STRATEGIC DEFENSES AND INTERNATIONAL STABILITY

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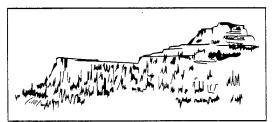
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Strategic Defenses and International Stability

John J. Weltman, Editor



Center for National Security Studies Los Alamos National Laboratory

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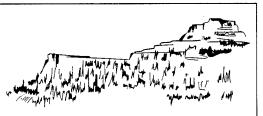
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Strategic Defenses and International Stability

John J. Weltman, Editor

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PREFACE

These papers grew out a workshop on Strategic Defenses and International Stability held at Los Alamos on October 30, 1987. The workshop was sponsored by the Center for National Security Studies of the Los Alamos National Laboratory. The purpose of the workshop was to present a broad discussion of the relationship between stability and defenses against ballistic missiles. A range of views about the relationship exists in policy circles in the United States and among our allies, and this range was reflected in the presentations by a panel of experts.

The term "stability" has a number of specific meanings when used in public discussion of strategic matters. This report first examines these different meanings—deterrence stability, crisis stability, arms control stability, and alliance stability—in the context of historical and contemporary strategic problems. Each member of the panel of experts then, in turn, assesses the effects of strategic defenses on stability for each of the meanings given above.

ABSTRACT

The papers presented here grew out of a workshop held at the Los Alamos National Laboratory, October 30, 1987, on *Strategic Defenses and International Stability*. The workshop was sponsored by the Laboratory's Center for National Security Studies.

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INTRODUCTION

STRATEGIC DEFENSES, STABILITY, AND POLITICAL CULTURE

by

John J. Weltman

The papers in this publication grew out of a workshop held under the auspices of the Center for National Security Studies of the Los Alamos National Laboratory on the topic "Strategic Defenses and International Stability." Our purpose in this gathering was not to attempt any technical assessment of the feasibility of defenses against nuclear attack by ballistic missiles or other means, but rather to display the range of attitudes about such defenses that may be found in circles concerned with policy issues in this country and, to a lesser extent, among our allies. It is notable that the mere mention of the idea of such defenses immediately excites a range of strenuous responses—pro and con—which has minimal relationship to the technical feasibility, cost-effectiveness, or even military purpose of any such systems, however defined. It is in this sense that attitudes toward strategic defenses have become part of the political culture. Furthermore, it is these attitudes that will powerfully influence the course of research and development on technical questions perceived as having a bearing on defenses, as well as the character and outcome of debates which may arise in the future about the actual deployment of any such systems.

It is noteworthy, furthermore, that the place of strategic defenses—and correlative attitudes toward the strategic offense—in the political culture is not immutable and has indeed undergone a complete reversal in the past. President Reagan's March 1983 speech putting forward his Strategic Defense Initiative solidified a constellation of attitudes toward strategic defense and offense that had existed in somewhat more inchoate form for some time and we have now come to regard as a given in the political landscape. Broadly speaking, the further right one moves on the political spectrum, the more advantage one sees to defenses and the more skeptical one becomes about the desirability of a strategic posture in which strategic goals are achieved by offensive forces alone. If one moves in the opposite direction in the political spectrum, suspicion about defenses increases, as does the conviction that purely offensive forces must serve the goals of policy. As with all such generalizations, this account does not give full justice to the complexity of views which exist. Certainly, there are exceptions to the pattern. In its general tendency, however, this picture does describe the pattern of responses in the political community to these broad strategic questions.

If one attempted a similarly broad snapshot of the political constellation in this country in the late 1940s and 1950s, one would find a set of attitudes essentially the mirror image of the one just described. The controversy over whether to proceed to the development of thermonuclear weapons provided the occasion for the sides to take shape. At bottom, the air force and much of the political right chose to place emphasis upon the development of such weapons for use in strategic bombing campaigns which were to form the centerpiece in American war plans for the eventuality of a conflict with the Soviet Union. The opposition

to these views—which included many in the center and anti-communist left of the political spectrum—favored an approach which combined an emphasis on tactical offensive systems with the development of strategic defenses against those threats which were then most feared. This group argued for the continued development of fission weapons primarily for use in support of theater campaigns, rather than placing their major emphasis upon strategic bombing. They further proposed a crash program for the development of defenses against the emergent Soviet strategic bomber fleet. In essence, this group proposed to subordinate a strategic offensive campaign against the Soviet homeland to the development of defenses of the American homeland as a means of achieving American goals should a war with the Soviet Union occur. The Soviets would be unable to coerce the United States with the threat of direct punishment because the Soviet offensive capacity would have been blunted by American defenses. Thus, the United States would retain freedom of action to use military means elsewhere.

The eclipse of defensive programs, which was capped by the Antiballistic Missile (ABM) Treaty of 1972, represented the culmination of a strategic debate which raged throughout the 1960s and saw the emergence of a reversal of positions on strategic defenses which has largely survived to the present day. Those groups that had previously lost the debate over the development of thermonuclear weapons came to see doctrines of mutual assured destruction (MAD) as a means to put limits upon the size of strategic offensive forces. If the offensive forces need only be required to inflict a certain minimal level of pain and destruction upon the opponent, they could be much smaller than what would be required to attack the enemy's ability to wage war itself and ideally to disarm him. Additionally, the view was widely expressed that the latter, counterforce role was physically impossible anyway. To persist in trying to accomplish it thus represented at best simply a needless waste of resources.

Defenses came to represent a threat to the success of this means to cap strategic offensive levels while still accomplishing national strategic goals—now defined as the deterrence of attack against the United States. If defenses worked—or if they were perceived to work—they might give the side possessing them the notion that it was possible to attack the opponent's forces and reduce the latter's capacity to respond to tolerable levels. If they didn't work—or more precisely if they could be overcome by the opponent saturating them with increased offensive forces—the result would simply be higher and more costly force levels, with no change in the fact of the inability of either side to escape its vulnerability to attack by the other.

When the USSR joined with us in the ABM Treaty, this was widely interpreted here as heralding mutual acceptance of this logic. This interpretation, however, was probably not sufficient to explain the decision of either side to accept the treaty. Decisive in both capitals, instead, were estimates of the state of the technology. In each case, its estimate was to impel the government to the view that it would derive no advantage from proceeding with deployment of defenses. Assessments of the state of technology at the time convinced decision makers that it would be cheaper to attack than to defend. An attacker could swamp any defense by building more offensive weapons at a lower cost than the defender could build defensive systems.

President Reagan's 1983 speech revived the debate, with the parties to it essentially still holding the same positions as they had held for the previous decade. The renewed arguments for the proponents of defenses were essentially two: first, that developments in technology in the intervening period promised to eliminate the technical inadequacies of previous schemes for mounting defenses; and second, that the mutual vulnerability which had been proclaimed as an inescapable condition earlier had not proven to be so. Arguments were presented that various strategic developments in the 1970s—most notably the asymmetric vulnerability of our land-based missiles to attack—had had the effect of rendering the United States more open to attack than the Soviets, a situation which it was claimed would operate to our disadvantage in the

event of serious crises with the Soviet Union. It was also often argued that these vulnerabilities would operate to constrain our actions even in advance of such crises.

The opponents of defenses argued variously in response. They denied that the technological advances claimed by defense advocates would, in fact, lead to effective defenses. They argued that the perception or fear on the part of the players in the strategic balance that defenses might, after all, be possible would lead at best to expensive increases in both offensive and defensive forces and at worst increase incentives to attack out of fear that an opponent might in the future be capable—or think he was capable—of blunting one's assured ability to inflict punishment upon him. Finally this camp took the view that the condition of mutual vulnerability had survived fundamentally unchanged, and the strategic developments cited by proponents of defensive deployments had in fact had no discernible effect on the political relationships between the superpowers or upon the ability of American strategic forces to serve national goals.

The discussion thus far is, of course, a very compressed account of arguments that have often been highly complex and cogent on both sides, arguments to which we cannot hope to do justice here. It is not meant to suggest that these arguments can be reduced simply to reflections of political or bureaucratic interests. It is to suggest, however, that arguments about strategic defenses have taken place within a context of an enduring debate about national goals and priorities, the dangers which the world beyond our borders holds for the United States, and the utility of military forces in dealing with those dangers. This debate has produced an enduring bifurcation of preconceptions when dealing with the issue of defenses—as indeed it has with other strategic issues. We have seen one major reversal in these preconceptions and the camps which held them, and we cannot rule out another in principle. But the steadiness of the arguments mounted on each side in the most recent period of debate gives little ground for expecting such a reversal. If we wish to speculate in a coherent manner on the future prospects for strategic defenses—and indeed on the question whether there are any matters relating to strategic defenses which might surmount this bifurcation of opinion—we must certainly take this debate into account.

In attempting to elucidate this political and strategic debate, one must be struck by the extent to which notions of "stability" are central terms in public debate and discussion. Commonly, proponents of a program proclaim that it will add to stability in some sense, while opponents decry it as destabilizing. When these discussions are subject to even minimal analysis, it becomes obvious that stability is not being used in a single way. Neither is the term employed in so subjective a manner as to render it totally devoid of meaning. There are instead a small number of particular ways in which it is employed in public discussion of strategic matters. In order to elucidate the nature of the policy debate over strategic defenses today, it was decided to attempt to identify these different usages of the term. We invited Professor George Quester to introduce the topic by expanding upon the meanings of stability and applying them to the analysis of strategic problems, historical and contemporary. We invited a panel of other prominent policy analysts, whose views about the desirability of strategic defenses range across the spectrum of that policy debate, to comment on defenses in the light of these usages. Our panel consisted of Professor Kenneth Waltz. Dr. Stephen Cambone, Dr. Robert Hunter, and Dr. Fred Hoffman. We deliberately avoided any attempt to define "strategic defenses," whether in terms of military or political purpose, doctrine, coverage, weapons systems, or architecture. Examination of public debate about defenses reveals not only that participants differ on what is desirable, but also that they commonly choose to attack or defend defensive concepts which differ widely from one another in all these terms. We instead allowed participants to define defenses as they chose, hoping that we could define points of commonality in later analysis.

The usages of stability which we put to our panelists were as follows:

Deterrence stability. Would the addition of defenses help or hinder the process of convincing the Soviet Union (or keeping it convinced) not to attack certain vital interests of the United States and its allies?

Crisis stability. Would the addition of defenses encourage or discourage the belief on either or both sides that there would be advantage in striking first in a period of high tension?

Arms control stability. Would defenses heighten or dampen a process of competitive interactions in armaments?

Alliance stability. Would defenses add to or subtract from the political coherence of our alliances?

Let us now consider these meanings in greater detail and lay out the range of views put forward by our panelists as to the effects of strategic defenses upon them.

Deterrence stability. A weapons system or strategy is said to be stable in this sense insofar as it tends to discourage those undesired actions by an opponent which it is the object of one's policy to discourage. When the term "deterrence" first came into prominence in the postwar period as a staple of strategic discourse, the essence of deterrence was conceived to be the ability to punish a transgressor, irrespective of whether or not one was able to physically prevent him from performing the acts one wished to prevent. In assessing the character of a system or strategy in these terms, one must begin by specifying the object of one's policy. If one's object is simply to deter an attack upon North America, a weapon system contributes to stability in these terms insofar as it reduces any propensity on the part of the other side to make such an attack. The difficulty arises, however, from the fact that postwar American policy has never been so clear-cut and single-minded in its goals. Indeed, much of the evolution of our nuclear weapons stockpile, and the permutations of doctrine about the purposes and uses of these weapons, has been due to this fact. Throughout much of the postwar period, the United States has sought to find ways to make its nuclear forces—and especially its strategic nuclear forces—relevant to the problem of deterring assaults against certain of our allies. This has largely come down to our allies in Western Europe, although a concern to prevent assaults against our allies in northeast Asia has been of concern also. Furthermore, it has not necessarily been nuclear attack only against such allies which has been conceived as the threat. The premise of American policy for much of this period has also been that our principal global opponent—the Soviet Union-must be made wary of using its presumed conventional superiority against our allies. We have presumed that we could not do this directly through our conventional forces—or those of our allies although at times we have concluded we could come close to doing so. We have presumed that the Soviet Union has possessed an inherent superiority in the sinews of conventional military force, and we must bring nuclear weapons into the balance to redress this superiority.

In the view of the present writer, deterrence stability is central to the debate, with views on the other meanings of stability fundamentally derived from the analysis of deterrence stability. (One of our authors, George Quester, would disagree, holding that the notion of crisis stability is the central issue.) Much of the analysis of strategic defenses in terms of deterrence stability flows from views about the robustness of our present deterrent posture and the seriousness of threats to that posture.

None of our speakers saw any need for strategic defenses to deter an attack "out of the blue" on North America, largely because none saw that such an event was even a remote threat. Where they differed was in their assessment of the likelihood of lesser threats, the potential for escalation from lower-level conflicts, and the role of defenses in deterring such threats.

In Kenneth Waltz's view, strategic defenses are a solution to a problem which does not exist. He argues that nuclear weapons have been impressively effective in achieving American deterrence goals at all levels. They can do this largely because it is so easy to deter with nuclear weapons. Governments are inherently cautious, unwilling to consciously run large risks. Nuclear weapons—even very small numbers of them—can threaten immense levels of punishment. Deterrence flows from "what you can do, not what you will do." If the threat one wishes to deter is that the Soviets might attack Western Europe, this threat is effectively neutralized by the existing nuclear arsenal, especially by those nuclear weapons present in and around the European theater. (In this view, Waltz is joined by Quester and Hunter.) It is not necessary

to construct elaborate theories to convince ourselves and others that we might deliberately engage the American strategic nuclear arsenal in the event of a catastrophic collapse of NATO's conventional defenses. The presence of nuclear weapons in and around Europe creates a finite but real risk in the minds of the Soviet leadership that such weapons might go off in the event of an attack upon Western Europe, and in the process cause them pain and injury as great or greater than any gain they might hope to achieve from launching such an attack. They are effectively deterred already, and the addition of strategic defenses would do nothing to add to the credibility of the deterrent.

Stephen Cambone presents an opposing picture. He argues that with nuclear weapons—and in particular strategic nuclear weapons on long-range ballistic missiles—numbers do matter. He argues that Soviet superiority in nuclear weapons allows them a freedom of action at lower levels of conflict, which places the U.S. at a disadvantage. The U.S. is essentially confined to attempting to meet Soviet actions locally and on Soviet terms and is deterred by the Soviet nuclear "overhang" from credibly threatening a response that would change the terms to those in which the advantage would be more in our favor. Thus, the present nuclear offensive posture is a weak deterrent against Soviet threats to American interests at levels less than direct attack against the American homeland. In principle, one could redress this imbalance by adding to the offensive equation on the American side. Since this option is effectively precluded as a practical matter, one must instead turn to the alternative—defenses which have a capability to blunt or eliminate the Soviet offensive nuclear advantage. If this can be done, Cambone argues the Soviets will be placed at a disadvantage which will exert a powerful deterrent effect against any propensity they may have to launch less-than-ultimate threats against American interests.

A widely held view is that if nuclear weapons—especially those carried on long-range ballistic missiles—are eliminated from the equation, the Soviet Union would retain an inherent advantage at the conventional level flowing from quantitative superiority in resources and the possession of interior lines of communications. Cambone's premise is that the reverse would be true. In such circumstances, he argues that the Soviets would be at a disadvantage owing to the existence of potentially hostile powers at all points on their periphery and the consequent fear that any conflict could not be kept localized and could erupt into a multi-front encounter in which the Soviets would be overmatched. By creating such a situation, Cambone argues that defenses could enhance the stability of the deterrent against all levels of threat.

Between the view that deterrence is adequate and defenses can add nothing to its effectiveness, and the view that defenses are necessary to rescue the deterrent from inefficacy, there lies a middle view. In this view, the deterrent is presently in a fundamentally sound posture, but particular gaps exist in its effectiveness which appropriately designed defenses might fill. Fred Hoffman accepts the view that a certain small risk of Soviet conventional attack in Europe remains. The principal means of deterring such an attack must lie in the creation of a robust conventional defense. Active defenses of a particular sort can assist in this and fill certain special roles in deterring the residual risk of a Soviet escalation to the nuclear level in desperation—if their conventional attack runs into difficulties and they thereby face the unpleasant prospect of a protracted conventional war against the superior and mobilized industrial might of the NATO alliance. Active defenses of critical sites—command centers, ports, airfields, etc.—against Soviet non-nuclear ballistic missile attack would greatly assist in blunting a Soviet conventional attack and thus enhancing the deterrent against their trying one at all. These defenses should also be capable of dealing with small and selective Soviet nuclear strikes against such targets. Otherwise, if a conventional attack bogged down, the Soviets might be tempted to launch such attacks, which might appear to offer high leverage in disrupting the defense, yet could be carried out with minimal collateral damage. (With some considerable qualification, Robert Hunter would find defenses of this sort useful.) There would be yet another danger in such a situation. The Soviets might extend such selective nuclear strikes to the relatively small number of targets in the U.S. which are of particular importance in sustaining our military effort in the European theater. Again, active defenses of these sites would be useful in eliminating such temptations and thereby enhancing the deterrent against the possibility that such an attack might even be begun.

Crisis stability. While we are treating crisis stability as a separate case here, we may also regard it as a subcategory of deterrence stability. A weapons system or strategy is said to be stabilizing in this sense, to the extent that neither party feels it can gain advantage by striking first in a crisis—a period of high tension precipitated by some set of outside events. Another way of putting this is that neither party perceives it runs dangerous risks by refraining from striking first. The obverse of crisis stability is the "use it or lose it" situation where one or both parties feel they could be disarmed or placed at a grave disadvantage should the other side strike first.

