

ETHICS, TECHNOLOGY, AND NUCLEAR WAR, II

How do nuclear weapons affect our military policy?

Joseph I. Coffey

Since the end of World War II, the United States has aimed at deterring aggression against this country or its allies by a judicious combination of long-range nuclear striking forces and other forces armed with both nuclear and conventional weapons. (The verb "to deter" is defined as "to inhibit" or, in a more absolute usage, as "to prevent." One of the ambiguities of the concept of deterrence is that no one, including ourselves, is clear as to which usage is meant, much less which may prevail.) Of late years, as the Soviet Union achieved and developed a nuclear capability, deterrence has increasingly rested on the ability of the United States to launch a devastating retaliatory blow against anyone attacking the U.S. or, by extension, our allies. An authoritative restatement of that policy was made by President Kennedy in 1961 in his special budget message to the Congress:

Our strategic arms and defenses must be adequate to deter any deliberate nuclear attack on the United States or our allies—by making clear to any potential aggressor that sufficient retaliatory forces will be able to survive a first strike and penetrate his defenses in order to inflict unacceptable losses upon him.

The two-pronged question confronting the United States is how best to deter such aggression and how to use its nuclear weapons if deterrence fails—as it well may do.

Even the brief statement by President Kennedy cited above illustrates some of the problems in devising a strategy of deterrence and in developing deterrent forces. First of all, this strategy depends on designing forces such that no possible combination of attack patterns by an alert aggressor can knock out vulnerable parts of the system, thereby nullifying or drastically reducing its retaliatory capabilities. Secondly, it implies that the enemy remains vulnerable to residual retaliatory attacks: that his air defenses and anti-missile missiles are incapable of destroying incoming weapons carriers and his civil defense program relatively ineffective in minimizing damage. Thirdly, deterrence depends on impressing the enemy with the fact that you have this capability to retaliate without seeming so provocative and

threatening that he is frightened into launching a preemptive attack. Fourthly, it depends upon his being convinced that you *will* retaliate if he attacks you or your allies—a conviction which some of the latter apparently do not share. Fifthly, it depends upon your sharing with the enemy a common understanding of what constitutes "unacceptable damage," and upon avoiding the kinds of threats to his security and vital interests which could bring him to risk greater losses than you have calculated he would. And finally, deterrence depends upon the enemy acting upon the basis of "rational" or logical calculations with respect to all the points noted above, whereas if experience teaches us anything, it is that human beings espouse values and aims which cannot be rationally justified, act frequently upon culture-oriented (and hence non-rational) beliefs, and otherwise behave in ways which can only be characterized as irrational.

All this is said not by way of invalidating the concept of deterrence but rather to illustrate the difficulties and complexities of a strategy of deterrence. Similar—although more technical—problems confront those who must decide what we should do if deterrence fails. In the past our aim has been to maintain a counter-force capability, i.e., an ability to destroy the bases and the planes of the Soviet Long-Range Air Force before these could be used against the United States.

There have always been difficult and unsettled questions as to how a counter-force strategy was compatible with the policy that we would retaliate only after being attacked, a circumstance in which the bulk of the enemy aircraft would presumably already have been launched. However, a retaliatory counterforce attack could destroy aircraft which had not been launched, could put out of commission Soviet air bases, and could prevent second and third strikes against the United States by Soviet aircraft.

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In the missile age, a counter-force strategy seems increasingly impossible. In the first place, missiles are not fired in sequence from the same slot, like shells in an automatic shotgun, but singly from separate launching points. Under these circumstances, retaliatory strikes against missile bases are likely to be of little value in preventing repetitive attacks, and may, unless we know that the enemy

