LEADING BEYOND THE FUTURE

A Monograph

By

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14. ABSTRACT
This study investigates senior leadership in the eras of warfare over time and those senior leader traits, skills, and characteristics, that have endured, changed, or will no longer apply in the ultra-modern era of warfare. The study predicts the warfare environment and challenges for senior leaders in the next era of warfare. The study first defines and reviews each of the eras of warfare and compares the characteristics, traits and skills required of senior leaders in each of the eras of warfare from pre-modern, modern, post-modern, and finally it predicts the next era of warfare, the ultra-modern era. A review of particular senior leaders in each of the eras shows how different each era was and the challenges that faced these senior leaders. The study shows that the Army must look at many different aspects as it transforms to the Future Force, not just advances in technology. In each era of warfare, the senior leaders are the ones who have led armies to victory or defeat. Technology alone does not win the wars. U.S. Army Transformation must look at senior leadership traits, characteristics and skills required to lead our army into the future and win. Senior leaders of the future must continue to consider those traits, skills and characteristics of leadership that are indicative of other eras and look to see which ones apply, which ones do not, and develop new ones for the future. Such senior leader skills as communicating to subordinates and leading by example will not be the same in the ultra-modern era of warfare. Senior leaders will have to learn how to leverage new technologies before becoming a senior leader, because today's junior leaders are tomorrow's senior leaders. This study concludes that by reviewing historic examples of senior leaders in the context of their specific era of warfare, one can predict what senior leaders need in terms of skills and traits for the future. Some of these skills or traits are no longer valid because the characteristics of the wartime environment has changed, others have endured from a preceding era of warfare, and still others have developed into new ones. The Army must recognize the fact that senior leaders will have to adapt to the ultra-modern era and develop a school for senior leaders that addresses these future challenges.

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LEADING BEYOND THE FUTURE

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MASTER OF MILITARY ART AND SCIENCE

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ABSTRACT

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This study investigates senior leadership in the eras of warfare over time and those senior leader traits, skills, and characteristics, that have endured, changed, or will no longer apply in the ultra-modern era of warfare. The study predicts the warfare environment and challenges for senior leaders in the next era of warfare. The study first defines and reviews each of the eras of warfare and compares the characteristics, traits and skills required of senior leaders in each of the eras of warfare from pre-modern, modern, post-modern, and finally it predicts the next era of warfare, the ultra-modern era. A review of particular senior leaders in each of the eras shows how different each era was and the challenges that faced these senior leaders.

The study shows that the Army must look at many different aspects as it transforms to the Future Force, not just advances in technology. In each era of warfare, the senior leaders are the ones who have led armies to victory or defeat. Technology alone does not win the wars. U.S. Army Transformation must look at senior leadership traits, characteristics and skills required to lead our army into the future and win. Senior leaders of the future must continue to consider those traits, skills and characteristics of leadership that are indicative of other eras and look to see which ones apply, which ones do not, and develop new ones for the future. Such senior leader skills as communicating to subordinates and leading by example will not be the same in the ultra-modern era of warfare. Senior leaders will have to learn how to leverage new technologies before becoming a senior leader, because today's junior leaders are tomorrow's senior leaders.

This study concludes that by reviewing historic examples of senior leaders in the context of their specific era of warfare, one can predict what senior leaders need in terms of skills and traits for the future. Some of these skills or traits are no longer valid because the characteristics of the wartime environment has changed, others have endured from a preceding era of warfare, and still others have developed into new ones. The Army must recognize the fact that senior leaders will have to adapt to the ultra-modern era and develop a school for senior leaders that addresses these future challenges.

TABLE OF CONTENTS

CHAPTER ONE

INTRODUCTION

THE TRANSFORMATION OF LEADERSHIP?

Following the unanticipated collapse of the Soviet Union, the United States Army changed its focus for change from that of a Cold War strategy of containment to a strategy of engagement and enlargement. The Army began a look into the future in terms of force size and modernization to meet the challenges of a new era. This new Army vision included a transition from a Continental United States based force-projection Army to a capabilities and knowledge based one for the 21st century.[1] LTG Blackwell and LTC Bozek wrote about this transition in Leadership for the New Millennium, that; "Force XXI is the Army's process to harness and incorporate information-age technological advances."[2]

Then suddenly, another unforeseen and dramatic event occurred, the terrorist attacks on the United States on September 11, 2001. The Army was forced into a new kind of fight, the war against terrorism. This fight would be a very aggressive one and even preemptive when required. As one might expect, this change to a preemptive foreign policy might be a catalyst to the way the United States military prepares to meet the new challenges. It has indeed.

Already in the throws of a process of force modernization, the United States military continues to review its current doctrine and weapons in terms of adequacy for the future. Force XXI remains the overall vision for the Army's change. Transformation is the term that encapsulates this evolution to the future. Although not a new term in any respect, transformation

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[1] Paul E. Blackwell, LTG (Ret) and Gregory J. Bozek, LTC, "Leadership for the New Millennium," *Military Review* (May/Jun 98). http://www-cgsc.army.mil/milrev/English/mayjun98/bla.html, accessed on 12 Nov 2003.
[2] Ibid.

means many different things to different people. I define transformation as the never-ending process of change.[3]

Although the Army's current advertisements about transformation put people first as "our most valuable resource," much of the transformational proof has been hardware and weapon system based. Probably the most famous development in this transformation yet is a new vehicle called the Stryker. The Stryker is a lightly armored wheeled vehicle designed to be the intermediary between the troop ground transport vehicle known as the Hummer and the M1A2, the latest main battle tank of the United States Army.[4] This transformational vehicle will "bridge the capabilities gap" according to another Army advertisement. The Stryker is a perfect example of one of these transformational, hardware based weapon systems, but where is the focus on our "most valuable resource," the people?

The Army is addressing the transformation to a new force and calling it "The Objective Force or "Future Force." The Future Force is a military force designed from the bottom up around a single, networked, integrated C4ISR architecture."[5] C4ISR is the complex framework that integrates the management of operations on the battlefield from senior U.S. Army

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[3] My definition may draw criticism from those who do not distinguish transformation from evolution or who define it differently, but that topic is for another monograph. The point is that it is an alteration of our current force to a future force in some manner. The Merriam-Webster Online Dictionary defines transformation as "the operation of changing (as by rotation or mapping) one configuration or expression into another in accordance with a mathematical rule; *especially*: a change of variables or coordinates in which a function of new variables or coordinates is substituted for each original variable or coordinate." http://www.m-w.com/cgi-bin/dictionary, accessed on 9 February 2004.
[4] The commonly referred to "Hummer" or "Hummvee" is actually the United States Army's High-Mobility Multi-Purpose Wheeled Vehicle (HMMWV). This four-wheel drive transport vehicle replaced the WORLD WAR II version manufactured originally by the American Bantam Car Company of Butler, Pennsylvania. The first Bantam (later, commonly called the Jeep) was delivered to Camp Holabird, Maryland, on September 23, 1940 according to information cited at: http://www.film.queensu.ca/CJ3B/Poster/Bantam.html, accessed on 9 February 2004. The HMMWV can take on many versions from a gun-mounted vehicle to an up-armored version for added protection.
[5] During the writing of this monograph, the new Chief of Staff of the Army, General Peter J. Schoomaker adjusted the way ahead for the Army and the term "Objective Force" has dropped from use. The term Future Force, although still used has now been translated into the "Relevent and Ready" land power [provided to] the Combatant Commander as part of the Joint Team. C4ISR is the U.S. Army acronym for Command, Control, Communications, Intelligence, Surveillance, and Reconnaissance. Additional information about this topic can be found at: http://www.ARMY.mil/, accessed on 20 November 2003.

commanders down through lower tactical levels.[6] This aspect of transformation comes closer to addressing the required changes relating to management, leadership, and thus people.

The part of the Army's view on transformation about "people as our most valuable resource" relates directly to the main concern of this monograph. Specifically, the senior leadership of this new force will have to either change or the attributes leaders possess will have to change in order to meet the demands of the transformed fighting force. The old concepts and characteristics of leadership will have to be updated. This monograph addresses the leadership skills required of senior leaders in the future ultra-modern era of warfare.

As the eras of war fighting change over time, so do the war fighting environments. Each war brings new technology, tactics, and strategies to the fight in an environment different from the previous one. As transformation brings about new hardware, weapon systems, and complex digital command and control systems for the battlefield in the future, it will be necessary to transform the leader of tomorrow as well as these implements of war. The new era of war fighting coming with advances in technology, equipment and highly digitized systems without a doubt, will require a different kind of leader than in the past. Yet, the Army and its leaders maintain the same mission today, as it will in the future. That is the mission to win the wars of our nation. As General Douglas MacArthur stated in his 1962 farewell speech to future military leaders graduating from West Point, "Yours is the profession of arms, the will to win, the sure knowledge that in war there is no substitute for victory, that if you lose, the Nation will be destroyed, that the very obsession of your public service must be Duty, Honor, Country."[7]

Many describe the current era of warfare as the post-modern era of warfare. The post-modern era is a new era of warfare that occurs in a much different environment than in the

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[6] For the purposes of this monograph, senior leaders are defined as Division Commanders and above.
[7] From General Douglas MacArthur's Farewell speech to the corps of cadets at West Point, New York on May 12, 1962. A transcript of this speech can be accessed at: http://www.nationalcenter.org/MacArthurFarewell.html, accessed on 9 February 2003.

previous modern era of warfare. The post-modern era is especially different from the modern era in terms of leadership skills and traits required of senior leaders.

However, I see an emerging era of warfare that follows the post-modern era. The next era of warfare will provide yet another environment for military leaders. The new era will include a fully digitized environment and one in which leadership will be required of course, but leadership with a much different set of skills and characteristics. The future era is one I identify as the ultra-modern era of warfare.

SORTING OUT THE ERAS OF WARFARE

It is no surprise that warfare has drastically changed since the time of Napoleon, yet one thing remains constant, the need for some form of military leadership in order to direct the fight and win the wars. Senior military leaders must be able to lead large formations of soldiers into combat in order to achieve victory in any wartime environment including a less definitive one in the future. Each of these eras called for a different kind of leader or at least a leader with a different skill set. The context for this monograph will be the eras of warfare as described above; pre-modern, modern, post-modern and what I predict to be the ultra-modern era of warfare.

There is no agreed upon date or precise dividing line that distinguish between the eras of warfare. However, there are characteristics that generally separate types of warfare over time. Just as it is difficult to put a date on what is ancient, it is difficult to place a date on each of these eras. The names given to these eras, pre-modern, modern, post-modern, and ultra-modern are actually a sliding scale. It is conceivable that over time, one is always in a modern or post-modern era as time changes and the future becomes the present. The labels become a moving moniker as time evolves.

I mark the pre-modern era of war beginning at some undetermined time lasting up to the age of Napoleon.[8] The pre-modern era can be described as an era in which kings fought wars by

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[8] A specific date or event does not serve a purpose here, as the emphasis will be placed on the future following the post-modern era of warfare. What is important is that there were changes in leadership and

standing up temporary armies in order to obtain limited objectives in limited wars.[9] For example,

during this period, Norsemen and Romans made their way across Europe. Although, historians

may break this era down even further by making marked distinctions between the two warrior

groups, the fact remains that similarities exist between these armies and they fought similar

battles and wars. The Roman army moved quickly and conquered territories; built roads and

settlements under the leader who formed them and would disband them once they accomplished

their mission. Indicative of this era was a need for a temporary force constructed for a specific

purpose. Today, one can visit the ruins left by the Romans as they made their way North through

Europe.

The Norsemen or Vikings from Scandinavia fought their way through Eastern Europe

mainly through waterways. This army fought their way down to the Balkans and developed

settlements in the same way the Romans did in the West. Most notably are the settlements along

the Northern coast of Poland where the Poles are now settled. Today, one can see the very strong

Viking influence in this area.[10] It is obvious as one travels through Eastern or Western Europe

that the pre-modern era was about conquering and expanding territory with armies who fought

with brute force in hand-to-hand battles. Their weapons were basic. Swords, spears, and knives

were the common weapons and their protection came from metal shields held in their hands or

mounted to the sides of their vessels. These armies moved great distances by beast of burden,

boat, or foot. A frontal assault is about the limit of the maneuver skills used in order to attack and

defeat their enemy.

