

(Address given by the Reverend Theodore M. Hesburgh, C.S.C., President of the University of Notre Dame, at the Fourth Annual Meeting of the Council of Graduate Schools, Chicago, December 10, 1964)

### THE UNIVERSITY IN THE WORLD OF CHANGE

The theme of your conference is new answers to old and new questions. Before speaking of answers, I should like to develop some of the new questions facing universities today. One might begin by questioning the assumption that there really are new questions, whether universities today are or should be anything different than what they always have been. I think there are new, as well as old, questions, and that universities will change if they find and apply new answers to these new questions. Why? Because the world in which the university lives and operates today is vastly different from the traditional world in which universities were born and in which they mainly developed in traditional and somewhat unchanging splendor. There is something almost sepulchral in that figure of ivy-covered walls.

One could choose many different points of departure in describing the changes that characterize the modern world. Perhaps the most fundamental statement of all would be the obvious remark that ours is essentially an age of rapid and fundamental change, so rapid that it is difficult, if not

impossible, to understand the full dimensions and effects of the change; so fundamental, that age-old institutions like the university and the Church must readjust their ancient missions with quite unaccustomed rapidity unless they are to become irrelevant and non-directive in the process of change.

Personally, I welcome change, not for its own sake, but because it is a sign of life in a non-eternal, imperfect world. Centuries without change were most often centuries of stagnation. Change, however, has not always been inevitably and automatically for the good of man or society. Some changes have indeed been ruinous, particularly when the change was not related to the changeless principles that give meaning and direction to human life. Will the changes that characterize our age be a force for good or for evil? It would be foolhardy to prophesy at this moment, but I would say without hesitation that unless institutions like the university participate actively in the process of change, the change is less likely to bear the ultimate marks of the true and the good to which universities are by nature committed.

To come to grips with this proposition, let us consider several specific changes now in progress: the process of human emancipation, the

process of human development, the process of technological innovation. All of these processes are, of course, inter-related and, to some extent, inter-dependent. All of them present a new and unprecedented challenge to the university. Each of them is at the heart of modern change; all will affect mankind for good or for evil; all are both national and world-wide phenomena and each of these changes will take place with or without the direct involvement of the university.

First, the process of human emancipation. It is a startling fact that more nations have become independent political entities since the close of World War II than the total of existing nations prior to the war. About a billion people, a third of mankind, have passed from a colonial to a free status. If a new Rip Van Winkle, expert in the political, economic, and social situation of pre-war Africa, for example, were to awake today from a sleep begun in 1946, he would be bewildered by the existence of 36 new nations, many with new names, all with completely new aspirations and institutions. All this has happened in less than twenty years. Much the same story is true of Asia. In Latin America, the move to national independence came much earlier, but the new aspirations in Latin America

are of post-war vintage, as is also the move towards new structures and new institutions there.

This modern process of human emancipation is not restricted to recent colonial peoples either. Here in our country, we had at our birth a series of marvelous documents stating in the main that all men are created equal. The ideals thus stated did not preclude the existence of slavery, though eventually we had a Civil War to settle the issue. A new federalist paper issued during the Civil War, Lincoln's Emancipation Proclamation, seemed conclusive, but more than eighty years passed before we really began to do something about it. The last twenty years have seen a new emancipation come upon our Negro citizens, and they have actively participated in the process with rising crescendo in recent years. Today, three Federal Civil Rights laws and innumerable protests later, we find ourselves at a new crossroads of emancipation, with new human aspirations, not unrelated to those of the people of the developing nations. In fact, we are just beginning to realize that we have in America an underdeveloped area within the most developed nation of the world and the moving force within is for a new human emancipation.

