
Deterrence Now

Patrick M. Morgan

University of California, Irvine



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1 History: deterrence in the Cold War

Deterrence is an old practice in international politics and other areas of behavior. It has been given plenty of thought and study, yet is not easy to understand or explain. The onset of the Cold War provoked enormous interest in deterrence because its role in international politics, particularly at the global level, promised to be critical. However ancient it is in some ways, the greatest part of what we think we know about it was gleaned in the last six decades of systematic thinking and research on deterrence. I won't inflict a lengthy review of its modern history. However, certain comments about deterrence theory and deterrence during the Cold War will be useful for what comes later. I briefly outline what we thought we were doing in managing the Cold War via nuclear deterrence and assess, briefly, the actual role it played in preventing another great war. What the parties *thought* they were doing was not always what they *were* doing and the role of nuclear deterrence was not entirely what it seemed. For those familiar with all this, apologies and a request that you grimace and bear it.

The origins of Cold War deterrence

The essence of deterrence is that one party prevents another from doing something the first party does not want by threatening to harm the other party seriously if it does. This is the use of threats to manipulate behavior so that something unwanted does not occur: "... the prevention from action by fear of the consequences. Deterrence is a state of mind brought about by the existence of a credible threat of unacceptable counteraction" (*Department of Defense Dictionary* 1994). This is fairly straightforward and refers to behavior practiced by nearly all societies

and cultures at one level or another.¹ Thus it is hardly surprising to find it used in international politics. However, there the concept came to be applied explicitly, and narrowly, to threats for *preventing an outright military attack*. In a technical sense deterrence is used in international politics in far more ways than this, but forestalling attacks became the focus. Thus a more elaborate definition would be that in a deterrence situation one party is thinking of attacking, the other knows it and is issuing threats of a punitive response, and the first is deciding what to do while keeping these threats in mind (Morgan 1983, pp. 33–42).

Deterrence is distinguished from *compellance*, the use of threats to manipulate the behavior of others so they stop doing something unwanted or do something they were not previously doing.² As with deterrence, in security affairs a compellance threat also normally involves military action and often the unwanted behavior to be stopped or steps to be taken involve the use of force, e.g. stop an invasion that has begun, pull out of an occupied area. The distinction between the two is quite abstract; in confrontations they are often present together and virtually indistinguishable. Nevertheless, we attend to the distinction because analysts consider compellance harder than deterrence – it is more difficult to get people/governments to stop doing something they are already doing, like doing, and prepared carefully to do. We now think this is because people tend to be more reluctant, under duress, to take a loss – to give up a benefit in hand – than to forgo seeking an additional benefit of equivalent value. Also, using force to maintain the status quo often seems psychologically more legitimate (to the parties involved and observers) than trying to change it.

¹ Other definitions: “persuasion of one’s opponent that the costs and/or risks of a given course of action he might take outweigh its benefits” (George and Smoke 1974, p. 11) – a very broad definition covering almost all forms of influence; “discouraging the enemy from taking military action by posing for him a prospect of cost and risk outweighing his prospective gain” (Snyder 1961, p. 35) – narrows what is to be deterred; “. . . the effective communication of a self-enforced prediction that activity engaged in by another party will bring forth a response such that no gain from said activity will occur, and that a net loss is more probable” (Garfinkle 1995, pp. 28–29) – a very precise, rational-decision conception somewhat at odds with threatening under *nuclear* deterrence to blow the enemy to kingdom come, a real “net loss”; “. . . 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” (Mueller 1989, p. 70). This makes deterrence ubiquitous – everyone is ready to attack everyone else if not restrained – which is not rewarding analytically.

² A recent work on compellance, where the distinction is reaffirmed, is Freedman 1998a.

In practice the two overlap. For one thing, they involve the same basic steps: issue a threat, the credibility of which is vital; avoid having the threat make things worse; and thus compel the other side to behave itself. However, parties to a conflict often define “attack” and “status quo” differently, so they disagree over who is attacking whom. When the US threatens military action to halt North Korea’s nuclear weapons program is this *deterrence* of a provocative step (a kind of “attack” by the North), or *compellance* of the North to get it to stop what it is doing? And is the US defending the status quo (in which the North has no nuclear weapons) or aggressively threatening the North, which has not directly attacked the US or its allies? The parties in such cases disagree on the answer. If compellance is harder than deterrence then *it matters what the opponent thinks is the situation* since that is crucial to his reaction to the threat. In the example both deterrence (in the US view) and compellance (in North Korea’s view) are present.

Thus we should put less emphasis on the distinction between deterrence and compellance and instead treat them as interrelated components of *coercive diplomacy*, the use of force or threat of force by a state (or other actor) to get its own way. This book is about deterrence but assumes that an overlap with compellance is often present and that the two can and must often be discussed interchangeably when examining real-world situations.

In settled domestic societies, deterrence is a limited recourse, used only in particular circumstances and rarely expected to provide, by itself, a viable way to prevent unwanted behavior. In international politics it has had a more pervasive presence. Used primarily as a *tactic*, it has also had a role as a strategic behavior within the jockeying for power that preoccupies states. However, while it was a popular recourse of those fearing attack, it was not the only or even the predominant one, and was not thought of, in itself, as a true strategy.

