for ACE book - elaboration on Toronto talk [Oct 13, 1983]

I would like to consider the possibility of our academic institutions to shape the future and I would presume to speak particularly of the moral dimensions of higher education and some of the impending ethical questions that attend such a consideration. While I speak directly to my fellow educators, themessage is for everyone, everywhere. We have all been schooled in the proposition that the life of the university is the life of the mind, the free search for truth and its dissemination to the upcoming generation. This is at first glance an intellectual, not a moral task. Why then, the ethical or moral concern?

I think it is fair to say that education, lower or higher, involves more than the mind. We are educating human persons, that most marvelous of all visible realities. Jacques Maritain, the late French philosopher, said of the person:

> "What do we mean precisely when we speak of the human person? When we say that a man is a person, we do not mean merely that he is an individual, in the sense that an atom, a blade of grass, a fly or an elephant is an individual. Man is an individual who holds himself in hand by intelligence and will. He does not exist only in a physical manner. He has a spiritual superexistence through knowledge and love; he is, in a way, a universe in himself, a microcosm, in which the great universe in its entirety can be

encompassed through knowledge; and through love, he can give himself completely to beings who are to him, as it were, other selves, a relation for which no equivalent can be found in the physical world. The human person possesses these characteristics because in the last analysis man, this flesh and these perishable bones which are animated and activated by a divine fire, exists 'from the womb to the grave' by virtue of the very existence of his soul, which dominates time and death. Spirit is the root of personality.

"The notion of personality thus involves that of totality and independence; no matter how poor and crushed he may be, a person, as such, is a whole and subsists in an independent manner. To say that man is a person is to say that in the depths of his being he is more a whole than a part, and more independent than servile. It is to say that he is a minute fragment of matter that is at the same time a universe, a begger who communicates with absolute being, mortal flesh whose value is eternal, a bit of straw into which heaven enters. It is this metaphysical mystery that religious thought points to when it says that the person is the image of God. The value of the person, his dignity and his rights belong to the order of things naturally sacred which bear the

imprint of the Father of being, and which have in Him the end of their movement."

(Principes d'une politique humaniste, Paris: Paul Hartmann, 1945) pp. 15-16.

I have cited at some length Maritain's eloquent description of the person for two reasons. First, it is persons, not minds, not hearts, that we educate, individuals, worlds unto themselves, the most sacred of all visible realities, the repository of all rights and obligations, the only free and intelligent agents in all the visible universe. If you view persons as unfree or totally dependent on society for all they have, you are speaking of a completely different world than that we educators visualize in a free democracy. My second reason for quoting Maritain at length is that I have been unable to find a more eloquent portrayal of what it really is to be a human person, the exalted subject of all education, the hope of a better world.

In educating those persons who will form the leadership of all the other great institutions in our present and future, the family, church and state, the great business organizations and labor unions, the military, the many voluntary organizations that so enrich our lives and our professions, we must face the reality that our universities and colleges are perhaps the most important element in shaping the future. How we educate these student-persons will have an all important influence on what our future will be.

How we educate, this is perhaps the greatest moral dilemma of all, because there is all too little agreement among us as to what is right or wrong in what we are purporting to do. We have many hints from the past.

Plato speaks of knowledge as a completion and a concomitant to virtue. Concomitant perhaps, but I think all of us would agree that while knowledge is power, it is power for good or evil, not necessarily virtue. Knowledge acquired at our best universities was the entrée for the young leaders in President Nixon's White House, but after the Watergate debacle, they admitted that they learned how to use methods that were effective, but not to ask whether what they were doing was right or wrong. Augustine, a well-educated man who sowed his share of wild oats before becoming Bishop of Hippo and a saint, described education as working towards ordo amoris, putting order into what we love. I suspect that this insight, like others in his Confessions, came somewhat later than during his formal education as a Rhetorician. Thomas Aquinas is in the same line, saying that the truly educated person is the one who knows the right things to have faith in, to hope for, and to love.

