The Essential | John Mueller **Irrelevance of Nuclear** Weapons

Stability in the Postwar World

It is widely assumed

that, for better or worse, the existence of nuclear weapons has profoundly shaped our lives and destinies. Some find the weapons supremely beneficial. Defense analyst Edward Luttwak says, "we have lived since 1945 without another world war precisely because rational minds . . . extracted a durable peace from the very terror of nuclear weapons." And Robert Art and Kenneth Waltz conclude, "the probability of war between America and Russia or between NATO and the Warsaw Pact is practically nil precisely because the military planning and deployments of each, together with the fear of escalation to general nuclear war, keep it that way."² Others argue that, while we may have been lucky so far, the continued existence of the weapons promises eventual calamity: The doomsday clock on the cover of the Bulletin of the Atomic Scientists has been pointedly hovering near midnight for over 40 years now, and in his influential bestseller, The Fate of the Earth, Jonathan Schell dramatically concludes that if we do not "rise up and cleanse the earth of nuclear weapons," we will "sink into the final coma and end it all."3

This article takes issue with both of these points of view and concludes that nuclear weapons neither crucially define a fundamental stability nor threaten severely to disturb it.

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^{1.} Edward N. Luttwak, "Of Bombs and Men," Commentary, August 1983, p. 82.

^{2.} Robert J. Art and Kenneth N. Waltz, "Technology, Strategy, and the Uses of Force," in Robert J. Art and Kenneth N. Waltz, eds., *The Use of Force* (Lanham, Md.: University Press of America, 1983), p. 28. See also Klaus Knorr, "Controlling Nuclear War," *International Security*, Vol. 9, No. 4 (Spring 1985), p. 79; John J. Mearsheimer, "Nuclear Weapons and Deterrence in Europe," *International Security*, Vol. 9, No. 3 (Winter 1984/85), pp. 25–26; Robert Gilpin, *War and Change in World Politics* (Cambridge: Cambridge University Press, 1981), pp. 213–219.

^{3.} Jonathan Schell, The Fate of the Earth (New York: Knopf, 1982), p. 231.

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The paper is in two parts. In the first it is argued that, while nuclear weapons may have substantially influenced political rhetoric, public discourse, and defense budgets and planning, it is not at all clear that they have had a significant impact on the history of world affairs since World War II. They do not seem to have been necessary to deter World War III, to determine alliance patterns, or to cause the United States and the Soviet Union to behave cautiously.

In the second part, these notions are broadened to a discussion of stability in the postwar world. It is concluded that there may be a long-term trend away from war among developed countries and that the long peace since World War II is less a peculiarity of the nuclear age than the logical conclusion of a substantial historical process. Seen broadly, deterrence seems to be remarkably firm; major war—a war among developed countries, like World War II or worse—is so improbable as to be obsolescent; imbalances in weapons systems are unlikely to have much impact on anything except budgets; and the nuclear arms competition may eventually come under control not so much out of conscious design as out of atrophy born of boredom.

The Impact of Nuclear Weapons

The postwar world might well have turned out much the same even in the absence of nuclear weapons. Without them, world war would have been discouraged by the memory of World War II, by superpower contentment with the postwar status quo, by the nature of Soviet ideology, and by the fear of escalation. Nor do the weapons seem to have been the crucial determinants of Cold War developments, of alliance patterns, or of the way the major powers have behaved in crises.

DETERRENCE OF WORLD WAR

It is true that there has been no world war since 1945 and it is also true that nuclear weapons have been developed and deployed in part to deter such a conflict. It does not follow, however, that it is the weapons that have prevented the war-that peace has been, in Winston Churchill's memorable construction, "the sturdy child of [nuclear] terror." To assert that the ominous presence of nuclear weapons has prevented a war between the two power blocs, one must assume that there would have been a war had these weapons not existed. This assumption ignores several other important war-discouraging factors in the postwar world.

THE MEMORY OF WORLD WAR II. A nuclear war would certainly be vastly destructive, but for the most part nuclear weapons simply compound and dramatize a military reality that by 1945 had already become appalling. Few with the experience of World War II behind them would contemplate its repetition with anything other than horror. Even before the bomb had been perfected, world war had become spectacularly costly and destructive, killing some 50 million worldwide. As former Secretary of State Alexander Haig put it in 1982: "The catastrophic consequences of another world war—with or without nuclear weapons—make deterrence our highest objective and our only rational military strategy."4

POSTWAR CONTENTMENT. For many of the combatants, World War I was as destructive as World War II, but its memory did not prevent another world war. Of course, as will be discussed more fully in the second half of this article, most nations did conclude from the horrors of World War I that such an event must never be repeated. If the only nations capable of starting World War II had been Britain, France, the Soviet Union, and the United States, the war would probably never have occurred. Unfortunately other major nations sought direct territorial expansion, and conflicts over these desires finally led to war.

Unlike the situation after World War I, however, the only powers capable of creating another world war since 1945 have been the big victors, the United States and the Soviet Union, each of which has emerged comfortably dominant in its respective sphere. As Waltz has observed, "the United States, and the Soviet Union as well, have more reason to be satisfied with the status quo than most earlier great powers had."5 (Indeed, except for the dismemberment of Germany, even Hitler might have been content with the empire his arch-enemy Stalin controlled at the end of the war.) While there have been many disputes since the war, neither power has had a grievance so

^{4.} New York Times, April 7, 1982. See also Michael Mandelbaum's comment in a book which in this respect has a curious title, The Nuclear Revolution (Cambridge: Cambridge University Press, 1981), p. 21: "The tanks and artillery of the Second World War, and especially the aircraft that reduced Dresden and Tokyo to rubble might have been terrifying enough by themselves to keep the peace between the United States and the Soviet Union." Also see Bruce Russett, "Away from Nuclear Mythology," in Dagobert L. Brito, Michael D. Intriligator, and Adele E. Wick, eds., Strategies for Managing Nuclear Proliferation (Lexington, Mass.: Lexington, 1983), pp. 148– 150. And of course, given weapons advances, a full-scale conventional World War III could be expected to be even more destructive than World War II.

^{5.} Kenneth N. Waltz, *Theory of International Politics* (Reading, Mass.: Addison-Wesley, 1979), p. 190. See also Joseph S. Nye, Jr., "Nuclear Learning and U.S.-Soviet Security Security Regimes," *International Organization*, Vol. 41, No. 3 (Summer 1987), p. 377.

essential as to make a world war-whether nuclear or not-an attractive means for removing the grievance.

SOVIET IDEOLOGY. Although the Soviet Union and international communism have visions of changing the world in a direction they prefer, their ideology stresses revolutionary procedures over major war. The Soviet Union may have hegemonic desires as many have argued but, with a few exceptions (especially the Korean War) to be discussed below, its tactics, inspired by the cautiously pragmatic Lenin, have stressed subversion, revolution, diplomatic and economic pressure, seduction, guerrilla warfare, local uprising, and civil war—levels at which nuclear weapons have little relevance. The communist powers have never—before or after the invention of nuclear weapons subscribed to a Hitler-style theory of direct, Armageddon-risking conquest, and they have been extremely wary of provoking Western powers into largescale war.6 Moreover, if the memory of World War II deters anyone, it

