THE CONTINUING PROBLEM OF CONCEPTUAL CONFUSION

Conceptual confusion resulting from misperception and misunderstanding can create serious problems, particularly in the arena of military affairs and defense analysis. For all its dangers, however, such confusion is to be expected. Perfection is too much to expect from even the best of analysts. More disturbing by far are those situations in which the underlying problem is a result of closed or partisan minds refusing to look at theory, doctrine, or events in a new or different way.

The dangers of conceptual confusion in thinking about military affairs should be obvious. They can include unnecessary death and destruction, as well as defeat and the loss of all that a society or group may hold dear. Unfortunately, potentially dangerous misperceptions are not always evident, particularly to the people who are most closely associated with them.

The more I became involved in the study of contemporary military affairs, the more I became convinced that conceptual confusion was all too common among both civilians and the military. Just as many common perceptions of terrorism noted in the previous chapter can be seen to be misleading, the terminology often used to analyze conflict across the so-called "spectrum of conflict" are similarly flawed, and at times I wondered if rational discourse was even possible in debates over such varied topics as the proper way to fight irregulars or the optimum nuclear deterrent. I addressed the nuclear dimension of the problem in my final lecture in Tokyo, entitled "Prisoners of Language," and I noted problems at the other end of the spectrum in a short essay published in 1988.[1]

In some ways the problem of conceptual confusion reminds me of the problem of careerism in the Vietnam era officer corps. Both appear to be manifestations of broader problems evident in the society at large. If confusion exists in military discourse, it is by no means unique. One can find ample evidence of semantic confusion and calculated distortion in political discourse, which few Americans should find surprising. More disturbing is the extent to which similar semantic confusion exists in academic and scholarly dialogue.

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In the traumatic aftermath of the war in Vietnam, the American military seemed to turn away from its recent experience with revolutionary warfare to concentrate on preparation for more conventional conflict. Irregular warfare could not be ignored entirely, but it could be relegated to a grab-bag category of conflict with terminology that was not immediately reminiscent of events in Indochina. Long standing, well understood terms such as pacification and counterinsurgency were subsumed under the rubric of "low-intensity conflict" or, given the modern military's love affair with acronyms, LIC.

Although a term's public relations value would certainly not head a list of criteria for the naming of doctrinal categories, the American experience in the Vietnam War should have convinced both military and political leaders that such considerations can not be ignored. As a 1986 issue of Oxfam America News indicated, however, the choice of "low-intensity conflict" as a rubric for the grab bag doctrinal category covering a wide variety of operations from peacekeeping to counterrevolutionary warfare would seem to have been a predictable error.[2] As the authors of the Oxfam report noted, the view of such conflicts "at the grassroots level" was entirely different from that implied by the new American terminology, and by using a term such a "low intensity conflict," representatives of the military had only opened themselves to the charge of the Oxfam authors that they were using a term with "a misleadingly benign ring" as a way of manipulating language "in support of these wars." The sarcasm evident in the caption "'Low-intensity' Scorched Earth in Central America" in an
The choice of "low-intensity conflict" as a term to describe the subversion, insurgency, guerrilla warfare, and terrorist operations that have predominated in nuclear age conflict indicated, at the very least, a high degree of insensitivity to the subtleties of language and, at its worst, a lack of sensitivity to the suffering endured by the people in whose homelands such activities take place. Equally disturbing, of course, was the possibility that over time the use of the the term would distort the perceptions of the Americans who used it. If the majority of the world's wars were continually referred to as "low-intensity conflicts," at some point American leaders might actually begin to believe that the terminology being used provided an accurate indication of the intensity of the wars.

Many commonly cited examples of "low-intensity conflict," however, were definitely not fought at the low level of violence that the term implies. In fact, when one looks at a number of examples from the tumultuous 1980s one finds conflicts that are very high in intensity when measured by the number of people killed in them, even after allowances are made for the difficulty of obtaining accurate data. During the Soviet intervention in Afghanistan's civil conflict, for example, some 200,000 people were killed in a population of approximately 15 million. That is the equivalent of more than 3 million dead in the United States, more than seven times the number of Americans that died in World War II. The civil war in El Salvador may have killed as many as 75,000 people, an equivalent of approximately 3.75 million deaths in United States terms, and in Nicaragua Sandinista leaders said they lost 10,000 people to attacks by the Contras, a figure comparable to a loss of almost 800,000 people in the United States. Even in Northern Ireland, where at first glance the number of people killed seems small indeed (c. 2,500), the United States equivalent approximates a shocking 400,000. In short, no matter what one might call these conflicts, they are certainly not conflicts of "low" intensity.