Matthew Arnold speaks of studies that will quicken, elevate, and fortify the mind and the sensibility. I like that and I would hope that our future leaders would lead better if their minds and sensibilities are quickened, elevated, and fortified. However, as I look at universities today, my own included, I would say as an honest moral judgment, "Easier said than done." Martin Buber and Ghandi, too, to cite two more modern observers of the educational

scene, speak of the education of character as the only worthy outcome. Another modern, Robert Hutchins, described education: "the prime object of education is to know ... the goods in their order." Again, I must repeat, easier said than done. What agreement is there, in most faculties, on the "order of goods."

William Bennett, Chairman of the National Endowment for the Humanities, cites some of these in a recent paper and adds one more, Robertson Davies, who outdoes them all. He says: "The purpose of learning is to save the soul and enlarge the mind." (Address delivered at the Annual Meeting of the Association of Catholic Colleges and Universities, Washington, D.C., Feb. 1, 1983). If I might speak for the Church, I would frankly admit that it has its hands full in the effort to save souls and probably envies the universities in their easier task of enlarging the mind.

What do we do when students are not particularly excited about enlarging their minds, but would prefer to learn how to operate effectively as chemical engineers in a worldwide oil company, lawyers with a lucrative practice, say tax law, accountants in one of the big eight firms, or physicists in a national weapons laboratory? It may be our moral dilemma, but it is theirs, too. The rub is, we are the educators, we establish the curriculum, we teach the courses, we demonstrate what we think is all important in a total education, giving wholeness of knowledge, not bits and pieces.

Again, I trust that I am not overstating the ultimate moral dilemma that faces us, how we educate, but there it is, notwithstanding Plato, Augustine, Aquinas, Arnold, Buber, Ghandi, or even Robertson Davies. Their vision is, I fear, far from our present reality.

In the horrible jargon of modern youth, they would say we ought to "get our act together," but I doubt we will do whatever that means unless we can at least agree on something not too popular in modern universities and colleges: defining what we are really trying to do, what we most fundamentally believe higher education to be, what we deeply believe these future leaders should learn from us.

Doing this will require something even more unpopular in modern universities and colleges, spending a few moments to consider transcendentals like the true, the good, the beautiful, and the moral imperatives that flow from them, if indeed they are very relevant to what we are educating young persons to be, what will really qualify them to lead us out of the present wilderness into a better future. This will require more than simply useful knowledge, in the most pragmatic sense of "useful." I need not insist here that if we, the faculty, do not see the road ahead fairly clearly, it is unlikely that we will surmount this moral dilemma in time to help our present students become effective leaders in a world of considerable moral confusion.

Let me begin with something that we will all agree with, I hope, whatever we think about Plato and Aristotle or whatever we print in our catalogues. In simplest terms, I assume that we all agree that we are mainly, but not exclusively, concerned with the first of those transcendentals, truth. We all want to grow in knowing the truth, which is a road to wisdom, as well as knowledge, and which indeed does make us free. We cannot be like Pilate who asked the Lord, "What is truth?" and then walked away before getting a response.

Whatever else we do, we spend most of our lives seeking truth, about our world, about ourselves, about God, about how we go about knowing truth on a wide variety of levels, scientific and technological, really the easiest because mathematics is a precise language, then learning humanistic truth through literature and history, the social sciences like anthropology, sociology, political science, and economics, again with mathematics a helpful aid in these latter approaches to truth. Then we learn, too, through art and music and, perhaps most of all, through poetic intuition. At the core of all, we know there is, of course, philosophy which puts it all together, hopefully, in some meaningful rational synthesis. If we want to go still further in seeking truth, and here I speak of my own profession, we study theology which I did for six years after college. We call it all truth, and indeed it is, although we come to it by many paths of learning, the more, the better, if we are looking for wholeness of knowledge, not just tidbits of this or that truth, quarks at the heart of matter or black holes amid the galaxies. I am fascinated by both of these searches, but not exclusively so.

The pursuit of truth is what makes our profession most exciting and what gives most coherence to our institutions. James Billington, Director of the Woodrow Wilson International Center for Scholars, recently said at Catholic University in Washington:

> "The pursuit of truth is the highest form of the pursuit of happiness -- and the surest way to keep us from the pursuit of one another. Truth is non-competitive; the discovery of one can benefit all.

