational colleges, two of the nation's leading universities, renowned engineering and technical schools, highly ranked professional schools in Education, Business, Medicine, Law, Dentistry, Pharmacy, Music, Fine Arts, Public Administration and Architecture.

The constant flow of well educated young men and women is undoubtedly the most important contribution Missouri's private colleges and universities make to the state. This, however, is only a part of the story. These colleges and universities also have considerable economic impact on the state. During the 1969-70 academic year the 34 ICUM member institutions employed 17,150 people and met payrolls in excess of $68 million. The facilities that house
these institutions represent an investment of more than $300 million and would cost in excess of one-half billion dollars to replace. During the five-year period which will end in June, 1971, these colleges and universities will have spent more than $125 million on capital improvements.

A significant fact is that a high percentage of these dollars, which benefit all of Missouri, come from sources outside the state. A 1968 study prepared for the Missouri Commission on Higher Education by the Midwest Research Institute, Kansas City, estimated that an average of $16.8 million of the annual capital budgets and 60 percent of the annual operating budget dollars, come from outside Missouri. Applied to budgets of these institutions for the 1969-70 academic year that would mean that private colleges and universities attracted $104.4 million to Missouri for educational purposes. Conversely, it means that should Missouri's private colleges and universities continue to lose enrollment and be forced to curtail educational programs, these dollars will no longer be available to assist in the mammoth educational job facing the state in the decade ahead.

In addition to their role as providers of educated citizens and as economic enterprises, Missouri's private colleges and universities contribute actively to the communities in which they are located. In a recent speech discussing the mutual need that exists between Washington University and the St. Louis community, Chancellor Thomas H. Elliot said:

"Our Dental School's clinic had 48,820 patient visits last year, our Medical School's clinic had 138,668. Our School of Social Work, right now, has 150 students assisting at 31 agencies throughout the metropolitan area."

The president of any one of these independent institutions can point with pride to a long list of professional and voluntary programs in which his institution, or students and faculty from his institution, were actively involved.

Whether it be the development of a special educational program for the training of radiological technicians, such as the one operated by William Jewell College in cooperation with the North Kansas City Memorial Hospital, an "Effects of Drugs" program for high school students developed by the St. Louis College of Pharmacy, or a theater program made available to the residents of Bolivar by the students of Southwest Baptist College, the scope of activities of private colleges and universities aimed at dealing with community problems and enriching the lives of all residents of the state continues to expand. Almost all of these institutions sponsor institutes and workshops for business, industry and the professions. Centers for research and training have been organized on numerous campuses to work with community groups engaged in combating delinquency and drug addiction, in dealing with particular problems of local schools, and in addressing themselves to such pressing social issues as renewal of the inner city, school dropouts, etc. Adult educational programs have become an accepted fact of life in almost every community, from programs with a definite educational goal to others planned simply to open new horizons.
The MRI study quoted above concludes:

"Private education in Missouri is clearly big business... These benefits, combined with the many important intangible benefits, make Missouri's private colleges and universities one of the State's most valuable resources... The colleges play a major role in making Missouri's communities more attractive places in which to live... and satisfy one of the basic location prerequisites of modern industry (proximity of an institution of higher education), thereby helping to encourage industrial and economic expansion in the community and in the state."

A

Although it is obvious that Missouri can't afford to lose educational, economic, and social assets of such magnitude, the state's legislative leaders have persisted in pursuing a public policy for higher education which, because it overlooks the contributions made by private colleges and universities, threatens their strength and vitality, limits their ability to contribute to the educational task of the state, and guarantees continued decreases in enrollment and the consequent underuse of private educational facilities within the state.

This is not speculation, the statistics are in. Last fall 19 of the 34 ICUM affiliated institutions reported decreases in enrollment. During the past three years, since the fall of 1967, 28 of these institutions have had decreases in enrollment for one or more years. In many cases the decreases ranged from 15 to 20 percent of the student body. In response to a survey conducted by the Independent Colleges & Universities of Missouri during the 1969-70 school year, the member colleges and universities indicated that they could enroll an additional 2,700 students at little additional cost. A similar survey run in January, 1970, revealed that there were in excess of 5,300 vacancies at these institutions. The presidents of these private colleges and universities also indicated that they would be willing to limit out-of-state enrollment to accommodate an additional 5,000 Missouri students. In other words, the state could provide for the education of some 10,300 additional Missourians without spending a nickel to build additional facilities on state campuses and without hiring any additional faculty.

As a consequence of decreasing enrollments and the resulting under-use of their educational facilities, most of Missouri's private colleges and universities are operating with sizeable deficits in their budgets and many have been forced to eliminate educational programs, which although needed by their local communities and the State of Missouri, place too great a financial drain on available resources. Within the past two years, St. Louis University has been forced to close its Dental School and has eliminated undergraduate engineering programs. Just a few years ago Washington University was forced to close its Nursing School. These two examples are cited, from the many that might be used to illustrate the very real problems Missouri's policy for higher education has caused private colleges and universities.
It seems absurd for the state to persist in pursuing a policy for higher education which on the one hand threatens the very existence of the state’s private colleges and universities through under-use of their educational capacity and at the same time puts the public institutions in a position where they must turn away qualified students and curtail vital educational programs. It seems doubly absurd when one realizes that if the state were to make use of the vacancies at private colleges and universities it could resolve its problems in higher education at a minimal cost to Missouri taxpayers.

Let’s be specific. The University of Missouri St. Louis recently announced that it had to turn away 500 qualified students because it had neither the money nor the facilities to accommodate them. Presumably the State of Missouri is anxious to meet its educational responsibility to these 500 students and would like to be able to assist them achieve their goal of obtaining a college education. Under existing public policy this can be accomplished only by expanding the capacity of the University of Missouri. What does this mean to the taxpayer?

Based on the Missouri General Assembly’s appropriations to the University of Missouri for operating expenses for the 1968-69 fiscal year, it cost the taxpayer an average of $1,912.80 for every student enrolled on one of the four campuses at the University of Missouri. The figure varied from campus to campus and from program to program, but that really makes no difference to the taxpayer. To him the per student cost is simply the tax dollars appropriated divided by the number of students enrolled.

If the state is to provide for the 500 students on one of the campuses of the University of Missouri it will cost $1,912.80 times 500 or $956,400, close to a million dollars. On the other hand, if the state were to take advantage of the existing vacancies on the campuses of the private colleges and universities, under a plan proposed by the Independent Colleges & Universities of Missouri, the per student cost to the taxpayer would average $672.56, or a total of $336,280. The savings to the taxpayers, $620,120.

