ARE NUCLEAR AND NONNUCLEAR WAR RELATED?

by

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Report analyzes relationship of nuclear and non-nuclear warfare during the actual conduct of a war in either the conventional or nuclear stage and the relationship relative to deterrence and strategy.
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There is a tendency in the West to not take war too seriously; war being the province of specialists far removed from the mainstream of public consciousness. Even among those who do take war seriously, we find a tendency to not consider nuclear war as a very real prospect; hence it is often relegated to an even smaller subset of sub-specialists. The purpose of this essay is to consider the interrelationship between nuclear and nonnuclear war in light of the growing complexity of combined arms operations and military campaigns that are likely to occur in a future war. It is the author's contention that by failing to deal with these intricacies, politico-military planning might be unavoidably and erroneously bifurcated into separate nuclear and nonnuclear compartments resulting in less than satisfactory execution of military operations in support of a war or of its deterrence.

To bridge the gap between an academic exercise centered on deterrence, and the use of military force to achieve political goals during a war, it is the author's plan to begin by examining the issues from the perspective of likely military actions that might occur during an actual nuclear war. This is largely done to help the reader identify the more concrete relationships of nuclear and nonnuclear warfare before moving into the world of pure theory. We also need to separate ourselves from arguments that are used to support programming requirements (the procurement of new military hardware) and those that are part of our declaratory strategy (what we openly say that we will do) designed to enhance the deterrence of war.
If a nuclear war were to break out, it could certainly be an unprecedented global catastrophe with damage beyond anyone's most horrible visions. On the other hand, it is entirely possible that a nuclear battle might occur in such a manner that widespread global use does not occur, i.e., damage might be limited to the immediate battlefield due to an early termination decision. There will certainly be pressures to terminate any nuclear war at any cost in order to avoid damage to the superpower's homelands, but there will likely be other pressures to escalate vertically from the battlefield or to use one's central forces to limit damage to one's own homeland. Damage limitation by preemptive strike is the Soviet's openly declaratory strategy to fight a nuclear war.

Some of those who have tired to wrestle with the concept of nuclear war fighting prefer to consider it as an irrational act devoid of political context, unlikely, or not worthy of serious analysis. Witness arguments against certain new weapons or capabilities - they might make nuclear war more likely, hence they should not be developed. Similarly, some argue that there should not be any serious discussion of nuclear war fighting since it might make it more likely.

Despite what nations have to say in order to deter other nations from engaging in nuclear war, and despite what they must say in order to justify programming decisions to their own publics and allies, nations do have a responsibility to their citizens to thoroughly think through the concept of nuclear war fighting so that they can better understand the dynamics of how to deter it in the first place. Threatening to punish an aggressor by some measure of damage to his society might sound reasonable to many in the West, since that is likely what is sufficient to deter them from nuclear war, but it is the Russian and how he views war and deterrence that is significant. The Russians simply do not look at the world the same way that The West does.
The Soviet Union does take war and nuclear war quite seriously. Although there does not appear to be any desire by them to initiate a nuclear war, or even a general war with the West, from their own literature it can be clearly demonstrated that if the Soviet Union were to be involved in a war (any kind) with the West, their goal would be to "win" it or to at least ensure that the West does not. In this case, I prefer to use "winning" as a concept that remains undefined so that we can move on to consideration of what types of actions can be expected if an opponent is attempting to fight a war with nuclear weapons and terminate the hostilities on at least more favorable terms than his enemy has. One can create from the Soviet literature a set of strategic goals that, if implemented, are expected to lead to "victory." These include the maintenance of Party control over the Soviet Union and extended empire, the destruction of enemy nuclear forces before they can strike the USSR, and the undermining of an enemy's military-economic potential.

If a nuclear war were to occur, military planners and commanders would expect to execute orders designed to do something other than "lose" a war for their country. These people may be somewhat removed from the political decision makers who have to wrestle with the political, economic, social, and moral character of "victory." The military's function in a future war is to make recommendations about actions that are expected to achieve strategic goals and thereby "win" the armed conflict portion of the war and to carry out the orders to implement decisions reached by the political leadership.

Nuclear forces can and should be expected to be used directly against enemy nuclear forces in a damage limitation mode. If one can destroy an enemy missile or bomber that has a number of warheads on it before those warheads detonate on one's own homeland, then this would appear to be the type of action
that a military planner or commander would probably actually recommend to his political leadership in the event that a war were in progress.