> Truth is bigger than all of us, and can be pursued by each of us wherever we are with whatever we have at hand.
>
> "The open, unlimited search for truth is a major source of hope for a free society -- not because it offers easy answers, but because it offers a shared enthusiasm that threatens no one and can involve everyone. Only in the life of the mind and spirit can the horizons of freedom still be infinite in an era of growing physical limitations."
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> (Commencement Address, the Catholic University of America, Washington, D. C., May 21, 1983)

It would seem to me that the pursuit of truth is a good shared goal with which to begin to reorient and revivify our institutions as we attempt to shape the future through our students. At least, it has been the inspiration of all of our lives, and we should be able to inspire our students to see it as the best and continuing result of their higher education. The pursuit of truth and the full transmission of truth is at heart what makes educators and education interesting, even exciting, and at its best, fulfulling and inspirational. Universitas, which gave the name to our institutions, means pursuing truth in its fullness.

If you are still with me thus far, let me add another thought or two to the general theme, with the help of two good friends. We may think that our moral concern for shaping the future through our students is a modern concept. Hanna Gray of the University of Chicago puts the same idea in historical perspective:

"People tend to think of the Renaissance as a period of self-conscious new beginnings. The humanists thought it possible that they might produce great reform in the world .... Their educational thinking was the vehicle by which they criticized the society of their own time: its ethical values, its culture. The humanists believed that the kinds of knowledge and of scholarship and of advanced education, which characterized the university system of their own day, were too academic, too narrow, too pedantic, too specialized .... From their critique of what was wrong with contemporary thought and scholarship in the university, the humanists concluded that by contrast an education in the liberal arts was that form of learning most relevant to the development of people who would become masters of their own world and leaders toward an improved future. They thought it was not enough to know what ethics was; they believed it important to know how to apply ethics, how to become more moral, how to shape the will -- and not only the intellect -- of morally aware and active human beings." (The Liberal Arts Revisited, Henry Lecture, University of Illinois, pp. 14-15)

I read the Henry Lecture after practically completing this article and all I could think was: Plus ça change, plus c'est la

même chose. The Renaissance educational problem is our own today, only the stakes are higher in our modern world, as I will demonstrate later on.

Hanna Gray's thought is put into modern context by Ambassador Charles Malik when he delivered the Pascal Lectures at the University of Waterloo, Ontario, in March of 1981.

> "The fundamental spirit of the whole university is determined by the humanities. Philosophically and spiritually, where the humanities stand, the entire university stands, administrators, professors, and students, individually and, what is more dominant, in their meetings, in groups, their view of the nature and destiny of man, the general outlook on life and being, the interpretation of history, the fundamental orientation of the mind, the formation of personal character and the fixing of basic attitudes and habits, the nature of good and bad and right and wrong, the meaning and purpose of human existence, the whole spirit which stamps the individual human person -- all of these radiate in the first instance, not from the sciences, but from what is taught and presupposed in the humanities .... The scientist himself, both when he takes courses in general education as an undergraduate student, and from the general climate of opinion of the university, is stamped in his mind and character by the pervasive spirit of the university." (A Christian Critique of the University, Inter-Varsity Press, Downers Grove, Illinois, p. 70)

Hanna Gray writes as a historian. Charles Malik as a philosopher, a student of Whitehead at Harvard and Heidegger at Freiburg. They are saying the same thing, I believe. All truth is important, but some truths are all important. Education is the key to the future, but it had better include education in what is most important in life.

I found Gray and Malik, not just in these few words, but in their total lectures, quite helpful in the quest with which I began: trying to find some intellectually and morally coherent philosophy of education that can help us shape the future through the students we educate in our institutions. Our best goal is not just to educate in a thousand different ways -- although we will do that too -- but to give a vision of truth, a zest for the pursuit of truth, along all the avenues to truth, that might well lead these young persons to nobility of spirit and a commitment to do what each can do to create a world of greater justice and beauty as well, in a word, to educate persons really capable of shaping the future, not dull and drab practitioners of what is and has been and still needs changing.