6. Arkady N. Shevchenko, while stressing that "the Kremlin is committed to the ultimate vision of a world under its control," gives an "unequivocal no" to the question of whether "the Soviet Union would initiate a nuclear war against the United States"; instead, the Soviets "are patient and take the long view," believing "that eventually [they] will be supreme—not necessarily in this century but certainly in the next." Shevchenko, *Breaking with Moscow* (New York: Knopf, 1985), pp. 285–286. Similarly, Michael Voslensky asserts that Soviet leaders desire "external" expansion," but their "aim is to win the struggle between the two systems without fighting"; he notes that Soviet military ventures before and after World War II have consistently been directed only against "weak countries" and only after the Soviets have been careful to cover themselves in advance—often withdrawing when "firm resistance" has been met. Voslensky, Nomenklatura: The New Soviet Ruling Class (Garden City, N.Y.: Doubleday, 1984), pp. 320–330. Richard Pipes concludes that "Soviet interests . . . are to avoid general war with the imperialist Enough (New York: Simon and Schuster, 1984), p. 65. William Taubman says that Stalin sought "to avert war by playing off one set of capitalist powers against another and to use the same tactic to expand Soviet power and influence without war." Taubman, Stalin's American Policy (New York: Norton, 1982), p. 12. MacGregor Knox argues that, for Hitler and Mussolini, "foreign conquest was the decisive prerequisite for a revolution at home," and in this respect those regimes differ importantly from those of Lenin, Stalin, and Mao. Knox, "Conquest, Foreign and Domestic, in Fascist Italy and Nazi Germany," Journal of Modern History, Vol. 56, No. 1 (March 1984), p. 57. In his memoirs, Nikita Khrushchev is quite straightforward about the issue: "We've always considered war to be against our own interests." He says he "never once heard Stalin say anything about preparing to commit aggression against another [presumably major] country"; and "we Communists must hasten [the] struggle" against capitalism "by any means at our disposal, excluding war." Khrushchev, Khrushchev Remembers: The Last Testament, trans. and ed., Strobe Talbott (Boston: Little, Brown, 1974), pp. 511, 533, 531, emphasis in the original. The Soviets have always been concerned about wars launched against them by a decaying capitalist world, but at least since 1935 they have held such wars to be potentially avoidable because of Soviet military strength and of international working class solidarity. Frederic S. Burnin, "The Communist Doctrine of the Inevitability of War," *American Political Science Review*, Vol. 57, No. 2 (June 1963), p. 339. See also Robert Jervis, *The Illogic of American Nuclear Strategy* (Ithaca: Cornell University Press, 1984), p. 156; and Michael MccGwire, "Deterrence: Problem, Not probably does so to an extreme degree for the Soviets. Officially and unofficially they seem obsessed by the memory of the destruction they suffered. In 1953 Ambassador Averell Harriman, certainly no admirer of Stalin, observed that the Soviet dictator "was determined, if he could avoid it, never again to go through the horrors of another protracted world war."7

THE BELIEF IN ESCALATION. Those who started World Wars I and II did so not because they felt that costly wars of attrition were desirable, but because they felt that escalation to wars of attrition could be avoided. In World War I the offensive was believed to be dominant, and it was widely assumed that conflict would be short and decisive.8 In World War II, both Germany and Japan experienced repeated success with bluster, short wars in peripheral areas, and blitzkrieg, aided by the counterproductive effects of their opponents' appeasement and inaction.9

World war in the post-1945 era has been prevented not so much by visions of nuclear horror as by the generally-accepted belief that conflict can easily escalate to a level, nuclear or not, that the essentially satisfied major powers would find intolerably costly.

To deal with the crucial issue of escalation, it is useful to assess two important phenomena of the early post-war years: the Soviet preponderance in conventional arms and the Korean War.

First, it has been argued that the Soviets would have been tempted to take advantage of their conventional strength after World War II to snap up a

Solution," SAIS Review, Vol. 5, No. 2 (Summer-Fall 1985), p. 122. For a study stressing the Soviet Union's "cautious opportunism" in the Third World, see Stephen T. Hosmer and Thomas W. Wolfe, Soviet Policy and Practice toward Third World Countries (Lexington, Mass.: Lexington Books,

^{7.} Newsweek, March 16, 1953, p. 31. The Soviets presumably picked up a few things from World War I as well; as Taubman notes, they learned the "crucial lesson . . . that world war . . . can destroy the Russian regime." Taubman, *Stalin's American Policy*, p. 11.

8. Jack Snyder, *The Ideology of the Offensive* (Ithaca: Cornell University Press, 1984); Stephen Van

Evera, "Why Cooperation Failed in 1914," World Politics, Vol. 38, No. 1 (October 1985), pp. 80-117. See also the essays on "The Great War and the Nuclear Age" in International Security, Vol. 9, No. 1 (Summer 1984), pp. 7-186.

^{9.} Hitler, however, may have anticipated (or at any rate, was planning for) a total war once he had established his expanded empire—a part of his grand scheme he carefully kept from military and industrial leaders who, he knew, would find it unthinkable: see R.J. Overy, "Hitler's War and the German Economy," Economic History Review, Vol. 35, No. 2 (May 1982), pp. 272-291. The Japanese did not want a major war, but they were willing to risk it when their anticipated short war in China became a lengthy, enervating one, and they were forced to choose between wider war and the abandonment of the empire to which they were ideologically committed. See Robert J.C. Butow, Tojo and the Coming of the War (Stanford, Calif.: Stanford University Press, 1961), ch. 11.

prize like Western Europe if its chief defender, the United States, had not possessed nuclear weapons. As Winston Churchill put it in 1950, "nothing preserves Europe from an overwhelming military attack except the devastating resources of the United States in this awful weapon."10

This argument requires at least three questionable assumptions: (1) that the Soviets really think of Western Europe as a prize worth taking risks for, ¹¹ (2) that, even without the atomic bomb to rely on, the United States would have disarmed after 1945 as substantially as it did; and (3) that the Soviets have actually ever had the strength to be quickly and overwhelmingly successful in a conventional attack in Western Europe. 12

However, even if one accepts these assumptions, the Soviet Union would in all probability still have been deterred from attacking Western Europe by the enormous potential of the American war machine. Even if the USSR had the ability to blitz Western Europe, it could not have stopped the United States from repeating what it did after 1941: mobilizing with deliberate speed, putting its economy onto a wartime footing, and wearing the enemy down in a protracted conventional major war of attrition massively supplied from its unapproachable rear base.

The economic achievement of the United States during the war was astounding. While holding off one major enemy, it concentrated with its allies on defeating another, then turned back to the first. Meanwhile, it supplied everybody. With 8 million of its ablest men out of the labor market, it

^{10.} Matthew A. Evangelista, "Stalin's Postwar Army Reappraised," International Security, Vol. 7, No. 3 (Winter 1982/83), pp. 110.

^{11.} This assumption was certainly not obvious to Bernard Brodie: "It is difficult to discover what meaningful incentives the Russians might have for attempting to conquer Western Europe." Bernard Brodie, Escalation and the Nuclear Option (Princeton: Princeton University Press, 1966), pp. 71-72. Nor to George Kennan: "I have never believed that they have seen it as in their interests to overrun Western Europe militarily, or that they would have launched an attack on that region generally even if the so-called nuclear deterrent had not existed." George Kennan, "Containment Then and Now," Foreign Affairs, Vol. 65, No. 4 (Spring 1987), pp. 888–889. Hugh Thomas characterizes Stalin's postwar policy as "conflict which should not be carried into real war. . . . Thus, though expansion should be everywhere attempted, it should not come too close to fighting in zones where the United States, and probably Britain, would resort to arms." Hugh Thomas, Armed Truce: The Beginnings of the Cold War, 1945-46 (New York: Atheneum, 1986), p. 102.

