THE GREAT OFFENSIVE

By the same Author:

BATTLE FOR THE WORLD

MILITARY STRENGTH OF THE POWERS

THE GREAT OFFENSIVE

THE STRATEGY OF COALITION WARFARE

by

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LONDON
VICTOR GOLLANCZ LTD
1943

PRINTED IN GREAT BRITAIN BY RICHARD CLAY AND COMPANY, LTD. (T.U.)
BUNGAY, SUFFOLK.

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FOREWORD, DECEMBER 19TH, 1942

THIS BOOK was concluded in mid-August 1942 and published in the United States at the beginning of October.

Between August and December 1942 great military events took place. In Russia and North Africa the forces of the anti-Hitler coalition seized the initiative. A new chapter of fighting has begun, continuing and changing the course of the war described in this book.

The battle for Stalingrad is the longest single battle of the Second World War. As these lines are written, on December 19, 1942, it has lasted a full four months. It has been waged by the German Army with the greatest possible concentration of its offensive power and with unprecedented tenacity. Undoubtedly Stalingrad was the chief strategic objective of the German 1942 campaign in Russia. The military prestige of the Third Reich was at stake.

The battle for Stalingrad, the major battle of 1942, was won by the Red Army in a dual sense. The battle for the strategic key position dominating the whole of South-East Russia was won. Held up at Stalingrad, Hitler was prevented from reaching all his main objectives in the Russian offensive of 1942. He did not get the Lower Volga, did not get the Caspian shores, did not get the Caucasian mountain range, did not get Baku, did not even get Grosny. The German campaign failed as a campaign of territorial conquest too.

But, in addition, the Red Army actually won the battle for Stalingrad in a military sense. This battle was of even greater military importance than the fight for the decisive strategic position. The battle for Stalingrad was a great test of forces. In its first phase it was a hard contest between the offensive power of the German Army and the defensive power of the Red Army. The entirety of German weapons and fighting methods in this offensive were unable to overcome the entirety of Russian weapons and fighting methods in the defensive. Now it has been proved definitely that the German Army cannot overthrow the Russian system of defence and, therefore, cannot win the war.

The German Army demonstrated, even in the first phase of the battle, the inadequacy and decrease of its offensive power. But in the second phase of the battle the Red Army accomplished even more. It broke the offensive power of the German Army and took the initiative. It struck successfully at the main concentration of German forces, at crack German divisions. Taking into consideration German casualties and losses in arms, the battle for Stalingrad, next to the battle for Moscow, is the biggest defeat Germany has suffered throughout the war.

It was planned by the Red Army as a battle of encirclement and annihilation, and it succeeded, at least in its initial phase. Later, the Russians encountered the defensive stubbornness of the Germans, but in its counterstroke the Red Army showed its potential offensive power.

In North Africa two important events changed the picture of the war—the defeat of Rommel and the Anglo-American occupation of French North Africa.

The defeat of Rommel in Egypt and Libya has greater consequences than mere loss of territory. It means that North Africa has ceased for ever to be a potential German offensive front.

The other significant fact in Africa was the improvement of British conduct of the war. The Germans had hoped the British Army in this war would be second rate, never equal to dealing with Germans. The British victory over Rommel dashed this hope.

The German hope for permanent superiority over the British Army has no historical basis. On the contrary, there is a historical basis for the assumption that the British could and would overtake the Wermacht in the course of the war. Such was the experience of the First World War. After the battle of the Somme in the summer of 1916, the British Army was at least equal to the German Army. The first decisive defeat of German forces in the World War was inflicted by the British, by British tanks, infantry and cavalry. This was the battle of Amiens on August 8, 1918, called by Ludendorff the Black Friday of the German Army. With it began the collapse of the Kaiser's war machine.

In the recent Libyan battle, British weapons, tactics and leadership were superior to those of the Germans.

The Anglo-American blow at French North Africa was excellently prepared and executed with surprising speed. The operation relied on exemplary co-operation of all arms and branches. It was a war of movement against the undefended flank of the enemy, executed by means of naval manoeuvre and a series of simultaneous landings.

This is new type modern war used by the Germans in the occupation of Norway and by Japan in her campaign in the south-western Pacific. The significance of the North Africa operations lies not only in the seizure of first-class strategic positions. Its greater significance lies in the fact that these positions were captured by United States Forces. This was the start of active American war against the European Axis. Fresh American forces precipitated the position and turned the tide of war. From now on this will be the law of the second World War.

The North African operation was the beginning of Allied grand strategy in the Mediterranean. The African Front is becoming a great offensive front of the Allies, no longer limited to local fighting for Libya. The occupation gives the Anglo-American army a marshalling ground for the deployment of Forces and the preparation of new blows. They have an extensive base of operations for an attack directed towards Southern Europe.

One of the decisive tasks of Allied strategy is solved: it has free space for the starting of an offensive against Hitler's most vulnerable front. The Anglo-American forces are no longer confined to the British Isles alone. Hitler must now revise his whole plan for the defence of the European continent. Italy is in deadly danger. In the shortest possible time, Hitler must organise the defences of Southern Europe and combine this defence with the holding of the whole of North-Western Europe and maintaining his defence on the entire Russian front.

The transition of the Red Army to counter-offensive action and the African operation open up a new vista for the Allied War of Coalition.

We are now in the second half of the war. The first half is over, and we must win now. These factors determine the strategic calculations for 1943; the growing exhaustion of the German Army; the deployment of Anglo-American forces; and the present strength and reserves of the Red Army.

The military achievements of the Red Army should be considered not only as the defence of the Soviet Union. In evaluating the failure of German strategy in Russia and the exhaustion of the German Army, the conclusion is imperative that the Russians have already half won the war for the Allies.

The Red Army has laid the military groundwork upon which Allied victory can be built. Russia has provided the Allies with the opportunity, and the war can be won with relatively limited additional effort. The war can now be won if an additional Allied force, equal in size to one-fourth of the Red Army, is established on the European continent, and there exerts one-fourth the pressure of the Red Army.

It is necessary to evaluate the North African theatre of war in its real function for a war of coalition. The North African front is not yet a real Second Front. That is to say it is not a front on the European continent directed against important forces of the German Army. The North African front is a Third Front. It cannot be assumed that a Second Front in Europe can be established from North Africa alone. For this purpose a larger part of the British Army destined for offensive operations would have to be shifted to North Africa, together with the whole American Expeditionary Force.

The front in North-western Europe and the front in Southern Europe should supplement each other. The distribution of forces will depend on considerations on strategic usefulness, transport, and so on. From the south Hitler's system of defence can be outflanked, but a simultaneous assault from the British Isles cannot be avoided.

The North African operation was a test of military doctrines that clarified the military situation. No longer can anyone speak seriously of one-sided, exclusive air war. The North African operation was waged by all fighting forces combined.

The American forces in Africa are the spearhead of the whole American Army. They must be strengthened and their operations developed.

Experience shows that Allied offensives in Africa and Europe are already realisable, while a great offensive in the Pacific is not yet possible. There can be no question as to which theatre of war has strategic priority.

Finally, the African experience has shown that in 1943 the Allies want no second Dieppe, but operations on a large, decisive scale. The dispute for or against active coalition strategy, for or against the Second Front, is basically the dispute for a relatively short war or a prolonged war, for a military decision in 1943 or for a seven-years war.

Hitler has announced the transition of German conduct of the war to primarily defensive strategy. But it will be a strategy of active, aggressive defence, with sudden counter-offensives. In the young Generals, Hitler has found military leaders for his strategy of prestige. They will try to hold everything, everywhere. They will attempt to defend Germany where that defence is militarily senseless: in the Caucasus, on the Don, in Tunisia.

These German generals, forceful and ruthless as they are, will proceed, despite a basically defensive attitude, regardless of losses. They will force the last ounce of offensive power, of combat strength and physical endurance out of their troops, regardless of the final cost.

The German Army has abandoned a rational strategy. The outlook is for intensified consumption of German forces and accelerated pace of self-destruction in 1943. For the Allies, it is to choke off the offensive strength of the Wermacht for good, and then to break its defensive power, which remains enormous. It is a hard task, and can be accomplished only by all-out Total War, meaning consistent coalition strategy and common offensives.

THE TREND OF THE SECOND WORLD WAR

THE COURSE of the Second World War is determined by two laws: the extension of the fighting and its intensification. The campaigns of 1939–40 were successively localized to Poland, Norway, Western Europe, and the Balkans. The war waged by the German–Italian coalition against England was limited to aerial operations in the British skies, and to battles in the Mediterranean and Africa. But with Germany's attack upon Russia the war came back to the European continent and finally became the Great War; with the participation of the United States and Japan the struggle became global. The beaten nations get out of the ring, and the new belligerents enter. This war is characterized by a *renversement des alliances*—old coalitions are dissolved and new ones formed. Vichy France becomes a Third Reich satellite, and the Soviet Union becomes allied with Britain and the United States.

