NEO-STRATEGICON: Modernized Principles of War for the 21st century

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DO UNIVERSAL TRUTHS about war exist? When does the immutable become, well, mutable? Rethinking warfighting fundamentals like the principles of war raises such questions. Sadly, what *is* enduring about war is its relentless, tragic horror.

Other aspects of the human dimension also remain unchanged. The apprehension and determination a young Marine feels on the battlefield today are the same as the young Athenian felt on the Plain of Marathon in 490 B.C. Yet it is equally true that social, economic, political, and technological factors evolve war's practice if not its essence.

The traditional principles of war describe, as one document puts it, "those aspects of warfare that are universally true and relevant."[1] Today they typically include unity of command, objective, offensive, mass, maneuver, economy of force, security, surprise, and simplicity.[2] Over the ages the list has varied somewhat because what is common in one era might be rare or absent altogether in another. The necessity for recalibrations from time to time simply reflects the humanness (if not humanity) of war.

The Modernized Principles of War

Modernizing the traditional principles of war for 21st-century conflicts does not render older versions irrelevant. To the contrary, the intent of modernizing the principles of war is to capture the spirit of existing ones. For example, informed insight, when properly understood, incorporates elements of security and surprise. Likewise, the modernized principles of war such as perceived worthiness, informed insight, strategic anchoring, engagement dominance, unity of effect, adaptability, and culminating power strive to capture the essential objective, among other traditional principles. In short, the aim is not wholesale replacement of the traditional principles, per se, but rather a renovation that is conscious of the lasting value of the old.

Perceived worthiness. Why men fight and why they stop fighting are the classic inquiries of military thinkers. Ultimately, the answer is about worthiness. What makes it worthwhile for people to risk their lives in armed combat? What persuades them to make the enormous sacrifices war can require? For some, it is high-minded purposes such as achieving or preserving freedom. For others, it concerns personal honor, comradeship, or simply survival. Worthiness goes to the fundamental mindset of people both individually and collectively.

Assuming that worthiness necessarily equates to moral good is a mistake, however. Various groups might conclude that ethnic hatred, Lebensraum (living space), or any number of malevolent rationales add up to acceptable motivators for violence. Worthiness is a matter of subjective perspective, not objective merit. What is important is what a belligerent believes warrants war. Hence, this principle appends "perceived" to the idea of worthiness.

Thoughtful theorists suggest that the related concept of will should become a principle of war because overcoming an opponent's resolve is the central task of war.[3] In key respects, it is always a center of gravity. Although will has ready touchstones in military literature, perceived worthiness peels it back to address its underpinnings. For the warfighter, it literally asks the right question, the "why" of an antagonist's hostility. Opportunity lies in the answer. Sufficiently erode the perception of worthiness among decisive elements of an adversary's combat power, and the effort disintegrates, even if the physical capability to continue remains intact. Conversely, when it collapses among friendly forces, defeat likely follows.

PRINCIPLES OF WAR	
Traditional	*Modernized*
Unity of Command	Perceived Worthiness
Objective	Informed Insight
Offensive	Strategic Anchoring
Mass	Durability
Maneuver	Engagement Dominance
Economy of Force	Unity of Effect
Security	Adaptability
Surprise	Culminating Power
Simplicity	

Most opponents of the United States no longer pursue traditional military victory, per se. Instead, they try to get us to perceive that the goal no longer justifies the anticipated sacrifice of American blood and treasure. This is why managing perceptions among friend and foe is so important to 21st-century conflicts. To create the right perceptions, leaders need informed insight.

Informed insight. Informed insight seeks to make sense of the cacophony that swirls around concepts like information superiority and dominance. Suffused with the notion that more is always better, investments pour into various collection capabilities in an insatiable drive to accumulate information. While it is necessary to cast a wide net to ensure one is fully informed, warfighters need more than raw data, however voluminous.

Fusing information is the real challenge. It is not just gleaning relevant data from the mass; it is appreciating the human factors of information conveyance. How much can a commander usefully absorb and at what rate? Unless information is digested, it is as if it does not exist. That said, even comprehensive and well-fused reports will not, alone, produce the winning information differential.

