# Clausewitz's Continued Relevance and Foundation for Educating Critical Thinking Skills

by

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United States Army War College Class of 2012

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#### USAWC STRATEGY RESEARCH PROJECT

## CLAUSEWITZ'S CONTINUED RELEVANCE AND FOUNDATION FOR EDUCATING CRITICAL THINKING SKILLS

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#### ABSTRACT

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## CLAUSEWITZ'S CONTINUED RELEVANCE AND FOUNDATION FOR EDUCATING CRITICAL THINKING SKILLS

"Thinking about the future requires an understanding of both what is timeless and what will likely change." This pithy dichotomy articulated in the Introduction to the Joint Operational Environment (JOE) 2010 captures the essence of the ongoing dialectic between continuity and change as we move into the second decade of the 21<sup>st</sup> Century. On one hand, the strategic and operational environment is experiencing dramatic changes across almost every social, political, economic and military domain that is driven by major advances in just about every human field of endeavor. While on the other hand, many principles and theories of war remain timeless as warfare itself continues as a human endeavor<sup>2</sup> and is subject to many of the same human virtues and frailties. Correspondingly, many military theorists and practitioners disagree on the continued relevance of many classical military theorists such as Clausewitz, Jomini, Sun Tsu, and others as the military and the Nation confront the rapidly changing context of war in the 21<sup>st</sup> Century.<sup>3</sup> This paper examines the dynamic operational and strategic environment, assesses the arguments on the continued relevance of Carl von Clausewitz's theories of war, and proposes that the study of his theories provides a framework not only for thinking about future war but also as the overall foundation for officer education in 21st Century Warfare.

#### 21<sup>st</sup> Century Operating Environment

The conduct of warfare over the last 60 years has undergone a dramatic transformation driven by factors within the operational and strategic environment undergoing continuous and accelerated change. Advances in computer science, medical science, information technology, miniaturization, and other innovations in the

application of communication technology are currently affecting nearly every aspect of the social, political and military environments. The increasing use of information technology, micro-technology, robotics, progressively more capable sensor technologies, global positioning, distributed and layered wireless communications, and the extension of the world-wide web has revolutionized both the weapons used in war and military operations in general. From a systems perspective, weapons are more precise and accurate, possess greater lethality, have greater ranges and rates of fire, have improved survivability, possess greater mobility, are increasingly operated remotely and are generally much more costly. From an operations perspective, units now maneuver with relatively assured and instant communications with adjacent, lower and higher units and with supporting and supported forces.<sup>4</sup> Generally, commanders know and can continuously monitor the precise location of nearly every member of their own force and have a unique ability to strike, or place at risk, enemy targets virtually at any location within their Area of Operations (AOR) and, for the US global strike capability, anywhere in the world.<sup>5</sup> Additionally, the advent of a reliable communications network enables units to instantaneously share information and intelligence and conduct collaborative self-synchronization between friendly forces to seize and maintain the initiative. These innovations allow the greater dispersion of forces, empower decentralization of operations, and dramatically increase both the tempo of operations and the lethality of engagements. Similarly, Douglas McGregor argues that this rapid dissemination of information through networked Intelligence, Surveillance, Reconnaissance (ISR) capabilities could cause a paradigm shift in the character of

warfare in the 21<sup>st</sup> century.<sup>7</sup> These changes in the conduct of operations are accompanied by changes in our adversaries and the characteristics of conflict.

Generally, the US military currently categorizes conflict as either 'traditional' or 'irregular.' Moreover, the US military defines different conflict environments within these two major categories. Correspondingly, the Joint Operating Environment (JOE) 2010 describes future conflicts as being increasingly multidimensional with both state and non-state actors resorting to a combination of military and nonmilitary means to pursue their individual objectives while avoiding US strength in the conduct of conventional operations. Likewise, non-state actors may use high technology weapons and asymmetric attacks, such as those directed at US information networks, while state actors may resort to unconventional and irregular methods to attack and exploit US vulnerabilities. The JOE uses the term 'hybrid' to describe different adversaries concurrently employing multiple traditional and irregular operations all within the same conflict. The expected intent of our adversaries would be to confront the US with a broad array of threats while avoiding US conventional strengths and exploiting US niche vulnerabilities. Likewise, the US must react and adapt to new and/or unexpected applications of force. Thus, "conflict in the 21st century [primarily] most likely will be neither regular [traditional] nor irregular, but in some measure nearly always significantly mixed or hybrid in character."10

#### Warfare

The analyses of Clausewitz's theories require the use of some commonly used but frequently misunderstood terms such as warfare, war, strategy and theory. 21<sup>st</sup>

Century Warfare is further defined by the Office of the Secretary Defense (OSD) in the 2010 Joint Operations Concept (JOC) on "Irregular Warfare." The JOC breaks war into

two types: traditional war (TW) and irregular war (IW). Traditional warfare is "a form of warfare between the regulated militaries of states, or alliances of states, in which the objective is to defeat an adversary's armed forces, destroy an adversary's war-making capacity, or seize or retain territory in order to force a change in an adversary's government or policies."<sup>11</sup>

#### Traditional vs. Irregular Warfare **Traditional Warfare** Irregular Warfare Effect Desired: Effect Desired Government Government **Population** Military Population Military Effect Desired Effect Desired: Effect Desired: Gain Support of Population Isolate from Conflict Defeat Military Render Irrelevan

IW includes Actions to erode an adversary's power and influence over its people rather than defeat the adversary through direct military confrontation.