The intensification of the war runs parallel to its extension. The law of total war becomes compulsory for all belligerents. Limited warfare is now clearly a thing of the past. The campaigns of 1939–40 were only preliminaries to the great battles of 1941–42. The campaigns in Poland, Norway, France, and the Balkans were not genuine war. They were punitive expeditions, large-scale actions of occupation. All the laws established by World War I for big-scale warfare were overthrown. The discrepancy between the opponents in technics, armed strength, fighting capacity, and the military art were so great that there was no place for real war. From the Polish campaign to the drive in the Balkans there was no measurable relation between the losses of the belligerents, between attack and defence. In the German–Soviet War a relationship was re-established. The fighting raged with unprecedented intensity, with maximum masses and arms, specifically offensive arms. The average losses on both sides are from three to four times as high as in World War I.

It is a mistake to regard the German–Soviet War solely as a fight of the modern German Army against Russian masses and spaces. It is also a mistake to see on the Russian side merely masses and spaces, bolstered by the heroism of a people's war. The German–Soviet War is a war between *two* modern armies. The significance of the Red Army for United Nations strategy lies in the fact that it has modern arms and that it fights by the rules of modern tactics and strategy. In the Second World War the Russian Front has the same significance as the Western Front had in World War I. Hitler's army has a much greater offensive force than the

German Army in 1914, the Russian Front offers vaster possibilities for a war of movement than did the Western Front in 1914–18, and Germany's territorial gains are much greater. But from a military point of view, in terms of the fighting force of both armies, there exists a relative equilibrium between the German and the Red armies of the kind that existed in the First World War between the German and the Franco-British armies.

The German-Soviet War must be examined and understood as it really developed. It has a definite logic of its own. It is determined by the reciprocal counter-effects of two armies and two war plans. The direction of the German offensive in the summer of 1942 was foreshadowed by the Ukrainian campaign in 1941. The outcome of the battle of Smolensk foretold the outcome of the battle for Moscow. The war on the Eastern Front shows the whole force as well as the limitations of the German striking power, the relationship between the German offensive and the Russian defensive, between the Russian counter-offensive and the German defensive. The operations that took place in Russia in 1941 indicated the character of the fighting in 1942, and the 1942 drives make it possible to draw conclusions about the course of the fighting in 1943.

The experiences of World War II have not yet come to an end, but the forms of the great continental war are already quite clear. The German-Russian Front has shown the world for the first time the methods of modern land war: combining battle in depth, co-operation of arms branches, war of movement. The war in the Pacific took a course that was unexpected. Instead of being a great naval war, it turned out to be a combination of land, air, and naval fighting in oceanic spaces and on the south-eastern periphery of the Asiatic continent. The importance of sea-power has decreased in this war, the importance of air-power has risen. But the importance of sea-power has not simply been nullified—it has acquired a different technical structure and is more than before dependent on co-operation with land and air forces. And the experiences of the Second World War give us not the slightest reason to believe that air-power alone might eventually decide the outcome of war—air-power too has to rely on co-operation with land- and sea-power. The experiences of this war show that there can be no successful isolated strategy of air, of land, or of naval forces. There has emerged on a new technical foundation the strategy of unified fighting forces, of all war technics on the ground, in the air, and on the sea. The Anglo-Saxon Powers can profit more from a unified strategy of such a three-dimensional war than the big continental Powers, Germany and the Soviet Union. They form the large reserve of the United Nations. The strategic effectiveness of the Anglo-American intervention can still be increased to almost unlimited proportions. They can use their strength on land, in the air, and on the sea in various new combinations, to create new fronts and to establish closer interrelations among all the fronts.

The Second World War was determined by the rules of German strategy from the Polish campaign to the Balkan campaign, with one exception—the aerial battle over Britain. Since the German–Soviet War started, the war has no longer proceeded according to the German plan. In Berlin the following witticism is said to be making the rounds: "General Field Marshal Keitel is now writing a book, *Five Years of Blitzkrieg.*" A protracted war has been imposed upon Germany. In September of 1942 it entered its fourth year. A Blitzkrieg that runs into the fourth year is no longer a Blitzkrieg. In the second half of 1942 the war was a race between the German offensive and the transition of the United Nations to a strategy of coalition. In both camps two crises in the conduct of the war proceeded simultaneously. The German crisis consists of a relative diminution of the German Army's offensive power, of the failure of the original German war plan in the Russian campaign, of the German shift from a strategy of military decisions to an oil strategy. The crisis in the anti-Axis camp consists of the threat to the Russian supply system caused by the German advance in the South, of the delay of the full unfolding of Anglo-American forces, of the belated coalition strategy of the Allies. In the second half of 1942 and in 1943 the democracies face the military decision. At such a time mistakes are no longer permissible. Clinging to obsolete war doctrines, loss of time, neglect of the requirements of total war and of the strategy of coalition will be fatal. The war will be half won when the German offensive force is broken, and three-quarters won once all the fighting forces of the United Nations combined go into action.

PART I

THE COURSE OF THE GERMAN–SOVIET WAR

CHAPTER ONE

THE ORIGIN OF THE WAR

THE REAL world war, the Great War, began only with the German–Soviet War. The vast extension of the front, the volume of forces engaged, the intensity and duration of the fighting, immediately made of the German–Soviet War the central front of World War II. The centre of gravity of the Second World War lies in the clash of the two strongest continental Powers, and remained there even after the war had turned into a global struggle with the entry of the United States and Japan.

The origin of the German–Soviet War is no purely academic problem, no mere chapter of diplomatic history. It is a question of burning timeliness. It is for the *present* course of the war of great *political* importance. It shows that the Soviet Union, the United States, and Great Britain were predestined allies, not merely since Hitler's invasion of Russia, the attack on Pearl Harbour, and Hitler's declaration of war against the United States, but ever since the outbreak of the Second World War, since September 1939. The German–Soviet War was unavoidable. And what is more, no conflict was as unavoidable in the cycle of World War II as the German–Soviet War. It did not come to pass unexpectedly. On the contrary, the only unexpected element was that it did not break out earlier, considering the explosive character of German–Russian relations. These relations had been far more tense during the "peace" pact than during the preceding period from 1934 to 1939, when an incessant diplomatic war between the two Powers had been carried on. Compared to the degree of tension that prevailed during the period of the Pact, the conflicts between Germany and the Western Powers in the years between 1934 and 1939 were mere child's play.

The German–Soviet War did not come about by chance. It had been prepared on both sides. The history of German–Soviet relations from August 23, 1939, to June 22, 1941, was a history of concealed yet incessant and sharp conflicts, of enforced and short-lived compromises, of mutual distrust and deceit, of grave underground discord—and of the preparation for a decision by force of arms. The inevitability of the German–Soviet War, however, proves the necessity and inevitability of the

Soviet-Anglo-American alliance. The political lesson to be drawn from the genesis of the German-Soviet War is that in the course of the Second World War the world coalition against the Third Reich is to be organized in explicit and definite forms.

The silent war between the partners of the Pact of August 23 began as early as September, 1939 as a concealed struggle of power-politics with pressure from both sides. The very first happening, the partitioning of Poland, resulted in friction. In the second half of September 1939 there were two border delimitations in the former Polish region. After the first delimitation, whose outline was announced on September 22, the Soviet Union was to receive a part of the Polish nucleus, the territory between the Bug and the Vistula. According to that settlement the Soviet borders were to be on the middle Vistula, including Lublin and even Praha, a suburb of Warsaw on the left bank of the Vistula. The Soviet Union would in that event have been in possession of a strategic position which dominates the entire Vistula, and thus all of Poland.

> German claims were subject to limitations entirely out of proportion to the achievements of the German forces.

Hitler complained with respect to the German-Russian border demarcation in his war proclamation against Russia. One week after the first demarcation, after Ribbentrop's second visit to Moscow, came the revision of the borderline. In contrast to the first arrangement, the Third Reich now received the territory between the Vistula and the Bug. At first Hitler had conceded much more to the Soviet Union, in expectation of a much stronger Polish resistance and Allied action on the Western Front. But when Poland collapsed within eighteen days and the French Army in the West did not stir, Hitler demanded—and received—a revision of the demarcation line from the Soviet Union. The incident was important because it showed that parallel to the success of German arms, and because Germany was relieved in the West, the German pressure in the East was immediately increased.

Even the Soviet treaties with the Baltic States of October 1939, and especially the setting up of the Russian military bases and garrisons in them, were regarded as a treaty breach by the Germans. Both Hitler in his war proclamation and Ribbentrop in his memorandum declared that Lithuania had been pronounced a German sphere of influence according to the unpublished terms of the Pact. The inclusion of Lithuania in the chain of Soviet pacts with the Baltic States, and the first arrival of the Russian garrisons in Lithuania, were regarded by the Third Reich as a particularly bitter blow. Ribbentrop's memorandum declared even the first Soviet treaties with the Baltic States (and not only with Lithuania) to be *casus belli*. Whether these first positions the Soviets took up in the Baltics were, legalistically speaking, "in accordance" with the treaties or "a breach" thereof, the Third Reich could never accept them. The

Baltic States were regarded by the Third Reich as a German reservation, as an undisputed zone for German expansion. Thus the German–Russian conflict of power began even during the first weeks of the Pact.

The division of the spheres of influence in the East was nothing but the establishment of an advanced front for the coming German–Russian theatre of war. All Russian territorial and strategic gains in the East were directed against the Third Reich, and against the Third Reich alone.

