CHOOSING IS THE HARDEST THING TO DO

Student Orientation Address

Aims of Education Series

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References

(1) Quotes attributed to Arthur Holly Compton are from the book:
    The Cosmos of Arthur Holly Compton, edited by Margorie Johnston,
    Alfred A. Knopf, New York, 1967

(2) Quotes from the book 1984 are from the Signet Classic (paperback) edition

(3) Quotes attributed to South Africans are from the book The White Tribe of
    South Africa—South Africa in Perspective, by David Harrison, University
I was very pleased when Dean Levine asked me to give this year's "Aims of Education" address. I have not spoken to a group of entering college students since I was the dean of a college myself...at Brown University. In order to prepare myself for this evening, I looked back at some of the talks that I had given during the years from 1974 to 1979. I will not inflict upon you the important messages that I left with those entering classes, but I can assure you that much of the advice I gave them proved to be the same kinds of things that I would say to an entering class today, which to me means one of two things.

First, perhaps there are some enduring messages which retain their validity over long periods of time. That is the positive interpretation. Another interpretation is that what I have to say is so limited and unimaginative, it has not changed in ten years. I, of course, choose to believe the former.

In any event, it is a pleasure to have the opportunity to address you. Before saying anything else, let me first wish you the best of luck during your studies at Chicago. I hope you not only profit from the experience, but that you also enjoy it. There are few points in one's life that are as important as this week will be for you. Finishing high school, graduating from college, the first job, getting married, and the first child are among the most important milestones in anyone's life. Entering college ranks among these events. You are embarking on a new adventure...one that will in many ways shape the rest of your life. For those of you who are transfers from other institutions to Chicago, your Chicago experience will also be a new adventure.
For everyone, new students and transfers alike, the first aim of your education will be to master the curricular requirements of the College of The University of Chicago. I read the materials sent to you, including the catalogue and many of the course descriptions. On the one hand, I am very much tempted to sit in on a number of the courses. They sound very exciting. However, if I had to write out the schedule of the requirements to obtain a bachelor's degree, I might be too intimidated by the whole prospect and forego enrolling; but I am sure you, with fresher, more imaginative minds, and more energy and determination, will have no trouble mastering these curricular requirements. I should point out that you have the advantage of entering Chicago under the new, simplified curriculum. I am sure there are seniors wandering around the quadrangle...lost in a daze...who have yet to master the old requirements.

Education has many aims, some quite pragmatic and practical. You will, of course, after leaving The University of Chicago, have acquired skills, knowledge, and tools that will allow you to function in a modern, complex society. Part of that functioning means being gainfully employed, which will no doubt please your parents.

On a broader level, the goals of a liberal education are probably not expressed any better than in a statement made by your own dean of the College, Donald Levine. Writing in The Forum for Liberal Education in March 1986, he described the interdisciplinary nature of the Chicago curriculum. As Dean
Levine stated, "At Chicago we hold in mind three principals as foundational for constructing a liberal curriculum. First, it should provide an informed and thoughtfully articulated orientation to the world and our place in it. Second, it should cultivate a range of capacities that enable persons to make inquiries on their own, express themselves decently, and form sound judgement. Third, the liberal curriculum should be designed to enhance appreciation of some of the major experiences and achievements of the world's civilizations."

Those views certainly coincide with my own. The curriculum itself does not, of course, constitute the sum total of the educational environment in which you will participate for the next four years at Chicago. That environment includes numerous activities and experiences that will not be found in the classroom or in lectures. It includes your interactions with professors, with other students, and with the community in which you will live. The values and goals that will be reinforced by those extracurricular experiences will perhaps contribute as much to your education as will the curriculum itself. I have used the words "liberal curriculum"...to quote Dean Levine...and "liberal education" several times. I use those terms deliberately as distinct from the practical aspects, or aims of an education, that I mentioned earlier.

A liberal-education should do more than simply prepare you for a career or a profession in life. One of the major aims of a liberal education is to liberate, or free you...free you to make
the significant decisions and choices that will be so important in your life. Learning to make decisions, and more importantly to make choices, is to me what a liberal education is all about. College is not a preparation for life; it is part of life. The habits, insights, goals, values, and modes of behavior that you will have reinforced or weakened while at Chicago are already formed to a very large degree; and these habits, insights, goals, values, and modes of behavior will be with you throughout your life. Education alone cannot make you free or wise, but a proper liberal education can help by giving you the tools, context, examples, and practice (one hopes) that will allow you to create and find your own vision of the good and realize your own values and aspirations.

