SPECIAL ADDRESS

THE UNIVERSITY: CUSTODIAN OF THE FUTURE EDWIN R. WALKER, Oklahoma A. and M. College, Stillwater

I chose the title for this address. That fact is now a source of embarrassment. If the program committee had chosen it—and I am not so discourteous as to assume that your program committee would have done so—I would have accepted it without feeling much obligation to make my remarks justify the title. In defense, it can be said the intention in selection of that title was not just oratorical bombast. On the contrary, it was a child of sober musings—whether that child is sport, mutant, or Mendelian legitimate, I can not say. The fertilizing sperm was a sentence from Whitehead; the passive, but receptive, ovum was a promise to appear here tonight; and, you are the witnesses to an experiment in ectogenetic gestation. But, I take it we are under the obligations of the professorial fifty minutes, so let us leave figures aside and get on with the business.

In perspective, the last 250 years may be called the "Age of the University." There is fully as much justification for that naming as there is for speaking of the period from the 7th to the 13th century as "The Age of the Church." This comparison was first suggested by some sentences in an autobiographical essay of A. N. Whitehead's. "At the present time, the system of modern Universities has reached its triumphant culmination. They cover all civilized lands, and the members of their faculties control

knowledge and its sources. The old system also enjoyed its triumph. From the 7th to the 13th century, it also decisively altered the mentalities of the surrounding population... Then about the year 1500, we find an ominous fact. These foundations, which started with such hope and had performed such services, were in full decay. Men like Erasmus could not speak of them without an expression of contempt. Europe endured 100 years of Revolution in order to shake off the system. With this analogy in mind we wonder what in 100 years or in 200 years will be the fate of the modern university system which now is triumphant in its mission of civilization. We can not be more secure now than was the Ecclesiastical system at the end of the 12th century and for a century onward. And it falled." That comparison and warning from the most-truly-philosophical mind of our century deserves attention. Consider a few comparisons in detail:

In the earlier period, the church shaped the world-view, or climate of opinion, of the time. It was responsible for the fact that men interpreted all events in terms of the purposes of God. The coming of rain or drought, disease or health, happiness or frustration, were to be explained by the purposes of God. In the later period, the university has shaped the climate of opinion or world-view. It is responsible for the fact that men interpreted events in terms of the events that have gone before. Rain or drought, disease or health, happiness or frustration are understood by modern man by tracing out the series of events that led to the issue.

In the earlier period, the church provided the men who administered the social institutions of the time. They were the ecclesiastics, the monks, the nuns, the friars, or other men trained by the church. In the later age, the university provides the men who administer our social institutions. It is only the very exceptional man who can administer a contemporary business institution, political institution, or other form of social organization today, without the benefit of university training.

In the earlier age, the church shaped the patterns of social philosophy. The thinking of the common man about justice and the right to rule was derived directly from Augustine's City of God. In the later age, the social philosophies were born, nurtured, and taught in the university. Stop any half dozen men on the streets of Oklahoma City; ask them about their basic political beliefs: four of those men will quote John Locke directly without being aware of it.

In the earlier age the church was intimately a part of the economic life of the time, both by active participation and by shaping the ideas that controlled it. In the later age, it was work done in the university that created the industrial revolution, contemporary technological processes, monetary theory, and theory of credit structures.

In the earlier age, the church shaped the minds of succeeding generations of youth. There was no education, except that dominated by the monastery and the cathedral school. In the later age, the university shapes the minds of succeeding generations of youth, indirectly in the secondary schools, and directly, in its own processes.

In the earlier age, the church provided the centers for the dissemination of the culture of the time to new lands and new peoples. In the later age, it is the university that establishes its branches in China, India, Africa, and among other peoples who have not yet fallen under the dominance of Western culture.

In the earlier age, the church was the custodian of such libraries as the time afforded. In the later age, it is the university that is the custodian directly or indirectly, of these deposits of cultural heritage.

In the earlier age, the church was the means of cultural interchange across social boundaries. In the later age the university transcends national boundaries and exchanges its findings with scholars in other lands.

In the earlier age, the church trained the musician and the artist. In the later age, the university performs the same function.

In the earlier age, the church designed the buildings of the period. In the later age, the university trains the architects and provides them with their canons of taste and conceptions of design.

In the earlier age, the church shaped the traditions of taste in literature and the arts. In the later age, the university performs the same function. In the earlier age, the church was the most nearly universal institution of its epoch. In the later age, no other social institution is so nearly catholic in its relations and outlook, as the university.

