

in Brazil I am very glad to meet him here again. As we have met quite often during the last nearly 15 years. I would like to point out that I find very important the paper Professor Gottstein, from a methodological point of view. I think that this idea that we should try to look at each other with the eyes of the other, is a very important and could be a very fruitful idea. But even more, it is extremely important what kind of arguments we are going to speak of and which arguments we are going to present when we try to understand each other with the arguments of the opposite side. And in this respect it's difficult for me not to point out that some of the arguments of Professor Gottstein really do need some clarification and should be at least a little bit more precise. Well I did speak this --

(TAPE ENDS)

(TAPE 13)

REVEREND HESBURGH

. . . I hope you take what I say in that context. I'm not trying to make any political points. I'm not even trying to make any military points, because I'm not in the military. I'm not even trying to make scientific points.

I'm simply commenting on facts that I know. ~~but I remember~~
~~One day,~~ After spending most of my 42 years as a priest,
 and all of my years in a university since I've been 18
 years old, and I'm now 68, I suddenly one day listened to a
 lecture by one of our alumni, Dr. James Miller of Harvard
 Medical School, and He came to the university because 250
^{were having symposium on nuclear peace}
 universities, ^{that} day. It happened to be Veterans Day in
 November three years ago. He gave a talk simply on what
 would happen if a one megaton bomb exploded over the city
 in which our university is located, South Bend, Indiana,
 and It was something I knew about up here, ^{in my head,} but I hadn't
 really thought about it in my heart. And as I was walking
 back to my office in the afternoon, dusk, it was getting
 dark and cold, the thought struck me that all the things
 I'd been working on, ^{during my life} were all human problems -- human
 rights around the world, human development in the Third
 World, use of science and technology for development,
 world health, world literacy, what to do about creating a
 better circumstance for those 80 percent of the world's
 people who have to live with 20 percent of the world's
 wealth, whereas the 20 percent of us have 80 percent. ~~in~~
 That's not fair. You couldn't do that on a space ship. I
 don't know why we do it on ~~this~~ space ship, ^{Earth.} In any event,

With one crew member in ~~five~~ ^{for} five having
 80% of the life resources.

The nuclear holocaust that

it suddenly struck me that if ~~what~~^{what} young Dr. Miller had ~~described~~^{described} ever came to be, there would be no more human problems such as I ^{have} spent my life working on, there would only be death and destruction and silence -- a deep silence following the sonic boom, and there would be nothing but devastation, and simply there wouldn't be any human problems because there wouldn't be any human beings. There would be no one except perhaps a few ^{survivors} on the fringes who are ^{now} back in the stone age grubbing for food and living in a polluted atmosphere. ~~And~~^{It} I decided that afternoon that while the things I was doing ~~I thought~~ were important, ~~that~~^{nuclear dilemma} this ~~thing~~^{thing} I was thinking about this day was all-important and it was very important to try to do something about it, ~~and the first question I got asked was,~~ ~~when I started to get into this and when I cancelled out~~ everything else I was doing, I gave up the chairmanship of the Rockefeller Foundation and ~~I gave up~~ the chairmanship of the Overseas Development Council; I gave up the chairmanship of the U.S. Commission on Immigration Refugees; I ~~got off~~^{resigned from} the Board of Directors of the Chase Manhattan Bank and a lot of other things, so I could give time to ~~this~~^{a solution to the nuclear dilemma}, plus the university which I still have two years to serve, ~~and~~^{and} people asked me, why are you suddenly

concerned? After all, next week will be 40 years ^{since} August of 1945, 40 years since the explosions of Hiroshima and Nagasaki, and somehow we've managed to survive. But the fact is, almost by spontaneous combustion, the concern about the nuclear threat to humanity has spread across the whole world ^{recently,} even down to little children. I don't know if you saw it, but there was a study made of children in the United States and children in the Soviet Union. I think it was done by the University of California, Berkeley, and you know, they came out almost precisely the same. You can talk about probabilities and statistics, but over 50 percent of those children -- these were teen age youngsters and below -- over 50 percent of them said they thought they would die in a nuclear holocaust in their lifetimes. Now that's not a very nice way to begin life. Over 50 percent said that, but the thing that gives me hope is that 70 percent of them said, if the grownups who run this world would decide to do something about it, their chances would be greatly increased of living a normal life and having children of their own and loving and creating in their own lifetime. ~~And~~ I have to say that the reason that this spontaneous ~~combustion of~~ interest and concern went across the world, in my judgment