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missiles are still on their launch pads, constitute a waste of weapons. Even then, counter-force attacks might not prove successful, since the time required to launch missiles is so short—fifteen to thirty minutes if they are kept in operational readiness—that any Soviet missiles which had not been fired at American targets could probably be launched during the period when the planes of our Strategic Air Command were on their way to attack Soviet missile bases. The same would be true even if missiles were used in the American retaliatory attack, although in this case the time of flight would be only thirty minutes as compared to approximately eight hours for that of a bomber. (Our Ballistic Missile Early Warning System is designed to give us sufficient advance notice of enemy attack to enable Strategic Air Command planes to take off and Strategic Air Command missiles to be fired. Presumably the USSR has—or could have—a similar warning net.) Even if we could destroy all known air fields and missile sites in the USSR, hidden missiles, mobile missiles, and missile-firing submarines could still wreak severe damage on the United States. In short, the possibility of neutralizing the Soviet nuclear strike forces by retaliatory attack is presently dim and seems likely to grow dimmer.

It is, of course, possible to pursue still further this counter-force strategy, with the aim of developing and maintaining a force which could blunt a Soviet attack; however, there are several drawbacks to this. In the first place, this would require continuous surveillance of the USSR, surveillance which could detect and report any Soviet preparations for attack. Such a requirement, which theoretically could be met by reconnaissance satellites and space-borne missile detection systems, would be technically difficult and very costly. Moreover, a posture which aimed at a “first strike” against the USSR on the basis of intelligence reports would probably be sensitive to false alarms and misinformation, thereby increasing the possibility of accidental war. It could also be very provocative, and might well lead the Soviet Union to launch a preemptive attack simply out of fear.

Further, counter-force attacks against hardened missile sites may require two to ten nuclear weapons for every one destroyed, while scores may be needed to blanket an area containing hidden or mobile weapons systems; unless the USSR is content to allow the U.S. a marked quantitative superiority, our attempts to implement a counter-force strategy may only lead to a spiraling arms race. Finally—and perhaps most importantly—a counter-force strategy implies that under certain circumstances the United States would strike first, a premise which poses major political, as well as ethical, problems.

If this is the case, and the use of nuclear weapons

to destroy other nuclear weapons seems increasingly unprofitable, what strategy should we follow in the event deterrence fails? Our strategic striking forces could, of course, be launched against fixed military targets such as depots, barracks, communications centers, etc; however, the use of high-yield nuclear weapons against military installations, and more particularly against industrial targets such as arsenals and foundries, would also involve large losses of life, so that even an attack on “military” targets could cause civilian casualties running into the millions.

By using relatively small nuclear weapons, by detonating these weapons in the air instead of on the ground, and by relying on the more accurate bombers instead of missiles, we probably could (with some difficulty and at heavy cost) reduce the blast and thermal damage to adjacent areas and minimize the lethal fallout. Unless, however, the targets struck were also limited, the difference in casualties would be one of kind, not of degree, as anyone can see by looking at the “military” targets in the Washington area: the Pentagon, Fort Myer, Fort McNair, Andrews Field, Anacostia Naval Air Station, the Naval Ordnance Laboratory, and other like targets.

Paradoxically, if such attacks could be made with little damage to the civilian population, they might for this very reason be less effective in deterring Soviet aggression, since the Communist leaders might cold-bloodedly calculate that their country could “absorb” this kind of a retaliatory strike. Again paradoxically, the more successful the Soviets might be in a preemptive attack, the greater the United States difficulty in launching planned, coordinated strikes against military installations in the USSR and the greater the likelihood that the American response might be to strike back at Soviet cities.

Whatever the ethical aspects, then, American nuclear retaliation may of necessity take the form of attacks on large, fixed targets; i.e. cities. Moreover, the threat that this course of action would be taken, either deliberately or as part of a campaign to eliminate military targets, is probably a major factor in deterring Soviet aggression, since virtually no form of attack could guarantee the elimination of sufficient United States forces to preclude the loss of millions of lives and the destruction of many of the most cherished monuments to Soviet progress.

