

Cass Military Studies

## WAR AND STRATEGY IN THE **MODERN WORLD**

FROM BLITZKRIEG TO UNCONVENTIONAL **TERRORISM** 

Azar Gat



# War and Strategy in the Modern World

This volume brings together some of Professor Azar Gat's most significant articles on the evolution of strategic doctrines and the transformation of war during the twentieth and early twenty-first centuries.

It sheds new light on the rise of the German Panzer arm and the doctrine of Blitzkrieg between the two world wars; explores the factors behind the formation of strategic policy and military doctrine in the world war era and during the Cold War; and explains why counterinsurgency has become such a problem. The book concludes with the spread of peace in the developed world, challenged as it is by the rise of the authoritarian-capitalist great powers – China and Russia – and by the chilling prospect of unconventional terrorism. This last chapter summarizes the author's latest research and has not previously been published in article form.

This collection will be of much interest to students of strategic studies, military history, and international relations.

Azar Gat is Ezer Weitzman Professor of National Security at Tel Aviv University. He is the author of eight books, including *A History of Military Thought: From the Enlightenment to the Cold War* (2001); *War in Human Civilization* (2006); *Victorious and Vulnerable: Why Democracy Won in the 20th Century and How It Is Still Imperiled* (2010); and *The Causes of War and the Spread of Peace: But Will War Rebound?* (2017). His books have been translated into Spanish, Japanese, Chinese, Korean, Greek, Turkish, and Hebrew.

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# War and Strategy in the Modern World

From Blitzkrieg to Unconventional Terrorism

**Azar Gat** 



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#### **Preface**

This volume brings together a select collection of my articles on the evolution of strategic doctrines and the transformation of war during the twentieth and early twenty-first centuries. The articles are arranged in chronological order: the volume begins with the rise of the German Panzer arm and the doctrine of Blitzkrieg during the interwar period; it ends with the spread of peace in the developed world, threatened as it is by the challenge posed by the authoritarian-capitalist great powers – China and Russia – and by the chilling prospect of unconventional terrorism. The sequence of the articles also reflects the development of my interests and scholarly pursuits, starting with my books on the evolution of military theory and doctrine, assembled in the omnibus edition A History of Military Thought: From the Enlightenment to the Cold War (2000). My interests later expanded to broader questions relating to war, pursued in my War in Human Civilization (2006), Victorious and Vulnerable: Why Democracy Won in the 20th Century and How It is still Imperiled (2010), and The Causes of War and the Spread of Peace: But Will War Rebound? (2017).

In revising these articles for publication, I have tried not to make changes that would reflect the benefit of hindsight. Indeed, I have been satisfied to see that the articles have well withstood the test of time. Choosing to leave them basically in their original form has also meant that later publications on their respective subjects have not been included either. I do not find that they significantly alter my conclusions. Most of the changes I have introduced are cuts made to avoid repetitions and overlaps between the articles. I have also made occasional stylistic changes.

Misconceptions regarding the rise of the Panzer arm which gave Germany its lightning victories at the beginning of World War II are, surprisingly, very significant indeed. 'British Influence, the Evolution of the Panzer Arm, and the Rise of Blitzkrieg' sets out to correct some of these major misconceptions. Revelations that the famous British military theorist B.H. Liddell Hart manipulated the German generals' testimonies after World War II have discredited the claim of a decisive British influence on the evolution of the German Panzer arm during the 1920s and 1930s. However, the German archives from that period reveal that this influence was indeed paramount. The article also shows that fateful historical accidents, unnoticed by scholars, were largely responsible for the fact that the Panzer arm did

not follow the mistaken routes taken by the other great powers with respect to the organization of armour. Finally, the article shows that, rather than being a formal doctrine formulated by the German armed forces during the 1930s, 'Blitzkrieg' emerged as an operational concept only during the early campaigns of World War II, while the word itself was sensationally coined by the foreign press.