Authors do however; sometimes define the eras of warfare by specific events. For

instance, in The Art of Warfare in the Age of Napoleon, Gunther Rothenberg wrote about the

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of course technology, social structure, and war fighting forms between the pre-modern and modern eras of
warfare.
[9] Gunther E. Rothenberg, *The Art of Warfare in the Age of Napoleon* (Bloomington, Indiana: University,
Press, 1978), 11.
[10] I lived in a town originally settled by the Romans in what is now St. Leon-Rot, Germany and had the
opportunity to recently visit the Drowsko Pomorski area of Northern Poland where they are very proud of
their Scandinavian heritage and culture.

events in 1792 that separated the pre-modern and the modern eras of warfare in his view.

Rothenberg wrote; "On 20 September 1792, the combined armies of the French Generals

Dumoureiz and Kellerman faced a Prussian army commanded by the Duke of Brunswick near

Valmy in north–eastern France…. and; Two patterns of warfare, the one limited and now

becoming obsolete, and the other, potentially unlimited, had collided for the first time."[11]

Rothenberg also wrote about the eighteenth-century limited war that;

> "During the century before Valmy the wars of the kings had evolved into formal affairs, pursued with limited means for limited objectives. Monarchs decided on war and peace by calculating gains and costs in terms of their interests; the people neither were consulted nor normally expected to contribute much to the fighting which was left to small professional armies. And in the absence of any national or ideological content it was not in anyone's interest to seek the total destruction of the enemy. Costly pitched battles were avoided when possible; manoeuvre not combat were the principal operations of war."[12]

Rothenberg's distinction between the pre-modern and modern eras of warfare suffices for this

monograph as a break between the two eras of warfare.

The leap into the modern era can be described by several changes in warfare. One

important difference between the old and new eras of warfare was the fact that maneuver not

combat was the principal operations of war now. Another difference between the two eras was

that military operations were carried out with mathematical precision and costly battles were

avoided when possible. During the modern era, campaigns were designed to place the opponent

in a position to capitulate on specific terms. It was no longer necessary for commanders to fight

to the last man to achieve objectives and win battles or wars. All of this was the result of military

constraints and limitations, as well as political, social, and economical factors.[13]

Although in our American History classes, we learned that World War I was supposed to

be the war to end all wars, it was not. Following World War I, a short period of reconstruction,

later termed the interwar period, was only a precursor to World War II. I view World War II as

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[11] Rothenberg, 11.
[12] Ibid.
[13] Ibid.

the last war in the modern era of warfare. This was the last war in which several countries tied by alliances fought other groups of countries across the globe. World War II was fought by nation state coalitions or alliances across Europe, in the Pacific and in Northern Africa. Each country formed huge military forces into many divisions that fought against each other across vast areas of land and sent their naval forces to fight at sea on several other fronts. Truly, this was a time where warfare affected each citizen in his or her respective country, a distinct characteristic that separates it from post-modern warfare. Even if a country did not participate militarily, most took sides and therefore it involved many countries across the globe that never saw the violence, but never the less were affected economically, socially, or diplomatically.

For the purposes of this monograph, the post-modern era begins on the heels of World War II. In 1950, following World War II, The United States found itself involved in the Korean War on the behalf of the United Nations. The Korean War was called a police action for diplomatic reasons and thus marked a turn in how wars would be fought in the future. The United States deployed forces under a United Nations Resolution and since the newly formed United Nations was not a war fighting entity, the conflict was to be resolved through a police action vice a war. "The Security Council of the United Nations recommended that troops should be sent to defend South Korea. Because the Soviet Union was boycotting the Security Council at the time, it was unable to veto this decision. Fifteen nations sent troops to Korea, where they were organized under the command of General Douglas MacArthur."[14] Thus, the post-modern era of warfare was initiated.

One of the differences in this new era of warfare was that the Korean police action was fought on behalf of the United Nations, a union of world nations who decided to take military action in order to quell the violence of the North Korean invasion of its Southern half-brother. A major change in warfare began as unified member nations of the world sent soldiers, sailors,

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[14] A brief description of how the United Nations and the United States became involved in the Korean War can be found at: http://www.spartacus.schoolnet.co.uk/USAkorea.htm, accessed on 7 Mar 2004.

airmen, and marines to battle. The past era was marked by not much more than bilateral

agreements and temporary alliances as in World Wars II and I. A formal membership in the

United Nations meant voting rights on resolutions and proposals to decide how conflicts would be

mitigated and the Korean police action was an example of just that.

The new era of warfare included new technology as well. For instance, The United

States introduced helicopters much more largely than in World War II, where they played an

inconsequential role. "However, World War II demonstrated that the helicopter could perform

useful missions, and they did see service to a limited extent as supply craft and for rescue

operations in the China-Burma-India Theater, and were operated by the 1st Air Commando unit.

But the helicopters of the day were still limited in their power, size, and hence their

capabilities."[15]

"By Korea helicopters were more numerous but were still confined largely to support

roles, primarily search and rescue and medical evacuation, not to combat. Both the U.S. Army

and the Marine Corps used helicopters in certain logistical roles. Although army leaders thought

about using helicopters to ferry troops during Korea, the service was prohibited from operating

large aircraft by a law passed when the United States Air Force was created in 1947. This

situation later changed in 1952."[16]

The technological advancement of helicopters during the pre-modern era of warfare led

to further developments that continued into the modern era of warfare where helicopters were

much more common on the battlefields. The more reliable and common helicopters became, the

more their capabilities enhanced senior leaders abilities to lead. Senior leaders could rely on

them for communications, scouting, direct fires and medical evacuation, as well as many other

functions. It was however, the medical evacuation capability that helicopters had the most

important, or immediate impact to soldiers on the battlefield. Soldiers knew that if they were in

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[15] A brief synopsis on air power in the Korean War can be found at:
http://www.centennialofflight.gov/essay/Air_Power/Heli_at_War/AP42.htm, accessed on 18 Mar 2004.
[16] Ibid.

trouble or wounded, they had a better chance of survival because it was possible to reach medical help in less time. "Helicopters appearing in their first major conflict [Korea] also helped transport men, especially those in trouble."[17] The invention of the helicopter became a significant development in this era of warfare for senior leaders, providing them options they never had before.

The post-modern era of warfare continues today as we finish the second Gulf War in Iraq. This unique war is what I believe to be the last of the post-modern wars. Many modern inventions were developed during the first Gulf War in the early 1990's and perfected in the second Gulf War. One of the greatest developments was in communications where information in all forms can move almost instantly. Senior leaders can now view battle scenes using unmanned reconnaissance vehicles, both on the ground and in the air. The technology used in this war has advanced at an unprecedented pace and as that pace continues, a new era in warfare will emerge.

The United States is on the cusp of a new era in warfare. How a leader will fight his forces in the future is being practiced and tested today. Managing the vast quantities of information and making decisions based upon volumes of very accurate data is changing how are senior leaders will act and lead in the future ultra-modern era of warfare.

I define the ultra-modern warfare era as the next era of warfare following the post-modern era of warfare and beyond. We are preparing to enter the ultra-modern era of warfare at the time of this writing and I predict the next war the United States enters using the transformed future force will clearly identify the start of this era. The ultra-modern era of warfare should be viewed as a separate and distinct period of warfare from others because the environment will be so different. For example, a complete integration of combat within the areas of land, sea, air, and space will maximize the effects of future forces.

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[17] A brief synopsis on the Korean War can be found at:
http://www.centennialofflight.gov/essay/Air_Power/korea/AP38.htm, accessed on 18 Mar 2004.

The ultra-modern era of warfare contains several other aspects that the other eras do not. This is an era of warfare in which multiple small wars or insurgencies occur within one theater of operations and simultaneously in multiple theaters, including the area of space, the newest theater of war. An era in which the leaders of these insurgencies or small wars have the means to procure weapons of mass destruction and use the threat of terror as their doctrine for their cause. It is also an environment where senior military leaders have real-time battlefield information down to tactical levels. This new reality, only written about in science fiction up to now, will turn instant information into actionable intelligence at a pace never before imagined.

The focus of military operations in the ultra-modern era of warfare will be planned around surgical strikes based upon this actionable intelligence, that which can lead to immediate military strikes or operations. The ultra-modern era of war will be a fast paced, multi-theater, and simultaneous reaction to acts of terror. It will no doubt include global intelligence networks that provide the information commanders require to act immediately anywhere, within the bounds of multi-national agreements for time sensitive target acquisition. A systems approach to warfare will include effects based operations, where success will be determined by the actual effect achieved by lethal and non-lethal means. Future wars will be fast paced global wars requiring a different kind of senior leader.

The techniques of leading soldiers in combat in the future will be very different than in pre-modern or even modern warfare for many reasons. Post-modern war is already much more cybernetic than before, allowing commanders to have as Major General Scales wrote, "unprecedented battlespace awareness."[18] He went on to write, "The ability to see the battlefield and to know the enemy, combined with the speed to exploit these advantages, will fundamentally change the dynamics of fire and maneuver."[19] These predictions are already true today in the

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[18] Robert H. Scales, Major General (Ret), *Future Warfare* (Carlisle Barracks: Pennsylvania, U.S. Army War College, 1999), 11.
[19] Ibid., 11.

post-modern era. The future of warfare only promises to improve the ability of senior leaders to see the battlefield further back from the front.

Post-modern warfare takes place in an environment where non-state actors can conduct wars with weapons equivalent to those of the super powers. In the ultra-modern warfare era, the environment will change significantly. Soldiers will fight for the same reasons as they did in the other eras, but the tools of war will be much different. Leading soldiers into these future battles will require different techniques and not necessarily, the same kind of leadership skills we admire today or have admired in the past.

Digitization of the battlefield provides a new paradigm for future leaders to operate in and with future advancements in technology even greater changes will take place. It is only logical that as the environment of war changes, so must the senior leadership skills change in order to transform with the new era of warfare. Leaders and subordinates will of course be required as in the past, but many options will be open for leaders in terms of how they lead. The environment in which the military forces will fight will change drastically, allowing senior leaders an option to lead from the sanctuary of their office.

The new environment will allow senior leaders to potentially direct their units from outside the theater of war. Senior leaders will have to adjust to this new environment, as the concept of leading from afar is not commonly accepted in warfare. The old precepts of leading from the front and command presence could change how officers are taught to lead. The idea of senior leaders who are not actually in the battle will be a hard concept to change however. This future environment of war will allow new leadership skills to develop based upon a new paradigm of fighting wars. The Army's old and getting older slogan of "Be, Know, Do" is not going to be enough for tomorrow's successful senior leaders.[20]

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[20] *Field Manual, FM 22-100, Army Leadership, Be, Know, Do* (Washington, DC: Headquarters, Department of The Army, August 1999, Cover. This is the current United States Army Field Manual for leadership doctrine.

Chapter three of General (ret) Gordon R. Sullivan's book, Hope Is Not A Method, is titled "Leadership for a Changing World" and in it he restated another of the Army's one-line, bumper sticker phrases, "When in charge, be in charge."[21] Being in charge of any organization makes you a leader by position only. It is the skill set, characteristics and tools one has and uses that makes them an effective leader. Today's leaders, whether they are military, business managers, supervisors, or administrators know and understand that the term leadership means the ability to get others to accomplish particular requirements.

A good leader provides guidance, direction, management, and control. Senior military commanders must be able to do all of this and just as importantly, provide command, under the intense pressures of combat. In the past, during the modern era of warfare for example, a similar set of traits and leadership skills were expected of military leaders to provide the guidance, direction, management, and control. These leadership skills and traits are indeed very important, but how can future leaders provide them in the ultra-modern era of warfare?

It is easier to describe what tasks a leader must accomplish than to describe how a leader can accomplish the tasks. In the 1941 U.S. Army Field Service Regulations, FM 100-5, Operations stated, "Troops are strongly influenced by the example and conduct of their leaders. A leader must have superior knowledge, will power, self-confidence, initiative, and disregard of self."[22] These are the overarching characteristics of leaders in any wartime environment, but may not necessarily be required for the ultra-modern era of warfare.

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[21] Gordon R. Sullivan, General (Ret) and Michael V. Harper Colonel (Ret), *Hope is Not a Method* (New York: Random House, 1996), 39. This book focuses on "What business leaders can learn from America's Army." As the former Chief of Staff, United States Army, General Sullivan offers great advice from a leader who changed one of the most complex organizations in the world, the U.S. Army. These changes included "retooling for the Information Age, tackled and mastered a bewildering array of new missions, and moved to shed decades-old bureaucratic methods-all while dramatically downsizing."

[22] *Field Service Regulations, FM 100-5, Operations* (Washington: War Department. United States Government Printing Office, May 1941), 19. This is a Pre-World War II document, prepared under the direction of the Chief of Staff, which outlines the doctrine for leading troops in combat and tactics for the U.S. Army. A good example of what the U.S. Army expected from its leaders during this period. Many of the concepts of leadership written in 1941 have remained in doctrine throughout the years. Word choices in this evolution of leadership doctrine have changed, but the concepts remain through at least two eras of warfare, modern and post-modern.

