THE PHILOSOPHY OF NUCLEAR PROLIFERATION/NON-PROLIFERATION: WHY STATES BUILD OR FORGO NUCLEAR WEAPONS?

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Abstract. Nuclear proliferation is the biggest challenge posing direct threat to international peace, security and strategic stability. International community's endeavor to halt proliferation of nuclear weapons or related technology is simultaneously a difficult mission. Central objective of this paper is to understand and explain the phenomenon of nuclear proliferation and non-proliferation by applying different theoretical models including liberalism, realism and nuclear deterrence theory. Paper highlights how liberalism directs states to cooperate and accrue benefits from international anarchic system. It sheds light on the strength of liberal philosophy in convincing states to forgo nuclear weapons. Attempt is also made to explain reasons of nuclear proliferation through the prism of security needs. The realism was therefore applied in attempt to explain nuclear proliferation behavior. Further, attempt is made to explore how possessions of nuclear weapons enable states to achieve national interests? Realism and liberalism helped assess aforementioned aspects of the study carefully.

1. Introduction

Nuclear proliferation no doubt is a difficult task it involves risks and challenges yet it is one of the biggest challenge posing direct threat to international peace, security and strategic stability. International community's endeavor to halt proliferation of Weapons of Mass Destruction (WMDs) or related technology is simultaneously a difficult mission. The central objective of this paper is to understand and explain the phenomenon of nuclear proliferation and non-proliferation by applying different theoretical models including liberalism, realism and nuclear deterrence theory. It further attempts to highlight the point of difference between

liberalism and realism on the phenomenon of nuclear proliferation. Liberalism offers effective theoretical framework for understanding international cooperation focused on achieving distinct national interests without going to war. It provides reasoning that non-proliferation mechanism based on the International Atomic Energy Agency (IAEA), the Nuclear Non-Proliferation Treaty (NPT) and Nuclear Suppliers Group (NSG) cannot be evolved in isolation. However, major portion of this chapter discusses causes of proliferation through realist's worldview.

This paper debates the following questions:

- How liberalism enable opposing states to cooperate?
- Why states go to war?
- Why states adopt strategies based on war avoidance?
- How nuclear deterrence defuse crisis?
- What are the requirements of credible nuclear deterrence?
- How possessions of WMDs enable states to achieve national interests?

2. Liberalism

Neo-liberalism believes states play leading role in world affairs. It emphasizes cooperation among states through institutions building to affect state behaviour. It encourages cooperation among states to achieve security goals. Cooperation through institutions in anarchic system of states is noticeable rejection of realist teachings. Institutions gained prominence, assert Robert Keohane and Lisa Martin (Keoane & Martin 1995) because of their effectiveness to identify common grounds for cooperation. It promises incentives for cooperating states hence states voluntarily agree to cooperate to avoid crisis and the outbreak of violence. Voluntary adherence reflects acceptance of states to willingly reduce their share by devising mutually accepted rules necessary to allow competing states to secure or achieve national interests peacefully. It reflects rational decision making approach by avoiding war through institution building. Liberalism ignores possible cheating behaviour among cooperating states by reducing the fear through cooperation and mediation, if dispute emerges over distribution of gains. It echoes the emerging powerful role of institutions as equalizer, ability to limit problems and suspicions. Peculiar characteristics of institutions force states to enter into cooperation to achieve enduring, sustainable and absolute gains. Liberals believe states increase their power by developing institutions. The world or regional peace and stability thus depend upon institution building rather than BoP.

The organization, successful performance and preservation of institutions in some instances require major powers support. Major Powers support or setup the agenda for institutions to ensure the status quo and reduce economic cost of independent decision making. A state ability to influence or monopolies institution's decision making process determines state position in international community. The West developed, financed and preserving prominent institutions including the

United Nations (UN), World Trade Organisation (WTO), International Monetary Fund (IMF), Missile Technology Control Regime (MTCR) and IAEA. Development of these institutions strengthens liberal's argument that cooperation reduces anarchy, overcome trust deficit and mutually distribute incentives among co-operating states. Liberal teachings direct states to create workable environment for instance China ensured its peaceful rise by developing institutions including East Asia Summit (EAS) and the Shanghai Cooperation Organization (SCO) (Goswam 2013). China used these institutions to mitigate problems with East and Central Asian states. Liberalism enables states to sign security accords and set up security organizations. A stable European continent demonstrates warring states can coexist peacefully, surmount trust deficit, suspicions and mutual threat perception. Prosperous Europe is the byproduct of institution building and successful functioning of European Economic Community (EEC) and the North Atlantic Treaty Organization (NATO).