In the wake of World War II, the controversies of the interwar period regarding both national policy and strategic doctrine were dramatically viewed as struggles between prescience and folly. This narrative continues to dominate the popular view and the media. However, from the late 1960s, as national archives opened, scholars have been formulating a more complex and nuanced picture, in which 'right' and 'wrong' have not been as starkly contrasted as before. In 'Technology, National Policy, Ideology, and Strategic Doctrine between the World Wars', I outline the real dilemmas, deep constraints, genuine uncertainties, and conflicting goals which haunted governments and military establishments during the 1930s.

'Isolationism, Appeasement, Containment, Limited War: The Democracies' Strategic Policy from the Modern to the "Post-Modern" Era' was my first article on the question of whether or not modern liberal democracies were special and different from other societies and regimes in their conflict behaviour. The article argues that, ever since the beginning of the twentieth century, democratic great powers have tended to follow a characteristic strategic pattern in the face of threats. They move cautiously up the scale from appeasement, to containment and cold war, to limited war, and only most reluctantly to full-fledged war. This sequence underlays the democracies' response to the German, Japanese, and Soviet challenges alike before and during the three great power clashes of the twentieth century. And it is still evident in the democracies' policies towards both strong and weak rivals in today's world.

The conspicuous changes that have taken place in the character of warfare over the past decades have been titled the 'Revolution in Military Affairs' (RMA). The problem with this label, however, is that it tells us nothing about the nature of the revolution and its place in the broader sweep of technology-driven revolutions of the industrial-technological age. The article 'The "Revolution in Military Affairs" (RMA) Compared with Earlier Military-Technological Revolutions of the Nineteenth and Twentieth Centuries' addresses this broader context. Over the past two centuries, innovations in technology accelerated dramatically in comparison to pre-industrial times, with military technology constituting only one aspect of this general trend. In close unison with civilian developments, military technology has undergone three major revolutionary waves, corresponding to and closely matching the characteristics of the first, second, and third (electronic-information) industrial-technological revolutions.

From earliest times and throughout history, fighting has been associated with men. Cross-cultural studies of male-female differences have found that serious violence is the most distinctive sex-related behavioural difference. Is this difference a matter of education and social conventions, or are men naturally far more adapted to fighting than women are? This question is at the centre of a heated public debate regarding women's equality in modern society: can and should women enlist in

combat roles in the armed services? 'Female Participation in War: Bio-Cultural Interactions' attempts to elucidate the respective roles of nature and nurture in this question, whose complexity, and even existence, are all too often ignored in this debate. This may facilitate a realistic, cool-headed and non-ideological assessment of the possibilities and of future trends.

The last five chapters in this volume return, from various angles, to the question of how and why modern liberal democracies differ in their conflict and war behaviour from other societies and regimes. For example, the liberal democracies' colonial record includes a particularly problematic element: the charge that in both the United States and Australia, democracies exterminated the native populations. This is the source of a profound sense of guilt in the two countries, reinforcing pervasive doubts about whether liberal democratic societies really behave better than others. In his book *The Dark Side of Democracy: Explaining Ethnic Cleansing* (2004), historical sociologist Michael Mann suggests that the democracies are particularly prone to genocide. However, in 'Is Democracy Genocidal?' I show that this charge is fundamentally invalid, as are the conclusions drawn from it.

Down to the wars in Afghanistan and Iraq, insurgency warfare has earned a reputation of near invincibility, driving great powers out of their former colonial empires during the twentieth century and frustrating military interventions even where the asymmetry in regular force capability is the starkest. Why have mighty powers that proved capable of crushing the strongest of opponents failed to defeat the humblest of military rivals in some of the world's poorest and weakest regions? Composed in collaboration with Gil Merom, 'Why Counterinsurgency Fails' argues that, rather than being universal, this difficulty has overwhelmingly been the lot of liberal democratic powers – and encountered precisely because they are liberal and democratic. The crushing of an insurgency necessitates ruthless pressure on the civilian population, which modern liberal democracies have found increasingly unacceptable. Premodern powers, as well as modern authoritarian and totalitarian states, have rarely had problems with such measures, and overall they have proved quite successful in suppression. The measures proposed in this article for fighting guerrilla given liberal societies' norms and sensibilities – a reliance on local allies on the ground and extensive use of high-tech, stand-off, accurate fire, aircraft (manned and unmanned), and special forces to minimize friction with the civilian population – have since become the methods of choice for the democracies' conduct in such operations. At the same time, the article highlights the inherent limitations of these measures.

