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Development of a Military Command System: Technological and Social Influences

A Thesis Submitted to the Faculty of the University of North Georgia

In Partial Fulfillment of the Requirements for the Degree Bachelor of Arts in Strategic and
Security Studies With Honors

Holden Armstrong

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Societies have gone to war for as long as there have been organized groups of people, and if some are to be believed, long before the development of society. While many factors and realities of war have evolved throughout the millennia a few characteristics have remained constant. War is a violent and destructive activity that is conducted with the hopes of achieving a political goal. War has always been limited by the technologies available to the warring parties, but it was not until the development of atomic energy that an atomic weapon became feasible. Planes drastically increased the scope and range of military operations from the pre-aeronautical period.¹ Sociopolitical forces have always shaped the nature of the conflict in one manner or another. Northern Native American warfare was limited in nature and more closely related to a religious ceremony than to a full-scale European war, the limited nature was directly caused by the sociopolitical context of what violence was used for and how tribes interacted with each other.² However, the social-political realities of Europe were vastly different, leading to large-scale wars such as the 100 Years War, 80 Years War, and the 30 Years War. This form of warfare developed over the generations as a reaction to Europe's unique political climate.³

While other factors have remained constant throughout warfare's long and bloody history, the technology and social-political realities are perhaps the most instrumental in affecting the nature of a current conflict, which, in turn, could influence the nature and structure of a nation's military high command. Concerning the development of high command and their military doctrine, technological and sociopolitical factors play a crucial role. Through this research, I argue that sociopolitical factors are more formative in the development of military

¹ Max Boot, *War Made New: Weapons, Warriors, and the Making of the Modern World*. (New York: Gotham Books, 2006) 295-297.

² Gene A Smith, David Coffey, and Kyle Longley, *In Harm's Way: a History of the American Military Experience*. (New York: Oxford University Press, 2020) 10-13.

³ Christian I. Archer, John R. Ferris, Holger H. Herwig, and Timothy H. E. Travels, *World History of Warfare*. (Lincoln: University of Nebraska Press, 2002) 217-220.

leadership than technological factors in modern western war. To discover the nature of the relationship, this research will consist of two case studies: first the Union Army during the American Civil War and the U.S. Army during the Second World War.

What exactly does the term high military command mean? While the term has different meanings concerning certain armies and nations, this paper defines the term "high command" as the leaders most directly responsible for the two highest levels of war, the political and strategic levels. The political level of war refers to the political goal and objective for the entire conflict, it gives the war a definition of victory. Within the 21st Century American context, this level directly involves the President, the National Security Council, and the Secretary of Defense, and the service secretaries. Within the political level, war is designed and institutionalized through a top-down approach. The President and their Security Council dictate the rules of engagement, the escalation of force, and the public message regarding the war. The strategic level of war involves the chief military planners and commanders of a nation's military and the relevant political leaders. Within this level of war, a strategy is created to achieve the policy objective created by the political leadership. Within the modern American system, this level includes the Joint Chiefs of Staff and the heads of the intelligence agencies. The last two lower levels of war, the operational and tactical levels of war, deal more with the conduct of war.⁴ Though this system was not yet created by the time of the American Civil War, the National Defense Act of 1947 is the law that formalized the policies that had developed and evolved throughout the history of the United States. The current military command structure is the successor of the command structures of the nation's early days.

⁴ USAF, "Levels of War," *Curtis E. Lemay Center for Doctrine Development and Education*, February 27, 2015.

The American Civil War

In his work, *War Made New: Weapons, Warriors and the Making of the Modern World*, Max Boot examines the impact that technological advancements have had upon the larger field of military science and the conduct of war. The focus of his work is global and does not always draw upon the American way of war. However, his work provides insight into the trends that developed during a period, which is why I am using this his work to provide context. The American Civil War in the 1860s occurred during a turning point in global history. The Industrial Revolution was in full swing having started in Great Britain in the 1750s, however, the impacts of the revolution were not yet certain. Both technology and society were caught in between the traditional status quo and the allure of change. Military affairs were not immune to change, and militaries often embraced technological changes. One such change that the European militaries embraced was the railroad. Prussia spent much of the 1800s developing an extensive rail system that the state could utilize in times of national crisis. Also, the Prussian General Staff drafted mobilization plans that relied upon this rail network by the mid-1800s.⁵ The steam engine was not only used to power trains during this time but ships as well. In the United States, civilian steamships were used extensively on the many rivers for trade and transportation. Militarily, the steamships allowed troops to be reliably transported upriver and allowed for the development of ironside ships.⁶ The steam engine was also used in many factories in the United States to increase the manufacturing capacity of the factories.⁷ Faster manufacturing proved to be crucial for producing the war material for the Civil War. The manufacturing process was standardized, and interchangeable parts were introduced, providing for greater maintenance of equipment. By

⁵ Boot, *War Made New*, 125-126.

⁶ Boot, *War Made New*, 174-175.

⁷ Boot, *War Made New*, 110.

the mid-1860s militaries had started integrating rifled repeating firearms into their armories. Additionally, artillery pieces became rifled, improving accuracy and range.⁸

In many regards, the American Civil War was a catastrophe that was impossible to avoid given the volatile political and social climate brewing in the first half of the Nineteenth Century. The United States of America had rapidly increased the size of its territory growing from thirteen states to thirty, not including the territories, by 1848. Some of the new lands were bought while other swaths of land were won through military conquest. With the addition of every new state to the Union, a fierce debate ensued surrounding the West: would new states or territory be free or permit slavery? Congress attempted to mediate the debate by passing laws intended to create an orderly system based upon lines drawn upon the map. However, these acts were not always enough nor soon enough. Conflict broke out in the 1850s in key slave states over their fear that slavery could be banned from the Union. These violent riots culminated in Bleeding Kansas in 1854 which further increased growing social tensions engulfing the country.⁹

The election of Republican Abraham Lincoln as president in 1860 was the final catalyst for the beginning of the American Civil War. Lincoln and the Republican Party included in their platform anti-slavery rhetoric and southern states feared that the Republican victory would lead to the end of slavery. Southern states viewed the Republican platform as an affront to their rights as states and the social system established upon slavery, resulting in the secession of eleven Southern states from the Union.¹⁰ The secession crisis was not by of itself enough to cause the outbreak of war. War did not begin until Confederate troops fired upon the Union-held Fort

⁸ Boot, *War Made New*, 127-130.

⁹ Smith, *In Harm's Way*, 220-221.

¹⁰ Smith, *In Harm's Way*, 221.

