

## *Development of Operational Thinking in the German Army in the World War Era*

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Historians and military figures, especially British and American individuals, again and again raise the question of why the German army was - at least for a time - so successful in battle in the world war era despite its inferiority in materiel and personnel. In addition to tactical capabilities, the explanations given often include the operational capabilities of the German land forces. While Geoffrey P. Megargee<sup>1</sup> and Shimon Naveh<sup>2</sup> are critical in their assessment of the Wehrmacht's operational achievements because of specific German command and control problems and Naveh points out that there is no coherent theory behind Germany's operational thinking<sup>3</sup>, others emphasize the outstanding operational capabilities of the German army. Edward N. Luttwak describes the Soviet invasion of Afghanistan as follows: "In fact it was an operation very much in the German style: elegant, full of risks, and most profitable."<sup>4</sup> Robert M. Citino goes even further. He draws a direct line from the Schlieffen Plan to Desert Storm, the most successful American military operation since World War II. The key to success lay in the decision to wage a war of maneuver, which was well-planned and thought-out, as well as the establishment of clear points of main effort - a fact any

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<sup>1</sup> Cf. Geoffrey P. Megargee, *Hitler und die Generäle. Das Ringen um die Führung der Wehrmacht 1933-1945*, (Paderborn: Schoeningh Ferdinand GmbH, 2006).

<sup>2</sup> Cf. Shimon Naveh, *In Pursuit of Military Excellence. The Evolution of Operational Theory* (London, Portland: Routledge, 1997).

<sup>3</sup>Naveh, *In Pursuit of military Excellence*, p. 128.

<sup>4</sup> Cf. Edward N. Luttwak, , *The Pentagon and the Art of War. The Question of Military Reform* (New York: Simon and Schuster, 1984).

German officer is aware of<sup>5</sup>. Both writers suggest that the Germans had a timeless art of command and control, the main factors of which – the establishment of points of main effort, risk awareness, speed and maneuver – were broadly adopted by American and Soviet officers. In this paper, I will present a short outline of the development of operational thinking in the German army in the world war era.

The history of operational thinking is the great narrative of the German army in the world war era and beyond. It is composed of several intertwined narrative components and has survived two lost world wars. Operational thinking, either as a whole or through individual aspects of it, has to this day repeatedly been heralded a success, particularly in the Anglo-Saxon world, and increasingly within the Bundeswehr since the mid-1980s. The boundaries between tactics, operation and strategy are often blurred due to differences in military cultures. It is almost a kneejerk reaction, however, to condemn operational thinking as a factor determining Germany's *Sonderweg* or the strategy of annihilation that culminated in "Operation Barbarossa". As is often the case in history, this narrative is neither black nor white, but grey.

This also applies to the development of German operational thinking. Its genesis is a continuous process whose roots go back well into the mid-19<sup>th</sup> century. The military leadership was convinced that determinants such as Germany's central geographic position, inferiority in personnel and materiel and ambition to become a major and world power, which were the foundation for Germany's operational and strategic planning until the end of World War II, already existed when the German Empire was founded. Originating from the necessity to move masses of forces over large distances on a decentralized basis, operational thinking largely took shape in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries as a military solution for waging a two- or multi-front war in the narrower border regions surrounding Germany and Central Europe.

In order to make up for the assumed objective disadvantages in space and inferiorities in resources, the general staff decided to make the advantages of the inner line resulting from the country's central position in combination with the build-up of a

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<sup>5</sup> Robert M. Citino, *Blitzkrieg to Desert Storm. The Evolution of Operational Warfare* (Lawrence: University Press of Kansas, 2004).

high-quality force and, in particular, a superior art of command and control the guideline for its operational thinking. It was based on the parameters of maneuver, attack, speed, initiative, freedom of action, points of main effort, envelopment, surprise and annihilation, which had already been developed by Moltke the Elder for waging a fast war. The objective was to annihilate the enemy in one or more swift battles in the border area by enveloping it. The term annihilation (*Vernichtung*) does not mean the physical extinction of a force, but its elimination as a factor of military power, for instance also by taking it captive. Against the background of Germany's central position, the factors of space and time were always at the center of the German military leadership's operational-strategic plans and efforts to raise the army's personnel and materiel levels. Together with the factor of forces, they not only formed the framework, but also constituted the crucial cornerstones of German operational thinking.

