

DETERRENCE, SECURITY DILEMMA AND ACQUISITION OF NUCLEAR ARMAMENT: A STUDY OF NORTH KOREA AND PAKISTAN

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Abstract

This paper examines the extent to which deterrence has motivated the acquisition of nuclear armament by North Korea and Pakistan. Nation-states involve in the acquisition of nuclear weapons to deter other nation-states with the notion that a nuclear attack by one would receive an overwhelming nuclear counterattack such that both the defender and attacker would be annihilated. This scenario has created a security dilemma and nation-states are grasping with fears. Both North Korea and Pakistan were involved in the acquisition of nuclear weapons because of adversaries that have constituted major threats based on ideological and religious differences. The paper adopted the neo-realism theory as its theoretical framework of analysis. The paper relied on a qualitative method of data gathering technique. It unravels that both North Korea and Pakistan's adversaries have motivated them to acquire more nuclear weapons. Therefore, the paper concludes that North Korea and Pakistan could enjoy peaceful co-existence with neighbours if they have enough deterrence.

Keywords. Deterrence, North Korea, nuclear weapon, Pakistan, security dilemma.

Introduction

Warfare has changed greatly over the centuries. It has created fear and anxiety in the international scene. The changing nature of war and advancement in technology have escalated the ability of nation-states to annihilated perceived enemies. Thus, successive advances in the ability to deliver weapons at increasing distances and the ability to kill even more people with a single weapon have also resulted in casualties, both absolutely and as a percentage of soldiers and civilians of the countries at war (Rourke and Boyer, 2004). Hence, Boulding (1962, p. 4) opined that "we live in a society with a positive possibility of irretrievable disaster- a possibility which grows every year. This is a very uncomfortable society to live in." Thus, humanity is confronted with an unprecedented human situation. Shortly after the atom bombs were first used against Japanese cities during World War II, an American physicist stated:

We find ourselves with an explosion that is far from completely perfected... it is conceivable that different methods may be discovered for converting matters into energy since it is to be remembered that the energy released in uranium fission corresponds to the utilization of only about one-tenth of one per cent of its mass. Should a scheme be devised for converting to energy even as much as a few percent of the matter of any common material, civilization would have the means to commit suicide at will...? Here is a new tool for mankind, a tool

of unimaginable destructive power (De Wolf Smyth, 1945, pp, 224,226).

Against this backdrop, nation-states prepare to deter nuclear attacks. This perception has often arisen based on assumption that if perceived enemies are not deterred and an opportunity arose, the adversaries would attack, leaving their victims vulnerable. “Conflict grows, intensify, and widening by drawing in other interested parties” (Ogele, 2020, p.1407). Hence, nation-states acquire more and more nuclear weapons to not only protect their countries and citizens but also protect their allies from nuclear attacks. This assertion corroborates Kroenig (2021, p. 1) that:

The nuclear threat to the United States and its democratic allies is growing, as nuclear-armed, revisionist, autocratic powers (Russia, China, and North Korea) are relying more on nuclear weapons in their strategies and are modernizing and expanding their arsenals. This means that the United States needs to retain robust, flexible, and modernized nuclear forces to meet its national security objectives... the United States uses its nuclear weapons not only to defend itself but also to protect the entire free world. The United States extends nuclear deterrence to over thirty formal treaty allies in Europe and the Indo-Pacific. These allies depend on US nuclear weapons for their security. This extended deterrence policy advances US interests by ensuring stability in the world’s most important geopolitical regions.

Another challenge is the ability of states that newly acquired nuclear weapons to test the capability and the range of this weapon. Deterrence indicates the ability to respond to any adversary’s attack or imminent attack on your militaries. For instance, the desire to test its capability was what India claimed when it openly tested nuclear weapons in 1998. Thus, India was displaying its capability to China. An Indian official declared that “we are not seeking nuclear parity with China... what we are seeking is a minimum deterrence” (New York Times, 1998, p. A7). It is not enough to acquire nuclear weapons without testing them since there is no way to defend oneself when a missile is launched. Hence, Rourke and Boyer (2004, p. 269) stated that “deterrence requires that you have enough weapons that are relatively invulnerable to enemy destruction so that you can be assured that some will survive for a counterattack.”

The desire to acquire nuclear weapons increased defense budget of most countries, particularly in the Cold War era. Most nation-states were involved in the mass acquisition of nuclear weapons to the extent that the principle of deterrence such as Mutual Assured Destruction (MAD) was adopted in order to limit the threat of usage. North Korea and Pakistan have common historical features. The Korea Peninsula became North Korea and South Korea since 1945. These two countries were victims of ideological difference leading to fierce war during the Cold War. Both present India and Pakistan were under the British Crown rule from 1858. However, in 1947, the British Indian Empire was divided into two independent states- a Hindu-majority India and Muslim-majority Pakistan. These independent nations have experienced high intensity conflict and unprecedented migration (Copland, 2021). Ahmed (2000, p.783) revealed that the inception of Pakistan’s nuclear programme can be traced to 1960 when India’s nuclear infrastructure began to expend. The actual decision to opt for nuclear weapons came after Pakistan’s defeat and dismemberment in the 1971 India–Pakistan war.”

