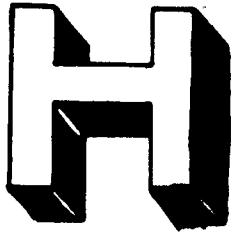
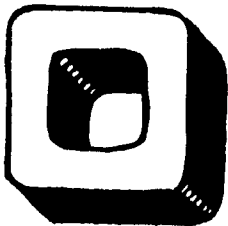


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79B The Deterrence Concept (1980)



STRATEGIC, TACTICAL AND DOCTRINAL
MILITARY CONCEPTS
The Deterrence Concept: A Synthesis
Based on a Survey of the Literature

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EXECUTIVE SUMMARY

The concept of deterrence has recently come under attack from two directions -- from what might loosely be called "hawks" and "doves." Some members of the defense community argue that deterrence has been outmoded by the Soviet arms buildup and for a nuclear war-waging capability, and suggest that deterrence be abandoned in favor of US war-waging strategies and buildup of weapons and forces, a posture which they view as something different from deterrence. On the other hand, some academic critics of deterrence, most of whom favor less military spending, have carried out historical or theoretical studies that purport to show deterrence as unsuccessful; these critics generally urge **less emphasis on deterrence** and more stress on political/diplomatic methods of exerting influence.

In addition, some advocates of deterrence visualize it as a kind of symmetrical model in which each of two opponents has an invulnerable retaliatory force and a vulnerable population -- the kind of deterrence usually called finite deterrence, and sometimes, in recent years, MAD (for mutual assured destruction). These advocates tend to view any deviation from this particular model as a betrayal of the deterrence concept.

The conclusion of the present report is that the deterrence concept is basically sound, is appropriate to the nuclear age, and is not necessarily outdated, and that what may have appeared as disqualifying flaws in it have actually been distortions of it.

This conclusion has developed from an extensive, although by no means exhaustive, survey of the literature on deterrence from 1946 through 1979. (A bibliography of about 85 of the works reviewed, with annotations, is appended to this report.) From this survey it appears that the history of deterrence theory can be summarized as follows (the dates are approximate and the periods overlap):

- 1946-1955. Beginnings of deterrence theory. The basic nature of the concept articulated.

- 1956-1965. The "golden age." Refinements and clarifications of deterrence theory; major synthesizing works.
- 1966-1970. Inactive period for deterrence theory.
- 1971-present. Critical reevaluation of deterrence theory.

Essentials of Deterrence

Deterrence is the restraining of one's opponent from a course of action by communicating its unpleasant consequences to him. Nuclear-age deterrence, which is the kind of deterrence considered in this report, implies using possession of nuclear weapons to deter the use of nuclear weapons, and sometimes to deter other actions. Nuclear-age deterrence grew out of the struggle by defense thinkers and policy makers in the West to gain some intellectual and practical control over the enormous power of nuclear weapons. Its development was stimulated by the determination, born of World War II experience, to assure peace through military preparedness. It was early pressed into service in the defense of Western Europe against a perceived Soviet threat, being used to compensate for the inferiority of the conventional defensive forces available to the West. This double role of US deterrence -- to deter a nuclear attack on the United States and also to deter any attack, nuclear or conventional, on Western Europe -- has posed permanent logical and practical problems.

The classic literature on deterrence, from Bernard Brodie's first 1946 essays and Winston Churchill's 1955 speech in the House of Commons, through the "golden age" writings of Raymond Aron, Brodie, Herman Kahn, Henry Kissinger, Albert Wohlstetter, and others, yields the essentials of the deterrence concept.

The fundamental requirement of deterrence is the credibility of the threat that is implicitly posed. Credibility depends on the opponent's perception of the threat -- it has to be credible to him. It also has to be real; bluffing is not adequate for deterrence. The essential components that must exist, and must be perceived by the opponent to exist, are a nuclear force that is able to survive a first strike, if necessary, and still do unacceptable damage, combined with the will or intent to retaliate. Even if these essential elements are present, deterrence can be undermined if the force is provocative through sheer overwhelming size or disposition. (If it were vulnerable, i.e., not survivable, it could also be provocative by providing a tempting target and by appearing designed to strike first, rather than survive a first strike; this is another reason why survivability is an essential requirement of the deterrent force.)

Deterrence is not an isolated structure, unrelated to the actual use of force. There has to be a credible bridge between deterrence and the actions that would be taken if deterrence should fail. Without this bridge, credibility fails and deterrence fails.