Democracy emerged victorious from all the great power struggles of the twentieth century – the two world wars and the Cold War – surviving both its right-wing and left-wing authoritarian and totalitarian rivals. To many, most famously Francis Fukuyama, this suggested some inherent selective advantages for democracy, conferring an air of inevitability on the past as well as on the future. 'The Return of the Authoritarian-Capitalist Great Powers: Is the Democratic Victory Preordained?' addresses the question of why the democracies won in the past, and what this can teach us about the future. The article argues that whereas the communist great powers, the Soviet Union and China, lost because they indeed proved to

be economically inefficient, the capitalist nondemocratic great powers, Germany and Japan, were defeated because they happened to be too small to contend with continental-size giants, most notably the United States. This analysis is relevant to the twenty-first century. Today's China (and to a lesser degree a territorially and demographically much reduced Russia) is the giant in the system, which for long was held back by its inefficient communist economy. However, over the past decades it has transitioned to a much more efficient, and hence more powerful, form of authoritarianism. We thus face a new, historically unprecedented challenge – a nondemocratic superpower which is both big and capitalist. The main part of this article was written and published before the outbreak of the Great Recession in 2007–2008, when the euphoria and triumphalism surrounding capitalist liberal democracy were still pervasive. Since then, the lustre of liberal democracy has dimmed, the challenge from both China and Russia has become more overt, and the Third Wave of democratization has stalled. As the article argues, while it may well be that China and Russia would eventually liberalize and democratize, this should be regarded as an open question rather than a necessary outcome of socioeconomic development, as the prevailing reading of twentieth century history held at the time.

The Arab Upheaval has been the cause of profound bewilderment in the West and among policy makers. Great enthusiasm for the Arab Spring was quickly replaced by confusion and concern regarding an Islamist Winter. And this was as quickly supplanted by disconcert and despair in the face of military takeovers and ferocious civil wars. The European revolutions of 1848, the Spring of Nations, with their great hopes and dashed dreams, have often been cited as an analogue. 'A Compass to the Arab Upheaval: What Can Nineteenth Century Europe Teach?' asks what the European experience of modernization and regime change during the nineteenth and early twentieth centuries may suggest with respect to the contemporary Arab world. While history does not quite repeat itself, it is still the best guide we have. The article cautions against unrealistic expectations and a historically insensitive application of ideological abstractions to the Arab world, its level of development and existing social and cultural characteristics. It was written before the rise of the Islamic State (ISIS) which has since captured the headlines. But its conclusions remain unchanged.

International relations theorists have identified a number of peace phenomena, most notably the democratic/liberal peace and commercial/capitalist peace. However, the historical record reveals gaps and inconsistencies with the Kantian formula for peace: premodern democracies and republics did fight each other; until the nineteenth century, rather than trade peacefully, states tried to monopolize trade by force; nondemocratic countries, and not only democracies, have participated in the general decrease in belligerency during the past two centuries, including communist powers that largely opted out of the global trade system. 'The Modernization Peace and Twenty-first Century Conflict' sets out to explain these problems in the prevailing peace theories, and at the same time reconcile, unify and transcend these theories into a broader whole. It compresses into article form my writings on the subject over the past decade and in my most recent book. The

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article argues that the process of modernization – unfolding since the onset of the industrial age in the early nineteenth century and constituting the greatest revolution in human history, but practically ignored in international relations theory – is the substratum on which the various peace phenomena ride. Hence the marked decline in belligerency since 1815 among both democratic and nondemocratic, and capitalist and non-capitalist, countries (albeit at different rates). Rather than war becoming more lethal and expensive under modern conditions (it hasn't), it is actually peace that has become more rewarding. Finally, the article explains the great divergence from the trend, the world wars, and explores how the various elements of the Modernization Peace might unfold in the twenty-first century and how this peace may still be challenged. Threats include alternative modernizers, such as today's China and Russia, and anti-modernists and failed modernizers that may spawn terrorism, potentially unconventional. The world has become more peaceful than ever before, with both inter- and intra-state war disappearing from its most developed and affluent parts, the areas most affected by the Modernization Peace. And yet there is still much to worry about in terms of security and there is no place for complacency.