As the age of warfare moves forward into another era, senior leaders will have to adapt to the new environment. The ultra-modern era will be like no other in history. Not only will the advances in warfare be technological, but also they will change how senior leaders manage the battlefield and the soldiers in units who fight them. Different leadership skills will be required in order to deal with the lightning pace of war as compared to any of the other eras in the past.

To begin, a common base of terminology must be clarified. It is very important to mark the distinction between the often confused and misused terms of management, leadership, command, and generalship in order to define leadership in today's terms and then take it beyond the future. For example, Martin Van Creveld wrote in On Command that "I am no admirer of jargon, however; so instead of constantly writing out the full term [C3, as in Command, Control, Communications] or using the abbreviation, I will use the word "command" throughout in much the same way as people commonly use the term "management" to describe the manifold activities that go into the running of business organization."[23] The concept is not difficult to understand, but there is a major difference between command and management. The quote by a noted historian and a Visiting Professor of the National War College should understand the difference, although technical maybe for an historian to comprehend, it is very different from business management. This is possibly the reason many commanders go on to be successful businessmen or managers.

Leadership in particular is studied intensely by the military for good reason. For example, leadership skills not well honed in the business world can mean a loss of time, money, or a lower production rate, not to mention unhappy or unwilling workers. In the military, a poor leader can mean the loss of a battle or political objective, both of which may mean defeat.

The term command in the military sense is not a replacement for the term leadership. In the military, leadership is an essential element of command and normally discussed and studied as part of command and control. This is commonly referred to as "C2" in military doctrine.

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[23] Martin Van Creveld, *Command In War* (Cambridge, Massachusetts, Harvard University Press, 1985), 1.

Effective command and control are required of successful military leaders in war or they may face defeat. However, leadership is not command in itself or control, they are two very separate and distinct things, as this monograph will point out. Again, as addressed in the Field Service Regulations, FM 100-5, Operations in 1941, "Command is the authority which an individual in the military service lawfully exercises over subordinates by virtue of rank or assignment."[24] It goes on to state however, that command and leadership are inseparable.

The Army's current August, 1999 version of FM 22-100, Army Leadership, begins with a 1941 quote from General of the Army, George C. Marshall and defines command as a specific and legal position unique to the military."[25] This shows that the 1941 version has stood the test of time and the important concept of command was just reworded to fit a new Field Manual in 1999. This also shows how the army has been slow to change its doctrine over time as well. The concept of slow change is one of the things that will not last as the Army pushes ahead its plan for transformation.

Leadership is also sometimes confused with military icons or legendary people who displayed great "generalship." However, this does not mean they displayed good leadership skills. Being a hero, famous, a legend, or a national icon, does not necessarily directly relate to having or using good leadership skills. Therefore, the term "leader" should never be confused with legendary people who are identified as icons for other reasons. In these cases, such things as luck, fame, popularity, or timing may have had more influence in the building of a legend than good leadership skills.

"Generalship" is another leadership term that is often misused. In the pre-modern era, about 300-400 B.C., Sun Tzu wrote about command saying the "qualities of wisdom, sincerity, humanity, courage, and strictness are the general's qualities."[26] This quote is a good example of

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[24] Ibid., 23.
[25] *Field Manual, FM 22-100, Army Leadership, Be, Know, Do*, 1-14.
[26] *National Doctrine Publication (NDP) 6, Naval Command and Control*. Department of the Navy, Office of the Chief of Naval Operations, Washington, D.C. and the Headquarters United States Marine Corps,

how, even back then "generalship," "leadership," and "command" were confused with each other. The problem is that the qualities of leaders and leadership are very difficult to measure. It is necessary to separate out generalship and command when focusing on leadership.

Many people today continue to assume that Sun Tzu's generalship qualities are the qualities of leadership and that command and leadership are one in the same. I content that although this may have been true at the time of its original writing, this it is not true today. As shown above, United States military doctrine clearly separates the two and has done so for many years. Some of Sun Tzu's qualities or elements are however, indeed resident in good leaders, but there is much more to leadership in the post-modern era than written thus far.

I believe this confusion is left over from the pre-modern, modern, and post-modern eras of warfare and is wrong for the ultra-modern era. Therefore, even though the qualities of leadership are difficult to measure, it is important to identify those qualities required for the senior leaders in order to prepare for the ultra-modern era. It is therefore most necessary to identify the right leadership skill set for today in the post-modern era and then look into the ultra-modern era to identify those skills that will have to change.

Generalship for the purposes of this monograph have more to do with how a general officer executes his duties while in command and command will be left to describe those who hold a position of command at the higher levels of the Army. Commanding Generals are those generals who are in command and execute those leadership skills written about in this monograph. Staff officers also execute leadership, however, this monograph does not address those skills.

Washington, D.C. (19 May 1995), 3. www.dtic.mil/doctrine/jel/service_pubs/ndp6.pdf, accessed on 18 Dec 2003. This quote can be found in many references about Sun Tzu and is one of the more famous quotes or more correctly, translations. I decided to use this particular quote from NDP 6 for those interested in further reading about the Naval view of command and control as an example where leadership plays a much different role than in the Army. Senior leaders in the Navy view the battlefield differently than that of Army senior leaders. A view where command and control are as Admiral Boorda and General Mundy write in the FOREWARD of this document, "…the foundation upon which the planning and execution of naval operations are built-from peace-time forward presence, to operations other than war, to crisis response, to regional or global war." This document provides an interesting example of how the Navy looks at leadership as a style of command.

The problem of leadership definitions is not a new one. Army doctrine writers seem to have struggled with defining leadership for a long time. In 1946, the Army had 23 identifiable "qualities" of a leader and by 1973; there were 19 "traits."[27] Determining the role of a leader is difficult to define with precision. In The GI Offensive in Europe by Peter R. Mansoor, the author wrote; "Human factors are the least easily quantifiable, but often the most critical aspect of combat effectiveness. Leadership is the glue that binds all elements of combat effectiveness together, for without competent leaders, a military organization will fail no matter how good or how numerous its soldiers, weapons, and equipment."[28] The latest version of Army leadership doctrine will be its FM6-22, to be published. The draft of this version of FM6-22 redefines the qualities or traits and calls them "competencies."[29] These competencies, yet to be decided upon, will be required to lead the Future Force to success. FM6-22 will be a manual written specifically for the Future Force and the next era of warfare, the ultra-modern era.

Failure to develop future senior military leaders with the right skill set for the new era will put these leaders in a position of fighting tomorrow's wars with yesterday's techniques. Twenty years from now, today's young leaders will be the senior leaders in the ultra-modern era of warfare. The Army must identify the characteristics of the future leader and get it correct now. The United States military should not teach tomorrow's senior leaders based on out-dated precepts from the wrong era of warfare. Major General Robert H. Scales also wrote in Future Warfare; "The challenge now is to begin to move from ideas and vision into action."[30]

The next chapter will identify and define more clearly the appropriate eras of warfare leading up to the ultra-modern era. Each of these eras has its own particular form of warfare and

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[27] *Field Manual, FM22-5, Leadership Courtesy and Drill* (Washington: United States Government Printing Office, 1946) and *Field Manual, FM22-100, Leadership* (Washington: United States Government Printing Office, 1951).

[28] Mansoor, Peter R., *The GI Offensive in Europe* (Lawrence: The University Press of Kansas, 1999), 3.

[29] *Field Manual, FM 6-22, Army Leadership.* To Be Published. The draft version of this document proposes leadership competencies that will be required to lead a technologically advanced Army. This Field Manual will be one of the newest documents written specifically for transformation and the new weapon systems, doctrine, and organizations of the Future Force.

[30] Scales, 160.

leadership requirements and characteristics. Scholars generally agree that there are several eras of warfare, what they do not agree on is when each of these eras begins or ends. The next chapter provides a definition of each era relevant to this monograph and examples of what other scholars have written about each of the eras.

CHAPTER TWO

On the Way to Beyond the Future

PRE-MODERN WARFARE ERA

There is difficulty in defining the beginning of the pre-modern era of warfare. As stated above the titles of eras change as does time. One may argue that the current era of warfare is always modern and that what was once the pre-modern era to one generation of leaders is the modern era to those living in it. Thus, there is the problem of defining the eras in terms of modern, post-modern, etc., but it is however useful to identify and group characteristics in different periods of warfare.

Recognizing this grouping of periods of warfare presents another potential problem, the one of grouping too much into a period. For instance, not all of warfare is the same before Napoleon, but for the purposes of this monograph, it suffices as a point of departure in order to get to the other periods. The importance of defining various eras of warfare in this monograph is to show how leadership characteristics changed or did not change through each of the eras of warfare.

Beginning with the pre-modern era of war, such as before the Napoleonic era, the characteristics of senior military leaders were very hands-on in terms of their approach to leadership. John Keegan, author of the Mask of Command, wrote that early leaders made decisions requiring "quick results, possible only through dynamic direction."[31] The dynamic direction Keegan wrote about was the technique used during the pre-modern era by senior leaders who were leading from the front and along side their soldiers on the battlefield. Senior leaders of this era used traits based on personal influence over their subordinates. Keegan also wrote; "Unification predicates leadership, and the organization of hunting parties, which was central to

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[31] John Keegan, *Mask of Command* (New York: Penguin Books, 1988), 10.

primitive society, provided a model from which leadership could be translated to the battlefield."[32]

Many leaders had the confidence and courage to go face-to-face on the battlefield against their enemy. These leaders made decisions on the field and many times, while in the fight itself. They actually personally led their armies into battle. John Keegan wrote in The Face of Battle about how in 1415, then twenty-seven year old Henry V led the English Army into France and personally "led the army out" of the area near Harfleur and onward to Calais during the Agincourt campaign in one of the invasions of France by England.[33] Although throughout the history of this era, or any other era in fact, one can find instances of leaders who did not lead by example. However, it is one trait or characteristic of leadership that has remained throughout the eras of warfare and up to now has not changed.

Leading an army long distances, in an invasion during this era meant being able to master the means of travel associated with that period. Naval senior leaders as well as senior leaders of armies had to be able to navigate of course, and very well. This however is more of a function of leadership rather than an intrinsic characteristic of the leader. It is a skill that must be learned and mastered and is directly related to the technology of that period. As time evolves, so does technology and therefore if one leads by example, it would only be prudent for that leader to be able to master the skills commensurate with the leadership position and the technology available. Earlier in time, a leader had to master the skills associated with chariots, then ridden horses, which lasted for several eras of warfare.[34]

Leading by example on the battlefield also meant being seen and heard, in order to provide guidance and give orders to subordinates. To be successful at leadership during the fight, leaders of this era had to be highly recognizable. In order to accomplish this, it became popular and practical to wear some distinctive feature, a uniform item such as a large colorful hat or

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[32] Ibid., 9.
[33] John Keegan, *The Face of Battle* (USA: Barnes and Noble Books, 1993), 80-82.
[34] John Keegan, *Mask of Command*, 10.

riding a white horse, in order to stand out on the battlefield. Being recognizable was part of one of the most important skills and functions of a senior leader, that of communication.

If a senior leader on the battlefield could be clearly seen, he could communicate orders by use of signals. Senior leaders and officers on ships wore distinctive headgear that could be viewed from up above during battle, allowing sailors to be able to quickly identify their leaders and take orders as required. Of course, this also marked the leaders as targets for the enemy, but that might also prove to their soldiers how brave their leaders were. Even if the soldiers saw a senior leader wounded on the battlefield, it would add to their respect for that leader, as they understood that even their leaders were susceptible to the elements of war.

One might argue that this display was directly related to leaders with large egos. One of the most common displays of leadership distinction or designation was that of General Patton and his famous pearl handled .45 cal pistol carried during World War II and Korea, in the modern era of warfare. However, Patton did not carry this .45 caliber pistol in order to be seen on the battlefield or in order to communicate better as a senior leader. I contend that the reason was more egocentric than that.

The pace of war was much slower in the pre-modern warfare era because of the time-distance relationship. During the pre-modern era of warfare, the fastest thing on the battlefield was the horse. Travel for soldiers during this period was limited to the speed of horses, which was even more restricted when moving war stocks. The rate of movement by foot could be enhanced by physical training, but training could not move armies as fast as things move today with modern technology.

