NAVAL WAR COLLEGE
Newport, R.I.

MORAL FACTORS:
THE 10\textsuperscript{th} PRINCIPLE OF WAR

By

John S. Walsh
Major, USMC

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of [National Security Decision Making].

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

DISTRIBUTION STATEMENT A
Approved for Public Release
Distribution Unlimited

Signature: 

8 February 2000

Captain John T. DuGene, USN

20000622 101
**Title:** Moral Factors: The 10th Principle of War (U)

**Abstract:**
The nine principles of war first published in 1921 do not contain any serious analysis of the moral factors and have remained essentially unchanged. Moral factors include those intangible human elements that decisively contribute to combat power; these encompass courage, discipline, morale, esprit de corps, duty, and spirit. Unlike the United States, the importance of moral factors is recognized and established in the doctrines of several nations to include Great Britain, Australia, Russia, and Japan. There should be concern that American infatuation with technology and the material components of combat power are driving procurement that, in essence, is absorbing the defense budget. While the U.S. should continue to develop and integrate the most effective weapons that our society can provide, the military must remember that quality and quantity of materiel is only one factor of combat power; the other is moral factors. The most advanced systems in the world will not be effective unless operated and supported by personnel imbued with moral factors. The fundamental strength of our services will continue to be the individual Soldier, Sailor, Airman, and Marine. The U.S. military must focus on the indoctrination, development, and maintenance of moral factors in service personnel because of the decisive impact they have on combat power. The time is present to focus attention on the human element that contributes convincingly to combat effectiveness by updating the principles of war to include moral factors.
The nine principles of war first published in 1921 do not contain any serious analysis of the moral factors and have remained essentially unchanged. Moral factors include those intangible human elements that decisively contribute to combat power; these encompass courage, discipline, morale, esprit de corps, duty, and spirit. Unlike the United States, the importance of moral factors is recognized and established in the doctrines of several nations to include Great Britain, Australia, Russia, and Japan.

There should be concern that American infatuation with technology and the materiel components of combat power are driving procurement that, in essence, is absorbing the defense budget. While the U.S. should continue to develop and integrate the most effective weapons that our society can provide, the military must remember that quality and quantity of materiel is only one factor of combat power; the other is moral factors. The most advanced systems in the world will not be effective unless operated and supported by personnel imbued with moral factors. The fundamental strength of our services will continue to be the individual Soldier, Sailor, Airman, and Marine. The U.S. military must focus on the indoctrination, development, and maintenance of moral factors in service personnel because of the decisive impact they have on combat power. The time is present to focus attention on the human element that contributes convincingly to combat effectiveness by updating the principles of war to include moral factors.
As the twenty-first century awakens to the buzz of modems and the ring of cell phones, the United States military is aggressively embracing the benefits of advancing technology that is so successfully being processed into American society. Procurement of high-technology weaponry is becoming the foundation upon which the U.S. military proclaims superiority over potential adversaries. B-2 bombers and Seawolf submarines give us comfort, and maybe overconfidence, in their unrivalled capabilities. Unfortunately, “One of the perils for military planners in a high-tech world is to be taken in by the destructiveness of modern weapons and...to envision a world where technologies, not people, dominate war.”¹ Combat power does not rest merely on machines. The fundamental strength of our services will continue to be the individual Soldier, Sailor, Airman, and Marine. It is time to focus attention on the human element that contribute convincingly to combat effectiveness by updating the principles of war to include moral factors.

What are moral factors? Clausewitz placed a strong emphasis on human qualities by devoting an entire chapter in Book III of his On War to “Moral Factors.” These moral factors are the skill of the commander, the experience and courage of the troops, and their patriotic spirit.² He emphasized that “…the moral elements are among the most important in war.”³ Furthermore, to the professional student of war he cautioned that “…it is paltry philosophy if in the old-fashioned way one lays down rules and principles in total disregard of moral values.”⁴ The nine principles of war first published in an Army training regulation in 1921 do not contain any serious analysis of moral factors and have remained essentially unchanged as they appear today in the new Field Manual 100-1, The Army.

