

Military Effectiveness: A Reappraisal

A Monograph

by

CDR Jeffrey J. Bernasconi

U.S. Navy



School of Advanced Military Studies

United States Army Command and General Staff College

Fort Leavenworth, Kansas

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CDR Jeffrey J. Bernasconi

Military Effectiveness: A Reappraisal

Approved by:

Robert M. Epstein, Ph.D.

Monograph Director

Kevin C.M. Benson, COL, AR

Director,
School of Advanced
Military Studies

Robert F. Baumann, Ph.D.

Director,
Graduate Degree
Programs

Abstract

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Key findings of this monograph are the importance of adaptability in military organizations, and the crucial role played by the linkages between all the levels of war. These linkages are an element of multiple ends, ways, means chains that also exist at and between each level of war.

Finally, the important of context cannot be ignored. Any potential adversary will be actively searching for ways to improve their own security situation without regard for the security of ones own nation. Tactical and operational level overmatch is no longer enough to ensure security of the nation. It is a useful and necessary ability, but without the corresponding tight linkages to the higher levels of warfare it may lead to ultimate failure.

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CHAPTER 1.

MILITARY EFFECTIVENESS: A REAPPRAISAL.

A quandary facing all military forces is the quest for efficiency while also attaining effectiveness. Efficiency, in its definition from thermodynamics is the percentage of useful work extracted from the heat of a system generated by the burning of a fuel source, divided by the total heat generated by the combustion processes. In any system, there is an amount of waste heat consumed in the process that does not provide any useful work. One hundred percent efficiency would have all of the energy put into a system come out as useful work. One hundred percent effectiveness would have all of the useful work output from a system applied to a specific requirement or task. In other words, efficiency is doing things right, whereas effectiveness is more concerned with the result. Some authors have defined military effectiveness as “the process by which armed forces convert resources into fighting power.”¹ This definition, however, neglects to account for the military force’s purpose.

Other possible definitions of military effectiveness concern themselves with the output of the security process. Several authors have also argued that “victory” or “success” is not an indicator for or against a force’s military effectiveness. Some even go so far as to posit that victory cannot be the sole criteria for determining military effectiveness.² This is another point of divergence. As will be demonstrated later, “victory” must be a component of military effectiveness, albeit not necessarily on the tactical level.

¹ Allan R. Millett, Williamson Murray, and Kenneth H. Watman, “The Effectiveness of Military Organizations” in *Military Effectiveness Volume I: The First World War*, ed. Allan R. Millett and Williamson Murray (Boston, MA: Allen & Unwin, 1988), 2.

² Ibid., 3.

Military effectiveness is a dynamic output of the security process. Evaluating military effectiveness requires comparisons of its horizontal and vertical components holistically, as well as in the third dimension of time. The ability to learn and adapt is a key ingredient of military effectiveness. This is so because war involves the interaction of two or more thinking opponents, rather than one person facing an automaton.

Military effectiveness has four horizontal components as determined by Millett, Murray, and Watman. These consist of the political, strategic, operational, and tactical levels of war. A brief summary of the four horizontal levels follows. Firstly, the political level concerns itself with all aspects of national power. The idea of the nation-state whose security the military provides. Second, the strategic level deals primarily with policy setting for the respective nation, what Barry R. Posen defines as grand strategy. Specifically, what is required to provide the nation the security it desires? Because resources are by definition finite, and the potential threats are numerous, there is a trade off between the political ends and the military means.³ The operational and tactical components are the two that are closest to the idea that military effectiveness is the process of converting potential into actual combat power. At the operational level, military effectiveness pertains to the proper synchronization and utilization of forces in time and space. At the tactical level, military effectiveness concerns itself most with the conversion of potential combat power into applied combat power. Each of these vertical levels affects the other three levels. However, it is necessary to first delve deeper into each individual level prior to stepping back and addressing all four holistically.

³ Barry R. Posen, *The Sources of Military Doctrine: France, Britain, and Germany Between the World Wars* (Ithaca, NY: Cornell University Press, 1984), 13.

The political level of war involves the interplay of a nation's senior military leadership and the leadership of the nation's government and its associated political apparatus. However, it should not be limited to a one-way exchange with the military simply providing funding requests for government to fulfill or not. Some relevant questions to ask regarding this interaction include the following. What is the level of integration between national and military policy? Does the military provide the capabilities required by the public policy? Conversely, does the military provide the timely and honest advice to the political process required to ensure that the desired policy is achievable with the military resources available?⁴ Is the desired political end state achievable by the military means and, more significantly, are the means affordable by the nation? With such questions in mind, one must always remember that the ultimate goal of any military is the security of the nation. The means ends equation must, as in a physics problem, be solvable from either end. When discussing military effectiveness at the political level one is really talking about the interface between the political and strategic levels of war. For example, certain authors define political effectiveness as the military's success or failure to obtain resources from its political masters in the form of money, technology, and people.⁵ This is only one-half of the equation. The other half is the affordability of the military force structure that is required by its political policies.

One popular definition of political effectiveness is based on the paradigm of threat-based planning. The United States military has shifted to a more capabilities based model. Rather than relying on the Cold War paradigm of the Warsaw Pact forces as the

⁴ Ibid., 23.

⁵ Millett, Murray, and Watman, 4.

premier enemy, the United States military is building capabilities usable in several different environments and against any conceivable foe.

The operational level of war shifts military effectiveness from a pure science of war over to the arena of the art of war. At the two preceding levels, the science of war was more important, because it was a quest for knowledge. What capabilities can our forces bring to the fight as against the capabilities of our adversary? The perceptual shift to art happens because at the operational level war is a quest for creative ability, to properly identify the root source of a problem and apply combat power in a sustainable manner to solve that problem.⁶ One cannot disregard military science however, even at the operational level. Sustaining the force in the field, the logistics of modern militaries, is an extreme exercise in military science.

Finally, we come to tactical military effectiveness. John A. Lynn in *The Bayonets of the Republic* provides a useful methodology for defining and evaluating tactical military effectiveness by what he defines as tactical combat effectiveness. Tactical combat effectiveness is the ability to convert potential combat power into applied combat power through fire and maneuver. Three elements making up tactical combat effectiveness. The first element is the military system itself. The military organizations discussed consist of a body of doctrine, organization, weapons systems, and training regimes. How were the units organized and why? What weapons systems did they deploy with, and after the first battles, what did they change? How effectively were combined arms used in both offensive and defensive operations? How did small unit doctrine change based upon experience? The second element of tactical combat effectiveness is

the motivation system. This consists of unit cohesion and morale. Deciding why men fight, or more specifically, why do men risk their own lives. What policies were in place that contributed to unit cohesion, or conversely, what policies directly hindered unit cohesion. The third leg of the tactical combat effectiveness triangle is the context of combat. The only way to measure tactical combat effectiveness is through actual combat, because one cannot reliably assess the action of the enemy unless that action has already occurred. It is not a battle against a simulation or an automaton, but a living, breathing, thinking, and most importantly, adapting enemy.⁷

In addition to the four horizontal aspects, military effectiveness possesses multiple vertical levels. These include resources, training, doctrine, recruitment, civil-military relationships, leadership, education, and socio-cultural factors. Considered separately, vertical components exert an influence on each level of military effectiveness, and can even run counter to the overall military effectiveness based on their influence at the different horizontal levels of war. Once viewed across both the vertical and horizontal aspects, the true value of military effectiveness is evident, which is to provide for a nations security through the conduct of war.

What is the purpose of war? It is victory. This leads to a requirement to define victory. Victory is imposing your will on your adversary. War is the attempt to force another country to conform to your will using organized violence.⁸ This can run the gamut from causing your adversary to stop physically threatening your society to the complete overthrow of your opponent's government and society. There are two factors

⁶ Carl Von Clausewitz, *On War*, trans. Michael Howard and Peter Paret (Princeton: Princeton University Press, 1976), 148.

preventing the imposition of one's will on others. First, one's opponent is also trying to get his way in the world. Not necessarily diametrically opposed to your will, but it is enough that he will resist your efforts to impose your will upon him. The second problem is that your will is not necessarily static. In autocratic societies, the ruler's goals may be the only will in the country; however, human life is by definition dynamic and adaptive. If one considers a democratic country instead, then the will of the people may change as frequently as the ticker underneath an all-hours television news channel. Military effectiveness is the ability to use all aspects of military power to impose your will on other international actors.

One cannot view military effectiveness as an academic grade, with arbitrary assignments of grades based on subjective assessments. Drawing from professional baseball, a more apt analogy is batting averages. Superstar ballplayers have batting averages in the high three hundreds, sometimes even cracking the four hundred range. To be able to bat four hundred in Major League baseball is an incredible accomplishment, but it also means that at least six out of ten times at bat that player failed to get on base. The baseball analogy is also preferable because it involves the action of the opposing team or enemy. If a batter routinely bunts because he can usually outrun the throw from the shortstop, eventually that shortstop will play closer in, to get to the ball faster and throw the batter out. If one side routinely targets frontline trenches with thousands of rounds of high explosives prior to an assault, the enemy will move his men out of those trenches, preserving his forces to engage the advancing waves of

⁷ John A. Lynn, *The Bayonets of the Republic: Motivation and Tactics in the Army of Revolutionary France, 1791-94* (Bolder, CO: Westview Press, 1996), 38-9.