The aforementioned have resulted in desperate acquisition of nuclear weapons to protect their sovereignty from any eventuality. The aftermath of the nuclear weapon race is fear leading to security dilemma. Herz (1961, p.241) argued that whether a man is “by nature’

peaceful and cooperative, or aggressive and domineering, is not the question. ... It is his uncertainty and anxiety as to his neighbours' intentions that places man in this basic [security] dilemma and makes the 'homo homini lupus' a primary fact of the social life of man. It is the mere instinct of self-preservation which, in the vicious circle [of the security dilemma], leads to competition for ever more power." Security dilemma leads to mutual anxiety of what initially may never have existed, which end bring that once feared. Security dilemma could be unpremeditated from the onset but may retrogress into fear occasioned by the desperation of states accumulating more and more power for their security. Jervis argued that security dilemma emanates from "unintended and undesired consequences of actions meant to be defensive" (Jervis, 1976, p.66). The state makes efforts to increase its security, decrease others and "one state's gain in security often inadvertently threatens others" (Jervis, 1978, p.168). In the light of the above mention, this paper aimed to examine the extent to which deterrence has motivated the acquisition of nuclear armament by North Korea and Pakistan.

Conceptual clarification

Deterrence

Deterrence is defined as the "use of threats by one party to convince another party to refrain from initiating some course of action. A threat serves as a deterrent to the extent that it convinces its target not to carry out the intended action because of the costs and losses the target would incur" (Huth 1999, p.27). However, there is major inherent confusion in conceptualizing deterrence, which is predicated on the ground that most scholars had used defense as deterrence interchangeably. Some scholars had treated the two as distinct and alternative (Art, 1980, pp. 5-7; Halle, 1984, pp. 23-33; Waltz, 1981, pp. 4-5). Whereas others viewed it from the point of incompatibility in many ways and some ways incompatible, as such assume that there is a broad overlap between them (Gray, 1982a, pp. 84-92; Hoag, 1962; Lodal, 1980, p. 155). Even though it is not within the scope of the paper. Most nations have produced more nuclear weapons for defensive reasons. Defense is not as the same as deterrence. The difference is what we considered as deterrence, which "has both definitional and political roots, and one needs to have a very clear understanding of it before trying to tackle the intricacies of the deterrence literature" (Buzen,1987,p.135). Buzen (1978, p.135) further argued that:

The definitional problem is easier to understand if it is approached using the more precise distinction between retaliation and denial as military strategies. Retaliation involves the infliction of punishment on an opponent in response to an attack. The punishment need not take place within the same area as the attack that provoked it. Its principal purpose is to inflict reciprocal cost. The threat of a nuclear bombardment that the superpowers hold over each other in the event of nuclear attack is a clear example of a retaliatory policy. Denial involves direct resistance by force to the attempt of another to attack areas that are under your control. The essence of denial is to block an attack by physical opposition to the forces making it

Given the above, deterrence is a statement of a strategic end, whereas retaliation/defense/denial in nuclear politics is considered as ways of pursuing that end. Taking a holistic conceptual view of deterrence in regards to traditional strategies for national defense, the term deterrence in international politics was unbeknown until the nuclear age. The notion that strong defensive forces would check adversaries from attacking is central element in strategically calculation. Hence, "deterrence is a distinctive concept because it gives priority to war prevention as a strategic objective" (Buzen, 1978, p.138).

Nation makes policy of deterrence to avert threats. Therefore, Huth (1999, p.27) referred to policy of deterrence as:

Threats of military retaliation are directed by the leaders of one country to the leaders of another in an attempt to prevent the other country from resorting to the threat or use of military force in pursuit of its foreign policy goals. It should be clear, however, that policies of deterrence in international politics can include both military and non-military threats that are intended to prevent both military and non-military courses of action by other states.

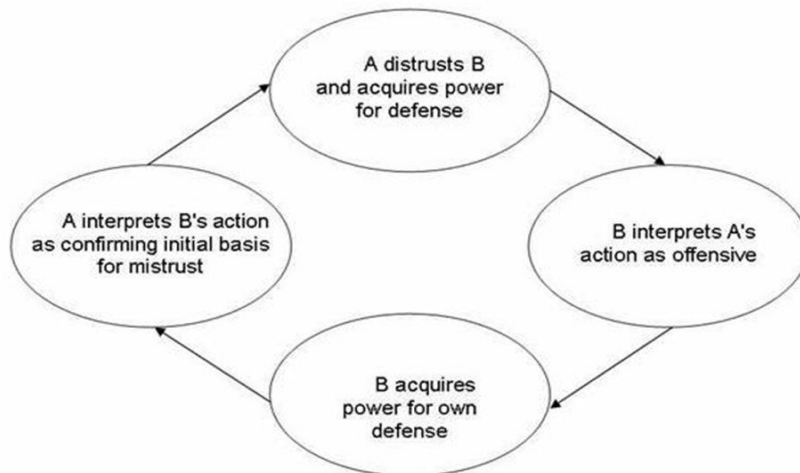
A successive policy of deterrence is aimed at preventing an attack against a country's territory (direct deterrence) or an alien (extended deterrence). Sometimes, deterrence threat might be issued in reaction to external short term threat of attack (Immediate deterrence) or deterrence policy aimed at preventing short term conflict and militarized crisis from arising (general deterrence) (Morgan, 1977). The immediate essence of deterrence is preventing state leaders who are already threatened by force in conflict or militarized hostility from engaging in large-scale use of military force. To avert wars or crises cannot be the only goal of deterrence but defenders would have the capacity to resist the political and military conditions of a possible attacker (Huth, 1999).

