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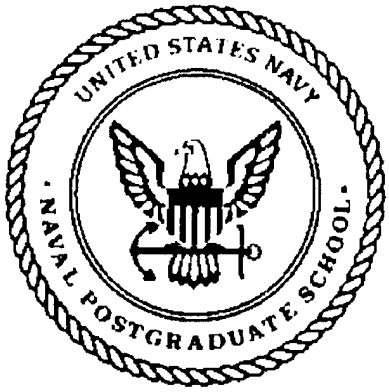

THESIS

NUCLEAR PROLIFERATION AND THE
STABILITY-INSTABILITY PARADOX

by

Michael A. Barretta

June 1995

Thesis Advisor: Peter R. Lavoy

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ABSTRACT *(maximum 200 words)*

This thesis tests the theory that nuclear proliferation might enhance strategic stability by making the use of military force between the possessors of nuclear weapons unlikely. It discusses the existing literature on deterrence and nonproliferation, emphasizing the stability-instability paradox. The stability-instability paradox offers an alternative to the optimism of deterrence logic, which views nuclear weapons proliferation as a beneficial and stabilizing force, and the pessimism of nonproliferation logic, which foresees dire consequences in the spread of nuclear weapons. The paradox is a synthesis of deterrence and nonproliferation logic because it allows for the coexistence of nuclear peace and lower levels of conventional war. Three cases of nuclear rivalry are examined. They are the United States and the Soviet Union, the Soviet Union and the People's Republic of China, and India and Pakistan. These cases provide evidence that challenges the Waltzian argument that nuclear weapons enhance international stability by forbidding violent response to confrontation between nuclear-armed states. Nuclear powers that have employable conventional forces at their disposal, a territorial interest at stake, and exist in a condition of nuclear stalemate can, and do, engage in conventional war.

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NUCLEAR PROLIFERATION AND THE
STABILITY-INSTABILITY PARADOX

by

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of the requirements for the degree of

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This thesis tests the theory that nuclear proliferation might enhance strategic stability by making the use of military force between possessors of nuclear weapons unlikely. It discusses the existing literature on deterrence and nonproliferation, emphasizing the stability-instability paradox. The stability-instability paradox offers an alternative to the optimism of deterrence logic, which views nuclear weapons as a beneficial and stabilizing force, and the pessimism of nonproliferation, which foresees dire consequences in the spread of nuclear weapons. The paradox is a synthesis of deterrence and nonproliferation logic because it allows for the coexistence of nuclear peace and lower levels of conventional war.

Three cases of nuclear rivalry are examined. They are the United States and the Soviet Union, the Soviet Union and the People's Republic of China, and India and Pakistan. These cases provide evidence that challenges the Waltzian argument that nuclear weapons enhance international stability by forbidding violent response to confrontations between nuclear-armed states. Nuclear powers that have employable conventional forces at their disposal, a territorial interest at stake, and exist in a condition of nuclear stalemate can, and do, engage in conventional warfare.

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I. NUCLEAR PROLIFERATION AND THE STABILITY-INSTABILITY PARADOX

A. INTRODUCTION

"The difficulties in coming to grips with the implications of nuclear weapons are perhaps best epitomized by our inability to answer the straightforward question of whether these weapons have made the United States - and the world - more or less secure."[1] This thesis argues that the possession of nuclear weapons can in select circumstances encourage, more than diminish, the tendency of nations to take certain military risks. I show that under select conditions some states will accept the risk of massive nuclear destruction and use conventional military force to achieve an objective or preserve an interest. A state's confidence in its ability to manipulate nuclear danger and control the pace of escalation leads to the use of military force to maintain or change a status quo.[2] With the common objective of avoiding mutual nuclear destruction, nuclear weapons can increase a state's willingness to use conventional military force to gain or protect an interest. This thesis examines three cases of

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[1]Robert Jervis, *The Meaning of the Nuclear Revolution* (Ithaca: Cornell University Press, 1989), p. 2.

[2] Leng identifies confidence in warfighting capability as a factor in crisis escalation. Russel J. Leng, *Interstate Crisis Behavior, 1816-1890: Realism versus Reciprocity* (Cambridge: Cambridge University Press, 1993), p. 112. Competitive risk-taking is examined in Hermann Kahn, *On Escalation: Metaphors and Scenarios* (New York: Harper & Row, 1965); Thomas C.. Schelling, *Arms and Influence* (New Haven, Conn: Yale University Press, 1966).

military conflict between nuclear-armed adversaries: the United States versus the Soviet Union from 1948 to 1980, The People's Republic of China versus the Soviet Union from 1964 to 1969, and India versus Pakistan from 1948 to the present day. These case studies reveal the conditions under which the use of conventional military force between nuclear adversaries becomes a viable option.[3] For the purpose of this thesis, conventional military force refers to any type of military force that does not involve nuclear weapons. Modes of warfare thought of as unconventional, like guerrilla warfare, satisfy the definition.

B. RESEARCH PROBLEM AND OBJECTIVES

1. Existing Theory

"It is true that most wars are perpetrated by states who want something they do not have rather than by states that are content to defend what they already have."[4] Modern states use military force to insure security, acquire material gain, achieve influence, claim status, and assert ideological supremacy.[5] This thesis is concerned with the conditions

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[3]Luttwak explores three generic strategies that states employ to counter nuclear weapons. They are circumvention (avoiding the political preconditions for nuclear weapons use), emulation or competition (matching the creation or status of a nuclear arsenal), and countermeasures (engaging in means to defeat nuclear weapons). Edward N. Luttwak, "An Emerging Postnuclear Era?" *The Washington Quarterly*, Vol 11, No. 1 (Winter 1988), pp. 5-15.

[4]Robert E. Osgood and Robert W. Tucker, *Force, Order, and Justice* (Baltimore: Johns Hopkins University Press, 1967), p. 11.

[5]*Ibid.*, p. 9.

under which *nuclear-armed* adversaries use conventional military force.

The strategic and military effects of nuclear weapons proliferation and conflict can be described in two contending arguments, the logic of deterrence" and "the logic of nonproliferation."[6] Nuclear deterrence theory stresses the stabilizing and beneficial impact nuclear weapons have on relations between nuclear powers.[7] In deterrence theory, stability between nuclear-armed states stems from the threat of mutual nuclear punishment. Theoretically, the more nuclear powers in existence the more stable the international environment. Duncan and Snidal identify the *fundamental deterrence problem* as the use of threats to induce an opponent to behave in desirable ways. The simplest model involves two rational actors, the initiator and defender, whereby the defender attempts to prevent the initiator from taking some action by presenting a credible threat to respond to the

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[6]Of the two concepts, deterrence logic fulfills the requirements to be considered a theory. It is a testable construction of assumptions. Nonproliferation logic does not fulfill the requirements to be considered a theory. It is a collection of observations. For the best effort to forge nonproliferation logic into theory, see Scott D. Sagan, "The Perils of Proliferation: Organization Theory, Deterrence Theory, and the Spread of Nuclear Weapons," *International Security*, Vol. 18, No. 4 (Spring 1994), pp. 66-107.

[7]Bernard Brodie articulated the classic notion of nuclear deterrence. "Thus far the chief purpose of our military establishment has been to win wars. From now on its chief purpose must be to avert them. It can have almost no other useful purpose." Bernard Brodie, ed., *The Absolute Weapon: Atomic Power and World Order* (New York: Harcourt Brace, 1946), p. 76. Waltz applied Brodie's concepts of nuclear deterrence to the problem of nuclear proliferation. Kenneth N. Waltz, *The Spread Of Nuclear Weapons: More May Be Better*, Adelphi Paper No. 171, London: International Institute of Strategic Studies, 1981.

aggression with punishing military action.[8] In deterrence theory, the use of military force by states armed with nuclear weapons is unlikely.

Nonproliferation logic expects an increase in the probability of nuclear weapons use through the expansion of the number of nuclear powers. It identifies weaknesses in deterrence logic and emphasizes the unstable environment between new nuclear states. Nonproliferation logic expects no meaningful change in the use of conventional military force and an increased probability of nuclear weapons use.[9]

Common ground between nonproliferation and deterrence logic is rare. In general, the two concepts are incompatible. The stability-instability paradox, the notion that strategic nuclear stalemate raises the likelihood of conventional military violence, offers the expectation of a third outcome.[10] The paradox represents the possibility that the "mutual fear of big weapons may produce, instead of peace, a spate of smaller wars."[11] It describes how nuclear-armed aggressors may

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[8]Christopher H. Achen and Duncan Snidal, "Rational Deterrence Theory and Comparative Case Studies," *World Politics*, Vol. 41, No. 2 (January 1989), pp. 150-152.

[9]Many nonproliferation advocates expect an increase in conventional military violence in the form of preventative or pre-emptive wars against the emerging nuclear capabilities of an adversary. Sagan, "The Perils of Proliferation," pp. 74-85.

[10]The stability-instability paradox was first presented in: Glenn Snyder, "The Balance of Power and the Balance of Terror," in Paul Seabury, ed., *The Balance of Power* (San Francisco: Chandler, 1965), pp. 184-201. Also see Robert Jervis, *The Illogic of American Nuclear Strategy* (Ithaca: Cornell University Press, 1984), pp. 29-34.

[11]Kenneth N. Waltz, *Man, the State and War* (New York: Columbia University Press, 1959), p. 236.

challenge the interests of nuclear-armed defenders and how the latter may respond. The stability-instability paradox identifies weaknesses of nuclear deterrence *theory* by emphasizing the alternatives to cataclysmic nuclear war. It predicts the means of conflict when states fail to deter.[12] If both states subscribe to the notion that a nuclear war cannot be fought to a meaningful victory and believes their opponent thinks similarly then military risk below the threshold of nuclear war becomes more probable. Conventional conflict can occur precisely because of the power of nuclear deterrence, a probability overlooked by deterrence theory. This thesis describes the conditions necessary for the paradox to operate and applies them to the case studies.

2. Hypothesis

This thesis examines one aspect of the argument that nuclear proliferation enhances strategic stability by inhibiting the use of conventional military force between possessors of nuclear weapons. This thesis demonstrates that under select circumstances conventional military force remains an option for nuclear powers in dispute. The stability-instability paradox predicts that the fear of mutual nuclear devastation makes the use of such weapons less probable than conventional alternatives. The conditions for the paradox to

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[12]The paradox does not imply a failure of deterrence theory but identifies conditions in which deterrence policy can fail. "The theory actually predicts some breakdowns. When deterrence fails because the retaliatory threat is absent, incredible, or less valuable than the prize, the theory has forecast perfectly." Duncan and Snidal, "Rational Deterrence Theory," pp. 152.

operate are that both states must exist in a condition of strategic nuclear stalemate. Strategic nuclear stalemate is not construed to mean a parity in the quantity or quality of nuclear weaponry but rather a condition in which both sides believe they are incurring some risk of nuclear retaliation, and that the other side believes the same. Both states must also have employable conventional forces that can challenge or defend an interest.[13] Finally, the interest at stake must be a contiguous piece of territory on the periphery of each state. The peripheral contiguous territorial dispute implies that the interest at stake is tangible and sufficiently important for both sides to assume the risk of nuclear weapons use. The Soviet Union versus China, and India versus Pakistan are examples of conflicting territorial interests that resulted in the use of some level of direct conventional military force. In contrast, the predominantly ideological challenges between the United States and Soviet Union developed into conventional proxy wars or political crises but never evolved into the direct clash of each state's conventional military forces. *Peripheral contiguous territory* is land whose incorporation is desirable but may not be

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[13]Huth and Russett have done extensive work in the field of deterrence failure and the role of nuclear weapons in supporting deterrence. Deterrence is likely to succeed when the short term balance of usable conventional forces favors the defender. The long-term balance of conventional forces and the possession of nuclear forces make little difference. Paul K. Huth, *Extended Deterrence and the Prevention of War*, (New Haven, CT: Yale University Press, 1988); Paul K. Huth, "Deterrence Failure and Crisis Escalation," *International Studies Quarterly*, Vol. 32 No. 1 (1988), pp. 29-45; Paul K. Huth, the Extended Deterrent value of Nuclear Weapons," *The Journal of Conflict Resolution*, Vol. 34, No. 2 (June 1990), pp. 270-290.

regarded as absolutely essential to the continued survival of the either state.

