QUIET CATACLYSM

REFLECTIONS ON THE RECENT TRANSFORMATION OF WORLD POLITICS

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In the aftermath of the quiet cataclysm, it may be time to reconsider deterrence, one of the central concepts developed during the Cold War. The problem is that deterrence has almost always been looked at strictly as a military issue. A typical definition characterizes it as "the threat to use force in response as a way of preventing the first use of force by someone else" (Morgan 1977, 9) or as "altering the behavior of a target by using, or threatening to use, force" (Rothgeb 1993, 139).¹

Starting with a definition like that, most discussions of deterrence quickly get bound up with analyses of military postures that make war more or less likely to be successful or profitable. **As** Paul Huth and Bruce Russett have observed, "scholars have tended to concentrate on the question of what types of military capabilities will effectively threaten the attacker with high costs, and what types of diplomatic and military actions strengthen the potential attacker's assessment of the defender's resolve to honor its threat of military retaliation" (1990, 470). Ideally, a classic argument runs, each side should have a secure second-strike capability: it should be able to absorb a surprise attack fully confident that it will be able to respond with a devastatingly effective counterattack. Thus each side, rationally fearing costly and punishing retaliatory consequences, can be expected to refrain from initiating war.

This view of deterrence has inspired quite a bit of criticism. It seems inadequate because it simply does not explain very well how states actually behave.

¹On these issues, see also Snyder 1961, ch. 1; Singer 1962, ch. 2; K. Mueller 1991

Sometimes countries start wars even when they have little reason to believe they will be victorious; at other times they remain supremely cautious, refraining from war even though they feel threatened and even though they enjoy a substantial military advantage (Jervis 1985, 6; Lebow 1985, 204; see also Rosecrance 1975, **33-35**).

But instead of abandoning the notion of deterrence because of these important criticisms, it can easily be recast to deal with them—and perhaps in the process to relate better to realities in the wake of the quiet cataclysm. A broader and more fully pertinent concept would vigorously incorporate nonmilitary considerations as well as military ones into the mix, making direct and central application of the obvious fact that states do not approach the world solely in military terms. As Huth and Russett observe, "Inclusion of positive inducements as a means to deter is not standard practice in academic writing or policy debates, but the lack of theoretical or practical attention cannot be justified on grounds of strict logic." And they label such considerations "a long-neglected and therefore underdeveloped component of deterrence theory" (1990,471).

When deterrence is recast to include such considerations it becomes clear that the vast majority of wars that never happen are deterred by factors that have little or nothing to do with military concerns. Moreover, it becomes clear that the oft-quoted crack reported by Thucydides, "the strong do what they can and the weak suffer what they must" (1934 ed., **331**) is actually quite simplistic. In addition, a recasting of deterrence suggests important modifications in the concept of stability.

DETERRENCE

Specifically,*deterrence* can be defined as a state of being—the absence of war between *two* countries or alliances. If they are not at war, then it is reasonable to conclude that each is currently being deterred from attacking the other. We observe, for example, that the United States and the Soviet Union never went to war with each other, and we conclude that the United States was deterred (by something or other) from attacking the Soviet Union while the Soviets were similarly deterred from attacking the United States. Then by the same reasoning we can also say that the United States is currently being deterred from attacking Canada, and that Canada is currently being deterred from attacking the United States. And finally, we can observe that Pakistan is currently being deterred from attacking Bolivia even while Bolivia is similarly being deterred from attacking Pakistan.

This unconventional way of looking at deterrence tends to draw attention to nonmilitary forms of deterrence and it immediately highlights an important central consideration, one that has attracted remarkably little attention. If countries are principally deterred by military considerations from attacking one another in our chaotic state of international "anarchy" as so many have suggested ("if you desire peace, prepare for war"), why is it that there are so many cases where a militarily superior country lives contentedly alongside a militarily inferior one?²

The United States obviously enjoys a massive military advantage over its northern neighbor and could attack with little concern about punishing military retaliation or about the possibility of losing the war. Clearly something is deterring the United States from attacking Canada—a country, as noted in the previous chapter, with which the United States has been at war in the past and where, not too long ago many war-eager Americans felt their "manifest destiny" lay. But obviously this spectacularly successful deterrent has little to do with the Canadians' military might. Similar cases can be found elsewhere. Despite an overwhelming military superiority, the USSR was never anxious to attack such troublesome neighbors as Poland and Romania. To be complete, a concept of deterrence ought to be able to explain common instances like these, as well as those in which military elements are presumably dominant such as the considerations which deter Syria from attacking Israel (see also Rosecrance 1975, 35).