George Quester argues that the character of the weapons themselves largely determines their effect on decision-makers in a crisis. He tests a wide variety of historical and contemporary cases against stability in this sense. He suggests that defenses per se cannot be characterized easily as stabilizing or destabilizing. Much depends upon what is to be defended. If it is the retaliatory force which is to be defended, then the effect may be stabilizing by making a disarming attack that much more difficult. (Fred Hoffman reinforces this point by suggesting that defense of critical command and control sites may be useful here.) If it is population which is to be defended, then this may suggest an aspiration to deliver a disarming attack and keep the response tolerable. To the extent an opponent believes the aspiration has been achieved, he may see an advantage to striking first. Robert Hunter points out that the distinction between the two types of defense—while perhaps clear enough in the minds of those designing and deploying them—may be quite ambiguous when viewed from the perspective of an opponent. The opponent may feel he must base his response on the most disturbing interpretation. Furthermore, the added level of complexity introduced into a crisis by deployed defenses will heighten uncertainty and therefore tensions.

Stephen Cambone responds from the premise that the present strategic relationship encourages Soviet behavior threatening American interests in a wide variety of locales and thus contains the seeds of many crises. The addition of defenses to the equation thus would make such crises less likely, as well as lowering any sense of advantage to be gained by actual use of strategic forces at any stage in a crisis.

Arms control stability. A system or strategy is said to be stable in this sense if it will not tend to produce a competitive interaction in weapons between the parties. The interaction may be either quantitative or qualitative or both. The interaction—or arms race—may either be open-ended or self-limiting, that is, tending to equilibrium. The implicit question here is whether the addition of defenses to the strategic equation to remedy perceived inadequacies in deterrence would produce an open-ended reaction, or one which would be self-limiting. An open-ended reaction might risk recreation of the inadequacies which had led to the original defensive deployments, but at a higher level of armaments. Such an open-ended reaction, with no lasting change in the relationships which had given rise to the deployment, is suggested by Kenneth Waltz. Those of our panelists who favored deployment of defenses in some form seemed to believe that a self-limiting reaction would result; that is, that defenses could achieve their aim without giving rise to compensatory measures on the other side which would wipe out any net gains. While not spelled out, we can presume that such a belief must flow from assumptions about the cost and technical character of defensive deployments: that additions to the defense could be made for less cost than compensatory additions to the offense.

Alliance stability. A system or strategy is said to be stable in this sense if it tends to support the existing political coherence of an alliance in peacetime. It is unstable to the extent that it tends to produce strains or to drive the members of the alliance to pursue divergent foreign policies. Thus, an American system or strategy which was interpreted in Western Europe as reducing the American commitment to the defense of Western Europe could be characterized as unstable in this sense.

An abstract argument may be made that strategic defenses enhance alliance stability. As previously noted, much of American nuclear doctrine and force structure has been driven, not by the goal of deterring an attack upon the American homeland, but by the goal of somehow engaging the threat of American nuclear forces to deter Soviet attacks of any sort upon our allies. The term "linkage" is commonly used here. The problem has been conceived as one of ensuring that the American forces would reliably be brought into play in the event of an attack against our allies which threatened to succeed. Those who put the problem in these terms feel that the rise of Soviet nuclear power has made this linkage increasingly difficult to achieve as the American perception of direct risks to the United States, should American forces be engaged, has risen. Strategic defenses, by reducing such risks to the American homeland, would, it is thus argued, increase the credibility of this "linkage," and, thereby, the confidence of the allies in the American commitment to the alliance. Such would be the implication of the position taken in these pages by Stephen Cambone.

The opposing view denies that the coherence of the alliance is fundamentally affected by the strategic balance, or by the niceties of strategic doctrine. The alliance is founded instead on the sense of mutual interest among the allies in countering increases in Soviet influence in Europe. This mutual interest will persist, in spite of changes in weapons balances, and can be relied upon to ensure the long-term coherence of the alliance, periodic rhetorical sallies to the contrary notwithstanding. Robert Hunter would add to this view a further contention: so confident are the European allies that the coherence of the alliance will indefinitely deter hostilities, that they generally see no utility in attempting to fill wholly theoretical gaps in its strategic doctrine or even to engage in a public exercise of calling attention to their supposed existence. Thus follows the general interpretation in Europe that American calls for strategic defense can only represent an American inclination to reduce risks to itself, and thereby reduce, rather than raise, its commitment. Hunter allows that certain limited forms of defense might win European approval, provided that they could be clearly connected with the problem of increasing the robustness of the conventional defense of Europe. In this respect, his views bear a distinct similarity to those of Fred Hoffman.

A potential policy consensus?

Strenuous differences in opinion were expected and encountered in this meeting. What is surprising is the degree of potential for consensus on the role of defenses which can be gleaned from the discussions. There is only narrow support for defenses whose operational purpose would be to exact substantial attrition against a major Soviet attack against the United States. Support for such a concept of defense is confined to those who believe that the strategic balance, and expectations about the outcome of strategic exchanges, will affect the outcome of crises and other political activities at all levels of confrontation. Those who take this strategic view are found, by and large, only in a narrow quadrant of the present political constellation, and there seems little forseeable prospect of their views carrying any wider appeal.

What is noteworthy, if we take the range of opinions presented here as representative of the political spectrum as a whole, is the potential for a broad coalescence of political opinion around more narrowly defined concepts for defenses. Whether or not such a coalescence would in fact occur, and whether it would lead to actual deployments, are further questions whose resolutions must wait upon outside events. But the shape of defenses around which such a coalescence could occur is apparent. Active defenses which are tied to the protection of particular crucial points can potentially appeal to a wide audience. Such defenses can have an appeal to those who see particular vulnerabilities in our nuclear force structure and potential avenues for escalation in a crisis. To remedy these defects, arguments for defenses can be made in terms of both deterrence stability and crisis stability. Defensive systems can also have an appeal under certain conditions to those for whom the primary problem is the augmentation of the conventional forces. Arguments for defenses can be made here in terms of alliance stability. What is common to the defenses which might

potentially be acceptable to this broader coalition is that the operational purpose of such defenses would lie in the remedying of particular difficulties and vulnerabilities, rather than any general attempt to blunt a major attack, which is not perceived by broad sections of political opinion to be a significant problem.

To suggest that a potential exists for a pragmatic consensus on the purposes which future defenses might serve is not to suggest any similar consensus on the fundamental wisdom of defensive deployments in the nuclear age. Here, a profound intellectual gap—probably incapable of logical resolution—exists between those who hold that strategic considerations relating to nuclear weapons are not different in kind from those which have applied in previous history, and those who suggest that nuclear weapons have produced a fundamental change in the nature of military strategy from what went before. Those in the former camp hold that nuclear balances cast a shadow on political behavior at all levels. Adverse balances threaten the political goals which nuclear forces, as indeed all military forces, are meant to achieve. If the goals are not to be sacrificed, the balances must be rectified, whether by additions to the offense, or by defensive deployments. Those in the opposing camp argue that the destructive potential inherent in nuclear weapons makes consideration of weapons balances or exchange ratios irrelevant in understanding the political implications of these devices. The mere presence of such weapons negates a vast array of potential threats, whatever the niceties of calculations of the outcome of hypothetical exchanges or credibility of use. Attempts to change nuclear balances, whether by additions to the offense or to the defense, change political results hardly at all.

We cannot resolve this intellectual argument here. Perhaps it can be resolved only, if at all, by the course of history itself. But policy is often influenced in the short term as much by subjective perception as by the implications of abstract propositions. Rightly or wrongly, this meeting suggests there are widespread perceptions that limited threats to our national security exist—threats which may be assuaged by limited modifications to our present strategic posture, modifications which may include the deployment of defenses, but defenses of a character and purpose far different than the original conception of the Strategic Defense Initiative.

SOME NOTIONS OF STABILITY

by

George H. Quester

It will be argued here that the concept of stability, especially *crisis stability*, may be the most important aspect of what we call arms control; important for its contribution to peace, important also simply for clarifying what too often gets blurred by our policy discussions.

To begin with some definitions. Crisis stability pertains to whether any particular weapons will, by their very existence, tend to cause such weapons to come into use (i.e., whether some kinds of military deployments can cause wars to happen) as a sort of self-confirming hypothesis. We think of a crisis as a time when rumors of war suddenly emerge, when war suddenly seems much more likely than it did the day before. If such enhanced anticipations of war cause each side to make preemptive moves, then the rumor of war can lead to the actuality of war, which would truly be an absence of strategic stability. If the weapons are instead so configured that rumors of war did not cause either side to lunge forward but rather caused them to wait and see, then such rumors of war do not have to be self-confirming at all. This would be a very nice and robust form of crisis stability.

Thus, crisis stability should be compared with two other notions of stability that are also important (but perhaps not quite as important): arms race stability and deterrence stability. Arms race stability pertains to whether weapons by their very existence cause other weapons to be procured, which, in turn, would cause more weapons to be procured again on the other side—all in a drain to the taxpayers involved. Deterrence stability refers to whether some kinds of weapons by their existence keep other weapons from being used; a favorite model is that the existence of nuclear forces has perhaps kept conventional wars from being fought in the center of Europe.

Preventing replays of World War II is important and avoiding economically ruinous arms races is also important, so all these notions of stability have to be balanced and sometimes traded off against each other as we try to serve our national interests best, as we try to serve humanity best. Yet avoiding World War III, avoiding "a war nobody wanted," is terribly important, and one of our most important benchmarks for arms control therefore has to be whether strategic stability has been degraded or enhanced.

Continuing our exercise in definitions a little further, arms control might itself be most properly defined as a focus on the outputs of any and all weapons decisions, as a concern for three outputs in particular: for reducing the likelihood of war, the destruction if war were to occur, and the economic and other peacetime burdens of being prepared for war.²

There are other aspects to reducing the likelihood of war besides achieving strategic stability (i.e., besides avoiding self-confirming hypotheses and mutual panics), but this is surely one major concern that we will continuously have to address. What if neither side prefers war to peace, as neither wishes to be an aggressor; but what if each very much prefers a war in which it gets to strike first over a war where it is struck first by the adversary's sneak attack? This, in conventional terms, could have been the situation in

1914, as World War I may have been a war that neither side looked forward to and certainly was a war on which neither side looked back as a success.³ A World War III might this time leave no one around to do any looking back.

BROADER SENSES OF STABILITY

Stability is a fairly familiar concept for the physical scientist. Yet, when they see what social scientists have done with the concept, physical scientists are often bewildered; what seemed straightforward has now become blurry and at times self-contradictory.

In physics, one regards an equilibrium as stable whenever things are arranged so as to bring forces to bear—once an object has been moved from its original position—to return to that position. An equilibrium would be similarly unstable if there were forces at work, once an object had been moved from its original position, so that it would be moved further and further from that position.

The classic homely illustration of a stable situation is that of a rubber ball placed inside a bowl. If a minor earth tremor jars the ball up one side of the bowl, the forces of gravity soon bring it back to where it was at the outset. The matching illustration of an unstable situation is where the bowl is turned upside down, and the ball is delicately set on top of it. The slightest jarring of the arrangement will cause the rubber ball to roll down the side of the bowl and keep on rolling.

One sees stable and unstable relationships of air masses in meteorology, allowing very smooth flying in some cases and causing great turbulence and thunderstorms in others. The design of an ordinary airplane is stable in that minor perturbations of its position in flight are balanced by a tendency to correct back to the desired position. The design of a helicopter, by contrast, is not inherently stable.

But what has stability been taken to mean in international relations and the social sciences in general? As we consider the impact of "offense" and "defense" (terms which themselves beg for an array of definitions since the terms have been used very perversely and confusingly over the years) on the outputs of "stability," will we be bedeviled by definitional confusions about outputs as well as inputs?

When we discuss the domestic social, political, and economic arrangements of societies, we sometimes see the term "stability" used simply to refer to any degree of order and predictability in such societies, by which citizens and foreign visitors and businessmen can know from one day to the next what the laws are and how to avoid violence. In effect, the social scientist is using stability to refer more to what a physicist would refer to as "equilibrium." Too many changes, and too rapid changes in any period of time, make life hard for one and all. At times this can sound as if we are becoming wedded to the status quo, but the intuitions and instincts here are indeed those of most human beings.

This concern for keeping things as they are, for blocking the threat of violent change, may be closely linked to the notion of deterrence stability that we noted above.

Yet the richness of the concept, and the value of any metaphors drawn from physics, would be wasted if we simply equate stability with whatever we liked in life. If we use the term "destabilize," as it is sometimes used right now—as synonymous with making life harder for someone else—then we have simply a substitute term to relieve ourself of a certain tedium in our prose and have added nothing analytical to our arguments.

The most interesting sense of stability in international relations is logically quite close to the concept as borrowed from physics, and here we get into what is often more precisely outlined as crisis stability. Is it possible that, under certain circumstances, the mere thought of something bad happening would cause actions to be taken that made such a disaster happen? Or, is it possible instead, under other circumstances, that the mere thought of a disaster causes actions to be taken that in effect head off such a disaster?

If we go from day to day expecting to be at peace, and then suddenly we hear rumors of "war," what then follows? If the rumors of war lead to precautionary actions on each side that make a war actually happen, this is crisis instability at its worst. If each side, instead, is led to precautionary actions that offer neither side any temptations to take the initiative in attacking and beginning a war, then this would be a very nice situation of crisis stability.

Because we have added the crucial causal linkage here of each side's mental perceptions of what is going to happen (of what the other side is going to do and what it itself is then going to have to do in anticipation of this), we are already far removed from the world of physical forces. Yet the analogue is there, clear enough for all of us to be fascinated by it. Do small shifts (mental and physical, instead of purely physical) away from where we were pull us finally and definitively away from where we were? Or do such small shifts get cancelled out by larger "stabilizing" forces and factors, allowing us to stay where we are? If this all sounds too smugly status quo oriented, we must remind one and all that "where we were" is defined here as peace, with the alternative being war. The premise for much of our discussion here is that both sides, indeed all sides, now normally much prefer peace to war, even if they often disagree on what kinds of peace they like the best; politically, economically, and socially.

Much of the discussion below will turn to the impact of kinds of weapons and military situations on such stability. Weapons do make a difference on whether rumors of war lead to actual wars. Some kinds of weapons put a premium on attacking, if war is likely anyway, since whoever strikes first does the best in the final military outcome. Other kinds of weapons offer an advantage instead to whomever sits still and lets the other side make a fool of himself by attacking. Weapons that reward the military initiative, that give the better results in terms of comparative force attrition to whomever attacks, might in general be labelled "offensive." Weapons which instead give better counterforce results to whomever has sat in place, waiting for the adversary's attack, ought to win the label of "defensive." We should stress here that we are talking for the moment of offense and defense in a strictly counterforce connotation in the grand game of reducing the enemy's military forces to zero before he does the same to you. A very different sense of offense and defense is introduced once one gets into countervalue notions of warfare; the imposition of pain and misery on the other side during and after a war and reducing his quality of life even if one is not in the same move reducing his military ability to fight.

Weapons by their very existence might, under some circumstances, cause themselves to come into use. This is the worry which we were addressing when we talk of "crisis instability." Not all weapons have this kind of impact. A few weapons make relatively little difference one way or the other, when they are introduced, in the attractiveness of taking the military initiative in a crisis. And some weapons dampen the temptations of such an initiative, encouraging all sides to sit still and wait for the opponent to make a move.

For some illustrative examples of developments that can move in a bad direction, one could note the changes in missile technology in the 1970s and 1980s, including the enhancement of accuracy and especially the introduction of multiple independently targeted re-entry vehicles (MIRVs) for missiles. Improved accuracies degrade crisis stability in that they might lead either side to guess it has a good chance of destroying an opposing missile by attacking it first. Yet the impact of enhanced accuracies would not have upset stability nearly as much by itself if it were not accompanied by the development of multiple warheads for intercontinental ballistic missiles (ICBMs), whereby the contents of one silo on the Soviet side might be fired off to attack ten silos on the U.S. side and vice versa.³ Even with near-perfect accuracies it would never, without MIRV, have been the case that either side could fire off 500 missiles to destroy more than 500 on the other side. With single warheads, the attacker would have had to use up more of his own arsenal than he would have eliminated from his enemy's. With multiple warheads, however, it became possible (as earlier, when an entire squadron of bombers was sitting on a single air base, to be hit by a nuclear bomb

dropped by one airplane of the opposing air force) that either side might again do very well by attacking first and might destroy more warheads on the opposing side than it used up in its own force.

THE IMPORTANCE OF CRISIS STABILITY

There is more to preventing war than simply seeking crisis stability. Even with the most stabilizing forms of weaponry, war might be thinkable, for *one* side, if it vastly outnumbered the forces of the other side. But with stable weapons systems, it would at least have been to neither side's advantage to attack if the forces were roughly comparable in magnitude. If the weapons systems are all like multiple warhead missiles, however, in working against crisis stability, then it might be to both sides' advantage to attack if a war was thought imminent. This is one of the worst nightmares for those who wish to keep the peace.

Figure I shows the spread of possibilities, as one side or the other has a larger force, along the horizontal scale when weapons tend towards crisis stability (i.e., where multiple warheads have not been developed for ICBMs). The figure also shows the same array of ratios of strength, however measured, between the two superpower nuclear forces, but this time with the presence of systems like MIRVs.

