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THE CAPITAL PROGRAM to provide $70,000,000 by 1970 for the support of Washington University was announced to the University community at a special convocation in Graham Chapel on February 2.

Before a capacity audience of more than one thousand faculty members and students, Chancellor Eliot on that occasion declared:

"The needs of the nation challenge the University to assume its full responsibility among the leading universities of the country."

This spring the Seventy by Seventy Capital Program is beginning to gain momentum. A national organization to direct the campaign and to enlist the support of alumni, foundations, corporations, and other friends of the University has been formed with Ethan A. H. Shepley, former chancellor and board chairman, at its head.

The goal is an ambitious one, but in the words of Chancellor Eliot:

"Any lesser aspiration would betray the efforts of those who, in the last two decades, have brought the University to its present level of accomplishment."
Ethan A. H. Shepley received a warm welcome at Graham Chapel when it was announced that the former chancellor and board chairman of the University would serve as chairman of the Capital Program.
COVER: Enthusiastic approval of the speech efforts of two pupils at the Central Institute for the Deaf is given by their teacher, Judy Reichle, BS63. This year, the world-famed St. Louis institution is celebrating its 50th anniversary as a center of education, care, and research. See article beginning on Page 4.

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Aristotle considered the deaf incapable of instruction, and Roman law classed the deaf with the mentally deficient. But in St. Louis, a 50-year-old, internationally recognized teaching and research facility associated with the University is proving both the great philosopher and the Roman judiciary wrong.

Dr. S. Richard Silverman, director of the Central Institute, helps two deaf youngsters get the "feel" of a word, a practice that helps the child to learn to speechread and to speak.
Both parents were noticeably distraught by the news. The father tried to affect composure by remaining silent. The mother fired questions in uninterrupted succession at the woman behind the desk.

"How long would she stay?"
"Well, that would depend upon . . ." 
"Might we see the dormitory facilities?"
"Yes, of course, let's go up right now and . . ."
"What vacations are there? When could she come home?"

Pausing, as if exhausted, to listen to the answer to her last question, the mother sighed deeply as a substitute for tears.

The woman behind the desk seemed undisturbed by the mother's insistence, but eager to provide reassurance. She explained patiently about holidays and vacations. For during the past thirty-four years, as a psychologist and a school principal, Dr. Helen Lane had faced dozens of parents in similar situations.

This couple, like many of the others, had travelled hundreds of miles to St. Louis' Central Institute for the Deaf to find out the severity and nature of their three-year-old daughter's suspected hearing loss. They had learned, just a short time earlier, that the child's handicap was considered both severe and, for the moment at least, permanent. Her deafness was not remediable by surgery, and even the best hearing aid—by itself—would be insufficient to let the youngster lead a normal life.

This family had just benefited from two of the Central Institute's services—diagnosis and assessment—provided through the Institute's clinics. Now they were trying to decide whether to avail their child of that service for which CID is perhaps best known, at least to the public: its school for deaf and speech handicapped children.

This scene, of uncertainty and hope, has been played out countless times in the proud history of the Central Institute for the Deaf, a close affiliate of Washington University whose influence has been profound and worldwide and which this year is observing the fiftieth anniversary of its founding.

At present, 175 children, ages 3-15, are enrolled in the Central Institute's school. About half are from the St. Louis area; the rest from twenty states and Canada. They are among the approximately 30,000 children enrolled in schools or classes for the deaf in the United States.

The school's teaching philosophy is to prepare the deaf child for independence in the hearing world as soon as possible. The cornerstone of the school's program is oral teaching, that is, instructing the children in lip-reading (now more accurately called speechreading), in using residual hearing, where possible, and in speech itself. It was recognized long ago that simply because a person is deaf is no reason for his vocal chords to be incapable of making sounds. The deaf can learn to speak, and at the Central Institute for the Deaf they do learn to speak.

The Institute's director, Dr. S. Richard Silverman, enunciates CID philosophy with conviction: "We believe," he says, "that the greatest economic and self-realizing opportunities for the deaf are in the larger world of the hearing, and that the preparation we provide, enabling the handicapped person to communicate with the hearing, is in the best interest of our pupils. The manual alphabet and the language of signs cannot achieve this."

The Central Institute is supported by school tuitions, clinic fees, and gifts from individuals and foundations. It also receives some support from the United Fund. Research support has come increasingly from government agencies including the National Institutes of Health, the Veterans Administration, the National Science Founda-
To learn how sounds are made, the teacher—in this instance Judy Reichle—has pupil feel movement of her jaw and neck muscles.

Then the process is reversed, and youngsters learn how it feels to attempt the same sound.

When children pronounce words with absolute clarity, congratulations are given and accepted joyously.
Six pupils is the average size class at CID. Here Miss Reichle helps one child while another practices pronunciation.
at Noel and says, "Sit down, Doug." Attentive Doug sits down. And so on through the class.

"How are you, Pat?" the teacher asks.

"Fine," comes the clear and correct reply.

Turning to another child. "How old are you?"

"Fine," comes the clear and incorrect reply.

Realizing he has misread Miss Reichle's lips, the child, along with the teacher and the other children, laugh, something that occurs frequently throughout the day, providing release from the required constant attention.

Attention is the key, for when these children enter the hearing world, they, like the blind, develop no supersense to compensate for their loss. They must learn to watch the lips, the jaws, the chin, and the facial expression of the speaker if they are to learn to understand—and to speak.

Most of the day is spent practicing vowels, consonants, word-endings, and whole sentences, which the children compose as stories during "I Have Some News" time.

"They work awfully hard for approval," says Miss Reichle, who gives approval spontaneously and repeatedly throughout the six-hour school day.

All pupils at CID, even the majority who are considered "totally deaf" (an imprecise term), wear hearing aids, except when using the central audio system in class or during active play, as in gym class. The hearing aid permits for most of them the hearing or at least the "feeling" of low tones. One CID graduate, who recently received his masters degree from Washington University, was known at CID by his middle name, Lee. When he became an undergraduate at Georgia Tech, he chose to use his first name, Paul: he had discovered that when friends in the dormitory or fraternity house shouted down the hall, "Lee," he could not hear them; when they called "Paul," he could. The latter has stronger low-frequency than the former.

Hearing aids help some deaf children to pick up certain vowel sounds. A youngster might hear "uh-oo-ee" when the person speaking is saying, "Brush your teeth." Even "uh-oo-ee" is an advantage, however, and modern hearing aids make this kind of recognition possible for some persons. For others, they provide help in gauging the volume and rhythm of one's own speech.

The complexity of the problems of hearing and speech, with which the Institute copes in numerous ways, plus the bureaucratic-sounding abbreviation, CID, in no way disturb the congenial, even intimate, way its staff goes about its work. It's a friendly place—and a busy one.

Besides the school, it encompasses a professional training college for clinicians and future teachers of youngsters with speech and hearing disorders, out-patient clinics for St. Louis area citizens with these disorders, and a highly productive and perpetually engaged research department.

It was this idea of a comprehensive approach to speech and hearing problems that led the late Dr. Max Goldstein, a St. Louis physician, to found the Central Institute in 1914. Beginning modestly, with three pupils with whom he worked in a room adjoining his medical office, Dr. Goldstein before his death in 1941 had developed a well staffed, internationally recognized center for education, treatment, and research. His contributions to the field of speech and hearing correction have been compared, by other professionals, with those of Alexander Graham Bell and Thomas Hopkins Gallaudet, for whom the college for the deaf in Washington, D.C. is named.

Among those staff members brought to St. Louis by Dr. Goldstein were Drs. Lane and Silverman. Dr. Lane, principal of the school since 1941, joined the staff as a psychologist in 1931. Dr. Silverman came to CID from Cornell University in 1933 on a Rockefeller fellowship. After earning a Ph.D. degree from Washington University, he joined the CID teaching faculty and, when Dr. Goldstein died, became administrative executive. His title was changed to director in 1947.

Since then CID has expanded its facilities and its services. Now, in addition to the administration and school building, acquired in 1929 and located on Euclid two blocks south of the Washington University School of Medicine, there is a three-year-old residence hall for students in the teacher's college and a four-story research and clinic building, both about a block from the main structure.

It is not the Institute's physical expansion, however, to which Dr. Silverman refers most enthusiastically, but to its distinctive mission.

"We're like Washington University in one respect," he says. "As a private institution, our role is to pioneer, to try to be a pace-setter, not to become a giant. Our smallness—at least our informality—may in fact be one of our greatest assets." Another, he adds, is the Institute's relationship with the University.

The formal connection between the two was established in 1931 through the teacher training college. Students completing the two-year training, after two years at an accredited college, receive a B.S. degree through University College, and in recent years, graduate curricula have been offered through the University's Graduate School of Arts and Sciences. Some 500 graduates have taught or are now teaching in schools throughout this country and in thirty foreign lands, and most of the thirty-five teachers in CID's own school now are Washington University alumni. Enrolled in the program this year are six men and 36 women. Members of the teacher college faculty (including Dr. Silverman, who teaches seven hours a week) and of the research department hold Washington University faculty appointments in the departments of psychology, speech, electrical engineering, otorlaryngology, physiology, audiology, and education.

Dr. Silverman lists as another advantage of the Institute a less formal tie with the University: its ability to draw on the skills of individual specialists, both at the Hilltop campus and at the Medical School, trained in disciplines not related so directly to hearing: psychology, physiology, physics, pediatrics, plastic surgery, neurology, and even dentistry. A large number of the 1500 persons, both chil-
Research at Central Institute includes measurement of responses of brain to various stimuli. With electrode in place on forehead, this subject, a pupil from the CID school, prepares for testing.

Child at first is instructed how to respond ("Raise your finger when you hear the sound," the research assistant says), later is asked to sit still without responding. Encephalogram readings are then studied carefully by researchers with help of computer.

During early part of test, child listens carefully for sound, eager to pop her finger in the air when she hears it.
Dr. Davis adjusts controls in research lab where studies of brain responses of deaf children to various stimuli are made.

A report from CID's versatile computer, HAVOC, is examined by Dr. Hallowell Davis, director of research at Central Institute.

Dr. Ira Hirsch, assistant director of research, looks over test results held by Dr. Davis. In background is Mrs. Hirsch, a research associate at CID.
dren and adults, tested and treated in CID's speech and hearing clinics each year, are referred to the Institute by just such specialists.

**IT IS THROUGH THE CLINICS that most persons with speech or hearing difficulties have their first contact with CID.** For it is there that the individual's disability is assessed and that a prescribed program of treatment or education is determined. Where treatment should occur, in the school or the clinic, depends upon the nature and severity of the disability and the age of the handicapped person.

Therapy in the clinics is available, usually on an individual basis, with the help of other members of the patient's family, for both children and adults with partial hearing loss; speech difficulties such as lisping, stuttering, and cleft palate; or speech loss from a stroke or aphasia. The latter, an inability to speak, has several causes, some known, some not known.

Mildred A. McGinnis, AB 33, MA 39, emeritus director of the clinics' division of speech correction and pathology, worked for forty-two years with such children at CID and pioneered procedures for children with compound language learning problems. She retired in 1962 and returned recently from Peru where she was a Fulbright lecturer.

The clinics also sponsor a pre-nursery school for children with impaired hearing, in which the emphasis is on parent direction. Generally, full-time schooling at CID is recommended only for children whose inability to speak is caused by severe hearing loss or associated difficulties.

The CID research department is no less impressive than the school or the clinics. Headed by Dr. Hallowell Davis, a physiologist from Harvard who came to CID in 1946 as director of research, the department is known throughout the medical, scientific, and educational worlds.

The spectrum of research projects at CID over the years has been great: studies have included psychoacoustics, concerned with what and how people hear; audiology, the measurement of hearing; perception and cognition in children with communication disorders; and the effects of noise on hearing. The latter included a project with the Navy in which the effects of jet engine noise on the hearing of flight-deck crew members were studied. (Surprisingly, no permanent negative effects were found.)

Each year, two or more research associates from distant parts of the United States and abroad become members of the CID research team. In the past eighteen years, since Dr. Davis came to the Institute, he and his associates have contributed more than 300 articles, chapters, and books to the professional literature. Drs. Davis and Silverman co-edited a book, *Hearing and Deafness*, in 1946, which is now in its second edition and has gained wide use as a text in universities throughout the country.

Within the past few years, large dividends have been forthcoming from a versatile computer developed at the Central Institute. Called HAVOC (for Histogram Average Ogive Calculator), it was constructed under the direction of Dr. J. R. Cox, Jr., then a member of the CID research staff and now a member of Washington University's Biomedical Computer Center.
In February, 1955, at the Washington University Second Century Convocation, the University conferred an honorary Doctor of Laws degree upon Chief Justice Earl Warren. On that occasion, the Chief Justice delivered an address that has become historic on the subject of "The Blessings of Liberty."

On the tenth anniversary of that event, almost to the day, the Chief Justice returned to Washington University to deliver the 1965 Founders Day address. In his address reproduced here, Chief Justice Warren asks two main questions: "Is the need for vigilance in the safeguarding of our precious rights any less than it was ten years ago?" and "How do our schools and colleges measure up to their responsibilities in teaching the values which we want to preserve?"
THE FOUNDATIONS of FREEDOM

By EARL WARREN

Chief Justice of the United States

IT IS GRATIFYING TO RECALL that it was at Washington University that Wiley Rutledge, a highly respected former Justice of the Court over which I am honored to preside, spent nine very rewarding years, first as a professor and then as dean of the School of Law. His was a distinguished and an inspiring judicial career. The essential quality of the man was accurately captured in the following comments by Brandeis:

If we would guide by the light of reason, we must let our minds be bold. . . . Few judges in our time have done this so notably as Rutledge. In boldness and imagination, in sense and defense of democracy, he was in the great tradition.

Washington University meant a great deal to Wiley Rutledge, just as he meant a great deal to it.

I believe strongly in the worth of anniversaries. Sometimes they come in important round numbers, like the University’s Second Century Convocation that brought me here in 1955, or the St. Louis Bicentennial which has so impressively marked the accomplishments of this cultural and industrial center. Sometimes they signify annual milestones which are less conspicuous but no less important.

Any anniversary, whether observing the birth of a person or the birth of a nation, the solemnization of a marriage or the establishment of an institution, has its own special import. It provides us with an appropriate moment, not for self-glorification, but for introspection. By setting apart such a day we can derive satisfaction from what has been accomplished; but, equally important, we can use the occasion as a means for taking inventory, for making a judicious self-appraisal and for taking our bearings for what lies ahead so that we can meet the challenge of the future.

It is hard to think that it is already a decade since I was last at Washington University. The passage of time might seem less awesome if we just called it ten years. My topic then was “The Blessings of Liberty.” On that occasion I observed that to keep its freedoms every generation must earn them through understanding of the past, vigilance in the present, and determination for the future.

I mentioned that there are some people who regard our freedoms merely as their birthright which they may simply take for granted; that people would never shrink from the loss of little freedoms—by the other fellow, of course; and that still another group would procrastinate until the deluge. But the fact remains, I observed, that we have a battle to keep our freedoms from eroding just as Americans in every past age were obliged to struggle for theirs.