On these grounds, I hold there is as much justification for speaking of the last 250 years as "The Age of the University" as there is for speaking of the period from the 7th to the 13th century as "The Age of the Church." Does the contemporary university contain within its functions the seeds of its own decay? Is the university creating the institution that will supplant it as did the medieval church?

Harvard's president is an example of the fact that it takes ten years for a chemist to become articulate; but, Mr. Conant's increasing number of utterances bear the mark of one who has set himself the task of taking thought before he speaks. From him, I draw, what seems to me, the most satisfactory definition of a university available in contemporary expression: "A University is a self-governing community of scholars devoted to serving the need for general education, professional education and the advancement of knowledge." He adds that throughout its history the university has been in a healthy and secure position only when these functions are in a balanced interrelationship. I suggest that we use that definition, if it is acceptable to all here, as a basis for a more intimate look at the institution that so vitally concerns us.

I.

The University is a self-governing community of scholars.

I submit that, this is a definition of a university in terms of what it ought to be, and can be, rather than, what, in most instances, it actually is. The prototype of social organization adopted by the university was the feudal system, and this form continued to characterize higher education down to our own generation. Many vestiges of that feudalism still survive.

You will recall that in the simple feudal system the king was vassal to God, and controlled, as his fief, all of the land of the kingdom. Chief noblemen were vassals to the king, and held their fiefs by his leave. The lesser noblemen were vassals to the greater noblemen, and held their fiefs by grant. The serf was vassal to the lord of the manor, and held his fief as a group of field-strips, under grant from his lord. The figure is not strained, when we suggest that the university president is vassal to a board and a constituency, holding his fief, so long as he serves their interests and gives loyal obedience. Each dean is vassal to the president, and holds his fief under lifetime grant. Each department head is vassal to a dean, and holds his fief under similarly granted tenure. Each department head is a lesser nobleman, lord of a manor fief, selecting his serfs, alloting each his strips of subject matter for cultivation. The serfs are not slaves, but relatively free, so long as they give loyalty and obedience to the lord of the manor.

I submit, within an organisation like that, the university sows the seeds of the conventionalization of knowledge, and the fixation, crystallization, and ultimate decay of its functions. Under such a system, it cannot remain sensitive, flexible, and adaptable to the needs of society for general education, professional education, and the advancement of knowledge.

Mr. Conant is right in asserating that a university must be a self-governing community of scholars, not because such a condition is demanded by any assumed inalienable rights of scholars, but because the society needs to have its requirements served by the university; and only a self-governing community of scholars can keep the flexibility, openness, and sensitivity required to serve those needs.

If evidence is required to support that contention, consider, for a moment, the difficulties the universities are experiencing in adjusting to needed changes in education in engineering, medicine, law, and general education. In each of the professional areas mentioned, groups have given careful consideration to the need for reform of the curricula, designed to prepare men for these professions. They have suggested change and improvement. But, it has been the experience of nearly all of our engineering schools, our law schools, and our medical schools, that the attempt to change the established practice has met with opposition and difficulty. In some, if not all cases, they have been completely blocked. The obstacles are conceptions and roots of authority that are based on the typical feudal organization of a university. Likewise, discussions of needed change in general education have required that our institutions look at their functions as a whole, considering the total result of their departmentally divided education on the student. Institution after institution has found it difficult, if not impossible, to get this unified consideration of the problem, much less any corporate action.

To organize the university as a self-governing community of scholars grants important privileges to members of the faculty, to be sure. What makes it really important, however, is the fact that only in this type of organization can the society have its needs served. I suggest we replace the feudal prototype for university organization with the principle of representative government, which is the most distinctive characteristic of our American society. To implement that shift, I suggest the principle: in all decisions affecting the interests of any group, those interests should be represented in the processes of decision. That is as radical as the Declaration of Independence or the Constitution of the United States. You will recall that these were once regarded as very radical documents; but, the persons who regarded them as radical were accustomed to a feudal political organization, and, I suggest that, those who regard the principle as radical when applied to the university will do so on the basis of their devotion to a feudal organization in the university.

П.

The first function of the self-governing community of scholars, which is a university, is general education.

