NUCLEAR WAR: THE HIDDEN DIMENSION

by

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What follows is an essay on the unconscious motivation behind nuclear war entitled Nuclear War: The Hidden Dimension. I have written this essay in the spirit of Jonathan Schell who showed us in The Fate of the Earth,\(^1\) that we will never be able to make sense of the absurdity of 50,000 nuclear weapons poised in readiness to destroy life on our planet, until the problem is posed in terms of the deeper strata of mind and emotions rather than the more immediate concerns of deterrence and arms control. In fact, the latter will always appear insurmountable until we are able to deal adequately with the former.

The primary source for many of the ideas of this essay is Robert J. Lifton, a psychiatrist from Yale, and his extremely intelligent book, The Broken Connection.\(^2\)

At first many people perceived the explosion of the atomic bomb over Hiroshima as just another explosion. Certainly, it was larger than any bomb ever dropped but qualitatively no different. This perception, combined with the immediate surrender of Japan, reinforced the feeling that the bomb would insure the security of America for many years to come.

However, some people were immediately aware of the discontinuity that this event presented to history. Truman commented: "This is the greatest thing in history." Scientists witnessing the New Mexico tests that preceded Hiroshima exclaimed, "The sun can't hold a candle to it," "This was the nearest thing to doomsday possible," "In the last millisecond
of the earth's existence, the last man will see something very similar to what we have." And Robert Oppenheimer recollected the words from the Bhagavad-Gita:

If the radiance of a thousand suns
Were to burst at once in the sky
That would be like the splendor of
the Mighty One.

I am become Death
The shatterer of worlds.

William Lawrence, the official science writer for the Manhattan Project, perhaps best summarized the prevailing feelings:

On that moment hung eternity. Time stood still. Space contracted to a pinpoint. It was as though the Earth had opened and the skies had split. One felt as though he had been privileged to witness the birth of the world. . .
The big boom came about a hundred seconds after the great flash—the first cry of a new-born world.  

Since atom bombs were dropped on Hiroshima and Nagasaki, we have had to deal with a new possibility, namely, the termination of our own life as a species. As Jonathan Schell points out, human beings have traditionally constructed elaborate symbolic and cultural systems to cope with the reality of "the first death," biological death. Lifton refers to this solution as the human quest for "symbolic immortality." I paraphrase his words:

We see ourselves embedded in an endless chain of generations which will be perpetuated by our children. We feel ourselves transcending death through the spiritual content of our religions. We live on in a creative sense through our "works." We see ourselves as part of the natural order. And finally, we all experience certain moments of connectedness to a larger human process during expressions of sexual love, childbirth, athletic effort, the contemplation of art or music or in the height of battle.  

By contrast, we have no symbolic or cultural systems to deal with
the "second death," extinction. We have religious images of the end of the world. The myth of Prometheus, the stories of the Tower of Babel and the Flood suggest the dire consequences that we face by tampering with the natural order or pursuing evil. But here, as Lifton says:

The terror is accompanied by a structure of meaning, a larger purpose, and even an image of a future, a Kingdom of God.\(^3\)

As awesome as the destruction of Hiroshima and Nagasaki were, they were still on the scale of disasters experienced before by mankind. They provide us with only the dimmest shadows of the levels of destructiveness that we have provided for ourselves since then. Yet there is nothing in our experience to help us to comprehend the meaning of such a potential catastrophe.

As a result of these nuclear events, we have developed a heightened sense of vulnerability, powerlessness and death anxiety, and we have had to develop new strategies to help us restore our lost sense of immortality and cultural continuity, our link to future generations.

Lifton suggests that one of these strategies is to regress to our earliest days as children. Children find solace by identifying with the all-powerful parent. In the earliest phases, the child hardly experiences himself as separate from his parents. He feels omnipotent since all his needs are readily satisfied by his parents. Later, by the age of three or so, the child experiences himself as separate and distinct, a potentially threatening notion. This is the time when children feel quite vulnerable, and they begin having nightmares and other fears of monsters, etc. However by a process of identification—first manifested by mimicking behavior and later by actually internalizing qualities of the
parent—the child in effect carries the parent within him, thus protecting
himself against the terrors of the world.