at least, is that we weren't paying attention to the man who really started the nuclear age, or even the thermo-nuclear age. Einstein ~~said~~. He said ^{that} the unleashing of the power of the atom has changed everything except our mode of thinking and thus we drift toward unparalleled disaster. Now Einstein said that in 1945, and I would submit to you that to this day we are still not changing our way of thinking about a world that has totally changed. No more war and peace; now, peace or extinction. We have, it has been said during this conference, increased by a million times, the destructive power of Hiroshima and Nagasaki of 40 years ago. There are now four tons of equivalent TNT available for every human being on earth -- every man, woman and child. Think of that -- four tons. We have the capability, the scientists tell us, of not destroying the whole world once, but 14 times over. There are, as has been said, 50,000 warheads; you're not killed by missiles, you're killed by warheads, ^{There are} and ^{over} 50,000 of them. Some of them are strategic and some of them, of course, are tactical. There are more tactical than strategic. But I have to say that they're held by two powers, one of them being my home country and one being the USSR. And this awesome destructive power is

not just theoretically out there somewhere, but is processed into these warheads. It's targeted on definite targets, including right where we're sitting. It's poised on delivery systems which can deliver anywhere in the world, much better than the mail system -- in about 30 minutes, if it's as far away as it can be. It's hair-triggered to be set off ^{by} ~~of~~ very fallible computers, and I don't know about the Russians, but I have to say in my own country we had about 120 difficult computer mistakes in the last year and a half that could have set off a war if they had been taken seriously. And you don't have much time to think about it. ⁴ One of my Russian scientist friends told me the reason he thinks everybody is concerned today is that 40 years ago there were only two ^{atomic} bombs in the world and we set them both off, and many of us are unhappy about that, but it happened. And then even in the 50s there were ^{only} a handful of bombs, and then there was the thermonuclear bomb, and of course then there were more bombs, but even in those days it took seven hours to deliver one, and if it got halfway there and you suddenly decided you made a mistake, you could call it back, and there are all kinds of movies about the difficulties of calling it back and what would happen if you can't call it

back, but generally speaking, theoretically we have what we call fail safe and you could call them back in those days. ⁹¹ Now you've got really about 15 minutes to make a decision, and if you're talking about a sea launch ballistic missile off the coast, you've got four or five minutes. And I suspect on a battlefield you've probably ^{have} ~~got~~ even less. ^{time for decision,} It's been said by a very respected general who knows NATO very well that if ^{a war} ~~the forces~~ engaged ^{the} NATO and Warsaw Pact ^{forces,} it would be about two hours before one side or the other would be calling for a nuclear strike, or the use of nuclear tactical weapons. ⁹¹ Now, I have to say that in addition to all that, ~~we're talking about not just a few more bombs, and~~ we're adding several bombs every week, sometimes several every day to the arsenal, but we're not only doing that, but we are now talking about going into space. We're on the land and we're under the sea, and we're in the air with bombers; now we're talking about going into outer space. And I have heard all the discussions pro and con SDI and I'm against nuclear bombs on earth and I'm against them in the water and I'm against them in the air, and I'm certainly against them in outer space. But I have to say that the only ultimate defense against nuclear weapons is get rid of

them. Get rid of all of them. Get rid of them now, or as soon as humanly possible, ^{Getting rid of all nuclear weapons is} ~~and I will tell you that's not~~ very likely to happen unless somehow we start working on the central problem which has been brought out so well at this conference, which is mutual trust between the forces and their allies and everyone else involved here. ~~And I think that absolutely has to be done.~~ ^{Mutual trust is indispensable} We talked about SDI and also about nuclear winter in our Bellagio conference and later at a conference with the Pontifical Academy at the Vatican in the following January -- last January -- and we said ^{that} all of this discussion is meaningless; all of the discussions at Geneva are meaningless, or anywhere else, here in Vienna, etc., unless somehow we work on this most important fundamental question which is mutual trust, mutual confidence, creating an atmosphere in which we can begin to cooperate, ~~and~~ ^{If} we have to compete, let it be in the economic or social sphere. I think when one goes over this and thinks of what might happen, it seems to me that we better remind ourselves that God didn't give the Americans the right to blow up the Russians, or the Russians the right to blow up the Americans. And he gave neither of us the right to blow up mankind on this earth. I remember so well the little girl Samantha who Mr.