> As Russia undertook to subjugate not only Finland but also the Baltic States, she suddenly motivated this action by the assertion, as ridiculous as it was false, that she must protect these countries from an outside menace or forestall it. This could only be meant to apply to Germany, for no other power could even gain entrance into the Baltic area, let alone go to war there. Still, I had to be silent,

Hitler said in his proclamation. The same was true for Finland. The Soviet Finnish War was directed by considerations of Russian strategy against Germany—and that is precisely how the German High Command viewed the situation. In his memorandum Ribbentrop listed the Russian territorial gain in Finland as an act that was directed against the Third Reich, as one of the measures "extending Moscow's military power wherever the possibility offered itself in the area between the Arctic Ocean and the Black Sea", and as one of the causes of the German–Soviet War:

> By the Finnish–Russian peace concluded in March, Finland was obliged to surrender part of her south-eastern provinces immediately.

The Third Reich, tied down in the West, did nothing against it because there was nothing it could do. It even tried, as long as the Pact with Russia was still in effect, to make its enforced neutrality in the Soviet–Finnish War appear as a kind of supplemental contribution to the Pact and to demand compensation for it. But as early as November 1940 Hitler, in his meeting with Molotov, had declared himself protector of Finland. In the Finnish question mistakes on both sides have made cooperation between the Western Powers and the Soviet Union difficult. The Soviet Union lost politically far more by the war with Finland than it gained strategically. And the Western Powers relieved the Third Reich diplomatically by their pro-Finnish policy. If there had actually been Anglo-French intervention on behalf of Finland in February and March 1940, not alone France—whose fate was already sealed—but Great Britain too, would have been engulfed by catastrophe. In the hour of deadly danger, when in 1940 and 1941 Great Britain waged war against the German–Italian coalition all by itself, it found out how bitterly it needed Soviet support. And in the hour of the German invasion, the Soviet Union realized how bitterly it needed Anglo-American support. It would be erroneous, incidentally, to assume that the Fascist iniquity of Finland occurred in one night, from June 22 to June 23, 1941. This

about-face towards the Third Reich had a long history. It should be remembered that Mannerheim's proclamation to the Army at the end of the Russo-Finnish War closed with the words that Finland had paid its entire debt to Western civilization, and that it did not owe a single cent more. It was the announcement of an obvious German orientation and a policy of revenge.

The Russian occupation of the Baltic countries in June 1940 had caused a severe crisis of German–Russian relations. The crisis deepened when a few days later the Soviet Union occupied Bessarabia and the Bukovina. Ribbentrop complained in his memorandum that the Soviet Government had confronted the Third Reich in the Bessarabian question with an actual ultimatum:

> The German Ambassador to Moscow declared to the Soviet Government their decision had come as a complete surprise to the German Government. Molotov replied that the matter was of extreme urgency and that the Soviet Government expected to be appraised of the German Government attitude with regard to this question within twenty-four hours.

Every step that brought the Red Army closer to the Balkans, and especially closer to the Rumanian oilfields, was regarded by Hitler as a deadly menace for the Third Reich.

> Russia's threatened attack on Rumania was in the last analysis equally intended to gain possession of an important base, not only of Germany's but also of Europe's economic life, or at least destroy it

Hitler declared in his proclamation. And Ribbentrop was especially indignant about the Russian occupation of the Bukovina:

> Territory that was ancient Austrian crown land, had never belonged to Russia, and had, moreover, not even been mentioned at the time of the Moscow negotiations . . .

Hitler's claim upon all former Austrian territories had been made for a long time. "Hitler is the successor of the Hohenzollerns *and* the Hapsburgs," Goebbels declared after the Anschluss.

With the kindling of the struggle in South-eastern Europe, the German–Soviet War drew immediately closer. In his proclamation Hitler openly admitted that he had decided to make war against the Soviet Union as early as August 1940, allegedly because of the Russian troop concentrations on the German border, in reality because at that time Hitler was carrying out the great expansion to the South-east at all costs, and because the war against Russia, as the decisive struggle for continental domination, stood on his grand war plan.

With the occupation of Rumania the transformation of the entire south-eastern part of Europe into a German jumping-off ground against

the Soviet Union began. From the summer of 1940 the Third Reich was relieved in the West, and it could now take the offensive in the East. In the fight for the intermediate regions from the Baltic to the Ægean Sea the Soviet Union gained the upper hand in the North-east, and the Third Reich in the South-east. The occupation of Bessarabia and the Bukovina was the last such action of the Soviet Government. From now on the Third Reich took the initiative. The reason for this was not alone that the Third Reich was now relieved in the West. The tactical goals of the two Powers in the development of the conflict differed. Soviet diplomacy wanted to gain time. German diplomacy, on the other hand, wanted to gain speed—that is, it strove to occupy in the briefest possible time as many positions around the Soviet Union as possible to be ready for the attack. That is why the Russian attitude since the summer of 1940 was more cautious and the German more aggressive.

The meeting between Hitler and Molotov at the end of November 1940 was the opposite of what many at that time thought it was: its aim was not co-operation, but a clarification of the position of both sides, which at that time were already in sharp and irreconcilable conflict. On the table of the Berlin Conference lay invisibly the loaded pistols. It was a rendezvous of enemies. Today the facts of the situation are known, because later both the German as well as the Russian quarters gave an insight into this conference. As Lozovsky hinted in the Moscow press conference of October 7, 1941, Molotov demanded in Berlin the withdrawal of the German troops from Finland, and protested against the German occupation of Rumania; he proffered a Russian guarantee for Bulgaria, that is, a Russian-Bulgarian alliance against the danger of German occupation. About the then Russian attitude towards the German occupation of Rumania, Lozovsky expressed himself as follows:

> Hitler violated the German-Soviet Treaty of 1939. Not only did he not consult with the Soviet Government on the question of guarantees for Rumania, which borders on our country, but he went still further, inasmuch as he factually occupied Rumania giving these "guarantees" as the reason. The Soviet Government could not ignore the fact that Hitler brought his troops to the Soviet frontiers from this side also, transforming Rumanian as well as Finnish territory into a rallying ground for an attack on the Soviet Union.[1]

Hitler expressly rejected all Molotov's demands. Specifically he declared himself the protector of Finland even at that time. After the Berlin meeting it became evident that both sides had taken up their positions and that the development was moving steadily towards war.

The fight for Bulgaria aggravated German-Soviet relations still further. It was known that before the German troops marched into Bulgaria, the Soviet Government offered Bulgaria a special guarantee through the special emissary Sobolev, a fact which Lozovsky later con-

firmed. It was also known that after the Germans had marched in, the Soviet Government handed in a strong note of protest in Sofia. It is now known from Ribbentrop's memorandum that the Soviet Government made serious representations in Berlin, too, which were not published at the time:

> The Russian Ambassador in Berlin pointed out in an official démarche that the Soviet Union regarded Bulgarian territory and the two straits as the security zone for the U.S.S.R. and that it could not remain a passive spectator of events taking place in these territories, which amounted to a menace to such security. For this reason the Soviet Government issued a warning with regard to the appearance of German troops on Bulgarian territory or on that of either of the two straits.

It could hardly be stated any more eloquently that this violation of Russia's vital interests had now brought the two countries to the brink of war. Berlin now realized clearly how Moscow judged Hitler's actions and what the consequences would be.

The next phase was the fight for Yugoslavia. On the eve of the German invasion, when, after the *coup d'état* which drove out Prince Paul, Yugoslavia was already launched on its sharply anti-German course, the Soviet Union closed a treaty of friendship with the Belgrade Government. Indignation in Berlin knew no bounds. A leading German journalist, who had been the correspondent of the *Frankfurter Zeitung* in Moscow during the entire period of the German–Soviet Pact, gave the inside story of German–Russian relations in those years in a series of articles in his paper. The crisis of German–Russian relations in March and April 1941 he described thus:

> Suddenly the Soviet Government reacted to Germany's actions in the south-eastern European region with growing hostility. The circle of reports, démentis, and protests closed in March with a measure which was even to render the Tripartite Pact ineffective in one essential point. The Soviet Government subjected transit traffic, that is, in practice, the exchange of goods between Japan and Germany, to new restrictions.
>
> This phase of a hardly concealed anti-German attitude reached its culmination when after the Belgrade *putsch* there was suddenly opened the perspective of a serious military conflict in south-eastern Europe. The happenings in Yugoslavia were described by the Moscow press in a manner clearly revealing sympathy for the rebels. The Soviet–Yugoslav treaty of friendship, signed on April 5, a few hours before the Germans marched into Yugoslavia, represented the most far-reaching, decisive demonstration of Soviet interests in the Balkans. Operations

in the Balkans were depicted in the optimistic coloration of the Yugoslav and Greek communiqués.[2]

The German-Soviet fight for the Balkans was waged along the whole line, revolving around Rumania, Bulgaria, Yugoslavia, and Turkey (the Russian-Turkish Pact was concluded on March 25, and the German-Turkish Pact on June 18, 1941, four days before the invasion of Russia). The struggle for the Balkans showed that the German-Soviet conflict could not be solved, and that the German-Soviet War was inevitable.

