



## Past and Future of Nuclear War

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**Arjun Makhijani:** I want to honor, first of all, Mrs. Murakami and Mr. Moriguchi [Hiroshima and Nagasaki bombing survivors] for bringing this message of love. It is a difficult message that you are living and setting an example for all of us. Mahatma Gandhi said that an eye for an eye, revenge, will turn the whole world blind. And Martin Luther King reminded us that hatred cannot cure hatred, only love can. So thank you for bringing that message to us. I also want to honor Louise Franklin-Ramirez and John Steinbach for more than 20 years, every year commemorating, rain or shine, whether there are few people or many, commemorating the bombings of Hiroshima and Nagasaki in the city where the decision was made for those terrible and tragic dates. And the American University for sponsoring this and organizing this. Thank you very much for holding this.

The terrorizing of the world with weapons of mass destruction – and that's what it was – the idea that terror would be an instrument of peace was born in the 1920s in the brain of an Italian, Brigadier Douhet. He thought that if you terrorized civilian populations, if you destroyed cities from the air, and waged wars of terror, then the leaders of countries being bombed would quickly submit and wars would be shorter and more merciful. And therefore the war of terror – even though it would kill many civilians – would be a merciful war.

The practice runs of the first full-scale merciful war were carried out in Spain by Hitler during the bombing of Spanish cities, commemorated by Picasso's famous painting, Guernica. But the first real full-scale terror war of peace, was World War II. Many cities were bombed and firebombed and it has been said that perhaps Hiroshima and Nagasaki were only extensions of this aerial warfare. And in some ways they were. But there was also something very special about Hiroshima and Nagasaki. After those bombing one lone plane could terrorize an entire city forever in the future. Now we know that one lone cargo container on a ship with many cargo containers can also terrorize a city, for we do not know which one of them might contain a bomb. Leaders all over the world are worrying about it.

How did we go from an idea that terrorism would be an instrument of peace and merciful war to the global war on terror that is in itself leading the world down a terrible precipice toward catastrophe. I believe that we are headed toward destruction in multiple different ways. As Professor Kuznick said, I'll describe the Nuclear Posture Review, but for five minutes I want to make a radically new proposal to you



the nature of the Manhattan Project, which started it all.

A few days from now we will have the anniversary of one of the most important, but also one of the most unnoted dates in the 20th century. May 5, 1943, which is hardly remembered, unlike August 6 and August 9, 1945. But August 6 and August 9, 1945 – the dates of the bombings of Hiroshima and Nagasaki – were born on May 5, 1943, when the whole idea of Manhattan Project as something that was done out of fear of Hitler began change. That was the day when the first targeting discussion was held in the Manhattan Project and it was decided not to target Germany, out of fear of German nuclear retaliation, fear of German nuclear capabilities.

It was decided to target Japanese forces, first on the island of Truk. Eventually the target became Japan itself, and the cities of Hiroshima and Nagasaki were bombed. Today, when society confronts great problems, especially of a technical nature but also of other kinds, environmental problems, for instance, people in this country often say, let's us have a Manhattan Project to solve it. I've always thought it odd that a project that resulted in the incineration of cities and an arms race should be spoken of in this way, as something exemplary that should be repeated. We are in a situation where today, in this city especially, where we could be evaporated with non-zero probability in any 15-minute interval because there are 2000 warheads on hair-trigger alert in Russia and somewhat the same number, maybe a few more, in the United States or United States forces. That is one enduring result of the Manhattan Project.

Today, Russia has already lost 18 out of 21 of the satellites that helped it keep track of the alarms in the sky and prevent false alarms and nuclear alerts. I would like to suggest to you that, although the Manhattan Project was a technical success by the criterion that the bombs went off on July 16 and on August 6 and August 9, that the Manhattan Project is one of the most monumental failures in military, in moral, political, social, and economic terms that human history has known. And the seeds of that were on May 5, 1943.

After May 5, 1943, the targeting was progressive toward Japan and Germany of never again specifically targeted, only mentioned occasionally. The bombers were prepared for Japan in the fall of 1944. The scientists were never informed, although Groves, who headed the Manhattan Project, said the target was always intended to be Japan. Always! He said, always. When I interviewed several of the scientists who led that project in 1995, none of them were aware of this fact at the time that I interviewed them — 50 years after the bombings.