As the child grows he begins to gain more knowledge of the mysteries
of the world—where he came from, what happens when people grow old and
sick, what adults do when they are alone. The child frequently experiences
this information as his secret which helps the child feel that he is power-
ful, and can master the complexity of the world. In addition, the secret
also comes to contain the child's aggressive feelings towards parents or
siblings or anyone else who frustrates or threatens him. Naturally, having
such feelings towards well-loved adults produces guilt which further re-
inforces the child's need to keep such feelings secret.

These themes relate to vulnerability or security: to hold on to the
secret is to hold on to life itself, to reveal it is to risk attack, an-
nihilation, loss of that life power. One of the difficulties of our
nuclear dilemma is that it reinforces the sense of terror that we all
feel with regard to the world, and it forces us either to face a world
of heightened terror or repress knowledge of these dangers in what Lifton
refers to as "psychic numbing."

I will now examine how three scientists coped with the heightened
sense of vulnerability and death anxiety that were the result of the
success of their scientific work. We will see that Niels Bohr immediately
sought to gain control over the weapons by sharing the secret. Edward
Teller thoroughly identified with the new forces. Finally, we see through
his ambivalence, J. Robert Oppenheimer become a tragic figure in the early
history of the bomb.

Niels Bohr was the physicist responsible for creating the modern
picture of the atom. He was also the person who, in 1939, communicated to American physicists the discovery, by the German scientists Hahn and Strassman and the Austrian Meitner, of the fission of uranium, setting the stage for the development of nuclear weapons.

The results of this experiment spread like wildfire through the world of science so that, six months later, Einstein was approached by the scientists Szilard and Wigner to help them alert Roosevelt to the danger of Germany making the bomb. This led in 1941 to the formation of the Manhattan Project.

Bohr felt that the technical problems of producing such a bomb were prohibitive and returned to his home in Denmark to devote his energies to helping scientists escape from the Nazi occupation.

In September 1943, Bohr first learned about the Manhattan Project. He immediately grasped the nature of the postwar international problems that the bomb posed, and he came at once to the U.S. with the objective of trying to convince the government to assuage Soviet mistrust of American intentions by informing Stalin of the existence of the bomb and developing, at this point, a plan for international control.

Bohr attempted to transfer his scientific ideals into the realm of international politics. He wrote:

> Knowledge is itself the basis of civilization, but any widening of the borders of our knowledge imposes an increased responsibility on individuals and nations through the possibilities it gives for shaping the conditions of human life... Every valuable human being must be a radical and a rebel for what he must aim at is to make things better than they are.⁴

Bohr felt that the fruitfulness of international cooperation found in the world of physics would also work in politics. He also felt that his
discovery from the world of physics, that two contradictory states could both be true, would hold for politics and enable conflicting theories of government, such as communism and democracy, to coexist.

As we know, Bohr's vision did not come to pass. His efforts to influence statesmen culminated in a meeting in 1944 with Churchill. The meeting was a total failure. "We didn't even speak the same language." Bohr continued to try for the rest of his life to find some way to put an end to the nuclear arms race.

Oppenheimer was a man of great knowledge, creativity, intelligence and administrative ability. Although originally apolitical, the anti-Jewish horrors of the Hitler regime awakened his social conscience.

He became the guiding force behind the Manhattan Project—in fact, the choice of Los Alamos as the location for the Manhattan Project was in great part due to its familiarity to Oppenheimer whose family owned a ranch nearby, and who had explored the area extensively in trips as a boy.

Lifton points out that, in a sense, the Manhattan Project with all its secrecy was associated in Oppenheimer's mind with secrets of childhood, "Secrecy had a more diffuse mystique around keeping hidden and exclusive one's connection to ultimate destructive power."

