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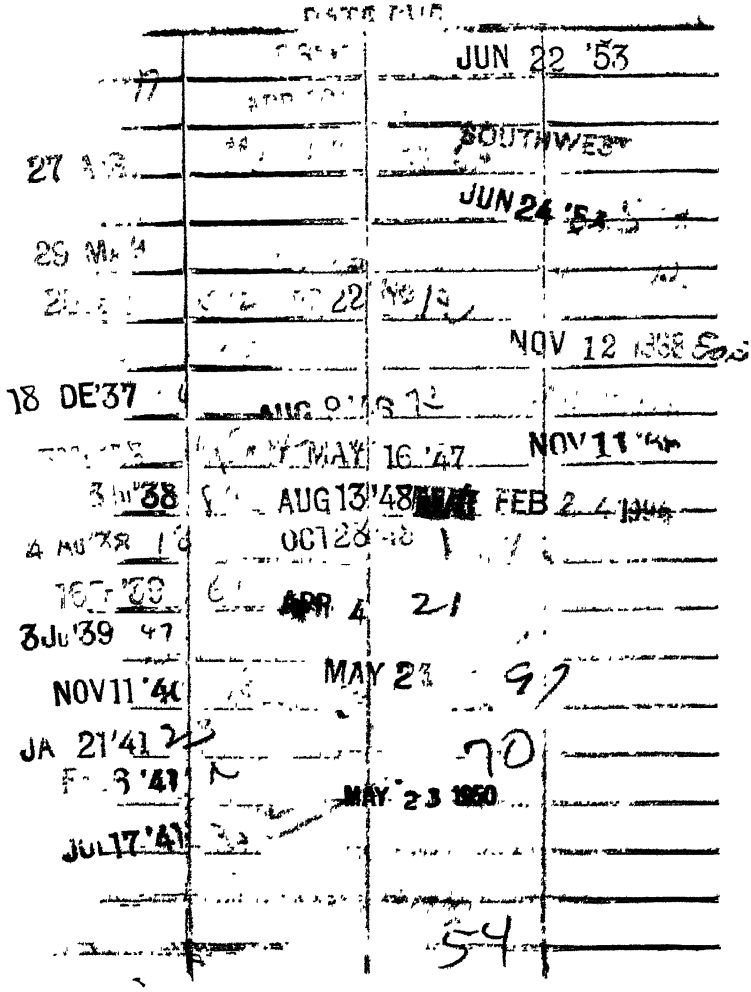

NO FRIENDLY VOICE

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# NO FRIENDLY VOICE

By ROBERT MAYNARD HUTCHINS

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*To*

THE PRESIDENT OF BEREA COLLEGE

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# TO THE GRADUATING CLASS, 1935

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IT IS now almost fifteen years since I was in the position you occupy. I can therefore advise you about the dangers and difficulties you will encounter. They are not, in my opinion, chiefly economic or financial. Presumably some of the American people will always be able to earn a living; and presumably the graduates of a great university will have a good chance of being among them. You have the advantage of your fellow-citizens. You have learned how to work; you have had some experience with people; you have had good teachers and read good books; you have been enlightened by the accumulated experience of mankind. If anybody can hope to survive, you can.

I am not worried about your economic future. I am worried about your morals. My experience and observation lead me to warn you that the greatest, the most insidious, the most paralyzing danger you will face is the danger of corruption. Time will corrupt you. Your friends, your wives or husbands, your business or professional associates will corrupt you; your social, political, and financial ambitions will corrupt you. The worst thing about life is that it is demoralizing.

The American system is one which offers great incentives to initiative. It is based on the notion of individual enterprise. The path to leadership is open to anybody, no matter how humble his beginnings. The most striking paradox of American life is that this system, which must rest on individual differences, produces the most intense pressure toward uniformity. The fact that any boy can become President, instead of making every boy an individual, tends to make him a replica of everybody else.

"Getting on" is the great American aspiration. And here the demoralizing part comes in; the way to get on is to be "safe," to be "sound," to be agreeable, to be inoffensive, to have no views on important matters not sanctioned by the majority, by your superiors, or by your group. We are convinced that by knowing the right people, wearing the right clothes, saying the right things, holding the right opinions, and thinking the right thoughts we shall all get on; we shall all get on to some motion-picture paradise, surrounded by fine cars, refreshing drinks, and admiring ladies. So persuasive is this picture that we find politicians during campaigns making every effort to avoid saying anything; we find important people condoning fraud and corruption in high places because it would be upsetting to attack it; and we find, I fear, that university presidents limit their public utterances to platitudes. Timidity thus engendered turns into habit, and the "stuffed shirt" becomes one of the characteristic figures of our age.

The pressure toward uniformity is especially intense now. More effective methods of applying it are constantly appearing. The development of the art of advertising and the new devices now at its disposal make more moving than ever the demand that every American citizen must look, act, and think like his neighbor, and must be afflicted with the same number of gadgets. In the second place, almost everybody now is afraid. This is reflected in the hysteria of certain organs of opinion, which insist on free speech for themselves, though nobody has thought of taking it away from them, and at the same time demand that it be denied everybody else. It is reflected in the return of billingsgate to politics. It is reflected in the general resistance to all uncomfortable truths. It is reflected in the decay of the national reason. Almost the last question you can ask about any proposal nowadays is whether it is wise, just, or reasonable. The question is how much pressure there is behind it or how strong are the vested interests against it.

Current fears are reflected, too, in the present attacks on higher education. From one point of view these attacks are justified. From the point of view of those who believe that heaven is one big country club, universities are dangerous things. If what you want is a dead level of mediocrity, if what you would like is a nation of identical twins, without initiative, intelligence, or ideas, you should fear the universities. From this standpoint universities are subversive. They try to make their students think; they do not intend to manufacture so many imitative automatons. By helping the students learn to think, the universities tend to make them resistant to pressure, to propaganda, or even to reward. They tend to make them dissatisfied—if there were no dissatisfaction, there would be no progress—and they are likely to make them want to do something to improve the conditions under which our people live. They tend to make them individuals, therefore, and individuals on a strictly American plan, asking no quarter for themselves, but alive to the needs of their fellow-men.

So much is this the case, so sharp is the contrast between the atmosphere of America and the aims of the universities, with the country afraid of independent thinking and the universities committed to nothing else, that in one sense the universities may be accused of deliberately unfitting their students for life. Their graduates may not "get on." They may not even be interested in getting on. Yet you will note that the virtues which a university seeks to inculcate are those which our form of government contemplates and without which it cannot endure. In subverting ignorance, prejudice, injustice, conformity, mediocrity, self-satisfaction, and stupidity, and in sponsoring instead the cause of intelligence and independence, the universities are performing an essential service to democracy. Democracy rests first on universal comprehension, to which the universities contribute through the education of teachers for the public schools and through the discovery and communication of knowledge. Democracy rests sec-

ondly on individual leadership, not necessarily political, but intellectual and spiritual as well. To this the universities contribute through the labors of their professors and their graduates. As Thomas Jefferson saw when he established the University of Virginia, these services are always indispensable to democracy. But the founders of this republic can hardly have foreseen how acute the need of them would be today. They cannot have anticipated the terrific storm of propaganda from every quarter that now beats upon the citizen. They cannot have expected a government by pressure groups, groups able and willing to drive into oblivion anyone who opposes them. They cannot have imagined that the day would come when individualism would mean: Look out for yourself, and the devil take the community. If they had foreseen these things, they would have left even more prayerful exhortations to their countrymen to foster and strengthen the higher learning.

So I am worried about your morals. This University will not have done its whole duty to the nation if you give way before the current of contemporary life. Believe me, you are closer to the truth now than you ever will be again. Do not let "practical" men tell you that you should surrender your ideals because they are impractical. Do not be reconciled to dishonesty, indecency, and brutality because gentlemanly ways have been discovered of being dishonest, indecent, and brutal. As time passes, resist the corruption that must come with it. Take your stand now before time has corrupted you. Before you know it, it will be too late. Courage, temperance, liberality, honor, justice, wisdom, reason, and understanding—these are still the virtues. In the intellectual virtues this University has tried to train you. The life you have led here should have helped you toward the rest. If come what may you hold them fast, you will do honor to yourselves and to the University, and you will serve your country.

# WHAT IS A UNIVERSITY?

A UNIVERSITY is a community of scholars. It is not a kindergarten; it is not a club; it is not a reform school; it is not a political party; it is not an agency of propaganda. A university is a community of scholars.

The scholars who compose that community have been chosen by their predecessors because they are especially competent to study and to teach some branch of knowledge. The greatest university is that in which the largest proportion of these scholars are most competent in their chosen fields.

To a certain extent the ability of a university to attract the best scholars depends on the salaries it can pay. To a certain extent it depends on the facilities, the libraries, and laboratories it can offer. But great scholars have been known to sacrifice both salaries and facilities for the sake of the one thing that is indispensable to their calling—and that is freedom.

Freedom of inquiry, freedom of discussion, and freedom of teaching—without these a university cannot exist. Without these a university becomes a political party or an agency of propaganda. It ceases to be a university. The university exists only to find and to communicate the truth. If it cannot do that, it is no longer a university.

Socrates used to say that the one thing he knew positively was that we were under a duty to inquire. Inquiry involves still, as it did with Socrates, the discussion of all important problems and of all points of view. You will even find Socrates discussing communism in the *Republic*

of Plato. The charge upon which Socrates was executed was the same that is now often hurled at our own educators: he was accused of corrupting the youth. The scholars of America are attempting in their humble way to follow the profession of Socrates. Some people talk as though they would like to visit upon these scholars the fate which Socrates suffered. Such people should be reminded that the Athenians missed Socrates when he was gone.

There is nothing new about this issue in America. At the opening of the eighteenth century the foundation of Columbia University was delayed for fifty years because of arguments about what religious teaching should be permitted in the institution. Thereafter the fight was over the advance of experimental science and its repercussions on religious faiths. In the first ten years of the University of Chicago the quarrel turned on the religious teachings of the staff. The battle for freedom of inquiry and teaching in the natural sciences and religion has now been won. No sane citizen, however he may disagree with any professor, can wish that battle had been lost. The scientific advance of the past century and the release from bigotry which we now enjoy can be traced directly to the success of the universities in securing the right to study these fields without interference.

In the past forty years universities have taken up the study of economics, politics, sociology, and anthropology. They have been endeavoring to create social sciences which, if they can be created, may prove as beneficent to mankind as natural science and the technology which rests upon it. In inquiry into social problems professors have run into prejudices and fears, exactly as they did in studying natural science and theology.

These prejudices and fears are now especially intense because we have been passing through a period of severe depression. In the twelve years I have been in higher

education I have seen a marked change. In 1923 we often heard that the professor was a useless creature, remote from the real world and giving his students no knowledge of it. Now we hear that the professor should get back to the cloister and not let his students learn any more about the real world than he can help. I ascribe this change to the bad case of nerves induced in many people by the depression. The normal reaction to misfortune is to blame somebody else for it. Universities are easy marks. They are tax-exempt. They do not reply to abuse or misrepresentation. One who suffers from business cares, or domestic worries, or political disappointment, or general debility can relieve his feelings with impunity by talking about the Reds in the universities. I know that many honest and earnest people are seriously alarmed. I know, too, that they are misinformed.

As a matter of fact, I have never been able to find a Red professor. I have met many that were conservative, and some who would admit they were reactionary. I have met some who were not wholly satisfied with present conditions in this country. I have never met one who hoped to improve them through the overthrow of the government by force. The political and economic views of university faculties are those of a fair cross-section of the community. The views of those who are studying social problems are worth listening to, for these men are studying those problems in as unbiased and impartial a fashion as any human being can hope to study them.

When I was in college fifteen years ago, students were the most conservative race of people in the country. Everybody lamented their indifference and apathy to the great questions of the day. I used to hear complaints that they read only the sporting pages of the newspapers and derived their other knowledge of current affairs from the movies. When I began to teach, I taught a course called "Introduction to Social Science." There were many as-

pects of the social sciences to which I could not introduce my class because they would not let me. The political and social dogmas then current these gentlemen had accepted whole. No suggestions of mine could sway or even arouse them.

At every age their elders have a way of overestimating the pliability of the young. As a result many people seem to have the notion that the student comes to college a sort of plastic mass, to be molded by the teacher in whatever likeness he will. But at eighteen, or nineteen, or graduation from high school, it is far too likely that the student has solidified, and too often in more ways than one. The most that a teacher can hope to do with such students is to galvanize or stimulate. If he wanted to, he could not hope to persuade.

It must be remembered that the purpose of education is not to fill the minds of students with facts; it is not to reform them, or amuse them, or make them expert technicians in any field. It is to teach them to think, if that is possible, and to think always for themselves. Democratic government rests on the notion that the citizens will think for themselves. It is of the highest importance that there should be some places where they can learn how to do it.

I have heard a great many times in recent years that more and more students were getting more and more Red. In universities that are intelligently conducted, I do not believe it. In universities which permit students to study and talk as they please, I see no evidence of increasing Redness. The way to make students Red is to suppress them. This policy has never yet failed to have this effect. The vigorous and intelligent student resents the suggestion that he is not capable of considering anything more important than fraternities and football. Most of the college Reds I have heard about have been produced by the frightened and hysterical regulations of the colleges.

They are not Reds at all; they are in revolt against being treated like children.

Mr. Thomas W. Lamont, partner in J. P. Morgan and Company, has advanced another reason for the interest of students in unconventional doctrines, a reason which is doubtless operating too. Mr. Lamont says, "I hear complaint that our college professors are teaching too much of socialistic theory. That would not be my observation." "These are days," says Mr. Lamont, "when among the teaching forces . . . . the freest sort of academic freedom should prevail." He goes on: "But to me it is little wonder that many of our students today are radical, joining the Socialist party, or are even looking with a kindly eye upon the allurements of Communism." "The sort of world they have seen," says Mr. Lamont, "is one of chaos. . . . ."

If Mr. Lamont is right, instead of attempting to suppress free discussion, we should set ourselves to remedy the cause of radicalism, the chaos of the modern world. I venture to suggest the value of encouraging intelligent, calm, and dispassionate inquiry into methods of bringing order out of chaos. That is the American way.

In the state of Illinois the Communist party is on the ballot. Should students be allowed to graduate from Illinois colleges in ignorance of what communism is? If they did, they might vote that ticket by mistake. The greatest historian of the South has shown that the War between the States arose largely because the southern colleges and universities did not dare to say that there were any arguments against slavery and secession. Those who would suppress freedom of inquiry, discussion, and teaching are compelled to say that they know all the answers. Such a position is egregiously conceited. It is also a menace to our form of government. As Walter Lippmann has said, "The essence of the American system

. . . . is a way of life in which men proceed by unending inquiry and debate."

Nobody who has real familiarity with higher education will hesitate to assert that professors are not engaged in subversive teaching. They will also remind the public that professors are citizens. They are not disfranchised when they take academic posts. They therefore enjoy all the rights of free speech, free thought, and free opinion that other citizens have. No university would permit them to "indoctrinate" their students with their own views. No university would permit them to turn the classroom into a center of propaganda. But off the campus, outside the classroom, they may hold or express any political or economic views that it is legal for an American to express or hold. Any university would be glad to have Mr. Einstein among its professors. Would anybody suggest that he should be discharged because he is a "radical"?

All parties, groups, and factions in this country should be interested in preserving the freedom of the universities. Some of our states now have radical administrations which have reached out to absorb the universities. The only hope in those states for the preservation of another point of view is in adhering to the doctrine that if a professor is a competent scholar he may hold his post, no matter how his political views differ from those of the majority. Not only so; the newspapers, the broadcasters, the churches, and every citizen should uphold the traditional rights of the scholar. Wherever freedom of inquiry, discussion, and teaching have been abolished, freedom of the press, freedom of religion, and freedom of speech have been threatened or abolished too.

Look at the universities of Russia and see how they have sunk to be mere mouthpieces of the ruling party. Look at the universities of Italy, where only those doctrines which the government approves may be expounded. Look at the universities of Germany, once among the

greatest in the world, now a mere shadow, because their freedom is gone. These are the ways of communism and Fascism.

In America we have had such confidence in democracy that we have been willing to support institutions of higher learning in which the truth might be pursued and, when found, might be communicated to our people. We have not been afraid of the truth, or afraid to hope that it might emerge from the clash of opinion. The American people must decide whether they will longer tolerate the search for truth. If they will, the universities will endure and give light and leading to the nation. If they will not, then, as a great political scientist has put it, we can blow out the light and fight it out in the dark; for when the voice of reason is silenced the rattle of machine guns begins.

# PROFESSORS AND TRUSTEES

LEGALLY the University is the Board of Trustees; they are responsible for the selection of the staff; they determine their salaries and tenure, and control the institution in such detail as they wish. They have greater powers than the directors of an ordinary corporation; they are self-perpetuating, and there are no stockholders.

The public concern with the University is shown by its incorporation under the laws of Illinois and the tax-exemption conferred upon it by the legislature. It may be suggested that the public regards the Board as its representative, with the duty of seeing to it that the University is conducted in the public interest. This may be urged particularly in regard to the teaching of very young people; it may be said that the Board has a special responsibility to guarantee that the instruction at these levels is the kind the community would like to have, or at least that it is not the kind that the community would not like to have. In this view the Board has an obligation to keep the University in tune with the life of the community, with its aspirations and ideals, and must exercise such supervision over education and research as to insure this result.

Since the University is a corporation, and one spending millions of dollars a year, it is easy to think of it as a business. If it is a business, there must be employers and employees, with the usual incidents of that relationship. In business an employer ordinarily would not tolerate an employee with whom he seriously disagreed, or whom he heartily disliked, or who, he thought, was bringing the organization into disrepute. In this view the Trustees are

the employers of the Faculty and have the right, if not the duty, to discharge those who in their judgment discredit or embarrass the University.

In attempting to analyze functions in a university it should be noted that a board of trustees is a unique American organization. Since the Middle Ages the European universities have been controlled directly by the state, without the intervention of a board of any kind, and the British universities have been controlled by the faculties. The universities of colonial America were not universities at all; they were professional schools, designed to train ministers for the churches which founded them. Some of the trustees of these institutions were teachers in them; but they were all clergymen, who were doubtless charged with the duty of making the education given by the college conform to the wishes and needs of the denomination. Since the colonial period the major universities have outgrown their original purpose and have become institutions concerned with research, general education, and all varieties of professional training. The sole object of the Harvard of 1636 has become a minute fraction of its activities today.

When we examine what the aims of the modern university are and what the community's legitimate interest in it is, we see the various relationships in a university in a different and, I think, a clearer light. The modern university aims to develop education and to advance knowledge. It is obvious that the freer it is the more likely it is to achieve these purposes. All the history of education shows the dangers of permitting public opinion to determine the content of the course of study. In Europe until the current dictatorships the state has recognized this fact by granting the most complete freedom to the universities. All the history of science shows the fatal consequences of allowing popular prejudices to inhibit the search for truth. Although no modern university would decline to abide by the law, as many medieval ones did, they would contend that they

will perform their greatest service to the community if they are left free to determine for themselves the content of education and the direction of research.

I should argue that society has thought it worth while to set apart men who are to search for knowledge impartially and to communicate it in the same spirit. It has thought it worth while to provide a haven for the individual specially qualified to pursue the truth and to protect him from the community, from influential citizens, and even from his colleagues. In this view a university is, first of all, a group of professors.

If ideally a university is a group of professors, what is a board of trustees? A board of trustees is a body of public-spirited citizens who believe in the aims of the professors, namely, the development of education and the advancement of knowledge. They have undertaken to relieve them of two responsibilities they cannot carry: the responsibility of managing their property and the responsibility of interpreting them to, and defending them from, the public. They fix the salary scale in order to make sure that the university's money is not squandered. They find out all about the faculty in order to interpret them to the public. But they have renounced for all practical purposes any right to pass on their qualifications to be professors. The faculty is not working for the trustees; the trustees are working for the faculty. The analogy of business or what an employer may do in business is therefore inapplicable.

The president of a university represents both the trustees and the faculty. At Chicago this is made explicit by the practice of having the President nominated by a joint committee. One of the President's duties to both the Faculty and the Board is to act as chief interpreter of the University. One of his duties to the Trustees is to see to it that they have all the information about the University they will consume. Another is to prevent the Faculty from wasting the University's funds. One of the President's duties to

the Faculty is to help the Trustees so to understand the University that they will not be tempted to use their financial control to control the educational and scientific work of the University.

How may the legitimate interest of the public be protected if the Trustees are not to regulate education? Professors are citizens and are affected by the customary influences brought to bear by the community on members of it. They are, of course, subject to law. The President is in a position to communicate to the Faculty the state of public opinion, which in turn the Trustees are in a position to communicate to him. But it must be clear that, if professors are to be guided by the prejudices of editors, bankers, lawyers, ministers, industrialists, politicians, or any other groups, they cannot hope to be professors or constitute a university in any real sense of those words. We must hold that the community wants real professors in real universities and that it has conferred upon them such privileges as are required to make its wishes effective.[1]

It follows that a professor on permanent tenure should not be removed unless he is incompetent or commits some illegal act. Whether he is competent is not a question the Trustees or any other group of laymen would wish to decide. Aside from their lack of acquaintance with many of the fields studied in the University, the Trustees would not wish to establish a precedent which in the hands of their successors might be an instrument of destroying that freedom of teaching and inquiry which is indispensable to a university. Only a group of qualified scholars can determine whether a professor is competent.

When the issue is the renewal of a temporary appointment, it would be unfortunate if the teacher's political, social, economic, or religious views played any decisive rôle. In the past few years the Board has adopted a policy of making all new appointments temporary. This was done

[1] The Catholic parochial schools are wholly independent of public control.

as a matter of financial discretion, to protect the University from the possible consequences of the depression. If the University permits considerations other than competence to affect the continuation of temporary appointees, the dangers of this policy are obvious. A professor on temporary tenure may fail of reappointment because he does not meet the requirements of the President of the University, the dean of his division or school, or the chairman of his department. These officers should, however, limit their investigation to the professor's scholarly and teaching abilities and his personality as it affects their exercise, to his desirability in comparison with others qualified for the post, and to the funds available for carrying on the work in his field.

This amounts to saying that a professor on permanent or temporary tenure should not be removed or fail of reappointment because of outside activities, assuming they are not illegal and do not consume so much of his time as to render him incompetent to do his university work. Outside activities are as much protected by academic freedom as the actual business of teaching and research. If this were not so, members of the Faculty could be removed because a Board of Protestants did not like Catholics, or a a Board of Baptists did not like Christian Scientists, or one of Democrats did not care for Republicans.

I do not deny that professors under these circumstances may embarrass the University. Even if they say, as they should, that they do not represent the University, the headlines they get usually originate in the fact that they are professors at the University of Chicago; and their title is never missing from newspaper accounts of their doings. This occasional embarrassment is part of the price that must be paid if the University is to be a great university, or indeed a university at all.

When a professor is accused of being indiscreet, unwise, or foolish in his off-campus activities, we may

first ask ourselves how we know that he is. In the recent investigation most of the witnesses against the University seemed to confuse nationalism and patriotism. They felt that anybody who could advocate free trade or even world-peace must be unpatriotic. To hold that a professor embarrassed the University if he took an internationalist, as against a nationalist, position would debar from our Faculty every orthodox economist in the country.

But assuming a case where the President, the Trustees, and the Faculty all agreed that a professor had embarrassed the University, what then? If he were a competent teacher and scholar on permanent tenure, he should not be removed. If he were a competent teacher and scholar, on temporary appointment, if the funds were available for his work, if there were no man as good to take his position, he should not fail of reappointment.

Although a professor in the case assumed should not be removed, it does not follow that he would not feel the consequences of his actions. He would be admonished by the chairman of his department. He would be subjected to the criticism of his colleagues. His professional standing and professional future would be seriously affected. These pressures a group of professors know very well how to apply, and they apply them constantly.

These are the consequences of regarding a university as a group of professors rather than a legal person, a public utility, or a business corporation. I have no hesitation in saying that the more a university approaches this definition the greater it will be. In a state university the exigencies of politics make the attainment of this ideal difficult, if not impossible. The University of Chicago suffers under no such handicaps. It is admirably situated to continue the demonstration that began with its foundation—the demonstration of what a university should be.

I cannot conclude this part of my report without recording my gratitude to the Board for its courageous support of

the Faculty and the Administration during the unpleasant period of the investigation. The Trustees have helped the University grow to greatness by their intelligent and far-sighted view of the nature and purposes of the institution. Their conduct reveals again their devotion to the welfare of the University.

# WHAT IT MEANS TO GO TO COLLEGE

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I HAVE been asked to speak to students and their parents about what it means to go to college. Let us start with the Freshman. In the first few days of the year the college may seem to him like a big buzzing confusion. To the Freshman's parents, who have watched him go with mingled feelings of anxiety and relief, it may seem like a quiet haven where their boy can for four years be protected from low company and new ideas. To both Freshman and parents it may seem, too, a place where he can make good friends and find out how to earn a living.

There is some reality in all these appearances. A college is a complete democracy and has at first that look of disorder which is characteristic of democracy and which is so distressing to the Fascist mind. Parents may feel sure, too, that the moral, physical, and social well-being of their Freshman child will be safe-guarded to the best of the institution's ability. There is not a college in the country without a health service to look after the students. There is not a college without a large staff of advisers, assisting all the students not only with their educational problems but also with every kind of personal question. In every college friendship has, from time immemorial, been one of the fine by-products of college life, though we cannot be sure that college men and women would not have made the same kind of friends if they had not gone to college. It is fair to say that whether the college graduate has taken vocational courses or not he will usually earn a larger income than the man who is without

higher education, though nobody knows why or to what extent this is so.

But it has long been clear to educators that the custodial, social, and vocational aspects of the colleges could not justify the vast public support which has come to them from governments and individuals in this country; nor could these functions, important as they are, justify the sacrifices of parents or of the hosts of teachers who, with little reward and no applause, have made our educational system. Neither the public nor the teaching profession would long be interested in higher education if its object were to keep young people out of trouble while they were being taught how to make money.

The object of higher education is the training of the mind. Since the student will not live in a vacuum when he has graduated, his mind must be so trained that he will act intelligently after he receives his degree. Or, to put it another way, the object of the college is the production of intelligent citizens. This is the object to which the educational profession has dedicated itself. This is the object which has led legislatures and donors to establish and maintain the colleges. This is the object, too, which parents and their children have come increasingly to recognize as the purpose of the college, for one result of the depression has been a new seriousness and a new industry in students. Students know that the income of their parents has been drastically reduced and that sending a boy or girl to college means much self-denial at home. Students know, too, that on graduation they will face a world where the competition is keener and the easy opportunities are fewer than at any time in the last forty years. The report from every part of the country is that American students are buckling down to the business of education as never before.

How does a college set about its task of training the mind for intelligent action? The college leads the student

into the world of ideas, and does it under the best possible auspices.

When the student graduates from high school, he has not yet caught a glimpse of vast reaches of science, history, philosophy, literature, and the arts. Most colleges now attempt to give him, during the first two years, an understanding of the leading ideas in these fields of learning. This is not done by a Cook's tour of all human knowledge; the effort is to get the student to master those fundamental principles upon which understanding must rest. The college attempts to avoid superficiality on the one hand and premature specialization on the other.

The course of study is framed by experts, people who have devoted their lives to the difficult problems of general cultural education. These men and women have been selected because of their interest in undergraduates and their ability to supply the kind of education that undergraduates need. The old days when the Freshman classes were handed over to the youngest instructors to give these immature teachers experience are gone forever. Today the colleges appreciate the basic character of the first two years and realize that students during these years cannot be put at the mercy of amateurs or novices. The staff is, then, experienced, able, and interested in introducing the student into the world of ideas.

The course of study is defined by this group. The most democratic thing about that democracy which is a college is the faculty. Older alumni of the University of Chicago may recall that in their time the faculty was so democratic as to resemble a collection of soloists. A given teacher worked up his courses by himself, taught them by himself, and examined and graded his students by himself. In the College of the University of Chicago this has now been changed. Each course that is part of the curriculum is worked over by the whole group. Courses are seldom constructed by a single teacher. The course in biology

for Freshmen and Sophomores, which occupies one year, was framed by twelve professors. A detailed outline of each of our courses is placed in the student's hands. He may obtain, in addition, sample examinations, indicating what he has to expect at the end of the year.

The examinations, in turn, are not framed by one man, nor are they given by the teacher who has taught the course. They are prepared by an independent board. The effect on the student is that he studies the subject and not the teacher. The effect on the teacher is that he teaches the subject and not his private hobbies. If he spent the time of the class in airing his own prejudices, his students could not pass the examinations. Whatever tendency teachers may have displayed in the past to wander far afield is now disappearing anyway, for the national organization of professors, known as the American Association of University Professors, has condemned any attempt by the teacher to indulge in day-dreaming, propaganda, or other irrelevant behavior in the classroom.

The student, then, enters the world of ideas under the auspices of stimulating personalities who have worked together to produce the fairest and most effective presentation of those principles which the intelligent citizen should understand. In the course of four years the student will have between forty and fifty teachers. They will, of course, represent different points of view. They will make a deliberate effort to see to it that the student hears about things he never heard of, and that he knows there are other opinions than his own. There would not be much point in sending young people to college if they were not to learn something they did not know before. Parents who are not willing to have their children enter the world of ideas should keep them at home. Even there they will not be safe. From the newspapers, from books, from the radio, from the movies, some new idea may reach them, and reach them in garbled or fragmentary form.

It has never been possible to insulate young people from the world; and with modern methods of transportation and communication it is less so now than ever. If they must meet new ideas sometime, it would seem the part of wisdom to have them meet those new ideas where they are fairly presented by intelligent people who have no ax to grind. If their conversation is disquieting when they come home for their first vacation, remember that their education is not complete, that they have learned only a small fraction of many subjects, the rest of which they will learn as they go on; that they are going through a process that they must experience sooner or later; and that the auspices under which they are going through it are the best that can be found.

Indeed, the discouraging thing about education is not that it makes so much change in the individual but that it makes so little. A university president once said that he knew his institution was a reservoir of learning because every student brought some knowledge with him and none of them ever seemed to take any away. Three things are necessary if the college is to do its job with any given student. They are a certain minimum intellectual equipment, habits of work, and at least a latent interest in getting an education. The college cannot give these things to the student; he must have them when he comes. If he does not possess them, he may have a good time and be kept out of trouble. If he does possess them, then the gifts of higher learning will be showered upon him, the world of ideas will open to him, and the college will produce one more intelligent citizen. The student who has learned how to think will be able to solve his problems and to share in the solution of those of his generation. His parents may feel at last rewarded for the sacrifices they have made. And we may have some confidence that in such young people lies the hope of our country.

# THE HIGHER LEARNING. I

THE most characteristic feature of the modern world is bewilderment. It has become the fashion to be bewildered. Anybody who says he knows anything or understands anything is at once suspected of affectation or falsehood. Consistency has become a vice and opportunism a virtue. We do not know where we are going, or why; and we have almost given up the attempt to find out.

This is an extraordinary situation. Certainly we have more facts about the world, about ourselves, and the relations among ourselves than were available to any of our ancestors. We console ourselves with the delusion that the world is much more complicated than the one our ancestors inhabited. It does not seem possible that its complexity has increased at anywhere near the same rate as our knowledge of facts about it. If, as Descartes led us to believe, the soul's good is the domination of the physical universe, our souls have achieved a very high degree of good indeed. If, as we have been convinced since the Renaissance, the advance of the race is in direct proportion to the volume of information it possesses, we should by now have reached every imaginable human goal. We have more information, more means of getting more information, and more means of distributing information than at any time in history. Every citizen is equipped with information, useful and useless, sufficient to deck out a Cartesian paradise. And yet we are bewildered.