### Acknowledgements

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- 8 Azar Gat, 'The Return of Authoritarian Great Powers', *Foreign Affairs*, 86 (4), 2007, 59–69; idem., 'Are Authoritarian China and Russia Doomed? Is Liberal Democracy's Victory Preordained?', *Foreign Affairs*, 88 (3), 2009. Reprinted by permission of the publishers.
- 9 Azar Gat, 'The Arabs' 1848', *The National Interest*, 20 April 2014. Reprinted by permission of the publishers.



# 1 British influence, the evolution of the Panzer arm, and the rise of Blitzkrieg

#### The British influence – a fraud?

B.H. Liddell Hart's reputation as one who decisively influenced the proponents of armoured warfare in Germany during the interwar period has been marred and thrown into question by revelations that this reputation was largely self-propagated, and that to create it he actually exploited the plight in which the German generals were after the Second World War, unscrupulously manipulating their evidence for his own ends. His personal contacts with the German generals, his role as the one who recorded and presented their war histories to western readers, and his strong public support for them bound the generals to him by feelings of gratitude, self-interest, and dependency. John Mearsheimer has fully exposed Liddell Hart's persistent efforts and elaborate techniques in using his connections with the German generals for extracting, inviting, and planting accolades, which he later inflated beyond their original context, modified, inserted in key publications, and disseminated widely by any possible means. As Mearsheimer has shown, three cases were of particular significance for Liddell Hart: Hans Guderian, Erwin Rommel, and Erich Manstein.

In Manstein's case Liddell Hart's efforts did not bear fruit, despite the fact that the field marshal was heavily in his debt. Liddell Hart intervened to relieve the hardship and humiliation which Manstein endured in a prisoner-of-war camp. On Manstein's request he arranged for his wife and child to be transferred to his sister's house in the French zone of occupation in Germany. He campaigned against Manstein's being tried as a war criminal, assisted in his defence when he was put on trial, and fought for his release after he had been convicted. He took under his care the publication of the English edition of Manstein's war memoirs, *Lost Victories* (1958), and as late as the 1960s intervened to secure a place at Cambridge for Manstein's son. Yet, despite Manstein's gratitude, he withstood Liddell Hart's attempts to make the latter the inspiration behind the Ardennes operation which Manstein had conceived and which had led to the Allies' collapse in the West in 1940. This, however, did not stop Liddell Hart from putting his words in Manstein's mouth in his *Memoirs*.<sup>2</sup>

Liddell Hart had more luck with Rommel's family. The field marshal's widow and son were very anxious that Liddell Hart would prepare an English edition

of his papers. On his persistent urging, Rommel's family and his chief of staff in North Africa, General Fritz Bayerlein, provided flimsy but reasonable evidence that Rommel, like most German officers, had known of Liddell Hart during the 1930s and had probably read some of his writings, though Rommel himself had not been converted to armour before 1940. The evidence further showed that during the war Rommel had on two different occasions mentioned the failure of his British opponents to adopt the theories of armoured warfare originally developed by 'British military critics' (Bayerlein explained that Rommel had meant [J.F.C.] Fuller and Liddell Hart). In one of his papers Rommel had also specifically referred to an article Liddell Hart had written during the war. Liddell Hart, however, only accepted the job of editing Rommel's papers after extracting from Rommel's family and from Bayerlein statements that made Rommel nothing less than his 'pupil' who had been 'highly influenced by his tactical and strategic conceptions'. He inserted this statement in the English edition of *The* Rommel Papers (1953), but failed to make Bayerlein have it incorporated in the German one.3

