

Dennis Showalter and the History of Armour during Second World War

Kaushik Roy

Introduction

Whenever one thinks of the Second World War, the image of dark menacing panzers cutting deep swathes into enemy forces comes up to the mind. No amount of interpretation and overinterpretation (following Umberto Eco) can belittle the extraordinary role played by the panzers in World War II. Similarly, despite the presence of numerous good works by various historians and introduction of exotic methodologies, Professor Dennis Showalter's place in the world of academic writings on World War II can never be marginalized. The present article humbly attempts to highlight one aspect of Professor Showalter's research: history of tanks during the Second World War. This essay has two sections. The first section evaluates Showalter's three works (one is a general history of the panzers,¹ another deals with two practitioners of armoured war² and the third monograph analyzes one of the biggest, if not the greatest tank battles in world history³) dealing with armour during the Second World War. In the next section, the present author, inspired by Showalter's works on armoured war, attempts to recount the evolution of armoured branch in the Indian Army until the end of World War II. Not to speak of a monograph, there is not even an article on the subject of armour of the Indian Army. Let us turn our focus to the master practitioner of history of armoured warfare.

Dennis Showalter and the History of Panzers

In all the three books mentioned above, Showalter uses German sources and weaves them into an interesting story, which attracts both the general readers and the specialists in the field. This is indeed a rare achievement because specialist books rarely capture attention of the lay readers.

And popular historians who write general works never use primary sources. Hence, they are not taken seriously by the researchers. Furthermore, popular histories are merely bland (at times interesting) narratives. But credit is due to Showalter for his ability to integrate complex analysis with his flowing narrative. This is possible due to his deep knowledge of German military history and his flair for writing. Again, in all his works, Showalter partly accepts the German Way of War concept. But unlike Robert Citino, he refuses to attach his narrative rigidly to this concept.⁴ What makes Showalter's three books important for the researchers is the fact that, despite targeting the general audience, the master historian of German military history not only provides new information about various facets of the war, but also engages with the recent debates in the field.

Hitler's Panzers, which came out in 2009, remains the best general history of Germany's panzer arm. Various elements such as technology, tactics, strategy, doctrine, training and leadership, etc. are woven together in a brilliant fashion by Showalter in portraying the rise of the panzer arm from the aftermath of the First World War until the fall of Berlin in May 1945. While R.L. DiNardo's *Germany's Panzer Arm in World War II* remains the best specialist work in the field, this book is not meant for general readers.⁵ Peter McCarthy and Mike Syron's *Panzerkrieg* is probably the best example of popular history on the rise and fall of the German panzer divisions.⁶ But, these two authors (one an archaeologist and another a journalist) rely on secondary sources published in English. In terms of analysis, their book offers nothing original (either conceptually or empirically) because the two authors are not trained historians. DiNardo's work, based on the German archival sources, is organized thematically. Furthermore, DiNardo does not discuss the panzer battles. In contrast, Showalter portrays the evolution of the panzer arm in Germany from 1920 in a lively narrative. And his dramatic description of tank battles

(especially those which occurred in the Eastern Front) comes alive through his artful prose. Carl von Clausewitz rightly notes: "...of the strategic budget, while important battles and other operations comparable in scale may be considered its gold and silver."⁷ Despite the recent popularity of the War and Society approach and the War and Culture approach, battles could not be deleted from the equation. The Germans excelled in panzer battles, writes Showalter, because of their superior doctrine and excellent training.

Both continuities and discontinuities characterized German doctrine during Second World War. True, *Blitzkrieg* (if this term originally coined by an American journalist can be used at all) actually stands for *Bewegungskrieg* (war of movement) as postulated by the German Way of War, which developed from the time of Frederick the Great. Showalter notes the elements of *Bewegungskrieg* as stress on mobility, deep penetration, envelopment, and initiative.⁸ However, there is something more. Here, he differs from DiNardo. For the latter, German armoured doctrine was just an extension of the doctrine for infiltration developed by Kaiser's Army during 1918.⁹ Showalter rightly claims that the panzer doctrine was something more innovative than Reichswehr era battle theory.¹⁰ And in *Armor and Blood* (2013), Showalter points out that interwar technological advancement, especially in the field of radios and internal combustion engines, made possible the transition of *Blitzkrieg* from a theoretical abstract into a deadly reality. The traditional view, as put forward by scholars like Captain B.H. Liddell Hart, was that the Germans learnt the art of panzer war from British pundits like himself and Major-General J.F.C. Fuller. Revisionist historians have challenged this view. In recent times, Azar Gat has revised the "Revisionists" by arguing in favour of the British influence on the evolution of Germany's panzer arm. After analyzing the writings of the German officers during the interwar

era in *Hitler's Panzers*, Showalter ends the debate once and for all, by portraying the indigenous development of the theory of armoured warfare in Germany.

From a methodological point of view, *Hitler's Panzers*' greatest contribution lies in reviving the debate about whether or not World War II was a near run thing. As usual, historians are divided over this issue. This is good because history is an argument without end. If debates end then the subject is dead. One group of scholars, who may be categorized as structuralists, assert that Nazi Germany in particular and the Axis powers in general had no chance in winning the Second World War. In their framework, Adolf Hitler had lost the war, the moment he attacked Poland. Massive demographic and economic superiority of the Allied powers had seen to that.¹¹ For a general treatment about military power being equated with economic potential of nations, Paul Kennedy's works remain seminal.¹²

From the opposite pole, a large chunk of historians challenges the concept of determinism in history.¹³ E.H. Carr has critiqued the ifs and buts of history as Cleopatra's nose history.¹⁴ But, counterfactuals are important, especially in case of military history. And a number of reputed historians have raised voices against structuralist determinism by painting alternate scenarios. Philosophically, the critiques of structuralist methodology (indirectly influenced by quantum mechanics) assert that human activities and social structures are non-linear dynamic systems. Human decision-making and activities are like the unpredictable movement of electrons as postulated by quantum mechanics. A small input might occasionally result in massive output and the end result may be completely unpredictable in scale and scope. This is known as "butterfly effect". And in such a reality, there is no place for rigid teleology.¹⁵ This assertion is in direct contrast to John Lynn's assumption that big effects do not result from small causal factors. Clausewitz's magnum opus *On War* (1832) repeatedly emphasizes the role of chance, unforeseen

and contingent due to the continuous friction and fog of war. Certain military history books point to the alternatives, which were possible at various moments.¹⁶

