The Academic Condition in the United States

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What are the causes of the crisis in American universities? And what solutions may be found? These were among the questions dealt with in one of the Granada lectures in London on October 21.

ONE person can at most add only a drop to the oceans of reporting and analysis of student protest. I would put first the necessity to recognize not so much the extreme degree to which a radical critique of society and government has developed in American students but the diversity and range with which it is represented. It is neither valid nor useful to think only of the radicals and the rest. A recent survey of student attitudes (January 1969) makes this clear. This is the spectrum which emerged: revolutionaries, 3 per cent; radical dissidents, 10 per cent; reformers, 39 per cent; moderates, 37 per cent; conservatives, 11 per cent. Thus only a quarter are at the extremes while three-quarters dominate the broad middle ground; it is these who will surely determine what is to become permanent from this cultural revolution.

One of the wonders of this period has been why some universities are caught in almost continuous turmoil or violent climaxes and others remain relatively stable. Many factors contribute and some are quite local. But the quick judgments, made in heat and anger, which blamed inept administration or spineless faculty do not appear to survive more considered examination.

Several surveys indicate that young adults who are alienated from society and adopt radically new values usually have college educated parents in the upper income brackets, who have been permissive in their child rearing. Such families tend to send their offspring to the more expensive private universities. Astin's research, based on 35,000 questionnaires from 200 institutions, indicates that whether or not a university is a centre of protest activities is not a function of university policies or size, but rather of the type of student. He concludes that a student body that includes a disproportionate number of students disposed to political activity is likely to have unrest regardless of administrative policies or the relationship between faculty and students.

It is, of course, not unreasonable that attitudes of alienation and rebellion begin in childhood and ripen in the struggle for identity during adolescence. The feeling that "youth has no future" begins then. This sense of futility is clearly nurtured by the long state of dependency that higher education imposes on more and more of the youth of affluent countries, most of all in the United States. Earlier experience, educational and otherwise, has done little to prepare for such a prolonged waiting and awareness of the contemporary world is so much greater because of their exposure to mass media and so it is no surprise that many students arrive at university already angry, impatient and unable to commit themselves to a long period of study. Instead they turn to criticize their society and attack their university as a surrogate for that society.

This predestinational view of student activists and their tendency to cluster at certain universities tempers the blame that is laid on faculties and administrations at beleaguered institutions. Of course, wise administration, serious attention to teaching and good communications can help greatly, but it now seems unrealistic to expect no serious problems at those universities which potential activists find attractive. No one I know thinks he could have provided a prescription to avoid chaos at Berkeley.

What is the present outlook? Clearly there are grounds for pessimism. Berkeley has had its worst year in five. In Japan, where student protest and disruption have existed longer than in any other developed country, the tragedy worsens with major universities closed or under police control. American universities are just beginning the difficult problem of the social and cultural integration of negro students in numbers approaching their representation in the population. There may be neither the skill nor the patience to accommodate this change. The student culture spreads, and this makes even those who think of themselves as reformers or moderates the potential allies of the radicals in a crisis. There is little corresponding latent support for faculty and administration. Indeed, the rituals and sacraments of the student culture—rock music, drugs, dress, speech and sexual behaviour—reinforce the generation gap and clearly make communication more difficult and more fragile. In a crisis communication is likely to be the first victim. And, finally, each day the Vietnam War continues adds to the strain on this college generation and the likelihood that it will strike at any symbol of the government that prosecutes that war.

Yet there are several developments that suggest a shift away from violent, militant action on a large scale. During the summer the revolutionary left split and the process of fragmentation and internecine warfare continues. The Vietnam moratorium on October 15 drew wide support from all but the extremities of the spectrum. Students for a Democratic Society (SDS) refused to participate because the protest on the Vietnam war was not coupled with a denunciation of the system of which the war is only a surface manifestation. The summer also provided time for administrations to exchange experiences and perhaps profit thereby. There is a much greater consensus on where the line against disruptions is to be drawn and how police and court injunction will be used. Opinion polls show that the public as well as students seem less tolerant of disruptive protest. And, most of all, many professors report that students have returned this autumn with a fresh interest in learning, even traditional learning. Nevertheless it takes only a small group of determined students to produce a confrontation.