That's a far easier solution to the nuclear dilemma than S.D.I. or other defensive plans.

Andropov invited to come to Russia. She went over and had a lovely two-week visit there, and when she got a chance to say something, and I quote her exact words here, she says, "If both of the sides, my country and your country say they won't start a nuclear war, why do they keep building up new weapons and adding to the weapons they already have?" ^QI think we have to ponder the uniqueness of the situation we find ourselves in, that never before in the history of mankind, and God knows how many hundreds of thousands of years we've been around in one form or another, but never before we had in our hands, in a matter of minutes, not even an hour, the power to destroy the total work of creation, and to do it 14 times over, and to do it ~~in a few minutes~~, even accidentally. The newer weapons are terribly destabilizing and unfortunately they come at a time when the whole world is rather unstable for a wide variety of reasons that have been discussed during this conference. ~~And I think~~ The military themselves are very jittery on both sides of the super powers, and ~~I think~~ for good reason, because they know better than anyone else that there's never been a weapon that has not ultimately been used, and that if a war begins, it's bound to escalate. You can't imagine Hitler in that bunker an

hour before he died, if he could hit a button and blow up Russia, France, Germany, the United States, that he wouldn't have done it. ~~There have been many~~ ~~and the world has been full of~~ idiots like Hitler in the history of the world. ~~It~~ To put it as bluntly as I can, I think it has to be the worst sin of all the possible sins in the world, and we've all had our share of them, but it's got to be the worst sin, the worst blasphemy to utterly destroy God's beautiful creation -- planet Earth -- the very gem of our solar system. It's ~~got to be~~ a terrible sin ~~to create all that we have~~ ^{To destroy all that we have created} ~~created~~ here so painstakingly, even politically and socially and economically and religiously over so many years, to destroy all our institutions that we've labored to perfect, like the university in which I've spent my life -- to destroy all learning, all science, all technology, all art, all culture, all books, all music, all architecture, every human treasure, everything, but especially millions of women and men and children -- especially children, all their futures and all futures, utter obliteration at worst and a return to the stone age at best. I think it has to be utter insanity for rational creatures to have backed ourselves into such a corner and to think we cannot get out of that corner, ~~we're stuck~~

~~here~~. I would say that anything that human beings create they can uncreate. Anything we make we can unmake. ~~So we~~ have to have the moral conviction to do it and we certainly have to develop the moral power to do it, and we have to do whatever needs to be done to do it. And there is nothing more important on the human agenda, ~~and there is nothing so terribly important that we can't do it because it's more important than the outcome of peace.~~

Q There ^{is} ~~was~~ a writer in America who writes for the New York Times -- he was head of the Policy Planning Division of the State Department. His name is Leslie Gelb, and he wrote an article in the New York Times on March the 4th last year. It was entitled "Is the Nuclear Threat Manageable," ~~and he~~ said something in the article that I think bears repeating, because people say, well we've ^{survived} ~~made~~ it for 40 years, why don't we just keep on ~~making it,~~ ~~maybe~~ muddling through but not blowing each other up? He says the problem is that it isn't that we've added so many systems and weapons in land, sea, air and possibly in space, but he says that we are now at a point with the development of technology that we're constantly adding new systems, whole new systems that didn't exist -- delivery systems, accuracy systems, monitoring systems, all the

rest, and this is what he says about it. He says, what has to be understood now is that the future could be different than the last 40 years, and that the nuclear peace of that last 40 years could be transformed into nuclear nightmare. What is in the offing is not simply another weapon system or two, whether it's Star Wars or whatever else you want to conjure up, but a whole package of technological breakthroughs that could revolutionize strategic capabilities and thinking. To be sure he says, there is some time before all of these new technologies *Come to reality and* ~~now boarding~~, and he mentions about six or seven of them, ~~mature into reliable weapons systems, but not that much~~ time left. He says ^{*what is*} ~~most~~ lamentable, ~~and this is the final word of his article, most lamentable~~, there seems to be a habit of mind developing among the American and Soviet officials ~~that~~ these kinds of problems, or how to cope with them, simply can't be solved, so we keep adding weapon system on weapon system. ^{*they think*} ~~That~~ technology really cannot be checked, and maybe that's the story of Star Wars. That a kind of combination is settling in, a combination of resignation and complacency, just riding with what is, just seeing the new systems added, and being complacent that somehow the world won't ~~go upside down or~~

