LIMITED NUCLEAR WARFARE

Spring 1982

Robert B. Barrix
under Direction of
Dr. Paul Hamori
TABLE OF CONTENTS

I. The Basic Concepts on the Theory of War
   A. War is an Extension of Political Action
   B. The Concept of the Economy of Force
   C. The Limitation of War to Political Objectives

II. The Basic Political Levels of Action in a Limited War
   A. Overall Foreign Policy
   B. Political-Effects Policy
   C. Battelfield Political Policy

III. The Problems of Escalation in a Limited War
   A. The Problem of Expansion
   B. The Problem of Explosion

IV. The Role of the Strategic Balance
   A. The Problem of Imbalance
   B. The U.S. "Triad" Concept

V. Nuclear Weapons in Limited War
   A. The Definition of a Tactical Nuclear Weapon
   B. The Gains and Losses of Using Tactical Nuclear Weapons
      1. Battlefield Arguments
      2. Political Considerations

VI. Limited Use of Nuclear Weapons in a General War
   A. The Official Soviet Doctrine
   B. Selective Nuclear Targeting

VII. Conclusion
In the postwar era, the interests of the United States and the Soviet Union, either directly or by proxy, have clashed in many areas of the world. In Southeast Asia, the Middle East or in Europe, wherever violence has erupted as a result of a political dispute, both superpowers have refrained from using the maximum force at their disposal to settle the dispute. The refusal to use maximum force, through the introduction of nuclear weapons, seems to denote the belief held by the leadership of both nations that such a move would subject the homeland of their own nation to severe destruction or complete obliteration. This knowledge has led both superpowers to practice a policy of restraint in the use of force to settle political disputes.

In the United States, as more areas of interest to the national security of the United States have become threatened by communist power, military and political leaders who see a grave weakness in conventional force deterrence have announced that this country may have to resort to limited nuclear weaponry in order to halt aggression. "In 1974, Secretary of Defense Schlesinger announced a major reorientation of U.S. strategic nuclear targeting policy . . ." This policy was aimed at providing plans for deterring or responding to a Soviet attack below the level of a total nuclear war. This rethinking of U.S. nuclear doctrine, coupled with the belief that current conventional force levels are inadequate to sufficiently deter Soviet aggression, leads many observers to conclude that a limited nuclear exchange would not be unthinkable in the future.

This paper deals with the subject of limited nuclear warfare. In any subject as difficult and interrelated as the concept of war, it is necessary
to reflect on the characteristics of the whole before discussing the differing aspects of specific areas in the concept itself. Since the present power structure of the world shows that only the two superpowers have the capability to wage large-scale nuclear war, much of this paper will center on the policies and actions of the Soviet Union and the United States.

When Karl Von Clausewitz wrote his work *On War*, he compared warfare with an enlarged version of a duel. Clausewitz stated that in a duel each individual is seeking, through the use of force, to impose his will on the other. Through this analogy Clausewitz stated:

> War is thus an act of force to compel our adversary to do our will... physical force is the means; to impose our will is the object.2

When war occurs between nations, it is the result of conflicting political objectives. When one nation wishes to impose its will on another, the ability of that nation to impose its will is determined by that nation's capability to use force. Thus, Clausewitz was able to further state:

> War is therefore a continuation of policy by other means. It is not merely a political act but a real political instrument, a continuation of political intercourse, a conduct of political intercourse by other means.3

Thus, the decision to wage war on an enemy is a result of a political decision.

Clausewitz also noted that the use of force is, in theory, unlimited; yet the use of unlimited force is often dependent upon the political influences which set it in motion. The relationship between force and the political object which set it into motion is directly proportionate to the importance
placed on that political object. This relationship of force to political objectives is known today as the concept of economy of force. It is important to note that the key to the limitation of force is in the political objectives of the nation and not with the availability of force. As previously stated, the United States and the Soviet Union have an unlimited amount of force at their disposal, yet in all the clashes of interest that have occurred in the postwar era they have elected to limit the use of this vast force. This is due to the fact that by using unlimited force the two superpowers would expose themselves to a greater risk than the value of the political objectives which could be gained. With these concepts in mind, one can state that limited warfare implies the refusal to use all the force available to a nation in order to pursue its political objectives.