The reasons are several. Digitization of data of all kinds makes plenty of militarily useful information freely available on the Web. In the future if anything exists in an electrical form, we must assume it is in the hands of the adversary. Moreover, technology such as Web crawlers, intelligent robots, and other relatively inexpensive autonomous means will likely do much of the fusing work. Third-party corporations already exist to fuse information for anyone for a price.

All of these developments will level the battlefield informationwise. Consequently, in many situations, warfighters should not waste time on the quixotic task of trying to achieve information superiority or dominance. Rather, they ought to develop doctrines and strategies for fighting in an environment of complete information transparency.

Authenticity will be the critical feature of information in 21st-century warfare. Manipulating and altering data, including images that exist electronically, is just too easy. Although technology itself might provide some solutions, the side that quickly verifies the legitimacy of information will have a significant edge. A new-style fog of war will mark modern conflicts as vast quantities of cleverly misleading data and outright disinformation flood decision centers and threaten to bury genuine facts.

The true asymmetric advantage does not come from information accumulation, but from the cognitive component of the warfighter. The insights drawn from information make the real difference. Data, no matter how all-encompassing, well-fused, or timely, cannot provide insight, which is not just knowing what the enemy is thinking and saying, but intuiting what he will think and do even before he knows. Thus, informed insight can capture a conventional principle like surprise and employ it offensively or defensively.

How does one acquire insight? The answer is experience and native talent combined with a wide-scoped liberal education, formally or informally acquired. These, coupled with a solid technological orientation and complemented by exhaustive study of all aspects of a foe's specific situation, can produce, if not wisdom, at least more astute evaluations.

The ability to focus matters. Napoleon spent hours alone deliberating about his battle plans. Time and again, this technique produced brilliant military insights. Obviously, the speed of modern warfare limits emulation of Napoleon's technique, but technology and behavioral studies might produce useful approaches. A distributed analytical process that links and synergizes the mental muscle of disparate

leadership elements is yet another possibility for exploration. Nonetheless, the innate military genius of individuals still counts. That genius, however, must have firm strategic anchoring.

Strategic anchoring. Strategic anchoring means consciously anchoring every action in a strategic context. The principle recasts the objective to highlight the potential the information revolution gives to all combatant actions. The traditional notion of objective is constituent to strategic anchoring because activities so connected automatically coalesce on the right goal at any level of war. In the Information Age, few objectives are exclusively tactical or operational, or even military. Each has latent strategic implications, some of profound importance.

General Charles C. Krulak's conceptualization of the strategic corporal epitomizes this phenomenon.[4] Actions at the tactical level, including even those of the ordinary corporal, overlooked in previous conflicts, can have far-reaching effects. The stunning strategic effect of the misconduct of a few low-ranking soldiers at Abu Ghraib prison amply illustrates Krulak's point. The scandal was a defeat in every sense of the word except, perhaps, the traditional kinetic one. Intentionally organizing actions around strategic purposes is essential.

In 21st-century conflicts, how we fight can determine if (and what) we win. Unfortunately, absent firm strategic anchoring, concentration on the objective encourages an unproductive fixation on short-term ends in isolation from other imperatives. The notion of "we had to burn the village in order to save it" typifies the problem. Globalized information systems can rapidly create adverse political effects from military actions, even actions that fit customary notions of victory. Accordingly, leaders must consciously shape even seemingly minor actions to account for the strategic potential each possesses.

Strategic anchoring takes issue with the prominence of the offensive in popular military thought. Unbridled obsession with an undifferentiated view of the offensive is dangerous.[5] Of course, restraining undisciplined offensive impulses is not the same as endorsing passivity. An active defensive that inflicts persistent stress on challengers while shrewdly avoiding unintended consequences deserves equal billing with the offensive. Linking all actions to their strategic anchor best accomplishes that aim. Durability readily informs the efficacy and relevance of strategic anchoring.