The central assertion of this thesis is that peripheral territorial disputes between nuclear-armed states will result inconventional military clashes providing conventional military forces are available and a condition of nuclear stalemate exists.[14]

The three variables suggest a possible rationale for the use of conventional force between nuclear-armed adversaries. Strategic nuclear stability, the degree to which a state is unwilling to use or be the victim of nuclear weapons, can create conventional military instability by making lower levels of violence seem safer to pursue. States existing under conditions of mutual nuclear vulnerability should ideally strive to avoid nuclear destruction. Nuclear weapons may facilitate the decision to resort to conventional violence by providing an absolute upper limit to the gains an aggressor may make and the costs a defender needs to concede. Under most circumstances a state will not risk the use of nuclear weapons as the cost of retaliation is too exorbitant to bear. Among nuclear powers, the downside risk, the absolute worst possible outcome of a dispute, is the actual use of nuclear weapons. A measure of control over the

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[14]Again, conventional war for the purpose of this thesis is a mode of violent conflict that excludes only nuclear weapons. State sponsored terrorism or paramilitary operations are construed as being under the aegis of conventional war despite their less than orthodox tactics.

downside risk is one of the benefits of a mutual nuclear capability. This control, however, is not absolute. Conflict between nuclear powers increases the opportunity for mutual destruction through accident, misperception, or deliberation. Brinkmanship on the nuclear level may be acceptable in relation to expected gains or incurred costs. In most situations the threat of nuclear weapons insures that the risk is unacceptable. Challenges will not be initiated or interests will not be defended. This factor and that there are comparatively few nuclear states in the international system may account for there being so few cases that the stability-instability paradox can be applied too.

A stumbling block in the use of conventional military force between nuclear adversaries is the role of nuclear threats. Why would a state choose conventional military force over the issuance of direct and sincere nuclear threats? The risk of a reciprocal response partially answers that question.

C. METHODOLOGY

This study reviews the pertinent literature on deterrence, nonproliferation, and the stability-instability paradox. It identifies the critical factors necessary for the paradox to operate and then applies them to the case studies. Alexander L. George's "method of structured, focused comparison" is used to compare the three case studies. The technique is "focused as it deals selectively with only certain aspects of the

historical case and structured because it employs general questions to guide the data collection and analysis in that historical case."[15] The availability of information on the decisions and capabilities of some states varies considerably. Information on the nuclear history of the United States is well documented, the Soviet Union less so. Information on China, India, and Pakistan is even more rare.

1. **General Questions**

Answering a specific set of questions in a case comparison study ensures the acquisition of comparable data. The questions considered in this study are oriented around the three variables that effect the stability-instability paradox. Again, these variables are identified as the conventional military capability of a state, its nuclear weapons capability and the interest that is being challenged and defended.

The questions asked are as follows:

- What were the interests at stake in the conflict?
- Did both sides exist in a condition of strategic nuclear stalemate?
- Did both sides have conventional forces at their disposal?
- How did these states contend with gaining or protecting contested interests under a nuclear threat?
- How did nuclear weapons influence the pattern of conflict between the two countries?

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[15]Alexander L. George, "Case Studies and Theory Development: The Method of Structured, Focused Comparison," in Paul, Gorden and Lauren, ed., *Diplomacy: New Approaches in History, Theory, And Policy* (New York: The Free Press, 1979), pp. 61-62

2. Case Selection

The cases examined represent the universe of cases of conflict between nuclear-armed powers.[16] They are necessarily abbreviated to conform to the constraints of this thesis.

a. The United States and the Soviet Union, 1948-1980

During the Cold War the United States and the Soviet Union dealt cautiously with each other, however, the deterrent value of nuclear weapons did not prevent the occurance of peripheral wars that each side supported. Indeed, one of the effects of nuclear weapons may have been to push conflict away from a state's core interests towards the periphery. This case will examine the 1948 Berlin crisis, the 1973 October war, and the 1980 Iran crisis. These examples are intended to provide a cross section of nuclear crises over time and under the aegis of different deterrent doctrines. The primary purpose of this case is to illustrate how the conflict between the United States and the Soviet Union is fundamentally different from the subsequent cases in this study. The United States and the Soviet Union were acknowledged nuclear powers and had ample conventional forces,

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[16]There are other possible cases. China's military presence in the Vietnam war could have been construed to be a proxy war between the United States and China. For China's presence in the Vietnam war see: Allen S. Whiting, *The Chinese Calculus of Deterrence: India and Indochina* (Ann Arbor, Michigan: The University of Michigan Press, 1975) pp. 170-223. The 1979 Sino-Vietnamese war could be interpreted as a proxy war between China/Cambodia and the USSR/Vietnam. In the 1956 Suez crisis the Soviet Union issued nuclear threats against the United Kingdom and France. A. F. K. Organski and Jacek Kugler, *The War Ledger* (Chicago: The University of Chicago Press, 1980), pp. 172-175. The Arab-Israeli wars may have a direct nuclear link between the USSR and Israel. Seymour M. Hersh, *The Samson Option: Israel's Nuclear Arsenal and American Foreign Policy*, with a new afterward (New York: Vintage books, 1993), p. 17.

however, there was no threat to the territorial integrity of either state. Without this threat there was insufficient reason to resort to the direct use of military force.

b. The Soviet Union and The People's Republic of China, 1964-1969

In 1964, the year that China detonated its first atomic bomb, China began a concerted attempt to alter the border between itself and the Soviet Union. The level of border violence increased over time and peaked with the Damasky Island clashes in 1969. This is the first instance of nuclear-armed states involved in direct military conflict. Soviet border force improvements, nuclear missile deployments in the far east, and direct nuclear threats to the Chinese ensured that the possibility of nuclear weapons use did not escape the minds of decision makers on either side.

c. India and Pakistan, 1947-present

India and Pakistan have fought three wars since becoming sovereign nations in 1947 and nearly fought again in 1987 and 1990. Their primary dispute is over the portion of Kashmir held by India. India and Pakistan are frequently involved in mid- to low-intensity conflict energized by ethnicity, nationalism, and ideology. Nuclear weapons have not offered sufficient incentive to refrain from low-level provocation.[17]

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[17]It is sufficient that both adversaries have, or behave as if they have, deliverable nuclear weapons. India and Pakistan fit the latter category. They are "opaque proliferators" in which a nuclear weapons capability is

II. DETERRENCE, PROLIFERATION, AND THE STABILITY-INSTABILITY PARADOX

A. INTRODUCTION

This chapter identifies the two primary arguments that describe the strategic effects of nuclear weapons proliferation and the stability-instability paradox. The logic of deterrence stresses that superpower success at mutual deterrence will repeat itself among emergent nuclear powers. The logic of nonproliferation contends that the Cold War history of nuclear deterrence was contextually unique and that nuclear deterrence in the future will be problematic. The two concepts are incompatible. The stability-instability paradox offers the possibility of a third way between the two competing thoughts. It asserts that the fear of large nuclear wars allows states to engage in smaller conventional ones.

B. THE LOGIC OF DETERRENCE

Deterrence theory is based upon the assumption of a unitary rational actor attempting to maximize his choices in response to the opposition's preferences and options. The

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assumed rather than declared. The concept of "opaque nuclear proliferation" was first introduced in: Benjamin Frankel, "Notes on the Nuclear Underground," *The National Interest*, No. 9 (Fall 1987). Other essays dealing with this phenomenon can be found in Avner Cohen and Benjamin Frankel, eds., "Opaque Nuclear Proliferation: Methodological and Policy Implications," *Journal of Strategic Studies*, Vol. 13, No. 3 (September 1990).

theory provides that when conflict can result in nuclear annihilation a rational decision maker will be deterred from a course of action that incurs that risk. Inescapable mutual vulnerability to nuclear attack ensures that nuclear risk is unavoidable. When nuclear weapons cannot be countered or preempted with absolute certainty neither actor can pursue goals the other is committed to protecting with nuclear force.

Mutual vulnerability and the awesome destruction of nuclear attack makes the connection between the Cold War's "long peace" and nuclear weapons plausible.[18] Stability between nuclear powers as a result of nuclear weapons is the central tenant of the logic of deterrence.[19] In deterrence logic the overwhelming destructiveness of nuclear weapons renders the prospect of a future multipolar nuclear environment tolerable.[20]

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[18]John Lewis Gaddis, "The Long Peace: Elements of Stability in the Postwar International System," in Sean M. Lynn-Jones, ed., *The Cold War and After: Prospects for Peace* (Cambridge: The MIT Press, 1991). Jervis, *The Meaning of the Nuclear Revolution*. pp. 34-35. Mueller argues that the increasingly destructiveness of conventional war renders nuclear weaponry irrelevant as a stabilizing factor. John Mueller, "The Essential Irrelevance of Nuclear Weapons: Stability in the Postwar World," *International Security*, Vol 13, No. 2 (Fall 1988), pp. 57-79.

[19]Kenneth Waltz is the most noted proponent of the stabilizing effects of nuclear proliferation on the international system. See: Kenneth N. Waltz, *The Spread Of Nuclear Weapons: More May Be Better*. Other works that contribute to the theory include Bruce Bueno de Mequita and William H. Riker, "An Assessment of the Merits of Selective Nuclear Proliferation," *Journal of Conflict Resolution*, Vol. 26, No. 2 (June 1982), pp. 283-306; John J. Weltman, "Managing Nuclear Multipolarity," *International Security*, Vol. 6, No. 3 (Winter 1981/1982) pp. 182-194; John J. Weltman, "Nuclear Devolution and World Order," *World Politics*, Vol. 32, No. 2 (January 1990), pp. 169-193.

[20]Kenneth N. Waltz, "The Emerging Structure Of International Politics," *International Security*, Vol. 18, No. 2 (Fall 1993), p. 74. The relative contributions of bipolarity and nuclear weapons to the absence of great power war is contested. See: Geoffrey Blainey, *The Causes of War* (New York: The Free Press, 1988), pp. 267-290; John J. Mearshiemer, "Back to the Future:

Adherents to the logic of deterrence maintain that nuclear deterrence exercises a powerful restraining influence on state actors. States contemplating the use of nuclear force are deterred from aggression for fear of reciprocating punishment. With the assumption that this cautionary influence is universal, in time, mutual deterrent postures should develop in areas of the world prone to violent clashes.[21] Deterrent logic expects that no rational actor can embark on a direct or incremental course of action that would result in nuclear destruction. The imperative of survival is to strong.

Nuclear deterrence in its purest form grants a state immense power to preserve its core interests but no capacity to usurp the interests of others in the face of a reciprocal threat. In a mutually deterrent condition, logic dictates that there are no forceful means of achieving an objective that an adversary is committed to opposing. The potential costs far outweigh any conceivable gains.

1. Punishment, Existentialism, and Defense

Deterrence is operationalized through two modes, deterrence by denial and deterrence by punishment. The difference between the variants is subtle. "An absolute sharp distinction between the punishment and denial functions [of

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Instability in Europe After the Cold War," *International Security*, Vol. 15, No. 1 (Summer 1990), pp. 13-18; Stephan Van Evera, "Primed for Peace: Europe after the Cold War," *International Security*, Vol. 15, No. 3 (Winter 1990/1991), pp. 36-40; Ted Hopf, Polarity, the Offense-Defense Balance, and War," *American Political Science Review*, Vol. 85, No. 2 (June 1991), pp. 475-490.

[21]Weltman, "Managing Nuclear Multipolarity," p. 190.

deterrence] cannot be made, nor can either function be attributed exclusively to any particular kind of force."[22]

Deterrence by punishment is primarily, though not exclusively, the province of nuclear weapons. It is predicated upon inflicting unacceptable damage upon an aggressor. Punishment renders differences in nuclear arsenal size and technical sophistication inconsequential within a wide range. Nuclear punishment operates by having sufficient weapons to destroy the opposition's cities. This is an absolute capability rather than a relative one.[23] In its most extreme form deterrence through punishment implies no defensive capability against aggression. It's intent is to influence an aggressor's intentions and decision-making processes rather than to defeat his actions.

Existential deterrence is an extreme variant of punishment based deterrence in which deterrence is derived not from the physical capability destroy but through the psychological consequence of the existence of nuclear

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[22]Glenn H. Snyder, *Deterrence by Denial and Punishment*, Research Monograph No. 1 (Princeton: Woodrow Wilson School of Public and International Affairs, Center of International Studies, Princeton University, January 2, 1959), p. 1.