be destroyed. ~~But~~ ⁱⁿ Then, his final two sentences, he says:
"The Americans and the Soviets have gotten used to both
competition and to the nuclear peace that ensued. Mankind
may not be able to survive on that alone." ^P During the
past three years I've read dozens of books and articles
and I have a file from here to the door, because there are
many things being written these days about this whole
situation. The first book I read was mentioned by the
ambassador. It was Jonathan Schell's book called Fate of
the Earth and that book really shook me, but I think it
was better at describing our precarious situation, rather
than in saying what must be done to cope with it. In
other words it was better at description than at
prescription. It was better at describing a bad situation
than at saying what we have to do to cure it. But then I
ran into another book that also appeared first, in of all
places, the New Yorker magazine, by Freeman Dyson, who is a
British physicist who works at the Institute for Advanced
Studies in Princeton, and He wrote a book also mentioned
during the course of this conference called Weapons and
Hope, and his ^{book} is a little more interesting. At least it
was for me, because at the end of a long description of
where we are and how we got there and what is happening

today ~~and he mentioned some of the new systems as well.~~

He says, I think I must come up with some kind of solution, which I don't think Jonathan Schell did. He tried to, but I don't think it came off. So Dyson says, here are seven possible solutions, and he goes right through them all -- I won't go through the seven -- but the final one is reminiscent of much that you have heard at this conference. It is simply entitled, Live and Let Live. ^{It} And the point he makes has been made more eloquently by the previous speaker, simply that we have this small space ship called Planet Earth, that of necessity because human beings are different in many ways, intellectually and spiritually and socially ~~and other~~ ways, ~~and there are~~ ^{with} all kinds of ^{different} political systems, ~~he~~ ^{Dyson} says, the only way we have to survive is to make a pact with each other that we will live the life we want to live for ourselves and we will allow others to live the way they want to ^{live.} We won't try to subvert them and they won't try to subvert us. Live and let live, and let things develop as they may. If the world turns communist, so be it; if the world turns capitalist, so be it. The odds are it won't turn either way totally. There'll always be competition between systems, but his advise is, let's not destroy ourselves in the process. Let us live and let

⁴¹
 live. ~~And~~ then he says, what's involved in that, what
 would ~~we~~ ^{we} really have to do to live and let live? And what
 I'm ~~reading~~ ^{about to quote to} you ~~here~~ is the final few paragraphs of that
 whole book, which is called Weapons and Hope, ~~and~~ I was
 really attracted by it because I think besides the moral
 conviction that this is the most important problem facing
 humankind, we have to have some hope that we can do
 something about it. We can't be complacent as Leslie Gelb
 says, and we can't give up and say there's nothing we can
 do. We can't be fatalistic about it. ~~And~~ ^{this} is the
 final page of ~~his~~ ^{Dyson's} book, ~~which I would like to read to you.~~
~~He says,~~ "The moral conviction must come first," and I've
 been speaking about that most of this afternoon in these
 few remarks. "The moral conviction must come first. The
 political negotiation second," because this is really a
 political problem as well as a moral problem, and "then
 and only then the technical means in moving mankind
 towards a hopeful future." ~~I got some very good very good~~
~~order, and he says a few more things about it, but,~~ ⁴¹ First
 we need the moral conviction and I assume and hope we can
 do something about it. Secondly we need the political
 discussions that are serious, not like the chess games
 we're watching in Geneva, and thirdly, ^{we need to adopt} the technical means

Solving The problem -
 of ~~pulling it off~~ and that's the least difficult part of
 all if we put our minds to it. ~~Then he goes on and says,~~

