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About this Issue: The years 1970-1971 bring the 100th anniversary of the death of Robert E. Lee and the naming of Washington and Lee University in his honor. Thus, this year on January 19, the Lee's Birthday-Founders Day Convocation in Doremus Gymnasium assumed greater significance. Washington and Lee students were unusually attentive as Professor Norman A. Graebner of the University of Virginia talked about the challenges to education in Lee's time and today — and how vastly different those challenges are.

This issue of $W\mathcal{C}L$ is devoted to Professor Graebner's remarks and to commentaries on those remarks by four Washington and Lee professors from the disciplines of politics, biology, law, and sociology. The whole makes provocative reading for those seeking a better understanding of the role higher education must play in helping to solve the conditions Professor Graebner cites.

Finally, the magazine presents a Special Report prepared by Editorial Projects for Education on the large and perplexing issues that higher education is likely to face in the decade between now and 1980.

On the Cover: When Princeton's Richard A. Falk said, "There are four interconnected threats to the planet — wars of mass destruction, overpopulation, pollution, and the depletion of resources," he probably had no thought of Albrecht Dürer's famous print, The Four Horsemen of the Apocalypse (see page 9). But the parallel between Falk's words and Dürer's graphic presentation of the vision in Revelations is so striking that our cover artist begged to revise the Dürer print to depict the four modern horsemen.

Photo Credits: Billy Davis, Louisville Courier-Journal, page 5; Tony Spina, page 6; Dallas Morning News, page 10; Stephen J. Hannon, II, Washington and Lee junior, pages 12, 15; National Air Pollution Control Administration, page 16; Pennsylvania State Department of Health, page 20; all other photos by A. Michael Philipps '64, Washington and Lee University.

The nation now requires a redefinition of individual behavior.

No longer can there be exploitation in the name of progress;

there must now be conservation in the name of beauty and survival."



introducing

President Huntley: In October of 1870, nearly 100 years ago, President Robert E. Lee of Washington College died in the President's Home on this campus. In the few short years of his presidency here, he had brought this institution a vision, a spirit, and an ideal without which it would surely have perished. His vision was of the future laying aside forever the awful nightmare of the immediate past. His spirit was of tolerance and gentle perseverance in the face of incalculable hardship. His ideal was of an institution moved by this kind of vision and this kind of spirit, facing firmly forward without apology, without fear, and without rancor.

Shortly after President Lee's death, the Trustees of Washington College renamed the institution Washington and Lee University and proclaimed that this college community should each year gather together on Lee's birthday to pay fitting homage to its founders, to take stock of its past, and to consider what lies ahead.

This year, in particular, it seemed appropriate for us to be addressed by a person who could bring to us the perspective of deep scholarship and a lively understanding of the tumbling events of the modern world. There are few such persons in this age or in any other. We are fortunate indeed to have one of them with us this morning.

Dr. Norman A. Graebner, a leading authority on American diplomatic history, joined the faculty of the University of Virginia in Charlottesville in September, 1967, as Edward R. Stettinius Professor of History.

Born in Kingman, Kansas, in 1915, he received a Master of Arts degree at the

University of Oklahoma in 1940 and began a teaching career at Oklahoma College for Women.

During World War II he served with the United States Army in the Pacific. He received his Ph.D. in history at the University of Chicago in 1949. Dr. Graebner taught at Iowa State College from 1948 to 1956 and at the University of Illinois from 1956 to 1967. He has been a visiting professor at Stanford University.

Dr. Graebner is known not only as a noted scholar, but also as a dynamic teacher. An Illinois newspaper described his classes at the University of Illinois: "Students have filled most of the 450 seats in the Gregory Hall auditorium on the Urbana campus every Monday and Wednesday morning at 8 o'clock ever since Professor Graebner started teaching U.S. History at that hour."

Dr. Graebner was a 1958 Commonwealth Fund Lecturer in London and a 1963 Fulbright lecturer in Brisbane, Australia. He is a member of the American Historical Association, Organization of American Historians and Southern Historical Association.

He is an authority on the entire field of American diplomatic history, and specifically on the middle period, the Lincoln era and the Civil War, and recent American diplomacy. He is the author of many books proclaimed both here and abroad for their clarity and depth — among them, Empire on the Pacific, The New Isolationism, Cold War Diplomacy and, most recently, Manifest Destiny.

His topic this morning is "The Challenge to the Universities: 1870 and 1970."



the challenge to the universities: 187%

Delivered on January 19, 1970 by Professor Norman A. Graebner at the Lee's Birthday-Founders Day Convocation at Washington and Lee University.

This memorable occasion gives me the opportunity to speak to you on two subjects of great interest to me: General Robert E. Lee and American university education. It is not illogical to begin evaluation of the current needs of education with the presidency of General Lee at Washington College. Perhaps it is true that Lee's philosophy and purpose in education would scarcely meet the demands of today's society. If this be so, what separates us from the views of that thoughtful and well-meaning leader are simply the changes wrought by a century of American history. This age has little relationship to that of post-1865 America; thus the tasks of education in the two periods cannot be the same.

Having accepted the presidency of Washington College, Lee rode across the Blue Ridge to this community alone in September, 1865. Shortly after taking the oath as president of this college, Lee wrote in October: "I have entered upon the duties of my new office in the hope of being of some service; but I should prefer, as far as my predilections are concerned, to be on a small farm, where I could make my daily bread."

Still, as subsequent months and years indicated, Lee did become an effective and far-sighted college president. During his five years as the head of this institution, General Lee pondered the role of education in confronting the challenges of the nation. Everywhere those challenges appeared to be clear enough. The South was empoverished and in need of industry and trade. Elsewhere the economic possibilities of this country had scarcely been touched. Many of the nation's basic resources — in iron, tin, and copper had been discovered, but the technology to exploit them had not been developed. Beyond the mineral resources lay the vast stretches of the Great Trans-Mississippi West beckoning to farmers, cattlemen, miners, capitalists, and speculators. Jefferson had once thought that the American people would require a thousand years to reach the Mississippi River; now they had moved beyond that river in large numbers. Still so extensive was the continent, so limitless its resources, that the possibilities for economic and population expansion produced little doubt or hesitation.

Thus Americans fell on the nation's natural riches in the late 19th century as if the building of railroads, cities, and industries was the only true measure of national greatness. The government encouraged the process of exploitation by making the resources in soil, timber, and minerals available to any and all who had the capital to process these resources into useful articles of manufacture. The historian, Vernon L. Parrington, once termed the process by which the government turned over to private individuals what was worth taking above and below the surface of the earth as the "Great Barbecue." Three words, he suggested, characterized the outlook of post-1865 America — pre-emption, exploitation, and progress.

For Lee, no less than for educators generally, the age called for a new education — one that emphasized the creation of the technology demanded by a rapidly expanding agricultural and industrial country. In 1862, the federal government, under the Morrill Act, established the first land-grant colleges with their emphasis on the agricultural and the mechanical arts. In the years that followed many of the nation's leading scientific and engineering schools came into being. MIT opened its doors in 1865; Lehigh University and Case Institute, both noted technological schools, soon followed.

At Washington College, Lee wrestled with the same problems, and only the lack of funds frustrated his efforts in 1865 to expand the curriculum to include applied mathematics, mechanics, architecture, metallurgy, agricultural chemistry, and civil engineering. There was much in the South to be done. As General Lee expressed it himself in 1867: "I agree with you fully as to the importance of a more practical course of instruction in our schools and colleges, which, while it may call forth the genius and energies of our people, will tend to develop the resources and promote the interests of the country." In 1868, President Lee projected three new departments in this college agriculture, commerce, and applied chemistry. For Lee, and characteristically for his times, the great task before the country was the development of its resources as if this was a worthwhile and laudable endeavor in itself.

Thus the challenge to education in 1879 was based, in large measure, on the general agreement among Americans that the nation's resources were limitless and that the wealth wrought from the development of these resources would

serve the requirements of society in some special way. The emphasis was always on discovery and exploitation; it was never on conservation. As one studies the subsequent expansion of the nation's economy, the successes of American education seemed clear enough. For if that system had as one of its purposes the creation of industrial and commercial leadership as well as improved technology, the aid it rendered encouraged the nation to develop the most productive economy that the world had ever known.

Now, a century after 1870, it seems apparent that something has gone wrong. Spaces and resources which appeared so limitless four generations ago have begun to vanish. For a century the economy expanded at an amazing rate; yet it seems clear that what appeared so logical for education a century ago has, in the long run, led to potential disasters. For there are limits to industrial growth and exploitation, and long ago the costs of economic expansion, when measured by business statistics, began to exceed what even a large and rich nation could afford. Suddenly we realize that the nation faces new challenges far more elusive than those of a century ago, for the mere making of things, whatever their complexity, is for a rich nation always comparatively easy.

Unfortunately expansion is no longer the answer, and as the central problems of society become human rather than material, they also become more difficult and divisive. Still the American educational system has expanded so rapidly over the last century that we might assume its capacity to keep pace with the changing needs of the nation. We should be ready for the great tasks that confront us. But are we?

No nation in history has expanded so much of its energy, its wealth, and its resources on its educational system. Education dominates the budgets of towns, cities, and states. Even the Federal government contributes billions each year to encourage the process of learning. Such a vast expenditure must have a purpose. Indeed, traditionally the logic of the expenditure appears so obvious that few bother to question either the goals or the achievements. For it can be assumed that a democratic form of government requires an educated public and that a complex economic system requires managers, engineers, and scientists to sustain its efficiency and to guide its expansion. The hopes for American education can be measured by the billions expended to create and sustain the system. But a realistic survey of

the nation, its people, and its problems leads one to wonder just what all this expenditure has achieved.

American education has contributed little to the resolution of the fundamental, intellectual, moral, and social challenges facing the country. It has not strengthened this nation's security. Despite all the appropriations for national defense, the American people are among the most insecure on the planet. And the fear centers not alone in the antagonists abroad; Americans are no more free to walk the streets of Washington at night than the streets of Saigon. American society is becoming increasingly violent. The violence which began in the urban ghettos has moved onto the campuses where university presidents for the last year have been forced to call the police. According to the President's Violence Commission, an American is four times more likely to be a victim of violence than a West European. In his inaugural President Nixon alluded to the divisions in American society - between the young and the old, the black and the white, the suburbs and the inner city — and asked that the people stop shouting at one another. But good manners are not necessarily the answer. As one college president commented at the time of his resignation: "A society that does not correct its own ills cannot expect peace."

Still the problems continue to mount. The ultimate danger of nuclear war increases with the passage of time as more and more weapons create greater destructiveness. Perhaps the institution of war is no longer compatible with the survival of the human race. Still the United States, already the most powerful nation in history, continues to make preparation for war its central activity. Defense still dominates the budget, the news, and the energy of this Administration.

In some measure the systematic destruction of the natural resources threatens American society with a surer, but perhaps a slower death. For example, the American people each year manage to share in the creation of the 142 million tons of smoke and fumes, 7 million junk cars, 20 million tons of waste paper, 48 billion cans, and 26 billion bottles. Every city with 500,000 people dumps 50 million gallons of sewage a year into the streams, rivers, and lakes. Pollution has already exterminated the Delaware shad and the Merrimack

[&]quot;... the American people each year manage to share in the creation of 142 million tons of smoke and fumes."



shellfish and has made Lake Erie, I understand, uninhabitable for fish of any kind. About 50 per cent of the space of cities is taken up by automobiles, roads, parking lots, and gas stations. One ecologist testified recently before Congress that automobiles are reducing the oxygen supply at a prodigious rate. The pollution of the air threatens the ecological balance that supports human life. At the same time the world is depleting mineral resources and fresh water so rapidly that the Secretary-General of the United Nations warned, "The future of life on earth could be endangered."

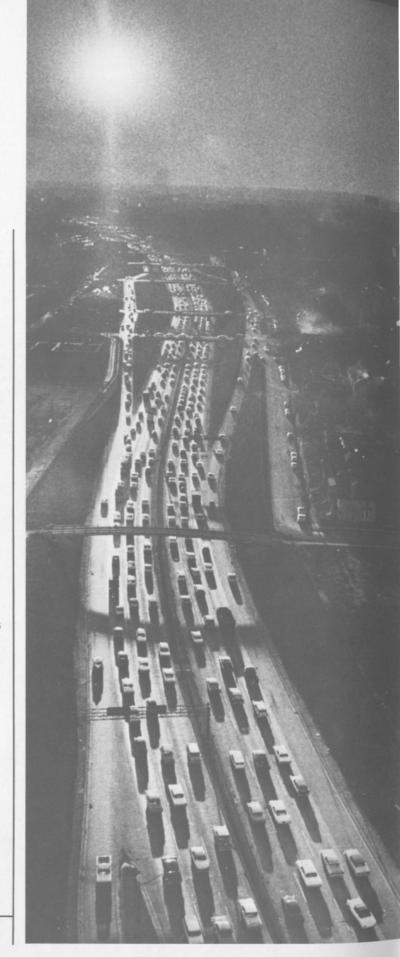
Still these mammoth problems command about 1.8 per cent of the federal budget. What is more, much of the nation's basic technological skill is still employed in those activities which produce the dangers to the environment. No government, state or federal, seems capable of dealing with these public problems. No one in authority seems prepared to face the country's mounting needs. The welfare rolls keep growing, the air and water become more polluted, airports and roads become more jammed, the war nobody wants drags on. It is not strange that so many people have wondered what American institutions, both educational and otherwise, have really accomplished.