THE COMPONENTS OF THE DETERRENCE CALCULATION

In contemplating an attack, it can be said, a would-be aggressor considers two central conditions and compares them: what its world is likely to be like if it goes to war, and what that world is likely to be like if it remains at peace. If, after making this assessment, the aggressor decides the war condition is preferable to the status quo—that is, if it feels it can profit from war—it will go to war. If it finds the status quo preferable to war, it will remain at peace—that is, it will be deterred from starting a war.

I will assume here that someone contemplating war does at least a modicum of thinking about it before taking the plunge. Although it would be foolish to suggest that decision makers go through an exquisite and precise numerical process, there does seem to be a fair amount of rationality in the way wars begin. As military historian Michael Howard concludes, after a lifelong study of the subject, "Wars begin by conscious and reasoned decisions based on the calculation, made by *both* parties, that they can achieve more by going to war than by remaining at peace" (1984, **133**).³

The would-be aggressor's calculations about what war is likely to be like can be broken down into three components. One is the net value it would achieve by winning the war: the benefits gained from victory minus the costs entailed in achieving it. Another is its net value should it lose the war: the benefits gained in losing (sometimes there are benefits) minus the costs (usually considerable and

²On this issue, see also Levy 1989b, 100–101. On the issue of "anarchy" in international politics, see Chapter 2.

³Political scientist Bruce Bueno de Mesquita argues that "for all the emotion of the battlefield, the premeditation of war is a rational process consisting of careful, deliberate Calculation"; and he notes "one clear indication of the rational planning that precedes war is that only 10 percent of the wars fought since the defeat of Napoleon have been quickly and decisively lost by the nation that attacked first" (1981, 19). On this issue, see also pp. 114–115 and Blainey 1973, ch. 9; Luard 1986, ch. **5**; Mueller 1989a, **227-232**.

unpleasant) entailed in losing, Finally, it must make some effort to calculate its chances of winning, These three considerations are blended together and the result is a general conclusion about what war would probably bring, and this is then compared to the value placed on remaining at peace—the status quo.

There is likely to be a great deal of guesswork in these calculations but something like them will normally be made. In general, a would-be aggressor is likely to be deterred when it finds (1) the status quo to be pleasant, (2) the net value of winning a war to be rather low, (3) the net value of losing to be very low—penalizing, in fact—and (4) the probability of winning to be low.

Each of these four components can vary over time and each can be manipulated by other countries. A policy *of deterrence* involves a conscious effort by one country to manipulate another country's incentives to go to war so that the potential aggressor, in thinking things over, finds the virtues of peace to be, on balance, substantially greater than those of starting a war. But of course two countries may very well be deterred from attacking each other even if neither has anything like a policy of deterrence toward the other: Bolivia and Pakistan enjoy a firm deterrence relationship though neither, it seems reasonable to presume, gives much thought to the issue one way or the other.

And, more importantly for present considerations, the absence of war—successful deterrence — does not necessarily prove that a policy of deterrence has been successful. The United States had a clear and costly policy in which it tried to deter the Soviet Union by threatening nuclear punishment for any major Soviet aggression. But the fact that the Soviet Union did not start a major war cannot necessarily be credited to American policy; indeed, as will be argued in the next chapter, the USSR seems to have had little interest in getting into any sort of major war, no matter how the United States chose to array its nuclear arsenal.4

THE NET VALUE OF THE STATUS QUO. To consider now the four components of a would-be aggressor's calculations, it is useful, if unconventional, to begin with the value it places on the status quo, on not going to war. Peace is most secure when a potential aggressor finds the status quo to be substantially preferable to the value it places on victory. In other words, if the blessings of peace seem to be even greater than those of going to war and winning (much less losing), the potential aggressor will surely be deterred even if it has a high probability of winning, The persistent American unwillingness to attack Canada is surely principally explained by such reasoning. The United States finds the independent existence of its huge northern neighbor to be highly congenial. Although there may be disagreement on various issues from time to time, on the whole Canada contributes very significantly to the American sense of economic, political, and military well-being and, since there is little hankering in the United

⁴Vasquez suggests the example of the boy in Brooklyn who runs out of his house once a day waving his arms in order to "keep the elephants away." When someone points out that there are no elephants in Brooklyn, the boy triumphantly observes, "See? It works!" (1991,207). The boy does have a policy of deterrence toward the encroachment of elephants, but the apparent success of the policy hardly demonstrates that the policy has been a necessary cause of the success.