To sum up, we are confronted with a situation in which the use of long-range nuclear striking forces against enemy weapons systems is profitable—if at all—only in the event that the United States attacks first. Regardless of any legal or moral justification for a policy of preemptive attack, such a policy is

politically infeasible and unacceptable; in recognition of this, our stated intention is to await clear evidence of Soviet aggression against the United States or its allies before launching our nuclear strike forces. If the Soviet long-range striking forces are composed largely of hidden, dispersed, or mobile delivery vehicles (as they well may be), U.S. retaliatory forces will have great difficulty in locating and attacking Soviet weapons sites, and may well have to strike at other targets. Although other kinds of military installations, such as air bases, depots, communications centers, arsenals, etc., could be attacked, their destruction is not possible without severe loss of life.

Moreover, if a Soviet first strike against United

States air and missile bases were really effective, the residual American retaliatory capability might not suffice to take out military targets such as those described. Under these circumstances, the United States may willy-nilly be reduced to "city-busting"—paradoxically, in the interest of not being an aggressor. This then is the dilemma which confronts us: that to maintain the peace we must threaten millions of men, women and children with destruction. And if our efforts to maintain the peace fail, there is an increasing possibility that these people will form the only feasible targets for our retaliatory strikes.

(The third and concluding part of Dr. Coffey's article will appear in the next issue.)

THE DEATH OF A GOOD MAN

After a long, productive and continuously active life, Dr. Arthur J. Brown died early this year at the age of 106. He was the sole surviving charter trustee of The Church Peace Union, the previous name of the Council on Religion and International Affairs, and he remained active as treasurer until his death. He was a pioneer in the ecumenical movement and maintained a constant interest in international affairs. Only last November the editor of worldview received a friendly letter from him commenting on the policies of this journal.

*The following quotations of Dr. Brown, taken from his book, *Memoirs of a Centenarian*, show something of his range of interest but little of the warmth and wit which were always his.*

"War has so tragically affected all human life in my time and brought such problems into my own work, that it is an inescapable subject in these memoirs. It is clear that some other than military preparation must be made if the havoc of war is not to be repeated until the human race destroys itself. It is impossible to have peace between scores of jealous independent nations as long as their relationship is that of individuals in the days of the Judges in ancient Israel when 'every man did that which was right in his own eyes.' The world has reproduced on a global scale the conditions of a frontier mining camp when men settled their disputes with revolvers and there was no safety for life or property. The remedy for a lawless world is just what it has been for each nation and local community. Peace and order came, not when individuals went about armed and each was judge and executioner in his own case, but when they formed organizations with laws, courts and police."

"In this tumultuous world, convulsed by the passions and tensions engendered by a war of unprecedented magnitude, the fact that an international peace agency, now representing 82 nations, could be formed and, against jealousy, suspicion and active opposition, manage to survive as 'a going concern' is in itself highly encouraging. It is good to note the resolute determination of our own and several other governments to hold the ground that has been won in the United Nations, to build on it as a base, to work through it, and to seek the needed additional strength, not by starting something else, but by amendments as soon as participating peoples are prepared for them.

American critics of the United Nations might learn a lesson from the history of their own country. The desperate necessities of the Revolution urgently called for union, but the Continental Congress, which was constituted in 1774, was denied power to function effectively. Three years of blundering impotence passed before the jealous colonies could agree on the Articles of Confederation in 1777. Although the weakness of the Confederation was soon as evident as the weakness of the United Nations today, it took ten years to get the Constitution on paper. Then there was strong opposition to its ratification. Jefferson and Patrick Henry opposed it in Virginia. New York and Massachusetts ratified it by narrow majorities, New York by only three votes. North Carolina and Rhode Island rejected it and reluctantly came in later only when they found themselves outside. It was not till Rhode Island's reconsideration in May, 1790, sixteen years after the formation of the Continental Congress, and thirteen after the Articles of Confederation, that unanimity was secured. All that time to induce people in thirteen states in one country, of the same race, language and religion to agree to a workable government! Even then, the issue of its supremacy was not finally settled until the close of the Civil War seventy-five years later. Why, then, should we expect 82 variant