[23]Robert Jervis, "Why Nuclear Superiority Doesn't Matter," *Political Science Quarterly*, Vol. 94, No. 4 (Winter 1979-80), p. 618.

weapons.[24] Existential deterrence is attractive because,

> the deterrent effect is almost wholly impervious to the location and capabilities of nuclear weapons and the doctrines that would notionally govern their use. All that is required is the availability of some nuclear weapons that *could* be used in anger.[25]

Deterrence by denial, or defense, is predicated on frustrating or denying an aggressor's objectives. Denial deterrence is primarily, though not exclusively, achieved through the use of conventional forces. Punishment is secondary to the purpose of defense in that it is an incidental quality achieved through the ability to defend oneself. Deterrence by denial is not usually associated with nuclear weapons.

C. THE LOGIC OF NONPROLIFERATION

1. Structural and Environmental Criticisms

Any criticism of the logic of deterrence naturally supports the logic of nonproliferation.[26] There are two broad

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[24]"Existential deterrence was first described by McGeorge Bundy, "Existential Deterrence and its Consequences," in Douglas Mclean, ed., *The Security Gamble: Deterrence Dilemmas in the Nuclear Age* (Totowa: Rowman & Allanheld, 1984): pp. 3-13. See, also: Marc Trachtenberg, "The Influence of Nuclear Weapons in the Cuban Missile Crisis," *International Security*, Vol. 10, No. 1 (Summer 1985), pp. 137-163; Devin T. Hagerty, "The Power of Suggestion: Opaque Proliferation, Existential Deterrence, and the South Asian Nuclear Arms Competition," *Security Studies*, Vol. 2, No. 3/4 (Spring/Summer 1993), pp. 258-260.

[25]For a critique of existential deterrence, see Lawrence Freedman, "I Exist; Therefore I Deter," italics in original, p. 184.

[26]Rebuttals to proliferation optimism are, Karl Kaiser, "Non-Proliferation and Nuclear Deterrence," *Survival*, Vol. 31, No. 2 (March/April 1989), pp. 123-136; Peter D. Feaver, "Proliferation Optimism and Theories of

areas of criticism of the logic of deterrence. The first concerns itself with the internal weaknesses of the theory and the second deals with the unique strategic environment in which deterrence has worked in the past.[27]

a. Structural Criticisms

Some adherents of deterrence logic assert that deterrence is a "metaphysical concept that has near-universal applicability, transcending all cultures and politics"[28] Nonproliferation logic holds that deterrence is defined by "unique experiences of particular societies at one moment in history rather than by universal laws."[29] Nations may have unique cultural and political experiences that preclude the acceptance of mutual nuclear vulnerability and Western definitions of rationality.[30] The acceptance of deterrence in which populations are hostage is difficult to accept. In the

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Nuclear Operations," *Security Studies*, Vol 2, No. 3/4 (Spring/Summer 1993); Steven E. Miller, "The Case against a Ukrainian Nuclear Deterrent," *Foreign Affairs*, Vol. 72, No. 3 (Summer 1993), pp. 67-80; Steven R. David, "Why the Third World Still Matters," *International Security*, Vol. 17, No. 3 (Winter 1992/93), pp. 127-159.

[27]Scott Sagan has created an organizational approach to deterrence theory in which parochial military interests override objective state interests. His argument is a composite of the structural and environmental weaknesses of deterrence theory. Scott D. Sagan, "The Perils of Proliferation: Organizational theory, Deterrence Theory, and the Spread of Nuclear Weapons," *International Security*, Vol. 18, No. 4, (Spring 1994), pp. 66-107.

[28]William C. Martel, "Deterrence after the Cold War," in Stephan J. Cimbala and Sidney R. Waldman, *Controlling and Ending Conflict, Issues Before and After the Cold War* (New York: Greenwood Press, 1992), p. 54.

[29]*Ibid.*, p. 54.

[30]Juliet A. Swiecicki, "Severing The Ties That Bind: Moving Beyond Deterrence," *Comparative Strategy*, Vol. 11, No. 3 (July- September 1992), p. 290.

United States, deeply held moral, psychological, and rational factors bar complete acquiescence to deterrence theory.[31] The unique experiences of other states and cultures may more thoroughly prevent the acceptance of the Western concept of deterrence.

Deterrence theorists have failed to delineate the boundaries of rational choice.[32] "When a challenger makes a decision to use or not to use force with reference to criteria outside of deterrence theory - such as domestic or alliance politics - then the validity of deterrence theory is doubtful."[33] States may resort to war for reasons other than external threat. Pressures to preserve the internal status quo may cause deterrence failure that is wholly disconnected from the perception of external threat.

Deterrence theory has failed to explicate the conditions for success. Initiation theory demonstrates the loopholes in deterrence theory and sets the requirements for its failure.[34] Initiation theory's basic postulate is that a

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[31]George H. Quester, "Cultural Barriers to an Acceptance of Deterrence," in Roman Kolkowicz, ed., *The Logic of Nuclear Terror* (Boston: Allen & Unwin under the Auspices of the University of California Project on Politics and War, 1987), p. 82-106.

[32]Richard Ned Lebow and Janice Gross Stein, "Rational Deterrence Theory: I Think, Therefore I Deter," *World Politics*, Vol. 41, No. 2 (January 1989), p. 217.

[33]*Ibid*, p. 212.

[34]Initiation theory was first described by Alexander L. George and Richard Smoke. *Alexander L. George and Richard Smoke, Deterrence in American Foreign Policy: Theory and Practice* (New York: Columbia University Press,

nation desirous of changing the status quo generally has more than one option to do so. Any deterrent effort that fails to address all the options at a challenger's disposal is inherently incomplete and prone to failure. In initiation theory deterrence can fail by degree. This incremental failure can assume one of three general types: the fait accompli, in which a defender is challenged to undo what has been done; the limited probe, a reversible military action; and controlled pressure, a military or political test of resolve.

b. Environmental Criticisms

Criticisms of deterrence theory based upon environmental conditions are viscerally persuasive, yet are essentially a collection of disjointed observations and untested assumptions. These criticisms attempt to qualify the environment that new nuclear states will exist in. Despite the anecdotal nature of the evidence that constitutes environmental criticisms, its importance is derived from the fact that new nuclear powers will interact within a more complex international structure.[35]

In nonproliferation logic, third world security environments are so profoundly different from the central balance of the Cold War that the likelihood of successful

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1974), p. 519-548.

[35]For a prognostication of conflict in a proliferated environment, see: Martin Van Crevald, *Nuclear Proliferation and the Future of Conflict*, (New York: The Free Press, 1993).

deterrent relationships forming is minimal.[36] Third world states are typically smaller, closer, and more densely populated than the United States and the Soviet Union.[37] The absence of strategic depth makes the immediacy of the threat and vulnerability to attack significantly higher. The grave consequences of losing territory by force may create offensive or preventative war strategies. The third world may "perceive the threat to be so high, some of these countries' leadership may be ready to risk nuclear confrontation, if not a surprisingly high level of nuclear damage, in pursuit of their objectives."[38]

Economic and technological constrains limit the size, sophistication, and reliability of new arsenals and their support systems. Command and control systems will reflect the degree of threat a state perceives, the resources the state has available, and the state of civil-military

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[36]A comprehensive picture of third world conflict can be found in: Donald M. Snow, *Distant Thunder: Third World Conflict and the New International Order* (New York: St. Martin's Press, 1993). A summary of wars fought since 1945 can be found in: Patrick Brogan, *The Fighting Never Stopped: A Comprehensive Guide to World Conflict since 1945* (New York: Vintage Books, 1990).

[37]The issue of "tight-coupling" is addressed in: Sagan, "The Perils of Proliferation," p. 99.

[38]Lewis Dunn, *Controlling the Bomb* (New Haven: Yale University Press, 1982), p. 69-70. "The meaning of a country's weapons is determined more by its policy than by the technical characteristics of its weapons." Colin S. Gray, *Weapons Don't Make War: Policy, Strategy, & Military Technology* (Lawrence, Kansas: University of Kansas Press, 1993), p. 9. Sagan's organizational approach highlights the proclivity of military organizations to fight a preventative war. Sagan, "The Perils of Proliferation," pp. 71-85.

relations.[39] The technical capacity, geo-political context, and decision-making apparatus of newly nuclear countries will greatly effect the quality and safety of new weapon systems.[40]

The safety of new nuclear arsenals assumes a level of technology and experience that may not be available in the third world.[41] One example is the highly unstable nature of Iraq's nuclear weapon design, a design described as being inevitably on the verge of going off.[42] The potential for misuse of nuclear weapons also has a greater chance of occurring in a state that has limited experience with the high degree of interactive complexity inherent in nuclear weapons systems.[43] The safety and security of new nuclear weapons is further complicated by the opacity of the process.[44] Covert construction and deployment prevents verification of safety

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[39]For a discussion of command and control systems of emergent nuclear powers, see: Peter D. Feaver, Command and Control in Emerging Nuclear Nations," *International Security*, Vol. 17, No. 1 (Winter 1992-93), p. 160.

[40]Dunn, "New Nuclear Powers," p. 6.

[41]Kaiser, "Non-proliferation and Nuclear Deterrence", p. 127; Bruce G. Blair, *The Logic of Accidental Nuclear War*, (Washington D.C.: The Brookings Institute, 1993). Sagan asserts that newly nuclear state's arsenals will be crude and likely stay that way for a longer period of time. Sagan, "The Perils of Proliferation," pp. 99.

[42]Gary Milhollin, "Building Saddam Hussein's Bomb," *New York Times Magazine*, March 8, 1992, p. 32.

[43]See Scott D. Sagan, *The Limits of Safety: Organizations, Accidents and Nuclear Weapons* (Princeton: Princeton University Press, 1993).Interactive complexity is numerous interrelated, yet unplanned interactions which are not readily comprehensible. Sagan, "The Perils of Proliferation," p. 95.

[44]Organizational and technical reasons suggest that opaque proliferation methods are inherently less safe. Tight compartmentalization, lack of public debate, and the prohibition of full scale tests inhibit safety efforts. *Ibid.*, pp. 98-99.

measures, placing doubt on the reliability and utility of untested weapons.

Nuclear preemptive or preventative strikes may be more likely among new proliferants.[45] Poor early warning systems, limited reaction time, common borders, and preexisting tension endemic to the third world mandates a high degree of readiness and possibly launch on warning responses. The proximity of the threat and the smaller amount of targets that need to be accounted for may lead to increased estimates of success to fight a pre-emptive or preventative war. An accidental strike in response to a false alarm is a possibility and the parallel proliferation of ballistic missile technology means that a weapon launched cannot be recalled.

New nuclear states might engage in regional adventures under the aegis of a nuclear force. The presence of nuclear weapons may have changed the coarse of many of the most recent conflicts. The Falkland Island's invasion and Iraq's seizure of Kuwait could have been successful fait accomplis had these nations possessed nuclear weapons. Newly nuclear states could use their weapons to exclude great powers from intervening in regional affairs.

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[45]Louis Rene Beres, "Israel, Iran and Prospects for Nuclear War in the Middle East," *Strategic Review* (Spring 1993), p. 52-60; Sagan's "inward-looking" military governments may be predisposed to preventative wars. Sagan, "The Perils of Proliferation." pp. 66-107.

D. THE STABILITY-INSTABILITY PARADOX

The stability-instability paradox allows for a third way between deterrence and nonproliferation logic. The paradox states that, "if neither side has a 'full first-strike capability,' and both know it, they will be less inhibited about initiating conventional war, and about the limited use of nuclear weapons, than if the strategic balance were unstable."[46] The case studies support the paradox under a narrow range of conditions and exclusive of its provision for limited nuclear strikes. The conditions hypothesized as necessary for the paradox to operate are a strategic nuclear stalemate, a peripheral territorial dispute, and employable conventional forces. Strategic nuclear stalemate implies that neither side is willing to risk nuclear weapons use and believes the other thinks the same. Lower levels of violence become possible because there is no credible basis for nuclear weapons employment.[47]

A peripheral territorial dispute implies that the interest in conflict is sufficiently important for both sides to fight over but not enough to risk mutual nuclear suicide. Territorial interests are sufficient provocation to result in

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[46]The original quotation is framed by the United States extended deterrent commitment to defend Western Europe from Soviet aggression. Glenn H. Snyder, "The Balance of Power and the Balance of Terror," Paul Seabury, ed., *The Balance of Power* (San Francisco: Chandler Publishing Co., 1965), p. 199.

[47]The usability-credibility paradox is discussed in Avner Cohen, "Deterrence, Holocaust and Nuclear Weapons: A Nonparochial Outlook," Louis Rene Beres, ed., *Security or Armageddon: Israel's Nuclear Strategy,* (Lexington, MA: Lexington Books, 1986), p. 173-190.

the employment of some level of military force. Ideological and political commitments are not enough to result in the direct use of conventional forces between nuclear opponents.