Figure 1. Traditional warfare vs. irregular warfare<sup>12</sup>

Irregular warfare is "a violent struggle among state and non-state actors for legitimacy and influence over the relevant populations. Irregular warfare favors indirect and asymmetric approaches, though it may employ the full range of military and other capabilities, in order to erode an adversary's power, influence, and will." Figure 1 conceptually portrays how traditional warfare and irregular warfare may differ on "focus" of effort. Irregular warfare employs a strategy of exhaustion to undermine and erode the adversary's power, influence, and will to exercise political authority over a relevant population. By employing this strategy of exhaustion, it gains influence over and the support of the population. Conversely, traditional warfare employs either a strategy of annihilation or strategy of attrition focused on direct military confrontations with the adversary's military.<sup>14</sup>

While the JOC provides an excellent explanation of warfare, Joint Publication 1, *Doctrine for the Armed Forces of the United States*, serves as the capstone publication for all joint doctrine, presenting fundamental principles and overarching guidance for the employment of the Armed Forces of the United States. Accordingly, the U.S. military definition of war is found in the first chapter: "War is socially sanctioned violence to achieve a political purpose. In its essence, war is a violent clash of wills. War is a complex, human undertaking that does not respond to deterministic rules." Joint Publication 3-0, Joint Operations, states that war exists at three distinct levels: strategic, operational, and tactical. Each level is differentiated by related but distinct objectives at the national, theater, and unit levels. JP 3-0 also provides the definition of strategy and states that a strategy is a "prudent idea or set of ideas for employing the instruments of national power in a synchronized and integrated fashion to achieve

theater, national, and/or multinational objectives."<sup>18</sup> By this definition, a strategy would not be used at the tactical level of war. Rather, at the tactical level specific 'concepts' would be developed and executed during relatively short time periods usually achieving a limited objective: geographical (seize key terrain, city, physical asset, etc); positional (flanking, envelopment, dislocation, etc), or conditional (attrite, demoralize, destroy, etc). Finally, Merriam-Webster defines theory as an idea or set of ideas that is intended to explain facts or events.<sup>19</sup> Theories serve as the framework by which senior leaders develop strategies and concepts.

While the U.S. Joint Publications provide clear and concise definitions, the perspective is from a US. Department of Defense-centric viewpoint and varies somewhat from other uses of the term. For instance, Merriam-Webster rather narrowly defines war as "a state of usually open and declared hostile armed conflict between states or nations." Differing, John Keegan widens the definition of war and treats it as a universal phenomenon whose specific form and scope is relative and 'defined' by the society that wages it. For the purposes of this essay, war in the 21<sup>st</sup> century is defined as 'a condition that exists when a state or group (non-state actor) employs lethal force against an opposing enemy in order to achieve an objective. Understanding that there are no absolutes in theory, the definition is worth further refinement.

The key words for this operable definition of war are: condition, lethal force, enemy, and objective. The term 'condition' relates to what Keegan is trying to capture with his definition. The term 'condition' addresses the unique perspectives of the opposing sides and identifies a distinctive set of circumstances that is dramatically different than the normal status quo. The use of 'lethal force' differentiates war from

many other forms of competition or conflicts with both sides resorting to violence in an effort to kill or destroy the opposing enemy or its resources. If the intent is not to kill or destroy as a means for achieving a higher 'objective,' it is not war; rather, it is an alternative use of the instruments of power. This also discriminates war from many criminal acts. The 'enemy' is simply defined as the opposing entity that is expected to resist and employ lethal force in opposition. As alluded to previously, the term 'objective' provides the rationale or purpose for the conflict. Importantly, both sides may pursue dramatically different though conflicting 'objectives.' With two opposing sides acting, reacting, counter-reacting and pursuing conflicting objectives while employing lethal force, war results in a dynamic, complex, adaptive and open system where violence, death and destruction creates fear and anguish that routinely obfuscates and distorts the judgment and the perceptions of both sides at all levels of war.

No one can accurately predict the exact future context of war. However, despite major changes in the conduct and instruments of war and the corresponding increased uncertainty of who will be the opposing actors, this author proposes that the primary nature of warfare will not change.<sup>22</sup> Likewise, many of the classical theories of war will not change, particularly those theories on war offered by Carl von Clausewitz.

### Clausewitz's Theories and the 21st Century

Clausewitz's thoughts and writings were never meant to be used as prescriptive approaches to warfare. Rather his theories of war are intended to capture the human element of warfare and are more descriptive in character. Thus, much of his theory remains applicable to the nature and conduct of warfare in the 21<sup>st</sup> century. Several contemporary theorists and strategists, such as Rupert Smith, John Keegan, and Philip Meilinger have discounted Clausewitz and his theories of war. Their criticisms

characterize his theories as misguided or obsolete for the study of warfare in the 21<sup>st</sup> century. Conversely, there are other theorists who continue to value Clausewitz's theories and argue they are just as relevant today as when he first composed them. This paper will examine his overall treatment of war, assess what he proposes as the various purposes of war, and focus on the continued relevance and applicability of what he terms as 'the remarkable trinity.'

Carl von Clausewitz's definition of war is consistent with the framework previously discussed and is very applicable in today's strategic environment. In chapter one of book one of On War, Clausewitz is careful to explain that he is using an uncomplicated definition of war as "an act of force to compel our enemy to do our will."<sup>23</sup> Additionally, he states "war is nothing but the continuation of policy with other means."<sup>24</sup> Although rather simplistic in prose, these definitions reflect a nuanced appreciation of the timeless nature of war as both subject to violence and the will and intent of the opposing participants. These aspects will be addressed in later sections. Additionally, Clausewitz believed in both ideal/absolute<sup>25</sup> and limited war.<sup>26</sup> This is an important distinction but should not be confused with the current 'traditional' and 'irregular' forms of warfare since both would be categorized under Clausewitz's limited war construct. While both of Clausewitz's types of a war are tied to political aims, there are some distinct differences. Absolute war would be unlimited—maximum violence and aimed at the complete destruction of the enemy. The theory of absolute/ideal war implies that war is a wholly isolated act unto itself, uninfluenced by political events, a single or set of simultaneous decisive acts, and with perfect results unto the act itself.<sup>27</sup> Clausewitz uses this concept of 'ideal' war where both sides are willing to 'risk all to gain all' to

contrast its form and substance with that of the commonly occurring 'limited war.'