Security Dilemma

The concept of security dilemma in contemporary international politics was first used by John Herz, Herbert Butterfield, and Robert Jervis (Butterfield, 1951; Herz, 1951; and Jervis, 1976). However, the concept has evolved and its application widened. Wheeler and Booth (1992, p. 32) premised security dilemma on "dynamic 'action-reaction' cycle with insecurity breeding insecurity." Morgan (2007) argued that a security dilemma was used in international politics to narrate a scenario where a government equips itself to facilitate its security but as a result scares other state actors into arming as well, the net outcome being decreased security for all. Historically, the circumstances that the security dilemma explains has long been observed in the past. At the time of the Peloponnesian wars, Thucydides wrote that the "growth of Athenian power, which terrified the Lacedaemonians and put them under the necessity of fighting" (cited in Brunt 1963, p. 13). Security Dilemma also existed during the 19th century when the European powers were competing for power and influence over colonies (Collins, 1997). It is deduced that sometimes, security dilemma was unknown to persons in an anarchic state. Contrary to this assertion is Posen's (1993, p.104) position that "the nature of their situation compels them to take the steps they do." In explaining what an anarchic state meant, Butterfield used the term to describe 'Hobbesian fear' to clarify the cause of what he referred to as a condition of absolute quandary or irreducible dilemma (Butterfield, 1951). The 'Hobbesian fear' was used in referring to Thomas Hobbes 'state of nature.' This is "a state of perpetual war of every individual against everyone else" (Warburton, 2006, p. 66). Herz (1951) argued that the security dilemma was driven by the self-help nature of the anarchical international system as opposed to the distrustful view of it being the product of self-interest and defective human nature that symbolizes classical realism. Jervis (1976, p.62) disclosed that the causes of security dilemma are entrenched in "the anarchic setting of international relations... [not in] human psychology nor in a flaw in human nature." Hence, Posen (1993, p.104) defined the Security Dilemma as a situation where "what one does to enhance one's own security causes reactions that, in the end, can make one less secure." The above definition suggests that the actors involved harbour benign intentions since their only objective is to enhance their security. Wheeler and Booth (1992) differentiate between inadvertent and deliberate Security Dilemmas as a way of explaining whether a given situation exhibits either benign or malign

intent. Jervis (1976) also highlights this issue by suggesting that governments must decide whether they are in a deterrence situation or a spiral model situation. The diagram below indicates the security dilemma spiral.

Security Dilemma Spiral



Sources: <https://www.google.com/search?q=diagram+of+security+dilemma+pdf>

Given the above, only the spiral model explains the dynamics at work in the Security Dilemma as it deals with “unintended and undesired consequences of actions meant to be defensive” (Jervis 1976, p. 66). This characteristic of benign intent on the part of the participants is one of the three characteristics that Collins (1997) argued constitutes the Security Dilemma in its ‘original’ sense. The hopelessness of a state’s situation, or what Collins (1997) refers to, as the choice between “self-defeating/paradoxical policies”, described above, is another of the three characteristics. The third characteristic, this paper argued, is what generates the Security Dilemma; it is the ambiguity of each other’s intentions or what Wheeler and Booth called ‘unresolvable uncertainty’.

Theoretical underpinning

This paper adopts the neorealist theory as its theoretical construct. “Neo-realism is an offshoot of realism, a conscious attempt at the reformation of classical realism” (Gilbert, 2011, p. 55). Neorealism theory emphasizes the role of power politics in international politics. Neorealism’s perspective on international politics is derived from its two core assumptions - the centrality of autonomous states wishing to survive and the silence of international anarchy. This is because world politics takes place with the self-help realm, states must rely on their resources to protect themselves and further their interest. Hence, neo-realism sees competition and conflict as enduring characteristics and limited potential for cooperation (Jervis, 1999). Thus, competition and conflict among states stem directly from the twin fact of life under conditions for anarchy; states in an anarchic order must provide for their security, and threats or seeming threats to their security bond (Waltz, 1988). Preoccupation with identifying dangers and counteracting them becomes a way of life. Relations remain tense; the actors are usually suspicious and often hostile even though by nature they may not be given the suspicion and hostility. Individually, the state may only be doing what it can to bolster its security. Their intentions aside, collectively their actions yield an arms race and alliance. The uneasy state of affairs is exacerbated by the familiar ‘security dilemma,’ wherein that of others (Herz, 1950). In the anarchic domain, the source of one’s comfort is the source of another worry. Others cast a state that is an amazing instrument of war, even for its defensive, as a

threat requiring a response. The response itself then serves to confirm the first state believes that it had reason to worry.

The neo-realism theory is useful to this paper because it analysis the competition and alliances in nuclear weapon politics leading to security dilemma and deterrence. Both North Korea and Pakistan acquired nuclear for their security to avoid the threat of elimination from their adversaries. These countries identified these threats and countered them through the unending acquisition of nuclear weapons leading to a security dilemma.