⁸ Clausewitz, 75.

infantrymen when the artillery finally lifts. If one side possesses tactical overmatch in one field of military endeavors, the thinking enemy will strive to neutralize that advantage by whatever means is available to them. Additionally, each time a game is played each player has the potential to be very effective (going three for three) or very ineffective (zero for three).

Military effectiveness is turning potential combat power into applied combat power sustained over time. One must balance the requirement to optimize military effectiveness across the four levels of warfare while still developing and maintaining the ability to sustain or even increase their level of power over time. Military effectiveness is never fixed or unchanged. Even a very conservative military that is locked into its doctrine experiences fluctuations to its military effectiveness everyday. Old soldiers leave the military and new soldiers replace them. Outside forces play upon the social environment that the military inhabits. These forces can be social, political, or technological. The environment that we inhabit is constantly in flux, and the enemy always retains influence.

Total military effectiveness is a theoretical construct, similar to (and derived from) Clausewitz's concept of total war as opposed to actual war.⁹ From this assertion, one could take the stand that evaluating military effectiveness in any setting other than historic is futile. However, there exists a better, and this better returns us to the interaction of the opponent. The opponent is a thinking, acting creature that will do their best to impose their will upon us. One cannot go with a minimalist opinion such as the only necessity in war is to be slightly superior to your opponent. One cannot also assume

⁹ Ibid., 78.

that the enemy will not adapt, nor that the enemy will even consent to engaging in the type of warfare that one's military is especially suited to. One example of this is the Israeli's after the Six Day War of 1967.

The Israeli Defense Force decisively defeated the combined militaries of Egypt, Syria, and Jordan.¹⁰ The Israelis based their victory on three key capabilities: Their superior intelligence capability; their air power; and their tank fleet.¹¹ Israel became a regional power, and her military seemed to have developed the solution to the security dilemma. All the preexisting conditions for conflict still existed after the conflict, but Israel decided to prepare their security by committing the majority of her resources into the three capabilities that served her best in the previous conflict, namely intelligence, aviation, and armor.¹² Unfortunately, Israel's main opponent, Anwar Sadat of Egypt, also developed the same assessment of the reasons of Israel's victory in the last war, and developed a political strategy to counter those specific strengths. Israel, with heavier losses than their public desired, eventually went on to achieve their operational and tactical goals during the 1973 War. Nevertheless, the Egyptians, under Sadat's leadership, succeeded in their ultimate political goals.¹³

Current thought on military effectiveness divides into two divergent camps. One stresses the physical aspects of warfare and the other morale. Restated, these two concepts are the organizational and sociological factors directly affecting military effectiveness. Shils and Janowitz ranked the German Army of World War Two as highly

¹⁰ Dr. George W. Gawrych, *The 1973 Arab-Israeli War: The Albatross of Decisive Victory*, Leavenworth Papers No. 21 (Fort Leavenworth, KS: Combat Studies Institute, 1996), 1-3.

¹¹ Ibid., 5.

¹² Ibid., 7-8.

¹³ Ibid., 81-2.

militarily effective theorizing the reason for this was the high level of unit cohesion.¹⁴ Their theory strongly supports the idea that sociological factors trump organizational factors in any measurement of military effectiveness. Interestingly, W. Victor Madej questions this assessment, noting that rather than being the cause of military effectiveness strong group cohesion was an effect of the organizational superiority of the German military.¹⁵ Neither side questioned the military effectiveness of the German state as a whole, or the impact of the military's resource requirements on the state. Nor did they address the adaptability of the German military as an institution at any level. Both sides in the debate are correct, and both sides are incorrect. They are correct in that both sociological and organizational factors are important; they are the building blocks of military efficiency and military effectiveness. However, both are also incorrect in that they are not only neglecting to look at the interplay of all factors across the levels of war, but they are also neglecting the ability to adapt to changing context.

A major flaw in previous attempts to measure military effectiveness is that most were static looks at very dynamic systems. The logic trap is that military effectiveness can be measured in two ways from the historical record. One is purely superficial, in that the side that won was the most effective militarily. The converse to this view revolves around how well one side's forces did during the conflict. However, the flaw with this style of evaluation is its failure to view the system as a whole while it is in motion.

The real challenge in evaluating military effectiveness is the systems dynamic nature. Militaries, as institutions, derive from their past, must thrive in their present,

¹⁴ Edward Shils and Morris Janowitz, "Cohesion and Disintegration in the Wehrmacht in World War II," in *Center and Periphery: Essays in Macrosociology*, ed. Edward Shils (Chicago, IL: The University of Chicago Press, 1975), 345.

while always searching for what lays in their future if they are going to succeed in an effective manner. All four horizontal components must contribute to the safety and security of the nation, with difficult but necessary trade-offs in levels of effectiveness based on their impact to the system as a whole. An excellent test case for evaluating military effectiveness in all its dimensions is the German military during the interwar period. Coming out of the spectacular failure of the Great War, the German military was completely fettered by the Treaty of Versailles. The German military was limited in all four horizontal components as well as most of the vertical ones. It was, however, fairly well unbounded in the field of adaptability. It was capable of looking at the recent past and attempting to distill the lessons from its recent defeat with an eye toward its future security requirements. Taking the two lenses of sociological thought and organizational method, we will look at the interwar German military across the previously defined horizontal and vertical slices. Then an examination of the two methods added with an expansion of the system to include the missing inputs to the political system and the inherent ability to adept in conjunction with the fault lines between the two concepts will provide a fuller look at the military effectiveness of this historic organization. Finally, the result should be a reassessment of the military effectiveness of military organizations in general with recommendations for future force developments in particular.

¹⁵ W. Victor Madej, "Effectiveness and Cohesion of the German Ground Forces in World War II," *Journal of Political and Military Sociology* 6 (Fall 1978): 233, 246.

CHAPTER 2.

MILITARY EFFECTIVENESS: THE SOCIOLOGICAL LENS.

Sociology is the study of social structures. More specifically, it is the study of how people interact with one another in a specific set of circumstances or context.¹⁶ In the arena of military effectiveness, the sociological lens looks at patterns of social interactions and their influence, positive or negative, on the overall effectiveness of military organizations as social structures within a greater society.

The military is not a stand-alone organization created out of the ether when a nation's security is threatened. An armed force cannot subsequently be wished away once the apparent threat is removed. It exists as a distinct sub institution of the nation's larger social structure. By its very existence a military influences the larger civilian society that it protects. Conversely, a military is also subjected to influences from that society.

The three primary spheres examined through the sociological lens in this case study are the political, cultural, and cohesive spheres.

Political issues span the vertical and horizontal levels of warfare, as well as their counterparts in civil society. At the apex of political thought is the question what kind of society is most desirable? For Germany, the desire was for a stable and secure nation. The Great War left the German people exhausted; emotionally, physically, and economically. The Treaty of Versailles, in addition to the articles limiting the armed

¹⁶ Nicholas Abercrombie, Stephen Hill, and Bryan S. Turner, *The Penguin Dictionary of Sociology*, Third Edition (London: Penguin Books, 1994), 396-7.

forces, also mandated severe reparations payments. This left Germany in what one historian has referred to as “perpetual economic slavery.”¹⁷

States care about their own survival. However, simple survival is not enough for most societies, especially after exposure to more prosperous times. States, by definition, desire the continuation of their way of life.¹⁸ This leads to a tension between civilian society and its’ armed forces. Resources expended on the military are obviously not available for other purposes. The battle for resources is a normal function of the political sphere of a state. In the economic collapse of the depression years following the Great War, German economic life was in ruins. Paying for armed forces capable of defending the nation from external threats was problematic especially when coupled with the onerous reparations payments.

After the end of the Great War, there was massive social disruption inside Germany. The General Staff attempted to redeploy the German Imperial Army back into Germany proper. This redeployment fulfilled two purposes. One reason was to get the troops out of foreign lands, as directed by the Treaty of Versailles. The other reason was to assist in the internal security of Germany. Regiments marched home, under arms and led by their officers. Leading politicians gave speeches lauding the troops as “unconquered in the field.”¹⁹ The General Staff developed a plan for redeployment and demobilization that would provide for the stability and security of Germany.

¹⁷ Hans Delbruck, *Delbrucks Modern Military History*, trans. Arden Bucholoz (Lincoln, NE: University of Nebraska Press, 1997), 193.

¹⁸ Stephen Peter Rosen, “Military Effectiveness: Why Society Matters” in *International Security*, Vol. 19, No. 4. (Spring, 1995), 6.

¹⁹ Walter Goerlitz, *History of the German General Staff: 1657-1945* (trans. Brian Battershaw, New York, NY: Praeger, 1953) 209-10.