States for a fifty-first state anyway, cheer, contentment, and peace prevail between these militarily unequal countries. To get invaded, Canada would probably have to do something to dramatically lower its neighbor's pleasure with the status quo. Agreeing to become an outpost for hostile missiles—as Cuba did in the early 1960s—might do the trick.

A would-be aggressor's sense of the value of the status quo includes estimations of the future — a country may be basically content at present but, fearing a future attack by its opponent, may be led to preempt while in a position of comparative strength. The perceived value of the status quo also varies over time, and it is a quality that can be manipulated by a country trying to deter war. Canada, of course, does plenty of things that encourage the United States to prefer the status quo over aggression — for example, establishing a beneficial trading relationship that war would painfully disrupt. While Canada's actions are probably not conscious enough to be considered a policy of deterrence, they do have the effect of lowering the American incentive to invade by raising the value of the status quo that is, they help to deter war.

There was a conscious effort to deter by manipulating a would-be aggressor's estimate of the value of the status quo during the Cuban missile crisis. The United States loudly let it be known that its satisfaction with the status quo had just fallen precipitously: it had a severe grievance—the pending implantation of offensive nuclear arms by the Soviet Union in Cuba—and it was apparently prepared to go to war to rectify this grievance. It was deterred from carrying out its threat when the USSR agreed to improve the American evaluation of the status quo by removing the offending arms. Similarly, the United States has sought to deter Egypt from attacking Israel by raising Egypt's evaluation of the status quo though extensive aid which war would terminate. And it seems likely that the Poles in 1956—and perhaps also in 1981—deterred a Soviet invasion in part by putting forward political leaders who were to the liking of their large and threatening neighbor.

In fact, except in the cases where a country goes to war for the sheer fun of it, *all* wars can be prevented by raising the potential aggressor's estimation of the status quo. Pearl Harbor could have been prevented by letting the Japanese have Asia, Hitler's aggression might have been deterred simply by giving him the territory he wanted, and Israel could send Syria into peaceful contentment at most any time by ceasing to exist. As these examples suggest, a policy of deterring war by raising a would-be aggressor's estimate of the status quo closely resembles what is commonly known as "appeasement," a word that has picked up extremely negative connotations. More neutrally, it can also be called "deterrence by reward," "positive deterrence," or "reassurance" (Milburn 1959; see also Baldwin 1971; Jervis 1979, especially 294–296, 304–305; Stern et al. 1989, 21–22; K. Mueller 1991).

But however labeled, such a policy contains both dangers and appeals. Clearly, if the aggressor's price is higher than the deterrer is willing to pay, appeasement is simply not feasible: in 1991, Iraq's Saddam Hussein could have deterred the war against his country by withdrawing from Kuwait, but he apparently was convinced that such a humiliating backdown would result in his elimination from office (and perhaps from life), a price he was unwilling to bear (Mueller 1994a, 21). Furthermore, to apply the central lesson usually drawn from the

Munich crisis of 1938, even if the price is bearable, serving the demands of an aggressor may be unwise and ultimately counterproductive because the aggressor's appetite may grow with the feeding, and thus it may be enticed to escalate its demands on the next round, ultimately demanding a price too high to pay. However, the discredit heaped. upon appeasement as a result of its apparent misapplication in the 1930s does not mean that the policy is always invalid. Obviously the policy worked in 1962: the Soviet withdrawal of offensive forces in Cuba satiated the American appetite for concession, it did not whet it,

THE NET VALUE OF VICTORY. Against its estimates of the value of the status quo—the value it finds in remaining at peace—the potential aggressor balances its estimates of what war would most probably bring. For present purposes its thinking about war has been broken down into three components: its estimates of the net value of victory, of the net value of defeat, and of the probability of winning. All three of these qualities can change with time, and all are potentially manipulable by a country which is pursuing a policy of deterrence.