John Baynes analyzed the moral factors that served as the foundation for the cohesion and combat effectiveness of the 2nd Scottish Rifles during the horrific carnage of the First
World War. What motivated the simple Private to obey his orders and repeatedly go over the
top of the trenches for the hazardous charge through “no-man’s land”? He found that one key
was discipline, for this enabled a soldier to carry “out his orders even though they may lead
to his own death.” The other key ingredient was high morale, and to find the source of this
morale in units like the 2nd Scottish Rifles, “one must look to the three virtues of sense of
duty, kindness, and unselfishness…A man who did his duty and loved his neighbors was the
hero of the trenches; no other moral values compared in importance with these two.”
Moreover, Major General Newman, in his writings on the human elements of leadership,
expounds that high morale is critical, but it is not enough to create combat effectiveness
unless it is accompanied by esprit de corps. The American soldier in Viet Nam with only a
few weeks remaining on his twelve-month tour of duty would have had high morale for he
was to be sent home soon. Nevertheless, unit cohesion was diminished because the ‘short’
soldier had little esprit de corps to fight effectively. As Sam Sarkesian expounds in Combat
Effectiveness, “Unit cohesion, in the most simple terms, is esprit de corps.” With less than a
month remaining on his combat tour the soldier avoided any aggressive actions that would
greatly increase his risk of injury; therefore, he ceased to be a contributor to the combat
effectiveness of his unit.

For application as the 10th principle of war the definition of moral factors will
include those intangible human elements that decisively contribute to combat power. These
human elements include courage and spirit as derived from Clausewitz; discipline, morale
and duty from Baynes; and esprit de corps from Newman. Unlike the United States, the
importance of moral factors is recognized and established in the doctrines of several nations
to include Great Britain, Australia, Russia, and Japan.
Great Britain establishes moral qualities as one of the three essentials on which success in war depends. The British Field Service Regulations commence with clear guidance; “Success in war depends more on moral than on physical qualities... The development of the necessary moral qualities is, therefore, the first of the objects to be obtained.” The primary factors of moral qualities are considered to encompass courage, energy, and determination. Meanwhile, the Australian army manual, Combat Power, contains an entire chapter on morale in order to stress its importance as a force multiplier. In addition, the need for the maintenance of morale is accorded such interest as to warrant the study of various influential factors to include: medical treatment, education standards, the media, and the comfortable society from which the soldiers are drawn. The soldier must feel he is being cared for on a comparable level to the society from which he comes. Realizing that he is a member of an institution that has an interest in his welfare and development, the soldier will develop pride in his unit, esprit de corps, and a sense of duty to the institution responsible for his well being.

The Russian military embraces the role of moral-psychological elements as decisive for combat effectiveness. This is a rational response by a nation who has been invaded by materially superior adversaries several times in her history and has had to rely upon the fighting spirit of her armies and the will of her people to compensate for technological and materiel inferiority. The outnumbered and outclassed Russians reacted to the Napoleonic invasion of 1812 by courageously rallying to the defense of their homeland and fighting with such stubborn tenacity and bravery that even while suffering bloody tactical defeat, such as at Borodino, their army maintained cohesion and ultimately inflicted the most disastrous defeat ever upon the French Grand Army. Later, during the Russian Civil War, the fledgling
Bolshevik armies managed to repel the invasion of foreign armies allied with “White Russian” forces armed with superior weaponry. Finally, the pinnacle of Russian spirit and valor was revealed in the Eastern Front of World War II; during this conflict, the “Great Patriotic War”, the Soviet Army suffered almost total destruction following the Nazi invasion of 1941. Nonetheless, the Russian people effected a miraculous industrial relocation, suffered extremes of deprivation in places such as Leningrad, and heroically defeated the might of the German Army in the largest battles of the war. In all cases the invader was unable to impose his will upon the Russian people or extinguish their indomitable spirit to fight for Mother Russia.

The lessons of history are not lost upon the Russian military who understand the critical role to be played by the individual soldier devoted to his cause and included morale in their principles of war formulated in 1918. The Soviet principles of war were termed the “permanently operating factors” under Stalin and published in 1941 as five factors:

1. The stability of the rear
2. The morale of the army
3. The quantity and quality of divisions
4. The armament of the army
5. The organizing ability of the command personnel

The emphasis placed upon a stable rear, the ability to maintain/create organization, and the importance of an army with high morale that does not lose its fighting spirit comes from the Russian experience of suffering invasions.