In addition to direct attacks by nuclear forces against enemy nuclear forces, we should expect that conventional forces would also be the subject of direct attack by nuclear weapons during the nuclear phase of a war. If an attack on command, control, communications, and intelligence facilities can be shown to preclude the use of an enemy's nuclear forces to attack you, then we should expect these forces to be high on the priority list for destruction in order to limit damage to one's own homeland. If these conventional structures and capabilities are heavily defended or located in areas making direct conventional attack unlikely to succeed, then the nuclear option may be the only one that the military can feel it should recommend.

Similarly, if it could be shown that key logistical and support infrastructures are vulnerable to nuclear strikes and that as a result of such strikes, an enemy might be even more constrained in his attempt to reload and threaten to reuse his nuclear forces, then it would seem logical that a military planner would recognize this and recommend attacks on such facilities to his political leadership. Not only could this directly limit future damage to one's own homeland but it might also contribute to a more satisfactory war termination climate and postwar balance of power. Simply put, if both superpowers were to expend their entire nuclear arsenals but the Soviet union had a unilateral advantage in that it could reload (even if it took months), then the postwar world would probably be unacceptable to the U.S.

If the context of the nuclear phase of the war was that it escalated from some conventional military action, such as rolling Soviet tank armies crossing the inter-German border, then one should expect to see nuclear weapons used
directly against those enemy forces. Mobility of ground forces presents a targeting problem but attacking key bottlenecks and known fixed support facilities might be sufficient to complicate the Soviet's ability to manage an offensive in Europe to the degree that they consider it unlikely that they could meet their own prewar planning objectives on schedule.

Any national political leadership (such as the Politburo) that relies on military force to retain control over its own country and extended empire should expect those forces to be the subject of direct attack during any phase of a war. If conventional capabilities appear to be incapable of successfully attacking an enemy's military, then nuclear ordnance may the weapon of choice. If the leadership itself is sufficiently protected from conventional attack, then the use of nuclear weapons against them may be recommended in order to degrade command and control to the extent possible. The Soviet's historical record for "successful" war termination is to first defeat an enemy's army, then to destroy his government, next to install a new government, and finally to negotiate war termination with this new "friendly" regime. Why should we assume that the Russians would break this pattern in a future war?

If a nuclear war were already in progress, there would certainly be some that would recommend the use of nuclear weapons against conventional power projection forces that might otherwise threaten one's self or allies in the final stages of the war or during its aftermath. If an enemy's naval forces, for example, were seen to be a thorn in the side of "progress" towards the successful manipulation of one's own foreign policy objectives prior to the war, the war may be seen as an opportunity to eliminate as many of those forces as possible. Again, nuclear ordnance may be selected as the weapon of choice if conventional capabilities are perceived as incapable of destroying the target set.
When assessing the possible targets for nuclear weapons in an actual war, the key considerations should be: the political objectives of the war; the required military campaigns and actions that are necessary to achieve strategic goals expected to attain these objectives; the time schedule by which one hopes to meet these goals; and the price that one is willing to pay in order to achieve them. If it can be shown that attacks against an enemy's cities are not likely to influence him to terminate the war on terms that are favorable to you and thereby achieve any political objective of the war or strategic goal, then there would be no military or political reason to do so. Neither superpower embraces attacking enemy cities and both have made strides in increasing accuracy and decreasing yields that can be viewed as attempts to limit collateral damage.

There are similar relationships between the employment of conventional forces and nuclear weapons in the nuclear phase of a war. For example, non-nuclear ballistic missile defenses (such as antiballistic missile systems, mobility and hardening) can reduce the impact of an enemy's nuclear strikes. Nonnuclear air defenses can degrade an onslaught of nuclear armed airbreathing bombers and cruise missiles. A factor that is significant in calculating the impact of such nonnuclear operations is that the authority to employ such forces can be delegated down to rather lower levels of command, thus minimizing the delays in receipt of an intelligence warning and the execution of a response.

It is not necessary to await the nuclear phase of a war before attacking an enemy's nuclear capabilities. In fact, this is exactly what the Soviets openly tell us they intend to do. For example, storage casernes containing nuclear weapons are probably high priority targets for Soviet destruction by nonnuclear forces during the initial conventional phase of any war. Similarly,
the Soviets have told us that they intend to strike Western ballistic missile submarines prior to their possible use or threatened use. The potential payoff for the destruction of an enemy ballistic or cruise missile submarine is quite high in the number of warheads given that they could be destroyed by expending only a few conventional weapons.