If education is a matter of making decisions and choices, then life is even more so; and many of the important decisions and choices your generation will have to make are connected with matters that are scientific and technical. So many, in fact, that I thought I would say a few words this evening about the nature of those kinds of decisions, and how a proper liberal education ought to help us prepare to make the right choices in life.

There is practically no aspect of our lives untouched by scientific and technical developments; for example, the rapid computerization of society due to advances in microelectronics; breakthroughs in recombinant DNA research that could lead to the elimination or alleviation of entire categories of diseases and
afflictions; and energy-related research and development that will have profound effects on our quality of life. Although each of these areas (and many other which could be mentioned) have their base in science and technology, in each instance research in the area, or application of the research, raises issues which go beyond the scientific and technical into the sociopolitical, economic, and moral and ethical realms.

Rapid computerization has raised concerns for the rights of privacy of individuals and questions concerning who should control access to information in a world in which information is power. Computerization, especially as it relates to automation, has economic consequences which must be weighed in deciding how fast and in what fashion society should accommodate to this technology. The debate about certain kinds of recombinant DNA research still continues, a debate in which many non-scientists... and a significant number of scientists themselves... question the moral and ethical appropriateness of work which might open the door to forms of genetic manipulation, which could have detrimental as well as beneficial effects.

Energy presents perhaps the most graphic illustration of an area where scientific research and development and technological applications are intimately interwoven with social concerns, economic considerations, and value judgments about the kind of future society we desire, and where the ultimate decisions and choices have to be made by citizens in a political process. The recent accident at Chernobyl and its implications
for the continuing debate on the future of nuclear energy and the growing concern about acid rain and carbon dioxide buildup in the atmosphere from the use of fossil fuels...coal in particular, are reminders of the decisions and choices that confront us in the energy area.

However, having said this, I do not mean to imply that a college education should be structured to meet the currently perceived problems of the times, no matter how important those problems may seem. Society's needs change over time; and now in particular, they change so rapidly that it would be dangerous to design curricula solely to educate students to meet the needs of today. After all, many who felt quite proud, happy, and content with the education they received say twenty-five years ago, now find themselves not included in the "fellowship of educated men and women," if that fellowship is defined as the ability to understand and contribute to solutions of the critical issues of our time. Who knows what issues and problems will confront society twenty-five years from now, when most of you will be in the prime of your lives and at the mid-points of your careers.

No education will be sufficiently broad or sufficiently detailed to allow even the well-educated person to become an expert in all areas, and indeed that is not the aim of a liberal education. The aim is to give one the tools and the context that will allow him or her to make choices in these and other important areas. No education will give us the solutions to problems or the answers to questions raised by progress in
science and technology, or any other field, but a proper education should prepare us to know how to think about such issues.

By examining the lives and writing of others who have dealt with these questions, we can gain some insight and guidance for ourselves. Two people whose work I have admired for some time wrote about the need to be prepared to make decisions and choices, especially in areas of science and technology... George Orwell and Arthur Holly Compton. Both men in their work emphasized the importance of making right choices and the consequences of making the wrong ones. George Orwell and Arthur Holly Compton did some of their most important, and most significant, writing on this subject during a period of rapid technological change...a period in which the potential for good from the development of science and technology and the awesome potential for destructiveness was more publicly dramatized than at any previous time in history, and perhaps more than any time since.

Both men wrote the materials I asked you to read in the period following World War II...when the development of atomic energy was made publicly manifest primarily through the atomic bomb. The dropping of that bomb on Hiroshima and Nagasaki was a vivid indication that the world in which they lived had changed dramatically. This period...from about 1946 to 1956...was a time when great intellectual, political, and social ferment developed concerning the appropriate uses of science and technology, and
the kind of society that would or should grow out of the application of new scientific developments...atomic energy being one of the most striking and vivid examples, but by no means the only one. This was the period when the first large computers were made practical, and when aircraft that flew faster than the speed of sound were first used for civilian purposes. It is interesting and informative to compare the visions of the kinds of society that could grow out of advances in science and technology, as seen respectively by Compton and Orwell.