The repeated attempts by the military leadership to solve the strategic dilemma with operational means, that is, to make up for strategic deficiencies like Germany's central position and potential inferiority with operational successes, played a major role in German operational planning. What is of particular interest are the efforts made to draw conclusions regarding tactical-operational and technological issues from the experiences of past conflicts like the First World War, and apply them to the preparations for a new war and to anticipating what the war would look like. The pursuit of greater efficiency, which resulted in modern operational maneuver warfare, therefore seems significant. With a view to the planning and conduct of operations, it is possible to point out lines of development which reveal the dynamics of this process within warfighting as a whole.

As long as defensive action could result in nothing other than an unwinnable war of attrition, the top brass was convinced that in the event of war, offensive action was the only option. In the triad of strategy, tactics and operation, the latter's function was to make decisive battles of annihilation come about due to the conduct of quick mobile operations in order to prevent the enemy from building up the potential of his superiority. Time pressure was the sword of Damocles hanging over all operational considerations and plans. The will to maintain or regain mobility during the attack was therefore traditionally at the heart of the tactical-operational thinking of the German army in the world war era. This offensive concept was not developed in a political and

mental void. In addition to the country's foreign policy, the aim of which was to make it a major and world power, this concept was also based on the communis opinio that "attack has always been the Germans' way of fighting<sup>6</sup>."

Germany's defeat in the First World War did not sever these lines of continuity. As early as in 1918, the German military elite started to look for answers to the following questions: What can be done to correct the outcome of the world war and what could be done to win a future war? In a collective denial of reality, they blocked out the real strategic reasons for the failure— Germany's inferior force potential. This selective perception culminated in the conviction that the tactical-operational approach was right, but the people who put it into practice had failed. Convinced of being "undefeated in the field", they agreed to restore the German Empire's position as a major power that had been lost. There was therefore dissent only over the path, but not the goal. What lessons did the German military elite want to learn from the First World War? Based on the premises that rapid operational attacks were the answer to the risks objectively inherent in Germany's central position, the military's limited willingness to learn was basically reduced to adopting a military-professional perspective. There was little learning in the sense of re-learning<sup>7</sup>. As in the First World War, the crucial question was: How can offensive action, a basic condition of German operational thinking, regain its mobility? Guderian seemed to have untied the Gordian knot, which had been tied from the factors of time, central position and inferiority in personnel and material resources, with the quick reaction force concept and overcome the attack crisis.

Despite the experiences of the First World War and although enormous amounts of funds had been invested in the expansion of fortifications in the 1930s, the German

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<sup>6</sup> Ludendorff on 22 February 1918 in his letter to Friedrich Naumann, printed in: *Ursachen und Folgen*, Vol. 2, p. 250.

<sup>7</sup> Gottfried Niedhart, "Learning Ability and Willingness to Learn after Wars: Observations in the Wake of the German Post War Period in the 20th century", in: *Historical Guidelines for the Military of the 1990s*. by Detlef bald and Paul Klein, Baden-Baden 1989 *Military and Social Sciences* Vol. 2, pp. 13-27. Translation of (Gottfried Niedhart, Lernfähigkeit und Lernbereitschaft nach Kriegen. Beobachtungen im Anschluß an die deutschen Nachkriegszeiten im 20. Jahrhundert, in: *Historische Leitlinien für das Militär der neunziger Jahre* hrsg. von Detlef Bald und Paul Klein, Baden-Baden 1989 (=Militär und Sozialwissenschaften Bd. 2), pp. 13-27).

army began the Second World War with large-scale offensive operations and a shocking neglect of the defense. In contrast to the First World War, the military leadership of the German Empire had a detailed operational plan in the Schlieffen/Moltke plan and was convinced that this plan was a recipe for victory. When it failed, the disillusionment was all the greater. In 1940, German armed forces again attacked in the West, using a plan devised at short notice – the Sickle cut. When France was defeated after only six weeks, euphoria was all the greater.