FOUNDERS DAY PROVIDES a good time to ask ourselves: Is the need for vigilance in the safeguarding of our precious rights any less than it was ten years ago? Are our rights today more secure than they were before? How do we feel about our rights anyway, or, perhaps more important, how do we feel about the rights of “the other fellow”? Finally, how do our schools and colleges measure up to their responsibilities in teaching the values which we want to preserve?
Polls taken of our young people in both high school and college have helped to answer these questions. These surveys have sampled the student attitude toward various problems of the day and toward the basic tenets of our democracy. Some of the best known of such polls were those made over a period of years at Purdue University under the direction of Dr. H. H. Remmers. One of his samplings was published about fourteen years ago under the title "Does Youth Believe in the Bill of Rights?" As you will ruefully recall, that was a time of national hysteria. It was at a time when some of our cherished concepts of freedom of expression, of association, and of belief itself were stunted by fear and intolerance. It was in that general period that Irving Dilliard, then of the St. Louis Post-Dispatch wrote: "I am convinced that the Bill of Rights would not be submitted and ratified as part of the Constitution were it presented in Congress today."

Dr. Remmers, paraphrasing the guarantee of the Bill of Rights, asked teenagers whether they agreed that there should be such freedoms. The answers in many instances were disquieting. For example, 41 per cent disagreed with the statement that newspapers and magazines should be allowed to print what they wanted except for military secrets, and 14 per cent were uncertain; 34 per cent felt that the government should prohibit some people from making public speeches, and 13 per cent were uncertain; 26 per cent thought that the police should be allowed to search a person or his home even without a warrant, and 5 per cent were uncertain; 52 per cent agreed or were uncertain that persons who refuse to testify against themselves should either be made to talk or be severely punished.

Ten years later, after we had emerged from the era of fear and suspicion when his first poll was made, Dr. Remmers' survey of young people's attitudes, though disclosing improvement in certain areas, still revealed a disturbing lack of change in certain opinions by appreciable segments of the school population.

Other similar surveys have been made from time to time. One of these, conducted by another expert, sampled student attitudes at an Eastern university. He, too, used the method of paraphrasing parts of the first ten amendments to the Constitution. The results again showed that many students were not in agreement with the Bill of Rights. As a matter of fact only about a third of the students correctly identified the source of the questions as the Bill of Rights or the Constitution. No single provision of the Bill of Rights commanded unanimous approval of the students.

Dr. Paul Nash, who made this study, asked: "What does all this mean?" He drew these conclusions: (1) that at no point in their formal education have most students studied the Constitution in a way which made its terms a permanent part of their stock of knowledge; (2) that there is widespread disagreement among students as to the worth of some of the amendments to the Constitution, including many which are regarded as the very cornerstone of American liberty; (3) that it is reasonable to assume that among the population as a whole many provisions of the Bill of Rights are regarded as anachronistic; and (4) that if a healthy democracy presupposes a people in harmony with the nation's basic beliefs as expressed in law, apparently either the Constitution or the opinions of the American public ought to be changed.

There is no doubt in my mind, and I know that there is no doubt in yours, that it is not the Bill of Rights which should be changed. It has served as the guiding star of our national destiny from almost the beginning of our history and it will continue to do so. No, the Bill of Rights should not be changed. But perhaps our attitudes toward it should. I see a need for all of us in our daily lives to rededicate ourselves to the maintenance of its principles, which are basic to our democracy. I see a need for our schools and colleges carefully to reappraise their roles in this continuing commitment. As your former distinguished Chancellor, Ethan Shepley, has noted, "It is the obligation of our University to prepare our youth for their role in society. As a community—in fact, as a world—our future depends in great measure on the quality and thoroughness of this preparation." A vital phase of this preparation, I submit, is acquiring thorough knowledge of, and adhering unswervingly to, the Constitution and its Bill of Rights, as well as making a continual and a searching appraisal of what our democratic system is and what it means to each one of us.

We need to remind ourselves of the fundamental principles which too many of us tend to take for granted. When I was at Washington University ten years ago, I mentioned the saying that "men more frequently require to be reminded than informed." I believe that by this process of reminding ourselves, of re-evaluating attitudes in terms of the great heritage of democratic freedom which is ours, and of rededicating ourselves to the enduring standards by which our Founding Fathers set their sights, we can effectively combat indifference to, and erosion of, our fundamental rights.

In this process of self-reminding, we must be sure that we are not just approving the Bill of Rights as an abstraction. The words themselves mean little if they are not implemented in our daily lives. Just recently I read the statement that "Too many approach the Bill of Rights... as they do the New Testament... in Samuel Butler's words they 'would be equally horrified to hear (it)... doubted or to see it practiced.'"

An illusion which many of us have, and I submit one of the reasons for unconcern about basic rights, is the assumption that our democratic system is an easy one to maintain. In allowing ourselves to think that this is so we fall into grievous error. It was not easy for our Founding Fathers to establish this form of government. They did so in many instances by great sacrifice—sacrifice in some cases of everything but their principles. Nor was it easy for them to keep and preserve the republic once it had been established as a foundling among nations. That too took courage and sacrifice. Now, all these years later, though the effort may seem less dramatic, the need
is no less compelling.

We can succeed in making our democratic form of government work only as long as we retain an accommodation of interests. This is essential in a government such as ours, embracing as it does such a pervasive diversity. I used the word "accommodation" advisedly, though the word "compromise" necessarily be more give-and-take, a more mature heed-essential in a government such as ours, embracing as it form of government work

on only as long as we re-

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WE CAN DO NO BETTER when in such a mood than to reflect on the Constitution itself as perhaps the best example of accommodation—of compromise in the best sense of the term. How did this come about? Because there were farsighted men among our forebears who had the capacity to see their work in the large perspective of an enduring union of separate states. One of these was Benja-

min Franklin. His words at the conclusion of the Constitu-
tional Convention are well worth recalling.

Four months of discussion, deliberation, and debate had gone on in the hot Philadelphia summer of 1787, and the delegates to the Constitutional Convention were getting ready for the final vote. It was Saturday, September 15, at almost six o'clock in the evening when Edmund Randolph of Virginia arose to explain that he could not approve the plan as it then stood. He moved that the state conventions be allowed to offer amendments to be submitted to another general convention. George Mason seconded the motion. Elbridge Gerry of Massa-

chusetts listed what to him were fatal shortcomings. And others were in opposition. Dissents were not unexpected, but unanimity was viewed by Franklin and others as of urgent importance. It was on the next day that Dr. Franklin presented a "mellow appeal for tolerance" that would produce the desired consensus:

I confess that there are several parts of this constit-

ution which I do not at present approve, but I am not sure I shall never approve them: For having lived long, I have experienced many instances of being obliged by better information or fuller consideration, to change opinions even on important subjects, which I once thought right, but found to be otherwise. It is therefore that the older I grow, the more apt I am to doubt my own judgment, and to pay more respect to the judgment of others.

On the whole, Sir, I cannot express a wish that every member of the Convention who may still have objections to it, would with me, on this occasion doubt a little of his own infallibility—and to make manifest our unanimity, put his name to this instru-

I submit that we can all take a leaf from Dr. Franklin’s book and by “doubting a little of our own infallibility” give our democratic system the leeway it sometimes needs to function.

A democracy is also constantly tested by talk, at times what strikes us as endless talk, in our legislative bodies. I do not mean to suggest that with proper safeguards a parliamentary or congressional body cannot properly curtail debate after liberal allowances have been made for the full exposition of ideas. But in a system such as ours impatience sometimes develops to let the opposition talk, particularly when we are convinced that we are right. As has been pointed out, the intolerant spirit “is the more dangerous when armed, as it usually is, with sincere conviction.” However much we sometimes dislike talk, whether it be in the halls of Congress or of a state legislature, in the courtroom or in the classroom, we must concede that the alternatives are far less appealing. For talk in a democracy is often a safety valve. Walter Lipp-

mann once aptly described the advantages of discussion in a democratic system, when he wrote:

A great deal of scorn has been poured out upon the endless talking done in representative parliaments. It is often tiresome. In great emergencies it may be dangerous. But this endless talking marks a very great advance in civilization. It required about five hundred years of constitutional development among the English-speaking peoples to turn the pugnacity and the predatory impulses of men into the channels of talk, rhetoric, bombast, reason, and persuasion. Decide the talk as much as you like, it is the civilized substitute for street brawls, gangs, conspiracies, assassinations, private armies. No other substitute has as yet been discovered.

These principles, I submit, apply not only to our own democracy but are equally applicable to the conduct of international relations. However much we may disagree with foreign adversaries it is much better to use the halls of the United Nations, the conference rooms of chancelleries and less formal surroundings for discussion than to employ the "less civilized substitutes," as Lipp-

mann put it, of the streets, or worse yet, the battlefields, to resolve our differences.

BUT IT IS NOT JUST IMPATIENCE with protracted talk that tests democracy; it is often talk, whether terse or prolix, spoken or written, that we do not want expressed because we think it is wrong, or even downright dangerous. In this area democracy, and the Bill of Rights on which it rests, comes under the severest kind of test. That test can be met if we remember Justice Holmes’s precepts that "time has upset many fighting faiths” and that the ultimate good desired is better reached by free trade in ideas—that the best test of truth is the power of the thought to get itself accepted in the competition of the market.”

In a case which our Court decided last term, Justice Black expressed the view that "The best way to promote

Continued on Page 46
This is the involved generation.

The phrase has become the password of the day and the major reason given for student riots in Berkeley, sit-ins in Montgomery, summer projects in Mississippi, student participation in educational and recreational programs for the underprivileged, even the Peace Corps.

While only a short time ago, "apathy" was considered a major problem on this campus, Washington University students today are also becoming involved in larger and larger numbers. Volunteers go regularly to a St. Louis Negro suburb and to the "inner city" to tutor underprivileged youngsters; through the Campus Y they volunteer to coach athletic teams in deprived neighborhoods, to paint and plaster and sew for a new community center; they join collegiate counterparts from all over the country in Mississippi civil rights projects; (they join the Peace Corps;) they demonstrate in St. Louis for civil rights and peace.

And as spring comes, an ever-growing number of students on this campus begin plans to go abroad—not as tourists, but as volunteers—to live and to work in an environment foreign to their own and to become deeply involved in it.

To try to understand why they seek involvement, we have asked four students who spent last summer living or working outside the United States to relate their experience in personal terms. Their personal comments follow.

While each of the four approached his experience abroad in a different way, they agree that the primary motive for all of them was the desire to put themselves in an environment completely different from their homes and from the campus, to go alone into situations where all surroundings were unusual and all people unfamiliar; to seek, in short, a "cultural shock."

YVETTE DRURY, a counselor in the Forsyth Residence Houses, is a graduate student in sociology from Chicago. Last summer she joined a small group of American students on an Experiment in International Living project in Montreal, Canada.
"Each of us went home with a clearer picture of who he was."

We were six and varied in color, sex, and background. We met for the first time less than a week before we were dropped in the middle of Montreal to spend eight weeks on an Experiment in International Living.

We were to plan and execute a day camp program for one hundred children in an urban community center, while living with families in other parts of the city.

In the next two months, we each met and grew to love about twelve dark-skinned children. We took them swimming, hiking, fishing, and bowling. Usually, it was the first time any of the children had experienced any of these activities. We showed them how to paint and to make belts and bracelets out of rope and gimp. We brought hot dogs and marshmallows, donated by grocers in the area, and roasted them on fires which we taught the children to build. We taught the children American folk songs and learned their Canadian national anthem by singing it with them each morning. We saw the same children come to camp happy some days and irritable others and wondered, sometimes, what had happened at home when they did not come at all. Curious, we went to their homes in the evenings to meet their mothers, aunts, sisters, or often, the friends who were the substitutes to our children for an entire family.

We lost a French-speaking nine-year-old in a traffic-filled English-speaking section of the city and searched for three hours before the police telephoned to say the child had been found, safe and sound. We discovered that children who had never been swimming before either would not touch the water without crying or would jump smiling into great depths when our eyes were turned elsewhere. We did not know or had forgotten, in our cocoon worlds, that fear is learned.

It was impossible at first, to keep even as few as eight children together on a city street or in a museum or a park. When eight-year-olds scrambled uninhibited over pews in austere Montreal cathedrals, we found, after having lost frayed tempers, that they never before had entered a public building, never seen a cathedral.

The group of older girls baked cookies and sold them with lemonade to earn money to dress up and have lunch in a restaurant, a thing none had ever done before. After a shirt was ripped in a fight during the day, we faced a screaming and swearing mother who took her child from camp on the spot. "Rowdy Americans were bad influences." The boy instead returned to recreation in the steaming streets of the slum.

We found some of the children warm and friendly, eager to join the group; some pathetically overfriendly, for fear of rejection; some openly hostile. We soon became aware of their myriad insecurities, looking beyond their behavior to grow to love them. We began to know them and to respect their efforts, and sometimes even their lack of effort. We gradually began to know each other as human beings. We increased the meaning of our own experiences, through working together and sharing discoveries, often about children with whom more than one of us worked.

We were five Whites and a Negro. We were two Midwesterners, two New Yorkers, a New Englander, and a Southerner. Two of us had been Peace Corps volunteers in Latin America, one had spent a summer in India, one had lived with a family in Switzerland, another in Sweden. For one of us, for me, it was the first time out of the United States.

We each saw our experiences in Montreal differently. We soon rose above talking about our differences and realized much of our sameness.

Each of us went home a different person from the student who had entered the Montreal slum district two months before. Each of us went home with a clearer picture of who he was, having seen himself act and react in a setting stripped of all that was familiar except humanity's basic heritages.
"When you give a part of yourself to a land, it becomes a part of you as well."

HENRY N. MASSIE is a sophomore in the School of Medicine. He spent last summer participating in a research project studying infantile malnutrition at the British-American Hospital in Lima, Peru. Although his home is in Ladue in suburban St. Louis, he is a resident counselor in Forsyth Houses.

I spent most of June, July, and August participating in studies of infant malnutrition at the British-American hospital in Lima, Peru. Intellectually and emotionally the summer was an experience I shall carry as part of me for the rest of my life.

Shortly before I left, an American woman, the wife of a Peruvian physician whom she had met and married while they were studying at Washington University, gave me some indication that my sudden attachment to the country was not so unusual as I had imagined.

"Lima becomes a way of life," said Mrs. Celestino Sanchez. "Perhaps Peru binds so strongly because there is so much of ourselves that we can give to it."

It seems to me she hit very close to the crux of the matter. When you give a part of yourself to a land, it becomes a part of you, as well.

In the hospital, I worked with frighteningly undernourished children who were brought in by an Indian mother or a nun or priest working in the slums. If the child survived the first few days, our research studies would begin. We fed them carefully measured diets and protein food supplements from a wide variety of sources.

Participation in this kind of work, so germane in the developing countries—whether as a Peace Corps volunteer digging a latrine, an economic adviser in tax reform, or a researcher in a hospital—must involve giving a part of ourselves to a people in need of help. It is an act of commitment.