Oppenheimer supported the point of view that the bomb should be used on an enemy city without warning, and he tried to talk Szilard out of circulating a petition to prevent use of the bomb against Japan. On the other hand, his inner feelings about nuclear weapons are revealed in the following statement:

In some crude sense which no vulgarity, no humor, no overstatement can quite extinguish, the physicists have known sijh, and this is a knowledge which they cannot lose.
One of Oppenheimer's biographers recorded that "He had always believed that he had a higher purpose than to beat the Germans." The bomb would "shake mankind free from parochialism and war." But then he awoke from his identification with the bomb to become the most outspoken critic of the production of the H-bomb, or "superbomb" as it was called. He said in 1949,

What concerns me is not the technical problem. I am not sure the miserable thing will work.... What does worry me is that this appears to have caught the imagination... as the answer to the problem posed by the Russian advance [in nuclear weapons]. It would be folly to oppose the exploration of this weapon. We have always known it had to be done, and it does have to be done.... But that we become committed to it as the way to save the country and peace appears to me full of danger.6

But in 1951, after hearing about Teller's breakthrough in the H-bomb program, he commented that this achievement was "technically sweet" and went on to say,

It is my judgment in these things that when you see something technically sweet, you go ahead with it, and argue about what to do about it only after you have had your technical success. That is the way it was with the atomic bomb. I don't think anybody opposed making it; there were some doubts about what to do with it after it was made. I cannot very well imagine that if we [the General Advisory Committee, GAC] had known in late 1949 what we got to know by early 1951, that some of our report would have been the same.6

The hope of the GAC was to hold back production of the H-bomb as a way of encouraging Russia to join the U.S. in nuclear arms control. But the advice of the GAC was ignored, and Oppenheimer was discredited and stripped of his security clearance by the government in order to silence his opposition to their plans for nuclear arms development.

Edward Teller participated in the Manhattan Project also, but he is
most noted for being the "father" of the H-bomb and a constant proponent of bigger and better weapons systems.

Teller explained, when refusing to sign Szilard's petition, that he had no hope of clearing his conscience, for the things they were working on were "so terrible that no amount of protesting or fiddling with politics will save our souls." He had worked on the bomb "because the problems interested me and I should have felt it a great restraint not to go ahead." He felt that "the accident that we worked out this dreadful thing should not give us the responsibility of having a voice in how it is used."

In the final analysis, the facts had to be made known because the responsibility had to be shifted to all the people.

I feel that I should do the wrong thing if I tried to say how to tie the little toe of the ghost to the bottle from which we just helped it to escape.4

Later Teller developed an almost proprietary interest, or "kinship," with the H-bomb. He withdrew from active participation in the events of the Manhattan Project to explore his pet project, and is said to have referred to it as "my baby." From the earliest time when the idea of Fermi, that the atomic bomb could be used to start something similar to the reactions in the sun, Teller was fascinated by the "scientific puzzle" it presented and spoke glowingly of the "spirit of spontaneity, adventure, and surprise" surrounding early discussions with colleagues about thermo-nuclear problems. When everyone else thought them insurmountable, he persevered.

Lifton points out that Teller's religious fervor in support of the H-bomb could be likened to a scientific version of the "call to greatness"
described in the myth of the hero. And as Lifton points out there was an aura about Teller of an Old Testament prophet. His colleagues apparently referred to him as "the apostle of the super." They recalled his apocalyptic prophecy:

It won't be until bombs get so big that they can annihilate everything that people will become terrified and begin to take a reasonable line in politics.²

He has defended American bombs against all critics and tried his best to prevent the 1963 ban on atmospheric testing. On the question of the fallout scare, he made the following remarkable statement in his book The Legacy of Hiroshima:

Radiation from test fallout is very small. Its effect on human beings is so little that if it exists at all, it cannot be measured. Radiation from test fallout might be slightly harmful to humans. It might be slightly beneficial. It might have no effect at all. Fallout might produce abnormalities which may be offensive at first sight but such mutations have always been necessary to the evolution of the human races. Deploiring the mutations that may be caused by fallout is something like adopting the politics of the Daughters of the American Revolution, who approve of a past revolution but condemn future reforms.⁷

He goes on to say that unlimited nuclear buildup, constant testing and comprehensive civil defense could "save 90% of the people" (all of which sounds familiar). Finally, he urges us that if we can only hang on and "buy time," the nuclear deity will save us completely. "The drama that began at Hiroshima will be finished before the end of the century," he says, meaning that by then extraordinary scientific advances, themselves primarily nuclear, will have resolved our dilemma. He shows what he means by this in the January 18, 1982 New York Times. Here, a scheme of his is reported, to destroy all the missiles in an enemy attack.
by exploding nuclear weapons in space which will in turn trigger batteries of lasers which will fire at the missiles.