Perhaps I am being too idealistic, but I do believe, after living all of my life since age seventeen in a university, that students do react positively to a great vision of what they and their world might become. If we really want to shape the future, the operative question is: Do we want to shape it in truth, justice, beauty, the good and, yes, in love, too? If we are unclear or less than enthusiastic about this, who will follow the uncertain trumpet?

Certainly not our students. We all know we are decent people, totally engaged in a noble quest. But let it not be forgotten that how we think, what we do is so much more important than what we say. Every act of ours is teaching. Our words are only buttressed by our deeds, and our deeds are inspired by our convictions. If we are not deeply concerned about truth, justice, beauty, and the good as we know it, how will they be?

Perhaps I can cap this discussion of our greatest moral challenge as educators by making it concrete in seeing how we might face the greatest moral problem confronting humanity today or ever. Weak tea will not do here. I speak of the nuclear threat to humanity.

I could speak of a whole series of other ethical challenges that face us: How to preserve excellence in a time of retrenchment (the Carnegie Commission has the ultimate word on this one); how we preserve our freedom while seeking new and massive funding from business enterprises (we have had at times this same problem with government support); how we respond to the legitimate desires of women and minorities when there are so few openings on our faculties; how we effectively reach out to potential poor and minority students when student aid is shrinking; how we balance vocationalism and the humanistic concerns in higher education; how we relate to Third World yearnings for development and human rights; how we sustain support for the fine arts in our institutions when all the emphasis is on computers which are basically uncreative -- I know that computers have composed symphonies, but spare me from listening to them; how we concern our business and

and engineering students in not just being consultants, but creative managers of greater productivity without which we will not make it in the world markets; how we inspire our lawyers to work for justice, whatever the cost, not just for profit whatever the manipulation of the law involved; how we graduate physicians who care about people, whose deep personal concerns transcend cat-scans and electro-magnetic machines; how ultimately we reproduce ourselves, not practicing celibacy as regards the most important cohort to come and the one with the least attraction today, great teachers. All of these are fundamental moral concerns for our educational endeavors. I could say something about all of them, but just let me address the most important, the nuclear dilemma. If we do not learn and teach our students how to cope with this primordial nuclear problem, we need not worry about all the others. After total nuclear conflagration, all human problems are moot.

I have spent over three decades coping with such urgent moral problems as human rights, here and abroad, world hunger, immigration and refugees, transfer of technology for development, illiteracy, education, and many others. One day, two and a half years ago, we joined two hundred other universities in dedicating a whole day to the study of the nuclear threat to humanity. I had been involved in nuclear matters for fifteen years representing the Vatican at the International Atomic Energy Agency (Atoms for Peace) in Vienna, and in several other capacities since the advent of the Nuclear Age some thirty years ago. Suddenly, on a grey November afternoon in 1981, following Dr. Jim Mueller's graphic lecture on what would happen if

a one megaton nuclear bomb were detonated over the adjoining city of South Bend, Indiana, I was walking back to my office thinking that this great University and all the other problems that had preoccupied me would be totally irrelevant: no humans, no problems. Then and there it seemed important to disengage myself from these other concerns, except education, and to do whatever I might about this quintessential threat of nuclear annihilation.

I am often asked, "Why the sudden concern? The nuclear threat has been with us for 38 years since the obliteration of Hiroshima and Nagasaki. Somehow we have survived."

I believe the sudden concern stems from the current accelerating trend to utter disaster which has, during the past 38 years and increasingly in the past two or three years, been escalating upwards. Remember, it was in 1945 that Albert Einstein prophecized: "The unleased power of the atom has changed everything except our mode of thinking -- and we thus drift towards unparalleled disaster." We now have available a million times the destructive power of those primitive yet devastating bombs that ushered in the Atomic Age in Japan in 1945. There are now four tons of TNT equivalent available in the form of nuclear bombs for every man, woman, and child on earth. That awesome destructive power is not just theorectically there, it is processed into warheads, targeted, poised on delivery systems, hair-triggered to very fallible computers, and there is a decision time of ten or fifteen minutes on whether or not to fire them, much less on the field of battle, and there will be practically no time for decision once these systems are placed in space, as is now being planned by both the USSR and the U.S.