The most important case for Liddell Hart, and the one in which he achieved his crowning success, was that of Guderian, Germany's foremost armour pioneer. The two corresponded extensively from September 1948. The brisk and abrasive Guderian had made himself quite a number of enemies in the German army, and was interesting in getting his side of the story told. Liddell Hart's interviews with the German generals, The Other Side of the Hill (1948), had been published before he and Liddell Hart made contact, but Liddell Hart was planning a second, enlarged edition of the book. Six months after they began their correspondence he informed Guderian that he intended to devote a whole chapter to him in the new edition. At about the same time he inquired if Guderian had considered writing his war memoirs. Guderian, who was receiving no pension, was then living with his wife in one room under conditions of virtual poverty. As he wrote to Liddell Hart, publishing his memoirs was, if nothing else, a means for him to earn a living.4 Liddell Hart took it upon himself to find British and American publishers for the memoirs and also put Guderian in touch with British and American journals. Getting the memoirs accepted for publication in the West proved, however, very difficult. Two publishing houses, Collins and Cassell, successively rejected the typescript, describing it (rightly) as 'full of self-pity and unrepentant nationalism, typical of a German officer of the nationalistic school'. 5 Liddell Hart worked hard to soften and remove the problematic passages in the book, find another publisher, and, finally, secure the best financial terms for Guderian. When the book, Panzer Leader (1952), became a bestseller, he asked for the 25 per cent of the royalties which Guderian himself had offered him for his immense trouble. His request remained unanswered, for Guderian had just died.

As Mearsheimer has pointed out, the more Guderian's debt to Liddell Hart had grown, the more persistent Liddell Hart's enquiries became regarding his influence upon Guderian, and the more Guderian realized that he would have to contribute the kind of acknowledgement that Liddell Hart wanted to maintain the mutually beneficial relationship. When Guderian failed to respond to hints, Liddell Hart

resorted to more direct measures. In the German edition of his memoirs, *Erinner-ungen eines Soldaten* (1951), Guderian wrote the following paragraph:

It was principally the books and articles of the Englishmen, Fuller, Liddell Hart and Martel, that excited my interest and gave me food for thought. These far-sighted soldiers were even then trying to make the tank more than just an infantry support weapon. They envisaged it in relation to the growing mechanization of our age, and thus they became the pioneers of a new type of warfare on the largest scale.

Going over the English translation of the book, Liddell Hart was unsatisfied. He wrote to Guderian:

I appreciate very much what you said in the paragraph. . . . So I am sure will Fuller and Martel. It is a most generous acknowledgement. But because of our special association and the wish that I should write the foreword to your book, people may wonder why there is no separate reference to what my writings taught. You might care to insert a remark that I emphasized the use of armoured forces for long-range operations against the opposing army's communications, and also proposed a type of armoured division combining panzer and panzer-infantry units – and that these points particularly impressed you.

Coming after Liddell Hart's tremendous efforts over the publication and contract of the book, this request was not refused. Guderian inserted the substantive sentences of Liddell Hart's letter in *Panzer Leader* after the paragraph he had originally written for the German edition.<sup>6</sup>

Guderian's lavish acknowledgement established Liddell Hart's reputation for a generation as the inspiration behind the German Blitzkrieg. Such strong evidence left little room for doubt, especially as Liddell Hart took care to cover his tracks. He apparently removed his letter to Guderian and Guderian's letter of agreement from his archive. Only in the mid-1970s were the incriminating letters discovered in Guderian's records by his biographer, Kenneth Macksey, and replaced back in the archive <sup>7</sup>

When manufactured evidence is revealed, the damage to one's case might be fatal. Liddell Hart's claim for influence on the Germans has lost credibility in the eyes of historians. At the very least it has become clear that he exaggerated this influence at the expense of Fuller and other British armour pioneers. At the same time, not only his significance but British influence as a whole on the evolution of the German Panzer arm, which was previously taken for granted, has now been called into question. And yet Liddell Hart's self-inflicted injury does not close the case, but merely opens it afresh. The fact that he was fraudulent does not necessarily mean that he was wholly incorrect. To establish how things really were, the evidence on the subject from the German sources of the interwar period itself must be looked into. This has simply never been done. Liddell Hart himself did not read German, and he was anyhow satisfied with what he had managed to extract from

#### 4 British influence, Panzer arm, and Blitzkrieg

the German generals directly. His biographers too confined themselves solely to his own records. Only in recent years have historians, working on the other side of the hill on other subjects using the German documents, dug up some evidence relevant to our case. Although a great deal of the German archival material was destroyed by the war or lost, leaving considerable gaps in the record, the surviving material is substantial. In addition, open publications from the interwar period, particularly the general staff's semi-official *Militär-Wochenblatt*, a professional journal of high quality, provide a very useful and often parallel source which complements the official record.

