

The Political Effects of Nuclear Weapons

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A Comment

Perhaps the most striking characteristic of the postwar world is just that—it can be called “postwar” because the major powers have not fought each other since 1945. Such a lengthy period of peace among the most powerful states is unprecedented.¹ Almost as unusual is the caution with which each superpower has treated the other. Although we often model superpower relations as a game of chicken, in fact the U.S. and USSR have not behaved like reckless teenagers. Indeed, superpower crises are becoming at least as rare as wars were in the past. Unless one strains and counts 1973, we have gone over a quarter of a century without a severe crisis. Furthermore, in those that have occurred, each side has been willing to make concessions to avoid venturing too near the brink of war. Thus the more we see of the Cuban missile crisis, the more it appears as a compromise rather than an American victory. Kennedy was not willing to withhold all inducements and push the Russians as hard as he could if this required using force or even continuing the volatile confrontation.²

It has been common to attribute these effects to the existence of nuclear weapons. Because neither side could successfully protect itself in an all-out war, no one could win—or, to use John Mueller’s phrase, profit from it.³ Of

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1. Paul Schroeder, “Does Murphy’s Law Apply to History?” *Wilson Quarterly*, Vol. 9, No. 1 (New Year’s 1985), p. 88; Joseph S. Nye, Jr., “The Long-Term Future of Nuclear Deterrence,” in Roman Kolkowicz, *The Logic of Nuclear Terror* (Boston: Allen & Unwin, 1987), p. 234.

2. See the recent information in McGeorge Bundy, transcriber, and James G. Blight, ed., “October 27, 1962: Transcripts of the Meetings of the ExComm,” *International Security*, Vol. 12, No. 3 (Winter 1987/88), pp. 30–92; and James G. Blight, Joseph S. Nye, Jr., and David A. Welch, “The Cuban Missile Crisis Revisited,” *Foreign Affairs*, Vol. 66 (Fall 1987), pp. 178–179. Long before this evidence became available, Alexander George stressed Kennedy’s moderation; see Alexander L. George, David K. Hall, and William E. Simons, *The Limits of Coercive Diplomacy: Laos, Cuba, Vietnam* (Boston: Little Brown, 1971), pp. 86–143.

3. “The Essential Irrelevance of Nuclear Weapons: Stability in the Postwar World,” *International Security*, Vol. 13, No. 2 (Fall 1988) pp. 55–79. But as we will discuss below, it can be rational for states to fight even when profit is not expected.

course this does not mean that wars will not occur. It is rational to start a war one does not expect to win (to be more technical, whose expected utility is negative), if it is believed that the likely consequences of not fighting are even worse.⁴ War could also come through inadvertence, loss of control, or irrationality. But if decision-makers are "sensible,"⁵ peace is the most likely outcome. Furthermore, nuclear weapons can explain superpower caution: when the cost of seeking excessive gains is an increased probability of total destruction, moderation makes sense.

Some analysts have argued that these effects either have not occurred or are not likely to be sustained in the future. Thus Fred Iklé is not alone in asking whether nuclear deterrence can last out the century.⁶ It is often claimed that the threat of all-out retaliation is credible only as a response to the other side's all-out attack: thus Robert McNamara agrees with more conservative analysts whose views he usually does not share that the "sole purpose" of strategic nuclear force "is to deter the other side's first use of its strategic forces."⁷ At best, then, nuclear weapons will keep the nuclear peace; they will not prevent—and, indeed, may even facilitate—the use of lower levels of violence.⁸ It is then not surprising that some observers attribute Soviet adventurism, particularly in Africa, to the Russians' ability to use the nuclear stalemate as a shield behind which they can deploy pressure, military aid, surrogate troops, and even their own forces in areas they had not previously controlled. The moderation mentioned earlier seems, to some, to be only one-sided. Indeed, American defense policy in the past decade has been driven by the felt need to create limited nuclear options to deter Soviet incursions that, while deeply menacing to our values, fall short of threatening immediate destruction of the U.S.

4. Alternatively, to be even more technical, a decision-maker could expect to lose a war and at the same time could see its expected utility as positive if the slight chance of victory was justified by the size of the gains that victory would bring. But the analysis here requires only the simpler formulation.