Limited war is constrained by 'politics' that essentially balances risk with the level of desired or attainable objectives. Clausewitz viewed limited war as driven by the political nature of all wars that generally drove a range of related objectives other than the total destruction of the enemy. Therefore, the vast majority of wars have been and will continue to be limited in nature.

Rupert Smith, a retired British General Officer and author of the book *The Utility of Force: The Art of War in the Modern World*, disagrees with Clausewitz. He asserts that "War no longer exists. Confrontation, conflict and combat undoubtedly exist..." <sup>28</sup> He goes on to argue that a paradigm shift in war has occurred. This paradigm shift is from interstate industrial wars to war amongst the people. <sup>29</sup> Smith states that wars amongst the people reflect six trends: War 'ends' focus on societies and not states and that the media has brought fighting into our living rooms. These conditions have made conflicts timeless with fighting directed at not losing the force rather than achieving the military objective. Additionally, emerging threats are exploiting new technology and finding new uses for old technology, with opposing sides frequently being non-state actors. He argues that war is no longer a massive event that achieves well defined political objectives. <sup>30</sup> Despite his many cogent arguments, it is difficult to move past Smiths' statement that war no longer exists, especially when he continues to use 'war' in describing the range of alternatives throughout his book.

Many of Smith's assertions are based upon his limited interpretation and restrictions placed on Clausewitz's definitions. As previously discussed, DoD's current doctrine addresses war as both traditional and irregular. Clearly, Smith's description of

"war amongst the people" directly relates to the characteristics of irregular warfare (IW) outlined in the JOC and in current joint and service doctrine. Similarly, Dr. Nicolas Garner, an author and professor at the US Air War College, contends that actions employed by actors utilizing "war amongst the people" or "people's war" as a type of conflict are not completely different than those practiced in conventional operations. Rather, he believed Clausewitz viewed both as different methods of warfare chosen based on the actors' relative strengths and their offensive or defense orientation during a conflict.<sup>31</sup> "War amongst the people" is in essence addressed by Clausewitz under his theory of war by limited means. Smith's arguments appear to focus on Clausewitz's treatment of ideal war, despite Clausewitz's primary use of 'ideal war' as a comparative framework. Similarly, Smith downplays and artificially restricts the applicability of Clausewitz's theory of limited war to "war amongst the people." With very little extension of Clausewitz's definition of 'limited war,' his theories remain as applicable today as when he wrote them and are useful in describing and conducting war amongst the people.

Directly correlated to Clausewitz's definition of war is the purpose for which wars are fought. The JOE 2010 states that "war is a political act, begun for political purposes" and applies to states and non-state actors alike. "Thus, war retains its political dimension in the twenty-first century, even when it originates in the actions of non-state and transnational groups..." Whether a democracy or a dictatorship, whether a state or non-state actor, if war ensues, there exists a stated or implied purpose of the collective adversary. Referring back to Clausewitz's definition, the objective is political in nature. For instance, a non-state actor's objective could be

ideological or religious and is the motivation for war. This political 'ends' will ultimately dictate the corresponding objectives. Moreover, the risk and amount of force used to achieve this military objective are relative to ends that are desired to be achieved. These Clausewitzian principles apply to the current war effort in Iraq and Afghanistan. President Bush stated a clear objective referencing the US stance on the removal of weapons of mass destruction (WMD) during a speech on February 2, 2003. He stated, "The danger posed by Saddam Hussein and his weapons cannot be ignored or wished away. The danger must be confronted. We hope that the Iraqi regime will meet the demands of the United Nations and disarm, fully and peacefully. If it does not, we are prepared to disarm Iraq by force. Either way, this danger will be removed." Military leaders were then able to formulate a plan that would remove Saddam and eliminate the threat he posed for the employment of WMD and then applied the proportional amount of power needed to achieve the stated objective.

John Keegan, a British military historian, lecturer, writer and journalist, takes issue with the Clausewitzian 'purpose' for which wars are fought. In his book, *A History of Warfare*, he denounces the concept of "war is a continuation of policy by other means" and argues that war is a cultural activity rather than a political one. In the first chapter of his book he states that "war is not a continuation of policy by other means" and that the translation of the word "policy" is actually a mistranslation and the product of incomplete thought.<sup>35</sup> Keegan argues that war "is wholly unlike politics because it must be fought by men whose values and skills are not those of politicians and diplomats."<sup>36</sup> Keegan believes that Clausewitz's definition of war does not address cultural influences and that "war embraces much more than politics: that it is always an

expression of culture, often times a determinant of cultural forms, in some societies the culture itself."<sup>37</sup> Keegan is not alone in his criticisms. Phillip Meilinger, a retired Air Force officer, author, and educator, is also criticizes Clausewitz in his article "Busting the Icon: Restoring Balance to the Influence of Clausewitz." He concurs with Keegan's view points on both the belief that societies have waged war for cultural reasons throughout history, that modern authors have mistakenly translated Clausewitz word 'policy'<sup>38</sup> as being more expansive than Clausewitz intended, and correspondingly that Clausewitz's assertion that war is continuation of policy by other means is applicable to modern warfare.

Both Keegan's and Meilinger's criticisms are simply not accurate. Colin S. Gray, the director of the Centre for Strategic Studies for the University of Reading, recently wrote, "Military force is not an anachronism; it is and will long remain an essential instrument of policy." Gray argued that there are conflicts that cannot be resolved by non-military means for reasons covered by Thucydides' three governing factors of 'fear, honor, and interest.' Thus, warfare can resolve conflicts where diplomacy and policy have failed to do so. To refute Keegan's "cultural" reasons for war, Gardner references a Bassard article to explain that all wars have the same connection to politics, regardless of the cultural influences:

The power being contested may be social, as in the endemic personal competitions in feudal societies or during the European "Age of Kings;" economic, as with control of gold for the mercantilists, human flesh for the cannibal or slave-trader, or food for the ecological disaster victims on Easter Island; religious, as in the early stages of the Thirty Years' War or, in a rather different sense, Aztec Mexico; ideological; or anything else. Regardless of the motivation, the contest is for power and is therefore political.<sup>41</sup>

Gardner also argues that Clausewitz knew that policy was not a completely rational undertaking.<sup>42</sup> Rather, Clausewitz very much understood the influence that non-rational factors such as sociological, ideological, religious, etc. may have on policy and these factors are clearly included in the first element of his "remarkable" or "wonderful" trinity.