This apparent gap between the nation's problems and the size and potential contributions of its educational structure has discouraged many of its most distinguished observers and lent encouragement to its antagonists. After reviewing a lifetime of experience in Washington, the noted bureau chief of *The New York Times*, Arthur Krock, concluded his recently published *Memoirs* in these words: "These are among my personal assessments of the consequences of the revolutionary political and social new American revolution. And from these consequences I have contracted a visceral fear. It is that the tenure of the United States as the first power in the world may be one of the briefest in history."

It was left for Art Buchwald to pass judgment on this country's refusal to grapple with its fundamental problems, such as air and water pollution or urban congestion. Buchwald reported the alleged top-secret meeting of Kremlin officials and noted why the Soviets anticipated the destruction of America without much investment of Soviet rubles.

Comrade Potomski made his report on air pollution in the United States.

[&]quot;About 50 percent of the space of cities is taken up by automobiles, roads, parking lots . . ."



"At the present rate," he said, "everyone in the United States should be dead in 20 years."

"But surely," said one member of the Presidium, "the Americans must be aware of what air pollution is doing to them."

But Potomski replied: "They are, but it doesn't matter. They have many pressure groups who scream that if something serious were done about air pollution it would hurt business. So government leaders talk about the problem and do nothing."

Similarly Comrade Redhevnov reported: "Comrades, I also have good news. The Americans are polluting their water at such a rate that in 10 years they will make every river, stream, and lake undrinkable, unswimmable, and uninhabitable for fish."

When the president of the Presidium asked why the Americans would do this to themselves, the Comrade replied, "It's hard to believe, but even though they know what they're doing, they still keep on doing it. If they stopped pollution, the polluters say, they would stop production of goods the Americans need. So no one is going to give the polluters any serious trouble."

And then finally Comrade Sokolov made his report: "I have the best news, Comrades, the American transportation system is breaking down. The railroads are shot, the roads are impassable and the airports are so congested that flying is nearly hopeless. In five years, the crisis will have reached a point where nothing in the United States can move."

And when the Presidium praised Sokolov for accomplishing the impossible, he simply admitted "Comrades, the Americans have done it all to themselves."

Clearly the nation is in deep intellectual trouble. The dichotomy between expectation — the expectation that education would create large masses of people capable of thinking deeply, clearly, and honestly on a wide range of public issues — and the actual state of the public mind merits some analysis. On the surface American universities have emerged into powerful and impressive institutions with the best faculties and the best students in the history of this nation or perhaps any other nation. It seems that somehow this vast accumulation of intelligence and good intention should fulfill the deeper purposes of education admirably. Why it has not can be discovered with some precision.

Except for advances in size, and perhaps in quality, the educational system has not changed much from my day. As an undergraduate I was compelled to enroll in a variety of core courses to insure a rather broad exposure. No less than students of the present day, I took some 40 separate courses, passed them, and received a degree. The philosophy and purpose of education has changed little since that time. Colleges and universities manage to graduate thousands of highly intelligent, sensitive, thoughtful students each year, apparently well prepared to serve themselves and society. But perhaps we are not turning out enough to make much difference. Or perhaps we are not, after all, teaching them well. At any rate the kind of intellectuality which we associate with training in the social sciences and the humanities remains a comparatively rare commodity.

Even among college graduates there is a lack of intellectual sophistication which will tolerate, much less ponder, complex public issues. For example, Richard Rovere, trying to explain the unacceptability of the views of George Kennan to Washington officials, attributed that failure in the late 1940's and the early '50's not to the radicalism of Kennan's proposals or even to the low esteem in which they were held. Rather he attributed the failure to the complexity of those views. They could not be attached to notions of fear or to slogans that might make them salable to the American people generally. They were simply beyond the possibility of a national consensus. Thus the government rejected them.

Despite all this educational effort, there is still a clear divorcement of the best thought of the universities from the policies of government. Indeed, with the passage of time there has actually developed a distrust between government and the educational system in many important areas of public policy. Are the facts that elusive? Cannot matters of foreign policy, for example, be studied and understood with some precision? If true, why cannot even the educated agree on basic assumptions concerning the external world? Whatever the contribution of the universities, they have not resolved this dilemma. And when some members of the academic community have tried, their advice has usually not been heeded. Indeed, the universities have been charged so often with a lack of wisdom that I have sometimes wondered why governments, both state and federal, go to the trouble of sustaining such expensive institutions.

Whether education has contributed to personal fulfillment is also a subject of doubt. Much of the alienation of the young has resulted from a conviction that the educational experience of the previous generation has led to some degree of material success, but for many to a life otherwise vacuous. It was against this that many of the young began to rebel long before they became caught up in the problems of race relations and Vietnam.

In short, American liberal education has not achieved its purposes. Although it is not easy to define a liberal education, that education has always sought the refinement of the rational process, the search for the meaning of things and the relationships among them; to enrich the pleasure that comes from the contact with the great minds of the past. Its fundamenal purpose has always been to help people make up their own minds, to learn to think. It creates the individual — the individual who sets about using his talents in his own way to achieve to the limits of his capacity in science, art, literature, and philosophy.

That American education has produced tens of thousands of such individuals can scarcely be denied. Still the system fails. As one University of California senior compained: "Its getting pretty depressing to watch what is going on in the world and realize that your education is not equipping you to do anything about it." What this student meant to say was that her education was not relevant. Arthur Lewis, a Negro educator at Princeton, recently expressed the same feeling toward the fragmentation of the liberal American education. Only in America, he said, are students required "to fritter away their precious years in meaningless peregrination from subject to subject . . . spending 12 weeks getting some tidbits of religion, 12 weeks of learning French, 12 weeks seeing whether the history professor is stimulating, 12 weeks seeking entertainment from the economics professor, 12 weeks confirming that one is not going to be able to master calculus."

What liberal arts programs have lacked, John Fischer of *Harper's* magazine has written, is a unifying philosophy. Individual teachers may have their philosophical preferences and personal convictions, but among teachers there is no coherent set of beliefs. At the end of four years, students conclude that no body of thought is superior to another body of thought. Thus they have not learned how to think about problems; they have not learned how to make up their own

minds in a rational manner because this process requires an intellectual system.

But universities were not always like this. Medieval universities existed largely to train people for service in the church. To achieve this goal each student was required to master certain subjects and each subject was connected with every other. Later at Oxford and Cambridge, education had the purpose of training men for service in the empire. At early Harvard and Yale the purpose of education was to train clergymen, doctors, and lawyers. In each case the curriculum was prescribed. This is the reason why engineers, doctors, and lawyers today complain far less of their educational experiences than do students generally, particularly those in the liberal arts. All the efforts to build meaningful arts programs have failed. The survey courses have been less than successful — often superficial and often synthetic. Often they have been shunned by those who might contribute most to them as teachers. If they are not taken seriously by the senior faculties, the sudents will not take them seriously either.

Again what has limited the impact of the liberal arts is the difficulty of perfecting and conveying humanistic thought, especially when measured against the gains of science where the results of progress are always more easily stored, saved, and accumulated. Indeed, with federal encouragement, the development of the sciences has been nothing less than phenomenal. Those achievements have burgeoned in a way that no one could have predicted 20 years ago. They have reached a day of reckoning, it is true, for the budgets for purely scientific research have been reduced. But the application of billions to the advance side of the university — that which is geared into the modern industrial, military world - has brought benefits to mankind as well as good incomes to many of the practitioners. Postwar education has had other technological spin-offs to meet the needs for specialists in business, industry, government, and education. This is especially true in the fields of computer science and communications. The universities have made their contributions to the expansion of business — the great prosperity — of this present generation. Perhaps this is reason enough for sustaining them at any costs.

In keeping with the times, much of the recent effort has been in growth and research. Education has become one of the nation's big businesses. Its internal needs generally have



Although there have been various interpretations of the four horsemen of the Apocalypse, most people accept the idea that they represent famine, pestilence, war, and death. The similarity between the Biblical vision and today's thinking about mass destruction may be seen in the following quotations: "And power was given unto them . . . to kill with the sword, and with hunger, and with death, and with the beasts of the earth."

- Revelations 6:8

- Richard A. Falk

been satisfied. The building programs on hundreds of campuses have been impressive. The faculties have enjoyed a maximum of liberty, sometimes good incomes, and a minimum of responsibility. This has created its problems problems of size and impersonality, as well as instructors caught up in consulting and research which gives them little time for students or teaching. Intelligent young men will gravitate toward the money, and if money is in research and nonteaching, that is where many will go. But for this the students have often paid a price. In part, the problems of teaching are organizational; in part they are intellectual. Never have there been enough good teachers to go around, but university and college presidents could improve these matters by shifting the direction of their rewards. Universities will usually obtain that for which they pay, and if they pay for research, this is what they will get — some of it might even be useful. But perhaps what is called for even more in the '70's is a higher level of competence in teaching and a new concentration on those subjects that matter for our continued existence.

John Fischer, in a recent issue of *Harper's* magazine suggested the idea of *survival* as the organizing principle of American university education. For him the need was clear: the future of the human race was in doubt. Richard A. Falk of Princeton University issued the warning in these words:

"The planet and mankind are in grave danger of irreversible catastrophe . . . Man may be skeptical about following the flight of the dodo into extinction, but the evidence points increasingly to just such a pursuit. . . . There are four interconnected threats to the planet — wars of mass destruction, overpopulation, pollution, and the depletion of resources. They have a cumulative effect. A problem in one area renders it more difficult to solve the problems in another area. . . . The basis of all four problems is the inadequacy of the soverign states to manage the affairs of mankind in the twentieth century."

Similar warnings have been voiced by other scholars, notably George Wald of Harvard University. Most believe that the nation still has some chance to bring the weapons, the population growth, the destruction of the environment under control before it is too late. But the time is beginning to run short. What is far more disturbing, however, is the lack of evidence that people generally take these problems seriously. Too many citizens really do not care what happens

[&]quot;There are four interconnected threats to the planet — wars of mass destruction, overpopulation, pollution, and the depletion of resources."



to this environment once they leave it. To stop the destruction, the present generation of students must develop some deep emotional commitment to this great cause of human survival.

Overpopulation should now be within the control of human beings; it requires but knowledge and determination. What people must be taught is that it is sinful to have more than two children. Biology departments must make it clear that unless the growth of population can be halted all other problems — poverty, war, racial strife, uninhabitable cities — are beyond solution. The major task of biology departments must be birth control.

The second theme in biological morality must be (and I quote John Fischer): "Nobody has a right to poison the environment we live in." Education can begin with a list of public enemies. At the head of the list will be those national leaders who make and deploy atomic weapons; for if these are ever used, they will fill the air so thoroughly with Strontium 90 and other radioactive isotopes that human survival seems unlikely. Also on the list will be those who make or test chemical or biological weapons, or who would dispose of obsolete nerve gas by dumping it in the sea. Other public enemies will be those who use DDT, an insecticide which remains virulent indefinitely and affects the streams and oceans to poison fish, water fowl, and eventually those that eat them. DDT is rapidly spreading over the entire surface of the globe. Its ultimate effects on human life can only be estimated. But there are other pollution problems which must be faced — sewage dumped into the nearest rivers or lakes and automobile exhaust. Perhaps Pogo saw the problem correctly when he observed, "We have met the enemy and he is us."

Similarly engineering students will learn not only how to build dams and highways, but where not to build them. Does one flood the Grand Canyon or build a jetport in the Everglades? Engineers must ask themselves, "What will be the effect of the highway on human life?" Is the highway necessary? Would it not be better to spend the money on public transit systems or build a new city rather than further congest the old? Is an offshore oil well really a good idea? Ask the people of Santa Barbara, California.

Engineers must also concern themselves with garbage

"Nobody has the right to poison the environment we live in."

disposal. America now spends \$4.5 billion each year to collect and get rid of garbage — more than five pounds for each person each day. Even the present cost is inadequate. But the future of the garbage disposal industry must be limitless. Dump heaps and incinerators are not adequate. Dumping and filling are ruining the waterfronts of many coastal cities. The Japanese have developed a method of compacting garbage under great heat into building blocks. Careers in this industry should bring profit as well as salvation.

Students of earth sciences know very well how rapidly the world is using up its raw materials. It is the depletion of resources that threatens the ever-expanding economy. The tonnage of the metal on the earth's crust will not last indefinitely. The world is already running short of silver, mercury, tin, and cobalt — all needed in modern technology. Even the more common metals are in short supply. The United States alone is consuming one ton of iron and 18 pounds of copper per person every year. And still the pressure to use increasing amounts of these raw materials is insatiable. Thus the chief task of the earth sciences is to teach people why they must live simpler lives which demand fewer natural resources. It has been estimated that the average American pollutes his environment 25 times as fast as a resident of India. This means, by definition, that all Indians are conservationists. In other words we must begin to accustom ourselves to fewer automobiles, beer cans, supersonic jets, barbecue grills, and similar gadgets, all of which consume metal. What is more, the simpler life might contribute considerably to human happiness.

New forms of bookkeeping would record the costs of business operated in social terms, not merely in terms of immediate monetary profits. Thus a real estate corporation which decides to build a 50-story building in the heart of a great city will have to ask itself, even if the building might turn a profit, what will be the cost to the environment of bringing 12,000 more employees into the heart of a great city and contribute that much more to jamming traffic, to placing a greater burden on the fumes, on the smog, on the environment. In other words, it is not so simple now to determine where and when and under what circumstances highways, bridges, or even skyscrapers should be constructed.

I return to 1870, neither to praise nor to criticize General Lee. But could the men of that day have seen the nation a century later, perhaps they would have thought less of exploitation and industrial growth, and more of a planned order for society, for they would have seen that the uncontrolled building of highways, cities, industries, and even automobiles does not necessarily add up to progress; with industrial and urban expansion has come retrogression and disaster.