Implicit in the criticism appearing in the Oxfam and Earth Island Institute publications was an important point. The words we use help to determine the way in which we think, and the repeated use of "low-intensity conflict" to categorize many of the wars that have been fought since 1945 could eventually mislead not only civilians but members of the military as well.

For the military officer, however, the problem with the term "low intensity conflict" was not only that it created a public relations liability, but also that it proved too lacking in descriptive specificity to be useful in the creation and implementation of doctrine. Although officers charged with the development of doctrine seem to have recognized that fact, they continue to have difficulty creating valid doctrines for dealing with the various types of conflicts that have predominated in the years since the end of World War II.

Greater attention to conceptual clarity is needed. "Intensity," for example, had serious yet predictable problems of ambiguity when used in a military context, for the word has two possible meanings. It may be used to describe input, in which case it refers to the intensity of effort or the amount of force to be applied to achieve one's goal (basically a political rather than a military decision). But one may also use the term to describe output, in which case the focus is on the intensity of the fighting or the amount of damage being done. Since the casualty statistics of many "low intensity conflicts" have been too high for the term to be an accurate description of output, one must assume that when used as a doctrinal category it described input. Intensity of effort, however, is a political as well as a military variable. Furthermore, it is a variable over which neither the American military nor the United States government has total control. Overlooking such seemingly obvious points, both civilian and military analysts appear to have assumed that the United States could create and sustain the type of environment postulated by its terminology or that the environment would necessarily remain static should the United States be lucky enough to find one that suited its definitions.
Although the United States can control the level of intensity as far as its own efforts are concerned, the overall intensity of a conflict is often beyond its unilateral control. In revolutionary wars such as that in Vietnam, for example, revolutionaries have used techniques of varied intensity (including underground political organization, armed propaganda, terror, guerrilla warfare, and mobile or regular warfare), combining methods and moving up and down the intensity of effort continuum to suit the situation. Countering such an approach demands a similar flexibility on the part of the counterinsurgents. Thus an American effort may begin as one of low intensity, but at some point the failure of one's ally or the success of one's enemy may necessitate a greater effort. By definition, the doctrinal category in which the guidelines for that greater effort reside would appear to be something other than either "low intensity conflict" or traditional conventional war.

Even without the conceptual problems noted so far, a serious, unsolvable problem existed. The various operations included in the "low-intensity" doctrinal category were too diverse to be lumped together. The problem was particularly significant given the difficulty many individuals in and out of the military have often had recognizing the important difference between techniques such as terror or guerrilla warfare, which can be used by parties on all points of the political spectrum in all kinds of conflicts, and the types of conflicts in which those techniques are used, conflicts which are more properly defined in terms of their aims, such as wars of national liberation and revolutions.[6] In the past such confusion has led both governments and their military to focus on countering particular techniques rather than on the more comprehensive problem of fighting particular types of conflict.

The "low-intensity conflict" concept seemed to represent a doctrinal dumping ground into which military and civilian leaders had thrown all types of conflict that they hoped they would never have to fight. If that is in fact the case, then they had obviously learned little from the history of the nuclear age or their nation's experience in Vietnam. One would like to believe that is not what happened, but the tendency in military journals to focus on more conventional topics and the quality of much of the writing on "low-intensity conflict" is not reassuring.

Like "low intensity conflict," the term "military operations short of war" also represents an ill-defined grab bag in need of specification. For the purpose of operational planning, as well as doctrinal development, military officers need to know exactly what type of operation is being considered, be it a rescue, a retaliatory strike, or a coup de main. As in the case of "low intensity conflict," the concept of "military operations short of war" postulates an environment that neither the United States government nor its military can guarantee. Other parties can easily turn an operation "short of war," such as peacekeeping, into war, and American military forces must be prepared for that eventuality.

The concept of "military operations short of war" can easily become a significant liability if it fosters a state of mind that assumes such operations will be free of the risks associated with war or demand less attention to security than wartime operations. In Lebanon and in Saudi Arabia Americans saw the kind of disaster that can result when American troops are attacked by suicidal bombers who rejected the view that the American forces were engaged in a "military operation short of war."