Teller dismisses real dangers as inappropriate anxieties, and equates reservations about nuclear weapons with childish illusions, a refusal to recognize "a sudden transition from protected childhood to the responsibilities of a grown man." In so doing, he leaves us with no alternative to dealing with nuclear nightmares other than psychic numbing. Finally, not only does he advocate the use of nuclear weapons for war, but has also actively pursued their use for the building of harbors, in constructing a new canal through Panama, and for propelling rockets.

I do not mean the preceding survey of Teller's activities on behalf of nuclear weapons development to be construed as an indictment of Teller as an individual. In fact, he is a highly cultured man in the old-world sense, and an accomplished pianist. The people who have dealt with him in scientific or personal matters attest to his graciousness, accessibility, and generosity. As a young man he was rather idealistic, and he participated for a time in the World Federalist Movement. But he became deeply embittered by the harsh treatment of his family in Hungary at the hands of both the Nazis and the communists, which led to his extreme anti-communistic views. Rather than personifying evil, Teller is a product of his own experiences.

I have dealt at length with Edward Teller for two reasons. First, due to his flamboyant personality and the strength of his convictions, he has had an enormous influence on the nuclear policies of two generations of political leaders and a large segment of public opinion. Second, he embodies the most extreme expression of nuclearism among American
scientists according to Lifton's definition of Nuclearism:

The passionate embrace of nuclear weapons as a solution to death anxiety and a way of restoring a lost sense of immortality. Nuclearism is a secular religion, a total ideology in which "grace" and even "salvation"--the mastery of death and evil--are achieved through the power of a new technological deity. The deity is seen as capable not only of apocalyptic destruction but also of unlimited creation. And the nuclear believer or "nuclearist" allies himself with that power and feels compelled to expand on the virtues of his deity. He may come to depend on the weapons to keep the world going.²

Now that we have examined the approaches of these three scientists to the events at Hiroshima, I would like to look at several questions about the relationship of the scientist to society and the formulation of nuclear policy of our country. These are not "mere" academic or philosophical questions since one-third of our scientists are now employed directly or indirectly in military research and development, and 550 billion dollars of the world's resources are spent on the military each year.

I contend that it is Teller's approach, and to some extent Oppenheimer's, which best expresses, albeit in exaggerated form, the dynamic of modern technological civilization. I do not consider myself anti-technological, nor do I feel that technology can or should be abolished. However, I feel that unless we are able to comprehend the fundamental problems inherent in technology we will prevent ourselves from developing more appropriate technologies, while continuing to produce technology run amok as with our present nuclear weapons. Lifton has given us this sensitive critique:

There is first the deification of not just nuclear weapons but of scientific technology in
general. It is this broader technicism and scientism that provides the matrix for nuclearism. Within this scientific aberration, "knowing"--the essence of both science and the arts--becomes only solving puzzles or manipulating the environment. Science, the parent, is consumed by its technological offspring. What results is an impulse--never stronger and never more dangerous than now--to substitute brilliant technological vision for the more recalcitrant problems of human continuity and symbolic immortality. "Works" give way to tools.  

Lifton feels that the radical measures that people must take to recover their lost sense of cultural continuity usually takes the form of totally embracing some ideology as symbolic of a powerful parent. Nowadays, the ethic of technology provides one form of totalism which is seen as the answer to all problems of civilization drive out other forms of symbolic expression.

Religions, as systems to mediate the terror and awe that people feel in relation to the world, are forced on the defensive. They try to compete with science by developing a pseudo-science such as creationism, or they feel compelled to legislate "technological fixes" such as forced prayer in the schools in order to stay alive.

The arts are also encouraged to draw excessively on technology, often diluting the emotional content which is their raison d'etre. Artistic expression is also threatened by the lack of support that it receives from government and the public who feel that the arts are expendable as compared to the so-called "immediate needs" of society. The result is that some of our most talented people are forced to live at the brink of poverty.

Ethnic diversity throughout the world is overwhelmed by the speed and
all-encompassing nature of modern communications and media. Here, the technological nations who control these media have an unfair advantage in expressing their world view, which inevitably comes to replace all others. Other cultures are valued only as markets for goods or sources of raw materials.