The term general education has come into wide usage only in very recent times. The function of the university that it designates, however, is a very old one, indeed. As with other new terms which come suddenly into very wide usage, an undue amount of confusion has grown up around it. Those who are particularly interested in the area are apt to use the term as a kind of "solving word," as if there were some virtue in the term itself. Those who are not familiar with the term, and not so interested in the functions that is designates, are likely to react negatively to the word itself, simply because, they are confused by it. It helps in clarifying the term, first, to point out some specific negatives. General education is not synonymous with study in the lower division. Much of the study elected by a student, in his junior and senior years, serves the purposes of general education, while much of one's reading throughout life continues to serve these purposes. Second, general education is not synonymous with survey, or general courses. To be sure, such courses have been used to serve the purposes of general education; and, some of them have served those purposes well; but, the educational function is not to be confined to a particular

organization of subject matter. Positively, general education is defined by one group of purposes in the educational process. I tend to identify these with three needs of the society and of the individual.

scritural tradition in a community of shared meanings and values. The basis of unity, in any culture, is what is truly common, in thought and feeling, in that culture. Unless there is some common body of ideas, some common body of knowledge, some common tendency to respond to values, there is no basis for common discussion, feeling, or action. The area of common knowledge, meanings, and values, has steadily diminished throughout the history of the United States. In the colonial period, one might essume, among the educated classes, a fairly large area of common knowledge and meanings. This was drawn from familiarilty with the Greek and Latin classics, the Biblical literature, the writings of a group of Protestant English divines, and the political philosophy of English liberalism. One has but to read the literature of that period to find evidence for the assumption of such a common background. That literature is replete with references assuming this common knowledge. It is not possible to assume any such common knowledge, meanings, and values today. One of the most fundamental needs of the society of our time is for such a common core. The education that is directed toward recovery of such a common core is one aspect of general education.

General education is directed toward the development of competence in accepting social responsibility. The best definition of democracy that I know is not in terms of freedom; rather, the degree of actual democracy is measured by the distribution of responsibility for making choices. There can be no effective choice unless there is knowledge and the ability to think, sufficient to enable one to delineate the actual alternatives that are present in any specific situation. That is to say, there is no meaningful choice unless one knows what the possibilities of choice are. It follows that democratic citizenship is actual only for those who can, in the words of the SPEE report, "understand, analyze and express the essentials of an economic, social, or political situation or problem." That education which is devoted to bringing one to the level of maturity in citizenship constitutes a second aspect of general education.

General education is in the third place the attempt to provide a basis for the maturing of the individual's capacities for enrichment and enjoyment in his life. The pleasure of understanding processes in his environment that are outside the areas of his professional responsibility; the basis for coming alive to the world of meanings communicated through music, painting, sculpture, literature; the intellectual satisfaction that comes through the wholeness of mind that should be the result of the study of the integrating ideas of philosophy: it is the purpose of general education to provide the basis for these things. It can not, of course, secure achievement in any of these realms at a very high level; but, it can give the understanding of fundamental ideas, the familiarity with sources and methods, and the initial experiences on which the individual may build his own growth.

If general education is properly understood as being devoted to the purposes of creating a community of knowledge, meanings, and values, of contributing to maturity in citisenship, and of giving the basis for the fulfillment of one's capacities for enrichment and enjoyment, it will be recognized, quite readily, that its purposes have never been truly foreign to higher education. In much of the higher education in America since 1900, however, these purposes have been very sorely neglected. It is probable that every person in this room could bear testimony in evidence of such neglect. The company of the educated illiterate is a very wide company indeed. The average American doctor, engineer, lawyer, business man, and, yes, school basicher, cannot read intelligently the whole of any issue of a good, general periodical. The doctor, engineer, scientist, or businessman, is very likely to read articles dealing with social problems, stories, poems, and discussions

of music and art, at that level of competence provided him by a high-school education. The writer, artist, poet, musician, or housewife, will read discussions of developments in science at about that level of competence expected of an eighth-grade student. From 1636 to 1900 there was an overemphasis upon general education in America, and a relative neglect of the advancement of knowledge. For the last 45 years, there has been an overemphasis on what we call technological education to the neglect of the development of "well-balanced persons" and competent citizens.

III.

The second function of our self-governing community of scholars is professional education.

Genuinely professional education is one of the most widely neglected of the university's functions today. Certainly there has been no underemphasis on vocational education, that is to say, education which teaches skills in work. Likewise, there has been no neglect of technological education, which goes one step beyond vocational education, in that it is based upon a knowledge of the conclusions of the sciences and their application to some particular area of societal need. But there has been relatively little genuinely professional education. By professional education, I mean more than training to produce skills in application of knowledge in accord with current practices. I mean education as a basis for creativity in the profession as well as mastery of current practices. I have a friend who likes to say: "A man who can build a bridge is a skilled workman. A man who can create a new bridge design and build the bridge is a good engineer. A man who can create a new bridge design, build the bridge, and explain it so any fool can understand it is a damn-good engineer." Engineers tell me that education in that field is not truly professional, that schools are turning out men who are skilled in the application of the techniques and the formulas that are in current usage, but not men who are capable of bringing to their work the resources of fundamental knowledge of the sciences that are used and creative imagination in the application of that sciences that are used and creative imagination in the application of that knowledge. Medical men tell me that the medical schools are turning out, not scientists, but men who are skilled in the techniques of the application of the sciences in their particular fields, according to the accepted practices at the time of their graduation from medical school. Philosophy of law has fallen within my own field of study, and I know that our law schools, typically, are turning out men skilled in particular practices in the law, but, with very little fundamental knowledge of the law, or of its processes, and no knowledge at all of the relation of the law to its social context, or to the assumptions that its behind trends in judical decima context, or to the assumptions that lie behind trends in judicial decisions. Certainly the education that we give to teachers, businessmen, newspapermen, musicians, artists, and writers is not geuninely professional in character.