The figures above are for operating expenses only. Presumably it would require new buildings to accommodate these students on one of the state university campuses. If we add the average per student capital appropriation of $33.21 for the University of Missouri for 1968-69 for each of these 500 students, it would necessitate additional appropriations of $165,605. No appropriations for capital expenses would be necessary to take advantage of the vacancies that exist at Missouri’s private colleges and universities. We leave it to the reader to calculate the savings to Missouri taxpayers if the state were to stop spending tax dollars for new brick and mortar on public campuses and take advantage of the 10,300 available spaces on private campuses.

Missouri’s legislative leaders can no longer afford to ignore the assets of the private colleges and universities as they plan for the future educational development of the state. The consequence of such action would simply be bad economics. In the words of Dr. Allan M. Cartter, Chancellor of New York University:

“You will have to seriously face the alternative of aiding independent colleges to survive or decide to absorb them into the already sizeable public system... For a century or more you and your state have benefited greatly from the presence of strong private colleges and universities; it is in the long run social, economic and cultural interest of your citizens that the state assume some responsibility for the continued health of these valuable public resources.”

Dr. Cartter makes it clear that the primary benefit is economic:

“Every independent institution which is either absorbed by the state or replaced by state facilities will cost the taxpayer ten to fifteen times as much as modest supplemental aid to insure vitality...”

A graphic lesson in the economics of higher education was provided when the state took over the University of Kansas City and made it a branch of the University of Missouri. What had formerly been operated as a private university without any expense...
to the state, immediately involved an appropriation of close to $4 million. State appropriation for the University of Missouri Kansas City for 1968-69 was $13.7 million.

Perhaps the best testimony to the economic soundness of this concept is the fact that 40 states have adopted some kind of program to either aid students enrolled in private colleges and universities or to aid the institutions directly. Some 20 states, including Missouri’s neighboring states of Illinois, Iowa and Kansas, have programs designed to assist students make up a portion of the tuition difference between public and private institutions... programs similar to the ones proposed by the Independent Colleges & Universities of Missouri.

Illinois has both a State Scholarship program and a Tuition Grant program. The Scholarship program is designed to assist the academically superior student who has financial need. The winner of an Illinois State Scholarship can use his award to attend either a public or a private college or university. The Tuition Grant program is aimed at the broader range of students who, although not academically superior, are capable of doing and benefiting from college level work. Applicants for Tuition Grants are limited to students with financial need who are enrolled at a private institution. Both programs determine the dollar amount of the award by the income of the student and his family.

A recent report of the Illinois State Scholarship Commission and the Board of Higher Education states:

"Findings show that ISSC (Illinois State Scholarship Commission) programs have diverted large numbers of students from public to non-public colleges and have contributed substantially to the economic and enrollment stability of nonpublic colleges in Illinois. The estimated cost to the state of operational expenses alone (estimated to be $1,220 per year per student) to educate these diverted students in tax-assisted colleges would have been $6,275,000 per year. This figure does not include the additional capital expenses needed for facilities to accommodate them. Illinois has invested $4,600,000 in 5,142 students in the form of scholarships and grants to attend nonpublic institutions. The diversion of these students to private colleges was a net savings in operational costs alone of $1,847,200. Additional capital appropriations from the state would have been required if they had attended public colleges."

When the Illinois legislature was holding hearings concerning increased appropriations for its scholarship and tuition grants program, Michael J. Howlett, Auditor of Public Accounts, State of Illinois, prepared a statement which said in part:
"Tax dollars can be stretched if we expand the present system of grants and scholarships merited by qualified students who would be free to choose their schools."

As early as 1963 the presidents of Missouri's private colleges and universities proposed a modest state scholarship program. Although it met strong resistance initially, it subsequently received the endorsement of the House Education Committee and was passed by the House of Representatives on two occasions. However, the proposed legislation has never cleared the hurdle of the Education Committee of the Missouri Senate and has thus never been considered by the full membership of that legislative body. During the 1969 regular legislative session, legislation to provide state scholarships and tuition grants was killed in the Senate Education Committee on a secret ballot. One senior Senator, friendly to the legislation, commented that it was the "first time" he could remember a secret ballot in the Senate Education Committee.

Legislation to assist students desiring to attend private colleges and universities will be introduced again when the Missouri General Assembly meets in regular session in January, 1971. The Independent Colleges & Universities of Missouri believes it is in the interest of all Missourians, and the long run strength of Missouri's public and private colleges and universities, that such a program be passed.

1. Except where indicated otherwise, enrollment figures are on the basis of full-time equivalency (FTE). FTE attempts to equate part-time students to full-time students by taking the total full-time students and adding the total credit hours taken by part-time students divided by 12 credit hours for undergraduate students and 9 credit hours for graduate students.

2. Unless otherwise noted, all statistics in this article are limited to the 34 private institutions that were members of the Independent Colleges & Universities of Missouri. All of the private non-profit educational institutions in Missouri accredited by the North Central Association of Colleges and Secondary Schools are members of ICUM. There are some 13 other private institutions of post-secondary education located in the State of Missouri which are accredited by their own professional or religious accreditation group.

The Independent Colleges & Universities of Missouri

Avila College  The Lindenwood Colleges  Stephens College
Cardinal Glennon College  Marillac College  Tarkio College
Central Methodist College  Maryville College  Washington University
Columbia College  Missouri Baptist College  Webster College
Cottey College  Missouri Valley College  Wentworth Military Academy
Culver-Stockton College  Notre Dame College  & Jr. College
Drury College  Park College  Westminster College
Evangel College  Rockhurst College  William Jewell College
Fontbonne College  Saint Louis College of Pharmacy  William Woods College
Immaculate Conception Seminary  St. Louis College of Pharmacy
Kansas City Art Institute  St. Louis University
Kemper Military School and College  St. Mary's College of O'Fallon

This report was prepared by the Independent Colleges & Universities of Missouri, an organization devoted to raising the standards of higher education in the state among the private colleges and universities, to maintaining a central agency for the discussion of current educational problems and to recommending policies and practices to strengthen higher education in Missouri.
Dr. Pescatello's undergraduate degree is in journalism; her master's in Far Eastern and Slavic studies; her doctorate in history with work in African, Asian, and Latin-American studies. She has spent six of the last eight years abroad—in Japan, India, Pakistan, Australia, and Latin America. In this article, she stresses the crucial importance of Latin America to the United States, and comments on the relative amount of attention paid to that part of the world in this country, especially on its campuses, in the "B.C." (before Castro) and the "A.C." (after Castro) periods.