Rather than sticking with the General Staff demobilization plan, the units of the old Imperial German army simply drifted away. Instead of improving the internal security of Germany, this contributed to the overall insecurity in Germany proper by providing a flood of modern weapons and a mass of highly trained, experienced, and unemployed former soldiers into civilian society. Coupled with the social disorder brought on by five years of war and the fall of the Kaiser's government, the above factors provided the opportunity for the creation of the *Freikorps* for internal security of Germany. These volunteer organizations were usually led by former front-line officers, and shared a political viewpoint that was strongly right-wing in its outlook.²⁰ They did not have any official standing with the government, and in many cases were openly hostile to it.

Society's influence on military effectiveness typically is viewed from the negative perspective. The idea has been advanced that peoples' political views create moral conflict in a state, and this civil-political tension can be transmitted into the military organization. This leads to the development of fault lines within the military that sets limits on the efficient and effective generation of combat power.²¹ The creation of the *Freikorps* is an example of the negative effect political tension produces in society. The *Freikorps* were not subordinate to the German military, even though former officers led most *Freikorps* formations.

One method for a military to overcome political friction is to divorce itself from the political arena. The German military under Von Seeckt attempted this exact course of action. There was some very strong historical precedent to support this decision. In the

²⁰ Ibid., 213.

case of Germany, civilian society perceived the institution of the Army as a non-political pillar of society.²²

Separating the military from the political arenas had carried over to the extreme during the Great War, with the German military completely divorced from the political process. The experience of the Hindenberg-Ludendorf quasi dictatorship accomplished this divorce by subsuming all aspects of national policy that was required by the military as decided by the military. The Great General Staff did not want to involve itself in the politics of the state; rather it preferred to be ready for conflict. The purpose of the military, according to the General Staffs' view, was to develop the doctrine that would lay out the most appropriate use of weapons systems and troop deployments.²³

After the Great War, the General Staff did not possess a political point of view in that it did not identify with any one party or political organization. It did have a specific higher idea for what the overall German state should be. It was "the principle of authority and order, a principle that could be incorporated equally well in a democratic, monarchical or socialist form of society."²⁴ It did not matter to Von Seeckt what specific form the political process of Germany took, as long as it contributed to an ordered society that held the military in high esteem.

When the Kapp Putsch occurred, most of the German Army stayed on the sidelines. Von Seeckt viewed the most probable outcome of the German Army openly supporting either side as Civil War, which was exactly the opposite of the idea of

²¹ Rosen, 5.

²² Gordon A. Craig, *The Politics of the Prussian Army* (London: Oxford University Press, 1964), 382.

²³ David T. Zabecki, *The German 1918 Offensives: A Case Study In The Operational Level Of War*, (New York, NY: Routledge, 2006), 71.

²⁴ Goerlitz, 212.

authority and order that the General Staff professed to value for society.²⁵ The end result of the failure of the Kapp Putsch was a weakening of the power of the *Freikorps*. The internal security of Germany was still very problematic, but the fall into open civil war was avoided. This episode also assisted in the removal of domestic political ideas from the army. The army was then left free to be, as it desired to be, a nonpolitical pillar of German society.

Regardless of the desires or intent of Von Seeckt political concerns can never be completely exorcised from a military organization. Von Seeckts final downfall was completely political. In 1926 he authorized the former crown Prince of the Hohenzollerns to attend a military exercise. Members of the former royal family were specifically forbidden from having any association with the new German Army according to the Treaty of Versailles. The German government forced Von Seeckt to retire over this incident.²⁶

Politics concerns itself with the establishment of policies to encourage and maintain a certain way of life. Culture, however, is the belief system that the established policies support and defend.

The shared beliefs and values of a societal group are what can be defined as a groups culture. An important question to ask is “[I]n what ways and to what extent does culture shape military effectiveness...”²⁷ Essentially do the values of society impact military effectiveness in a positive or negative fashion, if at all?

²⁵ Ibid., 220-2.

²⁶ T. N. Dupuy, *A Genius For War: The German Army And General Staff, 1807-1945*, (Falls Church, VA: NOVA Publications, 1984), 220.

²⁷ Kenneth M. Pollack “The Influence of Arab Culture on Arab Military Effectiveness”, (Ph.D. diss., Yale University, 1988), 23.

For the German Army, culture played a deterministic function in its ability to synthesize the lessons of the Great War, at least on the tactical level. “[I]t was the corporate culture of the German Army and especially its General Staff system that allowed the lessons of war to be absorbed quickly and the doctrine and training to be changed accordingly.”²⁸ The Great General staff held the rigorous historical analysis of past events, be they the recent battles of the Great War or the more historically distant battle of Cannae, as critical to the professional development of the officer corps.

From these rigorous studies, specifically the ones focused on the most recent battle experience of the Great War, an update of German military doctrine developed. “[T]he key test of doctrine was what worked on the battlefield. They saw doctrine as a means to an end, and not as an end in itself. Methodology was the key to the doctrine process. They paid close attention to cause-and-effect relationships and they did not cloak fuzzy doctrine in fancy terms and catch phrases.”²⁹

The culture of the Great General Staff resided on the extensive education of the officer on how to think, not on what to think. Such a cultural education was a vital trait of the military institution. The result of this robust education was a common understanding and approach to operational and tactical problems even if the specific methods varied by individual interpretation. Military tactical solutions already are acknowledged to vary based on context, here meaning the enemy and the terrain. For the Germans tactical solutions also would vary based on the officer in command. As long as he understood the overall intent of his mission, it did not matter how a solution was derived. He would still bend it to fit the desired outcome.

²⁸ Zabecki, 65.

“[T]o the extent that culture shapes both individual behavior and group interactions, it is reasonable to assume that it also influences how individuals and groups act in combat. Thus a full understanding of military effectiveness is impossible without an understanding of how—and how much—culture can influence the actions of soldiers and officers in battle.”³⁰

Germany retained its historic belief in the cultural value of its armed forces, especially its army.” In Germany since the Wars of Unification the Army was highly regarded by most of the people and was considered the pride of the nation.”³¹ This cultural underpinning allowed the German Army to recruit and retain the highest caliber of officer and enlisted man. In addition to the active army, the reserves also held very high cultural esteem within civilian society. Reserve officer commissions of the rank of lieutenant and captain carried with them large moral authority in the cities and towns of Germany.³²

Other cultural factors assisted in the maintenance of relatively high levels of effectiveness. The new army continued the policy of recruiting units on a national basis, with the old Germanic nations of Württemberg, Bavaria, Saxony, and especially Prussia all sending their native sons into specific units based on their national origin.³³

This reliance on smaller, culturally cohesive groups to reinforce the positive aspects of military service continued even into the later periods. Rather than feed replacements into the line individually, the Germans during World War Two would build new units, only sending units back to home station for refit periodically. This appeared

²⁹ Ibid., 65.

³⁰ Pollack, 23.

³¹ Martin Van Creveld, *Fighting Power: German Military Performance, 1914-1945* (Washington, D.C.: Office of Net Assessment, 1980), 18.

³² Ibid., 19. “A widely circulated story had it that an old and famous professor, granted an audience with the Kaiser and asked to make a request, raised his glaucomous eyes and, with a shaking voice, begged to be made a second lieutenant of the reserve.”

³³ Ibid., 51.

to be wasteful because the same logistical tail continued to exist even as the front line elements of a division were attrited. This raises a couple of related issues. The Germans sent their best soldiers into the infantry, unlike the Americans who would send their best into the technical branches such as the Army Air Corps. The German logistic and administrative tail was lean to start with. German commanders would use whatever was at hand regardless of unit designation as combat or support. In addition, the greater number of divisions generated meant that the Germans had the ability to rotate divisions out of the line for rest and recuperation. This greatly increased unit cohesion,³⁴ especially when compared with an individual replacement policy. Soldiers developed close associations with men of similar cultural background, shared experience, and an expectation of shared future endeavors.

Professional culture goes along way towards explaining genius. Some would argue that Germany was very fortunate in having Von Seeckt available to rebuild the German army. Yet, Dupuy points out that Von Seeckt did not arrive miraculously on the scene in Germany's hour of need. Manufactured for his role through his career progression in the General Staff, Von Seeckt was the output of a very thorough education process that included formal education and training tied to cultural background and practical experience. If Von Seeckt had not taken up the problem of rebuilding the German Army, it is likely that another General Staff officer, with similar training, education, cultural background, and experience would have stepped forward and in all probably developed a similar solution to the problem set.³⁵ Not necessarily exactly the same solution, there is a role for individual genius in the military equation. Nevertheless,

³⁴ Ibid., 52

the culture of the organization does provide for general directions in the evolution of military thought. This general direction, when combined with historical trends at work, the context so to speak, drives the flow of military endeavors.