German-Russian relations in the years 1939-41 had a façade of feigned confidence. To the outside world the Pact was supposed to appear as a permanent understanding of two great continental Powers, based on a balance of forces in Eastern Europe. Behind this façade there stood the reality of power-politics and of preparations for war. German as well as Soviet diplomacy was based on dissimulation in this period. Each side knew the real intentions of its partner and enemy-to-be. Each knew that its partner realized its true intentions, and each side tried to pretend that it did not know of its partner's knowledge.

There was some manœuvring also on this tenuous foundation. It was a manœuvre on the Part of the Germans to seem to acquiesce first in the Russo-Finnish War and its consequences, later in the Russian occupation of the Baltic countries, Bessarabia, and the Bukovina. And it was a manœuvre on the part of the Russians to be outwardly obliging after the German success in the Balkans. (Regulations regarding the German-Japanese transit were relaxed, the Yugoslav, Greek, Belgian, and Norwegian ministries were closed down, etc.) But on the whole there was little room left for German-Russian manœuvring at that time. Even the Russian note on the Bulgarian question showed Hitler that Moscow clearly recognized his game. And the manner in which Berlin reacted to the obliging Russian attitude of the period from the middle of April to the beginning of June 1941, is shown by the above-mentioned inside story of German-Russian relations:

> The unexpected affirmation of friendship, however, did not find the expected response in Germany. Stalin's attempt to lull the Reich Government once more into a feeling of security by this pretended friendship, at the moment of imminent danger, was in vain. The men of the Kremlin dropped their mask too soon. Their game was up.[3]

The fight for territories and strategic positions, the fight for the Baltic region and the Balkans, showed the dynamic of the German-Russian crisis. These regions were tremendously important. In the Baltic region the Soviet Union faced the Third Reich with a *fait accompli*, just as in the Balkans the Third Reich did with the Soviet Union. And yet—neither went to war because of the territorial gains of the partner-enemy. The Baltic region and the Balkans were vital objectives in the German-

Russian contest, but they were not big or decisive enough to provoke the war on their account.

The position of the Soviet Union was in part dictated by motives that are revealed in the report of the Yugoslav attaché in Moscow, dated February 17, 1940 (he was quoted in Ribbentrop's memorandum and the statement is probably authentic as far as content is concerned):

> According to information received from Soviet sources, armament for the air force, tank corps, and artillery in accordance with the experience of the present war are in full progress and will, in the main, have been completed by August 1941. This probably also constitutes a time limit before which no appreciable changes in the Soviet's foreign policy can be expected.

That means: it was not individual objects and interests—important as they may have been—which decided the readiness of the Soviet Government to enter the war, but the evaluation of the entire military and diplomatic situation. Basically, considerations of the same order determined Hitler's decisions too. The difference lay in the tempo. The German-Soviet War stemmed from the fact that two mighty armed continental Powers could not possibly exist side by side, and from the entire dynamics of German Fascist imperialism. The German-Soviet War was part of Hitler's grand war plan from the outset.

From this point of view the analysis of the origin of the war has special timeliness. The invasion of the Soviet Union was Hitler's greatest decision, and this step determined the entire course and outcome of the Second World War. Hitler's entry into the war against the Soviet Union was based on a calculation of conditions and of chances. By this calculation the Third Reich stands or falls. If it were sound, Hitler's domination of the world—at least his mastery of Europe, Africa, and Asia—would be secure. It if turns out to have been false, the defeat of Hitler Germany is inevitable. It is on the basis of this calculation by Hitler which brought about the German-Soviet War, that every single phase and every temporary balance of World War II must be figured out.

Today we know the factors of this calculation. It was in part founded on the results of the one year and ten months of the German-Russian Pact. Hitler could assume that the balance sheet was more favourable for Germany than for Russia. Every Russian loss could be put down as a German gain. Russia gained time during the period of the Pact. It gained strategic positions. And it delayed the entry of Russia into the war so that it came close to the entry of its most powerful potential ally, the United States. The Soviet Union, however, did lose during this period the immediate chance of a continental European coalition against the Third Reich. The disintegration of this coalition began with the loss of Czechoslovakia, after Munich. But to the extent that the Soviet Union did not enter the war as long as France was still in it, the chances

of a continental coalition against the Third Reich were now over. The question might arise whether France, after the military weakness it showed, was still one of the decisive factors for this coalition. However that may be, in the period of the German–Russian Pact the possibility of a continental war on two fronts against the Third Reich was liquidated. The entire classic strategy of a two-front war against Germany was based chiefly on the great continental war and on the Russian–French vise. In the time of the German–Russian Pact the Third Reich firmly established itself in South-eastern Europe—another great Russian loss on the books. At the moment of the German invasion the Soviet Union had no ally at all on the European continent. Specifically, it had lost Turkey as a potential ally. The Soviet Union's diplomatic freedom of movement was wholly paralyzed during the pact with Germany. No diplomatic counteraction was being prepared during this time which could have held the Third Reich in check. This could have been accomplished only by Russian-Anglo-American co-operation, at least the preparation for such co-operation. After the victory in the west, Hitler had the initiative in Eastern Europe. Hitler could choose the moment when the blow should fall, and he could benefit from the effects of the surprise element.

Hitler regarded the war against the Soviet Union as so urgently necessary that he gave up a number of military possibilities open to the Third Reich in the spring of 1941. Before the attack on the Soviet Union Hitler stood at the crossroads: he could continue the war against the British Isles and the British Empire, carry on the war in the Mediterranean and in the Near East, with even larger opportunities than ever—or start a new war. The war against the British Empire from the British Isles to the Near East now belonged to Hitler's missed opportunities. In the winter of 1940–41 the Third Reich waged a combined war of destruction in the air and strangulation by a submarine campaign against the British Isles. In the spring of 1941 Hitler Germany had even better chances against Great Britain. Better atmospheric conditions permitted an intensification of the German air offensive. Shortly afterwards, the war in Russia showed that the German Army had large reserves in planes, tremendous effectives in fighter planes and bombers. Undoubtedly the German aerial war against Britain in the summer of 1941 could have grown much more effective than in the preceding winter. The German submarine war against England reached its peak in the spring of 1941. In the summer and autumn of 1941 it subsided. Even if one does not put the let-up in the German submarine war against England fully to the account of the new war against Russia, it is still undoubtedly true that a part of the German submarine fleet was commandeered for the Baltics and the Arctic Sea to fight against the Soviet Union. But above all: the German war of destruction by the Luftwaffe and the submarine war of strangulation have to be regarded as a co-ordinated action against England,

Both supplement each other. Aerial and submarine war was not intended merely to cripple Great Britain economically: it was to cripple it militarily also. It was supposed to prepare for the invasion of Britain.

Hitler's turn against Russia meant his renunciation of the greatest and last chance to invade England. In the spring of 1941 Germany's land and air forces were far stronger than after Dunkirk in 1940, when a German attempt at invasion would have been mere improvisation. In the spring of 1941, however, the Wehrmacht had a completely established base for the invasion, from the Norwegian to the French Atlantic coasts. Yet nothing happened. For the first time in World War II a major German operation was not carried through to the end. The result of Hitler's decision to attack the Soviet Union was that active warfare against Britain, with all the possibilities it offered the Third Reich, was virtually stopped.

But that was not all that Hitler renounced. In the spring of 1941 a tremendous harvest awaited the Third Reich in the Mediterranean and in the Near East. At that time Hitler Germany could throw as many air and land forces into that region as it needed. A great deal of pressure could be exerted against Turkey, including invasion. Rommel's offensive could at that time have been carried beyond Cyrenaica. An invasion of the Near East was at that time possible in three directions: via the Nile valley, through Syria, and through Turkey. The Third Reich had it in its power to give support to and to exploit the pro-Axis putsch in Iraq, to forestall the British occupation of Syria, and to prevent the entrance of the British and Russian troops into Iran. If the huge weight of the German Army, instead of having been hurled eastward, had exerted pressure to the West, South, and South-east, Vichy France and Spain would automatically have joined the Axis. The entire Western Mediterranean basin, with North Africa, would then have been in German possession, and Gibraltar would have been doomed. Even in the case that Hitler directs his strategy south once more—he will never again have the kind of opportunities he had in that region in the spring of 1941, because today the bulk of the German Army is tied down in Russia. In the spring of 1941 Hitler could have become the Kaiser of the Mediterranean. He renounced this opportunity.

If Hitler let all this slip out of his hands, it was because to him the objectives which he pursued in a war against the Soviet Union by far overshadowed all other objectives and conquests.

His motives for the invasion of the Soviet Union are now clearly evident. He could not tolerate a continental major Power of first-class military strength side by side with the Third Reich. The attack on the Soviet Union was an act of the peculiar policy of security by aggression of German Fascist imperialism. Without having vanquished Russia, Hitler regarded all his previous successes and all his possible future conquests as tenuous and ephemeral. Only the victory over Russia would give security to all these conquests. According to Hitler's estimation he could

have anything once he had Russia, and he would have nothing without having Russia.