Colonel Savkin of the Frunze Military Academy who, in 1972, updated the five factors into four laws of armed conflict reveals current Soviet military thought. The human element was still considered of such importance that Savkin states, “The fourth law of war is that the course and outcome of war depends on the correlation of moral-political and
psychological capabilities of the people and armies of the combatants." The Soviet Army took great pains to ensure the psychological conditioning of their soldiers by maintaining political officers who directed the education of the soldiers in the Marxist-Leninist ideology; this education was compulsory, continuous, and decidedly one-sided. The Red Army's use of aggressive indoctrination and education ensured that the soldiers would believe in the legitimacy of their society and justness of their cause when sent into armed conflict.

"Marxism-Leninism defines the morale factor as one of the decisive elements of any war, since victory, to a considerable extent, depends on...the spirit of the masses who shed their blood on the battlefield."

Japan is another culture with a long and proud martial heritage whose military forces embrace the importance of human factors for combat effectiveness. The Japan Ground Self-Defense Force defines the principles of war as "the basic principles of combat in order to obtain victory and the fundamental rules that, to some degree, embody those principles."

The Japanese Command and Staff School teaches that the basic principles of combat are governed by three interrelated factors: Energy (Combat power), Time, and Space. Combat power is recognized to comprise both tangible and intangible factors. Tangible factors are military personnel strength, and the quantity and quality of war materiel. The intangible factors include the following human elements:

1. Quality of command and control
2. State of discipline (troop morale) and fighting spirit
3. Quality of training
4. Esprit de corps and the spirit of teamwork

These moral factors of morale, fighting spirit, esprit de corps, and teamwork are all critical ingredients that enable a soldier, and his unit, to multiply their combat effectiveness many times over. The tenacious fighting ability of the Japanese soldier and the incomprehensible
acts of suicidal defiance during the War in the Pacific are the product of a military institution that understood the importance to focus upon the awakening and development of each soldier’s inner strength.

The combat power of the Japanese soldier is based upon an intangible foundation of spiritual strength that has demonstrated a remarkable ability to motivate men towards a level of self-sacrifice and fighting spirit rarely witnessed in the history of warfare. As Lord Moran observed in his study of British soldiers during World Wars I and II, “A man with high morale does things because in his own mind he has decided to do them without any suggestion from outside sources.” Unquestionably, the Japanese warriors who willingly flew their kamikaze planes to inevitable destruction against the US Navy in the closing days of World War II did so because they believed in their cause and made the decision to give their lives to advance that cause in the slightest degree.

The beliefs in bushido and kodo -‘the soldier’s code’ and ‘the Imperial way’- were the two ingredients instilled in the Japanese soldier’s character that developed their remarkable fighting spirit. “Bushido taught the virtues of absolute loyalty to a leader’s commands, an austere way of life, honour, and courage.” Additionally, it taught that to retreat or surrender would constitute the greatest disgrace upon a Japanese soldier, while failure in battle, viewed as a lack of fighting spirit, could only be redeemed by committing the act of hara-kiri. Kodo taught the absolute divinity of the Emperor and the destiny of Japan to rule over the peoples of Asia. Consider the fact that the 21,000 Japanese defenders on Iwo Jima fought mainly in small groups, or individually, to the death, and it was not until 1951 that the last two defenders finally surrendered; these actions bring to a new level the meaning of the words ‘devotion to duty’. Since kodo required the soldier to follow his orders as though they were
from god, and *bushido* repelled the disgraceful act of surrender, the pitifully small numbers of prisoners taken in the Pacific War is understandable. Although moral issues are raised when commanders order their men on missions of certain death, the fact that the Japanese sailors on board the *Yamato* and the pilots inside of the *kamikaze* aircraft willingly carried out their suicidal missions should not be relegated to fanaticism, but rather, to supreme bravery and devotion to duty. By embracing the intangible human elements of combat power, the Japanese military leadership was able to instill in their men a fighting spirit and commitment to mission accomplishment that overrode their basic instincts for survival and manifested itself in a fighting force that for a time was believed to be unstoppable.

While the Japanese consider the principles of combat to be time, space, and energy (combat power), the U.S. military instruction in operational art focuses on the factors of time, space and force. Semantics aside, the factors of force and energy have essentially the same meaning in the two military institutions. Both encompass tangible and intangible factors. As Dr. Milan Vego discusses in his extensive writings on operational art,

"The moral strength of a nation cannot be viewed separately from the factor of force...the overall combat power of any force in a conflict is difficult to precisely assess because of the need to evaluate many intangible elements, such as quality of leadership, soundness of Service/joint doctrine, and the morale and discipline of the rank and file. These elements of the factors of force are often far more important than simple numbers of troops or platforms..."  