For three hundred years we have cherished a faith in

the beneficent influences of facts. As Hilaire Belloc's doggerel puts it:

> The path of life, men said, is hard and rough
> Only because we do not know enough.
> When science has discovered something more,
> We shall be happier than we were before.

Our faith in facts grew with every succeeding century, until it became the dominant force in our society. It excluded every other interest and determined every procedure. Let us get the facts, we said, serene in the confidence that, if we did, all our problems would be solved. We got them. Our problems are insoluble still.

Since we have confused science with information, ideas with facts, and knowledge with miscellaneous data, and since information, facts, and data have not lived up to our high hopes of them, we are witnessing today a revulsion against science, ideas, and knowledge. The anti-intellectualism of the nineteenth century was bad enough. A new and worse brand is now arising. We are in despair because the keys which were to open the gates of heaven have let us into a larger but more oppressive prison-house. We thought those keys were science and the free intelligence of man. They have failed us. To what can we now appeal? One answer comes in the undiluted animalism of the last works of D. H. Lawrence, in the emotionalism of demagogues, in Hitler's scream: "We think with our blood." Man, satisfied that he has weighed reason and found it wanting, turns now to passion. He attempts to cease to be a rational animal, and endeavors to become merely animal. In this attempt he is destined to be unsuccessful. It is his reason which tells him he is bewildered.

My thesis is that in modern times we have seldom tried reason at all, but something we mistook for it; that our bewilderment results in large part from this mistake; and that our salvation lies not in the rejection of the intellect

but in a return to it. Let me say at once that in urging a return to the intellect I do not urge a return to that vicious intellectualism whose leading exponent is Descartes. He turned his back to the world and its past, and there by his German stove in a heavy woolen bathrobe thought himself into a mathematical universe which was to be understood by measurement alone. His thinking produced a reaction in succeeding generations which led at the last to a denial of the intellectual powers of mankind.

Let me say, too, that in advocating a return to reason I do not advocate abandonment of our interest in facts. I proclaim the value of observation and experiment. I would proclaim, also, the value of rational thought and would suggest that without it facts may prove worthless, trivial, and irrelevant. In the words of a great contemporary, "The flame remains feeble on which piles of green wood are flung." During the nineteenth century and since, we have been flinging piles of green wood on the fire and have almost succeeded in putting it out. Now we can hardly see through the smoke.

Our program has amounted to a denial of the nature of man. Tested a priori, such denial results in self-contradiction; tested by its consequences, it has been found unsuccessful. It has led us to devote ourselves to measuring and counting the phenomena which passed before our eyes. It has diverted us from the task of understanding them. Modern empirical science, which in origin was the application of mathematics to experience by means of measurement and experiment, has come in recent exposition to be considered exclusively an affair of experiment and measurement. Contemporary physical and biological research inherited the analytical procedures which, combined with observation, constitute a science; and to a great extent the heritage has been fruitful. But contemporary physical and biological scientists have also inherited the nineteenth century's anti-intellectual account of

empirical science, which placed primary emphasis upon the accumulation of observed facts. The practice of contemporary scientists is thus paradoxically better than what they preach about the nature and ideals of science. In this paradox we have a source of our bewilderment. And, unfortunately, other disciplines, the social studies and the humanities, have been more influenced by the precepts of the natural scientists than by their practices. They, too, even in the fine arts, have decided they must be scientific and have thought they could achieve this aim merely by accumulating facts. So we have lots of "gadgets" in the natural sciences and lots of information in the other fields of knowledge. The gadgeteers and the data-collectors, masquerading as scientists, have threatened to become the supreme chieftains of the scholarly world.

Now, a university should be a center of rational thought. Certainly it is more than a storehouse of rapidly aging facts. It should be the stronghold of those who insist on the exercise of reason, who will not be moved by passion or buried by blizzards of data. The gaze of a university should be turned toward ideas. By the light of ideas it may promote understanding of the nature of the world and of man. Its object is always understanding. In the faith that the intellect of men may yet preserve him, it seeks to emphasize, develop, and protect his intellectual powers. Facts and data it will obtain to assist in formulating and to illustrate the principles it establishes, as Galileo used experiments to assist and exemplify his analysis, not as a substitute for it. Rational thought is the only basis of education and research. Whether we know it or not, it has been responsible for our scientific successes; its absence has been responsible for our bewilderment. A university is the place of all places to grapple with those fundamental principles which rational thought seeks to establish.

A university so organized and so conducted might stand unmoved by public clamor; it might be an island in a sea of turmoil; it might be a rallying-point of all honest and upright men. It might show us the social order we should desire, and help us keep it when it was achieved. A university may make these contributions not by having its professors politicians on the one hand or hermits on the other. Both extremes are equally disastrous. The university must find better and better means of communicating the ideas which it is its duty to foster and develop. A university without these means of communication will die, or at least will not be fruitful. Its ideas are not intellectual playthings, but forces which will drive the world. A university must be intelligible as well as intelligent.

If we look at the modern American university, we have some difficulty in seeing that it is uniformly either one. It sometimes seems to approximate a kindergarten at one end and a clutter of specialists at the other. The specialists are frequently bent on collecting more and more information rather than grappling with fundamentals. So much is already known, so much is being discovered, so many new fields are opening up, that this approach requires more courses, more hours, more laboratories, and more departments. And the process has carried with it surprising losses in general intelligibility. Since the subject matter is intelligible only in terms of the volume of known facts which must be familiar to the scholar, universities have broken down into smaller and smaller compartments. And yet Whitehead may have been right when he said, not long ago, that "the increasing departmentalization of universities has trivialized the intellect of professors."

Nor do we seem always to grapple with fundamentals when we come to education as distinguished from research. The system has been to pour facts into the student with splendid disregard of the certainty that he will forget them, that they may not be facts by the time he graduates,

and that he won't know what to do with them if they are. It is a system based on the false notion that education is a substitute for experience, and that therefore little imitation experiences should be handed out day by day until the student is able to stand the shock of a real experience when he meets one. Yet we know that it is impossible to imitate experience in the classroom and that the kind of experience we might reconstruct there would not be the kind the student will meet when he leaves us.

To tell a law student that the law is what the courts will do, and have him reach his conclusions on this point by counting up what they have done, is to forego rational analysis, to deny the necessity of principles, and to prevent the exercise of the intellect. To remit a business student to cases representing what business used to do, not only provides little intellectual experience but also little practical experience, for the cases of the past might be a positive disservice in solving the problems of the present. To turn the divinity student away from the great intellectual tradition of the church and teach him how to organize a party in the parish house is neither to prepare him for the ministry nor to contribute to its improvement. To instruct a medical student in the mechanics of his trade and to fill him full of the recollection of particular instances may result in a competent craftsman, but hardly in a product of which a university may be proud. If professional schools are to rise above the level of vocational training, they must restore ideas to their place in the educational scheme.

The three worst words in education are "character," "personality," and "facts." Facts are the core of an anti-intellectual curriculum. Personality is the qualification we look for in an anti-intellectual teacher. Character is what we expect to produce in the student by the combination of a teacher of personality and a curriculum of facts. How

this result can emerge from the mixture of these elements is a mystery to me. Apparently we insist on personality in the teacher because we cannot insist on intellect; we are anti-intellectual. We talk of character as the end of education because an anti-intellectual world will not accept intelligence as its proper aim. Certainly since the *Meno* of Plato, we have had little reason to suppose that we could teach character directly. Courses in elementary, intermediate, and advanced character will fail of their object. The moral virtues are formed by lifelong habit; a university education contributes to them, but it is not its primary purpose to supply them. A university education must chiefly be directed to inculcating the intellectual virtues, and these are the product of rigorous intellectual effort. Such effort is the indispensable constituent of a university course of study.

We see, then, that an anti-intellectual university involves a contradiction in terms. Unless we are to deny forever the essential nature of man, unless we are to remain content with our bewilderment, we must strive somehow to make the university once again the home of the intellect. I repeat: a university is the place of all places to grapple with those fundamental principles which may be established by rational thought. A university course of study, therefore, will be concerned first of all not with current events, for they do not remain current, but with the recognition, application, and discussion of ideas. These ideas may chiefly be discovered in the books of those who clarified and developed them. These books are, I suggest, at once more interesting and more important than the textbooks which, consumed at the rate of ten pages a day, now constitute our almost exclusive diet from the grades to the Ph.D. To aid in his understanding of ideas the student should be trained in those intellectual techniques which have been developed for the purpose of

stating and comprehending fundamental principles. Armed with these, he may at length be able to effect transformations and combinations in any subject matter.

Such a course of study would involve in the fine arts, for example, more aesthetics and far less biographical and factual material. In the physical sciences and in experimental biology it would require more attention to the nature of measurement and its relation to the formulation of a science, and far fewer of the countless isolated measurements and exercises now performed in the laboratory. Here I am referring, of course, to the laboratory as an educational institution, not to the laboratory method as a method of research. In so far as biology deals with evolution, a university course of study would diminish the emphasis now given to innumerable details about innumerable organisms and place it on the comprehension of the general scheme of evolution as a theory of history. And in all that study which appears in every department and which is called "history," a university would endeavor to transmit to the student, not a confused list of places, dates, and names, but some understanding of the nature and schemes of history, through which alone its multitudinous facts become intelligible. By some such course of study the university might pass on the tremendous intellectual heritage of the race.

The scholars in a university which is trying to grapple with fundamentals will, I suggest, devote themselves first of all to the rational analysis of the principles of each subject matter. They will seek to establish general propositions under which the facts they gather may be subsumed. I repeat: they would not cease to gather facts, but would know what facts to look for, what they wanted them for, and what to do with them after they got them. They would not confine themselves to rational analysis and ignore the latest bulletin of the Department of Commerce. But they would understand that without analysis

current data remain a meaningless tangle of minute facts. They would realize that without some means of ordering and comprehending their material they would sink deeper and deeper beneath the weight of the information they possessed, as the legal scholar has long since sunk beneath the countless decisions and statutes rained down upon him every year.

Since the multiplicity and overlapping of specialties are caused by the superficiality of our analysis, and since grappling with fundamentals should show us what our subject matters are, the ordering of our concrete material by rational means should show us, too, the absurdity of many intellectual barriers that now divide us. We might see again the connections of ideas, and thus of subject matters. We might recapture the grand scheme of the intellect and the unity of thought. Once the three "departments" of the European university, and the only ones, were medicine, theology, and law. These three fields were so studied as to deal with the same propositions and facts, but with different ultimate references. Each one thus penetrated the whole of contemporary thought and was penetrated by the other two. The scholar and student laboring in one of these fields never lost consciousness of the rest. Thus, wherever he was working he remained aware of the individual, living in society, and under God. To this formal organization of a university we cannot and should not return. But it may suggest to us some consequences of believing that the result of general education should be clear and distinct ideas; the end of university training, some notion of humanity and its destiny; and the aim of scholarship, the revelation of the possibilities of the highest powers of mankind.

# THE HIGHER LEARNING. II

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I HAVE affirmed on another occasion that the object of a university is to emphasize, develop, and protect the intellectual powers of mankind. Scholarship and teaching must be tested by their contribution to this intellectual end. I have attempted to show that facts are not science and that the collection of facts will not make a science; that scientific research, therefore, cannot consist of the accumulation of data alone; that the anti-intellectual account of science given by scientists has produced unfortunate effects on the work of other disciplines which wished to be scientific; and that our anti-intellectual scheme of education, resulting in large part from this anti-intellectual account, was misconceived and incapable of accomplishing the objects set for it by its sponsors. At the same time I have proclaimed the value of observation and experiment. Nor have I suggested that ideas are revealed. All ideas come from experience. Propositions, however, do not. Propositions are relations between ideas, and science consists of propositions. As Whitehead has said in speaking of the world which is the goal of scientific thought, "My contention is that this world is a world of ideas, and that its internal relations are relations between abstract concepts. . . . ." I have insisted upon the logical priority of rational analysis, not its psychological priority. The psychology of scientists and the time order in which they do things—their behavior, in short—is something I have never ventured to discuss. I have been talking about how a science, which must be distinguished from the isolated activities of individual scientists, is constructed. I repeat: I am concerned with the logic of science, not with

the psychology of scientists. Without proposing that we discontinue anything we are doing, I have proposed a shift in emphasis and attitude. Our emphasis and our attitude should be intellectual. If they are, we may then discover whether all the things we are doing are equally significant.

These ideas were not original with me. If they were, they might be discredited merely by pointing out that fact. I offer you instead Bertrand Russell: "Many people," he says, "have a passionate hatred of abstraction, chiefly, I think, because of its intellectual difficulty, but as they do not wish to give this reason they invent all sorts of others that sound grand. . . . . Those who argue in this way are, in fact, concerned with matters quite other than those that concern science. . . . ." "The power of using abstractions," says Russell, "is the essence of the intellect, and with every increase in abstraction the intellectual triumphs of science are enhanced."

Perhaps you prefer Jevons: "Hundreds of investigators," he says, "may be constantly engaged in experimental inquiry; they may compile numberless books full of scientific facts, and endless tables of numerical results; but . . . . they can never by such work alone rise to new and great discoveries. . . . . Francis Bacon spread abroad the notion that to advance science we must begin by accumulating facts, and then draw from them, by a process of digestion, successive laws of higher and higher generality. . . . . His notion of scientific method was a kind of scientific bookkeeping. Facts were to be indiscriminately gathered from every source, and posted in a ledger, from which would emerge in time a balance of truth. . . . . It is difficult to imagine a less likely way of arriving at great discoveries. The greater the array of facts the less is the probability that they will by any routine system of classification disclose the laws of nature they embody. . . . ." "Newton's comprehension of logical

method," says Jevons, "was perfect; no hypothesis was entertained unless it was definite in conditions and admitted of unquestionable deductive reasoning, and the value of each hypothesis was entirely decided by the comparison of its consequences with facts. . . ." "Francis Bacon," Jevons says, "held that science should be founded on experience, but he mistook the true method of using experience, and in attempting to apply his method, ludicrously failed. Newton did not less found his method on experience, but he seized the true method of treating it, and applied it with a power and success never since equalled. It is a great mistake to say that modern science is the result of the Baconian philosophy; it is the Newtonian philosophy and the Newtonian method which have led to all the great triumphs of physical science. . . ."

Perhaps you prefer Poincaré: "Can we not be content," he asks, "with just the bare experiment? No, that is impossible; it would be to mistake utterly the true nature of science. . . . Science is built up with facts, as a house is built up with stones. But a collection of facts is no more a science than a heap of stones is a house."

Or listen to Claude Bernard: "The experimental method cannot give new and fruitful ideas to men who have none; it can serve only to guide the ideas of men who have them, to direct their ideas and to develop them so as to get the best possible results. . . . As only what has been sown in the ground will ever grow in it, so nothing will be developed by the experimental method except the ideas submitted to it. The method itself gives birth to nothing."

You may say that all this is perfectly obvious; that everybody knows it; that you don't know anybody that is merely gathering facts for the sake of gathering them; that I am simply setting up a straw man in order to knock him down again. I agree that research in the natural sciences proceeds, for the most part, in accordance with the principles which I am advocating. Physics, for

example, is an excellent empirical science. The reason for this is not necessarily that all physicists have a clear understanding of what they are doing. It is rather because of the intellectual heritage of the science. This has resulted in turn from the intellectual endowments of such men as Galileo and Newton. It is not necessary for physicists to understand the nature of science, because the techniques of experimental and theoretical work in physics are so explicit and so well established that they cannot escape them. In the law, the humanities, and the social sciences, however, scholars have received no such inheritance. If they are to be scientific, they must understand what science is. From Francis Bacon on, many people have advised them that it consists merely in accumulating data. Some of them have taken this advice seriously and have concluded that their scientific attainments would be measured by the number of items of fact which they had written on cards. I know some of them have done it; I have done it myself.

You may deny that natural scientists even think or talk as though science were the accumulation of data. For answer I refer you to what they teach. We have in every university in America the interesting spectacle of pure scientists teaching in ways which cannot be reconciled with the way they work. They offend as much as, or more than, the rest of us in filling their students full of facts, in putting them through countless little measurements, in multiplying their courses, in insisting they must have more of the student's time so that they can give him more information, and in dividing up their subjects into smaller and smaller bits. Contrast the amount of information which the student in science has when he enters the medical school here and in Europe. Here I am sure the student knows many more facts than some of the older professors. In Europe his information will probably not be a third of that of his American contemporary; but he

will have something else: he will have ideas, and he will have that understanding of the relation of ideas which John Locke thought was all that knowledge could be.

As for the rest of us, we have taught our students in harmony with the worst American tradition. We have assumed that they could learn nothing except in the classroom or from textbooks. The reading periods at Harvard and Yale are ridiculous because they show how little time those universities feel should be devoted to thought. Courses get longer and longer. There are more and more of them. The number of hours in the classroom is the measure of the labors of both teacher and student. And the hours in the classroom are devoted to the exposition of detail.

And yet the words of Whitehead are apposite: ". . . . the university course," he says, "is the great period of generalization. The spirit of generalization should dominate a university. At the university [the student] should start from general ideas and study their application to concrete cases. A well-planned university course is a wide sweep of generality. I do not mean to say that it should be abstract in the sense of divorce from concrete fact, but that concrete fact should be studied as illustrating the scope of general ideas. . . . . Whatever be the detail with which you cram your student, the chance of his meeting in after-life exactly that detail is almost infinitesimal; and if he does meet it, he will probably have forgotten what you taught him about it. . . . . The function of a university is to enable you to shed details in favor of principles."

An anti-intellectual attitude toward education reduces the curriculum to the exposition of detail. There are no principles. The world is a flux of events. We cannot hope to understand it. All we can do is watch it. This is the conclusion of the leading anti-intellectuals of our time. Since the fact that certain things went by us once is no guaranty that they will go by again, there is really not

much use in watching them, except that we may be able to discover certain patterns of behavior which will enable us to tell sometimes what is going to happen next. In this view our object, in so far as we have one, is prediction and control, the exploitation of the universe.

I may point out that this anti-intellectualism will mean the end of pure science and of education. The driving power behind science has not been merely the desire to master nature; it has been the desire to understand it. If we cannot understand it, we may as well abandon pure science and betake ourselves to engineering. If we cannot understand it, we can give our students nothing but evanescent facts selected on the basis of the kind of experiences we think they will have when they graduate. The multitude of facts, as well as their evanescence, and the tremendous number of possible experiences mean that education in this view is a hopeless task. If we want to give our students experiences, we should go out of business. The place to get experiences is in life.

Nor can education in this view include any contact with the intellectual inheritance of the race. So to anti-intellectuals, rational values are worthless; they are based on the past. They cannot be valid for the future, because man and his world are changing. A curriculum of current events, without reference to the intellectual and artistic tradition that has come down to us from antiquity, is the only possible course of study which anti-intellectualism affords.

Anti-intellectualism dooms pure science; it dooms any kind of education that is more than training in technical skill. It must be a foreboding of this doom which accounts for the sense of inferiority which we find widespread among academic people. Those who have it feel that business and politics are the really important things in the world, far more important than education and research. Certainly they are right if research is merely

the collection of facts, and education is committing them to memory. Neither process is significant and neither will long be supported by a hard-pressed people. But if research is understanding and education is understanding and what the world needs is understanding, then education and research are what the world needs. They become at once the most significant of all possible undertakings. They offer the only hope of salvation, the hope held out to us by the intellect of man.

It was such considerations as these that induced John Dewey in 1930 to clarify his views—a clarification, unfortunately, which has escaped the notice of some of his followers. Mr. C. I. Lewis had written that "Professor Dewey seems to view such abstractionism in science as a defect—something unnecessary, but always regrettable." Mr. Dewey replied: "I fear that on occasion I may so have written as to give this impression. I am glad therefore to have the opportunity of saying that this is not my actual position. Abstraction is the heart of thought; there is no other way . . . . to control and enrich concrete experience except through an intermediate flight of thought with conceptions, relata, abstractions. . . . . I wish to agree also with Mr. Lewis that the need of the social sciences at present is precisely such abstractions as will get their unwieldy elephants into box-cars that will move on rails arrived at by other abstractions. What is to be regretted is, to my mind, the tendency of many inquirers in the field of human affairs to be over-awed by the abstractions of the physical sciences and hence to fail to develop the conceptions or abstractions appropriate to their own subject-matter." This statement of Dewey is a recognition that ideas are the essential elements in the development of a science, and is a repudiation of the anti-intellectual position.

The anti-intellectual position must be repudiated if a university is to achieve its ends. Its buildings may be

splendid, its endowment adequate, and its faculty notable; it may have achieved unity, liberty, and clarity in its organization. Its mechanics may be perfect. It is nothing without an abiding faith in the intellect of man. Without such faith its efforts are blind and groping, and will at length expire. The university is the home of the intellect; it is its natural and perhaps its only home. Teaching and scholarship will be fruitful in such measure as the university realizes its intellectual aims. Such realization will be fruitful not merely in the higher learning. It may create an atmosphere congenial to philosophy and the arts, to moral and social theory, to the imaginative reaches of science, and to the noblest aspirations of mankind. And it may at last bring order, enlightenment, and understanding to a bewildered world.

# THE AUTOBIOGRAPHY OF AN EX-LAW STUDENT

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WHEN I began to study law in 1920, we were chiefly concerned with two things: one, our definition of law; and two, our desire to be scientific. We knew what we wanted in both cases. The law was what the courts and other governmental officers would do. If we were scientific, we could predict what they would do. The task of lawyers, law teachers, and law students was therefore clear. It was to learn how to predict what the courts and other governmental agencies would do.

To acquire facility in this mode of prophecy we turned, as Langdell had turned, to what the courts had done. Since what they had done last was what they were most likely to do next, we kept up with the recent cases, and even studied accounts of them in newspapers and mimeographed sheets. Since what the courts had said shed some light on what they would do, we devoted a good deal of attention to analyzing and reconciling the language of learned judges. What they had said and done, carefully noted item by item, made up the vast collection of items which at the end constituted our legal information.

You will observe that we were thoroughly Baconian as to science and thoroughly behavioristic as to psychology. It was scientific to collect and examine a multitude of particular items, which gradually arranged themselves into rules the courts had followed. We knew that the court would follow these rules in the future as they had in the past, because courts were people, and people be-

haved as they were in the habit of behaving. Our scheme was very simple and quite complete.

Yet even in those remote days we had some qualms about it. Since we were a university law school, we could not limit ourselves to what the courts had done. Our function was to improve the law, not merely to learn it. We had to decide, therefore, whether the courts had done right. We could not content ourselves with the weight of authority; that was too much like counting noses. We could not test the cases by their conformity to principle. There were no such things as principles in our definition or our science. How were we to tell whether the cases were "sound"? Fortunately, at this juncture pragmatism came to our aid. It told us that we could test the rules of law by discovering whether or not they worked.

This helped us a great deal. For a long time we sat and speculated about how the rules worked. In public utility law, for example, we decided that Mr. Justice Brandeis was right about the rate base and Mr. Justice Butler was wrong, because Mr. Justice Brandeis' rule would work better than Mr. Justice Butler's. Whether this was really because we were in favor of lower rates and thought the Brandeis rule would lower them, though today it would raise them, or whether it was because we liked liberals and therefore preferred Mr. Justice Brandeis to Mr. Justice Butler, I do not care to say. In attempting to decide which rule worked better, we had to assume a social order and the aims thereof, and then try to determine which rule did more to achieve the aims we favored. What made this difficult was that we didn't know much about the social order; we didn't have any special competence in the matter of social aims; and we didn't have the slightest idea how to go about finding out whether a given rule helped to accomplish them or not.

Suddenly we discovered that there were people who knew all these things, people who could tell us how the

law worked and why. They were the social scientists. We had every reason to resort to them. The courts were social agencies; their conclusions must be conditioned by society. The social scientists could help us to predict what the courts would do. The psychologists would help us understand the behavior of judges. The psychiatrists could help us there, too, and could also assist us in comprehending criminals. Hand in hand with these other scientists we could become scientific.

Therefore we added to law-school faculties men who had no legal training but who were experts in these other sciences. Where such additions were impossible because of penury or prejudice, we took co-operation for our watchword and began to work with scholars in other departments of our universities. The social contacts we developed were very pleasant. Imagine our confusion, however, when we discovered that from their disciplines as such the social scientists added little or nothing. They taught us to reverence our own subject; it was more interesting to them than their own. With the enthusiasm of converts they showed us the masses of social, political, economic, and psychological data which lay hidden in the cases. They then proceeded to teach the cases better than we could teach them, not because they had been nurtured in the social sciences, but because they were good teachers.

The fact was that though the social scientists seemed to have a great deal of information, we could not see, and they could not tell us, how to use it. It did not seem to show us what the courts would do or whether what they had done was right. For example, the law of evidence is obviously full of assumptions about how people behave. We understood that the psychologists knew how people behave. We hoped to discover whether an evidence case was "sound" by finding out whether the decision was in harmony with psychological doctrine. What we actually discovered was that psychology had dealt with very few

of the points raised by the law of evidence; and that the basic psychological problem of the law of evidence—what will affect juries, and in what way—was one psychology had never touched at all. Thus, psychologists could teach you that the rule on spontaneous exclamations was based on false notions about the truth-compelling qualities of a blow on the head. They could not say that the evidence should be excluded for that reason. They did not know enough about juries to tell you that; nor could they suggest any method of finding out enough about juries to give you an answer to the question.

We decided, then, that it was nice to have met the social scientists and that we should continue to associate with them in the hope of some day striking some mutual sparks. If, for the moment, they could not help us to tell whether the rules worked, we could at least see for ourselves what the courts were doing. Since the law was what the courts would do and since all the courts do is not in books, we decided to observe the law in action. We collected tremendous numbers of facts about the operation of procedural rules and set about getting them in other fields. We thus added greatly to our accumulated data about what the courts had done. It was data of another kind than cases. But, like the cases, it was data absolutely raw. We did not know what facts to look for, or why we wanted them, or what to do with them after we got them. We were simply after facts. These facts did not help us to understand the law, the social order, or the relation between the two.

Nevertheless, this new interest in facts had some effect on the curriculum. It culminated in what was known as the "functional approach." The functional approach was based in the "fact-situation." The fact-situation became the center of our educational attention. We knew that we were supposed to train young people to practice law. We

knew that cases do not present themselves to the lawyer labeled "Torts," "Contracts," "Equity I," or "Constitutional Law." The lawyer is faced with a fact-situation. The fact-situation may involve five or six of the traditional law-school disciplines. We could see that this was wrong. We could see that if we could organize a curriculum of fact-situations we could, by passing the young man through it, prepare him to meet these facts or these situations in afterlife. He would recognize a familiar fact-situation that he had known in law school and could deal with it as an old friend. So we shifted our courses around and renamed them in the hope that we might sooner or later find out how to introduce the student to those fact-situations he was most likely to encounter in the practice.

The trouble with the functional approach was that it threatened us with a *reductio ad absurdum.* If the best way to prepare students for the practice was to put them through the experiences they would have in practice, clearly we should abolish law schools at once. I challenge you to find the least excuse for one in the manifestoes of Mr. Jerome Frank. We could not successfully imitate experience in the classroom. Even moot courts were probably a waste of time. The place to get legal experience is in a law office. Since there were already too many law offices, we saw no reason for turning the law schools into law offices, too. The functional approach seemed likely to remove the last vestige of excuse for the maintenance of law schools in universities.

By another route this general program led us toward another absurdity. The law is what the courts will do. Courts are people. What people do largely depends on their visceral reactions. The law may thus depend on what the judge has had for breakfast. The conclusion is that legal scholars, adopting the slogan, "Tell me what you eat and I'll tell you what you are," should devote

themselves to studying the domestic larders of judicial wives. The prospect of a life of such investigation might well put an end to legal scholarship altogether. Digestive jurisprudence and the functional approach were on the verge of destroying the two characteristic activities of the university law school.

At the time when I stopped studying law, these horrid possibilities were just appearing on the horizon. They struck terror to the heart of at least one law teacher. And there were other fears that daunted me. Had we not engaged in a hopeless task? There were thirty thousand cases and eight thousand statutes a year. In addition we had taken up the burden of discovering and studying a lot of facts outside the cases. In addition we had decided to master the data of the social sciences. We had to do all these things if the law was what the courts would do, and our job was to predict what they would do next. How could we hope to make the slightest impression on all this material in one short lifetime? Of course we could break the field down into smaller and smaller compartments, narrowing our individual vision to our individual capacity. But this would mean adding to the faculty every year until the number approached infinity.

Another thing bothered me. Suppose the legislatures should repeal everything we ever knew. Mastery of all the facts about the Sherman Act painstakingly acquired in the course in trade regulation might be a positive disservice under the N.R.A. Could it be that in presenting our students with fact-situations of the present or immediate past we were actually handicapping them in their battle with the fact-situations of the future? We had given them no weapons but our advice about these good old fact-situations. But, suppose the foe was a brand new one, the product of a New Deal?

Finally, I was haunted by the notion that our duty to our students was to educate them. We knew, of course,

that they came to us without education. We had learned not to expect any from the colleges of liberal arts. When we got through with them, we might flatter ourselves that we had trained them to be good technicians, competent draftsmen, or, as Mr. Beale has put it, to make a noise like a lawyer. I could not see that we had done anything about their education. Education, I had supposed, was chiefly an affair of the intellect. Our curriculum was anti-intellectual from beginning to end. It involved not a single idea, not a single great book, not a single contact with the tremendous intellectual heritage of the law. We did not even expect intellectual exercise. We discussed the logic of the cases, it is true; but none of us knew any logic. We could not engage in intellectual exercise because we were not competent in the intellectual techniques which it requires.

I found myself, therefore, at the end of my legal career facing a series of dilemmas. We must educate students, but we couldn't do it because the law is what the courts will do and our students must become able prophets. This requires them to know all about what the courts have done and are doing. There is no time to do more than train them, even if we knew how to educate them.

We must, then, train students. This is a vain hope, because the law offices can do it better and because, just when we get them trained, new legislation which we cannot foresee may make the habits we have given them the worst they can possibly have.

We must, then, devote ourselves to legal research. But, if the law is what the courts will do and we are going to be scientific, we must get the cases, and the facts outside the cases, and the data of the social sciences. But, when we get this material it is useless, because we don't know what to do with it. It is a hopeless job, anyway, because there is so much material that we can't possibly accumulate it all, and we have no basis for selection and discrimination.

Now, I put it to you that these dilemmas are the inevitable consequences of our notion of law and our conception of science. I do not deny that our definition of law and our conception of science are possible. I do assert that they are not complete and not fruitful for the study of the law.

Let me emphasize as strongly as I can that we must accumulate cases, facts, and data. I simply insist that we must have a scheme into which to fit them. The law school that ignores the cases, the facts, or the social sciences will be a poor law school. The legal scholar who ignores these things will be a poor legal scholar. What I am suggesting is not to be taken as consolation or encouragement to those lazy, unimaginative, or irresolute souls who have opposed going beyond the language of judges into the facts of the law and of social science.

But I suggest that if we are to understand the law we shall have to get another definition of it. I suggest that the law is a body of principles and rules developed in the light of the rational sciences of ethics and politics. The aim of ethics and politics is the good life. The aim of the law is the same. Decisions of courts may be tested by their conformity to the rules of law. The rules may be tested by their conformity to legal principles. The principles may be tested by their consistency with one another and with the principles of ethics and politics.