As briefly discussed in chapter one, Shils and Janowitz theorize that because German troops trained together they formed a primary group bond that gave them very high levels of unit cohesion. This was especially true when compared to their opponents. This high level of unit cohesion is attributed as the direct cause of their higher tactical military effectiveness.³⁶ Madej counters this argument, claiming that the high levels of German unit cohesion, demonstrated by a lack of disintegration of units later in the war, was a result of the high level of tactical military effectiveness and not its cause.³⁷ Rosen even posits a third option to the question of which came first; cohesion or effectiveness? What if the German soldiers brought with them an aspect of civilian society that presupposed them to unit cohesion?³⁸

This intellectual argument opens several doors to inquiry. First, what is a primary group and how does its existence affect a unit's military effectiveness. Second, what influences the development of group cohesion? Finally, what is the correlation between high levels of cohesion and military effectiveness? Each of these questions will be further addressed below.

Primary groups have been identified in sociological research after World War Two. The premise is that soldiers instinctively bond into small groups, usually identified as the section or squad and usually no larger than the company, for mutual support and a

³⁵ Dupuy, 221.

³⁶ Shils and Janowitz, 345-6.

³⁷ Madej, 233-4.

sense of belonging. A primary group's existence is not a negative or a positive influence on military effectiveness, but the group can positively or negatively effect military effectiveness through its actions or inactions.³⁹

The German method of force generation was a key component to the successful development of positive primary group cohesion. Recruitment, training, and manpower policy was central to the overall German concept of cohesion. The Army divided Germany into Military Districts (*Wehrkreis*) for administrative purposes. Each Military District was the peacetime home to a Corps and its component Infantry Divisions. During wartime, the Corps commander turned over responsibility of the Military District to his deputy. The combat formations went with the Field Army, and the training and replacement units stayed behind in the Replacement Army.

This method, in addition to the cultural advantages already discussed, allowed for much tighter group cohesion. The sociological lens also identifies macro trends among social groups. It does not reliably predict the behavior of such groups, nor does it necessarily provide the specific causality to specified behaviors.

For example, the decision in the political sphere by Von Seeckt to depoliticize the army had both positive and negative influences on the German army's' military effectiveness. At the tactical and operational levels, the removal of political aspirations assisted in the return of stability and security to a nation and it's military on the verge of chaos. The intent to prevent the Army from participating in a Civil War was an effective use of political policy for Von Seeckt. Unfortunately, at the strategic and higher levels

³⁸ Rosen, 22.

³⁹ Anthony Kellett, *Combat Motivation: The Behavior of Soldiers in Battle*, (Boston, MA: Nijhoff Publishing, 1982), 320.

the lack of political exchanges ultimate effect was to remove the army from the political arena thereby setting (or more specifically, clearing) the stage for the National Socialists eventual grab for political power.

Cultural impacts likewise exerted both negative and positive influences upon military effectiveness. The General Staffs cultural bias to problem solving based on the core problem led to the creation of doctrine geared towards tactical and operational success while ignoring higher strategic and political problems. “A German officer, confronted by some task, would ask what is the core problem? An American one, trained in the engineering approach to war, would inquire: what are the problems component parts?”⁴⁰ A well trained and highly educated German officer could solve most tactical problems with very high levels of effectiveness, and yet still lose the war.

It appears that the cultural esteem, combined with the historic position as the defender of society, led to strong cohesion inside the military. This tendency was reinforced by the manpower policies adopted for the later army just prior to and during the Second World War. Cohesion is the most difficult of the sociological factors to adequately quantify. At the tactical level, the demonstrated high levels of unit cohesion were a necessary but insufficient element in the social makeup of small units.

The specific sociological lenses applied do not answer the whole question of military effectiveness. Although, they do provide general trends, courses that flow through the system causing increases in effectiveness in some areas and decreases in others. Ultimately, the sociological lens alone cannot define military effectiveness.

⁴⁰ Van Creveld, 189.

CHAPTER 3.

MILITARY EFFECTIVENESS: THE ORGANIZATIONAL LENS.

From the organizational perspective, provisions of the Treaty of Versailles severely hamstrung the German military during the interwar period. The German army was limited in size to 100,000 men. Enlisted soldiers served for twelve years and officers for twenty-five years. Forbidden to the new force was possession of certain types of war material, specifically tanks, submarines, and airplanes. In addition to the limitations of total force size, the Treaty of Versailles prescribed detailed organization and force structure.⁴¹

The Treaty of Versailles was not the first time Germany had been forced by another power to limit the size of its armed forces. After their defeat in 1806, Napoleonic France imposed a limit on the Prussian army's size. The intention was to keep Prussia from ever possessing the military might to threaten France again. The Prussian army was limited to 42,000 men. Gerhard von Scharnhorst, a Prussian General, led Prussia's efforts to evade the force restrictions. Rather than having the men stay in the army for the prescribed ten years of enlistment, Scharnhorst had many retire each year who were replaced with new enlistees. The new soldiers underwent training and eventual early retirement to be replaced by new soldiers. The retired soldiers became a shadow reserve force, available to Prussia upon mobilization.⁴² Scharnhorst is also credited, along with August von Gneisenau, with the creation of the modern Prussian staff system, another organizational factor believed to be behind the relatively high level of German military

⁴¹ Theodore Ropp, *War In The Modern World* (New York, NY: Collier Books, 1962), 275-6.

⁴² David D. Chandler, *The Campaigns of Napoleon* (New York, NY: Scribner, 1966), 872-3.

effectiveness.⁴³ The Prussian staff system is the direct forerunner to the system used by the Imperial German Army during the Great War.

In addition to evading treaty restrictions, several senior officers also conducted a reformation of the army as a whole during the first decades of the nineteenth century. These reforms consisted of several bold ideas and when combined, led to the reemergence of the Prussian Army. The first was the removal of the requirement to be a member of the Junkers class as a prerequisite to join the officer corps. In addition, the reforms tied promotion to professional examination scores and not one's lineage. The Napoleonic idea of promotion based on merit. Additionally, the Prussians made their first attempt at combined arms units. These first units were only Brigade sized organizations but they contained infantry, cavalry, and artillery. The Army also established institutions of higher learning for the officer corps to develop their professional knowledge. Tied into this was the previously mentioned Prussian General Staff system.

At the top, the Prussian General Staff had a Chief of Staff assigned to every field commander. The Chief of Staff was a product of the advanced schooling developed out of the reforms. His was the intellectual advice, steering the commander toward the correct battlefield decisions.⁴⁴ This idea of adapting to the current situation and applying intellectual research to past problems assisted in the development of an effective officer corps. Sitting down and evaluating previous battlefield experiences served, in the Prussian Great General Staff tradition, two purposes. The first is the practical answer to

⁴³ Ibid., 367.

⁴⁴ Robert M. Citino, *The German Way of War: From the Thirty Years' War to the Third Reich* (Lawrence, KS: University Press of Kansas, 2005), 129-131.

the specific tactical problems. Second, but in no way of lesser importance, was the education of the officers involved in the assessment. A rigorous assessment of historic battles develops in officers not what to think, but rather how to think.

All armies in the interwar period wrestled with how to correctly identify and incorporate lessons from the Great War into their force structure, doctrine, and culture. This is a useful and required first step, but does not go far enough in the educational aspects of officership. However, identifying and addressing the lessons of previous conflicts is required.

One critical problem to emerge from the Great War was how to return both tactical and operational mobility to the battlefield. All armies, to a lesser or greater extent, saw the technological leap to mechanization as a possible solution to the mobility issue. Full mechanization was the method to restore mobility across the killing zone of what was no-man's land.

The interrelationship between mass, firepower, and mobility in the emerging technologies was both the source and the possible solution to the problem of mobility on the battlefield. Technological improvements in firepower had developed into a situation where attacking forces either had to disperse to mitigate the effects of modern fire or mass to overcome it in one big push.

The French started the Great War with the idea that mass was the key, with Grandmaison as the leader of this doctrinal sect. He countered the power of defensive firepower with the idea that if the rate of fire increases, then the advantage still goes to the attacker because he is able to mass more soldiers at the point of attack than the defender. He did not completely discount the effect of defensive firepower, theorizing

that the final assault on the enemies' defensive position would be bloody and costly, but still possible.⁴⁵ During the Great War, this style of assault proved costly in practice.

Dispersion appeared to hold the solution. However, the inability to maneuver reserves quickly to the decisive point limited the efficacy of dispersion. The German solution to this conundrum was to search for a way to return mobility to the tactical and operational realms. Not just mobility for the infantry or the cavalry, but all arms must be more mobile. Operational mobility would no longer be simply the rail net behind the front lines.⁴⁶

The problem of a lack of tactical and operational mobility was not just in getting troops successfully across no-man's land. Through advanced usage of artillery tactics, such as rolling or creeping barrages, infantry attacks could usually take the enemy positions at least as far as the effective range of supporting artillery. Another solution to the tactical problem of the entrenched position as practiced by the German's during the Great War was infiltration tactics.⁴⁷ Both tactical solutions could only achieve limited tactical success. The troops usually were in possession of the enemy first line trenches. Although within range of the enemy's artillery, their own artillery support was at its maximum range. In addition, friendly artillery's ability to displace forward over the regolith that was no man's land was limited. Additionally, reinforcing and sustaining the troops in the new front line was challenging. Most supplies reached front line troops through communication trenches designed to provide protection to transiting forces from

⁴⁵ Jack Snyder, *The Ideology of the Offensive: Military Decision Making and the Disasters of 1914* (Ithaca, NY: Cornell University Press, 1984), 90-2.