Durability. Much of the value of durability as a modernized principle of war resides in its exquisite lucidity. Durability reflects the basic idea of continuing utility for the intended purpose despite hard use. In the military context, durability extends from the immediately practical to entire strategic themes. Along the way, the tenet subsumes several traditional principles. For example, modern commanders who are thinking durability will naturally incorporate security into their planning. Pundits quip that amateurs talk strategy and professionals talk logistics. What is clearly axiomatic is that durability depends on logistics. Consequently, the side that solves the vexing logistical issues intrinsic to modern warfare will reap a huge return. Consider how influential a scientific breakthrough that provides power sources to quench burgeoning (and burdensome) fuel demands could be. If human-nourishment requirements are lessened, possibly through advances in biotechnology, force durability would be dramatically enhanced. Of course, seeking to disrupt the often-voracious logistics of militaries endures as a feature of modern conflicts.

Durability is more than mere physical sustainment, however; it extends to strategy. Military commanders from Xenophon to George Washington to Mao Tse-tung appreciated that a force durable enough to maintain existence is, in itself, a strategy that precludes one's rival from attaining victory. Adversaries, especially irregulars, continue to attempt to draw out conflicts in the hopes of exhausting seemingly more powerful foes.

Nevertheless, past successes of similar strategies will be increasingly difficult to replicate. In a netted world that illuminates virtually every phone call, every financial transaction, and every plane flight,

Ultimately, war is still an art, and like all artistic endeavors, human imagination will continue to drive inventive forms and executions of its subject. In a sense, the most basic of the principles of war is the need to constantly challenge, reevaluate, and modernize all of them. The job is never done.

anonymity is becoming harder to achieve. Covertly sustaining logistics even for relatively low-demand insurgent operations will not be easy. In particular, obtaining advanced medical care surreptitiously might be nearly impossible. Carefully studying the implications of durability on an adversary might be the greatest source of fresh solutions to thorny military problems.

Another important durability consideration is that technology of all kinds now reaches even the remotest areas of the world and is quickly spawning generations addicted to it. Accordingly, a "death of a thousand cuts" strategy might profit those who exploit such a habituation because even small techno-encumbrances can accumulate into debilitating friction. Taking advantage of superior resources to produce redundancies and alternatives, as well as steeling one's own forces to technology loss, is fast becoming essential to force durability.

In modern conflicts, durability requires extraordinary mental toughness. Persevering in the face of the enormous stress the lethality of modern battlefields produces, withstanding increasingly sophisticated psychological warfare, and tolerating extreme deprivation place a huge premium on professionalism, especially discipline. Winning forces must be disciplined and confident, and few things enhance troop confidence more than engagement dominance.

Engagement dominance. The theory behind engagement dominance is not complicated. Beginning with David's defeat of Goliath, military history graphically demonstrates the value of this often overlooked principle. The concept calls for striking an opponent with impunity by outranging, outgunning, or even outwitting him through deception and surprise. The fearsome 14-foot pikes of Alexander's phalanxes killed thousands of short-sworded infantrymen before they could land a blow; English bowmen destroyed the flower of French knighthood from long distance at Crécy; and during the first Gulf War, American tanks simply outranged Iraqi T-72s to win a crushing victory at the Battle of 73 Easting.

Obtaining engagement-dominating technology is complicated, however. Although everyone intuitively appreciates that advanced warfighting hardware can separate winners from losers, too many assume that all technology is an unqualified "good." The result? Confusion about such critically important but intricate concepts as transformation, system of systems, battlespace awareness, and more. Worse, research and development (R&D) efforts diffuse wastefully into solutions in search of problems. Replicating engagement dominance's past triumphs requires orienting sufficient R&D toward the overarching problem of war: preempting or disrupting an opponent's ability to bring his weapons to bear.

Another aspect of the engagement-dominance solution is methodological. Employing weaponry at the right time is as, or more, important than the sophistication of the equipment itself. This calls for processes that allow commanders to get inside the enemy's observe, orient, decide, act cycle that applies combat power.[6] Using superior capabilities effectively to seize the initiative and to deny it to the foe produces engagement dominance. Furthermore, engagement dominance incorporates and simplifies maneuver and can impose or oppose surprise. It even results from the actions of third parties through the orchestration of unity of effect.

Unity of effect. The traditional principles of war speak of unity of command with its implicit assumption of direction and control. What really counts in war, however, are effects, however obtained. While putting available resources into a workable chain of command always helps, leveraging that which is beyond command and control is especially valuable. Unity of effect, therefore, reinterprets economy of force and even mass and maneuver by accentuating results.