The concept of limited warfare demands that in order for a war to remain limited, there must exist some incentive to limit a nation's political ambitions. The possession of thermonuclear weapons by both superpowers which could devastate the homelands of any combatant provides this incentive. It is indeed this concept which is the basis of the theory of deterrence. The idea that the Soviet Union and the United States both have the capability to destroy each other through the possession of nuclear weapons has led many observers to speculate that war will become obsolete. Though the existence of nuclear weapons greatly diminishes the possibility of a total war in which the political objective would be to totally subjugate another nation, the mere existence of such weapons cannot guarantee that war will not happen. A review of the conflicts of the postwar era can easily demonstrate this fact.
Politically, the world is divided into different spheres of influence dominated by the Soviet Union and the United States. In each of these spheres both superpowers have established a system of economic and military alliances in order to create an atmosphere favorable to the political goals of each nation. The basic foreign policy objectives of the Soviet Union and the United States are in direct conflict with each other. The Soviet Union has established itself on a course to increase its influence and that of communism throughout the world. Morton Halperin has stated that "the Sino-Soviet bloc has demonstrated an understanding of the techniques of various forms of local warfare (including guerilla warfare) as well as a willingness to exploit the use and the threat of force to advance its international objectives." In order to stem the growth of Soviet influence, the United States must be able to deal with this willingness to exert force in local wars. This implies that the United States must be willing to use force in limited war situations in order to meet the Soviet challenge.

In dealing with a limited local war Morton Halperin suggests that the Soviet Union and the United States have "... three levels of foreign-policy objectives that will influence their conduct in a local war." These basic foreign-policy objectives can be divided into basic objectives: political-effects objectives, and battlefield objectives.

The first level of foreign policy objectives deals with the basic objectives of the two superpowers. As has been stated, the Soviet Union is on a course of expansion where the United States is dedicated to a course of containment. If this were the only determinant of policy both the Soviet
Union and the United States would be justified in applying as much pressure as necessary in achieving their political objectives in a local war.

The second level of foreign-policy objectives that Halperin deals with is the political-effects objectives. Here, Halperin states that the reason major powers commit themselves to local war situations is not concerned with the spoils of a military victory but the effects that entering into the situation have politically. In reality, Halperin is stating that the superpowers often fight local wars over the principle issue and not the actual incident which triggered the war. Secondly, great powers become involved in limited local war efforts to transmit a political message either to their principal enemy or to other countries of the region. An excellent example of such a policy would be the United States' current interest in El Salvador. Here the diplomatic message is that the United States will fight any communist aggression in Central America and that the friendly governments of Central America can expect help from the United States in dealing with communist pressure.

The third level of foreign-policy objectives is the battlefield objective. In this level of objectives each side in a limited local war situation will have clear-cut objectives regarding the ending of hostilities. During the Korean War the battlefield objective of the North Koreans was to control the entire Korean peninsula, the battlefield objective of the United Nations forces was to repel the enemy across the border. As the situation of battle changes, so does the basis of the battlefield objective. In the Korean War, after the Inchon landings and the subsequent collapse of the North
Korean army, the battlefield objective of the U.N. forces became involved with offense and the North Koreans became interested in defense.

It is at this level of political objectives that the problem of escalation might occur. A war might expand the scope of violence because one side might determine that it cannot win its battlefield objectives without such an expansion. In the Vietnam War, the United States increased the level of violence by bombing North Vietnamese cities in an effort to keep supplies from reaching North Vietnamese troops. Here, the battlefield objectives of the United States were not being met and the perceived threat of enemy supplies was the cause of concern. Another point of danger lies in escalation due to explosion. Here, the fear is that miscalculation or failure to clearly communicate one's political objectives in a limited local conflict might lead to an explosion of the local war into a greater general or central war where the homelands of the opposing superpowers would be threatened. It is in this level of foreign-policy objectives that the greatest risk of a breakdown of the limited war concept can occur.

Inherent in fighting a local war is the risk of central or general war. The Soviet Union and the United States during the postwar era have been careful to avoid a general war. Unavoidably, a local war always increases the risk of general war through the methods of escalation previously mentioned or through a deliberate move on the part of a losing power who feels that defeat in a local war is unacceptable. This built-in risk factor of a general war developing into a central war often will direct how superpowers
conduct a local war. This risk of general war is often thought of in terms of strategic balance.8