Sumter in Charleston, South Carolina on April 12, 1861, forcing the Union to surrender the fort.¹¹

The original policy objective for the Union during the American Civil War was to restore the Union as swiftly as possible with the least number of American casualties. As the war dragged on, the political situation changed, and the potential involvement of European powers on the side of the Confederacy, the policy objective expanded to include the emancipation of American slaves in January 1863.¹² The Union struggled to develop a coherent strategy for most of the war and often granted preferential treatment to the Eastern Theater because both countries' capitals, as political centers of gravity were located there.¹³

Before the war's beginning, there were several important developments concerning military technologies as well as civilian technology that was repurposed for military use. Perhaps one of the most crucial of these developments was the advent of the steam engine. Riverboats were able to easily and with great speed for the day carry cargo upstream. While being able to sail upstream might not seem all that revolutionary by standards today, but before the steam engine, it was exceedingly difficult to fight powerful currents to bring goods and supplies upstream on major rivers such as the Mississippi. Militarily, steam allowed the U.S. Navy to ship supplies upriver to Union troops operating in the surrounding areas, projecting the power of the Union by leveraging the industrial might of the Union against the Confederacy. On land, the steam engine proved crucial within the Union-controlled rail system. Rail allowed the rapid transport of supplies, heavy guns, and troops. What had once required weeks of tiring foot marches could be

¹¹ Bruce Catton, *The Coming Fury*. (New York: Pocket Books, 1967) 304-306.

¹² Allan Reed Millett, Peter Maslowski, and William B. Feis, *For the Common Defense a Military History of the United States of America*. (New York, NY: Free Press, 1994) 163.

¹³ Millett, Maslowski, and Feis, *For the Common Defense*, 170-172.

completed in mere days on the rail with little to no strain on the troops, increasing the lethality of the troops. Even so, the foot march would resume once the troops disembarked from the train. In addition to the steam engine, the newly developed telegraphic was an equally important development. The telegraph allowed for instant communication to the front from both the strategic and political leadership located in Washington D.C., increasing the ability for the high command to influence the outcomes of the war by being involved more heavily in the conduct of war planning.¹⁴

Concerning military technology, rifles had improved over the century leading to a more lethal fighting force, especially when paired with the traditional battle formations of the day. Artillery had not seen any drastic improvement but the ability to move guns more rapidly with rail did play a role in increasing the use of large guns. Upon the water, the navy developed more heavily armored ships known as the ironclads to conduct riverine operations and coastal bombardment. Also, during the war, submarines were experimented with to some degree.¹⁵

Field armies lacked basic maps as the Army had failed to conduct intensive geological surveying of the country except for the Western Territory. Even after generals ordered maps to be charted, they were often inaccurate. Mapmakers sometimes knew that they would not be accurate and warned that the best the map could do was not to mislead the armies.¹⁶ As late as 1862 maps prepared for campaigns were unusable, inaccurate, and costly. Some commanders bought maps from local shops to understand where they were. The Army of the Potomac rarely had access to reliable maps of northern Virginia until mid-1863, which was their area of

¹⁴ Edward Hagerman, *The American Civil War and the Origins of Modern Warfare*. (Bloomington: Indiana University Press, 198) 40.

¹⁵ Boot, *War Made New*, 116-130.

¹⁶ Williams, *Lincoln and His Generals*, 5-6.

operations for the past two years. It was not until the last year of the war did a staff office in Washington open whose responsibility was communicating to commanders which railroads were under military control and could be used for their campaigns.¹⁷

Even so, the technological realities for the Union Army were the best it had ever been up to that point. The American military had traditionally been a smaller, less funded force than other contemporary states. Naval shipbuilding was often restricted to times of war. Congress did not make it easy for the Army to buy or develop new weapon systems or experiment with developing technologies. For instance, British officers noted in 1864 that Union Armies had very few rifled artillery pieces of large caliber, while many of the cannons used were similar to the ones used by the armies of Napoleon at the beginning of the century. Before the war, the Army adopted two new rifled muskets for service, the Enfield rifled musket and the Springfield Model 1861 which both fired the .58-caliber Minie ball. Both rifles had been bought in small numbers but had not yet been integrated into field units. The use of the Minie ball itself was a drastic improvement in military technologies, increased range, accuracy, and lethality due to the shape of the weapon system. When the Minie ball entered the body, it would tear the flesh of the victim and shatter bones often forcing surgeons to amputate the affected limb to prevent gangrene. In addition to the improvements in firearm technology during the Civil War, the Union Army had to contend with the South's heavy usage of mines during the war. Key waterways and rail lines were often mined by the defending Confederates. These rail mines forced the Union Army to devise methods of clearing and handling mines.¹⁸ The Union Army created the first rolling mine

¹⁷ Williams, *Lincoln and His Generals*, 5-7.

¹⁸ A. D. Harvey, "Was the American Civil War the First Modern War?", *History* 97, no. 326 (2012): 276-278.

clearing roller which was deployed in advance of their locomotives to detonate any enemy mines on the track before the valuable locomotive could.

Within society, the Army was in the process of undergoing a process of professionalism that began after the War of 1812. Society saw these reforms as a necessity, hoping to prevent the state of unreadiness that the Army was in when the War of 1812 began. Increased professionalism heavily affected the officer corps made up of mostly regulars and West Point graduates. One key aspect of the reforms was the establishment of a core made up of professional officers trained in the hard sciences.¹⁹ Engineering was selected as the primary major field for West Point, and the school taught that “military professionalism [was] a mastery of applied scientific and mathematical principles.”²⁰ The use of historical analysis was abandoned when teaching strategy, relying instead upon a prescriptive method, limiting the scope of tactics and strategies taught at West Point. Even so, American society started to view these men as elitist and distant from the rest of society which might have reinforced the ideas of fighting in a gentleman-like fashion that was very much entrenched during the military cultures of the world at the time. These sentiments started to develop between the War of 1812 and the Mexican American War.²¹ Due to a long-standing social view, much of the Army in wartime were ill-trained citizen-soldiers, a tradition dating back to the colonial era when the colonies' only defense was the militia.²² The inferior quality of these citizen-soldiers impacted the military effectiveness and strategic effectiveness of the Army. In the Mexican and Civil Wars, volunteers enlisted into state units but served under federal authority.²³

¹⁹ Hagerman. *The American*, 31-33.

²⁰ Hagerman. *The American*, 32.

²¹ Hagerman, *The American*, 31-33.

²² Smith, *In Harm's Way*, 14-17.

²³ Smith, *In Harm's Way*, 255.

Organizing enlistees into states might have seemed like a promising idea at the time but it had its drawbacks. Fighting in the Civil War was extremely fierce and bloody, it was not out of the realm of possibilities for entire units to face mass casualty events during a single battle and become combat ineffective. In the Army, a mass casualty event is when present medical support is unable to handle a sudden increase in patients.²⁴ Additionally, a unit has sustained losses upwards of 30 percent of their combat power is considered combat ineffective.²⁵ As units were often drawn and organized by towns and states, a whole town could suffer heavily in the span of an afternoon if the electing officers, were ineffective when assigning soldiers to units. Even if this system was not the best militarily it was a political necessity. American military leaders had begun to understand that American citizen-soldiers were not volunteering to serve the federal government but their states. The fact that citizen soldiers were not serving the federal government was shown very plainly during the War of 1812. State militia commanders on several occasions during the War of 1812 refused to take part in offensives that did not directly impact their state's security as their men were not fighting to protect America but to protect their own home. It was not until after the American Civil War that the idea that citizens were first an American and then a citizen of that state, so many Americans did not view America as their home requiring their sacrifice. However, if commanders kept state groups together in single units, it would instill a stronger fighting spirit in the troops, as the perceived threat to their community would feel more urgent due to the fact the men of their state were committed to the battle. Additionally, it was much easier for the government to raise its mass army when each

²⁴ Joint Trauma System Battlefield Trauma Educational Program, Mass Casualty and Triage, 2020.

