

Nuclear Sharing: NATO and the N + 1 Country (1961)

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Is the spread of nuclear strike forces good or bad? When we regard the diffusion of nuclear weapons as bad or at least worrisome, we refer to it as the Nth power problem. In this guise it appears as the principal menace lending a sense of urgency to our negotiations on arms control and as a trend to be fought. In particular, it is the chief justification offered for a test ban. During most of the time since the summer of 1958 we have been in negotiation with the Russians to conclude a treaty prohibiting the explosion of nuclear weapons. We do this largely because we hope that other countries will join us in abstaining from tests, and so find it harder to get a nuclear capability. Meanwhile we have stopped testing ourselves, and hope that the Soviet Union has too. Quite apart from the test ban, of course, we have for a long time so regulated our study, manufacture and operation of weapons as to reduce the chance of information of weapons design spreading to other countries, including our allies. These self-constraints have been embodied in our Atomic Energy Law. In both our atomic energy legislation and our arms control negotiation we act on the assumption that it is bad to increase the number of nuclear powers.

On the other hand, at least some of our military policies seem to proceed from the notion that it is good. Some contemplated NATO policies suppose in particular that we want to disperse the power to decide to use nuclear weapons, to have more than one center for such decision in the West. We have, of course, deployed nuclear weapons under our own control in many parts of the world. In several countries we have put weapons under the dual control of ourselves and our host. While we have not transferred warheads to the independent control of other countries, we have, in the case of several allies, sold or given them significant parts of a total system—delivery vehicles, personnel training and the like. We contemplate assisting the Dutch and the French to construct atomic submarines, or—in order to avoid a formal clash with the Atomic Energy Law—we might at least

help them build the submarine hull and the non-nuclear parts of the propulsion machinery. In the case of the United Kingdom, we have actually given not only atomic submarine plans, but also designs and special materials for nuclear warheads. We modified the MacMahon Act in 1958 so as to justify this special treatment of the United Kingdom, but we did it in such a way as to seem to offer incentives to our other allies to demonstrate a nuclear capability of their own, and so become eligible for help.¹ We are now contemplating the transfer to NATO of the major components of an entire weapons system—submarines, Polaris missiles and war-heads—possibly for use without our veto. In many of these actions we appear to have been the initiators of moves toward diffusion. In most of them we have tended at least to view the spread of nuclear capabilities benignly. We use an appropriately benign word, “sharing,” which has overtones of fairness, Christian charity and right behavior.

It is conceivable that these two sets of policies are consistent, that we are *for* sharing nuclear weapons with some of our allies and just against spreading them to enemies or neutral powers or certain of our allies. But in fact it has always been clear that the two sorts of diffusion are not so easily separated, that the acquisition of nuclear military power by some of our allies can impel its acquisition by enemies and that it is particularly hard and divisive to select among our allies. The spread occurs in chain. It seems more likely that this division in our policies expresses a divided purpose.² The arms control moves that we have made to limit diffusion are largely formal or declaratory, tied to complicated and uncertain negotiations with the Russians, and, in fact, likely to depend on the cooperation of potential Nth powers. On the other hand, the moves we have made in alliance policy which favor diffusion are strong. If our military and foreign policies are to be consistent and effective, we ought to decide whether the Nth power problem really worries us, or whether we favor sharing and the state of the world it may bring about.

But perhaps there is no point in deciding how we feel about the diffusion of nuclear capabilities. It is frequently claimed that the trend toward diffusion is inevitable. There are cheerful as well as pessimistic views of the trend. The pessimists, who are (correctly, I believe) concerned with the enormous instabilities and dangers of a world with many nuclear powers, call somewhat wanly for an immediate and comprehensive program of international controls. Some of the optimists, on the other hand, suppose that if bombs

are spread much more widely they will be less likely to be used, that stability will increase. Others, not quite so cheerful, hold that since diffusion is inevitable we should go along with it or try to direct it into less harmful channels, but in any case we should help our friends in NATO by reducing the costs.

However, both the gloomy and lighthearted prophets of inevitable diffusion have been rather unclear as to precisely what sorts of nuclear capability will be diffused and how fast. A more analytic understanding might make the optimists less cheery, and lead the pessimists to a less fatalistic view. It seems very likely that *some* new countries will acquire *some* sorts of nuclear capability in the next decade, but it is by no means certain just how many countries and which ones will acquire what sorts of nuclear capability. Though even a little diffusion has important implications for strategy, it makes a great deal of difference whether 20-odd countries develop or are given bombs and delivery capabilities in the next six or seven years, or whether it is two or three of the more industrialized powers.

A mechanical view of the inevitability of the trend toward nuclear diffusion places the entire burden of stopping or slowing the spread on effective international agreements — which are hard to come by. It tends to ignore decisions that the United States can make on its own and so fails to exploit some possible brakes on nuclear dispersion stemming from the immediate self-interest of prospective Nth powers. Their decisions will affect the trend, too. It is worth pointing out to the responsible prospective Nth powers in the NATO community that the undertaking is not merely arduous; it is unlikely to pay off. A failure to pay in terms of immediate national self-interest is likely to affect the intentions of Nth countries more strongly than arguments about the stability of the world system.

So far as long-run world stability is concerned, the Nth country tends to think of the problem as beginning with N plus 1. The original irony intended by the label, "Nth power problem," was seated precisely in the fact that the United States and the Soviet Union thought of the trouble as the third-power problem, Great Britain thought of it as the fourth-power problem, France as the fifth-power problem, and so on. Each new or prospective nuclear power thinks of the problem as that of stopping the next country after itself. This is the N-plus-1-country problem.

As for world stability through arms control, France and England, for example, have tended to think of their own acquisition

of nuclear weapons as entirely beneficial. Mr. Macmillan has justified British weapons and V-bombers on the grounds that they permit the English to exercise influence on arms-control arrangements between the two major nuclear powers. General de Gaulle speaks of the increased effect on nuclear disarmament which France would have by becoming a nuclear power. In the limit, one might suppose that unanimity for nuclear disarmament may be achieved by distributing bombs to everybody.

The choices among alternative nuclear policies confronting members of NATO are likely to play a key role in the diffusion of nuclear capabilities—especially in Europe—and in the problem of avoiding small or large nuclear wars. For this reason I would like to consider, from the standpoint of the national interest of the individual members, some of the major alternatives open to them. What sorts of nuclear capability are the lesser industrial powers in the West likely to achieve? What are the motivations for achieving independent capabilities? What is the role of the American nuclear guarantee? Is it, as it is currently fashionable to say, “incredible?”

The four main alternatives open to the European powers are these: (1) the rejection of nuclear weapons, of the American guarantee, and of all association with nuclear powers; (2) the development of national strike forces; (3) a jointly controlled force, and especially the NATO-wide force; (4) reliance on the United States guarantee. Let us examine the relevance of each for avoiding large-scale nuclear war and for meeting lower levels of aggression in Europe.³

I. THE REPUDIATION OF NUCLEAR WEAPONS

The rejection of any reliance on nuclear weapons, even an ally's, to deter Russian nuclear attack has been prominently advocated in England in the last few years, and very recently it has gained some adherents in the United States. It deserves more extended comment than can be included here.

According to this view, nobody in his senses believes that either the Russian or the American Government would deliberately initiate a nuclear war, since this would amount to self-annihilation. None the less, it is thought, there is almost a “statistical certainty” that a continuing policy of mutual deterrence will result eventually in accidental war and the devastation of most of mankind. The diverse representatives of this view range from those who, like Mr.