The Roman Legionnaires are probably the most famous physically fit fighting force in history. Roman soldiers were between the ages of seventeen and forty six years old. They trained hard and were taught how to fight, march, and form into special box, testudo, and tortoise formations using their swords, pilum, and shield for protection. One of the most amazing

characteristics about the Romans was their rate of march. It is said that a Roman Legionnaire could march about thirty-two kilometers in a five-hour period, while wearing full armor.[35]

These figures have been debated for centuries, but if even they are true, they do not compare with the rate of march using today's vehicles. Because the rate of march was so much slower, the pace of war was slower as well when compared to other eras of warfare. Senior leaders could take their time plan and deliberate over potential future actions. The practice of leadership could and did take lots of time. This contrasts greatly with the very quick decisions made today during the modern era.

Senior leaders of this era usually led on foot or horseback and very practically, led by example in the very front of the formation. Many of the leaders during the pre-modern era of warfare were also responsible for raising their own army. Some of these leaders were the statesman or ruler of not only the army, but the country as well. They had to be convincing, knowledgeable and charismatic, forthright and dependable and even on occasion, brave in battle. In Mask of Battle, Keegan wrote, "In such circumstances it [leadership] would have been fostered by the likely mastery of the means of travel - that the strong, the brave and the adventurous were likely to display" writing about leadership conditions for success.[36] Sometimes, these leaders were born into the position of leadership through lines of nobility, by inheriting a position of leadership. These leaders were not formally trained in the art or skills required to lead great formations and often learned from experience alone.

Leaders in the pre-modern era of warfare did not always rise to the top through hard work, perseverance, or even climbing the proverbial ladder. During this era, "officers were often

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[35] A synopsis of the Roman Legionnaires can be found at:
http://ecs.lewisham.gov.uk/youthspace/ca/roman%20home%20page/page4.htm, accessed on 8 Mar 2004.
[36] Ibid., 10.

put on a regiment's list at birth."[37] Leaders were more often than not chosen based on wealth or family status, not necessarily based on skills, past experience or formal training.

The pre-modern era of warfare does not begin at any one particular date or event, but for the purposes of this monograph, ends in 1792 as described above. The pre-modern era is an era in which leaders of armies could be the kings or rulers themselves. An era in which these senior leaders might raise an army just to fight one war and lead the army themselves through battle. Following that battle or war, the army might be disbanded until another army was required. Exceptions to this can be found in history, as with almost anything in history. Historians can argue the point about when the era began or ended. However, the overall characteristics of the times are what influenced the leaders of that era. Those characteristics are also the ones that influenced the beginning of the next era of warfare.

Personal skills or functions of leadership, such as good horsemanship, expert marksmanship, were as important to leadership as being appointed a leader due to family status or wealth. Those who followed required their leaders to be seen with them on the battlefields. The senior leaders would be seen as lesser men if they did not lead by example, lead from the front, and make the decisions on the battlefield that might mean the survival of the way of life as they knew it.

In the caldron of battle, a senior leader had to communicate orders to be effective. In the pre-modern era that meant being seen on the battlefield in order to send the communications necessary to direct their armies. Flashy attire, a white horse, or a headdress that stood out among the others was sometimes a way to remain obvious while the battle raged. These were just some of the characteristics of the senior leaders of the pre-modern era. Those characteristics that endured time and flowed into the next era or even further, are significant and are the ones many senior leaders based their leadership style on.

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[37] Robert L. Taylor and William E. Rosenbach, "Leadership as an Art," in *Military Leadership, In Pursuit of Excellence* ed. James L. Stodesbury (Boulder: Westview Press, 1992), 9.

MODERN WARFARE ERA

Robert Kaplan, a travel writer and author of several books, wrote in his introduction to Chapter 1 of Warrior Politics that; "As future crises arrive in steep waves, our leaders will realize that the world is not "modern" or "postmodern" but only a continuation of the ancient-world that, despite its technologies, the best Chinese, Greek, and Roman philosophers would have understood, and known how to navigate." Kaplan titled this chapter "There is no "modern" world."[38] I contend that Kaplan wrote this in the sense of the old cliché about how everything changes, but nothing changes.

My understanding of Kaplan's writings is that crises and other problematic aspects of an era can be dealt with as they have been since the days of the early philosophers. Kaplan pointed out the gap between what was ancient and what is modern and closed this gap with basic principals, despite the best technologies. However, with respect to warfare, the statement that there is "no modern world" could not be any more wrong.[39]

The world has changed and been revolutionized several times over. Distinct periods of warfare exist and each contains characteristics that clearly separate each era of warfare. We have gone from rocks and spears to weapons of mass destruction. We have had world wars, wars fought with weapons from the air, sea, and land all used simultaneously. Warfare has most definitely changed over time.

In the modern era of war, the period from World War II forward to the Korean War, other major changes in warfare occurred. During this period, senior leaders fought with massive armies from mobilized states and led from command posts far away from the actual battles. Advances in technology changed warfare with the introduction of helicopters into combat during this era and airpower became a serious element and a formidable weapon system.

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[38] Robert D. Kaplan, *Warrior Politics, Why Leadership Demands a Pagan Ethos* (New York: Vintage Books, 2002), Contents Page.
[39] Ibid.

Senior leaders conducted personal visits to the front periodically, which were a way to ensure orders were being followed or to communicate new directions. Senior leaders did not have to maintain a position up front in the fight itself in order to be effective. They were able to move around the battlefield more because of new technology not available in other eras of warfare. Senior leaders had the freedom to move by vehicles such as airplanes to visit a wide range of positions in a theater of war and could cover much more distance at greater speed than ever before. The senior leaders of his era were also able to be in the best position, at a given time to manage and lead major combat actions.

Also in the modern era, many of these senior leaders attended formal leadership training as young cadets or officers, all in preparation of their duties to come. "Formal military schools such as The United States Military Academy at West Point and The Military College of South Caroline, The Citadel, in Charleston, South Carolina were established in the 1800's to academically prepare future leaders for military service as officers."[40]

Of course, there were other sources of officer education during this period. Such schools as Officer Candidate School, started in 1938, became popular within the ranks of the Army.[41] Enlisted personnel and non-commissioned officers had the chance to move up into the officer ranks and receive leadership training. Additional leadership education for Army officers exists in other schools such as the branch specific basic and advanced courses for each of the different Army branches, such as infantry, artillery, and engineer. In 1946, the Command and General Staff College at Fort Leavenworth, Kansas, as it is known today, also teaches leadership to Army

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[40] The United States Military Academy (USMA) at West Point, established in 1802 has provided courses on leadership since its inception. Further information and links about the history of USMA at West Point can be found at: http://www.fieldtrip.com/ny/49382638.htm, accessed on 18 Jan 2004. The Military College of South Caroline, The Citadel, founded in 1842 also provided formal training in leadership since its beginnings. Links to additional information about the history of The Citadel can be found at: http://citadel.edu/r3/about/history/index.shtml, accessed on 18 Jan 2004.

[41] Additional information on Army, Officer Candidate School history can be found at: http://www.ocshistory.org/army_museum/ocshistory.html, accessed on 18 Mar 2004. Other services have various types of Officer Candidate Schools that produce officers trained in leadership as well.

officers of the ranks of Major and Lieutenant Colonel.[42] The leadership classes at this school continue to teach a more senior level of Army leadership.

During the modern era of warfare, leaders required the proper leadership skills to be successful, but new skills became more important for this new period. There was a shift in priority of skills required. Senior leaders during the modern warfare period now had the option of making decisions further back from the actual face-to-face front lines of combat. These decisions could be made in a less stressful environment than in the pre-modern era. Face to face, communicative skills were still required. However, the telegraph, radios, and other means of communication were leveraged and senior leaders were able to distance themselves from the battlefield. This also meant distancing themselves from their subordinates.

The modern era progressed at an alarming rate in terms of technology. The advancements that allowed for speed of maneuver forced leaders to make decisions faster based upon data that are more accurate. Although advances in technology occur in each of the eras of warfare, this era contained a rate of technological advances not seen before. The weapons systems developed during this period increased the distance between fighting forces and permitted a faster pace for maneuver units. "The small bore repeating rifle, the machine gun, and quick-firing filed artillery extended the deadly zone, or the distance that soldiers had to cross to turn a defender out of his position, from 150 meters in Napoleon's day to a thousand meters or more by the end of the American Civil War."[43] Leaders adapted to this new era by learning how to communicate clearly at a faster pace in order to keep up with the battle. The technology allowed the senior leaders to also communicate along further distances than ever before.

Senior leaders found that they did not have to be present for every meeting or discussion or out front leading by example in every battle. As long as senior leaders could communicate their orders and receive reports from the front, there was no longer a need to personally fight each

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[42] Additional information on The Command and General Staff College and its history can be found at: http://leav-www.army.mil/cac/history.htm, last accessed on 19 Mar 2002.
[43] Scales, 4.

battle. There was an option now for leaders to be in the theater of war where they thought best to manage the battlefield over time. This could only be accomplished with the means of new communications technology. This also meant less risk for the senior leaders who could possibly fight future wars if needed.

In order to be successful, the senior leaders no longer had to lead by example as much as they did before. They still had to have the leadership quality or characteristics of leading by example and to be that guiding light for subordinate soldiers, but the techniques had to change in order to adapt to the new battlefield environment. Although not a skill, but most definitely a characteristic, a senior leaders reputation became much more important during this time in terms of its impact on subordinates.

Senior leaders, who were repeatedly successful, developed a reputation as a good leader. The reputations of senior leaders meant more to subordinates than in past eras of warfare. This is simply because the subordinates did not see or fight with the senior leaders as much as they did in the earlier eras of warfare. Many soldiers in battle during this period of warfare never even saw their senior leaders, but through the means of advances in technology such as newspapers, film and radio media, they were at least exposed to the reputation of their senior leaders. Of course, reputations have always been around, but in this era of warfare, reputations became more important in terms of leadership because the senior leaders were less visible on the battlefield.

The leaders of this era also had less of a need to be recognizable on the field of battle because they may or may not be actually present, yet still needed to effectively communicate. Senior leaders had to rely more on the written word as opposed to physically being there to direct others verbally or to further explain details. Written orders sent by telegraph or messenger, a method left over from previous eras of warfare, or verbally by radio, had to be precise, and clearly understood a characteristic that will carry on through future eras of warfare.

When World War II ended so did the modern era of warfare. Larry H. Addington wrote in The Patterns of War Since the Eighteenth Century that several historic developments emerged

during the period following 1945. These characteristics of warfare changed the environment for which war would be fought in the future. There was a technical revolution, the beginnings of a Cold War between the United States and the Union of Soviet Socialist Republic, and the breakup of Western overseas empires in Asia and Africa, and the birth of the United Nations, who had limited success conducting its peacekeeping mission during this time. "War became all too common in the turbulent world after 1945."[44]

The post-modern era followed World War II and the modern era. For The United States, the beginning of the Korean War was the first in a line of post-modern conflicts in the new era of warfare. The post-modern era brought with it new challenges for senior leaders. The new environment of warfare created an opportunity for senior leaders to take the available technology and move forward into a new era of warfare like no other era before it.

POST-MODERN WARFARE ERA

Post-modern warfare is an era marked by multiple forms of war occurring at the same time. Cyber warfare, information warfare, the potential for nuclear warfare, and coalition warfare with a wide variety of allied capabilities, are all characteristic of post-modern warfare. Tremendously important is cyber warfare's role in the post-modern era as computers and microchips touch every aspect of warfare. In cyber war, computers are not only targets, but can be weapons as well. Computer attacks occur across a spectrum of cyber space not commonly used in other eras of warfare. Writing about the information revolution during the post-modern era, James Adams wrote in The Next World War, "This revolution also requires the political and military leadership to understand the purpose and consequences of war and the risks that attach to any military action."[45]

The new concept of information war fighting spurred new developments in technology and the requirement for greater skills in senior leader communication. The leaders not only had

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[44] Larry H. Addington, *The Patterns of War Since The Eighteenth Century* (Bloomington and Indianapolis: Indiana University Press, 1994), 266.
[45] James Adams, *The Next World War* (New York: Simon and Schuster, 1998), 313.

to learn about the technology, but learn how to best use the technology to communicate faster and in different ways. They in fact, had to learn to develop a greater capacity to understand how electrons moved through cyber space.

A very important part of the post-modern era and what I predict as an enduring characteristic of future eras of warfare, information warfare will continue to develop as technology allows for greater capabilities in communication. The United States military has taken advantage of the current technology not only to communicate better, but to intercept enemy communications as well. In order to solve the obvious communications challenges resident with this senior leader to frontline battlefield distance some means other than courier had to be developed.