A wide variety of irregular conflicts have taken place since World War II, and a need certainly exists for the development of doctrines to deal with them. To date, however, the United States military has seemed determined not only to minimize the doctrinal variety required, but also to define the conceptual categories used in ambiguous ways. Neither "low intensity conflict" nor "military operations short of war," for example, provide the kind of clarity needed by the military personnel who must use the concepts.

For doctrine to guide officers in the accomplishment of their missions, its terms should not only be unambiguous, but they should also be task oriented. Goals should be both tangible and well defined. Field manuals should be clear as to their purposes. Although Army field manuals from the
pre-Vietnam era focused on specific kinds of operations (psychological, guerrilla, civil affairs) or defined operations in terms of goals (combating insurgent forces), post-Vietnam concepts such as "low intensity conflict" and "military operations short of war" have been suited to neither approach.

Not only must doctrine be clear regarding its purposes and the operational techniques to be employed, but it must also be based on a valid understanding of contemporary conflict. Unfortunately, concepts like "low intensity conflict" and "operations other than war" seem to embody the faulty premise that an American involvement in someone else's war is not war if Americans choose to call it something else. Such an approach is infinitely more suited to the creation of fiction, as Lewis Carroll demonstrated so well in *Through the Looking Glass* than to the development of military doctrine. Humpty Dumpty could tell Alice that a word "means just what I choose it to mean--neither more nor less,"[7] but military officers and civilian officials should prepare for a great fall if they take a similar approach to the development of doctrine and policy.

Concepts like "low intensity conflict" and "military operations short of war" appear to be based on wishful thinking and a desire to avoid unpleasant situations, such as that which developed in Vietnam, where the goal was not achieved despite the significant involvement of American forces in sustained combat. Like that euphemism of the Korean War, "police action," both "low intensity conflict" and "military operations short of war" appear to have more political than military value. They identify what policy makers want conflicts to be and not the real environment in which the American military must operate. No matter what the United States calls the nuclear age conflicts in which it plays a role, and no matter how minor its part may be, those conflicts are still wars. When the United States participates in them, it becomes a belligerent, even if no declaration of war is forthcoming. In fact, a formal declaration of war now occurs so infrequently that it no longer appears to have any place in the definition of war.

When the United States enters into someone else's war, even in a peacekeeping role, it may not be seen as neutral in the eyes of some belligerents, and its operations should not be seen as activities "short of war," no matter how minimal its involvement. Similarly, if the efforts of an ally or that ally's enemy are great or the devastation of the war is high, then the United States should not pretend it is involved in conflicts of "low" intensity, no matter what the level of American involvement may be.

To understand a conflict fully, one must be able to see it as one's opponent sees it. Such a view is essential to thwarting the enemy's strategy and overthrowing it by a superior strategy of one's own. Although American forces may see themselves engaged in "low intensity conflict" or "military operations short of war" (whatever one decides those terms may mean), opponents may still see the United States as a belligerent enemy and act accordingly. In such situations the resulting conflict may also be of significantly greater intensity than that postulated by American doctrine.

One suspects that some of the pressure to embrace such vague terminology as "low intensity conflict" is a result of the American defeat in Vietnam. Not wanting to think about a similar involvement elsewhere, civilian and military analysts devised categories that implied an ability to avoid the sustained use of American combat forces in such conflicts, a goal that was both laudable and unrealistic.

Assuming involvement outside of the United States will continue, the American military needs doctrine that uses more precise, goal oriented terms (such as counterinsurgency, counterrevolution, or pacification), although the legacy of Vietnam may make that difficult. In the past, both the American people and their soldiers have sometimes been uncomfortable when faced with the fact that their government is involved in counterrevolutionary war in support of unpopular, corrupt, and/or exploitive regimes. If that is the nation's policy, however, no one, particularly Americans risking their lives in the field, will be served by pretending that the nation is doing something else, calling a bitter internal war a "low intensity conflict," or labeling a potentially costly involvement a military operation "short of war."
More time and evidence is needed to tell if the conceptual confusion noted stems from an improper choice of terminology and superficial thinking or from a continued inattention to conflicts that are too painful a reminder of the American failure in Vietnam. Whatever the reason, the result so far has been the creation of a doctrinal morass that may well be of more use to the military's critics and the nation's enemies than it is to the people charged with the defense of the United States.