The first of these, the net value of victory, is rarely discussed, yet it is probably the most important of the three, and a close examination of it in juxtaposition to the value of the status quo helps to explain why there is so much peace in so much of the world. For, simply put, many countries much of the time prefer the status quo to fighting a war and *winning*, and thus they are comfortably deterred no matter how big their military advantage. Spectacular cases in point, again, are the noninvasions by the United States of Canada and by the USSR of Romania or Poland: the big countries believed, probably quite accurately, that they would be *worse* off after the war even if (as seems highly likely) they were to win handily.

There are quite a few policies a country—even a comparatively weak one can adopt to deflate a would-be aggressor's anticipated value of victory. It can make threats which either reduce the benefits the aggressor would gain upon victory or increase its costs for achieving victory.

Presumably an aggressor will see some sort of gains — territorial, economic, or whatever-in a victory. The deterrer could announce a scorched earth policy, in which it pledges to burn everything as it retreats, and thus significantly lower the potential aggressor's anticipated gains. The Dutch have threatened from time to time to greet invasion by destroying their dikes, inundating the victor's newly acquired territory. The Swiss have mined their railway bridges to suggest that a successful aggressor would occupy a country with plenty of Alps, but no transportation system. Fearing encroachment by the United States during the petroleum crisis of the 1970s, some poorly armed Arab states pledged to blow up their oil wells if invaded (see Rosecrance 1986, 11). Another device, promoted by pacifists, is to organize to be able credibly to threaten passive, nonviolent resistance after losing the war. If an invader is interested in taking over a country because it seeks the productive capacity of the people of that country, it will be deterred if it becomes convinced its invasion would cause the country to become unproductive (Holmes 1989, ch. 8; Brown 1987, 127–131; Sharp 1973; Johnson 1987, 248-253). As with all deterrent threats, policies like scorched earth, economy destruction, and passive resistance will be effective only if they are believed by the would-be

aggressor. Since these threats involve a certain amount of self-destruction by the deterring country, there is an inherent problem with credibility. The Dutch never did blow up their dikes in World War II, and aggressors who are sufficiently bloody-minded may feel confident they can break down passive resisters.

A country can also seek to increase a victor's costs. As war becomes more destructive in general, the pain suffered even by the victor increases. If the war is sufficiently terrible, victory can quickly become Pyrrhic with the costs outweighing the gains. In the age of long range bombing, a losing country can often embellish the usual costs of war by threatening to visit destruction upon a victor's cities far behind the lines of battle. If the bombers carry nuclear weapons, this threat becomes highly dramatic indeed. This approach—often called deterrence by punishment—was more difficult to carry out before the advent of airpower, though punitive raids could be conducted (Schelling 1966,178–180). One analogous earlier procedure was for kings who were potential combatants to have their heirs brought up at each other's court, making them hostages against an outbreak of hostilities.

There are policies even small countries can adopt to increase a victor's costs considerably and thus to enhance deterrence. Switzerland is surrounded by countries that have at various times been militarily strong and aggressively inclined; yet its last battle was fought in 1798. In considerable part this is because the Swiss have a large, dedicated, well-trained civilian army: "Switzerland does not have an army," Metternich is reported to have said, "It is an army" (Perry 1986). The country does not threaten so much to defeat an invader as to make the costs of invasion, even a successful invasion, very high—and this threat has apparently been effective even against such devoted aggressors as Adolf Hitler (K. Mueller 1991). If defeated in initial battles, the Swiss army has been trained to fall back into a network of secluded bases and installations in the Alps; from this bastion it would foray out to harass and obstruct the occupiers (Quester 1977, 174; Perry 1986). Moreover, were the Swiss to fight as tenaciously as they threaten, an invader could conquer the country only by destroying it as a productive society, thus lowering the gains of victory (unless, of course, the aggressor wanted to control the country solely for its scenery),

Other small countries have used similar threats in an attempt to deter. At various points in its postwar history, Yugoslavia had reason to fear a Soviet invasion. At those times, Yugoslav officials were quick to let the potential invader know that, if attacked, they would revert to the kind of costly guerrilla warfare they used so effectively against the German invaders during World War II (Quester 1977, 174–175). Fearing an attack by the United States, the Sandinistas in Nicaragua made similar threats, as did Castro in Cuba.