Historians following the non-structuralist approach argue that Axis defeat in the Second World War was not preordained. After all, war is not merely a matter of mathematics and material factors. War is also the province of creative art. Non-material factors like tactics, strategy, doctrine, training and leadership do matter. Otherwise how one can explain the economically weak Habsburg Empire maintaining a great power status till 1914? However, the proponents of this view differ among themselves about the turning point. Was there one or many turning points in the history of Second World War. And if one could find a turning point, exactly when it occurred. For some, it was December 1941 in front of Moscow, for others it was the summer of 1943 at Kursk and another group refers to the summer of 1944: the period of Overlord and Operation Bagration. Some scholars have also attempted to locate the turning point in the Asia-Pacific Theatre. Michael W. Myers in his provocative monograph asserts that if Japan had pursued alternate strategic decisions then it would have been impossible for the Allies to maintain a two front global war: one front encompassing Mediterranean-Atlantic and another the Asia-Pacific. Myers challenges historical teleology and determinist triumphalism and reminds us: “The story of the Pacific War is a story of great contingency and of the warring powers’ efforts to master that contingency with ever new and successive strategies.”¹⁷

Myers’ methodology is fine but his arguments are less persuasive. Among the three Axis powers, Germany was the most powerful industrial nation.¹⁸ If tipping points exist, probably it makes sense to locate the turning points (if any) in the area of German decision making. The British military officer turned military theoretician cum historian J.F.C. Fuller, in his monograph on the Second World War, is somewhat influenced by his arch rival Liddell Hart’s concept of

Indirect Strategy. Fuller writes that instead of following the Direct Strategy of launching Barbarossa (1941) and Blau (1942), if Hitler had followed Indirect Strategy against Russia, then the Third Reich might have won. Fuller's concept of Indirect Strategy involved going into Russia through the back door, i.e. invading Caucasian oil fields through the Middle East.¹⁹ Citino in his *The German Way of War* points to early December 1941 when the strategic balance passed irrecoverably against Nazi Germany.²⁰ However, he is ambiguous about whether or not Germany had any real chance of winning the war even before that date. In his three volumes history of the *Wehrmacht*, Citino seems to push the point that the defeat of Germany was almost inevitable.²¹ Showalter is more flexible in his approach. In *Hitler's Panzers*, he links the turning point with the operational decisions taken by German High Command during the summer of 1942.²² And Showalter's analysis of German operational decisions are priceless gems. One may agree or disagree, but Showalter has brought the debate to the forefront. The point to be noted is that, as far as Showalter is concerned, the issue is not whether Germany could have won the war. But, alternate decisions might have changed the course of war, resulting in different political, demographic and economic consequences. Such an historical approach is important because Citino in an article on military historiography reminds us: 'As historians in all fields seem increasingly willing to recognize the role of contingency, chance, and even "chaos" in historical development, operational military historians find themselves in an unusual position of being well ahead of the scholarly curve: they have been talking about all of these things for years.'²³

The panzers were so successful both in attack and in defence, agree the historians, because of the German generals who were trained in the tradition laid down by the Prussian General Staff. Field-Marshal Erwin Rommel's name is included in the list of some of the best panzer generals. Hitler's generals have received due attention from many scholars. In general,

military historians, despite accepting the criminality of the Nazi regime, could not suppress their hidden admiration for the boldness and dash of the Nazi commanders.²⁴ Looking at the generals to understand the dynamics of battle has a long tradition in Western historiography. It started with Xenophon's and Julius Caesar's autobiographies.

The rise of micro history somewhat challenged the study of generalship. In the field of military history, one example is George Stewart's *Pickett's Charge*. Nevertheless, it is an example of history from top. The focus is on General Robert E. Lee, the Confederate commander, and his corps commanders with regard to a particular tactical decision taken (or not taken) at the Battle of Gettysburg (3 July 1863). Military historians chose to neglect this book, which came out in 1959.²⁵ However, with the rise of personless social history (the influence of both Annales School of France and E.P. Thomson in Britain) in the 1970s and history from below due to rise of "marginal groups" (women, Blacks in USA, tribes and Dalits especially in case of India), the study of great men, aka generalship, came under serious attack. Especially feminist scholars started asking the pertinent question about why historians should be considered with the activities of men (especially white men) in history. The rise of postmodernism and the cultural studies approach dealt further blows to the "old fashioned" study of great commanders. To give an example, the famous French historian Georges Duby, who is an expert of the history of feudalism, in a monograph on the Battle of Bouvines (27 July 1214) claims that both the common soldiers and the commanders themselves were utterly confused about what was going in the battlefield. The sources, if anything, were more confused, and the scholars analyzing the source materials tried to get rid of this chaos by resorting to fiction. The modern historians, while interpreting these incoherent source materials, take recourse to further fictional assumptions and a high degree of authorial interventions to create order out of chaos. So, historians, and

especially military historians, are writing fictional battle tales.²⁶ We are back to Hayden White's assertion: all history is fiction.

Military history adapted to these challenges by adopting new methodologies. John Keegan's *The Face of Battle* (1976) is the military historians' response to the above mentioned challenges. Keegan by following a "bottom up perspective" and focusing on the nameless and faceless common soldiers portrayed their experience of combat in the three battles fought in West Europe.²⁷ The history from below approach became popular among at least a section of military historians. One historian of ancient Roman military history has followed this approach to paint the experiences of the common soldiers during Cannae.²⁸ The problem with "fox hole perspective" is that such an approach cannot explain why the common soldiers were in a particular battlefield on a particular date. Furthermore, the foxhole or the "muddy boots perspective" fails to explain why in a particular battle one side lost and another party won. This is because technology, tactics, strategic decision making (sphere of the political and military elites) and all these related factors are left out of the bottom up approach. So, the "Keeganian approach" (if at all this term could be used) cannot explain causality. And Keegan himself dumped this methodology in his later books.