Clausewitz's trinity "is the concept that ties all of Clausewitz's many ideas together and binds them into a meaningful whole." "The 'remarkable trinity' is, in fact, Clausewitz's description of the psychological environment of politics, of which 'war is a continuation of." According to Clausewitz, war is "composed of [1] primordial violence, hatred, and enmity, which are to be regarded as a blind natural force; [2] of the play of chance and probability within which the creative spirit is free to roam; and [3] of its element of subordination, as an instrument of policy, which makes it subject to reason alone." These three characteristics relate to the irrationality of many aspects in the conduct of war, the affect of unanticipated and uncontrollable events, and the role of reason in balancing ends, ways and means.

Clausewitz's remarkable trinity continues to be applicable to modern warfare.

One author argues that Clausewitz's three principles directly address the psychological influence of three major entities that drive and conduct war: the people, the army, and the government:

The people are paired mainly with irrational forces--the emotions of primordial violence, hatred, and enmity (or, by implication, the lack thereof--clearly, it is quite possible to fight and even win wars about which one's people don't give a damn, especially if that is the case on both sides.)

The army (which refers, of course, to military forces in general) and its commander are paired mainly with the non-rational forces of friction, chance, and probability. Fighting organizations deal with those factors under the creative guidance of the commander (and creativity depends on

something more than mere rationality, including, hopefully, the divine spark of talent or genius).

The government is paired mainly with the rational force of calculation-policy is, ideally, driven by reason.<sup>46</sup>

These three sets of human factors can be applied to modern warfare as previously discussed in Figure 1 where the formal or informal organization hierarchy of non-state actors or groups constitute the 'government.' The concept of 'People, Army, and Government' is not offered as an alternate definition to the trinity, merely as an example of how these principles may connect in the operating environment of actors at war. "The government establishes the political purpose, the military provides the means for achieving a political end and the people provide the will...all three are indispensable legs of Clausewitz's strategic triad."<sup>47</sup>

The first element relates to the effects of violence. "Here, however, Clausewitz is not talking primarily about physical violence, but about violent emotion as a motive force." A good illustrative example exists in Afghanistan. Eastern Afghanistan and Western Pakistan are comprised primarily of the Pashtu tribes. Pashtu's lead their lives according to Pashtunwali. Pashtunwali has core tenets which include self-respect, independence, justice, hospitality, love, forgiveness, and tolerance to all (especially to the stranger or guest). Pashtu do not recognize any government's authority as higher than their own or that of God. This proved to be very beneficial to al-Qaida operatives over the last 10 years who sought and received safe havens and support from the Pashtu. The Pashtu culture requires that they provide refuge and support to a stranger as long as this stranger asks for support and wishes them no ill-will or harm. Conversely, if they are 'wronged,' say from an errant bombing of a wedding party, then violence begets violence. Once begun, long-standing cycles of violence and

retributions cannot be broken until the harmed side or both parties achieve what they perceive as moral justice. Rote adherence to these cultural norms coupled with the passion of retribution drive irrational acts of war that can result in the self-destruction of the tribe.

The second element of the paradoxical trinity is volatility (associated with chance and probability). This element identifies influences outside the control of the competing sides. "This objective environment consists both of the physical world (roads weather, disease, etc.) everything we cannot alter at once by merely wishing) <u>and</u> ...the human ecology within which the participants' perceptions, plans, and actions must co-evolve." The environment creates what is termed fog and friction. Fog relates primarily to the effects of uncertainty and ambiguity in obfuscating information and distorting perceptions; friction relates to the combined conditions of war that create unanticipated failures and make almost every human endeavor or activity take longer and require more effort and resources than expected. These are human factors associated with war that will not change no matter what advances in technology or computing power may occur: fog and friction will distort, cloak, and twist the course of events even in modern traditional and irregular wars.

Eugenia Kiesling argues that rejecting the "fog-friction" dichotomy allows for a better understanding of "friction." She argues that Clausewitz actually discussed two forms of friction rather than the two different factors of mental fog and physical friction.<sup>51</sup> She argues that the word "fog" is only used, in a non-meteorological sense, two times in Clausewitz's writings and never phrased as the 'fog of war.' However, in chapter two of book two of On War, Clausewitz is very deliberate when he discusses the uncertainty of

all information: "Finally, the general unreliability of all information presents a special problem in war: all action takes place, so to speak, in a kind of twilight, which, like fog or moonlight often tends to make things seem grotesque and larger than they really are." <sup>52</sup>

Clausewitz's theory of war incorporating fog and friction as operative factors remains valid for 21<sup>st</sup> Century warfare. As in the past, modern warfare will not be deterministic. As Douglas McGregor argues, fog will result from information overload, our own misperceptions and faulty assumptions, and the fact that the enemy will act in an unexpected fashion. Regardless of how well new technologies collect and disseminate information and intelligence, they cannot provide perfect situational awareness or perfect information about the enemy or friendly intentions. Friction has, and always will, lead to unexpected consequences. Friction provides an almost infinite number of outwardly insignificant influences that can impede or derail operations<sup>53</sup> and, when combined with fog, will ensure surprise in warfare will always exist.

Countermeasures in multiple forms, including exploiting cyber warfare to disrupt modern information systems, ensure the fog of war will persist in 21<sup>st</sup> Century warfare.<sup>54</sup>

The final element of the trinity as it characterizes war is the importance of the rational decision maker. The success of the war effort depends on the relative quality of the opposing strategies adjudicated by battle. Quality strategies balance ends, ways and means. Simply put, strategies define the purpose for war. The political goals coupled with the corresponding military objectives accomplish the latter. Clausewitz attempts to convey the close interplay between political objectives (ends) and the use of armed combat to achieve those ends.