Arthur Compton and George Orwell were contemporaries, but from different backgrounds. Orwell was born in 1903; his parents were members of the British Civil Service serving in the Far East; and much of Orwell's early development was influenced by the role the British Empire played as a colonial power. Orwell was also greatly influenced by the growing power of the Soviet Union and the development of a totalitarian society in Soviet-controlled countries, as well as by his experiences with fascism, not only from the Nazis in Germany, but in the Spanish Civil War that preceded World War II.

Arthur Compton was born some years before Orwell in 1892 in the small town of Wooster, Ohio. It is difficult, if not impossible, to discuss any aspect of the influence of science and technology on society in the 1940's and 1950's without discussing Arthur Compton and the role he played in the developments of that time. Professor Compton was a leader of the Manhattan Project based here at The University of Chicago. The Manhattan Project
was, of course, the large, intensive effort devoted to the development of the atomic bomb. Compton was a long-time professor at The University of Chicago and a Nobel Prize winner, who later became Chancellor of Washington University. Science was, perhaps after religion, the most important thing in Compton's life; and he saw science and scientists as having a special role to play in society. This special role was accentuated and enhanced by the war-time development of atomic energy...and the bomb.

As you begin to discover your way around the campus, you will no doubt be drawn to a unique spot. Now commemorated by the statue by Henry Moore, it marks where the first sustained atomic chain reaction was initiated.

One of the major effects of working on the Manhattan Project for many scientists, was that it caused them to consider the consequences of their scientific research. Many people such as Enrico Fermi, Leo Szilard, Eugene Wigner, and others whose names will become familiar to you if they are not already, along with Compton, were very concerned that the results of their research be used for purposes that would advance and enhance the quality of life for the human race, rather than leading to applications that would either destroy or cause suffering and grief. Professor Compton, perhaps more than most however, strongly believed in the ultimate beneficial potential of scientific research and resulting technology.
In an essay written in 1954, entitled "Man's Hopes and the New Needs for Human Responsibility," Compton asked himself the question, "How is man's..." (and this was the period when the masculine was used exclusively, so I will apologize for using it throughout my quotes). "How is man's growing hope for a world in which all may live freely to be fitted with the ugly fact of more destructive wars? The hope of this situation lies, as I see it," he goes on, "in the world's rapidly changing attitude towards war. Probably the greatest incentive towards war has been the desire of one group to prey on another for its own advantage."

Compton argued that the great contribution that science and technology can make, and would make, to society is contributing to an increase in the resources required for all individuals to lead productive lives, thereby reducing the probability of conflict over scarce resources. He argued and believed that, "This is the growing concern, that the welfare of every individual shall be considered important. Men have become aware of the possibility that every person may reasonably hope for such a degree of freedom from disease, destitution, and ignorance that he can take a responsible role in the great human enterprise."

The potential dangers of the misuse of science and technology were apparent to Compton, but the potential of science and technology as a force for the liberation of society and for the promotion of freedom of choice for individuals was a much stronger vision, and is the vision he sustained and promoted.
Compton envisioned a deeper meaning to the role of science in human affairs than simply providing freedom from physical want, as important as that role was. The growing realization that increased knowledge of scientific and technical matters implied new, or at least enhanced, responsibilities for individuals to make choices, was to Compton, ultimately a good thing. In the collection of his writings, The Cosmos of Arthur Holly Compton, by Marjorie Johnston, he tells the following story concerning his work on the atomic bomb (he was then at the University of Chicago).

"When this work was just getting started, one of my students came to me with a question. 'How do you satisfy your conscience when working on such a horrible weapon as the bomb we are making?' 'Remember,' I answered, 'that we in this laboratory are the only persons in the world who can possibly prepare this weapon before the Nazis may have it. If we do not do our part, the world is exposed to the mercy of the Nazis. Can we be responsible for that risk? Truly knowledge means power, and the fact that one learns new truths gives one an inescapable responsibility.'"