^{12.} This assumption is strongly questioned in Evangelista, "Stalin's Postwar Army Reappraised," pp. 110–138. See also Adam B. Ulam, Expansion and Coexistence (New York: Praeger, 1968), p. 414; John J. Mearsheimer, Conventional Deterrence (Ithaca: Cornell University Press, 1983), ch. 6; and Barry R. Posen, "Measuring the European Conventional Balance," International Security, Vol. 9, No. 3 (Winter 1984/85). Among Stalin's problems at the time was a major famine in the Ukraine in 1946 and 1947. Khrushchev, Khrushchev Remembers, trans. and ed., Strobe Talbott (Boston: Little, Brown, 1970), ch. 7.

increased industrial production 15 percent per year and agricultural production 30 percent overall. Before the end of 1943 it was producing so much that some munitions plants were closed down, and even so it ended the war with a substantial surplus of wheat and over \$90 billion in surplus war goods. (National governmental expenditures in the first peacetime year, 1946, were only about \$60 billion.) As Denis Brogan observed at the time, "to the Americans war is a business, not an art."13

If anyone was in a position to appreciate this, it was the Soviets. By various circuitous routes the United States supplied the Soviet Union with, among other things, 409,526 trucks; 12,161 combat vehicles (more than the Germans had in 1939); 32,200 motorcycles; 1,966 locomotives; 16,000,000 pairs of boots (in two sizes); and over one-half pound of food for every Soviet soldier for every day of the war (much of it Spam).¹⁴ It is the kind of feat that concentrates the mind, and it is extremely difficult to imagine the Soviets willingly taking on this somewhat lethargic, but ultimately hugely effective juggernaut. That Stalin was fully aware of the American achievement—and deeply impressed by it—is clear. Adam Ulam has observed that Stalin had "great respect for the United States' vast economic and hence military potential, quite apart from the bomb," and that his "whole career as dictator had been a testimony to his belief that production figures were a direct indicator of a given country's power."15 As a member of the Joint Chiefs of Staff put it in

^{13.} Despite shortages, rationing, and tax surcharges, American consumer spending increased by 12 percent between 1939 and 1944. Richard R. Lingeman, *Don't You Know There's a War On?* (New York: Putnam, 1970), pp. 133, 357, and ch. 4; Alan S. Milward, War, Economy and Society 1939–1945 (Berkeley and Los Angeles: University of California Press, 1977), pp. 63–74, 271–275;

Mercedes Rosebery, This Day's Madness (New York: Macmillan, 1944), p. xii.

14. John R. Deane, The Strange Alliance (New York: Viking, 1947), pp. 92–95; Robert Huhn Jones, The Roads to Russia (Norman: University of Oklahoma Press, 1969), Appendix A. Additional information from Harvey DeWeerd.

^{15.} Adam Ulam, The Rivals: America and Russia Since World War II (New York: Penguin, 1971), pp. 95 and 5. In essence, Stalin seems to have understood that in Great Power wars, as Paul Kennedy put it, "victory has always gone to the side with the greatest material resources." Paul Kennedy, *The Rise and Fall of the Great Powers* (New York: Random House, 1987), p. 439. Nor is it likely that this attitude has changed much: "The men in the Kremlin are absorbed by questions of America's political, military, and economic power, and awed by its technological capacity." Shevchenko, *Breaking with Moscow*, p. 278. Edward Luttwak, while concerned that the Soviets might actually be tempted to start a war, notes the existence of "the great deterrent": the Soviet fear that "more aggressive expansion will precipitate an Alliance-wide mobilization response which could quickly erode the Kremlin's power position down to a 'natural' level—a level, that is, where the power of the Soviet Union begins to approximate its economic capacity." Edward N. Luttwak, *The Grand Strategy of the Soviet Union* (New York: St. Martin's, 1983), p. 116. Or Khrushchev: "those 'rotten' capitalists keep coming up with things which make our jaws drop in surprise." Khrushchev, The Last Testament, p. 532.

1949, "if there is any single factor today which would deter a nation seeking world domination, it would be the great industrial capacity of this country rather than its armed strength." Or, as Hugh Thomas has concluded, "if the atomic bomb had not existed, Stalin would still have feared the success of the U.S. wartime economy."

After a successful attack on Western Europe the Soviets would have been in a position similar to that of Japan after Pearl Harbor: they might have gains aplenty, but they would have no way to stop the United States (and its major unapproachable allies, Canada and Japan) from eventually gearing up for, and then launching, a war of attrition. 18 All they could hope for, like the Japanese in 1941, would be that their victories would cause the Americans to lose their fighting spirit. But if Japan's Asian and Pacific gains in 1941 propelled the United States into war, it is to be expected that the United States would find a Soviet military takeover of an area of far greater importance to it—Western Europe—to be alarming in the extreme. Not only would the U.S. be outraged at the American casualties in such an attack and at the loss of an important geographic area, but it would very likely conclude (as many Americans did conclude in the late 1940s even without a Soviet attack) that an eventual attack on the United States itself was inevitable. Any Hitlerstyle protests by the Soviets that they had no desire for further territorial gains would not be very credible. Thus, even assuming that the Soviets had the conventional capability easily to take over Western Europe, the credible American threat of a huge, continent-hopping war of attrition from south, west, and east could be a highly effective deterrent—all this even in the absence of nuclear weapons.19

^{16.} Samuel P. Huntington, *The Common Defense* (New York: Columbia University Press, 1961), p. 46. See also Walter Millis, ed., *The Forrestal Diaries* (New York: Viking, 1951), pp. 350–351. 17. Thomas, *Armed Truce*, p. 548.

^{18.} Interestingly, one of Hitler's "terrible anxieties" before Pearl Harbor was that the Americans and Japanese might work out a rapprochement, uniting against Germany. Norman Rich, Hitler's War Aims: Ideology, the Nazi State, and the Course of Expansion (New York: Norton, 1973), pp. 228, 231, 246.

^{19.} In fact, in some respects the memory of World War II was *more* horrible than the prospect of atomic war in the immediate postwar period. Western proponents of an atomic preventive war against the USSR were countered by General Omar Bradley and others who argued that this policy would be "folly" because the Soviets would still be able to respond with an offensive against Western Europe which would lead to something *really* bad: an "extended, bloody and horrible" struggle like World War II. Richard Ned Lebow, "Windows of Opportunity: Do States Jump Through Them?" *International Security*, Vol. 9, No. 1 (Summer 1984), p. 170. See also Hanson W. Baldwin, "War of Prevention," *New York Times*, September 1, 1950, p. 4. The conventional threat might be more credible than atomic retaliation even in an era of U.S. nuclear

Second, there is the important issue of the Korean War. Despite the vast American superiority in atomic weapons in 1950, Stalin was willing to order, approve, or at least acquiesce in an outright attack by a communist state on a non-communist one, and it must be assumed that he would have done so at least as readily had nuclear weapons not existed. The American response was essentially the result of the lessons learned from the experiences of the 1930s: comparing this to similar incursions in Manchuria, Ethiopia, and Czechoslovakia (and partly also to previous Soviet incursions into neighboring states in East Europe and the Baltic area), Western leaders resolved that such provocations must be nipped in the bud. If they were allowed to succeed, they would only encourage more aggression in more important locales later. Consequently it seems likely that the Korean War would have occurred in much the same way had nuclear weapons not existed.

For the Soviets the lessons of the Korean War must have enhanced those of World War II: once again the United States was caught surprised and under-armed, once again it rushed hastily into action, once again it soon applied itself in a forceful way to combat—in this case for an area that it had previously declared to be of only peripheral concern. If the Korean War was a limited probe of Western resolve, it seems the Soviets drew the lessons the Truman administration intended. Unlike Germany, Japan, and Italy in the 1930s, they were tempted to try no more such probes: there have been no Koreas since Korea. It seems likely that this valuable result would have come about regardless of the existence of nuclear weapons, and it suggests that the Korean War helped to delimit vividly the methods the Soviet Union would be allowed to use to pursue its policy.²⁰

monopoly because an American retaliatory threat to level Moscow with nuclear weapons could be countered with a threat to make a newly-captured Western city like Paris into a latter-day Lidice. And of course once both sides had nuclear capabilities, the weapons could be mutually deterring, as has often been noted in debates about deterrence in Europe. Moreover, the Soviets could use nuclear weapons to destroy a landing force, as American officials noted in 1950; see Robert Jervis, "The Impact of the Korean War on the Cold War," Journal of Conflict Resolution, Vol. 24, No. 4 (December 1980), p. 578.