Proponents of liberalism, Keohane and Martin, have raised concerns while applying liberal teachings (Goswam 2013) for instance cooperating states fear that the other members may cheat in the gab of cooperation. Would be cooperating states may forcefully advocate different opposing proposals to maximize personal gains resultantly may refuse to cooperate. These fears are important in summing up liberalism.

3. Realism, the state security and conflicts

3.1. Classical realism

Realists believe international system is composed of sovereign states essentially states stand above individuals and institutions (Strange, 1998). However, realism based on Classical realism is divided into several branches. Political realism, evolved by Thucydides, is based on the premises first states are key actors; second power is an end in itself and; third states act rationally (Keohaneed 1986). However, it was accepted by Central European states after signing the treaty of Westphalia. Leading proponents of political realism includes Hans Morgenthau, John Herz and Hennery Kissenger. States quest to pursue national interest, maximization of power (Keohaneed 1986) and anarchy are the dominant themes of this branch. Anarchy breeds insecurity and compels states to ensure their existence by relying on self-help and robust economy necessary to raise state stature and sustain modern military. Powerful economy helps states to become hegemon or acquire great power status in international system. Hence economic and military policies in modern era cannot be viewed in isolation.

Morgenthau believes human nature leads states towards conflict because statesmen inheritably desire to take control over (limited) resources (Waltz 1988). Power hungry statesmen attempt to enhance state power therefore they are constantly engaged in constant struggle against one another. Morgenthau laid the foundations of realism by explaining why WWII broke out in *Scientific Man*

versus Power Politics (Morgenthau 1985). He explained behaviour of states in international anarchy in *Politics among Nations*. Realists contrary to liberals disregard moral values (Balogun 2011), international rules, institutions and cooperation among states. Major Powers avoid abiding by norms and values but coercing second and third tiers states to follow them. It is a potent technique devised to prevent, slow down the rise of competitor or weaken rival states without going to war. Waltz claims that the great powers use international institutions to transmit their dominance and seek national interest (Waltz 2000). Or impose embargoes on rival states an efficient strategy to achieve goals without going to war. Weak positions of international institutions push states to form alliances, for instance NATO, to cement national security. Mearsheimer argues transfer of power to international institution with such intention can neither regulate states behaviour nor preserve peace (Mearsheimer 1994/95). Waltz and Mearsheimer arguments prove that realist scholars do not believe in efficacy of global institutions.

Classical realist asserts military mussels determine state national interest and standing in international system either as a great power, a competitor or third tier states (Schweller 1998). Barry Buzan maintains each state is independent political and unique unit (Buzan 1989). Decision makers raise and maintain militaries (Jhonson, Kartchner and Jhonson 2009), to use it as a guard, to deter enemy from taking hostile action or to punish the aggressor. Competitor or revisionist's desire to enjoy benefits or lust for power provide basic impute for change in international system. Since change, in the status quo, is possible at the cost of great power's interest competitor is viewed as threat as a result conflict starts between forces of status quo and change. Great power continues to enjoy dominant position by coercing revisionist state. Concentration of military strength and great power's control over resources wear down revisionist morale. The latter realizes potential benefits would outweigh the cost hence status quo is maintained. Aforementioned notion gave birth to the concept of BoP (Mingst and Arreguin-Toft 2011), it best functioned before WWI in Europe and during the Cold War. It is functioning among third tier states. Confrontation is avoided if great power decides to accept the rise of competitor.