A. J. P. Taylor and Mr. Frank Cousins, call for exclusive reliance on conventional weapons, through those like Mr. Stephen King-Hall and the traditional pacifists who recommend passive resistance to Russian occupation, and finally to Mr. Philip Toynbee who contemplates surrender. A common thread in their arguments has it that the danger of war with the Soviet Union and the Soviet military threat itself are a consequence rather than a cause of the arms race, and that East-West differences are susceptible of settlement now, since the Soviet Union is a satisfied, status-quo power. Near one extreme of this view, Bertrand Russell takes Soviet desires for Communist transformation of the world as analogous to, and hardly more menacing than, Christian desires to convert the world to Christianity. The other end of the scale approaches those who, like some heads of Western states, are merely optimistic about early diplomatic settlements with Russia, including extensive disarmament. The United States is seen not as a defender of areas menaced by Soviet aggression, but as one half of a power conflict which threatens to crush third countries. In fact, it is held that the United States will not fulfill its commitment to defend its allies but is quite likely to implicate them in a war.

This view wishfully understates the conflict of interest between the East and the West, and, by repeating the familiar clichés about an automatic balance of terror, it shows no understanding of the difference between defensive military postures which would ensure damage to the aggressor and those which would make it highly probable that the aggressor would come off unscathed. It exhibits the weakest and most inconsistent form of the dogma about the automatic balance by failing to recognize that unilateral nuclear disarmament would insure the aggressor against retaliation. It is sometimes said that total disarmament and submission to Soviet demands would remove any motive for attack, but it is hard to take seriously the belief that the West at the height of its industrial and political power would follow a policy of *total* submission. Lord Russell himself regards this possibility as academic. The more likely result of "unilateralism" would be a partial disarming and resistance that would actually increase the danger of the nuclear war which advocates of nuclear repudiation want to avoid. Specifically, it would increase the danger of deliberate war.

The "statistical certainty" of accidental war so often referred to, sometimes even by reputable scientists, is usually a tautology that says nothing whatsoever about whether war is likely to come

in any finite period of time. In this form the proposition states that there is a fixed, finite probability of accidental war in any given year, and that therefore if the situation continues "indefinitely," war will come. Mr. C. P. Snow is an exception. He has ventured to say that if events proceed on their present course, nuclear war is a "certainty" within the next ten years. This last prediction has some content but, so far as I know, is completely unsupported by evidence or analysis. It hardly illustrates Mr. Snow's high regard for the responsibility of the scientist in public affairs. The tautology, on the other hand, treats time in rather a cavalier fashion. It makes quite a difference if it continues for ten years or hundreds. Time is important in itself, because we—and our children—can live in it. What is more, the passage of time affords opportunities to alter both military postures and the root antagonisms which make them necessary. For those who hold that East-West differences can be settled now, it should not be hard to believe that they might be abated in 50 years. And the probability of neither accidental nor deliberate war is fixed year by year. We can affect the chance of accident by the way we organize our decision processes. The West has taken important steps in the control of its response and more can be done.

Furthermore, the nuclear disarmers have shown little understanding of the close connection between problems of deliberate and "mistaken" attack. They simply, but erroneously, assume that the West has an automatic decision system for nuclear retaliation; in consequence, they minimize the opportunities for deliberate attack and exaggerate the dangers of an accident. And finally, a non-nuclear defense conceived as a substitute for any reliance on nuclear weapons could not itself deter the Soviets' use of nuclear weapons and would quickly be overwhelmed by them.

II. NATIONAL STRIKE FORCES

The justification for the spread of national nuclear forces—as elaborated, for example, by Pierre Gallois—is based on the belief that no nation can be counted on to defend another from atomic aggression, since in doing so it would chance annihilation. Thermonuclear weapons, however, favor the prospective victim of aggression, it is said, by making it comparatively easy to retaliate effectively. So a lesser power can deter even a major nuclear power such as the Soviet Union. Thermonuclear wars, therefore,

will be unlikely when nuclear forces are widespread. And because limited wars risk escalation to thermonuclear war with its attendant destructiveness, they too are improbable. It would seem hard to find a more lighthearted contrast to the unilateral disarmers' grim estimate of the consequences of the diffusion of nuclear capabilities. But there may be more persuasive ones.

Let us begin with the rather paradoxical claim that it is not very difficult for a small power to deter a Soviet nuclear attack. This claim has had a long history, dating almost from the time of Hiroshima. A number of distinguished analysts then held that nuclear bombs would be the poor countries' weapon, a kind of equalizer in international politics, giving their smallest possessor the power of retaliation over the largest. However, such judgments were not based on any sophisticated analysis of the requirements for deterring the Soviet Union. Even at the time that Britain and later France decided to become nuclear powers, there was little evidence that the distinction between a first- and a second-strike capability was understood. Later justifications were excessively optimistic: The British exaggerated the time that would be available in the event of surprise attack, and French military theorists overestimated the number of Russian missiles required to destroy sheltered missiles, miscalculating their accuracy by factors no lower than 5 and sometimes as high as 25. Now, methods of keeping bombs and delivery vehicles on the move are being looked to in the hope that mobility will permit them to survive.

But the job of retaliation is more complicated than simply assuring the survival of a few bombs and delivery vehicles in the face of an initial strategic assault. Its analysis involves much more complex and uncertain quantitative interactions than the simple duels, now abounding in the literature of nuclear strategy, in which the aggressor's strategic missiles hit the victim's, and the remainder of these in turn automatically destroy the aggressor's cities. In the last year or two, it has become somewhat better understood that, even for the United States, getting a responsible deterrent to Russian attack is far from easy. It is vital and feasible, but hard. Yet the United States has incomparable advantages of distance, size and industrial strength. While there are many barriers to retaliation besides surviving strategic missile attack, in what follows I shall focus on one which plays an especially crucial role in an examination of theories of multiple national strike forces and joint deterrents. This is the critically important problem of maintaining a protected and responsible command and control.

This obstacle to assuring retaliation against a major power would be less formidable if we were willing to be sufficiently irresponsible, if in fact we were to institute the sort of automatic and decentralized decision system by subordinate commanders which Lord Russell infers to be the present arrangement. If our response system were sufficiently hair-trigger, we might make it unlikely that our missiles would be caught before launching; even very ambiguous indications would trip our nuclear response. However, the chance of starting a nuclear war by mistake or without authorization would then be very much larger than it is. If one takes a sufficiently responsible view and requires positive orders from high authority to launch a retaliatory blow, there is the problem of protecting that authority, and the flow of information to and from it.

The United States has not set up a response system which involves starting World War III automatically on the basis of radar or infrared signals, or as the result of a failure in communication, or even on the detection of an unidentified nuclear explosion. On the contrary, it has set up "fail-safe" procedures and positive controls. Frequently those who are most concerned about the Nth country problem and the dangers of accidental war believe that "the maintenance of deterrent stability is relatively easy to achieve," but they base this belief in part on the notion that we should or will inevitably erect a completely automatic system for deciding to go to war.⁴ It is not surprising, then, that these theorists take the accident problem as something which will have to be solved by the *deus ex machina* of international agreement. However, to adopt an automatic procedure, which these theorists themselves regard as extraordinarily dangerous, is not inevitable, but a matter of choice. Such considerations suggest that the problem of forestalling deliberate attack is inseparable from that of preventing war by miscalculation. The solution of one can be made comparatively easy only at the expense of the other. The task of both national defense and arms control is to solve them simultaneously.

With the multiplication of national strike forces, the control problem becomes especially acute. If many nations have the power of decision, and if, in addition, each nation decentralizes its control to a multiplicity of subordinates, or—worse—to some electronic automata, it is evident that the situation could get out of hand very easily. The difficulty of distinguishing accidents from attacks or, if the attack is actual, in identifying its source would

be enormously increased. Diffusion therefore places increased burdens on control. Yet precisely because it is hard to get a responsibly controlled deterrent with a small national force, some advocates of diffusion have proposed such desperate expedients as huge "dirty" weapons with only the most primitive guidance and possibly no control.