Methodology

The paper adopted a qualitative method of data gathering technique. The paper made use of newspaper publications, journals, books and various reports on the internet on the trends in global politics on nuclear armament. The paper adopted a content analysis in analyzing the data collected from the internet and library. These include the trends of nuclear armament with particular reference to North Korea and Pakistan. It is imperative to acknowledge that this survey is far from comprehensive of all cases of nuclear activities, however, as many cases as reported by the media of nuclear armament in North Korea and Pakistan.

Motivation for the acquisition of nuclear armament by North Korea and Pakistan:

Brief History of North Korea

Historically, North Korea is a country with an estimated population of about 25 million people, living in the northern half of the Korean Peninsula that bordered between the East Sea (Sea of Japan) and the Yellow Sea. North Korea was previously known as the Democratic People's Republic of Korea, or DPRK. The country was "founded in 1948 when the United States and the Soviet Union divided control of the peninsula after World War II"(A&E Television Networks, 2022,p.1). North Korea operated as a secretive communist state that isolated itself from global activities until the emergence of the present leader, Kim Jong Un and his aggressive nuclear program, which is constituting a growing threat to international stability (A&E Television Networks, 2022, p.1).

Retrospectively, in 1910, Japan invaded the Korean Peninsula, which it had occupied five years earlier following the Russo-Japanese War. The country was colonized for 35 years with significant industrialization and modernization. Nevertheless, the Koreans suffered brutal repression at the hands of the Japanese military regime (A&E Television Networks, 2022, p.1).

During World War II, the Japanese government compelled the Korean men to fight and work in the wartime factories, whereas thousands of young Korean women rendered the service referred to as 'Comfort Women' – providing sexual services to Japanese soldiers. However, upon the defeat of Japan in 1945, the Soviet Union and the United State partitioned the "peninsula into two zones of influence along the 38th parallel or 38 degrees north latitude. In 1948, the pro-U.S. Republic of Korea (or South Korea) was established in Seoul, led by the strongly anti-communist Syngman Rhee (A&E Television Networks, 2022, p.1).

Korean War

The Korean War, which commenced on June 25 1950 when about 75,000 soldiers from the North Korean People's Army decanted across the 38th parallel. The 38th parallel is the boundary between the Soviet-backed Democratic People's Republic of Korea to the north and the pro-Western Republic of Korea to the south. This invasion took place during the Cold War. Hence, it was a war between the two ideological blocs. The American troops fought on the side of South Korea, whereas the communist countries fought alongside the North Korean. The War recorded many casualties. However, in July 1953, the Korean War ended with over 5 million persons including soldiers and civilians losing their lives in what the US referred to as the

“Forgotten War” because it received less global attention relative to World War I and II (A&E Television Networks, 2022, p.1).

Development of Nuclear Armament

According to Wakafield (2010,p.1), “the North Korea (DPRK) nuclear issue begins in the late 1980s and early 1990s as leaders in Pyongyang, faced with the loss of their Cold War alliance relationships and confronting unparalleled challenges to the survival of the regime, sought security through pursuit of nuclear weapons and diplomatic breakthroughs with the United States.” Jonathan D. Pollack, professor of Asian and Pacific Studies at the Naval War College, and research associate of the National Asia Research Program, noted that “there is a much longer lineage to North Korea's awareness of nuclear weapons and its interest in nuclear science and technology that even antedates the establishment of the DPRK in 1948” (Wakafield, 2010,p.1). Leaders of nations learn from experiences or event of the past. The Kim II Sung of the North Korea “learned from the atomic bombings of Hiroshima and Nagasaki that two atomic weapons could force an empire that once stretched across East Asia to capitulate” (Wakafield, 2010,p.1). Hence, Pyongyang was actively involved in nuclear research programmes in the 1950s, when it feared that North Korea might lag behind South Korea. This lack of confidence was vigorously pursued to the extent that “the North agreed to peaceful development programs with the Soviet Union to establish nuclear infrastructure” (Wakafield, 2010, p.1). As a member of the Communist Bloc, the Soviet did not hesitate in developing a reactor at Yongbyong. Nevertheless, the withdrawal of Soviet missiles from Cuba at the end 1962 Cuban Missile Crisis got Pyongyang worried that the superpower protectors also abandon them. Hence, increasing the number of nuclear weapons was considered as a way of North Korean national security.

In the 1970s, the nuclear programme was initiated in North Korea by President Kim Jong I. according to Wakafield (2010,p.1), Kim was “motivated by envy at South Korea's economic development, a continuing need to secure Pyongyang's independence from Beijing and Moscow, and a desire to leave a legacy for his successor and son, Kim Jong II.”

There is no doubt that Pyongyang viewed the evolution of the global nuclear non-proliferation regime in the 1970s as a means of facilitating its ability to secure a nuclear deterrent. Consequently, North Korea joined the International Atomic Energy Agency (IAEA) in 1974 and between 1975 and 1979; a nuclear scientist was stationed at the IAEA's headquarters in Geneva (Wakafield, 2010).