Technology has another curious dynamic which is becoming more and more evident in recent years. Technology always strives for the "best" or "most efficient" solution to a given problem. Also there is a great impulse to implement any new idea: "If it can be done, it will be done." The problem is that "best" or "most efficient" are narrowly defined, and we find ourselves burdened with technologies overly sophisticated to carry out their jobs.

According to the New York Times of October 24, 1982, we have been, in effect, unilaterally disarming ourselves during the past two decades. Costs for ultra-sophisticated military equipment have increased so much that although military spending has remained approximately constant, we could produce 6000 planes in the 1950's, but only 600 planes today. Costs for electronic equipment have increased 40-50 times in 30 years, while jet engines have increased in cost 15-20 times in 20 years. General Chain expresses the prevailing military attitude when he justifies present policy:

It doesn't do just because the Soviets have 100 aircraft for me to build 100 inferior airplanes. I can't justify the quantity problem without matching it in quality. If I have a choice--I have to err on the side of quality.

However, tests seem to show that greater numbers of planes always overwhelm greater sophistication during battle. Many people feel that it is
the need to compensate for this "unilateral disarmament" of conventional weapons that may be the basis for U.S. use of dangerous but cost-effective nuclear weapons as its primary defense.

Many of the problems with technology come about directly as a result of a mismatch between technical possibilities and social uses. Jacques Ellul gives the following example in his book The Technological System. There is a well known direct correlation between traffic fatalities and automotible speed. Many lives could be saved each year if cars were designed not to go faster than the 55 mile-per-hour speed limit. Yet, since cars can economically be designed to go up to 120 miles-per-hour, the public must accept the upper limit since it conforms more to the dictates of technology to provide the "best" in a technical sense.

There are many examples of the disparity between technical means and social ends inherent in the nuclear arms race. According to Thomas Powers writing in the November, 1982 Atlantic:

Military men... are concerned with what engineers think they can do, and are generally in favor of anything that serves the traditional military goals of fire and maneuver. They want weapons that are numerous, powerful, quick, accurate and versatile.

The problem is that whereas the bulky and inaccurate weapons of the past could be used only to deter an enemy attack, the new generation of smaller, quicker and more accurate weapons can be used to wage war by threatening to destroy the opponent's ability to retaliate. But this strategy, rather than giving its proponents military superiority according to the traditions of conventional warfare, gives rise to the unwanted side effect of destabilizing the nuclear arms race. Nuclear war, rather than being unthinkable, is now much more likely since the threatened enemy will
have to maintain his forces in a perpetual state of readiness or else risk losing them. Thus the fate of nations will be made to rely on "technical systems that are not, and can never be made infallible." Here, our great technological know-how paradoxically results in socially adverse effects that threaten our existence and seem beyond our ability to intervene.

In ways characteristic of Western experience since the seventeenth century, science and technology gain their great speed and success in comparison to other modes of human expression first and foremost by basing themselves on fundamental laws which have lasting validity. This enables scientific knowledge to accrete layer upon layer through the generations. By contrast knowledge from other areas is based more on ideology and is subject to change according to a variety of subjective circumstances.

In addition, science and technology gain great efficiency by distancing themselves from the emotional content of their products and through separating their activities into their various elements and giving these over to "experts" in each of these areas. In this way technology can be free of the gnawing doubts present in other human activities.

With regard to our nuclear dilemma, there is a large price to pay for this dynamic. Lifton says:
Whatever the assumed intellectual justification for this compartmentalization, the result is a radical separation of feeling and consequence. Nuclear scenarios are projected but not experienced, and it is on the basis of these non-experienced scenarios that the arrangements for nuclear violence are constructed.  

The majority of people who have worked on the development of nuclear weapons have given little thought to the moral dimensions of the problem. Even those who have considered these questions feel that they must "do their job" to help defeat a dangerous enemy by taking action that they perceive is necessary for national survival.

Henry Nash deals with these issues in his article, "The Bureaucratization of Homicide," as he describes his first job after college as an analyst in the Political and Economics Section of the Air Targets Division of the Department of Defense. It was his responsibility to "nominate" targets in the Soviet Union for nuclear bombing. He tells how celebrations were held whenever a member of the group had his target chosen. He also comments on how the language used by the Defense and Intelligence community helps to obscure the reality of what the work is about. For example:

War Department was changed to Defense Department, Strike Command to Readiness Command, the Air Force motto was "peace is our profession." "Power vacuum" and "power equilibrium" had the ring of the respected laws of the physical sciences. Weapons were called "hardware." "Baby H-bomb" was used to describe small tactical nuclear weapons. Finally the Hiroshima bomb was named "Little Boy" and it was the weight of the "Fat Man" that fell on Nagasaki.  