It would be quite wrong to ascribe the deep unrest in the university system solely to student protest and its consequences. Even without a single confrontation we would, I believe, find ourselves in a period of strain and trouble. This is due to the remarkably rapid expansion of the university system during that past decade—an

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expansion not only in the number of students but in the role of the university in research and scholarship and in its response to national problems.

In 1968, 640,000 students received bachelors degrees from United States universities. This was an increase of 75 per cent since 1958, and corresponding to nearly a quarter of the 22 year olds in the United States. The expansion in the two-year community colleges has been even sharper, but most rapid of all has been the growth of graduate education. The number of PhD degrees granted has risen exponentially in the past ten years until last year it stood at nearly 24,000—three times that in 1958. The annual investment in higher education is now about $15 billion, equally divided between undergraduate and graduate education.

This sudden enlargement of the system in the United States was not comprehensively planned. The expansion in undergraduate education has been financed chiefly at the local or state level, largely from private funds. Graduate education has grown through the contribution of federally financed fellowships, research grants and some facilities. The need to deal with these various sources has naturally produced severe growing pains, uneven development and frequent failures to maintain standards, and has been a steady drain on the energies of administrators and faculties. Thus, when the recent wave of student protest engulfed the campuses it often confronted a tired faculty and administration.

Another point of great vulnerability was the balance between scholarship, in the sense of both teaching and research, and the increasing demand for the university to help with national and social problems. With the sudden political awareness of much of the student body, it is unlikely that any previously determined balance would have met the criteria of the new "relevance" and the new "values" of the student culture. In this situation, the American experience is somewhat different from the British, for we have committed more of the university system to this task. For better or sometimes for worse, our universities have become in large measure the mainsprings of change and the clinics for the illnesses of society.

The growth of diversity, increasingly remote from traditional academic preoccupations, continued through the nineteen fifties. In the sixties two other features quickened this development: the growing awareness of great domestic problems the solutions of which might lie in techniques of research, and the increase in both federal and private funds that could be invested in such studies.

And so a new crop of institutes and centres were built on university campuses: institutes for auto safety, housing design, race relations, urban affairs, population studies, sexual behaviour and, most recently, the study of violence itself. This period clearly favoured academic entrepreneurship. Those attracted to university positions in these circumstances were likely not to have given serious thought or commitment to traditional university goals. And if teaching was required, it was more often an advanced seminar than undergraduate teaching. Often this commitment to greater diversity was a cloak for those ill equipped or unwilling to share the communal tasks of teaching. Understandably, such specialists were not well tuned to the first signs of student discontent.

By the mid-sixties, the result of these developments was clearly an overloading of the university system as a "multiversity", to use the word of one of its first victims, Clark Kerr. At the same time, expansion of the student body continued. On top of this there were severe problems of funding. Although the federal contribution was growing rapidly, it was reaching the universities through relatively few channels which did not allow for balanced growth. The remarkable feature of this period is that the universities were able to retain as much balanced growth as they did. But it could not last long.

Reports published early this year by the National Science Board and the Carnegie Commission on Higher Education recommended that, during the seventies, graduate education should become a federal responsibility apart from that usually supported by the states. The overworked system of current financing—the independent funding of specific research proposals—is to be reserved for its primary purposes, and several other mechanisms—sustaining grants, development grants and facilities grants—are to be added so that the entire financing of higher education is covered, not just the research grants and graduate fellowships that have carried so much of the load so far.

Thus American universities are poised for a new kind of development and growth. Whether we shall have it or not hangs in the balance and obviously depends very much on the resolution of the present crisis. To indicate what could possibly be in store, consider what the consequences would be in 1980 if the growth rate of the sixties continued. Then, in 1980, we would be providing complete college (as university undergraduate) education to half of American youth and the working force of PhDs would have increased from 170,000 at present to 500,000. Of course, there are many reasons why this may not happen and some reasons why it should not happen. But it can be strongly argued that the vitality and diversity of American society would be vastly greater in the 1980s if this large section of its youth were aided in reaching the limit of its educational capacity rather than left well behind. The state of American universities in the late sixties makes more understandable the inevitability of conflict. The students had become a really new generation. Those on the left actively reject conventional learning, believe all social function can be reduced to interpersonal relations and power and are in varying degrees ready to destroy the universities as we have known them. The administrators and faculties had a different, more conventional attitude. The university system had served fairly well the basic educational purpose, it responded to the extraordinary needs for expansion, it provided pleasant shelter, libraries and laboratories for most of the nation's intellectuals, it gathered its resources to study the problems of the state and the society of which it had become so much a part. But the radicalism of the students put all this at risk. Suddenly there was no consensus on the "nature of things", on the faith that holds a society together or on the goals it should aim for.

