



University
of Glasgow

Kjoerstad, Ola (2010) *German officer education in the interwar years*.
MPhil(R) thesis.

<http://theses.gla.ac.uk/2002/>

Copyright and moral rights for this thesis are retained by the Author

A copy can be downloaded for personal non-commercial research or
study, without prior permission or charge

This thesis cannot be reproduced or quoted extensively from without first
obtaining permission in writing from the Author

The content must not be changed in any way or sold commercially in any
format or medium without the formal permission of the Author

When referring to this work, full bibliographic details including the
author, title, awarding institution and date of the thesis must be given

German Officer Education in the Interwar Years.

*Frei im Geist, fest im Charakter!*¹

Author: Ola Kjoerstad

**Submitted for MPhil War Studies
Department of History
University of Glasgow
June 2010**

© Ola Kjoerstad 2010-06-01

¹ Minister of Defence Wilhelm Groener in a speech to the school of infantry cited in *Militär Wochenblatt*, 1930, no 25, (Berlin, E.S. Mittler und Sohn.), column 962.

Abstract

This dissertation is trying to discover some of the reasons why the Germans were so successful on the tactical level during World War II. Several factors contributed to this. The dissertation however, will limit itself to focussing on the human side of it. To be more specific it will look into which personal qualities the Germans looked for in their officers, and how these were developed, and claim that: ***In German officer development in the interwar years, the framework and environment in which the education and training took place were even more important than the content.***

To prove this the dissertation will go through several steps. Based on doctrines and the professional debate which took place in the military journal *Das Militär Wochenblatt*, the dissertation will point out which demands the Germans saw that the battlefield made on officers. These will be called 'Battlefield Demands'. The dissertation will argue that the most important 'Battlefield Demands' are; **being able to make decisions, being able to lead others, and the ability to endure the situation on the battlefield.** Based on these demands there will be a discussion of which personal qualities are needed to meet them. Having shown which personal qualities the Germans saw as imperative for coping with a battlefield situation, the argument will be enhanced by giving examples of how they trained their officers to develop those personal qualities. The discussion will argue that if the officer cannot endure the battlefield situation he will neither be capable of making decisions nor leading others. Therefore, the most important personal qualities for an officer on the tactical level are the ones that make him capable of enduring the situation he is in. These are qualities which are extremely difficult to teach and to learn through ordinary teaching and training. They are more a product of the environment than of the content. It is therefore fair to say that ***in German officer development in the interwar years, the framework and environment in which the education and training took place were even more important than the contents.***

Contents

1. Introduction	1
2. Foundation and Background	9
3. Analysis of Doctrine and Professional Debate	25
4. Conclusion	81
5. Final Remarks	83
Bibliography	84

Acknowledgements

This dissertation could not have been written without considerable help from several contributors. The Norwegian Military Academy gave me the opportunity to pursue my thoughts on Germany officer education by giving me time and funding. Without the unconditional support from the academy, this project could never have been accomplished. A special thanks to Anne Thelle and Nigel de Lee who have been helping me with improving my language. My supervisor, Professor William Mulligan at the University of Dublin must also be thanked for keeping me on track and always giving me motivating feedbacks on my work. Last, I have to thank my close family; Particularly my wife who has been extremely understanding in enduring stacks of books on German military everywhere around in our house, my two sons who are a constant source of motivation, and my father in law for renovating our basement while I was occupied with theoretical matters. All errors which have been made in this dissertation have been made by me and me alone. No one else can be blamed for them.

1. Introduction

On 10 May 1940 the Germans launched their campaign in Western Europe by attacking France through the Ardennes. They arrived on the bank of the river Meuse on the 12th and were able to cross the river on the 13th. Despite being inferior to French and British forces both in equipment and numbers, nothing seemed to stop the Germans. The French were beaten in a matter of weeks, and the British Expeditionary Force (BEF) stationed in France, was forced to retreat across the English Channel back to England. Some even argue that ‘the 1940 campaign was to all intents and purpose over in three days.’¹

In the introduction of Condell and Zabecki’s book on the *German Art of War, Truppenführung*, professor James Corum states,

*For years after the 1940 campaign the German victory was explained by Germany’s employment of masses of tanks, motorized forces and aircraft against an enemy bound to the Maginot Line and a defensive strategy. However, we now know that in terms of numbers of troops and weapons, the Wehrmacht in 1940 held few advantages. Indeed, it was often at a disadvantage against the Allied forces.*²

Taking into account the tactical principle that an attacking force should have a force ratio of 3:1, it is interesting to seek the roots of the German success.

Thesis

War and conflict have always been important tools for understanding how societies have developed. Winning wars is about winning engagements and battles. Therefore, finding the key to victory has, no doubt been the quest of every army ever since the first battle ever fought. There are several aspects to a battle which decide its outcome; equipment, technology, doctrine, and so forth. One thing is sure, no matter how military battles are analysed, one of the most important factors will always be the human beings participating in it. One may have

¹ Robert M. Citino, *The German Way of War*, (Kansas, University Press of Kansas 2005), p. 271.

² James S. Corum, Condell, Zabecki (eds), *On the German Art of War, Truppenführung*, (Colorado, Lynne Rienner Publishers, 2001), p. ix.

the best equipment and a perfect doctrine, but these are of no value if the people set to handle the equipment and work within the framework of the doctrine do not cope.

Therefore, human beings have always, and will for a long time to come, play an important role in battles. One fundamental question thus remains: how do you teach people how to succeed on the battlefield? Which personal qualities are needed? This dissertation will, concentrating on German experiences, focus on just this question

The idea of writing a dissertation on personal qualities in tactics derives from a general interest in German military tradition and culture. After having read Walter Görlitz's book *History of the German General Staff*,³ I became particularly interested in how the Germans selected and trained their officers. Since Görlitz's book deals primarily with the education and training of officers on a higher level, I also became interested in the German thinking on the education and training of lower echelon officers. The aim of this project was therefore to seek the answer to the following question: ***Which personal qualities did the Germans look for in their officers on the tactical level when the German Army was rebuilt after WW I and how were they developed?*** After reading different kinds of literature, and *Das Militär Wochenblatt* in particular, a thesis slowly developed. The Germans did not have a wide variety of ingenious methods to train their officers. What they did was to develop a professional culture where everything they did in training and education was characterized by high standards and quality. The reason for this was simple. For the Germans, the most important ability an officer needed on the battlefield was to endure the situation he was in. This ability could not be learned through lectures and exercises alone. It was rather a result of the environment and the values which characterized this environment. ***Therefore, in German officer development in the interwar years, the framework and environment in which the education and training took place were even more important than the content.***

In his book *Image and Reality The Making of the German Officer, 1921-1933*, David Spires discusses which selection criteria were used to recruit new officers for the German Officer Corps. He claims that the future German officers were selected based on their ability and their character.⁴ Their abilities were first of all judged by their general education, whilst character was more difficult to define. To assure proper intellectual abilities, General von Seeckt, chief

³ Walter Goerlitz (Brian Battershaw, translator) *History of the German General Staff, 1657-1945* (New York, Praeger Publishers, 1954).

⁴ David N. Spires, *Image and Reality: The Making of the German Officer, 1921-1933* (Westport, Conn, Greenwood Press, 1984), p. 2.

of the *Truppenamt* from 1919 to 1920 and then head of the *Reichswehr* until 1926, wanted candidates that had the *Abitur* (A diploma from a 9 class secondary school). When it came to selecting the right character, von Seeckt was vaguer as to explaining what that actually meant. Spires is very critical of this criterion. He claims that ‘character, rather than serving a meaningful educational function, came to mean simply discipline and obedience -- to Seeckt’.⁵ He also says that ‘character was clearly more important than education for, in reality, the basic objective was to preserve the officer corps’ homogeneity’.⁶ Also in his conclusion, Spires clearly shows his scepticism to this criterion:

But when von Seeckt’s comments are analysed, his meaning becomes quite clear. It included the elements of discipline, obedience and loyalty. These, of course, were the traditional virtues of the Prussian officer and gentleman, and these were the attitudes that Seeckt wanted to instill in his officer corps. ...His interpretation of character, nevertheless, came to haunt the officer corps because the overriding emphasis on obedience and duty did not encourage individual initiative and independent thinking.⁷

These are all well supported conclusions. However, disregarding character as an important human factor on the battlefield just because it does not encourage individual initiative and independent thinking, is too easy. Especially since the term is frequently used in military literature stretching from Clausewitz’s *On War* up till today’s more modern works. It is also understandable that von Seeckt wanted obedience in this critical period in German history. Having a loyal Army was probably more needed than ever in a period characterized by a constant fear of civil war and revolts threatening to break out all over Germany, and the failures of discipline in late summer – autumn 1918. Loyalty and obedience are unquestionably part of an officer’s character, but they are not the only words that explain the term. One of the intentions of this dissertation is therefore also to shed some new light on the term and its relevance on the battlefield.

Methodology

This dissertation will be organized in four chapters. After an introduction and a presentation of the thesis in chapter one, chapter two will set the framework for the dissertation. This will be done first by outlining and discussing other academic works (historiography) on the

⁵ Ibid., p. 29.

⁶ Ibid., p. 8.

⁷ Ibid., p. 129.

subject. Here I will argue why this approach to the subject is interesting. To further create a foundation for the analysis, the scope of research will be outlined. Due to the contents of the discussion that is presented, it is necessary to use both the historiography and scope when creating a foundation for further discussion and analysis.

Throughout the dissertation the word ‘tactics’ will be used extensively. This is a term which the reader needs to be familiar with. The second chapter will therefore also include a discussion and explanation of tactics and what it represents in this dissertation. The last part of chapter two will place the discussion in the right historical setting. This will be done by giving a short summary of the situation in Germany after WW I and what the Germans experienced and learned from it. All this is done mainly from a military point of view.

To prove the thesis and show that environment was even more important than contents, it will be necessary to go through several steps. This will be done in chapter three which is the main chapter. The chapter is a broader analysis of what the Germans viewed as crucial qualities for an officer in a battlefield situation. The analysis is comprised of three parts. First there will be an analysis of doctrines and the professional debate in Germany in the period. Based on this, the demands the Germans saw that the battlefield made on officers, will be pointed out. These will be called ‘Battlefield Demands’. The dissertation will show that ‘Battlefield Demands’ come from two different spheres: the physical and the psychological spheres. By the physical sphere this dissertation understands everything an officer has to do on a battlefield and which can be learned and practiced through ordinary education and exercises. It involves directing indirect fire, leading troops, shooting, battle drills and so forth. In addition to this comes the ability to handle lack of sleep, food, information and time. The level of proficiency is decided by the amount of training and practice one receives. By the psychological sphere this dissertation understands the effects of the battlefield, or the effects the battlefield environment has on soldiers and officers. These are first of all effects of fear and uncertainty. To ensure that officers are able to handle these effects is more difficult and is not necessarily a product of ordinary education and training. This does not mean that it is impossible to train officers to handle battlefield situations. Yet one cannot hold lectures in coping with the horrors of the battlefield because these conditions cannot be simulated during peace time. Therefore, they have to be developed indirectly. The dissertation will argue, by using doctrines and articles, that the two most important physical ‘Battlefield Demands’ are **being able to make decisions** and **being able to lead others**. Using the same sources it will then show that the battlefield also makes psychological demands. Despite having the qualities needed for decision making

and troop leading, the officer is highly dependent on a third ability; **the ability to endure the situation on the battlefield**, or as said earlier, handle the effects of the battlefield. Based on these demands there will be a discussion of which personal qualities are needed to meet them. In other words, which qualities are needed to handle the physical demands and which qualities are needed to handle the psychological demands. Through these steps the dissertation will show that if the officer cannot endure the battlefield situation he will neither be capable of making decisions nor leading others. Therefore, the most important personal qualities for an officer on the tactical level are the ones that make him capable of enduring the situation he is in. The dissertation's thesis is that these qualities are results of the environment he is developed in and not necessarily by the contents of it.

The inculcation of these qualities and values is difficult to trace, owing to the loss of many documents. Moreover the process of the inculcation of these values - in training exercises, in discussions around the mess table - was such that there are few written accounts that lend themselves to easy analysis. Nonetheless it is possible to come to some conclusions based on our knowledge of the structure and training methods of the German army. An Army or a nation's armed forces are normally a huge and bureaucratic organisation. New ideas and new values are therefore by the nature of the organisation difficult to introduce. The German Army after WW I may have been in a slightly different situation which made it perhaps a little easier. Germany had been defeated. The defeat meant that something had to be wrong with the way they had fought the last war. Even though several claimed that the German Army had not been defeated in the field, hence 'the stab in the back' theory, it was more than obvious to everyone that Germany had suffered a massive defeat. In 1918 they no longer possessed the capacity to continue the war.

It is fair to argue that the transformation which led to the doctrine of 1933 started during WW I with the development of Stormtroop Tactics and combined arms operations. The way the Germans were able to implement these new ideas already showed an impressive ability to adapt to a changing battlefield environment. However, changing or improving tactics and procedures as a response to battlefield demands during war time and changing values and implementing new ideas during peace time are two different matters. On the battlefield the survival instinct is extremely strong. You do whatever you have to in order to survive. Although an army is often a conservative organisation, the survival instinct forces you to adapt. This also happened in the British army during WW I when they changed from the

traditional way of attacking on line to a pattern more similar to German Stormtroop tactics.⁸ In peace time it is more difficult to implement new ideas and values. The first problem is the lack of the need for survival. Although it can be argued that the German Army fought for its survival in the interwar years threatened by social unrest and communist subversion, it can not be compared to the need for survival on the battlefield. Therefore, to fully understand how the Germans were able to inculcate the values in the doctrines onto the officer corps one needs to bear in mind some important aspects of the situation in interwar Germany.

The Versailles treaty compelled Germany to have an Army consisting of only 100 000 soldiers and of them only 4000 officers. Compared to other nations' armies and officer corps at that time, this was an extremely small army not even capable of guarding the borders and taking care of internal security. An officer corps of only 4000 officers may seem too small to be able to build a strong army upon. However, it can be claimed that something positive came out of this for the German army. After the war the social problems and the unemployment rate grew every week. This made serving in the Armed forces popular despite the experiences of the war. In addition to this, due to the Treaty, there was a huge surplus of officers in the German population. These two factors gave the German Army the opportunity to choose only the officers they wanted. Not only could they choose the best officers in terms of military skills, they had also the possibility to choose officers with the 'right' set of values. It may seem difficult to choose people in accordance with their values. However, as mentioned before their social background and level of education (*Abitur*) were used to decide this. In this way the Germans were able to build an officer corps which more or less had the same values. They were able to create a homogenous officer corps. Having a homogenous officer corps also makes it easier to implement new ideas and values than in a less homogenous corps. This thoroughly selected officer corps later became the core of the army when Germany started to increase the size of the armed forces. Another factor which supports this idea of homogeneity as an important factor to inculcate values is the way they organized and built up their units. Officers tended to stay in the same regions. For instance, officers from Bavaria served almost exclusively in Bavarian regiments. This reinforced the homogeneity of the corps even more. One can argue that focusing to much on homogeneity causes inbreeding. That may be, but as a starting point for implementing and inculcating new values and common ideas it is perfect.

⁸ Andrew Wiest, 'The Birth of Modern Land Warfare: The Western Front 1914-1918', *100 Years of Conflict 1900-2000*, Simon Trew and Gary Sheffield, (eds), (Sparkford, J.H. Haynes & Co. Ltd, 2000) pp. 21-44.

Another way to inculcate written doctrinal statements was through a lively and ongoing debate on important military issues. In Germany in the interwar years (and prior to this) important military issues were discussed and debated actively in different kinds of military periodicals. Examples of this were *Wissen und Wehr*, *Deutsche Wehr* and the ones which have been studied in this dissertation *Das Militär Wochenblatt*. These periodicals were distributed to all garrisons throughout Germany. It was expected that officers and soldiers would read them and also contribute to them. Through debates like this the General Staff had an important channel of distribution to the officers in order to form them.

Last but not least were the many exercises which were held throughout the year. Despite restrictions in numbers and military equipment the Germans showed an impressive ability to improvise. Good examples of this are the way they built dummy tanks to simulate tank- and mechanized infantry battles. These exercises were also frequently discussed and commented on in the periodicals. Not only did they have exercises where two opposite forces were fighting each other. They also had a huge umpire organisation which would do the evaluation and judge whether they fought as prescribed in the doctrine. In this way officers had to practice what was preached both in doctrines and in the professional debate.

In chapter four there will be a summary and conclusion.

Sources

This dissertation will use the 1933 doctrine (*Truppenführung*) and the *Militär Wochenblatt* as its primary sources. In addition to this, it will use both the 1921 doctrine and autobiographies of German officers who were influential in this period. The *Militär Wochenblatt* was a military periodical issued every week in the interwar period. It was aimed at the serving officer corps and even soldiers. Copies could be found in barracks around Germany. One can argue that by focusing on the *Militär Wochenblatt* one risks losing important aspects of the discussion. However, throughout the dissertation the reader will find that the thoughts in the doctrines are backed up by the discussion in the *Militär Wochenblatt*. This gives the *Militär Wochenblatt* validity. *Wissen und Wehr* and *Deutsche Wehr* were other military periodicals in the same period. Omitting these may limit the scope of the debate, yet the main thoughts will most likely be covered. There is a second problem with the *Militär Wochenblatt*. Some of the articles are not signed. It is therefore difficult to judge the significance of the authors. Nonetheless the *Reichswehr* Ministry used the journal to promote debate within the officer

corps and serving officers were encouraged to contribute, as well as to read, articles. For these reasons, despite some weakness, it is adequate to use the *Militär Wochenblatt* as the primary source of information.

Using autobiographies can also be a problem. Biographies are often written to justify actions and choices. Particularly after the German defeat in WW II and the collapse of Nazism in Germany, several felt the need for downgrading their role. It is also easy for a biographer, with the benefit of hindsight, to write what he sees fit into present time. It is for instance easy for a German veteran officer to explain how he practiced the 1933 doctrine. Since the doctrine has been admired almost as a tactical masterpiece, an officer can explain his tactical decisions based on the doctrine. It will give him credit, but it is difficult to be absolutely certain that this was really how he operated back then. This can be seen as a weakness in my sources. However, since identical views from several autobiographies can be found, it is fair to say that autobiographies can be used as valid sources.

It could also be interesting to study only lecture series, exams, and exercise plans from different officer schools and units in the period. This is obviously also very interesting but, as will be argued later, it is first of all through the professional debate one can see which values were prominent. It is first of all in these discussions that it can be seen whether the contents and structure of the formal manuals (the doctrine) is the general view of the officer corps. It is of course possible that The *Militär Wochenblatt* was censored in this period. However, judging from the number of different officers that contributed to the magazine in the 1920s, it is reasonable to believe that the view presented in the magazine represented the officer corps as a whole.

2. Foundation and Background

Historiography

There is no lack of literature which describes how and why the Germans were so successful on the tactical level. There is, however, a tendency to explain German success by referring to superior doctrine, superior equipment, superior training, superior numbers and so forth. When doing that one might miss out on one of the most important elements in war and thus tactics, i.e. the humans. In his excellent book *The Roots of Blitzkrieg*, Professor James Corum writes about the work of General Hans von Seeckt, the second commander of the German Army after WW I.¹ In his opinion the roots of the tactical doctrine called *Truppenführung* from 1933 can be traced back to the ideas of von Seeckt and how he rebuilt the German Army after WW I. This is a very interesting book, but professor Corum only writes about the development of the doctrine, how it happened and what made it special and effective.

In 1940 F.O. Miksche wrote the book *Blitzkrieg*.² Miksche, a Czech officer, was probably one of the first to write about the ‘new way of fighting’ and referred to how the Germans had stunned the world with their campaigns in the opening stages of WW II. Starting in Spain in 1936, which Miksche calls ‘The Spanish Laboratory’; he took the reader through Poland, Norway and France and explained how the Germans thought on the battlefield. He explained the German success by underlining terms like ‘Thrust and Pocket Tactics’, ‘Battle on Narrow Fronts’, ‘Schwerpunkt’ and ‘Aufrollen’. It would be too comprehensive to go into detail about the meaning of these terms, but they are all about describing how the Germans fought their battles, and through that explaining their success. Miksche also wrote about the forming of the Panzer divisions and the important role of the air-force. Both Corum’s book about doctrine and Miksche’s book about how the Germans implemented it are very interesting and give valuable contributions in the debate. But they both lack one important aspect. They say little or nothing about the human beings that were supposed to put this doctrine into practice and what qualities they needed on the actual battlefield to fight in this manner.

¹ James S. Corum, *The Roots of Blitzkrieg: Hans von Seeckt and German Military Reform*, (Lawrence, Kansas, The University Press of Kansas, 1992).

² F.O. Miksche, *Blitzkrieg*, Translated by Tom Wintringham, (London, Faber and Faber Limited, 1941).

Other interesting books that give a thorough introduction to how the Germans fought their battles in WW II are K.H Friezer, *The Blitzkrieg Legend*,³ R. A. Doughty, *The Breaking Point, Sedan and the Fall of France, 1940*,⁴ and F. K. Rothbrust *Guderian's XIX'th Panzer Corps and The Battle of France*.⁵ These are all useful contributions to understanding German fighting and the reasons for their success in WW II. They also give a very thorough description of what happened. However, they focus mainly on concepts and France's lack of will to adapt to the modern battlefield, and yet they overlook one important criterion. As Baron von Freytag-Loringhoven has observed: 'The capabilities of men rather than weapons will in the future, as in the past, control. Today, as always, the way to overcome all our difficulties in war, large or small, is to be found in the proper development of the military personalities of officers and men.'⁶ This notion is echoed by Franz Uhle-Wettler when he says that 'war is fought not by machines but by soldiers using machines'.⁷

These quotations are just two out of many that highlight the human aspects in war. Based on the importance of human beings in war, and the fact that a vast number of books have been written focusing mainly on how the Germans operated on the battlefield and how the doctrine and tactics were developed, this dissertation will approach the theme from a slightly different angle. It will concentrate on the human aspect of German officers on the tactical level.