To incorporate the broader human dimensions in the writing of military biographies, Nigel Hamilton in his biography of Field-Marshal Bernard Montgomery tried to bring in the latter's mentality (with a slant towards sexuality) and relate it with his art of war. In this framework, we should be considering Monty's attitude towards little boys and women to explain his generalship during the Battle of Alam Halfa and Alamein.²⁹ Two American scholars also tried to understand Frederick the Great's generalship by analyzing his relationship with his domineering father.³⁰ As expected, a serious empiricist historian like Showalter, in his dual

biography of Rommel and Patton, steers clear of such exotic methodologies. Instead of relying on dubious oral interviews, memories, etc. (as demanded by the cultural studies and post-modernists), Showalter interprets archival data to build up his story about Rommel and Patton. Richard Evans' recent critique of postmodernist and culturalist approaches and urging for a return to the documents have given the empiricist historians a shot in the arm.³¹ Dual historical biography approach (study of two great men on the opposite side) is nothing new. In 1920, H.H. Dodwell of the Cambridge School pioneered this approach. In recent times, Alan Bullock has followed this approach in his twin biographies of Hitler and Stalin. More recently, Richard Overy in his study of Hitler and Stalin has taken a broader approach. Instead of merely being a biographical study, Overy takes a broader approach and meshes the actions and beliefs of these two "evil" men with broader state-society approach.³² Showalter in *Patton and Rommel* (2005) follows a similar approach and paints the intricate relationship between two individuals and the two contrasting politico-military systems within which they operated. Showalter shows that both Patton and Rommel were adept in handling chaotic fast paced armoured battles.

One could say that German military philosophy of nineteenth century had already preempted the postmodernist challenge, which came in the late twentieth century about battles being chaotic. The argument runs that German military philosophy influenced by the *Aufklarers* (Counter-Enlightenment body of thinking translated as Romantics) assumed that war is going to be chaotic and a commander needs to take advantage of the chaos and confusion. Clausewitz's *On War* also refers to this strand of thinking. Moreover, the Romantics believed that human spirit must be allowed freedom for full flowering of its creative energy. In opposition, British military philosophy, influenced by the doctrine of Enlightenment, assumed that all human activities could be categorized, classified and brought under strict control. While German

military doctrine accepts that chaos is inevitable and the commander's mind must be prepared to face and exploit it, the British military doctrine assumed that through detailed careful planning chaos in combat could be eliminated. And even if chaos occurs then it could be marginalized through strict control from top.³³

If the *Wehrmacht* had its Field-Marshal Erwin Rommel (b. 1891-d. 1944), then the US Army had General George Patton (b. 1885-d. 1945), the most dashing armoured commander on the Allied side. In fact, the German generals accepted that among all the Allied generals, "old blood and guts" was most dangerous. Showalter's portrayal of Rommel and Patton brings to the fore the debate regarding mission-oriented command system of the Germans versus the centralized top down command system of the British. Rommel, inspite of not attending staff college like most of the German generals, was steeped in the *Auftragstaktik* command culture, which means decentralized or better mission-oriented command system. The influence of his peers and experiences of the First World War resulted in the flowering of mission-oriented command with a Rommel "touch". Its elements are brought out in Showalter's memorable phrase: "Personal influence at the decisive point, throwing the enemy off-balance... and exploiting victories to the final limit of available resources: that was Rommel's style of command."³⁴ Similarly, Patton's way of war, writes Showalter, was to throw the enemy off balance through brief and decisive combat and by making a judicious use of time, space and mass.

In contrast, the British Army followed the centralized tight top down command system. Such an opposing inflexible command culture enabled the German commanders, at all the levels, to rapidly respond to the ever-changing battle scenarios. In modern terminology, this allowed the German commander to get inside the enemy commander's decision making cycle. One can

conceptualize four stages in the command: observe, orient, decide and act (OODA). And the German officers following mission-oriented command system got inside the enemy's OODA loop. The latter lost all the initiative and only meekly reacted passively to the former's moves. In most cases, it resulted in the enemy commander dancing to the tunes of the German officer practicing mission-oriented command system. So, the enemy did what the Germans wanted. In modern terminology it is known as Effects Based Operations (EBO). At best, the enemy commander takes decision very slowly and all his decisions are outdated or ineffective by the time they are ready to be implemented, because his opponent, following *Auftragstaktik*, was taking decisions on a faster mode. This resulted in faster tempo on part of the German commanders. Moreover, as part of this command culture, the junior officers were encouraged, in midst of the messy and foggy battlefield, to show initiative and improvise in accordance with the changing combat conditions. Therefore, during combat even when communications with the rear headquarters were cut, the German commanders were on their own and able to operate. If necessary, the German commanders were allowed to display initiative and go beyond the original orders issued by rear headquarters, which had become outdated in the rapidly changing combat scenario. This aspect was called creative disobedience by the Germans. But, the British officers brought up in the tradition of strict top down command were unable to take any decision when communications with the higher headquarters in the rear were severed during the chaos of a battle.³⁵ This is the traditional picture.

In recent times, Revisionist historians have challenged this bipolar picture. They argue that German *Auftragstaktik* was an overhyped phenomenon. At times, German commanders' response was predictable. Inadequate planning on part of the Germans had led them to strategic disasters. And the British generals did not always adhere to strict dictatorial control from above.

Junior officers of the Allied armies, especially the Canadian and the American units, in Normandy during July 1944 did experience tactical innovations due to the wide latitude given by some of their generals to their subordinate commanders.³⁶ In addition, Hitler, from the latter half of Second World War, veered towards micromanaging the activities of the German military formations.