⁴⁶ T. N. Dupuy, *A Genius For War: The German Army And General Staff, 1807-1945* (Falls Church, VA: NOVA Publications, 1984), 213-4.

hostile artillery fire. No such protected avenues of approach existed to the enemy trenches. In the absence of any other information than an assault was underway, the defenders artillery would fire into no-man's land, sweeping it with lethal fires. If the attacking commander possessed the means, in numbers of troops and artillery, he could force the first line. From here two divergent solutions developed. One was the search for an exploitation, the other is the idea of simply biting and holding on to what could be seized in one leap forward of the infantry on foot.

The next challenge then became linking tactical success to more operationally significant endeavors. Based on increased mechanization of the armed forces, the technical solution displayed the most promise, but how and in what form?

Many possible solutions existed to the mechanization problem. The British seemed to lean toward the all heavy tank division designed for pure exploitation. The French hedged, designing two separate divisional structures. One for the light cavalry functions of screening and reconnaissance and another for the heavy cavalry functions such as shock action. Nevertheless, the light division was too light and the heavy division was too slow.⁴⁸

The German solution to the mobility/mechanization problem was the panzer division. The key difference between the panzer division and the armored formations developed by the British and French was that the panzer division was a balanced combined arms team. Combining all arms into one unit was not necessarily a new idea. As previously discussed, the Prussians experimented with mixed Brigades of cavalry,

⁴⁷ Timothy T. Lupfer, "The Dynamics of Doctrine: Changes in German Tactical Doctrine during the First World War," *Leavenworth Papers* no. 4 (Fort Leavenworth, KS: US Army Command and General Staff College, 1981), 42.

infantry, and artillery during the early part of the nineteenth century. What made the panzer division unique was that all arms including the supporting arms possessed the same level of mobility. An additional change was the technological maturation of the radio. Improvements in wireless communications meant that commanders could reliably send and receive information to and from units separated in time and space to an extent previously unfathomable. This force became the perfect instrument for tactical as well as operational objectives.⁴⁹ Next, we return to the concept of methodical evaluation of experience.

In late 1919, Von Seeckt set out to capture all of the problems and lessons from the Great War experience with the very practical purpose of updating army doctrine. He wrote “It is absolutely necessary to put the experience of the war in a broad light and collect this experience while the impressions won on the battlefield are still fresh and a major proportion of the experienced officers are still in leading positions.”⁵⁰ Other nation’s armies conducted similar studies, but none with the freedom or academic rigor of the German effort.⁵¹

A key element to the organizational approach to warfare was the development of updated doctrine. For the German Army that task fell to Ludwig Beck. He had access to the French tactical doctrines published after the Great War, as well as all the staff studies commissioned by Von Seeckt to capture the lessons from that great defeat. Interestingly, the product did not contain scripted answers to tactical problems. Instead, Beck

⁴⁸ Citino, *The German Way of War*, 253.

⁴⁹ Ibid., 254.

⁵⁰ James S. Corum, *The Roots of Blitzkrieg: Hans Von Seeckt and German Military Reform* (Lawrence, KS: University Press of Kansas, 1992), 37.

⁵¹ See John J. Pershing and Hunter Liggett, *Report of the First Army American Expeditionary Forces* (Fort Leavenworth, KS: The General Service Schools Press, 1923) for an illustrative example.

“...maintained that it was more important for an officer to learn how to think than to memorize textbook tactical solutions.”⁵²

The result of von Seeckt’s reevaluation of the Great War was the development of solutions to the tactical problems that armies faced in the previous war. From this basis, the German army wrote magnificent doctrine. It laid the plans for training and equipping an army that in the future could succeed at the tactical and even at the operational levels of war.

Still missing from the organizational analysis of the German army was the strategic and political levels of war. The information was available to the German army, yet they chose to ignore it. Delbruck had written, in reference to the 1918 Ludendorff offensive, that “[T]he great strategical offensive should have been accompanied and reinforced by a similar political offensive...”⁵³ This linkage of all levels of war is a key point of failure when evaluating military effectiveness.

Another area in which Germany evaded the constraints of the Treaty of Versailles was in the exact composition of the army. The treaty stipulated Germany be allowed an army of 100,000 of which only 4,000 would be officers.⁵⁴ This did not specify the exact number of noncommissioned officers authorized in the new German army. At one point, there were 40,000 noncommissioned officers in the 100,000-man army. Additionally, Von Seeckt mandated that each individual infantry company maintain the lineage and

⁵² S.J. Lewis, *Forgotten legions: German Army Infantry Policy 1918-1941* (New York, NY: Praeger, 1985), 33-4.

⁵³ Gordon A. Craig, “Delbruck: The Military Historian,” in *Makers of Modern Strategy: from Machiavelli to the Nuclear Age*, ed. Peter Paret (Princeton, NJ: Princeton University Press, 1986), 349.

⁵⁴ Lewis, 6.

heraldry for one of the former regiments.⁵⁵ This type of force structure severed a dual role in Von Seeckt's plan for the army. First, it formed the nucleus of a much larger army inherently able to expand with an influx of new recruits. On the other hand, it could provide the instructors from its overlarge cadre of noncommissioned officers for recruit training in new formations. Finally, because it was a small, highly trained force, it could assume the role of an elite striking force.⁵⁶

As directed by the victorious allies, the German Army was reduced to its treaty specified size and composition by 1 January 1921. It was with this force structure the army would defend Germany until the 1935 rearmament.⁵⁷

The restrictions of the Treaty of Versailles forced Von Seeckt to develop tactics, doctrine, and organizations designed to fight in a highly aggressive and offensive manner.⁵⁸ He could not rely on new fixed fortifications because treaty restrictions prohibited Germany from building fixed fortifications. Even if those clauses were avoided, the small size of the army precluded reliance on fixed defenses. A 100,000-man army simply did not possess the mass to enable fixed border defenses along a frontier the size then held by Germany. Therefore, Von Seeckt attempted to substitute quality and mobility for mass.⁵⁹ The Treaty of Versailles explicitly limited fortifications on Germany's eastern and southern borders to the conditions that existed on 10 January

⁵⁵ Kevin W. Farrell, "Culture of Confidence: The Tactical Excellence of the German Army of the Second World War," in *Leadership: The Warrior's Art*, ed. Christopher Kolenda (Carlisle, PA: The Army War College Foundation Press, 2001), 189.

⁵⁶ Craig, *The Politics of the Prussian Army*, 397-8.

⁵⁷ Robert M. Citino, *The Evolution of Blitzkrieg Tactics: Germany Defends Itself Against Poland, 1918-1933* (Westport, CT: Greenwood Press, 1987), 15.

⁵⁸ *Ibid.*, 41.

⁵⁹ Craig, *The Politics of the Prussian Army*, 393.

1920.⁶⁰ Forced by the political and strategic context of his day, von Seeckt adopted a defensive strategy for Germany. Thus, he chose an offensive oriented method to accomplish this task, reasoning that Germany could not survive as a nation if it allowed an enemy to successfully invade. Von Seeckt believed that what he called strategic mobility won wars by the destruction of the enemy army, not a defensive strategy.⁶¹

Von Seeckts wartime experience shaped his view of modern war. He felt that mass conscripted armies led to a decrease in military effectiveness and ultimately to a reliance on positional warfare. This occurred because the great rabble of half-trained civilians did not possess either the discipline or the mobility to engage in decisive warfare based on maneuver.⁶²

The small size of the army and the economic conditions of Germany in general, led to a very high quality of recruit. Von Seeckt raised the already stringent German standards for non-commissioned officers (NCO's) even higher than previously maintained by the old Imperial Army. One of Von Seeckt's goals was the creation of a Leaders Army. Training of NCO's and soldiers with further leadership potential was very high. The high percentage of very competent NCO's, juxtaposed against the absolute limits on the number of active duty officers, meant that the German Army had to use NCO's in positions other armies would have placed commissioned officers.⁶³

Von Seeckt never completely achieved his goal of an apolitical army. He had to deal with certain senior officers who supported the Kapp Putsch, and again Hitler's 1923

⁶⁰ Citino, *The Evolution of Blitzkrieg Tactics*, 61.

⁶¹ Craig, *The Politics of the Prussian Army*, 397.

⁶² Citino, *The Evolution of Blitzkrieg Tactics*, 71.

⁶³ Corum, 47-8.

Putsch included some junior officers.⁶⁴ He did succeed in ensuring that the great majority of officers were outwardly apolitical.

Nevertheless, he did not stifle dissent with respect to doctrine. Several different schools of thought developed in the Army. Von Seeckt supported a doctrine of maneuver warfare. Small, offensive, mobile, aimed at the enemy's army with the mission of encircling and destroying.