The term 'the human aspect' probably needs an explanation. Tactics is about what happens in an engagement. The human aspect in tactics is about the role of the human beings taking part, and their significance for the outcome of the engagement. Although both soldiers and officers are important factors, this dissertation will first of all focus on the role of the officer. More specifically it will focus on which personal qualities the Germans saw as imperative for an officer to handle a tactical engagement in a best way possible. What does he need to be able to deploy his resources in the best way? What does he need to be able to focus the will of the fighting force? And what does he need in order to endure the conditions on the battlefield? Herein lies the human aspects of tactics. Through that it will also try to show the importance

³ Karl-Heinz Frieser, *The Blitzkrieg Legend*, (Westport, US Naval Institute Press, 2005).

⁴ Robert Allan Doughty, *The Breaking Point, Sedan and the Fall of France 1940*, (Hamden, Connecticut, Archon Book, 1990).

⁵ Florian K. Rothbrust, *Guderian's XIX'th Panzer Corps and the Battle of France*, (Westport, Praeger Publishers, 1990).

⁶ Baron von Freytag-Loringhoven, "The Power of Personalities in War", *Roots of Strategy book 3*, (Mechanicsburg USA Stackpole Books, 1991), p. 276.

⁷ Franz Uhle-Wettler, "Auftragstaktik: Mission Orders and the German Experience", *Maneuver Warfare An Anthology*, Richard D. Hooker, Jr., (Novato CA, Presidio Press, 1993), p. 237.

of tradition, culture, honour and history and how these affect the officer's achievements on the battlefield. The fact that there are human beings who 'control' the outcome of an engagement is also one reason why tactical combat is unpredictable.

It would be wrong to claim that this dissertation is the first to discuss the human aspects of the German officer corps. The problem is that the influence of the Nazi regime very often tends to serve as a backdrop when German officers and their qualities are described. In his book *Fighting Power*, Martin van Creveld has done a thorough analysis of German and US Army performance in WW II.⁸ The armies are compared and van Creveld comes up with sound arguments about why the Germans were successful throughout WW II. He mentions everything from the role of society to command principles, doctrine and training. The difference, however, between his book and this dissertation is that he concentrates more on the unit level and not as much on the training and development of personal qualities in each officer. He also relates their success to what happened in Germany after the Nazi takeover and the importance of ideology. This dissertation tries to avoid this by concentrating on the years prior to this period.

Image and Reality, The Making of the German Officer, 1921-1933 by David Spires avoids the Nazi period by focusing on the period prior to 1933.⁹ David Spires was criticized earlier for disregarding the term character. However, that does not mean that his book is not worth reading. The book gives a thorough account of how the Germans educated their officers in the Weimar Period. He writes about selection and training of both officer candidates and General Staff officer candidates, and goes through the cumbersome steps to becoming an officer in the *Reichswehr* due to the Versailles restrictions. He discusses how the selection took place, how they trained and to a certain extent, what they looked for in their officers. What Spires lacks in his book, in addition to what was mentioned earlier, is a deeper explanation of how the thorough and strict focus on certain qualities materialized on the battlefield and not just for the built up of the officer corps.

⁸ Martin van Creveld, *Fighting Power*, (Connecticut, Greenwood Press, 1982).

⁹ Spires, *Image and Reality*, 1984.

Detlef Bald has also written about officer education in the interwar period. In *Vom Kaiserheer zur Bundeswehr* he also discusses the Weimar Period.¹⁰ The book deals predominantly with the social structure of the Army and from which stratum of the people the officers were selected. One gets a very good understanding of the social background of officers and qualities each layer represents, but he fails to bring this down to the tactical level. Bald is more specific when he in the article *Zur Reform der Generalstabsausbildung in der Weimarer Republik: die Reinhardt-Kurse* discusses which qualities officers need.¹¹ He focuses on how to build a strong and reliable officer corps that can be trusted in difficult times and how the *Reinhardt-Kurse* would select only the best. But again he does not bring up the relevance these qualities have for the tactical level of war. Like Spires he highlights qualities which are needed to give the officer corps the right position in society and not what they mean on the battlefield.

Explaining the German success by pointing at one or two factors would be a huge mistake. Success on the tactical level comes as a result of the synergy drawn from several factors operating within a framework of luck, chance and uncertainty. And although this dissertation is trying to avoid it, one must not or can not forget the impact of ideology, which especially influenced the German Forces in WW II.¹² However, there is no doubt that no matter how military battles are analysed, the human aspects are of huge importance. Thus making the personal qualities of the German officer and the German soldier one of the reasons why they were so successful.

Scope

This research will focus on the period between the end of the First World War and the publication of the tactical doctrine in 1933. The reasons for choosing this period are many. First of all, the Germans had to rebuild their Army after the defeat in 1918, under the restrictions of the Versailles treaty. This called for innovative thinking where they had to focus on something that did not conflict with the Versailles treaty. Second, 1933 is when *Truppenführung* was published. *Truppenführung* was the last major doctrine published prior

¹⁰ Detlef Bald, "Vom Kaiserheer zur Bundeswehr: Sozialstruktur des Militärs; Politik der Rekrutierung von Offizieren und Unteroffizieren" *Europäische Hochschulschriften*, (Frankfurt a.M, Bern : Lang, 1981).

¹¹ Detlef Bald, "Zur Reform der Generalstabsausbildung in der Weimarer Republik : Die Reinhardt-Kurse", *Militärische Verantwortung in Staat und Gesellschaft : 175 Jahre Generalstabsausbildung in Deutschland* (Koblenz, Bernard and Graefe, 1986.), p.109-123.

¹² Williamson Murray, "The Problem", *German Military Effectiveness*, Williamson Murray (ed) (Baltimore, Maryland, The Nautical and Aviation Publishing Company Of America, Inc., 1992), p. 23.

to WW II and was a result of experiences drawn from WW I and the developments in the 20s. '[T]he tactics of the 1939 and 1940 campaigns were, for the most part, developed in early 1920.'¹³ It must therefore be expected that this is the doctrine under which the Germans fought. Bruce I. Gudmundsson also comes to this conclusion in his book *Stormtroop Tactics* when stating that: 'By the time that the German attack against the West was carried out in the spring, the fundamentals of the blitzkrieg at both the tactical and operational level had been present in the German army for almost a quarter century.'¹⁴ James Corum also sees this link when he writes that 'The Wehrmacht and its military victories from 1939 to 1941 were firmly rooted in the Reichswehr of 1919-1933.'¹⁵

If the doctrine and tactics, which won the battles in 1940, were developed in the early 1920, this will also be true for the human aspects. This does not imply that the human aspects and focus on personal qualities were invented in 1920. For instance Gudmundsson writes about the influence the old Jäger tradition had on German tactics in 1940.¹⁶ But the doctrine was developed in an atmosphere where the human aspect was closely interlocked with the development of new tactical ideas fuelled by new technology and equipment. This meant that parallel to the development of the doctrine, there was a development in how the human aspect was viewed. In other words, the question that needs to be asked is which personal qualities were needed for officers and soldiers to realize the doctrine? The majority of the officers who had vital positions during the campaign in France 1940 were either selected, educated or trained within the frames of this doctrine, or they were responsible for developing it. This period, therefore, is very formative and important for the German Army and its officer corps in deciding how to fight.

Another reason for ending this research in 1933 is the arrival of Hitler on the German scene and his influence on the German nation and the armed forces. Although Hitler had been a well-known person in Germany since the Munich Putsch in 1923,¹⁷ it is from 1933 his

¹³ Corum, *The Roots of Blitzkrieg*, p.xii

¹⁴ Bruce I. Gudmundsson, *Stormtroop Tactics: innovation in the German Army, 1914-1918*, (Westport, Praeger Publishers, 1995), p. xii.

¹⁵ Corum, *The Roots of Blitzkrieg*, p. ix.

¹⁶ Bruce I Gudmundsson, 'Maneuver Warfare:The German Tradition', *Maneuver Warfare An Anthology*, Richard D. Hooker, Jr. (ed), (Novato, Presidio Press 1993), p. 281. Here Gudmundsson refers to several sources on the German Jäger tradition. The best primary source is according to Gudmundsson: Johan Ewald, *Abhandlung über den Kleinen Krieg* (Kassel: Johann Jacob Cramer, 1785). This book is also available in English translated by Robert A. Selig and David Curtis Skaggs as *A Treatise on Partisan Warfare* (Westport, Conn. Greenwood Press, 1991).

¹⁷ Spires, *Image and Reality*, p X.

influence on the Armed forces can be seen. After 1933 the Germans started to increase the number of officers and the size of their armed forces rapidly.¹⁸ This could, at least to some extent, imply that the qualities and abilities needed to become an officer or a soldier were reduced. When wanting to increase the size of an organisation there is a chance that this will have implications for the quality of it. There is, however, no reason to believe that the Germans changed the qualities they looked for and wanted in officers and soldiers after 1933.

*The officer candidate program was expanded, but the educational qualifications were still maintained. Even though the percentage of officers in the army fell to below 2.5 percent, the full four-year officer training program of the 1920s was the same until 1937. Even then, when the officer course was shortened to two years, the strict requirements for commissioning were unchanged.*¹⁹

Despite this, when increasing the size of their armed forces, the Germans no longer had the possibility to choose only the best. This makes the period prior to 1933 and the publication of *Truppenführung* a more distinct period to study. In this period the Army could cultivate their officers and soldiers in what they thought were the qualities needed to succeed on the tactical level.

The Germans lost both WW I and WW II most likely due to poor grasp of strategic planning and thinking. It can also be argued that too much focus on the tactical level, and an almost romantic view on fighting in itself was the reason for this.

*Operations had increasingly lost the coherence given them by concepts derived from the Napoleonic Wars. Dominated instead by tactics, fighting became an end in itself. Particularly in Germany it acquired a vocabulary – Heldenkampf (heroic struggle) and Durchhaltung (holding on) – that made a virtue of not of victory, not of war's purpose, but of the nature of combat.*²⁰

This dissertation will not look into possible reasons why Germany lost the two wars and how this could have been avoided. This would be a too large project to embark on. It has also been

¹⁸ For a thorough analysis of German rearmament see Wilhelm Deist's contribution in Wilhelm Deist, et.al. *Germany and the Second World War*, (Oxford Clarendon Press, 1998). And Wilhelm Deist, 'Blitzkrieg or Total War? War Preparations in Nazi Germany', Roger Chickering and Stig Förster, *The Shadows of Total War*, (Cambridge, Cambridge University Press, 2003).

¹⁹ Corum, *The Roots of Blitzkrieg*, p.201.

²⁰ Hew Strachan, "War and Society in the 1920s and 1930", *The Shadows of Total War*, Roger Chickering and Stig Förster (eds), Cambridge 2003. p. 36.

widely and thoroughly discussed in several books and articles.²¹ This study will focus strictly on the tactical level of war and what they did in order to succeed. Several might argue that it is not important to win battles if you lose the war. This was right in the two world wars, and probably still is. However, taking into account how important it is for a state today not to lose soldiers on the battlefield under any conditions, matters have perhaps changed. There is always something to learn from those who are able to win battles. Therefore, studying a military force which ‘performed at extraordinary levels on the battlefields in two world wars’,²² is worth the effort.

Although Professor Corum states that ‘the explanation for the dramatic German victory in 1940 can be found in two factors: superior tactics and superior training’,²³ this dissertation will not discuss the training which took place in *Wehrmacht* from 1933 towards the outbreak of WW II. Training is obviously an important factor for success and it could bring forward good examples of how to train and prepare an Army for war. It would also give good insight into their superior level of training.²⁴ However, it is also important and just as interesting to find the reason why they trained as they did. This could hopefully be found in the doctrine and the professional debate leading up to it. What also makes this less tempting is the influence of Hitler and the Nazi regime which, at least to some extent, strangled the professional debate within the officer corps.

When studying a narrow subject in depth there is a possibility that one is tempted to explain everything through this lens. This dissertation is not meant to give the only answer to German tactical effectiveness. Based on the findings one cannot conclude whether the personal qualities mentioned in *Truppenführung* or the qualities emphasized by officers in the professional debate were the reasons for their success in the opening campaigns of WW II or not. What is done is simply an analysis of the tactical doctrine from 1933 and the debate that shapes the contents of it, in a slightly different manner. Through this analysis, the intention is to learn more about one view of how to develop officers with the right qualities needed for the tactical level.

²¹ See for example Roger Chickering, Stig Förster and Bernd Greiner (eds), *A World at Total War; Global Conflict and the Politics of Destruction, 1937-1945*, (Cambridge, Cambridge university Press, 2005). And Chickering and Förster, *The Shadows of Total War*, Cambridge 2003.

²² Williamson Murray, “The Problem” p.30.

²³ Corum, *The Roots of Blitzkrieg*, p.203.

²⁴ See for instance Hew Strachan, ‘Training, Morale and Modern War’, *Journal of Contemporary History*, No 2 Vol 41, 2006.

On Tactics

In order to be able to discuss the human aspects in tactics it is necessary to grasp what the word tactics actually means and how the word is employed in this dissertation. This part will therefore first try to explain the word tactics. This will be done based on Clausewitz's thoughts on the subject. However, as will be argued, due to enhanced complexity on the modern battlefield, Clausewitz's definition needs modification. This is not an attempt to find a general definition of the word which everyone can agree upon. Every officer probably has his own definition and understanding of the word. The reason for coming up with a definition here is only for the purpose of having a common platform for the discussion throughout the dissertation. Having reached a definition of tactics this part ends by giving other examples of how the word tactics is understood in other military cultures than the German.

What exactly is tactics? Clausewitz claims that tactics is 'the use of armed forces in the engagement.'²⁵ This description is totally neutral when it comes to the purpose or the objective of the engagement. However, one does not use armed forces if you do not wish to accomplish- or achieve something. One might say the same thing about the engagement. One does not participate in an engagement if one does not wish to achieve something. The objective in the engagement is to achieve what you want. Or as Clausewitz says: 'In tactics the means are the fighting forces trained for combat; the end is victory.'²⁶ This, of course, raises a new question, what is victory? Again we can turn to Clausewitz. He claims that victory consists of three elements:

1. *The enemy's greater loss of material strength.*
2. *His loss of morale.*
3. *His open admission of the above by giving up his intentions.*²⁷

In addition to this, Clausewitz also says that 'the destruction of the enemy's forces is always the means by which the purpose of the engagement is achieved.'²⁸ Based on this, tactics can be understood as 'The use of armed forces to win an engagement'. In order to win an engagement, one has to be stronger than one's enemy. The natural question that arises is then:

²⁵ Carl von Clausewitz, *On War*, edited and translated by Michael Howard and Peter Paret (London, Princeton University Press, 1993), p. 146.

²⁶ *Ibid.*, p. 164.

²⁷ *Ibid.*, p. 277.

²⁸ *Ibid.*, p. 109.

what makes one party stronger than the other? In the engagement the military capacity will make the difference. According to Clausewitz the military capacity is based on two components, resources and will. At the same time, resources and will are irrelevant if one does not know how to use them. This indicates that tactics consists of a third factor; how. In other words: how do you focus your resources and will to win an engagement. Since the destruction of the enemy forces always will be important for winning the engagement, tactics will often discuss how to destroy an enemy in the engagement. By adding the word 'how' tactics becomes a more complex activity demanding a larger intellectual and creative capacity.

One might ask why it is necessary to make tactics more complex than Clausewitz defined it. Why do we need a more complex definition to describe it? To fully understand this it is important to remember from which circumstances Clausewitz drew his conclusions and at the same time understand how the battlefield has changed. Clausewitz based his theories on experiences from the campaigns of Frederick the Great and Napoleon. What characterised strategy and tactics in this era are somewhat different from what the nature of the two is today. Clausewitz claimed that an officer needed two qualities. These were intellect and courage. He continued by saying that intellect was more needed in the higher echelons than in the lower. This implied that the most important quality for an officer on the lower echelons, i.e. at the tactical level, was courage. If we look at a classical battle or engagement, for instance the battle of Waterloo, it is easy to agree with Clausewitz when he says that the most decisive factor at the tactical level is courage. At Waterloo, and similar battles, the size of the units fighting each other were often armies, corps and sometimes divisions. This made the role of a battalion commander less demanding when it came to intellectual challenges. He had very little manoeuvre space for his battalion. What it came down to was to yell whether to march forward, go backwards, right, left and when to fire. That does not demand a very high degree of intellect. On the other hand, it takes a huge amount of courage to stand and fight in the face of death and destruction. If we look at engagements during WW I and WW II, there is a difference. Although large formations still made up the largest part of the battlefield, engagements where smaller units were up against each other were more common. This made the role of commanders on lower levels more important.

Another factor which supports this view is the conditions surrounding the battle. Since the battle took place on a fairly visible place the tactical commander had fewer elements of

uncertainty to handle. The tactical commander could see what was happening and could act on that. This made the battle less of an intellectual challenge than one which demanded courage. A commander on the strategic level did not, and does not, have the same possibility to survey how a war develops. He has to trust his abilities to imagine and foresee what will happen next, thus making it more intellectually demanding. General von Freytag Loringhoven drew the same conclusion:

*In the 18th century, the coup d'oeil of the leader had its place on the tactical battlefield even in the physical sense. The small armies and accepted methods of fighting enabled him, as a rule, to watch not only his own troops but also the enemy's, which would be out of the question today for the commander of an army corps, and hardly possible for a division. While conducting a battle was easier for Frederick and even for Napoleon than it is today,...*²⁹

A third factor that has made the battlefield more complex for a tactical commander is the technological development. A commander or leader today, even down on platoon and company level, must be able to handle a large variety of military assets. It is enough to mention correction of artillery fire, calling in close air support, manoeuvring fighting vehicles and talking on three different radios at the same time. This definitely calls for a certain intellectual capacity. All these new assets were not available during WW I. However, the Germans definitely foresaw them in the interwar period by issuing the doctrine *Führung und Gefecht der Verbundenen Waffen* in 1921-23.³⁰ It was also commonly accepted in the professional debate in the 1920s as Colonel von Sochenhausen explains in an article from 1928.

*Due to technical progress, the officer profession has, like every other profession, developed into becoming more difficult and more weighed down by responsibility than before. The number of weapons and technical facilities that the officer has to master has grown and their application is more delicate.*³¹

A result of technological development and more space have also increased speed and tempo to the battlefield. New equipment not only demands commanders that are able to handle a large variety of assets, it also demands commanders that are able to make decisions and act

²⁹ Von Freytag-Loringhoven, "The Power of Personality in War", pp 285-286.

³⁰ H. Dv. 487 *Führung und Gefecht der verbundenen Waffen (F.u.G.)*, Neuedruck der Ausgabe 1921-1924 in 3 teilen, (Osnabrück, Biblio Verlag, 1994).

³¹ Oberst von Sochenhausen, "Die Offizier-Ergänzungsbestimmungen des Reichsheeres", *Militär Wochenblatt* no 12, (Berlin, E.S. Mittler und Sohn, 1928), column 459.

quickly. In an environment where things happen quickly, the one who is quicker than his enemy wins. This is of course not something new. Being faster has always been important in battle. The point is that the quicker things happen the more difficult and intellectually demanding everything becomes.

Based on these arguments it is fair to say that Clausewitz's claims have to be modified. The two important qualities needed for an officer are still intellect and courage. But the nature of the engagement today makes the need for intellect at the tactical level greater. This makes tactics an even more complex activity demanding both great courage and a highly developed intellect. Therefore by defining tactics as '**How to use the armed forces in the engagement to destroy the enemy**' one has a more modern understanding of the term which recognises the enhanced complexity the modern battlefield has given it.³² Having reached this conclusion it can be argued that the same elements which Clausewitz says make strategy difficult and complex also make tactics difficult and complex. This is why this dissertation will treat aspects that Clausewitz placed in the strategic sphere of war as important and relevant also for the tactical level. However, as will be seen later, it is not necessarily the need for a higher intellect which is the most important when the battlefield becomes more complex. The point is that a more complex battlefield requires officers that are able to withstand an even larger psychological pressure, in other words: to endure or as Strachan says *Durchhaltung* (holding on).³³

Finally, to understand what this dissertation means by the word tactics one must grasp the proximity between the enemy and ones own troops. As mentioned earlier, tactics is about what happens in the engagement. In that situation the enemy and oneself can see and shoot at each other. This gives the engagement an important human dimension; the fear for your own and your soldiers' lives. It will be wrong to claim that being face to face with your enemy is the only true aspect of the engagement. Others are planning and moving troops without being in direct contact. However, when referring to the engagement, the battle and tactics in this dissertation, it is the direct confrontation between two enemy forces that is meant. Or as von Clausewitz's intellectual opponent on military subjects, Antoine-Henri, Baron de Jomini said:

³² The importance of knowing how is also recognised by General Rupert Smith when he says that 'But as with the means and the trial of strength, here too the way is important: the way the force is being used will have direct impact on the will to take the risk, bear the burden and endure to the end'. General Rupert Smith, *The Utility of Force*, (New York, Vintage Books, 2008), p.244.

³³ Strachan, 2003, p. 36.

*Tactics is the art of using these masses at the points to which they shall have been conducted by well –arranged marches; that is to say, the art of making them act at the decisive moment and at the decisive point of the field of battle.*³⁴

There are others who have pondered on military theory and written about tactics since von Clausewitz wrote *On War*. The problem, however, which one meets when trying to find other definitions of tactics is that they often use Clausewitz as a starting point. It is also a challenge that although several authors use the word tactics, they rarely define it. They only come up with their understanding of the term and avoid going deeper into it and start talking about operational art which is easier to understand.³⁵ For example, Paddy Griffith demonstrates his understanding of tactics when he says that

*Strictly speaking, ‘minor tactics’ are normally construed as any specific ploys or arrangements that are agreed upon for use by a small group of soldiers in battle, in order to achieve their immediate objective.*³⁶

One can also find similar thoughts in Russian military tradition if one studies works of prominent Russian officers prior to Stalin’s purge. Aleksandr A. Svechin wrote a book on strategy in which he also discussed tactics. Although not giving a clear cut definition, he concluded that ‘[T]actics should focus their attention solely on an individual battle which follows from a deployment of troops moving on the same road.’³⁷ By stating this he at least narrows tactics down to what is happening in one single battle and avoids mixing it with operational art.