To give some small sense of the rate of escalation, we have been told in recent years that the Russians are escalating wildly, which they have been doing, one new SS-20 a week aimed at Europe, while we have presumably been sitting on our hands. Well, while we have been sitting on our hands, we have developed the MX with ten warheads, the Triton submarine with new super accurate, more powerful missiles, the Pershing II, the cruise missile to be launched at sea, in the air, and from the ground, the B-1 bomber, and the upcoming Stealth bomber and now Star Wars. What would we have done if we were not sitting on our hands? One Triton submarine alone represents three times the total fire power exploded by both sides during World War II and we are building more than thirty of them. The Soviets likewise.

All the movement, on both sides, has been massively upward and destabilizing an already very touchy political situation between us. All of this is happening in a very volital climate, where arms control talks go nowhere, and the leaders of the super powers have not met since President Carter signed the SALT II Treaty with Brezhnev in Vienna, still unratified. As the little girl, Samantha, who visited Russia at Andropov's invitation in the Summer of 1983, asked: "If both sides say they will not start a nuclear war, why do they both continue to build more weapons?"

Never before has humankind -- mostly mankind -- had in their hands the power to destroy the total work of creation, fourteen times over, in a few moments, even accidentally. The newer weapons are

greatly destabilizing, because they are either non-verifiable, like mobile SS-20's or cruise missiles that evade radar and defense systems, or they are offensive, first strike, like MX and its Soviet counterparts, rather than defensive and deterrent. The military on both sides are jittery and for good reason. Once the nuclear barrier is breached, for whatever reason, even no reason, or mistake, it is bound to escalate. Limited or winnable nuclear war is a most foolish illusion. As a Russian scientist recently put it: "These are not weapons because weapons are to defend yourself and if you defend yourself with this weapon, you are dead." "Neither," he added, "is nuclear war, war in any rational Clausewitzian sense of a continuation of politics by other means. Wars are won, but in nuclear war, there is nothing left to win, all is death, destruction, and devastation, your country and ours and probably most others." If you still have any illusions about this, read the recent novel Warday, that portrays America (and Russia) after a modest exchange of some fifty missiles each. (We each have thousands) Or read Carl Sagan on Nuclear Winter -- even following a modest exchange of nuclear weapons.

It has to be the worst sin, the worst blasphemy, to utterly destroy God's beautiful creation, Planet Earth, the gem of our solar system, and all we have created here, so painstakingly, in a few thousand years: all our institutions that we have labored to perfect, all learning, all science and technology, all art, all books, all music, all architecture, every human treasure, everything,

but especially millions of men, women, and children, all their future and all futures, utter obliteration at worst, a return to the Stone Age at best.

It has to be utter insanity for rational creatures to have painted themselves into such a corner, to have created such a monster. But in freedom, what we have created, we can uncreate, dismantle, and we must.

It will require, most of all, hope that it can be done, the beginnings of serious, high level conversations, with creative options on the part of the super power leaders. All movement must be reversed -- downward for a change -- done mutually and done is a totally verifiable manner. This is not a Russian or American problem. It is a threat that profoundly affects every human being on earth.

Hope that we can turn the tide is central to the task ahead. Otherwise, we are lost. The need for hope is implicit in a recent Leslie Gelb article: Is the Nuclear Threat Manageable (New York Times, March 4, 1984)

> "In nuclear doctrine, it is necessary to have choices between massive retaliation and surrender. But it is risky to assume, as current doctrine would have it, that once a war begins, it can be controlled. And it is downright dangerous to believe there can be meaningful winners and losers, as some strategists in this administration believe. These recent trends in strategic thinking are highly questionable.

"But what has to be understood now is that the future could be different, that the nuclear peace of the last 40 years could be transformed into nuclear nightmare. What is in the offing is not simply another weapons system or two, not just another phase of the old arms race, but a package of technological breakthroughs that could revolutionize strategic capabilities and thinking.