A more dangerous example of conceptual confusion and the use of inappropriate terminology came at the other end of the spectrum of conflict in analyses of nuclear deterrence and the attempts to develop a doctrine of nuclear war fighting. Although the collapse of the Soviet Union and the end of the Cold War worked to moot some of the controversy, the relationship between the conceptual confusion evident in the discourse surrounding deterrence and the potential for nuclear disaster present during the Cold War is still worthy of analysis. Although the dangers of nuclear holocaust have abated, the dangers inherent in flawed thinking about nuclear explosives remains.

In a text published in the United States in 1985 the editors referred to the system of international relations of the nuclear age as one of "structural terrorism." They argued that by holding entire populations hostage, forcing people to live in fear of nuclear annihilation, "the terror of the nuclear age has also become part of the international system's structure."[8] Whether or not the editors were correct in their assessment, one cannot deny that the invention of the atomic bomb and the many devices that followed it, including the hydrogen bomb and the ICBM, created new and unprecedented dangers in the world.

Before the breakup of the Soviet Union, the two major superpowers had approximately 50,000 nuclear devices with a total yield of some 15,000 megatons (the equivalent of 15 billion tons of TNT). Add to these numbers the warheads of other nuclear nations such as Britain, France, and China, and the dangers that existed are readily apparent. During the presidency of Jimmy Carter, for example, the National Security Council estimated that a nuclear exchange between the United States and the Soviet Union would kill over 250 million people in those two countries alone (about 140 million in the United States and some 113 million in the Soviet Union). Such statistics become more sobering when one realizes that the number of Americans killed in all the wars in United States history number only a few hundred thousand more than one million, and despite very heavy losses in both world wars and the civil war following its revolution (over 30 million people in all), the Soviet Union had lost less than a third of the people it might have lost in a nuclear exchange with the United States.

A conflict in which nuclear devices were used over a wider area than the home territory of the two superpowers would have been even more disastrous. In fact, the World Health Organization estimated that as many as 1.1 billion people could be killed, with many more injured (perhaps another 1.1 billion). In other words, approximately half of the entire population of the earth could have been killed or injured in the direct effects of a nuclear holocaust. The psychic numbing that would afflict the remainder of the population might have been great enough to prevent any attempt at reconstruction. Even the use of fewer and smaller devices in a so-called "tactical" role in Europe could have led to as many as two to 20 million deaths, with some estimates ranging as high as 100 million.

Although such statistics are frightening, even worse outcomes might have occurred. Scientists have spoken of the possibility of a nuclear winter, in which the smoke and dust created by nuclear explosions would create a cloud in the troposphere and stratosphere capable of absorbing sunlight and lowering the temperature of the earth. The scientist Carl Sagan noted that "the explosion of the Tambora volcano in Indonesia in 1815 led to an average global temperature decline of only 1° C, yet due to the obscuration of sunlight by the fine dust propelled into the stratosphere the hard freezes the following year were so severe that 1816 became known in Europe and America as 'the year without a summer.'"[9] The results of a nuclear winter would be far worse. In fact, many estimates
indicate that temperatures might drop as many as $8^\circ$ to $45^\circ$ C, with the drop in temperature lasting as long as a year or more.

Nuclear winter might give way to a nuclear summer. The high temperatures of the nuclear fireballs could destroy the ozone gas of the middle stratosphere. The result would be an increase in ultraviolet radiation on the surface of the earth, affecting both plant and animal life. Whether it brought on a nuclear winter, a nuclear summer, or both in succession, a large scale nuclear exchange could do potentially fatal ecological damage to the earth and its many plant and animal populations.

Most frightening, perhaps, given the number of nuclear warheads remaining today, is the point at which some scientists assume such ecological devastation might take place. Sagan noted that the "very rough threshold at which severe climatic consequences are triggered" is relatively low. All that would be needed to bring about such a disaster would be the detonation of "a few hundred nuclear explosions over cities, for smoke generation, or around 2,000 to 3,000 high-yield surface bursts at, e.g., missile silos, for dust generation and ancillary fires."[10]

Sagan concluded that "we have, by slow and imperceptible steps, been constructing a Doomsday Machine."[11] By continual deployment of more and more warheads, the world's nuclear nations and their leaders created a situation that threatens climatic disaster, and, as Sagan observed, "beyond the climatic threshold, an increase in the number of strategic weapons leads to a pronounced decline in national (and global) security."[12] Unfortunately, the climatic threshold of 500 to 2,000 warheads is far below the number of warheads presently available.

