

Reassessing the Deterrence Model

By Kopal Mukim

There was an anticipated change in the utility and the role of the Deterrence Model after the end of the Cold War. Today, we are better equipped to analyze the role of this theory and its practical implications. There may be a need for the deterrence theory to move from the constructs of the Cold war and to adapt to the current international climate. During the Cold War, it was developed as a holistic theory that could be utilized in the same format anywhere. However, the context of the Cold War was fundamental for its success and the context of international politics has changed markedly.

The objective of this paper is to highlight the evolution of the deterrence model and to describe the areas in which further adaptation would be feasible for current conditions and circumstance. It also aims to assess deterrence as a model of defense. This includes acknowledging, not just the changes, but also the limbo that political individuals and institutions have been struggling, or refusing, to step out of, since the Cold War. The dynamics of relationships between nation-states are very different now and we must enquire as to how this affects, or should affect, deterrence. It is important to determine the reasons for, and the extent, of the limited relevance of the Cold war conceptions of deterrence. Furthermore, this paper will assess the functionality of nuclear deterrence by examining the psychological basis of the deterrence model and how it can be manipulated.

Whether it is the inertia left after the Cold War, or the necessity for deterrence in the new age, the theory has survived and proved its significance. Now it is a matter of identifying its specific implementation and adjusting it to current regional and global regimes. This comeback cannot be restricted to responses to individual security threats. It is an attempt to reshape the tools used, while building an international order.

Deterrence can be explained as an attempt to influence another actor's assessment of the risk. It is only beneficial for both parties, if both are confident that the other has enough nuclear capacity to significantly harm, if not destroy them. This stalemate-like situation was coined by the early-cold war mathematician and physicist John Von Neumann, as 'Mutually Assured Destruction' or 'M.A.D.' It is a psychological ploy to convince the actor considering undesired behavior, that the cost will exceed any potential gain and that nuclear deterrence tests positively on a cost benefit analysis. Threat-based strategies have always been the nub of nuclear warfare, but there is almost no consensus among the policy makers on which conditions are conducive for these tactics.

For the purpose of analysis it is necessary to differentiate between the theory of deterrence and the strategy of deterrence. The former refers to the rational claims, as well as the psychological and political assumptions, they are based on. The latter is the practical application of the theory. The theory is a guide for the strategy. Deterrence can be characterized in two parts, general and immediate. According to T. Ferris in 'Sentencing: Practical Approaches' (Ferris), general deterrence is when the states play a long game based on existing power paradigms. It attempts to stall the adversary from any serious military action with the over-hanging threat of equally destructive retaliation. Immediate deterrence is more specific; it attempts to eliminate an anticipated challenge to a publicized and well-defined commitment. Immediate deterrence is employed when general deterrence is thought to be failing. It is tricky to know when general deterrence is successful, since non-action by a target state can be the result of numerous reasons, which include a state having no intention of using force. Since instances of immediate deterrence success and failure are easier to distinguish, most research has tried to clarify their results. This paper will be focusing solely on analyzing general deterrence in both its forms; direct and extended in the context of the Cold War and what followed.

Through analysis of the use of nuclear weapons in World War II, a claim can be made that the real reason for the Japanese surrender was that the Soviets joined the war, rather than as a result of the bombings of Hiroshima and Nagasaki. Perhaps the reason for the Japanese having cited the bombing as

the cause of their defeat was one of convenience. It is easier to pronounce to their own people, and the world, that they lost because of an unanticipated scientific breakthrough, than to accept they had misjudged and millions died because of it. Yet, in an attempt to save their dignity, they inadvertently gave nuclear weapons its unique psychological power. This is significant, as the bombings in Japan are the only actual point of evidence that can be observed in reference to the real power of nuclear weapons. Every move from that point on was based on the reactions from this singular event. The first instance misled us, leading to an inflated sense of the power of nuclear warfare. Subsequently we spent forty years, too frightened by the Cold War to reassess our initial estimations. By the time the Cold War ended, we had already morphed those initial reactions into hardened beliefs.