"To be sure, there is time before all of these technologies mature into reliable weapons systems. But not much time.

"Meanwhile, arms-control talks between the United States and the Soviet Union are getting nowhere. The two sides have not even been negotiating with each other for months. And when the negotiations resume this year or next, it must be remembered that they deal only with reducing and limiting numbers of nuclear weapons, not with the broader technological problems described here. (In this article.)

"Most lamentable, there seems to be a habit of mind developing among Soviet and American officials that the problems cannot be solved, that technology cannot be checked, a kind of combination of resignation and complacency. They have gotten used to both the competition and the nuclear peace. Mankind may not survive on that alone."

And so, the need for hope that we can change the present impasse. Interestingly, barely a week before, Freeman Dyson, physicist at the Institute for Advanced Studies at Princeton, had addressed the same problem in the fourth article of a series in the NEW YORKER (February 21, 1984). Dyson had begun his series, now a book, Weapons and Hope, with the concept that this discussion is always torn between the warriers (the hawks) whose battle cry is "Don't rock the boat" and the victims (us) who seem too easily to say "Ban the bomb." This is indeed, as he remarks, a dialogue of the deaf. Each side is speaking to itself and nothing really happens. Interestingly, after an exhaustive analysis and a choice of a position "Live and let live" (read the book), Dyson concludes his analysis on a call for hope.

> ".... The moral conviction must come first, the political negotiations second, and the technical means third in moving mankind towards a hopeful future. The first, and most difficult, step is to convince people that movement is possible -- that we are not irredeemably doomed, that our lives have a meaning and a purpose, that we can still choose to be makers of our fate.
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> "This lesson, not to give up hope, is the essential lesson for people to learn who are trying to save the world from nuclear destruction. There are no compelling technical or political reasons that

we and the Russians, and the French and the Chinese, too, should not, in time, succeed in negotiating nuclear weapons down to zero. The obstacles are primarily institutional and psychological. Too few people believe that negotiating down to zero is possible. What is needed to achieve this goal is a worldwide awakening of moral indignation, pushing the governments and their military establishments to get rid of these weapons which in the long run endanger everyone and protect nobody.

"..... the basic issue before us is simple: are we, or are we not, ready to face the uncertainties of a world in which nuclear weapons have been negotiated all the way down to zero? If the answer to this question is yes, then there is hope for us and for our grandchildren."

Dyson's final answer is to quote Clara Park, "Hope is not the lucky gift or circumstance or disposition, but a virtue like faith and love, to be practiced whether or not we find it easy or even natural, because it is necessary to our survival as human beings." (ibid. p. 103)

Curiously, hope, like faith and love, is not one of the moral, but a theological virtue. It becomes even more necessary to transmit hope to our students, who so often feel hopeless in the face of such cataclysmic issues, when we consider how the

purely intellectual approach to this nuclear problem has brought us even closer to the abyss. Fred Kaplan, in a recent book, The Wizards of Armageddon, portrays the efforts of the intellectuals who have elaborated American nuclear policy while rotating between the Departments of Defense and State and the national think tanks. After almost 400 pages of record, he concludes:

> "They performed their calculations and spoke their strange and esoteric tongues because to do otherwise would be to recognize all too clearly and constantly, the ghastliness of their contemplations. They contrived their options because without them, the bomb would appear too starkly as the thing that they had tried to prevent it from being, but that ultimately it would become if it ever were used -- a device of sheer mayhem, a weapon whose cataclismic powers no one had the faintest idea of how to control. The nuclear strategists had come to impose order -- but in the end, only chaos still prevailed." (The Wizards of Armageddon, Simon and Shuster, 1983, pp. 390-1)

Is it conceivable that universities and colleges who traditionally have been rational and objective critics of our society, local and global, can be silent in the face of the nuclear threat? Is it possible that our students can prepare to be future leaders and still not learn from us the dimensions of this nuclear threat, the moral problems involved, and possible solutions, if only they have hope that a solution is truly possible? It is mainly of their futures that we speak. Our lives are on the downside.