The war against the Soviet Union was of course uppermost in Hitler's mind even from the viewpoint of his policy of conquest proper. Hitler's actual goal in the Second World War was the attainment of continental mastery. The British Isles, North Africa, and the Near East were to Hitler chiefly peripheral objectives. Even the victory over France was important to him chiefly from a political and military point of view, as a means to an end. The real hinterland of the Third Reich, the region that was to give it simultaneously a field for colonization and vital agricultural, raw material, and industrial resources, consisted of the vast spaces in the East, in the Soviet Union. The variety of Soviet resources was for the Third Reich much more attractive than all Western Europe and the Balkans combined. Thus the war against the Soviet Union was to be for Hitler at the same time the big preventive war, in which the military decision for the entire Second World War was at stake—and the decisive war of conquest as well. Everything Hitler renounced to concentrate forces against the Soviet Union was of secondary importance compared to the objectives he sought in the war against the Soviet Union.

These were Hitler's calculations regarding the war against Russia:

The war was to be waged at all costs as a one-front war, with the concentration of all available German forces in the East. A two-front war for Germany was to be avoided under all circumstances. That also accounts for the choice of the moment for the attack—a moment when England was still not strong enough to intervene on the European continent. The Soviet Union was to be beaten before England's military strength had increased sufficiently. Hitler could not fail to realize that his attack on the Soviet Union would lead Great Britain out of its isolation and give it a new ally. But that was to be but a temporary state of affairs. Hitler was plagued by a nightmare of coalitions, he was obsessed by the fear of an Anglo-Russian alliance:

> England still had hopes of being able to mobilize a European coalition against Germany, which was to include the Balkans and Soviet Russia,

his war proclamation of June 22, 1941, said. The attack on the Soviet Union was to act as a preventive, designed to knock that country, as Britain's potential ally, out of the war, and finish it. Despite his obsession of power, Hitler was aware of the limitations of his forces. That is why

> The tying up in the East of such powerful forces that a radical conclusion of the war in the West, particularly as regards aircraft, could not be vouched by the German High Command

was to be avoided under all circumstances, as his proclamation said.

Hitler himself did not believe in the possibility of an offensive war against the Soviet Union combined with the simultaneous invasion of England, or even with active aerial warfare against England. He had given up this perspective of a simultaneous offensive in the East and in the West in advance. That is why the Soviet Union had to be beaten rapidly, so that the Third Reich would have enough time and strength afterwards to do away with Great Britain. That was Hitler's solution of the war against the enemy coalition.

The Soviet Union was, in addition, to be beaten so quickly that the United States and Great Britain would have no time to develop their industrial potential to the maximum. In the spring of 1941 the Soviet-Anglo-American coalition was for Hitler the most ominous possibility, and it was to be averted by a swift victory in Russia. As Hitler's war proclamation put it, what was to be prevented was

> the alignment of Soviet Russian armies and the increasing readiness for war in order finally, together with England and supported by expected American supplies, to crush the German Reich and Italy.

Even the possibility of American supplies to Britain and the Soviet Union frightened Hitler in the spring of 1941. The moment for the invasion of the Soviet Union was chosen to prevent the formation of a Soviet-Anglo-American coalition. Hitler's tactics in the period immediately preceding the invasion of Russia were also aimed at a *rapprochement* with Britain, to gain a free hand in the East. That was the purpose of Rudolf Hess's mission. But in the event of the failure of this, Hitler's tactics also included the variation of a simultaneous war against the Soviet Union and against Britain. In this event the war against the Soviet Union was to be a psychological and ideological means to deter the United States from entering the war. But in both eventualities Hitler had decided for war against the Soviet Union in advance.

Thus a swift war in the East, a rapid victory over the Soviet Union before a real war of coalition against the Third Reich could get going, was the basis and prerequisite of Hitler's calculations for the attack on the Soviet Union. His proclamation to the German Army of October 2, 1941, in which the annihilation of the Soviet Union and the liquidation of Great Britain's last ally were promised within a few weeks, before winter would set in, was in accord with the principle and deadline for that initial calculation. The military guarantee was to lie in the superiority of German strategy. Hitler could not have been in ignorance of the huge material and military might of the Soviet Union; but he was convinced of the superior quality of German strategy.

Thus, the end of the first year of war in Russia showed that the basic assumptions that led Hitler to enter the war against the Soviet Union were miscalculations.

CHAPTER TWO

THE BATTLE OF THE FRONTIER:

Conquest in a Vacuum

WHEN THE German divisions at dawn on June 22, 1941, hurtled across the Soviet border, the German High Command clearly intended to attain the decisive victory in the very first battle, the battle of the frontier. At the very least it expected to proceed immediately from this initial engagement to the decisive battle and victory. From the outset of hostilities the German Army was drawn up in fighting order for the gigantic battle. It had the power of a coiled steel spring suddenly released. In these early stages the odds for victory strongly favoured the German Army. It was fighting close to its bases of operation; it was concentrated for the decisive blow; in attacking it took advantage of the element of surprise. In the battle of the frontier the operative superiority of the German Army over the Red Army reached its peak.

This battle lasted twenty-six days, from the day of the invasion to the German occupation of Smolensk. It was followed by the great drawn-out battle of Smolensk in the centre, and by the German flanking operations in the North and the South. When it ended, the front ran approximately along the line Pskov–Smolensk–Zhitomir–Dniestr. The easternmost German penetration during this period took place near Smolensk, about 400 miles from the German border. In this first, gigantic battle of the German-Soviet War two powerful armies, two war plans, and two fighting methods came face to face.

The battle of the frontier was of extraordinary importance in the plans of the German High Command. German war *communiqués* and Press accounts about the Russian campaign rarely gave an accurate picture of the real course of the battle. But they usually told what aims had been pursued in that battle. In German quarters the battle of the frontier has been depicted as a successful battle of annihilation; it has been compared to the German victories at Kutno, in the Polish campaign, and to the victory in the battle of Flanders. Even now there has arisen a German myth about a battle of annihilation and encirclement in the region of Bialystok–Minsk. The original version was given in the German Army *communiqués*, to be further elaborated in the German Press. When the battle of the frontier was over, the *Völkischer Beobachter* wrote:

> It is not this territorial gain or that which is essential for German strategy, but the annihilation of the enemy's combat forces. The great battle of encirclement in the region of Bialystok and Minsk is the fourth one to be carried out with complete success by German strategy; the others were the battle of Tannenberg in August 1914, of Kutno, in the

bend of the Vistula, in September 1939, and of Flanders in May and June 1940.[1]

True, that was what the German High Command had sought to accomplish in the battle of the border when it planned the war against the Soviet Union. The battles of Kutno and Flanders were not merely outstanding successes reflecting credit on German arms: they were battles that actually decided the issue—battles after which the liquidation of the enemy armies had been child's play. The frontier battle in the Russian campaign was similarly appraised. Colonel Soldan, one of the most influential of the German military writers, had this to say about it:

> The twin-battle of Bialystok-Minsk, in contrast to that of Tannenberg, will, to reiterate the words of the German army communiqué, go down in history as a decision of world-historical importance. In it annihilation meant the decision of the issue.[2]

According to German reports, the frontier battle was a glorious victory of German arms. In the battle of Bialystok-Minsk alone, the *communiqué* of July 10, 1941, said the German Army took 323,898 prisoners, and captured or destroyed 3332 Soviet tanks and 1909 guns. Total Russian losses were put at over 400,000 prisoners, 4423 guns, 7617 tanks, and 6233 planes. But the really crucial importance of the frontier battle, in the German view, consisted of the fact that it was supposed to have opened the way to the heart of the Soviet Union, especially the way to Moscow. As early as July 1941, the direction of the next German offensives was indicated:

> Three weeks of war in the East—and the issue in the East has already been settled. There are neither natural nor artificial barriers between Vitebsk and Moscow that could brake the German onslaught.[3]

And a few days later after the occupation of Smolensk:

> Smolensk is the last halt on the road to Moscow. The enemy capital is still more than 200 miles away. But the distance from Brest-Litovsk by way of Minsk to Moscow is only 600 miles. Thus it is evident that our troops have to traverse only a fraction of the distance they have already covered.[4]

The German High Command had its eyes fixed upon Moscow at the end of the frontier battle. It could hardly have foreseen what still faced the German Army. The conviction that the way to Moscow was open was based upon the fact that by the middle of July, after the frontier battle was over, the permanent Russian fortifications in the West, the so-called Stalin Line, had been stormed and pierced. "The entire system of the Russian field fortifications, so far as it consists of artificial

installations, has been smashed," General von Westhofen wrote at the time. Amazingly enough, German military quarters made the mistake of measuring the Russian campaign by the standards of their campaign in the West. They believed that the frontier battle in Russia was another battle of Flanders, that the break through the Stalin Line would have the same effects as the break through the Weygand Line on the Somme. They were still thinking along the lines of their strategy in the West. It was a kind of Maginot Line complex in reverse. In the French view the defence was secure as long as there was a strong line of fortifications. In the German view the offensive was successful once the fortified line had been pierced.

Around the middle of July the German High Command was obviously envisioning an irresistible advance into the deep interior of the Soviet Union along the entire front. The German Army *communiqué* of July 13, 1941, said that the German troops were already at the gates of Kiev, while the North German tank units were closing in on Leningrad.