Knowledge as power, and the responsibility of those possessing it to make the right choices, is a theme that shows up repeatedly in the writings of Compton. Providing ways, structures, and experiences to make people free agents capable of functioning in a free, democratic society was of great concern to him. He saw science, the public good, the development of the
human spirit, and education as being inextricably intertwined. He states in another part of the same essay, "It has been said that it is such things as truth, beauty, and freedom that give meaning to life. Increased freedom is a gift that science offers to all who are part of the modern age. I consider this, therefore, to be the great contribution of science to human life."

And on choosing, he wrote, "Is not this the very essence of being a person, that one shall choose regarding matters of human significance, that one shall make his choice effective, and that one shall accept the responsibility for the consequences of one's choice?"

Compton also recognized that science is only one of the important forces in life which offers the opportunity and the responsibility for making important choices. He used the word "science" in a representative sense, to illustrate several factors responsible for the rapid and widespread changes in society. "Science," he said, "is symbolic of several great forces working together to change our world."

By "several great forces," he meant new developments in the understanding of human behavior, changes in the political structure of nations, and the changing views of the importance of the individual in society...views concerning the equality of individuals regardless of race and/or nationality.

George Orwell addressed these same issues in the book 1984. This book is not often discussed with respect to its comments on the role of science in society and the effects science can have
on society. The effects of technology...and by technology I mean the application of scientific research through the development of products, devices, machines, inventions, and the like...is a theme that is often discussed in relation to the book 1984. Orwell wrote 1984 in the same period of Compton's writings, in 1948, and published the first edition in 1949. He, of course, was also very much affected by the great event of this period...the development and actual dropping of the atomic bomb.

The vision of society that Orwell presents us in 1984, however, is vastly different from that seen by Compton. Whereas Compton envisioned a world in which science and technology not only contributed to the tangible, physical needs of individuals, but also provided them intellectual, emotional, and indeed spiritual growth, Orwell shows us another world...a world in which technology is used to crush the human spirit and to restrict individual freedom, and a world from which science is excluded. Orwell reminds us in 1984 that the visions held by the Compton's of that age would not inevitably be realized, and that the kind of society which might result from progress in science and technology, and every other field of human endeavor, would be a matter of choice.

The use, or perhaps the misuse, of technology in shaping society is the most remembered image of the book 1984. This image comes through in part because the primary technical instrument used for control of the population is the two-way telescreen, which as you recall is a television-like device
placed in every public place and every private room...of Party members, at least. This two-way communications system allows the government, big brother and his minions, to monitor the population and to observe practically every aspect of a citizen's life. The telescreen, as I said, is perhaps the most vivid technological device in the novel; but it is really a minor component in the Party’s control of the society.

The society of 1984 is less controlled by the presence of the telescreen than by the applications of applied psychology and sociology. Both Orwell and Compton believed science and technology had the potential to create conditions that could lead to a fully democratic society in which the goal of human equality would be realized. Arthur Compton embraced this vision. The Party leaders in 1984 rejected it. The Party desired a hierarchical rather than a democratic society. It desired and sought a society in which a small group maintained power. You will recall O'Brien, the Party leader, stating to Winston Smith during part of the interrogation, that the only goal of the Party was power, and that the ultimate goal was absolute power. Power could only be maintained if a large segment of society were kept constantly and totally controlled.

The role technology might play in such a society was addressed by Orwell in the so-called manifesto by Goldstein, "If the machine..." and here he means the machine as a metaphor for technology in general. He argues that, "If the machine were used deliberately for that end (that is for the benefit of
mankind), hunger, overwork, dirt, illiteracy, and disease could be eliminated within a few generations."

But it is also clear, he points out, that an all-around increase in wealth would threaten the destruction of the hierarchical society. In a world in which everyone works reasonable hours, has enough to eat, has adequate and comfortable living arrangements, and possesses many of the finer things in life...even some luxuries, the most obvious and important forms of inequality would have disappeared. For if leisure and security were enjoyed by all alike, Orwell writes, the great masses of human beings normally stupefied by poverty would become literate and would learn to think for themselves.