The telegraph was probably the first communications device invented that reduced the separation on the battlefield to such a great degree. Today, this communications link is magnified 100 fold with such things as video teleconferencing and instant communications through voice, video, and other digitization using the environment of space as a new continuum. The reliance on these communications devices is ever present in today's battlefield. This is in direct contrast to the tactical level of war in WWII, as S.L.A. Marshall wrote in <u>Men Against Fire;</u> "The axiom that there is no substitute for personal reconnaissance applies as fully as ever, even though these are days when the majority of commanders and staff rely ever more heavily on the radio and the telephone."[46] Particularly important to senior leaders in the post-modern era of warfare are information technology and information warfare.

Both have proven to be increasingly important, but are very difficult to prosecute effectively. Adams wrote in <u>The Next World War</u> that "The ability to understand the use of information as a weapon of war, and how it impacts the conduct of military and foreign policy, is

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[46] S.L.A. Marshall, Brigadier General, USAR (Ret), *Men Against Fire* (Alexandria: Virginia, Byrrd Enterprises, Inc, 1947), 95.

something very few in government possess."[47] The ability for senior leaders to understand how

information affects the battlefield is crucial to current warfare and is currently known as

information operations. Not only are information operations difficult to prosecute, it is difficult

to organize and plan for.[48]

Another example of technological advances in the post-modern era is the global

positioning system (GPS). The GPS is as common now on the battlefield as the compass used to

be in the modern era of warfare. Other technologies in the post-modern era are ground and

airborne sensors. These sensors can enhance human patrols and sometimes replace humans on

the battlefield. Other technological advances in communications have spread widely during the

post-modern era and the information age. These advances are only the precursor to future

developments as microchips get smaller and computers become more powerful.

One aspect of the post-modern era is the fact that non-state actors can fight with weapons

equivalent to those used by the super powers. Therefore, the battlefield is a very different

environment now than in past eras. The senior leaders during the post-modern era can rely on

electronic means to convey messages vice face-to-face communications. Therefore, senior

leaders have the potential to be removed further from the actual fighting, maybe even in sanctuary

well away from the theater of combat.

As stated above, in the post-modern era, warfare takes place in an environment where

non-state actors can conduct wars with weapons equivalent to those of the super powers. This

new environment adds a dimension to warfare that did not exist before. However, even though

The United States is clearly in the post-modern era of warfare, it still finds itself fighting other

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[47] Adams, 274.

[48] This past year, I have traveled to almost all of the senior unified commands within The United States
military as part of the Advanced Operational Art Studies Fellowship. I discovered that all senior leaders
agree that information operations is very important to the current and future battlefields, but they can not
agree on how to organize and plan for these operations. The problem is one of complexity. Information
operations include so much, from defense to attack, from international perceptions to local media reporting.
The effects of either successful or unsuccessful information operations may mean a shift in the perceived
winner or loser of a war. This complex challenge is one that senior leaders must solve in the ultra-modern
era of warfare.

styles and forms of warfare left over from other eras. This is characteristic of the post-modern era

will continue in future eras as well because potential enemies will not be modernized to the same

level as that of the United States. An example of this dichotomy is in the War on Terrorism. For

instance in Afghanistan, The United States military is facing an enemy found sometimes on

horseback, yet using cell phones to communicate. This is a clear example of the blend of old and

new in the post-modern era.

Thus, during the post-modern era, it is possible for developed counties or undeveloped

countries to be involved in war with characteristics of the modern era, post-modern era, or both at

the same time. The advancements in technology and specifically weapons technology have

increasingly matured in countries that can afford it and stymied in countries that cannot. Of

course, this is and has been the case throughout the other eras of warfare. An important

characteristic of the post-modern era is that the difference in economic power is so great. The

economic disparity has created a crevasse too large for undeveloped countries to cross and keep

up with the superpowers. However, in future eras of warfare, undeveloped countries may procure

the economic means to change this dynamic. As James Adams wrote in The Next World War

"The United States straddles the globe, the most powerful nation ever seen, with an array of

weapons and an economic vitality that produces a stream of innovation no nation can come close

to matching."[49]

Currently in Iraq, one can see the most technologically improved equipment and weapons

alongside rock throwers. The overlap of eras in the post-modern era of warfare will continue in

the future. However, one of the most dangerous aspects of this new era is that an undeveloped

country, with an unstable or nonconforming government, could obtain weapons of mass

destruction and raise the threat level higher than before. Therefore, tomorrow's leaders must

have and understand the enduring leadership qualities from past eras of warfare and obtain and

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[49] Adams, 305.

develop the new qualities, skills, and traits in preparation of fighting tomorrow's battles and winning.

Understanding the dynamics of how capabilities develop and how threats are forged throughout past eras of warfare are very important. For instance, it is conceivable that a single senior leader will have to be up front and personal with his forward commanders, as in past eras of warfare to gain an appreciation for the battlefield developments that technology cannot provide. Yet, that same leader must be skilled enough to lead soldiers and units into battle from a secluded sanctuary.

It is necessary to examine other elements and characteristics of senior leadership such as charisma, adaptability, judgment, dependability, and in today's terms, respect for others. I will determine those senior leadership characteristics necessary for the post-modern war era we now face that may become the foundation for leadership in the ultra-modern era. Exploring what past senior leaders did or how they led will provide a backdrop to compare and contrast what will be required of future leaders in the ultra-modern era of warfare.

Senior leaders already have to have a great capacity to anticipate changes on the battlefield along a short timeline. In the future, with real-time battlefield awareness, senior leaders will have to increase this capacity and shorten the timeline for decisions. These are skills or in some cases, problems today's leaders are dealing with in the post-modern era. What the future holds for senior leaders is uncertain. Future eras of warfare will only magnify the challenges and demand senior leaders who can adapt to the great changes to come, yet to be discovered.

ULTRA-MODERN WARFARE ERA

Ultra-modern warfare will be even more challenging for senior leaders as the environment of space becomes an important part of the new battlefield. Senior leaders will require some of the same leadership skills of other eras of course, but what aspects of leadership will become more essential during this period? Leaders must deal with the new tools and

advancements in technology, but how will real-time assessments change the face of battle

decisions and decision-making and leadership? Senior leaders must learn to use these new

capabilities to their advantage, yet maintain the leadership skills necessary to succeed in multiple

environments. Are those aspects or characteristics of leadership the same as those in pre-modern

warfare or even modern warfare? As stated above, probably not, but will new skills be necessary

to make decisions that are based on assessments from highly digitized staffs that have real-time

knowledge of events and absolute current situational awareness? Will the leader of ultra-modern

era require a greater capacity for acting alone?

Generally, the ultra-modern era of war is the next era of warfare to occur. It will be

marked by smaller wars or insurgencies occurring within one or more theaters of operation and

possibly, simultaneously. Included in this new era is space, a new warfare environment. This

view of the next era of warfare is a logical extension of the current post-modern era. As

transformation of our armed forces continues in this era, it is only natural that the techniques of

fighting will change with the technological developments and of course, as these developments

occur, one can assume the enemy will adapt as best it can.

An enemy's ability to develop economic power is extremely dangerous in terms of

adapting to changes brought about by technology and other advances the superpowers make.

Economic growth in countries that once were referred to as third world countries may be able to

afford a force or capability that could threaten the United States or other nations. They may be

able to actually cross the crevasse I described earlier. Another adaptation for a country with bad

intentions might be the support of terrorist groups or a sponsor for untoward actions. All of

which will present a change in the dynamics of future warfare.

The ultra-modern era seems not that much different from the post-modern era at first

glance because of the overlap of eras I described above. However, one difference is that the

enemy will have weapons of mass destruction and the means to employ them as weapons of

terror. Another difference is that this era will be marked by technological advancements never

seen before in war fighting. Advancements in intelligence gathering and perfect instant

communications will dominate the situational awareness of senior leaders. This will allow the

movement of real-time battlefield information throughout the levels of war, strategic through

tactical.

The ultra-modern era will also be marked by surgical strikes based upon actionable

intelligence that may lead to immediate political results. The Pentagon is already perfecting

techniques to decrease the response time to actionable intelligence. Actionable intelligence is that

information gathered by a sensor or human intelligence gathering efforts, which can be quickly

exploited in order to achieve the shortest possible reaction time between the sensor and shooter.[50]

The efforts made to reduce the sensor to shooter times will result in immediate reactions

to terrorist acts anywhere on the globe, whereas in the post-modern era, these strikes might take

an inordinate time to prosecute. "Strategic speed will allow theater war to take the form of a *coup

de main*."[51]

Conventional wars will exist, but they will be the exception. In Robert Kaplan's book,

Warrior Politics, he predicts " War will increasingly be unconventional and undeclared and

fought within states rather than between them."[52] Unconventional wars will be the warfare of

choice for the future because it allows undeveloped countries to bridge the gap created by

economic disparity and evens the battlefield for an undeveloped country or enemy to compete

with a superpower. However, "undeclared wars and fought within states," I disagree. Terrorists

usually claim their acts immediately following an attack; otherwise, they would not get credit for

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[50] As an Army Special Operations Plans and Policy officer working in the Army Operations Directorate, I have been part of several planning efforts to reduce the time it takes to gather information, turn it into actionable intelligence, and then target the actionable intelligence with a weapon system for prosecution. This process reduces the chances of a target moving out of range or contact and maximizes the element of surprise.

[51] Scales, 166.

[52] Kaplan, x. In addition, further down the page, Kaplan goes on to explain that the "result of the collapse of the Cold War empires, the advancements in technology and low-end urbanization – has provoked the breakdown of families and the renewal of cults and blood ties. He believes the result is a birth of a new warrior class, as cruel as ever-and better armed. It will be the speed of reaction, not international law that their defeat will depend upon."

the attack and not be able to further their cause. Although this is not a declaration of war, as in World War II, it is the declaration by an enemy in a new wartime environment called terrorism.

Kaplan also wrote about wars fought within states. But, the breakdown of families and the renewal of cults and blood ties will not get any worse if a stable government is allowed to function. Kaplan further predicts that the result of these breakdowns will birth a "…new warrior class, as cruel as ever-and better armed."[53] It is evident that even in Iraq, there is a quest for a stable form of government. Governments form in order to maintain peace and stability and have institutions such as the United Nations can help with any challenges that occur. Although it will be interesting to see how the world views the current war on terrorism and how polices are set to fix blame on countries that support or sponsor terrorism in the future. Already we see in Afghanistan and Iraq that state versus state conflict can occur when they are held responsible for actions within their borders. These in most cases will be declared wars.

The war on terrorism is clearly declared by The United States, in open forum and with worldwide participation. In the first round, Afghanistan harbored terrorists and was attacked by the United States along with a coalition of many nations. First, the coalition, led by the United States went against the leadership of Afghanistan called the Taliban. It was clearly known that terrorists were present in Afghanistan and using the lack of security there to operate its training bases. Senior leaders know how to deal with targets presented in a conventional sense, most militaries have been structured for and train to this type of fight. What the senior leaders had a more difficult time in dealing with was a less codified network target of terrorists. The war against the terrorists in this case was state versus state, or more clearly, coalition against the Taliban and associated terrorists hiding under their umbrella.

Senior leaders will have to adjust to the new form of warfare. This new form of warfare is one in which many conventional leaders are generally uncomfortable. MG Robert Scales wrote in <u>Future Warfare</u> "We can no longer fight the destructive campaigns of World War II. The

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[53] Ibid.

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indirect approach enables us to use knowledge and speed to their fullest potential to achieve our strategic ends with the least cost in human life and destruction of physical property."[54] These two characteristics of future warfare, use of knowledge, and speed, are important in the post-modern era of warfare and will be two of the most important factors for future senior leaders to deal with. These characteristics of future battles will require a very agile leader who can act fast while gaining information from a staff who must sift through more data than in any other era of warfare.

It seems everyone has an idea or theory of what the future will bring in terms of military warfare. Much of what is written relates to emerging technology. Technology will be, no doubt a major player in the future of warfare, but it cannot solve all of the problems or challenges of the future. General Scales also wrote "Although emerging technology offers promise for applying precision firepower and swift maneuver through enhanced information, it will not eliminate the fog and friction of war."[55] However, there are very specific challenges technology can address for senior leaders of the ultra-modern warfare era.

One such challenge that can be addressed by technology is language skill. During the past year, several of the guest speakers at the School of Advanced Military Studies, Fort Leavenworth, Kansas, mentioned in their talks that military leaders must address language capability immediately. Many of these speakers suggested that soldiers and officers should learn other languages in order to be more effective on the battlefield. It was obvious from their research that both soldiers and leaders lack foreign language capabilities. The benefit of having more translators on the ground will only improve the situational awareness for senior leaders in the future.