The endstates here basically break into four cases, as shown: where the U.S. alone could benefit by launching a nuclear attack (I); where the Soviet Union alone could benefit (IV); where neither side could benefit (II); and where either side would do well by striking first (III)—our worst situation of all, it is being argued here.⁴

Some Americans would question whether the situation where either side might be tempted to strike first is really the worst, as compared with one where only the Soviets had such an opportunity; and a few Americans would indeed like the U.S. to have such an opportunity, ahead of neither side being able to contemplate a disarming of the other. We have thus identified a difference here between what could be more of an arms control perspective, as compared with what is sometimes called hawkish.

The latter would list its sequence of preferred world situations as follows:

- 1. only U.S. capable of meaningful first strike (I)
- 2. neither capable (II)
- 3. both capable (III)
- 4. only Soviets capable (IV)

The arms control perspective would rather list its sequence of preferences for the world as follows:

- 1. neither side capable of a meaningful first strike (II)
- 2. only U.S. capable (I)
- 3. only Soviet capable (IV)
- 4. both sides capable (III)

It should be noted that both perspectives would agree that a world in which no one had a counterforce option is preferable to where both sides had such a capability. This already shows how widely acknowledged the importance of strategic stability is. (Being patriotic Americans, all would also agree that we trust Washington alone with such a capability more than we trust Moscow alone.)

The most interesting difference then argues whether we see our very worst world as that where both sides could have a shot at winning a World War III or where the Soviets alone had such a chance.

		U. S. > USSR	U. S. = USSR	U. S. < USSR
Without MIRV	Soviet Counter-force Capability	I NO	II NO	IV YES
Without Wild V	U. S. Counter-force Capability	YES	NO	NO
With MIRV	Soviet Counter-force Capability	NO	YES	YES
· ·	U. S. Counter-force Capability	YES	YES	NO

The difficulty with the dual-capability case is, of course, that each side might panic to the fears of what the other side might be about to do. If there is some risk that Moscow might prefer nuclear war to peace (still highly unlikely in terms of all the complications and collateral damage), there is surely a greater risk that the Soviets would prefer to strike first if Moscow thought we were about to strike.

Denying yourself a military capability goes against traditional intuitions about how one serves the national interest, but this is one of the most important aspects of the concept of strategic stability. Enhanced accuracy for a weapon system would have been welcomed in earlier times, since this presumably let one hit what one intended to hit and let one avoid destroying what one would like to spare; but this can be welcomed no longer. A weapon which can destroy the other side's cities, and only the other side's cities, may seem gruesome but it is now truly stabilizing. A weapon which can avoid such cities, cutting the collateral damage in any future attack we launch, could conversely be quite destabilizing; this could panic the other side as it felt itself thrust into a position of "use them or lose them" with regard to its own strategic missiles.

Our intuitions also have to be challenged on the "efficiency" of adding multiple warheads to intercontinental ballistic missiles. The engineers working on this might obviously have felt that they were giving their country a much more effective use of the throw weight of ICBMs, but this is the kind of efficiency that very much threatens crisis stability.

ASSURED DESTRUCTION

It is important to remember that manned bombers and land-based ICBMs are not the entirety of the two nuclear superpowers force, since the submarine-launched ballistic missiles (SLBMs) remain invulnerable to first-strike attack. Polaris eliminated "missile gap" anxieties more than two decades ago, and Poseidon and Trident have taken the meaning out of "window of vulnerability" more recently. Also taking the edge off such instabilities is the inevitable collateral damage that would arise to the civilians near, or not so near, to ICBM silos in any future war. Some for a time expressed alarm about a Soviet first strike only at

ICBMs, somehow carefully orchestrated to avoid killing American civilians, so that the U.S. president would somehow not dare use his SLBM force in retaliation. But, by most accounts, the numbers of Americans killed by nuclear fallout would still have risen into the tens of millions, making such a Soviet first strike all the more dangerous and improbable, once again reducing the potential crisis instability in the scenario.⁵

Working as an antidote to crisis instability, the extreme of such an exposure of the civilian population arises with the possibility of nuclear winter, by which even the most splendidly successful Soviet first strike, somehow catching all U.S. missiles (even the SLBMs) before they could inflict retaliation on the Soviet Union, would still impose unacceptable destruction on the Soviet homeland, as the smoke and soot would change the earth's climate so that millions of Soviets would freeze or starve to death.⁶

Thus, one has to face up to the moral paradox that crisis stability in the nuclear age typically amounts to mutual assured destruction, to a situation, arranged by man or by nature, whereby neither side can protect its people, or achieve anything else, by striking first or striking preemptively, or by acting generally in haste. Protecting one's own cities may be a noble cause by traditional standards. But any kind of haste, in a noble cause or otherwise, may produce very undesirable results. Crisis stability, to repeat, is the avoidance of need for haste.

Arrangements that protect people against retaliation are thus faulty by the criterion of crisis stability. Arrangements that instead protect the missiles that threaten people are conversely desirable. The moral perversity of this still sticks in many people's throat. "Missiles which kill missiles are bad; missiles which kill people are good." The important point, of course, is that arrangements that prevent war are paramountly good; crisis stability is about keeping wars from beginning and about keeping missiles from ever being fired at either kind of target.

How would someone apply this to President Reagan's Strategic Defense Initiative (SDI)? It all depends on which version of SDI one is talking about. As described by the president himself, SDI—intended to shield American cities against nuclear attack—could be very threatening to crisis stability because it could make the Soviets feel at some point that they were about to lose their last ability to strike the U.S. As described, however, by some other administration spokesmen (for example, George Keyworth, the president's former science advisor), SDI was instead primarily intended to shield U.S. land-based missile silos against a Soviet counterforce attack. This would be a very different application of this kind of antiballistic missile system (ABM), one reinforcing rather than undermining strategic stability—an application to be faulted only in that it might prove far more costly than some other approaches to hardening land-based ICBMs against attack.

The same held true with regard to earlier forms of ABM in the 1960s. An ABM system shielding cities would have been dangerous to peace, while one guarding a missile silo complex in North Dakota was supportive of that peace. Any kind of ABM suited only for the defense of a narrow particular target area is thus conducive to strategic stability, whereas a missile defense system that covers a wider area would not be, and the same distinction applies now to various notions of SDI.

CRISIS STABILITY VS VERIFICATION

American arguments about the need for verification in any arms reduction agreement are well-enough taken, since the secrecy and duplicity of Soviet leadership processes suggest that the world can hardly count on Moscow to forego cheating wherever cheating would offer any significant gains.¹⁰ Yet this emphasis on verification has, in its own way, also become an emphasis on quantities—on whether the strict letter of a contract has been adhered to on the other side, ahead of whether any particular Soviet violations of the letter or spirit of an agreement really make any difference. One of the most important gains of a pursuit

of the kinds of weapons and deployments that foster crisis stability, as we have defined it here, is that it will diminish the significance of any violations of a contract, reducing the importance of cheating and verification.

There are other, more political reasons, of course, why the United States might have to demand that Moscow adhere to what it has promised. If the Soviet leaders get more and more into the habit of ignoring their treaty obligations or if they conclude that Washington will be a pushover on such matters, there would be too many problems developing on other fronts. Yet the fact remains that our vigilance on full and exact compliance in arms reduction treaties may again lead us to distort our priorities.

There have indeed been instances in our negotiations about arms control where a concern for verifiability has gotten in the way of reaching for assurances of crisis stability.

American debates about the cruise missile illustrate some of the paradoxes and confusions here. The cruise missile, deployed on bombers, on air transports, on land, on board submarines, or surface naval vessels, can amount to a tremendous reinforcement for mutual assured destruction and, hence, for peace. The impact of such vehicles will be to reinforce crisis stability and mutual deterrence, even if not every cruise missile is equipped with nuclear warheads and many are outfitted instead for conventional war.

Yet the dual-purpose nature of cruise missiles raises some severe verification problems if the two sides are intent on limiting the numbers of the total nuclear arsenal of each side. Arms race stability and verification are threatened because what each side claims as being dedicated to conventional warfare might be assigned instead to carry a nuclear warhead, and neither side can be so easily assured that the other's quantitative nuclear arsenal is being restricted.¹¹

American representatives in the SALT II negotiations devised a counting rule whereby, when any ICBM had been tested with multiple warheads, all the ICBMs of that type would have to be treated as being MIRVed. The same counting rule was then turned around by the Soviets in their complaints about cruise missiles, with the U.S. having to accept this logic here because the Soviets had accepted it for the ICBMs.

A concern (perhaps even a mutual concern) about limiting the arms race quantitatively thus has been allowed to reduce the acceptability and legitimacy of the cruise-missile weapons system, which otherwise might have been seen as the ready antidote to any concerns about windows of vulnerability.

CRISIS STABILITY VS ARMS RACE STABILITY

We have been arguing that crisis stability is not the same as arms race stability, i.e., that a concern about the *output* of weapons policy (the likelihood of war, the destructiveness of war, the peacetime burdens of being prepared for war) does not mesh so perfectly with a concern about the total quantity of arms (basically an *input*). Our recent experience in arms negotiations reveals, as just noted, several instances where a concern about quantity proved to be a distraction from our more important concerns about quality.

One of the *output* categories, however, would seem a little more closely tied to the *input* of the totals of armament procured; namely, our concern with reducing the economic and social and political burdens in peacetime of our preparations for war. Arms generally cost money, and disarmament generally saves money. Except for those particularly dangerous cases where weapons emerge naturally as a byproduct of the pursuit of peaceful uses of technology (the nuclear proliferation risk and the overlap between the pesticide industry and chemical warfare provide two worrisome examples), we do not have to readjust our intuitions very much.

But there is a more profound, and indirect, way in which crisis stability can indeed help with arms race stability, i.e., can cut the peacetime economic burden of defense. If crisis stability is pursued, attained, understood, and digested by the relevant public and decision makers, it (as noted already above) takes much of the serious urgency out of the numbers and makes it less necessary that every 10% increase in an opponent's arsenal be matched by a similar increase in our own. It is here that we get people talking more about sufficiency and less about parity or essential equivalence. We would get more statements like that of President Eisenhower, in fending off demands for additional spending in the 1950s to counter alleged Soviet progress in strategic weapons: "... it is vital that we get what we believe we need. That does not necessarily mean more than somebody else does."

CRISIS STABILITY AND DETERRENCE STABILITY

Arms do cost money, and thus disarmament typically saves some money. Yet some kinds of arms cost less, and others cost more. One of the more enduring justifications for nuclear weapons has been that they allow us to waste less money and man-years on preparations for conventional warfare.

We have slid, therefore, into the other juxtaposition of definitions of stability, with what is sometimes labelled as deterrence stability and other times is simply referred to as extended deterrence. If we can keep Soviet nuclear weapons from being fired at American cities simply by the prospect that we would destroy Soviet cities in response, can we similarly deter Soviet nuclear attacks on cities in Western Europe, Japan, or Australia, etc.? And can we, by the same threats of retaliation, also deter Soviet conventional attacks on Western Europe, a most valuable peninsula sticking out from the Eurasian continent—a continent whose center is controlled by Moscow?

It would be argued here that all of our discussions of nuclear strategy, and military strategy in general, would be much less worrisome and much less interesting if the NATO countries of Western Europe were on an island safely away from the Eurasian land mass. The ground forces of the USSR, so heavily equipped with tanks, can roll to Brussels or Amsterdam or Paris, while U.S. reinforcements will always have to be brought in by airplane or by ship.¹³

Anyone studying the history of relations between Britain and Russia in the nineteenth century, in what was often labelled "the great game in Asia," might note that this is hardly such a new problem or source of worry. London, the center of English-speaking liberal power before Washington inherited this mantle, constantly had to worry lest the Czar's forces, using interior lines enhanced with the building of railroads, might advance on Korea and Japan, or on China. India, Turkey, the Balkans, or Scandinavia. Whether the power of a maritime-based force could counter the advantages of such interior lines was always somewhat in doubt. The German threats posed to Britain, under the Kaiser and then under Hitler, seem almost like passing interludes by comparison with the decades of concern about what would emerge from the center of Eurasia. What was Britain's problem in an earlier time may then have become America's problem, with the added ingredient that Americans have had nuclear threats they could direct at the Russian leadership if it tried to exploit the military advantages of its central position.

The immediate practical problem for us here comes in assessing how such applications of extended deterrence, by which the United States' threat of nuclear escalation is widely assumed to have prevented any Soviet advance into Western Europe, relates to our broader issues of crisis stability. If deterrence stability is to be defined as the prevention of Moscow's exploitation of Soviet conventional-force power advantages, how does this tie to strategic stability as we have been discussing it here? How does it relate to the comparisons of numbers we debate so much in our analyses of superpower arms control?

It will be argued here that we often exaggerate the importance of the linkages. One such linkage is drawn between the comparisons of forces in the U.S. and Soviet strategic arsenals, and the credibility or incredibility of an American escalation to the use of nuclear weapons when a Soviet conventional advance in Central Europe cannot be repulsed. If the United States has a superiority in strategic forces, this allegedly makes our escalation on behalf of our NATO allies credible, while the reverse becomes true when the Soviets achieve such a superiority.¹⁴ The very same concern with careful total-forces comparisons that emerge—when strategic stability is in question—is thus seen as being relevant also to the prevention of any Soviet conventional military initiatives. Yet, the point has been made many times that New York and Washington and all the other cities of the United States would have been destroyed in the event of such an escalation, whether the U.S. was superior or inferior in nuclear arms; the important transition, in terms of whether it is "rational" and credible for the U.S. to escalate, came already when the U.S. lost its nuclear weapons monopoly in 1949.

Other analysts draw a somewhat different linkage here, seeing the plausibility of a U.S. first use of nuclear weapons in Europe as being inversely related to crisis stability and thus suggesting we avoid an excess of such stability. If there are plausible advantages to striking first in a crisis, according to this kind of reasoning the Soviets will be less willing to risk engendering a crisis, i.e., will be additionally deterred from sending their conventional forces forward to seize territory in Western Europe. By this argument, we are willing to trade off some assurance against a World War III as part of guarding against something that more resembled World War II.

It will be contended here that we need neither of these digressions to support the nuclear umbrella that extends deterrence to shield our allies. The credibility of U.S. nuclear escalation threats remains strong after almost three decades of publicly expressed doubts about such credibility, but this does not stem from the comparative numbers of forces in the two superpower nuclear arsenals, and it also does not have to stem from any lack of crisis stability. Rather, we are dealing here with a simple existential likelihood of nuclear escalation as long as nuclear weapons are deployed (as they have been deployed for these three decades) in the path of any plausible Soviet advance. Gorbachev cannot order his tanks forward, even if the U.S. has lost its superiority in strategic nuclear weapons (and even if no rational American president would order an escalation as long as the Soviets had not yet used any nuclear weapons on their side), simply because of his residual uncertainties about whether or not the forward-deployed U.S. nuclear forces would come into use "in the heat of battle." If such nuclear escalation occurs, it is indeed likely to mean the destruction of all U.S. cities and all Soviet cities, and hence a Soviet leader is unlikely to launch any conventional attacks in the first place.

We can thus maintain a fair degree of deterrence stability (of extended nuclear deterrence), while pursuing a crisis stability in the confrontation of the two superpower nuclear forces and at the same time largely tuning out on the exact numerical comparison between the forces.

Our reliance on the forward deployment of U.S. theater nuclear weapons (and the forward deployment of a large force of American soldiers), for coupling U.S. nuclear responses to any Soviet invasion of Western Europe, obviously amounts to a trade-off between the safety of the U.S. and the security of our allies on the European continent. Decoupling the American commitment, by removing American troops and American nuclear weapons, would reduce the damage to the United States if a European war were to occur and would reduce the risk of escalation to all-out nuclear war; but it might in the process make it safer for the Soviets to contemplate such an aggression (i.e., might "make Europe safe for a conventional war"). Is there any difference, therefore, between this trade-off and the one we rejected just above, whereby we would leave a substantial amount of crisis instability in place because this contributed also to deterring Soviet conventional aggressions?

One clear difference would be specified: coupling the risk of nuclear escalation by means of forward deployments is relatively situation-specific or threat-specific, i.e., the risk of escalation is very much coupled to a Soviet invasion crossing the very territories into which such theater nuclear weapons have been deployed. Tactical nuclear weapons deployed in West Germany thus work to deter attacks in Germany and play no such role for another country. Similar weapons deployed to another country work to deter invasion but play no such role with regard to Germany.

By contrast, an enhancement of deterrence by a degradation of crisis stability, by a toleration of the kinds of strategic nuclear weapons that enhanced the option of striking first—would run the risk of provoking all-out wars in any and all the crises between the superpowers, crises in Germany or Korea, or in Chad or Angola or Grenada, as we made any perception of an increased likelihood of war more prone to be self-confirming.

The U.S. does not need any global degradations of crisis stability to protect its most valuable allies by extended nuclear deterrence. Instead, it still needs enhancements of such stability to more generally avoid "wars nobody wanted."

CONVENTIONAL CRISIS STABILITY

If we favor crisis stability in the confrontation of nuclear forces (having to balance this against the extended deterrence of deterrence stability and our desire to hold down the economic costs of military preparedness in arms race stability), we might easily conclude that we also ought to favor such a crisis stability for the confrontation of conventional forces. Here, just as in the missile vs. missile standoffs, we would like to see a situation where neither side was tempted to strike first during any temporary ennancement of the perceived possibility of war.

Indeed, if the defenses at the conventional level were only strong enough, there might be no need to rely on the threats of nuclear escalation for extended nuclear deterrence. Advocates of a lesser reliance on such nuclear escalatory threats for the protection of Western Europe have in recent years proposed the development of a theory of "defensive defense," the development of conventional weapons for NATO which could blunt a Warsaw Pact tank attack, without leading Moscow to fear in reverse that its position in Eastern Europe could be attacked by the conventional forces of NATO. If we reinforced the counterforce defenses of NATO's antitank weaponry, and otherwise made it less attractive for Moscow to send its armored columns forward, the result would be to reduce the likelihood of war, the costs if war happened, and the tensions affecting the two sides in peacetime.