Employable conventional forces means that the conflicting states have credible coercive means other than nuclear weapons at their disposal. Strategic nuclear stalemate destabilizes the balance between states and shifts the determinants of stability towards the conventional balance.[48] In the paradox, a conventional war-fighting strategy complements a nuclear deterrent strategy.[49] However, the possibility of escalation between opposing nuclear-armed states is always unavoidable. The interest at stake, the forces available, and the credibility of their employment provide some limits to the level a conflict can escalate too. Factors such as poor judgement, flawed perceptions, and common recklessness can escalate a conflict.

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[48]"Strategic stalemate does shift military competition to the tactical level. But one must add what is usually omitted: nuclear stalemate limits the use of conventional forces and reduces the extent of the gains one can seek without risking devastation. Kenneth N. Waltz, "Nuclear Myths and Political Realities," *American Political Science Review*, Vol. 84, No. 3 (September 1990), p. 739.

[49]Colin S. Gray, "Deterrence in the New Strategic Environment," *Comparative Strategy*, Vol. 11, No. 3 (July-September 1992), p. 261. Waltz disagrees. "...in a nuclear world a conventional war-fighting strategy would appear to be the worst possible one, more dangerous than a strategy of relying on deterrence." Waltz, "Nuclear Myths," p. 739.

III. THE COLD WAR: THE U. S. AND SOVIET NUCLEAR RIVALRY

A. INTRODUCTION

This section examines the nuclear rivalry and the use of force between the United States and the Soviet Union. Three crises will be examined during different periods of United States nuclear strategy. They are the 1948 Berlin crisis during massive retaliation, the 1973 Middle East war during the phase of assured destruction and flexible response, and the 1980 Iran crisis during PD-59's countervailing doctrine. This chapter demonstrates that the ideological foundation that best describes the Cold war was inadequate cause for conventional conflict. Intangible interests are an insufficient rationale for war between nuclear powers. Concurrently, a defender's nuclear strategy or superiority have no bearing on the issuance of a challenge. Each of the examples occurred under the aegis of a unique strategic doctrine and yet a challenge was still tendered. Interests at stake while politically or ideologically important were not peripheral territorial interests. Berlin and the Middle East, while politically important were not territorially linked to either the United States or the Soviet Union. Their loss, while not inconsequential, was not threatening to the integrity of either state.

B. NUCLEAR STRATEGY DURING THE COLD WAR

1. Massive retaliation and the 1948 Berlin Blockade

The synthesis of domestic pressures for demobilization, international challenge in the form of rising Soviet hostility, the technical state of the art, and President Truman's conception of nuclear weapons forged the doctrine of massive retaliation.[50] The military and political consensus that emerged was that nuclear weapons could balance the shortfall of conventional military forces.[51]

Initially, obsessive secrecy shrouded United State's nuclear weapons, so much secrecy, that they were held separate from other American military forces, however, enough was known of their capabilities that they were conceived of as weapons of last resort.[52] The threat to use nuclear weapons in the face of conventional provocation, suited the United States during 1948 Berlin Blockade. The strategic position of the United States dictated that in the event of hostilities with the Soviets, "strictly conventional war was never seriously considered to be an option."[53] Nuclear weapons would be needed

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[50]In June of 1945 the United States had more than 12 million under arms. Two years later there were only 1.5 million military personnel. Gar Alperovitz and Kai Bird, "The Centrality of the Bomb," *Foreign Policy*, No. 94 (Spring 1994), p. 14.

[51]"Betts, *Nuclear Blackmail*, p. 26.

[52]David Alan Rosenberg, "The Origins of Overkill: Nuclear Weapons and American Strategy 1945-1960," *International Security*, Vol. 7, No. 4 (Spring 1983), p. 11. Tight civilian control of nuclear weapons and a subservient military are one of Sagan's preconditions for stable deterrence to evolve. Sagan, "The Perils of Proliferation," pp. 81-85.

[53]Betts, *Nuclear Blackmail*, p. 24.

to check the Soviets superior conventional weapons forces and geographic advantages.

This crisis, the first Cold war challenge and the only one in which the United States would enjoy absolute nuclear preponderance, began the process of erosion of the utility of nuclear weapons. Despite the United State's nuclear advantage the Soviet Union was not deterred from attempting to force the United States to cede its position in Europe by blockading the land route into Berlin. "The Western Allies did not directly challenge the ground blockade; instead, they hastily organized an airlift of supplies to West Berlin."[54]

Early weapons and delivery systems were cumbersome.[55] Modified B-29's were the only means of delivering atomic weapons. Their ability to penetrate into enemy territory was uncertain and the valuable weapons, developed in ever increasing yields, were designated for only the most impressive targets. Without a credible conventional military presence, the United States implicitly threatened the Soviets with nuclear weapons by announcing the movement of 60 B-29's, the premier U.S. strategic bomber, to Great Britain.[56] The B-29 deployment forced the Soviets to consider the possibility

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[54]George and Smoke, *Deterrence in American Foreign Policy*," p. 108.

[55]"In the fall of 1948, for example, the United States had about 100 bombs, but the early bombs took two days to assemble by a team of twenty-four. "Thomas Powers, "Choosing a Strategy for World War III," *The Atlantic*, Vol. 250, No. 5 (November 1982), p. 82.

[56]In mid-1948 only one air force unit, the 509th Bomb Group, with its 32 planes, was nuclear capable. None of the B-29's moved to Berlin were from the 509th. Betts, *Nuclear Blackmail*, p. 28.

of a nuclear response to their conventional threat. With the effectiveness of their blockade mitigated by the massive airlift and the United States willingness to engage in escalatory spiral, the Soviets relented.

2. Assured Destruction, Flexible Response and the 1973 Middle East Crisis.

Improved technology and growing Soviet nuclear menace turned the United State's strategic thought process to counterforce options and the creation of a secure second strike capability.[57] Growing U. S. vulnerability set the stage for the competing doctrines of flexible response and assured destruction. Flexible response offered a range of limited nuclear and conventional options tailored to a specific threatening action. It's intent was to provide flexible strategies requiring a fraction of the striking power needed for assured destruction. Assured destruction was predicated upon the deterrent power of mutual nuclear devastation.[58]

While the Kennedy administration officially adopted assured destruction, it supplemented assured destruction with "discriminating counterforce options"[59] Powerful conventional

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[57]Defense Secretary Thomas Gates said, "We are adjusting our power to a counterforce theory. We are not basing our requirements on just bombing Russia for retaliatory purposes." Desmond Ball, "Targeting for Strategic Deterrence," *Adelphi Papers* No. 185, (London: International Institute for Strategic Studies, Summer 1983), pp. 6.

[58]McNamara believed the United States and Soviet Union attained mutual assured destruction in 1968. Bundy, *Danger and Survival*, p. 544. Henry Kissinger concluded in 1970 that there was little evidence that the Soviets subscribed to MAD. Kissinger, *Nuclear Weapons*, p. 378.

[59]Betts, *Nuclear Blackmail*, p. 97.

forces and limited nuclear options were designed to complement the ability to escalate to mutually suicidal levels. Assured destruction would safeguard the United States from a Soviet nuclear attack and flexible response would counter Soviet adventurism abroad.[60]

This doctrinal synthesis was tested during the 1973 war in the Middle East when Israeli forces had effectively defeated Syria and encircled the Egyptian Third army. The Soviet Union as the principal arms supplier and political supporter of Egypt and Syria hinted at United States and Israeli collusion in the destruction of their clients and began preparations to unilaterally intervene.[61]

On the 24th of October a United Nations Security Council drafted a resolution calling for a joint superpower force to disengage the Egyptians and Israelis. Citing the danger of superpower forces in such close proximity, the United States rejected the suggestion. Communications from the Soviet Union and confirming intelligence sources revealed that the Soviets were prepared to take action on Egypt's behalf. Soviet airborne divisions were alerted, air and sea

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[60]"Because the balance is so stable at the level of all-out nuclear war, each side is relatively free to engage in provocations and military actions at lower levels of violence." Robert Jervis, "Why Nuclear Superiority Doesn't Matter," *Political Science Quarterly*, Vol. 94, No. 4 (Winter 1979-80), p. 619.

[61]Kissinger, *Diplomacy*, p. 737; Richard Nixon, *RN, The Memoirs of Richard Nixon* (New York: Grosset and Dunlap, 1978), Vol. II, p. 495.

transports were loaded and a special airborne command post established.[62]

"Rather than matching the Soviets 'Tit-for-Tat,' the secretary [Kissinger] believed, it was necessary to do something more dramatic, something that would get the attention of Soviet decision-makers because it was several times more alarming than their own action."[63] Before the reply was delivered, the alert state of the United State's military was advanced to Defcon III, the 82nd airborne was prepped for movement, additional aircraft carriers were deployed to the Mediterranean, and B-52 bombers were surged from Guam to the United States.[64] On the 25th of October Israel halted offensive operations and reluctantly allowed humanitarian convoys to reach the beleaguered Egyptian forces. This concession effectively ended the rational for Soviet intervention and de-escalated the growing crisis.

3. Nuclear Warfighting and the 1980 Iran Crisis

"Kissinger's National Security Study Memorandum-3, requested the day after Nixon's 1969 inauguration was designed

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[62]The United State's Navy claims to have tracked a Soviet cargo ship, bound for Alexandria, that emitted neutron radiation. This indicates the possibility of Soviet nuclear weapons deploying to Egypt. William B. Quandt, "Soviet Policy in the October Middle East War," *International Affairs* (London) Vol. 53, (October 1977), pp. 596-597.

[63]Blechman and Hart, The Political Utility Of Nuclear Weapons'" p. 145.

[64]Henry Kissinger, *Years of Upheaval* (Little, Brown, 1982), pp. 587-589. The United State's reply stated that "we must view your suggestion of unilateral action as a matter of gravest concern, involving incalculable consequences." Reference was made to the 1973 agreement on the prevention of nuclear war. Nixon, *RN*, Vol II, pp. 498-499.

to 'kill assured destruction' and establish the need for limited nuclear options and escalation control."[65] The National Security Decision Memorandum-242 and the Nuclear Weapons Employment Policy Guide-I implemented counterforce strategies. President Carter reaffirmed this doctrine with Presidential Directive-59 which introduced a countervailing strategy.[66] This strategy represented a convergence with long held Soviet theories of nuclear war.[67] Not only would Soviet strategic capabilities be targeted but their mechanisms of state control and communications.[68] PD-59 emphasized the ability to fight a nuclear war by enhancing United State's capabilities rather than influencing Soviet intentions.

PD-59's test began less than a year after the 1979 invasion of Afghanistan when there were indications that the Soviet Union was prepared to attack Iran. Large scale unannounced military exercises, strengthened ground combat units, the use of war reserve frequencies, and redeployed

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[65]Amos A. Jordan, William J. Taylor Jr., and Lawrence J. Korb, *American National Security: Policy and Process*, 4th ed., (Baltimore: Johns Hopkins University Press, 1993), p. 237.

[66]The Soviet military response to PD-59 was to renew emphasis on the preemptive use of nuclear weapons. Michael MccGwire, *Military Objectives in Soviet Foreign Policy* (Washington D.C.: The Brookings Institute, 1987), p. 63-64.

[67]Joseph D. Douglas, Jr. and Amoretta M. Hoeber, *Conventional War and Escalation: The Soviet View* (New York: Crane & Russak, 1981).

[68]PD-59 incorporated an ethnic component to its targeting strategy. The logic was that it would speed the destruction of the Soviet state. For a discussion of the ethnic dimension of nuclear targeting see the account of a high level meeting with Zbigniew Brzezinski discussing Presidential Review Memorandum 10's Annex C, "Military Strategy and Force Posture Review," in which he queries a briefer as to the military requirement to kill *Russian* Russians. Powers, "Choosing a Strategy," p. 86.

fighter-bomber units were actions "unprecedented since the 1968 invasion of Czechoslovakia."[69]

After evaluating the evidence, Defense Secretary Harold Brown met with the Joint Chiefs of Staff to discuss the available options. The JCS responded that the United States had no conventional military option available to prevent the Soviets from seizing the warm water ports and oil fields of Iran.

In order to deter Soviet movements into the Persian gulf, B-52 bombers flew "reconnaissance" missions in the Arabian sea. The bombers, inappropriate for a reconnaissance mission, were intended to dissuade Soviet movements. In mid-September, approximately one month after the Joint Chiefs of Staff discussed the use of nuclear weapons, the Soviets stood down from their unprecedented state of readiness.

