

## WHAT'S LIVING AND WHAT'S DEAD IN NUCLEAR ETHICS

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If we look back over twenty years to the mid 1980s, we find a rich and wide-ranging debate over nuclear ethics. Spurred by the 1983 pastoral letter of the U.S. Catholic bishops, the debate engaged the general public and the military, as well as the academy, to an extent unprecedented in the nuclear age. Despite the vigor and breadth of the debate, however, it broke little new ground. Most of the major issues had already been addressed in the previous great nuclear debate, that of the late 1960s. Central to both debates were discussions of the moral acceptability of a strategic posture based on mutual assured destruction (MAD), the relative moral and strategic merits of countervalue and counterforce targeting, and the moral implications of strategic defense. Between the times of the two debates, much had changed technologically in nuclear weapons and their delivery systems, yet the moral issues did not change. The moral issues of nuclear weapons arose with the advent of nuclear technology and its development in the first twenty years of the nuclear age, but they remained largely unaltered in the face of further technological innovation.

Since the 1980s, of course, the nuclear world has changed radically, not in its technological dimensions, but in its political dimensions. The cold war is long over. How does this change the moral debate? This is the question I address.<sup>1</sup> It is time to ask, from our vantage point more than a decade past the end of the Cold War, what's living and what's dead in the cold-war ethical debate over nuclear weapons?

During the 1990s, the moral issues surrounding nuclear weapons policy all but disappeared as a matter of public discussion. With the end of the cold war, nuclear complacency replaced nuclear angst, and nuclear weapons in general, and nuclear ethics in particular, were little discussed. But nuclear weapons have not gone away, so the question remains, what should our moral concerns be with nuclear weapons after the cold war? How much of the cold war moral debate is still relevant and how much of it needs to be recast? With the end of the cold war, what has nuclear ethics become?

With the new century, we do have a renewed debate over nuclear weapons policy. Like the 1980s debate, it is occurring partly as a result of the proposals of a Republican president to substantially revamp U.S. nuclear policy, including the building of extensive ballistic missile defenses. So, now we are able, like those in the 1980s, to connect our abstract moral analysis of nuclear weapons to policy initiatives under active consideration.

What changes in nuclear strategic posture has President Bush proposed? In remarks at the National Defense University delivered in May of 2001, the president proposed the building of missile defenses and a reduction in the number of nuclear weapons.<sup>2</sup>

We need new concepts of deterrence that rely on both offensive and defensive forces. Deterrence can no longer be based solely on the threat of nuclear retaliation. Defenses can strengthen deterrence by reducing the incentive for proliferation. . . . I am committed to achieving a credible deterrent with the lowest possible number of nuclear weapons consistent with our national security needs. The building of defenses, he acknowledges, would require abandoning the 1972 Anti-Ballistic Missile Treaty. This new approach to nuclear security “reflects a clear and clean break from the past, and especially from the adversarial legacy of the Cold War.”

The administration has not cast these proposed changes overtly in moral terms, in contrast with the Reagan administration's proposals two decades earlier. But the same moral rationale that was explicit then is implicit now. We must move away from the old concept of deterrence based on mutual threats of annihilation, in part, because it is immoral to make such threats. So the moral issues are again engaged, at least implicitly. One of my purposes in this paper is to apply the analysis it contains to Bush's strategic proposals.

Let us begin the discussion by considering how the end of the cold war has changed our nuclear world.

## **I. HOW THE NUCLEAR WORLD HAS CHANGED**

There are four important differences between then and now.

(1) First, of course, and most importantly, the cold war hostility between the superpowers has substantially disappeared with the dissolution of the Soviet Union and the coming into existence of a post-communist Russian state. Whereas there are now regional nuclear rivalries, such as that between India and Pakistan, there is no longer a global nuclear rivalry. This means that the threat of a global nuclear war, for the time at least, has largely disappeared. Another aspect of the end of cold war hostility is that Russia has been greatly weakened by its political transformation and the United States now stands as the lone superpower.

(2) Second, the most important military threats the United States now faces are different from those of the cold war. For one, the main danger from nuclear weapons is probably an increased likelihood of nuclear proliferation and nuclear terrorism. If a nuclear weapon is used in the next decade, its user is most likely to be either a new state proliferator or a terrorist organization. The end of the cold war has not only brought the dangers of proliferation and terrorism to the fore (they had, after all, been there all along), but it has exacerbated them. The

anti-proliferation discipline that the superpowers exercised over other states has weakened and the breakup of the Soviet Union has made nuclear materials and complete weapons potentially available for theft or on the black market.

(3) A third important difference between then and now is the apparent range of feasible nuclear policies. Radical reductions in nuclear arsenals, or even complete nuclear disarmament, are now perceived, in a political sense, as real possibilities. Amidst the tensions of the cold war, radical reductions or complete disarmament were utopian dreams. Now their realization can at least be imagined. Many people share the view that nuclear weapons, having kept the cold war cold, have done their job, so that now we should get rid of them. Of course, the bomb remains deeply entrenched in our political and military cultures. But the rationalizations for keeping it have lost much of their force.<sup>3</sup>

(4) Fourth, the technology involved in weapons systems has advanced considerably. Most significantly, advances in the areas of computing, miniaturization, remote sensing, and information processing, at the basis of what has been dubbed the revolution in military affairs, may have important implications for the development of new modes of nuclear weapons policy.