The real course of the frontier battle, and its results, were quite different. True, there had been a German offensive of tremendous force. Whereas in the campaign in the West, in the conquest of France, the German Army had used only a fraction of its full strength, in Russia it was clearly employing far greater forces. In the first twenty-six days of the war in Russia the German Army waged its classic Blitzkrieg, advancing incessantly and along a broad front against a first-rate opponent. The efforts and combat achievements of the German Army in the frontier battle alone by far surpass those of the entire campaign in the West. For one thing, there were far more engagements during those twenty-six days than in the Western campaign. The offensive capacity of the German Army was revealed in this phase of the German–Russian War by the mere fact that after almost three weeks of fighting and hundreds of miles of marching and offensives, it was still able in a few days to overrun the strong Stalin Line, which ran from Pskov past Vitebsk, Orsha, Mogilev, to Zhitomir.

The battle of the frontier began with a German surprise air attack aimed primarily at the Russian air bases. Russian plane losses were considerable but not catastrophic. Russian airfields were dispersed widely, both over the width and depth of the front. By Russian standards, pursuit planes are stationed at least 120 miles behind the front line, medium bombers 200 miles, heavy bombers 300 miles away. In the frontier battle the Germans waged Blitzkrieg with their well-known virtuosity. There were moto-mechanized break-throughs and tank raids, especially on the Central Front, in the direction of Minsk. German tactics had been further perfected since the campaign in the West. Co-operation between tanks and motorized infantry, between tanks and air force, formed the basis of the offensive. With an intensity that surpassed by far the next phases of the war, the German air force attempted to disrupt the Russian

rear and to attack marching columns and communication centres. The German infantry's marching performance in the battle of the frontier represents a record for the whole German-Russian War. Measured by the brief span of time, its penetration in depth was extraordinary. The assault operations of the infantry and the pioneers, conducted at mobile warfare speed, culminated in the overrunning of the Stalin Line between Pskov and Zhitomir—a far greater achievement than the taking of the Franco-Belgian fortifications and the rather makeshift Weygand Line.

This German Blitzkrieg, however, developed under singular circumstances. The German offensive was not face to face with a numerically strong opponent. It did not encounter the bulk of the enemy forces. There were no Russian troop concentrations along the frontier and in the frontier regions. For three or four days what fighting there was took place exclusively with Soviet frontier guards. This was recorded not only by the Russian, but by the German dispatches as well. To a certain extent the gigantic first German offensive was a blow delivered into a vacuum. At the beginning of the war the Red Army's forces were deployed in depth. The bulk of Soviet forces was stationed far from the border, for the most part in the rear of the Stalin Line. For a major Power this type of troop concentration was unquestionably unprecedented. The disposition of the Red Army was quite different from that of the German, French, and Russian armies in 1914 and from that of the German, Polish, and French armies in 1939. This fact affords insight into the Soviet war plan. The Red Army units stationed between the Stalin Line and the frontier merely served as a screen—it was an *armée de couverture*, as French military terminology calls it. The battle of the frontier had been envisioned and planned by the German High Command as the major, the decisive battle between the main forces of the two armies; to the Soviet High Command it was but a large-scale advance skirmish. The Soviets used only limited infantry forces in the battle of the frontier, probably far less than half the German infantry masses used —according to Soviet estimates the German invasion forces numbered about 140 infantry divisions. The entire battle of the frontier saw no major infantry engagements. The Russians did, however, throw in strong tank forces which were to cover the infantry and to repulse the first onslaught of the German armoured divisions. There were major tank battles at Lutsk, with 4000 tanks participating, according to Russian reports, and others north of Kovno and north of Minsk.

The crucial question with regard to the course of the battle of the frontier is whether the brilliant "twin-battle of encirclement and annihilation at Białystok-Minsk", with its tremendous Russian losses, ever actually took place. Colonel Soldan described the pocket into which the Soviet forces on the Central Front were said to have fallen as an encirclement area measuring 600 miles around. This circle was then supposed to have been compressed and tightened up. Such a pocket would have been

more than three times the size of the one which trapped the Allied troops in Flanders. The German Army was incapable of closing off such an expanse. In Flanders the encirclement was conditioned by geography, so to speak, since the Allies stood with their rear to the sea; the German Army did not have to close the pocket from the North. In the battle of the Russian border, however, the Red Army units in the direction of Minsk, where the encirclement allegedly took place, were by no means shut off from the East and South. Over the entire southern half of the front, south of Minsk, there were no German attempts at encirclement whatever. In this region are the swamps of Pinsk and Rokitno, where the German Army did not penetrate until much later, late in August. On the Southern Front, in Galicia and the Western Ukraine, the Red Army was pushed back only in a frontal direction, without break-throughs or encirclements.

The only large-scale German attempt at encirclement was made, as mentioned before, in one direction, towards Minsk, and merely from the North. North of Kovno a strong German tank group pivoted to the South, to deliver a blow via Vilna against Borisov, north-east of Minsk; here, in the Minsk region, it was to join with another strong German tank group which was to reach Slutsk and Bobruisk via Brest-Litovsk and Kobrin. The encirclement was thus to be carried out in the form of a tank noose, which was to have been thrown over the Russian Minsk group from the North. This encirclement, however, could not have been either water-tight or complete. The Soviet Army *communiqué* of June 27 mentions the destruction of 300 German tanks north of Minsk. Those were alleged to have been chiefly tanks of the 39th German Tank Corps, which was repulsed during the attempted encirclement north of Minsk. But there are other reasons why the German version of the victorious battle of Bialystok-Minsk does not ring true. According to German reports, late in June two Soviet armies were to have been encircled there. According to the German *communiqué* of July 10, 1941, the German Army took 323,000 prisoners. Now Soviet armies have a smaller number of divisions than German armies, for the sake of greater mobility. Two Soviet armies could not have much exceeded 300,000 men. Thus they must have been taken prisoners to the last man. And there could not have been any dead or wounded—if the German *communiqué* was correct. But German military experts themselves have denied this. They insisted that the Red Army units in this encirclement did not surrender at all. As Colonel Soldan stated categorically:

> The essential difference between Hindenburg's victory [at Tannenberg] and the one attained here lies in the fact that in 1914 the encircled Russians surrendered, while in this instance they fought to the very end. That must be regarded as an amazing phenomenon, for in the Polish campaign as well in the campaign in the West our enemies

laid down their arms as soon as they realized that they were encircled and that further resistance was hopeless. We shall see later that the Bolsheviks, even in utterly hopeless situations, time and again hurled themselves against the German forces. The majority scorned capture.[5]

That is an outright denial of the official German version. An entire enemy army cannot be both destroyed in battle and taken prisoner at one and the same time. The much-publicized version of the "twin-battle of Bialystok-Minsk" with its 323,900 Soviet prisoners did not describe what actually took place, but simply what the German High Command was striving for. The report of the great German victory was but *ersatz* for the decisive battle of the frontier for which the German High Command had prepared and which it expected, but which never actually took place.

In the battle of the frontier German Blitzkrieg tactics came face to face with combat methods of the Red Army. For the first time these Red Army techniques were demonstrated in a large-scale war. True, this first test of Soviet arms happened in retreat, in a delaying action, for the Red Army quite deliberately did not care to hold the terrain. The Red Army regarded the entire regions it had but recently acquired as a buffer zone, in which the power of the coiled steel spring of the German offensive was to be taken up and exhausted as much as possible.

Even this first phase of the Russian-German War revealed many of the Red Army's fighting qualities. It is interesting to note that the front-line dispatches of the German officers and soldiers who functioned as war reporters during the fighting—the so-called propaganda units—from the outset evaluated the quality of their opponents rather objectively and accurately. From the first day of the war they recorded the extraordinary violence of the fighting and the inconceivable tenacity of the enemy. House-to-house fighting in the cities, in Libau, Dvinsk, and Pskov; bitter hand-to-hand fighting of a type that the Second World War had not hitherto witnessed—these amazed the average German soldier, who up to that time had not been accustomed to enemy resistance on such a scale. For the first time the Soviet soldier showed his capacity for individual combat and for fighting in small units. One front-line dispatch from a German propaganda unit during the battle of the frontier reported:

The Soviet soldiers put up an individual fight, in offering a holding resistance. They let the infantry through, only to resume fire on straggling columns or isolated vehicles hours later. Concealed in carefully camouflaged fox-holes behind shrubs and on roof tops they wait for the infantry to approach within a few yards' distance, and then open fire.[6]

Another report says:

The individual Russian soldier shows great skill in building earth fortifications, trenches, and fox-holes; he is especially well versed in the

use of ruses and camouflage, and in the utilization of terrain. Concealed in woods or behind other protective covers, snipers open fire in the German rear from trees or house-tops.[7]

Such German revelations are especially interesting, since they inadvertently show that Soviet infantry rarely appeared massed in the battle of the frontier, fighting chiefly in dispersed formation.