THE OTHER AMERICA

By ANN PESCATELLO
Chairman, Latin-American Studies Committee

Beneath our nation's southern borders lie dozens of countries and colonial island clusters in which we have strong economic and political interest but for whose social and cultural values we have little or no understanding.

We readily admit our alienation from the distant civilizations of Asia, but we neglect to note our very real ignorance of the southern sector of our hemisphere and the complex cultures which occupy millions of square miles, contain at least one-third of a billion persons, and constitute a human laboratory of the richest racial, ethnic, and cultural mix in the world.

Gunnar Myrdal has pointed out the problems which altruistic, market-oriented, Western societies encounter when they attempt to restructure and reform traditional societies, but we as a nation have been blind to these faults. In Asia, over the last three decades, we have betrayed our ideals by cloaking our "national interests" and anti-communist paranoia in our instigation of and involvement in undeclared wars. Analysis of all of the flaws and failings of our "Asian drama" I leave to experts in the field, for my special intention here is to draw attention to our narrow and myopic vision of our Western Hemisphere.

Latin-American governments have consistently scored us for our apathy toward their countries in all of the vital areas and for our involvement in all of the touchy matters. Our Latin-American policy seems almost to have been purposefully conceived to alienate the Latin-Americans. The only consistent and considered concern for Latin America has been in our universities and that, much of the time, has involved a struggle with administrations to recognize the necessity of maintaining courses and programs in the face of such problems as monetary deficiencies and governmental neglect. Anglo-Saxon disdain for things Iberian has carried its weight in the granting of funds and programs for Latin-American studies, since, in competition among the American, Asian, and African continents, Ibero-America has received the least monetary support.

Latin-American studies programs can measure the attention devoted to them by their status in two eras: B.C. (before Castro) and A.C. (after Castro), for it is with the Cuban "revolution" that panic poured millions of dollars into an area of studies which, heretofore, had limped along the periphery of academic curricula. In the B.C. period, Latin-American studies in universities followed much the same pattern as our national interest since the nineteenth century, when "America" meant the United States and Latin-Americans were immediately thrust into a position of adjusting to that categorization.

In the B.C. period two images of Latin America were at work: that of Europe and that of the United States. To the Europeans, Latin-Americans were likeable aristocrats and landholding magnates who floated between European capitals leading lives of luxury in search of culture. In the United States, conditioned by its proximity
to the Caribbean, a different caricature emerged in the persons of feudal landlords, corrupt caudillos (rural political chieftains), and warring generals. Both of these images developed into a credible myth which, on the one hand, distorted the true Latin America whose masses lived in extreme poverty and ignorance and, on the other hand, perpetuated the myth of neighbors incapable of governing themselves and needful of the discipline of United States expeditionary forces.

Ignorance and contempt led to the United States practice of military intervention—especially in the Caribbean—and to denial of economic aid. These actions ultimately induced a pathological attitude toward the United States on the part of the Latins and a resistance to any positive efforts by the North Americans to aid economic and social progress. Except for the brief interludes of the Good Neighbor Policy, the continental front of American solidarity during World War II and, momentarily, the Alianca, the United States reverted to an attitude of apathy toward its southern neighbors, diverting its gaze to America Latina only when it was necessary to squelch coups inimical to us or to guide revolutions sympathetic to United States interests.

Fidel Castro was different, or at least his movement was, for he and members of the Cuban revolutionary forces sought to establish a "people's democracy," a social revolution which pricked the conscience of the United States to such a degree that our nation responded with renewed interest in Latin America. But it was not a totally healthy interest nor one geared toward understanding neighboring cultures in order to respect them as independent entities struggling to find a way to develop within the context of their own traditions, not ours. Our interest took the form of learning enough about the Ibero-American countries to find means to thwart the development of other Castro and Guevara-type societies. Beginning from this distorted perspective, United States scholars have now been able to move us from the vantage point of selfish government interest to the construction of solid and successful Latin-American area studies programs sympathetic to latino interests.

Latin-American area studies programs in the United States usually maintain the wisdom of providing their students with an academic degree in a particular discipline and its requisite skills, while affording them concentration in a particular culture or geographic area. The multi-disciplinary approach inaugurated new vistas for cross-cultural and comparative studies and for joint courses within and among departments. It also had the effect of opening up departments which, heretofore, had chauvinistically concentrated on the narrow world of Europe and the United States. It became obvious to a few farsighted scholars that, just as it was necessary to understand the discoveries and developments of the New World in the context of European history, it was axiomatic for Europe and the United States to be understood in the historical context of the Wider Worlds.

The first major, non-foundation support to Latin-American and other area studies programs came with the National Defense Education Act, passed in the Eisenhower administration, which provided federal support to both institutions and students through the funding of NDEA Title IV, National Defense foreign language and area fellowships (NDFL Title VI), institutes, centers, programs, conferences, and other channels. Since then the government has channeled funds, even if small in amount, into Latin America and other so-called underdeveloped areas, through fellowships, research grants, and other forms of support.

So, too, have corporations, banking complexes, commercial enterprises, the media, and foundations, but in piddling sums relative to the great wealth they have been able to extract from these areas. For example, if United States oil corporations were to fund fellowship and research programs for Latin America, in just proportion to their interests in Latin America, the universities would be hard put to spend it all. And the tragic thing again is that today these foundation funds have all but been extracted from area studies and applied to our own domestic needs which are, in themselves, overwhelming. Here we are caught in the tragic consequence of a necessity and obligation to aid our own racial and ethnic minorities, yet we are using funds for this purpose which have, in many instances, come from our exploitation of other underdeveloped areas.

The argument about "clean money" is long and involved and should be discussed, but my primary purpose is to concentrate on the positive aspects of what can develop from an imaginatively conceived and intellectually solid area program such as our own Latin-American Studies. Washington University has been in the vanguard of academic institutions wise enough to realize the necessity, duty, and interest we must show our own southern neighbors, and many years ago developed a Latin-American Studies Program of high quality.