There are many parallels between the current trends in the historiography of interwar British and German armour. As with Fuller and Liddell Hart, it has become apparent that Guderian monopolized the history of the Panzer arm. The many existing popular histories of the development of German armour merely paraphrase Guderian's *Panzer Leader*, and his biographers have not diverged from his own version either.<sup>8</sup> Surprisingly for a subject that has attracted so much interest, a full-scale scholarly history of the German Panzer arm, based on the documents, has yet to be written. This study, of course, can fill the gap only partly. It will attempt to outline the genesis of the Panzer arm and the growth of its operational doctrine, with special attention to the British influence on these developments, including that of Liddell Hart. As will be shown, this influence was indeed, after all, decisive.

## British pioneers and the Reichswehr's awakening interest in mechanized warfare

The first substantial modification to have been made in Guderian's version concerns the notion that the German army's serious interest in armour was born, and had always been associated, with him. This is very far from the truth. Contrary to its popular image as professionally conservative, an image fostered by Guderian's memoirs, the Reichswehr showed lively interest in armour in the 1920s. At that time Guderian was only beginning to develop as an armour man and was still remote from positions of influence. A study of the Reichswehr in the Seeckt era has recently highlighted all this in considerable detail. 9 Compared with the Entente powers, Germany created a very small tank force only late in the First World War, and came out of the war with little practical experience in tank warfare. The stipulations of the Versailles Treaty, which prevented Germany from building and possessing tanks, further fundamentally hindered her development in the field of armour. For both reasons, however, the Reichswehr's sensitivity to the new weapon was in some respects heightened. For both reasons it was also especially conscious of, and dependent upon, developments abroad to a degree that no other great power's army was.

Thus the German postwar field service regulations, *Leadership and Battle with Combined Arms* (1923), dedicated several sections to the tank. Taking their cue from the postwar doctrines of the French and British armies, the regulations incorporated advanced ideas regarding the use of heavy and light tanks for the breakin and cavalry-type missions. <sup>10</sup> The sections on the tank in the regulations were

probably drafted by Lieutenant Ernst Volckheim, a veteran of the First World War German tank force, who served after the war in the inspectorate of transport troops (In.6). They are practically identical to his own publications. Volckheim was well recognized towards the middle of the 1920s as the Reichswehr's leading expert on the use of armour. He was well informed about the history of the tank in the First World War and the French and British postwar armour organization and doctrine, upon which he relied and which he introduced to German readers.<sup>11</sup>

Germany's foremost expert on tank technology and another major source of information on the world's armour for German readers was the Austrian captain, engineer Fritz Heigl. His *Pocket Book of Tanks* (1926) was the standard work on the subject which, expanded and updated by others after its author's premature death, ran into three editions before the war. Heigl also advised the German army on tanks. <sup>12</sup> In 1925–1926 the Reichswehr issued preliminary specifications for the building of two experimental tank types, to be produced by German firms in secrecy in order to avoid detection by the Allies. These were codenamed 'Heavy Tractor' and 'Light Tractor' – fast-heavy and medium-light types respectively. From 1929–1930 the various models produced were secretly tested in the joint German–Soviet tank school in Kama, near Kazan. <sup>13</sup> Both types possessed high speed (30–35 km/h) and resembled the British Independent and Vickers Medium Tank respectively.

