The Madness beyond MAD—
Current American Nuclear Strategy*

Robert Jervis**
Columbia University

A rational strategy for the employment of nuclear weapons is a contradiction in terms. The enormity of the destruction, either executed or threatened, severs the nexus of proportionality between means and ends which used to characterize the threat and use of force. This does not mean, however, that all nuclear strategies are equally irrational. The nuclear policy of the Reagan administration—which is essentially the same as that of the Carter administration and which has its roots in developments initiated by even earlier administrations—is particularly ill-formed. As I will demonstrate, the basic reason for this is that the strategy rests on a profound underestimation of the impact of nuclear weapons on military strategy and attempts to understand the current situation with intellectual tools appropriate only in the pre-nuclear era.

American strategy for the past several years—the “countervailing strategy”—has been based on the assumption that what is crucial is the ability of American and allied military forces to deny the Soviets military advantage from any aggression they might contemplate. The U.S. must be prepared to meet and block any level of Soviet force. The strategy is then one of counterforce—blocking and seeking to destroy Soviet military power. The goal is deterrence. Although it is concerned with how the U.S. would fight many different kinds of wars, both nuclear and non-nuclear, it is not correct to claim that the strategy seeks to engage in wars rather than deter them. Instead, it argues that the best way to deter wars and aggression is to be prepared to fight if need be; the Russians are unlikely to start or risk a war if they know that they cannot win. To a significant extent, current strategy fits with common sense, but I will argue that nuclear weapons do not conform to our traditional ways of thinking.

Whether one accepts this kind of strategy is largely determined by two factors which are correlated more closely than logic would suggest: one’s image of the Soviet Union and one’s analysis of the extent to which nuclear weapons have brought about a revolution in strategy. I have discussed the former factor elsewhere1 and here just want to note that the policy one advocates is and should be influenced by how aggressive one thinks the adversary is and what sort of posture is necessary to deter it. Also crucial, and what will be discussed in this article, are beliefs about nuclear weapons. Some analysts, starting with Bernard Brodie, have argued that mutual second-strike capability makes many military “truths” wrong or irrelevant. In the past, military advantage allowed the state to harm an enemy and to protect itself. Now protection is possible only with the other’s cooperation. Seeing mutual vulnerability before and throughout

---

* This article is drawn from *The Illogic of Nuclear Strategy*, which will be published by Cornell University Press this spring.

** Robert Jervis is professor of political science at Columbia University and is the author of *Perception and Misperception in International Politics*.

The Madness beyond MAD

any war as central, these analysts conclude that it is the fear of uncontrolled violence rather than the details of the military balance which influences political outcomes. Other analysts, while realizing that nuclear bombs are more than larger explosives, see the changes as less far-reaching. This logic leads to the countervailing strategy. Thus, Paul Nitze argues:

It is a copybook principle in strategy that, in actual war, advantage tends to go to the side in a better position to raise the stakes by expanding the scope, duration or destructive intensity of the conflict. By the same token, at junctures of high conflict short of war, the side better able to cope with the potential consequences of raising the stakes has the advantage. The other side is the one under greater pressure to scramble for a peaceful way out. To have the advantage at the utmost level of violence helps at every lesser level.  

**Escalation Dominance Versus Competition in Risk-Taking**

Nitze’s view and the countervailing strategy rest on what is called escalation dominance—i.e., the claim that deterrence requires that the U.S. be able to contain or defeat Soviet attacks on all levels of violence with the possible exception of the highest. (The last phrase is needed because in an unrestrained nuclear war it is hard to talk of one side having an advantage.) Those who stress the importance of this capacity argue that in the hands of an aggressor, it is a strong tool for expansion and in the hands of a defender it greatly eases the task of maintaining the status quo. If the Soviets had escalation dominance in Europe, they could launch a war in relative safety because no matter what the West did it would lose. If NATO did not escalate, it would be defeated. If it employed tactical nuclear weapons, it would only create more casualties on both sides, not alter the outcome. Escalation to limited strategic nuclear war would similarly fail because the Soviets would have superior capability on this level also. The West would be in a very weak position because not only would it have to bear the onus of escalating at each stage but doing so could not prevent a Soviet conquest of Europe. Thus Georgia Democratic Senator Sam Nunn concluded, “Under conditions of strategic parity and theater nuclear inferiority, a NATO nuclear response to non-nuclear Soviet aggression in Europe would be a questionable strategy at best, a self-defeating one at worst.”