Both events – the defeat of 1914 and the victory of 1940 – resulted in divergence in the way the military leadership learned. While, in the First World War, the German army only started to develop new methods of mobile defense and attack within the framework of combined arms combat due to the pressure of trench warfare, it believed it had a recipe for operational victory after the victory over France in the Second World War – the *Blitzkrieg*. This dream came to an end in the winter of 1941 in the expanses of Russia. The German troops – ill-prepared for mobile defense – had again been forced onto the defensive. In both world wars, the tactical-operational peace-time considerations were more or less quickly put to a merciless test, which they were unable to fully pass due to the everyday conditions in the wars. In both the First and the Second World War, the German army felt compelled to develop a method of defense which matched the availability of munitions available and its shortage of resources. While the 3 *OHL* connected the experiences of the frontline forces with its own ideas about mobile defense due to the severe losses suffered, Hitler reacted like Falkenhayn in the First World War in that he categorically turned down requests from the forces to be allowed to conduct a mobile defense. He preferred to order a linear defense to be mounted, making explicit reference to Falkenhayn's ideas. The forces went as far as they possibly could to interpret Hitler's orders as permitting maneuver operations simply for the purpose of being able to compensate to some extent at least for their inferiority in materiel and personnel by surrendering ground. More and more often, the dictator overruled the innovative tactical and operational ideas developed in everyday life at the front, referring to the experiences of the First World War. The reason for Hitler's success was that many Second World War generals had been subordinates in the First World War and influenced by similar experiences as their commander-in-chief, they increasingly fell back on their own experiences as the war continued. For this

generation, slogans like “1918 – never again” (Nie wieder 1918) or “Withdrawal behind the Marne” (Rückzug an der Marne) symbolized a lack of leadership among the former generals which resulted in the defeat in the First World War because they had stopped fighting the battle too early at the Marne in 1914 for example. As generals, the former second lieutenants wanted to avoid such leadership errors at all cost and adhered to orders to hold on even in hopeless situations.

It is impossible to understand the leadership of many senior officers in the Second World War without having knowledge of what they had experienced and of what military socialization they had undergone in the First World War. At times, they fought the First World War a second time, in the same areas, only with more advanced weapons.

In the Second World War, there were only few tactical innovations that had effects on operational warfare, compared to developments in the First World War. Command and control in the German army in both world wars was exercised on the basis of mission-type command and control, although Hitler banned the use of this form at the operational and sometimes even at the tactical level. When it comes to answering the questions of the extent to which the lower levels of command obeyed these orders and whether mission-type command and control was exercised towards the end of the war at all in view of the inadequacy of officer training, doubt is permitted.

When the operational approaches employed to solve the problem of Germany’s capability shortcomings proved to be inadequate, the military leadership in both world wars began to compensate for this failure by raising the level of commitment and tried to make stronger the soldiers’ will to keep going and discipline by appealing to their will and fighting morale; two factors with allegedly unlimited potentials. On March 1945, the commander-in-chief of Army Group B, Model, wrote to his commanders: “The war cannot be won with calculations and not by the mere performance of duty. The decisive factors are the will to win and the belief in victory! (...)”<sup>8</sup>. Hitler and the NSDAP took over a large share of the job of mobilizing the “will to go on” for the

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<sup>8</sup> Letter from the commander-in-chief of the Army Group B to his commanders, 29 March 1945, BArch, RH 41/603, pp. 13-14.