Counterforce Strategies and Finite Deterrence

Deterrence strategies may be classified as counterforce or countervalue, on the basis of the targets they threaten to destroy. Counterforce strategies aim at destroying enemy missiles in their silos or over enemy territory. Countervalue strategies aim at destroying what the enemy values, usually interpreted as a large fraction of the population and industry. Counterforce strategies are more in harmony with traditional principles of military strategy and morality, but countervalue strategies call for smaller forces and are claimed by their advocates to be more humane, since, if both sides subscribe to the countervalue approach, neither will ever be willing to strike the other, and nuclear war will theoretically be surely and permanently prevented. This kind of symmetrical mutual deterrence is usually called finite deterrence (as indicated above, p. 1).

Since the 1950s, there has been a pattern of cyclic alternation between counterforce strategies and finite deterrence in US deterrence theory and policy. The countervalue approach of "massive retaliation" was followed by the ascendance of counterforce strategies until about 1963, when there was a turn toward finite deterrence. Finite deterrence in the rather extreme form of bilateral mutual assured destruction -- each side capable of wiping out about a quarter of the other's population and half the other's industry after receiving a first strike -- underwent reevaluation and adjustment, beginning about 1969. There currently appears to be a strong trend within the defense community toward a return to counterforce strategies.

Conclusions

The report concludes that the deterrence concept still appears sound and relevant to present circumstances, and that the most telling criticisms of it are actually criticisms of ways in which it has been distorted:

- Deterrence requires, above all, credibility, and there can be no credibility without a believable link between the deterrence posture and the action that will be taken if, despite that posture, the other side attacks. The threat to kill 25% of the Soviet population while the US population is exposed to attack lacks

any credible link between threat and action, and thus is not in accord with sound deterrence theory.

- Deterrence requires an invulnerable retaliatory force, and cannot remain effective if the US retaliatory force becomes vulnerable to a Soviet first strike.
- The retaliatory force has to be capable of doing unacceptable damage, but unacceptable damage is a function of what the opponent values. A thoroughly informed view of what is valuable to the opponent is necessary if an effective threat is to be posed.
- Deterrence, for the United States, has to be consistent with commitments to allies. Thus, it must either be believably extended to include nuclear strikes against any state that attacks US allies or it must be backed up by other provisions for defending them.
- Deterrence cannot be static. It has to be constantly reassessed and adjusted to changes in technology, the balance of forces, and the world political system.
- Deterrence requires the will of leaders and society to provide the forces necessary for an effective deterrent threat and the intent to follow through with action, even at great risk and sacrifice, if deterrence should fail.

PREFACE

This report was prepared by Gay Hammerman, with the research assistance of Dee Alyson Horne and James J. Knights. Allen R. Clark made important contributions to the portions of the paper dealing with theory of games. Useful insights and bibliography were contributed by Angus M. Fraser and Graham Vernon, and the report was reviewed by Trevor N. Dupuy and Grace P. Hayes.

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Recently deterrence, like most institutions that achieve any longevity, has come under attack from two opposing sides. Many tough-minded defense-community analysts see it as an obstacle to realistic war-prevention and war-fighting strategies. Colin Gray, for example, has written of it recently in tones suitable for the obituary page. (Gray 1979) When Gray writes of the late Bernard Brodie that the years 1946-1978 bound his career as a strategist, one can hardly escape the image of a tombstone for deterrence itself, to whose development Brodie contributed so much. At the same time, some sixties-generation, antiestablishment academics, seeing deterrence as a hostile, negative strategy, are eager to dismantle it in favor of "other kinds of international relationships" that do not involve the threat of force. (Morgan 1977:214-15) It is a conclusion of this paper that the deterrence concept is soundly based and strong, and that it is largely distortions of the concept, both by its opponents and by some of its ill-informed advocates, that have opened it to attack.

Definitions

No discussion of a concept can begin without a definition, and there are many available for deterrence. None of them seems to offer more than a good standard dictionary does, and the Oxford English Dictionary will be used as the reference here.

The root and original meaning of the word deter is to frighten away, but the OED's third subdefinition is probably closer to the word's most common meaning in everyday, nontechnical usage: "To restrain or keep back from acting or proceeding by any consideration of danger or trouble." This not only is the most usual general meaning but also is closest to the meaning deterrence has had since its appearance as the label for a nuclear-age concept after World War II. It is true that the word terror has been prominently used in the rhetoric of deterrence and that nuclear weapons inspire well-merited terror, but the emotional tone of deterrence is relatively dispassionate. The emphasis is not on fear but rather on prevention by the display of unpleasant consequences in contrast to prevention by the

use of force. With simplicity as an aim, the working definition for this paper will be this adaptation of the OED's words:

Deterrence is the restraining of one's opponent from a course of action by displaying its unpleasant consequences.

However, deterrence has certain connotations in its nuclear-age strategic sense, and they cannot be woven into a one-sentence definition. Following are some of them:

First, deterrence in the current sense is something new, and is specific to the nuclear age. It developed in response to the characteristics of nuclear weapons. The general idea of preventing attack through a display of strength is ages old, but, as Andre Beaufre has said, "The term is new . . . bearing witness to an attitude of mind quite different from that of the past and clearly the product of the existence of nuclear weapons." (1965: 23; emphasis added.) No study that fails to recognize the deterrence concept as a product of the nuclear age can say anything very useful about it.