Until recent times the depletion of the nation's resources remained a sign of progress. Those who fell on the forests, the veins of gold, the silver, the copper, and iron — regardless of the long range national interest — were regarded as heroic in direct proportion to their ability to reap a profit from their endeavors.

The nation now requires a redefinition of individual behavior. No longer can there be exploitation in the name of progress; there must now be conservation in the name of beauty and survival.

Can we make this adjustment? John W. Gardner, a most

distinguished American, believes not. As he said recently, "We know our lakes are dying, our rivers growing filthier daily, our atmosphere increasingly polluted. We are aware of racial tensions that could tear the nation apart. We understand that oppressive poverty in the midst of affluence is intolerable. We see that our cities are sliding toward disaster. But we are seized by a kind of a paralysis of the will. It is like a nightmare."

What hope remains must lie in education. In the new age, the college graduate must know how to examine what is going on in the world and be equipped to do something about it. Whether he ends up a city planner, a politician, an engineer, a teacher, or a reporter, he must have a relevant education. Such an education can still stop the processes of internal destruction and render the vast costs of this nation's colleges and universities worthwhile.

"... oppressive poverty in the midst of affluence is intolerable."



how the problemsolving approach Can help By William Buchanan Professor and Head of the Department of Politics

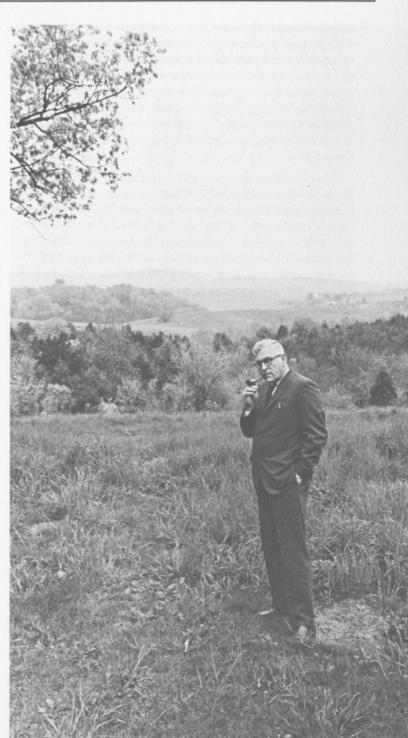
A puzzle which Professor Graebner's address poses to any Washington and Lee alumnus of my generation is how it was that this institution, that honored General Lee nearly to idolatry in the years after his death, on the whole paid so little attention to his educational objectives.

Lee's goals - apparently formulated after he had surveved the academic offerings of the little classical school envisioned an institution much more like MIT than W&L. In this, we perceive with hindsight, he understood the needs of the South and the nation during his generation. He also seems to have been an uncommonly adaptive person: after a lifetime as an army officer he avoided anything like military discipline for his students here, and he even symbolized his new role as a civilian educator by walking out of step with the band on ceremonial occasions. He pulled the school part of the way out of the sterile ante-bellum educational tradition. But the myth that enveloped him - and it - after his death, and had not evaporated 70 years later when I was a student, was not that of a forward-looking educator, but the plantation aristocrat, the charismatic leader of his famous horse, the old gentleman who patted children on the head.

Therefore it comes as a surprise to discover Lee as a person who was not uncomfortable in an era of rapid obsolescence and transition, who rejected the temptation to cop out on "a small farm where I could make my daily bread," and instead faced the necessity of drawing a backward-looking agricultural elite into the new world of technology. Why the college failed to follow his direction may be inferred from Professor Crenshaw's history, *General Lee's College*, and I wish it could be pursued even farther.

Professor Graebner has eloquently stated the comparable problems that face our own generation: harnessing the exploitative talent we created in the last century, guarding our diminished resources, disposing of the accumulating byproducts that clutter and pollute our surroundings, remedying the deprivation and idleness that breed violence in the centers of our cities (and also in the stagnant towns of Appalachia for which Washington and Lee University once provided leadership), facing the problem of race relationships too long postponed, taking that stance toward other nations most likely to inhibit them and us from obliterating one another.

Nor can anyone involved in American education deny that, here as well, something has gone wrong. The ideal of "large



masses of people thinking deeply, clearly, and honestly on a wide range of public issues" if it ever was a viable ideal certainly is not now within shouting distance of college courses that are too fragmented to lead to careful analysis of public problems, to personal intellectual achievement, or to cultural satisfaction. Lacking a single unifying philosophy, we cannot summon the dedication to teaching (as opposed to research) which a more widely accepted doctrine would inspire.

What Professor Graebner did not mention, however, was the massive, time-consuming effort the academic community is now investing in the search for new meaning, for new ways of teaching new things. In part this is spurred by the demands of students for relevance (whatever that means), but to a greater extent it stems from the feeling he so well expresses that we have something to contribute which the rigidities of our old academic structure have suppressed.

To give just one example, in the past year alone I have pondered what should be taught, either in my own discipline of political science or in the baccalaureate curriculum, in the company of the following groups: (A) W&L's curriculum committee, meeting weekly for two years to update obsolescent degree requirements, academic calendar, advisory system, and provisions for independent study; (B) our own department, re-examining its requirements for the major; (C) the Commerce School, considering the offerings of its four departments as a unit; (D) a large gathering of natural and social scientists in Washington examining the new stance of the National Science Foundation toward undergraduate education; (E) political scientists from predominantly Negro colleges in the South considering their peculiar problems; (F) a panel of computer-oriented teachers in Ann Arbor deciding how to communicate necessary statistical techniques to students interested in analyzing electoral behavior; (G) high school history and civics teachers at a summer institute at Norfolk State College adapting the college curriculum to their needs; (H) the political science department of a northern women's college evaluating its program; (I) a gathering of Virginia professors hosted by the U. Va. political science department; (J) a committee of the American Political Science Association, concerned with measuring what undergraduates have learned before admitting them to graduate study, (K) another APSA Committee considering what the

undergraduate departments should teach and how they should teach it.

The search for disciplinary identity and cultural unity is not confined to this institution or to the study of politics, although the demand for relevance is more justified in the social sciences than elsewhere. (The students are quite right that much we had been teaching was not relevant. Their problem is that whatever they seek to substitute for it often turns out to be, by their own standards, trivial or incoherent. The curriculum can be updated, but not quickly or easily.) Paradoxically, we sometimes are so busy deciding what we should teach next year that we neglect to prepare what we are going to teach tomorrow morning. So we dredge up last year's notes, and discover to our sorrow that they are still well received. Perhaps this is because students appreciate a familiar, skilled, and practiced performance more than they do a stumbling attempt to deal with ideas that are new even to the professor.

In seeking a central core for learning, I am not enthusiastic about John Fischer's theme of "survival." It is not hard to agree, as we stumble about in the dark, that we don't propose to march over the precipice, if we can ascertain where the precipice is. But that leaves us a lot of remaining directions in which to march. Perhaps I am overoptimistic, but I believe I see a gradual coalescence by at least a part of American education in one direction which offers some hope for a more idealistic and at the same time more pragmatic unifying principle by which the academy can prepare its graduates to cope with the problems that Professor Graebner lists.

This direction is a tendency to make part of undergraduate education a series of exercises in problem solving, instead of a mass of received written knowledge to be read, remembered, and mastered. There is an analogy with the earlier transition period when Lee saw the need for his students to understand the processes of making "acids, alkalis, salts, glass, pottery" and so on down the list. From a particular process for making something immediately useful, the sciences moved on to the basic processes underlying physics and chemistry, and thence moved again to the process of discovering processes, in other words, to their preoccupation with research, which has been so productive of good (and incidentally, of course, of evil). Many of us feel that this orientation toward problem solving can be extended from



the natural sciences to the social sciences and the humanities, and enlightened by an implicit regard for social good and human values that the technical community has sometimes lacked.

This problem-solving approach takes off from some apparent need — control of environmental pollution is the popular one, but there are others such as nuclear proliferation, population control, urban decay, resource depletion, poverty and bureaupathology — and explores alternative avenues of social action.

Such problems usually have a scientific component that requires some understanding of biology, chemistry, genetics, physics, psychology, engineering, zoology, physiology, geology, meteorology, or some comparable discipline. These problems may also have a statistical component, requiring the measurement of the incidence of several phenomena, including human values or behaviors. Attacking them requires that human efforts be coordinated, a babble of technical jargons be transcended, that costs and benefits of alternative proposals be assessed, that a wide range of values, sometimes including esthetic and doctrinal judgements, be taken into account. A political component usually involves the satisfaction, appearement, or denial of ethnic, religious, racial, occupational, or geographic groups, hopefully by processes of bargaining and compromise, but conceivably, in certain instances, by force. There is usually some legal or governmental structural reform entangled as well.

These are the processes by which problems in the complex world around us are solved, whenever they are solved; and the failure to understand these processes is often at fault when they are not solved. Look at a few examples. This problem-solving process got us to the moon, has substantially controlled poliomyelitis and syphilis, supplied the semi-arid Los Angeles basin with water, set up an international telecommunications net, and kept us from having a major depression for 40 years. It has not enabled us to govern our cities effectively, diffuse the best products of our art, literature and music, or provide adequate employment for young Negro males, to name a few.

What the educational establishment must address itself to is *not*, let me stress, solving the problem itself. Indeed, professors get themselves into deep trouble when they imply,

[&]quot;This problem-solving process has not enabled us to govern our cities effectively."

deliberately or inadvertently to students or politicians, that they have the solutions for what ails society. The academic responsibility, instead, is to simulate the real-life, real-time problem-solving process in an analog that is practicable within the academic environment and schedule. While such exercises may throw new light on a problem (for the idealism of students has a way of revealing the selfishness of adult interests), they will not themselves cure the ills of society. Such study is more likely to reveal the unexpected obstacles, the human or economic costs, or the obdurate quality of matter that shows an otherwise appealing solution to be physically or biologically impossible. The object is rather to emphasize the methods of learning, of inference and evidence, of separating fact and value while respecting both, of negotiation and decision, which characterize contemporary problem-solving.

The problem-solving analog will usually bring together a "task force" of students from different disciplines. This approach restores to the process of education some of the unity that has been fragmented by the knowledge explosion. It comes reasonably close to that meaningless high-school cliché that the pupils should be taught not what, but how to think. (If any of us knew how to think, we'd be in too much demand doing it to waste our time teaching it.)

As a teaching technique, an interdisciplinary task force simulating the problem-solving process holds great appeal. However, it does violence to some long-standing academic procedures and assumptions. It cuts across disciplines. It requires teamwork of academicians who are essentially individualists. It does not fit the pattern of class hours and semesters, and it does not permit the daily assignment of chapters that achieves "coverage" of a large quantity of written material. It violates a most cherished assumption that the professor knows the answer and the student must learn it. It makes difficult the assigning of grades to individual students, for they are often engaged in teamwork. Moreover, there are portions of the educational process where this method is irrelevant. For example, it violates the usual order of courses for teaching science to majors, although it has been shown most effective in teaching science to liberal arts students, and the NSF is encouraging it for undergraduate instruction. It is irrelevant to the teaching of languages, although it may have some impact upon which languages students consider it important to learn. Though it is no panacea for all that ails the educational system, taskforce learning offers a remedy for those particular defects which Mr. Graebner treats most directly. But don't expect it to be put into effect, here or elsewhere, tomorrow morning.

Thus the only portion of Dr. Graebner's address which I would take exception to (and this may well be a stylistic quibble) is the notion of "public enemies" — people who



[&]quot;The trouble is not with people who so much as with processes which."

make and deploy nuclear, chemical and biological weapons, use DDT, dump raw sewage in the river and garbage along the waterfront, crowd into cities, build jetports, pump offshore oil, use up scarce metals and fuels, and so on. As Pogo suggests, the trouble is not with *people who* so much as with *processes which*, and that is why our national will seems paralyzed. We can fight *people who* — we can sue them, jail them, break off diplomatic relations with them, shoot, poison or even "nuke" them. But we have not ourselves



learned to cope with the *processes which* make life hideous and dangerous despite our best intentions, and hence we are not teaching our students to think at a level of abstraction sufficient to understand them. Nor do we give them the opportunity to experience these processes at firsthand by participating in them where possible, or simulating them where not. Thus we have produced a generation that seriously advocates "participatory democracy" — a decision-making process whose inadequacy was revealed centuries ago.

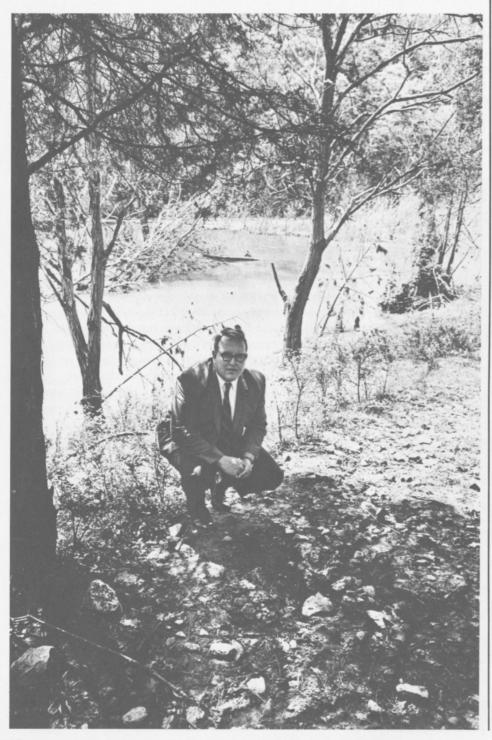
Our engineers brag upon our technological progress, and upon the speed with which inventions are put into use. Before World War I it took an average of 33 years between discovery of a device and its utilization; between wars the average time was 17 years, and since World War II it has been nine years. The transistor was discovered in 1948; the computer was introduced into industry in 1956. May I suggest that our record for inventing social and political processes and putting them into effect is not much worse than this? Constitutional government was developed and implemented between 1776 and 1791, the corporate form of organization was perfected and popularized in not much longer, the "think-tank" research corporation has been developed within two decades, the credit card was put into use in less than one decade, the Marshall Plan was conceived and implemented in less than a year. If we can give our undergraduates some training in analyzing and participating in team decisions, we should be able to do even better at social problem-solving with respect to both quality and

As Albert Einstein watched the statesmen and politicians struggle to give birth to the United Nations, an acquaintance asked him how it was that man, who could invent atomic energy, had so much trouble learning to control it. "That," Einstein replied, "is because politics is so much more difficult that physics."