The chief role of the scientist was to siphon off the agency's information to learn how to design a nuclear reactor. In 1980, North Korea was able to construct a reactor capable of producing weapons-grade plutonium. In the decades since then, the reactor has since generated power sufficient for only 23 days of electricity (Wakafield, 2010).

North Korea: Deterrence strategy of nuclear armament

The international security environment for the United States and its allies has deteriorated over the past decade as autocratic, great power competitors, Russia and China, have pursued more aggressive, revisionist foreign policies (Kroening, 2020). The policy of deterrence, no doubt is usually directed at preventing an armed attack from another country. Major Powers have been the principal states to practice extended deterrence. Research has proven that “extended-immediate deterrence from 1885 to 1984, 48 out of 58 cases of attempted deterrence (83%) involved major powers as defenders” (Huth, 1988, p.227). Furthermore, Huth gave instances of activities that orchestrates extended and direct deterrence. For instance,

The crises leading to the outbreak of World Wars I and II, in which Great Britain failed to deter Germany. Following the end of the Korean War, the United States established an alliance and military presence in South Korea in support of a policy of extended-

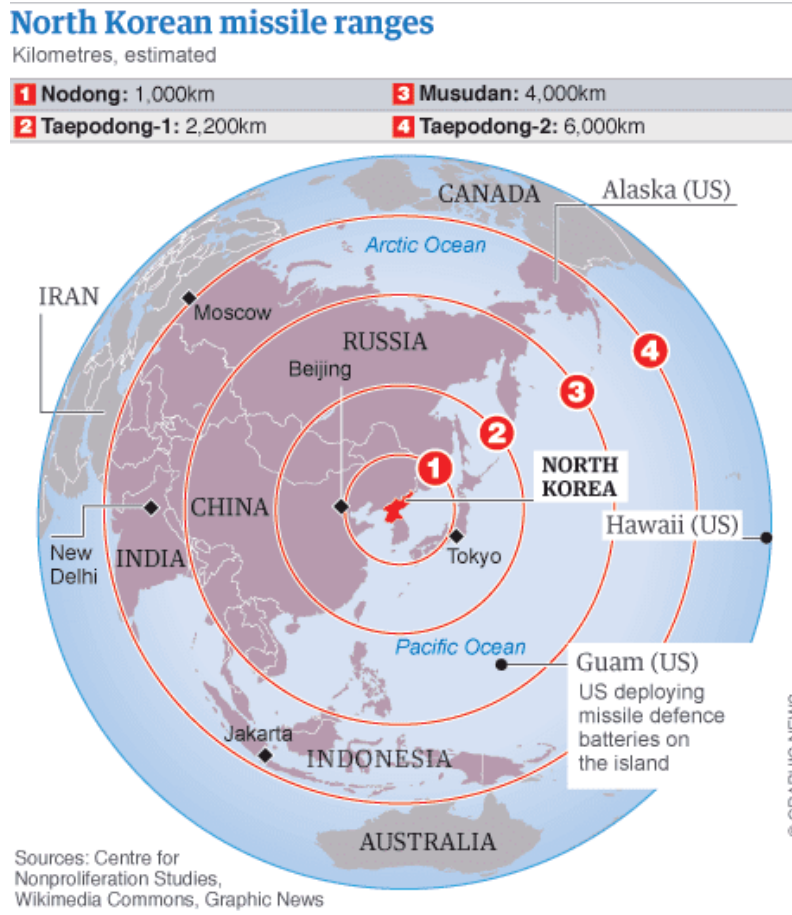
general deterrence against the threat of another invasion by North Korea. [For direct deterrence], In the Arab-Israeli conflict, Israel has relied on its military forces to attempt deterrence against hostile Arab neighbors. For example, since the end of the Six-Day War of 1967, in which Israel occupied the Golan Heights, Israel has generally been successful in its efforts to deter Syria from attempting to retake the Golan by force of arms. In October of 1973, however, Israeli policies of general and then immediate deterrence failed as Syria launched a large-scale attack against Israeli forces in the Golan Heights (Huth, 1999, p.27).

The North Korean situation requires extended and direct deterrence. Besides the extended deterrence to prevent the United States from possible attack, the doctrine of contiguity and propinquity that defined geopolitics is relatively not favourable to North Korea because of various reasons predicated on ideological differences and historical antecedent. South Korea and Japan occupy the southern and eastern neighbours, which is a major threat to their national security.

Given the above, North Korea's quest for acquiring more nuclear weapons is inevitable and has resulted in a security dilemma in the international community, especially the United States. Hence, "North Korea has become only the third US adversary with the ability to hold the US homeland at risk with the threat of nuclear war" (Wakafeld, 2010, p.1). It is estimated that Pyongyang possesses tons of nuclear warheads and the capability to deliver them against US bases, forces, and allies in the Indo-Pacific (Nikitin, 2021). The most agonizing aspect is that North Korea's intercontinental ballistic missiles (ICBMs) can reach Hawaii, Alaska, and much of the continental United States (Nikitin, 2021). The Congressional Research Service (2021, p.1) reported that:

North Korea continues to advance its nuclear weapons and missile programs despite UN Security Council sanctions and high-level diplomatic efforts. Recent ballistic missile tests and military parades suggest that North Korea is continuing to build a nuclear warfighting capability designed to evade regional ballistic missile defenses. Such an approach likely reinforces a deterrence and coercive diplomacy strategy lending more credibility as it demonstrates capability but it also raises questions about crisis stability and escalation control.