But fighting in small units, "sly tactics", and camouflage represent only one aspect of Soviet combat methods in the battle of the frontier. Another aspect was an extraordinary active resistance, "offensive defence" as the German Press puts it, incessant counter-attacks even in retreat, utilizing the most modern equipment. In the midst of the battle of the frontier the military expert of the *Frankfurter Zeitung* had this to say:

> In the latest engagements the Bolsheviks attempted to counter wedge by wedge, pincers by pincers, nor were these combat methods mere improvisation. They were the result of many years of military training —training that covered not only the art of war in general, but also the attitude of the individual soldier. In the last few days there has hardly been a front-line dispatch that failed to stress the almost insensate tenacity of the enemy in the defence or in counter-thrusts.[8]

Even in the battle of the frontier the Red Army showed that it had achieved full mastery of all modern weapons. The use of offensive weapons in the defensive, hitherto unknown, was here demonstrated for the first time. Special importance attaches to the counter-attacks of the Russian tank units in this connection; the *Frankfurter Zeitung* speaks of the "never-ending counter-attacks of the Soviet tanks". We may well question whether it was justifiable to hurl Red Army tank masses into action while the Red Army itself was in retreat, instead of conserving them for the great counter-offensive. But it would hardly have been possible to stem the gigantic German offensive even behind the Stalin Line without a Soviet tank defence of this scope.

As for the Soviet Air Force, it showed its effectiveness in the fight against the German tank divisions as early as the battle of the frontier. Its combat technique was later on further elaborated. During that same phase of the war with its holding resistance and constant yielding of territory Russian artillery did not yet come into full play, though even then it was active. But co-operation between the various arms branches while on the defensive was already put to the test during the battle of the frontier, as the Russian tactical counterpart to German arms co-operation on the offensive—and it came through with flying colours. The task of Russian fighting tactics in the battle of the frontier consisted not of holding the terrain or defending individual points with relatively weak

forces, but of inflicting the highest possible losses on the enemy, to wear him down, and to limit his initial success.

In the battle of the frontier the initiative was continuously in German hands. German territorial gains were large. Russian losses in men and matériel exceeded those of the Germans because at that time the Red Army was steadily retreating. The Red Army lost a number of vital strategic positions, among them the greater part of the Baltic regions and the Carpathian positions. But the result of the battle of the frontier must be evaluated not in terms of casualties, but by its strategic outcome.

The great, decisive battle of annihilation for which the German High Command was prepared did not take place at the frontier. The plan for the German offensive, as outlined for the first month of the war, failed. It was not the territorial gains of the German Army that constituted the most important strategic aspect of the battle of the frontier, but the fact that a protracted war became its inevitable consequence. At the beginning of any war, and especially in this modern war prepared for by the Third Reich as a war of swift decision, the time element has a special function and value. The Polish campaign was won by the German Army in eighteen days; the victory in Flanders, and thus the fate of the West, was sealed on the twelfth day, with the break-through to the Channel. The Balkan campaign was won by the Germans in ten days. The battle of the frontier on Soviet soil lasted twenty-six days. On the twenty-sixth day of the campaign in the West, the German Army launched the assault on the Weygand Line on the Somme, which opened the road to Paris within a few days. But when the German Army sought to storm onward after the battle of the frontier had been won, it found the road to Moscow blocked. The way for the success of the Red Army in the battle of Smolensk was paved by the tenacious resistance in the battle of the frontier.

CHAPTER THREE

THE BATTLE OF SMOLENSK:

First Battle in Depth

MILITARY EVENTS are tested by the military events that follow them. Thus the battle of Smolensk proved that the battle of the frontier had not decided the issue, that it had failed to open the way to victory to the German Army. On the contrary, the battle of Smolensk was the first battle in the German-Soviet campaign—and in the Second World War as a whole—in which the German Blitzkrieg was halted and cancelled out.

The battle of Smolensk was also the first battle of this war which was

fought over a stabilized front. It ended in September 1941 in about the same area in which it began in mid-July, with the front lines running between Vitebsk and Bryansk. It is to be noted that this was also to remain the front line of the summer of 1942, with the same now familiar names of Vyazma, Elnya, Dorogobuzh, etc. The battle of Smolensk was waged over a period of two and a half months, and it ushered in the series of tenacious, protracted battles that have characterized the Russian campaign. When the battle of Smolensk was over, the German-Soviet War had been under way for three months and nine days, during two and a half months of which the crucial Central Front had remained stable. Thus the process of evolution into a protracted war was now complete. All Hitler's time allowances in the Second World War had been exceeded. Even the time-table of German offensives and strategic decisions in the First World War and even the Franco-Prussian War of 1870 were exceeded. The first battle of Sedan took place forty-eight days after the outset of the Franco-Prussian campaign. In the First World War German strategy, basing itself on the Schlieffen Plan, planned victory between the fifth and sixth weeks of the war. The First World War turned into a protracted war and was lost by Germany because the German Army was halted and beaten back in the battle of the Marne on the thirty-eighth day of the war. Thus, after the battle of Smolensk, Hitler's strategic time-table in the Russian campaign lagged behind the time-tables of Moltke and Schlieffen.

The onset of the battle of Smolensk was signalized in the German Army *communiqué* of July 18, 1941, which stated that a gigantic battle was in process over the entire front, with nine million men participating. Thus the first really large-scale mass battle of the war was joined. For the first time the main forces of the two armies clashed head-on. That *communiqué* was in fact an admission by the German High Command that the battle of the frontier had actually been no more than a strategic prelude.

When the battle of Smolensk began, German military observers at last realized that the Russians had concentrated their forces behind the Dniepr rather than at the border. In the middle of July a German military reporter wrote:

> Now that we have reached the Dniepr, it turns out that the Bolsheviks have built up a tremendous defence front behind this river. Numerous Bolshevik divisions lie on the other side. Behind the Stalin Line, too, countless tens of thousands have moved into position.[1]

Both adversaries fastened on the Central Front as the decisive front, the main front. That was proved as early as the battle of the frontier by the German break-through towards Minsk and Smolensk. It was confirmed in the battle of Smolensk; and later, in the battle for Moscow and the winter campaign, it was proved over and over again. The strategic

choice of the main direction was definitively fixed by the battle of Smolensk, on the part of the German as well as the Red Army. Here the major forces as well as the decisive reserves of the two armies were massed. In the first month of the battle of Smolensk, the *Frankfurter Zeitung* wrote:

> The army group of Field Marshal General von Bock, fighting in the centre of the Eastern Front, is marked by a particularly large aggregation of armies and armoured forces.[2]

Here, in the battle of Smolensk, where for the first time the Red Army fought the German Army on equal terms, the other face of modern warfare was revealed. This was no longer Blitzkrieg, winged mobile warfare such as had been seen in the Polish campaign, in the campaign in the West, in the Balkan War and even in the battle of the frontier in the German-Soviet War. The elements of this modern battle were stabilization of the front, battle in depth, defence by means of offensive arms, and large-scale infantry combat. This was predominantly the Soviet combat method. Just as the character of the battle of the frontier was determined by German combat methods, so the character of the battle of Smolensk was determined by Soviet combat methods. This battle had no territorial objective. It must be measured by other criteria than the preceding battles of German Blitzkrieg. It was not aimed at territorial gain, and the goal was not the ultimate decision. Its objectives were the armies themselves. In this sense the battle of Smolensk bore a certain resemblance to such great battles of the First World War as the battle of the Somme and the battle in Flanders (autumn 1917), though it was waged with a different technique and according to different tactical rules.

In the battle of the frontier the Red Army actually engaged only in isolated defensive actions. But at Smolensk it proceeded to systematic counteraction, to a broadly conceived great battle. It is a curious paradox that after the loss of the Stalin Line the Red Army stabilized its front, while the German Army could make no further headway immediately upon taking the enemy line of fortifications. Thus it was shown once again that armies and their striking power rather than fortifications decide battles.

There can be no doubt that the original purpose of the German High Command in the battle of Smolensk was a large-scale offensive with Moscow as the goal. German mobile warfare, initiated in the battle of the frontier, was to be continued at the same pace under all circumstances and with all available means. The strategy of the German campaign in the West—from the battle of Flanders to the capture of the enemy capital and the destruction of the enemy armies—was to be repeated on Russian soil. German judgment of the situation after the

first week of the battle of Smolensk was optimistic, and German strategy continued aggressive, as before:

> Moscow is already exhausting its last reserves. With the Stalin Line, Moscow has lost its last cohesive fortifications in the European part of the Soviet Union—fortifications on which it had staked all its hopes. A new battle of annihilation is already raging to the East of the Stalin Line. In many places substantial sections of the Bolshevik Army are again being encircled. Demoralization and disintegration are increasing among the Soviet units. The German High Command on the other hand has a firm grip on its vast forces, and has at its disposal even greater reserves that have so far seen no action. Operations are proceeding victoriously according to the plans of the German High Command, utilizing all the resources of our army, our air force, and our navy. The Bolsheviks will be brought to heel, as have all Germany's enemies so far.[3]

When it became clear that the Red Army was resisting on an unprecedented scale, and with methods that were new to the German Army, there came a German declaration that the German Army was capable of overcoming any enemy attempt to stabilize the front. This declaration by the German News Agency of August 3, 1941, stated:

> The British try to give the impression that this battle has become a war of position. But Germany has the power and material to force a decision in the East.