Discourse, not Disruption

Each campus reacted as if to a revelation, whether disruption and violence were involved or not. No matter how much one heard of what had happened elsewhere, the experience on one's own campus was quite new. The discourse which followed and still goes on has deeply transformed university communities. The disappearance of consensus opened everything to question: teaching methods, what was taught, discipline, faculty power, administrative power, government and industrial recruiting on the campus, relationship between the universities and industry and the armed forces, decision making, the place of research, the problems that were researched, the role of the university in the community, the legitimacy of relations between university and

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government, the goals of the university and even academic freedom itself.

Looking carefully, one could often distinguish the discourse in progress at two different levels. There was the external discourse, in which student demands and criticism were taken fairly literally and judged to deserve response. And there was the inner discourse, within the faculty and administration, which was devoted largely to self scrutiny in response to the general atmosphere. On campuses that avoided disruption and violence, the external discourse often evolved into a kind of communication from which desired changes began to follow—for example, the winning by the students of the right to control their own social life. But when radicalization won, communication ceased, student complaints became standardized and no faculty response was sufficient.

At Berkeley in 1964–65, a study of student opinion showed that more than 70 per cent thought that the faculty and administration were concerned with students and that Berkeley was a good place to be educated. Four years later, after considerable efforts at educational innovation, courses sponsored by students, the introduction of many socially "relevant" courses, the creation of many small classes and undergraduate seminars, a similar study of Berkeley student opinion showed that only 30 per cent thought that faculty and administration were concerned with students, most now said Berkeley was not a good place to be educated. Clearly Berkeley had not become that much worse in the four years; what had changed was the ideological mood of the students. By 1968–69, the proper answer was to say that the faculty and the university were bad. Faculty members who insisted for the longest time on the meaningfulness of this kind of discourse are now often the most embittered. Naturally the gap between those who tried and failed and those who rejected extreme demands from the onset became unbridgable. The divided faculty that results is perhaps the greatest wound that can be inflicted on a great university.

The inner discourse, concerned with stocktaking and conscientious accommodation, can also have two outcomes. If it anticipates its needs and has time for judicious deliberate action, the outcome can relieve pressure and rekindle the sense of community. The combination of relatively quiet, non-urban campuses that do not attract the most politically motivated students and wise leadership that can anticipate such needs has the option of responding in this way. Yale and Princeton fall into this category.

The other outcome is, of course, the hurried self examination in the heat of rising protest. Here student demands often overlap what in quieter times would be in the interest of the university. But to respond hurriedly and in a way that can be interpreted as the giving in to student demands obviously risks a great deal. Here, too, the faculty can be divided over its interpretation of the motive behind reform and outsiders will almost surely decide that the faculty or administration has collapsed.

The situation at Harvard serves as an example. From 1963 to 1965, I chaired a committee to re-evaluate the programme of general education, which for twenty years had attempted to provide courses in the central features of western thought for all students regardless of their area of specialization. Such work constituted almost a quarter of the four years of undergraduate work. In retrospect this study was an example of an administration anticipating trouble and making with a much needed self examination. But the results were mixed at best. Although we consulted students, there were none on the committee and so we failed to recognize the coming wave of disenchantment with history, the shift to social studies and the new criteria of relevance. And our major structural reform failed to win faculty approval. This was primarily because we underestimated the growth of diversity, the loss of unity and the consequent inability of such a faculty to agree on its goals.