Peru is a country in which the great bulk of the people live in a poverty so abject it is incomprehensible to North Americans. The population is almost entirely Indian. They pursue a way of life remarkably similar to their Inca forebears of 400 years ago and in many ways less advanced. One of the main stumbling blocks to Peru’s economic and social advancement is the virtual absence
of a middle class. In Lima, where sufficient industrialization exists to demand the training and education of white collar workers, a middle class is beginning to arise.

Approximately half of Lima's two million population live in the barriadas, the teeming shanty-town slums that encircle the city. Peasant families leave the land to seek the new civilization they have seen in a picture magazine. But in Lima there are low wages and little work.

The mother continues to bear children; the father deserts the family. Fifty per cent of the children die before they are five years old. At the Clinic Anglo Americana, we knew that even the children who survive bear life-long scars of their early malnutrition.

There was, however, another side to my Peru. I walked each day by the Spanish style homes, past the Inca burial mounds, ate the criollo, and went to concerts, plays, and parties with hospital and university friends. Peruvians of all backgrounds invited me into their homes.

One of these was Lourdes Salgado, whom I met at a pachamanca, the Peruvian counterpart of a barbecue. Lourdes is that new kind of Peruvian. She comes from a family of seven who live in a three-room adobe house a few blocks from the barriadas. Her family came to Lima from a mountain village when she was five. She teaches grammar school during the day and studies at the University of San Marcos. Her younger sister is studying to become a laboratory technician. They are the rising middle class.

With Lourdes as my guide, I learned how the Limenas live. After a time, I learned that it was not a cause for alarm when the driver of our scurrying colectivo (collective taxi) lifted his hands from the steering wheel to cross himself at every church we passed. I learned to accept an invitation to the birthday party of a six-year-old. Birthdays are grand occasions, or rather, excuses for grand occasions. Relatives of all ages and many friends pack the house to dance till early morning.

As the Salgados are part of the rising middle class, the Díaz family is part of the ruling aristocracy. Dr. Díaz, trained at Stanford, is chief obstetrician at the clinic. His son, Roberto, attended the University of Kansas school of agriculture. On the week of the Twenty-eighth of July, the celebration of Peru's independence, I accompanied them across the cordillera of the Andes into the sloping jungle of the Amazon basin, where the Díaz family has sunk its fortune into an experimental farm. Dr. Díaz believes the vast forested areas to the east of the Andes hold the key to Peru's future. Presently most agriculture is practiced on Peru's arid coastal strip by means of irrigation. The jungle regions produce little more than bananas and coffee. The Díazes are seeking to introduce new crops and develop pastureage in the newly cleared jungle fields. It is an expensive proposition, but it is working.

The jungle and the mountains were a refreshing break from Lima's ugliness. Returning to the city, I saw the low crumbling adobe buildings, the streets swarming with ancient cars held together by bailing wire, the diesel buses whose fumes choke the air and threaten to destroy the ornate balconies of the Spanish colonial era.

I returned to the children whose dark eyes look out from heads massive on skeleton bodies. But I returned, too, to a city that embodies one of the most exciting cultures of the world, where the Inca traditions live in many aspects of the life, where social mores are largely Spanish and where newspaper sports headlines daily scream of the Corridade Toro, in preparation for a religious festival.

In Peru, in Lima, it is impossible not to succumb to the way of life, not to become intellectually and emotionally involved—impossible even in three months.
"By the end of our Russian journey, I realized...the significance—good and bad—of being an American Negro."

Thirteen Americans, twelve students, and one adult leader representing twelve YM-YWCA's, began on June 28, 1964, a journey to the Soviet Union.

We became a floating little island called America passing through Western Europe to Warsaw, then on into the Soviet Union—Leningrad, Moscow, Yerevan, Tbilissi, and Kiev. We were thirteen Americans "of diverse backgrounds, political views, races, and religions," in the words of the YM-YWCA summer projects committee.

On July 15, as our train pulled away from the Soviet border town of Grodno, my thoughts turned back two weeks to the day of the signing of the Civil Rights bill in Washington. I mentally reviewed the age-old concept of race pride, the new effort to promote pride in being Negro, in being an American of African descent.

During the next forty days and forty nights in the Soviet Union, I suffered growing pains in speaking as an equal American who is a Negro, not as an American who has been allowed to speak for white American citizens. Frustration was the result of participating in this group and of articulating my conceptions of American society. I experienced the anxiety of assuming the role of an American as a Negro, not in spite of being a Negro.

The frustration led me to a race pride or race conscious­ness, to a simple recognition of a distinct ethnic identity that is neither inferior to nor superior to any other American ethnic group. (Perhaps the Black Muslims have per­verted this consciousness to black racism, but absolutely no more than the Ku Klux Klan has perverted race con­sciousness to white racism.)

I was faced with frustration in interpreting American society to Soviet students with whom we spent fifteen days at Kiev Polytechnic youth camp and whom we met at other points in our travels, but I faced frustration within the group, too.

Each member of the group had a role in this personal change. With most of the members, I found it easy to agree in principle about most issues of contemporary American society, although we sometimes disagreed on the solution of these issues.

We discussed health-care for the aged, labor-manage­ment relations, political institutions, and, repeatedly, as news drifted to us about the Civil Rights movement in the South, American race relations.
Free exchange was not always easy. Incessantly, I found myself at loggerheads with one member of the group. To disagree on definitions of terms with a Soviet student was one thing, to find myself unable to interpret my attitudes to an American raised my frustration to frenzied moments of disgust and anger. There were many cases of this impasse: He could not understand why brutality has put the police in disrepute among some Negroes; he could not understand why the Negro no longer was willing to accept second class citizenship.

Although the experience led to a frustration that lasted until the Christmas holidays, in reflection, these were a valuable part of the summer, for these are the attitudes that I, as American Negro, must face. Without this individual I would not have become cognizant of a real element in American society.

Conversations with the Soviet students demanded the same crystallization of my ideas on American society. I was astounded by the curiosity about America exhibited by the students. On many occasions, the people asked questions that demanded an articulation of the intricacies of the American political system: It was necessary to explain why we have many organizations that do the same thing, to interpret the party system, the contemporary political-social atmosphere, and the meaning of the Presidency. It was necessary to describe the various functions and roles of religion in the American scene. These discussions were not simple. Hours, often into the early morning, were consumed in intense, though amicable, conversations.

At other times, interpreting America added to my frustration. First and foremost to a Russian, I was African. Only later did I become an American of African descent. Once, while standing in a hotel in Yerevan, Armenia, I noticed from the corner of my eye, a little girl looking at me carefully, then seeming to inquire of my identity from a group of adults. To set the record straight I winked at the girl (hiding a glint of anger) and informed them I was an American Negro. A friendly conversation ensued when we discovered we could converse in English. On another occasion, while strolling across Red Square, a lady looked at me and said "Vive la Cuba." In my most fluent, quick-fire Russian, I retorted "I am an American Negro."

As I have thought about these incidents and others, I have realized that I was not as disturbed by the mistaken identity as I was by the fact that they unknowingly were challenging what I subjectively was beginning to feel—a pride in being an American Negro.

This frustration was intensified in discussing the paradoxes in American society, such as poverty and wealth, equality and racial conflict, freedom and control. By discussing these factors, America was brought from an idealism of concepts to a reality of practices for me. I realized that the idealism of the Declaration of Independence became the practicality of the Constitution and the reality of political compromise.

The Soviet students were just as open with us as we were with them. We discovered a surprising amount of difference in attitudes about Soviet life. We had been told we would meet "activists" who advocated a strict party line. I had also expected to find some people, the Russian "beatniks," who disagreed completely with the party line. I found in discussions, however, that almost all the students supported the country's political structure. "The motherland is the motherland," the students agreed. Yet there were a few Russian students who disagreed with the practices of the party. With no prompting from us, they admitted the shortcomings in agricultural and industrial planning, discussed the latent dissatisfaction of the agricultural workers, and acknowledged the existence of controls on internal movement of the population, on social activities, and on the mind. They suggested that the developing nations may not develop socialism into communism.

These same students, however, said that the Soviet regime was responsible for the great economic development of their country. They pointed out the great benefits to them as students, the position of their country among world powers, the scientific achievements of their country, and the general improvements of living conditions in the country. They said elaborately what an old woman carrying a heavy pack on her back near the camp said simply. "Things are better than they were before."

By the end of our Russian journey, I realized not only a pride in being a Negro, but also the significance—good and bad—of being an American Negro.

To borrow a phrase from my Soviet friends, "The motherland is the motherland."
"The only way to visit a country today is to contribute something to it."

IRA SHARP, a senior in the College of Liberal Arts, past president of the Student Assembly, and counselor in the Forsyth Residence Houses, traveled around the world last summer participating in an Asian Seminar sponsored by the World University Service and the YWCA. His home is in Creve Coeur in suburban St. Louis.

There is a story told of the childhood of Buddha which I carried with me last summer through the Far East and India and returned home to ponder.

According to legend, astrologers predicted that the Indian prince would become either a great emperor or, on beholding four signs (representing senility, sickness, death, and renunciation) would give up the world to become a Buddha.

Soddodana, his father, choosing the former career, decided to plan his son's life to guard him against any unseemly sights. The prince grew to manhood.

One day, however, the Devas, angels, became impatient. One changed himself into an aged man and appeared before the prince. On successive days Buddha saw a sick man, a body on a bier, and a monk in contemplation. The shock of suddenly experiencing all of the miseries of man filled the prince with horror so great, he gave up the world.

After I traveled through the Far East and India, I wondered if Buddha would have become a saviour if his father had not shielded him from the world, for I found that sensitivity within myself could not exist in the presence of overwhelming human misery.

Last summer I participated in an Asian Seminar sponsored by the World University Service and the YWCA. We spent three weeks in Japan, Hong Kong, and Thailand, and seven weeks in India.

I had expected to be sensitive to the poverty which I knew I would encounter in India; I had expected to be shocked and revolted. Instead I discovered within me what I can call only a "saturation point." After less than forty-eight hours in Calcutta, our first stop in India, I had reached that point. I became almost oblivious of the poverty everywhere around me. I looked on and over it.

We had come to Calcutta two days before and had begun to tour the teeming city. Early one morning several of us rose to see the Howra Station area as it slept and as it awoke.

Howra Station is the receiving area for refugees from East Pakistan, through which pass (if they are lucky
enough to be able) those fleeing from what has come to be an alien land. Most of the people whom we saw were Hindus who had believed they could continue to live in Pakistan after partition. Only sixteen years later have they come to the conclusion that this is impossible. So they flee with the few possessions they are permitted to take.

They come to Calcutta where, since partition, the population has risen at a rate to stagger the imagination and where there is no work. The government of India pursues a program of geographical decentralization of industry under which all industrial aid goes to other parts of the country. So in Calcutta a stagnant economy and a fifty per cent population increase have stifled the city.

At 5 a.m. we saw the homes of these people—the streets of Calcutta. They live in doorways, on window sills, on sidewalks, on anything that will hold a human body while it lies down to sleep. We watched them prepare for another day—searching for cow dung to burn under the few grains of rice which are breakfast, washing in a public trough, competing with cows for the shelter of a doorway in the monsoon. They are not individuals, they are sickness and death personified.

What a relief to arrive in Belathur, a poor agricultural village in South India, but one in which the people have land and houses—and hope. Almost everyone in the village suffers from skin, eye, and ear diseases, but they could be identified as individuals—as a pretty girl who is deaf and dumb, as a year-old baby whose sore-covered body quickly responded to the penicillin which we had brought with us. In Belathur I was as acutely sensitive to suffering as I had been unconscious of that same suffering in Calcutta.

We were in Belathur to continue a project begun by World University Service students the previous summer. Our group of seven Americans was joined by an equal number of Indian university students. Except for a brief time, immediately after the death of Gandhi, Indian students have not become involved in helping their less fortunate countrymen. It was hoped that the seven would begin to interest others in service projects.

The earlier group had set its goal at building 600 feet of road and an equal amount of drainage ditch. The goal was set with the realization that the group might not receive help from the villagers.

By the end of that summer, however, Belathur had 10,000 feet of roadway and three quarters of a mile of ditch. Each village household had sent at least one member daily to work with the students. This was despite its being the season when crops were sown.

Many Indian development authorities and other Americans had cautioned us to expect the road to be in rubble and the 1963 work project forgotten. It was not. During the intervening months the villagers had forgotten neither the students nor the work they had done. The roads and ditches were not only maintained; the villagers had improved them.

We were to continue the improvements on the roads and ditches and to fill in village manure pits. The pits, some of which were 15 by 34 feet on the surface, had been formed over several hundreds of years. The villagers had first piled manure there to be saved for use in building and as fuel. When India's rains came between July and September the pits filled with water which seeped downward to pollute the wells beneath.

The village council and our group rented a tractor from the government to fill in the pits. We planted banana and coconut trees on the surface to hold the moisture. The trees will also provide sufficient income within five years to build a village high school and roads and to make other improvements.

I could not help compare the sadness I felt when we left Belathur with the immense feeling of relief I had experienced when we left Calcutta.

It suddenly made clear the truth of a remark made to me in Bombay by Mrs. Nayantara Saghal, niece of the late Prime Minister Nehru and a Washington University visitor in 1963:

"The only way to visit a country today is to contribute something to it."
The subject of the special report on the following pages is a critical and urgent one: The plight of the humanities. The special sixteen-page insert was prepared as a joint undertaking by the representatives of 22 colleges and universities, including Washington University, who comprise Editorial Projects for Education, Incorporated. EPE is a non-profit, non-partisan cooperative enterprise. Its reports on major problems and important issues in higher education appear each year in hundreds of college and university publications throughout the country.

To supplement this national view of a vital problem, this issue also presents two more specific examinations of the subject: one by a member of Washington University’s humanities faculty and the other by a prominent business executive. Dr. Leon A. Gottfried, associate professor of English, gives his reactions to the picture given in the national report and attempts to relate these observations to his work. James F. Oates, Jr., chairman of the board of the Equitable Life Assurance Society of the United States, discusses the importance of the humanities to modern business and to today’s society.
THE PLIGHT of the HUMANITIES

A SPECIAL REPORT
Amidst great material well-being, our culture stands in danger of losing its very soul.
With the greatest economic prosperity ever known by Man;
With scientific accomplishments unparalleled in human history;
With a technology whose machines and methods continually revolutionize our way of life:
We are neglecting, and stand in serious danger of losing, our culture's very soul.
This is the considered judgment of men and women at colleges and universities throughout the United States—men and women whose life's work it is to study our culture and its "soul." They are scholars and teachers of the humanities: history, languages, literature, the arts, philosophy, the history and comparison of law and religion. Their concern is Man and men—today, tomorrow, throughout history. Their scholarship and wisdom are devoted to assessing where we humans are, in relation to where we have come from—and where we may be going, in light of where we are and have been.
Today, examining Western Man and men, many of them are profoundly troubled by what they see: an evident disregard, or at best a deep devaluation, of the things that refine and dignify and give meaning and heart to our humanity.

How is it now with us?" asks a group of distinguished historians. Their answer: "Without really intending it, we are on our way to becoming a dehumanized society.

A group of specialists in Asian studies, reaching essentially the same conclusion, offers an explanation:
"It is a truism that we are a nation of activists, problem-solvers, inventors, would-be makers of better mousetraps... The humanities in the age of super-science and super-technology have an increasingly difficult struggle for existence."