I have spoken of the pursuit of truth as our greatest moral imperative. There is no truth about the world and humankind today that does not become darkened in the shadow of the thermonuclear mushroom and nuclear winter.

What to do? Many things. While the problem is fundamentally geo-political, politicians are mostly concerned with what their constituents are saying, especially if it is loud and clear and universal. I fully realize that our opportunities for political action far transcend that of those in controlled societies, especially behind the Iron Curtain. But even there, one finds great and, I think, sincere concern. One would have to be crazy not to be concerned. Again, as a top Russian scientist told me: "I'm really worried about your computers, and ours are worse."

Each of us and each of our institutions must do what we can do best, and there are some things we can do together. The nuclear problem involves the expertise of all our faculties and departments.

There is no dearth of intellectual materials. I have already quoted several authors. In the short time that I have become involved, dozens of books and hundreds of articles have come my way.

The book (earlier a NEW YORKER series) that I read first and found better at description than prescription was Jonathan Schell's Fate of the Earth (Alfred A. Knopf, New York, 1982). He has just published another, The Abolition (Alfred A. Knopf, New York, 1984). Dyson's four articles, now Weapons and Hope in book form, is, I think,

better at prescription and right on target in sensing that hope is the most important factor of all, especially for young people.

Then came the Bishops' Pastoral, "The Challenge of Peace: God's Promise and Our Response," with two commentaries by Philip Murnion and James Castelli, for both of which I wrote introductions. The great virtue of the Bishops' Pastoral is that, for the first time, the problem is put into a rational and faith framework. It is modestly reticent in making final judgements, but it does assert inequivocably that there is no possible moral justification for killing hundreds of millions of innocent people. If so, we have a compelling moral problem with offensive weapons and also with deterrence as long as there is not a serious effort right now to reduce and eventually eliminate nuclear weapons.

On the difficulty of nuclear negotiations, there are two fine studies: Kennedy, Khrushchev and the Test Ban by Seaborg (University of California Press, Berkeley, 1981) and Smith's Doubletalk, The Story of Salt I (Doubleday & Company, Inc., Garden City, New York, 1980).

I have mentioned a recent novel, Streiber and Kunetka's, Warday (Holt, Rinehart, & Winston, 1984). Another is Collins and LaPierre's The Fifth Horseman (Avon Books, New York, New York, 1981). Somehow novels and films (of which there are many) can grip us and our students in ways that serious books cannot. Perhaps they strike our emotions in ways that intellectual arguments do not.

In addition to these recent books, many articles and films, it would be useful to inform our students that professionals --

which many of them will soon enough be -- are organizing on this subject of the nuclear threat, almost by spontaneous combustion. The physicians are best organized at the moment. After their second international meeting in 1982 in Cambridge University, the three American leaders, two of them Notre Dame graduates, joined three Russian medical colleagues to discuss the medical effects of nuclear war on Soviet national television. The videotape is available.

At their Amsterdam third international meeting last year, Dr. Bernard Lown, the Harvard co-founder of IPPNW* said in his Presidential message:

> "We can and must instill a sense of moral revulsion to nuclear weaponry and the Orwellian term, 'deterrence' which is but a sanitized word for indiscriminate and colossal mass murder. Our goal should be the widest conditioning of an anti-nuclear instinct as potent as hunger. Moral arousal, I believe, will help tilt the perilously balanced scale in world affairs towards survival.
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> "President Eisenhower predicted that there will come a day when the people will generate such a mighty popular groundswell for peace that governments will be forced to get out of their way. Such a day is no longer remote for it is beckoned by the unleashing of the deepest forces embedded in humankind when threatened by extinction." (IPPNW Report, Vol. I, No. 2, p. 15)

* International Physicians for the Prevention of Nuclear War.

Lawyers have begun to organize. We have a chapter on our campus. Business leaders are essential in this crusade because they are presumed to be negative. Some assume that profits are all that concern them and again as President Eisenhower pointed out in his Farewell Address, there is a military-industrial complex. However, there are many deeply responsible business leaders who share the common concern. Many of them are grandfathers, too. Anyone in doubt should read Henry Willens, The Trimtab Factor, (William Morrow and Company, Inc., New York, 1984). A group of young businessmen, many from Silica Valley, have retired prematurely from business to promote "A World Without War."