Capabilities, interests and intentions determine rule of engagement for states. However, international anarchy remains at the core of international system. Anarchy provides opportunities to power hungry statesmen to maximize power by making alliances or through self-help. Jeffrey W. Taliaferro argues that anarchy can result in policy of conquest if it suits opportunist state (Taliaferro 2000/01). International institutions since cannot stop powerful state from pursuing expansionist policy hence realist regard them as ploy of great powers. Military capabilities realist believes determine expansionist policy hence states can neither trust intensions nor can ignore military strength of other members. Waltz maintains that anarchy breeds competition, insecurity and conflict (Waltz 1988). Feelings of insecurity, distrust and antagonism among states results in arms races, alliances and vicious cycle of security dilemma. Mearsheimer believes constant competition for power, self preservation and economic gains drives states relations

(Mearsheimer 1994/95). Possibility of war hovers over states due to competition among states over scarce resources. In the absence of war states enhance military mussels to deter wars and if war breaks out ensure state existence. This study will examine how security dilemma, growing military buildup and anarchy results in constant fear of war between India-Pakistan. The realist paradigm would be used to understand the changing dynamics of India-Pakistan strategic competition and reliance on WMDs.

3.2. Neo-realism

Neo-realism is a notable contribution by Kenneth N. Waltz. In 1979 Waltz's claimed in *Theory of International Politics* (Waltz 1979)*,* that international system is anarchic and composed of states. Waltz believes self preservation is the primary interest of every state (Waltz 1988). Since statesmen represent states they take planned steps in attempt either to protect the state or carefully maximize state's military mussels (Martin Griffiths 2007). Ability to control and distribute resources among other states determines state position in global system hence it is a significant characteristic (Wendt 1995). It is fair to claim that neo-realists view international system through materialistic lens. Waltz attaches acute importance to state's power simultaneously he highlighted risks associated with access of state power. Excess of power by a state will pose security dilemma for other states. Neo-realism argues military muscle itself is not an evil rather its offensive pro-jection creates problems resultantly alliance may be formed (against it) to maintain the status quo. Security dilemma stems from rival state's military capabilities. Fearful statesmen attempt to pursue policy based on power maximization during peacetime to prepare for future wars with the following possible outcomes first crisis are prevented from transforming into war; second adversary is restrained from making unexpected demands during crisis time; third an unending arms race starts and; fourth fear of war becomes a constant factor between adversaries. Waltz's qualifies the rank of defensive analyst due to his emphasis on war avoidance. States accrue power to preserve their existence rather than becoming hegemon (Waltz 1979). Potential threats should be seriously analysed as militarily weak state can come under attack from expansionist state. Peace preservation and war avoidance is possible if decision makers adhere to rational decision making approach for instance to rely on self-help, form alliances to coexist peacefully, maintain status quo, avoid arms racing and avoid gaining excessive power. The emphasis on rational approach rejects the notion advanced by political realists that man is by nature selfish and desires to grab more power. War can be deterred if would be aggressor is realized that perceived cost of war would increase perceived benefits.

In order to correlate neo-realism with India-Pakistan adversarial relationship Waltz's believe in international system needs to be highlighted. Waltz believes bio-polarity stabilizes international relations as major power in uni-polar or multi-polar system want to dominate the system (Martin Griffiths 2007). In uni-polar

or multi-polar system fear of external aggression and uncertainty about future dominates thinking of the decision making circles in small states (Waltz 1997). Bio-polar system stabalised NWS relations and ensured long peace during the Cold War era (Jervis 1998).

3.3. Offensive realism

Mearsheimer remarkable work *The Tragedy of Great Power Politics* evolved offensive realism (Mearsheimer 2001) based on five core principles:

- International system lacks central authority.
- States can resort to use of force against other states.
- Every state wants to preserve its sovereignty.
- States are rational actors and,
- Military power of a state creates fear of use of force in the minds of opponents. Fear of external aggression creates uncertainty and compels states to raise and sustain militaries.

Powerful state Mearsheimer maintains rejects cooperation in security affairs rather behave aggressively while dealing with opponents (Mearsheimer 2001). Offensive realism rejects and regards security guarantees as unreliable. Research and development in military sector is pursued to ensure military self sufficiency necessary to deter actual and potential threats resultantly ensure state existence. Dissatisfaction with the status quo also incites states to grab more and more power. Hence policy of power maximization, leading state to become hegemon, is deemed necessary due to dissatisfaction with status quo, suspicions, mistrust and international anarchy. Hegemony enables state to replace unfavorable policies with for example more favorable policies articulated to get benefit from the system; prevent rise of competitor by arming it's rival (Elman 2004). Major Powers policies based on security maximization is prime example to prove above claim.