C. CONCLUSION

Undoubtedly, nuclear deterrence between the United States and Soviet Union held, however, each found reason and method to engage each other in military tests of will. The logic of deterrence is validated because neither side went to war. Its internal flaws are revealed because there was still room to initiate challenge. The Berlin crisis established a measure of disutility of nuclear weapons that became more acute after

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[69]Benjamin F. Schemmer, "Was the U.S. Ready to Resort to Nuclear Weapons for the Persian Gulf in 1980?" *Armed Forces Journal International*, Vol 124 (September 1986), p. 93.

the Soviets had emulated the United States nuclear achievement. Subsequent provocations moved closer to central United State's interests as the Soviets became adept at establishing a baseline of provocation tolerable to the United States. In effect, no nuclear strategy was sufficient to deter the initiation of a crisis. The ultimate significance of these cases is that they delineate the requirements for the use of force between nuclear adversaries by demonstrating when there is, and is not, sufficient provocation for war.

The closer explanation can be detailed in the context of the stability-instability paradox. In each of these crises geography, logistics, and domestic politics made the injection of credible amounts of conventional forces problematic at best. If these places were to be defended against an actual attack, nuclear weapons would almost certainly have to be used. Each side existed in a condition of nuclear stalemate.[70] The most compelling link between these crises, through changing nuclear doctrines and shifts in relative nuclear capability, is the interest at stake. Each of these conflicts were over predominantly intangible ideological interests rather than any significant territorial issues. For the United States to lose Berlin or the Middle East would be a

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[70]In the Berlin crisis, Truman's personal conception of the weapons, their relative rarity, and general unwieldiness offered a reasonable substitute for a condition of nuclear stalemate.

terrible political and ideological tragedy, but it could not be translated as an immediate and dire threat to the core of the United States.

IV. THE 1964-1969 SINO-SOVIET BORDER CLASHES

A. INTRODUCTION

The Sino-Soviet border dispute demonstrates that nuclear-armed states can engage in direct conventional conflict. The conditions set forth in this thesis for the operation of the stability-instability paradox are fulfilled. Both states had sufficient concern to fear nuclear damage. The Soviet Union had a modern diversified nuclear force and the People's Republic of China had the beginnings of one. Both states had plentiful conventional forces in the contested region and mechanisms for rapid reinforcement. Most importantly, they were in contention over territory, a vastly more important concern than ideology.

Standard interpretations of the crisis emphasize the civil disarray of the cultural revolution, declining relations with the Soviet Union or Lin Bao usurping the will of the state.[71] None of these explanations factor he development of the Chinese bomb. In 1967, three years after China detonated its first atomic weapon, the relatively bloodless border incidents

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[71]Lin Bao issued General Order Number One, ordering Chinese troops to be prepared for an impending Soviet invasion. Stephen Uhalley, Jr. and Jin Qiu, "The Lin Bao Incident: More Than Twenty Years Later," *Pacific Affairs*, Vol. 66, No. 3 (Fall 1993), pp. 386-398.

escalated into a "vicious circle of tit-for-tat reprisals."[72] The Chinese were the principal challengers and the Soviets were the principal defenders of the status quo.[73]

A concerted Chinese policy of probing Soviet resolve to preserve the border is a logical explanation.[74] The intensity, and duration of the crises indicate a deliberate policy. Nuclear weapons afforded China the security to credibly threaten a former patron and superpower.

B. PRECURSORS TO DETERRENCE FAILURE

1. Chinese Experience

There are two general precursors of deterrence failure between the Chinese and the Soviets.[75] Chinese experience which forged its strategic perceptions and the nuclear weapons which afforded its security. The decline of China in the nineteenth century resulted in its exploitation by Russia and other European powers. China's loss of territory and diminished capacity to effect international events has had a

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[72]Thomas W. Robinson, "*The Sino-Soviet Border Dispute: Background, Development, and the March 1969 Clashes*, RM-6171-PR (Santa Monica, CA: Rand Corporation, 1970), p. 21.

[73]Some tactical actions contained within the overall conflict may have been initiated by the Soviets. *Ibid.*, pp. 72-74.

[74]Robinson disagrees, suggesting that the Chinese were not following a preconceived plan in the incidents that they instigated. *Ibid.*, p. 7.

[75]Griffith argues that deterrence did not fail. Existing Chinese nuclear forces could not be employed against the Russians with any reasonable amount of certainty and Soviet retaliatory attacks forced a successful Soviet ultimatum upon the Chinese. William Griffith, *The World and the Great Power Triangle* (Cambridge: MIT Press, 1975), p. 4.

powerful effect on its strategic perspective. With some justification, China has come to regard itself as being isolated and surrounded.[76] Russia's acquisition of vast tracts of Chinese land, which has never faded from Chinese memory, establishes the historic precedent for military confrontation between the two states.

While border incidents are recorded as far back as 1959, a deliberate pattern of confrontation did not appear until 1964, the year China exploded its first atomic bomb. Skirmishes and ambushes resulting from aggressive patrolling over disputed lands, "initiated history's only recorded incident of conventional combat between nuclear-armed nations."[77] For the first time ever the world was presented with bordering nuclear-armed states with irredentist claims. While the rudimentary Chinese nuclear capability could not destroy the Soviet Union, it could "tear a limb from the Soviet beast."[78]

2. Chinese Nuclear Proliferation

The treatment China suffered at the hands of outside powers contributed significantly in the creation of it's atomic weapons program.[79] The program's primary purpose was

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[76]Paul Kennedy, *The Rise and Fall of the Great Powers* (New York: Random House, 1987), p. 447.

[77]Betts, *Nuclear Blackmail*, p. 79.

[78]*Ibid.*, p. 126.

[79]For a comprehensive argument on the causes of Chinese nuclear weapons acquisition, see Avery Goldstein, "Understanding Nuclear Proliferation: Theoretical Explanation and China's National Experience,"*Security Studies*,

to strengthen the nation's defenses to meet a serious security threat and in October 1964, China succeeded in detonating an implosion-type uranium weapon. [80]

The Chinese military formed plans to use strategic weapons almost immediately.[81] The development of a few megaton sized weapons supported a minimum deterrent posture that hoped to disproportionately influence the perceptions and decisions of China's enemies.[82]

C. SOVIET AND CHINESE RISK-TAKING

The Sino-Soviet border incidents exhibited, "striking demonstrations of determination and caution by both sides," which included "ground combat operations and real nuclear threats."[83] The border conflicts did not erupt spontaneously but reflected the declining relations between China and the Soviet Union, the conflicts with Maoism and Soviet Communism, and increasing Chinese military power. "Both sides were extremely careful, and no single encounter lasted more than a matter of hours, but neither side could be certain of the prudence of the other, and each was certainly aware of latent

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Vol. 2, No. 3/4 (Spring/Summer 1993) pp. 213-243.

[80]John Wilson Lewis and Xue Litai, *China Builds the Bomb* (Stanford: Stanford University Press, 1988), pp. 2, 121.

[81]*Ibid.*, p. 131

[82]*Ibid.*, pp. 193, 197, 216.

[83]Bundy, *Danger and Survival*, p. 525.

nuclear danger."[84] Despite the presence of nuclear danger and superior Soviet military capacity the Chinese took advantage of rough local military parity and initiated conflict over territory.

1. Border Conflict

Military encounters along the border began as early as 1959 and paralleled the general decline of Sino-Soviet relations.[85] Secret negotiations and escalating public rhetoric brought no concessions from either power. On September 26, 1964, less than a month before the Chinese nuclear test, talks over territorial issues between the two nations broke off. The two powers would not meet at the negotiation table again until after the Damasky Island clashes.

The greater strategic picture affecting each state dictated the assets they could deploy against each other. The Soviets were preoccupied with Europe and the Chinese were distracted by events in Indochina. In response to the Chinese nuclear test, the Soviet's improved the qualitative measure of

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[84]*Ibid.*, pp. 530-533.

[85]China demanded that the Soviets declare the treaties of 1858 and 1860 as unequal, recognize that borders along the Ussuri and Amur rivers are in dispute, and that they withdraw from the area. David Rebs, "Soviet Border Problems: China and Japan," *Conflict Studies*, No. 139, 1982, pp. 4-5. Michael Speltz details the economic and security considerations that complement the political reasons that prevent the Soviets from acquiescing on Chinese border claims, see: Michael J. Speltz, "Chinese Territorial Claims on the Soviet Far East," *Military Review*, Vol. 65, No. 8 (August 1985), pp. 63-72. Nicholas Kristof describes China's contemporary territorial aspirations as "fairly reasonable" and that "any country in such a position would yearn to recover at least some of its land." Nicholas D. Kristof, "*The Rise of China*, *Foreign Affairs*, Vol 72, No. 5 (November/December 1993), p. 70; Robinson, *The Sino-Soviet Dispute*, pp. 7, 13n.

their border forces. In 1966 they did so again along the Mongolian and river borders and added nuclear rocket forces to the calculus.[86] Strategically the conventional and nuclear military balance overwhelmingly favored the Soviets.[87] This was insufficient to deter the Chinese who enjoyed localized tactical advantages in some positions. Up until 1967 the disputes were little more than minor incidents of harassment with few if any casualties. After 1967, the border incidents became more provocative. The increasingly provocative competitive patrols confused the Soviets, confirming their impression of Chinese irrationality and unpredictability.[88]

The Czech crisis and improved surveillance capabilities prompted a Chinese reevaluation of Soviet border strength and intent.[89] After the reevaluation, the risk of war was increased by placing the People's Liberation Army in an

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[86]*Ibid.*, p. 27-28.

[87]"At the earlier date [1967], Soviet Military capabilities against the Chinese were already very considerable, but only at the extreme ends of the spectrum of war: in border skirmishing on one hand, and in general nuclear bombardment of cities on the other. In between these extremes, the Soviet Union's actual ability to wage (non-nuclear) war upon China was quite small." Edward N. Luttwak, *The Grand Strategy of the Soviet Union* (New York: St. Martin's Press, 1983), p. 96-97.

[88]The Soviets, "were astonished and greatly disturbed at what they regarded as the incomprehensible temerity of the Chinese in accepting--and in some cases, provoking, armed combat with a greatly superior opponent." Harry Gelman, *The Soviet Far East Buildup and Soviet Risk-Taking Against China*, R-2943-AF (Santa Monica, CA: Rand Corporation, 1982), p. 31.

[89]Two months after the Czech invasion, "PRC officials moved from total silence on the threat of a Soviet invasion to explicit, authoritative alarms keyed to this specific contingency. The Chinese denounced the invasion, accused the Soviets of violating their own border integrity and linked Soviet "revisionism" with invasion. Allen S. Whiting, *The Chinese Calculus of Deterrence: India and Indochina* (Ann Arbor, MI: The University of Michigan Press, 1975), p. 237-239; Bundy, *Danger and Survival*, p. 533.

aggressive forward posture which resulted in direct conflict between two nuclear powers.[90]

The Sino-Soviet clash on March 2, 1969 is evidence of Chinese willingness to incur high risk in reaction to perceived threat. Despite Soviet warnings that further intrusions would be met with force, 100 Soviet troops were ambushed by nearly 300 Chinese troops at Damasky island. Tension along the border quickly peaked with both armies going into an increased state of readiness.[91] On March 15, in a better prepared battle, border forces engaged using artillery and armor. Battle preparations were more complete, engaging forces were larger, the duration longer, and losses correspondingly higher. This indicates a certain degree of premeditation on the behalf of both sides as opposed to the unilateral Chinese ambush on March 2 and the ad hoc nature of combat in the preceding years.[92]

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[90]Whiting, *The Chinese Calculus*, p. 236.

[91]Robinson, *The Sino-Soviet Dispute*, p. 33

[92]Conflict *after the March 2 incident* was probably initiated by the Soviets as part of their plan to drive the Chinese to the bargaining table. Kissinger believes that the Soviets may have been the more probable culprit in some if not all of the other border incidents. His conclusion is derived from a detailed border map which showed that, on May 20 and June 10, clashes on the Sinkiang border were only a few miles from a Soviet railhead but hundreds of miles from a Chinese one. Kissinger, *White House Years*, p. 177, 185.

D. SOVIET AND CHINESE DETERRENCE

1. The Chinese Calculus of Deterrence

For the Chinese, the best deterrence is belligerence - military force must be employed to be credible - and if success is not at hand try again but more so.[93] The Chinese assumption that the Soviet Union was unwilling to accept the possible consequences of a war with China contributed to the outbreak of border violence. [94] A significant component of the situation is the Chinese development of nuclear weapons. While nuclear weapons were officially disdained, their awesome destructive power and ability to influence one's enemies to behave with a degree of caution was recognized.