For the other instance we can move to early 1968. Moderate and reform students were becoming increasingly opposed to the training of reserve military officers (ROTC) as part of the normal curriculum, a practice dating from the First World War and supplying nearly 80 per cent of junior officers. These training programmes had become a symbol of the Vietnam war and an obvious target for anti-war feelings. A prompt and unbiased examination at that time might have shown that, despite the war, this was no longer an appropriate activity in a traditional university. The educational content of the courses was small, the staff was not recruited and appointed in the usual way and inquiry showed that the cost of producing an officer in this way was several times greater than if he went to officers' candidate schools in the summer.

But a slower, more painful and more decisive course unfolded. It is worth retracing its main features, for it is a lesson in how an inadequate system of governance can become overloaded, how easily communications fail and divisions mount, and how ambivalent a final decision can be. During the autumn and winter of 1968, the appropriate faculty committee heard testimonies, the best prepared being from student government groups who had already studied the problem. Opposing views emphasized the rights of students to take such courses, the beneficial effects of injecting liberal arts graduates into the military command and the financial aid which accrued to those students who were in need.

The recommendation was a compromise that referred decisions on course credit to appropriate departments and postponed other issues. The faculty meeting was faced with this and three other motions. Clearly the lethargic faculty meeting of the past was gone but its archaic procedures could not produce a rational choice for its members. In the ensuing vote the faculty committee recommendation was defeated.

Military Training to End

The president appointed a committee to renegotiate the agreement with the armed forces but did not include in it anyone who had supported the winning motion. In March, the president said everything possible was being done to keep ROTC, thereby moving further from the general consensus. In April, disruption and violence came to Harvard. "ROTC must go" was one of the demands. The split between administration and faculty widened when stolen correspondence revealed further the administration's insistence that its view, not the faculty's, should be controlling. In the ensuing crisis the faculty voted that ROTC should exist only as an extracurricular activity. The president's committee was enlarged to make it more representative. Its principal finding was that the armed forces refused to accept the extracurricular status, insisting that the university be a partner. By early June, the committee recommended and the faculty confirmed that training must end in two years.

What is the meaning of this rather sorry tale? As a

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member of the president's committee, the experience convinced me that the best solution was reached. Furthermore, I believe that a similar committee could have reached the same solution by quiet deliberation in the early sixties before student protest began. But it would have been an academic exercise. It was the climate of change, and not the student demands at a time of crisis, that made its enactment possible.

Perhaps the role of this issue in preventing a split within the faculty will turn out to be its most important feature. Despite charters and governing boards, and even students, the soul of the university must be its faculty. If it divides, chaos lies ahead as we have seen at Columbia and Berkeley. It is interesting to note that the cleavage plane on which a split may develop is not only right versus left or radical versus liberal versus conservative, but includes age and even academic interests. The younger scientists on the faculty at Harvard joined the most radical groups. A very liberal social scientist remarked, "These young scientists think restructuring the university is like doing an experiment. If it doesn't work, wash out the test tube and do it again".

How then is the university to save itself? Only by restructuring its government so that a division of labour allows it to take on much more work and do it so as to preserve the faculty's confidence in its procedures, maintain its authority and build links with the students.

In most of the important universities in the United States, committees have been at work during the past year or two, or are now being set up, to plan systems that will make clear who is responsible for what, and how decisions will be reached to this end.

The students' concern has been to run their own social life, a goal largely achieved, and to have an effect on the quality of their education and to share in decision making at various levels. Disciplinary procedures had to be overhauled because they had been designed to deal with individual misbehaviour. But now communal behaviour had to be judged. In general, it has been agreed that peaceful sit-ins that do not disrupt normal functions and even brief intrusions that do are permitted. But whole codes dealing with more extreme actions are now agreed, and student representation is substantial.

Beyond these matters a pattern is developing that maximizes student involvement where their interests are directly involved, but minimizes it in the academic realm of appointments, degree requirements and curricula. This does not satisfy the more fervent advocates of student power who insist that the democratic model be applied to university government. To them this argument is put in a Harvard report just released:

> " . . . we reject the analogy between the electoral practices of a democratic state and university governance and believe that an uncritical application of egalitarian theory in the universities is likely to damage the interests of students as well as the university of which they are a part. It is a shallow view of democracy to assume that every person has a right to participate equally in every decision that affects his life. To argue otherwise is to assert that there is no place in a democratic society for the authority derived from professionalized training, knowledge, and experience."