William Buchanan, professor and head of the Department of Politics, has been a member of the Washington and Lee faculty since 1966. A 1941 graduate of the University, he holds the M.A. and Ph.D. degrees from Princeton. His principal fields are political behavior, public opinion, the legislative process, state and local government, and public administration.

what can washington and lee do?

by Thomas G. Nye, II Assistant Professor of Biology



Once again Washington and Lee, no less than other colleges and universities. is faced with a new challenge. As Professor Graebner stated in his Founders Day address, "This age has little relationship to that of post-1865 America; thus the tasks of education in the two periods cannot be the same." The tasks of education during the post-1865 period have been, by economic necessity, concerned with facilitating technological development for the exploitation of resources. Throughout the United States the emphasis shifted from a primarily rural, agrarian economy based on individual enterprise, to an urbanized, industrial economy, strongly supported and encouraged by the federal government. Today we are faced with the even more complex problem of continuing our technological development while simultaneously striving to maintain, and in many instances reclaim, our own environmental habitat.

One might well ask how our nation has allowed itself to reach this point in terms of environmental pollution and contamination? The answer to this question is not entirely clear, but perhaps a closer look at the policies, or lack of policies, aimed at solving the problem during the past 100 years will help to clarify our present situation. As early as 1873, the American Association for the Advancement of Science called attention to the rapid exploitation of our forest resources; in 1879 Major John Wesley Powell, later of the United States Geological Survey, recommended to Congress a revision of the laws governing the land of the West, based upon the reality of the importance of water rather than acreage. Unfortunately legislators and an apathetic public ignored these recommendations for a decade until,

finally, in 1889, Congress took the first halting steps in the direction of soil and timber conservation.

Against the opposition of western cattle, timber, and mining interests, the last three Presidents of the 19th century, Harrison, Cleveland, and McKinley, withdrew millions of acres from public entry and established them as forest reserves. The century closed amidst dawning public realization that the days of plentiful, cheap land were gone. Mc-Kinley's assassination in 1901 brought to the White House one of the staunchest presidential supporters of conservation, Theodore Roosevelt. His first congressional message announced that, "perhaps the most vital internal problems facing the nation are those concerned with forest and water." To further protect national forests from exploitation by special interests he reorganized the Forestry Service by placing it under civil service and appointing as its head, Gifford Pinchot, whose zeal matched the President's. To arouse and educate public opinion he sponsored first the Inland Waterways Commission to study water resources, then a White House Conference attended by leading conservationists and scientists, and finally the National Conservation Association to continue stimulating public interest.

Not until the 1930's did an administration threaten Theodore Roosevelt's record as the preeminent exponent of conservation. Nevertheless, during the period between the two Roosevelts the government did take several important steps. In 1910 Congress authorized the Bureau of Mines to safeguard the nation's mineral resources; the Water Power Act of 1920 regulated use of water reserves on public lands, and the

Boulder Dam Project provided water power, flood control, and irrigation. Franklin Delano Roosevelt's interest in preserving our natural resources pervaded every part of his program. The relief-oriented Civilian Conservation Corps undertook the extensive project of forest protection. The Tennessee Valley Authority sought to reform an entire region's economy by reclaiming exhausted soil, reseeding timber lands, and establishing wildlife sanctuaries and recreation facilities. Other important conservation projects, on a more permanent basis, were carried out by the Public Works Administration. These latter projects included the elimination of pollution in streams, the creation of fish, game, and bird sanctuaries, and the conservation of mineral resources.

After World War II, public apathy regarding conservation returned. Only in the past four or five months has the subject caught the imagination. Attention has been focused on this topic by such governmental agencies as the National Science Foundation, Department of Health, Education and Welfare, and the Department of the Interior. The recent State of the Union Address and budgetary requests by President Richard M. Nixon have firmly established, as a first priority of the present Administration, the development of both immediate and long-term solutions to our environmental problems. In the words of President Nixon, "The battle for the quality of the American environment is a battle against neglect, mismanagement, poor planning and a piecemeal approach to problems of natural resources. It is a battle which will have to be fought on every level of government, not on a catch-as-catch-can basis, but on a well thought out strategy of quality which

enlists the aid of private industry and private citizens." We cannot hope to solve all of the myriad of environmental problems overnight, but we cannot afford to wait until tomorrow.

Recently much has been written concerning man's alterations of his environment or the ecosystem in which he lives. The term "ecosystem" was first proposed by A. G. Tansley in 1935. Tansley envisioned this unit as including "not only the organism-complex, but also the whole complex of physical factors forming what we call the environment." In such a complex system one must consider all the facets. Any study of environmental alteration would be foolish if it focused on only one facet of the organism-environment complex. Examples of this interaction are readily available to those who seek them and, unfortunately, examples of misjudgement of this complex are also available. Perhaps one of the most poignant examples of man's failure to consider the overall effects of environmental controls is the Aswan Dam on the Nile River. During 1966, scientists from a number of concerned countries gathered in Split, Yugoslavia, at a meeting sponsored by UNESCO. The results of this meeting dramatically illustrated an environmental imbalance which was precipitated by the presence of the dam. Originally the dam was constructed to provide a source of power and irrigation water for Egypt's lagging agricultural economy. The results of this meeting indicated, however, that although the Egyptians did benefit, the remainder of the Mediterranean economy suffered tremendously by irreparable damage to the staple sardine industry.

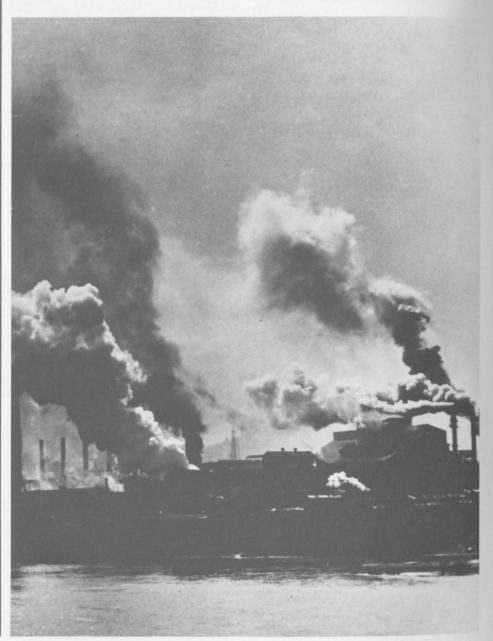
The question has now been posed as to how a dam on the upper reaches of

the Nile can affect a major industry located literally hundreds of miles away? Ecological studies have shown that prior to the building of the Aswan Dam millions of tons of dissolved phosphates and nitrates were annually carried into the impoverished Mediterranean Sea by the Nile. This rapid influx of nutrients initiated what ecologists call a "bloom" of phytoplankton (microscopic aquatic plants). In turn the phytoplankton provide nutrition for zooplankton (microscopic aquatic animals) which similarly "bloomed." The chain is thus established as young sardines flourish and grow rapidly on the great abundance of zooplankters in their diet.

Results of the meeting showed that the annual sardine catch in the Mediterranean Sea was decreased by 50 per cent, and it is anticipated the completion of the project may lower the catch to 25 per cent, or less, of its original figure, thus eliminating a major industry from the Mediterranean economy. At this date the total effects of this project are not yet known. Evidence also indicates that the Schistosomiasis disease will rapidly increase in portions of Egypt. This disease, producing irritability of the bladder and dysentery, enters the body by the alimentary tract, especially by drinking water, or through the skin of persons bathing or wading in infested waters. One of the alternate hosts of the organism responsible for this disease is a snail common to the waters of the Nile; thus as vast areas are flooded by the backwaters of the new dam the range of the infected snail will be greatly extended.

"Our environment is a vast complex incapable of being grasped by understanding any one of its parts." Such environmental alterations as the Aswan Dam point clearly to the gravity of unplanned adjustments of our environment. The complexities involving the interactions of physical, social, spa-

tial, and biological relationships are indeed difficult to determine and thus far are, at best, poorly understood. The need for basic research is clearly evident, but I would caution these same research-



ers to avoid the pitfall of examining each of these facets as a separate entity. In the words of Dr. Melvin A. Bernarde, of the Hahnemann Medical College and Hospital in Philadelphia, "our environment is a vast complex incapable of being grasped by understanding any one of its parts." Only by considering our environment as a true system with interrelated parts is this research relevant.

Much of the popular writing today concerning "ecology," "our environment," "pollution," etc., is meant to appeal to the masses and contributes little toward solving the basic problems of our environment. Writers who have seen the smog of Los Angeles, the contamination of Lake Erie or the Hudson River, the strip mining destruction of eastern Kentucky, southwestern Virginia, and southern West Virginia, or the conversion of east coast salt water marshes into housing developments, have suddenly cast themselves into the role of "ecological savior." Within certain limits I readily admit that they are performing a service to our society by focusing attention on environmental problems. On the other hand, I am somewhat bothered by the possibility of our society actually becoming indifferent toward the programs designed to eliminate these problems because of boredom produced by constant bombardment and saturation by all news media. This latter alternative is one which we cannot afford, especially since we do have the technological knowledge, in many instances, to begin the necessary clean-up programs.

The challenge confronting all responsible colleges and universities today is to establish the role they must play in the

forthcoming assault on environmental problems. The question is not whether we participate actively, for if we are truly a responsible educational institution, our participation may be assumed. The basic issue is: To what extent do we feel we can participate and make a worthwhile and relevant contribution toward solving these problems?

Washington and Lee University must soon address itself to this particular issue. Quite obviously we cannot establish a broad-based curriculum aimed at developing a new Department of Environmental Studies, although some schools such as the University of Wisconsin, University of Louisville, and the University of Virginia have already taken such steps. The initial and continuing costs, in terms of both space and money, make such an effort prohibitive for most smaller institutions.

From my own considerations, I would like to see Washington and Lee's role develop along two separate, but certainly interrelated lines. (1) There exists, within the present framework of the University, the possibility of establishing an interdisciplinary approach to an environmental studies program for undergraduates. Should the University find enough interest in such a program, the precedents have already been established. Interdepartmental programs already exist for pre-medical and chemical-engineering students at Washington and Lee. In addition, such a program would certainly harmonize with the recent changes in curriculum flexibility. Dr. F. Kenneth Hare of the University of Toronto has suggested that such interdisciplinary programs must by necessity be quite flexible and synthesizing in method and approach. This

is in opposition to most interdisciplinary programs which usually end up with the same analytical approach as their comprising disciplines. (2) The second approach which the University might undertake would be in the area of further focusing attention to environmental problems. This latter role would include not only our own students but local citizens as well. Lecturers from other campuses and governmental agencies, symposia by our own students and faculty, and lectures by our own faculty to local civic and service organizations would all lend impetus to such a program.

Student interest in this timely and critical topic has already been demonstrated on the Washington and Lee campus. On April 22, the students organized and participated in a Earth Day "teach-in" on environmental problems. Responses such as this are becoming the rule rather than the exception throughout the United States.

From the previous discussion it is quite evident that most of the present day problems concerning our environs are the result of years of apathy. Within our society, this sentiment cannot be allowed to continue unchallenged. Our environmental problems can be remedied only by a responsive and well-informed public.

Thomas G. Nye, II, a specialist in ecology, has been teaching biology at Washington and Lee since 1966. A 1959 graduate of Fairmont State College, he holds an M.S. in botany and a Ph.D. in biological science from the University of Kentucky.

is a single model appropriate

by Andrew W. McThenia, Jr. Assistant Professor of Law



Professor Graebner's address was noteworthy in many respects. His survey of the many ills facing our society was elegant, and he was generally successful in avoiding the usual rhetoric so common to commemorative occasions. Since hearing the address, however, I have been puzzled about his conclusions.

After his survey of the human condition and his diagnosis that we are "seized by a paralysis of the will," he concludes that the hope for Western man lies in education. Is this guarded optimism? Is he saying that although all of our institutions (i.e., political, economic, religious, as well as educational) seem paralyzed at the moment, they are capable of reform and can be made to work? Or, is he saying, on the other hand, that we are a decaying world ruled by technology and that the only salvation to man's dilemma lies in education? If the latter, then there is clearly no justification for an optimistic outlook.

The quandary presented is not an idle one, for as Professor Graebner himself illustrates, there is little historic evidence to support a claim of superiority for the university over other major institutions of society. In fact, the evidence may well point to the opposite conclusion. If other institutions are paralyzed, the university cannot long survive no matter how much tinkering is done with its structure. If, however, the other institutions of society can manage some reforms and face the "new age" as described by Professor Graebner, then and only then can the university survive. In the process of that survival it may, along the way, make some positive contributions to the "new age."