The duty of the legal scholar, therefore, is to develop the principles and rules which constitute the law. It is, in short, to formulate legal theory. Cases, facts outside the cases, the data of the social sciences, will illustrate and confirm this theoretical construction. Where formerly they were worthless because we had no theoretical construction; where formerly we did not know what facts to look for or what to do with them when we got them; where formerly we could make no use of social scientists because neither they nor we had any mutual frame of reference which made

material transferable, we may now see how all these things will assist our attempt to understand the law. We can even see how to tell whether cases are "sound."

The concern of the law teacher and of the law student, as well as the legal scholar, is with principles. The leading philosopher in America, Alfred North Whitehead, once addressed himself to the problem of the university school of business. His conclusions are applicable to the university law school, too. He said: "The way in which a university should function in preparation for an intellectual career, such as modern business or one of the older professions, is by promoting the imaginative consideration of the various general principles underlying that career. Its students thus pass into their period of technical apprenticeship with their imaginations already practised in connecting details with general principles." The general principles of the law are derived from politics and ethics. The student and teacher should understand the principles of those sciences. Since they are concerned with ideas, they must read books that contain them. To assist in understanding them they should be trained in those intellectual techniques which have been developed to promote the comprehension and statement of principles. They will not ignore the cases, the facts, or the social sciences. At last they will understand them. They will be educated.

I take it that an educated man knows what he is doing and why. I believe that an educated lawyer will be more successful in practicing law, as well as in improving it, than one who is merely habituated to fact-situations. His training will rest not on his recollection of a mass of specific items but on a grasp of fundamental ideas. The importance of these ideas cannot be diminished by the whims of legislatures or the vagaries of practical politics.

You will say that even if all this is true, it is utterly impractical: the students, the bar, and the public would never tolerate a law school organized to formulate and

expound legal principles, even though such formulation and exposition must take account of the cases and the facts of the law and of social science. They believe these schools are founded to train students in the art of practicing law and that facility in this art is best acquired through homeopathic doses of experience in law school. I think you are right. Therefore, I suggest that in every university where there is a law school a department of jurisprudence be established. The object of such a department would be to formulate and expound legal principles. Gradually its efforts would be reflected in the curriculum and studies of the law school. Gradually it would be discovered that its students were more successful at the bar and even in predicting what the courts would do than the progeny of the law school. And gradually, very gradually, the law might become once more a learned profession.

# BACK TO GALEN

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MY BRIEF remarks this evening are entitled "Back to Galen." Their purpose, however presumptuous they may sound, is not to tell you anything you do not know but to remind you of some things which in the busy and lucrative practice of your profession you may sometimes forget. This is all the easier for me because, as the Department of Surgery at the University of Chicago will tell you, I know nothing whatever about your profession and have so far preserved my figure intact from any association with your admirable but uncomfortable investigations. Since by definition a classic is a book that nobody reads, I feel all the more free to base my discussion on Galen. Where he does not agree with me, I shall suppress the fact, in the hope that you will not be aware of it.

Galen was the summary of Greek medicine. He had that faith in the beneficent operation of nature which was the slogan of Hippocrates. But the anatomists had shown him things Hippocrates never knew. He rested his argument on clinical observation. He proclaimed the value of experiment. In these respects he was completely modern. He attacked the atomists, who broke the body down into parts and looked at them alone. They wanted the practitioner to believe that the sole object of attention when a leg was fractured was the fractured leg. He attacked the methodists, who conceived of diseases as independent entities unrelated to anything. Here, as Brock has said, "What Galen combatted was the tendency . . . . to reduce medicine to the science of finding a label for each patient, and then treating not the patient, but the label."

The central idea which Galen entertained was that the organism is a whole. As such it cannot be further divided. The whole is not the sum of the parts. An organism is just that, nothing more or less. The organism is a whole with an environment. It cannot be considered apart from that environment. Knowledge of the environment is, therefore, as important as knowledge of the organism. Knowledge of the organism as living is more important than knowledge of it as body. And knowledge of the whole organism living in its environment is more important than the most intimate familiarity with all its parts. I think you will agree that in respect of this central idea Galen can hardly be called modern at all.

And yet I venture to suggest that it is to the least modern aspects of Galen's thought that a return is most desirable. We need not fear that medicine will underestimate the importance of clinical observation or experiment. The outstanding achievements in these fields are the proudest boast of the profession. But we still have our methodists, who treat the label instead of the patient. We still have our atomists, who believe that mere collection of minute facts about parts will in some mysterious way add up to a solution of the problems of the whole. The consequences of this denial of Galen's principal idea are of some importance to medicine, to education, and to the public.

The first of these consequences is vicious specialization; for a corollary of forgetting Galen is to assert that understanding depends upon analysis. No one will deny that it may. But the whole theoretical foundation of exclusive insistence on this attitude has now been swept away. Such insistence rested on physical doctrines of space and matter which incited investigators to look at little bits of matter, and the smaller the bits the better. It is possible in this view to examine one bit without any relation to any other

bit, except perhaps a relation in space. This notion modern physics has now discarded. Its leading concept is that of a unified world in which there is no such thing as an isolated object or organism. Every dislocation anywhere produces another dislocation somewhere. Every organism is constantly modifying its environment and is being modified by it. The theoretical basis of raw empiricism is gone.

We may be permitted to doubt whether raw empiricism can be the foundation of science. We may refer with profit to the words which Claude Bernard kept repeating again and again. "By simply noting facts," he said, "we can never succeed in establishing a science. Pile up facts and observations as we may, we shall be none the wiser." And, once more, "Endless accumulation of observations leads nowhere."

Failure to respect this axiom has produced confusion, and not in the natural sciences alone. The current desire to be scientific has led social scientists, and even humanists, to imitate what they conceive to be the method of natural science. Some of my friends in social fields seem to think that, by collecting data on cards and continuing the process until all available space in the University is filled with them, all social problems will be solved. To most medical men this view will no doubt seem archaic. In medicine there is a demand for understanding based on synthesis as well as on analysis. We see the fruits of this demand most obviously in the theory of the glands of internal secretion and in modern neurological doctrine. Nevertheless, we may sometimes feel that the wealth and prominence of a surgeon may depend on the degree to which he has succeeded in forgetting that he is dealing with a whole body, a whole person, with a living organism in its environment.

This attitude has had a disastrous effect on the study of problems of personality. Insistence upon empirical analysis led medical men for a time to ignore these problems, because there was no empirical method of investigating

them. At length, however, the belief that anything that had to do with health fell within the province of medicine, together with the assumption that medical problems must be tackled atomistically, produced, first, resentment against the attempts of other groups to deal with these matters; secondly, failure to co-operate with scholars in other fields having to do with organisms and their environment; and finally, efforts to solve problems of personality by such methods as the minute anatomy of the brain.

The family doctor at his best understood the organism as a whole. His disappearance under a wave of specialization has thrown the public into the arms of one cult after another. The modern clinic is a strenuous effort to reincarnate the general practitioner in corporate form. Here a group of specialists, frequently with an attachment of social workers, try to capture and pool knowledge of the organism in its environment. The effort is admirable and has great accomplishments to its credit. Yet, because of the cursory acquaintance that can at best be achieved and because of the difficulties of constructing a composite picture of an individual, we may feel that even here the sum of the parts will not quite equal the whole.

Then, too, raw empiricism in medicine has impeded other attacks on problems of personality, such as psychoanalysis, which provides at once a theory of personality and a method of investigating psychological processes. Whatever we may think of psychoanalysis, we must admit that it was, in its inception, an honest attempt to understand the organism as a whole. Those things in its later history of which we may disapprove have resulted as much from deliberate or ignorant misconception of its purposes as from any inherent weaknesses in its theory. Psychoanalysis, standing alone, is certainly not the answer to all problems of personality. But any solution of them must begin from the same starting-point, the one which Galen has given us.

The educational consequences of forgetting Galen are no less serious. I pass over the question of lay education in medicine, where we may simply note that the public has become hysterical in matters of health and manifests neurotic symptoms in response to the slightest impact of journalistic information. Instead, I would point out that all education, and not medical education alone, has suffered from overlooking the lesson that Galen might teach it. We have witnessed a shift of emphasis throughout education from thought to information, from idea to fact. The president of one of our greatest universities said a little while ago that it would soon be impossible to educate people in the time at our command. More and more facts come to light each year, so that there is more each year to know. Indeed, he said that there is now so much to know that it is almost impossible to know much.

The development of modern medicine, though its record is a grand one, has carried with it surprising losses in general intelligibility of subject matter, with unfortunate effects on research and practice, not least in problems of personality. We see that the general unintelligibility of the subject matter has confused the public and drawn its attention to spectacular or trivial details, to which it has reacted in accordance with well-known economic and psychological "laws." We see, too, that medical education, like all education, has broken down into smaller and smaller compartments, since the subject matter is intelligible only in terms of the volume of known facts which must be covered by the student and the scholar. Do not misunderstand me. The kind of analysis which medicine has pursued, under which the concrete data of a science are divided, classified, and selected for specialization, has resulted in the accumulation of tremendously valuable data and in the development of new and effective therapeutic modes. It has invented instruments, established laboratories, built schools of medicine, and endowed research

foundations. It deserves all the praise it has received. But, as the Renaissance could accuse medieval medicine of being rich in principles and poor in facts, we are now entitled to inquire whether modern medicine is not rich in facts and poor in principles.

How did Galen secure his extraordinary balance of speculation, observation, and experiment, and how can we regain that balance today? He took his stand on Aristotle's physics, which was not mechanics, but which was a statement of the general principles applicable to change and motion in nature. These principles governed change and motion in organisms as well as in inorganic things. The development of these principles led to the insight that the microcosm mirrors the macrocosm, and that the problem of medicine is the relation between the two. This is simply another way of saying that the problem of medicine is the organism as a whole.

Here we see another mode of analysis than that which modern medicine has employed. It is less showy and has been generally suppressed for two hundred years. It concerns the abstract rational content of a science. It is sometimes spoken of as "the interpretation of data," "the analysis of fundamental concepts," or in medicine as "the correlation of the sciences which lie at the basis of the medical arts." It should be recognized as the fundamental constituent of a science, without which all the rest is ultimately worthless. The proper immediate subject matter of a science is its abstractions, as can be seen as soon as the question is asked, What is the basis of the division, classification, and selection of the concrete material? The answer, contrary to Francis Bacon, is that the basis must be found in the rational science, which is logically prior to the empirical operations involved.

We can thus discover why and how Galen saw, through Aristotle, the problem of the organism as a whole. Rational analysis finds and orders abstractions which can be

organized into wholes, and it is by the application or recognition of these abstract wholes in concrete material that we understand things in nature. Questions of mechanism, materialism, vital principle, structure, and function can be answered if the abstractions in the analysis have been thought through, and not otherwise. The present confusion rests on doctrinaire empiricism, the antidote to which is the recapture of the rational science or sciences that lie hidden in medical knowledge.

In the absence of such rational science or sciences each other science orders its abstractions on a limited set of categories and offers its uncriticized results to the scientific world. The recipient of these results has, with his present training, the almost impossible task of reinterpreting the data in this raw form. He should be able to put them to work in his own science, but he has no rational scheme in which he can locate them. Whitehead has lately shown the fatal consequences that have overtaken theories of inheritance because biologists regarded genes as hard pellets of matter which were not affected by their environment. These fatal consequences ensued because of the inability of one science to keep up with the speculative progress of another. Only the development of rational sciences at the base of medicine can integrate the sciences and make true interchange between scientists possible.

In the Middle Ages the student, equipped through training in the seven liberal arts to effect transformations in any subject matter, continued in one of the three fields of the university—medicine, theology, and law—without forgetting the others. Thus he never forgot the organism as a whole, living in society and under God. Today, filled with little useless facts, 60 per cent of which he has had to repeat to pass countless quarterly tests, his intellectual interest stifled by the hopeless prospect of acquiring all the information he is told he must possess, the student treads his weary round, picking up a fragment here and a frag-

ment there, until he has been examined on fragment after fragment and has served his time. Without intellectual scope or grasp, with the belief that thought is memory and speculation vanity, with no obvious incentive but the need to make a living, he becomes the proud product of our institutions of higher learning. Now that health has succeeded happiness as the ruling passion of mankind, your profession has an obligation to be intelligible and intelligent surpassing that of any earlier day. To that end I recommend a return to Galen, which is perhaps only another way of saying what Galen said in the title of one of his treatises, "The Best Physician Is Also a Philosopher."

# THOMAS JEFFERSON AND THE INTELLECTUAL LOVE OF GOD

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THE note that recurs most often in Thomas Jefferson's writings is his insistence on the importance of education. The reason for this was, of course, principally political. He was a democrat. He had to prove that the people could operate their institutions. He had to supply some method by which the poor might meet the rich on equal terms and the slow-witted protect themselves against their more intelligent, but perhaps less scrupulous, compatriots. The doctrine of equality of opportunity was meaningless if knowledge was to be a monopoly of the few. That doctrine was to rest on universal comprehension and individual leadership. The common schools were to provide the first; the universities were to develop the latter.

So Jefferson wrote in 1818, "A system of general instruction, which shall reach every description of our citizens, from the richest to the poorest, as it was the earliest, so will it be the latest, of all the public concerns in which I shall permit myself to take an interest." Again he said, "Education generates habits of application, of order, and the love of virtue; and controls by the force of habit, any innate obliquities in our moral organization. . . . . What but education, has advanced us beyond the condition of our indigenous neighbors? . . . . Nor must we omit to mention among the benefits of education the incalculable advantage of training up able counselors to administer the affairs of our country in all its departments . . . .; nothing more than education advancing the prosperity, the power, and the happiness of a nation." In 1816 he wrote, "Al-

though I do not, with some enthusiasts, believe that the human condition will ever advance to such a state of perfection as that there shall no longer be pain or vice in the world, yet I believe it susceptible of much improvement, and most of all in matters of government and religion, and that the diffusion of knowledge among the people is to be the instrument by which it is to be effected." Again in 1818 he said, "If the condition of man is to be progressively ameliorated, as we fondly hope and believe, education is to be the chief instrument in effecting it." His object, he said, was to "give activity to a mass of mind, which, in proportion to our population shall be double or treble of what it is in most countries."

To give double or treble activity to this mass of mind he did more than any other statesman to advance the cause of public education, and left as his greatest monument an historic university, "the pride and idol of his old age." To insure the dominance of the educated he proposed an educational qualification for the suffrage. A confirmed devotee of states' rights, he nevertheless advocated, as President, federal aid to the public schools through funds acquired by duties on luxuries. He provided the basis for the tremendous structure of public education to which we have grown accustomed; he supplied the reasons which support it; he first employed the slogans which are still used to justify it.

"Because of the impetus given us by the ideas and language of Jefferson, we have today a system of popular education which is the wonder, if not the admiration, of the world. It is extensive. It is free. It is elaborate. It is costly. In these respects it exceeds the most highly colored of Thomas Jefferson's dreams. We have everything he wanted, and a great deal more. But I think no one will deny that democracy is in a worse plight than it was before Jefferson began to labor in its behalf. We should hardly today be ready to say that education has corrected any innate obliquities in our moral organization or that because

of it we had advanced beyond the condition of our indigenous neighbors, or that through it we had trained up able counselors to administer the affairs of our country; and an educational qualification for the suffrage would seem to us a meaningless addition to the multiplicity of our laws.

How can this be? Why is it that we no longer feel that naive confidence in education which was natural to Jefferson? Why is it that the blessing of universal enlightenment has not produced the results that seemed inevitable to him?

As to the organization, methods, and scope of education, Jefferson's views were sound when they were expressed and are sound today. The trouble is that we have not adhered to them. The great democrat understood very well that the same kind of education is not equally desirable for everybody. He divided the community into the laboring and the learned, and provided a different type of education for each group. He knew that some adolescents ought to go to work while others were continuing their education. It would have seemed to him fantastic that all students should pursue the same course of study up to their twentieth year. His letter to Peter Carr in 1814 stated the basis of the Bill for Establishing a System of Public Education which he drew in 1817. He wrote to Carr: "At the discharging of the pupils from the elementary schools [after three years of schooling], the two classes separate—those destined for labor will engage in the business of agriculture, or enter into apprenticeships to such handicraft art as may be their choice; their companions, destined to the pursuits of science, will proceed to the College. . . . ."

It would have seemed to him equally fantastic that a pupil might educate himself indefinitely at public expense merely by minimizing his stupidity or misconduct. He would have seen little merit in granting such an individual a Bachelor's degree because he had been around a long

time, had memorized some things he had been taught, and had resorted only to the less noisy and noticeable vices. The rigid system of selection which he proposed from 1779 to 1817 was carefully designed to limit free education for all to three years of elementary schooling. Beyond that, education at public expense was to depend on survival of a competitive process the like of which has never been seen in the United States. The present democratic notion that higher education is open to a student merely because he is the offspring of a voter would have seemed sheer nonsense to the most democratic of the Founding Fathers.

Nor would he have permitted the nation as a whole to ignore the national problem of education. As one of his biographers has pointed out, he felt so strongly the necessary connection between free institutions and free education that he would have been able to think of no way in which the Union could guarantee a republican form of government to the States unless it guaranteed them adequate support for their public schools. Had we followed Jefferson to this conclusion, illiteracy would long since have disappeared from our country, we should not have had schools closed all over it during the last few years, and the administration might have regarded reopening them as almost as important as reopening the banks.

"The variations in Jefferson's program that he would now introduce are made necessary by the change from an economy of scarcity to an economy of plenty. Children cannot now go to work after three years in the grades. They cannot go to work after eight years there. We must construct our educational system with a view to sending the ordinary individual into gainful occupations not earlier than his eighteenth or even his twentieth year. Jefferson would have insisted on his two principles: differentiation and selection. The principle of differentiation means that the pupil should find his way into an institution adapted to his individual needs and capacities. If such institutions

do not exist, they must be created. Jefferson would understand that students who have difficulty in existing institutions should not necessarily be excluded from all educational opportunities. Nor is their failure a reflection on the institution they happen to attend. It simply shows that they ought to be in another one. Under present conditions they must be educated; there is nothing else that can be done with them.

Jefferson would, I believe, extend his ward schools and his county colleges to cover a longer period of the pupil's life. In addition, he would provide in them, or parallel with them, training for those who are the modern counterpart of his group destined to labor. He would understand that these students must be taught to be self-sustaining, that they cannot be expected to thrive in institutions whose sole function is to enrich the mind or prepare for the professions or advance knowledge. Their presence there merely confuses the faculty, the students, and the public as to what it is the institution is about.

If we had followed Jefferson, then, we should have today a system of public schools, supported, where necessary, by the national as well as the local authorities, culminating in numerous local colleges and technical institutes designed to accommodate the youth of the land up to their twentieth year. We should have, in short, a tremendous expansion and diversification of educational opportunity. The principle of differentiation would operate all through these institutions; the principle of selection would not operate at all, for the reason that it cannot do so in the present economic situation.

This does not mean that the principle of selection should disappear from the educational scene. On the contrary, it should be invoked in all its Jeffersonian rigor at the end of the schools, colleges, and institutes that I have just described. It should be invoked at the beginning of the university. Our failure to invoke it there, where Jefferson would

have insisted on it most forcibly, has done more than most things to debase the higher learning in America. The state must foster the state university, to which only those who evidence genuine ability should be admitted, because of the necessity of fostering scholarship, elevating the professions, and cultivating the minds of those who have minds to cultivate.

Such, I take it, would be the consequences of being truly Jeffersonian about the methods, scope, and organization of education at the present day. Our failure to take a Jeffersonian attitude on these issues is partly responsible for the failure of education to realize the hopes Jefferson had of it. But the principal failure of education is more fundamental: it has failed to develop a content which can achieve the results for which Jefferson yearned. The reason is either that we have followed Jefferson's language without understanding it or that Jefferson himself, faced with the practical problems of his day, overlooked the intellectual problems of the higher learning. The language that he used has been employed to describe institutions quite different from those he was describing; the intellectual life was not a primary concern of the democratic statesman.

It is clear that Jefferson thought of education chiefly as the accumulation of useful information. This information was to help people earn a living and become good citizens. He rejected any curriculum that was not useful. He reduced the speculative elements in the course of study to a minimum. We are deceived in looking at his program today, because it seems much less useful than our own. Actually, it was much more utilitarian than any that had appeared before his time. It contains the elements of the present curriculum, and the language used to justify it could be and has been employed to justify the worst features of the modern course of study.

In the letter written to Peter Carr in 1814 Jefferson expressed the hope that Virginia would make an establish-

ment, "where every branch of science, deemed useful at this day and in our country should be taught . . . ." In his letter to Governor Nicholas in 1816, he said, "The university must be intended for all the useful sciences. . . . . The report will have to present the plan of an university, analyzing the sciences, selecting those which are useful . . . . ." The report of the Commissioners Appointed To Fix the Site of the University, written by Jefferson in 1818, referred to "the sciences which may be useful and even necessary to the various vocations of life."

The preliminary drafts of a course of study for the university and the enactment of the Board of Visitors on April 7, 1824, are the embodiment of these views. Of the eight schools or departments in the University, only one does not contain specific mention of subjects designed to improve morals or develop vocational aptitudes. That exception, the school of ancient languages, is more apparent than real; that school was thought of either as preparatory to something else or as illuminating the current scene in which the young Virginian would have to vote and earn his living.

Jefferson was not proposing a plan for the higher learning. He was proposing, rather, a system of education designed to produce self-sustaining and law-abiding citizens. That is, he was interested in the lower ranges of education. He used the words "college" and "university" in such a way as to confuse us now. He did not mean college and university in our sense. The student went to his "college," for example, at the age of ten, and to his "university" at fifteen. He was advocating an educational system that centered on external goods and the moral virtues. The intellectual virtues were not for him. What used to be called the "intellectual love of God," what we now call the "pursuit of truth for its own sake," the inculcation of which is the object of the higher learning, scarcely appeared in his prospectus. He was a practical, social reformer anxious to

make his people prosperous and civilized. He was correct as far as he went. Our mistake is in taking him farther than he meant to go.

At the lower levels of education the political and economic situation determines the content of education; education does not determine the political and economic situation. Jefferson could not hope to improve society, therefore, by improving elementary education. The quality of society must inevitably govern the quality of elementary education. Those representatives of the educational profession who today urge that the schools should be turned into an agency of social reform are making an error that we can trace to Jefferson. An effort to turn them into such an agency will merely succeed in ruining the schools.

Jefferson's plan of producing decent citizens able to earn a living was sound. He could not hope to secure an improved society by this means. He could legitimately hope to perpetuate the one he had. Because he said "college" when we should say "high school," and "university" when we should say "junior college" and "vocational school," we have been led to import his plan into the higher learning. Here it is quite inappropriate. As a result, in the higher learning the intellectual love of God has been submerged by external goods and the moral virtues. These are proper objects of elementary and secondary education. They should be the objects of such education as may be required to enable the citizen to be economically independent and politically responsible. We might even go so far as to say that they should be the objects of all technical and vocational training. They play only an incidental rôle in the higher learning. The intellectual virtues should be the preoccupation of the university.

Now it is clear that the intellectual love of God is the same in any good state. External goods and the moral virtues may vary in quality and supply from nation to nation. The intellectual virtues remain the same in a democracy,

an aristocracy, an oligarchy, or a monarchy. It is through the exercise of the intellectual virtues that the statesman orders means to ends and achieves the common good. The principal signification of a bad state is that it prevents the free and independent exercise of the intelligence. We may with confidence foresee the decline and fall of some European governments because they are, by this test, bad states. We can discern the dangers in the proposal of the professional educators who desire collectivism; they would force the intelligence to subordinate itself to the social purposes that they desire. The free and independent exercise of the intellect is the means by which society may be improved.

Because we have misunderstood Jefferson, we have not yet secured a university in the United States. And what we call universities have been made less effective than they would be if we had grasped the fact that Jefferson was not really talking about the higher learning, because he was not talking about the intellectual life. The accumulation of useful information has been made the object of our universities as well as of our inferior schools. And, because we have not been pursuing the truth but have been piling up helpful facts, we have had to multiply courses and departments. We could not get them all or teach them all otherwise. We have been able to justify the social aspects of college life—you make friends who will help you in business. We have been able to devote much time, effort, and money to the physical and moral welfare of students. We have been able to forget that a university should be devoted to the intellectual love of God.

The university should renounce any ambition to increase the ability of its graduates to acquire external goods and should relax its desire to train them in the moral virtues. Instead, it should see to it that in the college or in the university itself students might first learn how to deal with ideas. This means an education in disci-

plines designed to teach the student how to discover, analyze, and utilize ideas. At the same time he should become acquainted with the principal ideas which have directed the activities of mankind. These are to be found in books. It is true that many of them were written in the ancient languages. I am not suggesting, however, a curriculum largely composed of these languages. I am suggesting a curriculum composed in part of these books, which may be studied in translation.

This preliminary period would equip the student with the techniques which he needs to deal with ideas and would familiarize him with important examples. He should now be ready for the real work of the university. This should consist of the utilization of his previous training in some one large intellectual field; even this should not be studied by itself, but in relation to the other major disciplines. For example, medicine and the natural sciences at its base, law and the social sciences on which it rests, and theology are intellectual areas of study having a definite rational content, any one of which might constitute the scene of the student's intellectual activity. You will note that this activity should be intellectual and not vocational. It would have nothing to do with training a student to be a teacher, or a doctor, or a lawyer, or a preacher. It would involve the search for truth for its own sake, the practice of the intellectual virtues, that study which is the intellectual love of God.

A university with students and faculty so trained and so occupied would be freed automatically of the burdens which the curriculum and extra-curriculum now impose upon it. Its graduates would be educated. They might then, through the independent exercise of the understanding, make their contribution to the evolution of our political and social life. With clear ideas, instead of a mass of rapidly aging information, they would face the world, bringing to its problems the ordering and beneficent in-

fluence of trained intelligence. This is the influence that both our educational and our political institutions require today as at no earlier period. Now that we have passed the pioneering stage, now that we have established the crude structure of the basic educational system which was the concern of Jefferson, we must press forward to secure for our country the blessings of the higher learning. The intellectual love of God is indispensable to the fulfilment of Thomas Jefferson's dreams.

# THE EDUCATIONAL FUNCTION OF NEW ENGLAND

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I AM here tonight to utter a Macedonian cry. If occasionally it sounds hysterical, I beg you to remember that it is of the nature of such a cry to be so. If on occasion it sounds uncomplimentary, I hope you will understand that this is merely the result of limitations of time. I cannot remind you at the end of every paragraph that my purpose is to give you the highest compliment in my power and that my incidental brutality is intended simply to reveal in clearer light the opportunity that is before you. For I propose to show that the educational function of New England is to lead. My chief criticism of you is that you are so modest that you do not realize it. I wish to urge New England tonight to resume its rightful and natural place at the head of American education. I do not greatly care whether you do this from anger or ambition. I shall try to arouse both in you, in the hope that one or the other will result in the action which the country needs.

And, first of all, I wish to enumerate the general and pervasive contributions which New England has made. The preparatory schools, colleges, and universities of this region have done three things for all of us. In the first place, they have set high standards of scholarship for students and teachers. They have required them to meet the standards erected and have declined to temporize or soften under pressure. I do not say that these standards have in all cases been the wisest; I do say that New England has adhered to them. Its resistance to mediocrity in the staff and in the student body has strengthened the resistance of all other educational institutions.

In the second place, New England has maintained freedom of thought, speech, and teaching. Academic people who have not lived outside New England may not realize that the battle for academic freedom is a battle not yet won. Such freedom has become a commonplace in this part of the world. In less happy climes business men, parents, and men in the street often feel called on to request the expulsion of a professor if he disagrees with them, and sometimes succeed in securing it. The example of the New England universities, and notably Harvard, has made it more respectable than it once was to demand that the teacher be permitted to say what he thinks, inside and outside the classroom. To be sure, we must take care that he is competent in his field; but that is to be determined not by the general public but by his colleagues.

In the third place, New England has elevated education throughout the country by constantly raising teachers' salaries. Such improvement as we have witnessed in the profession has been largely the result of this phenomenon. The level of academic compensation on the Atlantic seaboard is much higher than anywhere else. It would be lower everywhere else if it were not as high as it is here. No important university in the East has reduced salaries during this depression. Elsewhere every university but one has reduced them. If it had not been for New England, that one would have done so; and the rest would have done it more.

These three contributions of New England are of the greatest importance. Unfortunately, however, I must also recite New England's sins against American education. They are sins of commission and omission. The requirements New England has established for entrance to, progress through, and graduation from, a school, college, or university have had a dreadful effect throughout the country. New England invented the horrid machinery composed of course grades, course credits, course examinations,

required attendance, and required residence through which we determine by addition, subtraction, multiplication, division, and a logarithm table the intellectual progress of the young. Of course this machinery has nothing to do with education and constitutes, in fact, one of the prime obstacles in its path. With the exception of Harvard, New England retains it in all its menacing vigor and thus makes it difficult to modify it elsewhere.

New England, too—and here Harvard has been the chief offender—has extended this vicious principle into new educational territory by requiring the Bachelor's degree for entrance to professional schools. Such a school acquires mystical prestige by being called "graduate." A law school, for example, is a good school if its students have spent four years in college. It is a poor one if they have lingered only three. It is really not respectable if they have devoted only two to the pursuit of the liberal arts. Of course, there is not the slightest basis in fact or theory for this view. In fact, students who have not spent four years in college are likely to do better in law school than those who have. In theory there is no reason why a student who has completed his general education and wishes to specialize should not do so in professional subjects instead of non-professional ones. Yet, New England has given impetus to the adding-machine system by deciding that you can tell whether a student will succeed in a professional school by adding up the years he has devoted to football and fraternities.

The influence of the College Board Examinations has, on the whole, been pernicious. They have not been adopted outside New England; they have been modified here. Nevertheless, they have served to spread abroad the erroneous and dangerous doctrine that the purpose of the secondary school is to prepare for college. This notion has prevented the high school from developing its own program in terms of the needs of its own students. Of course this idea

could not prevail indefinitely. The high school is not preparatory to college. The great mass of its pupils never go there. The high school has had at length to work out its own curriculum; but one of the reasons why it is not a very good one is that the high school is still confused as to what it is about. Nor have the College Boards been without painful repercussions on New England. The separation of the high-school course of study from the College Board curriculum is now great enough to make it most inconvenient for a high-school boy to take the examinations. As a result he may not go to a New England college or university.

Outside New England we are coming to the view that we do not know very much about selecting students at entrance. One middle-western university, after trying various arithmetical computations in this connection, with no result except to admit some students who should have been excluded and to exclude others who should have been admitted, finally announced a formula which I offer as the best that can be constructed at this stage. The announcement was as follows: "Any student will be admitted who commends himself to the Board of Admissions by reason of his personal qualities and scholastic aptitude." Under this formula, age, years in secondary school, credits, grades, and previous condition of servitude are not controlling. The student will be enrolled if, on the whole, he deserves a trial in college. The university knows that such a trial is the only real test. Its formula has this important consequence—it leaves the secondary schools free to frame the best course of study they can. It imposes neither the methods nor the subject matter of their program. As one who has prepared students for the College Boards, I can testify to the limitations they set to education. The teacher must prepare the pupil for the examinations first of all. In the school I taught in, I did not dare try to educate my charges. It would have confused their minds.