Destruction of enemy nuclear delivery vehicles during the conventional phase of a war contributes to the damage limitation goal, prevents their use and reuse, and may so alter the correlation of forces that an enemy is thereby deterred from escalation to nuclear war fighting. Attrition of dual-use forces such as cruise missile carriers and tankers is likely during the conventional phase of a war and will have an impact on the perceived overall ability of a nation to manage a subsequent nuclear phase of the war.

Unconventional nonnuclear forces should be expected to be employed to degrade enemy intelligence and warning sites that support nuclear operations, especially those located in remote and undefended positions. Direct attack by more conventional forces would also aid the penetration of borders by air-breathing nuclear forces. Nonnuclear attacks in space could have a decisive impact on the ability to manage a nuclear or even a nonnuclear war.

A major factor in many of these actions that can be taken against enemy nuclear forces in the conventional phase is time. Can sufficient actions be taken quick enough to undermine an enemy's confidence in his ability to fight at the nuclear level and thus cause him not to escalate in an undesirable manner?

In addition to employing nonnuclear forces in either the conventional or nuclear phases of a war to degrade the planned or current employment of enemy nuclear forces, we should expect to see nonnuclear forces used to enhance the
performance of one's own nuclear forces attempting to carry out their missions during either phase. For example, the bulk of the Soviet Navy is expected to deploy in bastions where they will defend nuclear missile submarines from attacks by Western antisubmarine warfare forces. This bastion defense could simultaneously ensure that control is maintained over one's own forces and that the air defense envelope is extended against Western airbreathing nuclear forces attempting to fly over the sea approaches to the USSR.

On the other hand, nuclear weapons can be used to directly enhance the employment of nonnuclear forces engaged in more traditional forms of warfare. For example, nuclear weapons might be used to open up channels for a conventional force ground breakthrough. Nuclear "leakers" that survive naval battle group air and antisubmarine defenses might cause sufficient damage so that subsequent "mop-ups" by conventional forces would be easier to accomplish.

It should be clear from all these possible actions that could logically be expected to be recommended during a war that nuclear and nonnuclear operations could have a significant impact on each other. This drives the need for much more sophisticated analysis of the nuclear balance well beyond the traditional units of measure. Dynamic assessments are going to be required during a war so that the proper recommendations can be made by the military to their political leadership as the war progresses from one phase to another. If nuclear operations end, do we expect either the armed struggle or the war itself to also terminate? If we wait until a war breaks out to think all this through, then the professional politico-military specialist has failed his country and its citizens.

All parties to a war will attempt to measure the correlation of forces and means during all stages of any future war. Decisions to engage in lateral excursions, vertical escalation, or war termination will in part be influenced
by the perceived existing and projected correlation of forces. The ability to dominate the decision to escalate vertically, horizontally, in time, or to another medium of warfare, is a significant political advantage that the U.S. gave up in the 1960's. We must recognize that in actually fighting any type of future war, the West may be unable to dominate the escalation decision and thereby control escalation or war termination. More importantly, we cannot allow actions taken once the armed conflict starts and during its conventional phase that will place the Soviet Union into a position where it can.

One of the paradoxes of our times is that we have generated a great amount of views about deterrence theory but despite all the discussion, we must recognize deterrence for what it is—a theory that cannot be objectively proven as the reason that we have not fought a war with the Soviet Union. Furthermore, there is no agreed upon concrete formula that quantifies exactly what it is that we must do to deter the Russians in the future. If there were, we would know exactly what combination of offensive nuclear missiles, bombers, submarines, and nonnuclear (or nuclear) defenses to build and deploy. When we attempt to objectively determine the exact contribution of one weapon system or strategy to deterrence, we proceed from an incomplete theory into an even softer and spongier area. We constantly get ourselves confused with how much is enough in our own minds instead of considering what will affect the minds of the Soviet leadership.

What is often more confusing is that the deterrence of war and of nuclear war is not the only political objective of the United States. We openly state that we will fight a nuclear war if the Soviet Union invades Europe and our nonnuclear forces are unable to defend the alliance. Hence the ability to live free and support key allies are apparently higher foreign policy objectives than the deterrence of nuclear war. Even if deterrence of a nuclear war is
considered the primary goal by some (no matter what the cost), once a war breaks out, other political objectives may be considered that also may be more important than the continued deterrence of the nuclear phase of a war.