A victor's costs may be substantially and importantly raised by factors other than those developed by the invaded country. The Soviet Union doubtless noticed that its surrogate invasion of South Korea in 1950 caused great alarm in the West and set in motion a substantial anti-Soviet military buildup worldwide; it surely could anticipate similar undesirable, costly developments were it to seek to conquer Yugoslavia or Finland or Iran. The Soviet invasion of Afghanistan in 1979 was met not only with an enervating guerrilla campaign in the country itself but also with trade boycotts, and the Soviets suffered costly reductions in credibility, trust, and prestige in important Muslim areas. In the wake of the quiet cataclysm, as noted in Chapter 1,the big countries of the world are now of such similarity of mind that they can gang up to impose, with little cost to themselves (and consequently with considerable credibility), devastating economic embargoes against small and medium-size countries they deem guilty of aggression—a form of deterrence by punishment. A winner could also become so weakened by victory that it might become tempting prey to other states.

Furthermore, a victor has to live with itself after success has been achieved. If its victory is treated by its population as a productive achievement, a thing of glory, a symbol of virility, an economic or political gain, then the victory will presum'ably add up on the plus side of the ledger for the leaders. But if the victory were to engender a domestic political upheaval-of the sort, for example, that the British suffered after their brief, successful war against Egypt in 1956—that could be a considerable cost. An adventurous American victory over Canada would likely cause just such a domestic crisis because it would be seen as an outrage by those Americans who would hold such an intervention to be unjust and unwise.

In fact, as Michael Doyle (1983, 1986), Bruce Russett (1990), and others (Streit 1939) have argued, Immanuel Kant's assertion in his 1795 essay, Perpetual *Peace*, that liberal regimes are disinclined to go to war has held up—at least insofar as war among liberal countries is concerned. For the 200 years during which there have been liberal countries, no constitutionally secure liberal states have ever gone to war with each other.; Liberal states tend to regard each other as legitimate and unthreatening (Britain, after all, has long had the ability to destroy American cities with nuclear weapons, yet the United States has never seemed to worry much about that prospect). And since the population in a liberal state can directly affect the government, an invasion of one liberal state by another will be effectively protested by many in the population of the victorious country, thus raising—perhaps devastatingly—the costs of victory to the victor. For this subset of countries, one which has increased markedly in number over the last two centuries, deterrence has held firm. And it is extremely unlikely that military factors have had much to do with the peculiar peace that liberal countries so far have worked out among themselves.

It also appears that the psychic costs of war have increased dramatically over the last 200 years or so, at least in the developed world. Where people once saw great glory and honor in war—and particularly in victory—they are now often inclined to see degradation in it instead as war has increasingly come to be regarded as an enterprise that is immoral, repulsive, and uncivilized (see Chapters 8 and 9). In deterrence terms, this change means the value of victory has been sharply reduced.

THE NET VALUE OF DEFEAT, A would-be aggressor will also be deterred if in its estimation the net value of defeat is sufficiently low—very

⁵For some caveats about this relationship, however, see the discussion at the end of Chapter 10.

negative, one might say. Sometimes an aggressor might envision gains in defeat: a well-fought, but unsuccessful, war might recoup lost prestige or self-respect for a country, or the test of war might have beneficial domestic consequences. German General Friedrich von Bernhardi argued before World War I that "even defeat may bear a rich harvest" because often "it leads to healthy revival, and lays the foundation of a new and vigorous constitution," giving the gains the Boers found in defeat in the Boer War as an example (1914, 28, 4345). Or perhaps the loser can anticipate a generous postwar aid program from the victor: there are Japanese who argue that losing World War II was the best thing that ever happened to their country. Perceived gains like these will be reduced and war deterred if the would-be aggressor can be credibly assured that such benefits will not accompany its defeat.

The main method for reducing the net value of defeat is to raise the costs of defeat — that is, to make war as painful as possible. A would-be aggressor is less likely to be deterred if it concludes that the costs of defeat will be unpleasant but bearable — the loss of a bit of unimportant land, perhaps, or the payment of some not-terribly-expensive reparations — than if it anticipates the kind of total loss legendarily suffered by ancient Carthage at the hands of the Romans.