Regarding the moral conviction, *Dylan says the* ~~and~~ most difficult step is to

convince people that movement is possible, that we are not
 irredemably doomed, that our lives have a meaning and a
 purpose and that we can still choose to be the makers of
 our fate and our history. This lesson, which I would
 underline, not to give up hope, is the essential lesson
 for people to learn *if we wish* ~~who are trying~~ to save the world from
 nuclear destruction. There are no compelling technical or
 political reasons that ~~we and~~ *should prevent us and* the Russians or the French *a British*
 and the Chinese ~~should not in time~~ *from* ~~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 at all possible. What is
 needed to achieve this goal is a worldwide awakening of
 moral indignation, not to commit that greatest of all
 sins, to destroy creation, God's and our's. ⁴¹ Pushing the
 governments and their military establishment to get rid of
 these weapons, which in the long run, *Dylan* ~~he~~ says, endanger
 everyone and protect no one. And that's a pretty strong
 statement. They endanger everyone and they protect no
 one. You spend billions of dollars creating them and it's

a disaster if you ever use them. It's like building a beautiful boat with the latest engine and beautiful sails and looking out at the Mediterranean for a sail, and polishing it up and working on it, perfecting it, getting good navigation instruments and everything ^{aboard,} and never leaving the dock. We are spending the wealth and the talent of this world to build something we can't possibly use without committing suicide. What idiocy! ^{He Dyson} concludes ^{that} the basic issue ~~then~~ is simple: are we or are we not ready to face the uncertainties of the 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 some hope for us and for our grandchildren. ^W As a kind of afterthought, Freeman Dyson quotes a lady named Clara Park, because so much of his book is about hope. I don't know Clara Park, but I agree with what she says here: ~~and she says,~~ "Hope is not the lucky gift of circumstance or disposition, but a virtue like faith and love, to be practiced whether we find it or not easy or whether we find it natural because it is absolutely necessary to our survival as human beings today." Ladies and gentlemen, I could go on, but I've already cut out half of this talk and I think I'm going to cut out the

of what is left
 other half, because I think the point that I have been
 trying to make ~~here~~ is sufficiently made ~~here~~ for the
 purposes of this conference. I was going to mention a lot
 of plays and books and articles and I was also going to
 mention different professional associations that have
~~burst up upon us~~ *espoused this cause during* the past two years like the International
 Physicians for the Prevention of Nuclear War, which was
 co-founded by Dr. Chasov of the Soviet Union and Dr.
 Bernard Lown of Harvard University. I could mention the
 lawyers' associations that have been founded around our
 country, and I'm sure around the world. We have a chapter
 at our law school at Notre Dame. I was thinking also of
 businessmen. There is a whole group *of American businessmen who* ~~I'm sure most of you~~
~~don't know this. there is a whole group of American~~
~~businessmen, millionaires in their 30s because they get~~
~~into computers and chips and they work at a place called~~
~~Silicon Valley across from Palo Alto, Stanford University~~
~~in California, and a whole group of these people just quit~~
~~their jobs and they are now banded together in something~~ *a group*
 called "A World Without War" because war ~~now~~ in the nuclear
 age is unthinkable, and *one* of the books that was written
 by one of them is called The Trim Tab Factor. It's about
 a little thing on the wing of an airplane or on the rudder

~~in a~~ ^{desired} ~~given~~ ^{direction}
 of a ship that will begin to turn the whole plane or the whole ship. It's called a trim tab in English. I'm sure there are words for it in every language, but this book was written by businessmen to businessmen in the ^L ~~American~~ military-industrial complex, ~~and~~ ^{It's} a very very interesting book to show that even businessmen are concerned about doing something about this. ^H I'd like to conclude by just giving you two statements that emerged from the group that I'm working with, which ^{a group of} ~~is~~ religious and scientific leaders. ^{Why is such a group important?} ~~I think the scientists have a good deal to worry about. As Oppenheimer said, he's quoted again in this week's Time magazine, the feature article is on the arms race and the nuclear threat, but Oppenheimer said something rather interesting after Hiroshima and Nagasaki. He said (TAPE ENDS)~~
~~. . . on the military and therefore if we can get them together, they would be much stronger together than they would be separately. Why?~~ The reason is that when scientists speak out, many people say, you people speak with poor grace. After all, you split the atom, you fabricated all these systems, you're involved ~~up to here~~ in all the new systems that are being created every year, you have so put this thing together and perfected it that