As previously discussed, Clausewitz's use of "policy" or "political" or "politik" when used in the context describing the reasons for war has generated criticism.

Perhaps ninety percent of the criticisms of Clausewitz's theories are based upon the use of these three words and their relationship to war. What Clausewitz rarely does is overtly define "politik" and when he does so, it is done to fit the immediate context. Bassford argues that the major distinction between policy and politics is interactivity. He argues that politics is multilateral whereas policy is unilateral. In the context of the trinity, war, in a subordinate role to rationality, is a political instrument. Within a modern context, 'political' ends can be interpreted as relating directly to the pursuits of non-state actors or groups resorting to violence in pursuit of their objectives. Politics or policy does not necessarily mandate a well-organized government.

Correspondingly, criticisms of Clausewitz's tend to limit attacks to isolated portions of his theories. Instead of holistically considering the interrelated body of his theory they focus instead on his specific use of a single term that has subsequently assumed different meanings and connotations. As previously discussed, he makes no attempt to simplify his thoughts on war. On the contrary, he reminds us that theory is not intended to be a prescriptive set of rules for rote application to war. Rather, theory "is meant to educate the mind of the future commander, or, more accurately, to guide him in his self-education, not to accompany him to the battlefield..." Remarkably, it this 'educational' aspect of Clausewitz theories that has truly made his writings timeless.

#### Preparing Future Senior Leaders

As early as 2001, now Maj. Gen. Gregg Martin, the current Commandant, United States Army War College, recognized that a more holistic approach to officer education

which had a greater fusion of education and training was required for future strategic leader development.<sup>59</sup> Likewise, Army Field Manual (FM) 7.0, training for full-spectrum operations, states that traditional education and training may not meet all the needs of an expeditionary Army; as appropriate, training and education must adapt to the needs of the new operational environment.<sup>60</sup> Arguably no single educational requirement is more important than the education of military officers on comprehensive thinking skills.

Effective education of thinking skills requires several enablers. First is preparing and educating leaders to think critically and creatively about complex problems.

Second is reevaluating how best to educate leaders on how to think. Lastly is determining how to best institutionalize the education of thinking skills into the formal education process throughout a military officer's career. "The 21st-century warrior must be able to think about a problem in terms beyond his or her own personal and limited training and experience. Comprehensive education gives a leader the tools to do just that."61

Critical thinking skills enable military officers to deal with contradictions and problems in a tumultuous environment in a reasoned, purposeful, and productive way. <sup>62</sup>
"As in the past, the most lethal weapon on the battlefield will be the soldier/leader who is fit, resolute, disciplined and skilled. Along with the requisite courage to fight, this soldier will have to demonstrate an unprecedented level of innovation and creativity in order to adapt to an ever-changing, complex situation." <sup>63</sup> This future leader must possess the ability to think critically. "The most important capability needed for the Army Future Force may well be thinking Soldiers and junior leaders who seek after the "why" of a

situation, task or directive, to understand and make better use of the purpose behind it."64

A faculty instructor at the United States Army War College began a block of instruction on critical thinking with the following statement: "One of your greatest challenges as future senior leaders will be to make the transition from what-to-think to how-to-think." A question that should have been posed back to him is if this is one of the greatest challenges senior leaders will face, why does the Army wait 25 years into the career of officers to focus on this type of education? Likewise, several recent studies have identified critical thinking is the number one requirement for successful leadership in the 21st century. Clearly, the education of thinking skills should be incorporated into officer professional education programs throughout their careers.

The Chairman of the Joint Chiefs of Staff, General Martin E. Dempsey recently released a copy of his suggested reading list.<sup>67</sup> It is comprised of 26 titles and broken into three categories: history and heritage, leadership, and critical analysis and the global context. The purpose of the reading list is to provide a means of self development and education through reading about our military's past, the profession of leadership, and critically thinking about the application of these lessons towards meeting future challenges. Also, in a recent article in Armed Forces Journal, Gen Dempsey states that future leaders "...must be able to think critically and be capable of developing creative solutions to complex problems. They must be historically minded; that is, they must be able to see and articulate issues in historical context." This is consistent with Clausewitz's assertion that "theory becomes a guide to anyone who wants to learn about war from books; it will light his way, ease his progress, train his

judgment, and help him to avoid pitfalls."<sup>69</sup> Not coincidentally, Clausewitz's "On War" is on Gen Dempsey's reading list and can help provide the foundation for critically thinking about war itself.

Perhaps the greatest challenge for military institutions is educating their leaders for judgment. "Education must give leaders the ability to orient to vastly different perspectives, to relate different fields of human knowledge, and to simplify and resolve complexity and conflict." While there is still a place for the 'task-condition-andstandard' model in Army training (i.e., M4 assembly, tank gunnery, radio procedures, orders production, etc.), leaders should not be educated and trained the same way. While they must understand the basic principles of doctrine and tactics, they must also be educated to adapt and respond to unexpected challenges within new and dramatically different contexts. Thus, training should be combined with education for judgment with leaders faced with a wide range of different training scenarios and provided with only the intent of the operation.<sup>71</sup> The basics of the Army profession, our doctrine and tactics, must continue to be trained at the junior leader level. However, providing a wider range of unexpected training scenarios together with only the "purpose" or intent of the operation allows the development of both tactical competence and key thinking skills. Developing junior leaders who think through complex problems at the tactical level helps develop the thinking skills required when they rise to positions at the operational and strategic levels.