The picture painted by the Revisionist scholars is partly true. After 1943, German high command to a great extent became dysfunctional. Still, at the lower and middle levels, the German formation commanders displayed initiative and judgement to conduct limited counterattacks with inferior forces and achieved substantial success at times. And whatever may be the level of Hitler's control, none of the German generals displayed strict adherence to fixed plans like, for instance Montgomery at Alamein (1942) and Dwight Eisenhower-Omar Bradley-Monty at Falaise (August 1944). Even when faced with Hitler's no retreat orders, German generals and especially Rommel did not display the characteristics of a control freak like 'Monty'.

The litmus test of an army and its commander is the conduct of battle. *Armor and Blood* deals with the armoured battles fought by the *Wehrmacht*. For the *Panzerwaffe* and its generals, the greatest armoured battle they fought was probably Kursk (July 1943). The traditional view is that Zitadelle (Citadel, code name of German plan of attack at Kursk) resulted in the greatest tank battle in world history. And the biggest and best German tanks were deployed in the battlefield of Kursk. For the first time, Nazi high command deployed the Panther and deadly Tiger tanks. The "battlefield bully" Tiger which made its debut at Kursk (some had been used at Tunisia and Leningrad earlier) was to cause much anxiety to the Allied ground force in Normandy during June 1944. Modern researchers are more circumspect regarding the role of

Kursk in the history of Second World War. Statistical analysis of the number of armoured fighting vehicles (AFVs) destroyed in the clash at Kursk in no way proves that this battle resulted in the swan song of Germany's panzer arm.³⁷

Showalter decisively intervenes in this debate. He asserts that whatever may be the body count or number of tanks destroyed on either side, Kursk cannot be written away. Why did the German *wagnis* (gamble) at Kursk fail? Showalter points out the limitations of the Nazi war machine at the tactical-operational-strategic levels. Dispersion, mobility and flexibility gave the Germans their tactical-operational superiority. However, these elements were missing in their Kursk Campaign. Furthermore, the Red Army itself was changing. The Soviet ground force registered huge improvement in combat effectiveness between June 1941 and July 1943. To stop the panzers, the Red Army initiated realistic training. Effective armoured war depends on aerial support. To his credit, Showalter gives due attention in *Armor and Blood* to combat in the third dimension and its effect on ground operations. We see that at Kursk the *Luftwaffe* was good, but not good enough to achieve aerial superiority, which might have given the panzers a chance to break through formidable Soviet defences. An intricate combination of static and mobile defence bloodied the panzers at Kursk. Traditionally, historians have blamed Hitler for delaying the attack. They have supported Field-Marshal von Manstein's position that had Hitler allowed him to attack in mid April 1943, then the Russians could have been defeated. The objective of Zitadelle was to destroy as big a portion of the Red Army as possible. David M. Glantz and Jonathan House note that if the Germans had attacked in mid April, then the prospect of destroying a large portion of the Red Army would have been absent, due to the fact that the Soviets had not amassed at that time a big chunk of their force within the Kursk bulge.³⁸ Showalter shows that not only Hitler but several members of the OKW and OKH were also in

favour of delaying the attack until the Germans were ready. Unfortunately, this delay also allowed the Soviets to prepare their defence in depth. Would it have been better if the Germans had remained on a strategic defence mode with their mobile forces in the summer of 1943? There is a big “if” in this assertion. Glantz and Showalter agree that Kursk was decisive for two developments: *Blitzkrieg* had finally died and even in the summer the Germans could be contained and the Red Army could advance. Now from the Eastern Front we move to the “Forgotten Front”.

Evolution of Indian Armour

Armoured, mobile troops which can kill on the move are for the time being most entitled to make such a claim. They have restored the fullest scope to the long established roles of mobile troops, which in the past have been similarly decisive in the classic periods of Alexander the Great, Hannibal, Chingiz Khan, Frederick the Great and the Napoleonic Wars.

Military Training Pamphlet, India, 1942³⁹

The history of Indian Armoured Corps (IAC) is not as chequered as that of the *Panzerwaffe*. Thousands of Indian AFVs did not clash with the opponents’ fighting vehicles resulting in a storm of steel as in Kursk. The Indian armour started from a modest beginning in the 1930s and during Second World War played a supporting cast in North Africa and a dominant role in Burma. The Burma Front received leftovers, i.e. not the latest tanks, but those AFVs, which were obsolete in the European theatre of war. Nevertheless, these tanks played an important role in the

reconquest of Burma. It is to be noted that the Imperial Japanese Army (IJA) met its greatest defeat in the country of the pagodas.

The IAC started its history inauspiciously. Strategic geography and the strategic functions of the Indian Army slowed the process of acquisition of tanks by India. The principal functions of the Indian Army before 1939 were threefold: policing the subcontinent against the Indians to maintain British rule (Raj); conducting low intensity operation (“butcher and bolt” expeditions) against the unruly Pathan (Pashtun) tribes who inhabited the region along River Indus; and defeat any probable Afghan invasion (a medium intensity war) with Soviet support along the North-West Frontier. In fact, the Raj fought the Third Afghan War during 1919-1920. After 1918, large number of Indian units remained engaged in counter-insurgency (COIN) duties in Mesopotamia. In 1919, the Raj experienced the Jallianwala Bagh massacre and the resulting backlash. After 1939, another task was added to the Indian Army’s strategic menu: to fight a high intensity war against first class powers like Germany and Japan.

In general, the dominant opinion in the Indian Army was that for policing tasks, AFVs were not required. Armoured cars were considered adequate for this purpose. Again, the roadless hilly terrain along Indus and the North-West Frontier ruled out the use of tanks. However, there were a few mavericks or forward looking military officers in the military establishment of the Raj. Just after the First World War, a few officers thought about the future of the armour in the British Imperial Army. Lieutenant-Colonel P. Johnson of the Royal Tank Corps stationed in India was one such officers. In 1920, Johnson came up with a detailed report. In this report, he discussed the probable tactical deployment of armour in varied terrains by the Indian Army and the nature of AFVs required for its different operational-tactical requirements. Johnson was influenced by the use of tanks in France and deployment of armoured cars in Mesopotamia.