"Soberly," reports a committee of the American Historical Association, "we must say that in American society, for many generations past, the prevailing concern has been for the conquest of nature, the production of material goods, and the development of a viable system of democratic government. Hence we have stressed the sciences, the application of science through engineering, and the application of engineering or quantitative methods to the economic and political problems of a prospering republic."
The stress, the historians note, has become even more intense in recent years. Nuclear fission, the Communist threat, the upheavals in Africa and Asia, and the invasion of space have caused our concern with “practical” things to be “enormously reinforced.”

Says a blue-ribbon “Commission on the Humanities,” established as a result of the growing sense of unease about the non-scientific aspects of human life: “The result has often been that our social, moral, and aesthetic development lagged behind our material advance....

“The state of the humanities today creates a crisis for national leadership.”

THE CRISIS, which extends into every home, into every life, into every section of our society, is best observed in our colleges and universities. As both mirrors and creators of our civilization’s attitudes, the colleges and universities not only reflect what is happening throughout society, but often indicate what is likely to come.

Today, on many campuses, science and engineering are in the ascendency. As if in consequence, important parts of the humanities appear to be on the wane. Scientists and engineers are likely to command the best job offers, the best salaries. Scholars in the humanities are likely to receive lesser rewards.

Scientists and engineers are likely to be given financial grants and contracts for their research—by government agencies, by foundations, by industry. Scholars in the humanities are likely to look in vain for such support.

Scientists and engineers are likely to find many of the best-qualified students clamoring to join their ranks. Those in the humanities, more often than not, must watch helplessly as the talent goes next door.

Scientists and engineers are likely to get new buildings, expensive equipment, well-stocked and up-to-the-minute libraries. Scholars in the humanities, even allowing for their more modest requirements of physical facilities, often wind up with second-best.

Quite naturally, such conspicuous contrasts have created jealousies. And they have driven some persons in the humanities (and some in the sciences, as well) to these conclusions:

1) The sciences and the humanities are in mortal competition. As science thrives, the humanities must languish—and vice versa.

2) There are only so many physical facilities, so much money, and so much research and teaching equipment to go around. Science gets its at the expense of the humanities. The humanities’ lot will be improved only if the sciences’ lot is cut back.

To others, both in science and in the humanities, such assertions sound like nonsense. Our society, they say, can well afford to give generous support to both science and the humanities. (Whether or not it will, they admit, is another question.)

A committee advising the President of the United States on the needs of science said in 1960:

“... We repudiate emphatically any notion that science research and scientific education are the only kinds of learning that matter to America.... Obviously a high civilization must not limit its efforts to science alone. Even in the interests of science itself, it is essential to give full value and support to the other great branches of Man’s artistic, literary, and scholarly activity. The advancement of science must not be accomplished by the impoverishment of anything else....”

The Commission on the Humanities has said:

“Science is far more than a tool for adding to our security and comfort. It embraces in its broadest sense all efforts to achieve valid and coherent views of reality; as such, it extends the boundaries of experience and adds new dimensions to human character. If the interdependence of science and the humanities were more generally understood, men would be more likely to become masters of their technology and not its unthinking servants.”

None of which is to deny the existence of differences between science and the humanities, some of which are due to a lack of communication but others of which come from deep-seated misgivings that the scholars in one vineyard may have about the work and philosophies of scholars in the other. Differences or no, however, there is little doubt that, if Americans should choose to give equal importance to both science and the humanities, there are enough material resources in the U.S. to endow both, amply.

THUS FAR, however, Americans have not so chosen. Our culture is the poorer for it.
the humanities' view:

Mankind is nothing without individual men.

"Composite man, cross-section man, organization man, status-seeking man are not here. It is still one of the merits of the humanities that they see man with all his virtues and weaknesses, including his first, middle, and last names."

DON CAMERON ALLEN
Why should an educated but practical American take the vitality of the humanities as his personal concern? What possible reason is there for the business or professional man, say, to trouble himself with the present predicament of such esoteric fields as philosophy, exotic literatures, history, and art? In answer, some quote Hamlet:

What is a man
If his chief good and market of his time
Be but to sleep and feed? a beast, no more.

Others, concerned with the effects of science and technology upon the race, may cite Lewis Mumford:

"... It is now plain that only by restoring the human personality to the center of our scheme of thought can mechanization and automation be brought back into the services of life. Until this happens in education, there is not a single advance in science, from the release of nuclear energy to the isolation of DNA in genetic inheritance, that may not, because of our literally absent-minded automation in applying it, bring on disastrous consequences to the human race."

Says Adlai Stevenson:

"To survive this revolution [of science and technology], education, not wealth and weapons, is our best hope—that largeness of vision and generosity of spirit which spring from contact with the best minds and treasures of our civilization."

The Commission on the Humanities cites five reasons, among others, why America's need of the humanities is great:

1) All men require that a vision be held before them, an ideal toward which they may strive. Americans need such a vision today as never before in their history. It is both the dignity and the duty of humanists to offer their fellow-countrymen whatever understanding can be attained by fallible humanity of such enduring values as justice, freedom, virtue, beauty, and truth. Only thus do we join ourselves to the heritage of our nation and our human kind.

2) Democracy demands wisdom of the average man. Without the exercise of wisdom free institutions
and personal liberty are inevitably imperiled. To
know the best that has been thought and said in
former times can make us wiser than we otherwise
might be, and in this respect the humanities are not
merely our, but the world's, best hope.

"3) . . . [Many men] find it hard to fathom the
motives of a country which will spend billions on its
outward defense and at the same time do little to
maintain the creative and imaginative abilities of its
own people. The arts have an unparalleled capability
for crossing the national barriers imposed by language
and contrasting customs. The recently increased
American encouragement of the performing arts is
to be welcomed, and will be welcomed everywhere
as a sign that Americans accept their cultural responsi-
bilities, especially if it serves to prompt a corre-
sponding increase in support for the visual and the
liberal arts. It is by way of the humanities that we
best come to understand cultures other than our own,
and they best to understand ours.

"4) World leadership of the kind which has come
upon the United States cannot rest solely upon su-
perior force, vast wealth, or preponderant technology.
Only the elevation of its goals and the excellence of
its conduct entitle one nation to ask others to follow
its lead. These are things of the spirit. If we appear
to discourage creativity, to demean the fanciful and
the beautiful, to have no concern for man's ultimate
destiny—if, in short, we ignore the humanities—then
both our goals and our efforts to attain them will be
measured with suspicion.

"5) A novel and serious challenge to Americans
is posed by the remarkable increase in their leisure
time. The forty-hour week and the likelihood of a
shorter one, the greater life-expectancy and the earlier
ages of retirement, have combined to make the bless-
ing of leisure a source of personal and community
concern. 'What shall I do with my spare time' all-too-
quickly becomes the question 'Who am I? What shall
I make of my life?' When men and women find
nothing within themselves but emptiness they turn
to trivial and narcotic amusements, and the society
of which they are a part becomes socially delinquent
and potentially unstable. The humanities are the im-
memorial answer to man's questioning and to his
need for self-expression; they are uniquely equipped
to fill the 'abyss of leisure.' "

The arguments are persuasive. But, aside from the
scholars themselves (who are already convinced), is
anybody listening? Is anybody stirred enough to do
something about "saving" the humanities before it
is too late?

"Assuming it considers the matter at all," says
Dean George C. Branam, "the population as a whole
sees [the death of the liberal arts tradition] only as
the overdue departure of a pet dinosaur.

"It is not uncommon for educated men, after
expressing their overwhelming belief in liberal educa-
tion, to advocate sacrificing the meager portion found
in most curricula to get in more subjects related to
the technical job training which is now the principal
goal. . . .

"The respect they profess, however honestly they
proclaim it, is in the final analysis superficial and
false: they must squeeze in one more math course
for the engineer, one more course in comparative
anatomy for the pre-medical student, one more ac-
counting course for the business major. The business
man does not have to know anything about a Be-
thoven symphony; the doctor doesn't have to com-
prehend a line of Shakespeare; the engineer will
perform his job well enough without ever having
heard of Machiavelli. The unspoken assumption is
that the proper function of education is job training
and that alone."

Job training, of course, is one thing the humanities
rarely provide, except for the handful of students
who will go on to become teachers of the humanities
themselves. Rather, as a committee of schoolmen
has put it, "they are fields of study which hold values
for all human beings regardless of their abilities,
interests, or means of livelihood. These studies hold
such values for all men precisely because they are
focused upon universal qualities rather than upon
specific and measurable ends. . . . [They] help man to
find a purpose, endow him with the ability to criticize
intelligently and therefore to improve his own society,
and establish for the individual his sense of identity
with other men both in his own country and in the
world at large."

Is THIS reason enough for educated Americans
to give the humanities their urgently needed support?
The humanities: "Our lives are..."
the substance they are made of."

...the national use of our environment and our material accomplishments.

... the national aesthetic and beauty or lack of it...
"A million-dollar project without a million dollars"

THE CRISIS in the humanities involves people, facilities, and money. The greatest of these, many believe, is money. With more funds, the other parts of the humanities' problem would not be impossible to solve. Without more, they may well be.

More money would help attract more bright students into the humanities. Today the lack of funds is turning many of today's most talented young people into more lucrative fields. "Students are no different from other people in that they can quickly observe where the money is available, and draw the logical conclusion as to which activities their society considers important," the Commission on the Humanities observes. A dean puts it bluntly: "The bright student, as well as a white rat, knows a reward when he sees one."

More money would strengthen college and university faculties. In many areas, more faculty members are needed urgently. The American Philosophical Association, for example, reports: "... Teaching demands will increase enormously in the years immediately to come. The result is: (1) the quality of humanistic teaching is now in serious danger of deteriorating; (2) qualified teachers are attracted to other endeavors; and (3) the progress of research and creative work within the humanistic disciplines falls far behind that of the sciences."

More money would permit the establishment of new scholarships, fellowships, and loans to students.

More money would stimulate travel and hence strengthen research. "Even those of us who have access to good libraries on our own campuses must travel far afield for many materials essential to scholarship," say members of the Modern Language Association.

More money would finance the publication of long-overdue collections of literary works. Collections of Whitman, Hawthorne, and Melville, for example, are "officially under way [but] face both scholarly and financial problems." The same is true of translations of foreign literature. Taking Russian authors as an example, the Modern Language Association notes: "The major novels and other works of Turgenev, Gogol, Dostoevsky, Tolstoy, and Chekhov are readily available, but many of the translations are inferior and most editions lack notes and adequate introduc-
There are more than half a dozen translations of *Crime and Punishment*. . . but there is no English edition of Dostoevsky’s critical articles, and none of his complete published letters. [Other] writers of outstanding importance. . . have been treated only in a desultory fashion.

More money would enable historians to enter areas now covered only adequately. “Additional, more substantial, or more immediate help,” historians say, is needed for studies of Asia, Russia, Central Europe, the Middle East, and North Africa; for work in intellectual history; for studying the history of our Western tradition “with its roots in ancient, classical, Christian, and medieval history”; and for “renewed emphasis on the history of Western Europe and America.” “As modest in their talents as in their public position,” a committee of the American Historical Association says, “our historians too often have shown themselves timid and pedestrian in approach, dull and unimaginative in their writing. Yet these are vices that stem from public indifference.”

More money would enable some scholars, now engaged in “applied” research in order to get funds, to undertake “pure” research, where they might be far more valuable to themselves and to society. An example, from the field of linguistics: Money has been available in substantial quantities for research related to foreign-language teaching, to the development of language-translation machines, or to military communications. “The results are predictable,” says a report of the Linguistics Society of America. “On the one hand, the linguist is tempted into subterfuge—dressing up a problem of basic research to make it look like applied research. Or, on the other hand, he is tempted into applied research for which he is not really ready, because the basic research which must lie behind it has not yet been done.”

More money would greatly stimulate work in archaeology. “The lessons of Man’s past are humbling ones,” Professor William Foxwell Albright, one of the world’s leading Biblical archaeologists, has said. “They are also useful ones. For if anything is clear, it is that we cannot dismiss any part of our human story as irrelevant to the future of mankind.” But, reports the Archaeological Institute of America, “the knowledge of valuable ancient remains is often permanently lost to us for the lack of as little as $5,000.”
MORE MONEY: that is the great need. But where will it come from?

Science and technology, in America, owe much of their present financial strength—and, hence, the means behind their spectacular accomplishments—to the Federal government. Since World War II, billions of dollars have flowed from Washington to the nation's laboratories, including those on many a college and university campus.

The humanities have received relatively few such dollars, most of them earmarked for foreign language projects and area studies. One Congressional report showed that virtually all Federal grants for academic facilities and equipment were spent for science; 87 percent of Federal funds for graduate fellowships went to science and engineering; by far the bulk of Federal support of faculty members (more than $60 million) went to science; and most of the Federal money for curriculum strengthening was spent on science. Of $1.126 billion in Federal funds for basic research in 1962, it was calculated that 66 percent went to the physical sciences, 29 percent to the life sciences, 3 percent to the psychological sciences, 2 percent to the social sciences, and 1 percent to "other" fields. (The figures total 101 percent because fractions are rounded out.)

The funds—particularly those for research—were appropriated on the basis of a clearcut quid pro quo: in return for its money, the government would get research results plainly contributing to the national welfare, particularly health and defense.

With a few exceptions, activities covered by the humanities have not been considered by Congress to contribute sufficiently to "the national welfare" to qualify for such Federal support.

I

T is on precisely this point—that the humanities are indeed essential to the national welfare—that persons and organizations active in the humanities are now basing a strong appeal for Federal support.

The appeal is centered in a report of the Commission on the Humanities, produced by a group of distinguished scholars and non-scholars under the chairmanship of Barnaby C. Keeney, the president of Brown University, and endorsed by organization after organization of humanities specialists.

"Traditionally our government has entered areas where there were overt difficulties or where an opportunity had opened for exceptional achievement," the report states. "The humanities fit both categories, for the potential achievements are enormous while the troubles stemming from inadequate support are comparably great. The problems are of nationwide scope and interest. Upon the humanities depend the national ethic and morality, the national aesthetic and beauty or the lack of it, the national use of our environment and our material accomplishments. . . . "The stakes are so high and the issues of such magnitude that the humanities must have substantial help both from the Federal government and from other sources."

The commission's recommendation: "the establishment of a National Humanities Foundation to parallel the National Science Foundation, which is so successfully carrying out the public responsibilities entrusted to it."

S

UCH A PROPOSAL raises important questions for Congress and for all Americans.

Is Federal aid, for example, truly necessary? Cannot private sources, along with the states and municipalities which already support much of American higher education, carry the burden? The advocates of Federal support point, in reply, to the present state of the humanities. Apparently such sources of support, alone, have not been adequate.

Will Federal aid lead inevitably to Federal control? "There are those who think that the danger of

("Until they want to, it won't be done."