There are other barriers to retaliation and analysis of them would reinforce the point: the task of getting and keeping a force able to survive Russian attack and hurdle all the barriers to retaliation, including the preservation of control and the flow of information necessary for intelligent decision, is much more difficult than proponents of independent strike forces have been willing to recognize. Not many nations will solve the problems involved. England's cancellation of its costly program for the Blue Streak missile marked the conscious transition from a hopefully "independent deterrent" to the much less ambitious "independent contribution to the deterrent." And it is not without reason—as François Mauriac has pointed out—that France's first "deterrent" vehicles will be called "Mirage."

The problem of deterring a major power requires a continuing effort because the requirements for deterrence will change with the counter-measures taken by the major power. Therefore, the costs can never be computed with certainty; one can be sure only that the initiation fee is merely a down payment on the expense of membership in the nuclear club. For the same reason, the alternative idea that a lesser power ought to be given a deterrent which it cannot get by itself should be regarded with caution by both the donor and the recipient. The gift is not only expensive; it is obsolescent as soon as given. It is not a grant of independence but of continuing dependency.

It follows therefore that both the pessimistic and cheerful prophets of the wide diffusion of "cheap" retaliatory systems forget that this is not a simple matter of improving technology to cut the cost of a standardized product. Unfortunately the job of building barriers to retaliation is subject to improvement too. Published studies of the diffusion problem consider only the requirements for making bombs, not those for securing retaliatory systems. An effective system of retaliation must meet changing demands placed upon it by the aggressor. Retaliatory systems in the last decade have become no cheaper. They *may* in the future, but it is dubious, and the simple affirmation that they will is not very persuasive. The cost of the first 100 B-58s, Atlas or submarine-

launched Polaris—including development and all other fixed and variable expenses needed for five years of peacetime operation—will be from three to five times greater than the costs of the first 100 B-47s.

Growing awareness of the complexities of retaliation has brought into prominence the argument that a smaller power, just because it is a less important prize, need not have a capability to do much damage in order to deter, and that a capability of sufficient size is not hard to acquire. This theory of “proportional deterrence” relies on several unfounded assumptions. Nothing quite so simple as a proportionality works here. There are huge “entrance fees” for getting even one’s first strategic missile and the communications and other elements to go with it. The costs of a small force are disproportionately high. The research and development costs of American missiles have been extremely heavy. It might appear that such expenses will be substantially less for Nth countries, since they will benefit by the results of our work. This belief rests in part on ignoring the dynamic aspects of the problem and the possibility of counter-measures: the missiles which the Nth countries learn about after a time lag, and develop after a further time lag, are likely not to be relevant for their original purpose. Surely the history of development programs among the lesser powers for both missiles and aircraft is not very encouraging.

But there are two additional factors, which weigh heavily against secondary powers. First, the United States and Russia benefit in any specific development program from parallel programs in progress or completed. Navigation systems or systems of propulsion, for example, may be transferable. So the Atlas was able to use a booster developed for the Navajo, and the Navy Ship Inertial Navigation System has several uses. Perhaps most important, the research, managerial and production skills, and the physical plant developed for earlier weapons are useful for the next. The major countries, in short, benefit in any particular missile development by the fact that they have created a huge space technology and rocket industry. This will be much less the case for a small country. Second, the United States and the Soviet Union spread their fixed or initial costs, including research and development, over a great many units—the lesser powers over only a few. The per unit cost tends therefore to be much higher for Nth countries.

Although this discussion has focused on *system* problems (specifically, command, control, coordination) rather than simply the vehicles, this does not mean that vehicles or their numbers are unimportant. It will not be easy for lesser powers to obtain their first missiles, much less an adequate number. Moreover, it should not be assumed that a force of 10 missiles—even assuming they are safely-launched—will do one-tenth the damage of 100 missiles. Here again the proponents of the small deterrent have vastly oversimplified their problem. By means of active defense—to take just one example—a major power can reduce the effectiveness of a small force perhaps to the vanishing point. The development of decoys to aid the offense in penetrating defenses requires particularly costly and sophisticated study of reentry into the atmosphere. While active defense against another major power is extremely difficult, it should not be very hard for a major power to erect an active defense capable of handling the retaliation, say, of Guatemala, supposing Guatemala had a few ballistic missiles. In fact, one of the consequences of nuclear diffusion would be to impose the necessity for such defenses on the major powers. A small strike force, then, could inflict, not proportionately small damage, but possibly no damage at all.

It is sometimes argued that the small power need not be able to offer much of a probability that damage will occur at all. Even a very small probability of retaliation—a mere “shadow of incertitude,” it is suggested—will be enough to deter, especially because a nuclear war might escalate and lead to almost “boundless” harm. As Raymond Aron has put it, any finite probability of a boundless injury is too much to make attack worth while. This line of reasoning parallels Pascal’s famous argument that, even if there were only a small probability of eternal damnation, the risk would be excessive. Yet some have risked hellfire. It is important to observe that this argument for the adequacy of national strike forces also removes their principal reason for being—at least as it is currently avowed. The proponents of national strike forces claim they are necessary because of the lessened credibility of the American guarantee. But even the strongest enthusiast for an independent deterrent would concede there is some finite probability that the United States would fulfill its commitments, and the harm done to the enemy by an undamaged American strike force, if not boundless, is at least as great as that to be inflicted by a damaged national strike force. The advocates of national strike forces, in short, seem to place incompatible requirements on the

credibility of American retaliation as compared to what they ask for themselves.

Even if the lesser power can assure only "a shadow of incertitude" of retaliation, the aggressor, in order to eliminate the possibility of retaliation, might have to effect enormous destruction. This might make aggression less attractive. But the victim's ability to force his own destruction is quite a different thing from a promise to do direct and extensive damage to the aggressor. It is rather more like the method of lying down on the railroad tracks or fasting until death, used (sometimes successfully) by the non-violent resisters. It is doubtful that it could be counted upon against a totalitarian opponent. And it is likely to wear heavily on the nerves of any but a nation of saints and heroes.

Of course the advocates of nuclear diffusion are only unintentionally non-violent. Yet in effect their tactic resembles the methods consciously chosen by some of those who repudiate the bomb altogether. And in spite of the obvious contrast, there are several strong points of resemblance between those who would distribute bombs to everybody and those who reject them altogether. It may be that the reaction of the unilateralists to the reckless nuclear policy characteristic of the diffusion advocates is made easier by the assumptions they hold in common. When General Gallois develops his view that no nation can be counted on to defend another in the atomic age, he sounds a little like Mr. Nehru and other members of the neutralist camp who talk of alliances as things of the past. It is not only the unilateral disarmers who call for the end of overseas bases and the withdrawal of American forces; the possibility of withdrawal is offered as bait by those Europeans and Americans who want us to give our allies bombs and, hopefully, the ability to shift for themselves. Both views share an underestimation of the problem of deterring deliberate attack, and specifically a deliberate Soviet attack.

Theorists of nuclear diffusion, in order to reassure us on the unstabilizing effects of the proliferation of weapons, sometimes say that no nation would use them except when confronted with annihilation or slavery. But anyone who believes this must, like the unilateralists, discount Russian nuclear attack, since the West does not confront the Soviet Union with these alternatives. It is significant that the moves toward nuclear independence in the last half dozen years have accompanied a lessening rather than a growing fear of Russian attack.

Whatever the motives for the national strike forces, they have a dubious utility for deterring Russian nuclear attack. There are, however, other functions which have been contemplated for them, and two are worth mentioning: (a) the deterrence of Russian non-nuclear attack; and (b) the defense of national interests in conflicts with lesser powers—possibly, for example, the defense of overseas interests in underdeveloped areas. Both of these have the familiar defects of the doctrine of massive retaliation which flourished in this country until recently; both lead directly to diminishing efforts in the field of conventional defense. As to the first, it is not hard for an enemy to devise a plan of aggression or a set of demands which are less than would seem to justify a nuclear response and, if conventional defenses are allowed to lapse, a small nuclear power will be extremely vulnerable.