Johnson noted that tanks could be used for the three tasks in which the Indian Army was engaged after First World War.

Compared to the deployment of infantry, use of AFVs deterred the political agitators and crowd. The crowd might use Molotov Cocktails against the Bren carriers. But, the tanks covered with light sheets of armour would protect the crew against the marauding lightly armed urban mob. Again, armoured cars fitted with machine-guns could easily be disabled within the city by roadblocks and barricades build by the unruly mobs. But, a tank with its tracks could overcome these flimsy obstacles. Johnson recommended use of light tanks for internal security tasks-i.e. each tank weighing 6 tons. Such a tank should have an operating radius of 300 miles and a maximum speed of 30 miles per hour. Johnson calculated that use of even one tank in such scenarios was equivalent to the use of minimum 100 soldiers and maximum 1,000 troops. Hence, deployment of tanks was cheaper than using a large number of infantry for crowd control tasks. Against tribal raids, Johnson recommended the use of a mixed force of tanks and armoured cars. While the armoured cars at high speed would move along the roads and maintain the lines of communications, the tanks moving across the valleys would provide flank protection to the baggage train and infantry moving along the roads. Johnson emphasized that while conducting Small War against the 'barbarians', all moral rules should be set aside. Are we anticipating the order which Field-Marshal Walther von Brauchitsch issued to the *Wehrmacht* during the opening gambit of Barbarossa? In Small War, the objectives, emphasized Johnson, were not to merely defeat the *lashkars* (war bands of the Pathan tribes) but also to destroy the economic infrastructure of the rebelling tribes. For the destruction of villages, crops, cattle, irrigation systems, etc., tanks fitted with light cannons and machine-guns were more suitable than use of infantry. It was almost impossible to tow heavy artillery along the impassable terrain of North-

West Frontier. But, tanks that were able to negotiate slopes at 45 degree angle could be used profitably. The thick mud walls of the village towers were impenetrable to rifle bullets and even mortars. Only a gun mounted on the tank could demolish such fortifications.⁴⁰

Johnson ruled out the use of heavy tanks, which were used in France by the British Army for two reasons. The forbidding terrain of North-West Frontier and the opposing force structure discouraged the use of such tanks. Neither the Pathan tribes nor the Afghan Army and certainly not the politicized crowd of India had heavy anti-tank weapons. Johnson recommended that the Indian Army needed six types of tanks and each AFV should have three crews. The six types of tanks in Johnson's scheme were as follows: light tanks equipped with machine-guns, medium tanks equipped with trench mortars and high explosive guns, supply tanks, tank tenders, signal tanks and ambulance tanks. One must note that the German Pzk 1 was also equipped with only a machine-gun. The ambulance tanks would be able to recover the wounded and being armoured would be impenetrable to the shots fired by the *jezails*. The supply tanks would carry supplies for the Indian detachments in the battle zone. Johnson stated that some supply tanks should be modified to function as carriers for infantry. So, Johnson was putting forward a case of the armoured personnel carrier (APC), a weapon which the British and American armies lacked until 1944. The point to be noted is that the panzer grenadiers carried by the APCs gave the panzer division the decisive punch, by allowing it to conduct combined arms battle. The tank tenders were to carry the engineers who would repair the damaged tanks. Furthermore, the tank tenders were to act as recovery vehicles to bring back the heavily damaged tanks back to the base. The signal tanks were to coordinate combined actions between infantry, light artillery, air force, armoured cars and tanks.⁴¹ Here, we have the recipe for a combined arms tactics, which the Germans, as Showalter shows in his books, put to good use against both the Soviets and the

Western Allies. So, Johnson, the “Indian Fuller”, had laid down the repertoire of an Indian panzer division.

Budget cuts and the rise of Indian nationalism, among other things, held back the creation of tank brigades in the Indian Army, but not everything was in stasis. For example, in 1922, flags and lamps were used for purpose of communication. And, in 1927, the armoured cars and light tank companies held an exercise in Baluchistan. The AFVs communicated through wireless sets borrowed from the Royal Air Force (RAF) units stationed in India.⁴² Had “clever Heinz” seen it, he would have been impressed. In 1937, Heinz Guderian in his book *Achtung-Panzer* wrote: “Tank forces are directed by radio, and the smaller units from company downwards also by visual signals.”⁴³

One of the most brilliant divisional commanders of the British Imperial Army Francis Taker (later Lieutenant-General) wrote a memorandum in 1935 about the possible use of tanks by the Indian Army along the North-West Frontier. He noted that the Indian units should always resort to offensive action against the tribesmen. However, the hills were impassable for the AFVs. Light tanks could be used along the narrow tracks in the valleys. Even then the *nullahs* (dried up streams) would pose considerable difficulties for the AFVs. In such a terrain, the hostile forces with a few anti-tank guns could easily disable the armoured vehicles. Luckily, the tribesmen lacked anti-tank guns and the Afghan Army had only limited amount of small artillery pieces. But, tanks should be used, emphasized the memorandum, for strengthening the morale of the Indian and British units operating along the North-West Frontier. Additionally, to prevent ambushes by the *lashkars*, the tanks must receive intimate support from the infantry closely following the AFVs. Again, to prevent the tribesmen sitting at the *sangars* (stone fortifications at the mountain tops) from blocking the narrow roads by rolling down boulders, the advancing

tanks must be supported by light artillery which would fire on the *sangars* and infantry carrying machine-guns to lay down suppressive fire.⁴⁴