War is more likely to be deterred if prohibitively high costs are the likely consequence of war itself rather than simply something tacked on at the end as they were at Carthage: the total destruction of the state, the execution of the men, the sale of women and children into slavery, and the salting of the earth so that nothing would grow there again. While it might make sense from a deterrence standpoint to lower a would-be aggressor's value of defeat by threatening it before the war with a Carthaginian "peace" should it be defeated, the threat will be successful only if the potential aggressor believes the deterring country will actually carry out its threat. However, an army that anticipates extermination after defeat has every incentive to fight to the last, thereby raising the costs to the victor and giving the winning country a strong incentive to cut a deal before the war is over. If the aggressor understands this before the war, a Carthaginian threat will not be credible. This dilemma reaches its ultimate in the age of the "doomsday machine"-the threat to blow up the entire world should the aggressor start a war. Even if the technology exists, the aggressor may well refuse to believe the deterring power will ever carry out such a self-destructive policy. Similar credibility problems arise with lesser nuclear retaliatory threats. In general, threats that require massive costs to be borne by the threatener — whether trade boycotts or suicidal destruction—are not likely to be very believable, and if they are not believable they may not be effective.

If, however, tremendous costs are a necessary consequence of any war—if extremely destructive warfare is the only kind likely to develop no matter what policy either side adopts — then the would-be aggressor can anticipate with some certainty that its costs will be very high, and it is therefore more likely to be deterred. Furthermore while Carthaginian costs are paid only by the loser of the war, costs that arise out of warfare itself accrue to both loser *and* winner; that is, *both* the aggressor's cost of winning and its cost of losing are raised. Thus the "nuclear winter" thesis—the notion that even a fairly "small" nuclear war could trigger a catastrophic climatic change because of the lofted smoke and soot from fires (see Sagan 1983/84)—would be, if accepted as valid, an example of a credible doomsday machine since unacceptable destruction to both sides would inevitably attend any nuclear war.

It is important to note that this factor is more a matter of escalation than of technology. Countries armed with nuclear weapons could still fight restrained and inexpensive wars with each other (Mueller 1989a, 237–238)—thermonuclear weapons are destructive only if they actually go off. However, if a would-be aggressor anticipates that a war is likely to escalate until it becomes intolerably costly (in all, or virtually all cases, this would be well below the nuclear level), it will be deterred. As discussed in the next chapter, insofar as World War III has been prevented by military considerations, it is this fear that conflict will escalate that has been crucial,

Raised psychic costs lower the value of defeat as well as the value of victory, and unlike the physical costs, they suffer no problem of credibility. If war is no longer held to be an honorable and invigorating test of manliness but is considered instead to be repulsive and uncivilized, one can only engage in it—win or lose—with a distinctly unpleasant sense of repugnance, and therefore at high cost.

THE PROBABILITY OF WINNING. Finally, the would-be aggressor must reflect upon its chances of winning the war. Normally it will be more likely to be deterred if its chances of winning seem low.⁶ By increasing its armed strength, a country with a policy of deterrence can seek to manipulate the calculations of a would-be aggressor in a favorable direction since better arms will lower the aggressor's probability of victory (while perhaps also usefully raising its anticipated costs of war).

As with appeasement, this policy could be counterproductive. If the country one is trying to deter misreads the signal and sees the arms buildup not as deter-

⁶This proposition assumes, of course, that the aggressor prefers victory to defeat, certainly a reasonable assumption under most circumstances. There may be a few instances, however, where it does not hold true. In 1898 many Spaniards welcomed a war with the United States over Cuba because a defeat there would allow them honorably to withdraw from that highly troublesome colony (see Lebow 1985, 222-223; Small 1980, 20 and ch. 3.) (Unfortunately for them, however, the victors went on to take over more valued Spanish colonies—Puerto Rico and the Philippines—which caused a revolution at home, exactly what Spanish politicians had sought to avoid with their Cuban policy which was, as it turned out, insufficiently fine-tuned.) Another instance is a fictional one. In the 1959 film, The Mouse That *Roared*, the impoverished Duchy of Grand Fenwick, a tiny country in Europe that somehow managed to miss getting involved in World War II, decides to invade the United States so that it can then enjoy the generous aid that Americans give to countries they defeat in war. Unfortunately the Fenwickians accidentally win; had they suspected their fate in advance they would have been deterred from their aggression. Though they never actually started a war, some Grenadians and Panamanians may be real life Grand Fenwickians: in the view of many grateful Panamanians and Grenadians, the American invasion of their countries threw out bad governments that had somehow gained control over their lives, and replaced them with better ones and with a degree of U.S. largesse. Some French Communist leaders said that they would fight for the Soviet Union in a war with France, thus suggesting that, as Frenchmen, they would prefer defeat to victory in this case (Shulman 1963, 58-61); however, they might be considered, from the French perspective, to be traitors or enemy agents and therefore not really speaking as true Frenchmen. During the Cold War, the Soviet Union had reason to believe that many of its Polish allies might find defeat in a war with the West to be preferable to victory.

rence, but as preparation for an armed attack, then it might actually be tempted to launch an attack before its opponent can do so—the nightmare of arms races and arms buildup that rightfully haunts so many discussions of military matters particularly since the advent of nuclear weapons and that has been labelled the "security dilemma."