The other side of this coin is that if the West had escalation dominance the Soviets would be stymied. They would not be able to conquer Western Europe with any level of violence, assuming (and, as we will see, this apparently straightforward assumption is troublesome) that the West matched the Soviet behavior—i.e., used conventional forces against their conventional army, employed tactical nuclear weapons if they did, and responded to their initiation of limited strategic nuclear strikes with similar moves.

The arguments rest on the beliefs that what matters most is what is happening on the battlefield, that deterrence without defense is difficult if not impossible, and that the threat to escalate lacks credibility unless the state can defeat the other side on the level of violence which it is threatening. After all, if the escalation cannot stop the aggression but raises costs on both sides, it would not make sense to escalate. The threat to do so, therefore, would not be credible.

---


3The discussion in this section is greatly influenced by James King, “‘The New Strategy’” (unpublished MS).


34  *PS* Winter 1984
The first problem with the escalation dominance logic is that a state confident of winning at a given level of violence may be deterred because it judges the cost of fighting at that level to be excessive. On the other hand, even if defense cannot succeed, the threat to defend can deter if the other side thinks that the status quo power is sufficiently strongly motivated to be willing to fight for a losing cause. Nuclear weapons have not changed the fact that defeating an enemy is not worthwhile if the costs entailed are greater than the gains.

**Escalation in a Losing Cause**

But what credibility is there in the threat to fight a losing battle? Often, there is quite a bit: such behavior is common—states usually resist conquest. Assuming the state knows it will lose if the adversary persists, the reasons for fighting are several. National honor is one. The desire to harm and weaken the enemy is another. Finally, and most important here, if the state can raise the cost of conquest higher than the value the other side will gain in victory, it can make the contest into a game of Chicken. That is, although war will lead to the state’s defeat, the adversary would also rather make concessions than fight. So, while war would damage the state more than the adversary, this does not mean the latter could be sure that the former would not fight; the game of Chicken does not have a determinative solution.

**Increasing the Costs to the Other Side**

The second and third lines of rebuttal to the escalation dominance position stress that the focus on the battlefield is misleading. The second argument is that in order to increase the cost that the other side will have to pay, the side that is losing can move to a higher level of violence even if it does not think it can win there. A state which realizes this fact can be deterred even if it thinks it can win the war. It is not correct to claim that the threat to escalate will be credible only if it is believed the action will bring a military victory; one must consider the price that both sides would have to pay. Thus, the U.S. might deter a Soviet invasion of Western Europe by threatening to use tactical nuclear weapons even if the Soviets believed that they could win such a war. To gain Europe at the cost of destruction of much of Eastern Europe and the Red Army might not be a good bargain.

But why would the state be willing to escalate if doing so would not bring victory? In the case of the American use of tactical nuclear weapons, such escalation would make a great deal of sense if the American decision-makers believed that war could be kept to this level of violence. For in this event it would be the Soviet Union (and the Europeans) who would pay most of the price. Even without this added incentive, however, escalation could be rational for the same reason that fighting in a losing cause would be—national honor, the desire to harm and weaken those who represent abhorred values, and the belief that the other side will retreat rather than pay the price which can be exacted for its victory.

The third and most important reason that it is incorrect to concentrate on who is winning on the battlefield is that the war may spread even if no one wants it to. The use of force involves a significant but hard to measure possibility of mutually undesired escalation. This means that a state which could not win on the battlefield could rationally enter into a conflict in the belief that the other side would rather concede than engage in a struggle which could escalate. Similarly, a state which had escalation dominance could avoid a confrontation in the knowledge that while it would win a limited war, the risk that the conflict would expand was excessive. The common claim that options which are militarily effective are needed is not correct.
Risk-Taking and Military Advantage