I want to believe that Professor Graebner chooses the optimistic path

for all of higher education?

with the university struggling for reform in tandem with the other institutions in society. However, I am of the opinion that little successful reform can come about unless the institution under consideration has some clear idea of its reason for being.

Higher education apparently is so distraught at the moment that it is incapable of asking this sort of question. It seems that the questions being asked in and around universities are "who" or organizational questions. Who shall make policy? Who governs university affairs? The attitude seems to be that if we answer the structural or organizational questions we will not have to ask the "why" or "what for" questions which are profoundly more difficult. What are the purposes of the university? The resolution of that kind of question may well determine who should run it.

There are at least two models of the university which are assumed to exist, and each seems to be more or less contradictory of the other. Professor Graebner himself uses language common to both schools of thought. One model, which might be called the Barzun model, is described by Professor Graebner as follows:

Although it is not easy to define a liberal education, that education has always sought the refinement of the rational process, the search for the meaning of things and the relationships among them; to enrich the pleasure that comes from the contact with the great minds of the past. Its fundamental purpose has always been to help people make up their own minds, to learn to think. It creates the individual — the individual who sets about using his talents in his own way

to achieve all that is to be achieved by him in science, art, literature, and philosophy.

He also refers approvingly to John Fischer's model of "Survival U." That concept, combined with the exortation to relevance, is enough to send a Barzun humanist to the barricades. I certainly agree with his observation that American liberal education has not achieved the goals it set for itself, but I would ask the question: Is that any reason to abandon it? One of the reasons for this failure is the continuing fragmentation within the university which denies the existence of any real unifying philosophy. It occurs to me that John Fischer's unifying concept of survival does not provide much synthesis. In fact, it may lead to greater fragmentation. I am not quite sure what "relevance" means in the current debate over the university. Relevance to whom and for what? Many adherents of the concept propose actions which are in the long run not relevant but trivial.

One of the faults within the university (and perhaps with this paper itself) is that we all too often assume that a single model is appropriate for all of higher education. The educational world, like most of the rest of society, has a propensity for emulation. Whatever is right for Berkeley must be right for everyone else. Even the smaller colleges depend for their teaching personnel on the whims of the major graduate schools. So the follow-the-leader influence filters all the way down to the level of Washington and Lee. Other than institutional size, there is really very little diversity within the world of higher education. Contemporary standards of success accreditation and other forms of profes-

sionalism — deny the possibility of pluralism. What is for one institution a successful experiment becomes, if that institution is sufficiently prestigious, the norm for all. If the institution is not prestigious in the first instance, it is unlikely to experiment and risk the scorn of the intellectual elite. Nearly all of the higher education seems to suffer the same identity crisis, and yet few institutions are brave enough to strike out on their own because they are fearful of losing the aura of respectibility. I wonder what would happen if there were a wholesale rejection of accreditation and other professional influences within American universities. That is, of course, a radical proposal, and since I am not charged with the task of administering in that anarchic world, I am open to the charge of making irresponsible sugges-

However, the danger of choosing one model for all Academe is that comments such as Professor Graebner's are often met with unusual hostility by those hidebound in their present ivy worlds. I did not receive his remarks in that fashion, and although I am not sure I would want to attend "Survival U," I think the address focused on the right question. I enjoyed it.

Andrew W. McThenia, Jr., an ardent conservationist, has been a member of the faculty of the School of Law since 1967. He was graduated from Washington and Lee in 1958; he received an M.A. from Columbia in 1960 and his law degree from Washington and Lee in 1963.



As a sociologist, I was very much interested in what Professor Graebner had to say about the current state of American society. I suspect that his speech contained nothing surprising to his listeners, for what he had to say is being echoed constantly on television, in the press, and from lectern and pulpit throughout the nation: that the Malthusian spectre, or its modern-day manifestation thereof, has been revived, that we have discovered collectively the reality of pollution in our waterways and lakes, and in the air that we breathe, and that we are being shown dramatically how our resources are being depleted at an alarming rate. And perhaps more significantly, that we are being made increasingly aware of the true state of violence which we as Americans are capable of reaching in our society.

the sociologist has by Emory Kimbrough, Jr. Professor of Sociology not been exactly fiddling

Given this, the question which I wish to raise here is what, if anything, has the sociologist qua sociologist to say about the situation of which Professor Graebner speaks. Does the sociologist have special insights that would give him greater comprehension of our condition; does he possess special techniques which he can apply to a given situation in order to achieve a higher level of analysis, and hence contribute to the amelioration of social ills; and finally, has he to date done very much to contribute to the solution of the various problems which afflict this society?

I wish that I could answer these questions in the affirmative, but I cannot, and in the remarks to follow, I hope some light can be shed on why the answers are not affirmative ones. And here and there, I hope to suggest what sociology can say and has said about our social condition.

I would begin by suggesting that the sociologist has not, over the long haul, had too much to say about current social ills because he has been too busy doing other things in his professional capacity. In the years following the Great Depression until comparatively recently, the American universities which train professional sociologists devoted relatively little emphasis to social problems, except for a few "service" courses on social deviance and social disorganization, and in some institutions courses loosely labelled "criminology." The concern of the graduate departments of sociology was with the training of "methodologists" concentrating on ever narrowing "specialties" such as social stratification, industrial sociology, political sociology, or the sociology of the family, to name only a very few. At least in my time as a graduate student the division of labor decreed that the social welfare people (generally evaluated as a generally inferior caste of students and professionals) should worry about social problems, whereas the sociologists should be concerned with making of the discipline a "science," and all that such entailed. Hence, the curricular bill of fare was dominated by courses in research design, statistics, and the

Implicit in all of this was the attempt of sociology as an academic discipline to shed the "do-gooder" and reformer image and to assume instead the image of the white-coated scientist in his exotic equipment-ladened laboratory, making important discoveries about the social behavior of man, and in all honesty, it would have to be admitted that the desire

for increased prestige in Academe was not the least of the motives involved here.

Now what arguments did sociologists make out of all of this? First of all, they would have denied that they were uninterested as sociologists and private citizens in social problems, but would have gone on to argue that before a discipline can bring about any positive effects upon a problem condition, and/or develop any useful insights into it, it would be incumbent upon that discipline to develop as far as possible its analytical tools; to be more specific, before the sociologist could comment intelligently and usefully on any problem — juvenile delinquency, for instance — he had better have reliable and valid analytical procedures at his disposal for the study of that problem.

The attitude that I have discussed above has dominated American sociology in the past, and is certainly the dominant orientation among the "Establishment" savants in the discipline domiciled in the most influential university graduate departments, and at least until recently, the effect has been to deflect sociological attention away from many of the concerns that face contemporary society. This situation has not gone unnoticed by others, especially the press in this country. The New York Times periodically asks why the social scientist has said or done so very little about the current problems to which the same distinguished newspaper devotes so much space in its column day after day. Others note the great foundation and governmental grants to universities for use in the social sciences, and how small the useful return these huge investments apparently have brought, and the general public wonders why tax dollars should go to support departments of sociology when they seem to contribute very little, if anything, to straightening up the mess human beings have made of their physical and social world.

But all of the blame should not be heaped upon the sociologist, for there are some other factors which have operated in the past to decrease his overall effectiveness in the problems area. One of the most important of these factors is the sheer complexity of his subject matter, and how essentially weak are the tools of analysis available to him in the pursuit of his task.

Let us take the example of juvenile delinquency. If one were charged with the task of "explaining" this phenomenon, and with the further task of coming up with effective solutions to the same, he would have to isolate literally dozens of variables interrelated in an incredibly complex fashion to do so; the same can be said for virtually every other problem. Given the paucity of resources available for attempting to analyze a given social condition, is it any wonder that diverse interpretations are possible concerning a condition such as juvenile delinquency, and that there is a considerable amount of conflict in the theories that purport to "explain" this condition to us? I think not.

And I should hasten to add at this point that one of the problems sociology had had to face is that too much is expected from it, given the interpretative power which the discipline has been able to achieve in many problem areas and for other reasons; we can thus fashion a reasonable answer to the *New York Times*' criticism: sociology is not yet *able* to provide the sort of answers that the *Times* and the general public would like to have, and further, that no answer at all is better than a half-baked one, for the latter can be dangerous to the national welfare. Let it be said, therefore, that the sociologist has not been exactly fiddling while the streets of Washington, Detroit, Watts, and Newark go up in flames, for he has been trying to perfect the tools of his trade.

Today the social sciences, and especially sociology, are being called to task for their failure to be more active in the solution of America's ills, and what is significant here for sociology is the development of criticism from within the discipline; we have already mentioned what has been going on outside. An increasingly strong, highly vocal minority of graduate students and the younger professors (along with a few senior professors) have begun to question the "objective," "value-free" orientation of sociology, and have become concerned and involved with social issues, such as poverty, Vietnam, violence, racial discrimination, to name a few; by concerned is meant taking an active stand with respect to the amelioration of these several conditions. This new position argues in essence that following the "value-free" canon, long considered a fundamental fact of the existence of the discipline, is really nothing less than a device employed by the sociologist to avoid becoming concerned with the pressing social problems of the day; in other words, the sociologist who goes along with the traditional dedication to the scientific canon is refusing to contribute his specialized knowledge toward the betterment of man. Implicit in this

argument is the point that if sociology remains uncommitted, if it remains of little positive utility to society, then its right to a premanent place in the university is dubious. And further, some critics fear that sociology is being used as an instrument by the established order to further its interests, whatever those interests might be at a given time.

This is not the place to make a judgment as to who is correct concerning the proper role of sociology in contemporary society; however, this conflict situation being fought out in sociology as well as the other social sciences (and a number of the humanities as well) is a very important aspect of the present structure of modern American sociology.

So far, we have been concerned with why sociology has not had very much to say about our various social prblems. Is there anything that we can say about the positive contributions that sociology has made, and/or is making? I think there is. First of all, let us take a look at the accomplishments in the area of methodological procedures. Without getting immersed in what has developed into a most complex and ever esoteric specialty, suffice it to say that the sociologist has made sound progress in developing techniques of a wide variety which help him to measure and interpret many aspects of human social behavior: attitude measurement procedures, techniques for analyzing group behavior, techniques designed to get at the way individuals perceive various situations, experimental design strategies, etc. The achievements in this area can be seen clearly when comparing earlier sociological methods textbooks with modern ones. With the advent of the high-speed computer, even greater strides have been forthcoming in data processing and analysis. In sum, very impressive strides have been made in methodology by all of the social sciences. We would be quick to point out, however, that in this respect they are still in the pioneering stage, or not too far removed from it.

I think it can be argued with authority, therefore, that the sociologist has made some contribution to an understanding of the social problems of the day via efforts in perfecting the analytical tools of the trade; one associated problem which should be mentioned is the lack of communication which still exists between those who are expert in analysis techniques and those who must deal with the problems on a day-to-day, involved basis — persons who might not be skilled in using such techniques. But progress is being

made in diminishing this gap: social workers, planners, even administrators of social agencies of one kind or another, etc., are increasingly well-versed in the techniques of the social sciences, and this bodes well for the future in coping intelligently with social problems.

What can we say has been the case for specific problem areas? Unfortunately we are not able to explore this very important area in the detail that it deserves, but a few points can be made. There is no doubt that the contemporary sociologist is much more sensitized to specific problems than was the case earlier, and this sensitivity does involve concern with the applied or action aspect. Hopefully this will lead to a fruitful union of theory, research, and action programs which, in the long run, would operate to the benefit of all concerned.

Another point is that our knowledge about specific problems is expanding, and doubtlessly will continue to do so. We know much more about the dynamics of racial prejudice today than we did in the past, although we do not know enough. We know more about poverty, including such aspects of the question as the poverty cycle, more about what types of programs can be expected to work, as contrasted with those which will not. We are beginning to understand more about urban ecology, and the balance that must exist between the human and the environmental dimensions. In these and in many other problem areas, our knowledge is being expanded, but still not nearly enough.

Therefore, on the basis of what we have done in sociology thus far, I for one believe that we can make some specific points concerning our general social problem situation. I think we realize first of all that the various social conditions which Professor Graebner discussed in his speech are not isolated from one another, but in fact are related in a very complex causal nexus. We know, for instance, that crime is related to poor housing, to poverty, to racial discrimination, and to a number of other factors. We know in addition that to cope with crime, the entire social setting must be involved, and here we mean everything from housing to the basic values to which the community adheres. And we know that closely linked to all of this is the general issue of population (the question of increasing numbers, the implications of the dramatic migratory flows that this nation has experienced in this century - from Europe to America, from the South to the North, East to West, rural to urban, and urban to

suburban — the changing age composition of the population, and other aspects of population).