Offensive realism as advocate policy of power maximization it is in staunch contrast of defensive realism. Realism encourages states to acquire WMDs to ensure state survival as nuclear weapons are viewed as absolute security guarantor. The realist also contends nuclear weapons deter nuclear weapons. This notion emphasizes proliferation of WMDs and nuclear doctrines based on the fear of mutual assured destruction (MAD). Competing nuclear doctrines based on MAD stabalised South Asian strategic milieu. However, Indian aggressive security policies based on the teachings of offensive realism resulted in hostilities, crises, nuclear arms race, missiles proliferation, security dilemma and affects South Asian strategic stability.

4. Nuclear deterrence theory

Deterrence means to halt an enemy from taking an undesired course of action through use or threat of use of force (Frey 2006). Hostile government carefully

analyse cost and benefit analysis prior to taking forbidden action. Deterrence advocates maintenance of credible force against the adversary as residual capacity of forces after surviving attack creates fear of punishment. Deterrent force maintains the status quo resultantly it enables state to operate in anarchic system. Because deterrer create fear of punishment in the mind of deterree to manipulate latter's calculations. Potential aggressor is convinced that the price would out-number the desired objective (Singh 2010), if prohibited action is taken. Deterrence is credible if undesired action does not take place. Deterrence mani-fests aggressive security posture, coercive foreign policy and functions between adversaries. Deterrence is theoretical and psychological in nature because intimidation rather than actual use of force drives it. Concept of deterrence however today is synonymous with and confined to nuclear deterrence, Robert Powell claimed that nuclear deterrence theory is central problem (Powell, 1990), in study of international relations. Nuclear capable states deliberately pursue coercive policy to secure national interest without going to war. For this reason Bernard Brodie in 1946 maintained that, "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 no other useful purpose," (Bernard Brodie 1946) Nuclear deterrence theory emphasizes nuclear war avoidance and peace preservation hence it is antithesis of classical logic of war. Bulk of literature available on nuclear deterrence theory discusses US-Soviet strategic competition (Gerson 2009). The absence of war between superpowers reflects cautious behaviour and under-standing that there is no defence against WMDs and nuclear war cannot be won.

Nuclear deterrence theory addresses problems concerning fear of first strike, decapitating strike and protection of national interest. William Kaufmann cha-racterized nuclear deterrence theory as duality of purpose (Kaufmann 1956). Theory categorically rejects advantages associated with preemptive nuclear strike (Powell 1990). Outlawing preemptive nuclear strikes in nuclear doctrines over-come trust deficit between adversaries and helps in stabilizing strategic stability. Second feature of theory asserts nuclear war invite mutual catastrophe hence should not be fought. Third nuclear war cannot be won therefore it should be avoided. Ward Wilson prescribed a diverse set of regulations concerning role of nuclear weapons (Wilson 2008) for instance possession of WMDs deter invasions and nuclear attacks against mainland (Brodie labeled it "basic deterrence)," (Brodie 1959). Credible nuclear forces raise political stature of nuclear capable force in international system. Henry Shue highlights US's provided nuclear security assurances (extended deterrence) to its allies against foreign security threats during the Cold War (Henry Shue 1989). Aforementioned regulations helped superpowers to coexist during the Cold War they are also guiding principles for contemporary and future nuclear adversaries. Possession of WMDs by adversaries induces caution and demands avoiding confrontation during crisis due to the threat of MAD. Rational decision making realizes nuclear adversaries that WMDs use is suicidal as devastation caused by nuclear weapons is irreversible therefore status quo should be maintained. Emphasis on rational

decision making and maintenance of the status quo is perhaps borrowed from Morgenthau's teaching. Morgenthau maintains rational leaders attempt to grab power (Morgenthau 1985). Power thus enables statesmen to deter wars, preserve peace and maintain the status quo.

Fear of irreversible catastrophe, proved in Japan, demanded prevention of nuclear war resultantly it necessitated process to evolve nuclear deterrent based on first strike forces followed by the development of second strike forces. Careful deployment of WMDs enables a state's nuclear forces to remain functional after absorbing first strike. The residual capacity of nuclear forces creates fear of punishment consequently deter potential aggressor from waging war. Waltz summarized the fear of losing precious belongings restrains the enemy from taking undesired action (Waltz 1990). The realization to prevent the use of nuclear weapons is known as nuclear taboo. WMDs alone are not sufficient to make nuclear deterrent credible or prevent the outbreak of war. Credible deterrence requires effective command, control and communication (C3) system, higher accuracy of delivery vehicles and incorporation of strategic forces in military doctrines. Vertical proliferation increases political value of strategic weapons simultaneously complicates deterrent strategies. Prior to discussing additional requirements of credible nuclear deterrence it is vital to have an overview of nuclear deterrent strategy.