More modern manuals have also tried to define tactics. The US Marine Corps has issued a manual called ‘Tactics’. According to them tactics is defined as ‘the art and science of winning engagements and battles. It includes the use of firepower and maneuver, the integration of different arms and the immediate exploitation of success to defeat the enemy.’³⁸ With this definition tactics consists of two main components. It is both an art and a science.

³⁴ Antoine-Henoi, Baron de Jomini, *The Art of War*, translated by Capt. G.H. Mendell and Lt W.P. Craighill, (New York, Dover Publications, Inc, 2007), p.294.

³⁵ This is actually a paradox since Clausewitz himself did not write about the operational level of war. He just devided war into a strategy and tactics. He only recognized that there needed to be something between those two levels.

³⁶ Paddy Griffith, *Battle Tactis of the Western Front*, (London, Yale University Press, 1994), p. 21.

³⁷ Aleksandr A. Svechin, *Strategy*, Edited by Kent D. Lee,(Minesota, East View Publication, 1992), p.69.

³⁸ Department of the Navy, *MCDP 1-3, Tactics*, (Washington, D.C. 1997), p. 3.

‘The science of tactics lies in the technical application of combat power.’³⁹ This includes how skilled a military unit is performing different drills and techniques. How good they are at directing artillery fire, how good they are at navigating and so forth. ‘The art of tactics lies in how we creatively form and apply military force in a given situation.’⁴⁰ This part of tactics is more concerned with timing. ‘When do we flank the enemy, and when do we ambush him? When do we attack, and when do we infiltrate?’⁴¹ The manual also recognizes that this kind of creativity ‘is a developed capacity, acquired through education, practice and experience.’⁴²

As stated earlier, the aim is not to find a universal definition of the term. What is necessary is to come up with something which characterises the tactical level of war, and also explains why the personal qualities of officers are so important. Since Clausewitz is a recognized writer on the subject and also the fact that he was a Prussian officer, it is natural to use his ideas on the nature of war as a foundation for the discussion in this dissertation. It will also be shown later that there is a strong connection between Clausewitz’s thoughts and the views of the officers who took part in the professional debate, which makes Clausewitz even more relevant.

Historical Background; German Lessons Learned from WW I

To understand the debate taking place in Germany among officers in the 20s and 30s, one has to be familiar with the experiences the Germans had in WW I. This section will therefore briefly discuss how the foundations for the new German Army came into being. In this respect this chapter will serve as a historical foundation for the dissertation. This is necessary in order to understand the context in which the doctrine and the professional debate took place and thus better understand why some aspects are important. It is not a thorough discussion of every aspect of German WW I experiences, this has been done by several others before⁴³. What is important is to understand how the War changed the German way of thinking from focusing on huge formations and numbers to the individual and his qualities.

³⁹ Ibid., p.4.

⁴⁰ Ibid., p.4.

⁴¹ Ibid., p.4.

⁴² Ibid., p.4.

⁴³ For example James S. Corum, *The Roots of Blitzkrieg*, Williamson Murray, *German Military Effectiveness and Gudmundsson, Stormtroop tactics*.

Germany attacked France in August 1914. After several successful battles the German progress were halted at the river Marne in early September. This is often referred to in German literature as the *Marne Schlacht*, or the battle of the Marne.⁴⁴ After the battle of the Marne the war on the western front turned into trench warfare where both sides dug into defensive positions in a line stretching from the Swiss border to the English Channel. The movement in the front was lost and almost every attack by either side was stopped by machinegun and artillery fire. It became obvious to the Germans that they would ultimately lose a trench war. They could not sustain a war where human losses were enormous. They would simply run out of manpower. Parallel to the battles on the western front, the Germans were also engaged in the east where the campaigns were more successful.⁴⁵ Here the battlefields were much wider and thus the engagements did not develop into stalemates. Their experiences from this part of the war combined with their initial success in the opening phases on the western front told them that they needed to turn the western front into a war of movement again. Only then would they be able to win the war.

The German army was, ever since the times of Frederic the Great, one of ‘the most decentralised ones in Europe.’⁴⁶ This was also the case on the outbreak of WW I. But the focus on the Schlieffen plan and the need for mass armies to handle the massive losses on the Western front gradually turned the focus of the German General Staff away from the qualities of each individual soldier and more towards numbers and large formations.⁴⁷ This probably reached its peak under Erich von Falkenhayn in the battle of Verdun. Falkenhayn’s strategy, and the reason for picking Verdun was to bleed the French army white.⁴⁸ By attacking Verdun he thought the French would fight till the last man. This would eventually lead to a French collapse and a break up of the French-English alliance. The strategy worked to a certain extent. French losses were enormous. The problem, however, was that German losses were equally huge. When the battle of Verdun ended, both sides had only accomplished the loss of hundreds of thousands of human lives.⁴⁹

⁴⁴ Gudmundsson, *Stormtroop tactics*, p. 2.

⁴⁵ For examples of successful tactics on the eastern front see Erwin Rommel, *Infantry Attacks*, (Virginia, Athena Press, 1979). Corum, *The Roots of Blitzkrieg*, pp. 7-10 and Gudmundsson, *Stormtroop tactics*, pp.107-138.

⁴⁶ Gudmundsson, *Stormtroop tactics*, p.18.

⁴⁷ There is an academic debate whether there was a Schlieffen plan or not. See for example Terrence Zuber, Robert T. Foley and Terrence M. Holmes’ discussion in *War in History* 1999-2004. I am not taking any side here, but simply recognise that the Germans attacked France in 1914 with an extremely powerful right wing.

⁴⁸ Corum, *The Roots of Blitzkrieg*, p.3.

⁴⁹ For an excellent account of the madness of the battle of Verdun see Gudmundsson, *Stormtroop tactics*, pp. 55-75.

As mentioned before, this could not continue. They needed to restore movement to the front. This was of course also important to the other side. They could likewise not justify the meaningless loss of human lives. The two sides came up with two different solutions to the problem. The British and French solution was the tank. This will not be discussed further here apart from simply stating that this invention was to become the hallmark of the next world wide conflict, WW II. The Germans however had a different approach. Now the focus shifted from huge formations to platoons, squads and individuals. The new tactics was called Stormtroop Tactics.⁵⁰ By equipping smaller units with combined arms weapons, thus making them capable of getting across ‘No man’s land’, the Germans had come up with something which could restore movement. Small combined arms units would lead across ‘No man’s land’ and punch a hole in the enemy lines. Regular infantry would then follow and pour through the gap which had been created. These tactics became so successful that Ludendorf who by now had become the de facto chief of the General staff wanted to develop every German unit into storm troopers. He almost succeeded and German forces had huge tactical success in 1918 and were able to penetrate deep into enemy territory. Germany’s problem, however, was that they no longer possessed the capability to pursue this tactical and operational success strategically. For instance, when reaching deeper into enemy territory, they no longer had a sufficient railroad network which could support the advancing troops. By now the allies were also much stronger than the Germans. The US had joined the French-English coalition, and allied forces were now strong enough to hold out until the German attacks ran out of steam, and then they would launch a counter attack.

The Germans lost the war but the tactical success they had experienced as a result of ‘stormtroop tactics’ was not forgotten. After the war the Germans quickly started to rebuild their armed forces. Based on the experiences derived from WW I they were soon able to write a new tactical doctrine.⁵¹ Once again the German army had turned its focus on the importance of the individual. It was the belief that the quality of each individual formed the foundation for a strong army, and not necessarily numbers. Despite severe restrictions from the Versailles treaty and constant threats of an outbreak of civil war, they now embarked on the project of rebuilding the German army based on quality rather than quantity, and doctrine which ‘almost completely disregarded positional, or trench warfare (*Stellungskrieg*). Instead, it focused on

⁵⁰ For a more thorough description of stormtroop tactics see Gudmundsson, *Stormtroop tactics*.

⁵¹H. Dv. 487, (*FuG*).

mobile warfare (*Bewegungskrieg*).⁵² The new Army would have officers with personal qualities similar to the ones of 'the Old Army' and tactical skills drawn from the experiences of the small combined arms units from the latest war, the 'Stormtroopers'.

⁵² Condell, Zabecki, p.3.

3. Analysis of Doctrine and the Professional Debate

The previous chapter provided a short overview of tactics and what became the German starting point after the war. This chapter will go further and analyse more thoroughly what the restrictions of the Versailles treaty and the experiences drawn from WW I lead to in terms of what demands the Germans saw that the battlefield made. This will be done primarily by examining the tactical doctrine from 1933. Through an understanding of the German ideas on the nature of the battle and how to fight a battle, one can deduce what they regarded as 'Battlefield Demands', or what a modern battlefield demands from its actors, including the officers. The chapter is divided into four parts. First, there will be a short discussion of doctrine and a doctrine's role in an army. Second, the German view on fighting and the nature of the battlefield will be discussed. Based on this discussion demands required both in the physical and the psychological sphere will be deduced. It is difficult to make a distinct division between the two spheres. What happens in the psychological sphere influences the physical and vice versa. However, the division is done to make it easier to follow the analysis. Following each battlefield demand there will be a discussion of which personal qualities that are needed to meet each demand. Having found the personal qualities that the Germans deemed necessary for an officer, the fourth part discusses how these qualities were instilled and developed by training.

One can argue that 'Battlefield Demands' can be drawn straight from the doctrine itself. That will without doubt be the official German view. However, the discussion will also be supported by views found in articles in the *Militär Wochenblatt* and other primary sources. The reason for not only focusing on the doctrine but bringing in other sources will be discussed below in the section on 'doctrine'. It can also be questioned why the doctrine from 1933 is used instead of the one from 1921, since the education and training of German officers in the 20s were necessarily based on this doctrine. The reasons for this are several, but first of all because the 1933 doctrine often is seen as a refined product of the 1921 doctrine.¹ Another reason is that since it was issued later it is also more a product of an ongoing professional debate than the one from 1921. The 1921 doctrine will therefore be used, but primarily to support the one from 1933. The articles which are used to support the doctrine will be of two kinds. One category will be articles that refer to incidents in WW I and draw conclusions

¹ Condell, Zabecki, p. 3.

based on what happened then. The second category of articles will discuss how the Germans viewed the training and education of their officers. This is done to show how seriously the Germans treated the experiences they gained in WW I, and their willingness to incorporate them into practical training and in this way accept the consequences of them. This strengthens the validity of the doctrine and hence this dissertation.

Doctrine

The dissertation uses the German tactical doctrine from 1933 as its primary source. An effective and sound tactical doctrine is often highlighted as a prerequisite for the successful outcome of an engagement or battle. Both Professors James S. Corum and Williamson Murray praise the value of the doctrine from 1933, and claim it to be one of the explanations of German success in the opening campaigns of WW II.² A doctrine is meant to set the framework for how an army should fight in a broader sense. Or to use Timothy Lupfer's words: 'guidance for conduct of battle approved by highest military authority.'³ Having said that, one might believe that only by studying the doctrine would one find the answer to which qualities the Germans looked for. This will only partly be true. Having a doctrine is not enough, 'for doctrine published is not always doctrine applied.'⁴

To understand the relevance of a doctrine one has to understand what a doctrine is, how it is formed and what makes it successful. In his book *Learning to Eat Soup with a Knife* about counterinsurgency lessons from Malaya and Vietnam,⁵ lieutenant colonel John Nagl concludes that doctrines which promote 'Changes that conflict with the dominant group's ideas on preferred roles and missions – the essence of the organization – will not be adopted.'⁶ Lupfer also supports this conclusion when he explains the reason why the Germans succeeded in changing their doctrine twice during WW I.

² See for example James S. Corum, in Condell, Zabecki (eds), *On the German Art of War, Truppenführung*, Boulder Colorado 2001 p. ix. "The possession of a superior tactical/operational doctrine was one of the things that made the German Army such a formidable and effective force during World War II" and Williamson Murray, "Leading the Troops: A German Manual of 1933," *Marine Corps Gazette*, September 1999, p. 95. "It remains one of the most influential doctrinal manual ever written."

³ Timothy T. Lupfer, "The Dynamics of Doctrine: The Change in German Tactical Doctrine During the First World War", <http://www.cgsc.army.mil/carl/resources/csi/Lupfer/lupfer.asp>, 2008-04-09. Quoted from the Introduction.

⁴ Ibid., Quoted from the chapter "Enforcement and Application".

⁵ John A. Nagl, *Learning to eat soup with a Knife Counterinsurgency Lessons form Malaya and Vietnam*, (Chicago, The University of Chicago Press, 2005).

⁶ Ibid., p. 216.

The process of developing principles to obtain this objective was a collective or corporate effort. Individual talents and personalities were essential, but the doctrine emerged in an atmosphere where ideas were discovered and shared, not invented and arbitrarily imposed. OHL solicited ideas and experiences from subordinate units, and this genuine interest gave the final product the wide ownership that eased the acceptance and application of the doctrine.⁷

This implies that for a doctrine to be successful it must reflect the general opinion of the officer corps. It does not mean that everyone in the German Army wrote doctrines. The point is that the new ideas to change the doctrine came from the lowest levels in the Army.

Corporals, lieutenants and captains saw that their way of fighting did not work and launched new ideas on how it could be improved. In this way the incitements to changing the doctrine came from below, based on real battle experiences and was not something that was imposed from the top of the organisation. The German tradition, as Gudmundsson says about, should also be mentioned here.⁸ This tradition where, contrary to other European armies in that same period, lower echelon officers and even soldiers were expected to disobey orders and act on their own initiative when they saw that orders were obsolete and did not fit the real situation.⁹ A tradition like this makes it possible for an organisation to change because changes come as a response to actual problems on the level where the real fighting takes place, i.e. at the bottom.

To judge whether a doctrine is rooted in an officer corps, one needs to make a deeper and broader investigation than just studying the doctrine itself. Having said that, a doctrine will always be important when trying to understand an army's values and way of fighting. However, to broaden the perspective this dissertation will also study the professional debate going on prior to the issue of the doctrine, and also use autobiographies written by prominent German officers. Even though autobiographies or works written after the actual period have the benefit of hindsight, they can at least support what is said in the professional debate. Through this one can judge whether the doctrine was firmly rooted in the German officer corps, thus giving it even more validity.

⁷ Lupfer, Quoted from the Chapter Tentative Generalizations.

⁸ Gudmundsson, *The German tradition*, p. 280.

⁹ *Ibid.*, p. 280. Here Gudmundsson refers to a situation where a major was reprimanded by Prince Carl of Prussia for doing something wrong. The major excused himself by saying he was only following orders. The Prince then responded that the King had made him a major because he expected him to know when to disobey.

On fighting

It can be difficult to see the relevance of discussing the German way of fighting when writing about personal qualities in officers. However, as mentioned before, the situation for the officer on the tactical level of war has become more and more complex. This part of the dissertation will therefore show how the increased complexity of the battlefield influenced the officer and demanded even more from him. By using doctrines and articles, the manner in which the Germans wanted an attack to be conducted will be explained. Based on that, three important aspects of German Warfighting will be derived.

Truppenführung is divided into fourteen chapters including an introductory chapter of 5 pages.¹⁰ From the doctrine it is possible to learn at least three main lessons. First it explains in a very clear way, almost giving a recipe for victory in battle. This is perhaps a very categorical conclusion. However, when reading both the doctrine and the history of how the battle, at Sedan in 1940, for instance was fought, it is easy to grasp the German idea of fighting.¹¹ Second it also describes how the Germans saw the nature of war and what its characteristics are. Based on how the Germans wanted to fight and how they saw the nature of the battlefield, it is possible to draw a third conclusion; which personal qualities are needed for officers and soldiers which are to put this doctrine into life.

This description of how the Germans viewed the attack is only meant to serve as an example. Every chapter in the doctrine is structured the same way and gives an easily understood recipe for how to think and act. This simple form can also give some reasons why both Professors Corum and Murray give so much credit to the German doctrine of 1933. For officers on every level it served as a perfect common theoretical platform for battlefield behaviour. The chapter called *Angriff* (Attack) draws a clear picture. Both an attack on one enemy flank coming from a single envelopment and an attack on both flanks as a result of a double envelopment are recognized as being the best way to attack. However, the doctrine acknowledges that very often the frontal attack will be the most common way to attack the enemy. Therefore it must be mastered by all officers.

The frontal attack is the most difficult to execute. Nevertheless it is the one most frequently used. Units which are not directed against the enemy front

¹⁰ H.Dv. 300/1, *Truppenführung. (T.F.), I. Teil (Abschnitt I-XIII)*, (Berlin E.S. Mittler & Sohn, 1936).

¹¹ Karl-Heinz Frieser, *The Blitzkrieg Legend*, (Westport, 2005).

*must also be prepared to attack frontally because the enemy has secured his flank.*¹²

Although the flanking attack was seen as the best way to hit the enemy, the Germans also accepted the realities of such an attack. A flanking manoeuvre conducted on a larger scale, was destined to result in a frontal fight for the individual unit, at least when making contact with the enemy flank security. The Germans therefore saw the ability to penetrate the enemy front and moving into the rear of the enemy position as vital for success both in a flanking attack and in a penetration attack. By breaking through the enemy lines one would create chaos among enemy units and destroy their ability to fight as coherent units. This was the rule of thumb whether the enemy was large or small.

*A frontal attack against an enemy of equal strength... leads most often to a decisive success if the enemy lines are broken through.*¹³

The attack would start out with the German forces advancing on a broad front seeking to find a weak spot where they could focus their effort. This area could either be decided upon prior to the attack, or had to be found during the attack. Having located the enemy's weak spot the Germans concentrated all their efforts in this particularly area. The attacking force was then more or less divided into three: break-in force, covering force and exploitation force. The break-in force was to advance from the line of departure, to the point for the break-in, and make the actual break-in.

*The infantry will in several places work its way forward towards the enemy position until they reach break-in distance.*¹⁴

The 'covering force' was responsible for suppressive fire and making sure that the enemy in the penetration point and the adjacent units covering the area were unable to inflict casualties on the attacking force. When the break-in force had broken in or was about to break in, the fire support was shifted deeper into and more broadly onto the enemy positions.

The advance on the enemy is conducted through a careful synchronisation of fire and movement... During this advance the neighbouring units will suppress the enemy, preferably with light machine guns in combination with more

¹² H.Dv. 300/1, *Truppenführung*. p. 119.

¹³ *Ibid.*, p. 119.

¹⁴ *Ibid.*, p. 145.

*heavy weapons. ...If weak spots in the enemy position are discovered, this will be the place to reinforce and commit the reserve.*¹⁵

*The supporting weapons shift their fires from the break-in place to the front of the advancing infantry.*¹⁶

Having punched a hole in the enemy lines the exploitation force was to penetrate deep into the enemy's rear. After the breakthrough the penetration site needed to be held open and made wider in order for larger forces to pour through the gap. The larger the gap in the enemy lines the larger the force that could be pushed through. This again leads to an even deeper penetration. A deeper penetration amplified the chaos among enemy forces and enhanced the possibility for success.¹⁷

*The main force and the mass of munitions must be focused on the decisive point. ... The attack will in this place have its Schwerpunkt.*¹⁸

The principle behind this way of thinking can be called '*Schwerpunkt* tactics'. Lessons from the First World War had taught them that an enemy defensive position had the advantage over an attacking force because of its knowledge of terrain, and due the effects of modern weapons, particularly the machinegun. Therefore one needed new tactics to be able to break through enemy defences. This was done by concentrating all available assets against one decisive point.¹⁹ Instead of massing the forces on a broad front and making everyone victims to enemy machinegun fire, the Germans focused on one small sector. In this way they created the *Schwerpunkt*. Although starting out in a broad formation with a small number of troops, this would change as soon as the decisive point had been found or decided upon.

It is important to understand that *Schwerpunkt* tactics was valid on all levels of command. This is best illustrated and understood when analysing the German attack on France in 1940. The attack consisted of three army groups on a broad front stretching from the Swiss border to the English Channel. However, the breakthrough was planned to take place in Army Group

¹⁵ Ibid., p. 142.

¹⁶ Ibid., p. 145.

¹⁷ Ibid., pp.121-122, paragraph 319.

¹⁸ Ibid, p. 123.

¹⁹ Ernst Jünger, "Skizze moderner Gefechtsführung", *MW* 1920, no 20, column 433. "Sein Ziel ist konzentration der Wirkung gegen einen Schlüffelpunkt feindlicher Stellung".

A's sector at Sedan.²⁰ At Sedan the commander of Army Group A, Gerd von Runstedt, focused his resources around Guderian's XIX'th Panzer Corps. After the breakthrough at Sedan the panzer corps did not halt, but continued their advance and drove an armoured wedge into the French defences. The Germans did not stop before they reached the English Channel and almost trapped and eliminated the entire BEF at Dunkirk. This was an example of high level *Schwerpunkt* tactics. The Germans massed their resources in von Runstedt's Army Group A. He again focused his resources around Guderian's Panzer Corps which made the breakthrough and the deep penetration.

If we look more closely into what happened in Guderian's Panzer Corps, we find that he did the same.²¹ Each of his three Panzer Divisions was given their sector of attack. However, his breakthrough unit was the 1st Infantry Regiment under Colonel Hermann Balck. 1st infantry regiment was given all available artillery and air support and directed to attack in a 500m wide zone. This meant that the main thrust of a Panzer Corps, which furthermore was the main thrust of the German attack, came in a 500m wide sector. This is almost the definition of *Schwerpunkt* tactics and the perfect practical example of how the doctrine describes a *Schwerpunkt* attack.