²⁵ Headquarters Department of the Army. *Ranger Handbook TC 3-21.76*. District of Columbia: 2017. 15-1-15-3.

state created its division of volunteers instead of attempting to place the new volunteers into the Army's preexisting units.

The U.S. Army was completely unprepared for the war in 1861. The Commanding General of the Army, General Winfield Scott, at the onset of the war, was one of two officers who had any experience in commanding a force larger than a brigade in the field. At 75, Scott was too old to lead in the field.²⁶ The other officer who had any command experience was General John E. Wool, who was beginning to show signs of dementia.²⁷ The lack of experienced field officers in the Union Army had deadly consequences for the Union soldier. Officers had to learn how to command, organize, and employ large forces while on the field, causing many deaths and injuries.²⁸ Furthermore, the curriculum at West Point, where most Union officers received their commissions from, did not focus heavily upon military sciences. Instead, most officers from West Point had received civil engineering education and had less knowledge of the theories of war or the conduct of European-style warfare. Officers in the Army were expected to build fortifications and fight against Native Americans on the frontier, not conduct large-scale military campaigns with field armies requiring logistical support and a higher strategic goal. The Army lacked schools to teach their field officers the complexities of command, strategic planning, and logistical operations.²⁹ Within the staff bureaus, only the Quartermaster General's staff could shift quickly from peacetime operations to wartime operations, but no bureau had conducted any prewar planning. This reality continued through much of the war, the Union Army lacked, for the most part, a unified strategy.³⁰ Scott proposed his now-famous Anaconda

²⁶ Thomas Harry Williams, *Lincoln and His Generals* (New York: Alfred A. Knopf) 3-4.

²⁷ Williams, *Lincoln and His Generals*, 4.

²⁸ Williams, *Lincoln and His Generals*, 4.

²⁹ Williams, *Lincoln and His Generals*, 4-6.

³⁰ Williams, *Lincoln and His Generals*, 5.

Plan in 1861, yet the rest of the Army did not implement the plan until 1864. Until then, theater commanders conducted their war as they saw fit with little thought on how this might affect the overall war effort. Furthermore, most of the Union's attention and war efforts focused on the Eastern Theater, which was the smallest theater of the war, containing primarily Virginia. It was within this theater that the Army of the Potomac fought.

For much of the war, President Lincoln was the chief strategist. Even though he had no military experience, he better grasped the situation than his undertrained officers who had not led large forces into battle. Many times, the president drafted and revised plans for campaigns that he directed his generals to conduct. President Lincoln also personally directed tactical movements of troops and units during the battle from Washington. Today, his direct involvement might seem like a gross overreach, but Lincoln's actions were in keeping with the contemporary role of the civilian leader. During America's prior military conflicts, the president had taken a direct role in the planning of operations by directing the policy objective, and the advent of the telegraph allowed Lincoln to extend this influence on the tactical level. Even if it was considered normal for the times, most of Lincoln's generals were not accustomed to including civilian leadership in their war planning. Sometimes Lincoln planned an operation for the pleasure of planning one and then would present it to his generals with the intent of gauging their reactions. His generals often found it difficult to tell the difference between operations that the president did not intend to occur from the ones that he desired to occur. This difficulty caused generals to plan and execute operations that were never meant to happen to occur.³¹

³¹ James M. McPherson, *Tried by War Abraham Lincoln as Commander in Chief* (New York: Penguin Press, 2008) 9-30.

For all the mistakes that President Lincoln made regarding his war plans, the president correctly understood the Union's strengths against the Confederacy. The Union had a larger population than the Confederates, and more of their population was able to join the war effort. The Confederates might have been able to conscript more soldiers due to slave labor, but the country was not able to finance or arm as large of an army. The president also understood that his forces had the backing of a stronger government that could raise and equip larger armies with more public support. The Union had the advantage of an established line of credit, allowing the state to borrow money to finance the war effort. Additionally, the institutions of the Union were established in such a manner that Congress was able to pass the first Income Tax on July 1, 1862.³² This tax further allowed the Union to finance the war. The Confederate's government was not established in a manner that would make it easy for President Jefferson Davis to raise and equip a mass army under unified command as the Union was able to. Lastly, President Lincoln understood that his forces held a large industrial advantage over the Rebels. The vast majority of the rail in the United States was located within the Union, as were most of the factories. While many Army officers defected to the Confederates, much fewer from the Navy left, and the Union remained in command of much of the fleet. The retention of naval officers gave the Union command of the sea throughout much of the war.³³

President Lincoln held the most direct influence over the selection and promotion of high-ranking officers in the military. In particular, the president replaced the commanding general of the Army of the Potomac four times throughout the war, due to failures in leadership that cost the Union strategically and operationally. However, it was not just the commanding

³² Cynthia G Fox, "Income Tax Records of the Civil War Years," National Archives and Records Administration (National Archives and Records Administration, December 6, 201)

³³ McPherson, *Tried*, 11, 34-35.

generals that the president had the responsibility of selecting, every general officer in the Union Army there was an exhaustive list of applicants to choose. Some of those seeking command were Regular Army officers who had spent years at the junior level of command. Officers who had resigned their commissions to gain civilian employment also applied for the newly created positions leaving divisions. Most interestingly, many politicians applied for their positions, believing that society would look favorably upon war heroes after the war. The desire to use military service as a political advantage shows the relationship between the military and society, both influence each other.³⁴

The president was often not satisfied with the indecisiveness of his generals throughout the war and did not find any solace until General Ulysses S. Grant took command of the Union Army in 1864. Before then, the commanding generals were often wary of engagements and did not press advantages out of fear of making a wrong move. Grant took risks and understood that the war must be fought differently than had been previously done if the Union was going to win the war. The command situation of the Union Army was not originally established in a way that could handle the realities of large-scale modern war, which the Civil War was slowly becoming.

As the war progressed the American command structure began to modernize, from the limited and skeleton staff created in the years after the creation of the country to a more modern command system. The most important development was the Congressional reauthorization of the rank of lieutenant general in February 1864. This rank had only been held by two officers before American history: Georgia Washington and Winfield Scott. The purpose of Congress reauthorizing the rank was to create a general in chief of the armies of America at the pleasure of

³⁴ Williams, *Lincoln*, 10-12.

the President.³⁵ This development was both political and strategic. The congressmen that proposed the bill were, in fact, close friends of Grant and pushed him for the appointment from the start of the debate on the bill. Some of the people in Washington, including the President believed that Grant desired to use this newly created position as a springboard to the White House. It took the President inquiring about Grant's presidential aspirations with close friends of the General before he would appoint him after he learned that Grant did not want to be president.³⁶ Strategically, the position was crucial for ensuring the Union created and implemented a coherent strategy. Prior, Army commanders would only worry about operations within their theater and would not consider the strategic implications of their actions in the other theaters. It would be the responsibility of this new position to construct operational plans for every theater that all fed back into the grand strategy which the President approved and directed.