Having people learn to think for themselves was a situation to be avoided by all costs by the Party. Therefore, progress in technology, except insofar as it led to devices to control the populace, were to be fought against rather than supported. In constructing the society of 1984, Orwell also realized that the values, modes of behavior, and ways of thinking inspired by science...and indeed necessary for science to prosper...had to be eliminated if such a society were to be sustained.

The basic message, as I read this book, is that in order to control a society totally, one has to remove all ability for critical judgement and rational, logical thought, and remove the incentive and ability for individuals to make choices. You will recall that the proletariat, the so-called proles, were the lowest of the classes. Winston Smith, the protagonist of the
novel, had speculated that the proles might one day rise up to rebel, but the Party member, O'Brien, knew better.

O'Brien said, and I quote, "From the proletarians, nothing is to be feared. Left to themselves, they will continue from generation to generation, working, breathing, and dying, not only without any impulse to rebel, but without the power of grasping that the world could be other than it is." O'Brien went on to say the proles could only become dangerous "if the advance of industrial technique" (that is, one might say, the growth of technology) "made it necessary to educate them more highly."

But since military and commercial activity were no longer really important, the level of education was actually declining in this society. Without a need to develop industrially or technically, the need to have an educated citizenry had totally disappeared. In fact, you will recall that the goal of the Party was to reduce society to a level such that thinking on the part of individuals was to be at an absolute minimum. The very language "newspeak," and one of its primary tenets "doublethink," was to make almost impossible the formulation of rational logical thought that might be able to counteract the pseudo reality presented by the Party.

Let me quote another passage...on dealing with children. The Party said, "The first and simplest stage in discipline which can be taught to even young children is called in newspeak 'crimestop.' Crimestop means the faculty of stopping short as though by instinct at the threshold of any dangerous thought. It
includes the power of not grasping analogies, of failing to perceive logical errors, of misunderstanding the simplest arguments if they are inimical to Ingsoc," (Ingsoc, you will recall, was English socialism, the ideology of the time.) "and of being bored or repelled by any train of thought which is capable of leading to a heretical direction." This kind of thinking, of course, is not only the very antithesis of science, it is the very antithesis of a liberal education.

The Party did not need science and did not, in fact, want science in society, and O'Brien said so to Winston Smith during his interrogation. "When we are omnipotent, we shall have no more need of science. There will be no distinction between beauty and ugliness. There will be no curiosity, no employment of the process of life."

Eric Fromm, in his afterword to the Signet Classic edition of 1955, notes: "The basic question which Orwell raises is whether there is any such thing as truth. Reality, the ruling Party holds, is not external. Reality exists in the human mind, nowhere else. What the Party holds to be truth is truth."

Neither Orwell nor Compton saw science in isolation from the context of the larger human experience. Orwell's vision of a world without real truth or beauty is a world in which science is impossible, and in which technology is only needed for destructive and constraining purposes. Compton paints us a vision of society where science is a necessary component for the growth of the human spirit, and where technology is a valuable servant in
helping to create the environment in which that human spirit can prosper... and in which human equality can be realized. It is this difference in visions of the possible that is the major difference between the Orwellian view and Compton's view.

The most important aspect of Compton's writing is his insistence that it is one's vision of the possible and one's quest for the good that is important in establishing the context in which choices can be made. He says, "It is only insofar as we have a vision of excellence for men's lives that science has a human meaning." This vision of excellence is what guides us to make the right choices, and it is making the right choices that is ultimately the most important thing.

Orwell, of course, in writing 1984, presented a vision of society, not as he perhaps thought it would come to pass, and certainly not as he wished it to come to fruition, but as a warning of what could happen and what might happen if humans did not make active and committed decisions about the uses of science and technology, and if humankind did not share a vision of equality and freedom and were committed to bringing it about.

Both Orwell and Compton surely shared the same hope for the development of society, but perhaps differed in their optimism concerning the possibility of their hopes being realized. Both viewed science as an endeavor that could lead to the uplifting of humanity, but differed on the propensity of human beings to misuse technology, rather than using it for the betterment of the human race.
It is clear that Orwell's vision as portrayed through the novel has not come to pass. Although it is likely that some aspects of the repression and oppression depicted can be found in many present-day societies...at least no one nation/state has managed, so far, to combine them all with such efficiency and comprehensiveness. But if Orwell's vision has not fully materialized, neither has Compton's. We are still confronted by many of the questions Compton raised concerning the uses to which science and technology will be put; and although it is clear that the human race is progressing and is by-and-large using and benefiting from the growth of knowledge, we still see examples of societies which come closer to the Orwellian vision than that of Arthur Compton.