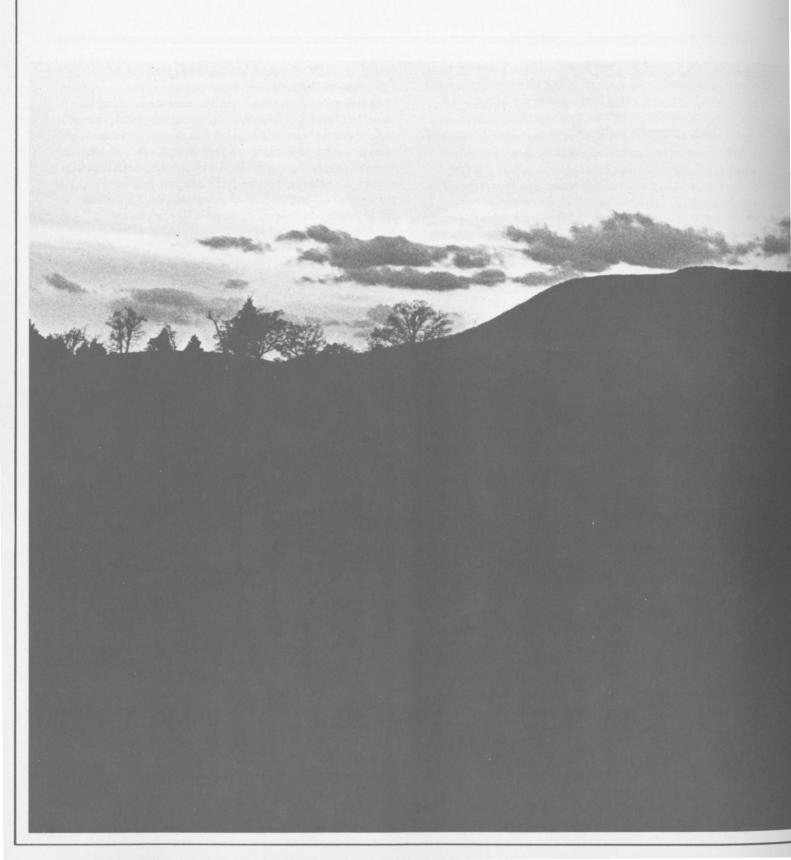
Our researches into these and other areas have sensitized us to the necessity of looking at the *gestalt*, the total picture with its complicated web of related problems, and this prospective has in the long run contributed much to our knowledge relating to social behavior. Finally, as indicated earlier, if we have not developed a comprehensive model for the analysis of the social ills that beset us, we have at least made progress in developing small-scale theories and methodological procedures of modest analytical power, and this certainly means progress.

This, then, is where I think sociology stands vis-a-vis the nation's social problem situation today. There is one final item that I find most encouraging as well as gratifying the recent upsurge of interest in these matters shown by undergraduates in most American colleges - and this applies to Washington and Lee as well. As a product of the collegiate generation of the apathetic 1950's, I was at first personally somewhat dubious at this new-found concern, and in fact distrustful as to the motives involved. But now I am led to believe that we have here a concerned, enlightened, and even committed generation, that our problems courses, often considered "gut," or "nuts and sluts," courses are sought not only for the grade, but for what the student can learn, and perhaps apply. If this be true, my level of alarm for the future of the nation, especially considering its pressing social problems, is somewhat reduced.

Certainly Professor Graebner's prognosis is not comforting: he may be right, and we may succumb to pollution, be crowded to death, be attacked in the streets, and watch our cities go up in flames; but on the other hand, we just might be witnessing the coming of age of a generation which will join with the social scientist and social reformer in laying the groundwork for a world drastically different from the one many of us fear will come about. I, for one, am encouraged over the prospect.

Emory Kimbrough, Jr., is a graduate of Davidson College and holds M.A. and Ph.D. degrees from the University of North Carolina. He has been a member of the Washington and Lee faculty since 1962 and became head of the Department of Sociology in 1967.

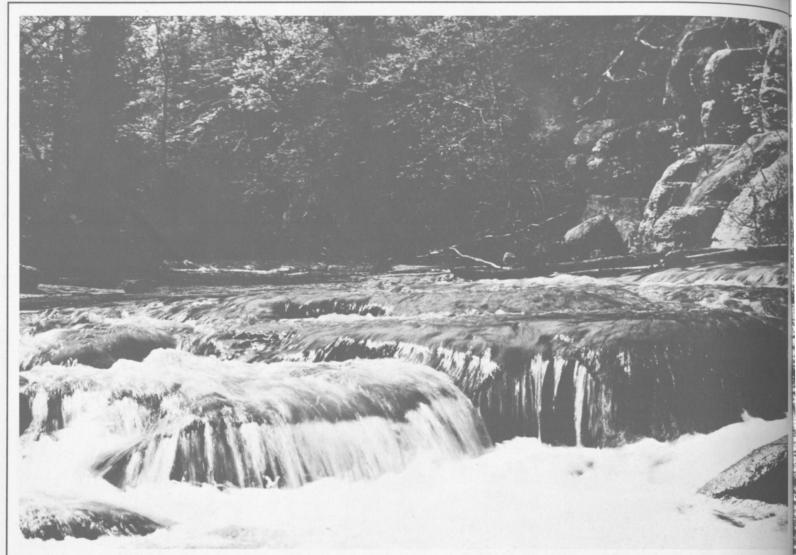
the mountains I live not in myself, but I become Portion of that around me; and to me High mountains are a feeling, but the hum Of human cities torture. — Lord Byron, Childe Harold





Steeped in the romanticism of yesteryear, we think of mountains in terms of crystal-clear air, clear mountain brooks, and paths cushioned with pine needles. But pollution has taken to the mountains as well as to the cities. Within a few minutes of the Washington and Lee campus you'll find scenes like these. Saw mills, institutions, and small industries shove their stacks above the trees and belch smoke over the countryside, creating an unusual haze across the Blue Ridge mountains.





The streams that once held trout now are loaded with contaminants . . . DDT washed from the soil of mountain farms, foaming detergents from communities that have no sewage treatment plants, chemicals from small industrial firms that have moved into the mountains in search of cheap labor — and cheaper disposal of their waste materials.

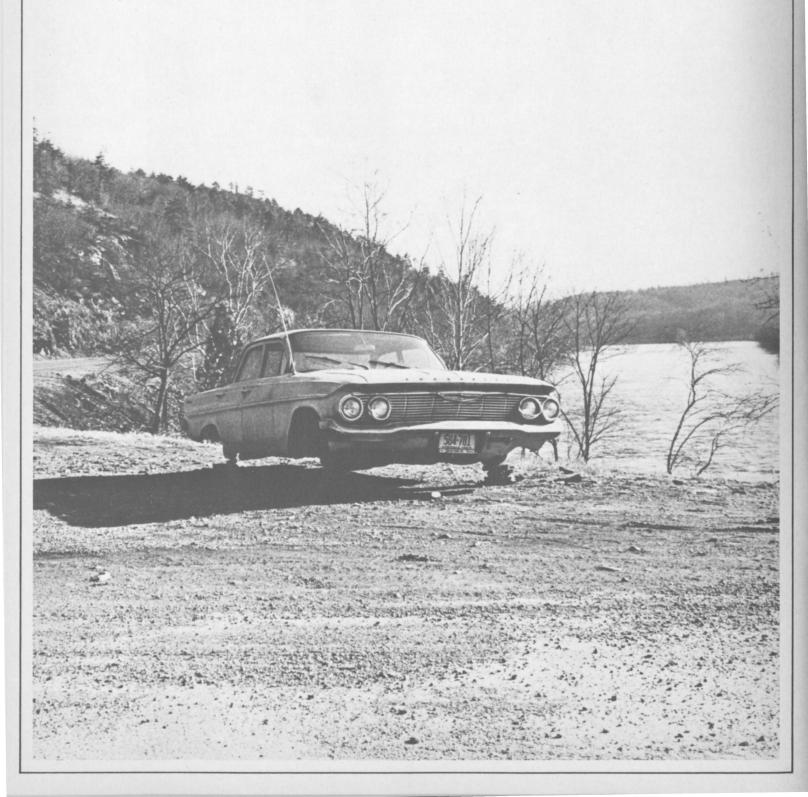
Instead of being cushioned with pine needles, the mountain paths are paved with empty beer cans and with the refuse of careless campers who find it easier to fling bags of trash into the bushes than to carry it back to the cities and dispose of it there.

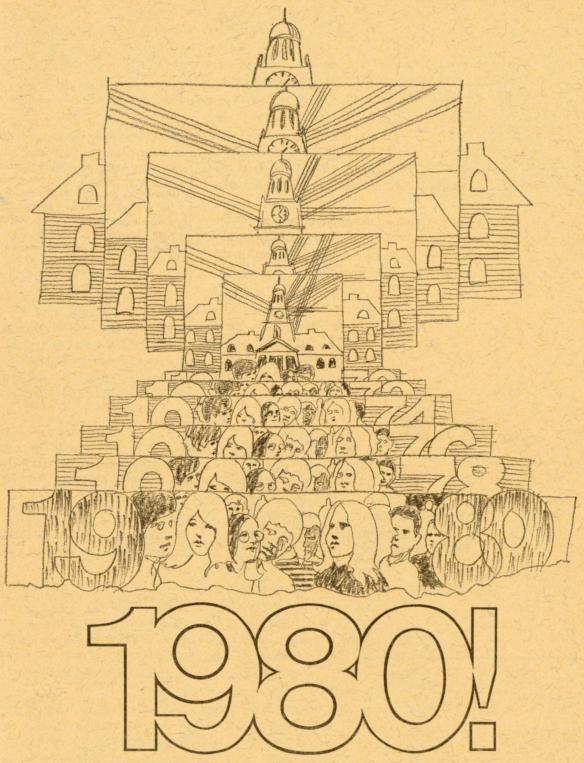


With greater and greater frequency, motorists get rid of their old cars by parking them near a mountain stream, stripping them of anything usable, and then deserting them to the elements. But the elements won't have them, and the carcasses rot away, a blemish on the landscape, until a few boys — eager to display their manly muscles — topple the wrecks into the stream bed.

Great things are done when men and mountains meet; This is not done by jostling in the street.

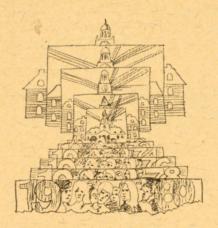
- William Blake, Gnomic Verses





In the decade between now and then, our colleges and universities must face some large and perplexing issues

NINETEEN EIGHTY! A few months ago the date had a comforting remoteness about it. It was detached from today's reality; too distant to worry about. But now, with the advent of a new decade, 1980 suddenly has become the next milepost to strive for. Suddenly, for the nation's colleges and universities and those who care about them, 1980 is not so far away after all.



Campus disruptions: a burning issue for the Seventies

Last year's record	Had disrup- tive protests	Had violent protests
Public universities	43.0%	13.1%
Private universities	70.5%	34.4%
Public 4-yr colleges	21.7%	8.0%
Private nonsectarian 4-yr colleges.	42.6%	7.3%
Protestant 4-yr colleges	17.8%	1.7%
Catholic 4-yr colleges	8.5%	2.6%
Private 2-yr colleges	0.0%	0.0%
Public 2-yr colleges	10.4%	4.5%

BETWEEN NOW AND THEN, our colleges and universities will have more changes to make, more major issues to confront, more problems to solve, more demands to meet, than in any comparable period in their history. In 1980 they also will have:

- ► More students to serve—an estimated 11.5-million, compared to some 7.5-million today.
- ► More professional staff members to employ—a projected 1.1-million, compared to 785,000 today.
- ▶ Bigger budgets to meet—an estimated \$39-billion in uninflated, 1968-69 dollars, nearly double the number of today.
- ► Larger salaries to pay—\$16,532 in 1968-69 dollars for the average full-time faculty member, compared to \$11,595 last year.
- ► More library books to buy—half a billion dollars' worth, compared to \$200-million last year.
- New programs that are not yet even in existence—with an annual cost of \$4.7-billion.

Those are careful, well-founded projections, prepared by one of the leading economists of higher education, Howard R. Bowen. Yet they are only one indication of what is becoming more and more evident in every respect, as our colleges and universities look to 1980:

No decade in the history of higher education—not even the eventful one just ended, with its meteoric record of growth—has come close to what the Seventies are shaping up to be.

BEFORE THEY CAN GET THERE, the colleges and universities will be put to a severe test of their resiliency, resourcefulness, and strength.

No newspaper reader or television viewer needs to be told why. Many colleges and universities enter the Seventies with a burdensome inheritance: a legacy of dissatisfaction, unrest, and disorder on their campuses that has no historical parallel. It will be one of the great issues of the new decade.

Last academic year alone, the American Council on Education found that 524 of the country's 2,342 institutions of higher education experienced disruptive campus protests. The consequences ranged from the occupation of buildings at 275 institutions to the death of one or more persons at eight institutions. In the first eight months of 1969, an insurance-industry clearinghouse reported, campus disruptions caused \$8.9-million in property damage.

Some types of colleges and universities were harder-hit than others—but no type except private two-year colleges escaped completely. (See the table at left for the American Council on Education's breakdown of disruptive and violent protests, according to the kinds of institution that underwent them.)

Harold Hodgkinson, of the Center for Research and Development in Higher Education at the University of California, studied more than 1,200 campuses and found another significant fact: the bigger an institution's enrollment, the greater the likelihood that disruptions took place. For instance:

▶ Of 501 institutions with fewer than 1,000 students, only 14 per cent reported that the level of protest had increased on their campuses over the past 10 years.

- ➤ Of 32 institutions enrolling between 15,000 and 25,000 students, 75 per cent reported an increase in protests.
- ▶ Of 9 institutions with more than 25,000 students, all but one reported that protests had increased.