^{20.} Soviet military intervention in Afghanistan in 1979 was an effort to prop up a faltering pro-Soviet regime. As such it was not like Korea, but more like American escalation in Vietnam in 1965 or like the Soviet interventions in Hungary in 1956 or Czechoslovakia in 1968. For discussions of the importance of the Korean War in shaping Western perspectives on the Cold War, see John Lewis Gaddis, "Was the Truman Doctrine a Real Turning Point?" Foreign Affairs, Vol. 52, No. 2 (January 1974), pp. 386–401; Jervis, "The Impact of the Korean War"; and Ernest R. May, "The Cold War" in Joseph S. Nye, Jr., ed., The Making of America's Soviet Policy (New Haven: Yale University Press, 1984), pp. 209–230.

It is conceivable that the USSR, in carrying out its ideological commitment to revolution, might have been tempted to try step-by-step, Hitler-style military probes if it felt these would be reasonably cheap and free of risk. The policy of containment, of course, carrying with it the threat of escalation, was designed precisely to counter such probes. If the USSR ever had any thoughts about launching such military probes, the credible Western threat that these probes could escalate (demonstrated most clearly in Korea, but also during such episodes as the Berlin crisis of 1948–49) would be significantly deterring—whether or not nuclear weapons waited at the end of the escalator ride.

The Korean experience may have posed a somewhat similar lesson for the United States. In 1950, amid talk of "rolling back" Communism and sometimes even of liberating China, American-led forces invaded North Korea. This venture led to a costly and demoralizing, if limited, war with China, and resulted in a considerable reduction in American enthusiasm for such maneuvers. Had the United States been successful in taking over North Korea, there might well have been noisy calls for similar ventures elsewhere—though, of course, these calls might well have gone unheeded by the leadership.

It is not at all clear that the United States and the Soviet Union needed the Korean War to become viscerally convinced that escalation was dangerously easy. But the war probably reinforced that belief for both of them and, to the degree that it did, Korea was an important stabilizing event.

COLD WAR AND CRISIS

If nuclear weapons have been unnecessary to prevent world war, they also do not seem to have crucially affected other important developments, including development of the Cold War and patterns of alliance, as well as behavior of the superpowers in crisis.

THE COLD WAR AND ALLIANCE PATTERNS. The Cold War was an outgrowth of various disagreements between the U.S. and the USSR over ideology and over the destinies of Eastern, Central and Southern Europe. The American reaction to the perceived Soviet threat in this period mainly reflects prenuclear thinking, especially the lessons of Munich.

For example, the formation of the North Atlantic Treaty Organization and the division of the world into alliances centered on Washington and Moscow suggests that the participants were chiefly influenced by the experience of World War II. If the major determinant of these alliance patterns had been

nuclear strategy, one might expect the United States and, to a lesser extent, the Soviet Union, to be only lukewarm members, for in general the alliances include nations that contribute little to nuclear defense but possess the capability unilaterally of getting the core powers into trouble.²¹ And one would expect the small countries in each alliance to tie themselves as tightly as possible to the core nuclear power in order to have maximum protection from its nuclear weapons. However, the weakening of the alliances which has taken place over the last three decades has not come from the major partners.

The structure of the alliances therefore better reflects political and ideological bipolarity than sound nuclear strategy. As military economist (and later Defense Secretary) James Schlesinger has noted, the Western alliance "was based on some rather obsolescent notions regarding the strength and importance of the European nations and the direct contribution that they could make to the security of the United States. There was a striking failure to recognize the revolutionary impact that nuclear forces would make with respect to the earlier beliefs regarding European defense."22 Or, as Warner Schilling has observed, American policies in Europe were "essentially prenuclear in their rationale. The advent of nuclear weapons had not influenced the American determination to restore the European balance of power. It was, in fact, an objective which the United States would have had an even greater incentive to undertake if the fission bomb had not been developed."23

CRISIS BEHAVIOR. Because of the harrowing image of nuclear war, it is sometimes argued, the United States and the Soviet Union have been notably more restrained than they might otherwise have been, and thus crises that might have escalated to dangerous levels have been resolved safely at low levels.24

^{21.} As Michael May observes, "the existence of nuclear weapons, especially of nuclear weapons that can survive attack, help[s] make empires and client states questionable sources of security." "The U.S.-Soviet Approach to Nuclear Weapons," International Security, Vol. 9, No. 4 (Spring 1985), p. 150.

^{22.} James Schlesinger, On Relating Non-technical Elements to Systems Studies, P-3545 (Santa Monica, Cal.: RAND, February 1967), p. 6.

^{23.} Warner R. Schilling, "The H-Bomb Decision," *Political Science Quarterly*, Vol. 76, No. 1 (March 1961), p. 26. See also Waltz: "Nuclear weapons did not cause the condition of bipolarity. . . . Had the atom never been split, [the U.S. and the USSR] would far surpass others in military strength, and each would remain the greatest threat and source of potential damage to the other." Waltz, Theory of International Politics, pp. 180-181.

^{24.} John Lewis Gaddis, The Long Peace (New York: Oxford University Press, 1987), pp. 229–232; Gilpin, War and Change in World Politics, p. 218; Coit D. Blacker, Reluctant Warriors (New York: Freeman, 1987), p. 46.

There is, of course, no definitive way to refute this notion since we are unable to run the events of the last forty years over, this time without nuclear weapons. And it is certainly the case that decision-makers are well aware of the horrors of nuclear war and cannot be expected to ignore the possibility that a crisis could lead to such devastation.

However, this idea—that it is the fear of nuclear war that has kept behavior restrained—looks far less convincing when its underlying assumption is directly confronted: that the major powers would have allowed their various crises to escalate if all they had to fear at the end of the escalatory ladder was something like a repetition of World War II. Whatever the rhetoric in these crises, it is difficult to see why the unaugmented horror of repeating World War II, combined with considerable comfort with the status quo, wouldn't have been enough to inspire restraint.

Once again, escalation is the key: what deters is the belief that escalation to something intolerable will occur, not so much what the details of the ultimate unbearable punishment are believed to be. Where the belief that the conflict will escalate is absent, nuclear countries *have* been militarily challenged with war—as in Korea, Vietnam, Afghanistan, Algeria, and the Falklands.²⁵

To be clear: None of this is meant to deny that the sheer horror of nuclear war is impressive and mind-concentratingly dramatic, particularly in the speed with which it could bring about massive destruction. Nor is it meant to deny that decision-makers, both in times of crisis and otherwise, are fully conscious of how horribly destructive a nuclear war could be. It is simply to stress that the sheer horror of repeating World War II is not all that much less impressive or dramatic, and that powers essentially satisfied with the status quo will strive to avoid anything that they feel could lead to either calamity. 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

^{25.} On this point, see also Evan Luard: "There is little evidence in history that the existence of supremely destructive weapons alone is capable of deterring war. If the development of bacteriological weapons, poison gas, nerve gases and other chemical armaments did not deter war before 1939, it is not easy to see why nuclear weapons should do so now." Evan Luard, War in International Society (New Haven: Yale University Press, 1987), p. 396. For further discussion of this issue and of the belief in many quarters after 1918 that the next war might well destroy the human race, see John Mueller, Retreat from Doomsday: The Obsolescence of Major War (New York: Basic Books, forthcoming in 1989).

than about a jump from the 5th floor, but anyone who finds life even minimally satisfying is extremely unlikely to do either.

Did the existence of nuclear weapons keep the Korean conflict restrained? As noted, the communist venture there seems to have been a limited probe though somewhat more adventurous than usual and one that got out of hand with the massive American and Chinese involvement. As such, there was no particular reason—or meaningful military opportunity—for the Soviets to escalate the war further. In justifying their restraint, the Americans continually stressed the danger of escalating to a war with the Soviet Unionsomething of major concern whether or not the Soviets possessed nuclear weapons.