But here we may have an even greater problem with the more primary worry about any weapons system: can it work in the first place?¹⁷ Can we ever generate a conventional defensive barrier that will surely shield Western Europe against a Warsaw Pact armored attack? Could the counter to Soviet-bloc tanks be anything besides NATO tanks, i.e., could we have a defense that did not have to worry and panic Moscow about Western intentions? And if a nonprovocative defense were ever to be put into place—a system which promised to stop a Soviet tank attack in its tracks—would it not lose its punch again within half a decade as new technologies were introduced on the other side to undo the impact of our latest technologies?¹⁸

Everyone watches the periodic outbursts of warfare in the Middle East to see how various new antitank and antiaircraft systems will work in actual combat. Typically, about half of such systems work magnificently, and the other half fail to work. The systems that worked in 1967 failed in 1973, and those that worked in 1973 failed in 1982. Conventional warfare has now become dependent on the very latest in high

technology, and this technology is marching along at an extremely rapid pace, so nothing about conventional war (i.e., who will win or whether the offense or the defense is to be favored) is very predictable anymore.¹⁹

As the democracies search for something relatively more safe and reliable as an insurance against aggressions from the Soviet bloc, the mechanisms of nuclear escalatory threats and extended nuclear deterrence may continue to offer substantial advantages over any prospects of conventional deterrence.

This imposes at least two conclusions on those of us who are concerned with defense in either of its senses. First, any reliable defense of the Soviet and American home areas against countervalue attacks will be less than fully welcomed in the threatened countries of the NATO area because this might cancel out the escalatory retaliatory threat upon which the security of these areas has been based for three decades or more. Second, while we will continue to seek after any form of conventional defense that would actually reduce or eliminate Moscow's temptations toward aggressive military actions, we cannot bet on any success in this area as our main solution given the political problems posed by the distrust and disagreement between the East and the West.

The unpredictability of conventional force confrontations cuts in two directions, of course. It may be inherently difficult or impossible for the NATO countries ever to be sure that they could hold back an armored attack coming from the center of Eurasia (Mackinder's geopolitical formulations still carry some weight²⁰) because it is still easier to move armies over land than by sea or air. Yet, because of all the uncertainties of the new emerging technologies being applied to conventional war, and also because of the inherent uncertainties about the loyalties of the East European peoples and their armies²¹ (even the loyalties of the non-Russian peoples within the Soviet Union), Moscow may also never feel sure of holding back any conventional invasion of its domains coming from the NATO area.

Are the United States and NATO so clearly committed to the defensive therefore? We are fond of saying that we are status quo in our political orientation in the democracies, and not aggressive, that we are always in favor of peace, and that the source of all military worries and tensions comes from the anti-status quo ambitions of the Soviet Union. (The Soviets, of course, paint exactly the opposite picture of who is aggressive and who is content with peaceful coexistence.) What if something like Solidarity emerges in East Germany, and what if the East German army decides to side with the workers rather than with the Communist Party and the Russians? What if other countries in East Europe boil over in a frustration with the political and economic burdens imposed by Marxist rule? Would not the West German Bundeswehr be very much inclined to intervene to help its ethnic brothers in the first case, in a manner which would have to be rated as "offensive" rather than "defensive" in any strictly military analysis? In the event of wider unrest across Eastern Europe, would not any American and Western assistance to the rebels similarly amount to an offensive (limited, of course, to conventional weapons since the introduction of anything nuclear would spoil the prize either side was striving for)? This may be what has sometimes been labelled "horizontal escalation" in the Reagan administration, although this is a phrase that can have many meanings.

If any such prospects of a successful move eastward limited to the use of conventional weaponry were to loom larger, it is not unthinkable that the Soviets might then take a turn at stressing nuclear escalation as their assurance against changes in the status quo, with the West dropping its own commitment to plans for such escalation.

As noted, various West European analysts have been pressing for an emphasis on defensive technology in conventional weapons preparations—an emphasis which might render the Bundeswehr able to repulse an invasion by Warsaw Pact ground forces, but leave it unable to intervene in East Germany and further east; and which, vice versa, would leave the Warsaw Pact able to defend its domains, but not able to threaten Brussels and Frankfurt. This would amount to a multisided stress on antitank weapons instead of the tank,

on fixed fortifications instead of mobility, etc. But, just as with the uncertain calculations of who would win, we are probably doomed to continual uncertainty on whether the defense would really predominate.

If we care predominantly about preventing war, we will generally welcome the battlefield defense. Exceptions can be noted, as discussed throughout this paper, as the strength of the defensive on just one sector might free an army to take the offensive on another. And the defense of population is, of course, an entirely different matter.

PROBLEMS IN THE POLICY PROCESS

In the past several years, some interesting retrospective scholarship has been directed toward the outbreak of World War I, noting how the major powers all assumed the military situation to be tilted totally toward the offensive with such assumptions very plausibly accounting for the actual outbreak of that war.

An important subquestion has emerged on whether these assumptions of an offensive preponderance were simply the logical response to what the technology and situation seemed to be offering, or whether there was instead some kind of blindness or cast of mind (among military officers in particular or perhaps among statesmen more generally) biasing all of the significant national decision makers in 1914 to see an offensive advantage, whether or not it was there.²²

Some aspects of the offensive may indeed be too attractive to the professional military officer, as the inclination towards the offensive has more get up and go and more of an implication of courage, while an inclination toward the defensive conversely denotes complacency and lack of initiative. To be accused of a "Maginot mentality" has been very troublesome through all the years since World War II and amounts to a barrier for any colonel seeking to become a general.

Yet, the more important point is that the military technology and the objective situation may sometimes, in truth, lean a situation toward the offensive in ways that would not require or reflect any psychological biases among the military professionals. If the German 1914 confidence in the Schlieffen Plan was exaggerated, especially in overstating the logistics support that could be maintained for any rapid advance across Belgium, ²³ can we be as critical of the Germans for being afraid of offensive French or Russian possibilities in a drive into Germany? And if the French were foolish to have so much confidence in their Plan 17, can we be as critical of their fears of what the Germans might do in any attack?²⁴

As demonstrated by French military planning between World Wars I and II, it is possible for the professionals to become locked into defensive thinking, just as it is possible to settle into a confidence in (and fear of) the offensive. Military organizations, like any organizations, tend to become somewhat wedded to what their own consensus has been over some time. It is very unusual for an organization, or for any human being, to be able to adjust rapidly to new evidence if that evidence is diametrically opposite conclusions demonstrated by the last rounds of evidence.

If there is a slight bias toward an enshrinement of the offensive among military planners, there is a broader bias simply toward sticking with "common sense." It may be true that "where you stand depends on where you sit" among military bureaucrats (indeed, among all bureaucrats), but it is also true that "where you sit depends on where you have been standing lately."

We are always well advised to guard against the parochial biases of any bureaucracy. If it was folly for the military planners of 1914 to count on the offensive, this was a folly that indeed caused a war. Yet, it is hardly the case that military offensives never work out as planned or one is always better off waiting for the other side to attack.

The highest goal of the weapons planner—a very difficult goal rather than an easy one—should be to design weapons systems that consistently and reliably indeed reward the defense; i.e., make it to everyone's

advantage to do nothing in a crisis. A Nobel Peace Prize should have been awarded to the engineers who perfected the Polaris submarine-launched ballistic missile system, for this has been, in fact, a kind of military equipment that substantially reduced the risks of war and associated political tensions in the 1960s and 1970s.²⁵

The perfect antitank weapon would also merit such a prize. But the antitank weapon is never likely to be as sure a thing as the invisibility of the submarine in the oceans. If NATO and Warsaw Pact military planners continue to have dreams (nightmares) of an offensive pitch to combat, this does not show them to be foolishly following some career pattern dictated by the French and German planners of 1914.

CONTINUING MORAL TRADITIONS

Our civilian notions of normalcy and morality do not always help here either. We generally applaud the battlefield defense. But we also applaud any defenses of population and denounce any threats against civilian populations, and this (certainly with the advent of nuclear weapons, and even before) cuts against the grain of a stress on battlefield defense. A somewhat different reason why military officers have been reluctant to commit themselves to the defense in the military sphere is because this no longer guarantees the shielding of one's civilian population. To really protect one's cities today, one must explore the possibilities of the counterforce offensive (i.e., one must find ways of destroying the other side's military forces), and thus of finally making the world safe.

Some of us might be content with a stable defensive balance between two nuclear forces, as each threatens the other side's population targets thereafter with mutual assured destruction; but this brings a torrent of moral and philosophic criticism down upon anyone so inclined, as it is still against all the laws of war and traditions of the West to aim so deliberately at the other side's women and children. One feels far better, and less in fear of confronting chaplains or war crimes tribunals, if one is aiming at military targets; but in the nuclear sphere, this may then entail exploring and rooting for the offensive rather than the military defensive.

Clausewitz²⁶ and Mahan²⁷ and others argued in an earlier day that the highest calling of the military professional was to eliminate his opposite number, for this would then render some real accomplishment in return for all the human sacrifices of warfare. They portrayed the military defensive as something that always had to be taken into account, but also as something that had to be regretted; the offensive was something to be pursued for all of its possibilities. In a nuclear age, the goals of striking the sword from the enemy's hand would be all the more of an accomplishment; if the other side is hankering after such an accomplishment, crisis stability is doubly threatened.

WHERE WE ARE HEADED

There are at least three important offensive-defensive distinctions now at play as we try to guess whether we will have war or peace through the rest of this century. There is the classic counterforce calculation for ordinary conventional warfare (perhaps all warfare below the nuclear level), on whether we are better off attacking or better off being attacked. There is the same basic crisis stability question with regard to the nuclear forces facing each other, whether a first strike would pay off or whether more missiles and warheads would be expended by the attacker than had been preemptively destroyed on the other side. And there is now also the paramount *countervalue* issue of offense or defense, whether cities and people will remain exposed to destruction whenever an enemy wishes to impose such destruction or whether such people can indeed now be shielded by something like SDI, or any other means.

Answering offense or defense to each of these three questions would generate a total of eight kinds of political situations, as follows:

	"defense" possible of value targets?	"defense" stronger in nuclear counterforce confrontation?	"defense" stronger in conventional counterforce confrontation?
A	yes	yes	yes
В	yes	no	no
C	no	no	no
D	no	yes	yes
E	yes	yes	no
F	no	yes	no
G	yes	no	yes
Н	no	no	yes

Many of us would regard situation A as our easy favorite, where people would be protected against attack, where no one could try to win a war by being the first to attack opposing nuclear forces, and where the same temptations of victory would be absent with regard to offensives of conventional forces. The only real problem is in the attainability of the technology that would deliver such an across-the-board advantage to the defense. Can we ever be sure that one side will not find a way to destroy the other side's nuclear force in some kind of "splendid first strike"? Can we even be sure for more than half a decade that the conventional military confrontation favors the defender rather than the attacker?²⁸ The conventional battles of the future will depend on very high technology, a technology which changes very rapidly and is very difficult to predict. And who would want to predict for certain that something like SDI could really keep cities from being destroyed in any future war that saw deliberate efforts to inflict massive retaliation?

This across-the-board superiority of the defense accords with our intuitions on what we ought to be striving for and on what, by the traditions of Western philosophy and civilization, is good or bad in military preparations. Unfortunately, such an across-the-board analytical approach risks a blurring of the differences in our categories of offense and defense, differences which may be very important when all the varying kinds of defense cannot be attained simultaneously.

Situation B is not nearly so easy to judge. Here, the cities of the world would be safe against nuclear destruction, but the temptations of the offensive would loom large between the conventional forces and also between the nuclear forces. The risks of either conventional or nuclear war would look much greater, in important part because the "assured" had been taken out of mutual assured destruction, and it is not at all clear that we would regard this as a state of affairs preferable to what we have now.

The contrast between situation B and the next case is very important and instructive for all of what has amounted to deterrence and a reinsurance for peace in the years since 1945.

Situation C may have applied at times over the years since 1945; a case where the offensive might have been tempting between conventional ground forces as in Europe, and even also between the strategic nuclear forces, but where the cities of both sides were assuredly wide open to destructive retaliation. Peace may thus have persisted, where wars would otherwise have occurred in an earlier day, simply because of the deterrence imposed by the damage that the battlefield loser could always impose on the winner.²⁹

Situation D is entirely hypothetical, but it brings to the surface some of the strong moral feelings of those who favor SDI or who otherwise want to free the world of the countervalue nuclear threat now so continuously directed at population centers. Imagine a case where there were no battlefield temptations to take the offensive, either at the conventional or nuclear level—would it not then be tragic to have left the cities of the world so exposed to easy destruction, whenever there is an instance of a case of madness or insubordination?

In situations E, F, G, and H, we see some important further variations on these counterforce themes, bracketed by whether or not there is a barrier to the countervalue offense. Consider cases E and F, where neither side sees any chance for a successful "splendid first strike" at the strategic nuclear level (i.e., where we have crisis stability at this level), but where there is no such defensive inclination (no crisis stability) at the conventional force level. Many of us have been seeing this as the situation for decade after decade in the NATO confrontation with the Warsaw Pact and in the confrontations of Moscow's and Washington's rapid deployment forces around the globe.

If we added the protection of populations envisaged in situation E, would this be preferable in terms of the likelihood of war, and of all we care about, to the situation F where SDI had not been successful or had not been attempted; where populations continued to be vulnerable to an adversary's decision to launch an offensive of mass homicide? If there is no nuclear threat to populations, there is, in effect, no nuclear umbrella that can be extended to guard other populations against conventional attack. What has kept West Germans from encountering Soviet tanks has, in part, been the potential that Soviets (and Americans) would encounter missile warheads if such tanks ever rolled forward. There have always been limits to how far nuclear umbrellas could credibly be extended, and how many conventional attacks and wars nuclear threats could deter. Yet, some of such a mechanism does seem to have been real.

Finally, as we examine situations G and H, we encounter cases where the confrontation of conventional forces does not favor the initiative, but where either side or both might see such offensive temptations at the nuclear level (i.e., where crisis stability is basically lacking at this highest and most destructive level of weaponry). One side's "window of vulnerability" might become the other's "window of opportunity," but both sides might be sitting in dread of the adversary's initiative and rush to preempt if they sensed a strategic nuclear attack was coming.

As has been theorized so many times since 1945, these are would-be situations where peace might depend on the vulnerability of populations (case H), and where war initiation might otherwise be very tempting (case G). The counterforce situation would not be quite as unstable as in situations B and C above, where the offensive was favored at both the nuclear and the conventional level, but it would still be far less stable than we want.

How much have we seen of such various situations in the past? Situation A is what we might have had in the days before nuclear weapons and airplanes, when we had two wide oceans to protect us. Here, there would have been no lack of crisis stability at any level of military forces, and the cities of the United States would also have been secure against any kind of devastation imposed by a foreign military force.

This is how we tend to remember the nineteenth century and portions of the early twentieth century. Yet there were periods in these earlier years when we feared intrusions by British agents and forces from Canada or Florida, colluding with Indians in the Northwest Territory or in the Mississippi Valley, and when the British, in turn, had to worry about invasions of Canada from the United States. There were also years in which the British Navy was capable of imposing substantial collateral damage on U.S. coastal cities, and perhaps, therefore, we were sometimes in situation F above.

Some of us would think that we were in situation A for the years immediately after World War II, when we alone had nuclear weapons; but they would have to remember the advantage we were continually

imputing to Stalin's Russia in conventional ground forces, and its geopolitical position threatening Western Europe, so that we were more probably in situation F^{30} .

For an example of case C (where the strategic forces look like either might be able to defeat the other in a preemptive counterforce attack, hence with a very low crisis stability, moderated only by the fact that cities would still be vulnerable to the "last gasp" retaliatory countervalue attack of the loser in this exchange), we could turn to the period in the 1950s and early 1960s, when bomber forces confronted each other, supplemented by the first generation of very vulnerable land-based intercontinental missiles.

As nuclear-warhead retaliatory missiles were deployed into the seas and also deployed into underground concrete silos, which (for a decade at least) looked to be secure against any adversary's counterforce attack, the confrontation of strategic nuclear forces moved decidedly in a defensive direction. The result by the middle of the 1960s was a version of what we have diagrammed above as situation F, where cities are vulnerable but the forces that threaten them are not vulnerable, and the incentive to do something hurried or rash in a crisis is thus very much reduced.

Our favorite situation, of course, would be to have the same kind of crisis stability developed for confrontations of conventional forces, perhaps because antitank weapons once and for all make the tank obsolete, or because other kinds of technology favor whoever has sat still over whoever took the initiative. As noted, the attainment of such an advantage for the defensive looks to be always less assured for the conventional confrontation than for the strategic nuclear. If we could attain both simultaneously, we would have situation D above; and then we could, without fear of making war more likely in the process of making it less horrible, move forward to try to restore defenses for population as well through SDI or any other approaches, perhaps grasping for situation A—still our favorite whenever our intuitions are what guides us.

Can we hope that a resurgence of a technological tilt toward the defensive in conventional nonnuclear warfare would at last ease our concerns about crisis stability for all areas? We have entertained hopes that new antitank weapons will work in this direction, eliminating what is preeminently a vehicle of the offensive (almost anything with wheels on it. especially tracked wheels, is threatening to stability in the battlefield counterforce sense) but one then sees new kinds of armor being developed for such tanks and new counters to the electronics and technology of antitank guided munitions.