2. The Soviet Calculus of Deterrence

The Soviet strategy was to bolster their credibility to preserve their borders up to the use of nuclear weapons.[95] The Soviets decided that they could not exhibit weakness in the face of aggression and initiated a strategy designed to convince the Chinese to come to peaceful terms or prepare for an escalated conflict. The Soviets were then faced with the choice of a quick decisive attack, possibly including nuclear weapons, or a prolonged border war in a period of increased

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[93]Whiting, *The Chinese Calculus*, p. 202.

[94]Gelman, *The Soviet Far East Buildup*, p. 34.

[95]The Soviets advertised the deployment of additional forces, cited previous examples of Russian invasions of Asia and communicated direct nuclear threats. Gelman, *The Soviet Far East Build*, pp. 34-40

European pressures.[96] Ultimately, the Soviets decided to reinforce their conventional operations with nuclear threats.

a. Nuclear Threats

Soviet threats to preempt Chinese nuclear facilities could not wholly eliminate the danger that China could respond. The Soviets believed that nuclear threats alone would be effective without conventional indications of resolve. The Soviet decision to use nuclear threats in conjunction with conventional action stems from the understanding that Maoist thought discounted the utility of nuclear weapons in combat and respected conventional-attritional war and territorial occupation.

The threats were issued from a variety of sources. In March 1969, a Chinese language broadcast by the Soviet's Radio Peace and Progress warned, "the whole world knows that the main striking force of the Soviet Armed forces is its rocket units" and that in a missile engagement the Chinese, "would certainly end up in defeat."[97] Several months later the Deputy head of the Strategic Rocket forces became the commander of the Far East Military District and *Pravda* reported that a Sino-Soviet war would involve, "lethal armaments and modern means of delivery."[98] Soviet threats were also promulgated through the West. A Soviet diplomat reportedly asked the

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[96]Robinson, *The Sino-Soviet Dispute*, pp. 66-68.

[97]Gelman, *The Soviet Far East Buildup*, p. 37n

[98]Ibid., pp. 37-38n.

State department how the United States would respond to a Soviet attack against Chinese nuclear assets. This prompted a meeting of the Washington Action Group to prepare contingency plans for a Sino-Soviet war. Later, a Central Intelligence Agency press briefing mentioned the possibility of strikes against Chinese nuclear facilities. The final nuclear threat was the publication of the probability of a Soviet Strike on Lop Nor, China's nuclear test site, in the Western press.[99]

Chinese reaction to the nuclear threats was to make frequent public reference to Soviet nuclear blackmail, missile deployments, and the possibility of surprise attack. This reflected a genuine leadership concern.[100] Chinese dissuasion efforts made no mention of their own nuclear capability and implied only that any attack would become a long-term land war.[101]

By early October 1969, the Chinese backed down. They agreed to reopen negotiations and denied they were trying to reclaim lost territories. A summit level meeting between Prime Minister's Kosygin and Chou En Lai at the Peking airport formally halted active hostilities.

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[99]Betts, *Nuclear Blackmail*, pp. 80-81; Henry Kissinger, *White House Years* (Boston: Little, Brown, 1979), pp. 183-185; Gelman, *The Soviet Far East Buildup*, p. 40.

[100]Gelman, The Soviet Far East Buildup, pp. 43.

[101]*Ibid.*, pp. 43n.

E. CONCLUSION

The stability-instability paradox, the predilection for conventional war between nuclear opponents, operated as predicted in this case. The conditions set forth for the paradox were fulfilled. Both states had a nuclear capability, available conventional forces, and a territorial enterest. The border war demonstrated the ability of nuclear-armed states to initiate direct conventional conflict if a territorial claim is at stake. Research indicates that conflict is rooted in territorial concerns far more than it is in political ideals. Violence is more likely if the territory exchanged is contiguous and regarded as home territory.[102] Geographic contiguity of territory is a prime variable for resorting to violence.[103] The material stakes in direct physical assault upon territorial integrity is far greater than an ideologically driven conflict waged in a third state.

The rough equivalence of Chinese and Soviet conventional forces theoretically should of preserved deterrence. The Chinese enjoyed superiority of numbers while the Soviets held the technological and logistical edge. Soviet nuclear and general conventional superiority did not intimidate the Chinese enough to fore go aggression. The Chinese exploited

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[102]Paul F. Diehl and Gary Goertz, "Territorial Changes and Militarized Conflict," *The Journal of Conflict Resolution*, Vol. 32, No. 1 (March 1988), p. 120.

[103]Stuart A. Bremer, "Dangerous Dyads: Conditions Affecting the Likelihood of Interstate War, 1816-1965," *The Journal of Conflict Resolution*, Vol. 26, No. 2 (June 1992), pp. 309-338.

the local balance of power when they thought they enjoyed an advantage.

This case would indicate that nuclear weapons are not a universal deterrent. China felt reasonably confident that by placing the Soviets under reciprocal threat, as diminutive as it was, it could not only avoid nuclear attack but win back some of its lost territories. The eventual Soviet seizure of the initiative and greater latitude for conventional escalation probably did more to dissuade the Chinese from pressing their claim than the nuclear threats.

What the stability-instability paradox does not do is specify a particular outcome. Either state can acquiesce under pressure, maintain the status quo, or escalate the conflict. The paradox only states that conventional conflict is possible.

V. THE SOUTH ASIAN NUCLEAR RIVALRY

A. INTRODUCTION

This chapter details the nature of conflict on the subcontinent and applies it to the stability-instability paradox. The Indo-Pakistani rivalry is a good test of the stability-instability paradox as both states have engaged in direct conflict before and after the assumed advent of a nuclear weapons capability. The Indo-Pakistani wars reflect an increased capacity to inflict decisive and lasting damage until the advent of nuclear weapons. After assuming the status of nuclear-armed states, large conventional war gave way to less provocative forms of conflict. Enduring guerrilla conflicts and threatening mobilizations have become the normal mode of conflict on the sub-continent. The paradox permits India and Pakistan to accept a level of violence that normally would be a prelude to conventional war. Nuclear weapons have created a reasonable amount of caution between the two adversaries but have left sufficient room for provocation.

B. WAR ON THE SUBCONTINENT

1. The First Kashmiri War, 1947

War on the subcontinent has a long history. The First Kashmiri war was one of the consequences of the Indo-Pakistani partition. Partition did not provide the political security

that both states required and left a violent legacy of unresolved irredentist claims and ethno-religious antagonisms.[104] When the states of India and Pakistan were inaugurated on August 15, 1947, the Princedom of Jammu and Kashmir at the northern apex of the sub-continent emerged as an "unattached political entity with an uncertain future."[105] The geographic scope of the first conflict was limited to the Jammu and Kashmir state. It was the longest but the least costly in terms of both men and material. At the conclusion of the war both sides could make a respectable claim for victory. Pakistan acquired approximately one third of the disputed state and India retained the vale of Kashmir, the most economically significant portion of the disputed territory.[106] Minimal casualties, tactical restraint, and reluctance or inability to escalate characterized the first war, however, it would do little to moderate the vehemence each felt for the other. The war officially registered and reinforced the separate territorial claims.

2. The Second Kashmiri War, 1965

The period between the first two wars was one of tension and low-level border clashes that were interpreted as

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[104]For an overview of the partition, see: Sheikh Mohammed Abdullah, "Kashmir, India and Pakistan," *Foreign Affairs*, Vol. 43, No. 3 (April 1965), pp. 528-535.

[105]Alice Thorner, "The Kashmir Conflict," *The Middle East Journal*, Vol. 3, No. 1 (January 1949), p. 31.

[106]Ganguly, *The Origins of War*, p. 18; Alice Thorner, "The Kashmir Conflict," *The Middle East Journal*, Vol. 3, No. 2 (April 1949), p. 170.

disparate and isolated instances rather than a directed policy by either state. In January 1965, the Rann of Kutch, a strategically and economically marginal land on India's northwestern border became the sight of frequent and escalatory Pakistani border incursions. Indian unwillingness to escalate the Rann incursions and poor performance in the Indo-Chinese war in 1962 gave the appearance of weak political and military determination to preserve its borders.[107] The second war expanded beyond the disputed territory into each other's mutually acknowledged domain. It was of greater intensity and scope than the first, featuring the use of airpower, massed tank battles, and artillery duels.

3. The Bangladesh War, 1971

Pakistani political mismanagement, ethnic separatism, and harsh repression in East Pakistan lead to massive refugee flows into India that precipitated the Bangladesh war. Under severe social and economic strain from the refugees, India invaded East Pakistan on the pretense of Pakistan's "indirect aggression."[108] The last of the official Indo-Pakistani wars was of greater scope and magnitude than the previous two. It introduced large-scale ground invasion, the use of naval forces, and two distinct theaters. The Pakistani strategy of

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[107]Sumit Ganguly, "Deterrence Failure Revisited: The Indo-Pakistani war of 1965," *The Journal of Strategic Studies*, Vol. 13, No. 4 (December 1990), p. 81.

[108]Richard Sisson and Leon E. Rose, *War and Secession: Pakistan, India, and the Creation of Bangladesh* (Berkeley: University of California Press, 1990), p. 190.

projecting power from West Pakistan could not prevent the isolation of its eastern territory. This last war was the most costly in terms of the men, material, and interests lost.

The Indo-Pakistani wars reflect an increasing capacity for destructive violence. Conflict between the two states exhibited a technological progression from localized guerrilla insurgencies to mechanized multi-theater operations. In terms of casualties and territory exchanged the wars show a greater ability to threaten each others vital interests. As the capacity for violence increased, the ramifications of deterrence failure became much more serious. The ability to introduce conventional forces into battle is a demonstrated fact and these wars indicate that this capability has improved over time.

4. Territorial Incentive

The principle cause of deterrence failure between India and Pakistan is the territory of Kashmir and the symbolism that is attached to it. Kashmir is a tangible symbol of divergent social visions and internal legitimacy of each state.[109] Integration of Kashmir by either state is seen as an important bulwark against further fracturing along diverse cultural lines.[110] The first two wars were fought

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[109]The founding rationale for India, Democratic Secularism, built a constitutional premise that all cultures could thrive under a democratically elected government. Pakistan committed itself to Islamic theology as the basis for statehood. Its assertion was that the Moslem minority would never achieve just representation in an India union.

[110]Sumit Ganguly, "Avoiding War in Kashmir," *Foreign Affairs*, Vol 69, No. 5 (Winter 1990-91), p. 60-61.

explicitly for the territory of Kashmir, the third only indirectly so. Both states valued Kashmir as gateway to greater influence in Central Asia and for the strategic depth it provides. The unexplored but assumed economic resources of the territory provided additional incentive to acquire the territory.

C. SOUTH ASIAN NUCLEAR PROLIFERATION AND DETERRENCE

1. Motivations

Indian concern over the Chinese nuclear test in 1964 prompted the 1974 Indian "Peaceful Nuclear Explosion." This in turn generated a Pakistani assumption of an Indian nuclear weapons capability directed primarily against them.[111] Pakistan's 1971 dismemberment and conventional inferiority provided the motivation to start its own nuclear weapons program.[112]

Each states nuclear capabilities are camouflaged behind an intricate web of covert and overt proliferation methods.[113] Both countries have gone through extensive efforts

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[111]Stephen Phillip Cohen, *The Pakistani Army*, (Berkeley: University of California Press, 1984), p. 153. Cohen asserts that while India and Pakistan influence each others nuclear programs they are not "racing." Stephen Phillip Cohen, ed., "Nuclear Neighbors" in Stephen Phillip Cohen, *Nuclear Proliferation in South Asia: The Prospects for Arms Control* (Boulder: Westview Press, 1991), p. 4-6.

[112]Pakistan's nuclear stance and approach to nonproliferation is explained in General Mirza Aslam Beg, *"Pakistan's Nuclear Program: A National Security Perspective,"* unpublished paper, no date, pp. 1-28..

[113]The Mechanics of the proliferation process are discussed extensively in: Leonard S. Spector, *Nuclear Ambitions* (Boulder: Westview Press, 1990); David Albright, "India and Pakistan's Nuclear Arms Race: Out of the Closet But

to acquire the knowledge and material to build nuclear explosive devices. Each have significant and increasing quantities of unsafeguarded fissionable materials and sophisticated tactical aircraft capable of delivering nuclear weapons. Both countries have the incipient capability to use intermediate-range ballistic missiles.[114] The creation of a deployable minimal deterrent capability is well within their capabilities.[115]

The nuclear rivalry between India and Pakistan is more complex and deliberately ambiguous than other cases of nuclear-armed rivalries. The comparison between the Indo-Pakistani and the United States-Soviet rivalry is a simplification of the dynamic at work on the Asian subcontinent.[116] Neither country admits to a nuclear weapons capability, has a publicized doctrine, or a visible command

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not in the Street," *Arms Control Today*, Vol. 23, No. 5 (June 1993), pp. 12-16.