Nor is it clear that the existence of nuclear weapons has vitally influenced other events. For example, President Harry Truman was of the opinion that his nuclear threat drove the Soviets out of Iran in 1946, and President Dwight Eisenhower, that his nuclear threat drove the Chinese into productive discussions at the end of the Korean War in 1953. McGeorge Bundy's reassessment of these events suggests that neither threat was very well communicated and that, in any event, other occurrences—the maneuverings of the Iranian government in the one case and the death of Stalin in the other were more important in determining the outcome.²⁶ But even if we assume the threats were important, it is not clear why the threat had to be peculiarly nuclear—a threat to commit destruction on the order of World War II would also have been notably unpleasant and dramatic.

Much the same could be said about other instances in which there was a real or implied threat that nuclear weapons might be brought into play: the Taiwan Straits crises of 1954-55 and 1958, the Berlin blockade of 1948-49, the Soviet-Chinese confrontation of 1969, the Six-day War in 1967, the Yom Kippur War of 1973, Cold War disagreements over Lebanon in 1958, Berlin in 1958 and 1961, offensive weapons in Cuba in 1962. All were resolved, or allowed to dissipate, at rather low rungs on the escalatory ladder. While the horror of a possible nuclear war was doubtless clear to the participants, it is certainly not apparent that they would have been much more casual about

26. McGeorge Bundy, "The Unimpressive Record of Atomic Diplomacy," in Gwyn Prins, ed., *The Nuclear Crisis Reader* (New York: Vintage, 1984), p. 44–47. For the argument that Truman never made a threat, see James A. Thorpe, "Truman's Ultimatum to Stalin in the Azerbaijan Crisis: The Making of a Myth," Journal of Politics, Vol. 40, No. 1 (February 1978), pp. 188–195. See also Gaddis, Long Peace, pp. 124–129; and Richard K. Betts, Nuclear Blackmail and Nuclear Balance (Washington, D.C.: Brookings, 1987), pp. 42-47.

escalation if the worst they had to visualize was a repetition of World War II. 27

Of course nuclear weapons add new elements to international politics: new pieces for the players to move around the board (missiles in and out of Cuba, for example), new terrors to contemplate. But in counter to the remark attributed to Albert Einstein that nuclear weapons have changed everything except our way of thinking, it might be suggested that nuclear weapons have changed little except our way of talking, gesturing, and spending money.

Stability

The argument thus far leads to the conclusion that stability is overdetermined—that the postwar situation contains redundant sources of stability. The United States and the Soviet Union have been essentially satisfied with their lot and, fearing escalation to another costly war, have been quite willing to keep their conflicts limited. Nuclear weapons may well have enhanced this stability—they are certainly dramatic reminders of how horrible a big war could be. But it seems highly unlikely that, in their absence, the leaders of the major powers would be so unimaginative as to need such reminding. Wars are not begun out of casual caprice or idle fancy, but because one country or another decides that it can profit from (not simply win) the war—

^{27.} Interestingly, even in the great "nuclear" crisis over Cuba in 1962, Khrushchev seems to have been affected as much by his memories of World War I and II as by the prospect of thermonuclear destruction. See Graham T. Allison, *Essence of Decision* (Boston: Little, Brown, 1971), p. 221. Morton Halperin argues that "the primary military factors in resolving the crisis" in the Taiwan Straits in 1954-55 were "American air and naval superiority in the area," not nuclear threats. Morton H. Halperin, Nuclear Fallacy (Cambridge, Mass.: Ballinger, 1987), p. 30. Alexander George and Richard Smoke note that blockade crises in Berlin in 1948-49 and in the Taiwan Straits in 1958 were broken by the ability of the Americans to find a technological solution to them. Alexander L. George and Richard Smoke, *Deterrence in American Foreign Policy* (New York: Columbia University Press, 1974), p. 383. Betts suggests that even if the American alert in 1973 was influential with the Soviets (which is quite questionable), it is "hard to argue against the proposition that the conventional force elements in it were sufficient, the nuclear component superfluous." Betts, Nuclear Blackmail, p. 129. As for the Soviet-Chinese confrontation, Roy Medvedev notes Soviet fears of "war with a poorly armed but extremely populous and fanatical China." Roy Medvedev, China and the Superpowers (New York: Basil Blackwood, 1986), p. 50; see also Shevchenko, Breaking with Moscow, pp. 165–166. On these issues, see also A.F.K. Organski and Jacek Kugler, The War Ledger (Chicago: University of Chicago Press, 1980), pp. 147-180.

the combination of risk, gain, and cost appears preferable to peace.²⁸ Even allowing considerably for stupidity, ineptness, miscalculation, and self-deception in these considerations, it does not appear that a large war, nuclear or otherwise, has been remotely in the interest of the essentially-contented, risk-averse, escalation-anticipating powers that have dominated world affairs since 1945.

It is conceivable of course that the leadership of a major power could be seized by a lucky, clever, risk-acceptant, aggressive fanatic like Hitler; or that an unprecedentedly monumental crisis could break out in an area, like Central Europe, that is of vital importance to both sides; or that a major power could be compelled toward war because it is consumed by desperate fears that it is on the verge of catastrophically losing the arms race. It is not obvious that any of these circumstances would necessarily escalate to a major war, but the existence of nuclear weapons probably does make such an escalation less likely; thus there are imaginable circumstances under which it might be useful to have nuclear weapons around. In the world we've actually lived in, however, those extreme conditions haven't come about, and they haven't ever really even been in the cards. This enhancement of stability is, therefore, purely theoretical—extra insurance against unlikely calamity.

CRISIS STABILITY, GENERAL STABILITY, AND DETERRENCE

In further assessing these issues, it seems useful to distinguish crisis stability from a more general form of stability. Much of the literature on defense policy has concentrated on crisis stability, the notion that it is desirable for both sides in a crisis to be so secure that each is able to wait out a surprise attack fully confident that it would be able to respond with a punishing counterattack. In an ideal world, because of its fear of punishing retaliation, neither side would have an incentive to start a war no matter how large or

^{28.} Thus the notion that there is a special danger if one side or the other has a "war-winning" capability seems misguided; there would be danger only if a war-profiting capability exists. As will be discussed below, the second does not necessarily follow from the first. As Lebow argues: "History indicates that wars rarely start because one side believes it has a military advantage. Rather, they occur when leaders become convinced that force is necessary to achieve important goals." Lebow, "Windows of Opportunity," p. 149. Michael Howard says: "Wars begin with conscious and reasoned decisions based on the calculation, made by both parties, that they can achieve more by going to war than by remaining at peace." Michael Howard, "The Causes of Wars," Wilson Quarterly, Vol. 8, No. 3 (Summer 1984), p. 103. See also Luard, War in International Society, chs. 5, 6; Jervis, The Illogic of American Nuclear Strategy, ch. 6; Bruce Bueno de Mesquita, The Wart Tran (Navy House), Vol. University Press, 1981), ch. 2; Coddig, Lorge Pages, 232: The War Trap (New Haven: Yale University Press, 1981), ch. 2; Gaddis, Long Peace, p. 232; Geoffrey Blainey, The Causes of War (New York: Free Press, 1973), chs. 9, 11.

desperate the disagreement, no matter how intense the crisis. Many have argued that crisis stability is "delicate": easily upset by technological or

economic shifts.29

There is a more general form of stability, on the other hand, that is concerned with balance derived from broader needs, desires, and concerns. It prevails when two powers, taking all potential benefits, costs, and risks into account, greatly prefer peace to war—in the extreme, even to a victorious war—whether crisis stability exists or not. For example, it can be said that general stability prevails in the relationship between the United States and Canada. The United States enjoys a massive military advantage over its northern neighbor since it could attack at any time with little concern about punishing military retaliation or about the possibility of losing the war (that is, it has a full "first strike capability"), yet the danger that the United States will attack Canada is nil. General stability prevails.