## **II. THE COLD WAR DEBATE**

In order to determine whether and how nuclear ethics has changed we need to review the cold war debate.<sup>4</sup> The most fundamental way to characterize the understanding reached about nuclear ethics in the cold war is that nuclear deterrence presents a profound moral paradox. The morally paradoxical nature of nuclear deterrence can be expressed in terms of three tenets.

(a) First, the use of nuclear weapons in war is morally unacceptable, due to the great devastation nuclear weapons would very likely cause to noncombatants and to civilian social structures. The great likelihood of this harm is due to physical differences between the effects of

nuclear and conventional weapons. Nuclear weapons have not only much greater blast effects, but they also have other novel effects, such as radioactive fallout, that spread their destruction over a much wider area. In addition, there is a serious the risk of escalation from the use of a few weapons to the use of many. This argument follows from just war theory, the traditional way of morally assessing military policy. In particular, it is an application to nuclear weapons of the principle of discrimination, a basic feature of the theory.

(b) The second tenet concerns nuclear deterrence. Like nuclear use, nuclear deterrence under the regime of MAD is morally unacceptable. The morally unacceptability of use implies the moral unacceptability of the threat to use, under the principle that it is morally wrong to intend to do what it is morally wrong to do. The assumption behind this implication is that the threat to use nuclear weapons must involve the conditional intention to do so. To be effective, the nuclear threat cannot be a bluff. An essential feature of just war theory is that intentions are subject to moral assessment, as are the actions. Because, under a regime of MAD, part of what is threatened, and so conditionally intended, is the destruction of the opponent's society, the threat is not morally acceptable. This argument, then, is a further application of the just war principle of discrimination. Moreover, the immorality of the threat can be argued on grounds other than the principle of discrimination. For example, the threats involved under a MAD regime are seen to be morally unacceptable when understood as policies of hostage-holding on a vast scale.<sup>5</sup>

Most of those who dissented from this tenet did so because they dissented from the first tenet as well. They accepted both the implication from the immorality of use to the immorality of the threat to use and the principle of discrimination, but argued that nuclear use need not contravene the principle. They imagined, for example, a limited nuclear war, one where the nuclear targets were limited to military installations outside of urban areas. But, given that large

numbers of nuclear weapons were targeted on urban areas (an essential feature of MAD) and that the likelihood of keeping a nuclear war limited to isolated military targets was probably not high, any use of nuclear weapons would have carried with it a morally unacceptable risk of escalation that would have brought about the deaths of vast numbers of civilians.

(c) The third tenet, like the second, concerns deterrence. While nuclear deterrence, under the second tenet, was morally unacceptable, it was, at the same time, under the conditions of the cold war, morally required. To begin to appreciate the positive moral status of nuclear deterrence, consider another aspect of just war theory. While the *jus in bello* (justice *in* war) principle of discrimination prohibits nuclear deterrence, along the lines of the argument just sketched, the *jus ad bellum* (justice *of* war) principle allowing military self-defense seem to permit it.

Carrying this point further, from a consequentialist (or utilitarian) moral perspective, the practice of nuclear deterrence is not merely permissible, but morally required. For the consequentialist, we are obligated to adopt the policy that brings about the highest level of human well-being. Given the hostile superpowers of the cold war, each vulnerable to destruction by the other, continuing a policy of nuclear deterrence could reasonably be seen by each of them as necessary to avoid nuclear attack at the hands of the other, an attack which would not only cause great suffering in the nation attacked, but which would be a disaster on a global scale. Thus, comparing the consequences of maintaining the policy of nuclear deterrence with those of abandoning it, the implication was that continuing with nuclear deterrence was morally required.

These considerations were often cast in terms of the notion of strategic stability. Roughly speaking, a military situation between two adversaries has strategic stability when it minimizes the risk of war between them. A military situation is stable when there is little temptation for aggression on either side and when the various kinds of shocks that might arise in the

relationship between the opponents are unlikely to lead to war between them. The argument, then, is that if one side greatly reduced or eliminated its nuclear weapons, then the result would be great instability, making nuclear war more likely. Clearly, the moral imperative for the consequentialist is to maximize stability. Thus, we have the moral paradox. From one moral perspective (the just-war principle of discrimination) the cold war policy of nuclear deterrence was morally impossible. From another moral perspective (consequentialism), nuclear deterrence, assuming that its abandonment (by one side) would greatly increase instability, was morally required. The conflict nuclear weapons generated between these moral perspectives ran deep, and, with the moral stakes so high on each side, seemed intractable. Nuclear weapons put morality at war with itself.