[114]India is developing two ballistic missiles, the Prithvi, with a range of 250 km and Agni, with a range of 2,500 km. Pakistan is also developing two ballistic missiles, the Hatf I, with a range of 80 km and the Hatf II, with a range of 300 km. "Ballistic Missile Proliferation: An Emerging Threat," A Report of the Strategic Defense Advisory Committee, (October 1992), pp. 18-19.

[115]Former Indian Chief of Staff, Lieutenant General K. Sundarji openly advocates a minimum deterrent posture for India. He asserts that a finite deterrent will result in stable relationships with China and Pakistan. Rodney W. Jones, "Old Quarrels and New Realities: Security in Southern Asia after the Cold War," *The Washington Quarterly*, Vol 15, No. 1 (Winter 1992), p. 120.

[116]John J. Schulz, Riding the Nuclear Tiger: "The Search for Security in South Asia," *Arms Control Today*, Vol. 23, No. 5 (June 1993), pp. 3-8; Brahma Chellany, "South Asia's Passage to Nuclear Power," *International Security*, Vol. 16, No. 1 (Summer 1991), p. 58.

and control structure.[117] Internal disorder and fractious politics of respective governments frustrate consensus on nuclear weapons and deterrence. Despite the lack of admission of a nuclear capability there is some evidence that nuclear deterrence does operate between the two countries.

2. Nuclear Deterrence

Deterrence between India and Pakistan is culturally unique and deliberately ambiguous.[118] "Non-weaponized deterrence" is one term used to describe the type of deterrence at work.[119] It is distinctly non-western in that deterrence flows from the ability to rapidly construct nuclear weapons rather than having them deployed in a high state of readiness.[120] It operates predominantly on the psychological basis of fear and uncertainty rather than the physical basis of credibility. In that manner, it is a type of existential

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[117]For an analysis of command and control in emergent nuclear powers see: Feaver, "Command and Control in Emerging Nuclear Nations," pp. 160-187.

[118]Cohen describes the Indian and Pakistani nuclear status as, "historically unprecedented," in regards to their "designed ambiguity." Stephen Phillip Cohen, ed., "Policy Implications," in Stephen Phillip Cohen, *Nuclear Proliferation in South Asia: The Prospects for Arms Control* (Boulder: Westview Press, 1991), p. 340.

[119]George Perkovich, "A Nuclear Third Way in South Asia," *Foreign Policy*, No. 91, (Summer 1993), p. 85-104.

[120]Two papers that highlight the difference between Western and Eastern perceptions of deterrence are: K. Subrahmanyam, "*Nuclear Policy, Arms Control and Military Cooperation*," paper presented at the conference on India and the United States after the Cold War, Sponsored by the India International Centre and the Carnegie Endowment for International Peace, New Delhi, March 7-9, 1993, pp 5-7; K. Subrahmanyam, "*The Non-proliferation of Nuclear Weapons: Past, Present & Future: A South Asian Perspective on the Management of Nuclear Weapons and Strategies for Peace in the Region*," unpublished paper prepared for The American Academy of Arts and Sciences and The Albert Einstein Peace Prize Foundation. no date, pp. 1-36.

deterrence.[121] Knowledge of a weapon or a technology demonstration as a deterrent is not a notion that could take root in the west.[122] Western concepts stress ambiguity of intent rather than capability.[123]

India's 1974 explosion and Pakistan's 1992 admission of a nuclear capability has forced many experts to conclude that the Indian subcontinent has been proliferated with nuclear weapons.[124] The resultant is that India and Pakistan behave as if each has the capacity to introduce nuclear weapons in an open conflict should their vital interests be threatened.

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[121] The linkage between opaque proliferation which characterizes the region and existential deterrence can be found in: Devin T. Hagerty "The Power of Suggestion: Opaque Proliferation, Existential Deterrence, and the South Asian Nuclear Arms Competition," *Security Studies*, Vol. 2, No. 3/4 (Spring/Summer 1993) pp. 264-270.

[122] Even with the diverging notions of the requirements of deterrence in the West none disagree on the necessity of a deployable and secure second strike force. In stark contrast, "an Indian strategic analyst, Dr Manoj Joshi, has developed the thesis that technology demonstration can be projected as a deterrent." K. Subrahmanyam, "Nuclear Theology," *Economic Times*, 13 July 1993.

[123] Some measure of credibility is required for deterrence to work. This is provided by Western political and academic processes. Pakistan's unwillingness to risk a nuclear test means that it is, "compelled to create crisis situations in which it could highlight its nuclear capability and thereby claim nuclear equality with India." K. Subrahmanyan, "Nuclear Policy, Arms Control and Military Cooperation," paper presented at the conference on India and the United States after the Cold War, sponsored by the Indian International Centre and the Carnegie Endowment for International Peace, New Delhi, March 7-9, 1993, pp. 14.

[124] Pakistan's nuclear admission without retraction came in 1992. R. Jeffrey Smith, "Pakistan Can build One Nuclear Device, Foreign Official Says," *Washington Post*, February 7, 1992 p. A18; Paul Lewis, "Pakistan Tells of its A-Bomb Capacity," *New York Times*, February 8 1992, p. 5.

D. MODERN CONFLICT ON THE SUBCONTINENT

1. The Siachen Glacier

The Siachen glacier conflict began because of vague borders between India and Pakistan.[125] Battle was joined on June of 1984 when patrols inadvertently crossed each others paths. Violence on the glacier peaked in 1987 when Indian forces stood off three Pakistani brigade strength attacks at the Bilafond La mountain pass. Meetings between heads of state have failed to find a way out of the sporadic episodes of low-level border violence. Violence on the glacier has corresponded with conflict and political tension in more hospitable climates. Civil unrest in Kashmir in 1990 derailed demilitarization plans for the glacier. While not significant in terms of interests at stake, Siachen represents an unwillingness or inability to disengage.[126] In effect, Siachen is a contest of will in which the determination of each state is continuously evaluated. Disengagement from this relatively insignificant battlefield, no matter how desirable, may inadvertently signal a willingness to concede on more important issues.

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[125]The origins of the Siachen glacier war and efforts to terminate it can be found in: "Cold War Ends," *The Economist*, Vol. 32, No. 7612, 22 July 1989, pp. 31-32.

[126]Ending the ongoing Siachen conflict is viewed by the United States as a symbolic step towards normalizing relations between Pakistan and India. Siachen is viewed in the West as a potential catalyst for greater conflict. "The Subcontinent's Own Cold War," *The Economist*, Vol 329, No. 7843, 25 December 1993, pp 43-44.

2. The 1986-87 Brass Tacks Exercise

In late 1986 India staged one of the largest military exercises in its history. Held in the Rajasthan desert near the border of the Pakistani province of Sind, the exercise was theoretically poised to strike into the heart of Pakistan.[127] Verbal assurances that India harbored no hostile intent were inadequate and each state found itself escalating troop placements.[128] Officials, "expressed alarm that an accidental shot by either side could lead to full-scale fighting."[129]

The Pakistani counter to the Brass Tacks exercise, was it's Zarb-e-Momin (Punch of the Believer) exercise. It was designed to carry a "dissuasive" message to India and test a new military doctrine called "defensive-offensive war."[130] The

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[127] For an Indian perspective on the Brass Tacks exercise, see: "Game of Brinkmanship," *India Today*, Vol. 12, No. 3, 15 February 1987, pp. 8-14.

[128] Cohen has suggested that one of the objectives of Brass Tacks was to frighten Pakistan. He also warns of the political and military detriments of such large scale exercises. Stephen Phillip Cohen, "Security, Peace and Stability in South Asia: An American Perspective," *Asian Affairs*, Vol. 15, No 1 (Spring 1988), p. 45.

[129] Richard Ned Lebow and Janice Gross Stein, "Beyond Deterrence," *Journal of Social Issues*, Vol. 43, No. 4, (Winter 1987), p. 51.

[130] "According to the Pakistani army, for the first time it feels well equipped to defend national territory adequately and carry the war into enemy areas. The army feels confident that it is in a position not to wait for India to attack but to launch an offensive as soon as the governments go ahead is received." Salamat Ali, "The Counter-Punch," *Far Eastern Economic Review*, Vol. 146, No. 43, 26 October 1989, pp. 25. Cohen stated in an interview that both nations had moved to a strategy of "offensive defense." Shekar Gupta and Kanwar Sandhu, "Defense: Are We Prepared?" *India Today*, 30 June 1990, pp. 31. Peter Lavoy rejects the notion of offensive-defense on the subcontinent for three reasons: Neither state has exposed allies or foreign possessions, territorial ambitions beyond Kashmir, or expansionist political aims. Peter R. Lavoy, "Civil-Military Relations, Strategic Conduct, and Stability of Nuclear Deterrence in South Asia," paper prepared for The Project on Civil-Military Relations and Nuclear Weapons, Center for International Security and Arms

exercise integrated Pakistan's Air Force and featured river crossings to simulate breaching India's network of defensive canals.

3. The 1990 Kashmir Crisis

There is speculation that India and Pakistan nearly brought nuclear force to bear in the 1990 Kashmir Crisis.[131] In this crisis, resurgent Kashmiri separatist groups destabilized relations between Islamabad and New Delhi.[132] Both governments increased their stakes in the violence through mobilizations and political rhetoric. India accused Pakistan of providing training and heavy weapons to the Kashmiri separatists. The Indian Prime Minister stated that Pakistan was trying to gain Indian Kashmir without resorting to war and that proof of Pakistani complicity in abetting the

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Control, Stanford University, January 1994 pp. 16-17. More extensive development of the offensive defensive war concept can be found in, Jack Snyder, *Myths of Empire: Domestic Politics and International Ambition* (Ithaca: Cornell University Press, 1991); Snyder, *The Ideology of the Offensive* (Ithaca: Cornell University Press, 1984); and Stephen Van Evera, "The Cult of the Offensive and the Origins of the First World War," *International Security*, Vol. 9, No. 1 (Summer 1984), pp. 58-107.

[131]Seymour M. Hersh, "On the Nuclear Edge," *New Yorker*, March 29, 1993, pp. 56-73; "Bush Sending 3 Aides to Assist on Kashmir," *New York Times*, 16 May 1990, Sec. A, pp. 9; "U.S. Urges Pakistan to Settle Feud with India over Kashmir," *New York Times*, 21 May 1990, Sec. A, pp. 7.

[132]For a historical perspective on the Kashmir conflict see: Ganguly "Avoiding War," pp. 57-73. "KASHMIR is at war with India. It is a declared war with open moral, financial, and logistical support from Pakistan." Inderjit Badhwar, "Perilous Turn" *India Today*, Vol. 1, No. 2, 30 April 1990, pp. 10-16. "Pakistanis are pleased that unlike 1965, when Pakistan first tried and failed to foment an uprising in Kashmir, the current uprising is purely indigenous." Jammu and Kashmir: The View from Pakistan, *Jane's Defence Weekly*, Vol. 13, No. 7, 17 February 1990, p. 299.

insurgency existed.[133] The intensity of the uprising and the possibility of direct Pakistani military intervention caused the Indians to deploy three divisions to Kashmir and one to the Punjab.[134]

Pakistan issued its own inflammatory statements and pledged ideological fealty to the insurgency. It accused India of massing a strike force 80 kilometers from the border in Rajasthan desert for the purpose of destroying Kashmiri "freedom fighter" camps.[135] Islamabad reasserted its moral claim to the region and devised a political-military strategy so that they would not drift inadvertently into war.[136]

Nuclear signalling in the 1990 crisis was subtle. Sources speculate that the national intelligence assets of the Soviet Union and United States witnessed the nuclear preparations of India and Pakistan and transferred that

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[133]For an Indian perspective on the 1990 Kashmir crisis, see: "War Games," *India Today*, Vol. 15, No. 4, 28 February 1990, pp. 14-21; "Defence: Are We Prepared?" *India Today*, Vol. 1 No. 6, 30 June 1990, pp. 30-38.