5. See the discussion in Patrick M. Morgan, *Deterrence: A Conceptual Analysis* (Beverly Hills, Cal.: Sage, 1977), pp. 101–124.

6. Fred Iklé, "Can Nuclear Deterrence Last Out the Century?" *Foreign Affairs*, Vol. 51, No. 2 (January 1973), pp. 267–285.

7. Robert McNamara, "The Military Role of Nuclear Weapons," *Foreign Affairs*, Vol. 62, No. 4 (Fall 1983), p. 68. For his comments on how he came to this view, see his interview in Michael Charlton, *From Deterrence to Defense* (Cambridge: Harvard University Press, 1987), p. 18.

8. See Glenn Snyder's discussion of the "stability-instability paradox," in "The Balance of Power and the Balance of Terror," in Paul Seabury, ed., *The Balance of Power* (San Francisco: Chandler, 1965), pp. 184–201.

Furthermore, while nuclear weapons may have helped keep the peace between the U.S. and USSR, ominous possibilities for the future are hinted at by other states' experiences. Allies of nuclear-armed states have been attacked: Vietnam conquered Cambodia and China attacked Vietnam. Two nuclear powers have fought each other, albeit on a very small scale: Russia and China skirmished on their common border. A nonnuclear power has even threatened the heartland of a nuclear power: Syria nearly pushed Israel off the Golan Heights in 1973 and there was no reason for Israel to be confident that Syria was not trying to move into Israel proper. Some of those who do not expect the U.S. to face such a menace have predicted that continued reliance on the threat of mutual destruction "would lead eventually to the demoralization of the West. It is not possible indefinitely to tell democratic republics that their security depends on the mass extermination of civilians . . . without sooner or later producing pacifism and unilateral disarmament."⁹

John Mueller has posed a different kind of challenge to claims for a "nuclear revolution." He disputes, not the existence of a pattern of peace and stability, but the attributed cause. Nuclear weapons are "essentially irrelevant" to this effect; modernity and highly destructive nonnuclear weapons would have brought us pretty much to the same situation had it not been possible to split the atom.¹⁰ Such intelligent revisionism makes us think about questions whose answers had seemed self-evident. But I think that, on closer inspection, the conventional wisdom turns out to be correct. Nevertheless, there is much force in Mueller's arguments, particularly in the importance of what he calls "general stability" and the reminder that the fact that nuclear war would be so disastrous does not mean that conventional wars would be cheap.

Mueller is certainly right that the atom does not have magical properties. There is nothing crucial about the fact that people, weapons, industry, and agriculture may be destroyed as a result of a particular kind of explosion,

9. Henry Kissinger, "After Reykjavik: Current East-West Negotiations," *The San Francisco Meeting of the Tri-Lateral Commission, March 1987* (New York: The Trilateral Commission, 1987), p. 4; see also *ibid.*, p. 7, and his interview in Charlton, *From Deterrence to Defense*, p. 34.

10. Mueller, "The Essential Irrelevance." Waltz offers yet a third explanation for peace and stability—the bipolar nature of the international system, which, he argues, is not merely a product of nuclear weapons. See Kenneth Waltz, *Theory of International Politics* (Reading, Mass.: Addison-Wesley, 1979). But in a later publication he places more weight on the stabilizing effect of nuclear weapons: *The Spread of Nuclear Weapons: More May Be Better*, Adelphi Paper No. 171 (London: International Institute for Strategic Studies, 1981).

although fission and fusion do produce special by-products like fallout and electromagnetic pulse. What is important are the political effects that nuclear weapons produce, not the physics and chemistry of the explosion. We need to determine what these effects are, how they are produced, and whether modern conventional weapons would replicate them.