Central to the issue of the strategic balance is the role that nuclear weapons play. The strategic balance refers to the perceived ability of the Soviet Union or the United States to wage a central war against each other. The risk of general war is greatest when there is a perceived imbalance which might tempt one power to strike first without risking excessive damage to its homeland. Based on a defense report issued by the non-partisan Congressional Research Service of the Library of Congress, the current strategic balance lies slightly in favor of the Soviet Union in terms of throweight (the amount of megatonnage deliverable on target) and in numbers. Though the balance currently favors the Soviet Union, the amount is too slight to achieve a complete measure of superiority. In Donald Snow's work, *Nuclear Strategy in a Dynamic World*, the author states that what makes the Soviet Union and the United States superpowers is their ability to receive a strategic first strike and still have the capability to retaliate with massive force. Due to the sheer amount of destructive force controlled by both superpowers, serious students of defense strategy feel that the balance of power rests no longer with numbers of nuclear warheads but with the delivery systems which will put a warhead on target. The United States strategic nuclear arsenal is composed of the "Triad" system of offensive nuclear capabilities, including long-range bombers, land-based missiles and missile-firing submarines. This system is designed to withstand a crippling presumptive strike on one or two legs of the "Triad" and still deliver a massive blow to a potential enemy. The Soviet
The nuclear arsenal is largely dependent upon land-based missile systems and a very potent missile-firing submarine fleet.

The use of tactical nuclear weapons has been advocated by defense analysts in a limited local war situation in Western Europe. The primary argument in favor of the use of these weapons is that it would offset the great non-nuclear disadvantage of the United States as compared to the Soviet Union. The conventional force structure of the United States has always favored technology over manpower; the Soviet Union tends to favor the exact opposite. Prior to continuing the discussion on the use of tactical nuclear weapons in a limited local war a note should be made on exactly what a tactical nuclear weapon is.

A tactical nuclear weapon, as the name implies, is a nuclear weapon and thus capable of great destruction. The major distinction between a tactical and strategic nuclear weapon depends upon the delivery system and the target. Indeed most tactical nuclear weapons are capable of greater destruction than either the Hiroshima or Nagasaki bombs of 1945. A tactical nuclear weapon is designed for use in close combat, thus, most weapons are of the ground-burst type as compared to the more destructive air-burst deployment. Secondly, tactical nuclear weapons can be deployed by the conventional forces on hand and require very little special preparation or coordination as a massive preemptive missile assault would necessitate. Tactical nuclear weapons are also often limited by the range of the delivery system used to employ these weapons, thus, they do not endanger an enemy's homeland. Finally, and many argue most importantly, tactical nuclear weapons are designed to be used
against military targets in order to achieve a battlefield advantage, not against strategic targets such as industrial or population centers.

In 1954, following an article published by Frank Sackton which stated that the Western Alliance would always gain from the use of tactical nuclear weapons, the NATO council committed itself to the use of tactical nuclear weapons in the defense of Europe. From this period to now, serious students of defense policy have debated the gains and costs of using tactical nuclear weapons in a limited war. One of the major arguments for use of tactical nuclear weapons lies in the question of battlefield advantage.

The major gain in using tactical nuclear weapons lies in offsetting the numerical advantage of Soviet conventional forces over United States forces. The Soviet Union now has more than twice the number of military personnel on active duty than the United States. Most strategists, including Henry Kissinger in his work in 1957, argue that in order to fill the gaps of our conventional deterrence, the United States must be willing to use nuclear weapons in defense of Western Europe. Though the use of nuclear weapons might be able to halt a Soviet drive into Western Europe, the possession of limited nuclear weaponry by the Soviets gives their military capability an equal ability to deliver a devastating attack.

The costs of using nuclear weapons in a limited war seem to be equal to the gains. Undoubtedly, a nuclear battlefield in which opposing armies would use such weapons would result in enormous casualties. Secondly, the United States, due to its superior resource position, could afford a more expensive non-nuclear limited war than the Soviet Union. Another cost of nuclear
weapons in a battlefield would be the distinct loss of the advantage of the defensive position. Current military strategy states that defensive warfare gives an advantage over three-to-one over an equally-sized attacking force. Since on a nuclear battlefield losses of forces will be more equal, dependent upon the dispersion of one's force, the defensive advantage might be lost.

Among the gains and losses on the battlefield side of the equation, the political problems faced by using tactical nuclear weapons in a limited war are also great. Halperin states that "... the general opposition of many people to the use of nuclear weapons, the feeling that they are somehow different or immoral, would bring about great shock and disillusionment on the part of neutrals, allies and Americans themselves if nuclear weapons were used."13 The general rise in public support for the non-nuclear movement in Europe and the United States gives support to Halperin's assessment. The amount of damage done by nuclear weapons would also inhibit many nations from seeking United States support in the face of Soviet pressure. The use of tactical nuclear weapons by the United States might also play into the hands of Soviet propagandists who might lure potentially neutral states into the pro-Soviet sphere. Though the use of tactical nuclear weapons might be a political debit, the possession and threat of use can be political assets. By threatening to use tactical nuclear weapons in a limited war situation, the United States could reassure allies by the threat and possibly deter further Soviet moves which could lead to escalation of a limited conflict into a general nuclear war.