How are students to influence faculty in matters that directly affect their education and their lives as members of the university? Rather than a token representation on faculty committee and in faculty meetings it is proposed that the principal committee of the faculty be subdivided into four subcommittees concerned with liaison between students and faculty, undergraduate education, graduate education and community affairs. These subcommittees would be joined by an equal number of elected students. The chief positions would be hammered out at this working level and then carried to the faculty committee and then to the faculty, where students would sit as observers.

It remains to be seen how this will work, but it offers considerable promise. The faculty's problem in recasting its system of governance is to maintain the legality of the whole faculty as the ultimate decision maker of academic policy, while delegating such authority broadly enough that the greatly increased flux of work can be carried out efficiently. The measure of effective government is not the number of committees or the time they consume, but rather the extent to which it liberates the faculty's energy for teaching, scholarship, research, and, I must now emphasize, genuine contact with students.

Opinion has become sharply divided as to whether or not faculty should elect its dean and the members of the council and other faculty committees. With participation a more evident virtue and with presidents often making their appointments from the more conservative sector of the faculty, the argument for election is making headway on many campuses. The outcome is not predictable. The risk of creating and maintaining political factions is abhorrent to many. And the ease with which the purpose of an election can be defeated when the attention of the faculty is not aroused must be assessed. But at many universities the decisions will be made the coming year.

The president and the highest members of the administration have had the most difficult times of all in the recent crises. The presidents have been the chief victims, having been forced out of office whenever the disruption has become extreme. The quality of their performance under fire has been important and those with the right combinations of leadership, courage, steadfastness and compassion have kept many an institution on a steady keel. Even so, it has not been an enviable job and many are tiring.

Traditionally, presidents have been appointed by the trustees, and because this is usually a legal requirement it is unlikely to change. But one can easily predict change within this framework. Undoubtedly the advice of faculty, students and alumni will be sought. And potential presidents, recognizing their indispensability, will surely hold out for assurances of sufficient staff of high quality to make their jobs workable and relief from other responsibilities that will enable them to maintain meaningful relations with students and faculty. And, finally, lifelong tenure will probably be ended so that presidents highly qualified in one era will not become obsolescent in another.

Watching Over Governing Boards

The institution of trustees or governing boards will also be subjected to the scrutiny of the new "protestantism", but, being embedded in legal structure, they will not change quickly. But the conflict will be sharp. On the one hand, many such boards have a tradition of selfless service and by resisting political pressures have provided indispensable protection to academic freedom. On the other hand, it is clearly questionable if such bodies, chosen from a narrow but highly successful class of business and law, should be the shapers of the universities' future. This is particularly questionable when as "absentee landlords" they spend only a day or two per month at this task.

This difficulty could be best resolved, it would seem,

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if the new generation of presidents formed a closer bond with the faculty using the new structures that should make such a working relationship possible. The long term planning and shaping of the university could then be done within this union. And the trustees and governing boards could then more properly assume the posture of overseers rather than managers.

In the 1960s, the American universities were busy expanding, offering a broader, more varied college or university education, increasing even faster graduate education, supporting more research, both pure and applied, addressing the mounting number of social problems—all in the assumption that they were playing their part rather well within a liberal consensus of what a modern university should be. Hence their shock to suddenly find much of the student body radically changed, unsympathetic to their labours, and insistent on, at the least, reform, at the most, a taking over.

The more actionist of these students tended to cluster at leading universities, particularly those in cities. The initial confrontations and conflicts were ragged, unpredictable, time-consuming, and at the least disrupted learning and scholarship. The students pressed unfair advantages on easy and vulnerable targets: the administrations often radicalized reformist and moderate students by harsh, badly timed, or ambivalent responses and lost the confidence of the faculty: the faculty unfamiliar with such mass rejection of authority often split with a part tending to support the students. As a result the academic condition became one of disarray at about 10 per cent of our universities last year and threatens to spread.

Violence Subsiding

The fundamental conflicts have not been resolved but, meanwhile, certain changes suggest that the period of violent confrontation may have reached its peak. Student diversity is emerging from being hidden behind a temporary coalescence behind a common front. Some sectors of the student body have been quick to return to normal work after disruptions. This applied particularly to those in science, pre-professional studies, economics and the like where steady, accumulative effort is required.