The second striking process of our times is that of human development. The process of human development is the age-old story of man's slow ascent from primitive caverns with flickering campfires that were pin-points of light in an all-engulfing darkness of human misery. How many centuries has man's lot been one of ignorance, illness, hunger, alternating cold and heat, minimal shelter, marginal life and early death? Whatever the estimate, this much is certain, that there has been more effort at human development in our age than in all the ages of man's previous history. Moreover, there are more than twice as many people involved than there were a hundred years ago, and there will be double the present number involved a short forty years hence. There have been more hungry people fed, more sickness cured, more minds educated, more houses built, more clothes manufactured, more books written, more studies made, and more groups formed to promote development in our age than in all the previous ages together.

Not that the problem of human development has been solved. But never before has it been possible to even think of a solution on a worldwide basis. Now the process has begun, the concern is born and multiplying, the means are at hand, and something is beginning to happen. What will eventually

result is still in question, as the solution to old problems always creates some new problems. The conquest of disease begets a population explosion.

The process of human development is as complicated as the man and the society to be developed. Economic development implies political development, and both presuppose education. Temporal development cannot override man's eternal concerns, or man's basic spiritual rights and obligations related to his long-range perfection and maturity as a person. Science cannot substitute for culture, nor the body for the soul in the course of development. The good man and the good society are not simple realities. There can ultimately be no real human development without both of them, and neither can be purchased with money or voted into being or accomplished by technology alone. Again, in the process of human development, we have a movement of significant human change crying for an ultimate meaning and direction.

The third key instrument of change in our times is the process of technological innovation. Here again, as in the processes of human

emancipation and human development, we do not have an absolutely new reality, but a process that is moving so precipitously and on so many different fronts at once that we are hard put to analyze its total impact on our times and ways. You all know the litany of change. Speed increased in a generation from a horse's gallop to a jet traveling through the sound barrier. And then when 3,000 miles an hour had been achieved a few years ago, an astronaut suddenly went six times faster. Communication advanced from a few miles to across the ocean, to around the earth, to millions of miles into space to correct the course of the Mariner vehicle en route to Venus. Sound communication changed from code, to voice, to colored pictures. The new pictures of the moon were not ten or a hundred, but a thousand times better than the old. High energy studies since the war jumped from a few million to many billion electron volts. Astronomy enlarged its field by billions of light years in extent, and by a much wider spectrum of observation through radio telescopes. Biology descended to the molecular level and below. Lasers and semi-conductors are again revolutionizing communications and calculations. The developments of one decade in electronic computers reduced problem-solving time from weeks to hours to minutes to

billionths of a second. Materials in common use today were unheard of ten years ago. New drugs appear so quickly that even the doctors are often bewildered.

One could go on, but the point should be fairly obvious that technological innovation has created and is creating a vastly different world. Nor is every innovation constructive. No matter how quickly the world's population multiplies, all the earth's people can now be destroyed in a matter of seconds and the earth itself made uninhabitable. The drama of human life has always contained great challenges, but today the drama is bursting through all its traditional limits. Life and death, war and peace, freedom and slavery, virtue and vice, work and leisure, health and sickness, ignorance and knowledge -- each of these may have the same philosophical content, as indeed they do, but the span of difference, the inner relationship of time and space in the human equation, the intensity of tension and desire, the magnitude of consequences, the mounting urgency of meaningful human freedom and character and wisdom for survival have come upon us educators as an almost alien force invading the halcyon life of university existence.



We have only spoken of three elements of change. There are many others. All of them are moving, moving ever more quickly, and most of them can best be described as explosive. The least the university can do is to attempt to understand the intellectual content and meaning of the ideas that lie at the heart of these movements, to plot, insofar as possible in the context of human understanding, where they are and where they should be moving; to prepare our students for this world as it actually is, not as we would wish it to be by some nostalgic attachment to a more peaceful and stable past; and finally it would seem imperative that with growing understanding there should also be a growing involvement of the universities, of its faculties, students, and graduates so that we may somehow guide this change into channels that are truly human, in the broadest sense of that word.

Some may say, "Better to get involved with a tornado - the university will never survive such involvement." One could just as well take the opposite approach, perhaps more realistically, and propose that without the direct involvement of the university in these all-persuasive processes of change, the university may not survive, at least not as the directive

influence and critical presence that it has always been in society.