DETERRENCE AS EXPECTED UTILITY

The four deterrence variables discussed—the net values of the status quo, of victory, and of defeat, and the probability of victory—can be neatly and simply interrelated by means of an expected utility formulation. The exercise leads to some nonobvious conclusions—for example, that countries with little chance of winning might still want to go to war.

FOOTBALL. Expected utility can productively be illustrated with an example from football. After scoring a touchdown in the college version of the sport, a team is given an opportunity to do one of two things: to placekick the ball through the goalposts, garnering one point if successful, or to move the ball past the goal line by passing it or running with it, in which case two points will be awarded. Now, what a football team wants is well known: to get more points than the other team. And since virtually all football players are aware that two is greater than one, it might be supposed that teams would invariably go for the two-point play. But in fact they do not: they almost always kick.

This happens because the desirability of an option is not determined only by its value, but also by the probability one will be successful in obtaining it. Kicking is far more likely to be successful than running or passing, and thus, all things considered, kicking is a better deal. What the team is trying to maximize is not points, but expected utility. If one assumes that the kick has a probability of .9 of being successful, the expected utility for the kick option is calculated as follows: the value of success (1point) is multiplied by its probability (.9), and to this quantity is added the value of failure (Opoints) multiplied by its probability (.1). Thus, the expected utility for a kick is $1 \times .9 + 0 \times .1 = .9$. If a running or passing play has a .4 probability of success, its expected utility is the value of success (2 points) multiplied by its probability (.4) to which is added the value of failure (0 points) multiplied by its probability (.6). Thus the expected utility for running or passing comes out to be $2 \times .4 + 0 \times .6 = .8$. If those probabilities are reasonable real-life estimates, it is wise to kick, and football coaches are doing the sensible thing when they pursue the less valuable but more probable option. They may not call it that, but they are seeking to maximize expected utility.

WAR. It is true that war is not the same as a football game, but the same logic can be used to sort through the decision making process. Using the deterrence variables already discussed, a would-be aggressor's expected utility for war is the value it places on victory multiplied by its estimate of the probability of

winning, to which is added its value of defeat multiplied by its estimated probability of losing (1minus its probability of winning). This expected utility for war is then compared to the expected utility for nonwar, or the status quo, which is the value the would-be aggressor places on the status quo (multiplied by its probability, which is 1). If the aggressor finds the expected utility of war to be higher than that of the status quo, it will go to war, and vice versa.

The usefulness of this approach is that it is comprehensive. It makes room for all the considerations discussed earlier—cost and benefit, reward and punishment, concerns about warfare, morality, trade boycotts, domestic political turmoil—and then interrelates them. It also allows one to sort through some of the puzzles deterrence critics have brought up.

For example, some analysts have suggested that the decision of the Egyptians to go to war against Israel in 1973 made no sense from a deterrence standpoint because the Egyptians knew they were likely to lose (for a discussion, see Stein 1985). But a country goes to war, not because it feels it can *win*, but because it feels it can profit—that is, emerge better off.

This can work either way. On the one hand: the United States refrains from attacking Canada because the United States could not profit from the encounter even though it could surely win militarily. On the other, the Egyptians seem to have felt, on balance, that they could profit from a war against Israel in 1973 even if they stood little chance of winning it: they had come to feel that the status quo after their defeat by the Israelis in 1967 was intolerably humiliating, and thus they saw some benefits in defeat which, if well fought, would at least raise their self-esteem and prestige: one Egyptian diplomat reportedly argued that it was important to "destroy Israel's image of military invincibility, irrespective of whether Egypt finally won or lost" (Shevchenko 1985,254; see also Keegan 1990, 77-78). It is possible, in fact, that the Egyptians even preferred defeat to the unsatisfactory status quo, in which case war would have been entirely sensible from their perspective and could not have been deterred no matter how low their chances of winning. Or even if they preferred the status quo to defeat—but not by much—they might well have chosen war even if they stood only a small chance of winning it. Suppose, to put things in numerical form, the Egyptians could be said to have placed a value of 50 on the expected utility of the status quo, a glorious 500 on the value of victory, and -10 on the value of defeat. In that case they would have gone to war even if they believed they stood only a .2 chance of victory. In their estimation, the expected utility of the status quo (50) would have been far less than the expected utility of war: $500 \times .2 + (-10) \times .8 = 100 - 8 = 92$. The same sort of logic could be used with the Japanese decision to attack Pearl Harbor (see Mueller 1968).