Without nuclear weapons and the Cold War deterrence would have remained an “occasional stratagem” (Freedman 1996, p. 1). After World War II, for the first time, deterrence evolved into an elaborate *strategy*. It eventually became a distinctive way of pursuing national security and the security of other states or peoples. Nuclear weapons forced those who possessed them, particularly the superpowers, to turn deterrence into a new and comprehensive strategy that touched, shaped, and coordinated many policies and activities. It came to seem intrinsic to international politics, an omnipresent, natural, and continuous recourse

in a dangerous environment, something governments engaged in as a regular feature of their existence.

In addition, however, deterrence by the superpowers and their blocs was gradually developed further into *cooperative security management* for the global international system. The superpowers began with unilateral steps to keep safe via deterrence, but the interactions between their deterrence postures soon constituted an elaborate deterrence structure (a “regime”), which constrained them and their allies in numerous ways (not always to their liking) and eventually impelled them into joint efforts to better manage this structure. This had the effect, intended or not, of producing a large increment of security management for the system. Deterrence became a cornerstone of international politics, on which virtually everything else was said to depend.

Thus deterrence came to operate on three levels: as a tactic, as a national security strategy, and as a critical component of security for the international system. Of these the last two made it a suitable subject for theoretical analysis, but it was deterrence as a *national* strategy, in particular within a mutual deterrence relationship, that provided the basis for the theory and became its central focus.

The theory was developed initially to prescribe. The initial question was not “what factors are associated, empirically, with success or failure in deterrence?” but “what are the requirements for a credible deterrence policy?” The straightforward answer (Kaufmann 1954) was to persuade your opponent

- (1) that you had an effective military capability;
- (2) that it could impose unacceptable costs on him; and
- (3) that you would use it if attacked.

The goal was to assist governments to survive in the nuclear age, to conduct an intense conflict without a catastrophe. The stimulus was the appearance and proliferation of nuclear weapons, but in a larger historical context development of some sort of deterrence theory was overdue. Many elements of deterrence thinking appeared before World War II (Questor, 1966; Overy 1992) and important concepts in arms control applied under nuclear deterrence theory were widely discussed after World War I. Nuclear deterrence is best understood as a solution to a fundamental problem of long standing. The evolution of military and other capabilities for war of major states had, well in advance of nuclear weapons, reached the point where great-power warfare, particularly on a systemwide basis involving most or all of the great powers, could be

ruinously destructive. One element was the rising destructiveness of weapons. Artillery became extremely accurate at ever longer distances, rifles replaced muskets, machine guns appeared. Other capabilities of military relevance were greatly enhanced. Vast increases in productivity, combined with new bureaucratic and other resources, gave great states huge additional capacities for war. They acquired greater abilities to sustain and coherently manage large forces and exploited the breakthroughs in communications and transportation. Nationalism added the collective energies of millions, whether for raising armies and money or for production of everything those forces needed (Levy 1982, 1989b). Great states became capable of huge wars – in size of forces, levels of killing and destruction, duration, and distance. This was foreshadowed by the Napoleonic Wars, displayed by the American Civil War, and grasped in Ivan Bloch's penetrating analysis at the turn of the century of what the next great war would look like (Bloch [1899] 1998). All that was missing was a graphic example, which World War I supplied. It had become possible to conduct "total war."³

It is important to understand just why this was *the* problem. For practitioners of international politics it was not war itself. Particularly for great powers, war had always been a central feature of the international system, a frequently used and legitimate tool of statecraft, the last recourse for settling disputes, the ultimate basis for the power balancing that sustained the system and the members' sovereign independence. It had also been fundamental in creating nation states. "From the very beginning the principle of nationalism was almost indissolubly linked, both in theory and practice, with the idea of war," and thus "It is hard to think of any nation-state, with the possible exception of Norway, that came into existence before the middle of the twentieth century which was not created, and had its boundaries defined, by wars, by internal violence, or by a combination of the two" (Howard 1991, p. 39). It was difficult to imagine international politics without war since it seemed an inevitable adjunct of sovereign autonomy. War had last threatened to get completely out of hand during the Thirty Years War (1618–48) and states

³ Vastly destructive wars are not unique to the twentieth century (Ray 1989; Mueller 1989, pp. 3–13). But beginning in the nineteenth century the capacities for destruction, even in a losing effort, expanded rapidly with the developments listed above and others (such as conscription) which "... served to make it much more likely that war, when it did come, would be total... The closely packed battle, in which mass is multiplied by velocity, became the central feature of modern European military thought. For the first time in history, governments were coming into possession of constantly expanding means of waging absolute war for unlimited objectives" (Dougherty and Pfaltzgraaf 1981, p. 195).

had responded by setting the Westphalian system into operation partly to get it under control. In the twentieth century the system was again being overwhelmed by war. Detaching sovereign rule, which is highly prized, from the rampant use of force for selfish purposes is the ultimate security problem of international politics, and now it threatened to destroy everything.