What is important is that this document is emphasizing the importance of intimate infantry-tank cooperation. In addition, combined arms operation (tanks-infantry-field artillery) was deemed mandatory by Tucker. During Second World War, as is evident from the works of Showalter and others, inadequate infantry-tank cooperation bedevilled Allied ground operation. Furthermore, combined arms technique was one of the sterling points of German tactical format, which enabled the *Wehrmacht* to hold out against great odds till May 1945. The 1935 memorandum ended with two observations about the potential strength and weakness of tanks, which could have come from the “father” of Germany’s panzer arm Guderian. Tucker noted: “We tend to forget two things about tanks;- Their mobility, which enables us to bring them from a great distance at short notice and for them to fulfil one task at one place and proceed to another one far away, from the first.... The margin between complete success and complete disaster with such a swift moving arm is narrow. Reconnaissance must be constant, wide and exact.”⁴⁵

Even when the war started, General Headquarters (GHQ) India could only form tank units at a snail’s pace. Inadequate funds, lack of skilled personnel and a weak manufacturing base were the principal culprits that slowed down mechanization and motorization of the Indian cavalry formations that were selected for becoming tank units. Moreover, the strategic scenario was horrendous as the Allied armies were suffering repeated defeats at the hands of both the Germans and the Japanese. Let us give the tragic example of one Indian armoured unit. The 100th Independent Light Tank Squadron was formed from personnel of the 44th Cavalry and the 8th Cavalry. This squadron arrived in Singapore in mid February 1942 just as Lieutenant-General A.E. Percival’s troops were surrendering. The whole unit went into captivity.⁴⁶

The point to be noted that besides fighting the Axis powers, the Indian Army also had to perform the onerous tasks of policing the subcontinent and guarding the volatile North-West Frontier where a low intensity conflict was continuing against the Pathans. The Indian National Congress under the leadership of M.K. Gandhi gave the call for a mass movement, which unfolded as the Quit India movement in the summer of 1942. It was the British Empire's worst possible hour. About 57 Indian Army battalions were used to crush this rebellion. This was partly possible because the Indian Army, including its armour branch, was extensively trained in aid to civil duties. The armoured cars and tanks were trained for reconnaissance, escort and patrol duty. Close cooperation with infantry, paramilitary and police had been emphasized during the crowd control exercises.⁴⁷ Close cooperation with infantry as emphasized during internal policing also aided the Indian Army in general and its armoured branch in particular when it fought the Afrika Korps in North Africa (1941-1943) and the IJA in Burma (1942-1944). So, training for COIN and conventional war did not always run at cross purpose. As the training manual published in 1941 noted: "Tanks, unlike armoured cars, cannot in any case, approach their objective silently. Full use should therefore be made of the moral effect of the noise of a tank. If a portion of the silencer is removed, the noise is greatly increased and resembled a series of explosions."⁴⁸ Therefore, tanks were utilized in medium intensity conventional conflict against the Afghans and in the low intensity conflict against the Pathans as well as for aid to civil duty. In all these three tasks, moral or deterrent effect of the tank was utilized to the full degree. In fact, *Blitzkrieg*, as Showalter have emphasized, to a great extent depended on generating a morale crisis against the opponents both at the mental and physical levels.

Until mid 1943, the strategic managers of the Raj were afraid that the Germans might break through from South Russia into Persia and Afghanistan. A joint Nazi-Afghan invasion was

the worst nightmare for the policy makers of Delhi. The Indian General Staff studied the *Wehrmacht's* campaigns in the mountainous areas of Ardennes and Balkan closely and updated its mountain warfare doctrine. The Indian Army accepted that integrated use of AFVs, artillery, infantry and ground support aircraft (especially dive bombers like Stukas) as practiced by the *Wehrmacht* in Europe was also possible in the low hills, open valleys and plateaus of Afghanistan. India's General Staff termed it as mountain warfare under modern conditions. Like their European counterparts, they accepted that tanks could only operate effectively under friendly air supremacy. A training manual of the Indian Army of 1941 noted: "The first task of our aircraft will, therefore, be the attainment of air superiority."⁴⁹ In January 1942, the 8th Cavalry Regiment received orders to form the 101st Independent Light Tank Squadron. The 101st Independent Light Tank Squadron was fitted with Mark VI light tanks. This unit was deployed for road protection duty at Dera Ismail Khan till September 1943.⁵⁰

One of the most famous Indian tank units was the 7th Light Cavalry. This unit was originally raised in 1784 during the Second Anglo-Mysore War to check Haider Ali's light cavalry. Late in 1940, this unit was ordered to shed its mounts, lances and colourful uniforms for olive green, radios, motorcycles and AFVs. However, as the regimental history duly notes, the spirit of boldness, dash and daring lived on and gave the regiment its fearsome reputation during the fighting in Burma. Such a spirit was necessary for conducting armoured combat successfully. Showalter in his works emphasizes that the German training manuals always stressed the inculcation of such a spirit among both the soldiers and their commanders. Anyway, the process of mechanization in the Indian Army (which was a backwater) was quite slow. In 1941, the personnel were trained in radio telephony and riding motor cycles for dispatch riders and the

AFVs (Stuart Light Tank M 3 nicknamed Honey) started coming in a slow trickle. Only in April 1943 did this unit receive its full complement of 52 tanks.⁵¹

In 1941, the IAC like the British Army accepted the necessity of motor infantry for cooperating with the AFVs.⁵² The motor infantry was carried on trucks but not on tracked vehicles as Johnson had demanded in 1920. The problem was that motor infantry trucks, lacking close country capability, could not achieve intimate cooperation with the tanks. In the Indian Army this problem was rectified only in the 1970s, with the induction of tracked APCs from Soviet Russia. Meanwhile in October 1942, Delhi flew in an expert named Major-General Giffard Le Q. Martel to provide inputs for developing the IAC. Martel noted that those cavalry units that had been converted into motor brigades should get tanks. This decision was somewhat similar to the *Wehrmacht's* decision of converting the light motorized divisions formed from cavalry units into panzer divisions. Furthermore, Martel noted that tanks could only be used in limited numbers in the valleys of Burma for patrolling and reconnaissance.⁵³ Here, Martel was wrong. As we will see the IAC under Slim played a greater role in the forthcoming Burma Campaign.