Political Effects of Nuclear Weapons

The existence of large nuclear stockpiles influences superpower politics from three directions. Two perspectives are familiar: First, the devastation of an all-out war would be unimaginably enormous. Second, neither side—nor, indeed, third parties—would be spared this devastation. As Bernard Brodie, Thomas Schelling, and many others have noted, what is significant about nuclear weapons is not “overkill” but “mutual kill.”¹¹ That is, no country could win an all-out nuclear war, not only in the sense of coming out of the war better than it went in, but in the sense of being better off fighting than making the concessions needed to avoid the conflict. It should be noted that although many past wars, such as World War II for all the allies except the U.S. (and, perhaps, the USSR), would not pass the first test, they would pass the second. For example: although Britain and France did not improve their positions by fighting, they were better off than they would have been had the Nazis succeeded. Thus it made sense for them to fight even though, as they feared at the outset, they would not profit from the conflict. Furthermore, had the allies lost the war, the Germans—or at least the Nazis—would have won in a very meaningful sense, even if the cost had been extremely high. But “a nuclear war,” as Reagan and Gorbachev affirmed in their joint statement after the November 1985 summit, “cannot be won and must never be fought.”¹²

A third effect of nuclear weapons on superpower politics springs from the fact that the devastation could occur extremely quickly, within a matter of days or even hours. This is not to argue that a severe crisis or the limited use of force—even nuclear force—would inevitably trigger total destruction, but only that this is a possibility that cannot be dismissed. At any point, even in calm times, one side or the other could decide to launch an unpro-

11. Bernard Brodie, ed., *The Absolute Weapon: Atomic Power and World Order* (New York: Harcourt Brace, 1946); Thomas Schelling, *Arms and Influence* (New Haven: Yale University Press, 1966).

12. *New York Times*, November 22, 1985, p. A12.

voked all-out strike. More likely, a crisis could lead to limited uses of force which in turn, through a variety of mechanisms, could produce an all-out war. Even if neither side initially wanted this result, there is a significant, although impossible to quantify, possibility of quick and deadly escalation.

Mueller overstates the extent to which conventional explosives could substitute for nuclear ones in these characteristics of destructiveness, evenhandedness, and speed. One does not have to underestimate the horrors of previous wars to stress that the level of destruction we are now contemplating is much greater. Here, as in other areas, there comes a point at which a quantitative difference becomes a qualitative one. Charles De Gaulle put it eloquently: after a nuclear war, the "two sides would have neither powers, nor laws, nor cities, nor cultures, nor cradles, nor tombs."¹³ While a total "nuclear winter" and the extermination of human life would not follow a nuclear war, the world-wide effects would be an order of magnitude greater than those of any previous war.¹⁴ Mueller understates the differences in the scale of potential destruction: "World War II did not cause total destruction in the world, but it did utterly annihilate the three national regimes that brought it about. It is probably quite a bit more terrifying to think about a jump from the 50th floor than about a jump from the 5th floor, but anyone who finds life even minimally satisfying is extremely unlikely to do either."¹⁵ The war did indeed destroy these national regimes, but it did not utterly destroy the country itself or even all the values the previous regimes supported. Most people in the Axis countries survived World War II; many went on to prosper. Their children, by and large, have done well. There is an enormous gulf between this outcome—even for the states that lost the war—and a nuclear holocaust. It is far from clear whether societies could ever be reconstituted after a nuclear war or whether economies would ever recover.¹⁶ Furthermore, we should not neglect the impact of the prospect of destruction of culture, art, and national heritage: even a decision-maker who was willing

13. Speech of May 31, 1960, in Charles De Gaulle, *Discours Et Messages*, Vol. 3 (Paris: Plon, 1970), p. 218. I am grateful to McGeorge Bundy for the reference and translation.

14. Starley Thompson and Stephen Schneider, "Nuclear Winter Reappraised," *Foreign Affairs*, Vol. 64, No. 5 (Summer 1986), pp. 981–1005.

15. "The Essential Irrelevance," pp. 66–67.

16. For a discussion of economic recovery models, see Michael Kennedy and Kevin Lewis, "On Keeping Them Down: Or, Why Do Recovery Models Recover So Fast?" in Desmond Ball and Jeffrey Richelson, *Strategic Nuclear Targeting* (Ithaca: Cornell University Press, 1986), pp. 194–208.

to risk the lives of half his population might hesitate at the thought of destroying what has been treasured throughout history.

Mueller's argument just quoted is misleading on a second count as well: the countries that started World War II were destroyed, but the Allies were not. It was more than an accident but less than predetermined that the countries that were destroyed were those that sought to overturn the status quo; what is crucial in this context is that with conventional weapons at least one side can hope, if not expect, to profit from the war. Mueller is quite correct to argue that near-absolute levels of punishment are rarely required for deterrence, even when the conflict of interest between the two sides is great—i.e., when states believe that the gross gains (as contrasted with the net gains) from war would be quite high. The United States, after all, could have defeated North Vietnam. Similarly, as Mueller notes, the United States was deterred from trying to liberate East Europe even in the era of American nuclear monopoly.