The U.S. intelligence community's annual threat assessment in 2021, "the North Korean leaders considered their nuclear weapons as "the ultimate deterrent against foreign intervention" (Nikitin, 2021, p.1). In January 2021, the North Korean Workers' Party Conference, North Korean leader Kim Jong-un celebrated the "status of our state as a nuclear weapons state" and praised its "powerful and reliable strategic deterrent" (Nikitin, 2021,p.1). Responding to the North Korean Workers' Party, Kim Jong II stated that "nuclear weapons of the DPRK can be used only by a final order of the Supreme Commander of the Korean People's Army [Kim Jong-un] to repel invasion or attack from a hostile nuclear weapons state and make retaliatory strikes"(Nikitin, 2021,p.1). The map below indicates the extent of the North Korea nuclear missile range.



The North Korean nuclear missile has a considerable range to its east coast and other areas. According to Kim, “a missile known as the Musudan...has a range of 3,000km (1,800 miles). That would make Japan and South Korea potential targets along with US bases in both countries”(The Guardian, 2013). The North Korea deterrence strategy has ignited a global threat that the Pentagon stated that “it would deploy a missile defense system known as the terminal high altitude area defense system to the US Pacific territory of Guam to strengthen regional protection against a possible attack” (The Guardian, 2013).

Nuclear Warheads

A nuclear warhead is an explosive device or weapon that originates its destructive force from nuclear reactions, either fission or a combination of fission and fusion reactions. “Nuclear warhead fissile material production in large part determines the number and type of nuclear warheads North Korea is building” (Nikitin, 2021, p.1). According to Nikitin (2021, p.1), the 2021 Director of Intelligence Agency(DIA) report indicates that North Korea “retains a stockpile of nuclear weapons.” Other experts estimated that “North Korea has produced enough fissile material for between 20 to 60 warheads” (Nikitin, 2021,p.1). Furthermore, in July 2017, the DIA assessment indicates that “the North Korea had achieved the level of miniaturization required to fit a nuclear device on weapons ranging across the spectrum of its missiles, from short-range ballistic missiles (SRBM) to intercontinental ballistic missiles (ICBM)” (Nikitin, 2021,p.1).

North Korea Nuclear Testing

The Government of North Korea has tested one nuclear explosive device six times since 2006 (Nikitin, 2021, p. 1). Each test resulted in subterranean explosions that were progressively

larger in size and performance. North Korea completed their most recent trial on September 3, 2017. A North Korean press release stated it had tested a hydrogen bomb (or two-stage thermonuclear warhead) that was perfect for delivery on an intercontinental ballistic missile. In April 2018, North Korea announced that it had met its targets that it would no longer conduct nuclear tests and that it would close its Punggye-ri nuclear test site (Nikitin, 2021, p. 1). In 2017, the Leader of North Korea, Kim “tested several missiles demonstrating what seemed to be rapid advances in its military technology. The Hwasong-12 was thought to be able to reach as far as 4,500km (2,800 miles), putting US military bases on the Pacific island of Guam well within striking distance...later, the Hwasong-14 demonstrated even greater potential, with a range of 8,000km although some studies suggested it could travel as far as 10,000km if fired on a maximum trajectory” (BBC News, 2021). Below indicates the type of nuclear missiles has:

What missiles does North Korea have?

Estimated upper ranges in km







Note: Shorter range missiles not shown
Source: CSIS Missile Defense Project



Below is the table indicating the number of times North Korea tested and detonated nuclear weapons.

North Korea's nuclear tests series and detonations

Sequence	Date	Time	Local Time	Location	Elevation height	Delivery	Yield
1	9 October 2006	01:35:27	KST (+9 hrs)	Punggye-ri Test Site, North Korea	1,340 m (4,400 ft), -310 m (-1,020 ft)	underground	0.7 - 2 kt
2	25 May 2009	00:54:43	KST (+9 hrs)	Punggye-ri Test Site, North Korea	1,340 m (4,400 ft), -490 m (-1,610 ft)	underground	2 - 5.4 kt

3	12 February 2013 02:57:51	KST (+9 hrs)	Punggye-ri Test Site, North Korea  41.26809°N 129.08076°E	1,340 m (4,400 ft), -1,000 m (-3,300 ft)	underground	6 16 kt	-
4	6 January 2016 01:30:01	PYT (+8:30 hrs)	Punggye-ri Test Site, North Korea  41.30900°N 129.03399°E	1,340 m (4,400 ft), -1,000 m (-3,300 ft)	underground	7 16.5 kt	-
5	9 September 2016 00:30:01	PYT (+8:30 hrs)	Punggye-ri Test Site, North Korea  41.343°N 129.036°E	1,340 m (4,400 ft), 0 m (0 ft)	underground	70 280 kt	-
6	3 September 2017 03:30:01.940	PYT (+8:30 hrs)	Punggye-ri Test Site, North Korea  41.343°N 129.036°E	1,340 m (4,400 ft), 0 m (0 ft)	underground	70 280 kt	-