Faculties were responding by improving their own communications and structure of government and relationship to the administration. And they were working out a more unified, enforceable position against serious disruption, while becoming more genuinely attentive to student interests and more assertive of their fundamental commitment to learning and scholarship.

Out of this turmoil a new collegiate community will be fashioned. There is too much resiliency in the university system, too much need for it, to expect other than some accommodation with these new social forces. A decade hence I believe we will find a new social contract in existence. I would like to take up the three features that seem to me most likely to determine the nature of that new social contract. To limit this device to three means that others have had to be discarded. I have indeed discarded four issues that are commonly thought to underly student protest in America. These are: the Vietnam War, the social and cultural exclusion of university groups, the inequitable distribution of wealth, power and prestige and the alleged educational irrelevance of much of today's teaching offered to undergraduates.

Why are these ruled out? The Vietnam War because it will be over and the shock of this experience will almost certainly prohibit any similar adventures. The social and cultural integration of negroes and other disadvantages will no longer be blocked by an unwillingness to accommodate at the university level; there will be difficulties, to be sure, but they will be complex and will not lend themselves to the advocates of protest and disruption. The inequitable distribution of wealth and power can only change very slowly. Relatively it has hardly changed at all in the last 20 years. While changing student attitudes may have some effect, the lag will be such that it is unlikely that this can remain a continuing issue when, in the short term at least, it is so stubborn. Finally, the dissatisfaction with current teaching will be defused largely because this is a campus issue that can and will be dealt with there.

If we can therefore accept the assumption that these four issues will diminish in intensity as we move into the seventies, what issues will prove more permanent in deciding the long term outcome of our present crises and the future of the university? The three that I would suggest are:

1. The availability of increasing government funding for higher education.
2. The extension of various qualities of the student movement, such as giving a high priority to participation, into politics and the professions.
3. The response that is made to the charge that modern technological society dehumanizes.

Let me conclude by considering each of these in turn.

On the average, American higher education is supported in roughly equal amounts from four sources: student fees, state government, federal research and fellowship-support and a fourth sector composed of endowment and gifts. Inasmuch as the student fees come largely from parents it is clear that all four sectors of this support are outside the direct control of students. Therefore, the willingness of these sectors to bear the costs of higher education and its continual growth can be decisive.

The extent to which this willingness is being undermined by the present conflicts on campus is difficult to assess. For example, many parents who would consider withholding financial support are restrained because their son would lose his draft deferment upon leaving college. Support from state governments is falling in only a few states, particularly California. Federal support in the form of research grants and fellowships is a cause for particular concern and deserves some comment.

Government support of research at universities ceased rising and levelled off three years ago. And this is causing considerable hardship, especially in removal of ending the expansion that would have accommodated younger staff and supported their research. Then came the particular effects associated with the tradition begun after the second World War whereby the Department of Defense supported a very substantial portion of the research done at universities. This is now diminishing rapidly because of the continuing demands of the Vietnam War and the Nixon administration's insistence on cutting the defence budget. But to this a further momentum is being added. Congressional attitudes toward research support have been hardening for some time, with insistence on applied research and accountability rising. This is reaching its peak in a Mansfield amendment to the current appropriation bills that would require each project to be justified by spelling out its relatedness to a military mission. Since previous legislation was broad enough to cover any project that improved the nation's health or intellectual and scientific resources and capabilities, it is evident that the crunch is at hand since many universities could not

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accept the new criteria. Still other pending amendments threaten the withholding of Defense Department funds from universities that do not maintain reserve officer training or allow military recruitment.

Of course, if the defence support for research could be transferred to other agencies such as the National Science Foundation, there would be general rejoicing. But that is quite impossible. There will be a long lag indeed before these funds can flow through other channels. Hence a period of declining research support and its depressing effects on graduate education is clearly on the cards.

Despite these setbacks, the greater concern must be with the total federal financing of higher education. In 1953 this was exclusively in research support and accounted for 15 per cent of the total budget. Ten years later it was 30 per cent and now it is close to 50 per cent. If this period of budgetary stringency is passed and if the university system can maintain or regain its wide public constituency, and justify further expansion, the growth of federal support may continue. Certainly this would require a move toward a constructive resolution of the present university crisis. Without such a resolution the universities will experience the decrease in vigour that financial strangulation will inexorably impose.