*A Schwerpunkt attack is characterised by: narrow sectors, arrangements for combined arms, including those of neighbouring sectors, reinforced by heavy infantry weapons and artillery.*²²

In addition to this, the doctrine concludes in paragraph 28 that 'You can never be strong enough at the decisive point. You act contrary to this principle if you try to secure everywhere and waste resources on secondary missions.'²³ Obviously one cannot be too strong at the point where one wants to reach a decision. This is more or less the same conclusion that Frederic the Great arrived at when he said that: 'He, who defends everywhere, defends nowhere.'

One important issue must be added to this. The Germans always talked about exploiting after having punched a hole in the enemy lines. 'A successful breakthrough must be exploited

²⁰ For a more thorough explanation on how the plan was formed see Erich von Manstein, *Lost Victories*, Ed. and trans. By Anthony G. Powell, (California, Presidio Press 1982). Von Manstein has been given the credit for coming up with the plan for the attack on France through the Ardennes.

²¹ In addition to the books mentioned earlier in the dissertation see also Guderian's own accounts of the crossing and the race towards the English channel in Heinz Guderian, *Erinnerungen eines soldaten*, (Neckargemünd, Kurt Vowinkel Verlag, 1960), pp.79-126.

²²H.Dv. 300/1 *Truppenführung*, p. 123.

²³ *Ibid.*, p. 9.

before the enemy can initiate countermeasures.²⁴ Several military historians have described this way of fighting by using the British military writer Sir Basil Henry Liddel Hart's theory of the expanding torrent. Here the German way of fighting is compared with how a dam bursts under the pressure of the water it is containing.

*If we watch a torrent bearing down on each successive bank or earthen dam in its path, we see that it first beats against the obstacle, feeling and testing it at all points. Eventually, it finds a small crack at some point. Through this crack pour the first dribblets of water and rush straight on. The pent-up water on each side is drawn towards the breach. It swirls through and around the flanks of the breach, wearing away the earth on each side and so widening the gap. Simultaneously the water behind pours straight through the breach between the side eddies which are wearing away the flanks.*²⁵

This way of fighting clearly values the need for speed in the attack, at least relative to the enemy. The Germans always wanted to be quicker than the enemy, thus making enemy countermeasures irrelevant and keeping themselves one step ahead. There is also a general view on the importance of speed when the doctrine writes that 'the weaker side can be stronger at the decisive point through speed, mobility, great march ability and exploitation of darkness, terrain, surprise and deception.'²⁶ If you are able to move and act more quickly than your enemy you can be successful despite being inferior, thus making speed vital in every situation. This is also highlighted later in the doctrine when it is said that 'the speed of the attack must not be restricted by too detailed orders.'²⁷ This does not only recognize speed as important, it also recognizes the need for officers capable of acting without detailed orders.

In combat speed has at least two dimensions. First there is the purely the physical dimension. The ability to walk faster, drive faster, shoot faster and so forth. Napoleon was often able to gain the upper hand because of his *Grande Armee's* marching capabilities. On several occasions he managed to achieve surprise because he arrived more quickly at a place of battle than any of his opponents expected. A more modern example can be seen in the Falklands War. Because almost all helicopters that the British Army had brought to the theatre had been sunk when the Atlantic Conveyor was hit by the Argentineans, the British infantry units had to walk across the island. They walked almost 100 km over extremely rugged terrain with

²⁴ Condell, Zabecki, p. 90.

²⁵ Sir Basil Henry Liddell-Hart quoted in William S. Lind, *Maneuver Warfare Handbook*, (Colorado, Westview Press, 1985), p. 9.

²⁶ Condell, Zabecki, p. 9.

²⁷ *Ibid.*, p. 123.

heavy bergens. They spent days doing this, but despite that they managed to be faster than the Argentineans and gained the upper hand. The second dimension of speed is more mentally related; the ability to think faster. The ability to think faster makes you able to make decisions faster, and with quicker decisions you are able to act faster.

The importance of 'being faster' is a well known principle also today. US Marine Corps puts it like this:

How is speed a weapon? Think sports again: The breakaway in hockey uses speed as a weapon. By rapidly passing the puck down the ice, one team denies the other the chance to set up a defense. Speed circumvents their opponent's ability to respond in an organized manner. The fastbreak in basketball seeks the same result. In two phases, the ball is downcourt and the basket scored, all before the opposition can react.²⁸

Another criterion needed for success was the use of combined arms. As mentioned before, the tactical doctrine that came out in 1921 was called *Führung und Gefecht den Verbundenen Waffen*. This was a result of lessons learned from the First World War on the importance of coordinated effort from all arms at one spot in order to succeed. During the First World War Combined Arms was mainly thought of as coordination between infantry and artillery. However, along with the technological development, being able to integrate both planes and tanks became more and more important.

All arms committed in the attack must know of each other's mutual capabilities and limitations. They must keep close and continuous communications with each other.²⁹

Using combined arms has a double effect. First there is the obvious effect of using all available resources at the same time. Coordinating efforts in time and space has always been important in military operations. This is also a vital aspect of 'Schwerpunkt tactics'. The second effect from using combined arms is more psychological. By using combined arms you place the enemy in a dilemma. The goal is to make enemy counteractions irrelevant to your actions. This way of thinking can be explained by how a minefield and an antitank weapon should be combined. If you lay a minefield to take out tanks it should be covered by an antitank weapon. When a tank arrives at what it believes is a minefield its only option is to

²⁸ Department of the Navy, *MCDP 1-3*, p. 59.

²⁹ H.Dv. 300/1, *Truppenführung*, p. 127, paragraph 329.

slow down. Slowing down will again make him vulnerable to the antitank weapon. Enemy counteractions have thus been made irrelevant to our actions. The chance of taking out the tank then increases. However, the second effect from this is that the enemy feels trapped. Taking care of one threat only makes him vulnerable to another.

The focus on *Schwerpunkt* and combined arms are examples of how the battlefield became more complex for the German officer. This influenced the officer in two ways. First, in order to optimize his manoeuvres on the battlefield the officer needed knowledge. Second, due to more intellectually demanding situations and the need for quicker decisions made independently, the officer had to cope with a considerably larger personal pressure. This section on fighting therefore brings up two aspects. First of all there is the need for knowledge. Officers must have an unstoppable thirst for knowledge. Second there is the need for developing officers that are able to cope with the situations this way of fighting leads them into. In other words making decisions in situations where lack of information and time is the norm. This section therefore constitutes one part of the foundation for the later discussion on 'Battlefield demands'.

On the nature of the battlefield

What have been described so far are important aspects. They have dealt with a physical or a practical side of war and tactics and have described how to think and what to do with available forces. There is however another aspect of the tactical level of war. That is the nature of the battlefield and what it does to the officer and his abilities to handle what is expected of him; the psychological side. In this part, the dissertation will first exemplify how the Germans viewed the battlefield and what characterised it. Next, an important German term called *Auftragstaktik* will be brought up. *Auftragstaktik* was seen as the only way to cope with the nature of the battlefield and therefore needs to be discussed here. Towards the end of this part, the German view on fighting and the nature of the battlefield will be seen together and conclusions will be drawn to form the foundation for the next section, 'Battlefield demands'.

For the Germans in the interwar period, their view on the nature of the battlefield can first of all be found in the introduction to the doctrine, an introduction which Condell and Zabecki

describe as ‘fifteen highly philosophical paragraphs that set the manual’s tone.’³⁰ One paragraph is particularly interesting to understand this view.

*The emptiness of the battlefield demands independent thinking and acting fighters, who can make calculated, decisive and daring use of every situation, and who is convinced that a successful outcome is dependent on the individual.*³¹

However, this way of viewing challenges from the battlefield was not invented in the interwar period. The authors of the 1933 doctrine have probably found their ideas in *On War* where Clausewitz wrote that [G]enerally speaking, the need for military virtues becomes greater the more the theatre of operations and other factors tend to complicate the war and disperse the forces.³² He goes on underlining this point when he says that:

*An army’s military qualities are based on the individual who is steeped in the spirit and essence of this activity; who trains the capacities it demands, rouses them, and make them his own; who applies his intelligence to every detail; who gains ease and confidence through practice, and who completely immerses his personality in the appointed task.*³³

In both cases the battlefield is characterized as empty and each officer is often on his own, only surrounded by his own soldiers. This indicates two things. First, as has been said in the doctrine, you need independently minded officers. However, herein also lies a huge challenge. In situations like this officers have the opportunity to ‘escape’ and not do what is expected of them. Because they are alone, they also know that they can get away with it, because no one sees them. This is obviously a huge problem. You therefore need officers who stay on the battlefield despite the opportunity they have to ‘escape’ and get an easy way out.

To get a better understanding, one can study an historic incident from WW II. In the race for the atomic bomb, Norway played an important part. The Germans thought that heavy water produced at Norsk Hydro’s plant in Rjukan Norway could help them win this race. Because of this, the Allies saw it as crucial to destroy this plant. Part of this plan meant that a Norwegian resistance cell consisting of Norwegian officers and volunteers had to establish a Forward Operating Base on the plains of Hardangervidda. They stayed there for several years both

³⁰ Condell, Zabecki, p. 3.

³¹ H.Dv. 300/1, *Truppenführung* p. 3, paragraph 10.

³² Clausewitz, p. 221.

³³ *Ibid.*, p. 219.

before the attack on the plant, but also after the attack if they were needed for other operations.

Living for several years on the high plains of Hardangervidda is hard. During winter time there are temperatures below minus 40 degrees celsius and food can be a very scarce resource. Although food and weather conditions were tough to endure, it is probably the endurance despite knowing that they did not “need” to stay there which is most admirable. If the young Norwegians had come down from the mountains in 1944 and simply said that it was impossible to stay there any longer, they would have gotten away with it. No one could have blamed them for giving up knowing the terrible conditions they had to endure. The point is that they did not come down from the mountain, they held out. They knew they would be heroes even if they gave up in 1944, but they kept going.

Even though this is not exactly an engagement or tactics, it says something about the personal qualities of the Norwegian soldiers. It says something about enduring situations despite the option of getting away with a much easier solution. Despite being alone and having extremely good reasons for giving up, they did not do that. Motivation for this is not something you can train for directly. It has to come from something or somewhere else. Hew Strachan argues that this kind of motivation comes from four sources: the buddy next to you, a higher cause (patriotism), fear of punishment and training in it self. Training is valuable for several reasons, but primarily because it builds self-confidence.³⁴ The point is that it is the combination of all these factors that is important in training. Not only because they develop the officer’s abilities but just as important, they build his personal qualities. The values and demands which characterize the environment in which the training is taking place are therefore of utmost importance.

Adolf von Schell was a German WW I veteran. He served as a platoon leader and company commander in the war and worked later both in line and staff in the new German Army after the war. ‘In 1930 he was designated by the government to attend The Infantry School at Fort Benning. He graduated from that institution with the Advance Class of 1930-31.’³⁵ During his time in the US he gave several lectures on lessons learned as an infantry small unit leader

³⁴ Hew Strachan, ‘Training, Morale and Modern War’, 2006.

³⁵ Major General Campbell King in the foreword to Adolf von Schell, *Battle Leadership*, (Quantico, The Marine Corps Association, 1988).

during WW I. These lectures were later collected in a small book called “Battle Leadership”. In these lectures von Schell makes several interesting remarks both on what the nature of the battle is and what it demands from both officers and soldiers. He also more or less reached the same conclusion as Clausewitz.

*In peace we should do everything possible to prepare the minds of our soldiers for the strain of battle. We must repeatedly warn them that war brings with it surprise and tremendously deep impressions. We must prepare them for the fact that each minute of battle brings with it a new assault on nerves. As soldiers of the future, we ourselves should strive to realize that we will be faced in war by many new and difficult impressions; dangers that are thus foreseen are already half overcome.*³⁶

Auftragstaktik or ‘Mission Tactics’

Another interesting concept which clearly shows the German view on the nature of the battlefield is ‘Auftragstaktik’. Adolf von Schell simply translates this into mission tactics and although it has been translated into English in several different ways, it is difficult to understand the meaning of it unless one digs deeper into the origins of the concept. The concept is interesting in two ways. First it explains how the Germans believed they could be faster than their enemies. Second and maybe more important, it says something about what kind of officers and soldiers an army needed to operate like this.

As mentioned earlier, tactics and the influence of commanders on every level have changed from the days of Napoleon and up till today. Field Marshall Helmuth von Moltke the older was Chief of the Prussian General Staff from 1857-1888. He also acted as commander in the field during two successful wars; against Austria in 1866 and against France in 1870-71. He has a very important place in German military tradition and is probably ‘the most important military thinker between the fall of Napoleon and the First World War.’³⁷ He recognised the difficulties of the modern battlefield early. His enduring remark that ‘no plan of operations, survives the first collision with the main body of the enemy’³⁸ has ever since ‘forced’ every commander on every level to think independently, but also forced every commander to trust his subordinates.

³⁶ Von Schell, p.10.

³⁷ Gunther E. Rothenburg quoting Helmuth von Moltke in the introduction to Hughes and Bell (eds), *Moltke On the German Art of War*, (Novato CA, Presidio Press, 1995), p. viii.

³⁸ *Ibid.*, p.x.

Von Moltke saw that it was impossible to plan a battle into minute detail. One could never foresee what the enemy would do. Therefore, every commander on every level had to make their own decisions based on their own judgement of the situation. The reason behind this acknowledgement was the need for speed on the battlefield that von Moltke saw. If every single new order which was issued on the battlefield had to be sanctioned by the commander on the top, one would have a very slowly moving army unable to exploit situations and opportunities on the battlefield.

How an attack should be conducted has been described earlier. There is a very important aspect of how the Germans anticipate the attack to evolve, which supports von Moltke's view. Under the headline *Angriffsverlauf*, one can read that '[A]t this point, the attack dissolves into individual engagements.'³⁹ This is of course not something very revolutionary and new. What is important is that the Germans expected the battle to be broken up into smaller and less controllable engagements. At least for the commander on the top, it will be almost impossible to control each engagements all by himself. This indicates recognition and acceptance for officers capable of independent action. A proof of this can be found later in the doctrine when it claims that '[T]he independence of action of subordinate commanders and their close coordination will influence decisively the success of the advance.'⁴⁰

Von Schell was clearly familiar with what von Moltke called *Auftragstaktik* and the reason for thinking that way on the battlefield and when training for the battlefield.

*In the German Army we use what we term "mission tactics"; orders are not written out in the minutest detail, a mission is merely given to a commander. How it shall be carried out is his problem. This is done because the commander on the ground is the only one who can correctly judge exiting conditions and take proper action if a change occurs in the situation.'*⁴¹

He goes on by giving a second reason for this way of thinking in battle. By simply giving the officer a mission and a possibility to act within the limits of this mission, the officer will feel responsible for what he does. But for this to be possible on the battlefield it must have been practiced in training. One can not expect initiative and independent action from junior leaders if this is not a natural part of daily training.

³⁹ H.Dv. 300/1, *Truppenführung* p. 146.

⁴⁰ Condell, Zabecki, p. 101.

⁴¹ Von Schell, p.17.

*Give the same independence to your platoon and squad leaders. It is certainly evident from training in peace that the more freedom allowed subordinate leader in his training, the better the result will be.*⁴²

Based on this discussion on fighting and the nature of the battlefield, the German view on what they wanted their officers to focus on in an engagement or a battle can be summed up in four points; concentration of efforts on one decisive point, coordination of all available assets, deep penetration, and being quicker than the enemy. This again can be reduced to two main points; Speed and Focus of effort. The purpose of this was not to give a recipe for how to fight, but rather an example of how the Germans wanted their officers to think and what to expect when conducting an attack. As mentioned earlier, similar recipes are given for other subjects throughout the doctrine. However, by understanding how the Germans thought about fighting and adding how they viewed the nature of the battlefield, it is possible to draw some conclusions as to what an officer must be capable of, in order to achieve speed and focus his efforts, i.e. ‘Battlefield Demands’, which is the subject of the next section.

‘Battlefield Demands’

Having arrived at two important aspects of the German way of war, it is time to look more closely into what the Germans believed a battlefield demanded from the officer. This section is divided into three. Each part discusses a battlefield demand; making decisions, leading others and enduring the situation. Under each battlefield demand there will be an explanation of why this particular issue was seen as a vital battlefield demand. Having done that, each demand will be linked to several personal qualities which were crucial for officers in order to cope with battlefield situations. This section ends by pointing out similarities between the German view and a more modern view of important personal qualities in tactics which are found in a US Marine Corps manual. This is done to enhance the relevance of what has been found in the German literature.

First; Making decisions

In the doctrine from 1921 one can read that ‘[T]he art of command lies in recognising when a new decision needs to be taken.’⁴³ Doctrines provide the officer with a draft on how to think and what to look for. They also explain the nature of the battlefield and what to expect there.

⁴²Von Schell, p. 17.

⁴³H. Dv. 487 (FuG), p. 9.

However, nothing happens until someone takes action. Someone has to decide where and when. Where is the decisive point? When should the break-in force start working? When should the exploitation force be committed? These questions demand action and decision making from the officer.

*The command of an Army and its subordinate units requires leaders capable of judgement, with clear vision and foresight, and the ability to make independent and decisive decisions and carry them out unwaveringly and positively.*⁴⁴

*The first criterion in war remains decisive action. Everyone, from the highest commander down to the youngest soldier, must constantly be aware that inaction and neglect incriminate him more severely than any error in the choice of means.*⁴⁵

These two quotations are from *Truppenführung*. The second quote is also written in *F.u.G.* using the exact same words, which amplifies the importance of this in German military tradition.⁴⁶ Several other aspects are discussed in the doctrine, but the way these two are formulated they call for one particular necessity for an officer. They claim that for an officer to be successful in the battle and avoid failure, he needs the ability to make decisions. According to the second quotation, what he does is not so important as long as he acts instead of fearing that his decisions are wrong and thus remains inactive.

Focus on decision making can also be found in an article written earlier than the two doctrines. In 1920 an unknown author wrote about how the infantry should be employed in the attack in a manoeuvre war. In general the article discusses how one should place support weapons such as the machinegun in order to get the most out of it and which formation is the most appropriate when approaching the enemy. Instead of advancing on a broad front each junior commander should be given freedom to exploit the possibilities the terrain give. Here we can see a direct link from what the Germans experienced during WW I, the development of Storm Troop tactics and how the 'new battlefield' was viewed. The battlefield could no longer be controlled by senior officers who commanded large formations by drills and blowing whistles. The author is specific when he talks about which qualities the officers in this unit must have. From leaders of such units one must demand great independence,

⁴⁴ Condell, Zabecki, pp. 17-18.

⁴⁵ *Ibid.*, p. 19.

⁴⁶ H. Dv. 487 (*F.uG*), p. 7.

judgment and the ability to make rapid and vigorous decisions. (*‘Von den Führern solcher Gruppen muss grosse Selbständigkeit, Urteilsfähigkeit und schnelle Entschlusskraft verlangt werden.’*)⁴⁷

The two quotations from the doctrines and the article from the *Militär Wochenblatt* stress the importance of decision making in the German Army. Not only do the doctrines highlight it, they also value it by the way they train and which focus they have on their exercises.⁴⁸ Based on this it is fair to say that in the eyes of the Germans, tactics is about decision-making. Making decisions sounds easy, but being able to make decisions in battle is very challenging. One should therefore ask which qualities are needed for an officer to be able to make decisions.

Vigorous

One part of the answer is being vigorous. Support for this view can be found in an article from 1919, written by Hauptmann von Sachs. He served as adjutant at the department of Refinement and Education *‘Erziehungs- und Bildungswesen.’*

*Guidance from people who themselves do not possess any leadership qualities can not compensate for lack of refinement, theoretical and practical knowledge, lack of energy and the ability to be vigorous (Entschlusskraft).*⁴⁹

This article was written as a critical answer to an article written in a newspaper (*Deutsche Allgemeinen Zeitung*). The newspaper printed an article where the German officers were called upon to protect the German government. Von Sachs was critical of demands coming from a government that made taunting remarks about the efforts made by German officers towards the end of the First World War. Although von Sachs mentioned several capabilities, it is obvious that the ability to make decisions was important. It was, however, not the recognition of the importance of making decision that was most remarkable. If we see this article together with the above mentioned from 1920 we find one common word; *Entschlusskraft*. This can be translated into English as ‘vigorous’.

⁴⁷ Author unknown, “Vervendung der Infanterie mit ihren Hilfswaffen im Angriff im Bewegungskrieg”, *MW*, 1920, no 121, column 2237. The original text is kept to show the word *Entschlusskraft*.

⁴⁸ See for example how the Great Autumn manoeuvre was conducted in “Die Grosse Rahmenübung 1930,” *MW* 1930, no 14, column 513-520.

⁴⁹ Von Sachs, “Dem Offizer muss seine Stellung wiedergegeben werden”, *MW* 1919, no 88, column 1554.

Decisiveness

Having argued that being vigorous is important; the following will explain what is needed to be seen as vigorous. At least three aspects influence this. First, you need a foundation, second you need to handle uncertainty, and third you the ability to act independently. The word foundation may need a more thorough explanation. In this dissertation it can be divided into two: being decisive and having knowledge. It can be questioned why being decisive is a foundation for being vigorous. What is meant is that the ability to make a decision is a quality in itself. In order to be vigorous you simply have to be able to make decisions. This may seem obvious, but the fear of making a decision because of the responsibility you are entrusted with can be a huge problem, and can be found in all human activity. Since a commander makes decisions which can decide life or death, it is easy to imagine that this can be a problem also on the battlefield. A quotation from the doctrines was used to show how vital making decisions is on the battlefield. The Germans even recognised that it is always better to make a decision and act, instead of not making a decision because you are afraid of not making the right one. This also shows a great appreciation for just making decisions. Another example which recognises the importance of being decisive can be found in an article from 1930 where Captain Gallwitz says that:

Bravery is an obvious quality for a commander; not just recklessness or tough endurance, but spiritual boldness combined with strength of character, decisiveness and firmness.⁵⁰

Although Gallwitz mentions decisiveness as an important quality, this is not the only one. Both strength of character and firmness are mentioned as important qualities in combination with decisiveness. One could therefore ask why the other two are not discussed here. The objective of this quote was only to show the importance of being decisive and that being decisive is a quality in itself for an officer. To further underline that making decisions is a quality in itself, there will later be a discussion on how the Germans trained their officers to cultivate this particular quality. The two other qualities mentioned have a more natural place under another heading and will therefore be discussed later.