Change, without the active presence of the universities within the process, may well run wild and produce a world that is alien to all that the universities hold dear: freedom, truth, and the good of mankind.

In a world of explosive change, the university cannot fear change within itself. The university has seen changes enough in its long history. It has survived them all, and indeed, perfected itself as an institution of great importance by coming to grips with each change as it occurred. The problem today is, I believe, very special and unique in the history of universities, because of the rapidity and expansiveness of change. My own preference would be to view our new situation not as a cause for dismay, but as a new and great opportunity to reiterate in our times, in many new and imaginative ways, the key importance of the university for man and society. We must do this without denaturing the university's essential mission or its deepest values: to be at the service of all that is true and good, to be the enemy of all that is false and evil, and to enlist the best minds and hearts of each generation to join us in this high endeavor; to transmit truth, to find new vistas of truth as it appears

in multitudinous and variegated forms in every age and yields itself to those who seek it diligently, to be critical of all sham that masquerades under the banner of truth, to form minds to make this all-important critical judgment, to inspire hearts to commitment and service -- this is our role, and its scope can indeed be enlarged by greater involvement in the three processes of change discussed above.

I can only suggest the main lines of involvement, but they may be sufficient, hopefully, to indicate that the university is indeed faced by new questions, as well as old questions, that demand the best of our old answers, as well as the most imaginative of new answers.

The modern process of human emancipation brings multitudinous new challenges to the university, both internationally and domestically. The university's basic mission can be cast in terms of human emancipation: the truth shall make you free. Education in all forms is the deepest aspiration of the newly-emancipated people of the world. Freedom without education is freedom for chaos, freedom for bad government, freedom for disorder - political, economic, and social. In many countries, more less-developed than others, the new freedom is at present a force for retrogression rather than progress.

One might argue with the timetable of emancipation, but such post-factum arguments fly in the face of history and reality. There is no point in the university engaging in this practice of futility and frustration. Right time or wrong time, emancipation has come to about a billion people. The university probably had some indirect part in the worldwide phenomenon since most of the new leaders are products of our universities who learned their lessons well and made their own timetables, crying "Uhuru" even as the French Revolutionists shouted "Liberte". We, too, like these modern patriots, had our Patrick Henry when there was scarcely a university in the land.

The task now is to give meaning to the new freedom. Universities everywhere can do this, but they will not be founded, nor will they grow to maturity in the developing lands, without our help. As they are born and grow, we shall have to help educate their faculties, both here and abroad. And we must do this in an open-minded manner, realizing that their university pattern maybe different than ours, for their needs are different than ours. We shall have to help them avoid the Latin American pattern, where a country whose main products are beef and grain educates

sixty per cent of its university students to be lawyers, two per cent to be agronomists and veterinarians. Already there is appearing something of the same pattern in the new African universities, as well as the nefarious practice of students attempting to dictate policy to the university. Freedom to riot is not the same as freedom to be critical and to grow in mature responsibility. Freedom to become highly educated also implies freedom to serve one's country and one's people, not to spend the rest of one's life on a pedestal. These are values that we have learned. They are in the best university tradition. They have served our freedom well and they can serve today the worldwide cause of human emancipation.

Some movement has been evident of late to create an international university, much as the Soviet Union created Freedom, later Patrice Lumumba, University. I think that we should resist such a movement. Today all universities should be international. All of us must serve the whole of humanity to become more learned and hence more free. Our students should be given ample opportunity to study in legitimate academic programs abroad and our doors should be as wide open as possible to international, let us stop calling them foreign, students. In a word, cost what it may in internal

adjustments and special services, we should all, without diluting our programs one whit, become Freedom Universities.