So far as the defense of overseas interests is concerned, the utility of nuclear strike forces is even more obscure. Though the French in sheer frustration after Indochina and the British after Suez are supposed to have turned more definitely towards nuclear independence, the experience of the last decade and especially of Suez seems to offer the opposite lesson. The English at Suez could not have used nuclear weapons against Nasser, and their nuclear capability did not make them more resolute against Russian rocket threats nor, for that matter, against the possibility of economic sanctions by their principal ally. Nuclear weapons simply were irrelevant in defense of what the English conceived their interests to be. Precisely because these Western powers are answerable to electorates as well as to many military allies and trading partners, there is very little chance that they will use nuclear strike forces against a non-nuclear power, especially in defense of overseas interests.

This is not to say that such forces do not have indirect political uses as well as some psychological value. In fact these values have been candidly discussed in both the British and French debates on their military nuclear programs. After extensive debate in which the military value of the *force de frappe* had clearly failed to impress the French Assembly, M. Debré achieved passage of the bill on a vote of confidence and by accepting amendments which formally acknowledge that the purpose of the bill is “as much political as strategic.” In the view of most observers, this amounted to agreeing that the purpose was primarily political.

It is not easy to define the political motives for nuclear weapons programs. They are necessarily a little vague and possibly not

always consistent. It is none the less evident that they have carried a good deal of weight, and may have been more influential than some of the varying military purposes which have been avowed from time to time. The motives range from the intangibles of prestige and rank in the world to the somewhat more concrete desire for a special position in NATO. On the one hand they express the desire to be able to exercise a veto on the use of any nuclear weapons by the West and to obtain complete solidarity in the West with respect to African and Asian policies. On the other hand, they express the very human desire to be completely in control of one's own self-defense — one's own fate — a nostalgia for absolute sovereignty, or a desire to be able to influence or survive the effects of either a contest or a rapprochement between Russia and the United States. (England has thought that with its prestige enhanced by nuclear status, it could mediate between East and West as an honest broker. General de Gaulle has expressed fears as to the results for France of either development — rapprochement *or* nuclear conflict.)

One can only sympathize with a desire to control one's fate, but a nostalgia for sovereignty in the traditional or dictionary sense, "independent of and unlimited by any other," was probably never easy to satisfy. It is especially hard today. The United States depends crucially on its allies, though this dependence is less immediate and pervasive than that of its allies on the United States. And though questions of prestige are always delicate, it is doubtful that any genuine purpose can be served by exaggerating the independence possible for European powers. We should not assume that our friends cannot face up to the real limitations of national strike forces. Britain's bitter experience with the Blue Streak program suggests that attempts to achieve nuclear independence can as easily result in loss of prestige as in gain.

The use of nuclear status as a bargaining weapon to attain a special position within NATO is of course an acknowledgement of interdependence. The English have talked of the position of leadership conferred by their nuclear power. And the French, quite willing to believe in the existence of an Anglo-Saxon duumvirate, hope by attaining nuclear status themselves to restore the triumvirate. But it is not likely to stop there. Such an objective for a weapons program is by its very nature divisive. Not all members of the alliance can be "more equal" than the others. The allies who are slighted are bound to resent the superior position of the others, especially if, as is quite probable, it is obtained by diverting

national resources from alliance obligations, and by getting the help of the United States. The British nuclear force was a direct spur to the French, and every real or fancied discrimination made in favor of England has added more incentive for the French to follow suit. It is hard to believe that the Germans will not be moved to follow the French, if we reward the French for their efforts to develop an independent nuclear power. Influence in the alliance might better be determined by contributions to NATO's defense. National nuclear forces have not added significantly to either the sword or the shield by comparison with equal amounts spent for conventional defense.

Up to this point we have been examining the worth of a nuclear capability largely from the national standpoint of a prospective Nth power. I have deferred speaking of the implications for "world stability," or more concretely the probability of small or large nuclear wars. It is easier to do this now when we can make a little more precise the sorts of nuclear capability that might be widely diffused. To begin with, we should distinguish the capabilities of the lesser powers against the major powers, and the sorts of capability a lesser power might have against various other lesser powers. This last in particular has been neglected.

First, to deter a major power such as the Soviet Union is hard, and this ability is not likely to be widespread. Second, the ability to disarm a major country and so to preclude extensive damage to oneself is likely to be still harder, if the major country exercises care, and particularly if it is a totalitarian country exploiting the characteristic advantages of secrecy. Against totalitarian Russia, I know of no *reliable* way even for the United States to achieve and maintain such a "preclusive first-strike capability." There remains a third capability — to strike first and do damage without precluding retaliation. Against a major power only this third sort is likely to be at all general. But this is a good deal less useful to its possessor than either a deterrent or a preclusive first-strike capability.

Against lesser countries, a secondary nuclear power might have any one of the three capabilities described. It might be able to do a little or a lot of self-destructive mischief. It might be able to attack and prevent all damage to itself. This obviously would be the case if the victim were not a nuclear power, but it could also be the case if both the aggressor and the victim were nuclear powers. Each might have the ability to preclude the other from striking, depending on who struck first. The only live question then would

be which one would be dead. Finally, between some pairs of lesser powers there might be a relation of mutual deterrence.

What does this mean for the likelihood of nuclear war? The view that widespread diffusion will be stabilizing assumes that the prototype relation among the many powers will be mutual deterrence. But it would in fact be a miracle if *every* pair of countries out of a large number of nuclear powers stood in this relationship. These countries are at different stages of development and in different relative strategic positions. It would be remarkable if there were not strong asymmetries and sometimes symmetrical "preclusive" capabilities. Relations, moreover, would shift constantly with changes in the military technology of the various powers and with the shifting coalitions among them.

If one starts with the assumption that all prospective Nth countries are interested in deterrence rather than aggression, one might suppose that an addition of nuclear weapons to their arsenal might merely add to the deterrent. However, in the real world, if there are many nuclear powers, some are likely to be interested in aggression and some able to get away with it without response from the victim. While the more responsible powers would be hard put to find a use for their nuclear capability, diffusion is likely to bring some less responsible recruits into the club. Then, with the major powers eager to avoid involvement, a lesser nuclear power might feel that he could attack one of his brethren with impunity. On the other hand, if, as may happen, a potential conflict looks as though it will be hard to isolate, it may be less likely to occur, but much more serious.

The probability of war by "mistake" as well as by deliberation is likely to increase. Vulnerability to attack and the incidence of "mistakes" can, it is important to observe again, be affected by the way we shape our posture, including our decision-making processes. However, the proliferation of nuclear forces has an essential connection with the difficulty of solving these two problems simultaneously. It places an increased burden on a system of positive control, and therefore increases also the problem of its protection. A dispersion of nuclear weapons complicates the problem of responsible deterrence by increasing the ambiguity as to sources of attack. One must decide not only whether one is under attack, but who has attacked; or one may feel obliged to attack all possible culprits including powers so far not involved; or the powers not yet attacked might preempt in order to diminish the consequences to themselves of a probable

spread of the conflict. The instability would be a worldwide problem. Even if, with large-scale proliferation, each new nuclear power adopted a positive control system with a high standard of responsibility, there would be an increase in the possibility of mistakes, simply because there would be *more* control centers. It is apparent that this problem is not widely understood. When it is, this should reduce any temptation to cut the costs of a national force by “volume” sales to other powers.