BARNABY C. KEENEY (opposite page), university president and scholar in the humanities, chairs the Commission on the Humanities, which has recommended the establishment of a Federally financed National Humanities Foundation. Will this lead to Federal interference? Says President Keeney: "When the people of the U.S. want to control teaching and scholarship in the humanities, they will do it regardless of whether there is Federal aid. Until they want to, it won't be done."
Federal control is greater in the humanities and the arts than in the sciences, presumably because politics will bow to objective facts but not to values and taste," acknowledges Frederick Burkhardt, president of the American Council of Learned Societies, one of the sponsors of the Commission on the Humanities and an endorser of its recommendation. "The plain fact is that there is always a danger of external control or interference in education and research, on both the Federal and local levels, in both the public and private sectors. The establishment of institutions and procedures that reduce or eliminate such interference is one of the great achievements of the democratic system of government and way of life."

Say the committeemen of the American Historical Association: "A government which gives no support at all to humane values may be careless of its own destiny, but that government which gives too much support (and policy direction) may be more dangerous still. Inescapably, we must somehow increase the prestige of the humanities and the flow of funds. At the same time, however grave this need, we must safeguard the independence, the originality, and the freedom of expression of those individuals and those groups and those institutions which are concerned with liberal learning."

Fearing a serious erosion of such independence, some persons in higher education flatly oppose Federal support, and refuse it when it is offered.

Whether or not Washington does assume a role in financing the humanities, through a National Humanities Foundation or otherwise, this much is certain: the humanities, if they are to regain strength in this country, must have greater understanding, backing, and support. More funds from private sources are a necessity, even if (perhaps especially if) Federal money becomes available. A diversity of sources of funds can be the humanities' best insurance against control by any one.

Happily, the humanities are one sector of higher education in which private gifts—even modest gifts—can still achieve notable results. Few Americans are wealthy enough to endow a cyclotron, but there are many who could, if they would, endow a research fellowship or help build a library collection in the humanities.

In both public and private institutions, in both small colleges and large universities, the need is urgent. Beyond the campuses, it affects every phase of the national life.

This is the fateful question:
Do we Americans, amidst our material well-being, have the wisdom, the vision, and the determination to save our culture's very soul?

The report on this and the preceding 15 pages is the product of a cooperative endeavor in which scores of schools, colleges, and universities are taking part. It was prepared under the direction of the group listed below, who form EDITORIAL PROJECTS FOR EDUCATION, a non-profit organization associated with the American Alumni Council. (The editors, of course, speak for themselves and not for their institutions.) Copyright © 1965 by Editorial Projects for Education, Inc. All rights reserved; no part may be reproduced without express permission of the editors. Printed in U.S.A.

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*
During Founders Week, James F. Oates, Jr., chairman of the board and chief executive officer of the Equitable Life Assurance Society, gave the main address at the Business and Industry luncheon. The ideas he expressed seemed especially appropriate to the theme of the special report in this issue on “The Plight of the Humanities.” Here then, are a few observations on liberal education and the humanities by an outstanding business leader.

BUSINESS AND THE HUMANITIES

I have been long familiar with the question of whether business men are properly concerned with results other than immediate dollar profits. Are there standards for business achievement other than the legal attainment of optimum current dollar profits? It is suggested that agreement with the view that profits should guide business management does not mean that business leaders and business enterprises have no concern with the welfare of society or that there is no substance to the concept of corporate citizenship. As a matter of fact, a moment’s reflection is convincing that long-term continuing profits can be achieved only where the enterprise is found to be acceptable by the public which it serves and where the society in which it operates enjoys health, education, economic strength and political and religious freedom. This means that philanthropic organizations including educational institutions must be created, maintained, and made successful.

Recently I have taken some pains to satisfy myself that the increasing acceptance by business of high citizenship responsibility is sound, not only socially, but also from a hard-headed business point of view.

A most significant and recent report by The Commission on the Humanities has been widely distributed. This Commission began its work early in 1963 and delivered its report on April 30, 1964. It was sponsored by the American Council of Learned Societies, the Council of Graduate Schools in the United States, and the United Chapters of Phi Beta Kappa. The first paragraph of the statement of The Commission on the Humanities reads as follows:

The humanities are the study of that which is most human. Throughout man’s conscious past they have played an essential role in forming, preserving, and transforming the social, moral, and aesthetic values of every man in every age. One cannot speak of history or culture apart from the humanities. They not only record our lives, our lives are the very substance they are made of. Their subject is every man. We propose, therefore, a program for all our people, a program to meet a need no less serious than that for national defense. We speak, in truth, for what is being defended—our beliefs, our ideals, our highest achievements.

Certainly the qualifications for business success in modern times include the capacity to select trustworthy
and competent assistants to whom responsibility for action, under general supervision, may be confidently delegated. It is said that the chief qualification of an executive is to induce another to do his work better than he can do it himself.

Another underlying characteristic of high quality business leadership is the capacity to distinguish between the important and the unimportant, hour after hour, week after week, month after month. A third characteristic is suggested to be an informed instinct which differentiates between principle and expedience, and which is supported by steadfast courage not merely to choose principles but to do so in a realistic fashion.

If it can be demonstrated that a liberal education serves to provide these subtle qualifications for business success, it must be conceded that the support of liberal education by business is an imperative for our times. To probe a little deeper, it seems rather obvious that skill in selecting assistants and delegating responsibilities must involve the capacity to understand something about the minds and emotions of other men. This means that one must seek to learn how other men think, including men not like one's self. It is relevant, therefore, to remember that at the very heart of liberal education is found a process designed to develop the power to think, by the study and discussion of a discipline, a field of learning, with one's contemporaries under the leadership of a trained scholar. The requirements of the liberal educational tradition in this setting have thus had a profound, if not paramount, influence in the development among thousands of students of more and more power to think. This is quite obviously a most tangible and practical result.

Likewise, to distinguish between the important and unimportant calls for the recognition and adaptation of essential features of the liberal tradition. Life is composed of a series of questions to be answered and problems to be solved. There are two steps to the answer to any question or the solution of any problem. The first is the historical step, to find the facts, the facts as they really are, not as you think they are, hope they are, or perhaps as they really ought to be. The second step is the philosophical step. That is, having found the facts, what are the criteria of value, the standards of life you wish to serve by the judgment you must make on the basis of those facts? There is no rule or magic formula to teach you what is valuable, what is true, what is good, what is just. There is no place that you can find such a rule or magic formula, but the very process of liberal education serves to equip a man to decide for himself what gods he seeks to serve.

As you analyze a set of facts to determine what is important and what is unimportant, your measurement tool is your scale of values, a scale which is the product of your experience in thinking and observing results, a scale which you find and develop by using it. The results of such use are incontestably tangible and, consequently, of vital practical significance.

The individual's scale of value is, of course, a mysterious product coming from his family, environment, religious background, and education. If a man's education has led him inexorably to a study and understanding of the standards by which men have acted throughout the ages, that man has a measurement tool of considerable practical consequence. Over the ages students in liberal institutions have been compelled by discussion with fellow students under trained direction to know, remember, and thereafter recognize such standards.

Also the differentiation between principle and expedience involves the possession and application of an exacting scale of values. Principle must never be compromised, but it must be put to work to bring forth realistic results. Principle, of course, is and must be the guiding star from which no deviation can be condoned. The task of daily life is to so apply principle that it brings forth its practical fruits in due season. Thus, principle can be useful and in that sense expedient if it is a sanction and not an excuse.

Let me illustrate from my own business experience. There came one day, in the conduct of a natural gas system, the realization that the public in a large northern city could be served by natural gas for home heating on an economical basis only if vast quantities of this fuel could be safely and economically stored near the market during the winter periods of the year when the pipelines' available supplies far exceeded current demands. The scientists and engineers gave assurance that the gas could be so stored in a nearby geological structure. The only way to ascertain if the technicians' opinions were correct involved the construction of a substantial plant, the installation of mighty pumps, and the actual storage of millions and millions of cubic feet of gas. To conduct this test involved the expenditure of many millions of dollars and a serious risk to business prestige and public reputation. We were encouraged to go forward with faith and courage on the principle that the opportunities for public service were so great that we dared not fail to make the attempt.

This encouragement came from older, wiser, and more experienced men, men who were the products of a philosophical background that trusted principle and made it expedient. The leader of this group was a great and good man; a man of whom it was said after his death, by a university chancellor: "He read a balance sheet and James Joyce with equal comprehension and complete recall."

Certainly essential qualifications for business success are definitely stimulated and enhanced by the form and content of traditional liberal education. It is therefore not an accident that the oldest secular institutions in historic time have been the great universities of all lands. This is so because it is in those universities that men are dedicated to the endless pursuit of reliable standards of value—the pursuit of truth. There, in those educational institutions over the ages, men has thus fulfilled his spiritual destiny. There is, as you will remember, high authority for the proposition "And ye shall know the truth, and the truth shall make you free."
The following postscript to the special sixteen-page article on "The Plight of the Humanities," featured in this issue, was written by Dr. Leon Gottfried, associate professor of English. Professor Gottfried received three degrees from the University of Illinois, including his Ph.D. in 1958. His special field of interest is nineteenth-century English poetry and criticism and he has written widely on the subject. His book Matthew Arnold and the Romantics, published in 1963, received excellent reviews both in the scholarly and popular press. The editors of this magazine asked Dr. Gottfried to read the article on "The Plight of the Humanities" and invited his comments in the form of an article. His title "What Money Can Buy" is a provocative one. So is his article.

WHAT MONEY CAN BUY

Through a jungle of television antennas looms the silhouette of the Statue of Liberty, dimly seen against the gray of industrial New Jersey. The photograph is charged with symbolism. What light, it seems to ask, can that statue’s isolated torch throw in the midst of all this smog, these wires, spokes, funnels, derricks, cranes, masts, and other assorted machinery of New York harbor? Can the light of our ideals, our dreams, our deepest purposes, which alone make all the bustle worthwhile, pierce this haze of mass production, mass consumption, and “mass-cult”? A caption as gloomy as the picture warns us prophetically that "Amidst great material well-being, our culture stands in danger of losing its very soul." The accompanying article proceeds to document the problem and to suggest ways in which our material well-being can be applied to forestall the danger.

Certainly, as the article on "The Plight of the Humanities" says, many of our cultural ills can be cured or ameliorated by money, and no one has the right to be so naive as to forget that. The appearance of our cities, our shortages of dedicated teachers, the niggardliness of our support of significant research in non-fashionable and non-utilitarian fields—all of these defects and more are
our shame. And beyond these critical shortcomings, why not a subsidized, competent professional opera and legitimate theater in every town over 100,000? Why not more support for libraries, art museums, and musical organizations? Many such activities which could add beauty and richness to our lives are readily purchasable, or partly purchasable, and often for shockingly little cash—though too much cash, it seems, for a society that prefers to enhance the beauty and richness of life by spending massive amounts on cosmetics, liquor, tobacco, and shoddy machinery. It is hard not to share the outrage of so distinguished a scholar as Professor Gay Wilson Allen when he tells us that only the lack of a million dollars stands in the way of editing and publishing a worthy edition of the complete works of one of our great national poets. Indeed, there is no single instance of financial need cited in "The Plight of the Humanities" to which anyone concerned with our culture and its values can say anything but "Yes, yes; let's get on with the job."

But the article as a whole and the assumptions that underlie it leave me with a less than whole-hearted attitude of assent. For if our souls, or the soul of our culture, are in danger of being lost in a sea of material plenty, I am not sure that the way to save our collective soul is simply to pour a larger share of the wealth into it. The article implies an understandable envy of the sciences—the enormous research funds they attract to the universities, the fellowships they make available, and the stupendous advances they have made in knowledge and prestige since the 1930's. Yet only the other day a group of prominent scientists published a report which might be a warning to the rest of us. After serious study, they conclude that subsidized and contracted research, whether sponsored by government or industry, has posed at least as grave a threat to the intellectual values and scholarly responsibilities of the sciences as neglect had done. They go so far as to point out that contract research must bear part of the blame for some serious blunders that have been made both in pure science and in areas practically affecting the lives of all of us. While we are digesting this report, we turn to reading articles about, for example, the discontents at Berkeley, not only among the students but among the faculty. We hear about the increasing domination of a sort of feudal system in the great universities, of a new tribe of "airport scholars," of inter-university rivalry intended not so much to draw great scholars as great research projects and funds to a university. A considerable literature has accumulated concerned with the decrease in teaching and the increase in bookkeeping and administering, and in the dehumanization of the university environment, a dehumanization affecting both faculty and student morals and morals.

If our scientist and social scientist friends are warning us that all is not well with them, we should not be hasty to prescribe for ourselves in the arts and humanities the same medicine which seems to be largely to blame for many of their current ills—and ours too.

Still, we must admire the genuine progress made in the sciences and social sciences since they began to receive massive financial support, and we might be permitted to hope that the problems I have referred to are mainly flaws in the new and essentially desirable machinery which regulates the relationship between a society's wealth and its learning, flaws which we can eliminate or minimize in time.

A more fundamental doubt, however, occurs to me, a doubt having to do with the efficacy of the humanities for saving the soul of our culture, as well as with the efficacy of mere wealth for saving the humanities. For one thing, I do not understand how a culture "loses" its soul. I had supposed that a culture was always busy expressing precisely such "soul" as it has. Isn't the idea of "saving" that soul the result of confusing cause and effect? Surely if the arts and humanities are in a sorry plight, it is because of shabbiness and negligence in our culture, and not the reverse. If that is so, how much can the application of politics and patches to the academic study of the humanities really do to "save" the culture? But here I seem to be expressing a doubt which is heretical in a professor of the humanities, and my colleagues would be justified in asking me accusingly why I teach and study in the field if I lack an abiding faith in its ability to transform and elevate our culture.

My answer begins with a preliminary look around the campus. I notice that the professors and students of the humanities and the arts are not uniformly more humane, more highly civilized, and more sensitively aware of their world or themselves than their colleagues in other fields of study, nor do I see in the former a consistently higher degree of engagement in activities designed for the public good. And if I do not find that humanists are decisively more humane than others, I must question the inherently soul-saving nature of their disciplines. Yet I do see in all departments of learning fine specimens of humanity, men and women with profound moral and mental awareness and commitment, and I see them leading productive lives. These splendid men and women, regardless of their field of specialization, possess as individuals the kind of spirit that keeps culture alive. I believe, therefore, that when we speak of a culture losing its soul, we speak of its losing something that was never its to lose. Only the individual human being has a soul, in any valid sense of the word. I teach to individuals, hoping to reach those who care or may be moved to care about the opportunities for self-cultivation which the study of literature offers them; thus they may develop, if we must use the word, their souls. These students are always a minority, and each is unique.

As for the culture, it may alter its structure and values,
but I know of no standard for measuring relative soulfulness of cultures or of different stages in the development of one culture. Some believe that medieval Christendom was a culture with a great soul; yet we know that most people in those days lived (in words applied by Hobbes in a different connection) in "continual fear of violent death" a life which was "poor, nasty, brutish, and short." Or we may point to moments in the history of a culture, such as the heydays of Athens or Florence, when a whole culture, a whole people, a whole locality seemed to ignite with a wonderful radiance. But even at those very moments, the "soul" of those cultures was the creation and the possession of a relatively small number of individuals.