For example, many incorrectly argue that our current overall political goal is stability. If that were true, then hegemony by one power should be an acceptable mechanism for attaining stability and the reattainment of strategic nuclear superiority before the war or during its initial conventional phase is a logical strategy. In reality, our political objective is closer to stability plus the maintenance of the existing international order, i.e., we do not currently seek to overthrow the government of the Soviet Union. But if we find ourselves in an armed struggle with the USSR (for reasons which strike at the heart of our national survival or that of our allies), should we seek to fundamentally overthrow the Soviet government? Would the Soviets try to do this? Can either side use its military forces to achieve that objective?

The point to all this is that there are some very subtle complexities that well exceed the average military officer's appreciation of international politics. These goals need to be clearly elucidated by the political leadership in a clear top-down manner so that the military can then design the plans to execute campaigns that will achieve these goals. This all needs to be done before the war so that we can better hope to keep war or at least its nuclear phase deterred.

Given that each of the two superpowers concedes the possibility of an extended conventional phase to a future war, thorough prewar planning must be undertaken to not "blunder" into unwanted escalation (of any type) and nuclear operations. The complex interactions between conventional and nuclear forces must be understood before nuclear phase begins so that opportunities for deterrence or satisfactory war termination are maximized.
There will be operations involving enemy nuclear forces that will be "risky" during the initial conventional phase of a war. Yet according to our Supreme Commander for Allied Forces in Europe, we are not prepared to fight an extended conventional battle in defense of Europe, hence if vertical escalation is likely anyway, then taking actions to alter the correlation of forces and means might be worth the "risk." The destruction of nuclear assets, command, communications, control, and intelligence facilities, etc., during the nonnuclear phase of a war may alter an enemy's perceptions, cost-benefit calculations, and confidence in his ability to manage the nuclear campaign, that he chooses not to escalate, or seeing that he cannot dominate the escalation decision, he chooses not to fight in the first place.

Additional measures that can be taken during the conventional phase of a war that may contribute to the deterrence of its nuclear phase are the posturing of one's own nuclear forces to enhance survivability and the upgrading of defensive measures to degrade an enemy's ability to successfully strike. For example, the dispersal of bombers, mobile missiles, and the fleet from known peacetime locations can send a message of political resolve and hopefully result in fewer forces lost to a surprise first strike.

Quick-fix nonnuclear defensive measures might also be undertaken to alter the correlation of nuclear forces. For example, dispersal of nuclear warheads from casernes to unknown locations, moving ground forces out of the barracks, naval forces out of home ports, emergency relocation of critical personnel and supplies, and the rapid construction of temporary passive defenses could all serve to alter the enemy's ability to achieve the expected levels of damage against a variety of targets if he resorted to nuclear war fighting.
Nations will have to be careful not to make their nuclear forces even more vulnerable over time by using them to send political messages during the conventional phase of a war. For example, will flexing the nuclear muscle result in so much domestic pressure against escalation that the threat to actually do so is perceived by one's opponent as empty? Will the dispersal of nuclear forces to less capable bases result in significantly lower alert rates after some period of time? Are dispersal bases more easily accessible to an enemy's special warfare forces or attack by sabotage? Does flooding Soviet submarines out of the bastions make them more susceptible to attack by Western antisubmarine forces? If so, are they likely to do it in the event of imminent hostilities?

The types of military actions that should be taken during the initial conventional phase of a war need not be 100% successful to enhance deterrence. The objective should not be to search for "silver bullets" that can do it all but to rather build a system of nuclear and nonnuclear offenses and defenses that deny an aggressor the ability to calculate a successful use of military force for political purposes. To do this, we need to understand what it is that a likely opponent says he is going to do in the event of a war, what his forces could do (based upon expert opinion), and how they train and exercise to fight. If there is congruence, then we should feel justified in drawing conclusions.

By attempting to get inside the enemy's head and alter his perceptions we stand a better chance of deterring war. We should look at his perceptions so that we can know how to best manipulate them to our advantage. The Soviet Union clearly supports the combined arms method of war fighting and appears to thoroughly understand the interrelationship of nuclear and nonnuclear offenses and defenses in an overall system designed to use (if necessary) military force to achieve definite political objectives. Our own appreciation of these
complexities can only help our ability to effectively manage the long-term competitive relationship with the Soviet Union without resorting to open armed conflict.