This was new. The morally paradoxical nature of nuclear deterrence makes nuclear weapons morally novel in comparison with other weapons, aptly called "conventional." No other kind of weapon had before generated this kind of moral conflict. Conventional weapons systems can be used in morally permissible ways and do not involve the risk of escalation to societal destruction. Conventional deterrence is not morally problematic in the way that nuclear deterrence is, because conventional deterrence can be practiced in a morally acceptable manner.

MAD generated the moral paradox. MAD is a situation in which military opponents each have a capability to destroy the society of the other even after receiving a surprise attack. Nuclear weapons make such a situation possible for the first time in history. MAD is an objective state of military affairs, not a doctrine or strategy. It is the context in which strategy must be made. MAD is the source of the moral paradox because of two of its features. First, nuclear weapons make possible societal destruction, something that, from one moral perspective, must not even be threatened. Second, given that one's opponent can destroy one's society, nuclear weapons, from

another moral perspective, morally require that one threaten the opponent with such destruction, as necessary to minimize the risk of nuclear war.

Another important feature of MAD is the impossibility of effective defense against nuclear attack. Deterrence is necessary because defense is impossible. With nuclear weapons, deterrence replaced defense as the only effective mode of national security. Traditionally, the chief purpose of military policy was to develop a capacity to deny the opponent any gains it might seek through aggression. This was the chief source of stability under conventional weapons. But, under a regime of MAD, such denial is no longer possible, and security must be sought through the threat of retaliatory punishment, which, in the case of nuclear weapons, is an immoral threat to destroy the opponent's society.

In the age of MAD, stability must be sought through deterrence by threat of punishment, rather than through defense and a capacity for denial. At the same time, peace has become a much more morally valuable commodity, given the consequences for human well-being of nuclear war. Peace requires stability, and the moral argument for nuclear deterrence is based on the claim that it is essential to maintain stability. In a situation of MAD, the best way to preserve peace, and avoid an unimaginable human catastrophe, is to maintain nuclear deterrence, a policy that involves morally unacceptable threats.

If the moral paradox is a function of MAD, then the way to escape it is to get beyond MAD. During the cold war, some theorists argued that we could achieve a *technological obviation* of the MAD relationship. They rejected the claim that defenses against nuclear attack could not be effective. With effective defenses against nuclear attack, one side would take away the other side's capacity for assured destruction, and the MAD relationship would no longer hold. The argument was that technological obviation could be achieved either through defenses



alone or through defenses combined with effective counterforce capabilities, nuclear weapons with the accuracy to destroy much of the nuclear capability of the other side. The hope for the defenses was embodied in Reagan's Strategic Defense Initiative, popularly known as "star wars."

But the hope behind the idea of technological obviation was as utopian as proposals for complete nuclear disarmament. To eliminate the other side's capacity for assured destruction, even a nation with effective counterforce capability would require defenses that were near-perfect, given the destructive power of even a few nuclear weapons. The offense dominance of nuclear weapons was so overwhelming that no foreseeable technological breakthrough could overcome it.<sup>6</sup>

Thus, the main conclusion of the cold war moral debate, on my reading, is that nuclear deterrence is morally paradoxical, as implied by the three tenets, and that there was no feasible way to avoid this paradox. It should be noted that this paradox, as a moral paradox, was a practical rather than a merely theoretical matter. It affected our collective moral life because it seemed to preclude our acting in a morally acceptable way. Thus, there was during the cold war a special urgency in our efforts to solve the paradox and a great frustration in our inability to do so.

### **III. NUCLEAR ETHICS IN THE NEW CENTURY**

Given the differences between our nuclear world and that of the cold war, what should we say about nuclear ethics today? I will consider in turn the four differences mentioned earlier and discuss what effect, if any, they have on the moral debate in general and on the moral paradox in particular. Recall that the four differences are: (1) the end of the superpower military rivalry; (2) the new military threats we appear to face; (3) the belief that complete nuclear disarmament may now be a feasible policy option; and (4) the advances in technology.

(1) The military hostility that characterized the cold war relationship between the

superpowers is gone. Does that mean that the United States and Russia are no longer in a MAD relationship? Two elements are necessary for a MAD relationship. First, two states must each have the military capacity to destroy the other's society even after a surprise attack and, second, they must be military opponents. While the United States and Russia clearly satisfy the first condition, their mildly friendly relations at this time suggests that they may not satisfy the second.

There is room for dispute here. Imagine a scale of hostility between nuclear powers, at one end of which is the United States and Britain, and at the other end of which is the United States and the Soviet Union during the height of the cold war. The current affinity between the United States and Russia would put their relationship somewhere in the middle of this scale. There is considerably more conflict of interest between the United States and Russia than there is between the United States and Britain. In addition, the political instability of Russia at the moment contains the risk of a rapid reversion to something like the old level of hostility between it and the United States. So, are the United States and Russia military opponents? Are they in a MAD relationship? There is no clear answer to this question. There are clear cases of nuclear powers who are not military opponents, such as the United States and Britain, and clear cases of nuclear powers who were, such as the United States and the former Soviet Union. And there are cases in between.