Indeed, at the time these models were launched attention in Germany was increasingly focusing on new and exciting developments in armoured warfare coming from Britain. By 1924–1925, in his last publications before disappearing from the scene, Volckheim, who had previously been more influenced by the larger and closer French tank force, was beginning to whistle new tunes. He cited a British officer's criticism of the French army's lack of a special inspectorate for tanks, and a British claim, following the latest French manoeuvres, that the French had made no progress in tank warfare since the war. He called attention to the heavily armed and fast (British) medium tank as a new significant development in the field, and described its use in the 1924 British manoeuvres in cooperation with armoured cars and cavalry. In 1926 Heigl's survey of the world's tanks mentioned the new theories, specifically associated with Fuller, of using fast tanks with a large radius of action to revive the war of movement.<sup>14</sup>

The earliest significant introduction of the new British school to German readers was Liddell Hart's articles 'The Next Great War' and 'The Development of a "New Model" Army: Suggestions on a Progressive, but Gradual Mechanization', published in 1924 in the *Royal Engineers Journal* and *The Army Quarterly* respectively. The former was abstracted as the opening piece of a July issue of *Militär-Wochenblatt*, whereas the latter received only a few lines in the regular military journals section in November but was described as 'very interesting for all concerned with the mechanization of modern armies' and recommended for a full translation into German. Here, as always, the summaries in the German journal were accurate and to the point. A month later, without mentioning either Liddell Hart's name or Fuller's (from whom the former derived his ideas 16), another opening piece in *Militär-Wochenblatt* described the new thoughts in Britain of

replacing the muscle armies by machine armies through gradual mechanization in several phases, ending with an all-armoured army and a reduction of 60 per cent in manpower. The article concluded that this programme would be tested in the next British summer manoeuvres in 1925. As was often the case in *Militär-Wochenblatt*, the summary was contributed by a general staff officer whose field of speciality covered the subject reviewed, and who for reasons of confidentiality signed only with a number.<sup>17</sup>

So Liddell Hart was basically correct in claiming that his earliest articles on armour had left an impression in Germany.<sup>18</sup> Yet this impression should be understood within a wider context. The older historiography, taking its cue from the writings of Fuller, Liddell Hart, and Guderian, emphasized the role of individuals and theories in the evolution of armour. For all their significance, however, armies are even more impressed and spurred into action by tangible developments in reality. It was only in combination with the path-breaking developments in tank design and armour organization in Britain, which were actually being tested in large-scale manoeuvres, that the British pioneering theories of armoured warfare, which had been a necessary condition for these developments in the first place, attracted so much attention in Germany and in other great powers' armies.

In late 1924 the intelligence branch of the German covert general staff (Truppenamt) surveyed the previous summer's British manoeuvres. In the section dealing with tanks and motorized troops the survey highlighted the appearance of the new Vickers Medium Tank, armed with a three-pounder and capable of a revolutionary 35 km/h. The survey emphasized the tank's potential for use in a war of movement, and noted a tension in this respect between the older and younger officers in the British army, the latter regarding the new tank as 'almighty'. The motorization on lorries of some of the other forces was also noted. <sup>19</sup> *Militär-Wochenblatt* published a summary of the survey, making the same points. It was written by the same general staff officer who three weeks earlier had described in the journal the new thoughts in Britain regarding the employment of armour. <sup>20</sup>

In the following years close attention to British theory and practice was strongly evident in the German army. Reports on and references to the revolutionary characteristics of the Vickers Medium Tank were unceasing, intertwined with reports on the British manoeuvres.<sup>21</sup> In 'A Reflection on the Employment of the Tank', a German officer wrote that the development of the tank since the war, embodied in the medium tank's speed and radius of action, opened new possibilities beyond its use for infantry support. This, stated the article, was the opinion of the British Colonel Fuller. Future war would be conducted by mechanized divisions in which all arms would be mechanized and armoured.<sup>22</sup> Several months later the same officer reported an article on the armour manoeuvres in the Daily Telegraph by 'Captain Liddell Hart, known from his book *Paris*'. The report highlighted the potential of the modern tank as against the views of the 'old school'.<sup>23</sup> Yet another article, 'The Impact of Modern Tanks on the Conduct of War', compared the British tanks and the British manoeuvres to the French. It stressed the great value of fast mechanized formations, and described the British Medium Tank as the most advanced in the world, possessing amazing speed and radius of action. 'It has