What their talks did not reveal however, are the devices used today to translate between English and many other foreign languages. Special Forces have used various devices for some time and the United States V Corps uses them in their training exercises while I was assigned

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[54] Scales, 185.
[55] Ibid., 198.

there in 2000.[56] Of course, these devices are not perfect and there were problems with different

language dialects, but I am confident that these problems will be solved in the ultra-modern era of

warfare.

Language will not be the only communications challenge for leaders in the future.

Current communications ability of the command and control aspect of warfare today is already a

challenge for senior leaders. Senior leaders have a requirement to be at the right place at the right

time while making decisions that affect the battlefield. Command posts in the rear area as well as

the front lines are necessary and now even more importantly are mobile command posts that

allow senior leaders to move to the best place on the battlefield or within the theater of operations

to make decisions.

The future is of course, unknown for sure, but senior leaders of the ultra-modern era will

have to deal with the enduring characteristics of past environments and eras of warfare, yet be

prepared for new characteristics and challenges. The old and new leadership skills must be

identified today in order to prepare future senior leaders for success in the post-modern and ultra-

modern eras. The basic skills and characteristics of senior leaders will have to change in order to

meet the demands of future warfare, but what are they exactly? How can future leaders adapt to

the ever-changing world and warfare environments? Is it possible to teach future senior leaders

to be more flexible, more adaptive, and better prepared to meet the demands of the uncertain

future? All of these questions are important to consider as we move quickly from the post-

modern warfare era and look beyond.

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[56] As commander of the Special Troops Battalion in V Corps from 2000 to 2002 I was involved with
several exercises in which translation devices were tested and used to further the ability of soldiers to
communicate on the ground. Some of these devices met with success, but most met with challenges that
will be overcome in the future.

CHAPTER THREE

CHARACTERISTICS OF SENIOR LEADERS

PRE-MODERN WARFARE LEADERSHIP

The selection of particular senior leaders in this chapter was purely by personal preference. Purposely, there is no detailed study of each leader. Rather, they are senior leaders who displayed the traits, skills, and characteristics of their associated era for future comparison to the ultra-modern era of warfare. One way to describe the future is by comparing it to the past, so past senior leaders will be used to provide that comparison.

As mentioned before, an example of a senior leader characteristic from the pre-modern era of warfare is the ability to communicate orders to subordinates. This enduring characteristic throughout time is a very important one. As a senior leader in any era, one must give orders and direction to subordinates. Many communication techniques are used through the eras, and some were already discussed, but one of the first used was simply by word of mouth. Senior leaders during the pre-modern era had to be specific and somehow ensure the orders were passed over great distances.

Martin Van Creveld wrote in <u>Command in War</u> that "Rapid, long-distance information-transmission systems were not, it is true, entirely unknown even before 1800. Extensive relay systems, dependent on mounted couriers and sometimes also on the human voice traveling from outpost to outpost across the desert, were a notable feature of the Persian Empire."[57] Leaders of this era had to communicate and they adapted to use every means available. These techniques were enduring in nature and used over the centuries. Van Creveld continues "They [relay systems] were subsequently copied by the Hellenistic monarchies and by the Roman emperor

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[57] VanCreveld, 20. He credits this information from; Book of Esther 3:13; 8:10, and 8:14, also Herodotus, *The Histories*, viii.98, and Xenophon, *Cyropaedia*, viii.6.17, et al.

Augustus, whose *cursus publicus*- carriages driving from station to station along strategic roads - survived for several centuries."[58]

This technique could only be possible if the senior leader had a lot of trust in the couriers and a way to control them and the system. Therefore, as Van Creveld wrote, "…such systems invariably required a strong, stable government as well as very good control over and policing of extensive tracts of territory, the absence of which probably explains why no such system is recorded in Western Europe during any period between the fall of the Roman Empire and the end of the sixteenth century."[59] Which emphasizes another point made earlier, that changes that affected senior leaders occurred within the evolution of an era of warfare, not just between them. Van Creveld points further points out how social, and in this case, a "strong, stable" form of government, and other aspects of the eras influenced the characteristics of senior leaders in various eras, not just technology.[60]

Leading by example was a very important characteristic for senior leaders to display during this era. Subordinates wanted to know their leaders were worthy enough to follow, and still do. Followers also expected credibility of their senior leaders. Leading by example gave subordinates the credibility they required. Caesar, Henry V, Frederick the Great, and Napoleon, are examples of leaders who personally led armies into battle as senior leaders and who displayed many of the senior leadership characteristics of this period. This leadership characteristic has endured several eras of warfare and for good reason. The thought is that if soldiers see the senior leader out with them in battle, that they will have respect for them because the leader is physically showing them that they have courage and therefore passing that display of courage on to the soldiers who follow.

It was very important for senior leaders to physically show their soldiers that they could have confidence in their leadership to take them into battle and into victory. This brings up the

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[58] Ibid. VanCreveld credits this information from the description in Procopius, *Anecdota*, chap. 30, et al.
[59] Ibid.
[60] Ibid.

question of why soldiers fight in the first place. Soldiers of any era do not only fight because of their leaders. However, for the purposes of showing leadership traits, skills and characteristics, it will suffice to point out that the armies during these early eras of warfare were fighting partly because their courageous leaders.

As previously stated, some of these senior leaders were the ones who formed the armies, took them to the fight, and brought them home if they were the winners. The leading by example characteristic of senior leaders is another one of the enduring characteristics brought forward, but may not be as important for senior leaders in the ultra-modern era of warfare. However, leading by example physically shows a subordinate a form of courage. Clausewitz wrote that "courage is of two kinds: courage in the face of personal danger, and courage to accept responsibility, either before the tribunal of some outside power or before the court of one's own conscience."[61] Senior leaders during this period and others benefited from both forms of courage. It will be interesting to see if future leaders will require either kind of courage.

Other immeasurable characteristics of senior leadership such as respect, honor, instinct, confidence, and as Clausewitz wrote in On War, "strength of character" meaning "stick[ing] to his "convictions" or "firmness" were important in the pre-modern era and will clearly be important to senior leaders of any era.[62] However, these characteristics are immeasurable and do not lend themselves for analysis in order to predict the characteristics of the ultra-modern senior leaders. Therefore, as qualities senior leaders should have in order to be successful, they remain enduring characteristics for the future. These less defined qualities are in distinct contrast to the hard skills necessary during the pre-modern era of warfare.

Senior leaders of the pre-modern era required a set of hard skills and to some degree had to be able to navigate, and show proficiency in horsemanship, the primary mode of travel for this period. Senior leaders had to have these skills in order to be able to lead armies into battle and in

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[61] Carl Von Clausewitz, *On War* ed. by Michael Howard and Peter Paret (Princeton, N.J., Princeton University Press, 1976), 101.
[62] Ibid., 107.

part show that courage Clausewitz wrote about in <u>On War</u>.[63] A senior leader without mastery of these two particular skills could not be effective on the battlefield as a senior leader. Although the particular skill levels of the pre-modern era senior leaders are different to document, it is safe to assume that the leaders were at least adequately skilled in order to lead an army into battle.

The pre-modern era, as one looks back in time, is a proving ground for senior leader characteristics. These characteristics were slow to change over time, but as we will see that will change. Technology is one of the main causes of this rapid change. The industrial revolution spurred many inventions and military advances. Along with the technological changes came change in how a senior leader led their armies. Several characteristics fell out, but others remained enduring.

MODERN WARFARE LEADERSHIP

This era began with the change in warfare from unlimited to limited around 1792. During this period, the senior leaders made the decision to conduct combat when and where they were ready to do so. More importantly, senior leaders during this time decided sometimes not to fight to the death of the army or their annihilation, thus, limited warfare was accepted as a form of warfare and aided in defining the modern-era of war.

It was also a time when the ever important and enduring characteristic of senior leader communication was required and sometimes failed. Although communications began to improve within this era, there are several examples of failed communications. For instance, as Martin Van Creveld wrote, "Napoleon at Bautzen in 1813 could do nothing to communicate with Ney, on whose advance the outcome of the battle depended, even though their respective headquarters were less than ten miles apart."[64] Another example is in 1866 when Moltke could not communicate with the Prussian 2nd Army at Koniggratz.[65] Senior leaders had to master a method of communication that worked for them during that particular period or face the potential to lose

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[63] Ibid., 101.
[64] Van Creveld, 23
[65] Ibid.

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the battle or war. The lack of practicable communications in earlier eras of warfare was one of the main reasons "armies normally stayed close together."[66] The risk associated with spreading an army out and not having real-time communications or even reliable communications, was too great for prudent senior leaders of this period to take.

One of the most interesting and colorful senior leaders from this period was Ulysses S. Grant, the General in Chief of the Armies of the United States during the Civil War. John Keegan wrote about Grant in the Mask of Command that the "slight, personally self-effacing, academically undistinguished" cadet who preferred horsemanship where he "excelled," as opposed to the infantry, where he ended up after graduating West Point in 1843, became one of the most famous generals in American history.[67] Grant's formal military education included some leadership training, but at the time the education West Point provided was more focused on "mathematics, engineering, and science [of war]."[68]

During the Civil War, formal education was an important part of growing senior leaders and West Point was the key institution for many of the Army generals. As Herman Hattaway and Archer Jones wrote in How The North Won, "Regardless of social class, which varied considerably on both sides, few Civil War general who lacked formal education gained promotion. Eighty percent of the total had graduated from West Point."[69] It is not clear however, whether senior leaders were chosen because of their West Point leadership education and training, or because of the fact the West Point was the national military academy and senior leaders were part of the expected outcome following graduation.

Grant earned respect for war during the war with Mexico, but soon resigned his commission at the rank of captain in 1848 to be close to his wife.[70] Keegan wrote that Grant

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[66] Ibid., 27
[67] John Keegan, *Mask of Command*, 182.
[68] Ibid., 181.
[69] Herman Hattaway and Archer Jones, *How the North Won* (Urbana and Chicago, University of Illinois Press, 1991), 503.
[70] John Keegan, Mask of Command, 184.

displayed his physical courage during this time, but the "discovery of his moral courage would come later" during the Civil War.[71] Grant entered the military for a second time after accepting the colonelcy of a regiment from the governor of Illinois, avoiding election into service and continued to work his way to the top.[72] Keegan wrote about one of Grant's leadership technique explaining that; "Grant would show himself at times as authoritarian as Wellington at his most iron ducal."[73] Keegan also wrote about Grant's leadership at Vicksburg and making "veterans out of his amateurs in two years of campaigning" "By this ultimate readiness to command by consent rather than diktat Grant discloses the populist touch that made him a master of people's war."[74] Grant showed flexibility as a senior leader and character. For instance, although not the most astute student at West Point and admittedly Grant wrote, "I had never studied the tactics I used."[75] Colorful indeed, Grant was a fine senior leader, but also commonly, as a failure at business between wars, known to drink occasionally and smoke to excess, was physically revolted by the sight of blood, a logistical expert for his time, and yet as Keegan wrote, that it was the Civil War that rescued him from his "social disability"[76]

Leading by example, Grant did, on the battlefield with skill. His success came from being able to use his experience in the Mexican War as a young officer and adapting to the characteristics of the Civil War while holding senior ranks. Grant was physically there on the battlefield with his soldiers and showed them his courage, both kinds, repeatedly. His leadership was not necessarily from the formal education at West Point, but learned through experience. He was not an impressive senior leader in "either appearance or manner," but a quiet man who kept

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[71] Ibid., 183.
[72] Ibid., 188.
[73] Ibid., 192.
[74] Ibid., 194. However, many of these "amateurs" were actually immigrants from Germany, Ireland, and other European countries and had some fighting experience before joining or becoming part of the conscription into the Union Army. Many had more military experience than the Americans (non-immigrants). See page 185.
[75] Ibid., 189.
[76] Ibid., 185. Keegan gives much credit to Grant's own *Memoirs* and to Grant's biographer William McFeely.

to himself.[77] However, Keegan quoted President Lincoln's remark about Grant in his book The Mask of Command saying "I need this man," He fights."[78] Obviously, Grant could do the job required of him, leading soldiers into victorious battle and back home again.

Grant's ability to communicate was extraordinary. Keegan wrote, [General] Meade's chief of staff once remarked that "there is one striking feature of Grant's orders; no matter how hurriedly he may write them on the field, no one ever has the slightest doubt as to their meaning, or even has to read them over a second time to understand them."[79] Writing concise orders became a skill necessary for this era of warfare. Although one may argue that is a skill enduring from earlier eras, particularly in the modern era of warfare was the skill of writing most important. The telegraph became a means to communicate effectively in this era. As the era progressed, writing concisely and clearly was extremely important for senior leaders as orders and was to be sent via the telegraph.