Other schools of thought included the defensive school. The concepts here were very similar to the French, in that the power of the defense was so absolute the proper way to wage war was on the defensive, thereby allowing one's opponents to bleed themselves white.⁶⁵ The only type of attack that could succeed was a methodical one, with preplanned and coordinated massed artillery. For example, one typical tactical scenario for which both the French and the German army theorized was the meeting engagement. The German solution was all about individual initiative and adapting to the lay of the land as well as the opponent. The French solution was to fall back, prepare a deliberate assault with supporting artillery and only then attack.

With Germany falling behind in her reparations payments, and the French economy also suffering from the after-effects of the Great War, the French Army invaded and occupied the Ruhr region as a bargaining chip. Von Seeckt immediately came out against armed resistance to this attack. The Germany economy after the Great War was in tatters, even worse than the rest of the world. Von Seeckt's line of reasoning was that resistance would lead to war with France. The current deployment scheme in place deployed half the army defensively against Poland. Von Seeckt was fully aware that

⁶⁴ Ibid., 54.

Germany did not yet possess the means to engage in such a conflict with France and have any hope of achieving the desired end state.⁶⁶

In a similar political and strategic context as Germany, the Soviet Union of the 1920's was isolated on the world stage. It faced Poland as its primary threat, after internal security. The same statement is true for Germany. Additionally, the Soviet Union was limited in its ability to design and manufacture mechanized vehicles by three fundamental problems. Their economy was destroyed, they still lagged behind the west with respect to industrial development, and they did not have the technological expertise to pull themselves out of these problems.⁶⁷

The German army required a location to test their mechanized vehicles away from the oversight of the allied commissions tasked with preventing their acquisition of banned weapons. The premise was that tank technology in the Great War was not yet mature, based on the mechanical unreliability of the tanks used in combat. Rather than technology slowly leveling off after the war, it appeared that it was continuing to grow rapidly. Therefore, the Germans desired three prototypes and a secure location with which to test the vehicles themselves in addition to the basic tactics and doctrine for mechanized warfare. Three German firms were contracted to each produce one large tractor.⁶⁸

The key to the technological recovery of the German army was the continuation of research in all areas not the stockpiling of various proscribed weapons. The idea was that because the pace of technology continued to grow, it would be foolish to waste

⁶⁵ Ibid., 55-7.

⁶⁶ Goerlitz, 233-4.

scarce resources in hiding stockpiles of weapons that would be obsolete before Germany was prepared to return on the world stage as a great power. Germany continued to conduct research in all areas and prepare the manpower and structure for a large army. Germany's intent was when she finally resumed her great power status to shift production to outfit the new army in the most up to date weapons.⁶⁹

Von Seeckt was successful in developing an organization that fulfilled three major concepts. First, it was capable of deploying as a small elite strike force. However, it was also able to be used as the nucleus of a larger ground force if required. Second, his emphasis on quality of recruits and concomitant of training and education meant that the Reichswehr was an extremely well trained land force. Finally, the technical adaptation and experimentation ensured that the force was willing and able to assimilate, as well as correctly utilize any and all technological advances achieved in the field of arms.⁷⁰

An additional challenge to evaluating the interwar years is the lack of actual combat experience, versus the extensive field exercises and training evolutions conducted by the interwar German Army. If one accepts the premise that to evaluate proposed doctrine and organizations, then the first time that Von Seeckts theories and structures were truly tested at the tactical and operational levels was not until the invasion of Poland in 1939.⁷¹

⁶⁷ Mary R. Habeck, *Storm of Steel: The Development of Armor Doctrine in Germany and the Soviet Union, 1919-1939* (Ithaca, NY: Cornell University Press, 2003), 45.

⁶⁸ Ibid., 84. The three firms were Henschel, Rheinmetal, and Krupp. None were successful.

⁶⁹ Ropp, 295.

⁷⁰ COL Rainer Waelde "The Experience of the Japanese-Chinese War and of the Spanish Civil War for the Development of the German 'Blitzkrieg Doctrine' and its Lessons for the Transformation Process" (SAMS monograph, US Army Command and General Staff College, 2003), 18.

⁷¹ Habeck, 247.

The campaign in Poland, executed well after Von Seeckts forced retirement, went exactly according to one of his operational plans drafted in 1920.⁷² The tactical combat developed fairly close to the German theories, with minor problems in execution blamed on the rapid expansion of the force. The biggest lessons from this conflict involved the recommended increasing the amount of motorization and mechanization amongst the infantry units not organic to the Panzer divisions. These recommendations were not accepted because of the realization of the limitations of resources in Germany.⁷³ Overall, the German Army was tactically combat effective in that they accomplished the defeat and occupation of Poland. Because the forces used in the invasion of Poland were limited to the older first wave divisions, one may infer that the German Army was also tactically combat effective in the early 1920's, when these forces were first recruited and trained.

At the strategic and political levels of action, a lack of actual combat encounters is not so problematic in evaluating military effectiveness. In the earliest years of the interwar period, the possibility of a civil war in Germany was very high. Von Seeckt was successful in building the army into the nucleus of a larger force without getting directly involved in a civil war. When directly confronted with a request from the government to commit soldiers against the putsch in Berlin, Von Seeckt replied with "German soldiers don't shoot at each other."⁷⁴ With regard to this period, the German army can be assessed as strategically and politically effective. They were building up an army to regain Germany's position as a Great Power. They successfully deterred Polish

⁷² Citino, *The Evolution of Blitzkrieg Tactics*, 72.

⁷³ Lewis, 94.

⁷⁴ Goerlitz, 220-1.

aggression during the 1920's. When threatened by France, Von Seeckt assessed that the German army did not then possess the relative combat power to prevent France from occupying the Ruhr, nor would insurgency achieve the political aims of the state. Rather than fail, Von Seeckt advised that the French be allowed to occupy without being molested militarily. This proved to be the correct path.

To evaluate strategic military effectiveness one must look at three elements. The first is what nations are hypothesized as potential enemies. This frames the security problem for the military. Secondly, how are resources expended against the hypothesized threat? Finally how successfully are assessments and assimilation of lessons from the most recent conflicts conducted by the armed force.⁷⁵

For Germany in the 1920's, the true enemy was and remained France. Von Seeckt realized that the Treaty of Versailles limitations meant that the German army was unable to match the French army in the field for the near future. This did not preclude, however, planning for the eventual resurgence of the German army later, but rather it was a prudent and practical evaluation of the current political and military context of the time.

The enemy that Germany did face was Poland. As already mentioned in 1939 the German army did attack and conquer Poland by executing a plan very similar to one devised by Von Seeckt in 1920. However, the army of 1920 was neither large enough nor mobile enough to execute such an audacious plan. Even with the Treaty of Versailles restrictions, the German army developed a deployment plan for its limited forces that ensured no part of Germany was vulnerable to a Polish coup de main. Operationally and

⁷⁵ Alvin D. Coox, "Military Effectiveness of Armed Forces in the Interwar Period, 1919-1941: A Review." in *Military Effectiveness Volume II: The Interwar Period*, ed. Allan R. Millett and Williamson Murray (Boston, MA: Allen & Unwin, 1990), 262.

tactically, the deployment could have been disastrous. The only professional force that Germany possessed was vulnerable to destruction in detail by the numerically superior Polish forces. Nevertheless, the deployment was politically successful on two levels. First, it reassured locals in the border provinces that the German nation was defending them, keeping war scares out of local politics. Secondly, it was an accurate assessment of the General Staff that Poland would not risk a general war but rather only conduct small territorial land grabs appears to have been on the mark. This dispersion of German forces, rather than concentration, successfully deterred Poland from taking any more territory at the expense of Germany. Viewed through tactical or operational lenses, the deployment is ineffective and inefficient. Looked at through strategic and political lenses and it is a very necessary and logical risk that was eventually born out as correct.⁷⁶

Another example of the effectiveness of the German army during the interwar period was in its extensive exercise program. Throughout the 1920's, the German army carried out several field exercises that tested the theories of war that the German army was working out. Much use was made of armored vehicles, motor transport, and cooperation between mobile forces and air forces. This occurred even though the German army was forbidden by the Treaty of Versailles from possessing armored vehicles or aircraft.⁷⁷ This ability to adapt and see the future of war, while experimenting with cardboard tanks, clearly demonstrated that the German army had the right idea, and would follow it as resources and political context allowed.

The organizational approach to evaluating military effectiveness suffers, like the sociological approach, from multiple answers to the same answer. The history of the

⁷⁶ Citino, *The Evolution of Blitzkrieg Tactics*, 52-4.

Prussian army continued to propel its descendents upon the path of decisive battle. The idea that tactical excellence would lead to strategic victory continued to push the army in its efforts to rebuild after the Great War.

The organizational view appears to give a better appreciation for the military effectiveness of large organizations, but only to a point. The systematic evaluation conducted of the experiences of the Great War was rigorous and effective in answering the questions posed of the data. The German army developed solutions to the major problems facing the tactical and operational effectiveness of land forces in the early twentieth century. However, the neglect of strategic and political issues in the evaluation of the lessons of the Great War set the conditions for the subsequent total failure of Germany in the Second World War.

CHAPTER 4.

MILITARY EFFECTIVENESS: A WAY FORWARD.