Of the three background variables in our sorting of whether peace can be maintained and whether stampedes into war during a crisis can be avoided (i.e., of whether crisis stability and deterrence stability can be maintained), the hardest to predict, and perhaps, therefore, the most dangerous to rely upon, might be whether the conventional battlefield will tilt toward the defense or the offense.

If a conventional war were to erupt today in Central Europe, the outcome would hardly seem so easy to predict, either on who would win or on whether the attacker or the defenders would be favored. The unpredictability of the seesaw warfare between Iraq and Iran illustrates a generic difficulty of analysis here. One would have to assign a certain risk to the possibility that Warsaw Pact forces would quickly slice through to the Rhine River. One would also have to imagine a possibility by which NATO forces, instead, were suddenly across East Germany moving into Poland. A large fraction of the possibilities might also be assigned to a stalemate, settling in immediately after fighting had begun. Given that the best weapons of NATO and the Warsaw Pact have not been tested against each other in combat, and given the uncertain political inclinations of the East European states and their armies, almost everything seems possible.

By comparison, the easiest to predict will be whether cities remain vulnerable to countervalue offensive capabilities, i.e., whether a reliable and significant defense can be erected to shield the populations of the world against the worst that Soviet or American or other nuclear forces could inflict on them in terms of mass murder.

Somewhere in between these two issues of offense vs. defense, in terms of predictability, we probably would find the counterforce option at the strategic nuclear level. By and large, the defense is likely to be preponderant here in that too many things can go wrong with a missile salvo aimed to direct thousands of warheads precisely against the underground silos of the other side and the land-based mobile missile forces being deployed on both sides; and very much can go wrong in any antisubmarine warfare attempt to locate and destroy the adversary's missile-carrying submarines at sea.

REFERENCES

- 1. On the definition and inner workings of a crisis see Richard Ned Lebow, Between Peace and War (Baltimore: Johns Hopkins Press, 1981).
- 2. The original specification of these categories can be found in Thomas Schelling and Morton Halperin, *Strategy and Arms Control* (New York: Twentieth Century Fund, 1961).
- 3. The problems for stability caused by MIRVs are outlined in Herbert Scoville, MX: Prescription for Disaster (Cambridge: MIT Press, 1987).
- 4. An earlier version of this analysis of alternative states of strategic confrontation can be found in George H. Quester, "Cultural Barriers to an Acceptance of Deterrence," in Roman Kolkowicz (ed.), *The Logic of Nuclear Terror* (Boston: Allen and Unwin, 1987), pp. 82–108.
- 5. On the inevitable collateral damage to civilians in even the cleanest nuclear exchange, see Sidney Drell and Frank Von Hippel, "Limited Nuclear War," *Scientific American* Vol. 235. No. 5 (November 1976), pp. 22, 27–37.
- 6. Carl Sagan, "Nuclear War and Climatic Catastrophe," Foreign Affairs Vol. 62, No. 2 (Winter 1983–1984), pp. 257–292.
- 7. The inconsistencies and varieties of explanation on SDI are outlined in Rip Bulkeley and Graham Spinhardi, *Space Weapons: Deterrence of Delusion?* (Totawa, New Jersey: Barnes and Noble, 1986), pp. 235–237.
- 8. For President Reagan's speech initiating the idea of SDI, see *The New York Times* (March 24, 1983), p. 20.
- 9. George A. Keyworth, "A Rational Look at SDI," Government Executive Vol. 16, No. 6 (June 1984), pp. 32-37.
- 10. Colin S. Gray, "Moscow is Cheating," Foreign Policy No. 56 (Fall 1984), pp. 141-152, offers an analysis stressing the importance of Soviet violations of the arms restraint commitments they have agreed to.
- 11. On the general issues concerning cruise missiles, see Richard K. Betts (ed.), Cruise Missiles: Technology Strategy and Politics (Washington: Brookings Institution, 1981).

- 12. Quoted in McGeorge Bundy, "Risk and Opportunity: Can We Tell Them Apart?," in Catherine M. Kelleher, et al. (eds.), Nuclear Deterrence: New Risks, New Opportunities (New York: Pergamon-Brassey's, 1986), p. 30.
- 13. On the importance and complexity of the issues of extended nuclear deterrence, see Glenn Snyder, Deterrence and Defense (Princeton, N.J.: Princeton University Press, 1961), especially pp. 120-224.
- 14. The argument for a linkage to the comparative totals of strategic nuclear forces is made in Henry A. Kissinger, "The Future of NATO," *The Washington Quarterly* Vol. 2, No. 4 (Autumn 1979), pp. 3–17.
- 15. The possible linkage between strategic instability and the deterrence of local conventional wars was noted already in Schelling and Halperin, Strategy and Arms Control, p. 31.
- 16. For some examples of this kind of analysis of a "defensive defense," see Horst H. Afheldt, Verteidigung und Frieden-Politik mit Militarichen Mitteln (Munich: Hanser, 1976); Horst H. Afheldt, Defensive Verteidigung (Reinbek bei Hamburg: Rowohlt, 1983); The Labour Party, Defense and Security for Britain (Manchester: The Labour Party, 1984); and G. Brossollet and E. Spannocchi, Verteidigung ohne Schlacht (Munchen: Hanser, 1976).
- 17. On the possibilities of a defensive cast to weapons for NATO, see additionally Steven L. Canby, "Territorial Defense in Central Europe," *Armed Forces and Society* Vol. 7, No. 1 (Fall 1980), pp. 51–67; and Robert Kennedy, "Precision ATGMS and NATO Defense," *Orbis* Vol. 22, No. 4 (Winter 1979), pp. 897–927.
- 18. The possibilities and risks of a conventional defense of Western Europe are discussed in John Mearsheimer, Conventional Deterrence (Ithaca: Cornell University Press, 1983), pp. 165-188.
- 19. The impact of conventional weapons developments for the situation in Europe is discussed in William P. Mako, U.S. Ground Forces and the Defense of Central Europe (Washington: Brookings Institution, 1983).
- 20. Halford J. Mackinder, Democratic Ideals and Reality (New York: W. W. Norton, 1962).
- 21. The loyalty of East European armed forces is discussed in A. Ross Johnson, Robert W. Dean, and Alexander Alexiev, East European Military Establishments: The Norther Tier (Santa Monica, California: The RAND Corporation, 1980).
- 22. For an argument that 1914 does not illustrate such clear biases or blindnesses, see Scott D. Sagan, "1914 Revisited: Allies, Offense, and Instability," *International Security* Vol. 11, No. 2 (Fall 1986), pp. 151-176.
- 23. See Martin Van Creveld, Supplying War (New York: Cambridge University Press, 1977), Chap. 4.
- 24. On the general war plans in 1914, see Michael Howard, "Men Against Fire: Expectations of War in 1914," *International Security* Vol. 9, No. 1 (Summer 1984), pp. 41–57.

- 25. For a prescient analysis of the stabilizing advantages of SLBMs, see Oscar Morgenstern, *The Question of National Defense* (New York: Random House, 1959).
- 26. Carl von Clausewitz, On War, edited and translated by Michael Howard and Peter Paret (Princeton, N.J.: Princeton University Press, 1976), p. 77.
- 27. Alfred Thayer Mahan, *The Influence of Seapower on History* (New York: Hill and Wang reprint, 1957; originally published 1890), p. 27.
- 28. For a statement of worry and doubts about the possibilities of conventional deterrence in face of the inherent opportunities for surprise on the offensive, see Richard K. Betts, *Surprise Attack* (Washington: Brookings Institution, 1982).
- 29. What is probably our typical strategic situation here is outlined in A. W. DePorte, Europe Between the Superpowers: The Enduring Balance (New Haven: Yale University Press, 1979).
- 30. See Samuel P. Huntington, *The Common Defense* (New York: Columbia University Press, 1961), pp. 35-36.

STRATEGIC DEFENSES AND THE PROBLEM OF WAR

by

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The overriding problem in a nuclear world is how to perpetuate peace without solving the problem of war. We have not solved the problem of war. Nations, including nuclear nations, continue to compete militarily. However low the probability of major war is at the center of international politics, we cannot say that war has become impossible. Yet, since 1945, we have enjoyed the longest peace in all of modern history, if peace is defined as the absence of war between the great powers and of general war among the major ones. Before 1945, if someone asked who has fought most of the wars, you did not have to look it up. The answer was easy to give: great powers. Great powers did most of the fighting and suffered most of the destruction of war. The years from 1945 onward represent a striking reversal of that long-standing pattern. War has become the privilege of poor and weak states. The presence of nuclear weapons has proved to be the most effective barrier to war the world has yet seen.

Yet in recent decades, and especially in the last one, nuclear weapons have been given a bad name. Demeaning words have come not just from the left, as one might have expected, but from the center and right as well. Strategists of all hues have doubted the reliability of nuclear deterrence, and many have suggested that the West would do well to base its security more on conventional weapons and less on nuclear ones. The Reagan Administration contributed greatly to the denigration of nuclear weapons by first fueling popular antinuclear sentiment with reckless statements about "prevailing" in protracted nuclear wars and then by offering the vision of a world in which defensive systems would render nuclear weapons obsolete.

The condemnation of nuclear weapons and the search for alternative means to security stem in large measure from the failure to understand the nature and requirements of a deterrent strategy. Not unexpectedly, the language of strategic discourse in the United States has deteriorated over the decades. This happens whenever discussions enter the political arena, where words come to take the meanings and colorations that reflect the policy preferences of the speakers. In the old days, deterrence meant deterrence in its dictionary definition. To deter is to dissuade someone from doing something by frightening him with the consequences that his actions may produce. A deterrent strategy is distinct from a defensive one. At the extreme, a deterrent strategy would be backed by weapons that by their design and deployment convey this message: "You can come and get us. We have no defenses. Our borders are open. But if you do, the consequences we will visit on you may be unbearable." In contrast, a policy of pure defense is intended to convey this message: "If you try to invade us, you will dash yourselves to pieces in the process." A purely defensive strategy would have no deterrent implications; it would contain no threat of punishing the aggressor by destroying portions of his country. Obviously, deterrence and defense are distinct concepts, and it is an elementary principle of logic that a concept must keep the same meaning throughout a given discourse. Otherwise, the speakers and their audience cannot know just what is being talked about. That

may have political advantages, but it contributes neither to clear thinking nor to sound policy. For example, former Secretary of the Navy John Lehman once argued before a congressional committee that another large-deck aircraft carrier was needed in order to strengthen deterrence. That statement implies two things: that deterrence is weak and that another aircraft carrier would strengthen it. Both implications are false.

Deterrence is easier to achieve than many would have us believe. One popular argument has it that nuclear deterrence is unreliable because deterrent threats lack credibility. Such worries reflect a failure to appreciate how political leaders behave. Leaders of countries do not run catastrophic risks for problematic gains. Among nuclear powers, a would-be attacker is deterred even if he believes only that the country attacked may retaliate. Uncertainty—not certainty—of response, is required because, if retaliation occurs, one risks losing all. Further, deterrence easily extends to cover interests abroad so long as they are manifestly vital. For either the Soviet Union or the United States to try to win, where winning would bring the central balance into question, threatens escalation and becomes too risky to contemplate. Nuclear stalemate limits the use of even conventional force by reducing the extent of the gains one can seek without risking devastation.

Yet, it is said, deterrent strategies amount to a mutual suicide pact. If the Soviet Union attacks vital American interests, we promise to do horrendous damage to them at the risk of suffering horrendous damage in return. This notion of what deterrence entails is as odd as it is commonplace. In January 1954, Dulles gave his first New Look speech. He gave the impression that by threatening massive destruction we could use nuclear weapons to deter others from almost any action we disapproved of. In the March 1954 issue of Foreign Affairs, he sensibly amended the thought by introducing a rule of proportionality. We do not need to do horrendous damage to the Soviet Union, or threaten to do so, in order to deter her. The deterrent threat is to do as much or a little more damage than the amount of damage that may be inflicted on us or our friends. Why would we want to do more, and why would the Soviet Union want to do more in return? It is preposterous to think that if the Soviet Union should ever send troops into Western Germany in force, we would suddenly strike back at thousands of military targets or hundreds of cities. Doing so would serve no purpose. Countries are deterred if they think they are going to lose, say, three cities or four. That would be plenty. Who would want to put New York, Chicago, and Detroit at risk? What Russian leader would want to put Moscow, Leningrad, and Kharkov at risk? Deterrence does not rest on mutual threats of suicide. This thought gets us back to another lost truth of the nuclear business. Deterrence depends on what you can do, not on what you will do. What deters is the fact that we can do as much damage to them as we choose and vice versa. The country suffering the retaliatory attack cannot limit the damage done. Only the retaliator can do that. Damage limitation depends on the observing of limits, which is strongly in the interest of both countries.

The preceding point raises the question of the effectiveness of defenses against nuclear weapons. As we know, nuclear warheads are small and light. They are easy to move, easy to hide, and easy to deliver in a variety of ways. An unimaginably perfect strategic defense can neither negate nuclear weapons nor make them obsolete. A successful Strategic Defense Initiative (SDI) would put a premium on the other side's ability to deliver nuclear weapons in different ways: firing missiles on depressed trajectories, carrying bombs in suitcases, placing nuclear warheads on freighters to be anchored in American harbors. Indeed, someone has recently suggested that the Soviet Union can always hide warheads in bales of marijuana, knowing we cannot keep these from crossing our borders. To have even modestly effective defenses, we would, among other things, have to become a police state. We would have to go to extraordinary lengths to police our borders and exercise control within them. Presumably, the Soviet Union does these things better than we do.

In no way can we prevent the Soviet Union from exploding nuclear warheads on or in the United States if it is determined to do so. Still, many have argued that, even if some cities are not covered, defenses

are very good for the cities they do cover. Charles Glaser has made the more general claim that ballistic missile defenses would increase the probability of nuclear war while lessening the damage of war should it occur. Both claims are spurious. The Soviet Union's defenses around Moscow have prompted us to multiply the number of missiles we aim at that city. We expect to overcome their defenses and still deliver the "required" number of warheads. The result of defending cities may be that more warheads strike them, especially since we and they, working on worst-case assumptions, are likely to overestimate the number of missiles the other country's system will be able to destroy. In December 1966, Robert McNamara argued that the appropriate response to a Soviet defensive deployment is to expand our deterrent force. More recently, both Caspar Weinberger and Mikhail Gorbachev have made similar statements.

In war, strategic defenses may increase the damage done. Meanwhile, they will certainly reduce both arms-race and crisis stability. A dominantly two-party competition encourages the competitors to imitate each other. If one deploys a defensive system the other, at least in the long run, is likely to follow. A system cannot simply be deployed and left alone; constant improvements will be needed to maintain effectiveness in the face of the adversary's efforts to overcome it. Both countries will worry, no doubt excessively, about the balance of offensive and defensive capabilities, a situation that on occasion proved dangerously destabilizing in the prenuclear world. Each will worry that the other may score an offensive or defensive breakthrough. If one side does so, it may be tempted to strike in order to exploit its presumably temporary advantage. The dreaded specter of the hair trigger will again appear.

Most knowledgeable people apparently believe that an almost leakproof defense cannot be built. Many, however, apparently believe that if improved hard-point defenses result from the SDI program, they will have justified its price. Defense of missiles and of command, control, and communications installations will strengthen deterrence. That would be a solution all right, but we do not have a problem to go with it. Deterrence is vibrantly healthy. If the Soviet Union believes that even one Trident submarine would survive a first strike, surely it would be deterred. The horror and fear of nuclear weapons are so great (in other words, deterrence works so well) that when we and they even begin to get into a situation that might develop into a crisis, caution prevails. The problem becomes to find ways to pull back, not occasions for striking first.

Since we do not need hard-point defenses, we should not buy them. The deployment of such defenses by one side would be seen by the other as the preliminary stage of an area defense system. Strategic considerations should dominate technical ones. In a nuclear world, defensive systems are predictably destabilizing. It would be folly to move from a condition of stable deterrence to one of unstable defense.

STRATEGIC DEFENSES, MILITARY POSTURE, AND STABLE DETERRENCE

by

Fred S. Hoffman

From day to day, national security policy must deal with the problems of managing relations with allies and adversaries. It must also deal with the choices that affect our military posture in the longer run and the implications of those choices for our policies on using that posture if we have to. Each is important and all are closely interwoven. To develop useful policies, we must both clearly distinguish and strive for consistency among them.

I concentrate here on issues concerning our military posture—in particular, those issues about the role that active defenses might play in achieving stable deterrence of Soviet aggression.

I begin by questioning the meaning of assertions that deterrence is currently very stable. This does not mean that I believe the Politburo has a daily, weekly, or monthly review session that asks. "Are we deterred today?" or "Should we attack, and if so, when?" Neither have I been a devotee of windows, either of opportunity or vulnerability. But in questioning the stability of deterrence, it is my intention to explore the operational implications of beliefs about the strength of deterrence. In particular, I want to explore the relation between our beliefs about the current state of deterrence and the longer term development of our military posture. The question is important because currently we do face far reaching choices among significantly different paths for our defense posture.

Some hold that we are in a state of "existential deterrence" (I think McGeorge Bundy may have originated the term); that the awful consequences of using the large superpower stocks of nuclear weapons ensure that neither superpower would ever deliberately use any, except in retaliation. In some versions, this is extended to the view that neither country would ever deliberately engage the other in any war. Such a belief has profound implications for policies on military posture.