[134]In an Interview with V. P. Singh, the Indian Prime Minister acknowledged the change from normal routine during the crisis by stating, " Pakistani forces have moved to the border. All their radars are operational. They've moved them to the Front. Their forward air bases are all operational, which is only done at time of war." Interview/V. P. Singh, *Far Eastern Economic Review*, Vol 148, No. 20, 17 March 1990, pp. 10.

[135]James Clad and Salamat Ali, "Will Words Lead to War?" *Far Eastern Economic Review*, Vol. 48, No. 7, 26 April 1990, p. 11.

[136]The possibility exists that much of the aid rendered to Muslim militants in Kashmir and Sikh separatists in the Punjab is not supplied through the central Pakistani government but through Nawaz Sharif, the Chief Minister of Pakistan's Punjab Province and political rival to Mrs Bhutto. P. Lewis Young, "The Threat of War over Kashmir," *Asian Defence Journal* (August 1990), p. 15. For a Pakistani account of the war in Kashmir and expressions of military confidence see: "In Torn Kashmir, Frontier Is Aflame Once More," *New York Times*, 16 November 1990, Sec. A, p. 4.

information to the adversaries.[137] The Hindu fundamentalist party, a significant and the most confrontational portion of India's coalition government urged strikes into Pakistani controlled Kashmir and overt nuclear weaponization. Raja Ramanna, the father of the Indian atomic bomb, was appointed to the position of Minister of State for Defense emphasized the higher priority given to Indian nuclear programs.[138]

The Kashmir crisis ended when both sides were satisfied as to the defensive preparations of their respective mobilizations and agreed to phased withdrawals of forces from the region.[139]

4. Low-level War

"India and Pakistan regularly engage in Mid- to Low-intensity warfare and frequently find themselves in tense

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[137] Hersh cites a U.S. intelligence analyst who asserts that the Pakistanis had nuclear-armed F-16's prepared to launch. Hersh, "On the Nuclear Edge," p. 65. The German magazine *Der Spiegel* published a report in July 1989 that Pakistan was wind tunnel testing nuclear bomb casings for their F-16's., see: Leonard S. Spector, *Nuclear Ambitions,* p. 106. "The Sunday Times (London) reported that the Soviet Union had warned the United States of India's readying of its nuclear arsenal." Young, "The Threat of War," p. 14.

[138] "Echoes of War," *The Economist*, Vol. 314, No. 7639, 27 January 1990, p. 38.

[139] Deputy National Security Advisor Robert Gates suggests that his visit to New Delhi and Islamabad helped to defuse the crisis, see: Hersh, "On the Nuclear Edge," pp. 56-73. Indian accounts of the events differ, in that the crisis was averted by U.S. embassy officials who observed the defensive preparations of the Indian army and relayed that information to Islamabad prior to Gates involvement, see: General V. N. Sharma, "Its all Bluff and Bluster," *Economic Times*, 18 May 1993, p. 13 and K. Subrahmanyam, "Valuable Inferences," *Economic Times*, 18 May 1993, p. 13. A Pakistani TV broadcast of a joint Indo-Pakistani agreement to cut troops along the borders emphasizes the role of reassurance in crisis diffusion, "Pakistan Reports agreement with India on Cutting Troops," *New York Times*, 23 December 1990, Sec. I, p. 3.

circumstances."[140] Internationally supported terrorists, their increasing sophistication, and elusiveness provides a unique mode of deterrence failure between opposing nuclear powers. Terrorists in both countries have taken on highly visible targets and exercised considerable autonomy.[141] Cultural animosity provides another unique trigger for direct military conflict. Anti-Muslim activities, which have achieved political respectability in the Hindu fundamentalist party, act as a catalyst for conflict.[142]

The mutual fear of big wars has, in fact, spawned a spate of smaller ones. Low-level violence is an accepted feature on the subcontinent. Violence over Kashmir is equal or greater than at any other point in their history. Pakistan and India have realized that it is less costly to engage in a subversive and largely clandestine war than to engage in

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[140]Peter R. Lavoy, "Civil-Military Relations, Strategic Conduct, and Stability of Nuclear Deterrence in South Asia," paper prepared for The Project on Civil-Military Relations and Nuclear Weapons, Center for International Security and Arms Control, Stanford University, (January 1994), pp. 21.

[141]Paul Levanthal and Brahma Chellaney, "Nuclear Terrorism: Threat, Perception, and Response in South Asia," *Terrorism*, Vol. 11, No. 6, (1988), p. 456.

[142]"The upsurge of Hindu-Muslim animosity throughout South Asia following the destruction of the Ayoda mosque has heightened the danger of war between India and Pakistan that could escalate to the nuclear level." Selig S. Harrison and Geoffrey Kemp, *India and America after the Cold War*, Report of the Carnegie Endowment Study Group on U.S.-Indian relations in a Changing International environment (Washington D. C.: Carnegie Endowment for International Peace, 1993), p. 2. For more information on Indian internal politics, see James C. Clad, "India: Crisis and transition," *The Washington Quarterly*, Vol. 15, No.1 (Winter 1992), pp. 91-104).

direct military action.[143] Despite the mode of warfare, the objectives of the hypothetical big war, the incorporation of Kashmir, and the actual small war remain the same. The advent of nuclear deterrence on the subcontinent has not provided a rationale for disengagement or compromise. Nuclear weapons have created a comfortable retreat and each party has settled into a tolerable level of violence.

E. CONCLUSION

None of the post-1971 war events erupted into open conflict. While this indicates a reasonable degree of prudence between states it also illustrates how internal events can reach dangerous levels of provocation over a territorial interest. It would appear that India and Pakistan have learned to step back from large wars safely and routinely and to accommodate themselves to a level of violence that would have been intolerable prior to a nuclear threat. The first Kashmiri war began with 2000 guerrilla fighters crossing the border with light arms. India faces at least a threat of equal magnitude from Pakistani supported insurgents today. The mutual acceptance of this level of violence is evidence of the stability-instability paradox at work. South Asian nuclear deterrence may have reduced the risk of bold and

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[143]"The Case Against War," p. 34. "Pakistan has found that fighting a proxy war through insurgents is cheaper, safer and more effective than a real war." "Kashmir's Proxy War," *The Economist*, Vol. 324, No. 7774, 29 August 1992, p. 29.

decisive conventional action but has little effect on less aggressive options. In this respect India and Pakistan have diverged from the precedent set by the Soviet Union and China which chose direct and overt conventional conflict as their mode of settlement. While these lesser strategies may be more viable, the stability-instability paradox, does not unequivocally preclude the use of bold and aggressive action. Decisive action under the cover of nuclear weapons is not inconceivable and is of some concern to strategists.

> Some Pakistani and many Indian strategists argue that such a Pakistani bomb, besides neutralizing an assumed Indian nuclear force, would provide the umbrella under which Pakistan could reopen the Kashmir issue. A Pakistani nuclear capability would paralyze not only the Indian nuclear decision but also Indian conventional forces, and a bold Pakistani strike to liberate Kashmir might go unchallenged if Indian leadership was indecisive.[144]

India and Pakistan find themselves in the discouraging position of being unable to make a lasting peace or being able to wage a decisive war. Both states are committed to achieving ends the other is sworn to prevent and the result is incipient crisis. Nonproliferation and deterrence logic can

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[144]Stephen P. Cohen, *The Pakistan Army*, (Berkeley: The University of California Press, 1984), p. 153. Despite this statement, Cohen asserts that Pakistani nuclear weapons are not intended as covers or fallbacks for aggressive action but rather as, "protective insurance, the legitimate response of a relatively weak power." *Perception, Influence and Weapons Proliferation in South Asia*, report prepared for the State Department, Bureau of Intelligence and Research (#1722-920184, August 1978), p. 24. The possibility of using nuclear weapons to re-energize the Kashmir issue has been communicated in India. Cohen's statement has been quoted in K. Subrahmanyam, "A Bomb We Cannot Ignore," *Times of India*, Sunday Review, 18 March 1984.

both be comfortably adapted to the Indo-Pakistani rivalry but neither captures the day to day reality of relations between the two states. They are of little use in describing routine operations between states which exist on the verge of crisis. With a nuclear backstop guaranteeing ultimate safety neither nation has a compelling reason for compromise.[145] Neither country can retreat from the level of violence that is a permanent feature of their existence for fear of signaling weakness nor can they move in a decisive military fashion to end the bloodshed.

[145]Pakistan cannot, "credibly threaten to use nuclear weapons in Kashmir itself or even in the neighboring Punjab to pursue its irredentist claim to the state. By the same token, India can ill afford to threaten Pakistan with nuclear weapons to deter if from its present course of action in Kashmir." Sumit Ganguly, "South Asia after the Cold War," *The Washington Quarterly*, Vol. 15, No. 4 (Autumn 1992), p. 177.

VI. THE PROMETHEAN PARADOX

According to Greek myth, the Titan Prometheus stole fire from the gods and gave it mankind. His act at once liberated man and cursed it -and so it is with nuclear weapons. Nuclear weapons may have freed their possessors from the fear of the cataclysmic war only to be condemned to a plethora of small ones.

This thesis has examined one aspect of the argument that nuclear proliferation enhances strategic stability by breeding caution among the possessors of nuclear weapons. It has presented the existing literature on the logic of deterrence, the logic of nonproliferation, and the stability-instability paradox. The cases examined established the conditions that result in small conventional wars between nuclear-armed adversaries. They are: a strategic nuclear stalemate, a territorial interest, and employable conventional forces.

Strategic nuclear stalemate implies several beliefs among the actors. Both sides must believe they cannot afford a full-scale war and that the other side believes the same. The territorial interest implies that the interest at stake is sufficiently important for both sides to fight over but not enough to risk mutual nuclear suicide. Interests were revealed to be a critical factor in the decision to resort to

war. The final condition is that states must have employable conventional forces at their disposal.

In the case of the United States versus the Soviet Union, conflict was primarily ideologically based. This case demonstrates that an important factor in the operation of the stability-instability paradox is a territorial interest. The United States and the Soviet Union never engaged in a contest of wills over contiguous piece of territory. In each of the crises in the case the injection of credible conventional forces into the arena of conflict was problematic at best. While nuclear weapons played a role in the decision-making processes, nuclear strategy or nuclear superiority had little bearing on whether a challenge was issued. The level of provocation became greater as nuclear capabilities achieved congruence. This cases most important contribution is that it demonstrates when nuclear-armed adversaries will not resort to direct conventional violence.

The Soviet Union versus the People's Republic of China was different in that the interest at stake was primarily peripheral territory. The Chinese aggressors were emboldened by their developing nuclear capability. While the Chinese were vastly inferior in the amount of nuclear force they could bring to bear against the Soviets, the Soviets did not have a guaranteed preemptive capability. Both sides had conventional forces in place and mechanisms for rapid reinforcement.

India versus Pakistan is a particularly good test for the

paradox. The States are relatively recent additions to the international system as sovereign actors and have an extensive history of conflict. The contested interest, like the Soviet Union versus China, is primarily territorial. Their ability to bring conventional force to bear is evidenced by their history of warfare and low-level conflict. Both countries are unique from the other case studies in that they have an ambiguous nuclear capability. In a manner, the Indians and Pakistanis have achieved congruence in nuclear capabilities almost instantaneously. While neither country admits to a nuclear weapons capability, they have both issued nuclear threats during periods of extreme stress. Both India and Pakistan behave as if they could each introduce nuclear weapons in short order should war break out. Nuclear deterrence can be said to be working on the sub-continent.

Another unique feature of violence between India and Pakistan that diverges from the Soviet and Chinese case is the patterns of violence. The pattern established by the Indo-Pakistani wars demonstrates an increasing capability to inflict damage on each other. Previous wars and more recent crises indicate that conventional mobilizations are not difficult. Exercises involving tens of thousands of men have occurred. While conventional war is possible, subversive guerilla wars and geographically isolated conflict have developed into the most prevalent form of violence. These lesser modes of violence may be exactly the sort of smaller

wars that Waltz postulated. It is a reasonable supposition to suggest nuclear weapons have moved conflict between India and Pakistan to the remote geographic regions such as the Siachen glacier and the lower reaches of provocation, such as clandestine subversive wars. This is roughly analogous to the proxy wars fought by the United States and the Soviet Union.

The cases suggest a possible rational for the use of conventional force between nuclear-armed adversaries. Under conditions of mutual vulnerability nuclear weapons may facilitate the decision to resort to violence by providing a rational limitation to the level of escalation that states are willing to risk. With a nuclear backstop guaranteeing absolute security, employable conventional forces, and a territorial interest at stake, nuclear-armed powers can engage in direct conventional conflict of one form or the other.

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