In the most recent ratings by the Social Science Research Council-American Council for Learned Societies of Latin-American studies programs in the United States, Washington University's was ranked in the top ten. It has had and does have scholars in Latin-American studies of such international repute and academic fame as David Felix in economics, Irving Louis Horowitz and Joseph Kahl in sociology, Merle Kling in political science, Ivan A. Schulman in Spanish-American literature, Lincoln Spiess in music, and Oscar Lewis, Jules Henry, and Norman Whitten in anthropology, as well as numerous world renowned guest lecturers and visiting professors.

The University maintains a full-time bibliographer for Latin America who oversees the more than 50,000 volumes in the Latin-American collections and supervises the acquisition of some 3500 to 4000 current volumes, and well over 10,000 "retrospective" volumes and microforms each year. Students and faculty have available to them strong collections in Spanish- and Portuguese-American literature, history, political science, economics, music and sociology. There are vast special collections of Congressional documents and excellent special collections of Latin-American literature. Washington University libraries hold 75 per cent (either in original or on microfilm) of the titles noted in Sturgis E. Leavitt's im-
portant *Revistas hispanoamericanas; indice bibliografico*, 1843-1935. They have strong holdings of censuses, statistical annuals, bulletins, and journals.

Among newspapers on microfilm are Cuba’s *Granma*, Uruguay’s *Marcha*, and Chile’s *El Siglo*, as well as the major Latin-American newspapers maintained daily in the reading room. We are also a selective depository for United States government documents on Latin-American affairs, and maintain the cataloging-microfilming project of the Mexican Musical Archives from the sixteenth century. Our program has recently begun oral history and audio-visual projects for Latin America, the initial one being Afro-Brazilian in concentration.

A strong intellectual content has been, as it should be in any area studies program of quality, a feature of our Latin-American Studies. Yet it has been successfully balanced with the refinements—cultural and artistic—which often arose only from personal experiences. Utilizing the combination of scholarship and field experience, the University’s graduate program in Latin-American studies has centered on the theme of modernization and development as viewed from several perspectives, including economic growth, industrialization, integration of rural communities into national life, rural to urban migrations, political integration under new conditions, institutionalization of political conflict, and the interplay between rural and urban values in Latin-American literature.

Instruction and research are integrated in the program, and graduate students accompany professors on field trips. They organize field stations in Latin America, which, operated in cooperation with local scholars and universities, serve as sites for students preparing dissertations. A portion of the faculty and students involved in Latin-American Studies are *latinos*, a happy and successful situation, for while we have been able to contribute disciplinary concepts and methodology to them, they have served as valuable resource people who, by dint of their differing nationalities and individual social and political orientations, lend more personal insights into their own cultures as well as into ours.

Courses range from conversational Spanish and Portuguese and the literature of Spain, Portugal, Catalonia, Brazil, and Hispanic America to seminars on social change, economic developments, and revolution and reform in Latin-American nations; from folk cultures in the modern world to tribal and peasant societies; from Latin-American music to the linguistics of Romance and Amerindian languages; from Yucatecan Mayan analysis to Latin America and the United States in the twentieth century.

Faculty and student research reflects the multi-disciplinary and cross-cultural influences of our program. It includes studies of agrarian reform, Afro-Hispanic music in Colombia and Ecuador, United States business and labor in Latin America, military elites in Latin America, revolution in Brazil, Mexican industrial workers, traditional versus modern values in Brazil and Mexico, linguistic analysis of Yucatecan Mayan, violence and politics in Latin America, symbolism and color in the works of Jose Marti, Mexican and Brazilian music, blacks in Ecuador and Brazil, university reform and student politics, and Yuto-Aztecan idioms.

Since area studies deal with relatively unknown geographic regions and historical experiences which are divorced from our own cultural orientation, visual aids, oral traditions, and other verbal and non-verbal means of communication are a welcome adjunct to microforms, manuscripts, newspapers, documents, and other published materials. The faculty’s personal slides, films, musical recordings, and reproductions of paintings, sculpture, and architectural forms are some of the ways which make Latin America and other distant worlds come alive for students. Presentations on the campus, such as last year’s showing of Sol Landau’s *Fidel* and of six major Latin-American films, all with the theme of social consciousness, help enhance an awareness of their (and our) social, economic, and political problems and allow us to share the creative talents of the Latin-Americans.

Field training for students who themselves may someday direct classroom activities is a must, for often it is the first-hand experience of the instructor that provides the only alive and relevant, if tenuous, link between our parochial culture and the societies to which the student is newly exposed in the University. For students who will go into non-academic enterprises, field training is also valuable, for acquaintance with foreign cultures at the grass roots level is one of the ways to orient our nation’s corporations to the real basic problems of the masses in underdeveloped nations.

As a university and as a Latin-American area studies program, we have the dual responsibility of providing a program of superior intellectual and objective content and analysis and of informing the academic and non-university communities of our national responsibilities to understand and cooperate with the peoples of our neighboring continent. It is our moral obligation to deny those who would maintain the status quo and to aid those who would change it within the context of their own cultural traditions. It is our educational obligation to bring to both town and gown an awareness that these Latin-American nations may be underdeveloped in terms of criteria.
we feel to be most important, like managerial proficiency, industrial efficiency, and commercial and corporate know-how, but that these same Latin-Americans embrace and disseminate a cultural heritage and artistic-intellectual greatness of their own, which could, in many ways, be counted as superior to ours.

It is said, with much veracity, that universities are the arbiters of ideas and students the conscience of society. Those teachers or administrators who would deny these ideals are quick to forget that they themselves once were students who felt that the ideals of reform were primarily their domain. Whether they have grown into teachers or administrators or are outside of the university community, they should recognize that the student soul does retain the basic residue of our once idealistic society. Students want to conduct pilgrimages, either as sugar cane-cutters or revolutionary commandoes, across our southern borders or in our own ghettos, and in turn are met with resistance by those who would be wiser.

But the rhetoric of the radical left and the radical right has disintegrated year by year into a welter of emotional idealism, with its last best hope for revival of pragmatic change resting in the very universities they seek to refute. Herein lies that same tenuous cable of communication—the multi-disciplinary and cross-cultural area studies program—for how much more articulate, how much more meaningful, how much more certain could our understanding be of our neighbors if we students, faculty, and administrators would indulge ourselves in the knowledge they have to share?