The greatest political risk of the use of tactical nuclear weapons in a
limited war situation is the fear of escalation. As previously stated, escalation can occur through expansion or explosion. In an expansion one can easily see how, once the nuclear barrier has been broken, the Soviet and United States forces could easily increase the use of nuclear weapons to the level of a general war. In the case of an explosion a limited war might degenerate into a general war through the use of nuclear weapons by an enemy overreacting to the situation. Since nuclear weapons have never been used against an enemy with nuclear capability, it is difficult to know what kind of reaction use of tactical nuclear weaponry might bring about. The only way an expansion might be avoided in a limited war situation would be if clear and direct notice of one's intentions are communicated to the enemy. By communicating his intentions to a potential enemy, one might reduce the risk of an inadvertent general war. However, such an action could not guarantee the enemy's reaction.

Since much of the literature deals with fighting a limited nuclear war and avoiding expansion into general war, one wonders if it is possible to limit nuclear weapons in a general war. Because of the experience of the devastation of World War II, many analysts feel that the Soviet concept of unacceptable damage to the homeland may be far from the American definition. This leads many students of defense policy to believe that strategies of damage limitation (the limited use of thermonuclear weapons in a general war), might be acceptable to Soviet strategists. Soviet military literature tends to disagree with this concept. General Talenskii of the Red Army exemplifies this view in his writings:
History has taught the Soviet Union to depend mainly on itself in ensuring its security. The Soviet people will hardly believe that a potential aggressor will use humane methods of warfare, and will strike only at military objectives.

Though officially stated Soviet doctrine does not support this view, damage limitation strategies in a general war are possible. Through both limiting the quantity of nuclear attacks or the type of targets attacked, limited use of nuclear weapons could be achieved. In order to effect a damage limitation strategy, both superpowers would have to come to some form of agreement in the use of nuclear weapons. Logically, as in limited nuclear warfare, clear communication of one's intentions to an enemy is a key to attaining such agreement and avoiding an all-out preemptive nuclear strike.

Of all the damage limitation strategies, the most sound plan calls for selective nuclear strikes. Depending upon the war aims of the nations involved, both sides might limit nuclear strikes to only military targets or high density population centers. In such a limited nuclear response in a general war, perhaps only large naval and air installations would be attacked in the United States. The immediate response might call for selective targeting of command and control centers within the Soviet Union. In such a war, one can envision a trade-off of targets until one superpower either surrenders or escalates to full nuclear war.

The political benefits of such a strategy allow for a further escalation of force in a controlled manner without fear of complete destruction. In such a manner, the superpowers might be able to display their determination not to surrender and thus facilitate a peaceful solution.
A second factor favoring the limited use of nuclear weapons in a general war revolves around the basic idea of damage limitation. By restricting nuclear strikes to military targets and using the ground-burst method of deployment of nuclear weapons, political leaders might restrict civilian casualties to a minimum. This idea, unfortunately, does not seriously consider the problem of radiation fallout and does not take into account that many military targets are located in high-density population centers. Furthermore, no military or political figure is willing to define what number constitutes a minimal civilian casualty rate.

The major problem confronting the theory of damage limitation in a general war is the fact that a large nuclear weapon has never been used. There are no scientific studies regarding the use of large nuclear weapons of one megaton or more on human life. Many scientists theorize that the explosion of a large thermonuclear device might produce electromagnetic pulses (EMP) which would totally destroy all communications within the continental United States. One could easily envision Soviet or American leaders, after an initial limited nuclear exchange, scrambling to launch all their weapon systems upon discovery that they are losing communications with many of their forces. Indeed, once the nuclear threshold is crossed, the probability the situation will become uncontrollable is greater than the likelihood of controlling the destructive force of nuclear weapons.

Throughout this paper I have examined the basic concepts which mold limited nuclear war and the limited use of nuclear weapons in a general war. The basic problem with any theory of warfare is that the strategists assume
that man can develop a rational response to irrational problems. In my opinion, the use of nuclear weapons in pursuit of any national political objectives other than self-defense is a crime against humanity. In researching this paper, I was amazed at the way scholars could rationally write about counter-city and counter-population strategies for deployment of nuclear weapons. In all fairness, it is necessary to fully understand all facets of such a complex field if our national survival, the primary political objective all nations, is to be maintained.
END NOTES


3. Clausewitz, p. 83.


5. Halperin, p. 3.

6. Ibid.


BIBLIOGRAPHY