We are witnessing in the West the collapse of all formal

requirements. Our problem now is not to keep students out of educational institutions but to find or create those they can profitably go to. The most footless question that university presidents have been debating in recent years is, Who should go to college? Where else is there to go? Today adults cannot get jobs. Boys and girls of college age can hope to find them only by accident. Because of the technological improvements of recent years industry will require in the future proportionately fewer workers than ever before. The great problem of the high school now is not to hold its pupils but to get rid of them. Their graduates cannot get work and demand that classes be provided for them by an overburdened staff in overcrowded buildings. The public junior colleges and the state universities in urban centers have been swamped by the tide that has swept over them since the depression began. If these students are forbidden to enter educational institutions, what will become of them? All of them cannot be absorbed into the army, navy, or Civilian Conservation Corps. We should not encourage them to try to get into jail. The answer is that we must expand the educational system of the country to accommodate our young people up to their eighteenth or even their twentieth year. If existing schools and colleges are not adapted to the needs of all these students (and they certainly are not), we must establish new ones for them. If existing methods of selection and instruction cannot be employed, we shall have to invent others.

New England's contribution to methods of selection I have already described. Her contribution to methods of instruction is individualized teaching. This, where it takes the form of the small class, has had a destructive effect on education elsewhere. All the evidence is that a small class merely as such is no better than a large one. New England's insistence on the small class has given even the high school in the West the impression that only in such classes can

education be conducted. The diminished resources of public education have thus been lavished on a kind of teaching it could have done very well without. The tutorial system is a contribution of New England which the rest of the country cannot accept if it means that every student will have individual instruction in every subject all the time. The rest of the country can hope to supply able students with individual instruction in fields in which they are particularly interested and qualified. It should not attempt, for financial and educational reasons, to give it to every student every hour of every day. It is far too costly; it cannot be demonstrated that it is worth the cost. The problem of the rest of the country is not to increase the amount of individualized teaching; it is to reduce it. We must find some way to cut down the number of miscellaneous small classes and discover some more economical and effective method of teaching the large number of students with whom we perforce must deal.

Nor can the rest of the country adopt the so-called house plan or college plan now being introduced at Harvard and Yale. If this plan is a housing plan, it can of course be imitated; it already exists in other places. If, however, the proposal is to conduct education in small residential units in which faculty and students can live and study together—if, in short, the plan is the plan of Oxford and Cambridge—then it can have no followers in the West. The cost of the scheme is a fatal objection now. But, assuming the money were available, we could not attempt it in the western universities, where coeducation is the rule and where 50 per cent or more of the students must live at home if they are to attend the university at all. I do not deny the merits of the British plan; I do assert that it cannot be instituted in the West.

Even though the plan will not be instituted in the West, its effects there are not likely to be salutary. It will be taken as another evidence that New England believes that

the purpose of the higher learning is principally social and moral. This lesson New England has taught us too well already. It has already convinced us that athletics, architecture, personality, character, and gentlemanliness are the essence of the intellectual life. The example of eastern colleges is always offered to refute a western president who wants to make his university an educational institution. Education and scholarship can be carried on in ramshackle buildings, with students who live at their homes and professors who live at theirs. Education and scholarship can flourish even if professors and students associate with one another only for intellectual as distinguished from social and athletic purposes. Of course, I should not expect a university to refuse gifts of beautiful and useful buildings. I should not expect students and teachers to decline to speak to one another except on subjects on which they will later take or give examinations. Nor should I expect a university to ignore the moral virtues. I should insist, however, that learning how to be clubly is not the highest learning that may be achieved in a university. The emphasis in the house plan on the non-intellectual aspects of university activity is not an emphasis the country needs.

The house plan will have one other effect upon the West. It will separate it still farther from New England. The junior college is rapidly becoming the characteristic educational institution of the country outside New England. The depression has stimulated its growth. The junior college takes its students through to the end of the Sophomore year. If the student goes to a university, he will enter it as a Junior. The house plan is built on the idea of a solid social and educational bloc inclosing the student from the Sophomore or even the Freshman year to graduation. This means that it will be almost impossible for the junior-college graduate to attend a university where the house plan is in vogue; and New England will be cut off once again from the American educational system.

Recent events suggest that New England is withdrawing farther and farther into itself. General examinations and reading periods, which the rest of the country can adopt, hardly atone for the loss of New England's leadership in attacking the great problems of organization and subject matter which now confront the institutions of the South and West. Not since Mr. Eliot presented us with the elective system, which was not an unmixed blessing, has New England given us an important idea which we may use in meeting such problems. Today we are in a desperate plight. Public education in some western and southern states has now collapsed. In many others it is on the verge of collapse. The state universities have received terrible blows from legislatures who have seen their states laid waste by the depression. The endowed colleges and universities are, many of them, barely able to maintain themselves. And yet we must now reconstruct our whole program to meet the new conditions which the economic situation has thrust upon us. We must reorganize the educational system and redefine the purposes of its units. We must create new units to accommodate students whom industry can no longer absorb but whom we have never regarded as our responsibility before. We need ideas, courage, imagination, now as at no earlier period. Where shall we hope to find them if not in New England? There are situated the strongest institutions in the country. They can enlighten us if they will. For forty years they have turned their backs to us and devoted themselves to their own affairs. The great developments of those years have occurred at levels which New England has ignored; they have occurred in the public schools—the elementary schools, the high schools, the junior colleges. We have been without the leadership which only New England can give us. We can do without it no longer.

With deference I venture to suggest what New England might do for us. Nothing would advance the higher learn-

ing in America so much as an announcement from the strong colleges and universities of New England that they had abandoned their Freshman and Sophomore work. If they then went on to develop a three-year course of study to the Master's degree, they would do still more for us. They would show us not only the organization we should adopt but also the subject matter we should treat of. New England need not take this step from philanthropic motives alone. New England faces the choice between resuming the leadership of American education and becoming an excrescence on it. If it becomes an excrescence on it, it will lose all contact with students from outside New England unless it bribes them to attend. If the strong colleges and universities in this part of the world will begin their work with the Junior year, they may expect to enlist in increasing numbers the graduates of junior colleges. If Yale and Harvard are going British, I suggest that they go the whole way and eliminate work which in England is regarded as of public-school grade. The first-year man at Oxford and Cambridge is the equivalent of a Junior here. I suggest that we make our Juniors first-year men.

With deference I recommend that the great preparatory schools of New England become colleges. This would mean that they would cease to be preparatory schools. They would take their students through to the end of what we now call the Sophomore year. Their qualified graduates might go on to the university if they cared to do so. If they did not, they could feel that they had had an education.

The location and environment of the New England preparatory schools are better for collegiate work than those of the New England universities. The preparatory schools can do the teaching that is now done in the Freshman and Sophomore years of universities better than the universities can do it. The object of a preparatory-school faculty is to teach. The faculty knows how to do it and wants to do it. A university faculty is selected to advance knowl-

edge. It does not want to teach and frequently does not know how to do it. As a result Freshman and Sophomore teaching is relegated to youthful instructors whose one ambition is to get out of it as soon as possible into the more respectable, remunerative, and rarefied atmosphere of scholarly research. To turn the New England preparatory schools into colleges would relieve the universities of a burden they do not want, give the schools an opportunity they are equipped to grasp, introduce some education into the two most wasteful years of the university course, and set an example for the country.

The object of these new colleges should be to give a sound general education to the students in them. One of the virtues of the organization that I foresee is that it would compel us to find out what a sound general education is. I cannot truthfully say that New England has done much for us lately in helping us to find out what the curriculum should contain. The principal differences between New England and the rest of the country have been on the issue of Greek and Latin. As formulated, the issue was not worth fighting over. The classical position degenerated into a defense, not of reading and understanding the great books of the ancient world, but of studying their language in infinite detail and as an end in itself in such a way as to create in the student a profound distaste for the ancient world and all its works.

If we are going to convince our fellow-citizens that education is an affair of the intellect, we must have a course of study that will corroborate, instead of refute, our pretensions. New England has a great intellectual tradition. If it will now revitalize that tradition, it may discover in the process what a general education ought to be. It may even discover a new classicism more worth fighting about than the old. With deference I suggest to the New England preparatory schools (after they become colleges) a course of study based upon ideas—how to recognize them, analyze

them, develop them, and apply them. This used to be done through what was called the "trivium": grammar, rhetoric, and logic. A course of study composed of the classics and the trivium would make the college an intellectual enterprise and college education an intellectual experience. The graduate would have had no vocational training. He would have trained his mind. He would be better equipped to meet practical situations than one whose training had been given him through the medium of little imitation practical situations in the classroom. I suggest also that the graduate of such a college would be better equipped to go into the university than one who had passed through a preparatory school of the variety that exists today.

With colleges and universities aiming to attain these ends, we might have an educational system in America that would give us the trained intelligence we need, that would furnish direction to our people, and that would produce at last an enlightened nation. To lead us to the achievement of these ideals is the educational function of New England.

# THE WESTERN UNIVERSITIES

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YOU are of course of the opinion that the western universities are the most important, delightful, and powerful institutions in the world. In this opinion I entirely concur. Therefore you do not need to argue with me, and I am spared the necessity of arguing with you. Nor can I hope to provide you, who attended these universities, with any additional light on this subject. Therefore in the few minutes that I shall consume I shall devote myself to something which you may know less about, or which through the lapse of time you may have forgotten.

I propose to discuss the peculiar responsibility of the western universities and the limitations on their success, influence, and prosperity. Now the peculiar responsibility of the western universities is the responsibility for the system of public education. With one notable exception the eastern universities have never acknowledged any such responsibility. For one thing, most of their students come from private schools. For another, they have most of them been in a position to exercise a kind of discrimination in admitting students which has been denied to the western universities either because of their public character or the low state of their finances. Finally, the eastern universities have not had the close association with public education which any western university has had either through being a state institution or being surrounded by them.

The direction higher education may take in the West, particularly in the metropolitan universities, may be toward the Continental and Scottish scheme, under which little effort is made to arrange, supervise, or control the living habits of students, and the entire attention of the insti-

tution is devoted to giving them the best teachers than can be found. Any such development in the West will require, of course, some change in the attitude of our constituency. Education in America now calls for a large amount of nursing. Universities have developed the idea in parents, or parents have forced it upon universities, that the institution is in some way responsible for the moral, social, physical, and intellectual welfare of the student. This is very nice for the parents; it is hard on the universities, for, besides being expensive, it deflects them from their main task, which is the advancement of knowledge. Clearly a university ought to have a health service to protect it against epidemics. It ought to provide every facility for the students to participate in the advancement of knowledge. But, sooner or later, it must take the position that the student should not be sent to the university unless he is independent and intelligent enough to go there. The university cannot undertake to give him character or intellectual interest. Parents whose children have neither should keep them at home or send them to another kind of institution. Whatever may be the responsibilities of a college, a university is not a custodial establishment, or a church, or a body-building institute. If it were free to stop behaving as though it were, it would be a better university.

But this necessity of chaperonage is, after all, a limitation on universities everywhere, and what I am trying to talk about is the peculiar duties and limitations of the western universities. The improvement of the system of public education is the peculiar duty of the western universities because they are, many of them, parts of that system and because the eastern universities will not or cannot bother about it. Now the situation of public education in the West is most precarious. The balance-the-budget–reduce-the-cost-of-government hysteria has swept over that country as nowhere else in the United States. This is not surprising. The Master of the National Grange told me in Janu-

ary that teachers' salaries in his district had multiplied seven times, measured in the price of corn. It is remarkable that the agricultural interest has been as lenient to education as it has. The farmers' organizations and the labor organizations, realizing the importance of the public schools to their children, have done their best to maintain them at the highest possible level. The attitude of other organizations, composed of business men, large taxpayers, and those who can afford to avoid the public schools, has not been so favorable, and has resulted in the first serious mass attack on the system that the country has ever seen. Education has always heretofore been the American substitute for a national religion. Whatever the economic situation has been, we have felt that the schools must be preserved and even expanded. Now teachers' salaries are being reduced and then withheld, school terms are being shortened, subjects are being abandoned, and the gains in public education hardly won over twenty-five years are being swept away.

"At the same time the system faces new problems of such a startling character that it would have difficulty in meeting them in the best of times. Industry has ceased to be the natural outlet for adolescence. The legal age for going into employment has been steadily advancing, and with it the normal age for leaving school. During the depression this condition has been accentuated by the fact that the boy who left school could not find a job. Consequently he has remained, and high schools all over the country have been forced to provide classes for their alumni. Moreover, there will probably be still further advance in the legal age for going into employment and still further difficulty in finding employment when that age has been attained. The National Child Labor Committee has announced that it will take two million children out of industry. What will it do with them when it gets them out? If we cannot put our children to work, we must put them in school.

The result of this situation is that we must look forward, whether we like it or not, to accommodating the youth of this country in educational institutions up to their eighteenth or twentieth year. The task of the western universities is to lead the way in the construction of the new educational institutions made necessary by these new conditions. Within the next fifty years we shall see the development of countless public junior colleges giving general education to the local community as the high school has been giving preparatory education to the local community. These colleges will be terminal, in the sense that they will prepare for life rather than for the university. They must be numerous and they must be local, for the simple reason that the great majority of their students could not afford to live away from home. Parallel with these institutions must arise technical institutes giving sub-professional, business, technical, and home-making courses to those who do not want and would not profit by a cultural education. With the proper development of these two types of institutions we should be on the way toward an educational system adapted to the needs and capacities of the individual.

The proper development of these institutions will not be automatic. The financial plight of public education and the tremendous numbers with which it has to deal make it almost impossible for those engaged in it to do more than administer what they are now doing. Leadership must come from somewhere; it can come only from the universities. The universities should therefore regard the first two years of college as experimental; there they should develop the methods and the curriculum for the public junior colleges. If, in addition, they can take over technical institutes and use them as models for public education, they will be making an even greater contribution. Nobody knows today what a general education ought to be. Nobody knows what a sub-professional technical education

ought to be. The situation in public education requires us to find out. Only the western universities can do it.

The limitations on the ability of the western universities to cope with this task are three. The first two are obvious: numbers and money. Some western universities are now so large that they have to direct most of their attention to finding classrooms and dormitories and dining-halls large enough for their students. It is difficult to conceive and execute new ideas under these circumstances. In the second place the western universities have been hit by the depression to an extent that few people realize. Of the seven universities which in 1929–30 spent more than ten million dollars each, three were eastern and four were western. Three of the four were state universities, Minnesota, Michigan, and California. Minnesota is an agricultural state; Michigan's troubles are world-famous; California has lately received dreadful shocks of more than one variety. The result has been that these universities have had to struggle to maintain what they have been doing, to say nothing of taking on something new. And, if they are in this condition, think of the situation in places less wealthy, like the Dakotas, Kansas, and Nebraska. At a time when the opportunity and obligation of the universities are greater than ever before, their ability to meet them is at the lowest point in history.

But these conditions may change, and the universities may be able to press forward once again. One limitation on the influence of the western universities will remain. It is the inferiority complex. Mark Van Doren of Columbia was lately on our campus. He was asked by a student reporter what the difference was between the eastern and the western universities. He replied that the principal difference was that the question would be asked only in a western university. The time has come when the western universities must rely upon themselves. They cannot look to England or to Europe. They cannot look to New England or New

York. They must rely upon themselves. The whole social and educational scene which the western universities face is vastly different from that confronted in the East. The problems of public education to which I have already referred—the junior college movement which has brought four hundred and fifty such institutions to our doors in forty years—all these things mean that our policies must be constructed with a view to elements of which eastern universities are quite oblivious. We cannot solve new and different problems by methods developed to meet conditions remote from our own. Only through the exercise of independent judgment can the western universities achieve the excellence which the West demands.

In the effort to exercise such judgment our alumni can be of the greatest assistance to us by suppressing the inferiority complex in themselves. They must realize that they cannot test the standing of their Alma Mater by many notions prevalent in the East. We have different functions, different duties, different opportunities. Why should we assume inferiority if we are not like a model which we should be foolish to imitate? James Bryce said that the most depressing feature of American cities was their uniformity. Still more depressing is the uniformity of our universities. The western universities must now strike out and be themselves. If they do, you will be even prouder of them than you are today.

# THE SENTIMENTAL ALUMNUS

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ALL alumni are dangerous. They see their Alma Mater through a rosy haze that gets thicker with the years. They do not know what the college was really like. They do not want to know what it is like now. They want to imagine that it is like what they think it was like in their time. Therefore they oppose all change. If changes are made without their approval, they are resentful. Since no useful change could ever be made with their approval, few useful changes have been made in higher education.

The more sentimental an alumnus is, the more dangerous he is. For him the rosy haze is denser; to him the good old days were better; to him any innovation is more scandalous than to his hazy and reactionary companions. He sees a beautiful uniqueness about the period when he was in college. That period has never been equaled before or since. The sole object of the institution should be to return to those glorious days that produced him.

All these vices you see exemplified in me; for I am the alumnus, and the sentimental alumnus, par excellence. In addition to the customary sentimentality which afflicts the aging graduate when he thinks of his college, Oberlin arouses in me that sentimentality which comes to all of us when we think of home. Here lived my grandfather and grandmother, my uncles and aunts, my mother and father, my brothers and I, all in some sort of relation to this college. Since the college dominated the town, since we took most of our meals in a faculty boarding house, since the hours of those meals were determined by the hours of chapel and my father's classes, since all the occupations of

every day revolved around the College, the memories that I have of home are memories of the College, too. It is impossible for me to separate the streets of Oberlin, the trees, the buildings, the activities of the College, from my family and my family's friends who in those surroundings were a part of those activities years ago. And since those were the most impressionable years of my life, those people seem to me much more real than you whom I see before me now, and far more gifted. University administration is a disillusioning kind of thing, and I have been in it for eleven years; but the illusion I have of Oberlin, the mirage that is the Oberlin I knew, can never be shattered.

The inhabitants of that mirage move about against a background that you will tell me has long since disappeared. Indeed, you will say that they have, many of them, disappeared themselves. You may even hint that neither the place nor the people ever existed as I claim. This may be true for you, but not for me. For me Oberlin never has been and never can be any different from what my mirage reveals. For me the campus still has two little red buildings crumbling away upon its corners. For me there is no retiring age for members of the staff, nor any new appointments. For me the class of 1919 never went to war and never graduated. This static, beautiful Oberlin wherein my friends and I are forever young and forever friends deprives me of the powers of reason and leaves me only the power of recollection.

The function of an administrative officer, however, is not reminiscence but projection. The true executive finds writing even an annual report a chore, because it takes his mind off the future and forces him to the uncongenial task of recalling events which, however recent, are still in the past. The educational executive, too, thinks not only of the future of his own institution but also of its place in the future educational system. The sentimentality that burdens reminiscence is foreign to these projections. The

sentimental alumnus cannot be the administrative officer —not, at least, at the same moment. And so today I cannot discuss the future of the college, a subject on which I have written with what seemed to me a very high degree of intelligence on other occasions. I still think of Oberlin as something isolated, independent, unique. No general educational observations can be permitted to apply to it. The sentimental alumnus is interested in its future only that he may re-create the past.

I must also admit that there have vanished from my mirage the things I wish to omit from it. With a struggle I can remember aspects of the Oberlin of my time which are no longer part of it to me. I can remember, for example, that this is the hottest, coldest, wettest, flattest part of the state of Ohio, so uninteresting and disagreeable that Plum Creek, the arboretum, the reservoir, and even the cemetery seemed like scenic gems glowing in a dull setting of yellow clay. I can remember sitting every day in this room on the most uncomfortable of all chapel seats trying hard not to hear what the speaker was saying. I can remember the dancing rule, the rules confining ladies to their rooms at earlier and earlier hours in inverse proportion to the time they had spent in college, and the smoking rule, which I abhorred but was not robust enough to violate.

But these items do not disturb me very much. On the contrary, they help me to preserve my illusion of the uniqueness of the Oberlin of my day. It assists me to this view to believe that my college had the worst climate, the hardest seats, and the silliest rules of any institution in the world. These items merge with my general picture, taking their place with others of a more favorable nature, such as the conviction that in my time all the athletes were heroes and all the girls extraordinarily good looking, convictions that neither the sight of Ohio State beating Oberlin 128–0 nor detached but sympathetic study of the female sex has served to eradicate.

Some of these items, too, that at first seem unfavorable, on reflection make their positive contribution to the miraculous Oberlin I remember. A pervasive element of that miracle was independence. Oberlin cared nothing for money and nothing for fame. By the same token it did not object to being ridiculous on principle. In perspective the silly regulations of my time endear Oberlin to me not for what they were but for what they represented. They represented a spirit so independent that all Oberlin's conventions were unconventional. The answer to all objections to those conventions was simple, complete, and characteristic. If we didn't like it, we knew what we could do. We didn't have to come to Oberlin. If we did come, it was assumed that we proposed to abide by the laws of the place. If we found, on making the attempt, that we didn't have the strength of character required, we could peacefully retire. I remember no departures from this attitude. Once a professor's son I knew was detected in the act of smoking with Mr. Braithwaite, the genial engineer at the water works. He was summarily expelled, and the community agreed that the only thing for that boy to do was to join the navy.

The independence of the College was in some way or other communicated to us. I do not know how it was done. Perhaps it was through those chapel services we did not think we heard. Perhaps it was through classes where we were often inattentive. Perhaps—and this, I think, is near the truth—it was in the air. One result was that the self-supporting student enjoyed an elevated social standing among us merely because he was self-supporting. It was impossible to be a prominent undergraduate unless one was working one's way. And this in turn, as you may imagine, had its own repercussions on the quality of the life we led. None of us could take the College as a matter of course when so many of us were making sacrifices to attend it. The tone of the College was set by those to whom education meant opportunity rather than ritual.

This was not without its effects on our interests. It is startling, and perhaps untrue, to say that the curriculum meant even more to us than the extra-curriculum. I know that here you will say I am romancing—but nevertheless I believe I am reporting accurately our state of mind. You may be even more surprised to hear that to us music and the arts and intellectual activities meant even more than athletics. Perhaps this was because our teams were not very good. Perhaps it was because our interest in music could be indulged in various charmingly coeducational ways. Whatever the cause, the interest in art and music Oberlin gave us was one of the most valuable and lasting of her contributions.

We acquired from Oberlin's independence not only habits of work and respect for work and a love of the true and the beautiful. We also absorbed that reforming spirit which is merely another aspect of independence. In the earliest times Oberlin had admitted women, had freed slaves, had opened its doors to negroes, had campaigned against the organized liquor traffic, and sacrificed its graduates to the development of China. And today one cannot associate with a group of Oberlin alumni without being struck by the fact that, far from accepting the world, they are all trying to improve it. If one of them is actually engaged in making money, he is almost apologetic about it, and usually assures you privately that his extra-curriculum activities are devoted to civic betterment. A university president once complained to me about an Oberlin graduate on his faculty. He said he was an excellent man in his field, but was always stirring up trouble about public questions and the wrongs of suffering humanity. The answer to my learned colleague was, of course, that he had never been a student at Oberlin. If he had been, instead of deploring the activities of his professor, he would have joined in them himself.

Another phase of Oberlin's independence appeared in its

resistance to the educational trend of the time. In general that was a trend toward expansion, publicity, athleticism, ambition, and uniformity. The junior college was invented, swept through the West like a prairie fire, and then devoted itself to becoming a college of liberal arts as much like every other college as possible. The colleges of liberal arts were moved by similar aspirations. Many of them began to call themselves "universities," apparently under the impression that a change in name was a change in character and that a university was something quite superior to a college. In spite of the fact that the college-teacher's business is to teach, the associations of colleges began to require their members to appoint only individuals who had degrees acquired by research. Except where it was compelled by the standardizing agencies, Oberlin did not care whether these things were going on. Perhaps it did not know it. It directed its attention to giving young people the best teaching that could be found in the best environment that could be framed for them.

In a period of expansion, Oberlin limited its enrolment. In the football era, Oberlin paid no more attention to athletics than was required by a reasonable program of physical education. In a period of imitation, Oberlin held fast to the secret it had known from the first, that whatever the future of the college may be, it will not be found in copying the aims, methods, curriculum, or organization of any other institution. Oberlin remained a college.

As I have already suggested, the function of the college is to teach. It is not to conduct scientific investigation or professional training. It aims at transmitting to young people an intelligible scheme of things. This is a full-time job. It requires an excellent staff centering its attention on teaching, on improving its teaching, on making its scheme of things more intelligent and intelligible. The responsibility of adding to the world's knowledge does not rest upon the college. Its object is to communicate it.

This the Oberlin of my day understood very well. Any friend of any college should say to it, "The Kingdom of Heaven is within you." Oberlin did not need to have it said. Intent on doing better and better teaching, it gave us the best teaching I have seen or experienced anywhere. With all allowances for the enthusiasm of youth and the devotion I feel to Oberlin, it seems to me that it had attained at that time that serenity which comes from clarity of purpose and the certainty of its accomplishment. In that scene of turmoil which was American education, it knew where it was going and why.

A peculiar possession of the college of liberal arts is its influence on character. In a university a preoccupation with character serves to divert the institution from its scholarly and professional tasks, and eventually dilutes its performance of them without contributing materially to the development of character. In the small, compact college the development of character is inseparable from the daily association of students and teachers. All attempts to teach character directly will fail. They degenerate into vague exhortations to be good which leave the bored listener with a desire to commit outrages which would otherwise have never occurred to him. Hard intellectual work is doubtless the best foundation of character, for without the intellectual virtues the moral sense rests on habit and precept alone. And it was on hard intellectual work that Oberlin placed its emphasis. It was not until much later that I learned that it might be respectable to slide by with a gentleman's grade. Before that I should no more have thought of it than I should have thought of eating with my mouth open or failing to take my hat off to a lady.

The community which was Oberlin seems to me to have achieved a synthesis of the intellectual virtues, the moral virtues, and what we may call the vegetative, or physical, virtues. The Rational Living about which we used to

hear so much in those days required us first of all to be rational. But it insisted, too, that we should behave ourselves and show a due regard for our health. I can remember a speech by President King in which he told us how ashamed he felt whenever he caught a cold. That balance which is so difficult to obtain among an interest in the private lives of students, a concern for their physical well-being, and the paramount object of the college, their intellectual development, Oberlin in those days achieved.

In my time the College was operated by thirty-two faculty committees. How, under such a scheme, anybody ever managed to give or get an education is a mystery to me. But the whole educational process is still a mystery. We know little more about it than that the traditions and ideals of certain institutions have through the years resulted in consequences moral, social, and intellectual which our country needs now as never before. In the highest rank of these institutions is Oberlin. If Oberlin will adhere to Oberlin's traditions and ideals—if Oberlin, in short, will be Oberlin—the future of our Alma Mater is secure.

# EDUCATION AS A NATIONAL ENTERPRISE

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I WISH this morning to insist upon a paradox. The first half of it is that there is an educational system in the United States; and the second half of it is that the parts of that system should be independent of one another.

There is an educational system in the United States. The separate origin of its various parts has obscured the fact of its existence. We have heightened the impression of its non-existence through that mutual disdain with which we have customarily treated one another. That you have asked the presidents of two privately endowed universities to address you on education as a national enterprise suggests that we here today, at least, realize that our work is interdependent, that our financial interests are identical, and that our problems are the same. In this sense, the sense of joint occupation in a common enterprise, we are all parts of the educational system of the United States.

Our work is interdependent. The universities may develop ideas in higher education of striking symmetry and beauty; they are futile unless they penetrate the public schools. At seventeen, or eighteen, or nineteen, the student is, from my point of view at least, far too old to effect significant changes in his habits and attitudes. The schools may experiment to their hearts' content; their accomplishment must fall short of complete success if they are unable to dislodge the ancient prejudices of universities. Even privately endowed universities have been able to restrict the scope of high schools managed by their own depart-

ments of education through solid indifference to their work and rigid adherence to requirements framed as though they did not exist. There is, moreover, a twilight zone between the college and the high school, the zone of general education. We do not know what to do with it. We shall never find out unless we are prepared to engage in a co-operative attack on its problems. The integration of the elementary school and the high school has resulted in great savings of time and money. Only through similar integration of the high school and the college can the problems of general education be solved. If we can regard the educational system as a unit, we can expedite and direct this process.

Our financial interests are identical. If the schools are cut to pieces this year, the state universities will be next year. If the schools are crippled now, the colleges will be later, either through reductions in their funds or through gross defects in the preparation of their students. If our work is interdependent, the universities cannot without protest watch a major operation performed on the schools which, to judge by its present rate and direction, seems more likely to kill the patient than to profit him or the community. The president of the University of North Carolina has taken a position for which he deserves the thanks of everyone in education. He has said that since the University is part of the educational system of the state, it must receive in this emergency the same financial treatment as the public schools. This position is as sound as it is courageous. In self-defense the universities must defend the educational system of which they are a part.

Undoubtedly, in the hysteria of inflation the schools, like the colleges and universities, did some things that they can now do without. But the things that communities propose to do to them in the hysteria of economy far surpass the wildest aberrations of bull-market days. We hear a great deal about frills. What are frills? Teachers' sal-

aries appear to be frills in some cities. The health of school children is a frill in others. Since night schools are a frill in one community, we close them and throw seventy-five thousand people into the streets. The plain fact is that the schools are under attack because it is easier to get money from them than it is to correct the fundamental iniquities and antiquities of local government. Only a people that had no conception of the place of education in its national life could contemplate the ruin of the next generation as the best remedy for governmental insolvency.

Our work is interdependent; our financial interests are identical; our problems are the same. The present effort of universities to solve their problems is comparatively new. In the flood of money and students that has poured into these institutions in the past thirty years the intellectual processes of administrators have been almost wholly directed to accommodating the students and spending the money. As long as both continued to roll in, we did not have to care very much what we did with them. Now that the flow of both is diminishing, we are wondering about our methods, our standards, our organization, our curriculum, our research work, our building programs; and some people are even beginning to wonder about athletics. The consequence has been all kinds of experiments, studies, and surveys. They have revealed principally how little we know about what we are doing.

The public schools face the same problems for the same reason. The tremendous increase in student numbers, the vast amount of new equipment they required, the money that came in almost unsought—all these things have diverted schools, colleges, and universities from the main issue, which is, What are we trying to do? We must admit that our own inability to answer this question with a unanimous voice, our very divergent views of what we are about, seriously weaken our efforts to enlighten the public and to secure from it the support that education deserves.

What is the place of the private university, the state university, the college, the junior college, the high school, the preparatory school, and the technical institute in our educational system? We can only find out by breaking down the barriers that separate those in charge of these various units. We can only find out by recognizing our community of interest and by facing our problems as the problems of us all. We can only find out, in short, by starting with the assumption that there is an educational system in the United States, and that it is our business to run it as a system for the benefit of the community as a whole.

And, yet, I must at this point insist on the second half of my paradox: the parts of this system must be independent of one another. Because students at different stages require different treatment, separate organizations of specialists have grown up, each designed to care for the special needs of students at a given stage. Each of these organizations requires complete freedom to work out its own program. It must devote itself to meeting the needs of its students rather than to meeting the demands of some other organization.

One reason why there is confusion in universities as to the function of the junior college, the senior college, and the graduate school is that no one of these groups has had this freedom to work out its own program. The tendency is always for the organization above to regard the organization below as merely preparatory to its own efforts. The organization above, therefore, will always seek to dominate the organization below in order to secure students who will fit readily into its machinery. But it must be clear that, as long as the junior college is controlled by the senior college and the senior college by the graduate school, no one of them can make its full contribution to the advance of education in America. No educational institution can flourish unless it is free to determine its own ideals and its own methods of achieving them.

It must follow that the public schools must have this freedom. The forces of experiment and progress latent in them can never be released if they are compelled to think chiefly of meeting the requirements imposed upon them by institutions of higher learning. If one thing is clear, it is that the primary purpose of the high school is not to prepare students for the colleges and universities. By behaving as though it were, the colleges and universities repress the high schools, and to that extent weaken themselves by weakening the educational system to which they themselves belong. The great task of educational administration in America is to take the organization above off the neck of the organization below. Our slogan must be co-operation, and not domination.