To sum up the case against national nuclear forces: from the national standpoint of a responsible power, they are costly and of dubious military value. Their political value has been exaggerated, for, as the English have learned, it encourages emulation and is therefore transient. From the standpoint of world stability, wide nuclear diffusion would be gravely disruptive. It would increase the likelihood of the use of nuclear weapons both by accident and by deliberation.

III. JOINTLY CONTROLLED STRIKE FORCES

Joint forces, such as the proposed NATO strike force, have been suggested as a means of strengthening the alliance and of heading off the diffusion of nuclear control—in particular, to offer the French some substitute for a national force and thereby to remove a stimulus to the Germans. Some very thoughtful analysts and policy-makers have supported these proposals, and, given the disturbing implications of nuclear diffusion, they deserve the most sympathetic consideration. None the less, I believe the proposals for joint nuclear forces are mistaken. They are likely to propagate the diffusion they are intended to control. They are expedients and their precise content is unclear. I believe therefore that they will weaken rather than “save” the alliance.

Proposals for a NATO strike force usually take at face value the claim that Europeans are genuinely fearful of a massive nuclear attack to which the United States would not respond and that it is this fear which motivates diffusion. To begin with, let us also take this claim at its face value. Would a NATO strike force in fact satisfy the problem? Would it be more credible as a deterrent to nuclear attack on Europe than the U.S. guarantee? There are several reasons for believing that it would be considerably *less* credible. I shall focus once more on the command and control problem.

What is it that members of NATO want — the power to launch a nuclear strike or the power to say “No”? There is much evidence to suggest that Europeans have been worried most about the possibility that the United States may be trigger-happy; they are mainly interested, therefore, in the power to say “No.” Even General de Gaulle, who has said that it is intolerable for France to depend on other countries for its defense, has indicated that he would like the ability to veto the use of nuclear weapons by the West anywhere in the world. But if those who jointly control the NATO force are principally interested in the power to say “No,” then the response of the joint force is less credible than the U.S. guarantee. For one thing, as a member of NATO the United States has a vote, and if a strike is not in our interest we would presumably exercise our veto. But even if we did not have a vote, or did not exercise it, the chance that at least one of the European powers would vote “No” seems extremely high—higher than the chance of an American veto, simply because there are many powers voting. But ironically, the power to veto the use of a NATO strike force would not offer much satisfaction to those who are worried about the control of their fates, and specifically control over supposedly trigger-happy Americans. Giving the members of NATO a smaller strategic force to veto during a crisis would not by sympathetic magic prevent Americans from invoking the tremendous power of SAC. Plans for joint controls, then, provide no assurance that the NATO strike force will itself respond, and none that SAC will not.

On the other hand, if the purpose of joint control is to say “Yes,” then what is its meaning? No one to my knowledge has suggested that the NATO strike force be at the disposal of any member of NATO who desires to use it, regardless of what the others think. This of course would be the extreme shortcut to the nuclear decentralization which the NATO strike force is supposed to avoid. Is the decision, then, to be taken by majority vote? By all or a majority of a subcommittee? Suggestions that have been made for committees of five or three powers to launch the NATO strike force raise in the most acute form questions of national sovereignty. They are not likely to be more practicable than the modest proposals for a division of labor in NATO, which have so far presented insurmountable obstacles. For the 15 countries to define “rules of engagement” for the use of a strategic force means that each must state in advance the precise circumstances under which it is willing to be committed to a general thermonuclear

war and to whom it would give this power of commitment. Agreement here would offer the greatest political difficulties. The hope that the problem can be solved by the formation of a United Europe, in which there would be no separate considerations of national interest, seems at the present date rather forlorn.

Another alternative, and the one most frequently discussed, is to delegate the decision to the Supreme Allied Commander for Europe. But SACEUR is at present a highly responsible American general, and it seems very doubtful that any other than an American could be agreed upon. (There is at any rate little enthusiasm for an English SACEUR in France, for a German SACEUR in England, for a Turkish SACEUR . . . and so on.) But is it really easier to place confidence in a decision by a responsible American SACEUR than by the American President? If retaliation were not in the American interest, SACEUR would order it only if he were not responsible to that interest and to the President: that is to say, only if he were not a responsible American general.

This point will stand out with greater clarity if it is understood that the launching of the NATO strike force is intended—quite explicitly in the minds of most of its proponents—as a trigger for central war and the use of SAC. The firing of Polaris missiles from NATO-controlled submarines would be indistinguishable from the firing of missiles under U.S. control. Russian retaliation is then likely to be directed at the United States and, since the United States would expect this, it would have little choice but to launch its weapons in anticipation. The power to launch the NATO strike force is therefore the power to decide on World War III. The President of the United States has not delegated the authority to make war to the Commander of SAC. It is unlikely that he would give to SACEUR an irrevocable power to commit the United States to war, especially for a contingency in which the United States is not attacked, and the President is alive and able to make the decision. In fact, it is hard to see just how such power could be made irrevocable. But if it is revocable, how has it helped the supposed problem of “credibility?”

I have suggested that protecting command and control and making them responsible are crucial for avoiding accidental war and at the same time deterring deliberate attack. If, as we have seen, it is difficult for the European countries individually to solve this problem, it is still harder for a *joint* command and control close to the enemy. The joint decision is more complex, involves more parties and will be extremely hard to protect. It seems dubious

that the NATO strike force will be a convincing substitute for the American guarantee in the event of massive nuclear attack on Europe.

On the other hand, the NATO strike force has sometimes been suggested as a substitute for the American guarantee not in the event of a massive nuclear attack on Europe, but in case of a nuclear attack on a single NATO nation. However, it is hard to see in this case why the unattacked NATO countries would be more likely than the United States to exchange their cities for a few Russian cities in retaliation for their fallen ally. We would have to presume that, say, Turkey is more closely identified with Norway, or Iceland with Greece, than is the United States.

In sum, it seems unlikely that a NATO strike force would provide a deterrent to the Soviets more credible than that of the dubious national strike forces. It is still more doubtful that it would improve the American guarantee.

Let us now examine critically the assumption that the Europeans are moved to seek nuclear independence or a NATO strike force by a deep concern about a Soviet thermonuclear attack on Europe to which the United States would not respond. In good part the American estimates of European fears project some American emotions. We have initiated much of the movement toward reliance on nuclear weapons in Europe, and our advocacy of nuclear sharing and of European union has been reinforced by an implicit isolationism: a hope that somehow a Europe capable of self-defense would enable the United States to reduce its overseas burdens and commitments. Such American views in turn unsettle the Europeans.

We greatly oversimplify the diverse fears and motives of the NATO powers. The only NATO countries that have attempted nuclear independence are England and France, and their programs started long before anyone was raising grave doubts about the American response—the English in the 1940s, the French in 1954. While these programs have been rationalized variously at different times, there is little evidence that the dominating incentive has been an urgent fear of Russian nuclear attack. On the contrary, diminishing efforts in national defense, hopeful statements about the prospect of resolving East-West antagonisms, and many explicit avowals suggest that the Europeans are little worried about a deliberate massive nuclear attack. If they are not worried, then their doubt about an American response to such an attack becomes an academic question. In discussing national strike forces,

I have already listed motives for nuclear military programs which have nothing to do with fear of Russian nuclear attack, and may even be incompatible with such a fear. The Europeans of course do have legitimate worries, but these center on the adequacy and appropriateness of NATO response to lower levels of aggression.