Much the same can be said for the support from the endowment and private foundation sector. Disenchantment with university performance will surely diminish private giving and endowment, which even at the most favoured universities is sufficient only if it grows in balance with the other sectors of support.

But there is a second possibility for current crisis producing a rather permanent effect. It lies in the infusion of certain ideas from the student movement into the mainstreams of contemporary life. It is quite natural to expect that the great majority of specific demands that well up from student protest and unrest will not be durable. Otherwise the arguments of those of us old enough to justify the importance of our opinions by the length of our experience would collapse! But there are testing grounds for these ideas well beyond the campus. One is in politics and the other is in the professional life into which many students are passing.

With regard to politics the impact is impressive and the victories are coming. No American Democratic Presidential Convention was like the one of 1968. On the Vietnam resolution which narrowly lost there was not a defeat even if Senator McCarthy never had a chance. Despite the hue and cry the present administration is set on a course more dovish than that resolution and the organized pressure of the youth in politics is most responsible.

Young people have returned from the depression of their defeat last year and have been clearly influential in several recent by-elections. And it is plain that those hoping for nomination in 1972 take this new constituency very seriously. The number of people between 21 and 24 will nearly have doubled by that time compared with any period before 1960 and a greater percentage is going to vote than ever before.

But this change in mood is making itself felt in professional life, as one can easily see in the American scene. In nearly every professional society the ritualistic and rather boring annual meeting has become transformed into a spirited contest with the younger members leading the attack against established orthodoxy. Across the board from modern language teaching to psychiatry, from political science to chemistry the insistence of reform is at hand. And one can sense the changes in the professions as well. The new breed of lawyers no longer wait dutifully for junior places in the firms of major partners. They are more interested in finding action in the ghetto or in the political arena. And the young doctors have upset their profession with their headlong plunge into patient care and community service with little regard for the structures that ensure a high income. This infusion of life into the traditional professions is surely healthy and makes a strong case for extracting from the confusing eruptions of the young those new traits—such as participation and personal involvement—which can be beneficially transmuted into the adult world.

Finally, there is what I am persuaded is the most fundamental issue of all. The students put it in the form of their being dehumanized by modern technological society. The basic faith that science and technology can protect us from the capriciousness of nature—from famine and disease, solve all problems of production and in the end produce an abundant life—is threatened. Contemporary conditions of life have deprived people, and especially young people, of a meaningful world in which they can act and find themselves. Rationality itself is discredited. The escape to astrology, psychedelic drugs and withdrawal from the actual world lures many.

It is here that we can see a society-wide disenchantment with the old goals and what technological society is doing to us. Of course, technology, and earlier the machine, has had an unending line of critics. What makes this era different is the increasing persuasion that technology is running man, not the other way around; that man has less to say about how it is used than at the height of the harshness of the industrial revolution; that technology has become an end in itself, subject to no control by the common man.

Surely this is mistaken. The central danger facing mankind is not the autonomy of technology nor the triumph of technological values but the subordination of technology to the values of earlier times and its exploitation by those who retain power from the social and political structures of the past.

If this be true, then the problem is how to assert control of technology, turn it to the elimination of poverty, the depollution of our environment, the building of a world in which man can feel at home. And to achieve this would be only a beginning. The more pervasive question is what values is the technology to serve, what new purpose will become the directive force in society. We cannot answer these here and now. It may take all of the seventies to fashion the answer. But we know that civilizations are the expression of the interaction of values and technology. If the well-spring of discontent that student protest reveals is to have a permanent consequence, it will probably be in hastening the end of this era of values and technology which has been with us for so long. But this can come to pass only with the informed involvement of students who are not content to be the spiritual descendants of William Cobbett and William Morris, living in self imposed semi-poverty making ceramic jewellery and psychedelic posters, who do not retreat from the more demanding preparation an increasingly complex technological society requires. And, on the other hand, by the commitment of their teachers to a new contract that accepts them as junior colleagues in a common purpose, commonly arrived at. Despite the gloom of the present, it is my hope that the university crises of this time can be the forerunner, a decade hence, of such a reordering of both our spirit and our technology.

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