The problems of education are more complex and baffling than they have ever been before. The elaborate structure that has been rapidly erected is in danger from misunderstanding without and disagreement within. Much of the misunderstanding without results from the discord within. If we can envisage an educational system in the United States, built on co-operation and not on rigid central control, if we can grant to each organization that independence which its full development requires, we shall illuminate the educational scene for our people and for ourselves, and in the light of a new day perform our common task.

# THE OUTLOOK FOR PUBLIC EDUCATION

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THE depression has presented educators with problems the like of which they never faced before. And it has presented them with them at a time when both their morale and their resources are at the lowest point they have touched in history.

American education has, up to now, been the idol of our people. Ever since the days of the Northwest Ordinance we have thought of it as the foundation of our democracy and the bulwark of our liberties. It was expensive, but it was worth it. The present depression has been the first in which education has been adversely affected. And I have no hesitation in saying that, of all public services, education has suffered most.

I cannot explain this reversal of form. I cannot account for the enthusiasm with which chambers of commerce and associations of taxpayers have clamored for a reduction in the opportunities for their children. Perhaps the schools were attacked because it was easy to attack them and it was difficult to dislodge the politicians who were really squandering the public money. Perhaps it was our own fault. Perhaps we had expanded too rapidly, without bothering to have the people understand what we were doing. Perhaps our organization, our course of study, and our purposes were so confused that laymen could not comprehend them. Perhaps we did not always comprehend them ourselves.

Whatever the cause, the consequence was clear. The minute the cry for the reduction of public expenditures went up, expenditures on public education went down. Nobody thought of revising the antiquated system of tax-

ation. Nobody thought of giving us a chance to present programs of economy. In many parts of the country, if money had to be saved, it was the school money that was saved even if the schools had to be closed. With an enlarged demand for seats in schools new school buildings were postponed. The teachers, few of whom had got rich in the practice of their profession, were of course reduced to penury through the reduction of salaries and the failure to pay them when reduced.

When the federal government began to move against the depression, education was the last thing to occur to it. Indeed, the group which has received the greatest attention from European governments was the one for which our own did least. That group is youth. Upon youth every Continental nation has centered its efforts in the last few years. I do not say that the motives of these governments have always been laudable; they have been anxious to perpetuate their political philosophies and have seen that this could only be done by concentrating on the young. I do say that they have recognized an obvious fact which our people have failed to notice, that the immediate future of our nation depends upon what is done with the young people who have had to grow up during the calamitous years now happily drawing to a close.

An impartial observer would have supposed that the first concern of any country would be its children. Such an observer would have expected our people to insist with one voice upon the maintenance, and even the improvement, of the school system; to insist upon the enrichment of the course of study; and to recognize that the teacher was more important than ever. When the federal government began to struggle against the disaster that was overwhelming us, it was only reasonable to expect it to come first of all to the rescue of the children. On the contrary, for three years the federal government did not lift a finger to help the schools. The first step which admitted the existence of the

adolescent unemployed was taken by the new administration in the creation of the Civilian Conservation Corps. But it never entered anybody's mind that it might be better to send the boys back to school than to send them into the woods.

Now, at last, we have an emergency plan of federal assistance to education for which the administration deserves the gratitude of us all. School buildings are being constructed. Students are completing their education. Teachers are being employed. Adult education and nursery schools are being developed. In seven states the federal government is keeping the schools open, and even the Chicago teachers have been paid.

Of course, the kind of educational program that we must now carry through cannot be sustained without federal aid —and federal aid on a permanent basis. I have been a long time in education, and I have yet to hear a single valid argument against the position that education is a national responsibility. We should regard it as inhuman to let a fellow-citizen starve merely because he was living across the boundary of our state. We have seen no impropriety in letting the children of some states grow up without schools, even though the consequences of their ignorance may be visited on us through the United States Senate and through their vote in national elections. The federal government must assume the obligation to equalize educational opportunity within the nation.

It must do more. It must recognize the fact that education must be one of the fundamental interests and activities of our people. If the Cabinet is representative of those interests and activities, then education must have a place there. The distinguished educator who occupies the Office of Education is a subordinate officer of the Department of the Interior. As such he has no automatic means of communicating the needs of education to the President, the Cabinet, and the heads of the new administrative

bureaus. If the Commissioner of Education had been of Cabinet rank, I cannot believe that federal interest in education would have been so inadequate or so long delayed.

On our part we must understand that, if we are going to receive federal support, we must conform to federal standards. It is not by refusing to conform but by another route that we must find our protection against bureaucracy. When we observe a reaction like that we experienced in Chicago a year ago, in which, in defiance or ignorance of professional opinion, a small group of office-holders undertook to throw the school system back twenty years, we must feel that only through organizing professional opinion can similar destructive operations be prevented in the future. When states pass laws forbidding certain types of teaching, they should bear the weight of organized, expert judgment. The qualifications and practices of teachers, the organization, presentation, and content of courses of study, are not the proper subject of decision by the generality of mankind. Until it can be made clear that education is a profession, that the profession has standards, ideals, and traditions which it is prepared to enforce, education will at intervals be at the mercy of politicians, large taxpayers, and cranks.

The only protection against government, visible or invisible, is in the professional tradition. It is fallacious to assume that government cannot at any time dictate the policies and personnel of education. It can. It has the power. A tremendous outcry from the citizens did not prevent the colossal damage that was done to the schools of Chicago. The history of educational institutions from the monasteries to the German universities shows that it is not the issue of private or public funds, private or public control, that determines their independence. It is the strength of the professional tradition. Where that tradition is strongest, namely, in England, the parliamentary grants that the private universities have received do not

lead anyone to expect that, because of them, the government will attempt to regulate the policies of Oxford and Cambridge.

The absolute necessity of federal support for public education becomes apparent when we look at the task that is now before us. That task is nothing less than the tutelage of the entire population. If we look first at the problem of juvenile and adolescent education, we see at once that the economy of plenty upon which we have entered will require us steadily to raise the legal age for going into industry. One of the things we are in for is the removal of the adolescent population from the labor market. By codes, by the attitude of capital and labor, and eventually, I hope, by the Child Labor Amendment, that population will be prevented from getting work. This palliative of our economic ills is so obvious that it is certain to be applied. Now the adolescent population cannot be transported to penal colonies, however gratifying that might be from many points of view. Therefore it will have to be placed in educational institutions until its members can become self-sustaining.

Although a declining birth-rate may for a time, at least, relieve the elementary schools, the pressure we are now feeling in the high schools and junior colleges will continue and will grow more intense. When three new junior colleges were opened at public expense in Chicago, they were rapidly crowded. The great increases in the enrolments in the Freshman years of public colleges and universities this year are merely symptomatic of a condition which will be with us for many years to come. That condition is clear and simple: the alternative to employment is education. Since we know that there will not be employment for the young, we must see to it that there is education for them.

Contrary to the popular belief, educators have in the past twenty-five years been reluctant to expand and diversify educational opportunity. They have often opposed

the demands of parents and of industry for more courses in more subjects. The so-called "enrichment" of the curriculum, which was characteristic of our educational program up to the depression, was largely forced upon the schools by the public. I predict that as our economic difficulties recede that pressure will be renewed, and rightly so. Our business should be to direct intelligently the educational boom which will shortly be upon us.

That boom will carry us, no matter how we may protest, into a field from which we have long withheld our blessing, the field of adult education. We used to think of adult education as the foible of the philanthropist and the social worker. It connoted to us lectures by somewhat disorderly individuals who were interested in reforming our social, economic, and political system in rather disagreeable ways. I put it to you that we have never thought of adult education as education and that we have consequently declined to accept much responsibility for it.

We know that the shorter day and the shorter week are going to be with us long after the depression is over People may for a time spend their new and perhaps un welcome leisure in sleep, at the movies, or in driving back and forth on the crowded highways, catching glimpses of the countryside between the billboards. It is inconceivable, however, that these forms of entertainment will long satisfy our population. They will demand, and are demanding, some form of occupation which will assist them to a more varied, stimulating, and important brand of activity. They will demand education. And they will demand it of us.

The exclusive preoccupation of the American educational system with the juvenile population is a little ridiculous, and has been beneficial neither to the system nor to the country. The mayor of a great city said the other day that all anybody needed was a grade-school education. That was all he had had. Without debating the merits of

an abbreviated education as revealed in the life and works of this statesman, I beg to point out that his consistent opposition to education may perhaps be explained by the fact that he thinks of it as something he endured in childhood, like the mumps, measles, chicken pox, or whooping cough. Having had it once, he need not, and indeed cannot, have it again. Our exclusive preoccupation with the juvenile population has divorced us from the sustained interest and support of adults.

We are, then, face-to-face with a tremendous task. We must accommodate the youth of the nation up to their eighteenth, or even their twentieth, year. There is nowhere else for them to go. We must undertake the education of adults, although the field is uncharted and our experience is almost nil. All this we must do when our resources are depleted, when our plant is inadequate, when our spirits are low. It is bad enough to be in education at all, for it is a mysterious business. And this mysterious business is carried on by people grossly underpaid, in political units which have proved the most unreliable in the country, subjected to the gravest social and economic hazards. We know, too, that when our people have recovered from their hysteria they will turn to us again and demand that we solve their problems for them. They will insist that we bring up their children, because they cannot be bothered and frequently cannot be trusted to do it themselves. They will insist that we tell them how to spend their leisure hours and that we stay with them while they are spending them. All these obligations we must assume because the fate of our country depends upon the intelligence and vision with which they are carried through. We must have faith in education still.

We cannot hope to fulfil the wistful wishes of America with our present educational scheme. It has not stood the strain already placed upon it. It will not stand the strain it will meet within the years to come. The naïve faith which our ancestors had in the processes of education can-

not survive tremendous expansion of facilities followed by dreadful economic collapse. A more reasoned confidence is needed to maintain the structure in times like these. If the American people are to understand education, we must first understand it ourselves.

Henry James in the Preface to *What Maisie Knew* discussed at length what he called "the constant force that makes for muddlement." He pointed out that the constant force that makes for muddlement afflicts all activity all the time. We cannot hope that education will escape its influence. All we can do is to resist it to the end. We must clarify for ourselves and for our fellow-citizens the purposes, the organization, and the content of education.

The standard organization of education is still an eight-year elementary school, a four-year high school, a four-year college, and three years of graduate work. The fact that when we describe the system we do so in terms of time is significant. We do not think of defining it in terms of the subject matter or purpose of its units. And yet it is entirely possible that the subject matter and purpose are more important than the period of incarceration. We are not really interested in learning how long a pupil has been in school. We want to find out what he knows and what he can do. Nor can we expect to satisfy this desire by counting up the number of hours he has attended classes in a certain subject. We know that merely sitting in a room where a topic is being expounded does not necessarily lead to comprehension of it. We cannot even say that the numerical or literal grades presented by the pupil give us much light on his education. They may show that he has a good memory, that he has attended regularly, that he was polite to his teachers, or that he had discovered that by studying them he might avoid studying anything else. Furthermore, a list of miscellaneous credits in everything from stenography to solid geometry or from salesmanship to Greek does not give us much understanding of the in-

tellectual level to which the pupil has attained. To take a course, memorize it, take an examination given by the teacher, pass it, forget it, and go on, seems to be the regular cycle of student life. We may gather from these facts that the object of the system is to develop memory and the ability to understand those peculiar adults who have become teachers.

Certainly we must have methods of measurement. The question is whether we cannot hit on something that instead of preventing us from educating the young will assist us in doing so. We should set up goals for the student to reach. His manner of reaching them is immaterial. A system of general examinations to be taken by the student when he is ready to take them, and given, if possible, by external examiners, seems to me to offer the best program of measurement. Under such a system the period of incarceration is irrelevant. The question is whether the student has mastered the material. Since the material covers more than one course, it is impossible to create the delusion of mastery by mastering the teacher's habits or by memorizing little bits of information. The painful accumulation of credits ceases to be the characteristic curse of education.

It is clear, however, that the question of measurement leads at once into questions of organization and subject matter, as can be seen as soon as the question is asked, How do you know what and where you wish to measure? To answer this question, you must know what the levels of education are and what you are attempting at each one. Now most people feel, I am sure, that the elementary school is a perfectly obvious and obviously perfect institution. Its task seems to be clear; it is to prepare pupils to go on into the high school. Yet the eight-year elementary school of Germany on which it was based was terminal. Here it was to be preparatory. Its origin determined at first its course of study and still determines its duration. It is now clear that primary work can be completed in six years.

The purpose of the high school has been even more confused. Is it to prepare pupils for life or for college? Since most high-school graduates do not go to college, the high school is obviously wasting its time if it acts as though they did. Yet, in many places the high-school curriculum is still constructed to meet collegiate requirements whose chief distinction is their rigidity, antiquity, and remoteness from the real world.

The high school cannot be regarded as preparatory to college. Current economic and social developments mean that it can no longer be regarded as terminal. The community must extend the period of public education which the ordinary youth is expected to enjoy by at least two years. This will be necessary, as we have already seen, because the ordinary youth will not be able to go to work until his eighteenth, or even his twentieth, year. The terminus, therefore, of public education will be advanced from about the end of the Senior year in high school to about the end of the Sophomore year in college.

You may say that this simply means that we must multiply existing junior colleges, expecting the majority of our adolescents to attend them. Such a suggestion compels us to look at the situation in junior colleges. It is not clear what the junior college is. In many places it seems to be a continuation of high school. In others it looks like an imitation of the first two years at the state university, which is usually the weakest section of the curriculum of that institution. Since 50 per cent of its students leave it every year, the junior college has difficulty in constructing a coherent program. It is, therefore, ambiguous in aim and unsatisfactory in organization.

If we reconsider the system of public education from the elementary school through the junior college, we see that the normal child should be able to complete elementary work in six years. He should then enter a secondary school, which we may as well call the high school. This unit would

be definitely preparatory and not terminal. Its work should be completed in four years. Some pupils might require more time, some less. The average pupil would come to the end of his secondary, or high-school, education at sixteen. He would then enter one of two programs which should occupy four years, more or less. One of them should be concerned with general education. The other should provide technical or homemaking training of a sub-professional type for those who do not want, or would not profit by, a general cultural education. In many places these programs can be administered most effectively by two institutions. In that case the one administering general education might be called a college and the one administering technical education might be called a technical institute. In places where both programs are under the jurisdiction of one institution, I see no objection to calling the whole enterprise a college.

Such a scheme of public education is adjusted and diversified to meet the conditions of the present day. Of course, it cannot serve its purpose unless the colleges and technical institutes proposed are numerous and local. They must be numerous and they must be local because they will be instruments of popular education, not asylums for the few. Each unit in the system has a definite task. Its accomplishment can be tested in terms of that task. Its administration, its faculty, and the public can understand what it is trying to do and decide to what extent it is succeeding.

Where does all this leave the colleges of liberal arts and the universities? They exhibit a confusion even greater than that of the rest of the system. The college of liberal arts is an extraordinary mixture of specialization and advanced study, of general education and university work. It is inevitable that many of these organizations must abandon their Junior and Senior years, joining their first two years to the last two of high school. They will thus become colleges of the type that I am proposing, devoted to general education, sub-professional technical training, or both. The

strongest of them may take another direction. They may devote themselves to non-professional specialization in arts, literature, and science. This might take the shape of a three-year curriculum beginning with the Junior year and leading to the Master's degree. I am clear that such work may be better done in a strong college than in a university, which from the Junior year onward should be dominated by scholarly and professional interests.

The university is today a perfectly amazing institution. It does everything and will do it for anybody. General education, professional education, non-professional specialization, research, and technical work are carried on in a highly indiscrimate and disjointed manner; and the whole is seasoned with the spice of college life. The result is that nobody can tell you what a university is, and any university can claim to be doing a wonderful job because nobody knows what its job is or how to tell whether it is doing it. The only possible answer to these questions is that a university should devote itself to scholarly and professional work; its task is the advancement of knowledge. Since education is a branch of knowledge, a university may conduct an experimental college or institute of the sort I have described in order to provide ideas and information to those laboring in the fields of general and technical education. If a university does not wish to do this, and many of them are not equipped to do it, it should abandon its Freshman and Sophomore years. Thus the university may be relieved of college life, of the burden of thousands who go there because they do not know what else to do, and may limit itself to research and to the education of research workers and professional men.

It is here, at the university level, by which I mean the beginning of the Junior year, that the principle of selection should operate, and operate with great severity. We have seen that we cannot exclude students below the Junior year. Instead of selecting the students we want below the

Junior year, we shall have to construct the institutions they need. The principle to be applied below the university is the principle of differentiation. We must discriminate among the students in order to find the institution adapted to their needs, not in order to keep them out of education altogether.

But at the opening of the Junior year in college we can take a stand. No student is entitled to proceed at public expense beyond this point unless he can demonstrate that he has the interest and ability which scholarly and professional work requires. He is not entitled, as a matter of right, to residence in the academic shades merely because he does not wish to labor in more sordid surroundings or because his parents wish to avoid the responsibility or monotony of having him at home. The state has no obligation to maintain a university as a picnic ground for the children of citizens who, merely because of this ancestry, now claim the right to disport themselves on the campuses of the nation and to receive the Bachelor's degree for doing so.

When we turn from the problems of juvenile education to those involved in educating adults, we find that the numerous local colleges and technical institutes which I hope may arise may supply the necessary institutions to carry on the work. They should be centers of adult education.

These institutions will find, I think, that there has been a change in the kind of education which interests adults. If current experience gives us any inkling of the future, we can be reasonably confident that what they will want is not vocational instruction (how to be a better bookkeeper, for example) but what we call general cultural education, education which fills in the gaps left by formal schooling or develops artistic and literary leanings submerged by formal schooling and the necessity of earning a living. In the down-town branch of the University of Chicago there is a steady trend away from vocational subjects to those which are supposed to be of general cultural value.

So much is this the case that I think it worth while to

point out that there are dangers, as well as advantages, in arousing professional educators about adult education. We are used to thinking about institutions and curricula. But adult education is in an experimental stage. It offers us many new devices, like the radio and the motion picture, with which we are relatively unfamiliar. It is an area, too, in which informal, spontaneous activities—activities which we may regard as extra-curricular and frown upon as such—may be more rewarding than highly organized instruction. In dealing with adult education we must regard the school, not as a place where classes are taught, but as a center of community life, reflecting the community's interest in music, art, the drama, and current affairs, as well as in what we have been accustomed to think of as "education."

"In all educational endeavor the basic question is, What are we trying to do? At present a group of able educators in New York are attempting to convince us that what we should be doing is preparing our pupils to bring about a new era of collectivism. According to them, every child born into this world alive must be not either a little liberal or a little conservative but a little collectivist. If he escapes being born in this happy mold, it is the business of the schools to remedy the oversight of nature and usher him into active life fashioned after the true collectivist pattern. I am not clear as to what that pattern is; doubtless that will be progressively revealed to us.

Now, I take it that as far as the public schools through the junior college are concerned they are trying to help their pupils to be self-sustaining and to be good citizens. Or, as Aristotle put it, "The citizen should be molded to suit the form of government under which he lives." Does this mean that the teacher and the school can do nothing to improve the national life? The answer is unequivocally no. The good citizen is not necessarily the one who always votes for the party in power. The good citizen has some understanding of the society in which he lives,

and, as Jefferson put it, carries his knowledge with him to the polls. The first duty of the school, therefore, is to see to it that the pupil understands the society in which he lives. We all know that we are doing a miserable job in this connection at the present time. We have not even the materials through which a comprehension of the development and current state of our society may be communicated to the young. Moreover, the object of education at higher levels will not be primarily to enable the student to earn a living or to adjust him to the political environment. Free from these obligations, the teacher and the school may devote themselves to developing the intellectual powers of the student. We must remember that it is through the intellectual virtues that the statesman orders means to ends and achieves the common good. The free and independent exercise of the intelligence is the means by which society may be improved. Proficiency in that exercise should be the crowning achievement of the American educational system.

This free and independent exercise of the intelligence is of the essence of the professional tradition, and it is now in dreadful danger throughout the world. In our country we are committed to the principle that the gains of civilization shall be mass gains, diffused throughout the population. It is inconceivable that the United States will ever depart from this ideal. But the methods of achieving it at any given moment must be determined by trained intelligence and submitted to an informed and understanding people. Without propaganda, without adherence to one ism or another, the teacher may develop through the school that universal comprehension and that individual leadership which the national life requires.

# THE SHEEP LOOK UP

MY TEXT is taken from a line of Milton: "The sheep look up and are not fed." When we survey the accomplishments of education in this country in the one hundred fifty years since the Northwest Ordinance, we may congratulate ourselves and our predecessors on what has been achieved. Nothing like it has ever been seen anywhere. We have wrestled with a quantitative problem of unparalleled dimensions. In an incredibly short time we have put all the children in school, and we are keeping them there for longer and longer periods. We have built up state universities and state teachers colleges and public junior colleges, accommodating young people long after the European allotment of free education for all has been surpassed. Now we have taken on the burden of adult education, one which will consume more and more of our time and energy as the years go on.

Merely the housing, equipping, and staffing job of the American educational system must fill the beholder with awe. Its custodial job alone is enormous. In depressions, at least, education is probably worth all it costs if it keeps adults occupied and children off the streets. But American educators have not been content with such negative and partial views of their function. We have tried to find out how to deal with young people economically and effectively. We have studied buildings, finance, and administration. We have worked on motion pictures, radio, and teaching materials. We have done a good deal with examinations. We probably know more about how to handle great masses of pupils than anybody in the world.

Yet the sheep look up and are not fed. The quantitative

problem has been too much for us. We have not had time to think about the quality of our students, our teachers, or our course of study. Nor do I see any relief from the quantitative problem in the future. Adult education means that we shall have millions of new students and shall have to have thousands of new teachers to teach them. The advance of technology will mean, even after the depression is over, that young people will not be able to get jobs and will have to be taken care of by us. This will mean, in turn, a great expansion of the high school, the technical institute, and the junior college, and a great expansion of the staff and plant essential for them.

Only at two levels is there even temporary relief in sight. A declining birth-rate may for a time, at least, reduce the population of the elementary schools. But the evidence here is quite unclear; and the prediction of sociologists that the number of our people will be stationary by 1960 may not be verified.

The other point at which the volume of students may be reduced is the university, by which I mean the beginning of the Junior year. The attitude of the public and of the universities themselves should result in limiting university training at public expense to those who seem likely to profit by it. Since we may expect to see a junior college or a technical institute wherever there is a high school today, we may expect the public to revolt against the great expense of sending any boy or girl who wants to go through the highest degrees at the state university. The real costs of education appear at the beginning of the Junior year in college. For work beyond that point specialized courses, small classes, and elaborate equipment are required. All these things are justified for students who have the interest and ability that scholarly and professional work demands. The taxpayer cannot afford them unless the students have this interest and this ability.

The universities, too, are now abandoning the foolish

attitude that more students are needed in order to obtain larger appropriations. The added cost of added students is far greater than any added appropriations obtained because of them. And the social and athletic character that large numbers of students have given the universities has done more than most things to prevent them from being universities and to debase the higher learning in America.

There are some signs, too, that the universities may gradually wipe out those competitive duplications which can best be described as a transfer of the football spirit to education and research. Some universities seem to have bought books merely in order to say that they had more books than the institution next door. Others have started departments simply because the institution next door had them. The present wave of enthusiasm for departments of public administration, forestry, housing, and aeronautics will lead to useless expenditure of the taxpayers' money by spotting competing enterprises all over the map, when, from the educational point of view, two or three centers are all that the country requires. The association of Governing Boards of State Universities has now taken this matter in hand. The result should be a new emphasis on quality and a restriction of the scope of the universities to what each of them can do best.

Nevertheless, these ameliorations of the quantitative problem at the elementary and university levels, even if and when they are realized, will be but slight assistance to the educational profession or the taxpayer. They will be more than matched by the vast increases in the high school and the junior college, which, though less expensive than the university, are far more costly than the elementary school. The Chicago School Board, as a measure of economy and a matter of principle, abolished the only junior college in the city two years ago. Last fall, one year later, they were compelled to open three junior colleges in place of the one they had abolished. We may confidently await

the day when every young person may, if he wishes, stay at home and complete the work of the Sophomore year in college, and may do so if he wishes at public expense. Graduation from the local junior college will be as customary as graduation from the local high school is today.

If, therefore, the educational profession has not had time to think much up to now about the quality of its students, its teachers, or its course of study, there is little reason to expect that it will have more time in future. Only by deliberate recognition of the importance of these problems and persistent attention to them can we hope to solve them. And only by solving them can we hope to secure the consistent support of the American people.

As we face these problems in turn and examine first what we have done hitherto about the quality of students, we see that most of the thinking that has been done about them has been directed to keeping them out of education on the ground that they were unlikely to make passing marks. The whole College Board development has had this object. Even if the College Board Examinations were successful in selecting students, which they are not, they are useless in our present situation. We see now that we shall not be able to keep students out of education—not, at least, until the Junior year in college. In the future we shall not be able to select the fit and exclude the unfit below that point. Instead, we shall have to discover or create the educational activity which is adapted to the needs and capacities of the individual. Until industry is prepared to absorb the individual, he will have to be engaged in some kind of educational activity. The future is certain to see various kinds of institutions, or at least various courses of study, below the Junior year in college, some of them designed to meet the needs of those whom we have discarded in the past as unworthy of our efforts.

Of course, they were not really unworthy of our efforts—at least, I do not think they were. Education is an act of

faith; and it is an article of my faith that no one is ineducable—no one, that is, above the grade of moron. There are two classes of students for whom we have never made provision, those who could not read and those who were not interested in reading. In the high school of the University of Chicago, which has a highly selected student body, not less than 10 per cent of the pupils are functionally illiterate. This percentage rises to about 50 in a metropolitan high school. These pupils can read words; but, aside from the words in the less difficult parts of the newspaper, they have no idea what they mean. An overlapping group, and an even larger one, is composed of pupils who will not learn from books even if they are able to. They may be interested in mechanics, in chemical reactions, in the behavior of animals; they are not interested in reading, or at least in the kind of reading that we have been giving them.

This reading has been, broadly speaking, the kind that New England colleges have expected of the entering Freshman for many years. The fact that these pupils were not going to a New England college, or indeed to any college at all, has not deterred us from acting as though they were all bound for the literary delights of a classical education. Naturally, they have failed. They have become the truants, the delinquents, and the young criminals. And we have consoled ourselves with the thought that they were stupid. They were not stupid. They could not fit into an educational scheme that was constructed with other aims, for other students, in other days.

The educational profession has done a good deal of scoffing at the Civilian Conservation Corps. It is easy to say that some of the five hundred thousand young men in that organization should, since they were of school age, have been financed in school. They should. But it is also true that the CCC results in part from our own failure to deal with functionally illiterate and hand-minded boys. If they had stayed in school, we could have done little for them.

At present it would be highly beneficial to all concerned if we could arrange a trade and send the hand-minded boys now in school to the CCC in return for the book-minded ones now in that organization.

I must admit that I do not know the answer to the problem of the functionally illiterate and hand-minded boy. What I am asking for is recognition of the problem and a change in our attitude toward it. Perhaps the work now being conducted by the Office of Education in the CCC and the experiments that will be tried there by the new Youth Commission financed by the General Education Board may give us some inkling of what the answer is. When we find it, we must hasten to put it into effect, for the greatest waste and the greatest failure of public education is at this point.

When we turn from the quality of students to the quality of teachers, we find other reasons why the sheep look up and are not fed. It is a gross but suggestive exaggeration to say that we do not know how to teach the three R's or what to teach beyond them. Anybody who has read dissertations for the doctorate or suffered through the examinations of law students will agree with a sigh that we do not know how to teach reading and writing, and will be ready to assume that we have made a like failure of arithmetic. When we look at the results of our instruction in the fine arts, in the languages, in composition, in natural science, and in the social sciences and history, we must admit that our people cannot write or speak their own language, to say nothing of any other; that they think of science as discoveries announced on the front page of the newspaper; and that they have little appreciation of the arts. We must admit, too, that the current level of discussion of economic and political questions reflects little credit on our instruction in history and social science.

However diversified and expanded the curriculum below the Junior year in college may be, the core of it must be a

good general education. There are certain special difficulties we must face, of course. We must find out how to communicate a general education to those who cannot read. We must modify it for those who require technical training of a sub-professional type. But a good general education must be the center or basis of every educational program at every level. We know that such a thing does not exist today. We know that what we give instead is a series of short unrelated courses composed of a smattering of miscellaneous facts which leave the student uneducated and, except perhaps in the spasmodic exercise of his memory, untrained.

In the preparation of teachers we are thus involved in a vicious circle. The teachers are badly educated. They educate their students badly. Some of the badly educated students become badly educated teachers who educate their students badly.

We have tried to improve the quality of our teachers by working for higher salaries, greater security, and academic freedom. All these things are important. In rural counties in Kansas an elementary-school teacher's salary is eighty dollars a month. It is laughable to hear Americans talk about their devotion to public education and then see them resist any increased expenditure upon it, and particularly any expenditure on teachers' salaries. Until adequate rewards are offered, we cannot hope for adequate teachers.

Nor can we hope for adequate teachers as long as teachers may be hired and fired for any reason or for no reason at all. I used to be opposed to permanent tenure for university professors. I thought it was an invitation to mediocrity and had a debasing effect on salaries. I am now convinced that the greatest danger to education in America is the attempt, under the guise of patriotism, to suppress freedom of teaching, inquiry, and discussion. Consequently, I am now in favor of permanent tenure, with all its drawbacks, as by far the lesser of two evils. We cannot ex-

pect to get good teachers without decent salaries and security.

Nor can we expect to get good teachers unless they are free to teach. I know, of course, that everybody in this country knows all about education. Everybody has either had an education or not had one. If he has had one, he knows what was wrong with it; if he has not had one, he knows what is wrong with everybody else's. No American ever breathed who cannot and will not tell any educator or any group of educators exactly what and how to teach. But if this deplorable national characteristic is allowed to run riot, nobody with any intelligence or independence will join the ranks of the teaching profession. Particularly is this the case if his behavior and opinions outside the classroom are to be made the basis of his continuance in, or expulsion from, his post. The general assumption nowadays seems to be that when a teacher becomes a teacher he surrenders some of the rights which the Constitution guarantees to everybody else. Freedom of thought, freedom of speech, freedom of assembly—these are in some mysterious way taken away from him. He is a teacher. As such he cannot do or say outside the classroom, to say nothing of inside it, anything which is objectionable to the most numerous, the most powerful, or the most vocal group in his community.

To add insult to injury, a dozen states have reflected on the patriotism of teachers by requiring them to take an oath to support the Constitution. Has anybody ever heard anything against the patriotism of teachers which would justify singling them out for this distinction? On the contrary, nobody who has had anything to do with education will hesitate to assert that teachers as a whole are the most earnest, hard-working, and loyal group in the entire country.

But, it is said, teachers have great influence on the young; and we must be sure that the young are under

proper care. Very well. If we are to insure the patriotism of those who have influence over the young, let us do so. Let us begin with parents and have them take an oath to support the Constitution. Let us include newspaper men, and especially the designers of comic supplements. Let us line up all the movie stars. Let us insist on an oath of allegiance from radio performers. If the teachers are to take an oath, Amos and Andy should be required to salute the flag and sing the "Star Spangled Banner" twice a day.