During the course of the Cold War a number of so-called experts argued that the dangers were not as great as presented because an exchange of nuclear devices could and would be controlled to limit damage and restrained to prevent the use of all the warheads available. As the strategic analyst Desmond Ball noted, however, "a strategic nuclear war between the United States and the Soviet Union would involve so many novel technical and emotional variables that predictions about its course--and especially about whether or not it could be controlled--must remain highly speculative."[13] Ball observed that it would require only between 50 and 100 warheads to destroy the national command system of the United States or to impair the communication between the nation's leaders and nation's nuclear forces. Anyone who placed his or her faith in the ability to control a nuclear exchange once it began would appear to have been engaging in a dangerous act of self-deception. One would have done better to accept the view of nuclear war that General A. S. Collins, Deputy Commander of the U. S. Army in Europe from 1971 to 1974, said he had developed "as a soldier." Collins said that he "never considered nuclear war to be a rational form of warfare or a rational instrument of policy."[14]

Certainly the military use of nuclear explosives does not fit into a traditional model of war. Karl von Clausewitz, the nineteenth century German officer whose treatise On War is still the primary work of military theory in the west, saw war as a continuation of politics or policy by other means. If the destructive potential of nuclear devices even approaches the levels that some scientists have predicted, however, a nuclear exchange would not be an act of rational policy. There is no political goal that could possibly be achieved by such environmental suicide. Similarly, although Clausewitz spoke of the goal of disarming one's enemy in war, such disarmament would seem to be an impossibility in the nuclear age, and by the 1980s the recognition of the logical fallacy of nuclear war had thrown strategic theory into "a state of arrested ambiguity."[15] Authors labeled it a "morass"[16] and argued that it had reached "a state of confusion amounting almost to disintegration."[17]

For decades two approaches had dominated thinking about nuclear devices. The strategist Bernard Brodie presented the first, stressing deterrence, as early as 1946. The awesome potential of nuclear power for destruction formed the basis for a doctrine in which fear combined with uncertainty to
deter war. Should deterrence break down, however, the result would be devastating. A common acronym for the doctrine was MAD, for Mutually Assured Destruction.

The other view, first articulated by William Liscum Borden, took an opposite approach. Borden concentrated on the military potential of nuclear power, attempting to integrate it into traditional military theory. As the Cold War intensified the thought of deterrence based upon a doctrine of mutually assured destruction became more frightening, leading some theorists to argue that a less dangerous alternative existed in a doctrine of nuclear use. Nuclear-use theorists, nicknamed NUTS by a few of their MAD detractors, devoted their energies to the development of ways in which nuclear devices might be used to fight, survive, and prevail in a war.

Both approaches were doctrines for disaster, for neither doctrine provided a means of survival should deterrence fail. In MAD, suicide was assured by the very nature of the doctrine. Although the doctrine of the NUTS did not intend suicide, that was still the most likely outcome given the probable consequences of even a limited nuclear exchange.

Unfortunately, a number of people continued to adhere to the flawed concept that explosive nuclear devices could play a role in international relations in addition to that of a deterrent. One of the most forceful statements of that position came in an article entitled "Victory Is Possible," published in 1980 in Foreign Affairs. Its authors, Colin Gray and Keith Payne, argued that "the West needs to devise ways in which it can employ strategic nuclear forces coercively, while minimizing the potentially paralyzing impact of self-deterrence." They wanted American nuclear power "to support U.S. foreign policy objectives," and to do that "the United States must possess the ability to wage nuclear war rationally."[18] Gray and Payne sought "a plausible theory of how to win a war or at least insure an acceptable end to a war," and they wanted the United States "to plan seriously for the actual conduct of nuclear war."[19] In fact, they argued that the United States should plan "to defeat the Soviet Union and do so at a cost that would not prohibit U.S. recovery."[20] In short, they hoped to achieve an outcome that the work of Sagan and others indicated was impossible.