Source: extracted from Wikipedia, the free encyclopedia

Brief History of Pakistan

The history of the Islamic Republic of Pakistan was birthed on August 14 1947 through the partitioning of British India, in response to the demands of Islamic nationalists. Despite the internal contradiction occasioned by religion, the Pakistan was emancipated itself political and culturally. This collaborates Ogele (2021, p.98) assertion that “no nation is 'pure'...each nation possesses a basis for the definition of its people - the foundation for its identity such as common ancestry, common values...” hence, the struggle for socioeconomic and religious emancipation are inevitable in plural societies. Pakistan was established on parliamentary democracy, however experienced several military interventions. Religiously adheres to the values of Sunni Islam-has increasingly because a standard by which political leaders measured. Pakistan has unresolved territorial disputes with India, resulting to conflicts. Later, Pakistan lost its East Region in 1971 that later became Bangladesh. Pakistan had a close ties with the United States during the Cold War era (Waseem and Mufti, 2009)

Pakistan has been involved in several armed conflicts both local and international. The main security challenge has influenced its military operations, both historical and current, particularly neighbouring India who had waged four major wars with the Islamic Republic of Pakistan. There is always recurring border scuffles and impasses. India and Pakistan have had antagonistic and stormy since their independence from the British government. The crux of the conflict is on the claim over Himalayan region of Jammu and Kashmir. The two countries (India and Pakistan) claim Kashmir in its entirety or taking absolute control of the region. The area remains divided and challenged between the two states by the Line of Control. The Kashmir conflict has resulted in significant, albeit unsuccessful, intervention and mediation by the United Nations. Apart from India, Pakistan had unfriendly relationship with her neighbouring Afghanistan (Allott, 2021) characterized by armed border scuffle and period of diplomatic tension. Consequently, the Pakistani government increased military activity along the Afghanistan-Pakistan border (Basit, 2021).

A Brief History of Pakistan's Nuclear Programme

Historically, Pakistan began developing its nuclear weapons programme in 1972. The programme was initiated by Zulfikar Ali Bhutto, while he was Minister of Fuel, Energy and Natural Resources, and later became Chairman and Prime Minister. Soon later, the loss of East Pakistan in the 1971 war with India, Bhutto initiated the program with a meeting of physicists and engineers at Multan in January 1972 (Samdani, 2000).

The nuclear programme was ongoing at a very slow pace. However, the India's 1974 testing of a nuclear "device" triggered the Pakistan's nuclear programme. Through the late 1970s, Pakistan's programme acquired sensitive uranium enrichment technology and expertise (Stengel, 1985). The 1975 arrival of Dr. Abdul Qadeer Khan considerably advanced these efforts. Dr. Khan is a German-trained metallurgist who brought with him knowledge of gas centrifuge technologies that he had gained through his attitude at the classified URENCO uranium enrichment plant in the Netherlands. Dr. Khan also allegedly brought with him stolen uranium enrichment technologies in Europe. He was in charge of building, equipping and operating the Kahuta facility in Pakistan, established in 1976. Under Khan's leadership, Pakistan used a vast underground network to acquire the materials and technology needed to expand its uranium enrichment capabilities (Hoodbhoy, 2013). In 1985, Pakistan crossed the threshold for producing military-grade uranium. In 1986, it was believed to have produced enough fissile material to make a nuclear weapon. Pakistan continued its uranium enrichment programme. Pakistan acquired the capability to proceed with a nuclear explosion in 1987 (Rehman, 1999).