Upon examining the origins of this system, it is obvious why it gained popularity with the military strategists during the Cold War era. The different means of delivery and the exorbitant quantities of atomic weapons were methods that ensured neither nation could be obliterated in a surprise assault, without still being capable of destroying the other in a second strike (notwithstanding, the measure of radiation discharged in these assaults would perhaps destroy human life on earth as indicated by a few researchers).

Assuming that rational players were in control of the atomic stockpiles, in both the Soviet Union and the United States, there would never be an atomic war between the two nations. It could not occur, as it would end civilization in both countries, and conceivably the whole world. This concept had seemingly worked during the lifespan of the Soviet Union with neither side daring to challenge the other with a nuclear war. The singular exception was the Cuban Missile crisis in 1962.

Scholars argue the same cannot be held to be true today, where the range and reliability of nuclear missiles are well established. But from this point on, both countries lived in mortifying and balanced fear of each other. They lived in fear of making a mistake that could be perceived as a threat. It was an apprehensive, but stable peace. During the Cuban Missile Crisis, a hotline was established between the

Pentagon and the Kremlin to ensure that any unusual activity could be directly explained. M.A.D. additionally prompted the Anti-Ballistic Missile Treaty in 1972. It was estimated that a workable anti-ballistic missile system that could catch approaching warheads, would tilt the balance of power for the nation that first assembled a powerful system. This would prompt a first strike before the Anti-Ballistic Missile System was set up, beginning a nuclear war. In spite of the fact that the treaty was to be valid for a long time, President Reagan stated in 1983, that the United States was going to continue with the Strategic Defense Initiative (SDI or Star Wars), which was a research project to check whether an anti-ballistic missile system might work. The Soviets were informed this was not to obstruct their atomic weapons which were overpowering, yet those of different players who just may have the capacity to manufacture a couple of missiles. Nevertheless, the SDI never became operational. Smaller proxy wars occurred during this time, pushing and repelling allies and some American powers. Nevertheless, M.A.D. did involve keeping up nuclear equality, this involved constant updating of nuclear weapons, as well as new and better delivery systems. Nuclear deterrence became the core of security strategies of major nations and because the stakes were so excessive, the need for it to work became overwhelming. The Cold War never escalated to any actual warfare, so it was assumed that the deterrence strategy was a success.

A clear illustration of the major failures of nuclear deterrence can be observed through the Cuban Missile Crisis and may be crucial to understanding the evolution of the theory. In 1962, over Soviet objections, America deployed nuclear-armed Jupiter intermediate range ballistic missiles (IRBM's) inside Turkey. From their point of view, adding these weapons guaranteed NATO's southern region of flank, helped cement relations with Turkey, and increased their nuclear deterrent. The 1961 Bay of Pigs invasion contributed to Khrushchev deployment of equivalent IRBM's in Cuba. This disastrous decision began a nuclear variant of tit-for-tat. Generally, in most deterrence encounters (Garthoff, 1989; Lebow, Stein, 1990). Both sides considered themselves the deterrent. This is due to the unique interpretations of the status quo. In the Cuban missile dilemma (Lebow and Stein, 1994), Khrushchev justified the furtive

Soviet missile deployment in Cuba to be part and parcel of his efforts to deter an American invasion within Cuba. Kennedy and his advisors interpreted the deployment as radical and underhanded work, so that he could upset the strategic position quo. The distorting ramifications of cognitive biases along with heuristics, cultural and political obstacles to empathy, as well as the differing cognitive contexts of the deterrent, created discrepancies in interpreting opposing movements. Despite learning the extreme risk involved in blockading Cuba throughout the crisis, President Kennedy decided for it. The objective of deterrence was to prevent leaders from displaying aggression, given the high stakes involved. However, this all or nothing game didn't deter aggression. Then, the Soviet boats approached the American blockade and neither side showed any sign of backing down. Finally, Khrushchev halted the Soviet ships, just short of the blockade. Within the resolution of the crisis, Kennedy made a decision to take away the American missiles inside Turkey, but he insisted that the key agreement be kept secret. The 1962 midterm elections occurred shortly following the crisis ending. With the secret protocol unknown, Kennedy was viewed as winning the standoff in addition; the Democratic Party fared drastically better than anticipated ahead of crisis. On the other hand, Khrushchev fell from command 24 months later, partly because of Russia's humiliation with regards to the Cuban Missile Crisis. Foreign policy is dangerously influenced by general public thoughts and opinions, as well as a leader's claim to reputation. As terrorists have an apocalyptic mindset, they may try to catalyze full-scale nuclear warfare by disguising their work as an assault by the U. S., or perhaps as Russia, letting open public pressure do the rest.