This relationship between enrollments and protests, Mr. Hodgkinson discovered, held true in both the public and the private colleges and universities:

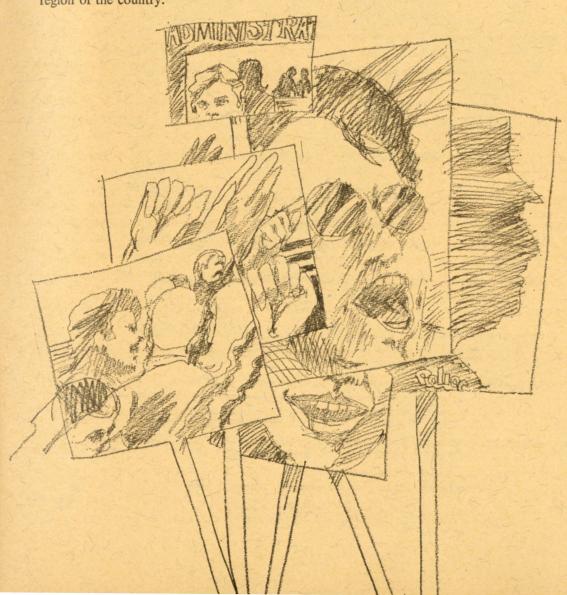
"The public institutions which report an increase in protest have a mean size of almost triple the public institutions that report no change in protest," he found. "The nonsectarian institutions that report increased protest are more than twice the size of the nonsectarian institutions that report no change in protest."

Another key finding: among the faculties at protest-prone institutions, these characteristics were common: "interest in research, lack of interest in teaching, lack of loyalty to the institution, and support of dissident students."

Nor—contrary to popular opinion—were protests confined to one or two parts of the country (imagined by many to be the East and West Coasts). Mr. Hodgkinson found no region in which fewer than 19 per cent of all college and university campuses had been hit by protests.

"It is very clear from our data," he reported, "that, although some areas have had more student protest than others, there is no 'safe' region of the country."

No campus in any region is really 'safe' from protest



Some ominous reports from the high schools

WHAT WILL BE THE PICTURE by the end of the decade? Will campus disruptions continue—and perhaps spread—throughout the Seventies? No questions facing the colleges and universities today are more critical, or more difficult to answer with certainty.

On the dark side are reports from hundreds of high schools to the effect that "the colleges have seen nothing, yet." The National Association of Secondary School Principals, in a random survey, found that 59 per cent of 1,026 senior and junior high schools had experienced some form of student protest last year. A U.S. Office of Education official termed the high school disorders "usually more precipitous,



spontaneous, and riotlike" than those in the colleges. What such rumblings may presage for the colleges and universities to which many of the high school students are bound, one can only speculate.

Even so, on many campuses, there is a guarded optimism. "I know I may have to eat these words tomorrow," said a university official who had served with the National Commission on the Causes and Prevention of Violence, "but I think we may have turned the corner." Others echo his sentiments.

"If anything," said a dean who almost superstitiously asked that he not be identified by name, "the campuses may be meeting their difficulties with greater success than is society generally—despite the scare headlines.

"The student dissatisfactions are being dealt with, constructively, on many fronts. The unrest appears to be producing less violence and more *reasoned* searches for remedies—although I still cross my fingers when saying so."

Some observers see another reason for believing that the more destructive forms of student protest may be on the wane. Large numbers of students, including many campus activists, appear to have been alienated this year by the violent tactics of extreme radicals. And deep divisions have occurred in Students for a Democratic Society, the radical organization that was involved in many earlier campus disruptions.

In 1968, the radicals gained many supporters among moderate students as a result of police methods in breaking up some of their demonstrations. This year, the opposite has occurred. Last fall, for example, the extremely radical "Weatherman" faction of Students for a Democratic Society deliberately set out to provoke a violent police reaction in Chicago by smashing windows and attacking bystanders. To the Weathermen's disappointment, the police were so restrained that they won the praise of many of their former critics—and not only large numbers of moderate students, but even a number of campus sps chapters, said they had been "turned off" by the extremists' violence.

The president of the University of Michigan, Robben Fleming, is among those who see a lessening of student enthusiasm for the extreme-radical approach. "I believe the violence and force will soon pass, because it has so little support within the student body," he told an interviewer. "There is very little student support for violence of any kind, even when it's directed at the university."

At Harvard University, scene of angry student protests a year ago, a visitor found a similar outlook. "Students seem to be moving away from a diffuse discontent and toward a rediscovery of the values of workmanship," said the master of Eliot House, Alan E. Heimert. "It's as if they were saying, 'The revolution isn't right around the corner, so I'd better find my vocation and develop myself."

Bruce Chalmers, master of Winthrop House, saw "a kind of antitoxin in students' blood" resulting from the 1969 disorders: "The disruptiveness, emotional intensity, and loss of time and opportunity last year," he said, "have convinced people that, whatever happens, we must avoid replaying that scenario."

A student found even more measurable evidence of the new mood: "At Lamont Library last week I had to wait 45 minutes to get a reserve book. Last spring, during final exams, there was no wait at all."



Despite the scare headlines, a mood of cautious optimism Many colleges have learned a lot from the disruptions



The need now: to work on reform, calmly, reasonably PARTIALLY UNDERLYING THE CAUTIOUS OPTIMISM is a feeling that many colleges and universities—which, having been peaceful places for decades, were unprepared and vulnerable when the first disruptions struck—have learned a lot in a short time.

When they returned to many campuses last fall, students were greeted with what *The Chronicle of Higher Education* called "a combination of stern warnings against disruptions and conciliatory moves aimed at giving students a greater role in campus governance."

Codes of discipline had been revised, and special efforts had been made to acquaint students with them. Security forces had been strengthened. Many institutions made it clear that they were willing to seek court injunctions and would call the police if necessary to keep the peace.

Equally important, growing numbers of institutions were recognizing that, behind the stridencies of protest, many student grievances were indeed legitimate. The institutions demonstrated (not merely talked about) a new readiness to introduce reforms. While, in the early days of campus disruptions, some colleges and universities made *ad hoc* concessions to demonstrators under the threat and reality of violence, more and more now began to take the initiative of reform, themselves.

The chancellor of the State University of New York, Samuel B. Gould, described the challenge:

"America's institutions of higher learning . . . must do more than make piecemeal concessions to change. They must do more than merely defend themselves.

"They must take the initiative, take it in such a way that there is never a doubt as to what they intend to achieve and how all the components of the institutions will be involved in achieving it. They must call together their keenest minds and their most humane souls to sit and probe and question and plan and discard and replan—until a new concept of the university emerges, one which will fit today's needs but will have its major thrust toward tomorrow's."

IF THEY ARE TO ARRIVE AT THAT DATE in improved condition, however, more and more colleges and universities—and their constituencies—seem to be saying they must work out their reforms in an atmosphere of calm and reason.

Cornell University's vice-president for public affairs, Steven Muller ("My temperament has always been more activist than scholarly"), put it thus before the American Political Science Association:

"The introduction of force into the university violates the very essence of academic freedom, which in its broadest sense is the freedom to inquire, and openly to proclaim and test conclusions resulting from inquiry. . . .

"It should be possible within the university to gain attention and to make almost any point and to persuade others by the use of reason. Even if this is not always true, it is possible to accomplish these ends by nonviolent and by noncoercive means.

"Those who choose to employ violence or coercion within the university cannot long remain there without destroying the whole fabric

of the academic environment. Most of those who today believe otherwise are, in fact, pitiable victims of the very degradation of values they are attempting to combat."

Chancellor Gould has observed:

"Among all social institutions today, the university allows more dissent, takes freedom of mind and spirit more seriously, and, under considerable sufferance, labors to create a more ideal environment for free expression and for the free interchange of ideas and emotions than any other institution in the land. . . .

"But when dissent evolves into disruption, the university, also by its very nature, finds itself unable to cope . . . without clouding the real issues beyond hope of rational resolution. . . ."

The president of the University of Minnesota, Malcolm Moos, said not long ago:

"The ills of our campuses and our society are too numerous, too serious, and too fateful to cause anyone to believe that serenity is the proper mark of an effective university or an effective intellectual community. Even in calmer times any public college or university worthy of the name has housed relatively vocal individuals and groups of widely diverging political persuasions. . . . The society which tries to get its children taught by fettered and fearful minds is trying not only to destroy its institutions of higher learning, but also to destroy itself. . . .

"[But] . . . violation of the rights or property of other citizens, on or off the campus, is plainly wrong. And it is plainly wrong no matter how high-minded the alleged motivation for such activity. Beyond that, those who claim the right to interfere with the speech, or movement, or safety, or instruction, or property of others on a campus—and claim that right because their hearts are pure or their grievance great—destroy the climate of civility and freedom without which the university simply cannot function as an educating institution."

Can dissent exist in a climate of freedom and civility?



What part should students have in running a college?

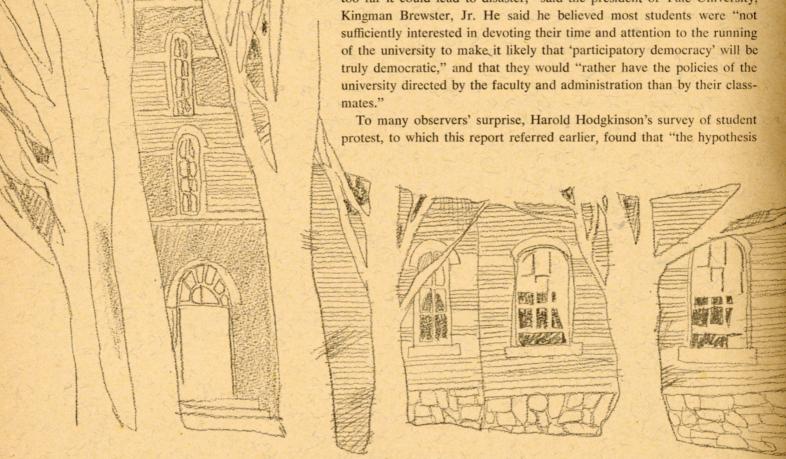
THAT "CLIMATE OF CIVILITY AND FREEDOM" appears to be necessary before the colleges and universities can come to grips, successfully, with many of the other major issues that will confront them in the decade.

Those issues are large and complex. They touch all parts of the college and university community—faculty, students, administrators, board members, and alumni-and they frequently involve large segments of the public, as well. Many are controversial; some are potentially explosive. Here is a sampling:

▶ What is the students' rightful role in the running of a college or university? Should they be represented on the institution's governing board? On faculty and administrative committees? Should their evaluations of a teacher's performance in the classroom play a part in the advancement of his career?

Trend: Although it is just getting under way, there's a definite movement toward giving students a greater voice in the affairs of many colleges and universities. At Wesleyan University, for example, the trustees henceforth will fill the office of chancellor by choosing from the nominees of a student-faculty committee. At a number of institutions, young alumni are being added to the governing boards, to introduce viewpoints that are closer to the students'. Others are adding students to committees or campus-wide governing groups. Teacher evaluations are becoming commonplace.

Not everyone approves the trend. "I am convinced that representation is not the clue to university improvement, indeed that if carried too far it could lead to disaster," said the president of Yale University,



that increased student control in institutional policy-making would result in a decrease in student protest is not supported by our data at all. The reverse would seem to be more likely." Some 80 per cent of the 355 institutions where protests had increased over the past 10 years reported that the students' policy-making role had increased, too.

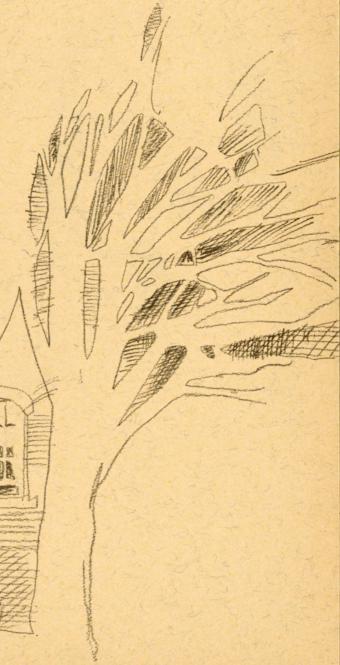
▶ How can the advantages of higher education be extended to greater numbers of minority-group youths? What if the quality of their pre-college preparation makes it difficult, if not impossible, for many of them to meet the usual entrance requirements? Should colleges modify those requirements and offer remedial courses? Or should they maintain their standards, even if they bar the door to large numbers of disadvantaged persons?

Trend: A statement adopted this academic year by the National Association of College Admissions Counselors may contain some clues. At least 10 per cent of a college's student body, it said, should be composed of minority students. At least half of those should be "high-risk" students who, by normal academic criteria, would not be expected to succeed in college. "Each college should eliminate the use of aptitude test scores as a major factor in determining eligibility for admission for minority students," the admissions counselors' statement said.

A great increase in the part played by community and junior colleges is also likely. The Joint Economic Committee of Congress was recently given this projection by Ralph W. Tyler, director emeritus of the Center for Advanced Study in Behavioral Sciences at Stanford, Cal.: "[Two-year colleges] now enroll more than 20 per cent of all students in post-high school institutions, and at the rate these colleges are increasing in number as well as in enrollment, it is safe to predict that 10 years from now 3-million students will be enrolled . . . representing one-third of the total post-high school enrollment and approximately one-half of all first- and second-year students.

"Their importance is due to several factors. They are generally open-door colleges, enrolling nearly all high school graduates or adults who apply. Because the students represent a very wide range of background and previous educational experience, the faculty generally recognizes the need for students to be helped to learn."

What about the enrollment of youths from minority groups?



Negro institutions: what's their future in higher education?



► What is the future of the predominantly Negro institutions of higher education?

Trend: Shortly after the current academic year began, the presidents of 111 predominantly Negro colleges—"a strategic national resource . . . more important to the national security than those producing the technology for nuclear warfare," said Herman H. Long, president of Talladega College—formed a new organization to advance their institutions' cause. The move was born of a feeling that the colleges were orphans in U.S. higher education, carrying a heavy responsibility for educating Negro students yet receiving less than their fair share of federal funds, state appropriations, and private gifts; losing some of their best faculty members to traditionally white institutions in the rush to establish "black studies" programs; and suffering stiff competition from the white colleges in the recruitment of top Negro high school graduates.