The leaders of successful revolutions, whether Jefferson and Franklin or Fidel and Ché, did not ride to power on the paper tigers of rhetoric, emotional outbursts, specious reasoning, or a welter of symbols and slogans. They wrought profound changes in society through hard work, sacrifice, deep intellectual commitments, and especially a knowledge and understanding of national and international problems that can come only from concentrated study. As North Americans we have the right and responsibility to settle only our own problems, but we also have the right and responsibility through knowledge, not rhetoric, to understand our fellow citizens of the world.

Soon again, our poorly informed and often misinformed government, our fluctuating foundations, our atmosphere of anti-intellectualism of both the right and the left, will ebb and there will be a reflooding of interest and altruism. Washington University's strong and vital Latin-American Studies Program will continue to offer its students the information and the tools to analyze and disseminate to the wider public an understanding of the lands and peoples of their southern neighbors.
For three years Emily Ruppert, MSW 67, has coordinated an experimental state program of foster community care for long-term chronic psychiatric patients. Emily and the people of New Haven, Missouri, have literally provided a new haven for lives almost lost to society.

In New Haven patients are relearning everyday routines forgotten in years of hospitalization. The environment of a small town provides an excellent setting for patient rehabilitation.
NEW HAVEN

By DOROTHEA WOLFGRAM

The bus stops at a small cluster of commercial buildings on Missouri Highway 100, just past the sign which announces "City Limit, New Haven, Pop. 1223." A tanned, stone-faced man steps down into the grey dust and heads towards home down the road that slants from the highway to the Missouri River. The man, whom we'll call Fred, is returning from vacation, and although he is eager to arrive at the house, he is also a little afraid. Homecomings are strange to Fred, and he is a man who is uncomfortable with deviation from routine.

Despite misgivings, Fred continues slowly down the road to the small clapboard house. His friend comes out to greet him. In the two weeks of separation both have felt freedom and loss, despite their differences in temperament. Jim McDonald is straightforward and active. New Haven is his home, as it was that of his father and grandfather before him. Fred is deeply anxious, meticulous, and many years Jim's junior. He is one of New Haven's new residents and, like all its "new residents," he is a former psychiatric hospital patient.

Nearly three years ago the people of New Haven agreed to take in long-term chronic psychiatric patients—human beings estranged from society by long periods of hospitalization. Through compassionate human contact and carefully structured situations these wasted lives are being reclaimed. Today nine former patients live in New Haven. Some lead sheltered lives and may rely on the state and community lifelong. Others are almost independent.

New Haven and its new residents have come far since 1968 when representatives of the Missouri Division of Mental Health approached leaders of the community with the experimental foster community plan. Although modeled after the community of Gheel, Belgium, which for centuries has provided home custodial care for the mentally ill, the New Haven program has been carefully shaped by the community, the patients, and the state.

Other patients are beginning along the same path; some will settle in New Haven, others will visit only for weekends. The people of New Haven conceived the weekend visit program. It offers a courtship period when both patient and family can try out the relationship. Each has benefited. For patients, New Haven can be a bridge back to normal life; for New Haven, the act of giving has drawn the community closer together and has enlightened its attitudes on mental illness.

Since its inception, the work in New Haven has been guided by Mrs. Francis (Emily) Ruppert, a psychiatric social worker and a graduate of Washington University's George Warren Brown School of Social Work. When Emily graduated from Lindenwood College in 1962, with a major in sociology, she was convinced she did not want to be a social worker. "Then I began working at St. Louis State Hospital, and I saw that the people doing what I would be interested in were social workers, so I went back to school."

She returned to St. Louis State Hospital after she received her master's degree from the University in 1967 and within a year had plunged heart and soul into the New Haven experiment. Officially, she is coordinator of the program, but no title accurately describes her involvement with the town and its residents—old and new. Hardheaded and practical as a professional, warm and sensitive as a human being, Emily is the spark and the mainstay for the community and the patients.

"A year ago, I would have said that the program might have folded, if I'd had to leave it. I don't think that is true today," she says. "The people of the community have assumed a major share of the responsibility and have taken over roles I was once exclusively qualified for."

From the beginning, Emily has encouraged this. "Ordinarily, a family which took in a former psychiatric patient might be looked upon by neighbors with some distrust. We needed to reverse that attitude, to make that act socially acceptable, even commendable."
Weekend visitors arriving on bus on Saturday morning are met by members of New Haven recruitment committee and driven to homes in which they will stay. Through the weekend program patients begin to learn to live outside of the hospital.

Emily Ruppert, MSW 67, has coordinated program since its inception. Residents of the community are gradually taking over her role. She encouraged formation of non-profit corporation "to give New Haven residents some leverage in dealing with the state bureaucracy."
New Haven’s new residents—eight women and one man—and those patients who come to visit are, often, establishing their first contacts outside of the state hospital in twenty years. They are patients so long hospitalized they are cut off from family and friends. They don’t know how to converse, dress, or care for themselves, and the natural rhythms of living—rising, eating, retiring—have long been imposed by hospital routine. The question of how to fill the hours of the day, suddenly open to so many possibilities and decisions, appears frightening. Their dissocialization, for the most part, is a result not of psychiatric illness, but of long hospitalization.

One of the women, let’s call her Sara, was admitted to the hospital at age 17. That was 1933, when mental hospitals were places of horror, not because attendants were cruel or physicians lazy (although Sara may still believe this), but because straight jackets and ice baths were recognized methods of restraint for uncontrollable patients. Today many of the symptoms of psychiatric illness can be controlled with tranquilizing drugs, and with control comes the possibility of return to life among family and friends. But many patients, like Sara, either have no family or are not accepted by their families.

Sara came to New Haven after thirty-seven years of hospitalization. This summer she said, “In all that time, I hadn’t given up hope. I just didn’t know where it was going to come from.” When they first told us about New Haven, it was like floating on air.”

Sara is one of three former patients who share an apartment in New Haven. Slowly they are learning to be more self-reliant. At least once a week, Jim Schucle, a hospital staff member, drives the seventy miles from St. Louis State Hospital to spend the day. He and Emily and Melissa Kimes Mullgardt, a 1965 graduate of Washington University, share the responsibilities of liaison between the hospital and New Haven. Melissa serves officially as occupational therapist on the project, but in New Haven her duties are general.

On the door off main street a sign reads “New Haven Foster Community, Inc.” One evening this past summer the room upstairs was filled when Emily and Jim arrived. The weekly patient meetings are group sessions, but they are also social events. On this particular evening Dr. Ali Keskiner, a psychiatrist and director of the program, had come, as he does once a month, to check on the patients. But the meeting was also a birthday party for Emily.