No, there is nothing rational about the present excitement over radicalism in the schools. It is a hysterical reaction from the depression. Somebody has to be blamed or criticized when things go wrong. The teachers are easy marks. Why should they take an oath? Why, because they can be forced to take one and other groups cannot. All over this country when there was a cry for reduction of public expenditures, school expenditures were cut first and deepest. The reason was the same; other groups spending public funds were strongly intrenched. It would have been difficult and unpleasant to dislodge them. School expenditures could be reduced with only a feeble outcry from disorganized teachers and scattered parents.

If we are not to pay decent salaries, if we are not to give some sort of security to the teacher, if we are to tell him in detail how and what he is to teach, if we are to deprive him of his rights as a citizen, we may abandon now our hope of improving the teaching profession and hence the education of our children. Only spiritless drudges will teach on terms like these. Salaries, security, and freedom will not make a good educational system. But we can never make one without them. They are the indispensable prerequisites to any development of American education.

None of them, however, will supply the fatal lack of an educated teaching staff. Nor will that gap be filled by all our splendid achievements in the realm of administration, organization, and finance. The best paper scheme carried

on in the best building in the best organization with the most up-to-date materials is nothing in the hands of callow and uncultivated teachers.

Most of the argument about teacher-training is beside the point. The argument revolves around the question whether a prospective teacher should take a lot of courses in the school of education or take a lot of courses in the subject-matter departments. The answer is that the teacher should understand his subject and should understand education; but, first of all, he should himself be educated. He should have a good general education. He should then have a mastery of the ideas in his chosen field, which the requirements of the schools and of common sense suggest should be a broad one. He should have a grasp of what the departments of education and psychology have to communicate about the theory of learning. But, counting courses and writing exercises euphemistically called "theses," either in education or in subject matter, are useless without, first, a general education and, second, a radical revision of the course of study both in education and in the subject-matter departments. And that revision should be designed to transmit to the student the intellectual content of the subject instead of its trivial details.

You will have long since observed that the refrain that runs through these remarks is the insistence on a good general education. We must develop it for all students; it is especially important for students who are going to be teachers. And we are discovering, too, that it is the answer to the question of adult education. In England the Workers' Educational Alliance has 65,000 adults enrolled in its classes. Eighty-five per cent of them are taking courses which have no vocational tinge whatever. These laboring people are trying to get a general cultural education. When the University of Chicago started to offer courses for Freshmen and Sophomores which were intended to amount to a general education, it found that it was these

very courses which the adults in the University's afternoon and evening classes were most anxious to have. If we can find out what a general education ought to be, we can solve the most pervasive and ubiquitous problem of education.

But before tackling this question perhaps we ought to decide at what point a general education may best be offered to the young. I think we shall find that the four years between the beginning of the Junior year in high school and the end of the Sophomore year in college constitute the logical period for this type of educational experience. Everywhere else in the world, in every country except America, general education is the primary object of the school system at this age level. The practice of other nations suggests that here is a natural social, biological, and intellectual unit.

We see, also, that the creation of such an educational unit might make our whole program more intelligible. The purposes of both the high school and the university, now befogged by the accidental complexity of our system, would be clarified and corrected. The high school would prepare all students for general education; the university would be limited to those who had demonstrated in the period of general education that they were capable of scholarly and professional work. The great mass of students would end their formal education at the end of what we now call the Sophomore year in college. Since American students are the most degree-conscious in the world, except the Chinese, it may be necessary to grant the Bachelor's degree at the end of the Sophomore year in order to induce them to leave us. This arrangement is desirable anyway, for the Bachelor's degree, which now stands for nothing but four years in college, might thus be made intelligible by representing a sound general education.

We should see to it, of course, when we know what a general education is, that arbitrary time requirements do not affect our decision as to whether a given student has

acquired one. We should formulate examinations designed to discover whether the student has a general education; we should permit him to take those examinations whenever in his opinion he is ready to take them, no matter how long he has been in school or what methods he has used to educate himself. Thus we could break up the lock step of the credit system and succeed at last in adjusting education to the capacities of the individual.

What do we mean, then, by a general education? In the first place, we do not mean scholarly or professional training. What we are talking about is a program for all students, for the whole of American youth. That program may and should serve as the basis for professional or scholarly study. But that is not its object. Its object is to provide the kind of education that every citizen should have.

In the second place, a general education has nothing to do with vocational training. This is not to say that those who have had a general education should not and would not be assisted by it in the business of earning a living. The question is one of method and one of emphasis. I believe that vocational emphasis and vocational method lead neither to education nor vocational fitness. It is paradoxical, but true, that the best practical education is the most theoretical one.

The University of Minnesota asked thirty-seven industries in the Twin Cities what specific training they wanted high-school boys to have if they were going to work for them. The whole thirty-seven unanimously replied that they wanted them to have no specific training at all. The machines the schools could train them on were already antiquated. The teachers were more antiquated still. The industries themselves could train the boys on the machines actually in use in about two weeks.

Our experience in professional education is illuminating. In engineering the usual program has been two years of theoretical work followed by two years of detailed instruc-

tion in some vocational field. If you elected steam turbine design, you spent two years in doing nothing but designing steam turbines. If, when you graduated, you had to go to work making light bulbs for the General Electric Company, you did so in the disturbing consciousness that two years of your engineering education had been thrown away. If you had spent the last two years, as well as the first two, in the fundamental sciences, you could have worked out your own formulas for either steam turbines or Mazda lamps as necessity required. The whole trend of engineering education is now away from vocational courses and towards increasing emphasis on physics, chemistry, and mathematics. The best practical education is the most theoretical one.

Education is not a substitute for experience. It is preparation for it. There is no substitute for experience. The way to get experience in a specific activity is to engage in that activity. Thus, we are likely to see in professional education an extension of the principle of internship that has worked so well in medicine. Even the law schools may eventually abandon the attempt to prepare students for the practice by putting them through little fake experiences in the classroom and in moot courts and may institute a system of interning law students under practicing lawyers after a sound and careful education in the theory and principles of the law.

In these examples we may discern the dangers in the slogans of the progressive educators and the sociologists. The progressive educators with a capital P have made great contributions to the method of education. They have shown us, as Plato suggested long ago, that we can and must free the student from arbitrary restrictions on his way of educating himself. Thus they have cleared away obstacles to giving and getting an education. They have freed the student so that he may get an education if there is one to get; they have freed the teacher so that he may give an education if he knows what to give. But the serious, the

difficult, the important question about education is the question of content. Assuming that you have sound methods, so that you can actually help the pupil to get an education, what is the education that you are going to help him to get? The ideas that the progressive educators have had about content have been either misconceived or misapplied.

The progressive educators say that the object of education is to fit the child for the contemporary scene. The sociologists say it is to adjust the student to his environment. Both slogans contain elements of truth. But the first danger into which they lead us is that of preparing students for the *status quo*. That becomes the scene for which we fit our students; that becomes the environment to which we seek to adjust them. But we have no idea whether the *status quo* or some other status will confront the student when he is graduated. Efforts to fit him for the *status quo* may merely succeed in unfitting him for the actual situation in which he will have to live.

Another difficulty with the slogans of the progressive educators and the sociologists is that they are likely to lead to a course of study composed almost wholly of current facts. In the effort to fit the student for the contemporary scene he is crammed full of miscellaneous information which he is expected to regurgitate on the examinations. The facts of science and of history, unrelated and unassimilated, serve simply to bewilder the student wandering through the mazes of this present world. He does not understand them. They have little meaning for him. Until he forgets them, as fortunately he does soon, they may give an air of erudition to his conversation; they have no effect upon his intellectual development. And the consequences to education of framing such a course of study are nothing short of horrendous. My distinguished friend and colleague, Professor Ogburn, has suggested that since the mass of our information is increasing so rapidly, we shall

have to prolong adolescence at least until age forty-five in order to have time to pour it all into the student.

Lately a new school of progressive educators and sociologists has arisen. They appreciate the inadequacy of a curriculum composed of lots of information about the contemporary scene. They propose one, instead, composed of lots of information about the scene they think the pupil will face when he emerges from school—a scene not contemporary but future. They have gone so far as to say that they know what kind of scene the pupil is going to face: it is one dominated by what they call "collectivism." This program seems to me even worse than the one that springs from John Dewey and the earlier progressives. It has all its defects and, in addition, is egregiously conceited. It implies that its sponsors can tell exactly what kind of social order the child now from one to sixteen years old will have to fit into in the next two to eighteen years. With deference to the learning and ability of these gentlemen, I do not believe that anybody knows what the social order is going to be two to eighteen years from now. My own impression is that within twenty-five or fifty years we shall be about where England is today. Whatever England is today, it is certainly not collectivist. But, whatever I think it is, I should not dream of recommending a course of study based upon my opinion, for that opinion hardly rises above the dignity of a hunch.

Nor is the object of general education the development of personality or character. We trust that an integrated personality and a rugged character may result from it. But, if we place personality and character before us as the aim of education, we shall get neither personality, character, nor education. Character is a by-product—a by-product, as Woodrow Wilson used to say, of hard work well done. The courses in character and personality that I have heard about seem to me calculated to produce in the student a burning desire to commit the most outrageous

crimes. The moral virtues are habits. The environment of education should be favorable to them. But only a diffused sentimentality will result from the attempt to make instruction in the moral virtues the object of education. And, in addition, resources that might go into intellectual training will be lavished on athletics, social life, and student guidance, a kind of coddling, nursing, and pampering of students that is quite unknown anywhere else in the world.

If the object of general education is not scholarly, professional, or vocational; if its primary purpose is not the development of character or personality; if it should not be composed of current information about the *status quo* or imaginary information about the future, what is its object and of what should it be composed? Clearly, the object of general education is the training of the mind. Clearly, too, the mind should be trained for intelligent action. Or, to put it another way, the object of general education is to produce intelligent citizens. Facts, data, and information, present and prospective, cannot be ignored. But the emphasis must be on the training of the mind. Facts, data, and information should be used to exemplify and enforce the principles upon which intelligent action must rest.

Such a program of general education proceeds on two assumptions: First, it assumes that everybody has a mind and that we must find out how to train it. Second, it assumes that it is a good thing to train it. Certainly I should be put to it to argue that a trained mind will result in a large income. I have no difficulty in holding that it will result in a happy and useful life. It will result in benefit to the individual and to the community.

It will do more. A program of general education resulting in trained minds will facilitate social change and make it more intelligent. The educational system cannot bring about social change. It cannot work out and impose on the country a blueprint of the social order desired by the teachers colleges. But the educational system can facilitate

social change; it can make it more intelligent. A program of general education which is based on ideas, which leads the student to understand the nature and schemes of history, to grasp the principles of science, to comprehend the fine arts and literature, and to which philosophy contributes intelligibility at every stage, is the kind of program that we must now construct. It may seem, at first glance, remote from real life, from the facts, and from the social order. On the contrary, if we can construct it, we shall find that it may give us at last a land fit to be free.

I realize that the suggestions I have made are both vague and violent. What I have been trying to do is to hold before you the dazzling vision of millions of young Americans receiving an education adapted to their needs at the hands of teachers who are truly educated themselves. This is the goal before us. Only if we can achieve it will the sheep, when they look up, be fed.

# THE Y.M.C.A.

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MY SOLE qualification for addressing you this morning is a very hot summer spent as assistant membership secretary of the Cleveland Y.M.C.A. At the conclusion of that experience I chose to join the army. And yet those were the palmy, the halcyon days. The Association had what seemed to me a magnificent building with facilities that looked to a boy from the country like those of a splendid club. It had a large staff; so large that most of the members of it found it possible to escape the heat by lingering in the swimming pool or attending the baseball games. I asked myself then what the Y.M.C.A. was for. As far as I could see, it was providing decent and respectable accommodations for young men. It was conducting some classes; I do not know how effective they were. Certainly at that date, or at least that summer, its activities seemed to be largely recreational and athletic.

This is an unfair picture. I was eighteen years old. It was summer time. Because of my youth and because of the season, I could expect to gain very little insight into what the Y.M.C.A. was actually doing. I mention that summer only to explain to you that, in spite of my father's very close connection with the movement for many years, in spite of the very large number of my friends who have played a prominent rôle in it, and in spite of numerous personal courtesies that I have received from the organization, I have for fifteen years been slightly disturbed about the Y.M.C.A. I gather that you are somewhat disturbed about it too.

It is customary to attribute the prevalent mood of heart-

searching to the depression. In large measure this is justified. When everything is booming, we do not bother to scrutinize very carefully what we are doing. Universities, for example, will take new money and spend it on new men and new departments without asking themselves whether the old men and the old departments might not be assisted first of all. Nevertheless, although the depression may be the occasion for self-criticism, the plans that result from it should be long-term plans, and not merely short-run devices to tide us over a financial emergency. The questions that I propose to ask about the Y.M.C.A. are questions that could have been asked in 1917 and doubtless were being asked at that time. The financial situation serves merely to make them more pressing and to induce people to join in the effort to find the answer to them.

The fundamental problem that confronts any organization at the present time is the problem of clarification. Any permanent institution sees the world change about it and must, sooner or later, attempt to determine whether those changes have rendered its own activities less useful or even useless. If we can determine analytically the function of the Y.M.C.A., subsidiary problems will settle themselves; we can test the performance of the organization and suggest its future. And in the first place, I should observe that the Young Men's Christian Association is not a business. It is not an investment trust or a bank or a hotel company. Its investments, its property, its hotels can be justified only as assisting it to carry out its main function—whatever that may prove to be. If we are not yet in a position to affirm what the function of the Y.M.C.A. is, we are at least in a position to deny that it is a business. Consequently, emphasis on the business aspects of the organization is a false emphasis. Whatever values the Association was formed to propagate, they were certainly not property values. Laymen, and particularly those who become members of boards of trustees, quite naturally think in terms of

the tangible assets of the organization. They easily understand these things. It is not surprising that sometimes they seem to regard these things and the preservation of these things as the sole object of the institution. It is the perpetual task of professional leadership to direct the mind of the public and of boards of trustees to the real function for which such institutions were established. This problem is particularly serious now and has been for the past three years. Professional leadership must demonstrate to lay boards that what is "sound" finance in business may not be sound in philanthropic activities. It must insist upon the maintenance of the excellence of the institution and present that ideal as a foil to the constant insistence of the business man on the conservation of assets.

The Y.M.C.A., like the universities, is now afflicted with large properties. The operation of those properties under present conditions is a task of the greatest difficulty. The temptation is strong to think only of the property, not of the purposes it was accumulated to serve. Like the universities, the Y.M.C.A. should stop worrying about its budget and think about its program. If the program is a good one, support for it will be forthcoming. If the program is bad or non-existent, the properties are useless anyway.

Preoccupation with property seems to me even more serious in the case of the Y.M.C.A. than in the case of the universities. The universities have fairly well established the idea that a professor can say and think and teach what he likes. This has been a long, hard struggle, not yet completely won. Nevertheless, boards of trustees always find it necessary to apologize when a professor is removed. I am not clear that Y.M.C.A. secretaries have yet acquired this freedom. If they have not, too great emphasis on finance and the plant will make them the slaves of the American business man. If professional leaders must always think whether their remarks will strike responsive chords or jangling notes in the breast of business, professional leadership

will not realize one of its greatest opportunities in the community. A professional leader who is compelled to think first about money and second about professional ideals is not likely to make a strong fight for those ideals when they come in conflict with vested interests. Particularly is this true if he may be removed for expressions or activities which may run counter to the views of the ruling class. Since, as will appear later, a function which I assume for the Y.M.C.A. may at times run counter to the views of the ruling class, I urge the subordination of budget to programs and academic freedom for secretaries.

If the Y.M.C.A. is not a business, neither is it a club nor the Boy Scouts nor a gymnastic organization. Although I subscribe heartily to the doctrine of *mens sana in corpore sano*, we must agree, I suppose, that the physical aspects of the Association's program have the same relation to it that we have already allocated to the physical plant. That is, these items go to make up a rounded development; they are not, and ought not be, central. In general the American public is overexercised and overbathed. The vast resources of the Y.M.C.A. should not be directed primarily to aggravating this great evil. Since the Y.M.C.A. was founded, many other institutions have taken to providing recreational facilities for our people. I do not urge the withdrawal of the Y.M.C.A. from a field in which it has provided leadership and pre-eminent service. I do urge that these things be relegated to their proper place and subordinated to the primary aim of the movement.

You are now entitled to ask me what I think the primary aim of the movement is. And my reply is that the primary aim of the movement is religious. It is a Christian movement. Still, it is not a church or a denomination. Therefore it must conduct activities different from theirs. This brings me to add that the Y.M.C.A. is a Christian educational movement. But it is not a college or a university. It must conduct activities different from theirs. Now, what

are the Christian educational functions of an organization, which neither churches nor colleges can perform? Doubtless there are many. But there is one great and pressing one, adult education. We may be quite confident that the present trend toward a shorter day and shorter week will be maintained. Whether the six-hour day comes this year or next, whether it comes by legislation or not, we may be sure it will come. Yet, we are not equipped to cope with the problem of adult education under present conditions, to say nothing of those that we shall confront in the future. The universities and colleges, absorbed in the difficulties of resident instruction for youth, will never, in my opinion, do more than handle a small section of the problem. They may be relied upon in addition for certain experimental work and for studies that will assist those who are administering work in this field. But the great burden must rest upon others; and upon whom principally if not upon the Y.M.C.A.? The Y.M.C.A. has been engaged in adult education by that name or by some other since its foundation. Its principal task has been a task of individual guidance. It has assisted in the adjustment of the millions of young men who have come in from the farms and taken up industrial occupations. The need for this type of individual guidance is now, in my opinion, passed. The movement of young men is the other way; they are returning to the farms. But the problem of adjusting youth to a new leisure is one of even greater importance and even greater complexity. The experience of the Y.M.C.A. in adjusting the farmer boy to an industrial civilization equips it with a point of view and a background which enable it to step into the present breach more readily and effectively than any other existing organization. If the Y.M.C.A. can attack the problem of adult education, which no one else is so well prepared to deal with, it will justify its millions, justify its properties, justify its facilities, and justify the faith of its founders and supporters.

Even if I were competent, I could not here explore all the various possibilities in adult education for the Y.M.C.A. I merely wish to call your attention to three points. In the first place, not only the experience of the Y.M.C.A., but also all its equipment, admirably qualifies it to take a leading place in the organization of leisure. I can think of nothing that the Y.M.C.A. owns which would not contribute to a program of adult education.

In the second place, the Y.M.C.A. seems to me ideally situated to carry on a type of adult education on a national scale which no other organization can attempt. Certainly the mission of professional leadership is to lead. The professional leader is not interested in maintaining the *status quo;* he is interested in improving it. He must have ideas as to how it may be improved; he must also have the means of communicating his ideas to the people. A resident of Chicago is naturally somewhat skeptical about the newspaper as a means of adult education. To put it mildly, the radio leaves something to be desired. Local forums are frequently limited by local fears and petty politics. But it is possible for the Y.M.C.A. on a national basis to plan and execute discussion of important and pressing problems under competent professional leadership. In general the forces that go to make up public opinion in this country are narrow and selfish. They can be called Christian only by courtesy. Yet, no one will venture to express a doubt that the message of Christ is more necessary to the world today than at any earlier period in our history. Issues must be discussed precisely because they are controversial. Positions must be taken even if they are unpopular. Forces must be opposed even though they seem overwhelmingly rich and powerful. An organization can attempt such a campaign of public education only if it is ready to declare its independence and guarantee to its professional leadership adequate security as long as it is honest and competent. The problems that lie ahead require honesty and

competency. But they require, most of all, the courage to face them. If the Y.M.C.A. has that courage, it may make for itself a unique place in the structure of our society.

But, finally, I am constantly driven back to the basic assumption of these remarks, which is that the Y.M.C.A. is a religious movement. If this assumption is correct, and if one of the great opportunities of the Association is in adult education, it must follow that the Association will devote great attention to religious education on the adult level. You will not misunderstand me when I say that it seems to me that most of the work that is called religious education does not deserve either name. Education in general is a highly technical profession. We no longer believe that anybody who has read a book can teach what it contains. Moreover, education is changing very rapidly. Its methods, its organization, and its content are quite different now from what they were when you and I were educated. And because of changed economic and social conditions, those changes in education are likely to proceed at an accelerated, rather than a retarded pace. Now in my opinion adult education is the most complicated problem in the whole educational field. Men cannot be expected to exert professional leadership in it without having a broad and thorough knowledge of education in general and of adult education in particular. I am satisfied therefore that training schools for secretaries must alter their courses of study to provide for the next generation a type of leadership in this field which is now almost wholly lacking.

I feel even more keenly the inadequacy of the religious aspect of religious education. A vague, sentimental desire to do good and be good does not seem to me to constitute religion. Still less does it seem to me to constitute at the present day a challenge to youth. The old methods of emotional appeal have lost their effectiveness. I doubt if they ever had much permanent influence. Certainly they will not bring young men to Christ today. The appeal that

must be made to them is the appeal to reason. A process of conversion to be worthy of that name must be an intellectual process. Faith is intellectual assent. You will remember that St. Augustine, one of the most powerful minds of history, had for fifteen years to struggle with the intellectual problems raised by Christianity before he could become a Christian. The approach to God upon which young men today may come to him is not sociological or aesthetic; it is intellectual. The faith that you represent must command the intellectual respect of youth. Nor do we need to worry if this kind of education does not conform to what we ordinarily call "character education." Education that sets as its stated and obvious aim the development of character is likely to degenerate into sloppy sentimental talk about character. The result is neither character nor education. Rigorous intellectual activity remains the best character education; and the less said about character in the process the better.

Professional leadership must therefore be intellectual leadership. That kind of leadership the Y.M.C.A. has provided in the past; it must provide it in the future. My remarks are not intended to suggest that I think new elements should be introduced into the movement. Instead, I believe that those elements which the movement needs are already characteristic of it and must not be lost because of economic pressure or because of other obligations which may seem at the moment more important. I suggest, in short, that the Y.M.C.A. should be the Young Men's Christian Association.

# RADIO AND PUBLIC POLICY

MY QUALIFICATIONS for discussing the imposing title assigned to me are so meager that I am afraid I must disregard it altogether. Aside from a very limited association with educational broadcasting, I am simply a consumer of radio. And, I must confess to you in the privacy of this gathering that my functions in educational broadcasting and in consumption are quite distinct. I never consume an educational program if I can help it. My attitude toward such programs is the same as my attitude toward exercise. I believe in it for others.

The difficulties of radio are easy to state: the medium is new, the companies must make money, and we are still having a depression. The newness of the medium means that mistakes must occur in the process of learning how to use it. Some of these mistakes have been corrected; and doubtless many more of them would have been corrected if it had not been for the two other difficulties I have mentioned: the necessity of making money and of doing so at this time. We should have a very different situation in radio today if the stations and chains were corporations not for profit. We should have a much better situation than the present one if the companies and stations had not been under such terrific pressure for the past four years.

It is presumptuous for a layman who never made any money to discuss the problems of an industry and to attempt to prescribe for it. I face these problems not as a critic of business but as a member of the educational profession and the consuming public anxious to make radio more effective in education and more satisfactory to the public. I hazard the guess that unless broadcasting can be

made more successful in these respects, it will find itself in immediate danger of more drastic regulation, of taxation, of competition with publicly owned stations, and even of government ownership.

I have never met anybody who wanted any of these things as an end in itself. Certainly as far as government ownership is concerned, everybody recognizes the grave danger of the political abuse of radio. Proposals of this sort are presented not because of the virtues of greater public control but because of the vices which have so far attended private management. Those who present such proposals see no way of eradicating those vices short of the measures they advance.

The question is whether those vices are inherent in private management or whether they can be overcome by the adoption of policies by private management which will convince the public that private management recognizes its public responsibility.

If I may take educational broadcasting as an illustration, the charges that can be substantiated are these: the claims of minorities have been disregarded, the best hours have been given to advertising programs, the hours assigned to education have been shifted without notice, censorship has been imposed, experimentation has been almost non-existent, and the financial support of educational broadcasting has been limited and erratic.

Although I should not go so far as Mr. H. L. Mencken in condemning the entire American public as boobs and morons, I am ready to admit that most of them have as little interest in educational programs as I have, though for different reasons. Still, I suppose even Mr. Mencken would concede, in his saner moments, that there is a large minority in this country eager to use the great new device that science has given them to continue their education. When all the Chicago stations of one company devoted all of every afternoon to the World Series, a lecture course broad-

cast from my University suffered serious dislocation. When I protested mildly to one radio executive, he gave what he thought was a complete answer by asking, "How many people are there in Chicago who would rather listen to the Humanities course at the University than to the World Series?" I did not deny that the overwhelming majority of my fellow-citizens would prefer hearing about a current home run to learning of the relatively remote accomplishments of Aristotle and Augustus. I did and do assert that some of them had entered upon the course in the simple faith that it would be given four days a week at the same hour, and that to disrupt this program because the listeners were few was to disregard the claims, if not the rights, of this minority.

The appeal of the advertiser of soap and tooth paste must be to the great unwashed. Their constant association with these advertisers has apparently created in broadcasters the delusion that a mass audience is the only audience. I admit that there is no use in broadcasting a program to which no one listens. But the radio cannot pretend, as all broadcasters pretend it is, to be an educational instrument if the sole test of every program is the number of people gathered around the receiving sets. Insistence upon this standard means that educational broadcasting must be confined to the most popular presentation of the most ephemeral topics. In other words, insistence upon this standard may mean that educational broadcasting will cease to be educational at all.

The pressure upon the stations to make money has frequently forced the shifting or even the cancellation of a non-paying program as soon as a paying client could be discovered for the time. Educational broadcasting has to be carried on very largely by volunteers. They sacrifice their time and effort without any compensation except the feeling that they are participating in a good cause. Few things have done so much to dishearten these people as the cava-

lier way in which carefully prepared plans have been pushed around in the interest of increasing station revenues. It is impossible to develop educational broadcasting in this country with the present organization of radio unless the broadcasters will guarantee the time that has been allotted to it. In the last year or so, marked progress has been made, particularly by the chains, in dealing with this crucial problem. That it is crucial anyone will agree who knows the infinite labor that goes into the construction of an educational series and the catastrophe that is caused by an arbitrary change of plans.

One cannot escape the impression that broadcasters have used so-called educational programs either for political reasons—to show how public spirited they are—or as stopgaps in the absence of paying material. This has resulted not only in the frequent change of hours but also in the donation of the poorest hours. It is natural, particularly in times like these, that the best hours should be sold; they bring the best price. But the hours that are best are best because most people are not free at other times. The finest educational programs in the world will not diffuse much education if the people who want education are occupied earning a living while the programs are on the air. If radio is to perform its educational function under private management, the stations must guarantee time, and good time.

Education must have guaranteed time; it must have good time. It must also have more time. The proportion of the broadcasting day devoted to education in the United States is far smaller than in England. I cannot believe that there is less need, or even less demand, for education here than there is abroad. The only conclusion is that our system does not do for education what has been found desirable and necessary elsewhere. The sacrifice of any time to education, assuming it could be sold, involves, of course, the loss of revenue. But as long as the American people cannot secure from radio the essential services they require,

there will be profound dissatisfaction with it; and this must eventually lead to consequences far more serious than a slight reduction in income.

I must take this opportunity to congratulate the chains on the courageous and intelligent stand they have taken as to the content of educational programs. I have never heard of a single case of censorship on the part of the great companies. A professor has the same freedom on the air that he has in his classroom, and in any good university that is freedom absolute and complete. The chains deserve the thanks of all friends of free discussion for an attitude that is basic to educational broadcasting.

Not so much can be said of the conduct of many local stations. They are sometimes obsessed with the idea of pleasing everybody and shudder at the political, social, and economic enormities uttered by professors. The executive of a Chicago station in the closing months of the last administration wanted me to silence or reform one of our professors who in his radio talks was actually demanding federal relief of the unemployed. Of course, education in a democratic community can only be conducted on the theory that through the free and untrammeled exercise of the intelligence the truth can be discovered. Business men in radio who wish to prevent the use of their facilities for free discussion may be in business; they cannot pretend to be in education.

The rights of minorities, definite and adequate time for education, and free speech can all be protected without impairing the earnings of the stations and the chains unduly. These things are part of the price that must be paid for the franchises these corporations enjoy, and the price is not high. The remaining questions are more complicated and serious. Who shall finance educational programs? And who shall promote and support experimental work in educational broadcasting?

The reason these questions are troublesome is that they

lead to so many more. Is radio really an educational device? What rôle should it play in our school, college, and university scheme? What is its place in adult education? What is adult education? And if it comes to that what is education? These questions I cannot pretend to answer. But they must be answered because they are the fundamental questions. What is needed is a comprehensive study of the educational possibilities of radio by a group of competent educators (not university presidents) which should attempt to discover what can and cannot be done with the medium and what part is to be taken by the industry, by the government, by the educational institutions, and by philanthropy in its development. All that I can do here is to indicate in an abbreviated and amateurish way a possible approach to a few of the problems.

To listen to the broadcasters, you would suppose that all non-commercial broadcasting is educational broadcasting. If a thing is not humor or jazz, it is education. An analysis of these non-commercial programs does not support the claims made for them. Yet some of them are very expensive. If part of the money devoted to them were spent for real education (assuming we could discover what that is), there would be all the education, on the chains at least, that anybody could desire. Clearly the chains must confine themselves in education almost entirely to adult education. With the money they are now spending on what they term education, they can support an adequate program in this field.

I am not impressed by the reply that the companies will get into trouble if they pay educators to broadcast. American education has an infinite capacity for taking tainted money and washing it. Far from getting into trouble, the companies will find that an indispensable condition of remaining in business is a good educational plan; and they will find that such a plan cannot be indefinitely maintained by the efforts of professional volunteers, dragooned into

speaking by Mr. Tyson or the administrations of their universities. Some of the time donated by the companies is very valuable, it is true. But that makes little impression on teachers who are already fully occupied and who regard publicity as an annoyance and not as a reward. The companies frequently complain that they cannot find good educational programs and that educators have not done their part. They cannot be expected to unless the broadcasters provide good time, guarantee it, and offer some slight compensation to those participating.

I hasten to say that I do not want for education any additional broadcasting facilities whatever. What could we do with them if we had them? Time and support are one thing; facilities are quite another. We haven't the money, the staff, or the technical competence to make use of more wave-lengths and equipment. To put it bluntly, I want the stations and the chains to provide the facilities, the time, and some part of the support, and to leave us to do what we are supposed to know how to do and what we may sometime learn how to do, namely, the educating. Is this fair? I do not know. That seems to me a matter of degree. Certain educational work must be regarded as part of the obligation of the industry to the public. The rest should be assumed by the educational institutions, the government, and the foundations.

The only division of responsibility between the industry and other agencies that I have been able to think of is, I admit, a very rough and unsatisfactory one. I submit it merely as a subject for study. It seems to me that the public and the educational profession are entitled to expect the industry to conduct as a part of its normal activities an adequate program of education, adolescent and adult, if and when such a program has been worked out by a group properly representative of education and the public. Education and the public should now receive a declaration from the industry that it will give support, moral and financial,

to such a program when it is formulated. On the other hand, the costly and complicated experimental work that needs to be done should be paid for by education, by governments, and by private philanthropy. We do not know, for example, what can be done with radio in the schoolroom. We do not know what can be done with short-wave. We do not know what can be done with wired broadcasting. I am clear that the future of radio in education will depend chiefly on our success in developing local centers. The methods of developing them are now unknown and will require for their discovery infinite pains and considerable expense.

One of my professors in law school used to reply when anybody asked him a question: "That is a very difficult problem." I am afraid that is my contribution to the discussion of educational broadcasting under private management in America at the present time. Yet, the problem is surely not insoluble; the difficulties are not insuperable. If the industry will recognize unequivocally its responsibility to education, if educators will work out a national plan that meets the needs of our people, I believe that the industry will prosper still, that education will be able to use at last the new tool that technology has given it, and that together we may take a significant step toward the civilization of the United States.