⁵⁰ Hauptmann Gallwitz, "Der Unterführer", *MW* 1930, no 13, column 480.

Having knowledge

The second part of the basis for being vigorous is knowledge. You need to know as much as possible of every military subject that involves your decision. To be able to concentrate your efforts against one decisive point you have to know how to use your assets. You need to know how to direct artillery fire, you need to know the range of your support weapons, you need to know the battle drills for breaking into trenches, and so forth. These are only a few of the things you as a tactical officer need to know in order to be able to make decisions. Without basic military or tactical knowledge you will not function on the battlefield. Being knowledgeable or having high level of learning is therefore one important quality needed for a tactical officer.

This is perhaps an area which clearly separates tactics and strategy. Whilst technical insight into battle drills and technicalities of weaponry may not interfere with decisions made on the strategic level, it is of utmost important for an officer faced with the enemy on the battlefield. Without these skills he will not be able to make decisions on the battlefield.

In an article in the *Militär Wochenblatt* from 1927 Lieutenant Colonel Hauck highlights the importance of knowledge. He claims that due to the versatility of the modern war one needs a high level of knowledge.⁵¹ He goes on by explaining that the necessity for knowledge has always been obvious in German military education. The article was written as a commentary on a Russian translation of a book by Colonel von Sochenhaufen. In his article colonel Hauck was critical to the Russian translation and claims it to be false in several aspects. According to von Hauck the Russian translation had not understood von Sochenhaufen correctly when it claimed that ‘the front officer only needs a strong will to succeed and that knowledge comes in second line.’ Judging from the German culture an interpretation like this is easy to understand. Both Clausewitz and the 1933 doctrine claim that character counts more than intelligence in tactics. Although the 1933 doctrine came out after this article was written, strength of character and will are definitely important aspects in German military thinking. However, Lieutenant Colonel Hauck saw the combination of the two, as important for military decision making.

For the commander to begin in his job with sufficient knowledge and intellect, he must have received thorough education based on practical examples and

⁵¹ Oberleutnant Hauck, “Wissen und Können”, *MW* 1927, no 38, column 1395.

*experience. This is the best foundation for a sound judgement of the situation and the ability to make the right decision.*⁵²

Knowledge is not only a theoretical matter, for officers, practical knowledge is often just as important as theoretical. Especially on the tactical level of war, officers need the ability to transfer theoretical knowledge into practical actions and decisions. The officer needs to know the effects of his actions. He needs to develop a feeling for what it means to have covering fire from machine guns. He needs to develop a feeling for what the effects of an air strike or an artillery fire mission are. After that he needs to develop a feeling for timing. He needs to know how much time and effort it takes to get these things to work. This can only be done by practical training through which one develops practical knowledge and skills.

*Higher education of the officer in the science of war is about making him a complete commander. To command a unit can only be done through orders. The first prerequisite for the education of the commander is therefore to make sure that he can give those orders. This is an art and from an artist it is required that he masters his trade. Every opportunity to master this must be pursued, but it is first of all a product from solving tactical problems.*⁵³

In the beginning of the article, Lt.col Hauck emphasized the need for knowledge because of how new wars had developed and how officers needed technological knowledge to master them. In the last quotation Hauck mentioned another kind of knowledge, the knowledge of how to command. Some will claim that this is what tactics are all about. That may be true, but if one should view the tactical level of war to be just about transferring knowledge of military equipment, drills and formation into practice, a very important aspect of the tactical level of war will be lost. As argued before, the human aspect of war is the decisive one. By viewing tactics only as transferring theory into practice one would lose the human aspect of it. On the tactical level the quality of humans is more important than any kind of equipment. One must therefore not forget to combine both military theoretical and practical knowledge and knowledge of human beings. This indicates that on the tactical level of war it is both the combination of military knowledge and skills and the ability to lead others, which must be transferred into practical actions. This is military command. Military command is how the officer combines *all* military resources available. Knowledge and skills concerning both material and humans are needed on the battlefield. One can argue that this has more to do with the next main ability highlighted in the dissertation, the ability to lead others. There is

⁵² Ibid., column 1396.

⁵³ Ibid., column 1396.

however a difference between leadership and commanding. Leading and leadership has more to do with what you do to make others follow you. Command has more to do with how you combine your knowledge of military technicalities, your knowledge of your men and your evaluation of the terrain to reach decisions. When you command soldiers have already decided to follow you because you are what you are and have done what you have done. How you now choose to use this resource is up to you. This is definitely something you need to have knowledge of and train for, to be able to master.

Another famous German officer with experiences from WW I was Ernst Jünger. Jünger was a 'Stosstruppführer' (Stormtroop leader) in WWI and later became an author of novels based on his experiences in WWI. In an article from 1920, he claimed that the 'new battlefield' demands 'Scientific knowledge and training in which every technical means at hand'.⁵⁴ The 'new battlefield' to which Ernst Jünger refers is a battlefield where one has to combine the effects of all available means to succeed. This was first of all recognized through the doctrine from 1921 (*FuG*), where the recipe for winning wars was through movement and use of combined arms. Even down at the lowest level this was seen as crucial. The fact that the Germans soon recognized the need for combining the effects of both infantry and artillery also underlines the importance of knowledge, or as stated in an article from 1928:

*The surest basis for a successful integration of the main weapons on the battlefield requires a mutual knowledge of how to operate the means of battle and how to manoeuvre them.*⁵⁵

As shown above, knowledge and skills in military matters are important for military decision making. There were, however, other views on which aspects were of importance to officers on the battlefield. General von Seeckt was the second chief of the German Army after WW I, and has been given credit for the successful build up of the German Army after the war. His experiences in WW I had convinced him that in a future war one could only win through superior movement and combination of all arms.⁵⁶ He also faced a tremendous challenge. After the war, Germany was allowed an army consisting of only 100 000 soldiers. Among these only 4000 could be officers. In addition to that, to prevent Germany from building up a huge military reserve, minimum service time was 12 years. This gave the Germans a hopeless

⁵⁴ Ernst Jünger, 'Skizze moderner Gefechtsführung', column 433.

⁵⁵ August v. Urbanski, "Zusammenwirkung von Infanterie und Artillerie, *MW* 1928, no 3, column 83.

⁵⁶ Generaloberst von Seeckt, "Über Heer und Krieg der Zukunft", *MW* 1928, no 38, column 1459.

starting point if a new war would occur. One solution von Seeckt saw was to make sure that in case of a crisis, civilians were ready to increase the size of the Army only after a short period of military training. This could only be done if the education of the new generation was focused on physical and mental training.

*To exploit the inadequate time for education in a best way possible, one must focus the education of young people more on mental and physical areas than on military.*⁵⁷

Von Seeckt shows in this quotation his beliefs in general education and education of the mind to improve one's intellect. Through that, he believed that new recruits would be more ready for military training and through a more developed intellect they would also be more able to make decisions on the battlefield. This was also one of his arguments for demanding the 'Abitur' from someone who was to be accepted for officer training. Both Corum and Spires have argued that von Seeckt demanded the *Abitur* because he wanted to ensure that the future German officer had the right social background and that they had a proven minimum intellectual level. These two factors, were according to Corum and Spires, a proof that candidates were officer material. This is probably right, but there is a second aspect to it. In a commentary written by Bernard Brodie in Paret and Howard's translation of *On War*, he concluded that

*Education, almost regardless of the field of specialization, undoubtedly enhances our intellectual sensibilities, and one of the ways in which it does so is by expanding our awareness of connections between events or insights remote in time and in circumstance.*⁵⁸

This indicates that developing or having a developed intellect within several areas is important for an officer's ability to make decisions on the battlefield. This means that general knowledge and not just military knowledge was seen as important for the officer's decision making capability. Perhaps the best description, of how important the Germans regarded knowledge, is presented in an article from 1930. In the article the author concludes that:

⁵⁷ Ibid., column 1460.

⁵⁸ Bernard Brodie in Carl von Clausewitz, *On War*, 1993, p. 787.

*First of all must the commander through iron diligence and an unstoppable thirst for knowledge, educate himself further and comprehend the science behind his profession.*⁵⁹

By this statement Gallwitz recognises the need for knowledge. You can never read and learn enough about military matters. Only through a constant search for more knowledge will you reach your goals and be able to fill an officer's shoes. We have seen that both Ernst Jünger and von Seeckt emphasize knowledge. In addition to them, there were several other officers who highlighted knowledge. There is no doubt that an officer's will is important. And although the Russian translation of von Sochenhaufen's book was criticized for focusing too much on will, it has an important role on the battlefield. However, one must not forget to guide this will in the right direction. This is what knowledge will do, and that is the prime reason why knowledge is one of the foundations for decision making. There is a second aspect to this quotation. By saying that an officer's thirst for knowledge must never end, one creates an environment where officers are expected to work hard and be responsible for their own future. Their career is not in the hands of anybody but themselves. This focus on the individual and their ability to trust their own qualities teaches independence, a quality which is much needed on the battlefield. This will be discussed in more detail later in the dissertation.

There are several other articles that highlight knowledge as important for the officer on the battlefield. Although it is the ability to make decisions in itself that is needed, you also need knowledge to make sure those decisions are the best one for the situation you are in. Therefore the ability to make decisions on the battlefield was largely seen as a product of both having theoretical and practical skills and being decisive.

Handle uncertainty

Being able to act and being decisive are without question important abilities for an officer and serve as a prerequisite to function in his post. However, one must not forget in which situations the decisions have to be made. Clausewitz said that '[W]ar is the realm of uncertainty; three quarters of the factors on which action in war is based are wrapped in a fog of greater or lesser uncertainty.'⁶⁰ The ability to act when having 100% situational awareness is one aspect of decision making which makes it fairly easy to come up with the right

⁵⁹ Hauptmann Gallwitz, "Der Unterführer", *MW* 1930, no 13, column 480.

⁶⁰ Clausewitz, *On War*, p. 117.

solution. However, being able to act when you only have 25% or limited situational awareness is a totally different matter. This calls for an officer that is able to act quickly and powerfully despite lack of information. In other words he needs the ability to handle uncertainty. The doctrine also comments on this subject.

*Uncertainty characterises the situation. It will seldom be possible to gain exact information on the enemy situation. To gain more information is an obvious necessity, but waiting for information in a critical situation is seldom a hallmark of a strong commander, but more of a weak one.*⁶¹

By this statement the doctrine emphasized the value of the ability to make a decision despite lack of information. From a tactical point of view it is unwise to wait for more information since making rapid decisions is of utmost importance. While waiting for information hopefully will give you a clearer picture of the situation, it may deprive you of an opportunity to hit the enemy when he is in an unfavourable situation. Just as interesting as the tactical perspective, is the German view on what characterises an officer who is unable to act for lack of information. Although wanting to have as much information as possible before making a decision lies in human nature, this is seldom possible in a battle. Therefore being unable to act due to lack of information is a sign of weakness.

What else creates uncertainty on the battlefield? As Clausewitz said you only control about 25% yourself. Uncertainty may come from the enemy, the surroundings and also from your own side. Being issued wrong orders based on false information will create uncertainty. The enemy is not where you were told. The weather may hinder your artillery observer from seeing, thus cutting your artillery support. Rain may have made the river you were planning to cross on foot impossible to wade and so forth. The responsibility for deciding what to do still lies with the officer on the spot. Everything that seemed obvious and was the foundation for your plan has changed. It is in this environment of uncertainty the officer must act and make decisions.

*Combat situations are of an unlimited variety. They change often and suddenly and can seldom be foreseen. Incalculable elements often have decisive influence. Your own will is up against the independent will of the enemy. Friction and mistakes are daily occurrences.*⁶²

⁶¹ H.Dv. 300/1, *Truppenführung*, p. 10.

⁶² *Ibid.*, p.1.

Von Schell also emphasized the necessity of being able to make decisions despite lack of information and in uncertainty because ‘[I]n open warfare, we will never know exactly where the enemy is, how strong he is, or what he intends to do. War is not as easy as a map problem. Leaders must nearly always issue orders without exact information.’⁶³ From this experience he draws one conclusion about decision making without proper information.

*When the situation demands it decisions must be made promptly without waiting for good information. Field exercises, map problems and war games should be based on poor information of the enemy. If real war brings us better information we will have an easy time.*⁶⁴

Where does this take us? As von Moltke said, in war and battle, the situation changes all the time. What you planned and thought were the right thing to do one minute ago is totally wrong because the enemy did something unexpected or because the weather changed. Therefore you need the ability to make decisions despite the uncertainty that characterizes the battle. To make it even more complex you must not forget that decisions have to be made quickly to keep the enemy off balance and maintain tempo. For officer to be able to act faster than the enemy and react quickly to ever changing conditions, you need officers that can handle uncertainty, but what kind of officers are able to handle uncertainty?

Independence

What does an officer need to be able to make decisions within the frames of *Auftragstaktik* and handle the uncertainty it implies? Some things have already been mentioned. You need officers that can think and act independently. However, that is perhaps easier said than done. In an article in *Militär Wochenblatt* from 1926 General Hermann von Francois wrote about experiences from WW I and commented on how he wants to educate future soldiers and officers.

*The master “War” convinced us soon that we had not paid enough attention to the maxims, and we threw the old moulds overboard. The soldier must be trained as an independent thinking and acting fighter but also as a member of his squad.*⁶⁵

⁶³ Ibid., p. 31.

⁶⁴ Ibid., p.39.

⁶⁵ General Hermann v. Francois, “Studien über Gruppen-und Zugkampf nach den Erfahrungen des Weltkrieges”, *MW* 1926, no 7, column 228.

According to General von Francois, it is important for every soldier on every level to be able to think and act independently. This indicates a huge difference from the Napoleonic battlefield where soldiers were only meant to stand and fight in columns and formation, and where a departure from the preset formation threatened to destroy the battle. In von Francois's article he calls for the opposite. He wants soldiers and officers to change and adapt to the battlefield, only then one can exploit the opportunities given.

More evidence, of the German view that the new battlefield needed independent thinkers, can be found in an article from 1928. The article discussed the value of training in fighting in close order. The author was not totally against training for marching in columns on the parade ground, practicing turning left and right. He saw this as an important and necessary way of teaching a unit discipline. What he did not agree upon was the relevance of this kind of training for the modern battleground. One of the main problems, he said, is that the officers become more occupied with looking at the soldiers legs than looking them in their eyes.⁶⁶ The modern battlefield demanded more fighting in open order. Fighting in open order demanded officers and soldiers who were able to think and act for themselves.

You often hear soldiers wanting to train parade ground drills and marching. This is easy to understand. As part of a larger crowd, the simple (Einfach) human being can hide himself in the foolish (blöde) crowd. There he feels secure and thinks he avoids the effects of modern weapons. However, regimental parade marches in the streets or on the parade ground, are not means for educating soldiers to independent thinking fighters.⁶⁷

In this quotation the author also recognises why soldiers want to train in closed order. It is easy and it demands little from the individual soldier. As long as everyone walks in line and in column, very little freedom of action is given to each soldier. By attending parade marches soldiers and officers also get the opportunity to show themselves in shiny and fancy uniforms, and show off to the rest of the world their skills in marching and parading. And although this kind of training had its relevance during the Napoleonic wars, it is not what the modern battlefield demands. Or as the author says: Just because a unit is skilled in marching and looking good does not mean that it is a good fighting unit, the opposite is more likely to be true.⁶⁸

⁶⁶ Author unknown, "Geschlossenes Exerzieren, Ausbildung, Diziplin", *MW* 1928, no 9, column 342.

⁶⁷ *Ibid.*, column 342.

⁶⁸ *Ibid.*, column 341.

It is one thing to say that independence is important; it is another to show through practical actions that you value independent thinking in officers and soldiers. Earlier in this dissertation it was said that David Spires was critical of von Seeckt and what he saw as officer qualities. In this respect, Spires had a valid point when he claimed that the overriding emphasis on obedience and duty did not encourage individual initiative and independent thinking.⁶⁹ To support this view it is enough to quote from both *FuG* and *Truppenführung*. In *FuG* one can read that '[T]he leader carries the full responsibility if he fails to complete his mission or changes it.' Or as said in *Truppenführung*: 'An officer who changes a mission or does not carry it out must report his actions immediately, and he assumes full responsibility for the consequences.'⁷⁰ Statements like this do probably not encourage initiative and independent action. However, both doctrines also state that:

*Every commander must constantly be aware and impress his subordinates that inaction and neglect will incriminate more severely than any error in the choice of means.*⁷¹

Cultivating independence and initiative can be difficult, especially within an army. On the one hand one needs units and officers that are able to coordinate their efforts. On the other hand one needs officers who dare to take initiative to exploit the opportunities given to them on the battlefield. On top of this the doctrine clearly tells you that if your decisions are wrong and you fail, you will be held responsible. To achieve this balance was probably even more difficult in Germany after WW I. As mentioned before, Germany was forced to reduce its army to only 100 000 soldiers including 4000 officers. This created a huge surplus of both officers and regular soldiers and made the struggle to become an officer extremely difficult. Being promoted was therefore only a result of someone retiring or dying. It is not difficult to predict who got the promotions; only the very best.

With a system like this, one could expect that officers would be reluctant to take any chances because they were afraid of making mistakes. Mistakes meant not being selected or promoted and being officers in Germany after the war meant, at least to some extent, economic security. There is, however, another way of seeing this, which explains why the German doctrines

⁶⁹ Spires, p. 129.

⁷⁰ H.Dv. 487 (*FuG*) p. 8 and H.Dv. 300/1 *Truppenführung* p. 11.

⁷¹ H.Dv. 487(*FuG*), p. 7 and H.Dv. 300/1 *Truppenführung* p. 5.

could demand this from their officers and still preserve initiative and independent action. There was simply not room for those who were not willing to take chances. Taking initiative and chances meant that some were not selected because they made mistakes. On the other hand there were enough officers who showed initiative and independence and succeeded. So if you wanted to become an officer, not trying was simply not an option.

It is also important to understand the German military tradition and culture. In Germany initiative from lower ranks was expected.⁷² This was part of being an officer. If you did not show initiative you simply were not doing your job. An interesting debate around initiative and the responsibility of officers took place in *Militär Wochenblatt* in 1928. The debate revolved around subordinate officers' role when attached to a larger unit. The example which was used was a machinegun company commander attached to a battalion. Was it his role to make suggestions as to how his unit should be employed or should he wait to be told? According to the first author the educational directive from the period was wrong when it claimed that it is the duty of every officer on every level to make suggestions to how his unit should be deployed.⁷³ In his opinion this was only his role in exceptional cases. Only when the battalion commander has not been able to see for himself is the company commander 'allowed' to make suggestions.⁷⁴ This is a stereotypical view of the military system. The chief on the top is always right and subordinates are allowed to speak only when spoken to. In a later edition in the same year these views were contradicted.

*The commander of supporting weapons is not to wait for orders before he commits his efforts. This is against the sense of our regulations. He is given the right and has the duty to suggest when his efforts should be committed.*⁷⁵

Support for this view can be found in number 47. Here the author concluded that the complex nature of the battlefield had made it almost impossible for commanders to be in control of everything. Having subordinates who actively come up with suggestions was therefore welcomed. He underlined his point by simply saying that '[W]hy should not suggestions be

⁷² See for example the earlier discussion in the dissertation where Gudmundsson mentioned the major who got reprimanded for just following orders.

⁷³ Unknown author, "Vorschlagstaktik", *MW* 1928, no 8, column 291.

⁷⁴ *Ibid.*, column 292.

⁷⁵ *Ibid.*, column 1685.

listened to if they lead to the objective... After all it will always be the commander's responsibility.'⁷⁶

What does this discussion teach us? In my opinion it has two important aspects. First it states that according to directives and doctrines, initiative and independent thinking from subordinates is expected. But just as important is the word which is used to emphasize it, 'duty'. 'Duty' is a very strong word, and it says something about how seriously the Germans valued this quality. It therefore strengthens the impression that not taking initiative and acting independently was not an option in the German army. There is a second aspect to this. As mentioned earlier Spiers criticized von Seeckt because his focus on character killed initiative. However, the Germans did not always value initiative, or more rightly put: initiative for the sake of the initiative. Both the *FuG* and *Truppenführung* says that '[H]e must always act within the overall framework of the situation.'⁷⁷ One way to interpret this is that although initiative is valued, it must be controlled. It has to be within defined limits. If one goes outside this framework, initiative can be counterproductive. This more than indicates that there are qualities that are more important than initiative.

Based on the German view of fighting and the nature of the battlefield, being able to make decisions was the first battlefield demand. To meet this battlefield demand the Germans highly valued decisiveness, having knowledge and independence. Knowledge is important because knowledge gives you the foundation for knowing what to do, or the foundation for making a decision. But knowing what to do is not enough, you also have to make the decision at the right time. The right time on the battlefield often means being able to act faster than your enemy. To make decisions faster than your enemy you often have to base your decisions on very little information. Therefore, the Germans valued independence. Independence makes officers capable of trusting their own judgement and thus able to handle the uncertainty. This again gives the operation speed, and keeps the enemy off balance. In an earlier quotation from an article it was claimed that the Germans created an environment for independent thinking by the way they focused on the individual and the responsibility each had for creating their own future. This was a much needed quality on the battlefield because 'the emptiness of the

⁷⁶Unknown author, "Zur Vorschlagstaktik", *MW* 1928, no 47, column 1856.

⁷⁷H.Dv. 487 (*FuG*) p. 8 and H.Dv. 300/1 *Truppenführung* p. 11.

battlefield requires soldiers who can think and act independently.’⁷⁸ You are on your own when you make decisions and therefore need to be able to trust your own judgement.