we no longer talk about hitting the Statue of Liberty; we
 can hit it between the eyes or at the belt. ~~It is the~~
^{when} scientists ~~when they~~ ^{they} speak, are not often very welcome,
 because they ~~said you~~ bear the moral ~~force~~ ^{stigma} that more than
 half of ~~the scientists~~ ^{them} in the last 40 years have ~~one way,~~
 directly or indirectly been working on problems of
 warfare, be ~~they~~ ^{it} biological, chemical or thermonuclear or
 nuclear, or delivery systems and all the rest. Well, the
 religious leaders have another kind of problem. I happen
 to be one of the religious leaders. When we speak up
 people say, well, it's too complicated. You really don't
 understand it. ~~It's very technological; it's very~~
~~complicated, and~~ you really don't know what you're talking
 about. Why don't you go back in the sacristy and talk
 about original sin or something you know about? ~~But~~ But if
 you get these two groups together and that's what I've
 been trying to do, and they supplement each other, what
 happens is the scientists keep the religious leaders
 honest. They tell them, no it's not that way, but it is
 this way. ~~I remember on targeting some people were~~
~~saying, well we only target military targets, and the~~
~~scientist laughed and said, yes, I know those military~~
~~targets and they're all surrounded by civilians in both~~

scientifically
correct,
24

~~countries, or throughout Europe.~~ So the fact is the
scientists keep the religious leaders ~~honest,~~ and I think
the religious leaders give a certain moral credibility to
the scientists that they might not have if they had to
just live with their past history of producing all of
this. ^{that} I find ^{the} the best scientists I know in the world
today, ~~and I know many of them,~~ feel terrible about what
they have created -- this Frankenstein -- and they want to
get rid of it, but they don't know quite how to ^{do} ~~get about~~
~~it, and there are many schemes floating around, but they're~~
~~willing to declare themselves and say that this is wrong.~~
~~And so~~ the first thing I did was to get only one other
religious leader, Cardinal ^{KONIG} ~~Kearney~~ here in Vienna, and we
met here at the top of the Intercontinental Hotel, and we
had the head of the Academy from Japan from Japan and
India and Great Britain and France. We had the Vice
Chairman from the Soviet Union and we had a ~~representative~~
~~of the President,~~ Spurgeon Keany, who is the scholar in
residence on this particular subject from the American
Academy, ~~and then we~~ had a followup meeting to get a
document ^{written} ~~ready and that was done~~ (at the Royal Society) and
~~that was done~~ ^{changed by M.G.K.} by Mr. ^{menon} ~~Mennen~~ who ^{was} ~~is~~ head of the All Indian ^{Academy}
~~Society, M.G.K. Mennen,~~ and Then we had two meetings at

the Vatican because this was now trying to get some
 religious group involved, ^{with} and the Holy Father, happens to
 have a Pontifical Academy, two-thirds of the members of
 which aren't Catholic, but they are very good scientists,
 many Nobels, ^{which} and they advise him on these subjects. And
 H We finally came up with a five-page document that was
 signed unanimously by 62 scientists present, representing
 36 of the national academies. Now the Chinese Academy
 couldn't be there that day so I personally had it
 translated into Mandarin and went to China and talked to
 the president and the vice chairman of the Chinese
 Academy, and they are studying it, but Everyone else
 signed it -- 36 academies, 23 representing, ^{ed} including our
 own, by their presidents, and they put out this five-page
 statement which was reproduced 3 million copies in the
 Soviet Union and we had it in Science magazine which only
 goes to 100,000, but at least it goes to the whole
 scientific community in the United States with an
 editorial comment, and I'm only going to read you one
 paragraph because it gives you some sense of what these
 scientists, at least ^{those} representing these academies and also
 representing ^{the the and Pugwash groups} ICSU, which is the International Council of
 Scientific Unions and the Pugwash(?) group and others,

~~and what they were willing to say, and this is just one paragraph of five pages with a lot of very specific details.~~

^H The paragraph reads, "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." ~~This was pre-nuclear winter,~~ "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 future and survival. The large scale use of such weapons would trigger major and irreversible ecological and genetic damages and changes, and the limits of these simply cannot be predicted." In other words, here are scientists used to precise language, and what they're saying is this thing is so awful, ~~this was from the first paragraph,~~ that we can't even predict the extent, and this is before they knew about ^a ~~the~~ whole new problem, nuclear winter. ^H ~~Now~~ We took this statement and we brought it back to Vienna where we ^{met with representatives} ~~began, and this is~~ ^{representatives of} ~~where I am, and we brought in the heads of religious~~