Grant's decision to establish his headquarters with the Army of the Potomac had a long-lasting impact on the Army's command system itself. First, the motive in establishing his command outside of Washington was an attempt to limit the political influence upon the strategic command of the Army to only the President's Cabinet. Congressmen and other bureaucrats would not make the trip to Grant's headquarters and the general would have to personally choose to place himself within their presence for them to influence his decisions. The President, however, would visit Grant's headquarters when needed or send a telegraph summoning him to the White House to discuss matters in private. Secondly, the distance between Grant's headquarters and Washington created the need for a new staff position to be created to facilitate coordination and called it the chief of staff. The President appointed General Henry Halleck due

³⁵ Williams, *Lincoln*, 296-298.

³⁶ McPherson, *Tried*, 211-212.

to his ability to understand the President's strategic goals and Grant's candor quickly and accurately. Grant would often tell Halleck what he wanted to convey, and Halleck drafted the order as he saw fit, helping to reinforce the idea that American officers have leeway with how they achieve their missions.³⁷

With Grant in charge, the Army's nature moved closer to industrial war, as Grant ordered General Sherman in 1864 to target the Confederate's industrial centers in Georgia. Cities were burned as were fields and factories. The target for Grant became not the Confederate Army but their home front, causing direct harm and hardship upon Confederate civilians. The reasoning behind this shift was twofold. First, it was believed that Confederates would lose the will to fight, fearing the destruction of their homes and livelihoods. Secondly, Grant and Sherman believed that the slash and burn tactics would destroy the economy of the Confederation to such a degree that the state would be unable to continue the war. General Sherman was in constant communication with Grant while conducting the campaign. Throughout the March to the Sea, Grant instructed Sherman on how to operate including the burning of Atlanta and rail lines. All of this was done with explicit consent from political leaders in Washington.³⁸

This kind of warfare would not have been possible without a shift in society. The Union was becoming tired of war and was not happy with the growing casualty lists. The President had enacted emergency powers to limit Constitutional rights and had turned the war into something larger than restoring the Union. All these factors and the slow slide towards totality helped to create a situation where the strategy of the Army became the destruction of Confederate armies

³⁷ Williams, *Lincoln*, 300-305.

³⁸ Ulysses S. Grant, *The Personal Memoirs of Ulysses S. Grant: The Complete Annotated Edition*. (Cambridge, Massachusetts: Harvard University Press, 2017) 632-636.

and the wholesale destruction of the South's ability to support its war effort.³⁹ Social pressures played a crucial role throughout the American Civil War, in particular the attitudes of the Unionists allowed for Sherman's March to Sea, ordered by Grant to occur in late 1864. If the Union had not viewed the Confederates as traitors that needed to be defeated, then politically the scorched earth tactic could never be used.

Throughout the American Civil War, the command structure of the United States Army went through evolutions that were crucial to the development of the modern American command system. Technology played a vital role in this evolution, the telegraph allowed for greater involvement of both the President of the United States and the general in chief in the strategic happens of the war. The vast rail network allowed for quick and organized deployments of Union troops causing the development of new offices designed to coordinate between civilian businesses and the military. Battlefield operations were also affected by the advancements in weaponry that had taken place since the Mexican American War. Naval operations played a role in the overall development of a national strategy which in turn helped to develop a more sophisticated military staff. Even so, the battlefield tactics used throughout much of the war, line tactics, were strongly enforced due to social pressures even in the face of dramatic losses. Traditional military thought praised the tactics of Napoleon and Jomini's written work, strongly emphasizes the frontal linear attack and massing of forces. These were some of the tactics that Napoleon employed sixty years earlier in Europe and was therefore seen as the peak of European tactics.⁴⁰ Technology had changed, firearms had become deadlier, even so, tactics did not change to adapt to the new deadlier reality of modern war. In the face of drastic technological

³⁹ McPherson, *Tried*, 250-255.

⁴⁰ Hagerman, *The American*, 4-5.

advancements, social pressures caused stagnation in military strategy for much of the war. Additionally, political factors were crucial for the development of the nature of the war, as the appointment of generals was extremely political, General Grant, the organizer of Union victory, almost was not appointed to command out of fear that the general would steal political leadership away from Lincoln. In fact, it took the president being assured from close friends of the general that Grant had no political aspirations for the president to appoint him. The Union's political and economic institutions provided allowed the state to finance, man, and equip the mass armies required to win the war. Additionally, public sentiment was crucial in the development of Sherman's March to the Sea, because if the president felt that the slash and burn tactics would prove to be politically a death bell, he would never have approved it. Therefore, social pressures impacted the development of the American strategic leadership more than the impacts of technology.

World War Two

To truly understand the origins of the Second World War it is important to understand the end state of the First World War. The Treaty of Versailles signed in 1919, in many ways caused the situation in Europe to be precarious at best following the war, Germany was made into a weak, albeit moderate, republic, and the once-powerful Austro-Hungarian Empire has broken apart. The war also delivered the final blow to the once-great Ottoman Empire, leaving a large section of Eastern Europe self-governed for the first time. The 1919 Treaty of Versailles forced the Weimar Republic to demilitarize to such an extent that the whole situation was viewed as a national insult to the German people. Additionally, the German government was made to pay massive reparations to the victors that helped create the hyperinflation that plagued Germany before the Great Depression of the 1930s. Ethnic tensions in Europe flared as states desired to

unite their dispersed nations in one state. Particularly in Germany, where their populace began to accept the reunification of the German peoples after Prussia had prevented all ethnic Germans from joining Germany. The treaty also established the League of Nations, which proved to be insufficient at preventing war, but did manage to cement the position of Germany, Italy, and Imperial Japan as counter to the international order as all three states directly violated the League's mandates and left the organization.⁴¹

The American public regretted its involvement in the Great War and rejected the greater international community in the 1920s. American society called for a move away from the affairs of the world and a return to isolationism. It was these very pressures that caused the U.S. Senate to reject the Treaty of Versailles, instead of creating bilateral ones with the defeated parties. These treaties did not bind the United States to the newly created League of Nations, allowing the U.S. to remain apart from the affairs of the other states. The separate peace treaties satisfied the American public and entrenched a staunch anti-interventionist attitude that lasted until December 1941.⁴²

Boot focuses primarily upon global trends during the Interwar period, 1919-1939. The world experienced a second industrial revolution during the early days of the 20th century, based upon oil and electricity. The automobile industry boomed in the 1920s. Militaries across the world, including the U.S., integrated automobiles into their force structure, forever tying logistical support to the truck. The interwar period continued this trend that had begun in earnest during the First World War. Within the U.S. half of the households owned an automobile by the mid-1930s, which made it easier for the Army to motorize.⁴³ The decommissioning of military

⁴¹ Millett, Maslowski, and Feis, *For the Common Defense*, 374-381.