Pakistan: Deterrence strategy of nuclear armament

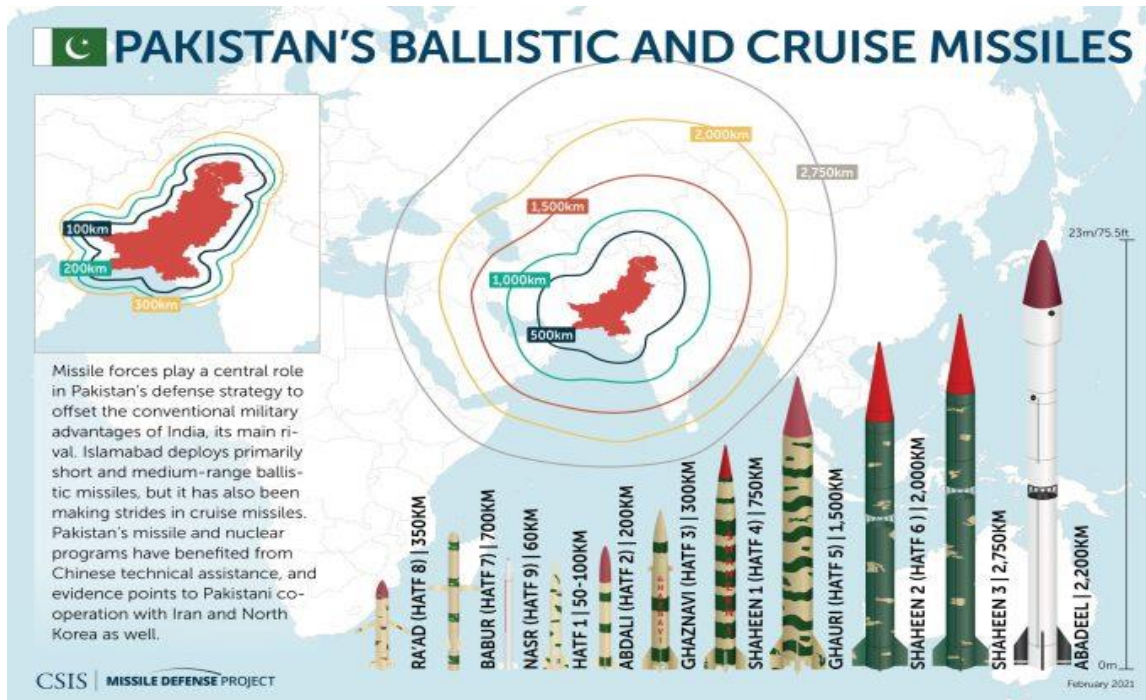
The main challenge of Pakistan is anchored on contiguity and propinquity occasioned by religion or contestation over regions. The Islamic Republic of Pakistan share boundaries with India and Afganishistan. Indian and Pakistan had fought five major wars that was high scale intensity, which has increased security dilemma in the region. Pakistan developed nuclear programme to deter her enemies from attacks. Huth (1988, p.27) argued that "direct deterrence often center on territorial conflicts between neighboring states in which the major powers do not directly intervene." For instance, "in the Arab-Israeli conflict, Israel has relied on its own military forces to attempt deterrence against hostile Arab neighbors. For example, since the end of the Six-Day War of 1967, in which Israel occupied the Golan Heights, Israel has generally been successful in its efforts to deter Syria from attempting to retake the Golan by force of arms. In October of 1973, however, Israeli policies of general and then immediate deterrence failed as Syria launched a large-scale attack against Israeli forces in the Golan Heights" (Huth, 1988,p.27).

In the light of the above mention, Pakistan displayed the capability in the first test of nuclear weapon in May 1998, becoming the world's 7th state to officially test a nuclear weapon. "Pakistan has not declared a strategic nuclear policy, but appears to maintain "minimum credible deterrence" against India's nuclear and superior conventional forces. Pakistan has adopted a position of "no first use" against non-nuclear weapon states" (armscontrolcenter.org). The United Kingdom's Foreign and Commonwealth Office argued that "Pakistan's strategic posture, including nuclear, is clearly framed around its perception of the threat from India" (Cited in House of Common, 2009,p.5).

Strategically, the persistent India-Pakistan rivalry drives Islamabad to develop its nuclear infrastructure, expand nuclear weapon stockpiles ... and seek more advanced nuclear warheads and delivery systems, including cruise missiles"(Durrani,2004,p.6). Pakistan has repeatedly described its strategic doctrine as "credible minimum deterrence" (Durrani, 2004,

p.6). Islamabad has pledged no-first-use against non-nuclear-weapon states, but has not ruled out first-use against a nuclear-armed aggressor, such as India (Durrani, 2004).

The evolving Pakistanian missile arsenal forms a significant deterrence to her main rival, India. Pakistan nuclear missile consists primarily of short and medium –range ballistic missile. Imperatively, Pakistanian combined strategic forces have the capability reaching its target at any point in India. The table and map below indicates Pakistan’s ballistic and cruise missile and missile name, class, range and status.



Source: <https://missilethreat.csis.org/country/pakistan/Missiles>

Missile Name	Class	Range	Status
<u>Ababeel</u>	MRBM	2,200 km	In development
0Abdali (Hatf 2)	SRBM	180 - 200 km	Operational
Babur (Hatf 7)	Cruise Missile	350 - 700 km	Operational
Exocet	ASCM	40 - 180 km	Operational
Hatf 5 "Ghauri"	MRBM	1,250 - 1,500 km	Operational
Ghaznavi (Hatf 3)	SRBM	290 km	Operational
Hatf 1	SRBM	70 - 100 km	Operational
Nasr (Hatf 9)	SRBM	70 km	In service
Ra'ad (Hatf 8)	Cruise Missile	350 km	In development
Shaheen 1 (Hatf 4)	SRBM	750 - 900 km	Operational
Shaheen 2 (Hatf 6)	MRBM	1,500 - 2,000 km	Operational
Shaheen 3	MRBM	2,750 km	In development

Source: <https://missilethreat.csis.org/country/pakistan/>

Conclusion

In this paper, it is clear that efficacious deterrence is considered in terms of political and military abilities. From the military perspective, deterrence effectiveness is viewed from

preventing impasse or military opposition into a crisis or militarized hostility, which leads to armed conflict and possibly war. The political aspect involves possible policies that can prevail on the adversaries to make reconsideration of the motives. However, the prevention of crises or wars is not the only goal of deterrence. Deterrence makes it possible for the defender to resist the political and military demands of a potential attacker. If armed conflict is to be avoided at the value of diplomatic enterprises to the extreme demands of the possible attacker under the threat of war, then, we can conclude that deterrence has succeeded. Nevertheless, both North Korea and Pakistan have resisted and prevented possible wars because of their continuous acquisition of nuclear armament.

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