Although the deterrence literature is preoccupied with military considerations, the deterrence concept may be more useful if it is broadened to include non-military incentives and disincentives. For example, it seems meaningful to suggest that the United States is "deterred" from attacking Canada, but not, obviously, by the Canadians' military might. If anyone in Washington currently were even to contemplate a war against Canada (a country, it might be noted, with which the United States has been at war in the past and where, not too long ago, many Americans felt their "manifest destiny" lay), the planner would doubtless be dissuaded by non-military factors. For example, the war would disrupt a beneficial economic relationship; the United States would have the task of occupying a vast new area with sullen and uncooperative inhabitants; the venture would produce political turmoil in the United States. Similar cases can be found in the Soviet sphere. Despite an overwhelming military superiority, the USSR has been far from anxious to attack such troublesome neighboring states as Poland and Romania. It seems likely that the vast majority of wars that never take place are caused by factors which have little to do with military considerations.³⁰

^{29.} The classic statement of this position is, of course, Albert Wohlstetter, "The Delicate Balance of Terror," *Foreign Affairs*, Vol. 27, No. 2 (January 1959), pp. 211–234. See also Glenn H. Snyder, *Deterrence and Defense* (Princeton: Princeton University Press, 1961), pp. 97–109.

^{30.} Under this approach, if two nations are not at war, then it can be said that they are currently being deterred from attacking each other. That is, deterrence prevails when the expected utility for peace outweighs the expected utility for war. In this sense a deterrence relationship exists not only between the U.S. and the USSR, but also between the U.S. and Canada, and between Bolivia and Pakistan. The usefulness of this approach is that it is not limited exclusively to

Now, it would obviously be too much to suggest that general stability prevails in the relationship between the U.S. and the USSR to the same degree that it does in the relationship between the U.S. and Canada. Yet, as suggested, it is remarkably difficult to imagine how the prevailing stability between the two big powers could be upset to the point that a war could come about: both have a strong interest in peace, and none whatever in major war. Thus many of the concerns about the stability of the military balance, while valid in their own terms, miss a broader point. In the current debate over the Strategic Defense Initiative, for example, it may be the case that the proposed system will make things less stable or more stable, but this change may not alter the picture very much. It is like the millionaire who loses or gains \$1000; it is true that he is now poorer or richer than before, but the important point is that his overall status has not changed very much.

If a kind of overwhelming general stability really prevails, it may well be that the concerns about arms and the arms race are substantially overdone. That is, the often-exquisite numerology of the nuclear arms race has probably had little to do with the important dynamics of the Cold War era, most of which have taken place at militarily subtle levels such as subversion, guerrilla war, local uprising, civil war, and diplomatic posturing. As Benjamin Lambeth has observed, "it is perhaps one of the notable ironies of the nuclear age that while both Washington and Moscow have often lauded superiority as a military force-posture goal, neither has ever behaved as though it really believed superiority significantly mattered in the resolution of international conflicts."31 In their extensive study of the use of threat and force since World War II, Blechman and Kaplan conclude that, "especially noteworthy is the

military considerations, and that it comfortably incorporates such important deterring phenomena as satisfaction with the status quo, as well as the restraining effects of economics, morality, good will, inertia, international opinion, national self-image, etc. Thus it can deal with that multitude of cases in which a militarily superior power lives peacefully alongside an inferior one. The approach can also deal with those cases where a nation has become so distressed by the status quo that it starts a war even when it has little hope of military success. For a more formal presentation, see John Mueller, Approaches to Measurement in International Relations: A Non-Evangelical Survey (New York: Appleton-Century-Crofts, 1969), pp. 284–286; and Mueller, Retreat from Doomsday. See also note 28 above; and Richard Rosecrance, Strategic Deterrence Reconsidered, Adelphi Paper No. 116 (London: International Institute for Strategic Studies, Spring 1975), pp. 33–37; Lebow, "Windows of Opportunity," pp. 181–186; and Richard Ned Lebow, "Deterrence Reconsidered," Survival, Vol. 27, No. 1 (January/February 1985), pp. 20–28.

31. Benjamin S. Lambeth, "Deterrence in the MIRV Era," World Politics, Vol. 24, No. 2 (January

^{1972),} p. 234 n.

fact that our data do not support a hypothesis that the strategic weapons balance between the United States and the USSR influences outcomes."³²

A special danger of weapons imbalance is often cited: a dominant country might be emboldened to use its superiority for purposes of pressure and intimidation. But unless its satisfaction with the status quo falls enormously and unless its opponent's ability to respond becomes very low as well, the superior power is unlikely to push its advantage very far, and certainly not anywhere near the point of major war. Even if the war could be kept non-nuclear and even if that power had a high probability of winning, the gains are likely to be far too low, the costs far too high.³³

STABILITY: TRENDS

Curiously, in the last twenty-five years crisis stability between the U.S. and the USSR has probably gotten worse while general stability has probably improved.

With the development of highly accurate multiple warhead missiles, there is a danger that one side might be able to obtain a first-strike counterforce capability, at least against the other side's land-based missiles and bombers, or that it might become able to cripple the other side's command and control operations. At the same time, however, it almost seems—to put it very baldly—that the two major powers have forgotten how to get into a war. Although on occasion they still remember how to say nasty things about each other, there hasn't been a true, bone-crunching confrontational crisis

32. Barry M. Blechman and Stephen S. Kaplan, *Force Without War* (Washington, D.C.: Brookings, 1978), p. 132. See also Jacek Kugler, "Terror Without Deterrence: Reassessing the Role of Nuclear Weapons," *Journal of Conflict Resolution*, Vol. 28, No. 3 (September 1984), pp. 470–506.

33. Betts finds "scant reason to assume . . . that the nuclear balance would be a prime consid-

eration in a decision about whether to resort to nuclear coercion." Betts, *Nuclear Blackmail*, pp. 218–219. Hannes Adomeit sees "no congruence between increased Soviet military capabilities and enhanced Soviet propensities to take risks." Adomeit, "Soviet Crisis Prevention and Management," *Orbis*, Vol. 30, No. 1 (Spring 1986), pp. 42–43. For an able refutation of the popular notion that it was American nuclear superiority that determined the Soviet backdown in the Cuban missile crisis, see Lambeth, "Deterrence in the MIRV Era," pp. 230–234. Marc Trachtenberg has presented an interesting, if "somewhat speculative" case that Soviet behavior was influenced by Soviet strategic inferiority. His argument is largely based on the observation that the Soviets never went on an official alert, and he suggests this arose from fear of provoking an American preemptive strike. But the essential hopelessness of the tactical situation and the general fear of escalation to what Lambeth (quoting Thomas Schelling) calls "just plain war" would also seem to explain this behavior. Marc Trachtenberg, "Nuclear Weapons and the Cuban Missile Crisis," *International Security*, Vol. 10, No. 1 (Summer 1985), pp. 156–163.

for over a quarter-century. Furthermore, as Bernard Brodie notes, even the last crisis, over missiles in Cuba, was "remarkably different . . . from any previous one in history" in its "unprecedented candor, direct personal contact, and at the same time mutual respect between the chief actors."34 Events since then that seem to have had some warlike potential, such as the military alert that attended the Yom Kippur War of 1973, fizzled while still at extremely low levels.³⁵ In fact, as McGeorge Bundy has noted, since 1962 "there has been no open nuclear threat by any government."36

It seems reasonable, though perhaps risky, to extrapolate from this trend and to suggest that, whatever happens with crisis stability in the future, general stability is here to stay for quite some time. That is, major war—war among developed countries—seems so unlikely that it may well be appropriate to consider it obsolescent. Perhaps World War II was indeed the war to end war—at least war of that scale and type.