If two nuclear powers are not military opponents, they have no need to deter each other, so they do not possess nuclear weapons for the sake of making threats against each other. Hence, in terms of their relationship to each other at least, their possession of nuclear weapons does not run afoul of the principle of discrimination and is morally acceptable. Mere possession of nuclear weapons is not by itself immoral, if the weapons are not being used to make threats against

civilian targets. But once nuclear powers begin to perceive each other as military opponents, each will, as a result of that perception, be intending for its nuclear weapons to be recognized by the other as a retaliatory threat, whether or not that threat is made explicit.

For the sake of the current argument, then, we cannot say definitely whether or not the United States and Russia are in a MAD relationship. So, let us consider both possibilities. If the two nations are military opponents, and so in a MAD relationship, then the end of the Cold War has not changed things morally--the moral paradox remains. If so, nuclear ethics today is not substantially different than nuclear ethics during the cold war.

But what if the United States and Russia are not currently military opponents, and so are not in a MAD relationship, as many observers would maintain? Because the moral paradox depends on MAD, it would seem that the paradox is gone as well. The dissolution of the Soviet Union resulted in the dissolution of the paradox. Nuclear ethics today would then be fundamentally different from nuclear ethics during the cold war. But this judgment is too quick. The moral paradox is built into MAD, and MAD is a universal relationship, not a particular relationship. MAD is an abstract relation that has multiple potential instances. The military relationship between the United States and the Soviet Union was one such instance. That instance existed for a time and now has ended. But the potential is there for other instances of the MAD relationship to come into being. All that is required is two nuclear powers with a level of hostility between them sufficient for them to be military opponents. This may be or become the case with the United States and China, for example.

The moral paradox lies in the potential of MAD to be instantiated and not in the vagaries of its instantiation in the Soviet/American relationship. That relationship is an historical, cultural phenomenon and as such it is unique. But MAD is merely one element in the mix of elements

that was the cold war. MAD can be repeated in other historical situations. What we made of MAD culturally, as exhibited, for example, in the film *Dr. Strangelove*, was unique, but MAD itself is an objective state of military capabilities between hostile nuclear powers. It has a reality beyond the cultural forms in which it may be embodied at different times. It is repeatable. Certain political and military conditions must be satisfied for an instance of MAD to exist. But once they are, it does.

If the United States and Russia are not currently military opponents, MAD is now latent rather than manifest, at least in their relationship. But, even so, in the potential for MAD to reappear lies the continuing presence of the moral paradox. Nothing since the end of the cold war has changed this. So, the most that can be said about nuclear ethics today is that the end of the cold war has brought about a temporary resolution of the moral paradox. Because MAD can return, the end of the cold war has not brought a permanent solution of the paradox.

(2) The second change in our nuclear world is the new military threats we appear to face. Here, I will focus on our increasing concern over nuclear proliferation and nuclear terrorism.<sup>7</sup> These have been a problem for decades, and the moral issues they it raise are not new, though they appear now with a new vigor. Because the acquisition of nuclear weapons is now easier, the problem is getting more attention. One issue is whether it is morally permissible for a nonnuclear state (or a terrorist group) to acquire nuclear weapons. Given the moral unacceptability of either using nuclear weapons or practicing deterrence with them, the answer seems to be no.<sup>8</sup> Of course, if a potential state proliferator is facing a military opponent with nuclear weapons, it would face the moral paradox directly, a moral demand that it acquire nuclear weapons along with the moral demand that it not do so. But all nuclear powers were once nuclear proliferators, and the moral demands regarding acquisition are on par with the moral demands regarding abandonment or

deacquisition.

Another moral issue raised by proliferation is how far a state is allowed to go to keep another state (or terrorist group) from acquiring nuclear weapons. What are the moral limits of anti-proliferation efforts? In the case of terrorist groups, these limits would be quite wide, but what about potential state proliferators? We may assume that the moral limits regarding interference with a potential state proliferator would be set by the moral limits, more generally, of one state's interference with the internal affairs of another state. There may, however, be greater moral latitude for anti-proliferation interference, given the regional and global threat that nuclear weapons pose. In addition, there are two other circumstances that would make a broader range of anti-proliferation interference morally justifiable. First, the interference may be multilateral, for example, through the United Nations, rather than unilateral. Second, the interference may be something that the state has indirectly consented to, for example, by being a signatory of the Nuclear Non-Proliferation Treaty (NPT).

A third moral issue, though, may limit allowable interference to stop proliferation. It is the issue of fairness, often raised by India prior to its series of nuclear tests in the late 1990s. One way to pose the issue is to ask to what extent hypocrisy limits a nation's moral freedom of action. The hypocrisy in question is that of the nuclear powers who hold on to nuclear weapons but demand that other states not acquire them. (Do as I say, not as I do.) Is it fair of the nuclear powers to make such demands, and, if not, does this imply that, without getting rid of their own, they are not morally entitled to interfere to keep other states from acquiring them? The moral argument against such interference is bolstered by the fact that the nuclear states hold on to their own despite having promised, in Article VI of the NPT not to do so. Beyond the issue of fairness, there is the matter of effectiveness. The nuclear powers' holding on to their own nuclear weapons

may make their anti-proliferation efforts much more difficult.