In 2009, Gen Dempsey, then commanding general of the United States Army Training and Doctrine Command (TRADOC), stated the need to transition to an outcome based training and education (OBT&E) approach. Likewise, he advocated

adopting an adaptive leadership methodology (ALM). Under ALM, "the focus is on growing the decision-maker by explaining the reason for the task of teaching in the context of a problem-solving exercise." ALM still incorporates classical education but takes it a step further where students are exposed to multiple situations where they are intellectually challenged to find answers to new lessons. The context immerses training with education as the student must think his way through new problems and apply intuition gained from previous experiences. Incorporating this style of "critical thinking" curriculum at the Lieutenant, Captain and Major level of education will be a key first step to better prepare the Army's future leaders. The ALM approach combines education with training and creates opportunity for a more holistic approach to leader development.

Finally, it is important to also expand and on the education of thinking skills for officers in the Captains Career Course (CCC), Intermediate Level Education (ILE) and even the Senior Service Colleges (SSC).<sup>74</sup> While great strides have been made at each of these levels in improving education on how-to-think, more attention needs to be paid to the role of theory in educating the 'mind of the future commanders.' In this regard, Clausewitz classical work "On War" provides a key springboard for educating our future senior leaders. Expanding its treatment in the curriculum at each level where officers can consider and debate its principles, and even its current relevance, can aid in educating our officers' judgment and thinking skills.

#### Conclusion

Defining exactly what warfare in the 21<sup>st</sup> Century will be like is difficult at best. A November 2011 search of the Army War College library catalog on "21 Century Warfare" returned 15,645 results. So there are plenty of opinions on what future war

will be or not be like. What is likely is that future warfare will most certainly see advancements in the applications of new technologies, it will probably consist of a "hybrid" mix of traditional and irregular warfare and it will definitely remain extremely complex in nature. What is also for certain is that today's junior leaders will eventually become our Nation's future strategic leaders and the security of our country will depend upon their thinking skills and judgment. Former Secretary of State Colin Powell wrote, "That wise Prussian Karl von Clausewitz was an awakening for me. His 'On War'... was like a beam of light from the past, still illuminating present-day military quandaries."

This essay examined the key aspects of Clausewitz's theories on warfare, assessed both criticisms and defending arguments and made the case for his theory's continued relevance in the 21<sup>st</sup> century. His writings reflect a timeless synthesis of experience and thought. His definitions of war, why wars are fought, and the relevance of the paradoxical trinity remains a viable framework considering the dynamics of warfare into the 21st Century. Additionally, his concepts of fog and friction, and their influences on the human dimension of war remain relevant despite major modern advancements in technology in pursuit of more accurate and timely information. Very simply, the enemy will always possess the ability to act to avoid predictability to ensure that warfare will not be deterministic. Correspondingly, preparing the intellect of our future military leaders is essential. Powell went on to write, "Clausewitz's greatest lesson for my profession was that the soldier, for all his patriotism, valor, and skill, forms just one leg in a triad. Without all three legs engaged, the military, the government, and the people, the enterprise cannot stand."76 It is in this regard that "On War" may still provide a key enabler for the improved intellectual development of the officer corps.

Clearly, how our future leaders are educated is critical to our future success.

Teaching officers how to think critically rather than just teaching them what to think will better develop them for future strategic roles. Doing so early in our officers' careers will help create adaptable and agile leaders who can think quickly and critically during warfare in the 21<sup>st</sup> century. Incorporating relevant teachings from the past for application in the future will help ensure leaders are adequately prepared for what lies ahead. The teachings of Carl von Clausewitz provide an educational springboard into the wars of the future. "No one starts a war, or rather no one in his senses should do so," Clausewitz wrote, "without first being clear in his mind what he intends to achieve by that war and how he intends to achieve it."

#### **Endnotes**

<sup>&</sup>lt;sup>1</sup> U.S. Joint Chiefs of Staff, *The Joint Operating Environment 2010*, (Washington DC: U.S. Joint Chiefs of Staff, February 18, 2010), 4.

<sup>&</sup>lt;sup>2</sup> Ibid.

<sup>&</sup>lt;sup>3</sup> For the controversy over the continued relevance of Clausewitz see Phillip S. Meilinger, "Busting the Icon: Restoring Balance to the Influence of Clausewitz," *Strategic Studies Quarterly* 1, no. 1 (Fall 2007): 116- 145, and the counter piece article by Nikolas Gardner, "Resurrecting the Icon: The Enduring Relevance of Clausewitz's *On War*," *Strategic Studies Quarterly* 3, no. 1 (Spring 2009): 119-133.

<sup>&</sup>lt;sup>4</sup> For background on information technology from on operations and a systems perspective see Douglas A. MacGregor, "Thoughts on Force Design in an Era of Shrinking Defense Budgets," *Joint Force Quarterly*, no. 63, (4<sup>th</sup> Qtr 2011), 22-24.

<sup>&</sup>lt;sup>5</sup> For background information on the Command Post of the Future see "Command Post of the Future CPOF," *Defense Update: International Defense Magazine Online*, no. 4 (2004), http://defense-update.com/products/c/cpof.htm, (accessed Mar 11, 2012).

<sup>&</sup>lt;sup>6</sup> For background information on Army's on-the-move, high-speed, high-capacity backbone communications network, linking warfighters on the tactical ground units with commanders and the Global Information Grid see "Command Post of the Future CPOF," *Defense Update: International Defense Magazine Online*, no. 4 (2004), http://defense-update.com/products/w/win-t.htm, (accessed Mar 11, 2012).

<sup>&</sup>lt;sup>7</sup> MacGregor, "Thoughts on Force Design in an Era of Shrinking Defense Budgets," 23.

<sup>8</sup> U.S. Joint Chiefs of Staff, *Doctrine for the Armed Forces of the United States*, Joint Publication 1, (Washington DC: U.S. Joint Chiefs of Staff, March 20, 2009), x. The executive summary states that "**Traditional war** is characterized as a confrontation between nation states or coalitions/alliances of nation-states. Traditional war typically involves small-scale to large-scale, force-on-force military operations in which adversaries employ a variety of conventional military capabilities against each other in the air, land, maritime, and space physical domains and the information environment (which includes cyberspace). **Irregular warfare** (IW) has emerged as a major and pervasive form of warfare. Typically in IW, a less powerful adversary seeks to disrupt or negate the military capabilities and advantages of a more powerful, conventionally armed military force, which often represents the nation's established regime."