In the autumn of 1943, the 14th Army under General (later Field-Marshal) "Bill" Slim hit upon a tactical innovation. By this time, the Japanese had gone on a strategic defence in the Burma Front temporarily. The Japanese bunkers, made of earth and wood with two-thirds of its construction underground and covered with foliage, were almost hidden from view and proved to be tough nuts to crack for the assaulting infantry. While the Japanese infantry from inside these bunkers with machine-guns almost wiped out the assaulting British and Indian infantry, their dugouts proved impervious to grenades, mortars, rifle and Bren Gun fire, so much so, that Slim commented that the Jap infantry fought like ants. It was found out that only a direct hit by a solid

shot from the 75-mm gun of a Lee/Grant tank could destroy these bunkers. Hence, Slim decided to use tanks for direct support of the infantry advancing against Japanese strongpoints in Arakan and in Central Burma. Nevertheless, the 14th Army was lucky. The Japanese in Burma lacked adequate number of anti-tank mines and a good anti-tank gun.⁵⁴ Showalter has shown that the deadly German 88-mm anti-tank gun was the principal tank killer during World War II.

The Indian armour's finest hour came with Slim's planning and implementation of Operation Extended Capital. Slim planned to use two corps: 33rd Corps (which had 254th Indian Tank Brigade with Lee-Grants and Shermans) and the 4th Corps (it had 225th and 255th Indian Tank Brigades with Shermans). The 33rd Corps was to attack Mandalay and draw all the Japanese units towards this city. Slim rightly assumed that the Japanese command would think that Mandalay was the main target and any attack by the 14th Army down south was to be a feint. And the 4th Corps was to move south secretly and cross the Irrawaddy and make a dash towards Meiktila, the principal Japanese supply dump and communication centre in Central Burma. Once Meiktila was captured, then the Japanese troops in Mandalay and in North Burma fighting General Joseph Stilwell's Chinese troops would be in the bag. One could not help comparing Slim's Extended Capital with *Sichelschnitt* (or Manstein Plan; the German plan of Invasion of France in May 1940). The 33rd Corps was functioning like Army Group B, which was to make a decoy attack in North-West France to draw the Allied units towards it, and the 4th Corps like Army Group A with bulk of the tanks was to make the real assault and go behind the enemy forces. Slim's deception (like the Soviet *maskirovka*) was a complete success. General Heitaro Kimura (commander of the Burma Area Army) ignored the 4th Corps crossing Irrawaddy further south and concentrated on the threat posed by the 33rd Corps.⁵⁵

Lieutenant-General F.W. Messervy' commanding 4th Corps issued the following order on 19 January 1945:

My object is to get a sufficiently strong force to Meiktila in time to be able to cut off all Jap forces retiring from the Mandalay area and in conjunction with 33rd Corps to destroy them.... To seize Meiktila with utmost speed. The Mechanized Group will move as one main striking force along one main axis so as to be able to crush quickly and completely any enemy opposition met. Minimum detachments only will be detailed for moves by flanking routes for protective purposes.⁵⁶

An example of Indian armoured units' rapid advance, which allowed the 4th Corps getting inside the Japanese OODA loop, can be given. On 22 February 1945, the 4th Corps burst through its bridgehead at Nyaungu with 255th Indian Tank Brigade leading and 17th Indian Division following. On 23 February 1945, Lieutenant-General S. Tanaka, Chief of Staff of the Burma Area Army, held a conference of the divisional and staff officers at Meiktila to formulate plans for defending Irrawaddy. It was planned that the principal counterattack was to be made by the 15th Army. The 15th Army with five infantry divisions was to attack Myinmu. Its right flank was to be protected by the 33rd Army along the Monglong Range. And the 28th Japanese Army was to make a feint towards Pakokku along the west bank of Irrawaddy to draw the Allied troops away from the 15th Army's front.⁵⁷ Next what happened is best described from the records of the 28th Army:

Whilst the conference was being held at Meiktila, strong enemy mechanized columns which had crossed the Irrawaddy near Nyaungu were moving eastwards and reached the airfield west of Meiktila on 26 February. As a result the 15th Army was compelled by force of circumstances to give up any idea of an offensive as planned at the Area Army conference, as it was vitally necessary to meet the sudden change in situation around Meiktila which was in fact captured by the enemy on 3 March.⁵⁸

The extreme mobility and maneuverability of the Indian armoured units resulted in collapse of the projected Japanese counteroffensive even before it started. Now, the Japanese danced to the tune of Slim by attempting to recover Meiktila. And the incoherent Japanese defensive units conducting piecemeal counterattacks were wiped out by the heavy firepower generated by the Allied air-ground units. Excellent aerial support enabled the 4th Corps to overcome fragmented but tenacious Japanese resistance. Effective air support by the RAF and the IAF were to an extent possible because of intensive training. It is to be noted that as early as 1940 training manuals were published in India focusing on providing close air support to the friendly ground forces.⁵⁹

After the twin defeats at Meiktila and Mandalay, the Japanese in Burma were on the run. Slim aptly sums up his strategy in the following words: “We had kicked over the ant-hill; the ants were running about in confusion. Now was the time to stamp on them.”⁶⁰ Burma was then a country with little infrastructure. There were few tracked and metalled roads and fewer bridges. The country was full of jungle covered mountains and streams. The monsoon generally comes in May. Heavy tropical showers would turn the few tracks into muddy pool and the small streams

in the jungles would become roaring rivers. In such a climate supplies could be air dropped by the RAF and the Indian Air Force. So, the monsoon would result in complete shutdown of military operations in Burma. Slim's troops had to reach Rangoon before the monsoon started. It was a case of "advance or bust." The 255th Indian Tank Brigade played the role of spear tip of advance during the "Race to Rangoon." In the end, the army reached Rangoon just before the monsoon broke.