Second, the great dependence on prevention through the display of consequences is a special characteristic of nuclear-age deterrence. "What is new is . . . the tendency to rely very heavily, if not absolutely, upon the effectiveness of the threat to employ deterrent forces." (Coffey 1963:2) As far as strategic nuclear forces are concerned (nuclear weapons mounted on intercontinental ballistic missiles), deterrence has been virtually the only US strategy for their use against an adversary and virtually the only US response to the threat of such weapons in the hands of an adversary.

Third, an aspect of this heavy dependence on prevention, namely the fact that nuclear-age deterrence includes self-deterrence, is worth noting. It has been characteristic of post-World War II US deterrence theory and policy that they have sought not to use nuclear weapons, even when there was little danger of retaliation; and the avoidance of all use, not just enemy use, has been part of the deterrence concept from the beginning. This effort has been pursued ad absurdum in recent years by some advocates of finite deterrence, and some arms-control advocates, to include making sure that the Soviet Union will not be inferior in retaliatory striking power to the United States.* However, there is no reason to denigrate or apologize for the fact that US deterrence theorists have always had as a basic goal the avoidance of the use of nuclear weapons, even by the United States, and have tried to construct strategies that

*See discussion of finite deterrence, below.

would make such use as unlikely as possible. Again, this self-restraint is a product of the same nuclear destructiveness that created deterrence in the modern sense, and is an inherent part of it.

Fourth, largely as a result of historical circumstances, including the development of the logical system known as the theory of games, and also the development of the high-speed computer, deterrence has been not just a general display of overwhelming strength but a peculiarly calculated display of consequences. The theoretical advantages and disadvantages of various decisions on the use of strategic weapons by each of two adversaries are calculated. In addition, there is "the attempt to structure [the deterrent forces] so that they can inflict a given -- and therefore calculable -- level of damage upon another country." (Coffey 1963:2; emphasis added.)

Finally, deterrence is a Western, and specifically a United States, concept. Although it was presented to the world by an Englishman, and owes much of its clearest exposition to French thinkers, essentially it is American in origin and development. Even as Churchill described it in eloquent language in 1955, he acknowledged that the United States would have primary responsibility for carrying it out. In elegantly summarizing the theory, Raymond Aron has implied that it was partly his distance from the creative work -- which had been done in the United States -- that allowed him to see it with clearer perspective. (1964:31) Deterrence is not a Soviet concept, and this fact has many implications, some of which will be discussed below. In this paper, the point of view will be understood to be American. Unless the context makes clear another meaning, it will be understood that when deterrence is discussed, what is meant will be deterrence by the United States, or the United States in company with its allies.

Deterrence Classified by What is Deterred

For the ease and clarity of the discussion that follows, it seems well to classify deterrence at the outset into categories based on what is deterred in each case, and to establish consistent terms for these categories. Four kinds of deterrence may be distinguished on this basis:

- Deterrence of direct attack on the United States, usually visualized as massive nuclear attack. This deterrence is assumed to be effected by the destructive capability of the survivable US retaliatory force. The US retaliation, should deterrence fail, has generally been assumed to be automatic, with no decision necessary, and thus this kind of deterrence is sometimes termed, especially by British writers, passive

deterrence. It could be called strategic nuclear deterrence, and it could be called SIOP (Single Integrated Operations Plan) deterrence, since the US SIOP embodies the threatened retaliation that presumably makes this kind of deterrence effective. It is Herman Kahn's (1960) "Type 1" deterrence and Brodie's (1959:273) "basic" deterrence. In this paper, it will be called strategic nuclear deterrence.

● Deterrence of attack against NATO countries. Any effort to use the US strategic nuclear capability to deter attacks against allies or others is called extended deterrence. From the beginning of deterrence theory in the decade following World War II, extended deterrence for Western Europe has had a special importance, sometimes being seen as an integral part of strategic nuclear deterrence. An attack on NATO is clearly perceived by the US leadership and attentive public to be in a different category from attacks on other non-US territory, and deterrence of such an attack thus forms a distinct category. In this paper, such deterrence will be termed deterrence for NATO.

● Deterrence of attack against non-NATO allies and friends. Strategic nuclear deterrence has been extended at various times -- explicitly, by implication, or by widely held assumption -- to deterrence of attacks against countries to which the United States has treaty obligations and/or perceived moral obligations of special weight. These include, or have included, Japan, Korea, Israel, Australia, New Zealand, and Taiwan (as the Republic of China).^{*} This kind of extended deterrence will be termed deterrence for non-NATO allies.