The NATO strike force is no more relevant for other objectives of national nuclear forces. For deterrence of Russian non-nuclear attack, it has roughly the same defects as national forces. Like them it may favor the illusion of providing a suitable response to conventional attack, though many of its principal proponents have the opposite intent. As in the case of those who advocate multiplying national nuclear forces on condition that conventional forces be expanded, the condition seems hard to impose. The joint force obviously could not be used for defense of purely national interests or in conflicts with other lesser powers; especially in the case of overseas interests, it is hardly likely to receive the consent of other members of the alliance. It is no use at all as a bargaining weapon for special position in the alliance, and it opposes completely the affirmation of national sovereignty. In short, it satisfies neither the surface nor the underlying motives for national nuclear military programs, and it is not likely therefore to head them off. In fact, many of the French have been explicit on this point. Like President de Gaulle, some members of parliament oppose the NATO force. Others openly favor it as a boost to the French national force, because, for one thing, they believe it will further weaken the MacMahon Act. But with or without the NATO force, the French Government intends to get its own *force de frappe*. In the words of General Billotte, the NATO strike force "does not respond even partially to the exigencies imposed for the security of France . . . it could in no manner be substituted for the French project."

Another hazard of a NATO force is that one of the members might withdraw some part of the force in time of crisis or, perhaps, to realize some purpose of its own. As a safeguard against this withdrawal, it has been suggested that installations be manned by mixed teams from all the member nations. Operational commanders, however, question whether such an arrangement is workable. In any case, the questions of sovereignty are here raised in a particularly acute form; General de Gaulle has resisted much less thorough integration. (The recent compromise on integrating French air defense in Europe applies only to the very small fraction of French fighters on German soil.) This safeguard

of multinational teams seems destined to be compromised out of existence also.

One omen of such compromises is that the NATO strike force has among its supporters not only those who want to restrain nuclear diffusion, but some who are simply unclear, and many who are actively in favor of the spread.⁵ These gentlemen are like the stout lady who drinks her Metrecal as an appetizer before a full-course dinner.

Some proponents of the NATO strike force concede that its military worth would be low, but feel that its political value is high. Its political worth, however, may be negative. First of all, its political effects cannot be divorced from its military content. If, as I have suggested, the alleged merits of a NATO strike force will not bear analysis, this will be evident in time and is bound to trouble our allies. Second, the automatic-decision features in some versions of the proposal have disturbing political implications and would be likely to feed the fires of unilateralism both here and in Europe. Third, the probable refusal of some of our principal NATO partners to join in the project would tend to break the alliance into blocs. Fourth, it may be interpreted as a move toward withdrawal of the American umbrella. Some of the French are quick to catch suggestions to this effect in the American press. During the November debate in the French senate, Philippe Dargenlieu used these suggestions to justify doubts about the American guarantee, and as evidence of the need for a national nuclear force. Fifth, it lends a little substance to the fashionable statements about the incredibility of the American guarantee.

In many indirect as well as direct ways, then, the NATO strike force seems more likely to be a step along the way to diffusion than a means to inhibit it. Both its military and its political worth are more than doubtful.

IV. THE AMERICAN GUARANTEE AGAINST NUCLEAR ATTACK

It is fashionable to say that an American response to a Soviet nuclear attack in Europe is incredible. Is the statement true? What precisely does it mean?

Perhaps the first thing to observe is that it means nothing very precise. To talk in terms of credibility or incredibility suggests that the alternatives are simply Yes or No. But in fact neither our response nor our failure to respond is certain. The real questions

center on how likely we would be to respond in circumstances that are worth considering. What risks would the Russians undertake if they attacked Europe on the assumption that we would not reply? How safe would the Russians feel? These questions are connected with others: How large is the American stake in defending Europe from annihilation or take-over by the Communists? From the American point of view how would the risks of failing to react—if bombs were dropping on Europe—compare with the risks of retaliation? What are the chances of irrational decision? What would be a rational decision in terms of American self-interest?

Sober thought would suggest that the American response is by no means “incredible.” The fashionable notion, I believe, is wrong, even if we interpret “incredible” as meaning simply “very unlikely.” In any plausible circumstance of thermonuclear attack on Europe we would be likely to reply today, and, if we and our allies choose our policies carefully, this will remain true. It seems clear that the Russians do not find an American response hard to believe, since they have been deterred from taking over Europe by fear of this response, and not by moral scruples or an inability to overwhelm purely European defenses.

There are many reasons why the Russians should doubt their ability to isolate Europe and attack it alone, without attacking the United States. For one thing, a considerable portion of American nuclear power is dotted over Europe in a great many places from the United Kingdom to Turkey. It would be difficult to distinguish between a massive nuclear attack on Europe alone and the first wave of a wider attack which would almost immediately engulf the United States. There are profound questions as to whether we could stand by while our allies were being taken over and destroyed piecemeal, without expecting a basic shift in power which would threaten eventual annihilation or take-over of the United States itself. But quite apart from such relevant long-term questions, there would be a large risk of imminent destruction of much of the continental United States.

To understand this a little better, we might contemplate how such an attack might look in the awful moments of the crisis itself. Is it likely that the Russians would stage a massive nuclear attack on Europe and leave untouched the several dozen points where American nuclear forces are stationed? It would be extremely dangerous; most would agree, very improbable. On our control boards in the basement of the Pentagon, in Colorado Springs and elsewhere, we would see that a considerable portion of our

nuclear capability had been eliminated, that a large portion of our forces had not yet been hit. Could we be counted on not to use these forces while they were still alive?

To fill out the picture a little, we should recall that around and about the United States at any particular moment there are unknown aircraft not definitely identified as friendly. From time to time the number gets quite large—large enough to be “critical,” that is, to be explicable only as an extremely out-of-the-ordinary configuration of air traffic or as errors in identification or possibly as an enemy raid headed toward or already infiltrating the United States. Experience shows that crises tend to generate false reports of over-flights or incursions. These and several other types of false alarm are ordinarily taken in stride. They are evaluated along with other indications of hostile action. But the coincidence of such an alarm with unmistakable confirmation of a Russian attack on Europe, if not certain to get us going, would surely add appreciably to the Soviet risk.

If we add to this picture of great menace to the country the knowledge that hundreds of thousands of Americans as well as millions of our close allies would already have been killed, it should not be hard to believe that we would make the decision to send our forces off. It is quite absurd, in fact, to think that the Russians have nothing to worry about. They would have to calculate our reactions under enormous stress, and they would have to risk a good deal more than a “shadow of incertitude.” To destroy part of our strike force and leave a larger part of it untouched would involve the utmost risk.

There are other ways in which we have identified our own defense with that of Europe. The most obvious one deserves considerable weight: We have signed a treaty saying that we do. For the United States it is not merely a figure of speech to say that we will treat an attack on Europe as an attack on ourselves. A failure to fulfill a commitment on a much less momentous matter would mean a tremendous loss in political power. While our promise alone may not be enough, it would be a mistake to underestimate the seriousness of our undertaking. We have predisposed ourselves to act.

Even if a cold calculation were to suggest that the balance lay in favor of *not* responding to Russian aggression, there is obviously a very considerable chance that in the circumstances we would not calculate coldly. In any event, there are immediate and long-run risks in failing to respond. The analysis presented

so far should make clear that our response would not simply depend on the possibility of our acting irrationally. If Europe had suffered a massive nuclear attack, it would be *reasonable* for us to expect the same at any instant. An aggressor who did not take this into account would himself be extremely irrational, for he would have put himself in an extraordinarily dangerous position, inviting by his delay an attempt by us to blunt his strategic force. The situation would be terribly unstable and would not recover quickly. If an attack on the United States did not immediately follow an attack on Europe, we would be justified in assuming either that the act was unauthorized or that some tremendous miscalculation had been made. And whether or not this were true, the aggressor would have to be concerned about the possibilities of preemption. The temptations on each side to forestall the other would be enormous.