In a way the Manhattan Project began living a lie on May 5, 1943. The decisive moment in the creation of that lie was in early December 1944, when the Allied troops were in Germany and it was known that Germany did not have an atom bomb project worth the name. The Alsos spy mission to check on German came back to the United States with that news. The great scientist Joseph Rotblat, who was part of the Manhattan Project, decided to resign. But he was the only one. The purpose of the project was over for him. Hitler did not have the bomb and would not have it. But for those leaders of the Project who had made the decisions to invest the money, for those who wanted to see this terror weapon come to fruition as a weapon of American power, not only during the war, but after the war, those leaders wanted to see the bomb used. And most scientists appeared not to care. Some did and they did not want it used, but most did not care.

Why do I say that the Manhattan Project was a failure? One reason is that war, after all, was not ended



with an unconditional surrender. It was ended on the same terms that most Japanese generals were ready in July and the Americans knew it. Even after two atom bombs there were heartless Japanese generals who did not want to surrender. They were ready to lead their country to suicide as the Germans were. Yet the Japanese surrendered only on condition that the emperor stay. And after the atom bomb the Americans agreed, but before that they would not agree. And I put it to you [that] the intervening decision to use the atomic bombs and the days on which they were used — as soon as the bombs were ready — had not so much to do with the immediate ending of the war or preventing an invasion — because an invasion was not due until November of 1945.

The establishment of American power on August 6, 1945, inevitably set off a nuclear arms race that you have heard about, that we all know could incinerate the world in seconds. These days we have heard a lot about suicide bombers who kill themselves and others, innocent people. These suicide bombings cannot be justified. Gandhi has said, and the message of his life was, that the end result is shaped by the process at which we arrive at it. If suicide bombing cannot be justified, what would the bombing that would destroy the entire earth be like? How can we describe it in relation to a cafe blown up, if in any 15 minute period there are at least two fingers on two buttons that can evaporate the earth and not only kill human beings instantly in the hundreds of millions, but also destroy much other life as well.

If I might be permitted a moment of levity. Mark Twain in a moment of dark humor, when many many innocent people were being murdered and brutalized in imperialist adventures a hundred years ago, was so shocked by the behavior of American troops at the time that he said something like, “Human beings are not at the top of the evolutionary ladder, they must be at the bottom of the devolutionary ladder.”

That nuclear weapons were about power and were not only about confrontation with the Soviet Union is to be seen by how many times nuclear weapons threats have been used against non-nuclear countries. The Nuclear Posture Review is not new. First use has been in the policy since 1945. The first post-World War II nuclear threat was made in 1946 to the Soviet Union to get out of Iran. It was not the Soviet Union’s oil, but it wasn’t American oil, either. It was Iranian oil.

Pearl Harbor was about oil, it was about Indonesian oil. The Americans had an embargo on the Japanese to not go after Indonesian oil. The Americans wanted to dominate the Pacific. The Japanese imperialists wanted to dominate the Pacific. But the oil was neither the Japanese nor the Americans’, and the Indonesians, whose oil it was, were at the time, slaves.

September 11th also arose out of a contest for oil, with American troops in Saudi Arabia and two-thirds of the world’s recoverable oil reserves in the Persian Gulf. I think the details of this are very clear by now. The negotiations for a natural gas pipeline with Afghanistan were restarted even before the Afghanistan war was over. Oil-related nuclear threats and nuclear alerts have occurred numerous times: 1956, 1958, 1973, 1979, 1991. And now we have the Nuclear Posture Review.

But before we go to the Nuclear Posture Review, I want to mention other nuclear weapons states. We have had a terrorist attack on September 11 in this country. People from 80 countries died that day, but that has been forgotten largely in the discourse. But its connection to Hiroshima is very important to remember. Osama bin Laden has made reference to Hiroshima many times. He has said, “If the United States could use bombs on Hiroshima, I can do the same.”



The United States has declared a war on a terrorist group and on countries that might hide the terrorists – although terrorism has never really been defined. And let us remember that the first definition of terrorism wars was in connection with wars by states. Certainly there are many other kinds of terrorism and we have seen one horrible and immoral face of that on September 11, but it is only one face. But there is also terrorism from the air that has been routinely conducted by states. I know Daniel Ellsberg could not come. Let me remind people of what he has said. When you stick a gun to somebody's head it is a use of the gun, even if you do not shoot it.

The United States has used nuclear weapons threats more times than any other country. The Soviet Union has used it. Now North Korea has used it. India, the land of Buddha and Gandhi, has done it; and Pakistan has done it. And other countries have also done it. The single fact of all of these countries is that in the name of national security, as a professor has described, “they’ve all harmed their own people first of all.”