Neither organizational theory nor sociology in isolation can fairly evaluate military effectiveness. What is required is a synthesis of both disciplines. Even this proposed synthesis does not completely answer the question of military effectiveness. It does advance the discussion to a point closer to the truth. In addition, a clearer understanding of the interrelationship of all the levels of warfare from the tactical and operational up through the strategic and political levels results from a synthesis of these two approaches to military effectiveness. The first step is to identify how the two theories are complimentary, where they diverge, and any overlap or seams between them.

The sociological theories of military effectiveness place great stock in evaluating the political process of the nation. Does the military, in both its elite section of higher

⁷⁷ Ibid., 72.

leadership and its more plebian general mass of enlisted soldiery, have a vested stake in its nation's political process? A complete answer to this question will quickly draw the researcher back on the organizational history of the military and the state in question. German Historian Hans Delbrück noted that "[e]very people is the child of its history, its past, and can no more break away from it than a man can separate himself from his youth."⁷⁸ The cultural concept in Germany of an orderly and safe society is a direct outgrowth of the history of the Prussian state⁷⁹. Moreover, the history of the Prussian state is a history of its army.

Organizational theory often questions the efficacy of doctrine. A military's doctrine derives not only from how they fight but what resources they allocate and to what branches or arms of the services. But the development of doctrine also has a cultural component that cannot be neglected. To cite one example of this difference, Martin van Creveld noted that when confronted with a tactical problem a German officer's first question is "what is the core problem", whereas an American officer's first question is "what are the problem's component parts?"⁸⁰ How does the evaluated nation's military view its own doctrine? Is doctrine viewed as the book of schoolhouse solutions? Or is doctrine a living document critical in the education process of the professional officer corps? For the interwar German army, doctrine was a living document, essential for the education process but by no means prescriptive. In the broader aspects of cultural order and security, a robust analysis and critique of doctrine kept it alive and relevant.

⁷⁸ Matthew Cooper. *The German Army, 1933-1945: Its Political and Military Failure* (Lanham, MD: Scarborough House, 1978), 3.

⁷⁹ Craig, *The Politics of the Prussian Army*, 2.

Culture is not the base of cohesion. A cohesive group can develop out of a homogenous group that has the propensity to tight group cohesion like the Prussians. On the other hand, a completely heterogeneous group can develop tight group cohesion through organizational factors such as the infantry replacement policies adopted by the German army. Long service professionals who stay in the same small unit and yet receive training enabling them effectively to advance immediately one to two levels of responsibility developed into very cohesive groups. Cohesion is also not always a positive factor when viewed in military effectiveness. A very cohesive primary group may value the survival of itself and its members higher than mission accomplishment. This can lead to shirking duty, such as lax patrolling or even early surrender. Thus, cohesion is not necessarily the cause of military effectiveness at the tactical level, but its presence is an indication of potential military effectiveness.

Von Seeckt felt that three major policy errors were the source of Germany's failure to achieve victory in the Great War. Germany failed to fully exploit her potential manpower. Germany failed to provide sufficient quantity and quality of replacements in both manpower and material. Finally, Germany failed to harness successfully the economic mobilization of the entire nation.⁸¹ If we assume that Von Seeckt's assessment is correct, then from an organizational theory approach, the force that he developed should logically address these three failures. Unfortunately, his force does not solve the core of these problems because all of them are fundamental disconnects between political

⁸⁰ Van Creveld, 189.

⁸¹ General Von Seeckt, *Thoughts of a Soldier*, trans. Gilbert Waterhouse (London: Ernest Benn Limited, 1930), 52.

policy and military strategy. Von Seeckt addressed the symptoms, but not the ultimate cause of the failure of German security policy.

Von Seeckt wrote “Perhaps the principle of the levy in mass...has worked itself out. Mass becomes immobile; it cannot manoeuvre and therefore cannot win victories, it can only crush by sheer weight.”⁸² Here Von Seeckt made a virtue out of conditions outside his control. He was constrained by political policy of both his own government and the governments of the victorious allies of the Great War. Forbidden from possessing a massive reserve force along the lines that Imperial Germany possessed before the Great War, von Seeckt had to develop his small force into a highly efficient force. Later, he wrote, “The whole future of warfare appears to me to lie in the employment of mobile armies, relatively small but of high quality and rendered distinctly more effective by the addition of aircraft, and in the simultaneous mobilization of the whole defense force, be it to feed the attack or for home defense.”⁸³ Here von Seeckt is leaving open the idea of the levy in mass, but instead of as an offensive instrument, its task is primarily defensive. Alternatively, a large reserve force may be used in the offensive for consolidation after the strike force has penetrated the enemy positions. This is a return to the tactical organization of the German army toward the end of the Great War. Divisions were divided into two categories, attack and trench divisions. The attack division were giving extensive training in infiltration tactics, and definitive superiority in supply and support as well as first call on replacement manpower. Employed in static defensive positions, the trench divisions only advanced once an attack division had

⁸² Ibid., 55.

⁸³ Ibid., 62-3.

achieved a breakthrough. On the defensive, trench divisions held the line, failing back when attacked in an elastic defensive pattern⁸⁴.

Priorities for officer retention in the army after the Great War were one of von Seeckt's crucial decisions. Three different criteria were immediately available; von Seeckt could have gone with a nobility discriminator, filling the officer corps with sons of the Junkers class. Alternatively, he could have stuck with the meritocracy, those officers who had served on the Great Imperial General Staff. Or he could have stuck with successful front line officers, men who had survived life on the front line of the Great War. There were political elements pushing for each of the three options. Von Seeckt chose to retain primarily those officers with General Staff experience, relying on their superior potential in education rather than the political connections of the landed nobility or the recent relevant tactical experience of the combat officer.

From a synthesis of the two approaches emerges a picture of the German army as effective, but with significant problems that will cause problems later. As S.J. Lewis noted, “[i]ts major strength rested in its aggressive tactical doctrine that fostered individual initiative and responsibility, an inner cohesiveness that bonded the individual soldier to his unit and his officers, and the technical expertise of the Reichswehr’s corps of professional officers. The fundamental weakness of the German Army consisted of friction between its military elite and its civilian masters.”⁸⁵ The sociological and organizational lenses both identified the doctrine, education, and cohesiveness of the army, but neglect the linkage between the political and the strategic.

⁸⁴ Lupfer, 48-9.

⁸⁵ Lewis, 61.

If the German military is viewed as effective, why did it still ultimately fail? This question leads back to a better definition of effectiveness. The synthesis of sociological and organizational theories on military effectiveness still leaves significant gaps in understanding and coverage.

The purpose of a military is the security, survivability, and maintenance of a nation's way of life. The German army in the 1920's has achieved this purpose. It brought order back to a revolutionary Germany that lay defeated in the Great War. Neither the far left nor the far right achieved control of the government. The dreaded slide into full-scale civil war never happened. Nevertheless, by the 1930s and 40's the German army allowed itself to be marginalized by the growing slide into fascism. The German army failed to achieve its ultimate aim, which was a failure at the political and strategic levels. It did usually succeed at the operational and tactical levels of war, even up to the 1940's. Unfortunately, these vary successes just led to the greater collapse when the bankruptcy of its political purpose became evident.

The complex interrelationship between the four levels of war is a key element to the ultimate failure of the German army. Victor Madej wrote that "[a]rmies are created to accomplish certain national goals: deterrence, destruction of other armies, and seizure of particular terrain. The accomplishment of these objectives should measure the military institutions effectiveness."⁸⁶ With the exception of deterrence, these goals are simply operational and tactical measures. In certain context, they could be strategic but only when implicitly linked to higher political goals. The absence of tight, direct linkages to

⁸⁶ Madej, 243.

the political and strategic levels of war is what led to the German army failing to secure its nation.

Winning or losing is not a valid criterion for military effectiveness. The security and survivability of the nation that the military serves, and the preservation of its way of life, are the true measure of success. A country can convert all its potential power into combat power and win every war it ever fights, but if the costs ultimately change the very fabric and ideals of the nation, then it has just redefined the concept of a Pyrrhic victory.

The concept of evaluating military effectiveness across all levels of warfare is vital for a valid assessment of a nation's security. The German Army during the interwar period can be evaluated on its tactical military effectiveness as good, but to what end? The tactical and operational overmatch that the German Army possessed was only effective when tied in with effective strategic plans and political goals. During the interwar period, they continued to be successful strategically and politically partially because they did not yet have the tactical and operational ability to threaten their neighbors.⁸⁷

Another seam identified between sociological and organizational theory on military effectiveness is adaptability. Both theories overlook the importance of adaptability. This oversight is because military action requires the active participation of a human enemy. The ability to adapt successfully crosses over both organizational and sociological boundaries.

⁸⁷ Jürgen E. Förster "The Dynamics of Volksgemeinschaft: The Effectiveness of the German Military Establishment in the Second World War" in *Military Effectiveness Volume III: The Second World War*, ed. Allan R. Millet and Williamson Murray (Boston: Unwin Hyman, 1988), 180-220.