But, again, one should not lose sight of the change in scale that nuclear explosives produce. In a nuclear war the "winner" might end up distinguishably less worse off than the "loser," but we should not make too much of this difference. Some have. As Harold Brown put it when he was Secretary of the Air Force, "if the Soviets thought they may be able to recover in some period of time while the U.S. would take three or four times as long, or would never recover, then the Soviets might not be deterred."¹⁷ Similarly, one of the criteria that Secretary of Defense Melvin Laird held necessary for the essential equivalence of Soviet and American forces was: "preventing the Soviet Union from gaining the ability to cause considerably greater urban/industrial destruction than the United States would in a nuclear war."¹⁸ A secret White House memorandum in 1972 used a similar formulation when it defined "strategic sufficiency" as the forces necessary "to ensure that the United States would emerge from a nuclear war in discernably better shape than the Soviet Union."¹⁹

17. U.S. Senate, Preparedness Investigating Subcommittee of the Committee on Armed Services, *Hearings on Status of U.S. Strategic Power*, 90th Cong., 2d sess., April 30, 1968 (Washington, D.C.: U.S. Government Printing Office, 1968), p. 186.

18. U.S. House of Representatives, Subcommittee on Department of Defense, *Appropriations for the FY 1973 Defense Budget and FY 1973–1977 Program*, 92nd Cong., 2d sess., February 22, 1972, p. 65.

19. Quoted in Gregg Herken, *Counsels of War* (New York: Knopf, 1985), p. 266. This conception leads to measuring the peacetime strategic balance and the projected balance during a hypothetical war by looking at which side has more capability (e.g., amount of megatonnage, number

But this view is a remarkably apolitical one. It does not relate the costs of the war to the objectives and ask whether the destruction would be so great that the "winner," as well as the loser, would regret having fought it. Mueller avoids this trap, but does not sufficiently consider the possibility that, absent nuclear explosives, the kinds of analyses quoted above would in fact be appropriate. Even very high levels of destruction can rationally be compatible with a focus on who will come out ahead in an armed conflict. A state strongly motivated to change the status quo could believe that the advantages of domination were sufficiently great to justify enormous blood-letting. For example, the Russians may feel that World War II was worth the cost not only when compared with being conquered by Hitler, but also when compared with the enormous increase in Soviet prestige, influence, and relative power.

Furthermore, without nuclear weapons, states almost surely would devote great energies to seeking ways of reducing the costs of victory. The two world wars were enormously destructive because they lasted so long. Modern technology, especially when combined with nationalism and with alliances that can bring others to the rescue of a defeated state, makes it likely that wars will last long: defense is generally more efficacious than offense. But this is not automatically true; conventional wars are not necessarily wars of attrition, as the successes of Germany in 1939–40 and Israel in 1967 remind us. Blitzkrieg can work under special circumstances, and when these are believed to apply, conventional deterrence will no longer be strong.²⁰ Over an extended period of time, one side or the other could on occasion come to believe that a quick victory was possible. Indeed, for many years most American officials have believed not only that the Soviets could win a conventional war in Europe or the Persian Gulf, but that they could do so at low cost. Were the United States to be pushed off the continent, the considerations Mueller gives might well lead it to make peace rather than pay the

of warheads, numbers of warheads capable of destroying hardened targets). I have discussed the problems with this approach in "Cognition and Political Behavior," in Richard Lau and David Sears, eds., *Political Cognition* (Hillsdale, N.J.: Earlbaum, 1986), pp. 330–333; and "The Drunkard's Search" (unpublished ms.).

20. John J. Mearsheimer, *Conventional Deterrence* (Ithaca: Cornell University Press, 1983). It should be noted, however, that even a quick and militarily decisive war might not bring the fruits of victory. Modern societies may be even harder to conquer than are modern governments. A high degree of civilian cooperation is required if the victor is to reach many goals. We should not assume it will be forthcoming. See Gene Sharp, *Making Europe Unconquerable* (Cambridge, Mass.: Ballinger, 1985).

price of re-fighting World War II. Thus, extended deterrence could be more difficult without nuclear weapons. Of course, in their absence, NATO might build up a larger army and better defenses, but each side would continually explore new weapons and tactics that might permit a successful attack. At worst, such efforts would succeed. At best, they would heighten arms competition, national anxiety, and international tension. If both sides were certain that any new conventional war would last for years, the chances of war would be slight. But we should not be too quick to assume that conventional war with modern societies and weapons is synonymous with wars of attrition.