▶ How can colleges and universities, other than those with predominantly black enrollments, best meet the needs and demands of nonwhite students? Should they establish special courses, such as black studies? Hire more nonwhite counselors, faculty members, administrators? Accede to some Negroes' demands for separate dormitory facilities, student unions, and dining-hall menus?

Trend: "The black studies question, like the black revolt as a whole, has raised all the fundamental problems of class power in American life, and the solutions will have to run deep into the structure of the institutions themselves," says a noted scholar in Negro history, Eugene D. Genovese, chairman of the history department at the University of Rochester.

Three schools of thought on black studies now can be discerned in American higher education. One, which includes many older-generation Negro educators, holds black studies courses in contempt. Another, at the opposite extreme, believes that colleges and universities must go to great lengths to atone for past injustices to Negroes. The third, between the first two groups, feels that "some forms of black studies are legitimate intellectual pursuits," in the words of one close observer, "but that generally any such program must fit the university's traditional patterns." The last group, most scholars now believe, is likely to prevail in the coming decade.

As for separatist movements on the campuses, most have run into provisions of the federal Civil Rights Act of 1964, which bars discrimination in housing and eating facilities.

▶ What should be the role of the faculty in governing an institution of higher education? When no crisis is present, do most faculty members really want an active part in governance? Or, except for supervising the academic program, do they prefer to concentrate on their own teaching and research?

Trend: In recent years, observers have noted that many faculty members were more interested in their disciplines—history or physics or medicine—than in the institutions they happened to be working for at the time. This seemed not unnatural, since more and more faculty members were moving from campus to campus and thus had less opportunity than their predecessors to develop a strong loyalty to one institution.

But it often meant that the general, day-to-day running of a college or university was left to administrative staff members, with faculty members devoting themselves to their scholarly subject-matter.

Campus disorders appear to have arrested this trend at some colleges and universities, at least temporarily. Many faculty members—alarmed at the disruptions of classes or feeling closer to the students' cause than to administrators and law officers—rekindled their interest in the institutions' affairs. At other institutions, however, as administrators and trustees responded to student demands by pressing for academic reforms, at least some faculty members have resisted changing their ways. Said the president of the University of Massachusetts, John W. Lederle, not long ago: "Students are beginning to discover that it is not the administration that is the enemy, but sometimes it is the faculty that drags its feet." Robert Taylor, vice-president of the University of Wisconsin, was more optimistic: student pressures for academic reforms, he said, might "bring the professors back not only to teaching but to commitment to the institution."

The faculty: what is its role in campus governance?





► How can the quality of college teaching be improved? In a system in which the top academic degree, the Ph.D., is based largely on a man's or woman's research, must teaching abilities be neglected? In universities that place a strong emphasis on research, how can students be assured of a fair share of the faculty members' interest and attention in the classroom?

Trend: The coming decade is likely to see an intensified search for an answer to the teaching-"versus"-research dilemma. "Typical Ph.D. training is simply not appropriate to the task of undergraduate teaching and, in particular, to lower-division teaching in most colleges in this country," said E. Alden Dunham of the Carnegie Corporation, in a recent book. He recommended a new "teaching degree," putting "a direct focus upon undergraduate education."

> Similar proposals are being heard in many quarters. "The spectacular growth of two- and four-year colleges has created the need for teachers who combine professional competence with teaching interests, but who neither desire nor are required to pursue research as a condition of their employment," said Herbert Weisinger, graduate dean at the State University of New York at Stony Brook. He proposed a two-track program for Ph.D. candidates: the traditional one for those aiming to teach at the graduate level, and a new track for students who want to teach undergraduates. The latter would teach for two years in community or four-year colleges in place of writing a research dissertation.

> ► What changes should be made in college and university curricula? To place more emphasis on true learning and less on the attainment of grades, should "Pass" and "Fail" replace the customary grades of A, B, c, D, and F?

> Trend: Here, in the academic heart of the colleges and universities, some of the most exciting developments of the coming decade appear certain to take place. "From every quarter," said Michael Brick and Earl J. McGrath in a recent study for the Institute of Higher Education at Teachers College of Columbia University, "evidence is suggesting

Can the quality of teaching be improved? that the 1970's will see vastly different colleges and universities from those of the 1960's." Interdisciplinary studies, honors programs, independent study, undergraduate work abroad, community service projects, work-study programs, and non-Western studies were some of the innovations being planned or under way at hundreds of institutions.

Grading practices are being re-examined on many campuses. So are new approaches to instruction, such as television, teaching machines, language laboratories, comprehensive examinations. New styles in classrooms and libraries are being tried out; students are evaluating faculty members' teaching performance and participating on faculty committees at more than 600 colleges, and plans for such activity are being made at several-score others.

By 1980, the changes should be vast, indeed.

BETWEEN NOW AND THE BEGINNING of the next decade, one great issue may underlie all the others—and all the others may become a part of it.

When flatly stated, this issue sounds innocuous; yet its implications are so great that they can divide faculties, stir students, and raise profound philosophical and practical questions among presidents, trustees, alumni, and legislators:

▶ What shall be the nature of a college or university in our society?

Until recently, almost by definition, a college or university was accepted as a neutral in the world's political and ideological arenas; as dispassionate in a world of passions; as having what one observer called "the unique capacity to walk the razor's edge of being both in and out of the world, and yet simultaneously in a unique relationship with it."

The college or university was expected to revere knowledge, wherever knowledge led. Even though its research and study might provide the means to develop more destructive weapons of war (as well as life-saving medicines, life-sustaining farming techniques, and life-enhancing intellectual insights), it pursued learning for learning's sake and rarely questioned, or was questioned about, the validity of that process.

The college or university was dedicated to the proposition that there were more than one side to every controversy, and that it would explore them all. The proponents of all sides had a hearing in the academic world's scheme of things, yet the college or university, sheltering and protecting them all, itself would take no stand.

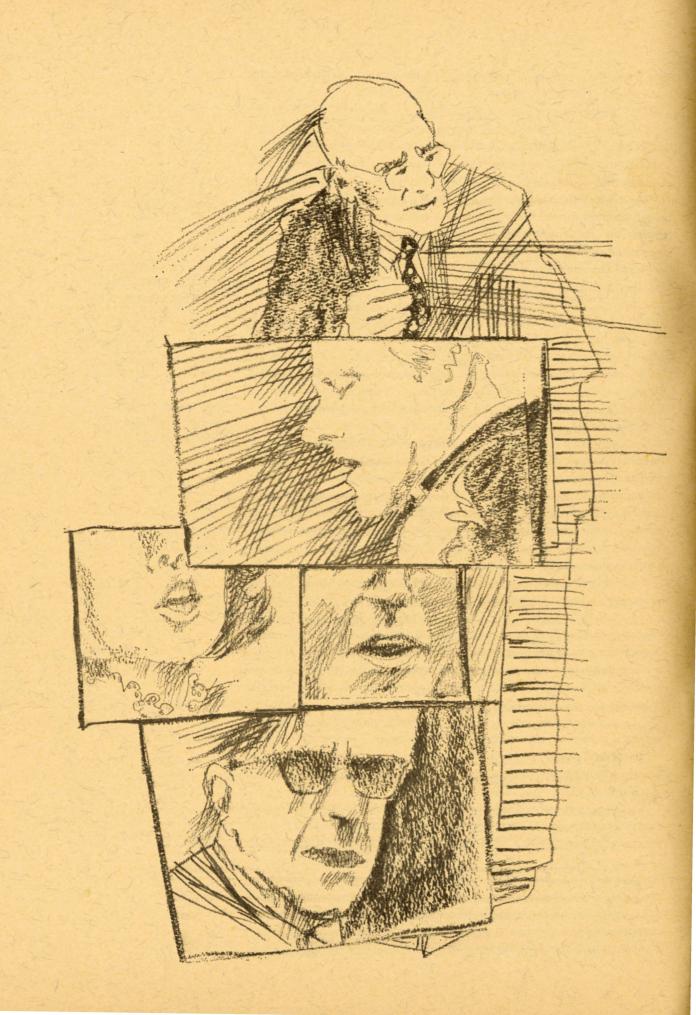
Today the concept that an institution of higher education should be neutral in political and social controversies—regardless of its scholars' personal beliefs—is being challenged both on and off the campuses.

Those who say the colleges and universities should be "politicized" argue that neutrality is undesirable, immoral—and impossible. They say the academic community must be responsible, as Carl E. Schorske, professor of history at the University of California at Berkeley, wrote in *Publications of the Modern Language Association*, for the "implications of its findings for society and mankind." "The scholar's zeal for truth without consequences," said Professor Schorske, has no place on the campus today.

Julian Bond, a Negro member of the Georgia state senate, argued

One great question will tower above all others





the point thus, before the annual meeting of the American Council on Education:

"Man still makes war. He still insists that one group subordinate its wishes and desires to that of another. He still insists on gathering material wealth at the expense of his fellows and his environment. Men and nations have grown arrogant, and the struggle of the Twentieth Century has continued.

"And while the struggle has continued, the university has remained aloof, a center for the study of why man behaves as he does, but never a center for the study of how to make man behave in a civilized manner. . . .

"Until the university develops a politics or—in better terms, perhaps, for this gathering—a curriculum and a discipline that stifles war and poverty and racism, until then, the university will be in doubt."

Needless to say, many persons disagree that the college or university should be politicized. The University of Minnesota's President Malcolm Moos stated their case not long ago:

"More difficult than the activism of violence is the activism that seeks to convert universities, as institutions, into political partisans thumping for this or that ideological position. Yet the threat of this form of activism is equally great, in that it carries with it a threat to the unique relationship between the university and external social and political institutions.

"Specifically, universities are uniquely the place where society builds its capacity to gather, organize, and transmit knowledge; to analyze and clarify controverted issues; and to define alternative responses to issues. Ideology is properly an object of study or scholarship. But when it becomes the starting-point of intellect, it threatens the function uniquely cherished by institutions of learning.

". . . It is still possible for members of the university community—its faculty, its students, and its administrators—to participate fully and freely as individuals or in social groups with particular political or ideological purposes. The entire concept of academic freedom, as developed on our campuses, presupposes a role for the teacher as teacher, and the scholar as scholar, and the university as a place of teaching and learning which can flourish free from external political or ideological constraints.

"... Every scholar who is also an active and perhaps passionate citizen ... knows the pitfalls of ideology, fervor, and a priori truths as the starting-point of inquiry. He knows the need to beware of his own biases in his relations with students, and his need to protect their autonomy of choice as rigorously as he would protect his own....

"Like the individual scholar, the university itself is no longer the dispassionate seeker after truth once it adopts controverted causes which go beyond the duties of scholarship, teaching, and learning. But unlike the individual scholar, the university has no colleague to light the fires of debate on controverted public issues. And unlike the individual scholar, it cannot assert simply a personal choice or judgment when it enters the field of political partisanship, but must seem to assert a corporate judgment which obligates, or impinges upon, or towers over what might be contrary choices by individuals within its community.

Should colleges and universities take ideological stands?

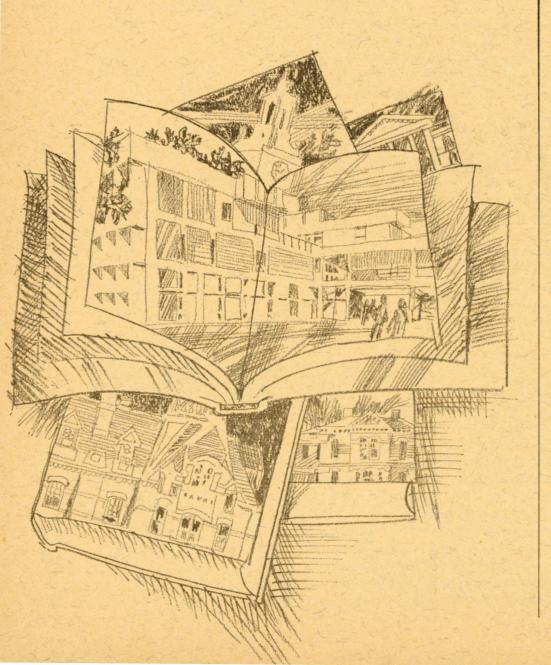


"To this extent, it loses its unique identity among our social institutions. And to this extent it diminishes its capacity to protect the climate of freedom which nourishes the efficiency of freedom."

WHAT WILL THE COLLEGE OR UNIVERSITY be like, if it survives this tumultuous decade? If it comes to grips with the formidable array of issues that confront it? If it makes the painful decisions that meeting those issues will require?

Along the way, how many of its alumni and alumnae will give it the understanding and support it must have if it is to survive? Even if they do not always agree in detail with its decisions, will they grant it the strength of their belief in its mission and its conscience?

Illustrations by Jerry Dadds



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 persons listed below, who form EDITORIAL PROJECTS FOR EDUCATION, a non-profit organization informally associated with the American Alumni Council. The editors, it should be noted, speak for themselves and not for their institutions; and not all the editors necessarily agree with all the points in this report. All rights reserved; no part may be reproduced without express permission.

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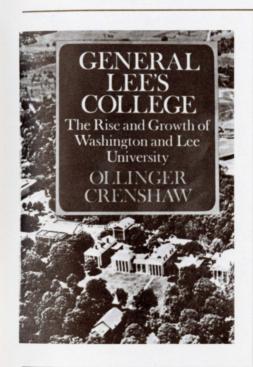
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