The development of deterrence was driven by a particularly onerous alternative solution that had emerged some time earlier to the threat of great-power war. Confronting the distinct possibility that the next war would be enormously destructive and costly, states worked hard to devise variants of a *cheap-victory strategy*. The idea was to ensure that the great costs, destruction, and loss of life would fall mainly on the other side. This was foreshadowed in Napoleon's shattering victories via single grand battles that collapsed the opponent. It dominated Prussia's wars against Denmark, Austria, and France in 1862–1871, wars so successful that such strategies have shaped military planning ever since. The Prussian approach involved diplomatically isolating the opponent, then utilizing industrial-age resources and nationalism to mobilize rapidly and throw huge well-coordinated forces into the initial battles to overwhelm the opponent, inflicting a complete defeat to end resistance. As a result, the major states approaching World War I had plans for rapid mobilization and decisive offensive thrusts to overwhelm the opponent in the opening battles, forcing the enemy to collapse in just weeks before intolerable casualties and costs were incurred. The Schlieffen Plan sought a cheap victory, as did the French Plan 17, the prewar plans of Russia and the Austro-Hungarian Empire, and British plans for fighting with Germany on land. Hitler sought to recapitulate the Prussian approach by isolating the target state and inflicting a (blitzkrieg-style) defeat so as to avoid a long and costly war. The point of the French Maginot Line was to fight a cheap, minimal-casualty war by exploiting the superiority of settled defenses (supposedly demonstrated in World War I) to wear down the attacking Germans; eventually France would push into a gravely weakened Germany and impose defeat at little cost. Japan's attacks at Pearl Harbor and elsewhere in late 1941 were meant to establish an impregnable defense far from home that would wear out the Americans and bring a settlement on terms favorable to Japan, producing victory at low cost.

Cheap-victory solutions influenced the development of deterrence theory in two broad ways. In the twentieth century these strategies were terrible failures in the world wars. Often initially successful, in the end

they failed and the resulting wars were dreadful even for the winners, making the problem of great-power warfare clear to everyone. Another approach was obviously needed. In addition, cheap-victory solutions – which often turned on winning quickly – could be highly destabilizing because they usually required striking by surprise or before the other party was fully prepared. Thus once a war looked quite possible they could have the effect of initiating it.

Making interstate war virtually impossible by either fundamentally changing international politics or abandoning it was difficult to contemplate. Neither seemed remotely feasible so serious thinking shifted, almost inevitably, toward how great wars might be deterred, temporarily or indefinitely. The first effort along these lines was the formation of the League of Nations. It was meant to provide *collective actor deterrence* – deterrence by the entire membership against any member thinking about attacking another. In addition, components of what would become deterrence theory began to emerge in the 1920s. Analysts began to describe certain forces and capabilities as dangerous because they made war by surprise attack or on short notice plausible. Hence the ban on conscription imposed by the winners on the losers after World War I; the absence of masses of trained men, plus limits on the size of the losers' professional forces, would – it was hoped – prevent the quick mobilization of vast armies to achieve a cheap victory. Analysts began to characterize offensive, as opposed to defensive, forces and postures as too provocative. The British eventually developed strategic bombing as a deterrent, with preliminary thoughts on how key targets might be industrial and military or the will, politically and psychologically, of the enemy to continue to fight, foreshadowing the distinction between deterrence via defense (war-fighting) and deterrence via punishment (retaliation). US military thinking was similarly interested in deterrence through the threat of strategic bombing (Overy 1992).

What drove these efforts to coalesce into a theory was the coming of nuclear (particularly thermonuclear) weapons and the emergence of more than one national nuclear capability, especially when linked to ballistic missiles. Those weapons seemed ideal for achieving a cheap victory and thus were regarded (by thoughtful scientists even during their development) as very destabilizing. And they promised destruction at even higher levels.

Nuclear deterrence was the ultimate in threatening awful consequences to prevent wars. It had been known for years that great-power wars could be awful, so threatening one was not, in itself, new. The

innovation lay in using nuclear weapons to *strip any cheap-victory strategy of plausible success*, to leave an opponent no reliable way to design a great-power war in which it would suffer little and gain much. As this is important for the discussion later on it is worth emphasizing. It was not that nuclear weapons promised so much destruction that made them crucial in deterrence, it was that they made this destruction seem virtually *unavoidable under any plausible strategy*. This was the crux of the “nuclear revolution” (Jervis, 1989a) in statecraft.

The essence of deterrence theory

In discussing the *theory* it is important to distinguish it from deterrence *strategy*.⁴ Deterrence strategy refers to the specific military posture, threats, and ways of communicating them that a state adopts to deter, while the theory concerns the underlying principles on which any strategy is to rest. Failure to keep this in mind is largely responsible for the frequent but mistaken suggestion that there are many theories of deterrence. Mostly there are different strategies, not theories. The strategies vary in how they operationalize key concepts and precepts of the theory. As for alternative theories, they are mostly theoretical fragments, not theories.⁵

The key elements of the theory are well known: the assumption of a very severe conflict, the assumption of rationality, the concept of a retaliatory threat, the concept of unacceptable damage, the notion of credibility, and the notion of deterrence stability. Examined briefly here, each is of importance later in considering whether deterrence has changed since the Cold War.