The assumption was that, in cases of conflict, both nation-states would act in accordance with the Prisoner's Dilemma theory. That is, to achieve maximum gains with minimum losses. The best strategy would be to build-up weapons for minimum losses if it would not be possible to maximize the gains through disarmament. By framing the problem in a zero-sum calculus, mathematicians artificially introduced conflict over cooperation. But the "game" in reality was not as symmetrical as hypothetical simulations made it out to be. Making policy decisions based on this information could have led to the start of the stockpiling of nuclear weapons. Assuming hypothetically that it was a zero-sum scenario,

could have been a self-fulfilling prophecy. Nuclear weapons did not make war unfathomable and did not provide significant diplomatic leverage every time. They did not prevent defeat in Vietnam and Afghanistan, or prevent the invasion of Israel in 1973. Nor did they stop war in the Falkland Islands in 1982 or prevent the loss of an empire for England and Russia. If these instances were analyzed based on the same game theory model, then nuclear deterrence has failed. The last resort is also the first and only response, in a nuclear war. Hence this war can never realistically be actualized.

A few experts assert that the Soviet Union's breakdown was only halfway, as a result of its endeavor to keep pace with the United States in building costly armaments, a procedure that its economy couldn't support. However, past mistakes have not been heeded as a guiding path by the current nuclear powers. The British Trident system of four Vanguard-class submarines armed with Trident II D-5 ballistic missiles needs a cost-benefit analysis. An analysis by a RUSI paper declared that Britain doesn't need to have a nuclear submarine continuously patrolling the sea anymore. However, conservatives argue that this system has been effective for the last 50 years and no alternative can match it. They refuse to risk downgrading to a part-time deterrent. It will cost £25 billion to renew the nuclear-armed submarines. That figure is enormous alone, but clubbed with the cost of maintenance, it is an amount that Britain cannot afford to spend on a deterrent without any immediate threat. The mere existence of submarines - whether active or inactive - would have the desired effect of dissuading a potentially hostile state from threatening or blackmailing the UK (if those potential enemies believed the UK's nuclear forces could be deployed 'in a crisis'). Also, it is important to re-examine the need for such a stringent nuclear policy to prevent the blind adoption of a strategy, only because it is precedent. "We need to come down the nuclear ladder in a way that is consistent with the world today. We no longer need to be able to fire on Moscow at a moment's notice. We cannot escape uncertainty, but we have finite defense resources and a Cold War nuclear capability has little relevance to the range of security challenges we're likely to face in the future." said, Nick Harvey a liberal democrat from the United Kingdom.¹ However, this is also an intrinsic shortcoming of the system itself. A state has to rely more on the threat of retaliation, than defenses to

prevent attacks. But this requires the maintenance of an extraordinary level of a standing peace-time nuclear arsenal (that is up to date) and also for conventional forces to be able to deter lesser attacks.

China relies heavily on ballistic missiles as a military defense, out of which 190 are nuclear capable. The U.S is countering China's deterrence by upgrading their Anti-Ballistic Missile defense system. Now China must make a greater number of better missiles to be able to infiltrate their defense. Essentially, China is developing technology like DF-210 to pose a credible threat. Although this threat will never actualize, as it would result in M.A.D. This faulty logic does not stop with China. The main objective for the United States is to stop someone from attacking them. The primary approach for anyone attempting to do so would be a missile attack. If China perceives their missile shield as a provocation, (which in this game, any move other than disarmament is) then they will launch a new wave of missile advancement. It is a catch-22. Even doing nothing would be a smarter defense strategy than doing this.