● Deterrence of other aggressive acts and provocations. For a brief period in the 1950s, the period of "massive retaliation" policy, an effort was made to extend strategic nuclear deterrence to cover any moderately serious aggression or provocation, but it was almost immediately recognized that such a deterrent threat was not effective because it was not credible. No one would have believed that the United States would attack the Soviet Union with nuclear bombs over a new Soviet-instigated invasion of South Korea by North Korean forces, much less over Soviet support for an insurrection in, for example, Indochina. Then, in the late 1950s, and especially the early 1960s, there was a strong US emphasis on using the possession of strong, flexible, conventional forces to prevent such threats to

^{*}The Secretary of Defense's Defense Report for fiscal year 1979 stated that the United States has a "particular interest" in the independence and territorial integrity of Western Europe, Israel, Japan, Australia, and New Zealand. (p. 17)

international stability. The term deterrence was applied to this approach also.*

A considerable amount of recent literature on deterrence deals with this kind of deterrence of moderately provocative actions by the implicit threat of nuclear or nonnuclear military force. (Morgan 1977; Naroll et al. 1974) However, there are serious difficulties in grouping it along with strategic nuclear deterrence and extended deterrence, and, in fact, in calling it "deterrence" at all.

Deterring and dealing with moderately aggressive and provocative acts is basically indistinguishable from traditional statecraft, in which some kind of threat is always at least indirectly implied. Traditional statecraft, in fact, is what this kind of "deterrence" is. It is different in kind, not just in degree, from nuclear strategic deterrence and extended deterrence. It does not necessarily involve nuclear weapons or threats, and it does not carry the other connotations of nuclear-age deterrence that have been discussed above. Extrapolating the results of statecraft "deterrence" efforts in an effort to learn more about the effectiveness of strategic nuclear deterrence and extended nuclear deterrence is, in the author's opinion, usually misleading and unproductive. There are not enough similarities between the two categories to make the process valid.**

This paper will deal primarily with strategic nuclear deterrence, deterrence for NATO, and, to a lesser extent, deterrence for non-NATO allies. It will refer to deterrence of moderately provocative acts, those not involving direct threats to the United States or its allies, as statecraft, or statecraft "deterrence."

Beginnings of Deterrence

Now that deterrence has been defined, the next task is to examine its inner nature, to try to discover the essential components that make it up. It seems most useful to start the work by looking at the beginnings of deterrence. This is not done as a historical exercise, but rather because such a tremendous

*This kind of deterrence is Kahn's (1960) "Type 3" deterrence -- defined as deterrence of "moderately provocative acts." (His "Type 2" deterrence was deterrence of "extremely provocative acts.")

**The bibliographic entries for Morgan 1977 and Naroll et al. 1974 expand this point.

volume of material has been written on deterrence, and the concept has been molded into so many different forms during the past 34 years that the soundest approach seems to be to try to identify what has been essential from the start.

Nuclear Weapons. The beginnings of the deterrence concept appeared very soon after the headlines announcing the atom bombing of Hiroshima and Nagasaki, although they apparently received relatively little attention at the time. Bernard Brodie wrote in 1946: "Thus far the chief purpose of our military establishment has been to win wars. From now on its chief purpose must be to avert them. It can have almost no other useful purpose." (1946b:76) Here is the fundamental idea: using nuclear weapons to prevent the use of nuclear weapons.

Brodie's 1946 words have recently been criticized by some who see a necessity for being prepared to fight a war, if need be, rather than simply constructing theories and forces to prevent it. (Pipes 1977; Gray 1979) However, the words have to be taken in the context of their time and seen for what they were, an effort to grapple realistically and responsibly with the enormity of nuclear destruction. This was a time in which many opinion leaders were saying that there must be one world or none, that an international government to control nuclear weapons was the only way to avert a global holocaust. Realistic observers, like Brodie, recognizing that no utopian world government was going to be created, and rejecting the idea that the alternative was an eventual global war far more deadly than the devastating one just ended, chose and developed the concept of deterrence.

What were the specific characteristics of nuclear weapons that these early writers were struggling to come to terms with? The first was their extraordinary deadliness and destruction, in relation to the size of the weapon and the short time in which it performed its destruction. The firebombing of Tokyo had done more damage in one night than the bombing of Hiroshima, but not in one minute from one airplane. A second characteristic was the generally assumed one that there could be no defense against these weapons. (See e.g., Beaufre 1965:24.) A third was the conclusion from these two characteristics that these weapons were extraordinarily suited for massive, decisive surprise attacks. It was correctly assumed that the United States would soon lose its monopoly over nuclear weapons and that it would have to face the possibility of a surprise attack from the Soviet Union. Brodie's answer was that a surprise attack would not work if the attacker's cities would also be destroyed -- even if evacuated they would hold the physical plant on which the nation depended. Thus surprise attack with nuclear weapons