Patrick M. Morgan defined deterrent strategy as calculated military posture to liaison threats to deter enemy. Premise concerns normative principles on which strategy rests (Morgan 2003). Effective deterrent strategy involves war fighting doctrine and plausible threats to realize the enemy that potential cost of war will exceed potential benefits if war breaks out. The adversary would only then take the threats seriously into consideration. Proponents of nuclear deterrence including Keith Krause, Kenneth N. Waltz and Gregory S. Jones have emphasized different requirements for credible deterrence. Keith Krause (Krause 1997) claims that in order to make nuclear deterrent credible nuclear managers delegate authority to launch WMDs to junior ranking officers if necessary. Waltz (Waltz 1990) asserts nuclear managing authority may authorize limited strikes against counterforce targets to convey the message that massive attack may follow. However, such strategy inherits possibility of retaliation from enemy thus such an action would result in war leading to mutual suicide. Gregory S. Jones requirements of credible nuclear deterrent include (Jones 2000) first adversary must have no doubt about the capability (nuclear forces) of the deterrer; Credibility of nuclear forces to reach their targets; third development of survivable second strike forces. Development and overhaul of large size nuclear forces enables state to maintain second strike forces. Fourth C3 requires nuclear establishment authority to survive nuclear or conventional strike and; fifth leadership determination and ability to effectively communicate the message that surviving nuclear forces will be used to inflict unprecedented damage upon the enemy. Crisis prevention thus is based on effective communication to dissuade the enemy from taking undesirable action by realizing him catastrophic results if deterrence fails. Messages are conveyed to the

enemy with clarity to elucidate forbidden actions and consequences adversary will have to bear. During crisis it is essential for leadership to express firm stand and resolve as weakness would otherwise vitalize the enemy to constantly pose threat and; secondly cause failure of the deterrent strategy. Phil William prescribed technique to ensure control over crisis is "rationality of irrationality," (William 1987). It is an extreme manifestation of will and resolve. Instead of backing down or relinquishing his position deterrer deliberately takes the matter to the brink of war amid to ensure effective control over the situation by taking irrational step. Deterree has to behave rationally to avoid head on collision as both the former and the latter wants to avoid catastrophe. The determination of the state leadership is efficiently highlighted by James M. Acton (Acton 2010). Aggressor is needed to be assured that the defender is determined to take punitive action if deterrence fails.

A state leadership send messages to express determination and firm resolve through diverse behavior for instance by ordering missile tests, terminating leaves of armed forces personnel, putting armed services on alert status, cutting off diplomatic relations with the adversary, deploying conventional and nuclear forces, public statements issued by statesmen and through neutral states. However, inadequate funds, bureaucratic hurdles and short time to respond may cause problems or delay deterrer's response during crisis. Or failure to devise contingency plan during peace-time to deal with crisis may also disrupt effective communication. Brodie was well aware of the importance of contingency planning. He asserted that "today… with the A-bomb… the basic decisions about wars and how to fight them have to be decided in time of peace; when war comes it is much too late," (Brodie 1959). Deterrer requires expertise to control internal problems and prevent them from becoming a public matter. Effective management and problem resolution ensures strength of deterrer's from negotiating position.

Survival is the supreme objective of every state. However, states endeavor to accomplish the following objectives through deterrence. (First three objectives are synonymous with defensive forms of deterrence). First thwart the outbreak of crisis. Prevent continuing crisis from transforming into war and; third dissuade the adversary from imposing demands (Frey 2006). Fourth objective is offensive form of deterrence for instance to break enemy resistance (Beaufre 1965). During Berlin blockade of 1948 US relied on nuclear deterrence to prevent Soviet forces from invading Western Europe and seizing control of Berlin. US policymakers draw lessons from Berlin Crisis (Lodgaard 2011) for instance to develop and deploy tactical nuclear weapons (TNWs); second US evolved nuclear policy based on first use. Despite inherited dangers associated with nuclear deterrent and possibility of nuclear exchange US relied on nuclear deterrence (Rob Van Riet 2013) to defuse Cuban missile crisis. Since US secured strategic interests without going to war US policymakers' belief that WMDs deter external aggressions (Posen 1997) cemented. US policymakers derived lessons from Cold War teachings that WMDs deter enemy from launching conventional and nuclear attacks against one-self and allies.