Wehrmacht by conducting ideological indoctrination after the army had failed in this matter in the First World War. While, in the First World War, the OHL concentrated on tactical innovation despite the introduction of “patriotic education” (*Vaterländischer Unterricht*), ideological leadership gradually became as important as tactical and operational command and control in the Second World War.

The German belief was that, in addition to excellent general staff officer training, the prerequisite for mobile operational-level command and control was high-quality troop training. While the Prussian-German army of 1914 consisted mostly of well-trained officers and troops and – according to the ideas at the time – command and control was exercised in a professional manner, the situation in the Wehrmacht was different. Germany’s Second World War army was, in many ways, only a slightly improved version of its First World War army. The campaign against Poland already revealed considerable defects in training and command and control. This cannot come as a surprise. In the short period after 1935, due to the complexity of the tasks and the advanced technology of the arms, it had not been possible to train the entire army to as high a standard as it had been to train the Prussian-German forces in the long period of peace before the First World War. Instead, a concentrated effort was made with a small number of selected units. These high-speed forces were the spearhead of the German attacks. This concept soon reached its limits in the campaign in the east, when all the divisions deployed were in battle. Armored divisions were virtually sucked into the Russian territory, which expanded to the east in a trapezoid shape. The disparity between the motorized “elite units” and the mass of unmotorized infantry divisions became more and more obvious as the war went on. Until the end of the war, the few well-equipped units were the backbone of the German army, which was confined in its ability to conduct maneuver warfare for a variety of reasons, not least due to the oppressive air superiority of the enemy. Not even the high-speed units were able to compensate for the allies’ superiority in materiel and personnel.

What catches the eye in this context, however, is that almost no answer was given to the question of why military considerations should continue to focus on a doctrine which had cost German land forces two world wars within a period of thirty years in the 20<sup>th</sup> century, largely ignoring the weaknesses in German operational thinking which contributed to the defeat.

There is no question that for years the German army fought successfully in two world wars against enemy coalitions which were far superior in both materiel and personnel, initially doing so in the offensive, e.g. the Western campaign in 1940, and later in the defensive. These successes, however, can first and foremost be attributed to tactical rather than operational capabilities, that is, to the soldiers and officers in the field units and not only to the general staff officers.

Crucial weaknesses in German operational thinking were due to its structure. Originating from the necessity at the tactical-operational level to exercise command and control over mass armies over large distances, Schlieffen further developed it at the operational-strategic level and turned it into an emergency solution for a war under conditions of inferiority. Its evolution from tactics, even tactics at higher command levels, which is reflected in basic parameters like maneuver, attack, speed, initiative, freedom of action, point of main effort, envelopment, surprise and annihilation, was not countered by an adequate expansion into the operational-strategic level even though the operation, the link between tactics and strategy, has an operational-strategic dimension on the one hand and a tactical-operational dimension on the other. Consequently, the fixation on the operational level of command within the German general staff went along with neglect of the strategic level. In the minds of most general staff officers, operational-strategic thinking was only of second-rate importance. The reasons for this development are to be found in the officers' attitude towards politics. Strategic thinking is basically political thinking. General staff officers always understood political thinking under the primacy of military thinking. They were largely unfamiliar with civilian political thinking although they accepted the political decisions taken in peacetime, albeit often with a mutter. In times of war, however, they reclaimed the leadership role in accordance with their interpretation of Clausewitz. Officers who had been socialized in the German Empire shared the basic political attitude of their monarch and his government towards domestic and foreign policy issues. The objective was to position Germany as a world power, if necessary by using military force. Even the defeat in the First World War did not change this attitude. In this context, it must be noted that until the beginning of the First World War, the use of military force was considered a legitimate foreign policy tool in Germany and Europe.