Severe conflict

Since deterrence theory was developed to help states cope with the Cold War, the nature of that struggle had great impact on it. The most

⁴ Standard works on deterrence theory are: Freedman 1981; George and Smoke 1974; Jervis 1979, 1984, 1989b; Morgan 1983; Powell 1990; Questor 1986; Maxwell 1968; Wohlstetter 1959; Brodie 1959; Kahn 1961, 1965; Schelling 1960, 1966; Snyder 1961; Mearsheimer 1983; Jervis, Lebow and Stein 1985; Lebow and Stein, 1989, 1990a, 1994; Lebow 1981; Stein 1991.

⁵ Escalation dominance/war-fighting was not a different theory, as is sometimes suggested. During the Cold War it presented a different view of what generates stability and credibility, what was unacceptable damage (particularly for Soviet leaders), and how to cope with deterrence failure. Colin Gray (1990, p. 16) says “theories of deterrence – or approaches to theories – are the product of their time, place, and culture,” but the operationalization shifts more than the theory itself.

important feature in this regard was its *intensity*. To both sides it was total and ultimate, with the future of the world at stake. Both considered war a constant possibility; the enemy would not hesitate to attack if a clear chance for success arose. Thus deterrence had to be in place and working all the time, every day. The necessary forces had to be primed and ready to go. All that was keeping this conflict from turning into a war, probably total war, was deterrence. It stood between the great states and Armageddon.⁶

Years ago I devised the distinction between “general” and “immediate” deterrence. In general deterrence an actor maintains a broad military capability and issues broad threats of a punitive response to an attack to keep anyone from seriously thinking about attacking. In immediate deterrence the actor has a military capability and issues threats to a specific opponent when the opponent is already contemplating and preparing an attack. Thus an immediate deterrence situation is a crisis, or close to it, with war distinctly possible, while general deterrence is far less intense and anxious because the attack to be forestalled is still hypothetical. For years the Cold War was conducted as if we were on the edge of sliding into immediate deterrence. The attack-warning systems operated continuously, weapons and forces were on high alert, and there were elaborate calculations as to whether the opponent could pull off a successful preemptive attack or had programs under way to produce such a capability. It seemed that a crisis could erupt quite suddenly and lead to war, and there were very strong threat perceptions. One Strategic Air Command (SAC) commander testifying in 1960 on why his bombers should be constantly on airborne alert said: “... we must get on with this airborne alert to carry us over this period. We must impress Mr. Khrushchev that we have it and that he cannot strike this country with impunity. I think the minute he thinks he can strike this country with impunity, we will ‘get it’ in the next 60 seconds” (Sagan 1993, p. 167).

This was a distorted and distorting perspective. Seeing the opponent as just looking to attack, as “opportunity driven,” was a Cold War political assessment of a particular challenger. There is no necessity to start with this assumption – we did so because that is where, at the

⁶ In the Soviet bloc the stakes seemed just as high, the enemy just as ruthless and willing to use war, but war seemed much less likely to come at any moment. Soviet strategic forces were less often on alert; political portents of a Western attack were expected to provide enough warning in advance. Only under Yuri Andropov, confronting the Reagan Administration, did Moscow consider an attack at almost any moment a real possibility.

time, deterrence *strategy* had to start. The theory worked outward from considering how to cope with a war-threatening confrontation, a worst-case analysis, rather than with general deterrence and working down to the rare and extreme situation of an impending war. Immediate deterrence was the primary consideration, dominating most thinking even about general deterrence. This was awkward because much of the theory, therefore, particularly in connection with arms control, came to be concerned with stability in situations in which neither party wanted a war. Refinements emphasized, in spiral-model fashion, the existence of a conflict and the nature of military plans and deployments as potential causes of war in themselves, and not only the machinations of an opportunistically aggressive opponent.⁷

This had a strong effect on theory and strategy. It is hard to imagine the theory as we know it ever having emerged if each side in the East–West dispute had felt the other had little interest in attacking. The theory could operate as if deterrence was critical for preventing an attack. It did not explore what the motivations for war might be (and thus whether they were always present). It simply took as its point of departure a conflict so intense that the two sides would likely go to war if they thought they could get away with it. Hence the recurring concern in the US that deterrence was delicate and could easily be disturbed by developments that might seem to give the other side a military advantage. Deterrence strategy, as Lebow and Stein (1990a) emphasize, came to view the occurrence of war as related to windows of opportunity generated by a flawed deterrence posture. More precisely, theory and strategy operated on the expectation that each side must assume the other would attack if a suitable opportunity emerged. (Actually, the theory did not have to do this – it simply concerned what to do to deter if and when a state faced a possible attack.)