It appears from all of these factors that nuclear and nonnuclear warfare are probably interwoven in ways that the average tactician or even strategist may not normally fully appreciate. The tendency by some to separate armed conflict into general warfare and nuclear warfare is an artificial one that can lead to erroneous thinking and possible catastrophic errors during the execution of military operations. Perhaps the most correct view of possible future warfare between the superpowers is that any armed conflict between them is automatically a nuclear war but one in which the nuclear weapons may not have yet been used.

That being the case, we need to become extremely more sophisticated in our construction of threat and net assessments. Simple minded tabulations of nuclear force levels based on familiar arms control measures of effectiveness are not only misleading but not a true measure of the strategic nuclear balance. We must move well beyond input measures that count "things" and perform complicated dynamic assessments that include the interaction between offense and defense and nuclear and nonnuclear forces over an extended period of time. "Spasm" exchange calculations must give way to analyses of campaigns in which time as a crucial variable is not overlooked. The correlation of forces and means is not a static calculation but is a dynamic assessment that varies over time before, during, and after the war.

A more correct way to assess a threat is to outline the objectives that each nation hopes to achieve by its expected military campaigns, the time required to do so, and the price that must be paid to meet those objectives on schedule. In short, we must focus on output measures that by their very nature
will not fit neatly onto briefing charts or the front pages of newspapers. New measures of effectiveness will be difficult to explain to the public and the political leadership of the nation but will serve to more fully represent reality. This will put a heavy burden on the simulation and gaming communities.

The nature of nuclear war must be taken seriously and investigated as best we can given the limitations of the social and hard sciences to predict. We no longer live in a world where we can afford to say that there is nuclear warfare and there is conventional warfare and we must not mix the two. The mixing will go on despite everyone's best efforts to separate the two forms of warfare. Keeping nuclear and nonnuclear warfare planning divorced in potential military operations or in the programming process cannot be allowed to happen; otherwise we risk having conventional operations that may adversely impact on the continued deterrence of the nuclear phase of the war, or that fail to maximize opportunities to keep the nuclear threshold high. Similarly, the start of nuclear operations in an armed conflict will not be the end of politics. Even if the political aim becomes to terminate the war at any cost, someone has to think through what combination of nuclear and nonnuclear operations should be undertaken to make this offer credible and to successfully execute it.

Arms control terms have been allowed to infiltrate military strategy to the point where we are allowing the semantics to obfuscate objective conditions. For example, the Soviet use of the term "strategic" to describe military weapons, missions, goals, etc., does not equate to how the West uses the term to generally refer to intercontinental nuclear. "Strategic" to a Russian may involve actions by conventional forces in an adjacent theater that can result in the attainment of strategic goals in that theater. The Russians have never accepted mutual assured destruction as a theory of deterrence as witnessed by both their words
and deeds. Their doctrine, strategy, nor force structure is indicative of a nation that accepts leaving its population as hostage to an enemy's offensive nuclear strikes.

Learning how the Russians think and calculate the correlation of forces and means must be of the highest priority to our intelligence community. They will then face the arduous task of explaining the Soviet perceptions to political and military decision makers who will not be as aware of the differences and will be tempted themselves to automatically "mirror image." If the Soviets appear to be oriented toward output measures, dynamic assessments, and deterrence by having a credible war fighting capability against all enemies, then we must deal with them on this level.

If the Russians who rule the Soviet empire appear to take seriously their own military doctrine, then we need to get ourselves inside that process and learn how to manipulate it to keep them from seeing any benefit in starting an armed struggle. For example, if the Russian is paranoid and security conscious, does not the maintenance of a bomber and cruise missile force help persuade the Politburo to deploy and maintain very costly and manpower intensive air defense forces that are unable to strike the U.S.? A combination of well thought out force deployments, declaratory strategies, exercises to shape perceptions, and arms control that is not sought as an end in itself, can all be combined to influence the Soviet Union to commit their rubles in a manner that is less threatening to the West and may keep the competition from breaking out into open war.

The complex relationships between nuclear and nonnuclear warfare needs to be more thoroughly investigated. An area that cries out for research is that of the socialization of our key political-military decision makers; do they
understand that the West can no longer dominate the escalation decision and do they understand what this means in global crisis response? Do we expect the Soviet Union to bargain with us from a position of strength or parity in a future crisis? Do we recognize that extended deterrence extends over our naval forces?

The dynamics of war termination also need to be more fully investigated to see what impact defenses could have on the successful termination of a war. What combination of offense, defense, and conventional and nuclear forces appears to have the best hope for deterring war in the first place but if deterrence were to fail, for achieving the likely political goals that we anticipate if we ever have to use our full military might.
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