Most of humanity, then as now, was most of the time concerned first with subsistence, then with the pursuit or avoidance of relatively simple pleasures and pains. One or two changes in the political situation, the death or removal of a few noble patrons, and the "soul" of the culture dies or moves to a new home.

The problem, then, is not to "save" a culture’s soul from materialism by a massive application of material wealth, though I am not arguing necessarily against such an application. The problem is to create an environment in which those who wish to possess and enrich their culture may pursue their efforts with dignity. This dignity means more than just financial security; it also means freedom from being treated either with contempt or with undue awe, for nothing may be more damaging to the creative person or the scholar than being fashionable. The attempt to manufacture cultural "soul" in any other way is likely to lead only to such well-intended failures as the recent theatrical endeavors at New York’s Lincoln Center.

**WHAT MONEY CAN BUY**

We have a dream of a country richly endowed by nature, as ours is, coming at last to realize the value of man-made beauty and man-preserved natural beauty. In this country, the scholar and the artist will be treated as serious and useful members of society and be neither lionized nor scorned. It is a country in which book stores will abound in small as well as in large towns, in which more and more towns will be setting up their own theatrical companies, orchestras, and art collections, and will be supporting professional artists with a living wage and reasonable job security. The general level of social and political awareness will be elevated with the cultural, as ugliness and waste in all areas of life come to seem more and more intolerable.

But we also have a nightmare. In it we see a proliferation of second-rate and artificial "culture," not only at its normal rate of growth but vastly accelerated by the massive infusion of large sums of money. More and more professors, in this nightmare, will spend more and more time on their "own" work, not necessarily for the love of learning but too often for the love of success. Now and then they will somewhat reluctantly oversee the advanced research of a few select graduate students who are working on promising subjects. Subjects, in turn, will be promising to interest the agencies which provide the grants which enable the professor to do anything but teach students. These are a few of the features of a nightmare familiar to anyone who has been watching current trends in university education.

What then can be done? The ascetic ideal of voluntary poverty is impractical and, for our times, probably misguided. Certainly there are sectors of our culture where more money could be spent to good advantage and ought to be spent. But we must beware of confusing the machinery of culture with culture itself, and the more money there is available to the arts and humanities the more wary we must be. If a humane education ought to teach us anything, it is that no one is immune to corruption, stultification, and self-deception. The professors of the humanities have no reason to think that they are morally more pure than their colleagues in other areas. Already, as the bidding becomes more competitive for the bright young men, as the rewards of money and status increase, we see in the humanities a corresponding rise in careerism and a "star" system with all its baneful consequences for education. (See, for example, an article in The New Republic, March 27, 1965.) In the palmer days to come, if they do come, the only defenses we shall possess against our own human weaknesses are those qualities of mind and spirit which we may hope have been developed by a humanistic education: humility, a sense of irony, self-criticism, a vision of something better always lying just beyond our best efforts, and a dash of skepticism. If we cannot maintain these defenses, we may find that we shall no longer need to worry about our culture’s loss of its soul through neglect of the humanities, for the humanities will have abandoned their own best heritage.
Continued from Page 15

the internal security of our people is to protect their First Amendment freedoms of speech, press, religion, and assembly, and . . . we cannot take away the liberty of groups whose views most people detest without jeopardizing the liberty of all others whose views, though popular today, may themselves be detestable tomorrow." I think of these wise comments of Justice Holmes and Justice Black when I hear of efforts to keep our young people from fully informing themselves of political or other philosophies which are antibacterial to ours. If our system cannot prove its superiority in the open "competition of the market" of ideas, as Holmes put it, it is not worth preserving. But few of us will doubt that it has the strength to survive, and none of us should therefore fear its capacity to do so.

An area which as much as almost any other tests our faith in democratic principles is that of criminal justice. The observation has been made that the "quality of a nation's civilization can be largely measured by the methods it uses in the enforcement of its criminal law." I firmly believe that this is so. If ever there was a standard by which the true nature of a government can be assayed, it is its attitude toward criminal law.

But this is also an area where patience and understanding are often notably lacking. It is not uncommon for people to express dissatisfaction, or worse, when the rights of a person accused of crime are concerned. This point of view may become particularly manifest where a crime is odious and the guilt of the person accused seems obvious from the news reports and public comment. But the right to counsel, the right to trial by a jury of one's peers, the right not to have used against one evidence which has been illegally seized, the right to fair play at every stage—these are not technicalities: they are the very essence of a democratic system.

To be sure, it would be much easier if we did not have to be so careful in observing rules for the investigation, accusation, and trial of alleged wrongdoers. Why worry about a coerced or extorted confession, some will ask, for example, when we know that a person is guilty? But in a civilized society we must be equally concerned not only with the fact that a crime is solved but with how it is solved. We must be equally concerned not only that wrongdoers are prosecuted but that innocent people are vindicated. The policemen, the prosecutor, and the judge throughout the long, the painstaking, and the tedious process of law enforcement in all its phases must zealously observe the safeguards of the Constitution and the Bill of Rights. It is only by scrupulous adherence to these safeguards that we can maintain the spirit as well as the letter of a truly democratic system of government.

The need for reflection on these subjects is especially compelling where we are concerned with the education and well-being of our youth. Additionally, there is a reason, I feel, why Americans, particularly, do well to remind themselves of the underlying principles by which we should set our sights. This is a relatively new country. Though ours is among the oldest of written constitutions, our history as a nation goes back less than 200 years. We have no ancient history nor national traditions as, for example, England has, which this year is celebrating the 750th anniversary of the signing of the Magna Carta. As Henry Steele Commager has recently pointed out, although some other countries in the Old World are "new" in a governmental sense, they came amply equipped with history, tradition, and memory. These nations have been the product of history, he noted, whereas our history was rather a creation of the nation. "It is unnecessary," the distinguished historian observes, "to emphasize anything as familiar as the importance of history, tradition, and memory to successful nationalism."

Then he asks these questions: If a historical past and a historical memory are indeed essential ingredients for a viable nationalism, what was the new United States to do in 1776, or in 1789, or for that matter at almost any time before the Civil War? How does a country without a past of her own acquire one? Or how does she provide a substitute for it? Where could such a nation find the stuff for patriotism, for sentiment, for pride, for memory, for collective character? The answer, as he details it, is that in various ways we created what he has termed a "usable past." Unlike those in a country that is steeped in ancient tradition, which inherits rather than creates its past, we consciously remind ourselves of our heritage. We must indoctrinate our young people in our own past and in the sacrifices of others for thousands of years which figured so prominently in our own national development.

As we project our thoughts ahead, we cannot prophesy the course of future events. We have already beheld scientific advances which have made the fantasies of Jules Verne and H. G. Wells almost commonplaces of modern living. There will continue to be startling scientific advances; that our social development will keep pace with scientific progress is far less certain. In the last analysis, what can be more important, more vital, to survival of our very civilization, than the ability of people to live together, to understand each other, and to respect each other's differences? If we cannot find a formula for living together, advances in other fields will be of little avail. In the continuing quest for a solution to this overriding problem of our times we can do no better than to be guided by our Constitution and its Bill of Rights.

If we abide by their principles we can meet with equanimity whatever lies ahead, knowing as we must that "dangers from without are seldom crucial until reinforced by fears from within," and that "resolute utilization of our present opportunities is the only guarantee which the future will honor, the only assurance which free men require."
PLANNING SESSION

The largest single physical facility in the University's Seventy by Seventy Capital Program is a University Center to serve as a focal point of informal education, recreation, and cultural life for campus and community.

In turn, the heart of the new University Center will be a performing arts complex built around a large modern theater. Joseph Passonneau, dean of the School of Architecture who has been named architect for the Center, has been working for many months on preliminary plans.

During Founders Week, six prominent figures in the world of the performing arts came to St. Louis to offer Dean Passonneau their advice and counsel on the project.

The six, all alumni, were: Louis B. Ames, television director and producer; Martine Bartlett, stage, motion picture, and television actress; Aaron Hotchner, playwright and producer; Marvin Miller, radio, television, and motion picture actor; Barney Phillips, the noted screen and television character actor, and William Jay Smith, poet and playwright.

Mary Wickes, who has played hundreds of comedy and character roles in motion pictures and on television, was unable to make the trip at the last minute because of a death in the family. Miss Wickes, however, conferred with Dean Passonneau at length this past summer when she was in St. Louis with the Municipal Opera.

The group gathered with Dean Passonneau at the architecture school for most of a day. They first received a complete briefing on the status of plans to date for the theater and other performing arts facilities for the Center. The dean showed plans and models and blueprints and slides, answered questions, aired problems, posed difficulties, and asked for criticism. The group responded with great enthusiasm, offering ideas and comments and criticism based on their long and varied experience in the field. They came prepared, too, with concrete suggestions and detailed critiques. Aaron Hotchner brought a bulging briefcase from New York filled with plans and blueprints of existing university and community theaters and with the copious notes he has taken on inspection tours of theaters in the East.

Out of the meeting came many helpful suggestions and new ideas that Dean Passonneau will be able to apply to his plans for the new Center. The alumni group will continue to work with the dean as the plans grow in the future. The week after their meeting, Passonneau travelled to New York to meet with theater designers and other experts in the field whom the visiting alumni had interested in the project.

When the performing arts complex becomes a reality it will be the work of the architect, but embodied in its design will be many of the ideas and suggestions of this group of alumni, which responded with such enthusiasm.
Alumni performing arts experts gather with Dean Joseph Passonneau (back to camera) to discuss the preliminary plans for the proposed University Center theater and to offer advice and suggestions.

Dean Passonneau and Author-Playwright Aaron Hotchner confer on theater design. Later Hotchner arranged for Passonneau to confer with leading New York authorities on theater design, lighting, and construction.
During the session, Dean Passonneau showed the visitors plans and models of possible designs for the new theater. The model shown here is an attempt at designing a multi-purpose theater for both large musical productions and intimate drama.

Various theater design possibilities were shown on the screen for the visitors to criticize, comment on, and offer suggestions about.
"Everywhere in our modern world bad writing abounds," Alumnus Ernest Havemann asserts, "and everywhere we put up with bad writing and with the imprecise and pretentious kind of thinking that lies behind it." Any change in this trend, he maintains, will have to start at the university level.

A former associate editor of Time and Life, Ernest Havemann has published more than a hundred articles in leading national magazines. He is the author of four books, and has received awards from the American Psychological Foundation for science writing. He is currently writing a new textbook in college psychology and continuing the interest in owning, racing, breeding, and handicapping thoroughbreds that has earned him the unofficial title of "The World's Champion Handicapper." A recent Time profile on Havemann stated: "In the world of free-lance magazine journalism, Horseplayer Havemann is the prolific, prosperous king of the corral."
WHY JOHNNY CAN'T WRITE

Writing. It sounds like such a simple word, such a simple subject. Either Johnny can write or Johnny can't write. Professor Smith is a poor writer. Professor Jones is a good writer. And almost everybody in the world believes that he could write a good book, much better than the stuff they're publishing nowadays, if only he had the time.

But the fact of the matter is that if we're going to try to talk seriously about writing—and about communication in general—we had better admit at the start that we are dealing with an extremely complicated and tricky subject. Think for a moment of that well-known and highly honored writer Jean Paul Sartre. In his recently published autobiography he concedes that he took up intellectualty in his boyhood as a totally cynical device to win approval from his doting mother; when he heard her steps approaching, he rushed to the library shelf to pull down one of the classics, and then pretended to be so absorbed in it as to scarcely notice her arrival. This masquerade became a way of life—and he confesses that as a writer he has been, to use an actual quotation from the English translation, "a fake to the marrow of my bones." In other words, he has spent his life espousing philosophical positions with which he did not necessarily have any vital concern at all, written in prose which he himself considered a hoax.

Many critics think that Ernest Hemingway's posthumous and incomplete autobiography, A Moveable Feast, constitutes a similar confession—not made with such complete, insightful, and charming candor as Sartre's, but readily apparent to anyone who cares to read between the lines. The young Hemingway, as chronicled by Hemingway himself, appears to these critics to have been a man without a thought in his head, without education or philosophical viewpoint, interested in nothing but style for style's sake and in food and wine.

You may consider this to constitute a rather harsh interpretation of A Moveable Feast, and I would not wish to argue the point—except to say I do believe that there is considerable evidence, in this book and in Hemingway's other writings and deeds, that he certainly regarded himself as playing much the same role in life as a boxing champion or a matador—a man to be judged more by the virtuosity of his technique than by the content of his performance.

I mention the Sartre and Hemingway books because they point to one of the subtleties that make the discussion of writing and communication so difficult. Just what is communication? Is it the art of arranging words in an esthetically pleasing and dramatic pattern, with the pattern to be valued for its own sake rather than for its meaning, as in Hemingway, if you choose to accept the viewpoint of his detractors? Is it the art of arranging words in a pattern which will impress readers with our intellectualty and profundity, even if the writer, like Sartre, admits that the intellectualty and profundity are a fraud? Or is communication something very different?

Let us start with fundamentals. Living in a complex civilization like ours requires a good many learned skills: driving an automobile, cooking a meal, balancing a checkbook, holding a job. Some people have to know how to type, others how to repair a television set, others how to teach college students or do scientific research. Modern living also requires a great deal of communication. On a simple level, husband and wife have to be able to communicate on problems like the family budget. On a much higher level, somebody has to undertake to communicate mankind's present knowledge—scientific, technological, and philosophical—to the new generations. On perhaps the highest level of all, somebody has to seek new patterns and unifying principles in our world, and communicate these findings to the rest of us.

Of all the skills required in our civilization, the art of communication seems to be the most difficult to learn. Even in face-to-face conversation, which is the simplest and most natural form of all, most of us do very badly. We have all the benefit of gestures and facial expressions, all the clues afforded by tone of voice; yet we often fail
to get our message across. Marriage counselors say that a frequent cause of marital failure is the inability of husband and wife to communicate; family counselors complain that parents and children are unable to communicate. In the business world and in the administrative aspects of the academic and scientific worlds, one of the prime sources of inefficiency and friction is the inability of the boss to tell the worker exactly what to do and exactly how to do it.

The problems of verbal communication seem to be multiplied a hundred-fold in communication by the written word. One of the most frequent criticisms of our educational system is that Johnny can't write. The inability of most high school graduates to write a clean-cut and logical report—or even a literate one—greatly handicaps college teaching. And even after four years of college and perhaps additional professional or graduate training, the product of higher education is seldom adept at writing. Business executives complain that college graduates are unable to write even a simple letter or report in clear and grammatical language. Yet the letters and memoranda exchanged by even the top executives in the business world are hardly examples of great prose in themselves.

Everywhere in our modern world, bad writing abounds—and makes the task of coping with the complexities of our civilization much harder than it would otherwise be. By bad writing, I do not mean only writing that offends the sensitive ear because it is ungrammatical or awkward; I also mean writing that fails entirely of its purpose simply because it cannot be understood. In other words, the kind of writing that makes it well-nigh impossible to follow the instructions for assembling Christmas toys, or to understand what you are buying in an insurance policy, or to make out your income-tax return, or for the businessman to grasp what in the world a memorandum from his planning committee is driving at, or for the planning committee to understand the businessman's letter of instructions. Also, alas, for students to understand many of their textbooks, and indeed for scholars to understand many of the papers in their professional journals. I mean the kind of writing that businessmen refer to so contemptuously as Washington gobbledygook, and that professors refer to so contemptuously as the businessman's illiteracy, and, to complete the circle, that government people, who employ professors as advisers or researchers, refer to as the academician's pomposity or preciosity.