The timely tactical retreat to Imphal in 1944, the dash at Meiktila and the race to Rangoon, etc., all these operations in which the Indian Army played a premier role were successful because of Slim's leadership and rigorous realistic training. Unlike Monty, Slim was an ardent follower of the mission-oriented command culture. Slim wrote in his *Defeat into Victory* that he taught all the subordinate officers to act on their own, and as army commander he gave his corps commanders adequate autonomy. Thus, the corps commanders and their junior officers developed a balance between firmness and flexibility and were quite capable of responding to sudden information reaching them or changing circumstances during a battle. Slim encouraged among his junior officers the following traits: acting without orders, in anticipation of orders, or without waiting for approval, yet always within the overall intention of the army commander.⁶¹ One wonders what would have happened if Slim had commanded the 21st Army Group in Normandy during June 1944.

Conclusion

We have seen even in the context of a resource crunch, India, a comparatively strategic backwater, came up with the theory and praxis of armoured combat, which had striking similarities with *panzerkrieg* as portrayed by Showalter. In fact, one could say that the strategic-

operational tasks, which confronted the Indian Army during the 1940s, were more onerous than the ones facing the German General Staff. The latter concentrated on conducting conventional war on the continent, but GHQ India had to prepare for the alternate tasks of internal policing; launching butcher and bolt expeditions across the Indus; a limited war with Afghanistan along with fighting high intensity wars in varied terrains starting from the rainforest of Malaya, malaria infested bogs of Burma, to the sandy dunes of Cyrenaica and the mountains of Italy.

Despite the advent of nuclear weapons, missiles, and cyber weapons in recent times, conventional ground war remains a reality. And armour remains an integral part of the architecture of the land forces of most countries. The post Second World War period saw great tank battles in Asia and some of these clashes were miniatures of the battles and campaigns fought by the armoured units of the great powers between 1939 and 1945, which Showalter has so admirably portrayed in his above mentioned works. The 1956 Sinai Campaign by the Israeli Defence Force reminds one of Barbarossa. Moshe Dayan almost seems like Rommel of Israel. It is worth examining how far the Israeli Defence Force has been influenced by Liddell Hart and *Blitzkrieg*. Especially in the post War Second World era, the doctrines of the Indian and Pakistani armoured units were shaped by the experiences of the tank units of the British controlled Indian Army. It is to be noted that the Indian and Pakistani armour fought one of the greatest tank battles in the post-1945 era at Khemkaran in 1965, which is comparable to the tank battle of Golan Heights in 1973. Herein lies the importance of this study.

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Dr **Kaushik Roy**, Guru Nanak Chair Professor, Department of History, Jadavpur University, Kolkata, India and Global Fellow, Peace Research Institute Oslo (PRIO), Norway

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⁴ Robert M. Citino, *The German Way of War: From the Thirty Years' War to the Third Reich* (Lawrence, Kansas: University Press of Kansas, 2005).

⁵ R.L. DiNardo, *Germany's Panzer Arm in World War II* (1997, reprint, Mechanicsburg, PA: Stackpole Books, 2006).

⁶ Peter McCarthy & Mike Syron, *Panzerkrieg: The Rise and Fall of Hitler's Tank Divisions* (London: Constable, 2002).

⁷ Quoted from Carl Von Clausewitz, *On War*, Edited and Translated by Michael Howard and Peter Paret (1976, reprint, Princeton, New Jersey: Princeton University Press, 1989), p. 244.

⁸ Showalter, *Hitler's Panzers*, p. 44.

⁹ DiNardo, *Germany's Panzer Arm in World War II*, pp. 95-103.

¹⁰ Showalter, *Hitler's Panzers*, p. 48.

¹¹ Some of the most prominent advocates of this line of historical interpretation are Gerhard L. Weinberg (*A World at Arms: A Global History of World War II*, Cambridge, Cambridge University Press, 1994), David Stahel, etc. among others. Stahel in his *Operation Barbarossa*

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and *Germany's Defeat in the East* (Cambridge: Cambridge University Press, 2009) argues that given inadequate military assets, Barbarossa was doomed to fail from the very beginning. And during the Battle of Smolensk (July-September 1941), it was clear (at least from hindsight) that the panzers would not be able to drive to Moscow.

¹² The best example is his *The Rise and Fall of the Great Powers: Economic Change and Military Conflict from 1500 to 2000* (1988, reprint, London: Fontana, 1990).

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¹⁴ E.H. Carr, *What is History?* (1961, reprint, Middlesex: Penguin, 1986).

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¹⁶ One such example is Peter G. Tsouras (ed.), *Rising Sun Victorious: Alternate Histories of the Pacific War* (New York: Skyhorse Publishing, 2015).

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²⁰ Citino, *The German Way of War*, pp. 299-302.

²¹ It seems from Citino's account that the *Wehrmacht* was half dead after Operation Typhoon (December 1941) and died at Stalingrad in December 1942. It was reborn (a weaker and dated organism) and finally met its ultimate demise in Berlin during May 1945. To sum up, in Citino's framework, the German defeat was not an absolute inevitability. Germany had a very slight chance of averting defeat, but with time, this margin vanished. Robert M. Citino, *Death of the Wehrmacht: The German Campaigns of 1942* (Lawrence, Kansas: University Press of Kansas, 2007); *The Wehrmacht Retreats: Fighting a Lost War, 1943* (Lawrence, Kansas: University Press of Kansas, 2012); *The Wehrmacht's Last Stand: The German Campaigns of 1944-45* (Lawrence, Kansas: University Press of Kansas, 2017).

²² Showalter, *Hitler's Panzers*, p. 208.

²³ Quoted from Robert M. Citino, "Military Histories Old and New: A Reintroduction," *American Historical Review*, vol. 112, no. 4 (2007), p. 1079.

²⁴ One such example is Correlli Barnett (ed.), *Hitler's Generals* (London: Weidenfeld and Nicolson, 1989).

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