What is crucial is that the ability to tolerate and raise the level of risk is not closely tied to military superiority. Because the credibility of the threat to escalate is not determined by the military effectiveness of the action, escalation dominance does not give the state a great advantage. If NATO leaders were willing to tolerate increased destruction and an increased risk of all-out war, they could escalate from conventional to tactical nuclear warfare even if they did not expect this action to turn the tide of battle. On the other hand, if they believed escalation could halt a Soviet invasion, but only at an intolerable risk of all-out war, their position would be weak. (The perceived risk of escalation depends in part on the state’s estimate of the risks the other side is willing to take. If NATO leaders thought the Soviet Union would back down quickly in the face of NATO’s use of tactical nuclear weapons, they would see using them as less risky. If the Soviet Union were seen as willing to tolerate a high level of danger, then escalation would appear as more dangerous since the U.S.S.R. would be believed to be ready to maintain or increase the level of violence, with the attendant risk that the war could spread further. In other words, the dynamics of the Chicken game come into play.)

The links between military power—local and global—and states’ behavior in crisis are thus tenuous. Escalation dominance does not make it safe to stand firm. The exact location of the battle lines and the question of whether American troops are pushing back Soviet forces or vice versa matters much less than each side’s beliefs about whether the war can be kept limited. This is true not only for warfare in Europe or the Persian Gulf but also for nuclear counterforce wars.

Imagine a situation in which the Soviets believe that they could gain advantages over the U.S. in a missile duel in terms of residual strategic forces. What would they gain? As Warner Schilling has noted, “the strategic debate has focused on numbers of missiles and warheads as if they were living creatures whose survival was of value in their own right, to the near exclusion of any effort to relate these military means to potential differences in the war outcomes among which statesmen might actually be able to discriminate in terms of the values about which they do care.” 1 Since destroying many of the other side’s weapons cannot protect oneself, an advantage in remaining warheads could help the state terminate the war under acceptable conditions only if its adversary were persuaded or coerced into sparing cities.

The crucial point is that each side’s hold over the other’s civilization is not affected by who is “ahead” in the counterforce exchange. It is hard to imagine the Soviets thinking “that in the aftermath of a Soviet nuclear strike . . . an American president [would] tote up the residual megatonnage or [warheads] of both sides and sue for peace or even surrender if his side came up short.” 2 Unless escalation dominance can be translated into a strategy for terminating war under acceptable conditions—which of course would have to include keeping one’s society intact—it would not produce the results analysts like Nitze and Nunn attribute to it. It worked in the pre-nuclear age because even if the war expanded, the state which was losing could not do overwhelming damage to the superior power. Once this is no longer true, escalation dominance is not controlling.

Resolve and Threats that Leave Something to Chance. The threat of escalation implicit in the limited use of force acts through two related mechanisms, neither of

---


which is linked to the local military balance. First, the use of force demonstrates the state’s resolve, its willingness to run high risks rather than retreat. It provides evidence that the state will continue to fight and even escalate unless a satisfactory settlement can be arranged.

The second mechanism involves the threat of unintended, as opposed to intended, escalation. As Bernard Brodie points out, “violence between great opponents is inherently difficult to control. . . .” The implications are best discussed by Thomas Schelling:

The idea . . . that a country cannot plausibly threaten to engage in a general war over anything but a mortal assault on itself unless it has an appreciable capacity to blunt the other side’s attack seems to depend on the clean-cut notion that war results—or is expected to result—only from a deliberate yes-no decision. But if war tends to result from a process, a dynamic process in which both sides get more and more concerned not to be a slow second in case the war starts, it is not a “credible first strike” that one threatens, but just plain war. The Soviet Union can indeed threaten us with war: they can even threaten us with a war that we eventually start, by threatening to get involved with us in a process that blows up into war. And some of the arguments about “superiority” and “inferiority” seem to imply that one of the two sides, being weaker, must absolutely fear war and concede while the other, being stronger, may confidently expect the other to yield. There is undoubtedly a good deal to the notion that the country with the less impressive military capability may be less feared, and the other may run the riskier course in a crisis; other things being equal, one anticipates that the strategically “superior” country has some advantage. But this is a far cry from the notion that the two sides just measure up to each other and one bows before the other’s superiority and acknowledges that he was only bluffing. Any situation that scares one side will scare both sides with the danger of a war that neither wants, and both will have to pick their way carefully through the crisis, never quite sure that the other knows how to avoid stumbling over the brink.9

In the past, military advantage allowed the state to harm an enemy and protect itself. Now protection is possible only with the other’s cooperation.