This was why the theory paid little attention to other ways of preventing war, such as by seeking to reconcile differences or offering reassurances and incentives. Efforts to suggest how deterrence might be used in conjunction with other approaches to peace were never incorporated; instead, it was about preventing a war when these other approaches had failed or could not be expected to work. In one sense this was fine. The theory was not held to be comprehensive or depicted as the only route to security under any circumstance. It merely

⁷ Thus Jervis (1976) contrasts a “deterrence model” with a “spiral model” when the theory embraced both.

explained how deterrence produced security under very unpromising conditions.

In another sense, however, this was not fine because the theory paid no attention to the effect deterrence might have on the *utility* of other approaches to peace. In the politics of national security adherents of deterrence tended to emphasize how alternative approaches could damage it (inviting advocates of other measures to do the same in reverse). In the terms supplied by Robert Jervis (1976), those attached to a deterrence model not only rejected the perspective of spiral-model adherents but regarded their prescriptions – don't think the worst of the other side's motives, seek détente, look and be cooperative so as to not incite the opponent's suspicions and insecurities – as a recipe for disaster because too little would then be done to maintain a robust threat.

This was related to shifting deterrence from a tactic to a strategy. As a tactic deterrence would obviously not be suitable in itself for managing national security – it was just one policy option, sometimes useful and sometimes not and never the sole recourse. Elevated to a strategy, deterrence could be viewed as suitable on its own for security. And the Cold War made it appear necessary not just for dire straits, when all else had failed and war loomed, but all the time.⁸

Assuming the existence of a strong conflict not only matched the pre-occupations of policy makers, it was very attractive for constructing a theory. It allowed analysts to simplify the description of state preferences and the calculations of unacceptable damage (only the costs and benefits of an attack would really matter in enemy decision making). It simplified the construction of deterrer priorities – deterrence was the prime objective – everything depended on it, and it was easy to arrive at a conclusion as to what prevented war (deterrence did).

The assumption of rationality

There is extensive discussion about this assumption and its effects on the theory in the next chapter so discussion here is brief. Deterrence theory was developed to prescribe. Since another great war could be absolutely dreadful, deterrence had to be practiced as effectively as possible. For purposes of the theory “effectively” was initially equated with “rationally,” and this became the point of departure. The aim was to help decision makers understand what a rational actor would do in immediate deterrence situations or in preparing to best handle those situations;

⁸ This was how American security studies came to be “militarized” (Baldwin 1995).

the initial assumption was that *both parties* would be rational. Rationality, in turn, was defined as gaining as much information as possible about the situation and one's options for dealing with it, calculating the relative costs and benefits of those options as well as their relative chances of success and risks of disaster, then selecting – in light of what the rational opponent would do – the course of action that promised the greatest gain or, if there would be no gain, the smallest loss.

This predilection stemmed in part from the precedent and influence of the realist approach, which insisted that international politics imposed on a state a preoccupation with conflict, the expectation that others were prepared to use force, and readiness to use force oneself. Deterrence was a component of this, one of the objectives and consequences of a balance-of-power system, and could not be ignored because other strategies for influencing the choices of opponents were seen as having limited utility. Realists saw themselves as assisting the policy maker (plus elites and citizens) in understanding the rational way to cope with the constant concern about security. Deterrence theorists set out to do the same, particularly because deterrence within a balance-of-power framework had an uneven record in preventing war and similar results in the nuclear age would mean catastrophe. However, deterrence theory was not equivalent to realist thinking. After all, it presumed war (at one level at least) could be avoided indefinitely, concluded that hostile states could cooperate in arms control endeavors, and anticipated that they could cooperate in managing security in crises or controlling conflicts at lower levels, etc., activities for which realists held out little hope of persistent success.

Another contributing factor was the normative and psychological appeal of rationality. "Irrational" was a pejorative term, and the nuclear age invited fears that irrational impulses and actions might kill everyone. Deterrence theory and deterrence had appeal if described as rational in conception and action. (So did criticisms of it – hence the recurring charge that relying on deterrence through vast nuclear arsenals was absurd, insane, criminally stupid.) A third element was the powerful inclination in the social sciences to model behavior in rational decision terms, as the best route to a strong theory. Analysts from these fields were prominent in development of the theory and it showed. For many analysts assumed rationality is intrinsic to theory building: "If expectations about benefits and costs do not shape behavior, what does?" (Downs 1989).

In principle, however, figuring out rational behavior for the deterrer did not require assuming the other side was rational. It would have been possible, say, to describe rational behavior for a defender uncertain about the rationality of challengers or to specify what would be rational behavior in response to specific patterns of nonrational behavior by challengers, but this was a road not taken. It was also possible to develop a theory in which both deterrer and the challenger were not altogether rational or one in which the attacker was rational but not the deterrer. These were also neglected in the original design. Instead, elements of them later crept into refinements of the theory and into specific deterrence strategies in the Cold War; they became adjuncts to, not the point of departure for, the theory. As a result deterrence was virtually *conceived in terms of application by a rational deterrer against attacker rationality*. It was not threatening an opponent so that he would behave; it was conscious, calculated threats to adjust the challenger's cost-benefit calculations so he saw attacking as nonoptimal.