The development of technological rather than professional education in the United States during the last 45 years is, of course, based upon the social demands of the period. Perhaps we can understand that period in our own life better by comparing it to a more-concentrated one in the life of another nation. In 1917 Russia found herself the inheritor of great scientific advance in Western culture, natural resources of unknown extent, and a great lag in the technological application of that scientific knowledge to her resources. Russia attempted to close this gap by an unparalleled concentration of effort upon the technological, a series of five-year plans, a concentration of educational processes in the field of technology, for the rapid training of personnel competent to carry out their bold schemes for advancement. We did the same thing over a much-longer period and in a characteristic American way. Beginning soon after the Civil War, we developed our technological schools. There was a parallel development of public and private economic enterprises, creating a snow-ball-like growth in the standard of living of the people fed back into this demand. It is only in

the last ten years that we have begun to close the gap between the knowledge of structures and processes in our material environment and the application of that knowledge to the needs of men and society. Professional education took time and during this period there was not time to spare in the training of men. The shortage was too great. We needed engineers, whether they had the training of creative professional men or not. As for education in the social sciences that would enable them to be mature citizens, and the education in the other spheres that would enable them to be fully developed persons: that was out of the question.

Now we have almost closed the gap between advancement in knowledge and its application. In the future the two must develop side by side. This means a demand for genuinely professional education rather than the narrow concentrated technological variety.

IV.

The extension of knowledge, says Mr. Conant, is a third function of our self-governing community of scholars.

It would be presumptuous for me, in this company, to emphasize the need for the university to accept responsibility for the extension of knowledge. Your membership in this society, and your presence here, is evidence of your commitment to this principle. There can be no effective general education or professional education ir, a university that is not devoted to the extension of knowledge, for in such an institution, the members in the faculty will lack that freshness and zest that comes only with the disciplines and enthusiasms generated in the attempt to extend the frontiers of knowledge. It is equally true that there can be no effective professional education unless the student is brought into association with those who are engaged in the extension of knowledge, otherwise, his education will be in the hands of those who deal with their subject matter at the level of the second hand. It is unfortunate that there have been those among us who were interested in either general education or professional education who have failed to recognize this fact.

I said a moment ago that it was unnecessary for me to emphasize the importance of the extension of knowledge, so we'll quit trying to do so. Let me, rather, point to what I regard as two negative characteristics of contemporary research.

In the first place, I think it is time that someone recognized honestly, and openly, that the emphasis on the importance of research has led to an unmannerly scramble for status by institutions and individuals in this area. So sealous are our institutions to lay claims to status by pointing to a long list of research projects, that they have become willing to accept almost any kind of a project, as research. Individual members of our faculties, convinced that their professional advancement is dependent upon making some showing in this area, and lacking ability, or time, or resources, that will be required to devote themselves to significant work, have cheapened the whole enterprise of research by devoting themselves to trivial and inconsequential matters. Mr. Bruce Truscot, in a very interesting book on higher education in England, called "The Red Brick University" distinguishes between "fact grubbers" and research that pioneers the extension of knowledge. Would that his distinction in words could be indelibly stamped on our at-

I think I have not too much kinship with the melancholy Jeremiah, in pointing to some possible dangers in new tendencies in the organization of research. It does not lie within my sphere of competence to point out these dangers in detail. I can only call your attention to them, and you can fill in the details, out of your own wider experience. I am concerned over the alarming volume of research that is now under the military control of the Army, the Navy, and the Air Corps. Insofar as these military units have established separate research institutes, perhaps I ought to be

encouraged by the observation that, I do not know a single really first-rate chemist, physicist, or mathematician, who has been willing to put his energies to work under these auspices for a very long period of time. The permanent personnel of these establishments seems to be made up exclusively of thoroughly second-rate men.