In any case, because the moral problems of proliferation existed during the cold war and because new proliferators face the same moral problem faced by the old proliferators (the current nuclear powers), the moral debate regarding proliferation is the same now as it was during the cold war.

(3) The third change in our nuclear world is the perception, new since the end of the cold war, that complete nuclear disarmament (CND) is a real possibility. Because the cold war is over, nuclear weapons are no longer seen as necessary. There may no longer be an overriding reason for keeping them, and the realization that this is the case may make their abandonment politically feasible. At the same time, there is a sense of urgency about the need to move quickly toward nuclear disarmament, based on the belief that the current window of opportunity may be narrow. International tensions may rise over the next several years to the point that there is again a MAD regime.

The feasibility of CND seems to entail that nuclear ethics now is fundamentally different than it was during the cold war, for it appears that CND would solve the moral paradox. If nations had no nuclear weapons, they would not be making nuclear threats, so the moral objection to their military policies would vanish. During the cold war, the paradox seemed intractable because the two principal proposed solutions, technological obviation and the elimination of nuclear weapons, were not real, that is feasible, solutions. They were utopian, one for technological reasons and the other for political reasons; hence neither was available to solve the paradox. The possibility of eliminating nuclear weapons seems no longer utopian. This would alter the nuclear ethics debate fundamentally, refocusing it from a theoretical concern about whether the moral paradox had an achievable solution to a practical concern bringing a solution

about. If no nation had nuclear weapons, then MAD would not again become instantiated, even if military hostility arose between former nuclear powers. MAD would, of course, remain a possibility, but one that in the absence of nuclear weapons could not be realized.<sup>9</sup>

On the contrary, however, the possibility of CND no more changes the fundamentals of the ethical debate than does the possibility, now realized, of warmer relations between the nuclear powers. The absence of nuclear weapons would provide no more of a permanent solution to the moral paradox than does the absence of hostility between nuclear powers. The instantiation of MAD requires nuclear weapons in the hands of hostile powers. If the hostility goes away or the weapons go away, that instance of MAD ceases to be, but another instance will come to be if either the hostility or the weapons return. The truth of the cliches that nuclear weapons cannot be "disinvented" or that the nuclear genie cannot be put back in the bottle testify to this.

But there is a deeper point to be made about the moral implications of the possibility of the elimination of nuclear weapons. The absence of nuclear weapons might not, by itself, provide even a temporary resolution to the moral paradox, in the way that the lack of hostility does. The abandonment of nuclear weapons may be less of a moral advance than is commonly thought. This is because nuclear war would remain a continuing possibility under CND. Nuclear weapons could be rebuilt after they had all been dismantled. Thus, the logical features structuring the deterrence relationship of hostile nuclear powers would, in some respects, continue to structure that relationship after their nuclear disarmament. Each would still need a policy to deter nuclear war. As a result, nuclear threats would, in one sense, survive the abandonment of nuclear weapons. Because the risk of nuclear war would continue to exist, a policy for managing that risk would still be needed.

The risk of nuclear war in a world in which nuclear powers had abandoned their nuclear

weapons would result from the possibility of the weapons being rebuilt. So, in managing that risk, a state would, as Jonathan Schell argues, seek to deter its opponent from rebuilding, and this would be achieved, at least in part, by the nation's having the capacity to follow suit and to rebuild its own nuclear weapons.<sup>10</sup> In this rebuilding capacity would lie a threat to rebuild them, and this threat, a threat to make a nuclear threat, would itself be a nuclear threat of sorts. Schell refers to this policy as "weaponless deterrence." Because the weapons could be rebuilt, they would continue to cast their shadow over a world in which they had been eliminated. The strategic logic of nuclear deterrence would remain in force, structuring the military policies of the hostile erstwhile nuclear powers.

The argument is that if nuclear deterrence, in the form of weaponless deterrence, would survive the abandonment of nuclear weapons, then the abandonment would not even temporarily resolve the moral paradox. The paradox is a creature of nuclear deterrence, and so if deterrence remained, so would the paradox, whether the deterrence is practiced with weapons or without. Because weaponless deterrence is a form of deterrence, it would mimic not only the strategic logic of deterrence with weapons, but its moral logic as well. In other words, since it may be appropriate to regard the situation after abandonment of nuclear weapons as itself a form of nuclear deterrence, the moral paradox would remain as well.

The question comes down to how effective a form of deterrence weaponless deterrence would be. Would weaponless deterrence lead to more or less stability? Would it or would it not greatly increase the risk of nuclear war? If weaponless deterrence is as effective or more effective than deterrence with weapons, then abandonment would resolve the paradox by bringing military policy into accord with the principle of discrimination. But if weaponless deterrence is significantly less effective, the paradox would remain: we would be required to abandon the



weapons to bring policy into line with the principle of discrimination, but required to retain them on consequentialist grounds.