Dr. Keskiner often adjusts medication on his visits. This evening he reminded Sara that she must follow his new orders. She’d been chided before for failing to take her medicine and responded, “Doctors aren’t always right. Remember only God is perfect.”

Dr. Keskiner said, “Sara, you may not agree with me, but you have to trust me. Now we agreed to that.”

Everyone nodded and the momentary flash of conflict disappeared. Such flashes occur frequently, but disappear in an instant. The patients are learning to understand their illnesses, to recognize their anxieties, and to deal with them. Part of Emily’s job, however, is to teach them to talk about their feelings.

Ella related that the woman she lived with had explained that she would have to move out soon. “She said because her husband might have another sick spell, and they had to have the bedroom I’m living in.”

Emily asked, “Did that kind of hurt your feelings, Ella?”

Ella: “Well, I guess it did, you know. I thought I’d be there two or three years and it has just been a year.”

Gloria: “But you can live with me. Emily, I called about that apartment and it has two bedrooms.”

Emily: “What do you think, Ella? Could you two get along?”

Ella: “Sure, I can get along with anybody. I never fight. Life’s too short for that.”

Emily: “How do the rest of you feel about Ella’s having to leave her people?”

Barbara Funk, a young mother who is treasurer of New Haven Foster Community, Inc., looks after “the ladies in the apartment.” “I’ve often wondered what will happen to them,” she says. “I guess we’ll just go on until they become too old to handle things themselves.”
Esther and June make excursion of Thursday patient meeting day. They leave the Duncan's in early afternoon for beauty shop, walk downtown to shop, have dinner and then attend the meeting.

Dr. Keskiner, center, director of program, joins birthday party for Emily. Her birthday had been months before, but new residents had had other birthdays then and had saved Emily's party for lean month.
Gloria: "Well, I guess that’s not so bad. You always told us we weren’t marrying them."

The meeting went on. Then Emily suggested that perhaps they could have some meetings without a staff member. The idea seemed frightening.

"Who'd solve our problems?" Beverly asked.

Emily responded. "Don't you think that you have some idea of how to solve your own problems?"

All reluctantly agreed that they did. "But we need you all sometimes," Beverly answered. "Besides coming to these meetings is like belonging to a club."

The New Haven project is a pilot study operated jointly by St. Louis State Hospital and Missouri Institute of Psychiatry, a research arm of the division of mental health.

Emily explains that the rehabilitation program works because it is specific. "We say, 'You'll do your grocery shopping at the Clover Farm store downtown. The man who runs the store is Mr. Seitter,' or, 'Mrs. Kappelman lives in a white house two doors down. If you need to know anything, ask her,' and we can ask Louise Kappelman and other townspeople to look after patients.

"In addressing New Haven groups about the project, we steered away from the medical approach and talked about the emotional problems—the rejection, fear, and uncertainty that the patient feels and that the community itself might feel. We can assure the residents that none of the patients is dangerous. We started with a strong belief that we wanted to provide experiential learning for both the community and the patient."

Although now resocialization is begun in a pre-New Haven program at the hospital, the first group was straight off the hospital’s back wards.

"You cannot imagine how far they have come," says Clara Mae Jacobsin, wife of the Rev. John Jacobsin, who is chairman of New Haven Foster Community, Inc., a not-for-profit corporation formed by townspeople to guide the program. "When Sam and Betty Duncan picked Esther from the first group, she seemed an unlikely prospect for success. She huddled in the back seat of our car like a frightened animal, wary and speechless."

Charles (Bud) and Fran McDonald couldn’t take a patient, but offered to help in some other way because, as they later said, "It came at a time when we needed to become involved in something outside of ourselves." Bud became the first chairman of the foster community corporation. Although he drives to St. Louis and back daily to teach at Parkway High School, he and Fran took the responsibility almost as a full-time job.

Bud was the project’s troubleshooter, and troubles there were. Despite careful selection, inevitable tensions developed. One evening a patient deeply offended the family with whom she was staying. They called Bud, who left his dinner to drive out to ease the situation. Thereafter he began taking the patient for occasional drives to give both her and the family relief from the unnatural relationship resulting from the addition of a strange adult to a family.

New Haven’s new residents regularly return to the hospital for checkups. They are on family-care discharges under which the sponsor family or the corporation signs a contract agreeing to some personal responsibilities, while the state maintains its financial and medical responsibilities. This discharge basis allows a free access to readmission to the hospital if necessary. There have been relapses, when a patient failed to continue proper medication, but the patient was then returned to the hospital for a brief period of treatment.

Not every patient who enters the program makes a successful transition. Several men have had to drop out before placement because, Emily believes, it is difficult for a man to maintain his identity through years of forced leisure and because the presence of a non-working male in a family is often intrusive and feared.

None of New Haven’s new residents is required to work, but those who are capable can find employment. Fred works in a tent factory, which is New Haven’s largest industry. His acceptance by other workers is now assured, but it has not come easily. After some time, the
foreman complained that Fred was upsetting other workers by laughing uproariously with no apparent cause.

Emily asked Fred about it. He explained, "Sometimes I feel so bad that I just have to laugh to keep from crying." Despite the sympathy she felt, Emily explained that this was not acceptable social behavior. Fred understood and the problem was resolved.

Fred is now financially independent. For all other new residents the sponsor families or the corporation receive $175 a month, including a sum designated for the patient's personal use. The amount was set by the corporation.

Membership in the corporation is open to all New Haven residents—old and new. Monthly meetings draw up to thirty persons. The corporation makes decisions about the program's implementation and advises the state on the program's needs. Corporation officers and sponsor families meet with staff members every two months. Townspeople, who make up the recruitment committee meet monthly to find and evaluate prospective sponsor homes. Bud McDonald notes that three years ago it took forty calls to find three weekend homes. Today five calls produce four acceptances.

"We have fairly stringent rules about who can take a patient on a permanent basis," says the Rev. Jacobsin. "If we didn't we would have placed many more. Home visits aren't the same problem. We've had people give up their own bedrooms to have patients for weekends."

Both the Rev. Jacobsin and Bud believe New Haven's saturation point will be reached at about twenty-five permanent residents. Then weekend visits can become the program. Of New Haven's 400 families, more than fifty have had patients in their homes, but that number is a small reflection of the number of townspeople involved.