What had enabled people like Gray and Payne to ignore the frightening possibility that the use of nuclear explosive devices could mean the end of civilization as we know it, perhaps even the end of the human species? Paul Chilton, a linguist at the University of Warwick in England, argued that in "both official and popular utterances about nuclear weapons and war" people have used language "in such a way that nuclear weapons and war are familiarized and made acceptable." He called the phenomenon "nuke-speak."[21]

Chilton observed that people used language to talk about nuclear devices that represented "an attempt to slot the new reality into the old paradigms of our culture."[22] The process began in 1945, immediately after the first atomic bomb was dropped in Japan. Often individuals spoke of the bomb "in terms of religious awe... One useful consequence of such language, if not one of its actual motivations," wrote Chilton, "was to appear to diminish human control, responsibility, and guilt."[23]

Over time, something even worse happened to the language. A trend began toward what Chilton identified as "the acculturation of the nuclear phenomenon. Instead of being symbolically classified as objects of supernatural awe," wrote Chilton, nuclear weapons came "to be classified as safe and usable instruments." The change, argued Chilton, "accompanied the gradual shift in strategic doctrine toward a more pronounced doctrine of war fighting."[24]

Use of the language of the prenuclear age in discussions of nuclear questions made understanding of the nuclear dilemma more difficult. Many of the terms used in speaking about the nuclear phenomenon had been used for a century or more. Frequently the terms had meanings as a result of their history or usage that had little relevance in an age of ICBMs with thermonuclear warheads, yet analysts and leaders, both civilian and military, used them in their new context with little hesitation.
The use of the term "weapons" to describe nuclear explosive devices provides a perfect example of the way in which language helped to obscure the nature of the nuclear forces that threatened the world. Traditionally the word "weapon" has identified a tool used in combat. A weapon derives its utility from its use against an enemy, but if that is the case, then one could only speak of nuclear "weapons" in extremely limited situations, such as that existing in 1945 when the United States possessed the world's only atomic bombs and could use them without fear of retaliation.

President Eisenhower once said that he saw "no reason why [nuclear weapons] shouldn't be used just exactly as you would use a bullet or anything else."[25] In a world in which many nations possess nuclear devices, however, one is at a loss to see how they can be used against an enemy to accomplish an end worth attaining given the risks inherent in their use. As the American scholar Theodore Draper noted, "nuclear weapons are too effective to be used."[26] Robert S. McNamara, Secretary of Defense under two Presidents, reached a similar conclusion, saying that "nuclear weapons serve no military purpose whatsoever. They are totally useless--except only to deter one's opponents from using them."[27] And such opinions are not limited to civilians. Admiral Noel Gayler, Commander of all United States forces in the Pacific from 1972 until 1976, observed that "there is no sensible military use for nuclear weapons, whether 'strategic' weapons, 'tactical' weapons, 'theater' weapons, weapons at sea or weapons in space."[28] If such statements are correct, then explosive nuclear devices can not be called weapons at all, for weapons, by definition, are instruments intended for use in combat.

A similar problem of linguistic confusion exists with other military terminology. In virtually all cases, the minute the adjective "nuclear" is applied to a term, it ceases to mean what it has traditionally meant. For example, the term "strategy" is used to describe "the way in which military power is used by government in the pursuit of their interest."[29] That being the case, one must believe that nuclear power can be used in the pursuit of one's interest before one can speak of "nuclear strategy." But almost anyone having written on the topic agrees that nuclear power does not have such utility. As the political scientist Robert Jervis observed, "a rational strategy for the employment of nuclear weapons is a contradiction in terms."[30] The term nuclear strategy really has nothing to do with war; it is only applicable when one speaks of deterrence.

"War" is another term that loses its traditional meaning when the adjective "nuclear" precedes it. War is supposed to be a purposeful act, calculated to make one's enemy do one's will, to paraphrase Clausewitz. In its traditional meaning, war is an extension of politics and diplomacy, a violent attempt to achieve one's goals when other methods fail. Given that definition, however, the phrase "nuclear war," like "nuclear strategy," becomes an oxymoron. If both parties to a conflict possess nuclear explosives (or have allies possessing them), then the use of those explosive devices might well prove suicidal, and suicide is not a rational extension of policy. General Collins appeared to come to the only reasonable conclusion possible when he rejected nuclear war as "a rational form of warfare or a rational instrument of policy."[31] An exchange of nuclear explosions is not an example of rational, goal oriented behavior, and therefore such an act is not war. One can speak rationally about nuclear disaster, but talking rationally about nuclear war is more difficult.