- <sup>10</sup>Colin S. Gray, *Schools For Strategy: Teaching Strategy for 21st Century Conflict*, (Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, 2009), 22.
- <sup>11</sup> U. S. Joint Chiefs of Staff, *Irregular Warfare: Countering Irregular Threats Joint Operating Concept,* JOC v 2.0 (Washington DC, U.S. Joint Chiefs of Staff, May 17, 2010), B-4.
- <sup>12</sup> James R. Greenburg, "Environment of the Combatant Commander," briefing slides with scripted commentary, Carlisle Barracks, PA, U.S. Army War College, December 2, 2011.
- <sup>13</sup> U. S. Joint Chiefs of Staff, *Dictionary of Military and Associated Terms*, Joint publication 1-02 (Washington DC, U.S. Joint Chiefs of Staff, October 15, 2011) 175.
- <sup>14</sup> For a background on the framework of traditional warfare see Autulio J. Echevarria, *Toward an American Way of War*, (Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, 2004), 4.
- <sup>15</sup> U.S. Joint Chiefs of Staff, *Doctrine for the Armed Forces of the United States*, Joint Publication 1, (Washington DC: U.S. Joint Chiefs of Staff, March 20, 2009), preface.

<sup>&</sup>lt;sup>9</sup> Ibid., 66.

<sup>&</sup>lt;sup>16</sup> Ibid. I-1.

<sup>&</sup>lt;sup>17</sup> U.S. Joint Chiefs of Staff, *Joint Operations*, Joint Publication 3-0, (Washington DC: U.S. Joint Chiefs of Staff, August 11, 2011), GL 14, 16-17. JP 3-0 defines the levels of war as follows. "The strategic level of war is the level of war at which a nation, often as a member of a group of nations, determines national or multinational (alliance or coalition) strategic security objectives and guidance, then develops and uses national resources to achieve those objectives. The operational level of war is the level of war at which campaigns and major operations are planned, conducted, and sustained to achieve strategic objectives within theaters or other operational areas. The tactical level of war is the level of war at which battles and engagements are planned and executed to achieve military objectives assigned to tactical units or task forces."

<sup>&</sup>lt;sup>18</sup> Ibid, GL 16.

<sup>&</sup>lt;sup>19</sup> Merriam –Webster, *Learner's Dictionary*, http://www.learnersdictionary.com/search/theory, (accessed September 11, 2011)

- <sup>20</sup> Merriam –Webster, *Learner's Dictionary*, http://www.learnersdictionary.com/search/war, (accessed January 11, 2012)
  - <sup>21</sup> John Keegan, A History Of Warfare (London: Hutchinson, 1993) 3-5.
  - <sup>22</sup> U.S. Joint Chiefs of Staff, *The Joint Operating Environment* 2010, 6.
- <sup>23</sup> Carl Von Clausewitz, edited and translated by Michael Howard and Peter Paret, *On War*, (Princeton, NJ: Princeton University Press, 1976), 75.
  - <sup>24</sup> Ibid., 69.
  - <sup>25</sup> Ibid., 77-80.
  - <sup>26</sup> Ibid., 80-81.
- <sup>27</sup> Ibid., 78. "But move from the abstract to the real world, and the whole thing looks quite different. In the abstract world, optimism was all-powerful and force us to assume that both parties to the conflict not only sought perfection but attained it. Would this ever be the case in practice? Yes, it would if; (A) war were a wholly isolated act, occurring suddenly and not produced by previous events in the political world; (B) it consists of a single decisive act or set of simultaneous ones; (C) the decision achieved was complete and perfect in itself, uninfluenced by any previous estimate of the political situation it would bring about."
- <sup>28</sup> Rupert Smith, The *Utility of Force: The Art of War in the Modern World*, (New York City: Vintage, 2005) 3.
  - <sup>29</sup> Ibid.. 5.
  - <sup>30</sup> Ibid.. 20.
- <sup>31</sup> Gardner, "Resurrecting the "Icon", 124. "It is important to recognize that, unlike many modern commentators, Clausewitz did not view" People's war" is a type of conflict fundamentally distinct from large-scale conventional operations. Rather, he saw both as different methods of warfare chosen by belligerents based on their relative strengths as well as their offense a poor defense of orientations at a given point in a conflict."
  - <sup>32</sup> U.S. Joint Chiefs of Staff, *The Joint Operating Environment 2010*, 6.
  - 33 Ibid.
- <sup>34</sup> George W. Bush, http://georgewbush-whitehouse.archives.gov/news/releases/2003/02/20030226-11.html, (accessed September 12, 2011).
  - 35 Keegan, A History of Warfare, 3.
  - <sup>36</sup> Ibid., xvi.
  - <sup>37</sup> Ibid., 11.