Here, Vego articulates the superiority of the intangible human factors of force over the tangible factors when assessing combat power.

Do the current principles of war lend adequate guidance to the commander on the importance of human factors when applying combat power to accomplish the mission? Mass, objective, offensive, surprise, economy of force, maneuver, unity of command, security, and simplicity do not address the fundamental human qualities that promote combat
effectiveness; these qualities are contained in the moral factors of courage, spirit, morale, esprit de corps, discipline and duty. The American citizen is not ingrained with codes of conduct such as *bushido* and *kodo* that dictate unwavering devotion to duty and spirited obedience to the Commander in Chief. The U.S. military does not maintain political officers in the chain of command in order to indoctrinate our servicemen and insure unswerving loyalty to the state. The U.S. government does not have the ability to declare a *Jihad* and instantly transform the American citizenry into a motivated mass ready to courageously sacrifice their lives for a declared just cause. Both our ally and adversary alike embrace certain elements of moral factors. As Clausewitz stated, "War is an act of human intercourse." Neglecting the moral factors of combat power can have devastating results as will be shown.

The opportunity to measure the significance of intangible human factors for combat power is not easily accomplished because of the myriad of differences existing in time, space, and forces during warfare. Nonetheless, the performance of American combat divisions in Korea offers such an opportunity due to the similarity in opposing forces, organic equipment, supporting assets, location, and time. During December 1950 the Chinese Communist Forces (CCF) launched an offensive against Allied Forces approaching the Yalu River in North Korea. The CCF that struck the American forces would have been ridiculed by those proponents of warfare who view success on the battlefield as merely a mathematical problem requiring sufficient numbers of men and materiel at the right time and place; the CCF was far from a scientific instrument of modern war. The backward Chinese communicated with bugles - not radios, they had no air support, few tanks and artillery, and their system of supply was founded upon muscle - not machine. The Chinese recognized that
the strength of the American forces rested in the coordinated actions of their artillery and armor, the tactical support and strategic interdiction of airpower, and the mechanization of their prodigious supply system. Nevertheless, the Chinese also perceived weaknesses that they would tailor their operations to exploit. The CCF attacked at night and concealed themselves during the day to negate U.S. airpower. They kept off roads and open areas to negate Allied mechanized forces and artillery support. The CCF chose to fight infantry battles matching their tough, disciplined, peasant soldier against the American soldier who they assessed to be lacking in discipline, courage, and the will to fight when his machines could not support him. The disaster that befell the Eighth Army, as units such as the 2nd Division retreated in a rout that left abandoned equipment and wounded in their wake, seemed to prove correct the Chinese assessment that the American soldier was lacking a fighting spirit.

The conduct of the 1st Marine Division, in contrast to that of the Army 2nd Division, demonstrates the vital contribution that those intangible moral factors provide to combat effectiveness. General Sung of the CCF sent six divisions against the 1st Marine Division with orders to “Kill these Marines as you would snakes in your home.” However, as T. R. Fehrenbach points out in his study of U.S. unpreparedness for the Korean War, “In 1950 the Marines, both active and reserve, were better prepared to die on the field of battle than the Army.” The reasons for this have mainly to do with the reforms instituted in the Army following World War II that the Marine Corps was, by and large, able to avoid. The Doolittle Board of 1946 produced recommendations adopted by Congress that eroded the traditional values of the U.S. Army. The measures imposed upon the army reduced the authority of junior officers and non-commissioned officers (NCOs), diminished the relative harshness and
brutality of indoctrination, and eroded the regimentation and discipline of daily life; these steps were an attempt to transform the large standing army into something more representative of the liberal democratic society it was sworn to defend. For the U.S. Army soldier of 1950 sent to Korea, “None of them were equipped, trained, or mentally prepared for combat...Soldiers fight from discipline and training, citizens from motivation and ideals. Lacking both, it is amazing that the American troops did even as well as they did.”