⁴² Millett, Maslowski, and Feis, *For the Common Defense*, 380-381.

⁴³ Boot, *War Made New*, 206-207.

aircraft used in the First World War spurred the development of commercial air travel. The civilian demand for air travel caused the development of more sophisticated aircraft with longer ranges, which also helped to improve military aircraft. Notably, the U.S. was the least involved in the militarization of aircraft out of the victors of World War I, due to America's isolationist policies. Even so, the newly created airlines represented a kind of reserve force of trained pilots that could be drafted and equipped quickly if needed.⁴⁴ Importantly, Boot claims that the Axis states spent the Interwar period "revolutioniz[ing] the art of war as thoroughly as Henry Ford had revolutionized individual transportation."⁴⁵ As Boot shows, the German Army developed its armor capabilities to fulfill a strategic role. Many of their early invasion strategies depended heavily upon the mobility and shock provided by massed armor units moving quickly. Likewise, the Soviet Union had developed their armor capabilities with operational mobility in mind, conforming to their doctrine of Deep Battle.⁴⁶ British and French armor was underdeveloped and relegated to tactical support to infantry units and scouting.⁴⁷ The British detached their tanks, which were lightly armored to infantry companies to act as scouts. American armor would be utilized similarly to the British, at a tactical level.⁴⁸

In America, the conduct of World War I had been unlike any other war that America had fought, except as new military technologies were developed that should have vastly altered the conduct of war. However, General Pershing staunchly believed in the spirit of the rifleman and continued to view the rifleman as the most important weapon of war. He did not wish to alter the tactical training of American forces to incorporate the new technologies efficiently, as he feared

⁴⁴ Boot, *War Made New*, 208.

⁴⁵ Boot, *War Made New*, 211.

⁴⁶ Boot, *War Made New*, 237.

⁴⁷ Boot, *War Made New*, 219-220.

⁴⁸ Boot, *War Made New*, 216-217.

they would detract from the spirit of the attack. Following the war, a panel of Army officers founded the Superior Board, analyzed what was learned during the war, and the report suggested that the Army begin to further incorporate the new technologies with the rifleman. Mobility was another vital area identified as lacking. General Pershing disagreed with their findings and suggested the Army keep its force structure and training programs unchanged.⁴⁹ Additionally, he oversaw the almost instant downsizing of the Army from a height of one million soldiers down to an extremely small standing army capped at 500,000 soldiers, a number that would be cut again in the late 1920s. Most of these units were not well funded and lacked the equipment needed to conduct extensive military training. Additionally, as the economy worsened, the already slim defense budget was cut even more. Money that was once appropriated for the defense was re-appropriated to other sectors of the economy leading to a difficult situation for the military. Promotions were slow, the public did not want to see large amounts of public funds allocated to the military.⁵⁰

Even so, the interwar years were crucial for developing the conduct of the Second World War. As airplane technology improved, the primitive missions of Army aviators during the First World War were replaced with a concept known as strategic air power. Strategic air power includes the idea that a war can be won with air power alone, involving massive bombing missions conducted against strategic targets in the enemy's heartland. These targets were designed to remove both an enemy's will and capacity to fight the war, though the Army Air Corps focused primarily on the capacity to fight.⁵¹ Therefore, many of these strategic targets

⁴⁹ Wilson, John B. 1983. "Mobility Versus Firepower: The Post-World War I Infantry Division." *Parameters: U.S. Army War College* 13 (3): 47.

⁵⁰ Millett, Maslowski, and Feis, *For the Common Defense*, 383-384.

⁵¹ Tami Davis Biddle, *Rhetoric and Reality in Air Warfare*. (Princeton: Princeton University Press, 2002) 161-162.

were economic nodes and civilian population centers. An industrial war cannot be waged without workers and factories to produce war materials.⁵² Within the Air Corps, this idea gained a large following and greatly influenced the conduct of the Air Corps during the interwar period. The infantry, however, viewed the role of air power differently and desired for the Air Corps to develop close air support capabilities. This debate continued throughout the interwar period and through the Second World War.

The role of tanks was also debated during the interwar period. Many different ideas and prototypes were proposed by the U.S. Army. As the American military budget was restricted during this period, the army had to rely primarily upon observations of other state's tests instead of constructing their prototypes en masse. To further complicate the development of the American tank was the views of some in the cavalry, who were fearful that the tank would remove them from their traditional horse-mounted roles. Some cavalry officers embraced the development of the tank as they correctly guessed that the tank would indeed replace the horse on the battlefield, and it would be wisest to not only accept the change but lead its development. This divide is the key reason why the massive field training exercises conducted in 1941 included horse cavalry. Armor also played a role during the 1941 Louisiana Maneuvers, commanded by General George S. Patton.⁵³ The success of tanks during the maneuvers and the rapid sacking of Belgium in 1940 using tanks were paramount to the rapid development of the American tank. Even so, American armor was not utilized in the same manner that other states used their armor. Before the war, doctrine was developed that envisioned the armor acting independently of every other arm in the army. In 1943 during combat operations in Tunisia, it

⁵² William Mitchell, "The Aeronautical Era", from *The Art of War in World History*, edited by Gerard Chaliand, (University of California Press, Berkley, 1994) 897-904.

⁵³ Millett, Maslowski, and Feis, *For the Common Defense*, 400-401.

became apparent that the prewar doctrine developed was not effective, and the operational independence of U.S. armor was abandoned. Instead, armor was attached to infantry units and provided tactical support in small unit teams. A platoon would have a light tank assigned to them to provide close tactical support and even provide cover from small arms fire. The role of U.S. armor would remain unchanged throughout the war.⁵⁴

These weapon systems were not the only technologies that were developed during the interwar period and had a substantial impact on combat operations. Communication technologies developed dramatically during the interwar period vastly improving the ability of commanders to directly influence the outcomes of the battle. Additionally, the improvements in communication technology allowed for political leadership to be involved in the conduct of the war in a manner that was not experienced before the war. President Franklin D. Roosevelt received reports from his theater commanders in almost real-time through phone lines and radio communication. Communication between allied leaders allowed for a tighter coalition that brought military operations together for superior coordination. While at face value this is not that different than what President Lincoln could do during the Civil War, the impact was different. For one, Roosevelt could directly communicate with his commanders and allies. While direct communication might not seem like a crucial step, it allowed for the president's intent and message to be conveyed clear than before, as there was no middleman. Additionally, this reality also provided some sense of secrecy and security to the conversation, as the president, or commander could be alone in the room while the call was taking place, limiting the impact of

⁵⁴ Christopher R. Gabel. "World War II Armor Operations in Europe." In *Camp Colt to Desert Storm: The History of U.S. Armored Forces*, edited by Hofmann George F. and Starry Donn A. (Lexington: University Press of Kentucky, 1999), 146-153.