During this period, much of the writing about communications focuses on the use of the telegraph. However, it is also important to note that railroads have been around military operations for a while. The railroad was used for not only moving war stocks, but mail and much more. Specifically, rail moved orders and instructions along with senior leaders who used the railroad at times to visit subordinate units and commanders. Although the rail was slower than the telegraph, it was still a relatively good means of communications during this period.

Just looking at leading by example and ones ability to communicate as characters of senior leaders during this era of warfare, one cannot overlook Wellington. Most famous for his exploits at Waterloo, Keegan wrote that he was also the "son of an Irish lord" who began a military career "more for ornament than use."[80] He was a senior leader of the time who looked

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[77] Ibid., 202.
[78] Ibid., 208.
[79] Ibid., 200.
[80] Ibid., 103.

forward to battles and avoided death several times only because of luck. Keegan mentioned "That Wellington had borne a greater share of danger than his subordinates is unarguable."[81]

Keegan brings up risk-taking when comparing Alexander to Wellington; "Alexander, bound and inspired by the heroic ideal, placed himself initially very close to and finally in the forefront of the battle line. Wellington also commanded from close at hand. In this, he was perhaps exceeding contemporary expectations of risk-taking."[82] The reasons both Alexander and Wellington had to lead from the front was mostly to stay close to the action and for control purposes, but still using 2,000 year old communications techniques such as mounted messengers and trumpet calls, and occasionally written orders.[83]

By contrast beginning in 1189, back in the pre-modern era, Genghis Khan moved armies from Korea to Hungary. He did so leading from a considerable distance from the action, as compared to Alexander or Wellington, communicating and receiving information by an extremely efficient system of messengers, scouts and spies, and imposing his will by a ferocious code of discipline."[84] Genghis Khan was noted for his brutal discipline rather than his method of communication, but it shows the enduring nature of communications for senior leaders over time and how leadership style can influence the success or failure of a system of communications.

Because most senior leaders after Genghis Khan did not continue with a leadership style using brutality or corporal punishment, it is evident that that form of leadership, although probably effective at the time, did not carry through as an enduring characteristic of senior leadership as people became more involved in military matters and democratic styles of government became popular. Throughout the eras of warfare, including the present era, there have been many cruel senior leaders with brutal regimes using corporal punishment as a method of leadership. However beginning sometime during the modern-era of warfare; senior leaders

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[81] Ibid.
[82] Ibid., 113.
[83] Ibid., 114.
[84] Ibid., 117. See also http://www.pma.edmonton.ab.ca/vexhibit/genghis/biog.htm for a brief biography of Genghis Khan, last accessed on 25 Mar 2004.

with a brutal leadership style became unacceptable. In fact, removal of these brutal senior leaders from power is an acceptable reason for war in this current era of warfare, such as in Haiti, Rwanda, and Iraq.

POST-MODERN WARFARE LEADERSHIP

Understandably, many can argue the choice to begin the post-modern-era of warfare at the Korean War versus World War II, but the differences are great enough to distinguish them as lines between eras. As discussed already, between any two eras of warfare, an overlap can be observed where characteristics of one era actually began in the previous era, where they were developed and tested. An examples of this is the telegraph system, developed in 1830, with a form of this device used during Napoleonic and after refinement, used throughout the modern and into the post-modern era of warfare as an important means of communication.[85] Another was the helicopter, developed in World War II, and used more extensively in the Korean War.

During this era, other technological developments began at the beginning of the era and further developed into extensive use. Communications technology increased at such an accelerated rate that information overload became a problem for senior leaders. Van Creveld wrote in <u>On Command</u> that, "New techniques, from operations research and systems analysis to cybernetics and games theory, were developed in order to cope with the flood of data."[86] Dealing with large amounts of data, from increased communications, technology became a challenge for senior leaders of this era of warfare. On top of trying to manage large amounts of data, senior leaders had to work more quickly in order to keep up with the changing battlefield.

One technique used to manage this data for senior leaders was the development f very large staffs. Compared with Moltke's General Staff in 1870, numbering around seventy personnel and controlling about one million men, today's army, much smaller, has hundreds of

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[85] More about the telegraph can be viewed at; http://inventors.about.com/library/inventors/bltelegraph.ht, last accessed on 28 Mar 2004.
[86] Van Creveld, 3.

staff members trying to deal with the enormous amounts of data and communications at many different levels.[87]

In all eras of warfare, some senior leaders went on to become high-ranking civilian leaders after a successful military career, such as General Grant who in the modern era of warfare, later became President of the United States. "As President, Grant presided over the Government much as he had run the Army. Indeed he brought part of his Army staff to the White House."[88] One of the senior military leaders of the post-modern era of warfare who later became a civilian statesman was General Colin Powell, currently The Secretary of State. Colin Powell once said that, "Leadership is the art of accomplishing more than the science of management says is possible.[89]

In The Leadership Secrets of Colin Powell, Oren Harari wrote about Powell's leadership characteristics and career as a military officer. As the V Corps commander with experience serving overseas during peacetime, two tours in the Vietnam War, national security advisor, and after receiving his fourth star, General Powell became the Chairman of the Joint Chiefs of Staff, the youngest as well as the first African American to do so.[90] Following a very successful military career, he was asked to run for the U.S. presidency, but declined citing family reasons, and in 2000, he was unanimously confirmed in the U.S. Senate as the sixty-fifth secretary of state.[91] Although true of many senior leaders during this era of warfare, Colin Powell learned his junior leadership skills in combat units in and out of combat environments. Later in his career as a senior leader, Powell spent most of his time on staffs working closer to the political issues that affect the military.

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[87] Ibid., 4. Although today's Army staff works many more missions at once, the battlefield staffs of even corps level operations have very large staffs in order to deal with the amount of data and multiplicity of missions.

[88] See; http://www.whitehouse.gov/history/presidents/ug18.html for more information about President Grant. Last accessed on 27 Mar 2004.

[89] Colin Powell and Joseph E. Persico, *My American Journey* (New York: Random House, 1995), 258.

[90] Oren Harari, *The Leadership Secrets of Colin Powell* (New York: McGraw-Hill, 2002), 6.

[91] Ibid., 4-7.

Powell is known of course for his various senior positions as a military officer and now government, but he is also known for his leadership philosophy. Oren Harari developed eighteen "Powell gems" and wrote a primer contained in his book, <u>The Leadership Secrets of Colin Powell</u>.[92] Harari wrote the primer to apply the "gems" to a corporate venue in terms of management techniques for senior corporate leaders.[93]

Just to mention a few of these principles, Powell believed in simple techniques to get to the issues and develop solutions that work. Powell believed that a leader should be a "dis-organizer" and "never stop doubting and challenging," to "not accept things at face value," that "complacency is the enemy," and that one should "put truth and integrity above all else."[94] Although these seem to be common sense while also making good sense, they are the basic senior leader principles that worked very well n this era of warfare. Anyone in the military for any length of time can think of a senior leader who portrayed some or all of these principles.

During the post-modern era of warfare, it became possible for senior leaders to talk directly with the political leaders such as the President using the telephone. The telegraph was slow, and one required a communicator to code the message and send it from a telegraph terminal. The telephone changed all that with instant communications in both directions from one's own desk. It was now possible for the President to talk directly to senior leaders to pass orders, guidance or discuss options. Although this gave the President access to the battlefield, which may seem contrary to the need for independent senior leaders, it also provided access to the President by senior leaders when they required guidance from the top.

Instant communications devices such as the telephone and television bred several problems, most notably during the Vietnam War, where political leaders over used these communications and created a perception that Washington was directing the war. The problems

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[92] Ibid., 9.
[93] Ibid., 9.
[94] Ibid., 92.

were later recognized and Washington learned to discipline itself against calling directly to the senior leaders in combat.[95]

Today there is even a greater potential for instant communications misuse as such capabilities as Blue Force Tracking are developed. Blue Force Tracker is the common name given to a system that portrays the exact location of beacons placed on vehicles or carried by soldiers. This system was developed for use of the battlefield for senior leaders to see exactly where their forces are. However, the system has a receiver at the Pentagon where senior leaders there, both military and political can view the exact locations of forces. The biggest problem with this situation is the temptation it provides leaders in the Pentagon to reach down and give unsolicited guidance to battlefield leaders. It creates a rub between senior leaders on the battlefield and those in Washington in terms of who is directing the actual war fighting.[96]

During the post-modern era of warfare, leading by example continues as a desirable characteristic of leadership for senior leaders. However, as time goes on, senior leaders require less of this enduring characteristic than junior leaders who actually lead small units of soldiers into combat. Increasingly, senior leaders are fading back from the front lines of combat as compared to earlier eras of warfare, and as senior leaders fade away from the soldiers in the battle, so does the requirement for senior leaders to lead by example.

In past eras of warfare, both senior leaders and junior leaders went into combat together with their solders. Soldiers had to have a level of faith and confidence in their leaders, both junior and senior, that the right decisions would be made in combat. The faith and confidence in

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[95] Michael D. Pearlman, *Warmaking and American Democracy* (Lawrence: Kansas, University of Kansas Press, 1999), 339. Chapter 9, "Vietnam: Getting in While Staying Out, the Strategy of Gradualism" discusses the relationship between senior leaders and political leaders in Washington during the Vietnam War. Also discussed in this chapter are the perceptions by the public, political, and military leaders, how they differed, and what associated problems developed.

[96] As a staff officer working in the Army Operations Directorate, I was briefed on the current situation daily and one of the systems used to brief this information was the Blue Force Tracker. The Secretary of the Army and senior members of the Army Staff had access to this information twenty-four hours a day. I noted several times where senior military or political leaders would be cautioned against using the situational awareness Blue Force Tracker provided to send directives out to the senior leaders on the battlefield and redirect actions.

their leadership is part of what kept soldiers fighting during the toughest times. In the post-modern era of warfare, senior leaders do not lead soldiers into combat the way they once did in earlier eras. Today, the junior leaders, such as lieutenants and captains are the ones who actually lead soldiers into battles. Rarely would one find a senior leader actually leading soldiers into a battle during this era. During the post-modern era, the characteristic of leading by example applies to junior leaders, but rarely applies to senior leaders in the same way.

It really is no longer as important for a senior leader to be able to skillfully shoot, never mind ride a horse, drive a vehicle, navigate, or even fight. However, as junior leaders, these same senior leaders had to lead by example and those soldier skills were important in order to earn the respect, confidence and set the example so soldiers had faith in them to lead. As a junior leader, running faster than ones soldiers, out-shooting them on the firing ranges, showing soldiers they can navigate better, all are developmental in the future senior leader, but do not apply in the same way when one is a senior leader. Those skills are only a very small part of the senior leader skill set required.

ULTRA-MODERN WARFARE LEADERSHIP

The next large-scale war will bring the United States into yet another era of warfare, the ultra-modern era. Currently the Global War on Terrorism (GWOT) is testing out the near term transformational technology such as Blue Force Tracker and the Stryker. These devices are either interim or the first generation of the tools in the next war. The United States must continue to prepare to fight a war like Operation Iraqi Freedom in the future, but must also train, and equip its military services to fight in the less defined GWOT. The challenge is up to the senior leaders to be ready for many different kinds of warfare, possibly at the same time.

Senior leaders have always had to adjust to the new environment of warfare, so it is no surprise that the future holds additional changes for them. The senior leaders of the ultra-modern era of warfare will have to adjust to new technology, political, and social views of warfare, just as

others have had to do in the past. There are many thoughts on what the future will look like, but one thing is certain, the current environment will change.

Samuel Huntington's view is outlined in *The Clash of Civilizations?*. Huntington wrote, "It is my hypothesis that the fundamental source of conflict in this new world will not be primarily ideological or primarily economic. The great divisions among humankind and the dominating source of conflict will be cultural."[97] In addition to the changing environment of warfare, some, such as Major General Scales insist that, "And in the end, America's next war, like those that have preceded it, almost certainly will be won-or lost-on land."[98] Certainty only exists in the fact that future leaders will have to adapt in order to succeed in war to the changes of future warfare in the ultra-modern era of warfare.

Tomorrow's senior leaders are currently junior leaders learning and using the characteristics of leadership described above, such as leading by example. These junior leaders are learning the skills, traits, and characteristics of leadership in the post-modern era of warfare, not necessarily those required of the ultra-modern era. Junior leaders should be studying and training for the ultra-modern era of warfare now. The fact that there will be some overlap between the post-modern and ultra-modern eras, where technology for instance will begin in one era and further develop in the next, will help the current junior leaders make the transition into the next era of warfare.

The ultra-modern era of warfare will no doubt remove senior leaders from the front lines as in the earlier eras. There will always be a desire and need for senior leaders to move forward, but not for extended periods and certainly not to lead large formations into battle. Senior leaders will be positioned far from the war front and thus they will require a new skill set to deal with leadership by proxy, rather than leadership by example.