Totalitarian, authoritarian, and repressive regimes exist throughout the world and across all political persuasions and ideological positions. However, one particular regime to me perhaps comes closer to the Orwellian vision than any I know of at present...I refer to the republic of South Africa. The situation in that country is a contemporary issue and concern about which you will be making decisions and choices during your stay at The University of Chicago. It is at least ironic, and perhaps significant, that the present regime in South Africa, the Nationalist Party, came to power during this same period following World War II in which Orwell and Compton did their writings. The Nationalist Party came to power in the election of 1948 and actually assumed control of the government in 1949.
You may not be aware that prior to that time some progress was being made in South Africa towards creating a multiracial society. In many respects in the period prior to 1948, minorities in South Africa...at least the coloreds (that is, those of mixed races) and Indians...it could be argued, were no worse off than blacks in America at the same time...at least many blacks in many parts of America, and certainly in the South. As a person who grew up in the state of Mississippi during that period, I am sure that if I had been transplanted to Cape Town, I would have noticed little difference...the segregated signs specifying colored and white, the total segregation of the transportation facilities and of commercial, educational, and social institutions would have been fairly similar. In fact, in South Africa prior to 1956, the coloreds were on the voting rolls in the Cape province. There were multiracial labor unions, and there were growing movements to create integrated educational institutions. The Nationalist Party, headed by Afrikaners...those of mostly Dutch descent...after coming to power in 1948, began to institute a society that was frightening in its Orwellian manifestations. In the period from 1948 to about 1960, a variety of laws were enacted that led to further separation of the races, removed the few freedoms the blacks, coloreds, and Asians had, and created a society in which a small group has instituted a system...the sole purpose of which is to keep them in power.

South Africa is the most prosperous country on the African continent, and one of the most potentially prosperous in the
world. It has assimilated science and technology in every area; and the world in which the whites move is as modern as any part of the United States or Europe. But, the benefits of science and technology are not used principally to create a society in which all may prosper, or to increase the potential for individual freedom and human equality. Science and technology are being used primarily to enhance the control the Party has over the rest of society.

The very names of the myriad of laws that have been passed since 1948 remind us vividly of "newspeak" and "doublethink" as portrayed in the novel 1984, where words and phrases could simultaneously have contradictory meanings...or have the opposite meanings from those commonly understood. You will recall in 1984, the ministry of truth was where propaganda was produced and history rewritten; the ministry of love was a torture chamber; and the ministry of peace was where war was prosecuted.

In South Africa the law that removed the coloreds in the Cape province from the voting rolls was not called the Removal of the Colored from the Voting Rolls Act, but the Separate Representation of Voter's Rights Bill. The law passed in 1949 which forbade not only mixed marriages, but sex between individuals of different races, was called the Immorality Amendment Act. The law passed in 1950 that prescribed separate residential areas for people of different races and resulted in the forced removal of thousands of blacks, coloreds, and Asians from places they had lived for years, was not called the Removal Act or Separation Act, but the
Group Areas Act. The law requiring each individual, at least non-whites, to carry a passbook that identifies them completely and gives their complete history is called the Population Registration Act. The law that created the so-called homelands areas to which most blacks are confined, and thereby denied citizen-ship in the Republic of South Africa, is called the Promotion of Bantu Self-Government Act. (Bantu is a term applied to Africans by the whites.)

The use of language to disguise the real intent of actions is frightenly similar between the society of 1984 and the Republic of South Africa. This misuse of the language has deeper implications and has led to the kind of internal contradictions in South Africa...some bordering on the absurd...that also existed in 1984. It is the goal of the Nationalist Party to classify every individual in South Africa according to a particular racial group. Given the history of South Africa, this is almost impossible. Hundreds of years of interracial sex led to the creation of the group called coloreds, and given the variety of individuals...Asian, white, and African...that exists in this society, to classify everyone into a particular group has become a task equal to that of the rewriting of history on a daily basis that occurred in 1984.