While remaining grounded in classical military theory and capable of fielding forces competent and current in relevant tactical concepts, an effective military is able to learn and evolve. This ability is most remarkable during sustained combat operations, as doctrines and theories are tested in the current context against an adapting opponent. Even during times of relative peace, the ability to successfully adapt and learn is crucial to military effectiveness. If a military force slavishly follows its written doctrine to the letter every time, it will not be long before adversaries copy that doctrine and devise methods to overcome it in battle.

C. S. Forrester wrote an excellent metaphor on the ability of military forces to adapt. He had several staff officers of the British Expeditionary Corps in a meeting attempting to determine the correct way to conduct an offensive, after the recent spectacular failure of the previous one. The metaphor was of a group of savages attempting to remove a screw from a piece of wood. Their previous experience had only prepared them for nails, but for some reason that they could not fathom the force they applied to the screw failed to pull it out of the wood. The solution devolved into elaborate attempts at applying more force to pulling the screw from the wood when a more simple turning motion of a screwdriver would have solved the dilemma.⁸⁸ Such an example provides evidence that an inability to look outside a set paradigm is how a military organization can fail to adapt and ultimately be ineffective.

Another way to look at the interrelationship of the levels of warfare is to concentrate on the ends-ways-means linkages. In the political sphere, there are several aspects to military effectiveness. It is not just a question of a resource strategy. Two

major questions: what does the military want from policy and what can the military provide to further policy or the achievement of political goals.

What does society provide to the military in terms of manpower (raw material) as well as the value society attaches to its military in terms of social esteem. What does the military provide to the society it represents? The military provides society security in an otherwise insecure world. It also provides a school of the nation, taking various ethnicities and imparting a common worldview upon them. This was the role of the United States military prior to the end of the draft.

The political process of a nation is vital to an evaluation of its armed forces effectiveness. Is the policy of the nation clear and does it provide the resources required by the military to achieve those policies? Where risk is apparent, are the military elites forthright and honest in their assessments back to the politicians?

A final element to consider when evaluating military effectiveness is the context. What is the current internal situation in the state? What is the current international security situation? Do not neglect the geographic realities of the state and its potential friends and enemies. The identification of potential enemies shapes the force structure and resourcing debate.

The enemy always gets a vote. Starting with the premise that one is operating in an open, democratic society, then military capabilities will be transparent to all potential allies and opponents alike. There will be some hiding capabilities, a war reserve mode for certain weapons, or even a hiding skunk works style weapons system a la the F-117 in the 1990's. Mostly these will not constitute the bulk of any nation's war machine, nor

⁸⁸ C. S. Forester, *The General* (Charleston, SC: The Nautical & Aviation Publishing Company of

will it constitute a war winning super weapon. This leads to a simple paradox, to wit, no thinking opponent should directly challenge an adversary in an arena where that adversary possesses a military overmatch capability. Any future or current opponent will strive to develop and refine capabilities that do not directly confront an adversary in their dominate domain. The solution is not to concentrate exclusively on ones proven combat capability, or on possibly esoteric “new” faces of war based on technology and scientific breakthroughs. Rather, it is the concentration of the majority of your resources on proven forces that posses the professional training and ability to adapt as necessary to unforeseen challenges, while still fully funding research, development, and experimentation.

Context matters. A battle of annihilation is effective only if your enemy also fights in a similar manner. Alternatively, a battle of annihilation can be effective if your side has such dramatic overmatch that their forces in the field are irrelevant and your political will allows you to resort to any level of draconian enforcement of peace upon conquered peoples. The first option is the most attractive, but it leaves out the concept that any enemy will eventually adapt. The second is not readily available to the liberal democracies. France attempted this tactic during its counterinsurgency in Algeria, wining all the tactical battles and almost destroying the very fabric of French society.⁸⁹

With respect to security, what is the nature of the society? Is it fairly safe and secure behind geographic obstacles? Does the nation possess the natural resources it requires, or must it go out into the greater world to ensure its economic survival?

America, 1982), 195-6.

⁸⁹ John Shy and Thomas W. Collier “Revolutionary War” in *Makers of Modern Strategy: From Machiavelli to the Nuclear Age*, ed. Peter Paret (Princeton, NJ: Princeton University Press, 1986), 853-4.

Military interaction with the political process must consist of more than just funding requests.

In the context of interwar Germany, the context was economic and social recovery after a disastrous defeat in what was the most horrific of wars. In addition, the terms of the Treaty of Versailles were so vengeful that it left as a core component of German political culture the desire to throw off its shackles by any means available.

In addition to evaluating the social and organizational factors, there are several missing seams necessary to generate a more complete picture of overall military effectiveness. One must address the interrelationship between the four levels of war. Without this aspect, one can easily assume that the German army during the interwar period was militarily effective. But this would only be at the operational and tactical levels of war. The ability to adapt and learn is another area of key concern when evaluating military effectiveness. Here the German army does much better, but again primarily at the lower ends of the spectrum of warfare. Their consistent use of experimentation and their rigorous postmortem of the Great War gave the Germans valuable insights into modern war. But it was primarily focused on the operational level of war specifically on tactical problems to the exclusion of the strategic issues. The issue falls back on how to avoid attrition warfare, which Germany could not afford, by returning mobility to the tactical and operational battle. However, operational success not directly tied to strategic goals quickly becomes bankrupt.

This reassessment of the interwar German Army leads to some relevant observations for future military forces. What role should a military have in the policy debate at the highest levels of government? How should that debate be framed? Currently,

debates on security issues usually revolve around budgeting and funding levels for the various services. A common saying is that inside the beltway the enemy is not a foreign power but the various sister services. It is time to take the resourcing debate for the Department of Defense away from the idea of a zero-sum game. The adversary for one service is not its sister services, but the unknown enemy on the other side of the hill. It is possible for the military to build a military structure, required by the security environment as defined by public policy, which cannot be maintained with the resources available. In this situation, two possible outcomes are possible. One, the military can accept risk in certain areas by shifting resources around internally. This can lead to serious capabilities shortfalls when actually called upon to function in the field against an enemy. The other outcome is for the military elites to go back to the policy debate and fight for either more resources or a change in the policy.

The approved concept for civil-military relations in the interwar period was just one side of the reciprocal means-ends equation of national security. The military provides the civilian head of the government what he wants and provides the funding for the military to secure his desires. The military services mission is to secure the country from attack.⁹⁰

The military, in a liberal democratic society, is a relevant part of the body politic. It cannot divorce itself or its component members from their civic duty without placing undue strain on the nation and the military subset of the nation. It could even lead to the self-destruction of the very society that the military is pledged to defend.

⁹⁰ Von Seeckt, 33-5.

How much should be invested in education as opposed to training of a military force? There is still a valid venue for training, and it must continue. But the education process also requires additional resources. Every military professional must be a life long student of his or her profession. This should not be limited to memorization of current doctrine or buzzwords, but a healthy skepticism. As von Seeckt noted, “Every man of action is an artist, and he must know the material with which, in which, and against which he works before he begins his task.”⁹¹ A true professional must not only completely know and understand their own branch and service, but the capabilities and limitations of their sister services and coalition partners. Additionally, they must constantly read and research on potential enemies capabilities.

Gone are the days of the Napoleonic era where forces were trained and recruited through similar means, leading to opposing forces that were very symmetrical.⁹² The enemy will know the composition and capabilities of our forces and will strive to counter them in any fashion possible. If the counter is conventional, then that will be the method a thinking enemy will employ. However, if the counter is unconventional, then the United States military must be thinking and experimenting in order to develop an adaptive force capable of countering and defeating any threat to the nation.

What kind of force should the United States field in the future? This is constantly a relevant question. The easy answer is we still expect and require the ability to overmatch any conceivable opponent at the tactical and operational levels of warfare. This requirement remains, or we may face a decision similar to von Seeckts decision to

⁹¹ Ibid., 125.

allow the French to invade and occupy the Ruhr without opposition. Without neglecting this overmatch capability, the future force must retain an ability to innovate and adapt. Keeping or validating doctrine or force structure based on the results of a previous war is not always the correct path. The Anglo-French and American victor's of the Great War did not make any major changes to their doctrine. The impression was that their doctrine and tactics had been validated by their victory in the Great War. Innovation was limited and the fiscally stringent environment in the Western democracies meant that the victories of the Great War maintained massive stockpiles of rapidly obsolescent war material⁹³. Finally, the tactical and operational effectiveness are only worthy when matched with an equally effective strategy and national policy. The myth that the German army was effective but that Hitler sent it on missions that it did not have the resources for is instructive⁹⁴. If the military does not work with politicians to develop policy goals and strategic guidance for the safety and security of the nation then the long term results of our tactical and operational military effectiveness could easily be the modern day equivalent of Stalingrad for the German Sixth Army.

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⁹² Roger A. Beaumont and William P. Snyder, "Combat Effectiveness: Paradigms and Paradoxes", in *Combat Effectiveness: Cohesion, Stress, and the Volunteer Military*, ed. Sam C. Sarkesian (London: Sage Publications, 1980), 22.

⁹³ Coox, 262.

⁹⁴ Cooper, vii-viii.

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