# THE PROFESSOR PAYS

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I CONSIDER it very gracious of you to admit one who has been all his life ineligible for membership in this Association to your company this evening and to throw a good dinner in with it. I have always wondered why you excluded administrative officers from your councils. In so far as I had an explanation, it was that you did not wish spies from the enemy's camp to discover and betray your secrets. A careful inspection of your persons and procedures now leads me to suspect that you have scorned administrative officers, not feared them; that your attitude toward them is one of superiority; and that you have refused to have anything to do with them merely because you did not wish them to muddy the waters of your thinking.

With this point of view I am in entire accord. Nor can I consider administrative intellectual processes as deserving much attention at the hands of a group like this. The public expressions of a college president are merely the expressions of his faculty, for which he is taking the credit. He is *vox et praeterea nihil.* Here you are the *corpus;* you need no *vox* but your own.

And so I should not have the temerity to address you as an administrative officer. Rather I appear simply as an individual who has been hanging around educational institutions in one capacity or another as long as he can remember. For twenty-eight years, except for a siesta of two in the army that were not wholly devoid of educational features, I have not been outside of some sort of school or other. I have been in a Sunday school, a kindergarten, two grade schools, two preparatory schools, a tutoring school, a law school, a college, and two universities, either among the

administering or those who were being administered. And, as if this were not enough, through a sort of congenital weakness of character all the members of my family may be found lurking about various educational enterprises. One of my brothers is a master in a preparatory school; the other is a teacher in China; and my father, after a long and honorable career as a professor, has disgraced us all by becoming a college president. Under these circumstances, you will understand that if I talk tonight as though I thought I knew something about education, it is not from conceit but from compulsion. It is not that I know education well; it is simply that I know nothing else at all.

No one who has the slightest connection with education can fail to observe and applaud the work of this Association. Great progress has been made in the past twenty-five years in establishing the idea of academic freedom. To this Association must go the credit for the progress. Yet, this progress should not blind us to the fact that academic freedom is not yet an academic question. It is an issue that is never settled, a battle that is never won. Four times in two years Chicago interests have raised with me the propriety of private or public utterances of members of our staff. On this point we must make ourselves entirely clear. The only question that can properly be raised about a professor with the institution to which he belongs is his competence in his field. His private life, his political views, his social attitudes, his economic doctrine, these are not the concern of his university; still less are they the concern of the public. I have no patience with the philosophy of "Yes, but" as applied to this matter. Any position short of the one I have stated will be found to involve such compromises that nothing is left of academic freedom.

A corollary of academic freedom with which the Association has concerned itself is the problem of tenure. But I think those who discuss this topic frequently overlook the fact that security of tenure is merely a corollary of aca-

demic freedom. If academic freedom were guaranteed, we should not have to worry about tenure. Tenure is what we use as a substitute for such guarantees. Tenure should not be more than this. If it is more than this, it is a protection for incompetence; and nobody, I judge, is much interested in protecting that. Nevertheless, we may be permitted an incredulous smile when business men attack permanent tenure as a educational idiosyncrasy that they would not tolerate for a moment. Indeed, one of the benefits of the depression is that we are less frequently urged to be business-like. The fact is that in most large businesses there is permanent tenure for men who have served faithfully over a long period. I have no thought of urging the abolition of permanent tenure. It is doubtless necessary now to protect liberty of thought and teaching; but I am certain that it should be restricted as far as possible, and not expended. And my reason is the reason for all that I have to say: The professor pays.

It is generally supposed that there is some conflict—some inevitable conflict—between presidents and professors. The appearance of reality is given this supposition by the organization of our universities. Under that organization the president is the only individual who can see the institution as a whole: its education, its research, its financial position, and its public relations. A dean is concerned primarily with his school; a chairman, primarily with his department; and a professor, primarily with his subject. In attempting to serve what he conceives to be the interests of the whole institution, the president may differ with dean, chairman, or professor as to things they regard as important to the university. On the other hand, the dean knows, or ought to know, more than the president about his school; the chairman, more than either about his department; and the professor, more than all three about his subject. In their efforts to carry them on, they may differ with the president as to the things he regards as important to

their school, their department, or their work. Nevertheless, if we assume an honest and intelligent president, like all the presidents I have known, and an honest and intelligent faculty, like all the faculties I have known, these difficulties become minor and insignificant, provided there is mutual understanding of one fact: the professor pays.

It is important to both presidents and professors to learn to regard the income of the university as one fund. If it is spent for one purpose, it cannot, oddly enough, be spent for another. Even where new funds are made available for new enterprises, they never cover their cost. They may cover all the obvious costs; but they cannot pay for the administrative and professorial attention they demand, which is taken away from the existing operations. Where additional funds are not provided for additional undertakings, we have a clear case where money is diverted from the betterment of present work for the sake of something new. The money of a university is not money for this and money for that. It is the money of the university. If spent for this, it cannot be spent for that.

Now the principal aim of an American university today should be to improve and dignify the status of the professor. It is now a truism—so true that it has found its way into the editorial columns of the press—that a university depends on men, and, I may add, on women. In attempting to bring good men and women into the profession and keep them there, we must give first consideration to their salaries. Their salaries and increases in their salaries should be a first charge on that single fund which is the university's income. For everything else that is done with it the professor pays. Indeed, it is not too much to say that for everything that goes on in the university the professor pays.

He certainly pays for the permanence of his tenure. Perhaps it is worth the price. He pays if the university permits or encourages him to do extension and summer teaching to

get enough to live on, when it ought to pay him a regular salary adequate for that purpose. As the Yale chapter has shown, he pays for the multiplication of the staff. I have never been able to determine whether the multiplication of the staff causes the multiplication of courses or whether the multiplication of courses causes the multiplication of the staff. In any case, the consequences are clear. In the absence of additional endowment specifically for additional work, suggestions that additional work be done amount to suggestions that the salaries of the present staff remain as nearly constant as possible. It does not seem to me indispensable that every university cover every section of every field all the time. The university with the longest list of courses is not necessarily the greatest. Until a university can say that its professors are receiving salaries of which it need not be ashamed, it can derive little satisfaction from the thought that its faculty is getting larger every year. The professor pays for the enlargement.

Particularly does he pay if new appointments are poorly made and made without regard to the interests of the university as a whole. The excellence of the entire staff is of concern to the professor, for their compensation is a charge on that fund from which he derives his own. A bad permanent appointment is a permanent drain on that fund, and he should insist that each department exercise extreme care in making one. In his own department he should, then, ask whether a new appointment is needed at all; and, if so, he should rigorously inquire into the qualifications of the candidate.

The professor pays, not only for additional personnel and incompetent personnel, but also for the wasteful organization of instruction and research. At one university with which I was once connected we had eight separate psychological shows on the campus for which the professor directly or indirectly paid. Under the old two-major rule at Chicago, if fifty men were added to the staff, three hundred

new courses were automatically added. The professor paid for that rule. The difficulties involved in revising the curriculum in any university result from the vested interests of the staff. Courses have always been given. Research funds have always been available. Even though courses are duplicated many times and research workers have long since expired, what has been must always be. Yet, if the status of the professor is to be dignified and improved, the administration and the faculty must constantly study the educational and research program of the institution with a view to promoting simplicity, efficiency, and economy. The professor pays for his vested interests.

For some things, as I have suggested, the professor cannot pay too high a price. He cannot pay too high a price for freedom. Perhaps he is not paying too high a price for the permanence of his tenure. For some things he can pay and is paying far too high a price. Consider what any university at this moment is paying for superfluous personnel, incompetent personnel, and the wasteful organization of instruction and research, and ask yourselves what would happen to the salaries of the professors in that university if all that money were available to increase the compensation of those that deserved it. The truth is that the resources of almost any great university would be today adequate to place the American professor on the economic plane which he should inhabit if they could be freely directed to that end. They cannot be directed to that end by presidents and boards of trustees alone. In that effort the faculties must themselves co-operate.

I am not so naïve as to assume that I have told you anything new. At any rate, it is an attitude that I am seeking to express, and not a program. But if that attitude is one that finds favor in your sight, I suggest that it may have some effect upon your program. The constructive effort that the Association has made to establish academic freedom may perhaps be duplicated in the preachment of the

gospel that the professor pays. I can think of no greater service that your various chapters could render their institutions and education generally than the study in their own colleges and universities of the organization of education and research, in the effort to recommend to the administration and the faculty methods by which their efficiency may be increased without reducing their effectiveness.

The present economic crisis is certain to produce great changes in the resources of our universities. It is important that you who have long safeguarded the professor should safeguard him still by seeing to it that we do not meet this crisis by reducing his income and lowering his status. Only the professors can save him from this fate.

# THE PROFESSOR IS SOMETIMES RIGHT

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MY BRIEF remarks this afternoon are entitled "The Professor Is Sometimes Right." I propose to tell you why he is right and how he is right. In addition I shall also indicate from time to time that there have been occasions on which he has been wrong. These I shall explain to your complete satisfaction, and leave you with the gratifying conviction that the professor is sometimes right.

We must first inquire who the professor is. And in this investigation I must urge you to banish from your minds the picture of him which you have cherished since your college days, or which you have constructed from a regular perusal of the funny papers. The charmingly eccentric old gentlemen who were on the verge of retirement when you were in college have long since passed that boundary, and most of them have passed another still more serious. Their places have been taken by men about your age, many of them your classmates. Unless you are prepared to think of yourselves as delightful antiques with long white beards, you cannot make that particular caricature of your contemporaries who have become professors.

Nor can you embrace the vain delusion that professors are cloistered theorists who know nothing of what is going on in the world. I am prepared to make, if necessary, an extended oration in defense of theory, and to prove to you that a preoccupation with facts, which can seldom be fully known and which are always in change, will lead to nothing but confusion unless ideas, which are immutable and which can be understood, receive their proper share of attention. This oration, you will be relieved to know, is quite unneces-

sary, because the professor is no longer a mere theorist—if, indeed, he ever was. The great developments in the study of the law and the social sciences in the last fifteen years have resulted from the effort to understand the law in action and society in operation. The work of Merriam in political science, of Ogburn in sociology, of Mitchell in economics, of the Yale Law School on the administration of justice has all rested on the study of observable phenomena. Indeed, if this work can be criticized, it is only from the standpoint that rigorous theoretical analysis plays too small a rôle in it. Today I do not know a single social scientist who is not studying, and studying hard, the world in which we live. You may say, as too many people do, that they do not agree about the results of their study. This is true as to details; but I should say that professors have been exhibiting remarkable unanimity on basic issues affecting our government and our society.

By this I do not mean to imply that the professor has now become a practical man. As has been amply demonstrated and frequently asserted in recent years, practical men are those who practice the errors of their forefathers. The professor who is sometimes right studies the practices of practical men; if he wishes to stay right, he does not practice them. The reason why few sound economists will today venture a prediction as to what the government's inflationary program will accomplish is that its consequences depend upon the mass psychology of business men. The predictions of economists in the past three years have many times gone wrong because they have assumed that business men in a given situation would behave in a reasonably intelligent manner. The economist can sometimes tell the business man what is the intelligent thing to do. He cannot make him do it. If enough business men do not do it, it may cease to be the intelligent thing to do.

Now, why is the professor sometimes right? In the first place, he is likely to be right because his sole desire is to be

right. He has entered the profession because he is interested in the pursuit of truth for its own sake. He has no vested interests which he is struggling to protect. His income is small. He knows it always will be, and he knew it when he decided to become a professor. The average professor of full rank in this country receives less than five thousand dollars a year, and the most that any of them can hope to achieve is ten. Professors' salaries should be raised so that we may offer a decent living wage to those whom we are trying to press into a life of scholarship. But they will never reach such heights that the professor will lose that fine impartiality with which he customarily regards the things of this world. Finally, the professor is absolutely independent. When he attains full rank, he attains permanent tenure. From this position he can be dislodged only for misconduct or incompetence. And the interpretation of these words is so strict that it is news whenever a professor is removed. Against the onslaughts of a hostile president, a nervous board of trustees, or a distrustful public the professor is secure. He is free to exercise his reason even though it leads him to criticize established policies or institutions, including the institution he serves and the policies thereof.

There are some qualifications on this, of course. An intelligent person is more likely to be right than a stupid one; and not all professors are intelligent. In the second place, the reasons which make it almost inevitable that the professor should be right about the world, the country, or other people's business have no application to his own. The professor is not always right about education, because there he has vested interests, personal ambitions, and ancient habits, all of which he wishes consciously or otherwise to protect. Every great change in American education has been secured over the dead bodies of countless professors. In education the professor is a practical man. Education

needs nothing so much as to have a group of experts studying it who are not parts of the system and who will examine it with the same cold and penetrating glance that the professor directs at the world about him. Finally, the professor loses his potential rightness if and when he becomes a business man. He may be a good business man—but he abandons *pro tanto* the detachment and the love of truth which assist him to be right in his professorial capacity. In other words, the professor is sometimes right as long as he remains a professor. To the extent to which he becomes something else he must become less frequently right.

You will say that all this may be true in theory but that it has nothing to do with the facts of life. And I will admit that if these suggestions had been made seven years ago they would have been regarded as the grossest heresy. Those were the days when the New Era cast its rosy glow over the operations of practical men, and when intelligence was a positive handicap to success. Professors who ventured at that day to suggest that all was not well with our society were put down by the deafening silence which greeted ideas in the Coolidge administration. They were Reds or Pinks—but they could be disregarded. Some of them actually thought that "take the government out of business" was a silly slogan. Obviously, they were insane. In this period almost all the professors of economics in the country urged Mr. Hoover not to sign the Hawley-Smoot tariff bill. He signed it, and gave new impetus to the world-depression. The first phase of that depression produced a different attitude, and, I think, a hostile one. Professors were now dangerous. Admittedly, things were bad; but the less said the better. This was the period in which Mr. Hoover was preaching the doctrine of salvation by incantation. We were going to whistle ourselves into prosperity, with stiff upper lips, chins thrust forward, and various other facial distortions symptomatic of rugged American individualism. The phrase I used to hear most frequently

then was: "Don't rock the boat." At this stage business men were shocked to hear that professors believed that the federal government must assist the states in relieving the unemployed. Now, many of them spend much of their time in Washington demanding federal funds for the unemployed in their local communities.

As recently as last January, some professors urged on the President's Conference on the Crisis in Education a resolution calling for immediate efforts to raise the level of commodity prices. The next day a leading New York newspaper published an editorial entitled "Educators Adrift." Three months later our most prominent private banker publicly commended Mr. Roosevelt's action designed to secure the exact result the educators had urged. I have yet to see an editorial entitled "J. P. Morgan Adrift."

The most recent phase of the depression came with the realization that after three and a half years of psalm-singing the boat was sinking more rapidly than ever, and perhaps some new devices for saving it might be tried. In this period we now find ourselves. The new devices which are being tried have, many of them, originated with professors; and some of them are being tried under their personal supervision.

Now, for all I know, some things may be said against these gentlemen. I know few of them personally. I cannot speak of their social graces, their individual talents, or their domestic habits. They may be open to criticism in some or all of these important areas. But I do feel competent to pass on the principal criticism that I have heard since Mr. Roosevelt moved the government to Washington, which is, that his advisers are professors. It is precisely because they are professors that they have something to contribute which neither business men nor politicians have yet offered. As long as they remain professors and become neither politicians nor business men, they will make this contribution. And that contribution is the application of a

clear, disinterested, honest, trained intelligence to the great problems that confront us. Such intelligence some politicians and business men possess; it is not the outstanding characteristic of their craft. Nor can it be suggested that many of those who have ruled us in the past ten years have given much evidence of it. In Plato's Utopia philosophers were kings, and kings philosophers. I see no reason to be downhearted if America is moving toward the Platonic ideal.

Unless we believe that we know all about our society, and unless we are entirely satisfied with it as it is today, we may count it wise to provide for the presence in it of men whose sole task it is to study it with a critical eye. Sometimes they may be right. At present there is not a single great center of social research in the United States. Individuals here and there are carrying on their investigations with remarkable fruitfulness and skill. We need more of them, and we need to supply them with the facilities and associations which the best results require.

But we cannot expect to secure the full benefits of their endeavors if we decline to permit them to tell us the truth when it is disagreeable. The *Chicago Tribune* has said editorially,[1] "Academic freedom will be preserved where men who have the power to discipline professors deliberately refrain from doing so in the belief that the search for truth should be unhampered." Surely, if the light of reason is ever to guide our people, the search for truth must go on unabated; and the truth, when found, must be revealed to us. The professors are our delegates, conducting this great enterprise in behalf of all the nation.

[1] May 14, 1933

# THE UNIVERSITY OF CHICAGO— TO THE STUDENTS

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IN ADDRESSING myself to the graduating class this morning, I wish specifically to apply to you and to this University those familiar phrases which constitute all that can be said to a graduating class. It is far easier to talk about the economic crisis, about the political situation, or about the educational program of the University of Chicago than it is to face the dreadful task of uttering once again those ancient platitudes which from time immemorial have been showered on the heads of departing students. To tell you that you stand on the threshold of life, that this is commencement and not termination, that the University is a miniature of that great world in which everyone of you is expected to do his duty cannot be news to any of you. Yet all these things are true. Our business is to give them life and content by considering them in relation to the University of Chicago and to you, its graduates of today.

This process requires us to ask what the distinguishing characteristics of the University of Chicago are. And we observe in the first place that the University has always been devoted to inquiry. When Mr. Harper was asked to be its first president, he made it clear that he had no interest in the project if the founders proposed another college. If, however, their purpose was to establish a great university in the Middle West, he was prepared to devote his life to it. On the day on which the University opened, it was obvious that it was and was to be a university. The character and interests of the faculty, the character and background of the students, indicated that this was not simply

another institution for the instruction of the young. It was an institution for the advancement of knowledge. We know the result. We know that the roster of great scientists, investigators, and discoverers is filled with those who, either as teachers or students, have borne the name of this University. No institution in so short a time has made such contributions on so vast a scale. The fact that today half its students are college graduates carrying on advanced work reflects the continuation since 1892 of that spirit of inquiry with which the University opened.

That spirit has informed the University's teaching. The changes that Mr. Harper introduced were the result of an attempt to inquire once again into the processes of the higher learning. The fresh view that he took of university aims and methods produced a reconstruction in educational institutions the influence of which is still felt. The business of taking a fresh view is one in which the University has been almost continuously engaged since Mr. Harper's day, and one in which it will always be engaged. Its new educational program is not, therefore, a violent eruption on its placid surface. It is the result of that spirit of inquiry in education which has characterized the University from the beginning. And so I hope that this present program will not be the last word the University will utter on education in America. It cannot be. The tradition of inquiry will compel the constant investigation of education as it has compelled the investigation of everything else.

Inquiry at the University of Chicago has been free inquiry. The University has been independent. From the outset it has been free from state or municipal domination. From the outset there was no religious qualification for membership in its faculty. The religious organization that founded it has now voluntarily relinquished its formal control. At no time has the denomination as such attempted to exert actual control. The constitution of the University therefore has given it independence. The attitude of the

Trustees, the faculty, and the administration has been independent. At the beginning Mr. Harper left no room for doubt on this question: there could be no interference with freedom of thought, speech, or teaching as long as he was president. This attitude the University has consistently maintained in times of hardship and prosperity, in the face of criticism and pressure.

That the University believes in independence is evidenced anew by its present educational scheme. The student is offered the realms of learning to explore at will. He is not required to do anything. At entrance he stops being taught and begins to learn. His education depends upon himself. He does not have to accept the views of his professors or conform to any social, religious, or political creed. The University believes in independence for others as well as for itself.

The third characteristic of the University of Chicago is enthusiasm. The University has believed that something can be done. It has enthusiastically entered into the life of the community. It has enthusiastically developed or accepted new ideas. There has never been anything contemptuous, defeatist, or indifferent about it. It has never cared to be conventional. It was founded by young men in a hurry. The University has been unwilling to indulge in calm contemplation of a suffering world. At Hull-House, at the University Settlement, in public affairs in Chicago, on national commissions, in surveys of school systems the country over, the members of the faculty have partaken of the woes and struggles of our people. Today you find them here and everywhere directing, advising, participating in movements designed to advance the welfare of mankind. The University's interest in ideas has prevented it from becoming a stronghold of reaction like the English universities in the eighteenth century, which, as Lecky shows, opposed every great step demanded by the English intellect. By the same token the University has declined to re-

main self-satisfied in the knowledge of its own deficiencies. When generations of experience have convinced the faculty that something ought to be done, it has done it, even though vested interests were dislodged and old idols destroyed. We have heard ever since I can remember, for example, that the credit system was the curse of education in America. I have never met anybody who had a good word to say for it. Nobody had ever done anything about it. Nothing could be done about it. The University of Chicago decided that if the system was bad it ought to be changed. The University abolished it. That great academic characteristic of suspended judgment, of not doing anything until nobody wants it done, or until it ought not to be done, or until something radically different ought to be done has not infected this University. This University has behaved as a pioneer university ought to behave. It has enthusiastically determined that something could be done, and it has done it.

The fourth characteristic of the University of Chicago has been its perpetual agreement with Cardinal Newman that the object of a university is intellectual, not moral. This is not to disagree with the attitude that moral values, high ideals, and strong principles must be among the results of education. The history of the University and this building are the best guaranty of this University's belief in these things. But universities are founded as places where scholars and their students may develop or exercise their intellectual powers. In universities, and only in universities, may this be done on the highest level. A university provides its students with rigorous intellectual training at the hands of stimulating individuals, surrounded by able, industrious, and intelligent contemporaries. It sets a standard of intellectual attainment that can only be achieved through those qualities that are commonly called "character." Character is the inevitable prerequisite and the inevitable by-product of university training. A system of

education that produced graduates with intellects splendidly trained and no characters would not be merely undeserving of public support; it would be a menace to society. In a real university, however, such a result is impossible. The business of education in a real university is too exacting, too strenuous, and puts too high a premium on character for the student to be affected intellectually alone. Consider the implications of the new Chicago plan. The student is now free, and to learn how to be free may be said to be the first duty of the educated man. The student who, by his own efforts in the face of the distractions of college life and a large city, has prepared himself for the general examinations under the New Plan has had an experience that will do more for his character than years of lectures on character-building.

If we are to make our people understand what a university is, we must insist on that intellectual emphasis which distinguishes it from all other institutions. The universities have only themselves to blame if the public confuses them with country clubs, reformatories, and preparatory schools. As long as the conversation of universities is exclusively about athletics, dormitories, and the social life of students, they can hardly expect the citizen to understand that these things are merely incidental to a university program and do not at all affect its principal task. Indeed, I should go so far as to say that the reason why the universities are successful in developing character is that they do not go about it directly. If a university informed the world and its students that it would improve the morals, inflate the physique, and enhance the social graces of all who entered there, it would in my opinion fail in these undertakings and it would also fail to provide a sound education. Character comes as a by-product of a sound education. The university method of developing it is to train intelligence.

These are, I think, some of the distinguishing character-

istics of your University. They are rather splendid characteristics. You could wish no better ones for yourselves. Devotion to truth, the courage to be independent, an enthusiastic interest in the community and in new ideas, an intellect rigorously trained and being trained—these things in law, in medicine, in teaching, in preaching, in citizenship will distinguish you as they have distinguished your Alma Mater. These qualities have never been in such demand as they are today. We know that cowardice, selfishness, and stupidity have brought the world to its present low estate. In opposition to these forces your University offers you the example of those qualities which it has displayed from the beginning. They are the qualities of leadership. For lack of leadership the whole world is in despair. How can it ever hope to find it if honest, courageous, unselfish, inventive, intelligent men and women do not emerge from universities like this?

You will, most of you, become citizens of that great region of which this city is the capital. This is the Middle Empire. Its development has hardly begun. Its significance as a cultural area is not yet appreciated. But its influence already determines national policy and will continue to do so. Here the qualities of leadership will be most telling. Here their absence will be most damaging to the country and to the world. If in this formidable territory at this formidable time you are to do your part, the characteristics of the University of Chicago must become your own.

# THE UNIVERSITY OF CHICAGO—TO THE FACULTY AND TRUSTEES

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TONIGHT for the first time since I can remember I can wish you a happy new year with some hope that we may have one. For five years, although we have sought to divert ourselves by talking about other subjects, our chief concern has been the financial position of the University. Now we are beginning to think that it may survive after all. The actual deficit in the general budget last year was 10 per cent of the deficit estimated when that budget was made up, and the deficit estimated for this year is being steadily diminished by the gradual improvement in our income. This improvement is so gradual that we can expect to make no grandiloquent gestures. But we can move toward some of the objects that are most essential, such as putting the support of research on a better basis and correcting the grossest injustices that have been done the younger men. To this general program the Board of Trustees has already shown a friendly spirit. Of course, the rate at which it can be realized depends upon the rate at which recovery proceeds; but it does begin to look as though after five years of thinking about little but budgets we might be able to devote ourselves to the improvement of education and research.

We may take some consolation, too, in the fact that the reorganization of the University which began in 1930 is now substantially complete. Of the scheme that we had in mind originally, only the combination of the College and the last two years of the High School remains to be made effective; it is now a paper consolidation. Other developments, such as proposals for the teaching of statistics and

some relating to home economics will be presented from time to time. Among other things, we must finally settle the place of the University of Chicago in medical education and the part to be played by our medical enterprises now on different sides of the city. Nor can I assure you that you will not be perpetually harried about the inadequacies, if any, of the curriculum. A good deal needs to be done, in spite of the great advances already made, to work out a general education in the College. Some of the divisions and professional schools have failed to take complete account either of the advances in the College or of the opportunities offered by their own organization. But changes in these respects must come as the result of unremitting effort through the years. They are the product of the normal activity of any faculty that has any interest in its work; they should not involve a general upheaval such as that which began five years ago.

In the third place, we may hope for a happy new year because we have routed, or at least repulsed, the forces of darkness. Repulsed is probably the proper word, for we cannot be sure that the ignorant and misguided will not return to the charge. If eternal vigilance is not the price of academic liberty, certainly eternal patience is. Although I was occasionally in favor of more violent methods, I am satisfied now that the course we pursued in the senatorial investigation was as successful as it was dignified. Even in LaSalle Street you can hardly find a person who is willing to repeat the stupidities popular last year. Outside Chicago the University's reputation is greater than ever. Other universities feel that we have fought and won a battle for them all. The alumni have been aroused to a new interest in their Alma Mater. The Trustees have borne the burden of our defense with courage, vigor, and even with cheerfulness. They have done more: every one of them, in addition to his usual gifts, has subscribed to the fund celebrating the University's birthday; the Trustees have given

to this fund since the beginning of the year more than $50,000. Because of our trials of last year, the faculty has been united for the first time in this administration and probably in any other. And the students have had the time of their lives.

We have, then, a hopeful financial outlook, an organization almost perfected, and academic freedom established more securely than ever. But the important question is what are we going to do with our money, our organization, and our freedom? Suppose we had a real investigation of the University. Suppose we had an investigation of the things that really matter. Could we say that all our money was wisely spent, that all our courses were needed, that they were all as intelligent as they should be, that all our research was significant, and that without regard to self-interest we had single-mindedly pursued the purposes for which the University was founded? We know that we could not. At this moment we can conscientiously say that this is one of the best universities in the country. We cannot say that it is as good as we can make it.

How can we use our funds, our organization, and our freedom to make the University as good as it can be? We can only do it by continuing the campaign that has been going on here for forty-five years against triviality, which, with its close relatives vocationalism and mediocrity, is the greatest enemy of the higher learning in America.

In a sense it was the triviality of university life that produced the senatorial investigation. Why should our people fail to see any difference between a university and a girls' finishing school? The answer must be found in the fact that the universities have made themselves unintelligible. They are understood only in terms of social life or vocational training. The popular conception is that the student, through athletics, fraternities, and indoctrination with "sound" principles, is taught to fit into our society in an unobnoxious way. In addition he may acquire, if he wants

it, specific preparation for a job, which, it is thought, will be a better job than he would otherwise get. When a business man finds that the university in which he has placed a young relative does not live up to this picture, you cannot blame him for being annoyed.

For the design and coloring of this picture we have only ourselves to blame. Every university president bemoans the "overemphasis" on football; and every stadium in the Big Ten was built on the recommendation of the president of the institution around whose neck it is now hanging. Wherever I have met with educational people, from Hawaii to Rhode Island and from Minnesota to Texas, I have been struck by their unwillingness to discuss the only important question about education and research, and that is the question of content. They want to talk about methods, the size of classes, organization, administration, student supervision, degrees, and buildings. The program of the Association of American Universities is a list of topics so trifling that one wonders how anybody managed to think of them; and each issue of the *Journal of Higher Education* brings us fresh evidence of the preoccupation of the profession with matters of no consequence whatever.

The New England universities, to which because of their age, prestige, and wealth the country might naturally have looked for the true meaning of a university, seem likely to confuse the issue further. It will be interesting and important to see whether any way can be found of making the new colleges or houses of these universities into real educational units. If this cannot be done, they will merely serve to illustrate on a grand scale the trivial aspects of American education. They will emphasize social life, making friends, table manners, and architecture, with some passing references to the development of character and personality.

We may raise the same kind of questions about the new professional schools in various fields that are now being established. If they turn out to be vocational schools, they

will give new impetus to vocationalism and end in triviality as disappointing as the new courses to train safe drivers that are now appearing. Professional education deals with the subject matter with which the profession deals. But the attitude of professional teaching and research in a university should be that of studying the subject for its own sake. And this is true whether the object is to educate a professional archaeologist, historian, chemist, lawyer, or engineer. Vocational training, on the other hand, deals with technical procedures and good advice. Both procedures and advice are frequently outmoded before the student has a chance to use them; but the time consumed in elaborating them in the university may interfere with, or even prevent, the acquisition of a true professional education. It is important for any lawyer, and would be useful to many citizens, to understand procedural law. But courses in New York Practice and Connecticut Practice, such as we used to give at Yale to help the boys through the bar examinations, are trivial. So were those we gave in Office Practice and Drafting Legal Instruments. It is probably important for the prospective teacher to understand what we know about measuring the educational progress of the individual. But a course in how to administer psychological tests is trivial. The most enlightened engineers and engineering teachers now favor as the best preparation for their profession first a good general education and second a program of theoretical studies almost indistinguishable from non-professional work in chemistry, physics, and mathematics.

The trivial results of vocationalism have given rise to the exaggerated view that in a university nothing useful should be taught. And this is not an exaggeration if what it means is that the pursuit of truth for its own sake is the most useful occupation in which we can engage. Attempts to encumber the higher learning with vocational techniques, moral lessons, and political dogma will all end in triviality.

The University of Chicago has been happily free from many of these manifestations. Vocationalism has suffered no more signal defeat than the abolition of our School of Education and the creation of the University Committee on the Preparation of Teachers. The faculty of the Departments of Education wanted to study education, not to get teachers ready for jobs. The Committee on the Preparation of Teachers has decided that the best way to prepare them is to see to it that they have a good education and that they understand something of the educational process. The Committee has succeeded in working out a plan in which the vocational elements are limited to those prescribed by state laws. We have had like success in resisting other temptations to triviality. We have insisted that the student was here to study; and this policy, together with the fortunate weakness of our football teams, has helped us to keep our eyes, and even those of the public, fixed on the real objects of the University. The abolition of the credit system, of required attendance, and of much of the paraphernalia that went with them have served to suggest that we regarded education as a serious occupation for serious people, and not as recreation or punishment for the immature.