Examples of leveraging the uncontrollable are many. Weather has long created effects with military implications. For example, during the second Gulf War commanders destroyed Republican Guard units by exploiting the fatal assumption by Iraqi leaders that sandstorms made armor movements invisible to airpower. Throughout history, warfighters have

also obtained positive results from the savvy use of geography, even though they enjoyed no dominion over it.

Deriving operational effects from third-party activities is especially important in modern conflicts. The Madrid train bombings, which occurred shortly before the Spanish elections in 2004, represent a clever (albeit heartless) illustration. The bombings influenced voters as intended, and the new government withdrew its troops from Iraq. The practical effect was indistinguishable from a traditional defeat: The combat power of 1,400 Spanish soldiers was lost.

Obtaining advantage from the actions of disparate, proxy groups is a force multiplier. Proxies in modern warfare might not always realize their role. For many reasons, warring groups might have no formal or even informal connection with entities that produce effects that nevertheless serve their interests. Alliances of the unknowing will exist, and the skillful use of Internet appeals for action is but one example of how they might form.

Consensus-building optimizes unity of effect. Even where a unified command structure allegedly exists, pragmatic commanders might still find persuasive skills the most valued implement in their warfighting toolkit. Modern warfighting effects, not the niceties of wiring diagrams, are the coins of the realm. Achieving unity of effect will require a great deal of forward-thinking adaptability.

Adaptability. Adaptability is a hallmark of the American way of war. During World War II, innovative American Soldiers bolted homemade plows onto tanks to cut through hedgerows frustrating the breakout from Normandy. During the Korean War General Douglas McArthur's Inchon landings were an operational-level adaptation to a battlefield impasse. The spirit lives on: During the second Gulf War, Soldiers adapted to the threat of improvised explosive devices and small arms fire by welding "hillbilly armor" to their vehicles.

Adaptability better explains commonly misconstrued concepts like asymmetric warfare, which is nothing more than adapting warfighting means and methods to apply one's strengths against an opponent's weakness. Adaptability presupposes flexibility, but it does not mandate simplicity. Indeed, complexity breeds lucrative opportunities. Adaptation that employs high technology and requires trained, disciplined troops is difficult to counter. Linking a handful of Special Forces with aircraft overhead to produce real-time precision bombing is a complicated adaptive response that broke years of stalemate on Afghanistan battlefields.

NARA

An M-4 Sherman tank with a "rhino plow" attached in front has just punched its way through a Normandy hedgerow. Note the infantrymen riding on the back of the tank.

Nutter, U.S. Army

BG Courtney Whitney; GEN Douglas MacArthur, Commander in Chief of U.N. Forces; and MG Edward M. Almond observe the shelling of Inchon from the U.S.S. *Mt. McKinley*, 15 September 1950.

U.S. Army

SGT Clay O'Dell, 3-112th Armor Battalion, 56th Brigade Combat Team, 36th Infantry Division, welds a 3/8-inch steel armor plate on a HMMWV in southern Iraq.

Encouraging the creative instincts of subordinates is vital, as is an organizational culture friendly to rapid implementation of adaptive ideas. At the same time, however, inappropriately reflexive adaptations fail. Some out-of-the-box ideas are deservedly off-the-table; others need more development. Consider the Jeune Ecole's (young school's) advocacy of torpedo boats as the French Navy's adaptive response to the capital ships of other European powers of the late 19th century. Despite presaging submarine warfare, the movement prematurely dismissed the importance of battleships and did not anticipate the emergence of aircraft carriers.

In modern conflicts, prized leadership qualities include the ability to rapidly sort through proposals as well as tolerance for the risks inherent to adaptation. Naturally, adaptability aims to produce culminating power.

Culminating power. The concept of culminating power answers the question: What type and measure of military (or other) power is needed to attain satisfactory closure at a given level of conflict? Ordinarily, the answer would be "enough," either to annihilate one's adversary or to make him perceive that continued resistance is not worthwhile. Culminating power encompasses elements of the traditional principles of war, such as offensive, mass, maneuver, and economy of force, without explicitly requiring any of them.