Emily is frank about the costs of the experiment. "It's tremendously expensive, but not in terms of patient care. It costs the state about $600 a month to keep a patient in St. Louis State Hospital, so $175 is a real bargain, but the staff time involved is the high cost." Emily has spent at least two years visiting New Haven twice a week. In addition she and Melissa spend hours working with patients in the hospital portion of the rehabilitation program.

Emily makes her strongest costs defense on the basis of the educational value of the experiment.

"We have three things working: rehabilitation of patients; what's happening in the community in terms of education; and what we are learning from what's happening in the community.

"We have a cadre of lay people in New Haven so well informed about mental health and emotional stability that we have provided a means of dealing more effectively with the mental health of the entire community.

"In almost every case we have given a sponsor family someone in the community to turn to in troubled situations. At first it was Bud as an on-the-scene replacement for a staff member; now we've replaced Bud with a dozen others. These are the level-headed aunts or sisters or sons who everyone has always turned to for help. We haven't created them, but we've found out how to locate them and make broader use of them. That's an important discovery in community mental health.

"These people don't just help sponsor families, they are literally 'used' by all of the surrounding community. I suspect that the townspeople intercept and teach people to handle emotional problems which previously were brought to mental health clinics. I know that I've been a social worker to New Haven, as well as to my new residents.

"Besides, in New Haven we've learned much about rehabilitation. Beverly has been in and out of the hospital fifteen times. Coming back is coming home.

"So we've built in a homing feature. Patients coming back for checkups see their friends, and staff members bring them continuous news of what's happening at the hospital. First we replace their hospital home, and then we try to ease out of our strong support, replacing it with less strong, but ever present, community support.

"Maybe reclaiming the lives of chronic mental patients has got to be costly," Emily says. "I'm not sure. I just know it works."
Apartment rented for three women sometimes provides patient visiting place. New Haven's weekly newspaper carries a column, now written by Clara Mae, about new residents and related activities.

Jim (left) and Fred spend summer evenings tending garden next to house. They share some activities, lead independent lives in other instances. Patients and families work out arrangements most comfortable to them.
IN MEMORY OF
JERRY MILLER

On May 31, 1970, Gerald Miller was ambushed and killed in Cambodia, while covering the invasion for the Columbia Broadcasting System.

In 1956, while making one of my many unsuccessful attempts to win Jerry over to an academic career, I wrote to the chairman of the history department at Berkeley: "Mr. Miller is the most talented and the most original of all the students I have had through twenty years of teaching in the United States." After fifteen additional years of teaching, this appraisal still stands.

Jerry and I met first in 1947 when, as a sophomore, he took my survey course in modern European history. In a class of not more than thirty-five students, personal contacts were easily established. Among other things, I learned that Jerry came from a large Jewish family with a European background. I also learned that Jerry had written the script of that year's Quad Show and was to play the lead role of Pericles. For the role he had raised a large beard, an outlandish thing to do at that time. One cold morning, as he came straight into the classroom from the streetcar, I asked him how things were going. "Very well," he answered. "Just now on the streetcar, I heard one woman say to another, 'Doesn't he look like Christ?'"

Jerry created his own program at school, concentrating as much on languages and literature, especially French, as on history. He took a few courses with me, but was far too versatile and responsive to go solely in one direction or to attach himself predominately to one professor. He soon struck me as unusually receptive. One day, after a lecture on Richelieu, he said emphatically, "That was great!" This remark somehow lingered on, if subconsciously. When I was asked a few years ago to contribute to a volume on "The Responsibility of Power," I chose Richelieu as my subject.

Always averse to institutions and their regulations, Jerry had come to terms with the system of credits and grades in his own way. At the end of the fall term in 1950, he and two of his close friends were informed that they had fulfilled the requirements for graduation one semester ahead of time. Jerry took his degree in January, 1950, and the next month left for Europe.

After his graduation, Jerry went to Paris, and with an unusual linguistic ability, familiarized himself intensely with French language and life. Soon after I came to war-torn Muenster as a visiting professor, Jerry and another of my former students visited me. In the midst of the destruction all around, I lived and taught in former barracks which brought me all the closer to the young people of my native country, mostly war veterans. There we
Last May, Alumnus Gerald I. Miller was killed while covering the Cambodian invasion for CBS. In this tribute, Professor Gerhard calls Miller "the most talented and original student" he has known in thirty-five years.

would sit in my office discussing beyond midnight the Nazi regime and the culture of the country and the world. When American guests joined us, I was the interpreter.

One night Jerry and the most vigorous of the German students, a veteran in a wheelchair, carried on a dialogue for hours, managing to bridge the language gap by tracing the common origin of words. Several years later, after I had accepted a professorship at Cologne, this experience in Muenster prompted Jerry to recommend to me a Smith student: "She might participate at one of the seminars on America and serve even as a topic of conversation at another one later."

Later that summer, I saw Jerry once more near Heidelberg. He had come by train from Frankfurt, his eyes sparkling as they always were after a moving experience. Early that bright morning, he had left the city for the countryside in the midst of the crowd whose happy response as they escaped the sights of destruction had given him confidence. His expressive face and bubbling eruptive language were indications of his delight when he felt himself at one with other human beings. He expressed similar feelings later in a letter about a Paris Sunday in the spring: "The city turned out like the villagers in Faust, who go into the fields to greet the spring. I walked among them in Montmartre and never have I felt such a deep spirit of community with these Frenchmen."

For some time, Jerry had made himself at home in Paris, where he was a news analyst with the North Atlantic Treaty Organization. In the summer of 1955, Jerry was our host in his apartment near the Bois de Boulogne. Previously, he had piloted our elder daughter through the city, after her freshman year at Swarthmore. Eventually, he had entrusted her, as he explained, to the care of "a very level-headed young woman from Kansas City," who later became his wife.

Several times in the mid-fifties I tried again to enlist Jerry in the academic profession. Once I nominated him as a Woodrow Wilson fellow and he was even flown over from Europe by the army for his required interview. Already at that time his heart was bent on Rome and the topic I suggested as a research project—Italian influence on French political thought in the late sixteenth century—bore this in mind. Nevertheless, when the fellowship was awarded to him, he turned it down. With biting humor, he described some of the other candidates who were interviewed: their petty concerns and lackluster, narrow evaluations of academic possibilities. From such an atmosphere, he would shy away. Each time, when he consid-
If anyone doubts that ours is an affluent society, he might ponder one recent statistic: recovering lost golf balls from golf course water hazards is now a million dollar a week business in this country.