The issue is illustrated by retrospective views about the Cuban Missile Crisis. For many involved in the event (including Mr. Bundy) it appears to have been a major divide in their thinking about national security strategy. Recent reminiscences on the occasion of its twenty-fifth anniversary have stressed that, in this "most dangerous nuclear crisis" we have experienced, the outcome was dominated by fear on the part of both leaders that they might lose control over the situation—in short, that existential deterrence was the dominant factor in resolving the situation. The implications of this view are rarely explored thoroughly or consistently. On the one hand it says, "don't get into that kind of crisis." On the other hand it says, "your military posture doesn't really matter much once you are in one; chance events are going to determine the outcome."

If you believe that about Cuba (where we had overwhelming superiority at the level of conventional military force and were close to the height of our operationally meaningful nuclear superiority), it suggests that we can afford to adopt military postures far outside the spectrum of those usually advanced in serious discussions of national security strategy. If the military balance doesn't really matter, there is little to keep

us from resolving our budget deficit by cuts in military spending far beyond those espoused by either of the major political parties.

I believe we cannot afford to rely on existential deterrence in dealing with crises involving the United States and the Soviet Union. In my view, any crisis involving these two countries is a nuclear crisis. What crisis that heightened the possibility of armed conflict between the United States and the Soviet Union wouldn't be? That the Cuban crisis was a nuclear crisis was made clear by President Kennedy in his first speech announcing the crisis. What does this mean for the future?

Despite our conventional inferiority and the erosion of the credibility of our nuclear threat against the Soviet Union as a response to a possible Soviet invasion of Europe, I agree with those who hold that our policy of deterring such an invasion has been, and remains, a resounding success. Nevertheless, we have to ensure that deterrence will remain successful in Europe and that we can preserve stability in other regions where there is a greater probability that U.S. and Soviet forces might collide. The Persian Gulf region is the one of greatest concern and is likely to remain so. Northeast Asia is another such region. At present, the spread of armed conflict originating in those regions is among the most plausible potential sources of war in Europe.

One should be wary about predicting how military engagements might turn out. However, our posture must at least convince the Soviet leaders that their use of military force in unstable regions will meet serious opposition. It must also convince them that, regardless of how such conflicts are going for them, they have nothing to gain by spreading them to other regions or making them more destructive.

We are not going to oppose Soviet military force with U.S. troops wherever they attack. We have not done so in Afghanistan. But wherever we need to deter Soviet use of military force by the threat of U.S. military response, we must convey a credible threat that we will respond. Credibility requires a posture that enables us to use military force in a way that makes sense in terms of a U.S. national purpose. That applies to the use of nuclear as well as nonnuclear weapons. The issue of nuclear deterrence is most likely to arise in the context of an ongoing nonnuclear conflict between the United States and the Soviet Union. In that regard, the threat of a Soviet attack out of the blue, simply to liquidate their "American problem," has long since receded into the background. We need constantly to make sure that it remains an unattractive proposition for Soviet leaders, but that's not our primary problem today. Our primary problem is to handle more plausible crises or conflicts in a way that protects rather than endangers our national interests.

The earlier discussion of crisis stability here has properly distinguished two senses of the term. It is most commonly used to signify the problem of deterring a preemptive attack against the opponent's nuclear forces to disarm him in a single blow—often called "first-strike" stability. Today's discussion has gone further and identified the need to be able to conduct effective military action at any level to assure crisis stability—that is to say, you can't leave any open doors if you want crisis stability. This distinction has important implications for assessing the respective roles of nuclear and nonnuclear forces and for the value of ballistic missile defenses in our posture. I will discuss several aspects of stability problems we face and try to show the role of ballistic missile defenses in each.

Let me begin with the future stability of the military balance in Europe. As I agreed earlier, war is relatively unlikely in Europe, and, if the Soviets were contemplating an attack on Western Europe, it is generally believed that they would prefer to accomplish their goals through the superiority of their conventional forces. To continue to deter the Soviets reliably, we must make them believe that under likely circumstances of outbreak of war, NATO's conventional forces could conduct a robust nonnuclear defense. However, continuing improvements in the accuracy of warheads and conventionally armed ballistic missiles, even under the intermediate-range nuclear forces (INF) Treaty, are giving them the potential to play a key role in a Soviet nonnuclear attack designed to preclude a robust NATO defense at the outset of a war by attacking a relatively small number of key facilities in NATO's rear area (airfields, key logistics

facilities, and command and control centers). This is an alarming prospect that would undercut stability unless remedied. In fixing it, a number of different measures are indicated, and ballistic missile defense is an important element of them. While the threat and the desired defense-systems characteristics are different from those likely to be optimal for a defense of U.S. territory, they would make use of similar technologies. The Strategic Defense Initiative (SDI) program can therefore contribute much to a defense against nonnuclear attack in Europe or other theaters of operations.

NATO's reliance on the threat of first use of nuclear weapons to redress its conventional inferiority is enshrined in its strategy of flexible response and is familiar to us. Soviet initiation of the use of nuclear weapons is less familiar but no less a possibility if a successful NATO nonnuclear defense were to stalemate a Soviet attack in Europe or make a quick victory uncertain. The Soviets might be tempted to use nuclear weapons despite their presumed preference for fighting, if at all, with nonnuclear weapons. If their choice were to use large numbers or none, the prospect of the loss of Europe as an economic prize and, even more, the fear of retaliation against Soviet territory would be a strong deterrent. But against NATO's current posture, very small numbers of nuclear weapons used against key targets—especially if used early in a war—could preclude a robust NATO nonnuclear resistance without inflicting major damage on European civilian population or infrastructure. The nuclear firebreak might look far less substantial under such circumstances than it does today.

While NATO might be expected to reply with nuclear weapons, geostrategic and political asymmetries between the two sides offer NATO far fewer decisive opportunities for the use of small numbers of nuclear weapons. And NATO, as yet largely undamaged, would have strong incentives to avoid an indiscriminate escalation of the level of violence. Unless NATO removes the possibility that the use of small numbers of Soviet nuclear weapons could decide a predominantly nonnuclear conflict, the widespread objective of improving NATO's nonuclear defenses could be largely negated. Ballistic missile defenses to complement NATO's air defenses, in conjunction with other measures, can serve a useful function by driving up the Soviet attack requirements to levels that make control of escalation too uncertain for them.

Let me turn next to the situation in United States territory. Other things being equal, the Soviets would prefer to achieve their objectives without overt use of force, and as noted, if they use force, they probably prefer nonnuclear weapons. And other things still equal, they undoubtedly prefer to gain their objectives without assuming the risks of attacks on U.S. territory. But if they found themselves engaged in combat, and improvements to our theater posture like those discussed above closed-off paths to quick victory, they might, like a fluid under pressure, seek other paths. (Soviet leaders undoubtedly remember that the coup that brought their own regime to power displaced a democratic regime that was attempting to continue a long and unsuccessful war.) Today, such a search for paths to early victory might lead them to attack a handful of targets in U.S. territory whose destruction could prevent deployment of U.S. reinforcements and resupply to support combat operations overseas. Those targets could be destroyed with little nonmilitary damage, leaving the U.S. with a strong stake in avoiding a massive and indiscriminate retaliatory response.

As discussed above, in the case of Europe, relatively modest defense deployments could increase Soviet attack requirements against small numbers of targets to levels at which escalation control would become much less certain. By denying the Soviets high-confidence opportunities to overcome obstacles to aggression, defenses can help strengthen stability. Moreover, their need to make such attacks provides the most plausible context for a Soviet decision to conduct a first-strike disarming attack against our nuclear forces.

A particularly troublesome aspect of our posture for responding to an attack on our strategic nuclear forces has been the emergence during the 1970s of the notion that we must put the Soviets on notice that they can't rely on us to refrain from launching our nuclear forces "under attack"; that is to say, that we might avoid the destruction of our nuclear forces by launching them before the full weight of a Soviet

attack impacted. This is a backhanded way of substituting a launch-under-attack policy for one based on an ability to ride out a Soviet attack and respond at a time and in a way of our own choosing. The choice an American president might make under a Soviet attack is not predictable. We can say, however, that the situation would be far more stable if we could ride out an attack and respond deliberately, a policy we formerly espoused under Secretary of Defense Robert MacNamara.

We have receded from that policy for two reasons: one relates to the forces themselves and the other to our command, control, and communications (C³). The vulnerability of our strategic forces became a problem as growth in the size and accuracy of Soviet inter-continental ballistic missiles (ICBMs) gave them the capability to destroy a large fraction of our silo-based ICBMs. But with the growth in the relative size and importance of our submarine-launched ballistic missile (SLBM) forces, beginning in the 1970s, and the continued maintenance of an effective bomber force, even destruction of our ICBMs would leave us with powerful remaining forces. However, the possibility that attacks against our C³ facilities, so-called decapitation attacks, would prevent us from responding to them in a coherent way, has remained a motivation for a launch-under-attack posture. The United States has been working on the command and control problem, and progress has been made. There are a number of avenues we can pursue to make decapitation an unappealing strategy for a Soviet attack, giving us the desired ability to ride it out.

One element in our efforts to improve the C3 situation is to make some of our command and control nodes mobile with the onset of hostilities. The problem is to make sure that the Soviet Union cannot conduct a small, short-warning attack as a precursor to a large attack, seeking to destroy our C3 system and other time-urgent targets, before they have assumed their wartime postures. The primary concern in this regard would be an attack from Soviet missile submarines (SSBNs) positioned relatively close to our coasts. The warning time available to us against such an attack might be ten minutes or less, rather than the thirty or so minutes available against attack by ICBMs or SLBMs on longer-range trajectories. Such a precursor attack could give very little warning time for dispersal of our C3 system (or to launch bombers, especially from coastal bases). The numbers of submarines that the Soviets could put on station near our coasts without detection or that they could keep on permanent station there are far less than their total operational SSBN inventory, and their reentry vehicles comprise a very small part of the total strategic ballistic missile re-entry vehicle inventory. To do so, the defense could initially employ ground-based interceptor missiles, and could be far more modest in size and technical sophistication than one designed to deal with the full Soviet strategic force. Such a modest defense could defeat the purpose of a precursor attack by forcing up the required attack size to a level at which the Soviets would have to use ICBMs or longer-range SLBM launches, increasing our warning. Such defenses would have to be complemented, however, by defenses of comparable capability against submarine-launched cruise missiles.

Turning next to the vulnerability of the ICBMs, it is mitigated by the existence in our forces of SLBMs and bombers. The triad may not be as sacred in our strategy as the Trinity, but we should not readily give up the diversity of our forces as a hedge against many uncertainties. The reliance of SLBMs on mobility and concealment (whose effectiveness we have no reason to question, but which we cannot test definitively) and the impossibility of assuring against surprises in future technological developments is reason to want weapons whose survival we can protect through other means, subject to other uncertainties. One could make the same point concerning the bombers, and their need to penetrate Soviet air defenses, and so on. The triad's reliability, while not-infinitely valuable, is worth a good deal.

It is generally agreed that, given the prospects for accurate ballistic missiles, ICBM survival depends on either the introduction of location uncertainty or active defense. The two are, moreover, mutually reinforcing. A defense with the characteristics of those being pursued under SDI, particularly the ability to protect a wide area, could offer a so-called adaptive preferential defense for protecting targets whose locations are unknown to the attacker. That is to say, the defender, knowing the actual locations of the

ICBMs, could concentrate his force of interceptors, ignoring those Soviet RVs aimed at locations not actually occupied by ICBMs, while the attacker would have to spread his forces over all possible locations. Such a situation offers very favorable leverage to a defense and is a promising approach to deterring attacks under any circumstances against forces so protected.

Let me conclude by summarizing my discussion of the potential contributions of ballistic missile defenses to strengthening stability and by setting that discussion within a more comprehensive framework of possible defense missions.

A relatively modest level of defense against short, medium, and intermediate range ballistic missiles is increasingly necessary to complement theater air defenses in protecting against either nonnuclear attacks or selective nuclear attacks on key targets throughout the depth of the theater. In its absence, the Soviets could preclude a robust Western defense against a predominantly nonnuclear attack without incurring escalation risks markedly out of line with those attending a large-scale nonnuclear conflict. In the continental United States, an initial deployment of ballistic missile defenses of modest size and cost and employing groundbased interceptors could protect against short-warning decapitation attacks or selective attacks on targets that were crucial to supporting theater combat operations. A larger and more capable defense on the scale of the first-phase defenses deployment envisaged in the operational requirements statement adopted by the Joint Chiefs of Staff in June 1987, if coupled with an ICBM basing option that incorporated location uncertainty, could make attacks on ICBMs too unattractive to warrant Soviet efforts in that direction. Further development in the technologies and effectiveness of a ballistic missile defense deployment, and increases in its size and cost—but still far short of an essentially leak-proof defense—could give substantial measures of protection against collateral damage from widespread, large attacks against military targets. The decision about how far to go toward each of these objectives would depend on the degree of success in the research and development program, the level of the U.S. defense budget and competing claims on it, and the future evolution of the Soviet threat.

To go beyond previous objectives toward President Reagan's objective of rendering ballistic missiles "impotent and obsolete" involves additional consideration of the future of U.S.-Soviet relations. I believe that President Reagan's initial motivation for the SDI was largely political, based on the corrosive effects of anxiety over the threat of nuclear destruction on alliance unity and public support for Western national security policies. It is worth recalling that in 1983 the American Catholic bishops were working on their pastoral letter on nuclear weapons and the nuclear freeze movement was at its height. Since then, Reykjavik and the INF Treaty have reminded many in the West of the essential role played in our security by nuclear weapons, but deep cuts in strategic forces are very much still on the agenda. I believe that President Reagan's decision to propose the SDI was related to his motivation in taking a much more positive stance on arms agreements; namely, that the West was politically unable to compete effectively with the Soviet Union if the competition were restricted to deployment of offensive nuclear arms.

Whatever the correctness of the President's political judgment, several observations are relevant to the long-term goals for SDI. First, there is a great difference between making ballistic missiles impotent and making them obsolete. A crossbow is obsolete as a military weapon, but it is hardly impotent. Technologically feasible levels of defense capability might well be sufficient to make ballistic missiles militarily obsolete, but to make them impotent will probably require cooperation from the Soviet Union in the form of agreements to deploy ballistic missile defenses while limiting ballistic missile forces. Not even such agreements would banish nuclear weapons as a major element in military forces, since delivery by aircraft (including cruise missiles) would remain a possibility, and I would guess that defenses against aerodynamic delivery will prove more difficult than ballistic missile defenses.

Nevertheless, diminishing the importance of ballistic missiles, with their compression of the time available for reacting to an opponent's moves would be a gain for stability. However, I want to associate

myself with J. Robert Oppenheimer when he stated thirty-five years ago that agreements for reductions in what were then called atomic weapons would have to ensure that violations would be "either far too vast to conceal or too small to have, in view of the then existing measures of defense, a decisive strategic effect." Whatever the desirability or feasibility of removing the nuclear threat, its accomplishment will have to incorporate "measures of defense."

THE STRATEGIC ENVIRONMENT IN THE ABSENCE OF STRATEGIC OFFENSIVE FORCES

by

Stephen A. Cambone

Since the president announced his strategic defense initiative, defenses have come under criticism for a variety of reasons. Among them are: they are technically infeasible; even if feasible, they will cost too much; even if they do not cost too much, we cannot see any point at which an offense/defense competition would end; and even if we could see an end to such a competition, we would not like the world in which we would find ourselves.

Each of these criticisms is worthy of close examination. Considerable effort has gone toward responding to each of them. It would seem, however, that the last is the most important. For no matter how clever we are with technology or how much money we might be willing to spend, if the end result is not one which we find to our liking, there seems to be little reason to make the effort to develop and deploy defenses.

What is it about a defended world that we might not like? The most commonly expressed concern is that it will put an end to nuclear deterrence. More explicitly, it is the concern that by eliminating the threat to the national survival of our homeland and that of any potential enemy, but explicitly the Soviet Union, defenses will create the conditions for large-scale conventional war. Furthermore, under these conditions it is thought that the Soviet Union would have a decided strategic advantage over the U.S. and its allies.

I will take up the second issue first, that the U.S. and its allies would find themselves in a strategically disadvantageous position relative to the Soviet Union. Having done so, I will turn my attention briefly to the first issue, whether large-scale conventional war would be more or less likely under the prescribed conditions.

In classic geo-strategic terms, the Soviet Union is a heartland power; the U.S. is an island power. The condition of a heartland power is that it is surrounded by other powers, some more and others less, hostile to it. Its strategic problem is how to manage and distribute its forces. It must meet the greatest threat or, in the case of an expansionist heartland power, must support its offensive campaigns, without thereby weakening itself elsewhere to the point that a secondary theater erupts, creating a two-front problem. The condition of the island power is one of relative invulnerability. Its strategic problem is the identification of points along the periphery of the heartland where it can bring to bear sufficient power to threaten the core values of its enemy and force it to spread his forces thinly or retract them from the frontiers to defend its center.

In the presence of strategic offensive nuclear forces (SONF), these classic considerations of strategy have been rendered moot in the conduct of war. I use the last three words advisedly. Clearly, as a matter of peacetime strategy, the Soviet Union has attempted to expand its influence and the U.S. to establish its presence on the Eurasian landmass. These peacetime operations are critical to the maintenance of international stability as seen from Moscow and Washington and are pursued with the utmost seriousness.

But in time of war, given the capability of SONFs, there are no "fronts"; all that exist are the FEBA (forward edge of the battle area) and the rear. SONF, particularly ballistic missiles, allow the Soviets to engage the U.S. to its full depth, to the very center of the island power's strategic base of operations. Likewise, the U.S. need not probe the periphery of the heartland power when it can destroy its core value(s) through a direct assault.