In the process of rebuilding the army, traditional German military culture was gaining momentum. Emphasis on willingness to take risks, handle uncertainty and acting independently was initially a result of huge officer surplus in the interwar years; afterwards it became a result of battlefield necessity. The use of *Auftragstaktik* probably had its ‘all time low’ during Erich von Falkenhayn’s period as chief of the General staff, when focus lay on detailed planning of huge offensive manoeuvres.

*In the 20th century, the German maneuverists again faced serious competition from German advocates of methodical battle, Erich von Falkenhayn’s strategy of attrition, and the fixation of real estate that Falkenhayn shared with Hitler.*⁷⁹

Through the process of rebuilding the army one might therefore also say that *Auftragstaktik* had its renaissance. Again, the commander on the spot was the one responsible for making the appropriate decision and taking action. This was seen as the only way to succeed but also something that was expected from officers. If Erich von Falkenhayn stands as the symbol of ‘the all time low’ in German *Auftragstaktik*, Heinz Guderian can be found at the opposite end of that scale, and maybe symbolizes the peak of this vital tactical tradition. During the invasion of France in 1940 he twice neglected the *Führers* direct orders.

*Orders actually went out to Guderian to halt and allow time for the infantry to catch up. Once they had consolidated a defensive position on his flanks, he could drive on. Anyone who has studied the centuries-long operational pattern of the German Army could not possibly be surprised at Guderian’s response. He ignored his orders and continued on, undertaking a “reconnaissance in force” that included-no surprise- his entire XIX Panzer Corps.*⁸⁰

⁷⁸ H.Dv. 300/1 *Truppenführung* p. 18.

⁷⁹ Gudmundsson, *The German Tradition*, p. 274.

⁸⁰ Citino, *The German Way of War*, p.287.

Second: Lead others

*From the very day of enlistment, the Reichswehr officer candidate was destined to be a leader. Every aspect of his training was designed with this objective in mind.*⁸¹

This section will start by highlighting the German view on the importance of leadership on the tactical level. Having done that it will show how vital the term trust was in the German army and how crucial trust was in every officer's leadership.⁸² Throughout this section, the link between tactics, leadership and command will also be touched upon. In the previous section of the dissertation it was shown that tactics was about making decisions. The battlefield demands officers who can make decisions. Based on that, it was concluded that the officer needed decisiveness, knowledge, and independence. But an officer cannot fight alone. He needs others in addition to himself to do the job. The second important aspect for the tactical level of war was therefore joint effort. This does not only apply to combined arms, which was discussed earlier. It also applies to making units fight together as a coherent and strong entity, thus exploiting the effects of all available means against a common goal. This was defined as command. One vital aspect of command is leadership. Leadership is often pointed to as an imperative for success on the battlefield. And although the importance of effective leadership is unquestionable, it is almost impossible to find a definition of leadership which covers every aspect of the term. The British doctrine defines military leadership as: 'the projection of personality and character to get soldiers to do what is required of them.'⁸³ Said in a slightly different way, military leadership is about getting others to do what you want.

One might ask why one should bring up leadership when discussing tactics. This is a valid question, but in German military tradition it is almost impossible to talk about tactics without mentioning leadership. Judging from the doctrine, leadership's role in achieving what you want on the tactical level is obvious. Again it is important to emphasize the connection between leadership, tactics and command. As mentioned before command is where tactics and leadership meet. To know tactics, or as defined earlier, knowing how to use the armed forces to win a battle, is useless if you are unable to get the soldiers to follow you. This

⁸¹ Spires, p.16.

⁸² William Mulligan also emphasizes the importance of trust in William Mulligan, *The Creation of the Modern German Army*, (Oxford, Bregman Books, 2005).

⁸³ Chief of the General Staff, *Design for Military Operations- The British Military Doctrine*, 1996.

connection was not only seen by the Germans, but the importance was highlighted through a clear statement in the introduction to the doctrine.

*The calibre of a leader and of the men determines the combat power of a unit, which is augmented by the quantity, care and maintenance of their weapons and equipment.*⁸⁴

Further into the doctrine the important role of leaders is once again emphasized

*Leaders must live with their troops and share in their dangers and deprivations, their joys and sorrows. Only thus can they acquire a first-hand knowledge of their combat capabilities and needs of their soldiers.*⁸⁵

Trust/Autorität

If one accepts that being able to lead others is an important aspect on the battlefield, a new question comes up. What is it that makes others follow you? One part of this question is probably already answered. Having knowledge and being able to make the right decisions will hopefully help you. Making the right decision will make sure that you win battles, and soldiers tend to follow officers that are successful in battles. Von Clausewitz said that there is only one thing that can reduce friction in war; combat experience.⁸⁶ An officer who has combat experience therefore has a prerequisite for succeeding in battle. *Truppenführung* also regarded the value of experience by simply saying that '[T]he wider his experience in combat, the greater his importance.'⁸⁷ Does this indicate that one needs experience to have soldiers follow you? This is probably not the case. Here it is also worth mentioning a famous quotation by Frederick the Great when he commented on senior officers' hostility towards book-learning. 'If experience were all a great general needs, the greatest would be Prince Eugene's mules.'⁸⁸ There will be times where an army does not have relevant battle experience. In those times, what is it that makes soldiers follow officers? What is needed to have soldiers following you? The answer to this is trust. Whether this comes from your proven abilities in previous combat or from something else, as an officer you need the ability to generate trust among your soldiers.

⁸⁴ Condell, Zabecki, p.18.

⁸⁵ Ibid., p.18.

⁸⁶ Clausewitz, p.141.

⁸⁷ Condell, Zabecki, p.18.

⁸⁸ Karl Demeter, *The German Officer-Corps in Society and State 1650-1945*, Translated by Angus Malcom, (London, Wiedensfield and Nicolson, 1965), p.68.

‘The leader must be trusted and respected by his soldiers.’⁸⁹ This quote is from *FuG*. A similar phrase can be found in *Truppenführung* where the importance of trust both from the soldiers in their leader but also the other way around is highlighted as vital on the battlefield. ‘He has to find the way to their hearts and win their trust by understanding their thoughts and feelings... mutual respect is the best foundation for discipline in the face of need and danger.’⁹⁰ A similar view can be found in the professional debate.

*He [The squad leader] is the platoon commander’s assistant but at the same time the independent and responsible leader of his of his own squad, with whom he stays, lives, fights flights or dies. He must be trusted by his superior officers and his comrades.*⁹¹

In an article from 1927 being able to generate trust is even seen as the most important quality for an officer.

*The most important condition for success is that soldiers trust their commander. Methods and ways to achieve this trust are therefore just as important study as studying strategy and tactics.*⁹²

From this quotation one might argue that Germans treat leadership, strategy, and tactics as separate themes. The author says that it is just as important to learn how to get soldiers to trust you as to learn strategy and tactics, but when reading further into the article one understands that this is a good example of the connection between leadership, tactics and command.

*Success is the biggest contributor to trust for a commander. Therefore it is the commander’s duty to create success. A safe path to success is a proficient education of the soldiers.*⁹³

The author recognizes that trust is important, and as mentioned earlier, trust is often generated when officers are successful in battles. At the same time he accepts that success in battle does not come automatically. Education and training are prerequisites for winning battles. Number one priority for leadership in peace time must therefore be to ensure that soldiers get proper education and training. This is done for two purposes. First he knows that the development in

⁸⁹H.Dv. 487 (*F.u.G.*), p. 7.

⁹⁰ Condell, Zabecki, p.18.

⁹¹ General Hermann v. Francois, “Studien über Gruppen-und Zugkampf nach den Erfahrungen des Weltkrieges”, *MW* 1926, no 7, column 229.

⁹² August Urbanski v. Ostrnmiecz, “Führer und Truppe”, *MW* 1927, no 2, column 33.

⁹³ *Ibid.*, column 35.

warfighting demands a higher proficiency from all levels. Second, he also recognizes that through tough training and showing that he takes preparing for battle seriously, he generates trust between the soldiers and himself as their commanding officer. This trust is, in his opinion, the foundation for an effective command in the battle.

In an article from 1929 Lt.Col Feurstein explains the influence a commanding officer can have on his soldiers. The article describes an attack on the eastern front where a regiment from Austria takes 3000 Russians prisoners and catches 20 machine guns. Lt.Col Feuerstein attributes this success to the personality of the regimental commander.⁹⁴ But what is it about the colonel's personality that makes him successful? The author goes far in explaining the colonel's success because he had the right relations with his soldiers. It is perhaps not very nuanced to claim that as long as you have the right relations between soldiers and officers, you will succeed on the battlefield. However, according to Lt.Col Feuerstein the connection is obvious since 'where the commander loses relations with his soldiers he will also soon lose the trust.'⁹⁵

The doctrine explained that officers needed to live, suffer and if necessary die with their soldiers. This is, together with knowledge, how trust is generated. Only by showing that you as officer are first among equals will trust be generated or as Lt.Col Feurstein puts it: 'You can not dictate soldiers and subordinates to trust their commanders. It begins in the sub-consciousness and holds the unit together even in the most critical situations.'⁹⁶ Adding to this, it can not be expressed more precise than in an article from 1930 called '*Der Unterführer*' by captain Gallwitz. 'Being a commander is being an example.'⁹⁷

Being first among equals is one thing, but are there other aspects that generate trust? The answer is yes. Despite earlier impressions of the German Army it is obvious that mutual respect and high standards in personal behaviour were important qualities for a German officer. David Spiers has argued that the reason for focusing on respect was to preserve the homogeneity of the officer corps and having officers that obeyed von Seeckt's orders. This is one view. A more important reason for focusing on this issue was to keep the much needed

⁹⁴ Oberstleutnant Valentin Feurstein, "Der Einfluss der Führer im Gefecht", *MW* 1929, no 32, column 1293.

⁹⁵ *Ibid.*, column 1293.

⁹⁶ *Ibid.*, Column 1294.

⁹⁷ Hauptmann Gallwitz, "Der Unterführer", *MW* 1930, no 13, column 480.

trust between officers and soldiers. This is highlighted in an article from 1930, where an unknown author says that:

*But only when commander and subordinates have a mutual understanding of each other, when commander and subordinates trust each other, can there be talk of commanding.*⁹⁸

He continues to recognize that trust and not force is needed to succeed on the battlefield when claiming that ‘only in this way can we achieve a relationship based on trust, and this will lead to subordination from subordinates who feel free of compulsion. This is also the objective which we in the Armed Forces and the political leadership want to achieve for the whole of the German people.’⁹⁹ This is a good example of how much the Germans valued trust. Both in the Army and in political leadership trust should be striven for.

There are also examples which show that trust between soldiers and officers was the hallmark of the German Army prior to WW I as well. In an article from 1929 an unknown author highlights this when he discusses the role and responsibility of the company commander in educating NCOs. ‘The Army from 1914 was so perfect, so metal tough because officers and men, superiors and subordinates knew each other and trusted each other.’¹⁰⁰

These quotes indicate that the need for trust goes both ways. Soldiers need to trust their officers to follow them. At the same time only officers that show that they trust their soldiers will be trusted. Soldiers must be motivated by trust and not by force. This is well rooted in German military traditions. In an article in *Maneuver Warfare, an Anthology*, Bruce Gudmundsson writes about how the old German Jäger tradition influenced how the Germans fought both in WW I and in WW II.¹⁰¹ This old tradition accepted that it was impossible to succeed in battle if the fighting was forced into a rigid system. Therefore commanders trusted their subordinates to act on their own initiative. This view and acceptance of the realities of the battlefield led to a system which based itself on mutual trust between officers and soldiers.¹⁰²

⁹⁸ Unknown author, “Das Wesen des Führertums”, *MW* 1930, no 22, column 843.

⁹⁹ *Ibid.*, column 843.

¹⁰⁰ Unknown author, “Kompaniechef und Unteroffizierausbildung”, *MW* 1929, no 40, column 1629.

¹⁰¹ Gudmundsson, “The German Tradition”, 1993.

¹⁰² Here Gudmundsson refers to several sources on the German Jäger tradition. The best primary source is according to Gudmundsson: Johan Ewald, *Abhandlung über den Kleinen Krieg* (Kassel: Johann Jacob Cramer, 1785). This book is also available in English translated by Robert A. Selig and David Curtis Skaggs as *A*

Other examples can also be found. In his memoirs of his military career Herman Balck has a perfect example which illustrates trust and how this was viewed in the German Army. As mentioned before, Colonel Balck's 1st infantry regiment was the *Schwerpunkt* of Guderian's panzer thrust across the Meuse in 1940. Colonel Balck was among the first to cross the river and continued attacking deeper into the French countryside. After fighting for days and nights without rest, his unit was on the brink of exhaustion.

I called the officers together: It is impossible, we need a night of sleep; we can then continue tomorrow. I quickly quieted them all: Gentlemen we will attack or we will give away the victory. It was a situation where you can command whatever you like, but the soldiers simply did not manage anymore. I turned around and began to walk over open ground towards Bouvellemont. 50m, 100m, then all broke lose. Soldiers and officers that just seconds earlier were unable to continue ran past me. No one thought about cover. Everyone ran forward. In the sinking sun the rifles twinkled. It was impossible to stop them. Everywhere could one hear shouting of hurrahs as we broke into the village. Bouvellemont was ours. I was not surprised.¹⁰³

The battlefield demands leadership, and although there might have been an impression that the role of an officer is to shout and force his soldiers forward, this is, at least from a German point of view, not always the case. An officer needs the soldiers to follow him and to do that he needs to be trusted. Experience and success in previous battles generates trust. However, if an officer does not have experience of this kind he still can gain trust from his subordinates through being first among equals, treating soldiers respectfully and having superior knowledge.

Third: Endure the Situation

The problem with war in general, and the tactical level in particular, is the conditions under which decision making and troop commanding are taking place. Making decisions without having to take the consequences is easy. Making decisions knowing that your own life and lives of friends are at stake is a totally different matter. In *On War*, Clausewitz has several statements that address what war is all about.

Treatise on Partisan Warfare (Westport, Conn.: Greenwood Press, 1991) Gudmundsson also quotes Wilhelm Balck, in Wilhelm Balck, 'Die Entwicklung der taktischen Anschauungen in der englischen Armee nach dem Burenkrieg' *Vierteljahresheft für Truppenführung und Heereskunde*, March 1906, pp. 450,451. Here Balck compares British light infantry tactics to those of Prussian Jäger.

¹⁰³ Hermann Balck, *Ordnung im Chaos*, (Osnabrück, Biblio Verlag, 1981), p. 277.

*War is the realm of danger; therefore courage is the soldier's first requirement. ... War is the realm of physical exertion and suffering. These will destroy us unless we can make ourselves indifferent to them, and for this birth or training must provide us with a certain strength of body and soul. ... War is the realm of uncertainty;*¹⁰⁴

In this section there will first be an explanation to what is meant by enduring the situation and why this is important in German military tradition. Having done that there will be a thorough discussion of the term character. This will contain what the Germans viewed as the most important contribution to an officer's character, and also explain why the term character had a decisive place in German officer education in the interwar period.

Making decisions and leading others are unquestionably important abilities for an officer. But faced with the realities of war these qualities are of no value if you cannot endure the conditions on the battlefield. As Clausewitz says, endurance refers to prolonged resistance, whilst staunchness indicates the will's resistance to a single blow.¹⁰⁵ What is therefore understood by enduring the situation? 'Four elements make up the climate of war: danger, exertion, uncertainty and chance. If we consider them together, it becomes evident how much of fortitude of mind and character are needed to make progress in these impending elements with safety and success.'¹⁰⁶ This is what the officer must endure. Because on the battlefield one will always experience periods where the officer who is able to take a deep breath and try again, is the one that will succeed.

*As a rule, every attack goes through large and small crises before it reaches its culmination point. The commander has to recognise this moment and deploy all his resources decisively to enhance success or prevent failure.*¹⁰⁷

It is in situations where your unit is beginning to lose people, everything begins to look hopeless and soldiers begin to doubt whether they can win the battle or not. This is the time where the officer needs to show his strength and his ability to endure. It is in other words 'the impact of the ebbing of moral and physical strength, of the heartrending spectacle of dead and wounded, that the commander has to withstand – first in himself, and then in all those who,

¹⁰⁴ Clausewitz, pp. 116-117.

¹⁰⁵ Ibid., p.122.

¹⁰⁶ Ibid., p.120.

¹⁰⁷ H.Dv. 300/1 *Truppenführung* p. 124, paragraph 324.

directly or indirectly, have entrusted him with their thoughts and feelings, hopes and fears. As each man's strength gives out, as it no longer responds to his will, the inertia of the whole gradually comes to rest on the commander's will alone.'¹⁰⁸ In Germany it even became a part of their vocabulary; *durchhaltung* or holding out.¹⁰⁹ All these examples sum up the meaning of the third battlefield demand; **enduring the situation**, and why the Germans considered it as a battlefield demand. The next question that arises is; what does it take to endure situations like this? This will be the subject of the next part.

Character

*War is an art, a free and creative activity founded on scientific principles. It makes the very highest demands on the human personality.*¹¹⁰

The German answer to endurance is simply character. Clausewitz keeps referring to this term, but as we have seen earlier, and as Spires has demonstrated, it can be difficult to grasp the exact meaning of the concept. Therefore there will be a discussion on what the term represents, at least from a traditional German perspective. In Spires's book he said that von Seeckt turned to tradition for inspiration and guidance.¹¹¹ It is therefore natural to seek the answer to what the German view on character is in Clausewitz's book *On War*.

Clausewitz dedicated several pages in his book to what is meant by strength of character or just character. In Book one chapter three 'On Military Genius' he says that 'character is the ability to keep one's head at times of exceptional stress and violent emotion.'¹¹² Or simply 'that a strong character is one *that will not be unbalanced by the most powerful emotions*.'¹¹³ He also broadens the meaning of the term character slightly when saying that '[W]e say a man has strength of character, or simply has character if he sticks to his convictions, whether these derive from his own opinions or someone else's, whether they represent principles, attitudes, sudden insights, or any other mental force. Such firmness cannot show itself of course, if a man keeps changing his mind.'¹¹⁴ He goes on and tells us that 'a man whose opinions are constantly changing, even though this is in response to his own reflections, would not be

¹⁰⁸ Clausewitz, p.121.

¹⁰⁹ Strachan, "War and Society in the 1920s and 1930, p.36.

¹¹⁰ Condell, Zabecki, p.17.

¹¹¹ Spires, p. 2.

¹¹² Clausewitz, p.122.

¹¹³ Ibid., p.122.

¹¹⁴ Ibid., pp. 124-125.

called a *man of character*.¹¹⁵ This indicates that not only should the officer be able to endure the impressions coming from death and destruction around him. A strong character is also one that is able to keep his integrity and do what he believes and know is right despite the strains put on him from the battlefield.

Which qualities does then a *man of character* need? Clausewitz says that war is the realm of danger; therefore courage is the soldier's first requirement.¹¹⁶ The officer needs courage. Only with the right amount and right kind of courage will make the officer keep to his own convictions throughout the battle. What can then be classified as the right form of courage? According to Clausewitz courage in face of personal danger is of two kinds. It may be indifference to danger, which could be due to the individual's constitution, or to his holding life cheap, or to habit. Alternatively, courage may result from such positive motives as ambition, patriotism, or enthusiasm of any kind.¹¹⁷ There are in other words two kinds of courage; one that is based on the individual's fearlessness of dying and suffering, the other is based on motivation. Clausewitz goes on by explaining the impact of the two. 'The first is the more dependable; ... The other will often achieve more.'¹¹⁸

When seeing this discussion one might think that character is only the other side of will and vice versa. However, having read both the doctrine from 1921 and 1933, one gets another understanding. Section 5 of the 1921 doctrine clearly treats will and character separately when stating that '[A] stronger will and higher character is next to knowledge a prerequisite.'¹¹⁹ A way to interpret this is that a higher character is the foundation for an officer's will or the source for his will. When an officer is battered time and time again on the battlefield, this breaks down his will. His character is what forces him to stay and endure the situation and ultimately keeps up his will. This is perhaps also why the introduction to the 1933 doctrine does not mention will as an important ability for an officer, but is more preoccupied with character and what makes up a person's character.

This discussion on character has shown two things. First it will be right to say that in German tradition character is a well known term. Second, based on Clausewitz's thoughts on the

¹¹⁵ Ibid., p.125.

¹¹⁶ Ibid., p.116.

¹¹⁷ Ibid., p.116.

¹¹⁸ Ibid., p.116.

¹¹⁹ H.Dv. 487 (*F.u.G.*), p. 7.

subject a man of character is a man who is able to do what he believes and knows is right despite the strains of the battlefield. The strength to do the right thing in a demanding and difficult situation comes from the officer's courage. This is not any kind of courage, but courage that is based on ambition, patriotism or enthusiasm, or a combination of them all because this kind of courage will achieve the most.

Sources of Character

So far, the value of character for the tactical level of war has been proven. The next step will therefore not only be to show that the Germans valued character, but that they valued the kind of character which can be traced to ambitions, patriotism and enthusiasm.¹²⁰ If this can be found both in the doctrine and in the professional debate on tactical issues, it is an indication of the importance of character. In hindsight, having experienced the rise of Nazism in Germany, it is not a surprise that patriotism played an important role in the German build up after WW I. However, by focusing on the period prior to the Nazi takeover this influence will be reduced. Having said that, patriotism will always be part of a nation's identity and will always be important when trying to unite against a common enemy. It is also worth mentioning that the word enthusiasm quickly can get a romantic undertone if one does not deepen the meaning of it. In a discussion with his father between the two world wars, Hermann Balck asked him his view on the necessity for enthusiasm in war. His father then responded quite bluntly that '[E]nthusiasm is gone after the first night out in the field with rainy weather. Sense of duty, the joy of fighting and esprit d' corps are far more important qualities.'¹²¹

Although the Germans lost WW I they still looked for something from the 'Old Army' they could build their new army upon. As mentioned earlier, they did not think they actually had lost the war, at least not in the field. They were still particularly impressed by the quality of their officers and their soldiers, and blamed the higher echelons for the loss. In Germany in these years, as in almost every other European country, the officer corps consisted of people coming from the 'right' social class. Both in France and Britain you could not become an

¹²⁰ William Mulligan translates the German term Vaterlandsliebe into patriotism in Mulligan, p.209.