The length of the war is important in a related way as well. The fact that a war of attrition is slow makes a difference. It is true, as George Quester notes, that for some purposes all that matters is the amount of costs and pain the state has to bear, not the length of time over which it is spread.²¹ But a conventional war would have to last a long time to do an enormous amount of damage; and it would not *necessarily* last a long time. Either side can open negotiations or make concessions during the war if the expected costs of continued fighting seem intolerable. Obviously, a timely termination is not guaranteed—the fitful attempts at negotiation during World War II and the stronger attempts during World War I were not fruitful. But the possibility of ending the war before the costs become excessive is never foreclosed. Of course, states can believe that a nuclear war would be prolonged, with relatively little damage being done each day, thus permitting intra-war bargaining. But no one can overlook the possibility that at any point the war could escalate to all-out destruction. Unlike the past, neither side could be certain that there would be a prolonged period for negotiation and intimidation. This blocks another path which statesmen in nonnuclear eras could see as a route to meaningful victory.

Furthermore, the possibility that escalation could occur even though neither side desires this outcome—what Schelling calls “the threat that leaves something to chance”²²—induces caution in crises as well. The fact that sharp

21. George Quester, “Crisis and the Unexpected,” *Journal of Interdisciplinary History*, Vol. 18, No. 3 (Spring 1988), pp. 701–703.

22. Thomas Schelling, *The Strategy of Conflict* (Cambridge: Harvard University Press, 1960), pp. 187–203; Schelling, *Arms and Influence*, pp. 92–125. Also see Jervis, *The Illogic of American Nuclear Strategy* (Ithaca: Cornell University Press, 1984), ch. 5; Jervis, “‘MAD is a Fact, not a Policy’: Getting the Arguments Straight,” in Jervis, *Implications of the Nuclear Revolution* (Ithaca: Cornell University Press, forthcoming); and Robert Powell, “The Theoretical Foundations of Strategic Nuclear Deterrence,” *Political Science Quarterly*, Vol. 100, No. 1 (Spring 1985), pp. 75–96.

confrontations can get out of control, leading to the eventual destruction of both sides, means that states will trigger them only when the incentives to do so are extremely high. Of course, crises in the conventional era also could escalate, but the possibility of quick and total destruction means that the risk, while struggling near the brink, of falling into the abyss is greater and harder to control than it was in the past. Fears of this type dominated the bargaining during the Cuban missile crisis: Kennedy's worry was "based on fear, not of Khrushchev's intention, but of human error, of something going terribly wrong down the line." Thus when Kennedy was told that a U-2 had made a navigational error and was flying over Russia, he commented: "There is always some so-and-so who doesn't get the word."²³ The knowledge of these dangers—which does not seem lacking on the Soviet side as well²⁴—is a powerful force for caution.

Empirical findings on deterrence failure in the nuclear era confirm this argument. George and Smoke show that: "The initiator's belief that the risks of his action are calculable and that the unacceptable risks of it can be controlled and avoided is, with very few exceptions, a necessary (though not sufficient) condition for a decision to challenge deterrence."²⁵ The possibility of rapid escalation obviously does not make such beliefs impossible, but it does discourage them. The chance of escalation means that local military advantage cannot be confidently and safely employed to drive the defender out of areas in which its interests are deeply involved. Were status quo states able to threaten only a war of attrition, extended deterrence would be more difficult.

General Stability

But is very much deterrence needed? Is either superpower strongly driven to try to change the status quo? On these points I agree with much of Mueller's argument—the likely gains from war are now relatively low, thus

23. Arthur M. Schlesinger, Jr., *Robert Kennedy and His Times* (Boston: Houghton Mifflin, 1978), p. 529; quoted in Roger Hilsman, *To Move A Nation* (Garden City, N.Y.: Doubleday, 1964), p. 221.