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[97] Samuel P. Huntington, "The Clash of Civilizations?" *Foreign Affairs*, Vol 72, No. 3 (summer, 1993).
[98] Scales, 20.

The senior leaders in the ultra-modern era of warfare will need to gain the trust and confidence of their subordinates, as in the past, but the senior leaders will not be located with the junior leaders. The distance between senior leaders and the front have been increasing throughout the eras of warfare and the trend will continue. However, one difference is that senior leaders in the ultra-modern era may actually lead from a location in sanctuary, far from the front, possibly from another continent, safe from danger and may only travel to the front for visits with troops and commanders.

Senior leaders will have to use different skills and define other characteristics of leadership in order to gain the confidence and trust in their subordinates as they operate in the new environment. Senior leaders will rely on prior leadership experience and scholarship credentials in order to gain trust and confidence in subordinates. Senior leaders will lead with characteristics much different than in other eras of warfare, such as the ability to make tough decisions in an extremely short amount of time. They will have to have the ability to synthesize large amounts of data from visual displays and few written reports. The speed of the battlefield will dictate a very fast paced environment in which senior leaders will deal with political issues, logistical issues, legal issues, and many others at the same time as the battlefield becomes more defined in terms of situational awareness, but less defined in terms of phases of operation. In other words, senior leaders will have to cope with a battlefield filled with multiple aspects of warfare occurring simultaneously. Phases of warfare, such as deployment, combat operations, post conflict operations, stability and support operations, redeployment, and others, all occurring at the same time and requiring quick and decisive decisions by senior leaders. There will be far less time to contemplate actions to be taken by the senior leaders as in other eras of warfare.

Communications in the ultra-modern era will be instant and secure from intercept at all levels of war, tactical up through strategic, no matter where the senior leader is. Senior leaders will be able to communicate anywhere in the world with real-time video, voice, and interactive displays of troop locations, weapons systems reports, enemy locations, and many other future

developments yet to be defined or developed. Senior leaders will also have the ability to view downlinked feeds from tactical and strategic intelligence collection platforms, adding to the unprecedented amount of data these senior leaders will have to deal with on short timelines.

The pace of battle will be a different aspect for the ultra-modern era of warfare as technology enhances the awareness of the battlefield environment for senior leaders, the pace of decision making will increase. Senior leaders will no longer have the luxury of time when deciding to make major adjustments in the battlefield environment. Of course, this assumes that the enemy is of equal capability. For instance, if the enemy is not up to the same level of technological advancements, of the United States, then the United States will be able to use this characteristic of war to their advantage and pace the war as they seem necessary. The battlefield will no longer move at the speed of the horse, as in the pre-modern era, but will move at the fastest speed technology can provide, by air or land. Senior leaders will have to learn to keep up with the speed of the new battlefield.

There is no doubt that unconventional warfare will continue in the ultra-modern era of warfare. Senior leaders will have to adapt to be able to conduct conventional and unconventional warfare simultaneously. The mindset of senior leaders will have to adjust to combat several forms of warfare at once. They will have to provide leadership to very different organizations in each of these forms of war, possibly to special operations forces working to quell an insurgency by more peaceful means as opposed to a conventional force conducting combat operations. Although this situation has already occurred in the post-modern era of warfare during the Vietnam War and the two wars against Iraq, it will more than likely be the norm for future wars.

The ultra-modern era of warfare will place new demands on senior leaders and require them to lead in new ways. Being out front, in sight of subordinates, and physically leading forces to war and into battles is no longer the focus or job of the senior leader. Yet, senior leaders will have to convince, demand, persuade, or order soldiers into combat and succeed in war. We have seen many techniques and challenges over the other eras of warfare and how leaders had to cope

with their particular wartime environment and situation concerning technology, social, political, and religious and even economic constraints or aspects of their time. The future will hold many changes for senior leaders and the Army must prepare junior leaders now to become senior leaders for the next era of warfare.

CHAPTER THREE

CONCLUSION

THE FUTURE IS HERE NOW

The eras of warfare described above are periods containing specific characteristics of warfare distinguishing them from one another as they relate to senior leadership. The research shows that the actual event or date is less important to an era of warfare than the broader characterizations of each period. For example, the ultra-modern era of warfare described above has one characteristic of being overall digital in nature. However, one can clearly understand that the ultra-modern era did not begin the very first time digitization was used in battle. There was a gradual acceptance and usage during a long period in the post-modern era of warfare. An overlap between eras of warfare exists, also making it hard to distinguish an actual transition point from one era to another. I predict that the ultra-modern era of warfare will continue until advancements in technology or a major global change of political or cultural nature occurs.

Throughout all of the eras of warfare discussed in this monograph, the basic characteristics of leadership or of leaders have taken on new hues. The traits of leaders have changed just as the environments in which they have led have changed. In the future leaders will have to maintain many of the skills, traits and characteristics of former eras of warfare, yet learn to hone new ones or at least reprioritize the current ones.

As leaders physically move further back from the soldiers and units they lead, they will have to have a greater appreciation for the capabilities of those soldiers and units. A complete understanding of each of the units will be necessary in order to best utilize them effectively in combat. Of course, this begins with the planners, but the senior leaders will remain the ones who provide the guidance to the planners and make the decisions.

Senior leaders must also better understand the limitations of their subordinates and learn to maximize results through more precise expectations. The future will also require motivated leaders, who are empowered to continually improve and are managed well. Motivated leaders who seek improvement are necessary now, but this characteristic will become essential in the future. Senior leader characteristics are difficult to teach because many come from experience, and one cannot plan a career around wartime experience. However, just because these characteristics are difficult to teach, does not mean that they should not be taught. The United States cannot afford to just promote its senior leaders without teaching them the new skills required for the future.

The research concludes that if the military is serious about transforming leadership, it must include its senior leaders in formal leadership training and education. After studying the past eras of warfare and a few of the senior leaders in each, it is clear that the United States military must make a choice about transforming leadership as it has done with technology. The senior leadership skill set of the future will require a more intellectual leader vice a debonair, charismatic one who might be able to personally shoot their way into a battle and win. The senior leaders of the Ultra-modern era will have to completely understand the details and combat readiness of the assigned units, their capabilities, limitations, the political setting, the social and economic aspects of the wartime environment, and other aspects of future war.

Since leaders are not born with the proper skill set, senior leaders must be taught to change from the junior leader skill set to the senior leaders skills, develop the traits and characteristics required for their role as a director of wartime events, rather than a small unit leader personally leading soldiers into combat situations. Having personally gone through the junior leader positions, up through command of a battalion, it seems the training and education is working for the junior leaders, but there is no similar training or education, at least to the same level as junior leaders, for senior leaders.

The United States military must take action to develop the currently junior leaders into senior leaders. The difference between the two has been great and the future only holds a greater challenge for senior leaders to cope with not only technology, but also the form of senior leadership we are currently moving towards in the future. Senior leaders must be completely comfortable when dealing with large amounts of data, not being able to wait to make decisions and mull over details, work from a location far from the front, and also instill faith, confidence, trust in their subordinates. One cannot learn or develop these characteristics just by being promoted to a higher rank.

The Army currently attempts to develop senior leaders by conducting seminars where senior leaders discuss the challenges of leadership at higher levels. There are also leadership electives at the Army War College that address some of these issues and the Army also encourages self-development with professional reading programs. The Special Operations Command has a specific program for Special Operations Forces (SOF) future commanders called the "SOF Leader Development Program." This program inventories leaders prior to command of Special Forces Battalion and Special Forces Group commands for levels of concentration skills and personality characteristics that play a critical role in a leaders performance. These inventories can be used to improve the leadership skills required of the command positions through further self-development. The inventory I took prior to battalion command provided results on; concentration skills; leadership, drive, and motivation; mental and emotional control; and people skills, all according to Robert M. Nideffer, Ph.D. of Enhanced Performance Systems, who developed the program. This tool was very useful in learning how to apply the traits, characteristics, and leadership skills I currently have to the leadership necessary for successful command of a battalion.

However, other attempts at senior leadership development have been weak. Unfortunately, the Army transformation to the future force is based largely on pop-culture leadership books written specifically for industry, not the military. For example, a few of the

books currently being used in the attempt to transform Army leadership at Fort Leavenworth's Command and General Staff College are; Robert Heller's <u>Learning to Lead</u> (New York: DK Publishing, 1999), Spencer Johnson, M.D.'s books <u>Who Moved My Cheese?</u> (New York: G.P. Putnam's Sons, 1998) and <u>The One Minute Manager</u> (New York: Berkley Publishing Group, 1982) with Kenneth H. Blanchard and J.W. Marriott, Jr.'s book <u>The Spirit To Serve</u> (New York: Harper Business, 1997). Other examples are being considered, but the theme from this review of books is leadership for business, not the military. Some consideration needs to be given to the business world, but a more complete look at military leaders over time must give way to the preparation of senior leaders for the ultra-modern era.

Transformation has already begun to focus on technology, but a warning must be sent to senior leaders in terms of education and how to best use impending technology. For instance, technology will most definitely improve the ability for seniors to communicate. However, it will be important for senior leaders to learn how not to abuse this new technology. For instance, communications devices will give senior leaders the ability to communicate in ways never before dreamed of, up and down the levels of warfare from tactical to strategic. Although the problem presents itself in the post-modern era of warfare with current communications technology, it will only be magnified in the future. Knowing when not to communicate and give orders to squad leaders or skipping up or down the chain of command will be temptation senior leaders must learn to avoid. Senior leaders must have the confidence from their civilian and military leaders in Washington to conduct warfare and not become puppets with strings leading from the Pentagon.

The research identified several categories of senior leader traits and skills. The first category is one where the skills and characteristics were era specific. That is to say those skills such as throwing a spear accurately, no doubt a senior leader skill important during the pre-modern era of warfare, are no longer required senior leader skills beyond that specific era. Skills, traits, and characteristics in this category did not follow into the next era of warfare for whatever reason, but were once important to senior leaders.

Another category includes those skills, traits, and characteristics that are enduring. Such skills as communicating to subordinates are very important to senior leaders during any era of warfare. Communication is a senior leader skill critical to leading a fighting force, but the methods and skills required in each era of warfare, although varied greatly from era to era, were essential in each era of warfare. Whether communicating by visual signals in the pre-modern era, the telegraph in the modern era, or video teleconferencing in the post-modern era of warfare, a senior leader must master the use the technology available to communicate in order to be successful in war.

Research showed that in some eras of warfare, new skills, traits, and characteristics were developed from a preceding era of warfare. For instance, the current challenge senior leaders have of leading by example. Senior leaders must still get others to fulfill requirements on the battlefield, yet they are physically removed from the front lines of battle. The characteristic of leading by example is an enduring one and one of the most basic principles of leadership, but the new environment of war places senior leaders further back from the soldiers in the fight. New ways to lead by example must be developed and taught to future senior leaders so they can cope with this challenge in the ultra-modern era.

Better use of existing technology can address the challenge of leading by example even when senior leaders are not up close and personal with subordinates. Today, a series of photographs of a soldier's chain of command from the Commander in Chief on down is the only way some soldiers know what their Brigade Commander looks like. By using Internet technology, soldiers can see and hear their senior leaders just by visiting a website. Even if the soldiers could not be present for a speech, they are able to listen to it later on their own time. The Internet provides an avenue for soldiers to understand their senior leaders. Much more can be done to exploit technology so senior leaders can lead by example in the ultra modern era.

Major General Scales wrote, "The Information Age will alter modern warfare in the 21st Century just as the Industrial Age altered 20th Century battlefields with new forms of integrated

mechanization."[99] The research shows that senior leader have to be prepared to meet the challenge. The most important thing the United States military can do is to begin training and educating its junior leaders now and continue to educate those who become senior leaders with a formal school that teaches them how to leader at the higher levels.

This study shows that senior leaders will have to adapt to the future warfare and a formal school or course of instruction is required for senior leaders that teaches the skills and develops the traits necessary to be successful in the ultra-modern era of warfare. Formal education cannot stop at the rank of Colonel anymore. My experience shows that the time it takes a junior leader to become a senior leader is about twenty years. Within that twenty year period, technology alone will have advanced so much that it will be necessary for senior leaders to attend formal training to learn how best to use that technology. Of course, there will be some informal training with the technology as it develops over that twenty-year period and technology will continue to change, but senior leaders have no other choice, but to master the techniques, develop the skills and traits in order to meet the demands of the ultra-modern era and beyond the future.

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[99] Scales, 117.

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