For a long period of time, industrial enterprises in the United States recognized the wisdom of keeping research inside the university, and devoted large sums of money, free of restricting conditions, to promote that work. I am concerned by the fact that, during the war years, deductions from excess-profits tax allowed business concerns to develop rather-elaborate research enterprises, at no cost to the stockholders. They have drawn some first-class men into these enterprises. My concern in this regard is over what the depletion of personnel does to the university, as well as, over the fact that the results of research then fall under the whole patent system and its control for the profits of a few.

The dangers to which I have pointed can be stated explicitly, and made clear, only by the men of science; and, only the men of science can prevent the growth of these negative developments, if they are as truly negative as I think they are.

V.

The future of our society, in its internal aspects, is in the hands of the university. We cannot operate the complexities of contemporary society without the university-trained men to administer its major institutions and functions. We cannot preserve a complex democracy without a broad group of persons educated for mature and competent citizenship. We cannot continue to deny to some of our best minds and most-competent public servants the opportunity to lay the basis in their education for the development of their capacities for personal growth in enjoyment and enrichment of living. In all of these ways, the university is the custodian of the future.

The well-being of that future depends upon two things: First, on the university itself. The university must keep that openness and flexibility that will permit a self-governing community of scholars to do the job of general education, professional education, and the advancement of knowledge, in relation to the changing needs of a dynamic and complex society. Our universities can not achieve and maintain that condition unless there is a widespread acceptance of responsibilities that have been passed by with regularity in the recent past, and unless there is an uprooting of some of the stubborn elements of traditional organization and practice.

The university's concern for its functions in general education, professional education, and the advancement of knowledge, and, keeping those three in proper balance must be matched by willingness of the society to maintain the conditions essential to the performance of those functions. Certainly there is no lack of appreciation of education in contemporary American society. On the contrary, there is a tendency toward a naive over faith in education, science and the university. This respect for education, and faith in its processes, does not mean, however, that there is an intelligent understanding, upon the part of the public, of the conditions that are necessary for its welfare. The public needs to understand its universities better than it does. It needs to understand the importance of the University in serving the needs of society, and the conditions that society must meet to promote the welfare of those functions. These conditions seem to me to be primarily two: One, financial support; and two, freedom to do the job.

In discussion of adequate financial support for the functions of the university, let us make the discussion specific by reference to the situation in Oklahoma. If the institutions of higher education in this State are not to lose much of the ground that they have gained, and, if the functions which they perform are to be maintained, much less improved, I submit that the

people of the State must seriously consider doubling the support for instruction and research in these institutions. I did not say "doubling the budgets" of these institutions, for I am not competent to discuss the needs in buildings, libraries, laboratories, etc. Others who have given attention to these matters will have to speak concerning them. But, I am convinced that the salary scale for the faculties of our institutions must be doubled, and that the money devoted to research must be multiplied by two or more. Our institutions entered the period of inflation rather far down the list in any comparative ranking of salaries paid in the Midwest. Now, though we have advanced those salaries somewhat, we have fallen farther behind in our relative position. Now, we have salary scales lower than those in Mississippi, Alabama, South Carolina, and Georgia, formerly the lowest in the Nation. Already we were in the position of needing to improve the quality of our faculties by attracting more-competent scholars into their membership. Now, we face a situation in which we cannot maintain the quality already achieved. I have no suggestions for the means of bringing the public to recognize this fact and to accept responsibility for the improvement of the situation. I point to it as a fact. Great men in ordinary buildings can make a great university; ordinary men in great buildings cannot.

The other condition which the society must maintain, if it is to have the benefits of the functions of the university at a high level, is freedom for the university to do its job in its own way. The way of the university, in confronting problems, is to seek their solution through variety of approach, open inquiry, and free discussion. If the problems, with which the university deals, are important problems, then they will be debatable issues, issues in which the public is concerned, issues about which there are great differences of opinion, issues concerning which people are committed on one side or the other. It follows that if the university pursues its work on these problems by open inquiry and free discussion, it is inevitable that many will be dissatisfied with many elements of that discussion. It will be recalled that during the Puritan Revolt in England, Oxford University was subjected to sharp criticism of diametrically opposite kinds. Milton directed sharp attacks against the University because he regarded it as a center of reaction, preventing the state from moving toward needed reforms. Hobbes, on the other hand, attacked the University, even more severely, because he regarded it a hotbed of Puritan radicalism. It has been suggested that these two criticisms taken together prove nothing except the fact that Oxford University in that period was a vital institution, dealing with live problems. Time and again university presidents have reported that they have received, in the same mail, opposite criticisms of the same faculty member.

The university more than any other institution holds the future of our culture in its hands, and one of the conditions for the security of that future is the freedom for the university to do its job in its own way. It cannot do its job in the businessman's way, or in the Army's way, or in the political way.