Our worship of technology appears to have prevented us from finding any sense of limit to the technology of weapons development, and has made us unable to achieve substantial arms agreements even when these are in
our best interests, and it has given us the perpetual sense of insecurity that we maintain about our own strength as a nation.

I do not condone the behavior of the Soviet Union as a nation. Their history of violating the basic human rights of their own people is well known, and their inclination to engage in mischievous acts in the world of international politics is also generally acknowledged. Nevertheless, we must try to understand how our own reactions to and perceptions of the dangers posed by the Soviets may be making the world more dangerous. The history of the nuclear arms race is replete with examples of how each of our attempts to enhance our security through technical means has failed, leaving the world a more threatening place to live. The interview with McNamara that I have distributed recalls his experience with this paradox and it tells how each our advances is rationalized by an exaggerated sense of Russia's strengths and their intentions.

We are now about to embark, at the President's direction, on a new level of technological "problem solving." Justified by the perceived threat of Soviet missiles pointed at Europe, the U.S. is about to place highly accurate Pershing II missiles in Europe, capable of striking targets in the Soviet Union in six minutes. We also plan to begin installing, in 1983, highly maneuverable cruise missiles able to evade all radar while honing in on their target. These missiles are so small that they can be carried in trucks or fishing boats, and will therefore make it almost impossible to verify future test bans.

Finally we are about to begin producing highly accurate MX missiles able to penetrate hardened missile silos wherein 70% of Soviet missiles are located, thus threatening the bulk of their deterrent force while
leaving 50% of our force aboard submarines invulnerable to attack.

Thus we are about to force the arms race into an era of "hair-trigger alert" in which a country is put in the position of deciding almost instantaneously whether an attack has been launched upon them and whether to respond. Our own military "experts" are aware of this situation and already are working on a technical solution. The New York Times of October 17, 1982 reports that our command-and-control of weapons will be made precise, in the future, by placing them safely in space with the decision-making capability of orchestrating a "prolonged nuclear war." The decision to launch a nuclear attack will have to be made either automatically or by low-level technicians!

By contrast, our present administration has ended the negotiations on the Comprehensive Test Ban Treaty, ended talks on limiting nuclear weapons in space and halted efforts to ratify the Salt II agreement--in spite of well-acknowledged mechanisms for verifying present weapons systems and explosions.13 It should also be noted that in a recent address, Admiral Davies, former head of the Arms Control and Disarmament Agency, stated that the only known violations by the Russians of ratified or unratified nuclear arms treaties have been purely technical ones. When informed of these violations, they moved immediately to correct them. Thus we are forced to acknowledge that our government has chosen to pursue an "easy" technological solution to the nuclear dilemma rather than the more difficult human solution.

It appears as though our inclination to embrace an all-powerful force to ensure our salvation in the nuclear age has led to a situation not unlike the one witnessed at Jonestown. We too are asked to trust our
leaders while they prepare for our self-destruction.

The psychic burden that our generation must carry of having to live at such close range with the possibility of human extinction has no precedent in history. This dilemma is made all the more difficult by the fact that the reality of the weapons and their effects are within the experience of only a very few specialists. The majority of us have almost no mental picture of what nuclear war would be like and it is the possession of these missing images that would make our present complacency impossible.

Regardless of our level of awareness of the nuclear dangers, we must all live double lives now. One life has purpose and meaning with a sense of the preciousness and sanctity of life; the other one is an absurd existence totally beyond our control, where a remote roll of the dice places our life in jeopardy. It is little wonder that most people react to such a dilemma by becoming remote from the problem or by psychic numbing. Even if nuclear war never comes, the psychological impact on our society, particularly the young, will be damaging in ways not fully understood.

Numerous men like McNamara have at one point in their lives served in the nuclear bureaucracy and then returned to the everyday world. Almost all of them counsel us that as difficult as it may be, the only way out of not only the reality of the nuclear madness but also the negative psychic effect that it places on us is to begin to awaken from our passive roles.
BIBLIOGRAPHY


Kennedy himself made statements implying that the United States might strike first if its vital interests were threatened, and the Administration embarked on a massive nuclear buildup.