In 1966, twenty years after the passing of the Immorality Amendment Act, there were still approximately 150,000 borderline cases of individuals who had yet to be classified according to a race. Each year in Parliament, the Minister of the Interior is
obliged to give a report on the previous year's reclassification. Let me read an excerpt from the report given in 1980. It reminds one of the attempt of the Party in 1984 to control reality. As you recall, O'Brien said, "Truth is what the Party says is truth."

The Nationalist Party reporting on races in South Africa said, "As of this year (1980), a total of 101 colored people became white, one Chinese became white, two whites became colored, six whites became Chinese, two whites became Indians, ten colored people became Indians, ten Malays became Indians, eleven Indians became colored, four Indians became Malays, three colored people became Chinese, while two Chinese were reclassified as colored people."

Although this clearly has a ridiculous and absurd side, the tragedy is the government behaves as if what it has said is, in fact, true. People who were colored one day have to act, live, and work in places reserved for Chinese, if they "become Chinese" the next day. People who were one day white and allowed all the privileges of society, the next day have to become colored in every sense of the word, because the government does control this much of the reality of their environment.

The Nationalist Party in South Africa also fully appreciates the role education plays in liberating individuals and creating conditions that lead to the growth of an aspiration for human equality. Prior to the Nationalists coming to power there were a number of schools operated by missionaries, and many public
schools, that attempted to give blacks...called Bantus at that
time...an education that aspired to be as good as that given to
whites. At least education for all groups had the same aims,
even if they were not equally realized. The aims of education
for the so-called Bantu people were changed drastically after the
assumption of power by the Nationalist Party.

Dr. Heindrick Verwoerds stated in a famous speech in 1953,
"The school must equip the Bantu to meet the demands which the
economic life of South Africa will impose on him. Until now he
has been subject to a school system which drew him away from his
own community and misled him by showing him the green pastures
of European society in which he is not allowed to graze (emphasis
mine). What is the use of teaching a Bantu child mathematics
when he cannot use it in practice? That is absurd. Education is
not, after all, something that hangs in the air. Education must
train and teach people in accordance with their opportunities in
life. It is therefore necessary that native education should be
controlled in such a way that it should be in accordance with the
policy of the state." George Orwell could have written that.

The passage of the Bantu Education Act in 1953 led to the
creation of totally separate universities for blacks, Asians,
coloreds and whites. In most of the black colleges, science and
engineering were not even offered, because these subjects would
be of no use to those people, and in fact in the government's
eyes would give them false hopes as to where they might
eventually stand in society.
The blacks of South Africa are the proles of 1984. Of course, as O'Brien well knew, it is impossible to control any segment of society without controlling every segment. If one large segment of society is not free, no part of it can be free. In 1984 the inner Party members, although they lived a more economically comfortable existence, were no more free to make individual decisions about their lives or about society than were the members of the outer party. Perhaps the freest people in the book 1984 were the members of the proletariat, because they could live lives in which choices could be made, even though those choices may have been restricted to a very small realm.

The Nationalist Party of South Africa has found in its attempt to control blacks that it has become necessary to control its own people...the whites. The flow of information to the society as a whole has to be restricted, and the image of the society that the whites see in the media is the image the Party wishes them to see. This image is a society in which the proles (the blacks) are happy and do not wish to become equal, where the misery and suffering of those individuals is over-exaggerated and due to their own laziness, and where unrest is caused by a few "agitators" and troublemakers.

The educational system for whites, of course, is also affected. A leading member of the Broederbond, the innercircle of the Afrikaner leadership, gave an interview on the role of education and the training of teachers...not for blacks, but for whites. He said, "Education is not open education. It is
education with a specific task. The aim is the preservation of the white man in general, and of the Afrikaner in particular. If you come from twelve years in school, where you have been under Broederbond control, then four years in a teacher training college, then indoctrinated with Broederbond thinking, with separation and the whole of that philosophy, by the time you are a teacher, it is not important whether you are a Broeder or not. The fact is that you would teach Broederbond philosophy because you do not know any other. You have not been exposed to any other thinking."