Which form of deterrence has greater stability? Schell claims that weaponless deterrence has greater stability.<sup>11</sup> Its stability benefit is that it lengthens the "nuclear fuse," the lead-time needed to wage nuclear war, the time that would transpire between the decision to wage a nuclear war and the commencement of the nuclear destruction. The chief virtue of a longer lead-time is that it would allow a greater opportunity for decisions that would halt the process before it led to catastrophe. The result would be "a stability that we cannot even dream of in our present world of huge nuclear arsenals."<sup>12</sup> A longer lead-time is indeed an important gain, but there is more to stability than the length of the nuclear fuse.

The advantage Schell claims for weaponless deterrence is primarily the advantage of avoiding accidental nuclear war. The longer lead-time would greatly reduce or eliminate the possibility of a run-away escalatory process in which nuclear weapons would be used without authorization by central authorities. (We may refer to this virtue of weaponless deterrence as *accidental-war stability*.) But how would weaponless deterrence fare in terms a more familiar kind of stability, namely, *crisis stability*? Crisis stability is the ability of a deterrence posture to resist a slide into war in a crisis. The extent of crisis stability is the extent to which a deterrence posture can create a firm belief in the mind of the opponent that striking first would not be advantageous under any circumstances. In the case of deterrence with weapons, crisis stability is due to mutual vulnerability. The absence of mutual vulnerability when each side has few or no nuclear weapons leads many commentators to argue that the attempt to abandon nuclear weapons would lead to serious crisis instability. The concern is that in a crisis, such as an imminent or actual conventional war, the nations would rush to rebuild their nuclear weapons, the way in

1914 the combatants on World War I rushed to mobilize. They might do so either out of the belief that the first nation to have the weapons would be able to use them to great advantage or out of fear that the opponent, acting on this belief, would be hurrying to rebuild its own weapons.

The degree of crisis stability, since it is based on the strength of each side's belief that a first strike would not be to its advantage, is a function of the strength of its perception that a first strike against its opponent would be met by devastating retaliation. This perception would inevitably be stronger when the nation has an existing assured destruction capability than when it has no nuclear arsenal. The reason is that the potential for retaliation lodged in a rebuilding capacity is more easily destroyed than the potential for retaliation lodged in existing weapons. First, it is inherently easier to reduce the vulnerability of existing weapons than to reduce the vulnerability of a rebuilding capacity, if only because the weapons are much smaller and more easily hidden than the large-scale industrial facilities that would constitute the rebuilding capacity. Second, the opponent would have more time to destroy the potential when it resides in a rebuilding capacity than when it resides in actual weapons. In a condition of mutual assured destruction, the opponent would have time for only one attack before the retaliatory attack would be launched, but under weaponless deterrence it may have time for a number of attacks before the weapons could be rebuilt and a retaliatory strike could be launched. Thus, crisis stability is much weaker under weaponless deterrence.

There is a third kind of stability, *noncrisis stability*. This kind of stability concerns the likelihood that war could result from an escalatory process that begins by one side challenging the interests of the other in some relatively small way, some limited form of aggression. Noncrisis stability results from the opponent's fear that such a challenge to the nation's interests could result in things getting out of hand and escalating to mutual destruction. But this fear

would not be as strong in the case of weaponless deterrence, due to the long series of steps involved in the rebuilding process before retaliation could occur. Given the extra steps, the opponent is more likely to believe that the escalatory process initiated by its aggression could be arrested prior to its own destruction. This belief is less likely under mutual assured destruction, where the process from initial aggression to destruction could be very short. The weaker the fear of inevitable escalation, the weaker noncrisis stability. Thus, lengthening the nuclear fuse through the abolition of nuclear weapons, while it has an advantage in terms of accidental-war stability, has serious disadvantages in terms of crisis and noncrisis stability. Nuclear war might be more likely in a world of hostile or potentially hostile nations where nuclear weapons had been abandoned.

This rough comparison provides at least some reason for thinking that nuclear deterrence with weapons is to be preferred over weaponless deterrence on consequentialist grounds. If so, then the abandonment of nuclear weapons would not resolve the moral paradox, even temporarily. The conflict between the two moral perspectives would remain. The principle of discrimination would continue to favor abandonment of the weapons and the consequentialist perspective would continue to favor their retention.

(4) During the cold war, a ballistic missile defense that would be sufficiently effective (even in conjunction with counterforce weapons) to put an end to the condition of MAD was not technologically infeasible. There is little reason to think that that has changed, despite the technological advances over the past two decades. Of course, missile defenses might be adopted for other strategic purposes, but they would put an end to the paradox and alter the fundamentals of the moral debate only if they could put an end to MAD. Because of the near-perfection that would be required of a defensive system for it to be able to remove the other side's capacity for

assured destruction, it seems clear that the technological advances that have been made are not up to the job. This is especially clear in the light of the ability of the offense to adopt countermeasures to thwart the defenses. Here, too, then, the paradox still holds and moral debate remains primarily unchanged.