The citizen-soldier sent to the frontiers of Korea was not on a crusade as he had been in previous wars when marching under Wilsonian ideals to save Europe, or righteously avenging the overt aggression against American territories in the Pacific. The Army infantryman in Korea did not wage the modern pushbutton war that his country was preparing for, instead he faced the same hardships as Roman legions faced almost two thousand years prior while trudging through a hostile frontier to slug it out in close quarters with a primitive enemy. The Romans were successful because of an iron discipline, pride in their profession, and cohesion of their legions. The American soldier would initially be unsuccessful because his country was preparing for a war requiring B-36 bombers maintained by skilled technicians instead of a war requiring bazookas manned by well-trained, disciplined fighting men.

In contrast to the 2nd Division, the Marines advancing 75 miles to the east were trained in an organization that was spared the public pressure to reform, and was still able to instill pride, discipline, and esprit de corps. As the six CCF divisions encircled the Marines, “Because their officers were tough-minded, because their discipline was tight, and because their esprit—that indefinable emotion of a fighting man for his standard, his regiment, and the men around him, was unbroken—weak and strong alike, they would face it well.” Units did not abandon equipment and run. Artillerymen did not refuse to fight like infantrymen. The
Marines who were still combat fit fought their way out on foot so that all of the wounded and most of the dead could be carried out on vehicles. Training and indoctrination had been harsh enough to instill pride in themselves and their unit, and to better prepare them to face the physical and emotional challenges of the battlefield. As Major General Smith sat in his tent at midnight, still surrounded by the CCF, still far from the sea, and contemplated his division’s seemingly hopeless situation, he heard some Marines outside singing the Marine Hymn. “All doubt left me,” said Smith. “I knew then we had it made.”

Discipline enables men to do their duty and carry out orders without question. Comradeship grows amongst men who face adversity, build endurance, and develop character; this makes it impossible for them to let their buddies down or leave wounded comrades behind. The raw material from which the soldier and Marine was forged came from the same stock, yet the process to develop the human elements of combat effectiveness still remained in the institutions of the Marine Corps while the Army had been reformed out of it’s ability to train and prepare soldiers for the brutality of combat.

The recent emphasis apparent in U.S. military thinking is that high-technology weapons and a systems focused approach to war will serve as a means to capitalize on the strength of American innovation and technology; this will lower casualties by allowing the machines to fight the wars. Of course no one would argue against an attempt to leverage technology in order to minimize friendly casualties, but as S.L.A. Marshall pointed out in the dawn of nuclear deterrence, “The belief in push-button war is fundamentally a fallacy.” Marshall was responding to his civilian contemporaries who reasoned that war had changed into something entirely different and that it was “ox-cart” thinking to dwell on the human element of combat power. Even in 1947 Marshall emphasized, “I believe that they are so
completely wrong that they constitute a positive danger to the future security of the United States...If I learned nothing else from the war, it taught me the falseness of the belief that wealth, material resources, and industrial genius are the real sources of a nation’s military power.” — Marshall’s foresight correct.

Napoleon professed that, “In war the moral is to the materiel as three to one.” Nonetheless, the overwhelming proportion of the Defense budget will be allocated towards the research, development, and acquisition of such high-tech materiel as DD-21 and F-22. “Even as we reduce our forces, budgets evaporate more quickly than missions; needed upgrades of countable tanks, ships, and aircraft quietly divert funds from nourishment of spirit and toning of muscle.” Should the U.S. exploit our current technological advantage and pursue weapons systems that will be unmatched by our adversaries? Absolutely. Only a fool would decline possession of such superior weapon systems in preparation for war. Nonetheless, “Since World War II, by one count, there have been more than 80 irregular conflicts.” Military Operations other than War (MOOTW) have been, and will continue to be for the foreseeable future, the preponderance of missions undertaken by our military. One characteristic of MOOTW such as humanitarian assistance or counterinsurgency is the emphasis on human involvement at a small unit level. This is in contrast to the impersonal manipulation of large combat elements with sophisticated weapons systems. For example, peace operations may require aggressive patrolling at the squad level in urban terrain vice the offensive operations of an Air Force Expeditionary Wing. These small units will need to have a high degree of perseverance, morale, and discipline in order to have a reasonable probability for success in a challenging urban environment. “The acquisition and use of
modern military technology is often seen as a solution to the problems of warfare in the late 20th century, with information warfare the latest example. Irregular warfare, however, remains confoundingly unaffected by changes in technology. Information warfare and Joint Direct Attack Munitions are of little use in irregular warfare when facing urban insurgents with little infrastructure. An emphasis on the development and maintenance of moral factors needs to be directed by the leadership of the U.S. military in preparation for personnel intensive MOOTW.