information leaks. Lastly, the telephone and radio allowed for a greater deal of information to be relayed from the tactical units on the front to the theater commanders, and in record time.⁵⁵

In General Dwight D. Eisenhower's own words, America was at the onset of the war in 1939, in a state of "almost complete military weakness" but by the end of the war had transformed into the world's military superpower.⁵⁶ America had adopted a policy of military unpreparedness during the years following the Great War, believing that the isolationist desires of its populace would be enough to protect the nation from being dragged into war. When the situation in Europe and Asia darkened, the American population was still holding out hope that the war would stay outside of the Western Hemisphere, keeping America well out of it.⁵⁷ Even so, Congress came to realize there was almost no chance that America would be able to stay out of the war, and passed the Selective Service Act in September 1940, creating the first peacetime draft. Congress and the President did not want to be forced to join the war without having a sizable military force already trained; due to America's involvement in the Great War, as it took almost a year for the first American troops to combat-ready once they arrived in France.⁵⁸ Both the defense budget and the capping of the armed forces were increased to coincide with the draft. By the summer of 1941, the U.S. Army had a peacetime strength of 1,500,000 men, the largest peacetime army in American history. However, this Army was comprised of citizen-soldiers as draftees and National Guardsmen, who could not be active for more than twelve months nor serve extended periods outside the Western Hemisphere. In August 1941 Congress passed the Selective Service Extension Act by one vote, which granted authorization for the stationing of

⁵⁵ Boot, *War Made New*, 215, 224.

⁵⁶ Dwight D. Eisenhower, *Crusade in Europe*, (NY, 1948) 2.

⁵⁷ Eisenhower, *Crusade*, 2.

⁵⁸ Jim Garamone, "World War I: Building the American Military." U.S. Department of Defense. U.S. Department of Defense, March 29, 2017.

any soldier regardless of their component anywhere in the world, while also extending service commitments for all enlistments through the Selective Service. Even so, it was clear that society had not fully accepted the idea that isolationism was going to fail, as the bill also released any man over 28 from service.⁵⁹

Within the Army itself, the same beliefs were held, that there were no reasons for urgency and therefore, many units were not yet training heavily until after the hasty evacuation of the British Army from Dunkirk in 1940.⁶⁰ The events of December 7, 1941, proved to all, that officials calling for rapid military preparedness were not seeing things that were not present. Instead, the senior leaders and politicians who were leading the war planning effort that began in 1939, despite the general view of society were the saviors of the country when quick and decisive action was needed.⁶¹ The Louisiana and Carolina Maneuvers in 1941 had given many Army officers the field experience needed to deal with the sudden influx of orders that were coming from Washington following the attack. The standard process for issuing orders was abandoned due to the urgency of the situation. More aspects of the order were left to the lower levels of command, something that was not done prior.⁶² The junior levels of command were not often granted much leeway in carrying out their orders, as every order was carefully drawn out to include every aspect of the plan. However, the junior officer was given an intended end state and was told to find a way to execute the mission without a carefully drafted plan sent from a higher headquarters.

⁵⁹ Eisenhower, *Crusade*, 3.

⁶⁰ Eisenhower, *Crusade*, 5.

⁶¹ Forrest C. Pogue, *General C. Marshall: Organizer of Victory 1943-1945*, (The Viking Press: New York, 1973) 280.

⁶² Eisenhower, *Crusade*, 11-13.

This decentralization of orders to the junior officer that occurred during the days following the attack on Pearl Harbor proved to be the start of changes to the way the U.S. Army operated and planned missions at all levels of command. The changes impacted the uppermost levels of military command, strategic command underwent many different developments, often learning from the harsh lessons of operational combat. While technological aspects played a role in the changing command environment it is not necessarily the only factor that played a crucial role in the changes. Political necessity, the feelings of the population, and military necessity certainly played a role in these developments. The American President and the War Department were constantly giving advice and instruction to Chief of Staff of Army General George C. Marshall that required him to consider their views while assigning missions and constructing his pathway to victory. The office of the Chief of Staff was where the impact of society and politics collided. The American public during their isolationist years held a sentiment against any activity undertaken by the Federal government or the military that was outward-facing in nature. This naturally included intelligence services, the public was strongly opposed to anything that might even suggest that the United States government was involved in spying. Therefore, the War Department and the branches of the military were woefully incompetent at intelligence gathering and analysis. General Marshall saw the need to restructure the intelligence capabilities of the Army just before the war and had plans drafted to increase the capabilities, however, the war began before the changes could be implemented. Even so, General Marshall ensured that the intelligence capabilities of the United States Army were developed during the early days of American involvement in the war, convincing Congress and the American people of the need to have a strong intelligence apparatus.⁶³ While the individual services had some intelligence

⁶³ Eisenhower, *Crusade*, 30-33.

capabilities, it was identified that the U.S. was not able to effectively gather, share, or receive intelligence from allies. The British helped to fill this gap by assisting with the creation of the office of Coordinator of Information in 1941. The following year the president ordered that the office be reorganized and strengthened, becoming the Office of Strategic Services or OSS. OSS would eventually be replaced by the CIA.⁶⁴

General Marshall was at the center of the command structure of the Army and was the driving force for the development of the culture of the Army. The way that General Marshall operated and the kind of traits he sought in his generals was quite different from any of his predecessors. Once General Marshall was appointed as the Chief of Staff, he began a strict reorganization process of the Army's senior leadership, removing officers who were not willing to adapt. Officers that possessed growth mindsets and were willing to not only make tough decisions but innovate were rewarded while those who had been in the Army for thirty years were retired. General Marshall developed a system of meritocracy that promoted many junior officers to high-ranking positions over officers with seniority.⁶⁵ A key example of this was when General Marshall promoted Eisenhower to the rank of brigadier general, the youngest of the officers promoted by Marshall. General Eisenhower proved that the Marshall method of promotions worked, as General Eisenhower would prove to be one of the finest generals during the war. Additionally, the commanding general of the Ninth Army General William Simpson was an embodiment of the ideals that General Marshall had been trying to instill into the army. During the Battle of the Bulge in December 1944, Simpson ensured that the battle was won, by sending multiple divisions to the Bulge without seeking any fanfare or fame before the better-

⁶⁴ Frank Schale, "The Government Advisor: John H. Herz and the Office of Strategic Services," *International Relations* 22 (2008): 411-412.