¹²¹ Hermann Balck quoting his father in Hermann Balck, *Ordnung im Chaos*, 1981, pp. 163-164.

officer unless you had the right social background. Only through the right upbringing in the right culture and tradition you would acquire the right qualities needed for being an officer.¹²²

This became a huge problem in Germany after the War when Germany became a republic. The officer corps feared that the army would lose what had been the hallmark of the Prussian army, 'the spirit'. Spies said that von Seeckt 'turned to tradition for inspiration and guidance. The old ideals and principles had stood the test of war and defeat and would again serve to guide the Army in the future. In an article from 1919, Major Jenke describes what characterized the spirit of the Prussian officer corps: '*Vaterlandsliebe, Anständigkeit der Gesinnung und Pflichtgefühl – mit anderen Worten der Geist.*'¹²³ Major Jenke feared that the new Army would lose these values when the army should be loyal to the republic and not a King. At first sight it is perhaps difficult to see the relevance of this when discussing the theme of tactics. However, Major Jenke claims that it was this '*Geist*' or spirit that kept the units together during the retreat in the autumn in 1918; this makes it an important aspect of tactics. It is a way of explaining and understanding what makes officers endure the situation on the battlefield.

Qualities which were significant for the 'Old Army' are also highlighted in another article from 1919. Here the author emphasizes 'obedience, sense of duty, punctuality and sobriety' as being the values of the 'Old Army'.¹²⁴ The article discusses the problem with the new republic and how it affects the status of the officer corps and the army. According to the author the new republic seeks to lower the status of the officer. Despite this it demands that the officer corps still performs as in earlier days. According to the author, this is absurd. One will not get the same officer corps and the same quality in the soldiers if one is to be loyal to a republic and not the King. It is not quite clear what the author actually means by the expression 'The Old Army'. One might believe that the Old Army is the one that Germany possessed towards the end of World War I. This is probably not the case. The state of this Army was nothing to be proud about. Mutiny and disobedience reached new heights, and they were probably not something worth building a new army upon. What the author probably refers to is the Army which began the war in 1914. An army based on old German traditions

¹²² For more detailed studies which show the persistence of the aristocratic class in the German army see for instance Karl Demeter, *The German Officer-Corps in Society and State 1650-1945*, Translated by Angus Malcom, (London, Wiedensfield and Nicolson, 1965) and F.L. Carstens, *The Reichswehr an Politics 1918-1933*, (California, University of California press, 1973).

¹²³ Major Jenke, "Der neue Geist" *MW* 1919, no 5, column 80.

¹²⁴ Unknown author, "Die schwarz-rot-goldene Nationalversammlung erwartet", *MW* 1919, no 8, column 138.

and values which could be traced back to Frederic the Great, Scharnhorst, Gneisenau and Clausewitz.

Having read this one might argue that Spires has a point since the author mentions obedience as being part of 'the old values'. Spires said that von Seeckt wanted to build the new officer corps like it had been built in the past. 'As in the past' he said 'the German officer will be chosen according to his abilities and character.'¹²⁵ According to Spires this character meant obedience and loyalty to von Seeckt, but if one take major Jenke's view into account, the Old Prussian values had an extremely important value in tactics as well. Obedience can therefore be said to serve two purposes. First it makes sure, as von Seeckt wanted, that one avoids loose cannons. On the other hand it is also a part of an officer's character which gives him an inner strength to make him endure the situation when he is on the battlefield.

Both articles were written before von Seeckt came to dominate the German army. This gives the impression that values that were held high in the 'Old Army' were recognized as being important when rebuilding the new Army, and not just something which von Seeckt invented to satisfy himself. According to Major Jenke it was the Old Prussian spirit that kept them together and made them fight. This makes these values even more important when discussing tactics. Being able to lead others and thus make soldiers fight was earlier mentioned as one of the three 'Battlefield Demands'. If it was the Old Prussian values that made officer capable of this, they not only made the officer endure the situation on the battlefield himself, but the values were also the prime reason for making the officers capable of leading others.

The word character is perhaps easy to turn to when looking for a word to describe a situation where an officer or another human being fails to meet the requirements of their profession. Maybe it is like Spires said that character meant everything and therefore also meant nothing. But when reading articles and literature from this period it is obvious that the term character has a specific meaning in German military culture. However, it is still difficult to define it precisely. It is more a word which everyone seems to understand without explaining it. Field Marshal and President Hindenburg had probably the best explanation of the term when he said that 'an attack without a *Schwerpunkt* is like a man without character' To find more proof that this was a well understood term in Germany in the interwar period, one can study a

¹²⁵ Spires, p. 2.

speech given by the *Reichswehrminister* (Minister of Defence) given to a Navy school in 1929:

*But one thing do we have, that is the superior spirit, the superior willpower and the superior character. To strive for this is our most serious task. A strive that must be characterised by a holy fire of patriotism and enthusiasm for our lovely profession.*¹²⁶

This quote underlines several points. First it treats will and character as two separate factors. Second it also says what an officers spirit, will and character must be distinguished by; love of the fatherland or patriotism. In this way the minister recognizes Clausewitz's thesis that officers need courage which is based on patriotism. It is also obvious that the minister of defence valued a great many of the qualities that the 'Old Army' had. These were not necessarily only the quality of their fighting but just as much the qualities that tied them together and made them a strong fighting unit. He mentions qualities like self discipline, obedience, self-sacrifice and service for the whole people. One can argue that the minister only wanted to make his own war experiences look good by saying this. However, it is clear that these are qualities that he wanted the Armed forces to be built upon when he called this 'a precious gift from the will of the old Armed forces.'¹²⁷

Based on this, one word described what the Germans saw as the core of character better than anything else; responsibility. From the top commander down to each individual soldier heavy responsibility was placed on their shoulders. Not only were they responsible for their own units but as mentioned in the quotation above 'service for the whole people'. This leads me to introduce an interesting German term; *Verantwortungsfreudigkeit*. Both doctrines use this term when they explain which personal quality that is the most important in war. The 1921 doctrine simply says that: 'The most distinguished leaders' quality is the joy of taking responsibility.'¹²⁸ *Truppenführung* form 1933 goes slightly more thoroughly into it by stating that: 'All leaders must in all situations without fearing responsibility exert his whole personality. The joy of taking responsibility is the most distinguished leader quality.'¹²⁹ This clearly demonstrates how important the Germans viewed responsibility as. It is not revolutionary that an officer has to handle the responsibility he has on his shoulder,

¹²⁶ Reprinted in *MW* 1929, no 3, column 82.

¹²⁷ *Ibid*, column 84.

¹²⁸ H.Dv. (*FuG*), p. 7. Die vornehmste Führeigenschaft bleibt die Verantwortungsfreudigkeit.

¹²⁹ H.Dv. 300/1 *Truppenführung*, p. 2 Jeder Führer soll in allen Lagen ohne Scheu vor Verantwortung seine ganze Persönlichkeit einsetzen. Verantwortungsfreudigkeit ist die vornehmste Führeigenschaft.

Clausewitz also talked about this. What is new is that the Germans wanted the officer to enjoy the responsibility he had. Said in a slightly different manner; one of the most important kind of training a German officer could get was to train his ability to enjoy taking responsibility. The reason for calling attention to this particular term is not only to show how much the Germans valued it. It is also because it is translated slightly wrong in the Condell and Zabecki's translation of the *Truppenführung*. Here the same phrase is translated into '[E]very leader in every situation must exert him self totally and not avoid responsibility. Willingness to accept responsibility is the most important quality of a leader.'¹³⁰ There is a huge difference in willingness to accept responsibility (*Verantwortungsbereitschaft*) and the joy of taking responsibility. The former only accepts that responsibility is important whilst the latter states that every officer has to enjoy it. Only then can this be said to be the most important leader quality.

Why is it important for an officer to enjoy responsibility? As mentioned earlier, independence was what equipped an officer to handle uncertainty and still make independent decisions. But when faced with the horrors of the battlefield an officer needs more than just independence to keep him vigorous. When everything is difficult and everyone around him seems to have given up that is when the feeling of responsibility kicks in. It is the feeling that it is up to him to decide the outcome of the engagement when everyone else has given up and he experiences the 'emptiness of the battlefield.'¹³¹ This is why '*Verantwortungsfreudigkeit*' or the joy of taking responsibility is what makes the officer 'endure the situation' on the battlefield, and is why it is the most important quality for a leader. Lieutenant Hauck also underlined this thoroughly when he claimed that it was the love of the fatherland that had led the Germans from victory to victory in WW I, and this love was also the reason why they were able to resist for four years before giving up to a superior force.¹³² Similar experiences are drawn upon when Major General von Haeften says that 'in the fight for the spiritual legacy of the old Army, it is a serious task of highest national significance for every leader in the young *Reichswehr*. Everyone carries with him a huge responsibility for the German people.'¹³³

Earlier in this dissertation tactics was defined as 'How to use the armed forces in the engagement to destroy the enemy'. In this chapter it has been shown that the Germans

¹³⁰ Condell, Zabecki, p.18.

¹³¹ H.Dv. 300/1 *Truppenführung*, p. 3.

¹³² Oberleutnant Hauck, "Wissen und Können", *MW* 1927, no 38, column 1395.

¹³³ Major General von Haeften, "Heerführung im Weltkriege" *MW* 1920, no 18, column 389.

recognized *the ability to make decisions, the ability to make others fight and the ability to endure the situation on the battlefield* as three important abilities needed to do this. These are only three out of probably several factors that influence the outcome of an engagement. Nevertheless it was these abilities which the Germans saw as vital for their officers. US Marine Corps Doctrinal Publication (MCDP) 1-3 has a slightly different view on the subject.

*Our education in tactics must develop three qualities within all tactical leaders. The first quality is creative ability... The second quality is military judgement... The third is moral courage.*¹³⁴

What the Marine Corps calls creative ability and military judgement is in this dissertation covered when it discusses the importance of knowledge. It is impossible to be creative or show judgement if one does not have sufficient amount of knowledge. It would be like asking a guitar player without the knowledge of the blues to improvise a solo to a blues melody. He will not know what to do because he has no platform to start from. However, in addition to just accepting that being creative and able to judge situations are important, it has been explained why this is important. It is important because you need this to be able to make decisions. One can argue that when focusing on moral courage, the Marine Corps value decision making. This is only partly true. By focusing on moral courage one does not necessarily value making decisions in it self, but rather accepting the strains put on the officers knowing the consequences of his action. This aspect is more or less covered in the discussion on enduring the situation and discussion about character. There is a second problem with the Marine Corps publication. It does not come up with any solution to what gives an officer moral courage. It simply states that it is important. Another interesting aspect when comparing the Marine Corps view and the German view is leadership. The Marine Corps treats leadership as a separate matter from tactics whilst the Germans discuss it as a part of tactics.

The purpose of this section has been to deduce what the Germans saw as battlefield demands. Based on that, it was shown which qualities that were needed to meet those demands. The next section will go a bit further. One thing is to talk and write about which qualities one believes are the ones needed. It is another matter to have ways of training and developing them. Looking into ways of training therefore serves two purposes. First it answers the second

¹³⁴ Department of the Navy, *MCDP 1-3*, pp. 115-116.

part of the question which was asked in the beginning of the dissertation. But just as important; being able to find out how they developed the qualities will strengthen the validity of the work so far. Having practical ways of training prove that the Germans actually valued certain qualities and not just talked about them in nice and lofty terms.

Training and Developing the Qualities

This section will look more into what the Germans did in order to develop the qualities they saw as imperative for the officer on the tactical level. It will start by giving an example of a typical German field exercise, which serves as a good example of how decision making was taught. Self confidence will be brought up as a personal quality needed for making decisions. One can ask why this is not mentioned when discussing personal qualities needed for decision making. The reason for bringing it up here is that self confidence is more a **result of training** than something which you could train directly for. To meet the second demand, leading others, there will be a discussion on developing authority. Having shown examples of training and development of officers there will be a thorough discussion of an extremely important aspect of German officer development: the term *Erziehung* or upbringing in English. *Erziehung* is vital because it is through *Erziehung* that you develop the ability to endure the situation.

Making decisions

The first battlefield demand was making decisions. As a result of that it was concluded that being vigorous is what you need to be able to make decisions. It was also concluded that being vigorous is easier said than done and that it had at least three components. First you needed a foundation, second you needed to be able to handle uncertainty and third you needed the ability to act independently. Training and developing these qualities is quite easy. And it seemed like the Germans had a simple solution. In an interesting debate which took place in the *Militär Wochenblatt* in 1931, several aspects of decision making are illustrated. In the number 25 issue there is an article about meeting engagements.¹³⁵ The author has the opinion that too much time is spent on training for meeting engagements.¹³⁶ In his opinion, the

¹³⁵ Author unknown, "Das Begegnungsgefecht bei Aufgaben für Truppenübungen", *MW* 1931, no 25, column 859.

¹³⁶ Citino describes a meeting engagement as 'two forces smashing into one another unexpectedly. Victory went to the commander who could recognize what was happening, react to it, and get his unit out of march column into the line.' Citino, *The German Way of War*, 2005. P.242. For another example, see Citino's description of the

commander will on the modern battlefield have the ability to gather so much information about the enemy that meeting engagements can be avoided. The focus of training should therefore be placed on prepared attacks on a known enemy. Although this view is contradictory to how the Germans viewed fighting and the nature of the battlefield, it can be understood. Especially because one has to take into account the technological development which took place in this period. In this respect the author is particularly enthusiastic about the opportunities aircraft can give the commander. The article is contradicted in number 29 where another author has a totally different view. He agrees that new technology gives the commander new and better opportunities to gather information about the enemy. However, as has been discussed earlier, one will never be in a situation where one has 100% situational awareness. Because of that, meeting engagements have to be practiced. This is obviously a good point and one that aligns more with the German view on the nature of the battlefield. The author's point however, is not necessarily whether one should focus more on preparing attacks or meeting engagements, but he values the effect training for meeting engagements has on officers and soldiers. 'Meeting engagements often place officers in situations where they have to make decisions. Training for meeting engagements is therefore important and makes the highest demands on command.'¹³⁷ Not only did the commander have to make decisions. They also had to be made based on very little information of the enemy. By training for meeting engagements one therefore also trained officers to handle uncertainty. There was a third element which was trained in a meeting engagement: independence. In these kinds of battles the situation is often that smaller units clash and that success depends on quick decision making to outmanoeuvre the enemy. There is, in other words, not time for a subordinate to wait for a higher ranking officer to come forward and see for himself. Decisions have to be made and it has to be done by the officer on the spot as quickly as possible. This promotes the officer's ability to act independently.

To further develop this ability one had to work along several paths. The obvious one was to focus on each individual in training and education, for instance focusing on individual decision making in meeting engagements. In addition to that one could have a more individual focus in general. Instead of working in groups where everyone could hide behind comfortable group solutions which pulverizes responsibility, one could make everyone work

fall manoeuvres of 1930 in Citino, *The German Way of War* 2005 pp.249-253. Or see the primary source: "Die Grosse Rahmenübung 1930," *MW* 1930, no 14, column 513-520.

¹³⁷ Author unknown, "Wird das Begegnungsgefecht zu viel geübt", *MW* 1931, no 29, column 1122.

on their own and come up with their own solutions to tactical problems. In that way everyone was forced to be responsible and learn to trust their judgement. 'Not just group tasks and other tactical command exercises, but also a lot of individual education both in camp and in the field.'¹³⁸

There was however, a problem with this. Making independent decisions and coming up with independent solutions when being monitored and observed is one thing, but this might create a false impression of independence. What happened when an officer was alone and could not be judged by his superiors? How did they train for situations like that? The answer was making each and everyone responsible for their own actions in all situations. For instance, when you constantly are having inspections of weapons and inspections of barracks, one does not teach responsibility for own actions. Then you only show lack of trust. If one at the same time punishes everyone in a unit if one room or one weapon is unclean, you deprive the individual responsibility. It is therefore not a sound way to teach independence. What the Germans did was to create an environment where everyone was trusted but also made responsible for their actions, 'because people who only can be disciplined by force do not belong in our army and have to be fired.'¹³⁹ A battle or an engagement is not decided in the barracks or dependent on one weapon being clean or not. However, the environment which was created taught habit and responsibility which hopefully could be transferred to the battlefield.

Self confidence

It is easy to understand and agree with the idea that an officer needs the ability to think and act independently. Training for meeting engagements is an excellent arena for doing that. There is, however, an important aspect which influences an officer's ability to act independently, which needs to be developed. Accepting the importance of and training in situations where officers are alone and responsible is one thing. However, to be able to actually make the decision and act is more difficult. Earlier the role of decisiveness was discussed, and it was claimed that being decisive is a quality in it self. What an officer needs to make independent decisions and act independently is therefore self confidence. An important aspect of training for independent thinking and acting officers is to develop self confidence. Only laden with a strong belief in one's own abilities will the officer be able to

¹³⁸ Author unknown, "Gedanken über Unterführerausbildung", *MW* 1929, no 42, column 1715.

¹³⁹ Author unknown, "Die Erziehung des Soldaten zur Selbständigkeit", *MW* 1929, no 47, column 1928.

act independently. This is recognised in an article from 1919 where Major Friedrich Wille writes about the challenges with a shorter military service time.

*Asking of the impossible does not nurse self confidence. Avoid failure, encourage initiative. Self criticism and guidance on how it can be done better are wiser means to an end than blame.*¹⁴⁰

In battle self confidence is needed for two reasons. First you need self confidence because without it you will hesitate to make a decision at the crucial moment and fail. This is also recognized in the 1933 doctrine. The doctrine calls for these qualities because like mentioned earlier: ‘The emptiness of the battlefield requires soldiers who can think and act independently, who can make calculated, decisive, and daring use of every situation, and who understand that victory depends on each individual. Training, physical fitness, selflessness, determination, self-confidence, and daring equip a man to master the most difficult situations.’¹⁴¹ As this quotation from *Truppenführung* tells us, self confidence is not something which only officers need. Everyone must be prepared for making decisions on the battlefield. The more who have the ability to make decisions the better. This builds self confidence in a unit. A unit consisting of self confident members creates a unit confident in its own abilities and thus becomes a formidable fighting force. Lieutenant General Metzsch had the solution to how one can train in order to achieve this. For him it was most important to ‘train units and officers in situations where they were numerically inferior.’¹⁴² This is actually a remarkable view. At least in modern the view of conducting attacks, one is expected to have a force ratio of 3:1 in favour of the attacking unit. What Lt.Gen. Metzsch wanted is to train for situations where units are inferior because managing these situations builds self confidence.

Training units in this way is one way of making the unit confident. A result of this kind of training is also self confident commanders. But are there other ways to build self confidence which aims directly at the individual? It is obviously important to succeed. All training should therefore aim at making the officer feel that he is successful. This must not be done by giving him simple tasks, but gradually building him up to master more and more complex situations. Another way of building self confidence is through physical training. Particularly, close combat was seen in the German army as a vital part of training. One aspect was the obvious

¹⁴⁰ Major Friedrich Wille, “Ausbildung in verkürzter Dienstzeit”, *MW* 1919, no 106, column 1928.

¹⁴¹ Condell, Zabecki, p. 18.

¹⁴² Generalleutnant Metzsch, “Trugschlüsse und Irrlehren”, *MW* 1929, no 26, column 1032.

need for the ability to fight in close quarters. This had become especially evident through the lessons from WW I where many battles ended up in the trenches. The other reason is what training in close combat does to a man's self confidence. To know that one masters fighting in the most intense situations makes one confident. This has a spill over effect on your ability to make decisions because you trust your own and your unit's abilities. This effect of training for close combat can be found in an article from 1929.

It must be stressed that education and training in close combat has an extreme morale importance. A soldier who feels that he is superior to his opponent will attack more resolutely, more decisive and more rapid.¹⁴³

It is this relationship between training and self-confidence which Hew Strachan also stresses in his article on *Training, Morale and Modern War*. 'The value of training is therefore in large part psychological: it is an enabling process, a form of empowerment, which creates self-confidence.'¹⁴⁴

This shows that the Germans were well aware of the necessity of self confidence for being able to make decisions independently. At the same time they had several ways to train in order to bring out this quality. One can argue that too much self confidence can lead to officers that are too full of themselves. By always focusing on succeeding one will easily have that effect. Officers being too full of themselves are obviously not good for unit cohesion and will probably create an unhealthy competitive environment. However, the Germans had a brilliant way of balancing this. As mentioned earlier, the most crucial leadership quality was the joy of taking responsibility. But that paragraph in the 1933 doctrine says something more which is just as important. 'It should not, however, be based upon individualism without consideration of the whole.'¹⁴⁵ In this way the heavy responsibility which the Germans placed on everyone's shoulders made sure the officers did not become too arrogant, but at the same time it was recognized that trusting one's own abilities was needed. Some might argue that there is a third reason for needing self confidence on the battlefield. You need self confidence because as an officer you know that the consequences will be death and destruction to your friends if you make the wrong decision. However, this ability was not improved by focusing

¹⁴³ Unknown Author, "Ausbildung und Ausrüstung für den Nahkampf", *MW* 1929, no 14, column 523.

¹⁴⁴ Strachan, "Training, Morale and Modern War", p.216.

¹⁴⁵ Condell, Zabecki, p. 18.

on self confidence but more on the joy of taking responsibility. This will be discussed more thoroughly later.