Deterrent strategies prevented direct military confrontation and enabled super-powers to preserve peace during the Cold War. Efficient deterrent posture set the foundation and cultivated classical deterrence theory. It focuses on strategic stability and superpowers affairs (Zagare and Kilgou 2000). Arvind Kumar asserts efficacy of classical deterrence theory depends upon BOP (Kumar), as it makes use of force between participants counterproductive. BOP deter wars this pheno-menon is also synonymous with strategic stability. Other concepts including nuclear primacy, maximum deterrence, minimum deterrence, existential deterrence and post-existential deterrence (Sauer 2009) evolved during Cold War era. Tom Sauer maintains horizontal proliferation, the nuclear taboo, international law, the risk of nuclear terrorism and missile defence undermined efficacy of strategic weapons (Sauer 2009). However, aforementioned trends could not prevent determined proliferating states i.e. India and Pakistan from developing WMDs. The efficient and deterrent role of WMDs would inspire states to proliferate in future.

5. Conclusion

Aforementioned paragraphs tend to explain relevance and importance of theories as guiding post in completion of this study. Paper highlights how liberalism and realism direct states to survive and benefit from international anarchic system. Liberalism claim states cannot live in isolation hence emphasizes cooperation among nations. Cooperation is viewed answer to contemporary security challenges including nuclear proliferation. Global community's coopera-tion and efforts resulted in signing of the NPT. Moreover, creation of the NSG mechanism and IAEA led safeguards system which with the passage of time has become main hurdle in halting nuclear proliferation.

Liberalism challenges realist teachings that cooperation is not feasible under international anarchy as it breeds insecurity, advocates self-help and rejects cooperation. Realists view self-help/ self-sufficiency, in economic realm necessary to raise and sustain modern military, as the only recipe to ensure state survival. Powerful military enables state to deter foreign aggression. A state ability to influence adversary's decision making process in personal favour determines state's standing in international community.

From realist perspective strategic forces enable weak states to resist coercive policies and enable weak states to deter military aggression of regional/ extra regional powers. WMDs are therefore viewed as absolute weapons for instance nuclear forces enabled North Korea to resist US's coercive policies, deter US aggression and ensure latter's security. WMDs provide absolute security guarantees therefore future proliferation would have roots in proliferating states' search for absolute security. Kenneth N. Waltz therefore strongly supported 'controlled', horizontal proliferation of WMDs. Attempt is made to explain reasons of nuclear proliferation through the prism of security needs. States, therefore, try to balance their enemies by maximizing their military strength, if

possible develop nuclear weapons, which helps them to maintain the status quo, stabilizes the international system and deter war.

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References

Acton, J. M. (2010) "Chapter One: Central Deterrence". *Adelphi Series* 50, 417, 27.

Balogun, M. J. (2011) *Hegemony and sovereign equality: the interest contiguity theory in international relations*. Ontario: Springer.

Beaufre, A. (1965) *Deterrence and strategy*. London: Faber and Faber.

Bernard Brodie (1946) *The absolute weapon.* New York: Harcourt Brace.

Brodie, B. (1959) *Strategy in the missile age.* Santa Monica: Rand Corporation.

Buzan, B. (1989) *An introduction to strategic studies: military technology and international relations*. London: The Macmillan Press.

Elman, C. (2004) "Extending offensive realism: the Louisiana purchase and America's rise to regional hegemony". *The American Political Science Review* 98, 4, 567.

Frey, K. (2006) *India's nuclear bomb and national security*. Oxon: Routledge.

Gerson, M. S. (2009) "Conventional deterrence in the second nuclear age". *Parameters* 39, 3, 32.

Goswam, N. (2013) "Power shifts in East Asia: balance of power vs. liberal institutionalism". *Perceptions* 18, 1.