⁶⁵ Thomas E. Ricks. *The Generals*. (The Penguin Press. New York, 2012) 32-33.

known Patton did. General Simpson believed it was crucial to develop his subordinates and therefore would often ensure that they would be the ones to receive their due credit for their division's actions on the battlefield.⁶⁶

Many aspects of the war effort were not decided out of military necessity, rather political necessity. For instance, the decision of where the Allies would launch operations against Germany was completely political. The political and military leaders of the United States desired to invade the European continent as soon as U.S. troops could be massed in the United Kingdom. The leaders of the United Kingdom, however, disagreed and adamantly believed that a Mediterranean first approach was needed, in part to protect their imperial interests. American leaders were willing to concede and allowed the British to plan a Mediterranean Sea approach.⁶⁷

A prime example of the impact that geopolitics and social factors had upon strategic decisions in 1942 was Operation Torch, the invasion of French Northern Africa. General Marshall and his advisors were against the idea of a military strategy that called for extensive military action in the Mediterranean Sea. Instead, they proposed to prepare a Cross Channel invasion as quickly as possible, without diverting strength to any other region. They viewed any possible action in the Mediterranean as serving only the political designs of British Prime Minister Winston Churchill. President Roosevelt did not share the same viewpoint as his generals, believing the Mediterranean campaign was a necessary political sacrifice needed to not only ensure British aid in the Pacific after Germany was defeated, but that the British Home Front would be able to sustain the war. Therefore, against the advice of his generals President Roosevelt agreed to the strategy proposed by Churchill.⁶⁸ All attempts were made to make the

⁶⁶ Ricks, *The Generals*, 107-108.

⁶⁷ Millett, Maslowski, and Feis, *For the Common Defense*, 413-420.

⁶⁸ Pogue, *General Marshall*, 9-11.

operation appear as though it was conducted primarily by the United States, as it was believed by both British and American senior leaders that the French forces stationed there would not respond well to seeing a British invasion force landing on their beaches.⁶⁹ The Allies were fearful that the French forces would view these British liberators as their traditional enemy and fight bitterly against them. The political leaders of the war effort were convinced that the impression that the force was American in composition would be crucial to ensure that the French forces quickly surrendered after putting up weak resistance and join with the Americans in liberating Northern Africa. While it is true that the British were already present in the region before Operation Torch, they were not in the French-controlled regions making the invasion lead by U.S. General Dwight D. Eisenhower crucial to removing Axis forces from Northern Africa. For the political leaders of the United States, there was another crucial aspect to this invasion that demanded an American commander. Throughout all American history the Army had never conducted an unprovoked aggressive attack against a natural state, and since Vichy France took over in 1940 France was a neutral state with no hostilities towards the Americans. The fear was that Americans would be deeply concerned by the invasion and public support for the war might be lost rather quickly. The perception of public sentiment is part of the reason American troops oversaw the operation, they were to limit their hostile intentions until it became clear that the French would not surrender, at which point British reserves would be committed to increasing the tempo of combat operations.⁷⁰

Additionally, the way the Allied forces organized their military command structure reflected the impacts of sociopolitical factors more so than those of technology. The military

⁶⁹ Eisenhower, *Crusade*, 85-86.

⁷⁰ Eisenhower, *Crusade*, 85-88.

forces that were committed into a theater were reorganized into combined units comprised of both U.S. forces and those from the British Empire, though the integration did not end there. The theater command was joint in nature, this means that all services that were committed to the theater were involved in the force structure. A delicate political solution was created to deal with the issues of ultimate command of a theater, the state that provided the most servicemembers in the theater would be the state that would provide the commander. Likewise, the service of the commander was determined by the very nature of the operation, this method meant that if the operation were primarily dependent on naval might, a naval officer would be appointed as the joint commander.⁷¹ The unified command structure was an important system to work out, as coalition forces in the past have struggled to create a unified command structure, which in turn has caused many coalitions to suffer and fail to achieve the desired political goal. An identified unified command also has positive impacts upon the common soldier, as they have an understanding of just whom they are fighting for and why they are under the command of another state's military. For example, the unified allied landings in Normandy on June 6, 1944, demonstrated the benefits of a unified command structure and allied cooperation. Every service member involved in the operation had a clear understanding of what they had to do when they had to do it, and most importantly why they had to do it. Providing purpose and understanding is a crucial part of the job of a leader.⁷²

While the issue of command of the Allied invasion of French northern Africa was a matter of social-political importance, the strategic aspects of the operation were controlled by technological aspects. When General Eisenhower was selecting his headquarters and the

⁷¹ Millett, Maslowski, and Feis, *For the Common Defense*, 425-426.

⁷² Pogue, *General Marshall*, 378-379.

assembly point for the invasion, technological aspects were the single greatest limiting factor. In the end, the General decided to base his operation out of British-held Gibraltar. There was a simple reason as to why Gibraltar was selected as both a headquarters and the assembly area for the invasion, the Allied Navies were unable to provide any aircraft carriers and therefore any air cover had to be launched from the ground. The only place that the Allies could provide air cover was Gibraltar which would also limit the scope of the invasion, as aircover could only be provided to the invasion force within the limited range of the ground-based fighters.⁷³

The interplay between technology and sociopolitical forces during the war in Europe might be most prominent in the war in the sky. Military air power, as already noted, had been developed at an astonishing pace during the interwar years. The commanders of the Army Air Corps were frantic to test out their new theories and capabilities of their air fleets. Many of the same ideas that the Americans had developed were already being put into practice by the airmen of the Royal Air Force, namely area carpet bombing of strategic economic nodes conducted at night. Strategically, this kind of bombing campaign made sense, it provided relative security to the bombers as well as tangible impacts upon the morale of the enemy and their war effort.⁷⁴ Even so, the American government did not allow its Army Air Corps to conduct these kinds of operations, electing to conduct daytime precision bombing instead starting in the summer of 1942. This kind of bombing required bombers to fly combat missions during the day at relatively low altitudes and slower speeds than their British counterparts. These factors combined to create a horrible casualty rate for the Army Air Corps, as German anti-aircraft batteries and fighters were easily able to pick off the bombers, who did not have long-range escorts until the P-51

⁷³ Eisenhower, *Crusade*, 74-78.

⁷⁴ Biddle, *Rhetoric*, 99.

Mustang was developed. The United States government accepted these losses on a moral ground, believing it was better democratically in 1943 for losses to be high than to indiscriminately attack unarmed civilians during terror bombing campaigns. The hope was that these precision bombing missions would limit the destruction to only the strategic node and not surrounding homes and schools.

Strategic nodes are focal points in a belligerent's war effort. Often this means factories producing weapons, food, aircraft, textiles, ball bearings, or telecommunication and logistical hubs. Arguments could and have been made that civilian population centers are strategic nodes. Due to the limitations of aiming technology, the intent was not always achieved, as bombs often missed their targets and struck residential areas.⁷⁵ It must be noted that the reluctance to use indiscriminate strategic bombing in Europe did not present itself in the Pacific. This difference in strategy is perhaps due to social factors, Europeans have been seen as the cousins of Americans, while anti-Asian sentiments had been the norm for quite some time in the United States, even before the events of Pearl Harbor. Additionally, the events of Dresden in 1945 and the U.S. public's desensitization to widescale violence by the time that U.S. bombers were in range of mainland Japan could have created a social climate that permitted area bombing of civilian population centers. American media did not even view the events of Dresden as being worthy of being front page, instead, American papers were covering the Yalta Conference.⁷⁶ During the early stages of war planning in the Pacific, Air Command had investigated the strategic value of incendiary bombs in Japan. They argued that since many buildings in Japan were constructed using wood and paper that incendiary bombs would be extremely effective against civilian

⁷⁵ Richard Overy *Why the Allies Won*. (New York: W.W. Norton Company. 1995) 113, 115.