In the presence of SONF, the outcome of a war between the U.S. and the USSR will not turn on the prowess of Soviet armies in defeating their enemies, occupying territory, and sealing off their periphery. Nor will it turn on the ability of the U.S. to organize, equip, and lead a coalition of states able to stabilize the front(s), marshal reserves, and apply them to vulnerable regions on the Soviet periphery for the purpose of defeating local Soviet forces and dismembering the loose structure known as the Union of Soviet Socialist Republics.

But if we at once remove the stupefying effects of SONFs, these are precisely the conditions that would obtain. Where today both the U.S. and the USSR are capable of "invading" the strategic sphere of the other, and neither has a "front" to defend, absent the SONF, neither has direct access to the other. For the heartland power, fronts are restored, and with them both barriers and sally ports. For the island power, his invulnerability is restored, and with it both his need to identify points of strategic influence and the flexibility to take advantage of developing circumstances. Without direct access to each other, and given the geographic circumstances of the two powers, a war is likely to turn on the capacity of the two sides to conduct military operations in areas contiguous to the Soviet Union.

It is, of course, the case that even in the presence of SONF, a war between the U.S. and the USSR is likely to erupt in and spread across areas contiguous to the Soviet Union. The Cuban missile crises, the unsettled state of Central America, and the instability of southern Africa do, however, gives us pause in asserting this point too strongly. But in keeping with the paradigm in use here, these would be operations run by the Soviets to delay U.S. action on the periphery, not beachheads to be developed for offensive actions on the U.S. island. This said, it is nevertheless true that even today the great concern for NATO's security along the front from Norway to Iraq, the unsettled situation in Southwest Asia which the Soviets have attempted to destabilize twice in the post-war era, and the enmity between China and India and the tension on the Soviet-Chinese border, all suggest that the flashpoints for war are on the Soviet periphery. These circumstances are not likely to change in a world without SONF.

But to repeat the point, in the presence of SONF, war started in these places is not likely to be decided there. The escalatory doctrine of the West and the preemptive doctrine of the East conspire to prevent large-scale conventional war involving the U.S. and USSR from remaining local or regional in character. And because this is the case, the contributions that can be made by the local powers in their own defense, the difficulty foreign forces would encounter of conducting offensive military operations in many of these areas, and the massive quantities of men and material that would be committed and expended in such operations are often overlooked. When these factors are included in any equation of the strategic balance in the absence of SONF, the a priori advantages thought to be possessed by the Soviets become less obvious and compelling.

This is true even as it might apply to the NATO theater. NATO's chronic ailments—e.g., insufficient covering and reserve forces in Norway; maldeployed forces on the central front; the lack of attention to Turkey's vulnerability; the low level of war reserve stocks—all in their way can be attributed to the expectation that a war in that region will be decided over the heads of the allies. Conversely, as formidable as Soviet forces in the region are today, they are not nearly strong enough to conduct offensive operations against the type of conventional defense the allies could deploy in a non-SONF dominated strategic environment. Soviet forces currently are tailored to conduct swift, violent and deep penetrations with little advance preparation. These operations are likely to take place against an enemy that has not fortified his

front nor is inclined to mobilize on sketchy strategic indicators. Soviet forces and operational doctrine are designed to trade combat power for time, accepting the possibility of significant losses to present NATO planners with a fait accompli before the NATO leadership is able to authorize a nuclear response.

Soviet forces in the Western theater of military operations (TVD) today are, relative to those deployed in other TVDs, larger in number, better balanced, and equipped with the most modern weapons. What can we suppose Soviet requirements might be for these forces if the allies (U.S. and European) shored up their flanks, redeployed units on the central front, fortified their border, and were able to mobilize without fear of nuclear pre-emption? Translate this problem around the periphery of the Soviet Union and one can begin to appreciate the military problem the absence of SONF will cause the Soviets. And in attempting to derive the solution set for the Soviets, factor in the poor state of the economy, their own demographic and growing regional problems, and the inadequate logistical infrastructure on the periphery.

Moreover, the ordinary multiplier effect on the military requirements of a heartland power are compounded for the Soviets. Not only do they have a classic multifront problem, but the ordinary diplomatic means for relieving pressure are hamstrung by ideological differences. Neither the NATO powers nor the People's Republic of China (PRC) share compatible world views. The Soviet need to maintain control over Eastern Europe puts an edge on political relations that military power cannot, by itself, either dull or eliminate. In fact, to the extent that the requirements of control include the actual deployment or implicit threat of the deployment of troops, the sharp differences will remain between the USSR and Western Europe. In the east, the Soviet problem is not ideological differences in kind, but in degree. And among totalitarian powers, these differences in degree are more real, and have more meaningful consequences, than those among Western powers. Any rapprochement between the PRC and the USSR will always have cast over it the shadow of their own past relations as well as that between the USSR and Germany before World War II. This two-front problem is further compounded by the chronically unstable southern region. There, both internally and externally, the local dislike of the Soviets for ethnic, religious, and historical reasons is more palpable than on the Western or Eastern fronts. Among those peoples diplomacy alone will not safeguard Soviet interests.

In a world without SONFs, all of these fronts will need protection. The Soviets need not fear premeditated invasion. What they need to fear is either that a crisis in one region will spread to another or that in the spirit of their political and military doctrine which enjoins that they seek to preempt hostile developments, they might precipitate a crisis on their own. For the Soviets then, being a heartland power carries additional burdens born of their ideology. The military must shoulder its share of that burden. And in the absence of the SONF, that burden will fall squarely on the conventional forces. I would argue that that burden cannot be carried by the conventional forces they deploy today.

Clearly, this characterization of the Soviet military problem in the absence of SONF turns on a fundamental assumption—that the states along the Soviet periphery do not ally themselves with the Soviet Union or stand neutral in a U.S.-USSR, bloc-on-bloc, war. But this, after all, is a political problem for U.S. diplomacy as much in the current environment as the one we are postulating. The case can be made, however, that U.S. diplomatic initiatives would be aided by the absence of SONF as part of the strategic balance. Nations along the periphery are more likely to see opportunity to satisfy their ambitions in the presence of or against a strategically overstretched Soviet Union than one whose SONF can "cover" any weakness they may feel in one region while pursuing or defusing a crisis in another. Without SONF, it becomes more difficult (not impossible) for the Soviets to manipulate local crises by covering the forward movement of relatively small numbers of conventional forces with the implicit threat of nuclear escalation should the U.S. become involved.

For nations like Iran and Iraq, Pakistan and India, and China and Japan, satisfaction of their interests will come at the expense of the Soviet Union. As each of them gained ground toward their objectives—rationalization of borders, religious homogeneity, and regional economic development—they would grow stronger. Even in Europe, the desire for more normal relations among powers whose history and culture incline them to look west and/or inward, and not toward Moscow, is likely to incline Western European powers to continue their resistance to the political blandishments and military pressures of the Soviet Union.

But to recognize that local powers might find opportunity at the expense of the Soviet Union does not necessitate their joining a coalition against the USSR led by the U.S. The basis for coalition building resides, however, in assisting these nations to achieve their reasonable ambitions. The most obvious form of assistance is through financial and trade agreements and practices. An admittedly more difficult way is through the adjudication of disputes between them. This latter is a function of diplomacy and military power, of course, but these are functions only the U.S. can perform. To the extent that they realize, and the circumstances allow, their larger ambitions are to be met through cooperation and not confrontation with one another, the scope of U.S. influence is likely to be fairly wide. In the end, of course, the fact that only the U.S. can supply the decisive increment of power in the event of war, and that this aid would be jeopardized by "lone-wolf" policies, provides a firm base for coalition building.

Last, and ultimately most importantly, the U.S. must show the willingness and capacity to coordinate a global coalition. This is, in fact, the inherent potential advantage of an island power. From its position, the U.S. can run lines of communication east and west; using the islands of the Pacific and the ports of Africa it can run lines of communication north and south. Its industrial base, secure from attack, can supply the goods of war in prodigious quantities. Its reservoir of manpower can supply the needed additional force required to tip the balance in local or regional theaters without the U.S. itself having to match the Soviets man for man and tank for tank.

There is, of course, no guarantee that in a world without SONF the Soviets would become overstretched and the U.S. would be willing to act the part of the leader of a global coalition. For both sides that is an issue of political choice. Geography and the interests of the peripheral states, however, do not dictate that in a world without SONF the Soviets would be in a strategically superior position.

That much said, the question of whether conventional war is more or less likely remains in an environment "unregulated" by the presence of SONF. A more precise formulation would be whether the interests of the Soviet Union incline it toward war, and how much more does the presence of SONF temper their enthusiasm for it than might the strategic situation outlined above.

The first half of the problem statement is more easily answered. The Soviet Union has not, in its history, exhibited a determination to wage large-scale warfare to achieve its ends. The process of history does not, in their view, rule war out as legitimate means for the creation of the new socialist man or the socialist world order. But the problem confronting the Soviets is political in character—the existence and activity of the capitalist-imperialist bloc. The solution is also political—revolution—directed by the forces of socialism. Military power is useful in protecting the gains of the revolution from the forces of reaction. It cannot, by itself, make revolutions.

To be sure, war can be generated out of an effort by the Soviets to protect the revolution—witness the crisis over Berlin and Cuba. But in those cases, consistent with the notions I have outlined, Soviet military power was displayed not as an "offensive" instrument of conquest, but as a bulwark of defense. In thinking about Soviet doctrine—for this is what we are discussing here—we should not mistake the operationally offensive character of Soviet military planning with the strategically defensive purpose of the operation. The Soviets operate offensively to forestall the aggression of their enemies. From the point of view of those under attack, this may be a distinction without a difference, and so the Soviets hope it will be. But

from the perspective of strategic planning, in the process of conducting risk assessments, this distinction is significant.

This Soviet doctrine has persisted in the presence of SONF. It is not likely to change if SONF should be eliminated. Thus, in theory the likelihood of war with and without SONF is no different. This leaves us with the last issue, whether, in the event war becomes likely, the presence of SONF retards or deters the decision to go to war better than conventional forces. Clearly, the prospect of not losing one's country by an act of war has a certain liberating effect. But at the same time, if the U.S. and its allies take the obvious and necessary steps to cement coalitions politically and to rationalize their military programs and strategy, conventional war for the Soviets on the global scale that is suggested here, is a monumental undertaking. And leaving aside the opportunity costs they would incur preparing for such a conflict, the price of defeat is high. Though defeat, or even an ambiguous victory, would not necessarily put their country at risk. It would put the revolution at risk. It is the preservation and advancement of the revolution that is the core value of the Soviet Union. So long as U.S. strategy—both in peacetime and in war—holds out the prospect of the failure of the revolution as a consequence of war, the Soviets are unlikely to become more enthusiastic about waging it simply because SONF are no longer present.

Thus far we have only addressed the strategic environment in the absence of SONF. The basic proposition is that under such conditions the military requirements of the Soviet Union would grow substantially and that meeting those requirements may result in imperial overstretch. Conversely, the military requirements for the U.S., while they are likely to grow, will not grow in proportion. Should more substantial military power be needed to meet the Soviet threat, that power will come from our allies. The willingness of the allies to meet new requirements would be, in part, a realization of their own interests and, in part, the expectation of support from the U.S.

We have treated the elimination of the SONF as complete in this discussion. It is worth concluding with a thought on the manner in which a transition from "offense-dominance" to "defense-dominance" might contribute to the creation of the environment we have been discussing.

The appropriate analogy to use is the launch of Sputnik. The orbiting of that small satellite utterly transformed the strategic equation. By bringing home to the U.S. its vulnerability to short-warning strategic nuclear attack, Sputnik put in train a series of events that resulted in a radical alteration in U.S. strategic doctrine, the dismantling of our air defenses, the rapid build-up in ballistic missile forces and a parallel reduction in bomber strength, and a revision of NATO military doctrine and political alignments. All of this by a technology which, in 1957, was highly unreliable and only five years earlier thought not to hold sufficient promise for the U.S. to pursue with a large investment of scarce resources.

The deployment of the first phase of SDI coupled to a program that promises the continuous evolution of the defense in effectiveness and technical performance will, I believe, have an equally massive impact on the strategic environment. It will signal the end of unobstructed access to strategic targets. It will compel the Soviets, who rely heavily on that access, to make one of a number of choices in response, none of which will immediately or directly offset the impact of the defense. More significantly, like Sputnik, it will signal a technological shift in the correlation of forces to which the Soviets, like the U.S. in 1957, must respond if they are to continue to be—and be perceived as—a superpower. A first-phase defense may be resisted through political and diplomatic maneuvering before it is deployed. But after it is deployed, the Soviets must respond to it directly and in ways consonant with the expectations of a superpower.

In broad terms they might respond by: a) concentrating on offensive countermeasures; b) concentrating on deploying defenses that provide levels of protection that meet their requirements; or c) developing and deploying both. The first choice is considered most likely. It does, however, hold the greatest risk for the Soviets. Large investments in offensive forces will never recover for them (assuming the U.S. does not resign its development and deployment program) the capability and therefore the strategic leverage they

possess today. Exclusive investment in offensive forces would leave them without corresponding defensive capability. The second choice, ipso facto, puts us on the path toward the outcome we have been discussing. The last may be the most likely if the Soviets choose to attempt to sustain some measure of offensive capability. But there is no reason to suppose that we will make the defense any less capable than if the Soviets choose the first option, and so it is hard to appreciate how much return they would receive for splitting their resources between offensive and defensive forces.

All three options must be assumed to cost as much for them as the program we are now contemplating. We cannot know which they might choose. But no matter which might be chosen, when their costs are placed over against the increased requirement for conventional forces to meet their broader defense needs, I would argue, the Soviets would find themselves in serious, though decidedly not mortal, condition. For the costs of pursuing any of the three broad options outlined are not only economic, but strategic as well. In an effort to sustain strategic power, offensive, defensive, or some combination of the two, the problems on their "fronts" may grow. An active U.S. foreign policy, coupled to the deployment of defenses, can begin to raise the price of maintaining the stability of their borders, internally as much as from external threats. A Soviet failure to address this problem while focusing solely on the "strategic" equation would only serve to drive up the cost of re-establishing control and increasing the risk of failure.

Whatever sacrifices they would make internally to respond, their history suggests that they will also seek to negotiate with the U.S. and our actual and prospective allies to reduce the pressure they might feel, to buy time for their responses to become effective and to increase the likelihood that those responses will lead to new arrangements more congenial to them. These are the conditions under which discussion of a transition are likely to lead to success from our point of view.

Thus, the deployment of defenses has a strategic impact beyond the protection of the homeland and the rendering of ballistic missiles "impotent and obsolete." They are a weapon against ballistic missiles as well as a tool to be wielded to craft an environment we find more favorable to our interests. And those interests would not be jeopardized, in my view, by the type of strategic environment that could evolve as a result of the success of the SDI.

STRATEGIC DEFENSES AND THE ALLIANCE

by

Robert E. Hunter

Most of my comments will relate to the implications of the Strategic Defense Initiative (SDI) for the NATO alliance—to what has been called "alliance stability" in this meeting. Before discussing these implications, however, I will touch on two other matters: first, the all-important political context of strategic defenses and stability; and second, the crucial distinction between two basic kinds of SDI architecture (the conclusions reached about the feasibility and advisability of SDI very much depend upon the particular architecture which is addressed).

First, let me make the point that it is not possible to consider strategic defenses and stability independent of a political context. We sometimes lose sight of this in mechanistic definitions of deterrence. We have had a confrontation with the Soviet Union (at least a competition) that was nuclearized by a set of steps in the late 1940s and 1950s. Once this happened, we had to take a series of steps according to the internal logic of deterrence.

The existence of nuclear weapons doesn't necessarily impose this requirement. There is no logically imposed deterrence between us and the French or the British. Nor does the very existence of nuclear weapons necessarily require the elaboration of deterrence theory and practice that we have developed in our nuclear relationship with the Soviet Union. For example, we don't see in the Soviet-Chinese relationship, insofar as we can perceive it, the same complexity in deterrence theory. That leads me to a "tickler" by way of conclusion: Some changes may be possible in the U.S.-Soviet strategic relationship in the political as well as in the strategic realm. Maybe we will find things to do that are more intelligent and more security-producing in the political area, rather than making changes in today's strategic propositions. As a blanket rule, if everybody on both sides was happy with everything, this would provide a luster of stability in all four senses we have been talking about.

Second, I want to make sure that the distinction between the two basic kinds of SDI architecture is clear. One kind is an attempt to make nuclear weapons "impotent and obsolete." The other is an attempt to protect missile silos or other second-strike deterrent forces, or perhaps with a variant that would include preferential defenses. The difficulty always lies in gaining the latter kind of defenses (of silos) without raising concerns that you are trying to develop the former (of cities). I'm prepared to concede the point that, in many respects, the defense of silos can be stabilizing—although Kenneth Waltz has raised a good question: "Why bother?" Frankly, there are cheaper and safer ways of dealing with the problem of ensuring the survival of land-based missiles than going into strategic defenses. Harold Brown has said that, if you want to deploy defenses just to protect silos, you can do it for about \$10 billion today with conventional approaches. We could go back to an updated safeguard system, if silo defense is what we want to have.

The problem lies in the confusion between silo and city defense. Now, in deterrence theory some "confusion" can at times be useful: This is the so-called uncertainty principle. In this case, my own

judgment is that, so long as there is a major element of distrust in the U.S.-Soviet relationship, then the capacity for either side to construct silo-protecting strategic defenses that do not at the same time raise fears about efforts to protect the nation as a whole—at least where this can be discriminated for purposes of national decision-making—is pretty well zero. (I take as axiomatic that distrust is a driving force in U.S.-Soviet relations and is likely to continue to be for the indefinite future. I am not someone who says that we should trust the Russians. Indeed, only by distrusting them can you derive means of arms control that are valid.)