Lead others

Authority

To meet the second battlefield demand it was argued that an officer needed to be trusted by his subordinates. However, to develop or train an officer to be trusted is difficult. Or as Lieutenant Colonel Feuerstein says in 'The Influence of the Leader in Battle' 'Trust in leadership cannot be dictated.'¹⁴⁶ It is therefore impossible to have a lecture on trust and expect that officers will be trusted afterwards. How then can trust be developed as a quality? As mentioned earlier the easy answer to that question is experience. An experienced officer is often trusted by his subordinates because he has proven himself in combat and survived. This is also one of Clausewitz's main points when talking about experience in war. The problem is that not everybody has experience from a war. Officers are not born with war experience. Therefore there has to be something else that can make soldiers and subordinate officers trust their commanding officer. What the officer need is to develop a kind of authority. If he has battlefield experience this authority comes naturally, but if he is inexperienced he has to create it.

First of all authority can be gained through knowledge.

But the best foundation for establishing authority for an officer is through a spiritual superiority – especially in war and other critical periods. The officer should simply have more knowledge than his soldiers.¹⁴⁷

This indicates that not only is knowledge important because it helps you to know what to do. It also gives you a psychological upper hand over your soldiers and therefore generates trust. There are no short cuts to this as has been mentioned before. Only methodical and hard work will give you this upper hand. In addition to that it is important that the officer gets the opportunity to show that he is knowledgeable and is able to command soldiers. This is done through field exercises like the ones which I have described earlier on meeting engagements. But this is only one kind of trust. Officers can be admired and trusted because they are good at finding tactical solutions in difficult situations. But again, we must not forget the

¹⁴⁶ Oberstleutnant Valentin Feuerstein, "Der Einfluss der Führer im Gefecht", *MW* 1929, no 32, column 1294.

¹⁴⁷ Generalmajor a.D.v. Amann, "Führerauswahl.", *MW*, 1929, no 25, column 988.

circumstances. On the battlefield soldiers and subordinates are afraid. We must therefore add another aspect of trust which comes from a more human side of the officer; his ability to take care of his soldiers. This does not mean that an officer should always be a nice guy and never do anything that upsets his subordinates. What is meant is that soldiers and junior officers have to experience respect and that their needs are taken care of. Again, this cannot be done through lectures and teaching. It comes as a result of the environment and the frames in which the education and training take place. Therefore creating an environment like this is an important way to achieve trust. One can not train trust like training decision making on regular exercises. This kind of trust comes as a result of taking care of soldiers in all situations over time.

*The platoon leader...He has to know every one of his men by age, profession and his domestic situation. He has to build himself an impression of each of his men regarding his character, his physical and psychological capability and his position in the group of friends. He must be stimulating and freshening and have the ability to promote job satisfaction and energy. He must worry for the well being of his men.*¹⁴⁸

Earlier it has been shown how different qualities make officers able to handle battlefield demands. Knowledge and self confidence will help the officer to make decisions on the battlefield. Care, personal example and knowledge will help him to become a trusted leader who soldiers are willing follow. This can be learned in school by reading books, and through field exercises. It is easy to create exercises that set officers in dilemmas where they have to make decisions based on little or no information. It is equally easy to create exercises where rapid decision making is required. It is perhaps more difficult to teach and train for gaining trust from your subordinates. However, through exercises where they are tested both physically and psychologically, and where soldiers see that their leaders are able to cope with difficult and demanding situations, mutual trust will develop.

Endure the situation

The problem is the last 'battlefield demand'; 'Enduring the situation'. It is impossible to train directly on enduring battlefield situations simply because it is impossible to simulate battlefield conditions in peace time exercises. You can, as mentioned above, simulate lack of information and uncertainty, but the way for instance fear influences an officers decision

¹⁴⁸ General Hermann v. Francois, "Studien über Gruppen- und Zugkampf nach den Erfahrungen des Weltkrieges", *MW* 1926, no 7, column 230.

making is difficult to simulate. The military profession differs from other professions because it is difficult to know if one can cope with battlefield conditions before you actually are in a battle. As mentioned under the part about making decisions and leading others, experience was said to be important for officers. The challenge is that it is impossible to get experience on enduring the situations without participating in a war. It is not like being a surgeon or a fire fighter. They can gain experience by gradually getting used to the situation together with more experienced operators and learn from them before they are on their own. Officers train day in and day out on things they do not know if they will ever experience. At the same time they do not know if they train on the right lines. They do not know if they will handle the most important part of the battle, to endure, because it is so far from what they can train for realistically. The famous British historian and former officer Sir Michael Howard explains this dilemma brilliantly in his article *The Use and Abuse of Military History*.

*It is as if a surgeon had to practice throughout his life on dummies for one real operation; or a barrister appeared only once or twice in court towards the end of his career; or a professional swimmer had to spend his life practicing on dry land for an Olympic championship on which the fortunes of his entire nation depended.*¹⁴⁹

There are reasons for arguing that enduring the situation is not the most important ability for an officer on the battlefield, and rather claim that it is the tactical problems that are the real challenges. It is difficult to weigh different qualities against each other. However, I have made some observations on different battlefield tours which I have been on. I have been in Normandy, Sedan, Narvik, Sinai and Golan, and each time same thing happens. On these tours we present students with a tactical dilemma which occurred in a particular battle, and they are asked to solve it. Each time they come up with a solution which is more or less similar to what actually happened. In their cases they can come up with their solution uninfluenced by the fog of war. They also have the benefit of being able to investigate the terrain more thoroughly. This indicates that on the tactical level it is not always difficult to see what needs to be done, or which decision that needs to be taken. The problem is to be able to do it under the conditions which the battlefield creates. This is not scientifically proven, however, it is more or less a confirmation of von Clausewitz's everlasting quotation that 'everything in war is easy but even the easiest thing is difficult.' And even though the tactical level has become more intellectually demanding, 'enduring' is still the most difficult part.

¹⁴⁹ Michael Howard, "The Use and Abuse of Military History", *The Army Doctrine and Training Bulletin* vol.6, No. 2 Summer 2003, p.21.

Erziehung

Where does this get us? It cannot be denied that educating and training officers must consist of developing tactical skills like decision making and troop leading procedures. Everything that makes the officer better in doing this is imperative. But if we see the discussion above, something is missing. How does one teach character or the joy of taking responsibility? How does one teach officers to endure the situation on the battlefield? Here we arrive at a very important aspect of officer training and education. ‘Character’ or responsibility cannot be taught directly. It has to come as a result of something else. Building character is something which takes time and has to happen in a milieu where the officer is constantly influenced and shaped into adapting to those values which are seen as the right ones. Therefore, in officer education, the framework and environment in which the education and training take place, and not just the contents, are of utmost importance. One German word describes this process: ‘*Erziehung*’. This is often translated into English as education, which does not describe the word adequately. The German meaning is probably more along the lines of forming or bringing up children. This gives an impression that something is going on over time and in within certain framework. You do not bring up your children by holding lectures. You constantly influence them with your own values and viewpoints. This is how they are shaped and how their values and hence character is formed. This is also how the Germans saw their officer education and training.

*The non-commissioned officer supports the officer and must in critical cases have to replace him. The inner solidarity of the unit depends on his trustworthiness and devotion to his duty....It is therefore, the highest responsibility of everyone in our army to make sure that refinement(*Erziehung*)and education(*Ausbildung*) of our non-commissioned officers get our fullest attention.¹⁵⁰*

Here it is worth mentioning that the environment and milieu are also important when teaching other aspects than just character and responsibility. It is, for instance, important to create a teaching environment where the right things are appreciated. A good example of this is how the Germans held their map exercises. First of all one has to recognise that there are no school solutions to tactical dilemmas. It all depends on the terrain in which the operation takes place, the enemy situation and friendly situation. Based on how one judges these factors one comes

¹⁵⁰ Major von Stosch, ‘Beitrage zum Wiederaufbau des deutschen Heeres.’ *MW* 1919, no 126, column 2315.

up with a reasonable plan. By focusing on this one does not train for the perfect solution. The perfect solution does not exist because one does not know what the enemy does. What one does train is the officer's ability to make judgements. Instead of criticising what he does one criticises his evaluation.¹⁵¹ By doing this one achieve two things. First one trains the ability to evaluate the situation. This is obviously important for an officer. But more importantly one also creates a teaching environment which recognises the reality of the battlefield. There are no perfect solutions. It is up to oneself and how he evaluates the situation. As long as one makes an evaluation of the situation and acts accordingly one has done the right thing. At the same time everyone that does not make a decision and do not act will be criticised. This is a teaching environment which values those who act and criticises those who does not. In this way one lives by the rule which is highlighted in both doctrines 'that hesitating to act because one is afraid of not doing the right thing will damage you more than acting despite not knowing if what you do is right.'¹⁵²

The reality of the battlefield was also an important aspect when having field exercises. This was done by creating battlefield situations where lack of sleep, food, information and time were obvious points of departure. This does not, however, get us any nearer the problem of teaching responsibility or to endure the situation. One will be better in handling the situation, but enduring is another matter. It was mentioned earlier that focusing on the individual and making each individual responsible for his own actions as a way of teaching responsibility. This is, however, not necessarily the kind of responsibility that is needed on the battlefield. What is needed is the joy of taking responsibility for more than just oneself. As we have seen, the Germans wanted officers who were willing to take responsibility for their country and its people. This is not easy, but again it is through 'Erziehung' that this is achieved.

*This war has once again shown the decisive effect of patriotism, sense of honour and discipline, which can not be taught over a short period of time, but is a result deriving from years of refinement.*¹⁵³

This meant that the teaching environment and the framework for the officer education needed to be based on values like pride, duty, honour, love of fatherland and so forth. In other words they needed something which the officers could feel the joy of taking responsibility for. Only

¹⁵¹ Unknown author 'Das Planspiel in der Unterführerausbildung' *MW* 1930, no 8, column 290-293.

¹⁵² H.Dv. 487 (*FuG*) p. 8 and H.Dv. 300/1 *Truppenführung* p. 11.

¹⁵³ Major Friedrich Wille, 'Ausbildung in verkürzter Dienstzeit', *MW* 1919, no 106, column 1927.

in this environment would the ability to 'endure' be developed. This was probably also the core of the officer character that the Germans wanted and also why the term character was so important. Some even went so far as to claim that only soldiers that had been raised to love their fatherland, and to be conscientious, were the ones who dared to take the final leap towards the enemy.¹⁵⁴ Or as captain Gallwitz puts it: 'officers have to be trained so that nothing is left besides the love of own people and the responsibility for the honour of the unit.'¹⁵⁵

This section has discussed some aspects of German officer training and how the qualities needed to meet battlefield demands were developed. It was done to support the relevance of each battlefield demand. Building self confidence, both through training and enhanced knowledge have been seen as extremely important for building independent officers. Knowledge was also important for an officer's authority and thus his ability to lead others. However, the most important quality needed for a German officer was the quality which made him endure the situation on the battlefield, i.e. the joy of taking responsibility. This was reached through *Erziehung*.

¹⁵⁴ Unknown Author, 'Nahkampfausbildung', *MW* 1929, no 23, column 895.

¹⁵⁵ Hauptmann Gallwitz, 'Der Unterführer', *MW* 1930), no 13, column 480.

4. Conclusion

This research started by asking the question *which personal qualities did the Germans look for in their officers on the tactical level when the German army was rebuilt after WW I, and how were they developed?* Based on the doctrines from the period and the professional debate in the *Militär Wochenblatt*, this question has been answered in four steps. First was deduced what was meant by ‘Battlefield Demands’. These were demands which the Germans saw the battlefield required from its actors. It was found was that the battlefield demanded officers capable of making decisions, leading others and enduring the situation. Having these demands in mind, the second step deduced which abilities were needed to meet these demands. To be able to make decisions one first of all needs the ability to be vigorous, to be able to lead others one needs the ability to generate trust, and to endure the situation on the battlefield one need character. When these abilities were identified the third step was searching for which personal qualities supported these abilities. To answer the second question in the thesis and also to further back up the findings, the last section gave some examples of how the Germans trained their officers and what influenced their unit training.

There were three personal qualities which the Germans clearly valued in their officers.

Knowledge, independence and the joy of taking responsibility. Knowledge served at least two purposes. First of all knowledge was what made the officer know what to do or was the foundation for making a decision. At the same time, it was also the main source for generating trust among your subordinates. Independence was also related to decision making.

Independence was needed because, as an officer, you were the only one present where decisions had to be made. You could not wait for others to tell you what to do and when to do it. The last and the most important personal quality was the joy of taking responsibility. The joy of taking responsibility was what kept you on the battlefield. It was what forced you to stay despite the horrors you were experiencing. It was what made you endure.

To achieve these qualities, the Germans had a very ‘comprehensive approach to training where the whole officer was shaped as a human being.’¹⁵⁶ Knowledge and independence were reached through demanding theoretical studies and realistic training which both built self confidence. The joy of taking responsibility was a more difficult matter. It could not be

¹⁵⁶ Gallwitz, ‘Der Unterführer’, column 482.

reached through ordinary training. It was a result of *Erziehung* (refinement). *Erziehung* of the officer's character was shaped in an environment over a long period of time based on responsibility. Responsibility implied not just for taking care of one's own men, but the pride and honour of one's uniform, men, unit, profession and Fatherland. If one failed as an officer one had not only let one's unit down, one had also brought shame on one's country. It was this kind of responsibility an officer was supposed to enjoy taking or be entrusted with. Only then would he be able to endure the situation on the battlefield.

It is therefore wrong to claim that the Germans had a wide spectre of different revolutionary ways of training their officers. What they did was to create an environment which was characterised by high standards and '[A] relentless pursuit of professionalism, out of which grew self-assurance and self-confidence.'¹⁵⁷ Not only in ordinary education and training, but professionalism in everything which interfered with the officers' lives and professions and which ultimately shaped the officers' personal qualities. It was in this environment and within this framework that every German officer was 'brought up' (*Erziehen/Erziehung*) to always take responsibility and to enjoy it. Therefore, it is fair to say that *in German officer development, in the interwar years, the framework of, and the environment in which the education and training took place, was even more important than the contents.*

¹⁵⁷ Uhle-Wettler, 'Auftragstaktik', P.242.

5. Final Remarks

Every development in an organisation must be seen in light of the society which it is a part of. This is perhaps especially important when studying Germany after WW I because of the difficult conditions the Germans experienced just after WW I. To German military leaders, character became extremely important because it was something which they had seen as crucial during the war, but also because they had to focus on something which did not collide with the Versailles treaty. When trying to find which qualities to develop in officers one has to look into which characteristics are dominant in a society. It is fair to believe that qualities which make an officer endure the situation on the battlefield are important also today. Values which defined strong and good character were much more common in earlier times. Today's society is more characterized by individualism and selfishness. One can therefore ask if focussing on character is wise when training officers. Are the young officers of today familiar with the word character? The answer is, probably not. However, if the right character and the values which define it, are what make you stay on the battlefield, it is perhaps more important than ever to focus on these qualities. These values are no longer a natural part of our society and hence no longer a natural personal quality of a modern officer.

Bibliography

PRIMARY SOURCES

German Official Documents

H.Dv. 300/1, *Truppenführung. (T.F.), I. Teil (Abschnitt I-XIII)*, (Berlin, E.S. Mittler & Sohn, 1936).

H. Dv. 487 *Führung und Gefecht der verbundenen Waffen (F.u.G.)*, Neuedruck der Ausgabe 1921-1924 in 3 teilen, (Osnabrück, Biblio, Verlag, 1994).

Periodicals

Militär Wochenblatt, (Berlin, E.S Mittler und Sohn, Volumes 1919-1931).

Autobiographies

Balck, Hermann, *Ordnung im Chaos*, (Osnabrück, Biblio Verlag, 1981).

Guderian, Heinz, *Erinnerungen eines Soldaten*, (Neckarmünd, Kurt Vowinkel Verlag, 1960).

Manstein, Erich von, *Lost Victories*, Ed. and trans. By Anthony G. Powell, (California, Presidio Press, 1982).

Books

Baron de Jomini Antoine-Henri, *The Art of War*, translated by Capt. G.H. Mendell and Lt W.P. Craighill, (New York, Dover Publications, Inc 2007).

Clausewitz, Carl von, *On War*, edited and translated by Michael Howard and Peter Paret (London, Princeton University Press, 1993).

Freytag–Loringhoven, Baron von, “The Power of Personality in War”, in *Roots of Strategy book 3*, (Mechanicsburg USA, Stackpole Books, 1991).

Freytag–Loringhoven, Baron von, *Deductions from the World War*, (London, Constable and Company Ltd., 1918).

SECONDARY SOURCES

Books and articles

Bald, Detlef, “Vom Kaiserheer zur Bundeswehr: Sozialstruktur des Militärs; Politik der Rekrutierung von Offizieren und Unteroffizieren“ *Europäische Hochschulschriften*, (Frankfurt a.M, Bern : Lang, 1981).

Bald, Detlef, “Zur Reform der Generalstabsausbildung in der Weimarer Republik : Die Reinhardt-Kurse“, *Militärische Verantwortung in Staat und Gesellschaft : 175 Jahre Generalstabsausbildung in Deutschland* (Koblenz, Bernard and Graefe, 1986.)

- Carsten, F.L., *The Reichswehr and Politics 1918-1933*, (California, University of California Press, 1973).
- Citino, Robert M., *The German Way of War*, (Kansas, University Press of Kansas, 2005).
- Chickering, Roger and Förster, Stig, *The Shadows of Total War*, (Cambridge, Cambridge University Press, 2003).
- Chief of the General Staff, *Design for Military Operations- The British Military Doctrine*, 1996.
- Corum, James S., *The Roots of Blitzkrieg: Hans von Seeckt and German Military Reform*, (Kansas, The University Press of Kansas, 1992).
- Creveld, Martin van, *Fighting Power*, (Connecticut, Greenwood Press, 1982).
- Deist, Wilhelm et.al., *Germany and the Second World War*, (Oxford, Clarendon Press, 1998).
- Demeter, Karl, *The German Officer-Corps in Society and State 1650-1945*, Translated by Angus Malcom, (London, Wiedensfield and Nicolson, 1965).
- Department of the Navy, *MCDP 1-3, Tactics*, Washington, D.C. 1997.
- Doughty, Robert Allan, *The Breaking Point, Sedan and the Fall of France 1940*, (Hamden, Connecticut, Archon Book, 1990).
- English John and Gudmundsson Bruce, *On Infantry*, (London, Praeger publishers, 1994).
- Frieser, Karl-Heinz, *The Blitzkrieg Legend*, (Westport, US Naval Institute Press, 2005).
- Foley, Robert T., 'The Origins of the Schlieffen Plan', *War in History* X (2003), pp.222-232
- Goerlitz, Walter (Brian Battershaw, translator), *History of the German General Staff, 1657-1945* (New York, Praeger Publishers, 1954).
- Griffith, Paddy *Battle Tactics of the Western Front*, (London, Yale University Press, 1994).
- Gudmundsson, Bruce I., *Stormtroop Tactics: innovation in the German Army, 1914-1918*, (Westport, Praeger Publishers, 1995).
- Holmes, Terrence, M., 'The Reluctant March on Paris: A Reply to Terence Zuber's "The Schlieffen Plan Reconsidered"', *War in History* VIII, 2 (2001), pp. 208-232.
- Hooker, Richard D. Jr (ed), *Maneuver Warfare An Anthology*, (Novato CA, Presidio Press, 1993).
- Howard, Michael, "The Use and Abuse of Military History", *The Army Doctrine and Training Bulletin* vol.6, No. 2 Summer 2003.

- Hughes Daniel J. (ed) and Bell, Harry (Author), *Moltke On the German Art of War*, (Novato CA, Presidio Press, 1995).
- Lind, William S., *Manuver Warfare Handbook*, (Colorado, Westview Press, 1985).
- Miksche, F.O., *Blitzkrieg*, Translated by Tom Wintringham, (London, Faber and Faber Limited, 1941).
- Mulligan, William, *The Creation of the Modern German Army*, (Oxford, Bregham Books, 2005).
- Murray, Williamson (ed), *German Military Effectiveness*, (Baltimore, Maryland, The Nautical and Aviation Publishing Company OF America, Inc., 1992).
- Murray, Williamson, "Leading the Troops: A German Manual of 1933", *Marine Corps Gazette*, September 1999.
- Nagl, John A., *Learning to eat soup with a Knife Counterinsurgency Lessons from Malaya and Vietnam*, (Chicago, The University of Chicago Press, 2005).
- Paret, Peter (ed), *Makers of Modern Strategy*, (New Jersey, Princeton University Press, 1986).
- Rommel, Erwin, *Infantry Attacks*, (Virginia, Athena Press 1979).
- Rothbrust, Florian K., *Guderian's XIX'th Panzer Corps and the Battle of France*, (Westport, Praeger Publishers, 1990).
- Schell, Adolf von, *Battle Leadership*, (Quantico, The Marine Corps Association, 1988).
- Smith, Rupert, *The Utility of Force*, (New York, Vintage Books, 2008).
- Spires, David N., *Image and Reality: The Making of the German Officer, 1921-1933* (Westport, Conn, Greenwood Press, 1984).
- Strachan, Hew, 'Training, Morale and Modern War', *Journal of Contemporary History*, No 2 Vol 41, 2006.
- Svechin, Aleksandr A, *Strategy*, Edited by Kent D. Lee, (Minesota, East View Publication, 1992).
- Trew, Simon and Sheffield, Gary (eds) *100 Years of Conflict 1900-2000*, (Sparkford, J.H. Haynes & Co. Ltd, 2000).
- White, Charles Edward, *The Enlightened Soldier: Scharnhorst and the Militärische Gesellschaft in Berlin 1801-1805* (New York, Praeger Publishers, 1989).
- Zuber, Terrence, 'The Schlieffen Plan Reconsidered', *War in History* VI, 3 (1999). pp. 262-305.

Zuber, Terrence, 'Terrence Holmes Reinvents the Schlieffen Plan', *War in History* VIII, 4 (2001), pp. 468-476.

Zuber, Terrence, 'The Schlieffen Plan Was an Orphan', *War in History* II, 2 (2004), pp. 220-225.

Internet

Lupfer, Timothy T., "The Dynamics of Doctrine: The Change in German Tactical Doctrine During the First World War",
<http://www.cgsc.army.mil/carl/resources/csi/Lupfer/lupfer.asp>, 2008-04-09.