To mention an unusual group, I am presently attempting to bring worldwide scientific and religious leaders together -- making common cause for the first time since Galileo -- against the nuclear threat.

The scientific statement, written and signed by representatives of 36 National Academies of Sciences at the Vatican in September, 1982, is very explicit, calling for moral judgment from religious leaders and indicating some possible first steps towards the ultimate elimination of all nuclear weapons. The statement was reproduced in full in the most popular technological review in the USSR, with a circulation of 3,000,000. We were able to reproduce it in SCIENCE which reaches 100,000 American scientists.

May I quote just one paragraph from the Preamble of this five page statement which has been translated into the principal world

languages and will be discussed by representatives of world religions in Vienna (already done), in Tokyo (on the 40th anniversary of Hiroshima and Nagasaki) in New Delhi, and Cairo.

> "The existing arsenals, if employed in a major war, could result in the immediate deaths of many hundreds of millions of people, and of untold millions more later through a variety of after-effects. For the first time, it is possible to cause damage on such a catastrophic scale as to wipe out a large part of civilization and to endanger its very survival. The large-scale use of such weapons could trigger major and irreversible ecological and genetic changes, whose limits cannot be predicted."

The first religious reaction to this statement studied by a select group of religious leaders in the company of Americans, Russians, and other scientists who wrote it, is completely supportive. I quote only their concluding paragraph:

> "What faith impels us to say here in Vienna must be fortified by the hope that it is possible to build a world which will reflect the love of the Creator and respect for the life given us, a life certainly not destined to destroy itself. Because of the deterioration of the international political atmosphere and the great danger posed by the rapid developments in military technology, humanity today

is in a critical period of its history. We join the scientists in their call for urgent action to achieve verifiable disarmament agreements leading to the elimination of nuclear weapons. Nothing less is at stake than the future of humanity, with its rich and variegated cultures and religious traditions."

Among the signatories of this statement were the principal religious leaders of the United States, Protestants and Catholics, as well as religious leaders from as far away as Delhi, Cairo, and Sanaa, North Yemen (the Grand Mufti) and, of course, Franz Cardinal Konig, Archbishop of Vienna who was central to this whole endeavor. These statements in their entirety are available on request.

At this point of conclusion, may I return to where I began? We are education persons, teaching students the wisdom of the past and pointing them towards the future. Their future, all of it, is threatened as never before in the history of humankind. There may be no future if the nuclear threat is not immobilized. As I asked previously, is it conceivable that they spend four years or more with us without being confronted with this unprecedented threat, at least to understand it in all of its dimensions, all the moral problems it implies, and what possible actions on their part might neutralize the threat lest it increase and eventually bring their world to utter devastation? At Notre Dame, we have begun a course

on the nuclear threat, involving many of our departments, and using many of the books mentioned above. We have also launched an Inter-Faith Academy of Peace at our Ecumenical Institute for Advanced Theological Studies in Jerusalem, under the Presidency of Landrum Bolling, a distinguished Quaker, and Dean William Klassen, a Canadian Mennonite with much concern for this effort.

While these efforts will touch a few hundred students each year and, through the videotape of the course, we hope to reach many others, a way must be found for all of our institutions to become involved as widely as possible. I have no magic answers, but if the nuclear threat is all that I have described it to be, there is no moral concern more threatening in our times and we, as educators, simply cannot fail to find a way to use our enormous influence to find a strategic breakthrough. Even if we could influence our counterparts in the Soviet Union to meet and discuss informally and unofficially our common interests in preserving the future for our students, it might be a beginning. I close by appealing to the most creative company I know, academe, to make a move in hope that might reverse the present headlong movement to the ultimate catastrophe -- an end to all we hold dear, all good, all true, all beautiful, all persons.

(Rev.) Theodore M. Hesburgh, C.S.C.
President, University of Notre Dame