In the minds of most general staff officers in the world war there was no room for realpolitik-oriented solutions that were appropriate to Germany's force potential. Neither the German Empire nor the NS regime expected the top military leadership to think in political terms; and the political establishment seldom demanded it to do so. This was not least due to the top-level structure of the Empire. The military line existed in parallel to the political one and the two merged in the person of the Emperor and later the *Führer*. The strategic level was therefore included in this top-level position. This command structure, which had been taken over from the Frederician period, eventually culminated in the idea of a "roi-connétable" – a role which Emperor Wilhelm II was never able to fulfill, while Hitler was able to, at least at a basic level, thanks to modern command and control assets. Nevertheless, this structure was not suited to overall warfare in the era of industrial mass war up to "total war" with its complex economic, political and military levels. The situation was made even worse by the military leaders of the Wehrmacht, which was paralyzed due to internal competition. Whenever the military leaders felt that their power was in danger, they were prepared to interfere in domestic and foreign policy matters and exert political pressure. While this was successful in the German Empire and in the Weimar Republic, Hitler unmistakably enforced the primacy of politics in the NS regime over the Wehrmacht, the latest upon Beck's resignation. After that, most general staff officers saw themselves as no more than "flywheels" in a well-oiled military machinery which implemented demands of the political leadership while refraining from expressing its concerns – doing so to an even larger degree than had been the case in the Empire. Against this background, it cannot be a surprise that the general staff of the army neglected the strategic level of warfare and focused almost dogmatically on the operational level.

It was there that the army general staff saw the chance to at least make up for the strategic inferiority in "the war of the poor man". As a consequence of the lack of strategic thinking, blatantly wrong strategic decisions were made, in the second half of the Second World War, initially in instructions and later in the neutralization of the general staff at the operational level by a politician who himself had not undergone any higher-level military training. In the world war era, the army leadership focused on continental warfare and never developed a strategic concept for overall warfare which

included the naval forces. Instead, it largely ignored the navy and naval warfare although both were indispensable to achieve world power.

The lack of strategic thinking and the tactical and operational fixation on quick outcomes of battles resulted in the development of further weaknesses in German operational thinking. It reached its limits as a military doctrine focused on rapid success in battle in the areas close to Germany's borders when the offensive warfare on which it was based went beyond the bounds of Central Europe. Logistics is the area in which this can be seen most clearly. In accordance with operational thinking, the logistics were designed to be adequate for one or more rapid battles of annihilation in a 100 to 200 km border area. The troops were meant to live off the land until well into the Second World War. However, as soon as warfighting expanded deep into an area, logistic support reached its limits, first delaying and eventually hindering the execution of the broad envelopment operations urgently needed to implement the operational doctrine. Surprisingly, the general staff officers, who were completely focused on the operational level of warfighting, ignored this knowledge. This attitude ran so deep that dealing with supply issues was perceived as a career hindrance even in the Bundeswehr. The reason for this development undoubtedly lies in the way German officers were trained to be pro-active in battle, but probably also in the realization of the inferior potential. The solution to the supply problems was sought and eventually found in the concept of attempting to quickly decide the outcomes of battles and thus wars, which ruled out further logistic problems. When logistic problems endangered the implementation of this concept within the framework of "Operation Barbarossa", even atrocities against the Russian civilian population were accepted to protect the overall operation.

In addition to the factors of time and forces, which were of central importance to the operations officers, the geographical factor played a crucial role in German operational thinking. In this context, the military leaders working to position Germany as a world power misjudged the fact that in order to rule over Europe, it was necessary to neutralize Russia as a power factor. While Moltke the Elder, Schlieffen and also Falkenhayn were wary about or even opposed to waging war deep within Russia for reasons including what Napoleon had experienced, their successors saw few problems in waging a war against the Soviet Union on account of their experiences with the Russian armed forces in the First World War. They expanded a doctrine that had

originated from tactics and was designed for bringing about decisions to battles close to Germany's borders from the operational to the strategic level even though they did not have the necessary instruments of power and resources. The concept of establishing points of main effort, which that the German army had developed as an emergency solution for warfighting with inferior forces and which was always accompanied by the will to seize the initiative and to regard German operational command and control as superior, had to eventually reach its limits in the 'law of numbers', in resources and the geographic conditions. General staff officers pushed aside the knowledge that even with superior tactical and operational command and control, it was impossible to defeat a superior enemy coalition not least because they were convinced that acknowledging the army's military limits and capacities would have meant admitting complete failure and questioning their position of power in the structure of the Reich.