What constitutes adequate culminating power depends on the situation. Surprisingly, at the strategic level it could involve a classic decisive battle. Such engagements are not passé; the fall of Stanley effectively ended the 1980 Falklands/Malvinas War, and the fall of Kandahar collapsed Taliban power in 2003. Future commanders might well impose a Dien Bien Phu effect on selected adversaries with great success.

Misunderstanding culminating power is easy today. Although conventional North Vietnamese divisions led the final assault on Saigon in 1975, that conflict, along with many of the post-World War II colonial wars, produced the widespread belief that guerrilla operations render orthodox militaries almost wholly irrelevant. Actually, low-intensity warfare usually succeeds only in the absence of high-intensity risk to a major power's fundamental security interests. True, insurgents in several colonial conflicts did force their opponents to tally the worth of fighting. Typically, the potential gains could not offset the investment needed to acquire enough culminating power to win. (Given the dismal economic performance of most former colonies, the calculations were largely accurate.)

Even in conflicts driven by ideology, such as Vietnam, a party will eventually objectively compute what it would have to do to conclude the conflict successfully. When it became clear that South Vietnam was not moving toward an effective democratic government, the American people calculated that the effort was not worthy of continued support given the costs.[7]

Regardless, when the stakes are higher, the arithmetic of culminating power differs radically, which is important in the zero-sum game of national security budgetary battles. Of significance is that neither Iraqi insurgents nor Al Qaeda terrorists can acquire sufficient culminating power to threaten the United States' basic security interest—America's continued existence as a free nation.

Terrorists can wreak savage injury—especially using weapons of mass destruction (WMD)—but only a peer competitor with a sizeable WMD capability can imperil America's survival. This should give pause to those who ridicule so-called legacy systems such as attack and ballistic missile submarines, nuclear-capable bombers and missiles, and show-stopping weapons like the F-22A. As important as defeating terrorism and other low-intensity forms of warfare might be, considerations of the larger context must guide decisionmaking.

Guideposts for the Future

Modernized principles of war could serve as guideposts (but not stop signs) for military and civilian leaders embroiled in 21st-century conflicts. Such principles could aid the conduct of war and assist in organizing, training, and equipping for the same. When appropriately interrelated, the modernized principles suggest ways to strengthen friendly forces and indicate vulnerabilities in enemy operations. Of course, the best commanders will deviate from the principles as the fortunes of war dictate. Moreover, the modernized principles will inevitably evolve. Ultimately, war is still an art, and like all artistic endeavors, human imagination will continue to drive inventive forms and executions of its subject. In a sense, the most basic of the principles of war is the need to constantly challenge, reevaluate, and modernize all of them. The job is never done.

In security matters, intellectual stasis could be fatal. The great danger today, for example, is assuming that the irregular warfare of current conflicts is the inescapable template for future wars. (Is occupying another sullen and hostile population really the likeliest scenario?)

Finally, we must continue to search for peace even as we prepare for war. We can hope that the melancholy belief that "only the dead have seen the end of war" is wrong, so long as we always realize that hope is not a principle of war.[8] ***MR***

NOTES

1. U.S. Department of the Air Force Doctrine Document 1, *Air Force Basic Doctrine* (Washington, DC: U.S. Government Printing Office, 17 November 2003), 23.

2. Ibid., 24.

3. See RADM John G. Morgan, Anthony D. McIvor, and the Secretary of the Navy's Action Team, "Rethinking the Principles of War," *Proceedings* (October 2003): 34, 36-37, on-line at <www.jhuapl.edu/POW/library/Rethinking_Morgan_Oct0_1.pdf>, accessed 17 February 2006.

4. GEN Charles C. Krulak, "The Strategic Corporal: Leadership in the Three-Block War," *Marines Magazine* (January 1999), on-line at <www.au.af.mil/au/awc/awcgate/usmc/strategic_corporal.htm>, accessed 17 February 2006. Krulak contends that the "inescapable lesson of Somalia and of other recent operations . . . is that their outcome may hinge on decisions made . . . and by actions taken at the lowest level. [Their decisions] will likely be subject to the harsh scrutiny of both the media and the court of public opinion. In many cases, the individual Marine will be the most conspicuous symbol of American foreign policy and will potentially influence not only the immediate tactical situation, but the operational and strategic levels as well. His actions, therefore, will directly impact the outcome of the larger operation; and he will become . . . the Strategic Corporal."