I’ll dwell a minute on the Nuclear Posture Review and then I’ll close by giving you a couple of vignettes of that damage in their own countries. The United States made many commitments to the world and especially to non-nuclear states in order to get them to agree to renounce nuclear weapons. The Nuclear Non-Proliferation Treaty was first of all an American idea. The treaty was born at a time when the United States felt a terrible threat from other countries acquiring nuclear weapons, even though it was the United States that had set in motion nuclear proliferation by using the bomb on Hiroshima. Many had warned about an arms race prior to that use. And they were right. It did come about.

The chain of nuclear threats produced a chain of nuclear proliferation, and that was largely stopped, although not completely by the Nuclear Non-Proliferation Treaty. There are 182 non-nuclear weapons states, five parties to the treaty that are nuclear -weapons states (the United States, Russia, Britain, France, and China), and three other nuclear weapons states: Israel, Pakistan, and India. In recent years, with pressure on the nuclear weapons states parties, the Nuclear Non-Proliferation Treaty has become a disarmament treaty. The non-nuclear parties are demanding that there be some consideration given to the solemn promise that the nuclear weapons states would eventually get rid of their nuclear weapons. The nuclear weapons states have been forced in these diplomatic discussions to agree that they are obliged to achieve nuclear disarmament in all its aspects. At the same time, the United States and slowly also the other nuclear weapons states, interestingly increasingly joined by France, of course by Russia, and Britain, one doesn’t know about China yet, are eliminating most of these commitments in practice and in their real policies, even as they make nicer and nicer speeches in the United Nations.

In the last ten years, the Non-Proliferation Treaty has become a disarmament treaty, the World Court has said, disarmament in all its aspects is a commitment under the treaty. After the end of the cold war, after every rationale that anyone ever had, if it were reasonable, has been taken away for nuclear weapons. The United States in the face of that, still has 2000 plus nuclear weapons on hair-trigger alert, has invited Russia to keep its own weapons on hair trigger alert, so the United States can deploy ballistic missile defenses with Russian agreement. By agreeing to Russian nuclear weapons on hair-trigger alert and keeping its own on similar alert, the United States is thereby subjecting its own people to a permanent threat of accidental incineration in a nuclear war. It also says that nuclear weapons must endure as a principle of American security forever. Even the potential target countries have been named in the Nuclear Posture Review. The naming of these non-nuclear countries as targets is a clear violation of the commitments that have been repeatedly given. We also we have had a high official, the very one who is responsible for security treaties in the State Department, say that treaties are a political matter not a legal



matter. He has suggested that United States will adhere to them only when the American interest dictates. No other interest is apparently relevant.

Well, other people are listening. We have that gentleman Saddam Hussein who we know is a ruthless man, who has killed his own people. He is faced with threats from the United States everyday. I do not imagine he will sit idly by. We know that Pakistan has nuclear weapons and nuclear materials, we do not know what is happening to the control of those nuclear materials since October 7<sup>th</sup>, 2001 when the war on terrorism began. Osama bin Laden was a big, big reason for launching that war, but he has not been captured. It is not known whether he is alive or dead – one day he's alive, one day he's dead, probably this or probably that. But he has disappeared as a high priority.

We have many nuclear materials around the world. Good accounting is practically unknown for many of them. It does not seem to be a high priority. We have spent fuel in nuclear power plants where security is not assured and which pose major threats should they become terrorist targets, but securing of spent fuel by shutting down spent fuel pools is not at all a priority.

Let me give you a vignette of the nuclear weapons establishment by telling you about Sharon Akers. I met her in 1998 in Idaho. The United States government had just published its study showing hot spots where much of the milk during the 1950s had been contaminated and children, especially who had been raised on farms, were getting high doses to their thyroids. I went to the most affected counties – four of the five were in Idaho — and I spoke there. I revisited there this year and I want to let you know that to this day, even though the children in those areas received very high doses of radiation to their thyroids, I'm the only outside scientist who has visited the area to inform the public what happened there. Sharon Akers gave birth to a boy who already had cancer when he was born. She carried him while he had cancer. He died when he was six.