- <sup>38</sup> Meilinger, "Busting the Icon", 132, "I attribute the myopia of America's military leaders regarding the importance of foreign culture and its influence on war and strategy in no small part to an overreliance on the writings of Clausewitz the nut of the problem focuses on the issue of Clausewitz's most famous online. The problems of translation and a translator's bias, noted earlier, are issues that must be addressed here is well. In book 1, chapter 1, Clausewitz pens his most famous sentence: (war is merely the continuation of...) Of what? What specifically was it that he stated war was a continuation of? Clausewitz use the word *poliik* In a subtitle in chapter 1."
- <sup>39</sup> Colin S. Gray, *Hard Power and Soft Power: The Utility of Military Force as an Instrument of Policy in the 21st Century,* (Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, 2009) 47, http://www.strategicstudiesinstitute.army.mil/pubs/display.cfm?pubID=1059, (accessed January 16, 2012).
- <sup>40</sup> Thucydides, *The Landmark Thucydides: A Comprehensive Guide to The Peloponnesian War*, Robert B. Strassler, Rev. trans., (New York: The Free Press, 1996); Gray, Hard Power, 47.
- <sup>41</sup>Christopher Bassford, "John Keegan and the Grand Tradition of Trashing Clausewitz: A Polemic," War in History 1, no. 3 (November 1994); Gardner, "Resurrecting", 126.
  - <sup>42</sup> Gardner, "Resurrecting the Icon", 126.
- <sup>43</sup> Christopher Bassford, "Tip Toe Through the Trinity", v.10 2011, http://www.clausewitz.com/readings/Bassford/Trinity/Trinity8.htm, (accessed September 14, 2011).
  - <sup>44</sup> Ibid., Gardner, "Resurrecting the Icon", 126.
  - <sup>45</sup> Clausewitz, On War, 89.
- <sup>46</sup> Christopher Bassford and Edward J. Villacres, "Reclaiming the Trinity," *Parameters* 25, no.3 (Autumn 1995): 13.
  - <sup>47</sup> Patrick Cronin, "Clausewitz Condensed", *Military Review* 65, no. 8, (August 1985): 42.
  - <sup>48</sup> Bassford, "Tip Toe."
- <sup>49</sup> I looked on line for the definition of Pashtunwali, http://www.wordig.com/definition/Pashtunwali, (accessed September 14, 2011).
  - <sup>50</sup> Bassford, "Tip Toe."
- <sup>51</sup> Eugenia Keisling, "On War: Without the Fog of War," *Military Review* 81, no. 5 (September-October, 2001): 86. "Rejecting the friction-fog dichotomy allows a better understanding of what Clausewitz actually means by friction. Instead of mental fog and physical friction, he guides us to see two different forms of friction. On one hand, friction encompasses the physical difficulties of moving and fighting armies. On the other, he links friction with intangible factors-fear, physical hardship and problems of information-that hamper the military commander."

- <sup>52</sup> Clausewitz. On War. 140.
- <sup>53</sup> U.S. Joint Chiefs of Staff, The Joint Operating Environment 2010, (Washington DC: U.S. Joint Chiefs of Staff, FEB 18, 2010), 7.
  - <sup>54</sup> MacGregor, "Thoughts on Force Design in an Era of Shrinking Defense Budgets," 23.
  - <sup>55</sup> Bassford, "Tip Toe."
  - <sup>56</sup> Ibid.
- <sup>57</sup> Ibid. "The key distinction between politics and policy lies in interactivity. That is, politics is a multilateral phenomenon, whereas policy is the unilateral subcomponent thereof. My ally, myself, and my enemy are all bound up together in politics, but we each have our own policies. I have my policy/policies/strategies; my ally has his policy; as an alliance, we have our policy. My enemy also has his own policy. But though they shared the same political stage and then joined together in war, Hitler and Churchill did not share a policy, and the war as a whole had no purpose, objects, or aims at all (unless you assign some guiding teleological intelligence to the historical process, which I do not, nor did Clausewitz)."
  - <sup>58</sup> Clausewitz, *On War*, 141.
- <sup>59</sup> Jeffery McClausland and Gregg Martin, "Transforming Strategic Leader Education for the 21<sup>st</sup> Century", *Parameters* 31, no. 3, (Autumn 2001): 13.
- <sup>60</sup> U.S. Department of the Army, *Training Units and Developing Leaders for Full Spectrum Operations*, Field Manual 7-0 (Washington DC: U.S. Department of the Army, February 23, 2011), 1-2.
- <sup>61</sup> Jacob Shuford, "Re-Education for the 21st-Century Warrior," *Proceedings* 135, no. 4 (April 2009): 14.
- <sup>62</sup> Catherine Reazak, "Leadership White Paper: Developing Critical thinking in Today's Leaders", 2011, 3,
- http://www.paradigmlearning.com/documents/Developing%20critical%20thinking%20in%20toda y%92s%20leaders%20006.pdf, (accessed January 4, 2012).
- <sup>63</sup> Robert R Leonhard, "Factors of Conflict in the Early 21st Century," *Army* 53, no. 1 (January 2003): 34.
- <sup>64</sup> Donald E. Vandergriff, "Today's Training and Education (Development) Revolution: The Future is Now!," *The Land Warfare Papers*, no. 76, (April 2010): 1.
- <sup>65</sup> Edward Filiberti, "Critical Thinking" lecture, U.S. Army War College, Carlisle Barracks, PA, August 8, 2011, cited with permission of Mr. Filiberti.
  - <sup>66</sup> Reazak, "Leadership White Paper," 1.

- <sup>67</sup> U.S. Joint Chiefs of Staff, *The U.S. Army Chief of Staff's Professional Reading List*, Chairman's Publication 105-1-1, (Washington DC: U.S. Joint Chiefs of Staff, August 11, 2011), 5-16.
- <sup>68</sup> General Martin E. Dempsey, "Building Critical Thinkers," *Armed Forces Journal* 148, no. 7 (March 2011): 14.
  - <sup>69</sup> Clausewitz, *On War*, 141.
  - <sup>70</sup> Shuford, "Re-Education for the 21st-Century Warrior," 15.
- <sup>71</sup> Edward J. Filiberti, "Transformation: In Search of Conceptual Clarity," Draft Paper, USAWC, 2009, 16-17.
- <sup>72</sup> Vandergriff, "Today's Training and Education (Development) Revolution: The Future is Now!," 3.
  - <sup>73</sup> Ibid., 9.
- <sup>74</sup> The USAWC dedicates an entire core block to theory of warfare covering almost a month of the curriculum with Clausewitz comprising three days of instruction. ILE has a core block, H100, which introduces the students to military theory through the writings of Jomini and Clausewitz but is not dedicated to the study of theory. Clausewitz is not taught at the CCC.
- <sup>75</sup> Colin Powell and Joseph Persico, *My American Journey* (New York: Random House,1995), 207.
  - 76 Ibid.
  - <sup>77</sup> Clausewitz, On War, 579.