The most dramatic response to the most anguishing domestic problem of our times has been the Negro Civil Rights Movement. Universities played all too meager a positive part in this movement, in fact, at times were the center and locale for a negative role. It often took court cases and federal action in the form of non-segregation clauses in federal aid contracts to get us to open our doors. Now that the open door is fashionable, we have not really begun to undertake the remedial action necessary if Negroes' equality of educational opportunity is to become a reality in our institutions. Everyone says that Negro leadership is often lacking, but where is it going to come from if not from those who have had the full opportunity for the highest and best education that our universities provide? The percentage of Negroes in our graduate schools is pitiful and will continue to be minimal until we become more interested in remedial programs, beginning in the elementary schools. Summer institutes for teachers and students have proven successful in the sciences. Why not promote the same kinds of remedial education for this most under-developed

part of our whole American educational system? No hope is possible without it, and ultimate hope calls for our imaginative research and action to find and apply new answers to the whole broad problem of civil rights in our country. We have generally avoided such research and action like leprosy, and the present excesses will continue until we provide better and more workable answers to the difficult problems of urban renewal and slum clearance, and integrated education, North and South. If no man is an island, neither is any university.

The process of human development is also at the heart of what a university is and does. The new element today is the worldwide context of development, the greater numbers of people involved, the new sciences of planning for the total development of whole countries, regions, and continents. Most modern universities have within their walls all of the arts and sciences that are necessary to the total development of man. I believe that the special problem of the university is to use all of the means available, to become involved to the greatest extent possible, and to guide a balanced development. There is always the temptation to see development as a purely economic reality, to play games with mathematical

models, to oversimplify the reality of total development that, in fact, involves every department that is relevant: science and technology, medicine and agriculture, economics, sociology, political science, psychology, anthropology, geography, history, business and public administration, languages, yes, even literature, philosophy, and theology.

Any academic discipline that offers legitimate knowledge to man can assist in the problem of human development. The front line of development may be the use of the new sciences and technology that provide us, for the first time in human history, with adequate means of liberating man from his ancient servitudes of hunger, illness, poverty, superstition, and homelessness. However, we can never forget that man may exist, but he does not live by bread alone. Any development that overlooks basic human dignity and fundamental human values merely substitutes a new servitude for the old ones.

Is it too much to expect that everyone in the university world today, even students, make some contribution to human development? I think not, for the opportunities are endless. There is one factor in modern student life, however, that seems to work against this. The modern



student is caught endlessly in a competitive situation that really denies him the freedom to find himself in service to others. In elementary school, he must compete to qualify for a good high school. In high school, the competition continues for entrance into a good college. Once in college, the same endeavor perdures to obtain the fellowships available to a good graduate school. Here, more of the same for a good appointment to a good teaching position in a good college or university, where publish or perish takes over. All this effort is for one's self, in competition with others, and never does the student really have a chance to get off the escalator to lose himself in altruistic service to others, that he might really find out what kind of a person he is, what his values are, how much generosity and dedication he has. He is deprived of that which would make him a much better teacher, because he would become a better person, more in touch with the true human situation, better qualified to teach others to understand themselves and their world.

I would suggest that we break the lock step at the most appropriate time, between college graduation and graduate school. Once the graduate fellowships have been awarded in the normal competitive process, we can

legitimately hold them in abeyance while the young man or woman takes time out to find himself or herself, without prejudice to the further educational opportunity that they have earned competitively. An imaginative psychologist, Frank Barron, recently described what a study had portrayed the ideal graduate student to be:

"There was, of course, a substantial core of agreement about the qualities that a creatively mature person should possess. These included self-respect and good sense; personal courage, independence, and a sense of humor; good taste; a certain innocence of vision and spontaneity of action; honesty of thought and behavior; social responsibility; and democracy in interpersonal relations. These mature ones should be persons who assumed responsibility for themselves, who treated others decently, and who felt friendly with their own past and unafraid of their future. Finally, they should be able in their own lives to contribute something of human love to the world." (Creativity and Psychological Health, Dr. Frank Barron, p. 38)

I cannot imagine such a graduate student evolving in our institutions of higher learning unless we break the present lock-step competitive process described above, and allow these students the opportunity "to contribute something of human love to the world." The graduate student of the future will be better for this experience, and so will the university.