Assuming rationality opened the door to a rigorous, parsimonious, abstract theory. In conjunction with assuming survival as a universal goal, which greatly simplified the estimation of actor preference hierarchies, that theory generated interesting and sometimes nonevident conclusions and prescriptions about how to conduct deterrence.

The concept of a retaliatory threat

Freedman (1996) has pointed out how it is possible to deal with a threat of attack by militarily eliminating it via a preemptive attack, or containing it by a vigorous defense. Deterrence theory proceeded as if neither was likely to be as effective, or as appealing in terms of comparative costs and harm, as deterrence. The proper goal was to prevent a war, not start it or fight it effectively. Prevention was to be achieved via manipulating the opponent's thinking, making deterrence a *psychological* relationship. To militarily eliminate or contain a threat would be a *physical* relationship, so deterrence was quite different in nature. The manipulation comes by means of the threat of very painful consequences via either defense or retaliation. The conception of deterrence via retaliation owed much to the presence of nuclear weapons. There would have been little surprising or useful in conceiving of deterrence as saying, in effect, "if attacked, we'll fight" or "if attacked we will win and then exact a nasty revenge." With nuclear weapons a state could say "if attacked, whether we are able to fight or not, and whether we win or not, we will do terrible things to

you.” One could conceive of pure retaliation or a combination of retaliation and fighting as reactions, as opposed to simply fighting. Nuclear weapons made pure retaliation plausible. It was also welcome as a recourse because of the possibility that a state attacked by nuclear weapons would suffer so much damage that it would shortly collapse or disappear – retaliation might be the only way an attacker would suffer. Thus deterrence was not equivalent to defense. They overlapped because one could deter via a threat to defend vigorously or by a threat to both defend and punish. But it was also possible to deter simply by a threat to punish, and this came to be seen as the ultimate, essential basis of deterrence in the nuclear age – after all, the goal was to never have to defend.⁹

This represented an important advance and reflected both the experience of war earlier in the century and the presence of nuclear weapons. One way to seek a cheap victory, displayed in both world wars, was to attack first either by surprise or by mobilizing and moving to the front more rapidly than the opponent. A state with this sort of military capability could deter only by promising to fight effectively, putting a premium on gaining a better war-fighting capability than the opponent and being ready to go to war quickly. Deterrence via retaliation meant being able to wait until the attack had started or later before doing anything. This made it possible, in theory, to try to rule out preemption. The challenger would have no incentive to attack and nuclear weapons would make a prospective war too dreadful for the deterrer to want to initiate it as well.

It was simultaneously a retrograde development. To deter via threats of retaliation alone came to mean a threat, as the ultimate resort, to devastate the core elements of the enemy society. Throughout the century it had become steadily more attractive to attack civilians but at least the point was supposedly to inflict a *military* defeat by disrupting the civilian base. Pure retaliation could mean attacking civilians with no military purpose at all (only the *threat* of it had a military purpose) and that is what all the great powers (and certain other states) threatened to do. Deterrence became hostage-taking on a vast scale.

The concept of unacceptable damage

How much prospective punishment was enough to deter? Assuming rationality provided an outline of an answer. If the opponent was rational

⁹ Analysts and officials realized that in practice it could be hard to distinguish defense from deterrence due to severe collateral damage in fighting or treating civilians as a war-making resource to be targeted accordingly, making defense look a lot like retaliation.

then the prospective punishment needed was that which pushed his costs of attacking too high to make it worthwhile, so that the total costs outweighed the total benefits because an alternative course of action offered a better payoff. The key to success was to be able to threaten the opponent with unacceptable damage (via defense, retaliation, or a combination of the two).

The key question became: how much harm would be unacceptable? This clarified matters by highlighting the importance of understanding the opponent's cost-benefit calculations.¹⁰ But it did not provide instructions on just how to gain such an understanding. However, nuclear weapons made it relatively simple to prepare a level of harm – destroying much or all of the enemy as a viable twentieth-century society – which was presumed to be unacceptable to any rational government. At lower levels of response, however, it was hard to figure out what would be unacceptable. It is a difficult concept to operationalize.

The idea of credibility

Credibility quickly became one of the two central concerns and problems in the theory and practice of deterrence. (Stability was the other.) Establishing why and how credibility was important was a major contribution of deterrence theory because many of the conclusions that followed were not intuitively obvious. Credibility is the quality of being believed. Deterrence theorists led the way in appreciating that it was not a state's capacity to do harm that enabled it to practice deterrence, it was others' *belief* that it had such a capacity. What deterred was not the threat but that it was believed. While this is not startling, governments had often simply assumed that if they had a significant military capability and issued threats the other side would get the message. Officials were now told to reexamine this, for it became clear that there were many ways a challenger might not get the message so proper crafting of a deterrence posture and effective communication of threats might be quite difficult. (After all, *conclusive* evidence for the attacker that the threat must be taken seriously would be available only when the defender retaliated.) It became apparent that deterrence had an intrinsic *credibility problem*, one with many facets.