The current political dynamic is very different from that of the Cold war era. The political relationships between the leading states have remained relatively stable and cooperative. Nuclear deterrence is no longer fundamental to peace. It now only performs residual functions. Most nations are simply hedging against the possibility of serious conflict. A significant amount of resources are still kept on high alert, but they are not targeting a designated opponent. Today, deterrence is often undertaken as a multilateral security effort, which leads to 'collective actor deterrence'. Protection is regularly extended to other states, making it central in the formation of alliances, attempts at non-proliferation, interventions and the general international climate. The international players are split into the 'haves and have-nots'. The nuclear capable states then form blocks that function like cartels. They protect their own, the bigger the group, the stronger they are. Finally, disloyalty within the group would lead expulsion from the setup (at the very least). South Korea and Japan have negative security assurances from the United States, according to the 2010 Nuclear Posture Review. This makes it harder for a state to deter these threats, as they come through a legitimized channel, and represent multiple parties. But the nuclear capable states still cling to the Cold War model, despite the absence of political conflicts that gave it value in the first

place. The nuclear forces exist on the same skeleton, just in smaller proportions and constant upgrading. This paranoia is contradictory to all the interaction and interdependency that the major actors have engaged in since the Cold war. All the evidence shows that communication has improved and that there is a higher exchange of information, as well as conflicts occurring at a manageable level. Currently the main threats are weak states, rogue states and non-state actors whose actions cannot be assumed as rational, and are therefore difficult to deter. We have transferred from a state of Cold War; sustained hostility short of World War III, to cold peace where a sustained truce without a settlement exists.

Lebow and Stein offer the next conclusions about the role connected with nuclear deterrence:

- 1) Leaders who make an effort to exploit serious or imagined nuclear advantages for political gain will not succeed;
- 2) Credible nuclear threats are incredibly difficult to create;
- 3) Nuclear threats will be fraught with risk;
- 4) Strategic build-ups will most likely provoke than restrain adversaries as a result of their effect on the domestic equilibrium of political power in the target state;
- 5) Nuclear deterrence works well when leaders on both sides dread war and appreciate each other's fears.ⁱⁱ

Public opinion is less concerned about the danger of a full-scale nuclear war, as it is generally considered to be a relic of the past. Numerous individuals trust that the disarmament of the last two decades has made the world safe. Be that as it may, reductions from about 75,000 nuclear weapons to 25,000 today, has made the world just generally more secure, but not more safe. Absolute disarmament is impossible now because of the potential threat of technology leaking to a rogue state or a non-state actor, and the hypothetical lack of viable defenses in such a situation. Others trust that, in light of the fact that World War III would be so damaging, nobody would begin such a staggering conflict. Yet, in times of emergency we are frequently irrational. In fact, one of the assertions of the Deterrence theory suggests

that it was logical for a leader to encourage a reputation for being irrational to be able to convey a more believable threat. This is seen in Richard Nixon's dealings with the Soviet Union and North Vietnam. The Cold War created a vocabulary with which nuclear strategy could be discussed with ease. It was the same labels that diminished the emotional content of nuclear atrocities to scientific indifference.

As for utilizing deterrence, the manner by which the western coalition is no longer status quo-oriented, fighting off difficulties against the established order is more fascinating. Rather, the West enthusiastically advances democracy, open social orders and economies, free market frameworks and human rights. Keeping with the diplomacy of democracy and related liberal ideas, it spreads those qualities and practices essential for secure global politics. The United States acts as a progressive state of sorts by advancing societal and administration change. This represents an existential danger to various states and social orders, impelling military form ups or nuclear weapons programs in countries like, Iran, North Korea and Venezuela. This is in an effort to dissuade expanding "assaults" into direct military ones. Deterrence now is regularly sought after or practiced against the West.