Schelling’s concept of the threat that leaves something to chance is crucial to understanding this process.10 This is the threat to do something which could lead to escalation undesired by either side. Any time military forces are set into motion, there is a


9Arms and Influence (New Haven: Yale University Press, 1966), pp. 98-99. Schelling provides no supporting arguments for the claim that military superiority provides any assistance in this process and, in an era of nuclear plenty, I do not think the claim is correct. Indeed, a little later Schelling notes that “If the clash of a squad with a division can lead to unintended war, . . . their potencies are equal in respect of the threats that count” (ibid., p. 103). Stephen Peter Rosen argues that military advantage was vital to determining each side’s resolve in Vietnam, but this was a long and costly struggle for what was to the U.S. a relatively minor objective. Furthermore, after U.S. involvement reached a high level, the fear of escalation could exert pressure only on the U.S., and even here it was not the major consideration. (See Rosen, “Vietnam and the American Theory of Limited War,” International Security, Vol. 7, Fall 1982, pp. 83-113.)

The Madness beyond MAD

danger that things will get out of control. Statesmen cannot be sure that they will—if they could be sure, then the threat to take the initial action would be no more credible than the threat to wage all-out war. But no one can be sure that they will not; the workings of machines and the reaction of humans in time of stress cannot be predicted with high confidence.

Because confrontations and the use of violence unleash forces of uncertain trajectory, states can deter a wide range of transgressions without making specific threats about what they will do in the event that the other takes the forbidden actions. The deterrent may be effective even if the threat to respond, when viewed as an isolated act, is not. This point is missed by the frequently expressed view that the American “threat of nuclear response has . . . lost credibility with respect to Western Europe and has virtually none at all as a deterrent to Soviet action in China, Southwest Asia or Eastern Europe.” 11 This claim is probably valid for the likelihood that the U.S. would use nuclear weapons as an immediate response to a Soviet invasion of China or Iran. But the common phrase, “the credibility of the American threat,” is misleading. The problem the Soviets face is not only that the U.S. might fulfill commitments but also that their action might lead to disaster. Could the Soviets be confident that a major attack on China would not lead to the involvement of U.S. strategic forces, especially if Chinese and Soviet nuclear weapons were employed? Could they be certain that the use of military force in the Persian Gulf would not lead to general war?

It is in the wider context of the possible chain of effect which the violent change in the status quo could set off that the influence of nuclear weapons must be seen. A state may then be deterred even if it is sure that its adversary’s initial response will not be to carry out its threat. If the Soviets attacked Europe and NATO resisted, nuclear war could readily result even if the U.S. did not immediately launch its bombers. The processes set in motion by the fighting cannot be easily controlled by the participants. States cannot carefully calibrate the risks that they are running. They cannot be sure how close they are to the brink of war. (Indeed, during the Cuban missile crisis Robert Kennedy suggested that enforcing the blockade might be too dangerous and that “it was better to knock out the missiles by air attack than to stop a Soviet ship on the high seas.”) 12 Deterrence does not require that states which face aggression begin by using all-out violence; states contemplating expansion must be concerned not with how their efforts would begin, but how they would end. As statesmen understand, the two are often very different.

**Competition in Risk-Taking.** Because the threat that leaves something to chance exerts pressure on both sides, it is not an automatic way to protect the status quo. In-

11Samuel Huntington, “‘The Renewal of Strategy,’” in Huntington, ed., The Strategic Imperative: New Policies for American Security (Cambridge: Ballinger, 1982), p. 13; also see p. 33. Kissinger’s view is similar, if more dramatically put: “I have sat around the NATO Council table . . . and have uttered the magic words [reassuring NATO of the American nuclear commitment] . . . and yet if my analysis is correct these words cannot be true, and . . . we must face the fact that it is absurd to base the strategy of the West on the credibility of the threat of mutual suicide” (“NATO: The Next Thirty Years,” Survival, Vol. 21, November/December 1979, p. 266). Although disputing most of Kissinger’s ideas on strategy, McNamara agrees on this point. See his “The Military Role of Nuclear Weapons,” Foreign Affairs, Vol. 62, Fall 1983, p. 73.