Sharon and her family lived in the country – cowboys and cowgirls on a ranch – thinking they were living the clean life in the open air. They did not know what the nature of the dust that was falling on their laundry. The government told them it was safe. Yet, the government knew that milk was being contaminated with fallout, but it did nothing to protect the milk supply, to protect American children in the 1950s. At the same time, the government supplied secret fallout data to the entire photographic film industry in the 1950s, Kodak and all the others, so they could protect their film supply. The photographic film industry had threatened to sue the American government if they didn't give them this data.

People have lived in nuclear terror for more than half a century. The fingers on those bombs – well, let me just say that there are no safe hands for nuclear weapons. We live in a situation where the world can be incinerated very fast. No finger is safe, because even if it belonged to a good and moral person, no finger is safe from error. We know we are all prone to error. And none of us is perfect. We were not born to be perfect. Nuclear weapons are not safe weapons in any hands. It is not so that there are some wrong hands and some right hands. All hands are the wrong hands for nuclear weapons. The fingers on the nuclear trigger are the ultimate fingers of terrorism, because nuclear weapons are designed to be weapons of terror. You read the documents. This is not not my assessment alone. It is the the assessment of those who invented these weapons.

Where shall we go from here? Let me suggest two things to you. This country gave the world the idea of the rule of law and it is in the process of disavowing its most important security commitments to the



people of the world, including its own people. And I put it to you, because it is very dangerous for everyone including the people of this country, [that] it lives under an illusion that the unilateral exercise of military power can bring security. This is a false illusion in an age when there are eight nuclear weapon-states, 36 other nuclear-capable states and nuclear materials scattered in more than 100 countries. This is an illusion. We must have whole-hearted cooperation from the world and it is declining despite the number of flags that might fly in the White House when there are political events. It is crucial for the United States to meet its security treaty commitments and to fulfill those commitments even when it seems difficult to do it.

The other suggestion I have is for the allies of the United States, including Japan and U.S. allies in NATO. They live under the so-called U.S. nuclear umbrella. I would say that the people of these countries should insist that ten years after the Cold War it is time to close up the nuclear umbrella and to close up the nuclear shop and end the illusion of nuclear deterrence. It is time to give up the idea that this will provide permanent safety. It is a wrong idea and it must be dispensed with, because the policy of deterrence is also the engine of proliferation.

I was recently in Texas and I spoke to some cowboys and farmers about guns and nuclear weapons. And I will close by recounting a couple of things from that, which to me are real symbols of hope. You don't imagine that I could talk to cowboys and farmers about nuclear weapons but you know, they live in the shadow of the Pantex plant, where nuclear weapons are assembled. They know me well. They know that I will struggle for the environment, for peace, and also for justice. So they came to humor me. I said to them that, out there where they live generally by themselves, far from their neighbors, it might be conceivable that a gun might be an instrument of self-defense if an intruder attacked their families. This is possible. I can conceive of this.

But I said to them also that slinging a nuke, that incinerating cities, that trading off the lives of children for the lives of grownups is wrong. What kind of morality is it that we can say that the lives of soldiers were saved by killing children. We must abandon this morality. Killing children is the ultimate disrespect of life. Adults normally must sacrifice for the future, which is represented by children. We have inverted this morality. So some of the cowboys actually wound up thinking they might agree with me and we got into deeper conversations.

One of the farmwomen told me that in her church a few days ago there had been a discussion, it had nothing to do with my talk, this is a church in a very conservative area of the United States. A young man had been reflecting in the study group and he said, "You know, I really am very troubled by this phrase 'God bless America,' that I hear all the time. I think if it is separating us from the rest of the world. I feel it says that we are different and more precious (I am paraphrasing) whereas everybody else is feeling the same fears and sorrows as us. Maybe we ought to be saying 'God Bless the Earth.'"

We talked about how people from 80 countries have died in the World Trade Center collapse. And I said, "Yes, maybe we ought to be sewing the flags of all of those countries into a composite flag that we might all fly.

The message of hope you bring – that Mrs. Murakami and Mr. Moriguchi bring — is being heard in most unlikely quarters. I want to close by assuring you of that and that there are many of us who are here and many colleagues who are not here who agree with your message of love — like the people you [Professor



Kazashi] have talked about in New York, who refuse to have their loved ones [names] used for war, who refuse to have their grief turned into blood, more blood. Your message is spreading. It is also true that there is a contrary message that is hurtling the world toward a kind of pain and sorrow and death that we cannot seem to oppose successfully with our modest efforts. Therefore, I think we must redouble those efforts of love and I want to thank you very much for coming here with that message.

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