The more McNamara studied nuclear war, however, the clearer it became to him that, with Soviet nuclear forces growing and becoming more difficult to destroy, it would not be possible to limit damage in a meaningful way. Moreover, he found that a "damage-limiting" strategy helped the Air Force drive for ever-larger strategic forces. In the middle 1960s, McNamara began to move toward Brodie. By 1967 he could say, "It is our ability to destroy an attacker... that provides the deterrent, not our ability to potentially limit damage to ourselves." McNamara never completely abandoned damage limitation; but the Brodie form of deterrence, now labelled "assured destruction," was publicly given top priority by McNamara during his last years.

Kahn's temporary victory had lasting effects, however. The United States increased its submarine-launched ballistic missiles and ICBMs 18-fold, a buildup which the Soviets soon began to match. A significant number of U.S. nuclear weapons were now "counterforce targeted," that is, aimed not at Soviet cities and economic assets, but at military targets including airfields and missile bases.

The boost from McNamara in the mid-1960s helped Brodie's views continue to dominate the writing and thinking of expert civilians. But the minority who supported a Kahn-like view, especially the analysts at RAND, was stronger and more vocal.

The complete victory of Kahn's ideas came in the early 1970s, the result of the public statements by another Secretary of Defense, James Schlesinger. Schlesinger, who took office in 1973, had been at RAND during the middle and late 1960s, serving for a few years as Director of Strategic Studies. He had published a number of scathing attacks on assured destruction, and soon after he was appointed head of the Pentagon, he returned publicly to counterforce and nuclear warfighting. In 1973 and 1974 Schlesinger announced "a change in the strategies of the United States with regard to hypothetical implementation of central strategic forces." In particular, the United States would obtain "the forces to execute a wide range of options in response to particular action by an enemy, including a capability for precise attacks on both soft and hard [military] targets, while at the same time minimizing unintended collateral damage." Schlesinger's successor, Donald Rumsfeld, echoed Kahn even more clearly, rejecting the notion that nuclear war would inevitably wipe out a major

Looking back at the 1960s

ROBERT SCHEER interviews
ROBERT McNAMARA

SCHEER: Let's return to the issue of the buildup of nuclear forces. How did it occur?

MCNAMARA: Go back to 1960 when many in the United States believed there was a missile gap favoring the Soviets. With hindsight it became clear there wasn't any missile gap. But Kennedy had been told there was. What actually happened was this: In the summer of 1960, there were two elements in the U.S. intelligence community disagreeing on the relative levels of the U.S. and the Soviet strategic nuclear forces... One element greatly overstated the level of the Soviet nuclear force vis-a-vis the other element. The first element had data which they believed justified their interpretation. When one looked over it, it became clear the data didn't justify the conclusion. And within two years of that time, the advantage in the U.S. warhead inventory was so great vis-a-vis the Soviets that the Air Force was saying that they felt we had a first-strike capability and could, and should, continue to have one. If the Air Force thought that, imagine what the Soviets thought. And assuming they thought that, how would you expect them to react?

The way they reacted was by substantially expanding their strategic nuclear weapons program. Now, when they did that, we sat back here and saw the way they were moving—and we always had to take account of their capability more than their intentions, because we weren't sure of their intentions—we looked at their capability and they were building submarines, missiles and planes, and experimenting with new warheads, at such a rate that we had to respond. We probably overresponded because it is likely that their capability, which we observed, exceeded their intentions. So you have an action-reaction phenomenon. And the result is that during the last 25 years, and particularly during the last 15, there has been a huge buildup much more than people realize, in the nuclear strength of these two forces. That has changed the nature of the problem and increased the risk greatly... .

SCHEER: What is so scary about this, and it's not just from you [is that I've interviewed hundreds of people who end up using words like, "they are crazy!" or "madmen!" But how did this happen?

MCNAMARA: Because the potential victims have not been brought into the debate yet, and it's about time we brought them in. I mean the average person. The average intelligent person knows practically nothing about nuclear war—the danger of it, the risk of it, the potential effect of it, the changes in the factors affecting the risk.

Los Angeles Times
April 8, 1982