Having to practice extended deterrence drove this home. Directly attacked, a state was quite likely to respond militarily. It was less apt to

¹⁰ Critics have charged that deterrence theory is insensitive to this, which is incorrect. Officials practicing deterrence have sometimes ignored the opponent's perspective on costs, but the theory does not encourage this.

do so if a third party was attacked instead, no matter how closely it was associated with that party's welfare, because a military response would be costly and risky and it had not yet actually been attacked itself. Hence the threat to respond to such an attack was less credible.

There were other, nontheoretical, concerns. In the US in particular, concern about credibility rested in part on fears that its opponents were rather primitive, imperfect, or irrational in assessing the will and intent of the US and the West.¹¹ What should be credible to a rational opponent might not be so for them. This also encouraged considerable uneasiness as to just when one had achieved sufficient credibility, as illustrated for example by the nervous American reactions, from JFK on down, to the Kennedy–Khrushchev summit in Vienna in 1961. Both considerations incited the desire to overcompensate, to reinforce credibility via everything from the scale of the destruction promised to the size of the defense budget to endless reiteration of American and Western commitments (Morgan 1985).

Some elements of this problem could be dealt with directly, others were impossible to resolve conclusively in the theory and remain conundrums to this day. To have credibility it was necessary to be able to do unacceptable damage, to have proper forces for that purpose, and have the opponent conclude that you had the will to carry out your threat. Having the necessary forces was achieved by great powers during the Cold War by extremely destructive weapons – even a few could do extraordinary harm; also via redundancy – having several times the minimum forces capable of doing unacceptable damage; and by giving great attention to their survival in an attack via hardening, hiding, mobility, and high-alert status.

For credibility the opponent had to know about these military capabilities. Initially, governments had to consider how far to go in making the necessary information available. Under the logic of deterrence, conveying some information to the challenger with great clarity, especially about one's military capabilities, is beneficial. In the long run the burden of what to convey and how was eased by the growth in surveillance capabilities.

If what was important was not capabilities but being *perceived* to have them, then it was also possible to bluff. This was important at times. The Russians bluffed about their capabilities several times in the 1950s

¹¹ For instance, in ExCom discussions during the Cuban missile crisis (May and Zelikow 1997, p. 700; Blight 1992, pp. 79–83).

and 1960s to enhance their deterrence credibility, and the US did the same in the 1980s concerning its prospective ballistic missile defense capability. Eventually improvements in surveillance made this more difficult, linking credibility more closely to actual capabilities (see, for example, "Report: Russia..." 1998).

Credibility also meant effectively *communicating* one's commitment. Deterrence could fail if commitments were not clear. The outbreak of the Korean War drove this home to Americans, leading the Eisenhower Administration to specify US commitments through formal alliances. Deterrence could also fail if it was not clear just what actions by the opponent were unacceptable. However, clarifying commitments and expectations was never complete, because rarely in politics is it appropriate to say something exactly and leave no room for later adjustments. There is also an inhibiting element in ambiguity which can be exploited to achieve deterrence. Debate continues as to whether an element of ambiguity about commitments and prospective responses to an attack enhances or detracts from deterrence.

Emphasis was also placed on ensuring that the opponent knew you were quite *willing* to do what was threatened. This became a driving concern during the Cold War, one lesson the US took away from the Korean War. Conveying intent and will was clearly more difficult, on reflection, than conveying capabilities and commitments. Governments could deceive others about their intent and will, and often did; officials could change their minds when the need to act arose, which they often did too; or they could be unaware when they promised that carrying out the promise would seem unwise if the contingency arose. A would-be attacker suspecting that any of the three was true might not believe the deterrence threat.

This brought strong interest in demonstrating intent and will directly in extended deterrence by giving commitments elaborate publicity (mortgage national honor), by highly visible statements of commitment and intent (mortgage the president's honor), and by suggestive military maneuvers (like the Team Spirit exercise in Korea each year – display plans to do what you have promised). It was also pursued *indirectly*, by acting in other situations so as to strongly suggest that if a situation you were concerned about ever arose you would do what you threatened to do. What might convey this? Perhaps fighting/retaliating when lesser commitments were challenged would create and sustain a reputation for upholding them. Or placing one's forces where they would be in the line of fire in an attack on an ally; maybe delegating the decision to

fight to commanders of those forces if they were attacked; or making – in advance – arrangements so the decision to fight/retaliate was virtually automatic once an attack was under way or about to occur. All this was so policy makers would seem to have little choice in the matter. And there were costly investments in forces – why buy so much if you were reluctant to use them? All were used at times during the Cold War. Thus the government study NSC-68 in 1950 rejected a posture of no-first-use of nuclear weapons because to opponents and allies this would signal weakness, that the US would not fight. This view is still held by the US, and is one reason Russia now has a posture of possible first use too.

However, these adjustments could not resolve the credibility problem. In *nuclear* deterrence, there is no necessary connection in logic or in fact between upholding lesser commitments (successfully or not) and what the deterrer will do later on a commitment that would involve vastly intolerable costs to uphold. Even the loss of some of your own forces could not be expected to justify upholding a commitment that would mean losing your society. If it would be irrational to uphold a major commitment, neither prior preparation to uphold it nor prior fulfillment of lesser commitments (no matter how consistently done) can make it fully credible under a theory that envisions rational decision makers (Freedman 1981, p. 397).