THE HOLLANDIZATION PHENOMENON. There are, of course, other possibilities. Contentment with the status quo could diminish in time and, whatever the traumas of World War II, its lessons could eventually wear off, especially as postwar generations come to power. Somehow the fear of escalation could diminish, and small, cheap wars among major countries could again seem

^{34.} Bernard Brodie, War and Politics (New York: Macmillan, 1973), p. 426. See also Nye, "Nuclear Learning." Betts concludes that no other Cold War crisis ever "really brought the superpowers close to war." Betts, Nuclear Blackmail, p. 132. At the time war did seem close, but Khrushchev's memoirs seem to support Shevchenko's conclusion that from the start the Soviets "were preoccupied almost exclusively with how to extricate themselves from the situation with minimum loss of face and prestige." Shevchenko, Breaking with Moscow, p. 118. New evidence demonstrates that President Kennedy was ready to end the crisis even on terms that were substantially embarrassing to the U.S., and thus it appears that, as David Welch and James Blight have concluded, "the odds that the Americans would have gone to war were next to zero." David A. Welch and James G. Blight, "The Eleventh Hour of the Cuban Missile Crisis," International

Security, Vol. 12, No. 3 (Winter 1987/88), p. 27. 35. See Scott D. Sagan, "Nuclear Alerts and Crisis Management," International Society, Vol. 9, No. 4 (Spring 1985), pp. 127–129; and Bundy, "The Unimpressive Record of Atomic Diplomacy,"

^{36.} Bundy, "The Unimpressive Record of Atomic Diplomacy," p. 50. On the improved atmosphere after 1962, see also Brodie, *War and Politics*, p. 431. On the declining use of nuclear threats, see also Blechman and Kaplan, *Force Without War*, pp. 47–49. Public opinion data also reflect relaxed tensions: see John Mueller, "Changes in American Public Attitudes Toward International Involvement," in Ellen Stern, ed., *The Limits of Military Intervention* (Beverly Hills, Cal.: Sage, 1977), pp. 325–328; and Rob Paarlberg, "Forgetting About The Unthinkable," *Foreign* Policy, No. 10 (Spring 1973), pp. 132-140. On the flurry of concern about war in the early 1980s in response to the debate over missiles in Western Europe and to some of Ronald Reagan's rhetoric, see Josef Joffe, "Peace and Populism: Why the European Anti-Nuclear Movement Failed," International Security, Vol. 11, No. 4 (Spring 1987), pp. 3-40.

viable and attractive. We could get so used to living with the bomb that its use becomes almost casual. Some sort of conventional war could reemerge as a viable possibility under nuclear stalemate.³⁷ But, as noted, the trends seem to be substantially in the opposite direction: discontent does not seem to be on the rise, and visceral hostility seems to be on the decline.

Moreover, it might be instructive to look at some broad historical patterns. For centuries now, various countries, once warlike and militaristic, have been quietly dropping out of the war system to pursue neutrality and, insofar as they are allowed to do so, perpetual peace. Their existence tends to go unremarked because chroniclers have preferred to concentrate on the antics of the "Great Powers." "The story of international politics," observes Waltz, "is written in terms of the great powers of an era."³⁸ But it may be instructive for the story to include Holland, a country which chose in 1713, centuries before the invention of nuclear weapons, to abandon the fabled "struggle for power," or Sweden, which followed Holland's lead in 1721.³⁹ Spain and Denmark dropped out too, as did Switzerland, a country which fought its last battle in 1798 and has shown a "curious indifference" to "political or territorial aggrandizement," as one historian has put it.⁴⁰

While Holland's bandwagon was quietly gathering riders, an organized movement in opposition to war was arising. The first significant peace organizations in Western history emerged in the wake of the Napoleonic Wars in 1815, and during the next century they sought to promote the idea that war was immoral, repugnant, inefficient, uncivilized, and futile. They also proposed remedies like disarmament, arbitration, and international law and organization, and began to give out prizes for prominent peaceable behavior.

^{37.} See Edward N. Luttwak, "An Emerging Postnuclear Era?" Washington Quarterly, Vol. 11, No. 1 (Winter 1988), pp. 5–15.

^{38.} Waltz, Theory of International Politics, p. 72.

^{39.} They did not drop out of the great power war system merely because they were outclassed economically. With substantial effort Holland and Sweden could have struggled to stay on for a while in the ranks of the great powers, at least enough to rival the less great among them, had they so desired. In 1710 when they were dropping out, each had armies bigger than those of Britain or the Hapsburg Empire and far larger than those of Prussia. See Kennedy, *The Rise and Fall of the Great Powers*, p. 99. The sacrifices would probably have been proportionately no more than those the Soviet Union has borne in its costly effort to keep up militarily with the United States, or those Israel has borne in seeking to pursue its destiny in the Middle East, or those North Vietnam bore to expand its control into South Vietnam, or those Japan paid to enter the great power club early in this century.

^{40.} Lynn Montross, quoted in Jack S. Levy, *War in the Modern Great Power System* (Lexington: University Press of Kentucky), p. 45. On this issue, see also Brodie, *War and Politics*, p. 314.

They had become a noticeable force by 1914 but, as one of their number, Norman Angell, has recalled, they tended to be dismissed as "cranks and faddists . . . who go about in sandals and long beards, live on nuts."41 Their problem was that most people living within the great power system were inclined to disagree with their central premise: that war was bad. As Michael Howard has observed, "before 1914 war was almost universally considered an acceptable, perhaps an inevitable and for many people a desirable way of settling international differences."42 One could easily find many prominent thinkers declaring that war was progressive, beneficial, and necessary; or that war was a thrilling test of manhood and a means of moral purification and spiritual enlargement, a promoter of such virtues as orderliness, cleanliness, and personal valor.43

It should be remembered that a most powerful effect of World War I on the countries that fought it was to replace that sort of thinking with a revulsion against wars and with an overwhelming, and so far permanent, if not wholly successful, desire to prevent similar wars from taking place. Suddenly after World War I, peace advocates were a decided majority. As A.A. Milne put it in 1935, "in 1913, with a few exceptions we all thought war was a natural and fine thing to happen, so long as we were well prepared for it and had no doubt about coming out the victor. Now, with a few exceptions, we have lost our illusions; we are agreed that war is neither natural nor fine, and that the victor suffers from it equally with the vanauished."44

For the few who didn't get the point, the lesson was substantially reinforced by World War II. In fact, it almost seems that after World War I the only person left in Europe who was willing to risk another total war was Adolf Hitler. He had a vision of expansion and carried it out with ruthless

^{41.} Norman Angell, After All (New York: Farrar, Straus, and Young, 1951), p. 147. See also A.C.F. Beales, The History of Peace (New York: Dial, 1931); Roger Chickering, Imperial Germany and a World Without War (Princeton: Princeton University Press, 1975).

^{42.} Howard, "The Causes of Wars," p. 92.

^{43.} See the discussion in Richard Rosecrance, Action and Reaction in World Politics (Boston: Little, Brown, 1963), p. 163; Luard, War in International Society, pp. 354–365; Van Evera, "Why Cooperation Failed in 1914," pp. 89–92; Roland N. Stromberg, Redemption by War (Lawrence: Regents Press of Kansas, 1982); Muleller, Retreat from Doomsday. For a sustained and impassioned argument against such thinking, see Norman Angell, The Great Illusion (London: Heinemann, 1909). 44. A.A. Milne, *Peace With Honour* (New York: Dutton, 1935), pp. 9–10. See also Paul Fussell, *The Great War and Modern Memory* (New York: Oxford University Press, 1975); I.F. Clarke, *Voices* Prophesying War 1763-1984 (London: Oxford University Press, 1966), ch. 5.

and single-minded determination. Many Germans found his vision appealing, but unlike the situation in 1914 where enthusiasm for war was common, Hitler found enormous reluctance at all levels within Germany to use war to quest after the vision. As Gerhard Weinberg has concluded, "whether any other German leader would indeed have taken the plunge is surely doubtful, and the very warnings Hitler received from some of his generals can only have reinforced his belief in his personal role as the one man able, willing, and even eager to lead Germany and drag the world into war."⁴⁵ Hitler himself told his generals in 1939 "in all modesty" that he alone possessed the nerve required to lead Germany to fulfill what he took to be its mission. ⁴⁶ In Italy, Benito Mussolini also sought war, but only a small one, and he had to deceive his own generals to get that. ⁴⁷ Only in Japan, barely touched by World War I, was the willingness to risk major war fairly widespread. ⁴⁸

Since 1945 the major nuclear powers have stayed out of war with each other, but equally interesting is the fact that warfare of *all* sorts seems to have lost its appeal within the developed world. With only minor and fleeting exceptions (the Falklands War of 1982, the Soviet invasions of Hungary and Czechoslovakia), there have been no wars among the 48 wealthiest countries in all that time.⁴⁹ Never before have so many well-armed countries spent so much time not using their arms against each other. This phenomenon surely

^{45.} Gerhard Weinberg, The Foreign Policy of Hitler's Germany (Chicago: University of Chicago Press, 1982), p. 664.