This brings us to one of the hard facts about writing. There do seem to be some prodigies from time to time—like Truman Capote, who published a rather generally admired book when he was very young, or like Josephine Johnson, who got her A.B. at Washington University and within a year or two had won a Pulitzer Prize for a novel. But these prodigies are few and far between, and often they do not persist in their careers; unlike musical prodigies, who tend to go on and on and reach even higher levels, prodigies in the writing field tend to burn out quickly, as if there were something a little unnatural and not too solid about their skills.

Most writers have to learn how to write the hard way, which is a very hard way indeed. Most professional writers—writers who earn their livings writing novels like John Hersey's White Lotus or reportorial books like Theodore White's The Making of a President—these men would tell you that they had a great deal of practice writing for newspapers or magazines, or in some cases writing totally unpublishable works in the solitude of their own offices. Often they wrote a million or more words before they reached anything like their present level of skill, and they may even be ashamed of some of the writing they did as recently as five years ago, when they were already established and successful. Even now, they have doubts about their mastery of the written word; they tend to be surprised and delighted when the day's work turns out well. And when they take a vacation, even a short one, the lack of practice quickly cripples their skills, and it takes many days of painful rehabilitation at the typewriter to get the nerves and muscles working smoothly again.

In other words, writing—our most important form of communication—is not something that comes naturally, like singing or dancing a jig, but is a difficult and unnatural ability which has to be learned through years of intensive effort, like a circus performer's act of juggling ten rubber balls and twenty hoops while standing on a tightrope, and then has to be practiced constantly lest it wither away. This is true of all kinds of writing—novels, non-fiction books, newspaper stories, journal articles, even casual letters.

Some years ago a university administrator, concerned about the lack of competent writing in our world, got the notion of establishing some new kind of campus program, perhaps a department of its own, which would be solely concerned with teaching students how to write good, functional sentences and paragraphs, on any and all kinds of subjects. Not creative writing, although he thought it would be nice if some of the students turned out to be creative, but simply writing that made sense, that got its message across. He asked me if I wanted to help, and I replied that I thought writing was so much a matter of long practice that I doubted we could promise the student anything of real practical value. He then suggested that even if we made no guarantees that any of the students would ever be able to write professionally, we could at least help them get a little fun and pleasure out of writing. I was agonizing over a book at the time, and I nearly wept at this suggestion.

Writing is not fun by any stretch of the imagination. It is not like playing the piano or dabbling at painting, which the amateur can do for pleasure on a Sunday afternoon. It is more like laying bricks, which nobody except a lion-hearted man like Winston Churchill would ever adopt as a hobby. Even at the simplest kind of expository level, writing is hard labor, and at the creative level it gets to be herculean. Novelist James Gould Cozzens was once quoted as saying that his normal working pace was to write two pages a day and throw one page away, which prompted another novelist, Hamilton Basso, to remark that he considered it a good day when he wrote one page and threw two pages away.
It is the inherent difficulty of writing—the long and arduous apprenticeship, the constant practice, the physical labor—that accounts in large part for the ironies inherent in the examples of Sartre and Hemingway. A professional writer is busy all his life learning how to write, writing, and remembering how to write. He does not have much time to do anything else. Most professional writers are rather poorly educated. Some of them were notoriously bad students from the start, like Shaw and J. D. Salinger, and even the potential scholars among them have long since lost their ties to the world of scholarship. They are no longer intellectuals at all, if they ever were. They are craftsmen—bricklayers, if you will. Their knowledge of human psychology tends to be naive and purely introspective. Their opinions on politics and social problems tend to be shallow and emotional. Although they may turn out beautiful phrases and sentences, they seldom have anything important to say. Often what they have to say is dead wrong—as in my opinion is the philosophical message of any Herman Wouk novel, and as beyond any doubt are the medical and scientific quackery in books like Arthritis and Common Sense.

By any standards of craftsmanship—sheer craftsmanship—the best of the writing which is published today is head and shoulders above most of the literature of the past. The best of our modern novelists, for example, are so adept at dialogue, at description, at narrative flow, as to shame a good many of the classical authors. It is very difficult nowadays, for example, to read a classic novel like The Red and the Black without being so distraught by Stendahl’s low level of craftsmanship as to underestimate the immense scope of his rendering of a society.

Unfortunately, the higher the standards of craftsmanship rise, the less time the writer has for anything else—especially for studying civilization’s accumulated knowledge, ruminating on the relation of this knowledge to our modern world, and coming up with something new and insightful and really worth writing about. Stendahl could probably not get published today; the publishers would tell him to go home and learn to write. The writer who does get published today has absolutely no time to develop Stendahl’s amazing powers of observation.

There is another important factor at work here, which is that the professional writer is estranged from all other human beings, from society and from scholarship by a phenomenon which I have often observed, but for which I lack any descriptive name. When a young person becomes interested in writing, for whatever reason—and I fear that often rather than not the reason involves some fairly unwholesome psychological quirks—he tends to begin thinking immediately of writing as a career in its own right. He does not say, “I plan to acquire some skills that will help me write intelligently and clearly in the field of chemical engineering, or of sociology, or of medieval history.” Instead he says, “I am going to be a Writer”—with a capital W, and with all the connotations of brooding sensitivity and omniscience that surround the word.

He does not try to write better term papers and more ringing answers to the questions on his semester examinations; indeed he may be inclined to neglect his studies as too mundane to deserve the attention of the literary mind. Instead, depending on his temperament and abilities, he starts writing news stories for the school newspaper, or editorials, or reviews of the new books and the avant-garde movies. Or he contributes poetry to the literary magazine, or locks himself in his room and turns out short stories.

In the back of his mind, generally, is the notion that he will some day turn out what used to be known in my younger days as The Great American Novel. But what shall he do in the meantime? Very few young people come from families indulgent or wealthy enough to support them during the apprenticeship, as a fond though not at all wealthy mother supported George Bernard Shaw throughout his twenties when his writing was earning him an average of only a penny a day. The other would-be writers must go to work.

Where can a writer hone his skills and at the same time get paid? Not at the university; there are no such positions on the faculty as Full Writer, Associate Writer, Assistant Writer, and Writer at the instructor level. Not anywhere else in the educational system; the public schools hire psychologists, librarians, and guidance counselors, but have no place for writers. Law firms do not hire writers. Nor do medical research centers. The aspiring young writer has few choices. He can go to work for a newspaper or magazine, the field of journalism. He can get into television, which is a world of its own; or into advertising, which is still another world; or into public relations; or into the growing army of people who write technical manuals for industry.

In a very real sense, these various occupations—journalism, television, advertising, and the others—are recruiters of writing talent. They do not often actively recruit, because they need not. But they do, without even trying, attract a vast number of the young people who for one reason or another want to become writers, and siphon them away from other pursuits. Many of these young people never leave their first jobs. They find themselves so busily occupied that they lose their desire to do any other kind of writing, or they try other kinds of writing and fail at it—and all their lives they continue to write newspaper or magazine stories, or publicity releases, or advertisements and TV scripts and technical manuals.

This constant migration of people interested in writing away from academic pursuits and from professions like the law, and into the occupations which employ writers as writers, accounts for some strange situations. Take advertising, which of all the writer’s occupations is the one most
generally deplored by intellectuals. Say what you will about advertising, the fact remains that from the viewpoint of sheer craftsmanship, there are more well written advertisements than well written textbooks or well written articles in the scholarly journals.

It all comes down, I sometimes think, to an unhappy dichotomy. The man who wants to be a writer cannot also be a scholar; the business of learning to write and practicing the craft of writing simply takes too much of his time. And the scholar cannot hope to find time to serve the million-word apprenticeship and engage in the constant practice that good writing entails. A man can do one or the other, not both.

We have to make the choice, with results that are by and large detrimental to our society. A great deal of talent and energy goes into writing cigarette advertisements that could be far better spent on textbooks that would help underprivileged youngsters learn how to prepare themselves for useful lives in the age of automation. Novels are written—and doubtless play a part in molding opinion—advancing a view of human behavior which every psychologist knows is utterly false, and an overly-romantic or overly-cynical view of love and marriage which every sociologist knows is absurd.

As for the other side of the coin, a great many scholars who have thought brilliantly original thoughts, or who have conducted important new research, fail to influence anybody except a mere handful of close associates, simply because they have not had the time to learn and practice the fine art of communication. The disciplined thinker who has painstakingly gathered and analyzed the evidence, and knows whereof he speaks, cannot generally hope to gain anywhere near as large an audience or wield nearly as much influence as can a Betty Friedan in behalf of the wholly nonsensical social observations she makes in The Feminine Mystique; or a Helen Gurley Brown in the shabbily-pseudo-philosophy of Sex and the Single Girl.

It was not many years ago, indeed, that the very foundations of rationality in the modern world were seriously threatened by a best-selling hoax called The Search for Bridie Murphy—which, come to think of it, took a sort of primitively superstitious viewpoint not far different from the one for which J. D. Salinger has been obtaining such a large and respectful audience.

The craftsmen get the audience. The scholars and the thinkers go unread. And the whole meaning of communication gets corrupted—because communication implies that there is something of substance to be communicated.

But now hold on a moment; Perhaps things really aren't quite that bad. Think of the exceptions. Walter Lippmann is not only a highly professional journalist but also a distinguished scholar in the field of political science and diplomacy. A journalist named Lincoln Barnett once wrote a book on Einstein that the physicists generally consider to be a great work of scholarship. And on the other side of the fence many scholars have written like angels—Holmes and Learned Hand on the law, Santayana on philosophy, William James and more recently George A. Miller on psychology. All of us from our own list of favorites, could name others. Not terribly many, perhaps—but enough to form an impressive rebuttal to the rule I was laying down.

What do the exceptions mean? Perhaps they mean only that the occasional genius can always violate the rules. But I have a more optimistic theory. I think they give us at least a little glimmer of hope that writing is not quite so difficult as we have made it seem in the past, and that we can, if we want to, make it far easier in the future.

My theory, in brief, is that our educational system, as it has operated in the past and operates today, could hardly have been better designed, by someone who was deliberately trying, for the creation of bad writers. I have two reasons for thinking this. Let me start with the one which, though possibly of lesser importance, is definitely the easier to explain.

I know many writers who are abysmally ignorant of the rules of grammar. As youngsters they hated the business of dissecting the mother tongue, and absorbed as little of it as they possibly could; and as adults they hardly know a subject from a predicate. Yet they never make a grammatical error, and their sentences are beautifully constructed and balanced. What they have is an ear for the language—an almost intuitive sense of what is right and what is graceful.

Now where did they get this ear? Were they born with it? Partly, I think, they were. The psychologists' aptitude tests have certainly shown that there are vast individual differences in musical ability; doubtless there are also such innate differences in language ability. But this is not the whole story. Without exception, the men and women who have an ear for language have been voracious readers, in childhood and throughout their lives. They learned—or at least developed their latent talents—by exposure. I said earlier that a writer learns his trade by writing. It is equally true that he learns it by reading.

Our educational system exposes our young people to very little good writing; but it does expose them to a great deal of very bad communication, which is my other and less obvious point. I ask you to think for a moment about the formal language you heard in your early school years, or that you have heard at the school functions to which you have gone as a parent. I am talking about all the assembly room speeches made by the principal or the superintendent, and by the athletic director and the football coach, and by all those visiting orators. The speeches are not only trite and purple and artificial, but very often something even worse. They are hypocritical and sometimes downright dishonest. The high school principal hands out something called the good citizenship award to Mandy Johnson, and to hear him talk you would think Mandy spent twenty hours a day picketing the state legislature in behalf of good causes and carrying food baskets to the needy—when the fact of the matter is that Mandy was elected to the honor because she is the prettiest girl in the class, looks great in a cheerleader's uniform, and drives her father's Cadillac.
WHY JOHNNY CAN'T WRITE

The superintendent extolls the class president, pointing out that the young gentleman served, "at great personal sacrifice and with selfless dedication"—when everybody knows that the class president knocked himself out politicking for the job and got tremendous ego satisfactions out of filling it.

We have all heard the speeches; so there’s no need to belabor the point, except, perhaps, to point out that the schools are not the only places in our society where formal speech is artificial, pretentious, and often hypocritical. The same is certainly true of politics. One of my duties as a journalist has been to listen to most of the political speeches made in my lifetime, and I must say that they leave a great deal to be desired. I rather doubt, indeed, that I ever heard—or that anyone else ever heard—a completely honest political speech. The politician never says what he means; nor does he even say what he thinks his audience wants to hear. He says what our tradition of fuzzy and cliche-ridden and disingenuous oratory tells him the occasion calls for.

The language used in our Sunday schools and churches, where young people often receive some of their earliest contacts with formal communication, is also frequently murky and pretentious. A good friend of mine who is a man of the cloth once told me, in a dark moment of self-doubt, that he felt the sermons had driven more people away from the church than the theory of evolution.

The schools not only surround our young people with artificial writing; they actually encourage and reward it. I once saw two compositions that had been graded by an English teacher at a pretty good high school. One composition was rather poorly thought out and sloppily organized, but was written in long and involved sentences, using a lot of obscure words that the writer had obviously gone to some trouble to find in the thesaurus as synonyms for everyday language. This composition was marked A. The other was completely logical, well organized and written in simple declarative sentences, mostly composed of words of one syllable. This composition was graded C.

There was a little news item recently about a sixth-grade teacher in California who asked her students to rephrase the old maxims in the most elaborate language they could think of; she thought that this would enlarge their vocabulary. They came up with things like—for dead men tell no tales—"Lifeless males of the human race communicate negative false truth." And for a rolling stone gathers no moss, "A solid rotating mass does not accumulate any biophytic plants." The story was supposed to be funny, but it made me shudder. What the teacher should have been doing, of course, was exactly the opposite. She should have presented her students with the verbosities and had them practice translating the polysyllables into the colorful and highly functional language of the old maxims. But that is not the way of our schools. Instead of extolling the merits of the simple declarative sentence, packed with unequivocal meaning, they encourage the artificial and the pompous.

The great and abiding truths are the simple truths. You can find them in the Bible: "He that is without sin among you, let him cast the first stone." Or in Shakespeare: "What's gone and what's past help should be past grief." Or in science: $E = mc^2$. But by the time a student has been graduated from high school, he has been brainwashed to think of this kind of language as unscholarly, uncouth, lowbrow. He is afraid not only of simple language but also of simple and direct thinking. When he writes, or speaks formally, he feels called upon to pretend to be saying more than he knows, in words and phrases as complicated as he can muster. If the words can be quickly understood, it is an unworthy thought, badly written.

This is the source of a great deal of bad writing. We haven’t thought our ideas through; we don’t really know what we are talking about; so we hide our fuzziness with rhetoric—as we have so often heard our teachers, our school principals, and our politicians do.