The aim of education, even for whites, at least among this group, is not a liberal education...an education that leads to freedom...but an education that has a specific task...the preservation of the Afrikaner in particular. As O'Brien said in 1984, "Our only goal is the preservation of the power of the Party."

No perversion of reality becomes unthinkable, and no restriction of human freedom becomes too oppressive in such a society. One might ask, "What is the meaning of a liberal education in a society such as South Africa? Is such a thing possible? What is the meaning of freedom in such a society? Can one really be liberated or free while others are not, especially when one's liberation and freedom is achieved at the expense of the oppressed?"

On a recent trip to South Africa I spoke firsthand with a number of blacks and whites who described situations in the black
townships. The brutality and cruelty inflicted upon black children at a very tender age is almost impossible to describe... but you read a lot about that. What one does not read about as much is the fact that the perpetrators of this cruelty are young people themselves, in many cases young, white soldiers who are still in their teens, or just out of their teens...your ages. One does not read about the brutalization of the spirit and the corruption of human nature that the whites are inflicting upon themselves through their children. One does not read about the destruction of their future through the dehumanizing of their own youth.

I have no doubt in my mind who is most free in that country. If I compare the young blacks in Soweto who have a vision of a future and a commitment to achieving that vision, and who are able to make choices...and do make choices, in spite of the constraints that are placed upon them...if I compare those youth to the young white soldiers, whose only vision of the future is to help sustain and keep in power a regime that not only restricts and crushes the freedom of all others, but of themselves, then it is clear in my mind who is the most free.

Orwell recognized that a society which has as its primary aim to maintain power for itself has no choice but to eradicate the spirit of creativity, the search for new knowledge, and the spark of humanity in all its people, even those people, and perhaps especially those people who are to wield the power. In 1984, the goal of the Party was not only to eradicate human
qualities in the oppressed, but even among themselves. Concepts such as love, loyalty, respect, and understanding were to be removed from the language.

But even South Africa is changing and will be forced to change more. Technology plays a role in these changes. Advances in communications and transportation have made it much more difficult for gross injustices to be perpetrated by repressive regimes. The subjugation of blacks in South Africa is no longer a local affair about which the world only hears bits and pieces, months or years after the events, but is now the subject of daily news reports, and the outpouring of anger against that regime makes it much more difficult for them to continue their present policies.

South Africa is perhaps a graphic example of an Orwellian vision manifested, but it is not the only one; and there are clearly aspects of our own society here in the United States, though by no means as widespread and as comprehensive as that in South Africa, but nevertheless aspects, which come closer to an Orwellian world rather than the vision painted by Arthur Compton.

Choices continue to have to be made. We, you, all of us will face those choices throughout our lives. The aim of a liberal education is to give us the tools, and most of all the vision and commitment, that will help us to make the right choices. But a proper liberal education goes even beyond that. It instills in one a sense of responsibility to act once those choices are made. As Arthur Holly Compton said, "We must realize
with a new urgency that what we do affects deeply the lives of others...(and)...that our moral choices must become more insistent and of greater intensity, because the effects of our choices are of greater consequence."

Four years from now...give or take one or two...you will take part in another ceremony at The University of Chicago. At graduation the President of the University will present you with your degree and say, "By the power vested in me, I now declare you graduates and welcome you to the fellowship of educated men and women." It will be a grand occasion. However, even after that auspicious intonation, and after four (more or less) years at The University of Chicago, I hope you will not consider yourselves educated, simply because you receive a degree. I hope you will think of your experience here as just the beginning of your education, and that you will equip yourselves with the appropriate tools, skills, and background, and acquire the motivation to continually educate yourselves throughout life.

There is a fellowship of educated men and women, but the entry ticket is more than simply a college degree. The entry ticket to that fellowship is an attitude...a state of mind and vision of the world...that recognizes that education is not a matter of fulfilling requirements, but of striving to understand the world as it is and ourselves as we should be.

It is obvious that you are not beginning your education tonight, for you are already capable of making some "right choices," and you clearly have already made one of the most
important right choices of your life. You have chosen The University of Chicago.

Let me welcome you again to our community and to becoming one of us, and allow me to wish you again the best of luck in achieving the "aims of education" that will fit your vision of excellence. Thank you.