Even if the aggressor were to take pains to make clear that he was attacking "only" Europe, and leaving America intact, this would be so unreasonable that it is unlikely we could be convinced. It is hard even to imagine a sensible motivation for an attack of this sort. A somewhat more plausible scenario might be trumped up for an attack against a single ally that had become a menacing, independent nuclear power. This, it should be observed, would be the result of diffusion, rather than a justification for it. But no plausible motive suggests itself for a massive attack on Europe in isolation. Such an attack seems to be a creation of some overly simple models of the world, rather than anything likely to occur in it. For Europeans it would seem that the last contingency to worry about is a deliberate massive nuclear attack on Europe which ignored the United States.

One final point should be recalled. To deter such an attack our response need not be certain. It must be probable enough to make the aggression excessively dangerous to the aggressor. The probability of our response is clearly large.

In examining the probability of our response, I have concentrated on the risks to us of failing to respond. We can and should also reduce the damage we could expect if we did respond. It is important, however, not to exaggerate what can be accomplished in this area. We should attempt to control the violence and diminish the frightfulness of a thermonuclear war. We should do this primarily because, in spite of our best efforts to avoid it, thermonuclear war may come, for example, as the result of an "accident" or an irrational or unauthorized act. But no active

or civil defense or other program for limiting the damage done to us in a thermonuclear war is likely to be so reliable that it would seem reasonable for the United States to go to war unless the alternatives were enormously risky. For this reason, a program to limit damage is not likely to make the United States be or seem aggressive. For the same reason, it would not reassure the Europeans that we would respond if there were not substantial risks in failing to respond.⁶ The most important purpose of our commitment to Europe and the deployment of our forces there is to make explicit to the Russians, to the Europeans and to ourselves that we are aware of the enormous risks to the United States in not defending Europe against massive nuclear attack.

What sort of risks would the Russians take? When we are not thinking wishfully about the Russians, we tend to think of them as if they represented the complete negative of our desires. But a move which would damage us would not necessarily be useful to them. It is important to consider a Russian threat from the standpoint of Russian self-interest. From their standpoint the problem of successful aggression in Europe is to find a level and kind of attack large enough to be useful, but small enough to be well below the threshold risking American nuclear response.

NATO's problem is to try to make sure the Russians cannot manage a useful attack without making it so large that it would be hard to distinguish from the start of a central war. Europe's principal strategic disadvantage is that it is susceptible to attack with conventional weapons, whereas the United States is not. It is becoming more and more widely accepted among critics of NATO that the most important task for the alliance today is to raise by conventional means the threshold of attack that the Russians would have to launch in order to be successful. The main defect of NATO strategy in the 1950s was a refusal to face this problem. Since 1954, NATO policy has been based on the assumption that the alliance would respond with nuclear weapons to any kind of aggression other than a local or temporary incursion. NATO military theorists took the view that the West had no choice but to adopt a policy of nuclear response to Soviet attack. The Russian hordes, we were told, could not be matched by NATO manpower, but only by the increased firepower derived from nuclear weapons. This argument was doubtful both in its estimate of NATO capabilities for non-nuclear defense and in its notion that nuclear weapons would redress the balance in favor of the West.

There is one point worth adding to the many telling criticisms which have been made of this nuclear policy. It has become clear in the last year or so that we must revise downward our estimate of Russian conventional capability. Premier Khrushchev's famous speech to the Supreme Soviet in January 1960 and other evidence indicate that Russian force reductions went further than the West had expected: two successive cuts since 1955 of over a million men each, and a cut in all categories of non-nuclear capabilities, including the surface navy, air force planes capable of delivering high explosives, and ground forces. Apart from the expected references to disarmament, the justification for these cuts appears to be much the same as those that influenced the West—the increased “firepower” of the new weapons—although the current manpower shortage arising from low wartime birth rates is probably a more important reason. It would seem that the Russians might have difficulty meeting the NATO hordes.

What are the implications of these changes in Russian force estimates for Western choices between nuclear and non-nuclear defense? Of course it might be argued that since the Russians are prepared for nuclear war, there is no point in our getting ready to meet a non-nuclear attack. Such an argument would sound strange coming from the same military analysts who argued that there was no point in our trying to defend ourselves with conventional weapons because the Russians were too well prepared for conventional war. On the contrary, it is now feasible to meet a wider range of possible attacks without raising the level of violence. This is one of many indications that the requirements for the defense of Europe ought to be reconsidered.

In essence present NATO policy promises to meet any prolonged aggression—even if it is local, so long as the intention to persist is clear—by turning it into World War III. Sometimes when people doubt the credibility of the American response, it is *this* policy they refer to and it is the validity of the strategic guarantee to deter *lower* levels of aggression which they doubt. Europeans do fear that so drastic a promise might not suffice to deter a carefully prepared aggression that was clearly at a lower level of violence. They also fear that if the aggression occurred we might keep our promise. In any case, the use of the strategic threat to deter smaller aggressions paralyzes efforts in conventional defense by making them seem superfluous. Recently high NATO officials have emphasized that NATO's “normal” response would be conventional. A more clear-cut change of concept

in this direction would help revitalize the alliance. Though the Europeans cannot decisively affect the capability for long-range strategic war, they can contribute a great deal to meet lower levels of aggression.

While giving NATO an artificial strategic capability makes no sense, the Europeans have a strong interest in increasing control of nuclear weapons of shorter range and of weapons based on their own territory. It is worth exploring an increase in their participation here. Tactical nuclear weapons have been oversold. Their use cannot be initiated with any confidence that the level of violence will be stable. This does not imply, however, that we want to leave ourselves only the option of using large-scale strategic weapons or conventional weapons. Where the aggressor initiates the use of tactical nuclear weapons, for example, greater flexibility than this would be in the interest of the Europeans.

One of the principal reasons for opposing nuclear sharing is connected with the need to try to limit the violence of war—either to keep a conventional conflict from becoming nuclear or to control or smother a nuclear conflict before it spreads. Clearly, a necessary condition for stable conventional warfare by an alliance is a highly responsible, centralized control of nuclear weapons. As for efforts to control the violence of a nuclear war, whether by making some distinction between military and urban targets, or by controlling the application of force within either category, or as part of a bargaining process to force termination of the war on more favorable terms, they become a rather remote possibility with nuclear diffusion. Coördinating and controlling one strike force in time of war is difficult enough, but to attempt coördination among congeries of independent strike forces seems quite hopeless.

Responsible control over the decision to go to war and over the level of the conflict is a central concern of our allies. Some of the current proposals for NATO nuclear policy err implicitly in assuming that the Europeans worry only because they doubt the Americans will issue a “Go” order when it is needed. In fact, a concern about a “Go” order is not easily separated from anxiety about the veto. The concern for a veto, while it may appear inconsistent with a desire for independence, is a very deep one. Moreover, it is precisely this which is ignored by the swarm of proposals in the United States as well as elsewhere in the West which in one way or another suggest—in order to make our deterrence of deliberate attack more certain—an automatic system of response. A concern about a veto is associated with the basic

fact mentioned earlier that the problem of deterring deliberate attack and avoiding accident are inseparable. The task for United States policy is to continue to perfect a force which would have a clear likelihood of being used in case of a massive nuclear attack on Europe, and yet be so controlled that it can reassure the Europeans as well as the Americans that it will not be used in the event of small provocations or false alarms.

Attempts to solve the first half of this task by automatic engagement rules that make the decision independent of the will of the United States will not satisfy us. And if the rules are automatic enough to be independent of both the Europeans and the Americans, they will, in their recklessness, satisfy no one. The only responsible way to satisfy doubts about the American will is to keep the United States so engaged in the immediate fate of Europe that the decision to answer a massive nuclear attack on it is a rational one, and to keep Europe's defenses strong enough to cope with any other reasonably likely form of attack.