Deterrence apparently did not fail in 1973 because the Israelis failed to convince the Egyptians that Egypt would probably lose a war. Rather, the Egyptians' value of defeat was insufficiently unpleasant in comparison to their rather low expected utility for the status quo while their visions of the value of a victory over Israel were blissfully high. If appeasement was not an option, the Israelis' best deterrent hope was probably to make the Egyptians' value of defeat far more pendizing, perhaps by promising devastating destruction of Egyptian values or society. But the Israelis were unable to do this credibly because of their own obvious preference for quick, decisive, and inexpensive wars. For the Arabs, even defeat was not all that bad given their apparent misery with the status quo.

CRISIS STABILITY AND GENERAL STABILITY

This approach can be used to distinguish between two kinds of stability: crisis stability and general stability. Discussions of deterrence and of defense policy in general have been preoccupied with crisis stability, the notion that it is desirable for disputing countries to be so militarily secure that they can adequately deal with a surprise attack: even if successfully surprised, they can absorb the attack and rebound from it with an effective counteroffensive. If each side is militarily confident in this way, then neither side would see much advantage in launching a surprise attack, and thus neither side would be tempted to start a war out of fear that the other could get a jump on it. Crises, therefore, would be "stable"—both sides would be able to assess events in a luxuriously slow manner and not feel compelled to act hastily and with incomplete information. In expected utility terms, crisis stability means that a country's expected utility for a war it starts is not much different from the utility it expects from a war the other side starts: there is, then, no great advantage to initiating hostilities.

In the nuclear period, discussions of crisis stability centered around the technological and organizational problems of maintaining a secure "second strike" capability—that is, developing a retaliatory force so well-entrenched that a country can afford to wait out a surprise attack fully confident it will be able to respond with a devastating counterattack. Many argued that such crisis stability was "delicate": it could easily be upset by technological or economic shifts (Wohlstetter 1959;see also Snyder 1961, 97–109), and a great deal of thought went into assessing whether a given weapons system or military strategy was "stabilizing" or "destabilizing."

General stability is concerned with broader needs, desires, and concerns and is essentially what Kenneth Boulding (1978)calls "stable peace." It prevails when *two* countries, taking all the various costs, benefits, and risks into account, vastly prefer peace *to* war: their expected utility for peace, for the status quo, is much higher than their expected utility for war. It is the sort of thing that has prevailed for a century between the United States and Canada, and has broadened considerably in the developed world in the wake of the quiet cataclysm.

For peace one would ideally like both crisis stability and general stability to prevail in a relationship between two countries. But efforts to improve one form of stability may weaken the other. For example, in an effort to enhance crisis stability, a country may try to improve its second strike capability by building up its military forces; but its opponent may find this provocative, concluding that the buildup is actually a prelude to an attack. On the other hand, generous appeasement concessions, designed to raise a potential aggressor's satisfaction with the status quo by reducing provocation and thus enhancing general stability, may

tempt that aggressor to attack by giving it reason to believe it could win cheaply in a quick strike: in a spectacularly futile effort to placate the Germans in the 1930s, Holland decided to remain quiet and neutral while, to decrease "provocation" to Hitler, Belgium broke off its alliance with France and Denmark disarmed.

However, when-general stability is high, crisis instability is of little immediate concern. Technically, crisis stability between Russia and the United States has declined since the quiet cataclysm because of Russia's increased military disarray. But, since general stability has increased so much, no one even seems to notice.

In addition, this line of thinking suggests that many concerns about changes in arms balances, while valid in their own terms, miss the broader issue. A defense may increase or decrease crisis stability but this may not alter the broader picture significantly. When general stability is high, the question of who could fight the most ingenious and effective war becomes irrelevant. Deterrence, and therefore peace, prevails.