CAN THIS BE CHANGED? Why not? But any change will have to start at the university level. This is where we must make the break with the past, and convince our future teachers and leaders of our society to value clarity of thought and simplicity of language; they can then help the message percolate down to the elementary schools and high schools.

That idea the university administrator had for a special program to teach writing was not a bad one. I wouldn’t have the foggiest notion how to implement it, but it is well worth considering. Certainly writing is not being taught now in our universities, except to a mere handful of students in the creative writing courses—young men and young women who are thinking of themselves as writers, or speaks formally, he feels called upon to pretend to be saying more than he knows, in words and phrases as complicated as he can muster. If the words can be quickly understood, it is an unworthy thought, badly written.

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It was a fun show, a swinging show, a 180-ring circus. For five weeks this past winter, the University's Steinberg Hall galleries were the site of a retrospective exhibition of the works of Alexander Calder.

The exhibition brought out record crowds to Steinberg Hall and seemed to give record amounts of enjoyment to the viewers. On display were some 180 Calder creations, spanning 35 years and including mobiles, stabiles, wire sculptures, and other startling examples of Sandy Calder's unending originality. The largest work on display was the University's own: the recently acquired stabile-mobile *Five Rudders*. Presented to the University by Mrs. Mark C. Steinberg, this massive but airy steel sculpture has been installed permanently at the entrance to Steinberg Hall.

What made the exhibition such fun was that the works were not merely on display; they were there also to be touched, tapped, blown upon, or sent into complicated motion at the touch of a button. Naturally, children had a field day, but few adult visitors could resist entering into Calder's fantastic world either. It was a true audience participation show—a sort of a Swing Along With Sandy session for everyone.
A small visitor sets a Calder motorized mobile into motion by pressing a button.

A big hit of the show was this metal monster called by Calder *Bucephalus*.

Viewers were fascinated by *The White Frame*. Pressing a button caused a hidden electric motor to set into motion various parts.

*Bucephalus* crouches over museum custodian at his work.
The Only, Only Bird flies at Steinberg. This inspired creation was fabricated from metal coffee cans welded together.

Novel solution for museum-hopping: a mobile gallery seat for children.
An elegant mechanism by which living cells control their metabolism has been the subject of intensive research in recent years. Called "feedback control," it may hold the key to important applications not only in biology, but in medicine and agriculture as well.

Dr. Howard Gest, professor of microbiology in Washington University's department of zoology, is the co-discoverer of two feedback control systems in bacteria, which were reported last year in leading scientific journals.

Professor Gest is a member of the University's Interdepartmental Committee on Molecular Biology and served as its chairman from 1961 to 1964. He joined the faculty in 1959 after ten years as a staff member of the department of microbiology at Western Reserve University's School of Medicine. During the war he conducted research in the chemistry of uranium fission on the Manhattan Project at the University of Chicago and at Oak Ridge, Tenn. Dr. Gest will be on leave this fall to do research on control mechanisms at the National Institute for Medical Research in London.
HOW CELLS CONTROL GROWTH

In the fall of 1963, two students in Dr. Howard Gest’s Microbiology 481 class at Washington University dug up some soil outside Rebstock Hall and isolated a strain of bacteria from it as part of a routine exercise. At the time, the students, Dennis Hall and Mohammed Chafoor, had no way of knowing that they had made the first step toward an important discovery in microbiology.

The bacterium was identified as *Rhodopseudomonas capsulatus*, or *R. capsulatus* for short, and cultures were stored in a refrigerator in Dr. Gest’s laboratory for possible use in other classroom experiments. Later that winter Dr. Gest and his research associates Dr. Prasanta Datta and Dr. Maysie Hughes (who is now at St. Louis University) were conducting experiments on cellular metabolism, and decided to make a comparative study of different photosynthetic bacteria. A representative of the *Rhodopseudomonas* type was required and the almost forgotten strain of *R. capsulatus* was retrieved and tested.

After several months of work, to Dr. Gest’s delight, he and his colleagues discovered in *R. capsulatus* a “new” subtle mechanism that cells use to control their metabolism. The control system was a unique variety of what biologists call “feedback control.” Feedback refers to a remarkable phenomenon in which an essential substance made by the cell signals the metabolic machinery to slow down or accelerate production of the same substance, depending on the cell’s needs at the moment. There is a certain artistry in how the cell does this which fascinates even veteran researchers like Professor Gest.

Proof from microbiologists that various forms of feedback exist in bacteria has stimulated extensive research during the past several years. Information on the critical role of feedback in cellular growth has been coming out of biology labs with such a surge that Dr. Gest likens the situation to the gold rush days. “So many investigators are coming into this field and uncovering new facts that it’s becoming difficult to keep up with the advances. It seems obvious, though, that the kinds of feedback found in bacteria will turn out to operate also in the cells of plants and animals,” Dr. Gest said.

The living cell is built to be efficient in carrying out the thousands of individual reactions of metabolism necessary for the complex process of growth. “If a cell becomes inefficient, if it begins making too much or too little of an essential substance, it’s in trouble,” Dr. Gest continued. Understanding the molecular basis for feedback controls has great implications not only for biology, but for medicine and agriculture. For example, it has occurred to scientists that defects in feedback systems may be a possible factor in cancer, where the growth of cells proceeds unchecked.

Feedback control is based on regulating the action of enzymes, large molecules of the protein family which catalyze vital chemical reactions in the cells of all living things. How enzymes “know” when to stop reacting to keep growth in balance is where feedback enters the picture. The new feedback cycle found in *R. capsulatus* proceeds in a subtle and rather artistic way. It is a relatively complicated mechanism, for which Drs. Gest and Datta coined the term “concerted feedback inhibition.”

The diagram (Page 62) gives a simplified version of how this control is believed to work. Foodstuff molecules, called metabolites, are converted by enzymes in the living cell to a number of substances required for growth. Usually, a number of chemical modifications of a particular metabolite are necessary. In this example of the principle, a metabolite can give rise to either of two essential products. Many intermediate reactions must occur, each represented here by an arrow. Eventually, the essential products A and B are formed.

The first enzyme (which catalyzes the chemical reaction indicated by the bottom arrow and “Z”) is designed in a unique way. It has built into it two special types of “antennae,” and these are of just the right chemical and physical structure to combine with molecules of A, on the one hand, and B, on the other. When the densities of A
and B molecules near the enzyme reach a critical point. A and B combine with their particular receptors. This, in turn, causes the shape of the enzyme to change to a form which can no longer combine with and act on the foodstuff metabolite. The rate of production of both A and B molecules must, therefore, slow down or stop altogether. The term “concerted feedback” is based on the fact that molecules of both A and B constitute the feedback “signal,” that is, A and B “act in concert” to shut off the action of the first enzyme.

In the general case, molecules of A and B are finally used for making even more complicated substances. When A and B are consumed to the point that their concentrations fall below the critical point, the “antennae” discharge their attached A and B molecules. The enzyme now snaps back to its original active shape and begins to work on the foodstuff molecules again. In brief, this elegant feedback cycle has a design which enables the cell to avoid excessive production of A and B.

To give a crude analogy, the process might be compared to the operation of a thermostat which turns on and off to maintain a proper level of heat in a home. But cellular feedback operates by vastly more sensitive and refined mechanisms, which, Dr. Gest pointed out, have been built into the cell through millions of years of evolution. “As yet we have little knowledge of the evolutionary development of such regulatory devices,” he said.

Dr. Gest recalled that the door to feedback research was opened in 1956 by Professors H. E. Umbarger of Purdue University and A. B. Pardee of Princeton. Their simultaneous investigations with bacteria (not of the photosynthetic variety) revealed the existence of the feedback phenomenon. “Before this important discovery scientists had only vague notions about the systems that control synthetic processes in the cell,” Dr. Gest said. The first feedback systems studied were relatively simple, requiring only one kind of molecule to inhibit the action of an “early” enzyme. By 1961, research had advanced to the point where more complicated production lines, such as the “branched network” just described, were under close scrutiny. Branched sequences present especially complex regulation problems for the living cell.

Dr. Earl Stadtman and his colleagues at the National Institutes of Health then showed that the common bacterium Escherichia coli (a normal inhabitant of the human intestinal tract) solves one of the regulation problems that arises in an important branched network by making three different forms of the first enzyme. Each form of the enzyme does exactly the same chemical maneuver on the foodstuff metabolite, but the three enzymes differ greatly in the sensitivity of their antennae. Thus, one enzyme form senses only molecules of A, and when just the right amount of A has been manufactured the activity of this enzyme is shut down by attachment of A to the receptor sites. A second form of the enzyme senses only molecules of type B, and so on.

Dr. Gest and his associates explored the same branched network in photosynthetic bacteria and were, at first, surprised to find that in these organisms the first enzyme exists in only one form. This led to more detailed studies and eventually to the discovery of two entirely different solutions to the problem of how this branched network important in the formation of proteins, is regulated. One of these is the concerted feedback system in R. capsulatus.

The uncovering of concerted feedback was for Dr. Gest the second noteworthy episode in which serendipity in student research played a significant role in scientific progress. The first instance, nearly twenty years ago, came about because of an observation by a doctoral student who was, as one might suppose, Dr. Gest himself. He was working for his Ph.D. under Professor Martin Kamen, then at Washington University and now at the University
of California, San Diego. Dr. Kamen, co-discoverer of the important isotopic tracer carbon-14, had been using algae in another long-range series of experiments. Green algae were being used extensively for studying the process of photosynthesis, mainly because they can be grown readily in the laboratory.

In 1947, student Gest made a summer trip to Stanford University where he observed photosynthetic bacteria for the first time in a microbiology course taught by Professor C. B. van Niel. He marveled at the luxuriant way in which the bacteria grew in cultures. Upon his return to St. Louis, he convinced Dr. Kamen that they should shift their emphasis from algae to the bacteria. A chance observation by Gest some months later led them to suspect that the photosynthetic bacterium *Rhodospirillum rubrum* might be a "nitrogen fixer": an organism which can capture nitrogen from the atmosphere and use it for cell growth. Intensive study disclosed that *Rhodospirillum* and, in fact, all kinds of photosynthetic bacteria fix gaseous nitrogen. This was a significant step in biology, since up to that time only a few microorganisms were thought to have this ability.

Dr. Kamen, in discussing their findings in *Scientific American*, later commented, "The discovery that nitrogen can be fixed by so many more organisms than we had suspected opens up exciting vistas. We can look forward to the possibility that we may someday be able to exploit the power of these organisms, just as we have already done with *Rhizobia*, and so help nature's nitrogen cycle to enrich our earth."

It is possible that a better understanding of feedback controls may lead to applications in agriculture and medicine. For example, such knowledge could provide new ways of inhibiting the growth of pests and infectious microorganisms. But many complicated problems will have to be worked out first.

"You would first have to find a small molecule that causes a feedback effect on an essential enzyme of the pest or pathogen," Dr. Gest said. "Also, the reaction affected would have to be unique to the organism or kind of cell you want to destroy. To find such unique reactions presents an extremely complex problem."

LAST YEAR, DR. GEST POINTED OUT, scientists held the first international meeting devoted exclusively to the subject of feedback controls in human and other cells. He took several books from a shelf in his office. "The proceedings of the conference are published in these volumes. Here's one report showing progress in defining feedback controls in one type of human cell," he said, looking through one of the books. "Many scientists are just getting started in the area of feedback research, and I would say there is considerable excitement over what the field will contribute to knowledge of human metabolism and biology," he added.

Accounts of feedback controls in bacteria by Dr. Gest and his associates were published last year in the science journal *Nature*, in the *Proceedings of the National Academy of Sciences*, and in the *Journal of Bacteriology*. In the latter publication, credit is given to the National Institutes of Health and the National Science Foundation for helping to support the research project. The report ends with this acknowledgement:

"We are indebted to Dennis Hall and Mohammed Ghafoor, who isolated the *R. capsulatus* strain during the course of a class exercise."

Dr. Gest added: "I guess it's possible that we might have hit on *R. capsulatus* if the students hadn't happened to isolate it in their classwork. But if they hadn't, there's a good chance that the discovery of concerted feedback control would have been delayed considerably."

As for the importance of serendipity in research, Dr. Gest quoted a remark by Louis Pasteur: "In the field of experimentation, chance favors only the prepared mind."
Comment / On the Seventy by Seventy Program

By now, the news that Washington University is attempting to raise $70 million by 1970 for the betterment of the institution is well known in the St. Louis community and among alumni throughout the country.

At first thought, the idea seems audacious—$70 million is a lot of money; in fact, it is the largest fund-raising goal ever set in the history of the St. Louis area. Yet this goal is not an idle dream. It is a realistic objective based on the most careful analysis of both the University's needs and the available resources.

The new Capital Program is the first major public campaign to be attempted by Washington University in a decade. The Second Century Development Program, announced ten years ago, had an objective of $20 million. Despite many skeptics who felt that such a goal was unrealistic, the community and the nation responded with enthusiasm: more than $23 million was provided in gifts and grants from corporations, foundations, and individuals.

Over the past ten years, the University has received more than $50 million in gifts and grants from non-government sources. With this kind of a record, it is surely realistic to believe that the goal of $70 million by 1970 will be reached.

The Capital Program will be used to meet a host of urgent needs—needs that have been defined by the most prolonged and thorough examination of the University's role, its goals, and its responsibilities by the faculty, the administration, and the board of directors.

The funds received from the Capital Program will be used to support four crucial programs:

1. An expanded and improved teaching program with strong emphasis on providing adequate facilities, realistic compensation, and improved conditions for the great faculty the University is building.

2. A dramatically increased program of student aid to provide scholarships, loans, jobs, and other assistance for deserving students.

3. Improved and expanded facilities for the University libraries—the very heart of the institution.

4. Construction of urgently needed physical facilities, including a University Center, classrooms, laboratories, and residence halls.

With these kinds of objectives, the "Seventy by Seventy" program is of course realistic. If the University is to reach the potential it is clearly demonstrating, of becoming a great university, this goal is not only realistic but essential.

What happens to my students," the article by Professor Alexander M. Buchan in the last issue of the Magazine, has received the widest acclaim of any article ever to appear in this publication.

Shortly after the piece appeared in the Magazine, it was reprinted in both the St. Louis Post-Dispatch and the National Observer. Since then, there has been a flood of requests for extra copies and for permission to reprint the article. Recently the editor of the National Observer called to report that the article was "sweeping the country." He had received so many requests to reprint the article in newspapers or magazines, or to quote from it on radio and television, that he asked our permission to grant these requests without checking with us in each case.

In his article, Sandy Buchan hit a responsive chord; he brought into the open a problem that has become increasingly apparent: the intense pressures under which today's students work and the effect of these pressures on the students, their parents, and the schools themselves.

To the Editor:

May I take this opportunity to congratulate you on the outstanding job that you are doing with the Washington University Magazine. My husband and I, as former students at Washington U., both look forward to the interesting and provocative articles contained in it.

The article by Professor Buchan was one that I thought particularly preceptive. It was my misfortune not to have had Professor Buchan as a teacher, but I was aware of the warmth and understanding he showed to his students. His comments on the change taking place at our American colleges and universities are a concern to many of us who will be sending our children to these institutions of higher learning.

Mrs. Gloria Yawitz Portney, AB 45