But, while defense cannot overcome the condition of MAD, they have important moral consequences given that would be inevitably deployed within a MAD condition. Extensive defenses that are less than near-perfect, as defenses would certainly be, are morally objectionable because they would decrease stability, especially crisis stability. If nuclear adversaries have extensive defenses, and a crisis occurs, each side may fear that the other side is contemplating a first strike. Each side may believe that its defenses create a significant advantage from striking first, or believe that the other side is thinking this. Either belief could, in a crisis, make it much more likely that one or the other side would initiate war. Defenses could make war more likely.

So where does this all leave us? What is living and what is dead in nuclear ethics? If my speculations are correct, the end of the cold war has changed nothing fundamental about nuclear ethics. The most basic feature of nuclear ethics, the moral paradox, remains unsolved. The paradox is inherent in the weapons themselves, not in any particular geo-political situation. The end of the cold war may have provided a temporary resolution of the paradox with the ending of the MAD relationship between the United States and the former Soviet Union. But, the paradox is waiting to re-emerge with the coming again of military hostility between nuclear powers. It is there in the weapons and in our knowledge of how to construct them.

The end of the cold war should help us to realize the fuller moral implications of our nuclear situation. From a moral point of view, the historical arrival of MAD in the early 60s is a kind of absolute, something that is irrevocable and that significantly changes things forever.

Once MAD came into being, nuclear ethics took on the basic shape it continues to have. This is why the 60s debate was so like the 80s debate, and why both are like the debate on nuclear ethics that we should be having today.

#### **IV. POLICY IMPLICATIONS**

From the moral point of view, this conclusion seems pessimistic, even fatalistic. It tells us that there may be nothing we can do to solve the moral quandary in which our technological ingenuity has placed us. Because nuclear weapons cannot be disinvented, the moral paradox of nuclear deterrence cannot be solved. If there is nothing we can do to escape the paradox, there is nothing we should do to escape it. But our situation may be understood in terms of a religious metaphor. In Christian theology, human beings are fallen creatures, having lost their moral innocence with the eating of the apple in the Garden of Eden, with no way to recover that innocence. Likewise, there is a kind of moral innocence we lost with the development of nuclear weapons. From now on, there will be no way for us to conduct our military activities free from the stain of that original sin. We are stuck in the moral paradox.

But in the religious metaphor, our fallen state does not destroy our ability nor preclude our obligation to make moral choices. In fact, awareness of our fallen state is a prerequisite for making effective moral choices. So it is with us in our nuclear fallen state. That we cannot solve the moral paradox does not mean that we cannot make moral improvements in our nuclear world, and understanding the paradox is necessary for the effectiveness of the moral choices we are called upon to make. The possibility of our making moral improvements despite our being mired in the paradox is shown by the distinction between solving the paradox, which is not possible, and temporarily resolving the paradox, which is. The moral direction before us is to work to establish the most enduring temporary resolution of the paradox that we can. To this end, we

must be as clear as possible about the nature of the paradox.

So, what are the policy implications? I will first make some general comments and then address specifically the proposals of the current administration. The paradox is temporarily resolved when there is an absence of hostility between states that have nuclear weapons or are capable of building them. So, obviously, we should work to create and sustain an absence of hostility. But, what is the role, if any, of nuclear disarmament in this process? We have seen that nuclear disarmament pursued for its own sake may result in little or no moral improvement. From a moral perspective, we need to understand disarmament not as an end, but as a means to the reduction of hostilities.

Mutual nuclear arms reductions can promote and reinforce warming relations between nuclear powers, both symbolically and substantially. Substantially, they allow each side to convince the other of its non-hostile intentions. Symbolically, they serve as a signal of the warming relationship and provide ceremonial occasions at which the improving relationship can be publicly affirmed. But nuclear arms reductions are not a panacea. They cannot guarantee better relations and in some respects they may have a negative impact. For example, arms reduction may weaken the “nuclear umbrella” of extended deterrence and so increase the likelihood of nuclear proliferation. In addition, when the numbers of weapons decrease below levels necessary to sustain MAD, the kinds of stability problems with complete nuclear disarmament discussed earlier can arise. For example, considering non-crisis stability, the risk of conventional war can be greater when nuclear weapons are below MAD levels or completely eliminated.

But these cautions simply reinforce the point that nuclear disarmament is not to be sought for its own sake. The moral demand that we establish a temporary resolution of the paradox

requires that we attempt to do what will bring about such a resolution, which is to lessen hostility. To the extent that reductions in nuclear arms promote this, they should be sought for that reason, and they should be sought in a way that does the most to lessen hostilities. (Part of the value of the reductions is the negotiation process that leads to them.) As hostilities lessen, as relations between formerly hostile nuclear powers move closer to the end of the hostility spectrum currently represented by the relations between the United States and Britain, the stability disadvantages of CND discussed earlier become less serious.

The policy implications of the argument could be expressed in this way. We should seek mutual nuclear disarmament, not for the sake of getting to low numbers or zero, but for the sake of reducing hostility to the point where there would be little or no loss of stability in complete elimination of the weapons. When such a state comes to be, the consequentialist objections to nuclear disarmament grow less, and CND can be sought for its own sake, in our efforts to bring our military policy into line with the principle of discrimination. When an end of hostility is combined with the elimination of the weapons, the strongest temporary resolution of the paradox will have been achieved. We should seek nuclear disarmament not for the sake of getting to zero, but for the sake of ending hostility, and thereby creating the conditions under which getting to zero will become a moral demand not in substantial conflict with other moral demands.