The kind of triviality that we have had to contend with has resulted from the atmosphere of American universities, which we have been almost powerless to correct by ourselves. Higher degrees have come to be tags with a definite market value. As such they have attracted many people who had little interest in them but the appointments or promotions they might bring. Then it has been felt that in order to maintain the standard of these degrees the candidate, even for the Master's, must be required to make an original contribution to knowledge. The result of all this has been trivial research. When a man secures an appointment in a university, he is made to believe that he must "produce," as the saying is, in order to be retained or ad-

vanced. The result has been trivial research. Since any kind of information about anything is regarded as an addition to knowledge, the collection of miscellaneous, insignificant information is called independent investigation; of course, it is really trivial.

In a university composed of strong and numerous departments, as a department grows and splits into two or more departments, and as each department tends to demand more and more of its students, the education of the student may become narrower and narrower. Nor is the remedy to be found in putting three or a dozen narrow or trivial courses into one and calling it a survey course. In fact, a course composed of a large number of trivial items hastily covered during the year may have less value than several courses treating minute sections of the field in a less superficial manner. General courses in which the leading ideas in a large field are presented to and mastered by the student are the ideal we have held before us in the College. No university course, general or departmental, can be justified unless it has intellectual content. And no research can aspire to that name unless it has an intellectual basis.

The triviality produced everywhere by the proliferation of courses was accentuated here by the rule which required every member of the faculty to teach two majors a quarter. The natural result was a lot of academic boondoggling. Though the two-major rule was abolished years ago; its disembodied spirit still rules over us. Men who should teach less teach as much as those who should teach more. The absence of the courses eliminated during the depression, to the number of three or four hundred, is hardly noticed by anybody. We should continue the process of elimination until we are sure that every course in the catalogue is worth giving. In addition the faculties should accept the offer that was made two years ago and reduce the periods of formal instruction as the Social Science Division has done, or in any other way that will accomplish the same purpose.

If they do not do this, it will be difficult for me to convince anybody that we need more money for research or to take very seriously the complaint that the administration is not interested in it.

Institutions that have larger assets than we can perhaps afford to indulge in irrelevant and unprofitable activities. Perhaps they can do so and still hold their position relative to us. We cannot do so and hold our position relative to them. And that means that every course, every project, and, above all, every appointment must be worthy of the great tradition of the University. If we can put down once and for all triviality, vocationalism, and mediocrity, we can preserve the place of leadership we have inherited and show our fellow-citizens at last what a university can be.

# EDUCATION AND RESEARCH. I

A UNIVERSITY may be a university without doing any teaching. It cannot be one without doing any research. But there is an essential conflict between teaching and research. Education is synthetic and generalized. Research is analytical and detailed. Education is becoming more generalized. Research is becoming more specialized. The college teacher, after intensive training in a minute field of physics, is expected to teach a general course in the natural sciences. The teacher aims at comprehension. But in the natural sciences in this country alone, 20,000 research workers are digging up important new facts and announcing new discoveries, some of which are as yet incomprehensible to their sponsors, to say nothing of those who are compelled to fit them into an intelligible scheme which may be communicated to the rising generation.

Nor is this all. American education confronts certain national peculiarities which present almost insoluble problems. A much larger proportion of our population gets into higher education than in any other country on earth. Enormous numbers of students have poured into the colleges and universities since the beginning of the century. Such numbers mean that you must have elaborate machinery; and before you know it, the machinery becomes an end in itself, cherishing its own special sanctity, and standing between you and education like a lattice-work screen, obscuring the vision and blocking the path.

The number of students has been swelled in recent years by the association of the formal indicia of education with certain vocational opportunities. We shall shortly see the Bachelor's degree required for elementary teachers and the

Master's for high-school teachers, as the doctorate is now almost universally demanded for teachers at the higher levels. Thanks to such requirements and to similar ones for entrance to professional schools, American students have in the last forty years become the most degree-conscious in the world. They are not to blame. Colleges and universities have themselves informed them that nobody can get anywhere in teaching, research, or the so-called "learned" professions without an appropriate alphabetical series after his name. And, when to this is added the absolute necessity of having the Bachelor's degree in order to pass the sacred portals of the local university club, we can see that the forces of both social and economic life conspire to exalt degrees at the expense of education.

When we add to the essential opposition between education and research the present singular confusion in the educational world and the great changes impending in it, we discern the dangers to a university in having anything to do with education at all. The problems of education are so immediate and far-reaching, the limitations of time and money are so serious, the demands of research are so great, that any university might well shrink from the task of straightening out American education and confine itself to research.

A university is either in education or out of it. The maintenance of educational work, and especially the Freshman and Sophomore years, cannot be justified on the theory that it provides preliminary training for research workers. Only 17 per cent of the Ph.D.'s at this convocation received their Bachelor's degrees at this University. For that matter, only 33 per cent of the Bachelors at this convocation entered this University as Freshmen four years ago. And not less than half the Bachelors at this convocation never attended our College at all. A recent survey of the 532 Bachelors at this convocation (the largest number we ever had) indicated that 8 of them, or 1½ per cent, expect to go into research. I am not talking here about graduate work

or teaching; I am talking about research. The education of Masters is, with few exceptions, as much an educational problem as the education of Freshmen. They are not going into research any more than the Freshmen are. The education of Ph.D.'s is, as to 75 per cent of them, as much an educational problem as the education of Masters. They are not going into research either. If a university is to devote itself exclusively to research, it must eliminate its undergraduates, its professional students, its prospective Masters, and the greater part of its Ph.D.'s.

On the other hand, a university that decides to make the attempt to conduct both teaching and investigation can find no way of dodging the responsibilities which such a decision imposes. The first is the responsibility of doing a good teaching job for its own students. The University of Chicago cannot be said to have complied with this condition when, as in 1920, over 150 graduate students were giving instruction in the Freshman and Sophomore years. In the second place, a university must understand what the educational needs and the consequent educational developments of the country are and are going to be. That some of the New England universities are moving in a direction exactly opposite to that of the United States outside New England may be attributed to the fact that they have remained oblivious of what has been going on beyond their borders, and particularly to one of the most remarkable phenomena of our time, the junior-college movement. Finally, any self-respecting university must ask itself whether in view of the emergency in American education it has not some responsibility beyond the education of its own students and the protection of its own educational skin. When we survey the scene of turmoil which American education presents, when we think of the pressure put on the system by the universities both through their requirements and their prestige, when we consider the limits that numbers, politics, and meager resources set to the efforts of the sys-

tem, when we reflect on the importance of education to the preservation and improvement of our people, we can only conclude that those universities that are free and powerful must exert such intelligence as they have to lead education, and hence the country itself, out of chaos, bewilderment, and despair.

Is there no way in which a university can make this contribution and still accomplish the purpose for which it exists, the advancement of knowledge? I think there is. If you will permit me to cast, like Orpheus toward Eurydice, or if you prefer, like Lot's wife toward Sodom, a brief backward glance at a departed object of my affections, without inflicting on it the fatal consequences those looks produced in legend, I shall point out that the proposed consolidation of the University of Chicago and Northwestern University was designed to resolve exactly those great and fundamental difficulties that I have here been discussing. The concentration of all essentially educational work on campuses other than this one and the concentration of all essentially investigative work on this campus would, I believe, have supplied the framework in which both teaching and research might have been enriched and reconciled. Nevertheless, I do not wish to be understood as saying that it is only through such amalgamations that such enrichment and reconciliation may occur. I believe that even without massive changes, afflicting alike to the sentiments and the interests of those affected by them, it is possible for a university to achieve the three objects which in my opinion any self-respecting university will wish to achieve today.

You will remember that those objects are, in ascending order of importance, first, to do a good job of teaching the university's own students; second, to provide some leadership for American education; and third, to advance knowledge. It is exactly these objects that the gradual and almost continuous reorganization of this University since 1930 has been designed to accomplish.

I believe we must go farther still. The essential conflict between education and research is revealed in the departmental organization. The Department of Anatomy, for example, does not do research in anatomy. Its investigations are in various sections of the biological field. The department as such exists for *teaching* purposes: to educate doctors and teachers of anatomy. On the other hand, there is probably no such thing as research in English. There is research in the English language, in literature, in philology, and in the ideas which English-speaking individuals have from time to time entertained. The inquiries of the Department of English are united only by the fact that they usually begin with books written in English. The department is, however, a unit for professional purposes. As such it prepares people to teach in departments of English. And it is clear that for many years departments must prepare people to teach in departments. In establishing the University Committee on the Preparation of Teachers, the University recognized this fact and accepted for the whole institution an obligation that had formerly been remitted to the School of Education. The staff has been torn between the demands of investigation and the demands of instruction. The students who intend to be teachers have failed to receive the type of education they need. The students who intend to be research workers have been treated as though they planned to be teachers. We have only just begun to realize that the same cross-purposes pervade the divisions and professional schools that used to obtain in the College.

I think we should proceed gradually and experimentally to establish in the divisions and professional schools, and in some cases between them, research institutes *without teaching obligations of any kind.* Members of the faculty would be assigned to them for such portions of their time as they wished to give to research. Only those students would be admitted to the institutes who were interested in research

and qualified to become research workers. Once admitted, they would act as research assistants and secure their training as apprentices. In the institutes departmental lines would be obliterated. The departments and professional schools would remain for professional teaching purposes.

I should hope that students in the institutes would be content without degrees. If they had to have them, I should reluctantly be willing to try to think up some special insignia for them. I see the departments and professional schools continuing to recommend candidates for the professional degrees and the M.A. and Ph.D. I see them continuing to require a certain amount of research for the doctorate. But what I see most clearly is that the institute plan would disentangle the last remaining complexities raised by the attempt to conduct education and research in the same institution.

We should then, I think, have completed the task of organizing a university. We should have erected a sound and rational structure in which with clear knowledge of what we were attempting at each stage we could proceed to improve the education of our own students, to make our contribution to the changes imminent in American education, and, most of all, to protect and develop the advancement of knowledge at a time when the reduction of resources and the demands of education threaten to extinguish it. Without the handicap of an organization at odds with our purpose we could then press forward to face far more perplexing questions, the aims and content of education and the aims and standards of research.

# EDUCATION AND RESEARCH. II

I MAKE no apology for asking the members of the graduating class to consider briefly one or two educational questions. Aside from the fact that many of you are going to be teachers, you are now very highly educated. And, what is more important for my purposes, you are probably thinking today more intently about education than you ever have before or ever will again. While you are in this propitious frame of mind therefore, I cannot refrain from taking advantage of you to discuss some things about education that may perplex you, and that have certainly perplexed your instructors.

In some divisions of the University there has been a feeling more potent than a rule that distinction in research in subject matter should be the sole prerequisite to recognition in any university. This seems to me to overlook the fact that a university is an educational institution. I do not say it ought to be; I say it is. Since it is, it should, I suppose, attempt to be the best kind of educational institution possible. Unless people who are interested in education can believe that their interest will lead to advancement, they will not retain it long, and the education administered will be mediocre at best. Of course, it is a fair question whether a university ought to be an educational institution. Perhaps it ought to be a research institution. But the change in title is not important for a university like this. If the purpose of a university is inquiry, it will hardly be able to avoid inquiry into education, one of the most significant activities of mankind. And inquiry into education will show on the college and university level that most of its major problems—whom to teach, how to teach, and

what to teach—are still unsolved. Since it is doubtful if they can be solved by armchair meditation, it follows that a complete collegiate organization is necessary in the university for the study of these problems as they present themselves in real life.

This is particularly true here, for we are surrounded by other universities not so free to experiment as we are. We have an unusual opportunity to show the way. But we shall not be able to do so unless we are willing to differentiate the individuals on our staff, to provide different kinds of opportunity for different men, to adjust the content and amount of each scholar's work to his individual capacity, and to reward him for contributing to our knowledge of education as we should reward him if he contributed to our knowledge of any other subject.

In dealing with students the same lack of adjustment of the university to the individual appears, and apparently for the same reason: there are so many of them that to deal with them at all we have to deal with them as though they were identical. Professional work may well be started, presumably, at the end of a good general education. But we have assumed, first, that all of college work was general education and, second, that the longer a man stayed in college the better his education was. And consequently, in the effort to get better students in professional schools we have constantly raised the number of years in college required for entrance to them. But it must be clear that the great advantage of the graduate professional school is not in the maturity of students, or in the preparation of students, but in the segregation of students. Segregation into a serious professional group has turned many a collegiate loafer into a first-rate professional man. But it has in many professions extended the period of training to quite disproportionate lengths. The graduates of some of the so-called "best" law schools cannot start practice before they are twenty-five; and the graduates of some medical schools of

the same grade cannot begin to earn a living until they are past twenty-seven. It has never been established that there was anything mystical about these particular ages or this particular background. In the effort to find an arbitrary automatic yardstick that would have the effect of reducing numbers and producing a homogeneous group, we have required and have sometimes succeeded in getting embalmed in law mere temporal qualifications that have small relation to individual competence.

And since we have had no standard in some professional schools but the number of college years, we have felt that the larger that number the higher our standard. I have always been interested in the discussions of law-school deans to observe the embarrassed blushes of one of them when he discovered that another school of which he had not hitherto had much opinion actually had higher standards, by which he meant longer collegiate requirements, than his own. About the only way in which a law school could attain prestige and aspire to leadership was to require more—not better, but more—college work of all—not some, but all—its prospective students. And so between our desire for a simple test of qualifications for entrance and our desire for prestige we have committed ourselves in some institutions to a system of pre-professional requirements which diminishes the student's opportunities without necessarily producing counterbalancing benefits to him, to the community, or to us.

Our whole system is set up for the average student. The result is that in any well-organized college there probably is not a single regulation governing the curriculum that a really excellent student should not break. Whatever one's view of a university, one may well doubt the value of such restrictions.

A university which aims to forward inquiry is naturally concerned about the production of men and women compe-

tent in and devoted to such inquiry. No one can be long in university work without becoming aware of the present scarcity of such individuals. Although the low level of faculty salaries is undoubtedly in large part responsible, there is another factor at work, and that is the method and content of collegiate instruction. Many people go to college with a real and even remarkable excitement about scholarship. Still more could be excited if they could believe that there was anything important or vital in what the scholar does. In far too many cases this present or potential excitement dies in the face of the peculiarities of the American collegiate system. The first duty of a college in a university is to organize itself so that a student who wishes to become a scholar will not have insuperable obstacles put in his path.

Such organization in both the university and college is not as impossible as it may appear. It does not necessarily follow that as numbers rise standards must fall. In many places as numbers have risen standards have fallen. But this is rather because we have not had time to think than because of any inevitable connection between numbers and standards. If we had time to think about education, instead of being forced to provide something that would look like it for the multitudes who suddenly demanded it, we should direct our attention in the first instance to the achievements of individuals. In order to test those achievements we should work out criteria applicable at the various levels. Instead of asking how many years in high school a student had had, we should determine what kind of training we should require for entrance to a college. We should next have to determine what accomplishments a man leaving the junior college should possess to show that he has finished his general higher education. As a person sought entrance to the university for either senior college or professional and graduate work, he should be required to submit evidence of his power to deal with it, and should be

graduated only after he had met tests indicating that he had the knowledge and ability that reflected the criteria previously established for graduation.

You will say that this is exactly what is done at the present time. At every stage students are required to submit evidence of their previous training, showing either that they are ready to go on with their education or that it is complete. The trouble is that all this is stated in terms of what a student has been through, instead of in terms of what he has learned and what he can do. We have been unwilling to go behind the record. We take that record with its courses and grades, forgetting that these give slight indication of the permanent information or inspiration derived from the schooling they represent. We have talked in the language of time, forgetting that we must therefore talk of the average student, and that, by insisting on temporal requirements, we do our best to compel the best students to be average, too.

The time that is wasted by good men and women through this insistence on time spent as the principal indication of intellectual attainment is enormous. Particularly does this waste occur in the process of passing from one institution to another, where the high school duplicates the grades, the college duplicates the high school, and the university duplicates the college. If it is impossible to articulate the grades, the high school, the college, and the graduate and professional school by general categorical rules, it ought to be possible to articulate them by articulating the work of the individual. In the college and university if we develop first the criteria of entrance to and completion of general higher education, if we then develop the criteria of entrance to and completion of non-professional and professional specialized educations, and if we at each stage employ general examinations with such other devices as may be necessary to be taken by the student when in his opinion he is ready for them, we eliminate for any given individual the loss of time

and the loss of initiative which at present curse our educational system. If then an individual remains at any level longer than the average student, it will be because he needs to remain there; if he goes on earlier, it will be because he is qualified to go on.

Such a system, eliminating or minimizing course examinations, course credits, course grades, and time requirements, is open to two serious objections. In the first place, the educational criteria and the testing devices to which I have glibly referred are very difficult to work out. But this amounts simply to saying that education is a hard job and a good deal harder than we may have thought. Since we must admit that our present methods are defective, we shall have to admit that we should exert what intelligence we have to improve them. The successful installation of such a scheme, or of a better one designed to accomplish the same objectives, will require long and painstaking thought. But thought is what education today requires; and, if we are in education, it is our business to put it forth.

In the second place, there is an economic problem. No matter how many controlled experiments may seem to suggest the contrary, we shall always have a vague feeling that individual instruction of the poorest students by the best teachers will be better for the student than mass instruction by the same or poorer teachers. But we simply can't afford to deal with our poorest students that way. There aren't enough good teachers to go around; why should we wear them out in the hope of rescuing a few men and women who at best will never do more than take a harmless place in the community? If we can afford individualized instruction at all, we can afford it first for those who can profit by it most and who will most amply repay the effort and expense devoted to them. The question before any university therefore is, not whether individualized education is desirable, but whether the university, in view of the other demands upon it, can afford to give individualized

education at all. Still, if we take the large lecture course as a base and select from it only those who are particularly interested and qualified for more individual instruction, without assuming the necessity of small classes and quiz sections in all courses for all students, we can accomplish everything I have in mind without additions to our faculties. And when we are ready to concede that even some Freshmen in some fields are able to learn something by themselves and are likely to develop powers of independent thought and effort only as we permit them to do independent work, we shall again revise our notions of the number of professors that a given number of students require for the best development of their individual talents.

By much thought and much patience, therefore, in spite of the economic problem and the present vagueness of the criteria we must ascertain, we may in some such ways as these adjust the university to the individual and the individual to the university. In some such ways as these we may make the college a place for the exploration of the realms of knowledge and the university a place for the beginning of a life of learning and inquiry. Then perhaps even the learned professions may become learned. And we may produce a generation more educated than our own and individuals better educated than ourselves.

# THE CHICAGO PLAN

BEFORE reviewing the recent developments at the University of Chicago, there are a few general statements that I should like to make about them. In the first place they have none of them been revolutionary or even highly original. They are, almost all of them, matters upon which educators at the University of Chicago and elsewhere have agreed for years. If there is anything startling about them, it is in the fact that all of them have not been tried before. And so the word "experimental" can be applied to them only in a restricted sense. The attitude of the University is experimental because it is willing to try some things when success is not guaranteed. It is willing to change if change seems, on reflection, to be desirable. But it is not striking out blindly in the effort to do something new merely because it is new. I may say in passing that almost everything in education is experimental, for we can seldom prove that anything we do is conclusively better than something else we might do, or indeed than nothing at all.

I wish to indicate at the outset that the measures lately taken at Chicago have been taken on the recommendation of the University Senate, which consists of all professors of full rank, and have been approved by the Board of Trustees. In the whole program, which has been presented step by step to the Senate and the Board, we have almost never had a close vote. The plans have represented the judgment of the overwhelming majority of the faculty and the Board. It is further important to notice that these plans have not been confined to any one school or to any single aspect of the University's life. They have affected the whole institu-

tion—its administration, its methods, its curriculum, and its organization. Although the process is still far from complete, we can give the main outlines of the program as it seems likely to proceed during the next few years.

Before 1930 the organization of the University of Chicago did not differ materially from the customary scheme except that the institution was perhaps more highly departmentalized than most. During the first seventeen years of its history, heads of departments held office for life. Under this system departmental autonomy flourished. Heads of departments dealt chiefly with the President, and very little with the deans. The deans advised students, awarded fellowships, and looked after other interdepartmental affairs. But budgets and appointments were departmental matters, on which the deans advised, but which they did not control. The result was that in 1929 the President had the task of co-ordinating 72 independent budgets.

It was clear, also, that each departmental budget represented at least two different interests—the interests of general education and of advanced study and research. These differences were not reflected in the organization of the University. The University consisted of the professional schools and the graduate schools and Colleges of Arts, Literature, and Science. It was becoming increasingly apparent that the Junior Colleges were concerned with a different problem from the Senior Colleges, and that the problem of the Senior Colleges was similar to that of the graduate schools. The graduate schools, however, had differences among themselves. There were strong groups in the humanities and the social sciences nominally united in the Graduate School of Arts and Literature. There were strong groups in the biological and physical sciences nominally united in the Graduate School of Science.

To accomplish at one stroke an administrative simplification and an organization that reflected the real activities of the University, the Senate recommended in the fall of

1930 that the graduate schools, the Senior Colleges, and the Junior Colleges be abolished and that in their places there be established five divisions: the Biological Sciences, the Physical Sciences, the Social Sciences, the Humanities, and the College. The College was to do the work of the University in general education; the divisions were to be devoted to advanced study and research and were to award all degrees. The deans of the divisions were to be vice-presidents in charge of their organizations, reviewing the departmental budgets and co-ordinating them into divisional budgets before sending them to the President. They were also empowered to recommend appointments, promotions, and increases in salary. In this way the number of independent budgets handled by the President was reduced from 72 to 24, and the organization of the University was related more nearly to its educational activities.

It was soon observed that the new responsibilities thrown on the deans would make it difficult for them to perform many of the tasks that they had carried hitherto. It was noticed also that the problem of educational and vocational guidance was one that we were treating in a very cavalier fashion. Some twelve separate units were concerned with student problems. In view of the methods of measurement that we proposed, adequate attention to guidance was more necessary than ever before. The Senate therefore recommended that a Dean of Students should be appointed who should have charge of the twelve organizations concerned with student affairs and who should relieve the deans of the burden of dealing with student problems. By this arrangement the number of independent budgets handled by the President was reduced from 24 to 12.

Since we were in the business of reorganizing, it was considered a propitious time to put into effect the results of deliberations that had been going on since 1927 affecting the methods of measuring the progress of students. We decided to get rid of credits and course examinations for them,

to abolish compulsory class attendance, and to reduce arbitrary residence requirements. In place of these various methods of detecting a student's intellectual development we provided for general examinations as the sole criterion of progress from one unit to another, except for those degrees where a dissertation has always been demanded. These examinations the student may take when in his opinion he is ready to do so. The object of this arrangement is not to speed up the educational process but to permit the student to keep constantly in contact with material that is stimulating and challenging to him.

A system of general examinations had to be administered. The Senate therefore recommended the appointment of a University Examiner who should be chairman of a Board of Examinations composed of nine members representing the various faculties. All examinations which were to count for anything were to be given by the Board. The Board's technical staff prepares the examinations on the basis of material supplied by the teaching staff. The Board then administers and tests the examinations.

These actions of the Senate and the Board of Trustees complete what may be called the first phase of the University's reorganization. They were taken in the fall of 1930. The College faculty offered in the fall of 1931 an entirely new course of study centering around four large lecture courses in the physical, social, and biological sciences, and the humanities. Many departmental courses for Freshmen and Sophomores disappeared entirely. The object was to give a general education and to eliminate, wherever possible, courses with a professional aim. In the general courses the student attends lectures, if he wishes, three times a week, and a discussion group once a week. Ordinarily, he attends two of the general courses in his Freshman year and two in his Sophomore year. Thus he has time left to attend courses that will give him those tools that he will need if he is going on into the upper divisions.

The other divisions and the professional schools are most of them still at work on their courses of study. In general the Bachelor's degree will be conferred on the basis of general examinations given on the theory that the student will spend one-third of his time in a department, one-third in a division, and have one-third of it free. The courses leading to the higher degrees will be still more specialized. The tendency in the divisions is essentially that manifested in the College—to drop as many departmental courses as possible and to consolidate their subject matter in divisional courses designed to give the student, first of all, a thorough understanding of the divisional field as a whole. The structure of the curriculum is thus pyramidal, proceeding from general courses in the College to divisional courses and then departmental courses in the divisions.

Almost simultaneously with the divisional organization the faculty began to make provision for interdepartmental and interdivisional co-operation in research and in teaching. Such a university activity is the preparation of teachers. Almost all departments are engaged in it. Many of them are engaged in little else. Yet the formal training of teachers has been accidentally relegated to one department, the School of Education. The effect of this has been to diminish the sense of responsibility felt by all the departments, to prevent the Department of Education from devoting itself to its proper field, the science of education, and to promote a certain degree of disharmony between that department and the rest. In recognition of the fact that the education of teachers is an undertaking of the entire institution we now propose to place that task upon a University committee composed of representatives of all divisions and schools, and to relieve the School of Education of the burden. The result will be clarification of the functions of that department and definite assumption by the whole University of a responsibility which belongs to all of it.

As we have studied for the past two and a half years the

problems of general education, we have become convinced that they cannot be readily solved by an organization with divided loyalties. We are certain, too, that an organization which has its students for only two years will always face great difficulties in the construction of a program designed to give a general education. In addition we have observed, like everybody else, the duplication and overlapping that have afflicted the last two years of high school and the first two years of college. Our College became a two-year unit in 1930. Our College faculty has been composed of members of the upper divisions, and has been to a certain extent, a faculty of divided loyalties. The members of it have been concerned with general education in the College and with research and advanced study in the divisions. They could not be appointed in the College without the approval of chairmen of departments whose interests might be exclusively in advanced work. Our high school has been a laboratory school of the Department of Education, under an administration separate from that of the College.

On January 12 the Board of Trustees on the recommendation of the Senate approved two important proposals, one to incorporate the last two years of the University High School in the program of the College, and the other to permit the appointment of members of the College faculty without the concurrence of departmental chairmen or divisional deans. The first action gives us a four-year unit devoted to general education. The second gives us the chance to build up a faculty chosen because of its special interest and ability in this field. The four years devoted to general education will be under the administration of the College Dean; the Principal of University High School has become Associate Dean of the College.

The purpose of these actions is to provide an organization and a curriculum for the American system of public education—if not for it to use, at least for it to consider. It will be clear, however, that this purpose cannot be accom-

plished if the University limits its experiment to general education. Although I believe that we underestimate the significance of general education for all citizens, although I am convinced that any terminal course of study must give large attention to the cultural heritage of the race, I am sure also that beside the College there must grow up parallel institutions or programs which will meet the needs of graduates of junior high schools who should be prepared for business or technical activity. The needs of all graduates of all junior high schools cannot be met by general education alone. Therefore, as soon as possible the University of Chicago, if it wishes to construct a program useful to the system of public education, must experiment with terminal courses of study of a technical or business character which will parallel the new four-year organization devoted to general education.

This, then, is in outline the program of the University of Chicago. From the administrative point of view I should say unqualifiedly that the changes we have made have promoted efficiency and economy. The reduction of the number of budgets from 72 to 12 and the grant of real authority to the deans have given us an administrative scheme without which we could not have met the rapid decline in our income since 1930.

From the standpoint of attracting, retaining, and educating students my impressions are equally favorable. Our applications increased in the first year of the New Plan and have kept on increasing. The students admitted have been markedly superior to any that we have had before, by all tests that we could apply. They appear to understand and value the opportunities offered to them by the new regulations or lack of them. Thirty-nine Freshmen in the first year presented themselves for general examinations in subjects which they had studied by themselves, without benefit of instruction. They all passed, and passed with an average higher than the general average of the class. Although

these are times in which we should expect no program to assist in the retention of students, we find that the holding power of the New Plan is 5 per cent greater than that of the old.

The faculty has been notably successful, I believe, in humanizing the sciences, in de-professionalizing Freshmen and Sophomore instruction in these fields and making the science courses contribute to a general education. The museum developed at the Quadrangles in co-operation with the Museum of Science and Industry has largely replaced laboratory work. The new sound pictures in the physical sciences have greatly simplified and improved the ordinary demonstration-lecture technique. Attendance at classes under the New Plan, where it is not required, has been higher than attendance under the Old Plan, where it was required. In general, good students seem to come to the University because of the New Plan; they seem to stay there because of it; and they seem to flourish under it.

Although the curriculum, the examination system, and the advisory service all leave something to be desired, I am satisfied that they are all definitely superior to anything we had before 1931. The examinations have proved a tremendous labor to the teaching and examining staff. Since the examinations are published and distributed, new ones will have to be prepared each time they are given, so that the labor will never end. Nevertheless, we are developing a group of examiners who understand the curriculum and a group of instructors who understand examinations; this will mean the gradual elimination of much waste motion that has beset us in the past two years.

From the point of view of the organization of education —elementary, secondary, collegiate, and university—I am clear that Chicago has taken some suggestive steps. But here, I must admit, I have little but faith to sustain me. I believe—I do not know—that a six-year primary school, a three- or four-year secondary school, a three-or four-year

college, paralleled by three- or four-year technical institutes, and followed by the university—I believe, I do not know, that this is a sound, efficient, and economical organization of education. At any rate, I think it is worth trying. Certain impressions from our experience may be relevant. Our experience seems to show that the natural association of students is not in a group covering the four years of the typical college of liberal arts, but rather in two groups which separate in the middle of that college. Our divisional students, who are Juniors, Seniors, and graduate students, have developed a divisional consciousness and a community of interest quite distinct from those of the Freshmen and Sophomores, who constitute our College. The natural associates of the Freshmen and Sophomores, on the other hand, seem to be the Juniors and Seniors in high school. Certainly the faculties of the upper divisions have developed a divisional consciousness; and the faculty of the College is coming more and more to see that its problems are distinct from those of the upper divisions and allied with those of the last two years of the high school.

The development of divisional consciousness has been a striking phenomenon, for it has marked a change in the traditional departmental feeling of the University of Chicago. The construction of divisional courses of study, of divisional examinations, of divisional requirements, and of divisional research projects has brought allied departments together for the good of the students and of one another. In the biological sciences this change has been of peculiar significance, for there the clinical medical departments have become members of the division along with the pre-clinical and non-clinical biologists. The group is therefore a unique association of biologists, who, because of a common administration and a common purpose, are likely to have some influence on the course of education and research in medicine and in biology as a whole.

In the same way the inclusion of the School of Education

in the Division of the Social Sciences seems to me fraught with important consequences for the science of education and for the social studies. The tendency of American universities to regard educational specialists as people who had the queer idea that they could and would train public-school teachers has done the greatest damage to universities and to scholars in education. The social sciences have missed association with one of the most important, if not the most important, of the social studies; departments of education have sometimes had a professional, or even a vocational, cast thrust upon them. At Chicago, the Department of Education is an integral part of the Division of the Social Sciences, to the advantage of both.

I do not offer this description of what the University of Chicago is doing because these things are the only things that are being done in the university area. It is only necessary to refer to the great contributions that are being made by the great university situated in this city to remind you that even we at Chicago are conscious that other institutions, and notably the University of Minnesota, are engaged in work of fundamental importance to the future of education. It may well be that everything that we are doing is wrong. I do not greatly care if it is, for I trust to the intelligence of educators to point out our errors and thus save both themselves and us from the final fatal consequences of our mistakes. So the Chicago Plan is not the only plan. It may not be the best plan. It is not a plan that we recommend to anybody else. It may have no ultimate significance whatever. The only reason that I think it worth while to present it here is that it may serve to remind us that even in times of great financial distress it is possible for us to direct some attention to what is, after all, our main task, the improvement of education in the United States.

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