24. See Benjamin Lambeth, "Uncertainties for the Soviet War Planner," *International Security*, Vol. 7, No. 3 (Winter 1982/83), pp. 139–66.

25. Alexander L. George and Richard Smoke, *Deterrence in American Foreign Policy* (New York: Columbia University Press, 1974), p. 529.

producing what he calls general stability.²⁶ The set of transformations that go under the heading of “modernization” have not only increased the costs of war, but have created alternative paths to established goals, and, more profoundly, have altered values in ways that make peace more likely. Our focus on deterrence and, even more narrowly, on matters military has led to a distorted view of international behavior. In a parallel manner, it has adversely affected policy prescriptions. We have not paid sufficient attention to the incentives states feel to change the status quo, or to the need to use inducements and reassurance, as well as threats and deterrence.²⁷

States that are strongly motivated to challenge the status quo may try to do so even if the military prospects are bleak and the chances of destruction considerable. Not only can rational calculation lead such states to challenge the status quo, but people who believe that a situation is intolerable feel strong psychological pressures to conclude that it can be changed.²⁸ Thus nuclear weapons by themselves—and even mutual second-strike capability—might not be sufficient to produce peace. Contrary to Waltz’s argument, proliferation among strongly dissatisfied countries would not necessarily recapitulate the Soviet-American pattern of stability.²⁹

The crucial questions in this context are the strength of the Soviet motivation to change the status quo and the effect of American policy on Soviet drives and calculations. Indeed, differences of opinion on these matters explain much of the debate over the application of deterrence strategies toward the USSR.³⁰ Most of this dispute is beyond our scope here. Two points, however, are not. I think Mueller is correct to stress that not only Nazi Germany, but Hitler himself, was exceptional in the willingness to chance an enormously destructive war in order to try to dominate the world.

26. Mueller, “Essential Irrelevance,” pp. 69–70; also see Waltz, *Theory of International Politics*, p. 190.

27. For discussions of this topic, see George, Hall, and Simons, *Limits of Coercive Diplomacy*; George and Smoke, *Deterrence in American Foreign Policy*; Richard Ned Lebow, *Between Peace and War* (Baltimore: Johns Hopkins University Press, 1981); Robert Jervis, “Deterrence Theory Revisited,” *World Politics*, Vol. 31, No. 2 (January 1979), pp. 289–324; Jervis, Lebow, and Janice Gross Stein, *Psychology and Deterrence* (Baltimore: Johns Hopkins University Press, 1985); David Baldwin, “The Power of Positive Sanctions,” *World Politics*, Vol. 24, No. 1 (October 1971), pp. 19–38; and Janice Gross Stein, “Deterrence and Reassurance,” in Philip E. Tetlock, et al., eds., *Behavior, Society, and Nuclear War*, Vol. 2 (New York: Oxford University Press, forthcoming, 1989).

28. George and Smoke, *Deterrence in American Foreign Policy*; Lebow, *Between Peace and War*; Jervis, Lebow, and Stein, *Psychology and Deterrence*.

29. Waltz, *Spread of Nuclear Weapons*.

30. See Robert Jervis, *Perception and Misperception in International Politics* (Princeton: Princeton University Press, 1976), ch. 3.

While of course such a leader could recur, we should not let either our theories or our policies be dominated by this possibility.

A second point is one of disagreement: even if Mueller is correct to believe that the Soviet Union is basically a satisfied power—and I share his conclusion—war is still possible. Wars have broken out in the past between countries whose primary goal was to preserve the status quo. States' conceptions of what is necessary for their security often clash with one another. Because one state may be able to increase its security only by making others less secure, the premise that both sides are basically satisfied with the status quo does not lead to the conclusion that the relations between them will be peaceful and stable. But here too nuclear weapons may help. As long as all-out war means mutual devastation, it cannot be seen as a path to security. The general question of how nuclear weapons make mutual security more feasible than it often was in the past is too large a topic to engage here.³¹ But I can at least suggest that they permit the superpowers to adopt military doctrines and bargaining tactics that make it possible for them to take advantage of their shared interest in preserving the status quo. Winston Churchill was right: "Safety [may] be the sturdy child of terror."

31. I have discussed it in the concluding chapter of *Implications of the Nuclear Revolution*.