The Bush principal administration proposals are that the United States build extensive missile defenses while reducing the number of nuclear weapons. The moral rationale for each of these can be seen in our earlier arguments. Each may be a way of seeking to move beyond MAD, although the proposals are not presented in these terms. According to the administration, we do not need to move beyond MAD with Russia because, since we are no longer military opponents we are no longer in a MAD relationship. In addition, the stated purpose of the missile defenses is

not removing the assured destruction capacity of Russia, but countering a potential missile threat from “rogue states.” The stated purpose is to deal with the new nuclear threats considered in (2) above.

Nonetheless, the proposals can be faulted for ignoring the fundamental policy implication of seeking to reduce hostilities with adversarial or potentially adversarial nuclear powers. First, the building of defenses is likely to increase the level of hostility between the United States and Russia, as the initial Russian reaction to the plans indicates. Russia fears that the defenses are the first step in a more elaborate plan that would seek to nullify its capacity for assured destruction. Second, the administration has chosen to pursue its proposals in a way that downplays or undermines the tradition of negotiation between the two nuclear powers. The weapons reductions, according to administration statements, will be enacted unilaterally, and the building of the defenses will require the abrogation of one of the most significant fruits of the past negotiation process, the Anti-Ballistic Missile Treaty. Thus, the administration’s proposals would tend to increase hostilities, or at least to squander the opportunity that further negotiations would provide to lessen them.

There is an additional moral concern about the administration’s proposals. Under MAD, as mentioned earlier, defenses are morally objectionable because they tend to decrease stability and make nuclear war more likely. The administration would respond that MAD no longer exists and, in any case, that the defenses are directed at the rogue states, with whom the United States is not in a MAD relationship. But, as we argued, the United States may still be in a MAD relationship with Russia, and even if it is not, the MAD relationship will return in a different historical instantiation. If it returns in a situation in which extensive missile defenses have been developed, it will return in a less stable form. This is why there is value to preserving the Anti-



Ballistic Missile Treaty, even if it is true that the United States and Russia are not currently in a MAD relationship.

For the future, we can say that if we are lucky, we may be graced with a future free of nuclear war. But such an eventuality, like grace in the religious sense, will come to us only if we work hard at bringing about what moral progress we can in our fallen state of unavoidable and intractable moral paradox.

## NOTES

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1. My efforts to answer this question in this paper have benefited greatly from comments on an earlier draft by members of the working group on "Ethics and the Future of International Conflict" sponsored by the Carnegie Council on Ethics and International Affairs and the National War College. Especially helpful were a commentary by John Langan and written comments by Martin Cook, Frances Harbour, Thomas Keaney, and Paul Zimmerman. Matt Mattern provided valuable editorial suggestions.

<sup>2</sup> The text of this speech, from which my quotations are taken, was found at the web site of the Department of State, <usinfo.state.gov>.

3. A signal indication of this is the statement issued several years ago by sixty retired high ranking military officials calling for complete nuclear disarmament. See "Statement on Nuclear Weapons," *Washington Quarterly* 20, no. 3 (Summer 1997), pp. 125-130.

<sup>4</sup> How one characterizes that debate will, of course, depend on where one stood in the sharp battles of that era. But the following characterization, I believe, captures some basic points shared by a broad cross section of the debate's participants.

5. See Steven Lee, *Morality, Prudence, and Nuclear Weapons* (Cambridge: Cambridge University Press, 1993), chapter two.

<sup>6</sup> Some of the theorists argued for counterforce capabilities, including missile defenses, not in order to overcome MAD, which they recognized as a permanent feature, but in order to allow for a stronger, more credible form of nuclear deterrence within MAD. But these arguments, in accepting the existence of MAD, involved no prospect of escaping from the moral paradox.

<sup>7</sup> For a discussion of the moral issues raised by proliferation, see Steven Lee, "Nuclear Proliferation and Nuclear Entitlement," *Ethics and International Affairs* 9 (1995), pp. 101-31.

<sup>8</sup> This is complicated somewhat by the question of whether a newly proliferating state would have an assured destruction capacity. Some theorists, such as Kenneth Waltz, have argued that such a capacity is very easy to obtain, since it requires only a small number of weapons. But even if the state does not immediately have an assured destruction capacity, its early nuclear weapons would almost certainly not be counterforce weapons, due to the greater technological sophistication they involve. Hence, its nuclear threats would be immoral even short of an assured destruction capacity.

<sup>9</sup> Some of the material that follows is adapted from chapter eight of my *Morality, Prudence, and Nuclear Weapons*.

<sup>10</sup> Jonathan Schell, *The Abolition* (New York: Avon Books, 1986).

<sup>11</sup> Schell, *The Abolition*, pp. 181-84.

<sup>12</sup> Schell, *The Abolition*, pp. 206, 207.