Hence it appeared that the best way to convey intent and will, assuming rationality, was to *demonstrate that a forceful response or retaliation was rational*. This turned out to be very difficult. The primary solution proposed but never fully implemented was a combination of flexible response and escalation dominance. It was claimed that multiplying your options for responding to an attack would enhance credibility. Who would want to set off a general nuclear war, and thus who would be believed in threatening that? Better to have effective responses at many levels of fighting – then you could threaten to respond not apocalyptically but sufficiently. This became one justification for a war-fighting flexible response doctrine and capabilities. And at each level of fighting the deterrer would seek to be able to do better than the challenger (escalation dominance) and thereby discourage the challenger from escalating.

However, this has inherent limitations. First, deterrence was to *prevent* an attack. Once one occurred the situation would change, making it necessary to reconsider what to do. Retaliation then might not make sense. It might be costly by causing the attacker to escalate the attack and his

objectives, or counter-retaliate, very painfully. In effect, in contemplating retaliation the deterrer became the prospective attacker and its urge to respond might be deterred by the prospect of retaliation. This was where Khrushchev landed in October 1962. He sent missiles to Cuba to deter a US attack on the island, but once it became clear the US was going to attack if they weren't removed, he had no stomach for retaliating.

It also seemed that credibility was particularly difficult to achieve in practicing extended deterrence because it would be harder to make a forceful response rational. If State A has an alliance with C and C is attacked then C is already suffering, but A is not yet suffering and may not have to if it chooses not to uphold its commitment. It could be argued that such a commitment to retaliate must be upheld because this has implications for the future effectiveness of deterrence (by impressing future enemies) and this makes it rational to respond. The immediate costs would be high but the long-term costs would be lower. This was a popular argument during the Cold War and had enormous impact, but there are problems with it. The costs of retaliating now are real, will be borne immediately, while the costs of not responding are hypothetical, pertaining to scenarios that might never arise. Of course, it is always possible that retaliating will not lead the attacker to redouble his efforts or to counter-retaliate – the attacker might decide to quit. But that is unlikely – few states start a conflict planning to quit at the first sign its opponents intend to fight.

The other major problem was posed by nuclear weapons. Retaliation against a nuclear-armed state (or one of its allies) might set off a nuclear war and *cancel the future* – your society and state could disappear. There would be no point to retaliating to prevent future attacks. So why defend or retaliate? On what rational basis could it be justified? This spilled over into maintaining credibility for commitments at the conventional (nonnuclear) level. If you knew a conflict would remain nonnuclear then it could be rational to defend/retaliate so as to forestall future attacks. But if the conflict might well escalate into even an all-out nuclear war, then it would make sense to not retaliate.

These considerations undermined the appeal of flexible response. In the past retaliation could be assessed in terms of the immediate outcome it could produce and the favorable effect it could have on future confrontations. But with extremely high levels of actual or potential destruction risking national survival, and when no precise calculation can be made of the probability of disaster, retaliation is not made more rational (even at lower levels) by multiplying available options.

This was sticky because if it is irrational to retaliate then the attacker can attack with impunity, making deterrence unreliable. There is no ready answer to this problem within the confines of deterrence theory based on rational decision making. The only answer is to retreat from the assumption of rationality, which is discussed in the next chapter.

The problem of stability

Paralleling credibility was the other core problem in Cold War deterrence. Analysis of the stability problem started with the most severe test of stability, the crisis where an attack is primed and ready to go and deterrence is used to bar a final decision to carry it out. In such situations, the deterrer might take steps that looked to the opponent like plans not to retaliate but to attack and, concluding that war was unavoidable, the opponent could conclude it had better launch the planned attack. The steps taken to deter would further incite the attack – in terms of preventing war deterrence would be unstable. It would be even more serious if, in a *mutual* deterrence relationship, each side feared it could readily be attacked and each side's last-minute efforts to deter might lead the other to decide war was inevitable. Then deterrence would really be unstable because it would make both sides strongly predisposed to attack. Given the stakes, the goal had to be to keep nuclear deterrence stable.

Analysts also asked about the implications for stability of preparations taken by one or both sides to cope with a deterrence failure. How did they expect to fight a war? If they believed the war could best be fought by attacking first to gain a crucial advantage, then once war seemed likely the incentive to attack would be immense. This would be one result of striving for a "first-strike capability" to conduct a successful preemptive attack. The military preparations undertaken at least partly with deterrence in mind would make it unstable.

There was also the matter of escalation. If fighting broke out it would be important to avoid all-out warfare, in part by threatening to retaliate for any escalation. But if each side was prepared to fight primarily in ways that made escalation a deliberate or inevitable choice then instability would be severe. Analysts also worried about the vulnerability of command-control-communications-intelligence complexes as well – if they were highly vulnerable to disruption by an initial attack, then this provided a great incentive to attack first, but destroying them risked having the opponent lose control over nuclear and other forces early in the fighting and be unable to control escalation.