Jervis, R. (1998) "Realism in the study of world politics". *International Organization* 52, 4, 984.

Jhonson, J. L., K. M. Kartchner, and J. A. Jhonson (2009) *strategic culture and weapons of mass destruction: culturally based insight into comparative national security policy making*. New York: Palgrave Macmillan.

Jones, G. S. (2000) *From testing to deploying nuclear forces: the hard choices facing India and Pakistan.* Santa Monica, CA: RAND Corporation.

Kaufmann, W. W. (1956) *Military policy and national security.* Princeton, N.J.: Princeton University Press.

Keoane, R. and L. Martin (1995) "The Promise of Institutionalist Theory". *International Security* 20, 1, 42.

Keohaneed, R. O. (1986) *Neorealism and its critics.* New York: Columbia University Press.

Krause, K. (1997) *Rationality and deterrence in theory and practice.* In Craig A. Snyder, ed. *Contemporary security and strategy*. London: Deakin University.

Kumar, A. (n.d.) *Theories of deterrence and nuclear deterrence in the subcontinent.* Available online at <from http://eprints.manipal.edu/1397/1/India-Pakistan_Nuclear_Relation-Book-AK.pdf>. Accessed October 19, 2014.

Lodgaard, Sverre (2011) *Nuclear disarmament and non-proliferation: towards a nuclear-weapon-free world?* New York: Routledge.

Martin Griffiths (2007) *International relations theory for the twenty-first century: an introduction.* New York: Routledge.

Mearsheimer, J. J. (1994/95) "The false promise of international institutions". *International Security* 19, 3, 9.

Mearsheimer, J. J. (2001) *The tragedy of great power politics*. WW Norton and Company.

Mingst, K. A. and I. M. Arreguin-Toft (2011) *Essentials of international relations*. New York: W.W. Norton and Company.

Morgan, P. M. (2003) *Deterrence now*. Cambridge: Cambridge University Press.

Morgenthau, H. J. (1985) *Politics among nations: the struggle for power and peace*. New York: Knopf.

Posen, B. R. (1997) "US security policy in a nuclear- armed world or: what if Iraq had nuclear weapons?". *Security Studies* 4.

Powell, R. (1990) *Nuclear deterrence theory the search for credibility*. Cambridge: Cambridge University Press.

Rob Van Riet (2013) "Moving beyond nuclear deterrence to a nuclear weapons free world". *Nuclear Abolition Forum* 2, 1.

Sauer, T. (2009) "A second nuclear revolution: from nuclear primacy to post-existential deterrence". *The Journal of Strategic Studies* 32, 5, 747.

Schweller, R. L. (1998) *Deadly imbalances tripolarity and Hitler's strategy of world conquest.* New York: Columbia University Press.

Shue, H. (1989) *Nuclear Deterrence and Moral Restraint.* Cambridge: Cambridge University Press.

Singh, R. (2010) "Nuclear weapons as a deterrent in South Asia: an analysis". *Asia Pacific Journal of Social Science* 2, 2, 36.

Strange, S. (1998) *The retreat of the state: the diffusion of power in the world economy*. New York: Cambridge University Press.

Taliaferro, J. W. (2000/01) "Security seeking under anarchy defensive realism revisited". *International Security* 25, 3, 128.

Waltz, K. N. (1997) "Evaluating theories". *American Political Science Review* 91, 41, 915.

Waltz, K. N. (1990) "Nuclear myths and political realities". *American Political Science Review* 84, 3, 732.

Waltz, K. N. (2000) "Structural realism after the Cold War". *International Security* 25, 1, 25.

Waltz, K. N. (1988) "The origins of war in neorealist theory" *Journal of Interdisciplinary History* 18.

Waltz, K. N. (1979) *Theory of international politics: neo-realism and its critics.* Addison-Wesley.

Wendt, A. (1995) *Social theory of international politics*. New York: Cambridge.

William, P. (1987) "Crises management". In John Baylis, ed. *Contemporary strategy* I: *Theories and concepts,* 243. London: Croom Helm.

Wilson, W. (2008) "The myth of nuclear deterrence". *Nonproliferation Review* 15, 3, 421.

Zagare, F. C., and D. M. Kilgou (2000) *Perfect deterrence.* Cambridge: Cambridge University Press.