^{46.} Knox, "Conquest, Foreign and Domestic," p. 54.

^{47.} MacGregor Knox, Mussolini Unleashed 1939–1941 (Cambridge: Cambridge University Press, 1982), ch. 3.

^{48.} On these issues, see note 9 above; Mueller, Retreat from Doomsday; Brodie, War and Politics, ch. 6; George H. Quester, Offense and Defense in the International System (New York: Wiley, 1977), p. 137; Luard, War in International Society, p. 365; the arguments by Michael Doyle about the widespread growth of liberal anti-war ideology over the last two centuries in Doyle, "Kant, Liberal Legacies, and Foreign Affairs," Philosophy and Public Affairs, Vol. 12, Nos. 3 and 4 (Summer and Fall, 1983); and Doyle, "Liberalism and World Politics," American Political Science Review, Vol. 80, No. 4 (December 1986), pp. 1151–1169. See also R.J. Rummel, "Libertarian Propositions on Violence Within and Between Nations," Journal of Conflict Resolution, Vol. 29, No. 3 (September 1985), pp. 419–455.

^{49.} For a similar observation, see Luard, *War in International Society*, pp. 395–396. Wealth is per capita, calculated using 1975 data when Iraq and Iran were at their financial peak (ranking 49th and 50th). If 1985 data are used instead, more countries would be on the warless list. Countries like Monaco that have no independent foreign policy are not included in the count. The British-Argentine war over the Falklands cost less than 1000 battle deaths and thus doesn't count as a war by some standards—nor does the bloodless Soviet-Czechoslovak "war" of 1968. The Soviet invasion of Hungary was in some sense requested by the ruling politicians in Hungary and for that reason is also sometimes not classified as an international war. On these issues, see Melvin Small and J. David Singer, *Resort to Arms* (Beverly Hills, Cal.: Sage, 1982), pp. 55, 305.

goes well beyond the issue of nuclear weapons; they have probably been no more crucial to the non-war between, say, Spain and Italy than they have been to the near-war between Greece and Turkey or to the small war between Britain and Argentina.

Consider the remarkable cases of France and Germany, important countries which spent decades and centuries either fighting each other or planning to do so. For this age-old antagonism, World War II was indeed the war to end war. Like Greece and Turkey, they certainly retained the creativity to discover a motivation for war if they had really wanted to, even under an over-arching superpower balance; yet they have now lived side-by-side for nearly half a century, perhaps with some bitterness and recrimination, but without even a glimmer of war fever. They have become Hollandized with respect to one another. The case of Japan is also instructive: another formerly aggressive major power seems now to have embraced fully the virtues and profits of peace.50

The existence of nuclear weapons also does not help very much to explain the complete absence since 1945 of civil war in the developed world (with the possible exception of the 1944–49 Greek civil war, which could be viewed instead as an unsettled carryover of World War II). The sporadic violence in Northern Ireland or the Basque region of Spain has not really been sustained enough to be considered civil war, nor have the spurts of terrorism carried out by tiny bands of self-styled revolutionaries elsewhere in Western Europe. Except for the case of Hungary in 1956, Europeans under Soviet domination have not (so far) resorted to major violence, no matter how desperate their disaffection.⁵¹ By one count, 43 civil wars (in addition to scores of anti-colonial wars, bloody coups, communal conflicts, and wars between regions of a country) were begun between 1945 and 1980; none of these civil wars occurred in the developed world.52

^{50.} See also Richard Rosecrance, *The Rise of the Trading State* (New York: Basic Books, 1986). 51. Even as dedicated a foe of the Soviet regime as Alexandr Solzhenitsyn has said, "I have never advocated physical general revolution. That would entail such destruction of our people's life as would not merit the victory obtained." Quoted in Stephen F. Cohen, Rethinking the Soviet Experience (New York: Oxford, 1985), p. 214.

^{52.} Small and Singer, Resort to Arms, chs. 12, 13. So traumatic was the Spanish Civil War of the 1930s that it inspired great restraint in the population when that country moved from dictatorship to democracy two generations later. See Edward Schumacher, "Spain Insists U.S. Cut Troops There," New York Times, November 20, 1985. The American Civil War seems to have had a similar effect on the United States; although General W.T. Sherman's postwar hope that there would be no war in America for "fifty years to come" proved pessimistic. Lloyd Lewis, *Sherman* (New York: Harcourt, Brace, 1958), p. 585. For the suggestion that internal stability has contrib-

As a form of activity, war in the developed world may be following oncefashionable dueling into obsolescence: the perceived wisdom, value, and efficacy of war may have moved gradually toward terminal disrepute. Where war was often casually seen as beneficial, virtuous, progressive, and glorious, or at least as necessary or inevitable, the conviction has now become widespread that war in the developed world would be intolerably costly, unwise, futile, and debased.

World war could be catastrophic, of course, and so it is sensible to be concerned about it even if its probability is microscopic. Yet general stability seems so firm and the trends so comforting that the concerns of Schell and others about our eventual "final coma" seem substantially overwrought. By themselves, weapons do not start wars, and if nuclear weapons haven't had much difference, reducing their numbers probably won't either. They may be menacing, but a major war seems so spectacularly unlikely that for those who seek to save lives it may make sense to spend less time worrying about something so improbable as major war and more time dealing with limited conventional wars outside the developed world, where war still can seem cheap and tempting, where romantic notions about holy war and purifying revolution still persist and sometimes prevail, and where developed countries sometimes still fight carefully delimited surrogate wars. Wars of that sort are still far from obsolete and have killed millions since 1945.

Over a quarter century ago, strategist Herman Kahn declared that "it is most unlikely that the world can live with an uncontrolled arms race lasting for several decades." He expressed his "firm belief" that "we are not going to reach the year 2000—and maybe not even the year 1965—without a cataclysm" unless we have "much better mechanisms than we have had for forward thinking." Reflecting again on the cases of the United States and Canada, of Sweden and Denmark, of Holland, of Spain and Switzerland, of France and Germany, and of Japan, it might be suggested that there is a long-term solution to the arms competition between the United States and the Soviet Union, and that it doesn't have much to do with "mechanisms."

uted to international stability in the developed world, see Luard, War in International Society, pp. 398–399.

^{53.} See also the discussion in Jervis, *The Illogic of American Nuclear Strategy*, pp. 158, 195 n. 17. 54. Herman Kahn, *On Thermonuclear War* (Princeton: Princeton University Press, 1961), pp. 574, *x*, 576.

Should political tensions decline, as to a considerable degree they have since the classic Cold War era of 1945–63, it may be that the arms race will gradually dissipate. 55 And it seems possible that this condition might be brought about not principally by ingenious agreements over arms control, but by atrophy stemming from a dawning realization that, since preparations for major war are essentially irrelevant, they are profoundly foolish.

55. In 1817 there was an arms control agreement between the United States and British Canada about warships on the Great Lakes, but conflict, hostility, and an arms competition continued between the two neighbors for 45 years after that. By the 1870s, however, the claims and controversies had resolved themselves or been settled, and mutual disarmament gradually took place without further formal agreement. Peace happened mainly because both sides became accustomed to, and generally pleased with, the status quo. In later decades there was substantial rearmament on the Great Lakes, by agreement, because both sides found them convenient areas for naval training. See C.P. Stacey, The Undefended Border: The Myth and the Reality (Ottawa: Canadian Historical Association, 1955).