This would make university involvement in human development much more meaningful later on as these students of today take our places tomorrow. The university involvement in human development must be a human, not merely an impersonal institutional commitment.

The process of technological innovation is not alien to the university either. In fact, much of the basic scientific research that gave birth to the new technology took place in the universities. We are mainly concerned here with the consequences of the new technology. I do not wish to retread the worn path of controversy surrounding C. P. Snow's Two Cultures. Personally, I think that in many areas the humanists have already lost the battle and we do have, more widespread than most of us would admit, one dominant culture that is largely technological. Certainly,

there is no reasonable comparison between support for graduate studies in the sciences and in the humanities. University people have recently shown great interest in a National Humanities Foundation, built on the pattern of the National Science Foundation. As one of the members of the Commission which produced this recommendation, I naturally concur with it. Congressman William S. Moorhead of Pennsylvania has already introduced H.R. 12406, a bill to constitute such a foundation. I would judge that the enactment of this bill is still on the distant horizon, but at least the process has begun. We should not resign ourselves to this one simple solution. Perhaps a story would illustrate what seems to me to be our key dilemma.

Dr. Norbert Wiener, who coined the word "cybernetics", once said that a computer could well give the best solution to the problem of winning wars, but it might not be a moral solution, because computers do not have a moral sense. They may well prescribe the most efficient way to win, but at the cost of destroying a continent. We are experiencing a better world today, thanks to technological innovation, but the best that this can produce is a better material world. It will not necessarily

be a more humane world, more sensitive to moral good or moral evil, a world which cherishes the higher values to which the university is committed. Science and technology are at best neutral powers. Their direction and ultimate meaning must come from other disciplines, from humanistic knowledge of every kind, including again philosophy and theology. In lieu of direction from these other disciplines, we may well find ourselves increasingly in Orwell's 1984 - even before 1984 - given the present rate of change. Again, as Wiener said, we are using machines to escape responsibility or divide it, asking them to make our moral decisions for us.

The universities can be the place wherein balance is achieved, meaning sought, and a humane direction provided. It will not happen if our graduate school departments of humanities slavishly ape the methodology and language of the physical sciences and neglect the methodology and language and philosophy proper to the humanities themselves. Despite the overbalanced support available to graduate students in the natural and physical sciences, we still get a reasonable proportion of graduate students in the humanities, but at what human cost to themselves and to the university.

They are made to teach when they should be studying or doing research; their time span of doctoral work is much longer than that in the sciences; they must undertake all manner of outside work to exist; they must teach before they are ready - in a word, we have allowed them to become second-class citizens despite our protestations to the contrary.

If we allow such imbalance between science and the humanities to exist in our institutions, I do not see how we can protest if it becomes more and more evident in society at large. Moreover, we continue to produce scientists and engineers who are technically competent as scientists and engineers, but often completely innocent of the values that give human life larger meaning. Should we then be surprised if there are 80 engineers working for the Agency for International Development and 8,000 for the space agency?

Another deeper problem. You will recall that at the beginning of this paper I spoke of the university as being by nature at the service of the good as well as the true. Universities are first and foremost and essentially dedicated to discovering and transmitting truth - but too long we have harbored a false dichotomy between the true and the good. What

is humanly, or divinely true for man is also good for man. I do not believe that we ~~cannot~~ be effective champions of the truth without some commitment to the good.

There seems to be a real moral vacuum in many of our universities today. We might ponder what this meant in Nazi Germany when great universities allowed themselves to be prostituted to inhumanity in the name of moral neutrality.

If universities are to face the changes of our times effectively, and not be swallowed up in the change, each one of us university people must, I think, be men of courage, of commitment, dedicated to justice, to the great human values of Western Culture, unafraid to speak out whether it is popular or not, knowing where we stand and why, unashamed of our moral, as well as our intellectual, commitment. We cannot expect the best of this new world unless we help create it, for such is our task and such is the ancient civilizing glory of our universities.