5. Note that Dien Bien Phu began as an offensive operation.

6. The observe, orient, decide, and act (OODA) loop concept was developed by Colonel John Boyd. See Grant T. Hammond, *The Mind of War: John Boyd and American Security* (Washington, DC: Smithsonian Books, 2001).

7. Ironically, as Vietnam increasingly becomes a supplicant for aid and investment from the capitalistic states it fought against, exactly who "won" the war is open to debate. See Victor Davis Hanson, *Carnage and Culture* (Garden City, NY: Doubleday, 2001).

8. George Santayana, *Soliloquies in England and Later Soliloquies* (London: Scribner's, 1924), 102.

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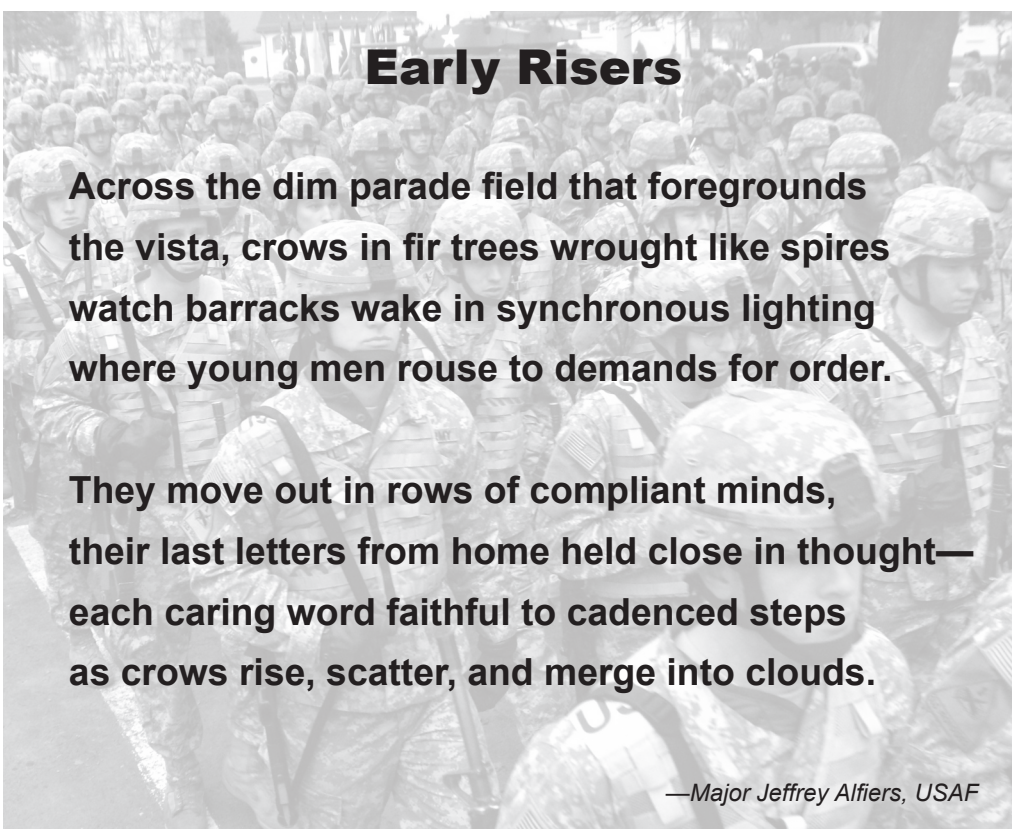

Early Risers

Across the dim parade field that foregrounds
the vista, crows in fir trees wrought like spires
watch barracks wake in synchronous lighting
where young men rouse to demands for order.

They move out in rows of compliant minds,
their last letters from home held close in thought—
each caring word faithful to cadenced steps
as crows rise, scatter, and merge into clouds.

—Major Jeffrey Alfiers, USAF

U.S. Army photo by Martin Greeson