Popular opinion held by the citizens of the world, is that nuclear weapons are absolutely necessary. But weapons become irrelevant the moment a smaller, more accurate and efficient weapon is invented. A genetic revolution is leading to the development of new biological weapons that can be matched in their threat level only by cyber attacks. This new form of warfare is not capital intensive and can be operated even by a single skilled non-state actor.

Conflicts short of full-scale attacks are difficult to deter and states might initiate a "probe" just to test an adversaries' resolve. This is problematic since nuclear deterrence only works if a credible threat exists. So if the state does not react with nuclear power on a small-scale attack, they lose credibility. It then begs the question, how big does an attack have to be to entail the usage of nuclear armaments? What if the attack is not full frontal but gradual? Is the nuclear retaliation supposed to be relative to the first

attack? If that is the case, then the attacking state is still able to utilize their second strike capacities on the defending state, making deterrence a failed security resource.

Of all the nation states that the Security Council and the Non-Proliferation treaty have mandated as nuclear capable, China is displaying the most restricted and practical nuclear policy. Despite a no-first use of nuclear weapons policy, plus a minimum-deterrence posture, China can now employ a quantity of technically feasible and cost-effective measures. This makes sure some warheads would have the potential for penetrating the American missile defense program and this response would be strengthened by a nuclear build-up and missile defense countermeasures (e. g. decoys added with penetration aids). US missile defense programs should be an important driver of Chinese nuclear expansion. However, any growth of the Chinese nuclear arsenal would be continually constrained by its fissile elements inventory, which at present wouldn't support an arsenal greater than 1, 000 warheads. In reality, there is no proof that China will change its long-standing insurance plan of the no-first use of nuclear weapons doctrine. Since its first nuclear explosion in 1964, China has constantly honored a nuclear policy that has the very least deterrent and a no-first-use pledge, both targeted at avoiding a pricey nuclear arms race within the P5 (USA, Russia, China, France, UK). This policy has become predicated on Chinese leaders' perception of the position of nuclear weapons and has been consistently embraced from Mao Zedong onwards. China's nuclear modernization is aimed towards increasing the survivability, reliability, security, and penetrating ability of its small nuclear arsenal. Furthermore, it aims, to maintain a restricted, although effective, second-strike nuclear force. The Chinese logic is that the minimum suitable nuclear force is the amount that will survive an initial nuclear influence, and penetrate a missile defense program, achieving its designated targets. How much the "minimum" nuclear warheads need to achieve success would, therefore, be frequently altered. A nuclear force of around 10 warheads that kill millions persons could be enough to inflict unacceptable damages over a target country, and therefore enough so that one can "deter" a nuclear first affect. If the nuclear weapons "haves" truly intend to do something for a nuclear-

free world, it is time for all those to adopt a worldwide agreement of no-first-make use of nuclear weapons.

In conclusion, nuclear deterrence is losing relevance. This would be acceptable, even positive, except there is no clear alternative to it that caters to the conditions of the current climate. Milburn argued that deterrence might be made a more efficacious strategy if threats of punishment were accompanied by promises of rewards for acceptable behavior.ⁱⁱⁱ

References -

ⁱ "UK Could Afford to Cut Trident Submarines, Report Says." *BBC News*. Web. 20 May 2016.

ⁱⁱ Lebow, Richard Ned., and Janice Gross. Stein. *We All Lost the Cold War*. Princeton, NJ: Princeton UP, 1994. Print.

ⁱⁱⁱ Milburn, Thomas W. "The Concept of Deterrence: Some Logical and Psychological Considerations." *Journal of Social Issues* 17.3 (1961): 3-11. Web.

Kopal Mukim is a recent graduate of Liberal Arts, Kopal is a Psychology major and an International Relations minor. She is fascinated by academic pursuits that intersect both subject areas. She has significant experience as a Model United Nations delegate and debater. Kopal is 21 years old and she is from Pune, India.