⁷⁶ Biddle, *Rhetoric*, 259.

population centers. Factories and economic buildings were more likely to be made of stronger, less-flammable materials. However, the plans to begin firebombing were not approved right away due to real concerns about the legality and morality of such a bombing strategy.⁷⁷

Throughout the war in Europe, there existed a tense interplay between three factors, military necessity, technology, and social-political factors. At times each of these three factors limited the war effort, while at other times the factors in unison propelled the war effort forward. At the divisional levels and lower, commanders began to develop doctrine and methods to deal with the harsh interplay between what needed to be done militarily and what society would allow to happen. The war in Europe was less brutal than the one in the Pacific and there is an argument to be made that restraint was caused by social factors. When it was at all possible the lives of civilians were to be minimally affected while conducting offensive operations in Europe and Northern Africa. This restraint extended to the citizens of Germany for much of the war, with the most horrific exception of Dresden. The horrors of American area firebombing only occurred in Europe once, while it became a nightly occurrence in the heartland of Japan. While the impact of the rapid technology change was evident during World War Two, social factors were more impactful in the development of a U.S. strategy.

Assessments

It is undoubtedly true that both technology and society have had a substantial impact on the development of America's modern army. Technology has had a defining impact upon the development of military strategy throughout human history. Changes in military technologies allowed armies to gain advantages over their adversaries. Take for example the development of

⁷⁷ Biddle, *Rhetoric*, 263-264.

the English longbow during the 100 Years War, its longer range and higher draw weight proved to be catastrophic for the French.⁷⁸ The addition of a stirrup to saddles greatly increased the lethality of cavalry units. Every time technology creates an inherent advantage a countermeasure is eventually worked out. The countermeasure is not always technological in nature, oftentimes it has included changing the shape of formations or the basic battlefield movement techniques used. Modern militaries all over the world today employ movement techniques designed to limit the amount of time a soldier is moving exposed in the open. As late as the Russo-Japanese War, these kinds of tactics were seen as cowardly and were therefore not employed.⁷⁹ The U.S. Army would not begin to use these movement techniques until experiencing battle during World War I. Technology, namely deadlier and more accurate enemy fire, mandated a change in military doctrine that was deeply rooted in a societal belief.⁸⁰ Without a shift in the perception of soldiers, the acceptance of these new movement methods would never have happened.

The interplay between technology and society is very important, as society developed, it seems as though militaries had to ask permission from political leadership to utilize new technologies. Permission was not necessarily implicit or required, but as society developed throughout the 1800s, citizens gained more oversight over what their governments did, including on the battlefield. No longer could militaries take drastic action in the name of military necessity without considering the impact this would have domestically. Particularly of the U.S., as the U.S. is a republic and public sentiment is very important. The American president, the person who establishes the political objective for the war, is shackled to public approval and will not approve

⁷⁸ Jean Froissart, "The Battle of Crecy" in *The Art of War in World History* edited by Gerard Chaliand. (Berkeley: University Press of California, 1994): 502-503.

⁷⁹ Archer, Ferris, Hewing, and Travels, *World History of Warfare*, 476.

⁸⁰ Nick B. M. Rooney, "The Rush: How Speed Saves Lives," *Infantry*, April 2016: 10.

any drastic measures that run counter to the beliefs of the masses if they want to be reelected. President Lincoln was aware of this reality during the Civil War and was concerned that unless the U.S. could make headway against the Confederacy that he would not be reelected in 1864. General Grant was able to win enough battles during the election year that the American people chose to support the president. This support and the overwhelming hatred for the rebellion, in turn, allowed America's strategy to slip towards totality.⁸¹

Throughout the Second World War the American public was acutely aware of what the U.S. Army was doing in Europe and as the war developed restraint was less important to the public. Throughout the war, the British advocated for large-scale night-time area bombing in Europe, and even after the creation of the unified bomber command, U.S. bombers were not allowed to conduct these kinds of bombing raids. Strategically they made more sense, as the casualty rates for these high-altitude nighttime bombing runs were better than the low altitude daytime precision bombing that the United States conducted. Therefore, the decision for the U.S. to conduct these kinds of bombing runs must have been sociopolitical and tied to the sentiments of the American people. The loosening of restraint which occurred in the final year of the war allowed for new military technologies to be fully utilized, such as nighttime area bombing and the firebombing of Dresden which occurred during the Spring of 1945. The implicit consent of the American people of firebombing allowed for U.S. forces in the Pacific to conduct multiple area firebombing campaigns.⁸² Additionally, the delicate nature of the Anglo-American alliance required President Roosevelt to make strategic decisions that went against the advice of his military advisers. Operation Torch and the Mediterranean-first strategy are examples of the

⁸¹ McPherson, *Tired*, 246-248.

⁸² Millett, Maslowski, and Feis, *For the Common Defense*, 477-478.

president making political decisions and placing them about the advice of his military chiefs of staff. During the war, the president and Prime Minister Churchill were deeply concerned with creating a new political system out of the ashes of Europe. The two leaders devoted time during their conferences to discuss their goals for a post-war Europe and the world, to achieve these goals certain measures had to be met, which included showing restraint when dealing with the German people once the invasion of Germany began. Militarily it would have been easier to not care about the aftermath of the war and speed as quickly as possible into Berlin with wanton disregard, but this is not what happened.

Strategic-level commanders do not make choices in a vacuum. The sentiments of their citizens, their political leaders, and the sentiments of allied states all influence commander's decisions. The world has become a global society where the views of other states and even non-state entities hold real weight. International watchdogs such as the United Nations closely monitor military action in an attempt to limit undue suffering and war crimes. International watchdogs are not a new phenomenon, the international community has been attempting to limit the destructive impact of war since the 1800s by signing international treaties such as The Hague and the Geneva Conventions. Society has forced the outright ban of the use of some military technology, in turn forcing a change in doctrine. For example, the use of chemical weapons against enemy combatants is internationally illegal, the United States has taken this ban seriously and has reframed from employing chemical weapons.⁸³ Additionally, after a lengthy international campaign, the use of indiscriminate land mines has also been banned, creating a need to update military doctrine.

⁸³ Boot, *War Made New*, 451-452.

Technology creates opportunities for strategic commanders on the battlefield and the potential to drastically change the doctrine of their forces, this is undeniable. However, opportunity alone does not create change, action and permission do. Society is the force that allows for strategic commanders to employ new technologies and techniques, shaping military doctrine in the process. What good is a new weapon system if the use of that weapon has been made illegal by that state's legislator? If society does not approve of the way the army is conducting war, then that government will be voted out and in a volunteer force, people will not join the ranks. Additionally, military equipment must be purchased through public funds appropriated by Congress, and this oversight prevents the purchase of weapons that are not socially accepted. Therefore, I believe that social factors have a larger impact upon the development of a strategic command than technology.

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