Network Centric Warfare (NCW) professes, and I would agree, that the principles of war related to the offense, economy of force, surprise, unity of command, and simplicity can clearly benefit by the application of NCW concepts. Notwithstanding these benefits, the greatest advantage of the information revolution will be the ability to decentralize control and rapidly disseminate critical information into the hands of the warfighters in the arena. Major General Berndt of the Marine Corps Combat Development Command has said that, “Only by giving junior officers full access to all of the network’s data, and the authority to act on their own initiative, can military leaders enable a force to react fast enough to win in the Information Age.”

Large battles are won by the multitude of separate small unit actions directed by junior officers and NCOs. Martin Van Creveld concludes in his work, Fighting Power, that the superior fighting ability of the German Army during World War II was found to rest primarily on the Wehrmacht’s insistence to promote “mutual trust, a willingness to assume responsibility, and the right and duty of subordinate commanders at all levels to make independent decisions and carry them out.” Creveld found the small unit leaders of the German Army were more effective because their military institution promoted freedom of action and the qualities “of discipline and cohesion, morale and initiative, courage and
toughness, the willingness to fight and the readiness, if necessary, to die." The opportunity to increase combat effectiveness through NCW can be realized with an understanding that the primary benefit will be the empowerment of the small unit leader with the potential to wield an enormous amount of firepower. Provided an investment has been made to indoctrinate and develop the necessary moral factors within these leaders, the advent of NCW in conjunction with superior weapons systems will produce a fighting force without equal.

There should be concern that American infatuation with technology and the materiel components of combat power are driving procurement that, in essence, is absorbing the defense budget. The same efficiencies driving the global economic expansion through communications networking, automation, business consolidations, and worker efficiency are believed to provide a panacea for declining defense budgets and recruitment in the all-volunteer force. "Yet not only the past thousand years of history but also the American excursions since Vietnam have highlighted and magnified the role of people as the predominant factors determining military outcomes." Ignoring the moral factors of combat power that have proven to be the true determinants of victory in the thousands of skirmishes that occur during war presents a danger to our national security. "The common theory that, in order to win, an army must have superiority of rifles and cannon, better bases, more wisely chosen positions, is radically false. For it leaves out of account the most important part of the problem, that which animates and makes it live, man-with his moral, intellectual, and physical qualities."

The U.S. should continue to develop and integrate the most effective weapons that our society can provide, but quality and quantity is only one factor of combat power; the
other is moral factors. The most advanced systems in the world will not be effective unless operated and supported by personnel imbued with high morale, esprit de corps, discipline, courage, a sense of duty, and fighting spirit. Whether engaging in MOOTW or a Major Theater War, "with a numerical inferiority, but a technological superiority, then the most decisive element for achieving a victory will be the personnel, specifically their morale and discipline." Moral factors are a primary concern of commanders in both peace and war. The U.S. military must focus on the indoctrination, development, and maintenance of moral factors in service personnel. Adoption as the 10th Principle of War will provide the guidance to assure that all relevant issues of combat effectiveness are analyzed. Moral factors are essential to combat power and deserve to be a principle of war.

What battles have in common is human: the behavior of men struggling to reconcile their instinct for self-preservation, their sense of honour and the achievement of some aim over which other men are ready to kill them. The study of battle is therefore always a study of fear and usually of courage; always of leadership, usually of obedience;...always of uncertainty and doubt, misinformation and misapprehension, usually also of faith and sometimes of vision; always of violence, sometimes of cruelty, self-sacrifice, compassion; above all, it is always a study of solidarity and usually of disintegration-for it is towards the disintegration of human groups that battle is directed.

-John Keegan, *Face of Battle*
NOTES


3 Ibid, 184.

4 Ibid.


6 Ibid, 217.


11 Raymond L. Garthoff, Soviet Military Doctrine (Glencoe, IL: The Free Press 1953), 34.


15 Ibid, 12.


19 Milan Vego, *On Operational Art* (The United States Naval War College 1999), 89.

20 Clausewitz, 149.


22 Ibid, 189.

23 Ibid, 149.

24 Ibid, 363.


27 Ibid, 24, 208.

28 Ibid, 67.


31 Ibid


36 Taylor, ix.


38 Vego, 89.

BIBLIOGRAPHY

Books


Periodicals and Articles