Similarly, terms such as "victory" or "win" lose their meaning when used in conjunction with the term "nuclear." One wins by accomplishing one's goals, which is also how one defines victory. One has difficulty imagining how any nation might accomplish a set of goals through an exchange of nuclear explosions, despite the attempt by contemporary strategists such as Colin Gray to make the case for a "Theory of Victory" and comments by Caspar Weinberger, Secretary of Defense under President Reagan, about using American "nuclear capabilities" to "prevail." Weinberger's assertion that nuclear devices could be used "to achieve political objectives and secure early war termination on terms favorable to the United States and its allies" was nothing short of ludicrous given the incredible dangers inherent in their use.[32] More useful is the conclusion of Rear Admiral Eugene Carroll, once director of military operations for all United States forces in Europe and the Middle East. Said Admiral Carroll, "there is no safety, no survival, if both sides continue to build and
deploy war-fighting forces designed to prevail in a nuclear conflict. Safety lies ultimately in changing our way of thinking about the role of military power in the nuclear age. [33]

Another term that loses its meaning when used in the nuclear context is "superiority." In military affairs, the term "superiority" is usually associated with weapons and combat. One gains victory through superiority. It helps one win. In reference to nuclear devices, however, the term, like so many others, has little meaning. As Henry Kissinger, former U. S. Secretary of State, once asked: "What in the name of God is strategic superiority? What is the significance of it, politically, militarily, operationally, at these levels of numbers? What do you do with it?"[34] The answer, of course, is that no one really knows what it means to be superior or inferior as far as the deployment of nuclear devices is concerned.

Throughout the Cold War, people continued to talk about the importance of nuclear force for "national defense" and "national security," although one could neither defend a nation by using nuclear explosives nor guarantee its security by threatening to use them. Gwyn Prins, the editor of The Nuclear Crisis Reader, observed that security is "a state of mind," not to be equated "with military force and its attendant supports. Security is produced by general social well-being... the sum of individual fulfillment, which depends upon the civilized arbitration of conflicts of interest in society, which in turn depends upon a just provision of goods, services and opportunities for all." Security, for Prins, was also "intimately bound up with... freedom. Freedom from want, freedom of thought, freedom from fear."[35] The deployment of explosive nuclear devices and their delivery vehicles would seem to have nothing positive to contribute to the concept of security as defined here.

Even the discussion of nuclear devices as deterrents was often muddled because of the language involved. In the United States, for example, one can find numerous references to the "Triad" of land-based ICBMs, the SLBMs of the submarine fleet, and the airborne bomber force. In the defense debates of the Cold War the concept quickly became an unassailable holy trinity, and few if any individuals were willing to challenge the need to maintain it.

By the 1980s, however, the kinds of delivery systems available for nuclear devices and the various methods of basing them indicated that the Triad, if it ever existed, existed no longer. In its place was an amazing array of possibilities which can best be described as a series of "duads." With the technology available in the last quarter of the twentieth century, nuclear devices could be kept on the earth or above it; on earth they could be deployed on land or at sea, on the earth's surface or beneath it. Deployment vehicles could be mobile or static; deployment could be hard (i.e. defended by concrete and earth) or soft. The delivery devices deployed could be with or without crews, recallable or non-recallable. They could move their deadly payloads through the atmosphere or above it. Only one's imagination seemed to limit the possibilities for thinking about ways in which nuclear devices could be deployed and delivered. The number of possibilities that existed seemed too large to list, but it should have been quite clear that there were many more than three.

In addition to the various "duads" described above, one could also identify a number of "spectra" or continua along which various delivery systems fell. On one spectrum, for example, one could plot the size of the explosive device, from extremely small artillery shells of a fraction of a kiloton to ICBM warheads and bombs of many megatons. On another spectrum one could plot the distance a delivery vehicle might cover (from stationary mines to globe circling planes), and on another one could measure the speed of delivery (measured in minutes for SLBMs and hours for manned bombers). All of these possibilities help to demonstrate the fallacy of thinking and talking in the simplistic terms of the Triad, yet even today one still hears references to the importance of "maintaining the Triad."

The analysis contained here obviously rests on certain assumptions, the most important being a belief in the possibility, if not the certainty, of retaliation in most situations in which nuclear devices might be used and of a high level of destruction accompanying such usage. At the very least, it
assumes that the degree of probability of a negative outcome occurring is so high that the use of nuclear devices as an act of war would be foolish. It also assumes that the dangers inherent in such weapons of mass destruction are independent of the Cold War that gave rise to their proliferation.