We need to remember the Tallinn Line in Estonia, whose discovery had a lot to do with our deploying multiple independently targeted re-entry vehicles (MIRVs). There was concern that the Soviets would upgrade this new antiaircraft weapons system into an antimissile defense system. That turned out to be wrong, but by the time we accepted that point, we had gone decisively in the direction of MIRVing. The lead-times are such that, once you get into an architecture that could serve more than one purpose—or even if you are in an architecture that might be phased, starting with terminal defenses of silos, but with something else coming along—then the time within which the other side would have to respond with something of its own means that decisions which are either rational or cost effective will not be made. This is the real world.

Let me explain my argument against going too far, certainly, against reaching for the perfect defense, but also against deploying limited defenses where they could be confused with city defenses. The argument is highly scenario-dependent. The theory is advanced that, if strategic defenses provide you with a higher degree of certainty that neither side can disarm the other, then this situation will lead in a crisis to both sides' being more cautious about using nuclear weapons. Waltz has pointed out some flaws in the theory. My own view is: The theory may be logical, but in a crisis strategic defenses merely add an extra layer of calculations. It is not just "can we ride out a Soviet first strike and then decide, maybe two weeks later, whether or how to respond?" But with defenses there is also the added calculation about the relative degree of damage on one side or the other, depending on who attacks first and who attacks second. Perhaps we can work this out by computer models, such that the situation would appear to be stabilizing. In the real world, however, my judgment is that the added layer of confusion is likely to have a destabilizing impact.

Of course, all these arguments assume that there can be a U.S.-Soviet nuclear crisis. I am not sure that that is any longer possible. We have learned an incredible number of things in the last forty years, one of which appears to be that nothing other than the defense of the respective homelands is worth a nuclear war of virtually any size. The effort of trying to construct scenarios that lead to nuclear war is very difficult. You see this in a lot of war gaming.

Assuming that there can be a nuclear crisis, however, I believe that there would be emotions and psychological attitudes that might not contribute to an atmosphere of decision making that is likely to promote stability. I do not want to burden the U.S. president with an added set of decisions and calculations to make beyond those he would face in today's world. Let us say that he calls in the Joint Chiefs of Staff. He asks for estimates of the likely performance and readiness of Soviet strategic defenses versus American. of offensive weapons, etc. Such judgments tend to look at worst-plausible-case scenarios—to put more weight on enemy capabilities (which must be estimated) as opposed to one's own capabilities (which are more subject to measurement). After that presentation, what happens when the Chiefs say, "By the way, Mr. President, the Politburo just left Moscow"? I would rather not live in that world, even if during a noncrisis situation there might be certain advantages in it. Ironically, I think that you can make a better case for strategic defenses in a noncrisis than in a crisis world—but I'm not sure that we can guarantee that set of circumstances. Incidentally, it may well be that, with the arms control and reductions that are beginning to take place regarding offensive nuclear weapons, SDI is becoming an idea whose time is past. The balance of my remarks will help to explain that point.

Now regarding alliance stability—my main point—we tend to think of it in terms of Western Europe and the American SDI proposal. That doesn't exhaust the subject, but it is a good starter. Incidentally, I will refer to something that we might want to consider later: what would be the impact of American strategic defenses on our relationship with Japan? And what about Japanese strategic defenses? If you really want a complex and difficult scenario, it is not that we or the Soviets get strategic defenses, it's that the Japanese develop and deploy them in the twenty-first century and they make theirs work!

I think there is value in looking at the history of the U.S.-West European alliance relationship for some clues. SDI was proposed in March 1983 and gained some reaction then in Western Europe. Interestingly enough, the strong reaction did not take place until late 1984 and 1985. This was about two years after President Reagan's speech, and this reaction also occurred before the Soviets made their great push on the subject. Perhaps that was Mikhail Gorbachev's major miscalculation: to push opposition to SDI as hard as he did.

Now, why do I think the European allies reacted this way? First, SDI was reiterated after a presidential campaign. During presidential campaigns, Europeans often recognize that "anything goes" in U.S. politics. They don't pay attention to every detail as being engraved in stone. Second, I think there was a growing belief by mid-decade that the United States was prepared to act unilaterally in the world. The SDI proposal clearly fit that mold. There was also a greater belief in Western Europe in the prospects for arms control (ironically, in part because of the president's shift in priorities); hence, there was concern not to rock the boat with a defensive program.

In all our discussions about strategic issues and relationships with the allies, it is very hard to find serious people in Western Europe who believe that there is going to be a war. Now that European judgment may be wrong (I hope it's not wrong), but it conditions a series of issues and attitudes. In fact, some of the allies are less concerned about war in Europe than they are that we will drag them into war because of what we do somewhere else in the world. That is one reason many of the allies have trouble with U.S. actions in Central America and why five of the allies have deployed ships in the Persian Gulf. It is not so much that they agree with our view of the threat in the Persian Gulf, but rather a concern to have some influence over American policy and to avoid increasing the risks of popular pressures here to remove some troops from Europe out of pique. The allies learned a lesson from what happened after the U.S. bombing of Libya.

Western European concerns about SDI also reflected some wariness after the intermediate-range nuclear force (INF) deployments began. "Let's not try something else," the recommendation was. There is tremendous resistance to change in Western Europe. Remember the multilateral force (MLF) in the 1960s. The MLF came about largely because of negative Western European reaction to Secretary of Defense Robert McNamara's 1962 proposal to the Athens meeting of the North Atlantic Council. Yet, this proposal became a doctrine called flexible response, and it was formally adopted by NATO in 1967. Now it is a doctrine that the allies don't want to change. Included in this European resistance to change is any risk to the Antiballistic Missile Treaty. Whether it has virtue or not (I think it does), the ABM Treaty remains the "best thing since sliced bread" for the Europeans because it is something that still exists.

Also, on European reaction to SDI, there was a sense of unrealistic goals in the president's language. For our European allies there was a sense of pressure for resources that they would have to commit to SDI, perhaps diverting resources not just from civilian economies, but also from other areas of defense. There was very strong realization of differential protection for America as opposed to Europe. This is something we haven't touched on. It is a recognition that, if you look at simple facts of geography, and given the same level of Soviet effort, Western Europe is always going to be more permeable and more threatened by Soviet nuclear weapons than the United States would be. At least this is the universal perception on the continent.

There is also a different view of the moral dimension of the SDI concept in Europe as opposed to the United States. Strategic defenses are not regarded in Western Europe as a way of returning to the Garden of Eden. The difference here has to do very much with approaches to the problem of what Reinhold Niebuhr called "moral man in immoral society." In Western Europe, as well, there is far less belief in the value of technology. After all, technology gave them the Second World War. You will find throughout Western Europe much less belief in the positive value of technology than we have, less of a belief in perfection, and certainly far less of a belief of any capacity to undo mutual assured destruction (MAD).

Now, four years since President Reagan's speech, most of these concerns remain undiminished, except for the effective dropping of the idea for full city-protecting strategic defenses. But views in Western Europe are still dominated by the context of arms control and by the political context.

These views are reinforced by the anxieties that developed over the superpower summit at Reykjavik. It is important to understand the extent to which Reykjavik was felt deeply in Western Europe. The good news, from an alliance perspective, was that for the President of the United States to do what he did required him to make at least three assumptions. Assumption number one: The U.S.-Soviet nuclear balance is incredibly stable (I am referring to crisis stability here). Second, the risks of a U.S.-Soviet nuclear war have sunk almost to zero. Third, the collateral uses of nuclear weapons for diplomatic purposes aren't worth what they used to be. I don't think Reagan is a stupid man. If he didn't understand these assumptions, I don't think he could have done what he did at Reykjavik.

For many Western Europeans, therefore, this set of assumptions led to at least two key conclusions. One, there are no windows of vulnerability. They cannot be possible any more—as political phenomena—against the background of what Reagan did. Two, according to Western European reasoning, why go into SDI precisely at a time when the President of the United States is prepared to make this kind of assessment with which most Europeans agree?

The other half of Reykjavik was the bad news. At least in terms of the symbols of U.S. commitment to Western Europe, as far as most of the Allies were concerned, what was offered at Reykjavik—had it gone through—would have appeared to be the most profound U.S. retreat from the Eurasian land mass since 1919. (I say symbols because, in reality, the U.S. commitment to Europe is both different from and much deeper than anything nuclear, which is something we have used as a shorthand. That commitment is not just in strategic theory but in the historic commitment of our nation to Western Europe.)

We have already covered the point that the logic of strategic defenses seems to work backward in Western Europe. It should be true that, if we are able to protect the United States—whether cities or silos—this should make us more willing to do things on behalf of the allies. This proposition was advanced. Yet various ideas intervened that kept it from gaining currency. First, there is the perception that, if indeed a strategic defense system worked perfectly, this might make the world (or at least Europe) safe for a replay of World War II. This perception is now very much involved with the debate in Europe about the zero option, double zero, and what is coming—triple zero, the short-range nuclear missiles that will remain in Western Europe.

Triple zero is clearly next on the Soviet agenda. Not only will it divide the Western European allies from the United States, but it will also divide the West Germans from the British and perhaps also the French. All four West German parties either favor this position (the third zero) or could be forced into it. After all, it was a conservative German parliamentarian who discovered that battlefield weapons have a range which means that if they are launched against the East, that means East Germany, and if they are launched against the West, that means West Germany. Thus, he dubbed these "German killer" weapons. We know that "singularity" for the Germans regarding nuclear weapons is simply not acceptable. By this they mean they will not allow a situation where only the Germans share the risks.

It is also ironic that, since in an SDI world it would be easier for the Soviets to attack Western Europe than the United States, strategic defenses could actually increase the nuclear component of potential conflict in Europe as opposed to the transatlantic dimension. In an era of defenses against ballistic missiles, if the United States were trying to deliver weapons against the Soviet Union and if the Soviet Union were trying to deliver weapons against assets of the West, then Europe (both East and West) would become a more attractive theater than it is today.

Now these arguments may seem illogical, but they have political appeal. I've already indicated that even limited silo-protecting strategic defenses on both sides might increase U.S. resolve, but the crucial point for the Western Europeans is that it would show a lack of U.S. will to face the reality that NATO ultimately is a suicide pact. Like it or not, NATO doctrine does come down to that. This matter is like burden sharing in the alliance: it is all right to argue in the alliance about the details, but you can't say that there are any circumstances under which the United States would not act—in this case use nuclear weapons on Europe's behalf. There cannot be a price beyond which the United States would not act—any price. As soon as you admit that is a possibility, you've lost.

This view about American will and strategic defenses was reinforced in Western Europe because it came along with more U.S. unilateralism and talk about protectionism. The protectionist debate in this country—in this case led by Democrats—reinforces this kind of concern in Europe.

Now, time has passed and more events have taken place. What about the SDI variants? My judgment is that if there were carefully phased-in strategic defenses of point targets agreed upon by the United States and the Soviet Union, without the ambiguities of discriminating between the city- and silo-protecting defenses, then over time these might become acceptable in Western Europe without damaging alliance stability. I think that may be possible, but I can't be certain. There would also be some residual issues, some things that would still be important: whether there would be a negative impact on arms control; whether the deployments would mean great cost and a diversion of resources from other things that are required; and, obviously, whether there is a solution to the insecurities of the transition period—the point after deployment of strategic defenses begins and before it is clear to both sides just what the limits of those defenses are.

For the Europeans, any deployments would have to include a successful phasing-in that does not upset alliance stability. It has to include the assumption that other weapons can get through, or that there can be a nonnuclear defense of Western Europe—even if that is a defense without the United States—or that there are basic changes in the structure of European security. If you can secure those conditions, I think in time it might be possible (no certainty) to have some strategic defenses without damaging the Western Alliance.

There are several other problems. First, the British and French nuclear arsenals are much more dependent upon ballistic missiles than they were before, and these weapons have acquired a greater role in the alliance. In fact, they have probably finally come into their own precisely at the time when Europeans are concerned about whether the United States is committed to flexible response and to fulfilling its commitments to Europe. Suddenly, the British and French nuclear weapons gain the catalytic role to a degree they never had when that concept was first conceived. This would be especially true if there were a perception of a progressive denuclearization of military doctrine in Western Europe.

The question of strategic defenses will become even more important if, as part of the development of the European defense pillar in the context of dealing with the German problem, British and French nuclear weapons come into political play. Under such circumstances, Soviet strategic defenses would have an enormous impact.

There is another problem. If relations between the Americans and Russians developed to the point that they could consider agreement on deploying strategic defenses, then there would be fears in Western Europe of a Soviet-American condominium. These would be fears, once again, that we might start making decisions over the heads of the Europeans. In this sense, the idea is not all that fanciful, and some West

Europeans have already raised it. This also illustrates what might happen if there were a change in the U.S.-Soviet political relationship such that strategic defenses on both sides could be phased in without dispute and difficulty. Then there would be less Western European fear of conflict, and the threat of U.S. escalation to nuclear war might not be as necessary as part of alliance doctrine; but this development would also raise the question, "Why bother with this at all?" I would argue, however, that even in those circumstances, retaining a residual capacity for nuclear escalation would still be for the European allies a central question in alliance stability and in the alliance relationship.

We are in an awkward position now that NATO is essentially becoming an insurance policy at a time when almost no one believes there is going to be a war. But the alliance partners still have to pay premiums that are becoming increasingly expensive, including the issue of nuclear weapons—both the political impact in Western Europe and concerns in the United States about potential escalation to attacks on the American homeland.

Other unpopular insurance premiums include having to continue spending large sums on defense and also, for some of the Western Europeans, adopting high technology weapons that could carry the war into Eastern Europe. Obviously, in considering the architecture of SDI and European security, it is important to look at emerging technologies. But there is difficulty for the Western Europeans and particularly for the West Germans, who don't want to get into a position of looking as if they would fight an aggressive war in Eastern Europe, particularly in East Germany. Just as President Reagan should never have made his SDI speech if he wanted to promote strategic defenses, whoever thought up the term FOFA (follow-on forces attack) should hang his head. Everybody is going to plan on carrying the battle to the enemy rather than fighting on our side of the line, but politically you shouldn't talk about it.

There is a further point here that relates to the question of differential protection. If the Soviets were to create a level of space-based strategic defense—as opposed to land-based point defense—that was sufficient to protect their silos against an attack from the United States, it is also very likely to be capable enough to blunt, at least to a major degree, totally the capacity of the British and French to retaliate. At least this would be true of the weapons that the British and French have on the drawing board. In other words, this limited Soviet capacity would reduce the British and French capacity to play either a catalytic war scenario or something limited to Europe. It is true that they could come up with substitute means of delivery—cruise missiles and the like—but the problem for the Soviets of defending their territory, as opposed to that of Eastern Europe, would be far less difficult than defending against a determined U.S. nuclear attack.

In my judgment, this development could have a significant impact upon the U.S.-European alliance relationship. Nevertheless, if we insist on going forward with some form of strategic defenses, then mutual, terminal defenses of point targets would be far better than something up in space and which might actually have an impact on Western European delivery systems, in addition to ballistic missiles. These defenses would also have to be nonnuclear or the Western Europeans would still do what they could to keep them from being deployed, especially in the context of arms control and whatever propaganda the Soviets were making.

This last point is similar to the case of chemical weapons. If you consider chemical weapons to have a deterrent quality—and I have my doubts—then the United States is now in a bizarre position. The unitary weapons are obsolete, but the United States has agreed that the binary weapons will not be deployed in the Federal Republic of Germany (which is virtually the only place in the world where we might want to have them) without the approval of that government. Yet, this permission is unlikely to be given under any circumstances by any West German government: This would be particularly true during an East-West crisis. In effect, by going to binaries we have, ironically, gone in the direction of disarming ourselves of chemicals.

This is the kind of political reality that would apply to the Europeans with regard to strategic defenses that don't meet the careful and limited criteria I outlined earlier—and perhaps even then. Thus, if we are to prevent a decoupling of the United States from Western Europe in a strategic defense environment, there must be a capacity for the nonnuclear defense of Western Europe. And even that has problems: especially for the West Germans, who fear that the risks of a war (even nonnuclear) would go up. Now, if we go forward with SDI deployments (with or without Western European participation) without a capacity for nonnuclear defense, there will be considerable political problems within the alliance.

I will make one final point. Before we become enthusiastic about having defenses, and before we depreciate the value of having some capacity to escalate, we should recall the following. A nonnuclear war world would, in my judgment, fundamentally favor the Soviet Union. For the projection of American power to the Eurasian land mass, nuclear weapons have played an extraordinary role in the last forty years. Unless we were prepared to project power through some alternative means, including much larger conventional forces, the Soviets would gain advantages. (This assumes that the West European allies will not take all the steps necessary for their own robust nonnuclear defense.) This does not mean conceding the capacity of the Soviet Union to attack and win, nor do I believe that Western European states will be Finlandized. But to the extent that the "correlation of forces" has an impact upon the course of diplomacy in Western Europe, for the Soviet Union to have these advantages would be quite significant.

In summary, therefore, I am arguing in terms of the Western Alliance. We in the United States should not be prepared to pay the price within the alliance of gaining the limited value to us of having strategic defenses to protect U.S. land-based silos.

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026-050	A03	176-200	A09	326-350	A15	476-500	A21
051-075	A04	201-225	A10	351-375	A16	501-525	A22
076-100	A05	226-250	A11	376-400	A17	526-550	A23
101-125	A06	251-275	A12	401-425	A18	551-575	A24
126-150	A07	276-300	A13	426-450	A19	576-600	A25
					-	601-up*	A99

*Contact NTIS for a price quote.