One of the thriving operations in this specialized underwater salvage business is the M & J Ball Company of St. Louis. The "M" stands for Mike Lopez, a former butcher, cook, and filling-station operator, who first started dunking for golf balls fifteen years ago; the "J" stands for Jerry Manker, AB 69, who began working for Lopez as a freshman at Washington University and went into partnership with him three years ago.

Jerry began diving for balls during summer vacations and after school hours. After he went into partnership with Lopez, Jerry began recruiting fellow Betas from the campus and the firm now has four three-man crews working golf courses throughout Missouri and Illinois and down into Texas, Florida, and Louisiana. They may work a hundred different golf courses during the year.

To work for M & J, a diver must sign a seven-year contract and take out a $10,000 life insurance policy. Scuba equipment is furnished by the company, but the diver must provide his own wet suit. Strictly a piecework operation, the divers get a nickel for each ball they bring up from the bottom. On a good day, a diver can come up with an amazing number of nickels. The company, in turn, then cleans and paints the balls and sells them to golf pros and driving ranges at anything from a quarter to a dollar apiece, depending on the kind of ball and its condition.

Jerry, who majored in psychology and also earned a teaching certificate, now teaches the sixth grade and helps run the M & J Company on the side. His duties with the firm now are strictly managerial. "I spent four years under water." Jerry says "From now on, I'm staying on dry land."
Wearing a wet suit and scuba diving equipment, alumnus Jerry Manker heads for the bottom of a golf course lake in search of lost golf balls. As a partner in a used golf ball business, Jerry seldom dives any more, but he worked his way through Washington University under water, diving for balls during summer vacations.

Jerry surfaces holding a gunnysack full of golf balls. Working mainly by feel in dark, murky waters, the divers pick up balls with hands and feet and stuff them in the sack around their necks. In one sweep of the bottom, an average water hazard will yield thousands of golf balls, and often a few clubs thrown into the water by irate golfers.
Balls are soaked in peroxide solution in old-fashioned bathtubs and are run through washing machines to remove dirt and stains. They are then painted in a homemade machine that can handle as many as 15,000 balls a day. Balls intended for sale to driving ranges are striped like those shown in the picture.

Using a device based on a chicken farm egg-grader, Manker sorts balls by quality and condition. The best unscarred Titleists will bring up to $1 a piece in pro shops. At any given time, the M & J Company has an inventory of about 160,000 golf balls, gleaned from the water hazards of about one hundred golf courses.
The Washington University Club in downtown St. Louis drew a capacity crowd for a dinner meeting on September 30 at which Chancellor Eliot was the principal speaker. The Chancellor's address was billed in advance as a "full report on last spring's campus disturbances, the University's responses to those disturbances, an analysis of their underlying causes, and what the University has done since to correct the problem."

The Chancellor gave a concise and candid summary of all four points and answered questions from the floor after the address. The most significant part of his remarks, however, came at the end of the address, and are well worth quoting. He said in part:

"...the future of America depends on the younger generation. The educated members of that generation will be the leaders of our country. And our university is doing its job to educate them."

"We are doing this job successfully.

"With all the hullabaloo last spring, what about our educational job? Except on one solitary day, academic classes met as usual. The laboratories were as busy as ever. So was the library...on a Wednesday right in the middle of the alleged strike, 4500 people were studying in Olin Library.

"We were doing our job, and we were doing it successfully.

"Don't sell our students short. Don't get so concerned over a few anarchists that you forget the thousands who are real students and are going to be the leaders of the future.

"Don't sell Washington University short. Join me in condemning violence. Support me in actions which I take to prevent it, to keep the anarchists from persuading idealistic youngsters to follow their lead, to avert needless clashes, and with justice and fairness to penalize wrongdoing if it occurs.

"But more important, support Washington University. It is a great university. Certainly it's a place where controversial ideas are expressed: a university without controversy would be a dead university. Certainly it includes people with whose views you or I may profoundly disagree: who wants a university to be a place of gray conformity?

"You can be proud of your university. You should be proud of it. It has reached the front rank in academic stature. Fires and rocks will not destroy it.

"Higher education is essential to a nation's progress. Washington University is one of the distinguished institutions of higher education in our country. It merits your loyalty and your support."

The new building is visible proof of how far modern medicine has come in the past few decades.

Today's medical student must acquire an enormous amount of knowledge of the basic sciences and master highly sophisticated concepts and techniques before he can begin to enter the clinical part of his training. The new McDonnell Building is designed primarily to facilitate providing this essential scientific training for the physicians of the future. From this building will come, no doubt, many important contributions to basic science and medical knowledge; its first function, however, is to turn out fully trained physicians for the decades ahead.

The heart of the new building is the concept of "multidisciplinary laboratories." These new labs are built around "core" work areas, at which medical students can perform all of the necessary laboratory work they must do in their preclinical first two years of medical school. The core concept permits a minimum investment to serve a maximum number of students and faculty members. In this new concept, departments need no longer devote valuable space to teaching laboratories, which often stand idle part of each academic year. Instead, much of the equipment can be shared in the multidisciplinary laboratory and optimum use achieved.

The new McDonnell Medical Sciences Building will contribute directly and substantially to public health care in the St. Louis area, to the nation's supply of physicians and medical scientists, and to the advancement of research. Its completion marks a major milestone in the history of Washington University.

As we go to press, we are happy to add a significant postscript to the article on state aid to higher education which begins on page 21 of this issue. In his welcoming address to the 2000 delegates of the American Council of Education at their annual meeting in St. Louis last month, Missouri Governor Warren E. Hearnes announced that he plans to appoint a task force to study the role of private higher education in Missouri.

Gov. Hearnes said, "While we face a shortage of funds to expand public colleges and universities, we find that the private institutions in Missouri have 7300 vacancies. Surely there must be ways in which these vacancies can be filled, making higher education available to Missouri students without a major tax increase.

"The task force will be asked to inventory available facilities of public and private higher education and to examine ways in which other states have utilized all their resources. I want this task force to recommend approaches which would save money for the taxpayers by making full use of both public and private colleges and universities."

The governor's announcement is a most encouraging and hopeful development. All of us who are concerned about the future of higher education in Missouri welcome and applaud it.

—FO'B
A foggy day at Steinberg. In this photograph by Herb Weitman a heavy fog converts day to night and veils Steinberg Gallery in swirling mist.