Unfortunately, both the end of the Cold War and the terminology used to discuss nuclear explosives diminishes popular awareness of the many conceptual problems that continue to exist. The inappropriate terminology and the conceptual confusion accompanying it distorts reality, and by doing so both create added dangers that someone might actually set in motion a series of events ending in the nuclear holocaust every sane individual wants to avoid. The dangers diminished with the end of the Cold War, but they did not disappear.

To solve the frightening problem of the nuclear threat, people need terms that they can use to speak and write about explosive nuclear devices that indicate how very different those devices are from anything heretofore invented. Ending all references to nuclear weapons, substituting a term such as nuclear explosives or nuclear deterrents in their place, represents an important first step. Similarly, one should never speak of nuclear war, only of deterrence, the possible breakdown of deterrence, and the possibility of a nuclear exchange. (I am not happy with the phrase "nuclear exchange" because it ignores the horrible consequences of the use of nuclear explosive devices, but "nuclear holocaust," a more vivid term, might not be accurate enough to cover all eventualities.)

In any case, one should not speak of "nuclear strategy," but of strategies for deterrence. Nuclear devices and their delivery vehicles must be designed in terms of their actual use, as deterrents, and terms such as "prevail," "victory," or "win" should never be linked to nuclear explosives or their use.

Recent world events, particularly in Eastern Europe, would seem to have created a perfect opportunity for making the shift from the deceptive nuclear language of the Cold War to a more accurate, less dangerous terminology that might eventually help people develop new ways of thinking about nuclear explosives as well as talking about them. With time people might even recognize that the military defenses they have developed, including the deterrent forces of the nuclear nations, are not a means to security but the essence of insecurity, fragile methods for preventing unthinkable but no less possible consequences. People may also recognize that security is not a function of superior military power, for such a concept has also lost its meaning in the nuclear age. A degree of conventional military power may be needed for defense, but it will not be so great as is often thought after the military realities of the nuclear world have been properly understood.

Assuring deterrence will remain difficult, however, if people continue to conduct their nuclear discussions in prenuclear language, and we must therefore break out of the linguistic prison we have constructed for ourselves. No one can guarantee that new terms will enable people to think in new ways, but the innovative thinking needed to insure human survival may not be possible within the prison of existing military terminology that in both the arena of irregular conflict and nuclear deterrence frequently distorts rather than enlightens.

Discussions based on inappropriate terminology and confused concepts lead all too readily to the development of inadequate doctrine. At best, such flawed doctrine will lead to military defeat; at worst, in the nuclear context, it might well result in an even worse outcome, inflicting the destructive consequences of a nuclear holocaust upon hundreds of millions of uninvolved and innocent people. Even with accurate terms and concepts, avoiding such catastrophes will not always be easy, but a reorientation of the way in which civilian and military leaders think about warfare is a necessary first step toward the development of an intellectual system to avoid disaster.

Statistics for deaths and populations vary from source to source, but the numbers used, taken from a variety of press reports in this case, need not be all that accurate to sustain the point being made here.

For an example of ways in which terminology has affected thinking about nuclear explosive devices see Paul Chilton, "Nukespeak: Nuclear Language, Culture, and Propaganda" in Nukespeak: The Media and the Bomb, Crispin Aubrey, ed. (London, 1982) and Carol Cohn, "Slick 'ems, Glick 'ems, Christmas Trees, and Cookie Cutters: Nuclear Language and How We Learned to Pat the Bomb, Bulletin of the Atomic Scientists, 43:5 (June 1987), 17-24.

Some analysts of the war in Vietnam have exhibited such confusion in their false distinction between "conventional war" (in which the conflict is defined by the technique being used) and "revolutionary war" (in which the goal defines the conflict). Excellent examples of such false distinctions can be found in Harry G. Summers, Jr., "A Strategic Perception of the Vietnam War," Parameters, 13 (June 1983), 41-46 and Timothy J. Lomperis, The War Everyone Lost--And Won (Baton Rouge, 1984).


Ibid., 320.

Ibid., 328.

Ibid., 329.

Desmond Ball, "Can Nuclear War Be Controlled?" in ibid., 271.


Ibib., 10.


Ibid., 118.

Ibid.

Ibid., 119.

[22] Ibid., 128.
[23] Ibid., 131.
[24] Ibid., 137.
[34] Ibid., 12.