^{religious} groups from all over the world, from the Hindus, the Muslims, the Jews, the Christians and the Confucionists, all the people we could get, ~~from all over the world, and~~

4 When we had given this statement the day it was prepared, to the Holy Father, he said, give it to everyone, get it all over the world and we did. We brought it here and gave it to these leaders, and again, they came out with a statement that replied to the scientific statement, or at least reacted to it, and again I'm only going to read you one paragraph of that religious statement, ~~and then I'm going to wind up.~~ They say, "What faith impels us to say here in Vienna must be fortified by the hope that it's possible to build a world which will reflect a 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 because of the great dangers poised and posed by the rapid development of military technology new systems, humanity today is in a critical period of its history. We join the scientists," -- this is probably the first time religious leaders have said this since Gallileo -- they said, "we join the scientists in their call for urgent action to achieve verifiable disarmament agreements leading to the total elimination of nuclear weapons. Nothing less is at stake than the future of humanity with its rich and variagated cultures and religious traditions."

~~Q~~ Ladies and gentlemen, I am going to stop with that thought. People say you are an optimist or a pessimist, and I say, in the world in which we live you can't afford to be a pessimist, because the only way ^{to survival} ~~open~~ is to be an optimist, and to be an optimist, as I said, we need hope. and hope I trust is the word I could leave with you this afternoon. Each one of us is an individual. ~~Each~~ one of us has our own connections and our own governments, and our own intellectual establishments and our own scientific societies, ~~and I think~~ I don't have to tell you that each one of us has a serious moral obligation to do what we can. I can't tell you what to do and you can't tell me what to do. We all have to do whatever we can do best to stand up and strike a blow for humanity and for creation, ~~and~~ I have confidence, as I said the first day here, ~~three days ago~~, that if you get this intelligent and well-intended group together and if we share ideas, even ideas we don't necessarily agree with, and if somehow we bring out in each other the perspective of hope and the prospect of peace, then I think I can tell you that everyone is grateful for you having been here, for the long hot days you've put in and the discussion and listening, ~~and~~ I have great hopes that from this meeting will come many, many

good effects and I thank you for all you've done. I'd like to give a special hand to the poor translators to whom I'm sure I gave a very hard time, because I didn't have a text. Thank you. I give you our director.

DR. WOLMAN

One more hand clap for Reverend Hesburgh.

(APPLAUSE)

All of us are grateful to Reverend Hesburgh for his inspiring, ~~and~~ thought-provoking and encouraging words. May I say a few words in concluding this conference. ~~of~~ ~~ours~~. Some time ago one of the national television chains in the United States produced a film, "One Day After." ~~Too late.~~ After may be too late. "After" there's nothing to talk about. Nobody's going to see the day after and nobody will participate in it. We are here one day before, and this is what our task is. Machines produce weapons, but human hands control the machines, and human minds control the hands, and this is our hope and this is our power. We can talk to people and we're going to do it, talk to ^{the} ~~^~~ entire mankind. The resolution that I am going to read to you will be mailed to all governments in the world calling them to cooperate for a peaceful life for all human beings. We, at this conference don't blame

anybody. We may have different ideas, we don't blame anybody. We call ~~for~~ everybody to help. We call on mankind to wake up. The nuclear winter may start any day *and* We won't wake up. There is no need for it, ^tThere is no reason for it. We still can cooperate, create goods for all of us and try to solve our difficulties in a positive and constructive way. There are about 30 nations represented now in this room. I got hundreds of letters from people who for a variety of reasons couldn't be with us, but they begged us to keep them in mind, to write to them, to encourage them for the future. The resolution that I'm going to read was prepared by three of us who ran this conference: the Reverend Hesburgh, Dr. Seitz and myself. We have avoided any controversies. We tried to quote it in positive terms as a call to humanity; wake up! ~~and~~ I hope that when I finish reading this resolution, all of us will raise our hands in commitment and promise that we shall do everything possible to work toward friendly, peaceful cooperation of all nations, all human beings, all around the world. I am starting the resolution. I am sure everyone has a copy of it; if you don't have a copy the girls in the office have it. The resolution was prepared, as I said, by Reverend Hesburgh, Dr. Seitz and myself.