The dogmatic fixation on rapid success in battle, the battle of annihilation, was intended not only to solve strategic problems, but also to restrict the war to being a cabinet war, to prevent it becoming a people's war and thus to keep politics out of the war. In the end, operational thinking in the world war era envisaged war as taking place in an empty space where neither the people nor politicians did anything, and the military moved around as if on a chess board. Some advocates adhered to this view into the 1980s. This idea of a cabinet war had been reduced to absurdity as early as in the Franco-Prussian War and at the latest in the Second World War, but general staff officers had refused to accept the fact.

Against this background, it is impossible to unambiguously answer the question of whether there is a specific German form of operational thinking. Certainly, it has German roots on account of the political will of Prussia and later the German Empire to pursue major power or later world power policies without having sufficient instruments of power and the extensive neglect of the strategic level on the part of the political and military leaders. But to seek empowerment with inferior resources was a widespread phenomenon in the past, is so in the present day, and will probably continue to be so in the future as well. "Mission-type command and control" as a classical German command and control process is also considered a key element of operational thinking. It is often forgotten that *Auftragstaktik* (mission-type command and control), as the term expresses, was applied more at the tactical than at the

operational level as early as in the First World War. As the defeat by the Marne in 1914 revealed to the OHL in the very first weeks of the war, excessive operational freedom could quickly result in disaster. In the Second World War, the general staff in the end limited the operational freedom of division commanders and commanders-in-chief after the first weeks of Operation Barbarossa and exercised stronger command and control from the top before Hitler later restricted operational freedom even more. Other key elements of German operational thinking like envelopment, mobility, speed, surprise or annihilation, which are rooted in tactics, or the conviction that attack as a type of combat operation is superior are military parameters that are prevalent in all armies. The difference lies in how they are applied. In this respect, the Germans went further than others by focusing on initiative and freedom of action. The urgent pressure to establish a point of main effort resulting from the high risk that originates from inferiority seems to be just as marked in the German army just as the rapid neutralization – that is, annihilation – of the enemy. These approaches, however, can also be found in military history, e.g. with regard to Napoleon, and are not in themselves an invention of the German general staff. Many parameters attributed to German operational thinking can also be found in the doctrines of other continental powers, like the Soviet Union. For decades, the Soviet Union also planned to undermine the superior force potential of a coalition of sea powers prepared for a protracted war by focusing on speed and mobility in its operations. This fact is of particular importance when it is seen against the background of the close exchanges that existed between the Reichswehr and the Red Army in the 1920s. Thorough academic analysis has yet to be conducted to determine the degree to which German operational thinking influenced Soviet operational thinking and the impact the strategic position of the USSR had on its development. Although in some aspects there are features of a distinct German form of operational thinking, such accumulations are not suited to assume the existence of a specific or typical German form of operational thinking.

There is no doubt that German operational thinking is based on structural deficiencies that are rooted in a faulty inclusion in an overall strategy that matches the German force potential, and in the case of logistics even opened the gate to criminal warfare within the scope of “Operation Barbarossa”, but the German doctrine is not based on a criminal intent focused on total annihilation. German operational doctrine is the attempt to find a military solution for the strategic dilemma of achieving continental

hegemony without having an adequate economic, military and political power base. The reason for this was the refusal of the military and political elites to accept the reality of Germany's actual power potential in the world war era.

German operational thinking always involved high risks that endangered the existence of the Reich and was by no means a recipe for victory, but rather an emergency solution. It was the doctrine for "the war of the poor man" who nevertheless aspired to find a "place in the sun".