12Bromley Smith, “Summary Record of NSC Executive Committee Meeting No. 5, October 25, 1962, 5:00 PM,” p. 3. In retrospect, this judgment seems bizarre. But in many areas the relative riskiness of various actions is still hard to determine. For example, Brodie argues: “I see no basis in experience or logic for assuming that the increase in level of violence from one division to thirty [in a conventional war in Europe] is a less shocking and less dangerous form of escalation than the introduction of [tactical] nuclear weapons” (“What Price Conventional Capabilities in Europe?” p. 32). Most analysts would disagree (and so would I), but in reaching our conclusions we must all rely heavily on intuition.
stead, the process involves what Schelling called "competition in risk-taking."\textsuperscript{13} The state more willing to run the danger of undesired escalation is likely to prevail; the state which feels that the situation is intolerably dangerous, that the stakes are not sufficiently high to justify a significant level of risk, or that the adversary is apt to continue the confrontation in spite of the dangers is likely to retreat. As Brodie argued soon after the Cuban missile crisis, the fact that states can take actions which create "'some' risk [of nuclear war] is what makes [crisis bargaining] possible. We rarely have to threaten general war. We threaten instead the next in a series of moves that seems to tend in that direction. The opponent has the choice of making the situation more dangerous or less so. This is all pretty obvious when stated, but so much of the theorizing . . . about the inapplicability of the nuclear deterrent to the future overlooks this simple fact."\textsuperscript{14}

\begin{quote}
What is crucial is that the ability to tolerate and raise the level of risk is not closely tied to military superiority.
\end{quote}

Indeed, it is missed by those who stress the importance of escalation dominance. As we saw, these analysts imply that local military superiority is crucial for deterring or prevailing in limited conflicts. But if confrontations and crises can get out of hand and lead to total war, advantages on the battlefield may not be of great importance. Such advantages are hard to translate into a successful termination of war. And as long as the conflict continues, both sides will be primarily concerned with the danger of all-out war. Thus, crises and limited wars involving both superpowers are competitions in risk-taking. A state which has gained battlefield victories but finds the risks implicit in continued fighting intolerable will be likely to make concessions; a state which is losing on the ground but finds this verdict so painful that it is willing to undergo higher levels of pain and danger is likely to prevail.\textsuperscript{15}

\section*{Conclusion}

As long as decision-makers realize that things can get out of hand, crises and the limited use of force will have most of their impact by generating risks even if neither side explicitly affirms this view. In other words, I am not arguing that the U.S. is facing a choice between escalation dominance and competition in risk-taking as alternative ways of bringing pressure to bear. Even though the U.S. can choose the former as the basis for declaratory and procurement policy, it cannot escape from the fact that in tense situations, decision-makers are going to be preoccupied with the danger of all-out war. Since military advantage cannot control the risk of escalation, the attempt to banish this element cannot succeed no matter what Western policy is.

Similarly, mutual assured destruction exists as a fact, irrespective of policy. No amount of flexibility, no degree of military superiority at levels less than all-out war, can change this fundamental attribute of the nuclear age. Not only can each side destroy the other if it chooses, but that outcome can grow out of conflict even if no one wants it to. Most of the dilemmas of U.S. defense policy stem from this fact, not

\textsuperscript{13}Arms and Influence, pp. 166-168.


\textsuperscript{15}Henry Kissinger made this point in Nuclear Weapons and Foreign Policy (New York: Harper, 1957), pp. 144, 188-189, although his later views have been very different.
The Madness beyond MAD

from policies which might permit the Soviets marginal military advantages in unlikely and terribly risky contingencies. Once each side can destroy the other, any crisis brings up the possibility of this disastrous outcome. Standing firm, although often necessary, has a significant degree of risk which cannot be much reduced by the development of a wider range of military options. Carrying out actions which are militarily effective does not take one’s society out of hostage; what undercuts the credibility of American threats is not that they cannot deny the Soviets any gain but that carrying them out may lead to disaster.