The presence of American forces in Europe not only implicates the United States in a Russian attack on Europe, but also implicates Europe in a Russian attack on the United States. This could have its drawback, if we were extremely provocative or irresponsible. But it is necessary, and the United States is not irresponsible. It might seem ideal from the European standpoint if the United States could be involved in a Russian attack on them, and they could be untouched by a Soviet attack on America. There are undoubtedly some analogous American desires, but they are equally fantasies.

Some fears expressed by Europeans about our eventual withdrawal from the alliance suggest, as much as their hopes for "independence," a belief that in the nuclear age alliances are things of the past. But the United States does have a crucial long-run dependence on its allies. The only very firm foundation for believing in our continuing engagement in the fate of Europe is that if the Europeans and other of our allies go Communist, we may follow or be destroyed. The process of Communist transformation of the non-Communist world cannot proceed indefinitely without making the United States itself subject to attack even by non-nuclear weapons. It could force us to expand our defense to levels very much higher than the current ones and possibly higher than is compatible with democratic forms. The alliance is viable, because neither our allies nor the United States in the long run can survive without it. This is the reason for

deliberately entangling our forces and their dependents in the lot of Europe. We identify our short-term fate with Europe's because we think our long-term fate cannot be extricated from theirs.

While I believe the American guarantee is absurdly underestimated in some current discussions—sometimes merely as a rationalization for national strike forces—this does not mean that the strength of the American guarantee is immune to change. On the contrary, one of the most serious troubles with moves towards NATO or national nuclear strike forces is that they might weaken the American guarantee in the future. If either a national or a joint deterrent can really deter the Soviet Union, it is hard to justify an American commitment for this purpose. If European nuclear forces should present merely a facade of deterrence, they might convince the American Congress even if they do not convince the Russians. Then Europeans will be surrendering something of enormous value for something that may be worth little or nothing. Advocates of nuclear diffusion as well as proponents of a European strike force have in fact offered as bait the possibility of reducing American forces overseas. It might not need the next balance of payments crisis for the bait to be taken. Clearly, extensive withdrawal of the United States from Europe would not only reduce our immediate stake, but would make it easier for the Russians to level an attack which was unambiguously against Europe and not against the United States.

I would like to avoid the impression of an American *folie de grandeur*. Given the critical importance of Europe for the United States, the need for the American guarantee to deter massive nuclear attack on Europe is a token of the limits of American, as much as European, independence. In fact, the principal implication of my argument is that the much used notion of interdependence has to be taken seriously.

To sum up the four alternatives for avoiding nuclear attack on Europe: For the Europeans, the first alternative, to repudiate all reliance on nuclear weapons including the American guarantee, would increase the likelihood of Soviet attack. Such an attack would still be dangerous for the Soviet Union, since the long-run interests of the United States would be critically injured by it. Yet it is apparent that, insofar as the attempt to disentangle the immediate fate of Europe from that of the United States was successful, it would lessen the probability of American response and the consequent risks of aggression. But the second and third alternatives are hardly better than the first. A European effort

to achieve nuclear independence, either in the guise of national forces or of any of various joint enterprises, would have much the same effect. It would weaken the American guarantee against Soviet attack without putting anything of substance in its place. The fourth alternative, the American guarantee of Europe, is a necessity for both the United States and Europe.

To keep the American guarantee valid, it is important not to diminish American nuclear power in Europe until conventional forces have expanded to close any gap; but in any case it is essential for us to stay in Europe. To remove any doubts about the responsible use of nuclear power, it is vital to keep that power under centralized control. For deterrence and responsibility we must do what we can to inhibit the diffusion of nuclear weapons.

Such a policy is best from the standpoint of both American and European security. It happens also to be sound from the standpoint of the stability of the world system and—insofar as the Soviet Union has a common interest with us in avoiding the chance of nuclear miscalculations—it may be in their interest too. This last is not necessarily a demerit. Our interests are not the negative of Russian desires, any more than the reverse is true. We should not assume that the acquisition of nuclear weapons by China or the Warsaw powers is good for us because it is bad for the Russians.

A good many people today favor unilateral steps toward disarmament, even at great risk, in the hope that this will lead the Russians to take similar actions. My point is quite different. The policies advocated here would *improve* alliance defense. We should take these measures, so to speak, “even though” they are in the interests of both East and West—for example, in reducing the chance of war by miscalculation or “accident.”

It may be felt that such a national policy to abate, delay or control nuclear diffusion is too uncertain or slow, that only an extensive arms-control agreement and perhaps even the imposition of a world authority are worth trying. However, we should not think of the achievement of arms control as if it were going to take place in one millennial, transfiguring instant. The serious control proposals on the agenda for negotiation today would themselves be at best very small steps, very indirect and uncertain. A verifiable test-ban agreement could have a modest utility but it would be a long way from stopping the diffusion of nuclear capability, and would fail to offset the strides toward diffusion taken by several of our alliance policies. By the same

token, a reversal of such alliance policies is likely to be a more effective brake on nuclear diffusion. Both in our national security policies and in our arms-control agreements, we can only hope to work on the problems of stability piecemeal. The probability of nuclear war, however, can be affected year by year.

ENDNOTES - Wohlstetter - Nuclear Sharing

1. It would be hard to imagine a deeper goad for the French than the statement by the Secretary of Defense on April 22, 1960. According to *The New York Times*, Mr. Gates indicated that "the United States did not regard two nuclear explosions as qualification for French admission to the 'nuclear club'." I am not sure there is a demonstrated ability," he is quoted as saying. "France would have to show a high level of technical competence." It appears that even our restraints offer a considerable incitement.

2. The Russians appear to be not entirely clear about how *they* regard the diffusion of nuclear power. They have not hurried to give bombs to the Chinese or the Warsaw powers; yet they have repeatedly opposed safeguarding reactor programs against diversion of nuclear materials to military purposes in the underdeveloped countries.

3. I am indebted for comments or stimulation to Michael Arnsten, F. C. Iklé, Malcolm Hoag, F. S. Hoffman, Herman Kahn, Ciro Zoppo, and especially to Daniel Ellsberg and William Kaufman. The views expressed are those of the author.

4. National Planning Association, *1970 Without Arms Control*, Special Committee Report, 1958, pp. 31-33, 44. Quotation from p. 48.

5. For example, *The New York Times* of July 23, 1960, reported that the Secretary General of NATO explored with General de Gaulle the possibility of France's accepting a gift of nuclear missiles under its own control, provided they would also accept some others to be placed under joint control.

6. The military editor of the *London Times*, for example, finds it as hard "to imagine an American president willing to risk deaths of five million Americans as of fifty millions." His comments were

prompted by some widely discussed American doubts about the credibility of American response to nuclear attack on Europe. However, these American doubts envisage quite incredible hypothetical circumstances in which our decision would be made. Mr. Herman Kahn (*On Thermonuclear War*, Princeton: Princeton University Press, 1960, pp. 27ff.) constructs his hypothesis as follows: (a) The Russians "simply to demonstrate their strength and resolve" wipe out London, Berlin, Rome, Paris and Bonn. (b) Following this event, which must be the classic case of all time for simply flexing muscles, the American decision-maker is prevented from making any decision for 24 hours. (c) During these 24 hours he is assumed to contemplate first the fact that 180 million Americans would be killed if he should say "Yes" and second, the fact that no attack on the United States would be made if he said "No." Mr. Kahn varies the numbers of Americans assumed killed in the raid to let the reader determine the "price" he would be willing to pay to fulfill American commitments to Europe. But he does not vary the probabilities of either the number of Americans dead given that we strike or the number of Americans dead given that we do not strike. In effect, he suggests one alternative with a very large price and another one that carries essentially no penalty.

In the real world the alternatives are not likely to be tens of millions or 180 million dead with certainty versus the certainty of total survival. Mr. Kahn leaves out all of the factors favoring a rational decision to respond, the large risks likely to be incurred by not responding.