The battle of Smolensk is of historic importance in the true sense of the term, because it cancelled out German Blitzkrieg. In it the limits of the German Army's offensive power were revealed for the first time. And it proved that the Red Army is a military power of the first order. That army's great achievement in the battle of Smolensk was that it halted the German war of movement. It is from this time that the crisis in German warfare dates.

The German Army's unbroken string of victories from the Polish campaign to the battle of the frontier in Russia had created the impression throughout the world that its fighting strength and skill were irresistible. Before the battle of Smolensk it was not even known whether and how the German offensive *could* be parried. In July 1941 the French General Duval wrote:

> German strategy reigns supreme and there is no parry against it.

This was the opinion of a conservative and ignorant soldier, based on his limited experience in the French defeat. In the battle of Smolensk it was shown for the first time that there was a method of parrying German mobile warfare.

German Blitzkrieg was now confronted by the Soviet anti-Blitz, systematically applied. German Blitzkrieg depended on a calculation

—what weapons, how many tanks, planes, guns, motorized infantry divisions, assault pioneers units, are required to smash open certain given fortified lines, to carry out a break-through and encirclement? What tactical methods must be used in the process? The Russians opposed this with an equally systematic counter-calculation—what weapons, how many planes, tanks, guns, motorized infantry divisions, are required to cut off and destroy the advancing enemy tank spearhead, thus first of all halting the mechanism of Blitzkrieg? The Russian method consisted of hurling against the onrushing German tanks, mobile troops that were to have superiority in fire-power: planes, tanks, mechanized artillery, and motorized infantry. The spearhead of the enemy attack was to be struck and at the same time cut off from the infantry that followed in its wake. But the Russian anti-Blitz is not merely a tactical method of fighting the German armoured divisions as the instruments of the break-through in mobile warfare. It is a broadly conceived method of modern defence, designed to resist not only enemy armoured forces, but the entire armed might of the German Army. The elements of this Soviet type of defence, as revealed in the battle of Smolensk, are the use of offensive weapons in the defensive, co-operation between arms branches, battle in depth with deeply organized defence zones, maximum use of fire-power, and operations with large masses of infantry. Certain elements of this Russian combat method were revealed even in the battle of the frontier—such as the use of offensive weapons in the defensive, and co-operation between arms branches. But the Russian defence in the battle of the frontier was no more than a delaying action to cover the retreat. There was no question of defence in depth, and the participating infantry forces were limited. But in the battle of Smolensk the Red Army held the terrain, and it now hurled strong infantry and artillery forces into the battle. Thus it was able to wage a modern defensive battle with all the necessary material means and tactical methods.

Between July 18 and August 5 these combat methods fended off the German offensive that had at first set itself such broad aims. After July 18 the German Army was no longer able to make any progress on the Central Front. For the first time the German Army was faced by utterly new combat conditions, and it proved unable to overcome the Soviet anti-Blitz. The German soldier particularly was taken aback by the battle in depth, in which he had trouble finding his way about. Now it was the German units that got into encirclements. A German military reporter wrote in those days:

> Where is the front? Forward, left rear, and right rear. Sometimes, too, it is everywhere. Then a section forms a single hedge-hog position.[4]

These difficulties facing the German troops were described at greater length by the German Colonel Soldan:

> Put yourself in the position of such a division which is able to push back the enemy immediately to the front, but which is then on its own. It seeks to push on, though it knows that in its rear the hole that has just been torn open will immediately close, cutting it off from adjoining units and supplies. It is certain to face a new enemy soon—an enemy who is as mobile as itself and who may appear on the right or left, in front or in the rear—or perhaps everywhere at once.[5]

This type of Russian strategy has a very important consequence. Battle in depth with the front stabilized forced the German High Command to engage strong infantry masses. Heretofore German mobile warfare had been a highly economical type of strategy for the aggressor, so far as man-power was concerned. But battle in depth absorbs large infantry masses. By August 3, according to German reports, large new infantry forces were being hurled into the battle-front at Smolensk. With this kind of enemy, with these Russian combat methods, casualties, consumption of man-power, grew by leaps and bounds. In the battle of the frontier Russian losses had been on the high side, but in this battle German losses by far exceeded those of the enemy, again for the first time in the Second World War. The battle of Smolensk witnessed a whole series of phenomena making their first appearance in the Second World War.

The decision to break off the German offensive at Smolensk was probably made around August 5. On August 3 *Dienst aus Deutschland* still declared that "the way to Moscow will be open shortly", and that the battle on the Central Front "would clear the road to the East". But the German Army *communiqué* of August 7 already spoke of the conclusion of the battle of Smolensk. After this date and until late September the initiative in operations on the Central Front remained in the hands of the Red Army. Activity on the part of the German air force declined rapidly. There were no more large-scale German armoured attacks. The magic of German Blitzkrieg on the Central Front was blown away.

The German version of the battle of Smolensk is even less plausible than the myth about the "victorious twin-battle of Bialystok-Minsk". The German Army *communiqué* of August 7 declares that the superbattle of Smolensk had been victoriously concluded by the German troops. This battle, too, is described as a successful battle of encirclement. The German Army claimed to have taken about 310,000 prisoners, 3205 tanks, and 3210 enemy guns. In the endless series of German military forgeries about the Russian campaign no claim is as ill founded as this one. There was in this battle no hint of a German encirclement, since the Russian troops behind the Stalin Line had free access to their rear at all times. Heretofore there had been no great success of German arms that was not translated into terms of territorial gain. Yet German mobile warfare was halted at the very outset of the battle of Smolensk, while it was precisely during this first phase of the war that German strategy

needed most to advance, break through and engage in mobile operations, on the Central Front. German descriptions of the first phase of the battle of Smolensk paint a picture that is diametrically opposed to the official version. They show the German Army on the defensive, the Red Army engaged in intensive counter-attacks. On August 1, General von Westhofen wrote:

> The Soviet High Command is undertaking very strong counter-attacks with new divisions and material swiftly brought up from the rear. The struggles growing out of these counter-attacks are exacting the utmost from our divisions. These are hard days through which our troops must pass.[6]

A day later a German military reporter wrote from the Smolensk front:

> These were no longer engagements which the German units had to fight in this area. It was a defensive battle, and in the judgment of many officers it may well bear comparison with the great defensive battles of the First World War. For more than eleven hours the Bolshevik batteries pounded the German lines. The bitterness of this fighting is marked by almost ceaseless attacks by Soviet infantry, in five, six, and even more waves.[7]

And in an article significantly enough entitled "That Was the Battle of Smolensk," another front-line reporter writes:

> At the very outset of the battle the Bolsheviks hurled every available division into the fray. The Russian attacks were carried out with light and heavy tanks—indeed, with tanks of the heaviest types—which were supported by artillery fire. The German infantry fought splendidly. It stood its ground in the midst of Soviet counter-attacks, barely entrenched, withstanding with iron fortitude the hail of fire from Bolshevik artillery and tanks.[8]

This is not the picture of a German encirclement operation, but of Soviet action of the utmost intensity.

The fact that at Smolensk the Germans were forced to proceed to the defensive did not mean that their offensive powers had become paralyzed. For simultaneously the successful German offensive in the Ukraine was being waged. Nor did it mean that the Germans had renounced offensive operations on the Central Front for any long time to come. Eight weeks later the greatest German offensive began on this front. But at that particular phase of the war—August–September 1941—the German forces on this crucial front were inadequate for the offensive. The shifting of the German attacks to the South was the result of a search for a sector where the Russians would offer less resistance. The successful Russian defence at Smolensk resulted in a German loss of pace for the entire campaign.

The great offensive against Moscow, which under the German plans was supposed to have been launched in July, as a direct continuation of the battle of the frontier, now had to wait until early October, when it was already too late, in view of the impending Russian winter and the heightened resistance of the Red Army. The loss of the battle of Smolensk pressed German strategy for time and nullified Hitler's entire war plan. In this sense the battle of Smolensk was one of the greatest events of the entire Second World War. The battle of Smolensk also showed that even in the first phase of the German-Russian War the strength of the German Army was inadequate to wage for any length of time simultaneous offensives on two great sectors of the front—the Southern and the Central fronts. The greatest and most successful German offensives in the Ukraine, especially the operations around Kiev, were for the most part carried out with forces withdrawn from the Central Front for that purpose—Guderian's tank army and the army of von Weichs. By September the all-important Central Front had been seriously weakened in favour of the Ukrainian offensive. It had been weakened to such an extent that a German military critic later actually painted a picture of a denuded Central Front in those days:

> Let us not overlook the tenacity of the thin German lines which had previously had to stand up for weeks at Smolensk. The pressure of Timoshenko's superior forces was there, all right. When the German High Command waged the battle of Kiev, it concentrated its strongest forces here in the Ukraine. But that meant that for a while the German troops east of Smolensk had to be left on their own. Often positions were held by means of the few machine guns and carbines of the gun crews.[9]

In general, the German High Command regarded the Central Front as crucial. But it did not act consistently. It allowed itself to be enticed away from the direction of Moscow by the promise of the Ukrainian campaign. In part, however, this postponement of the great offensive against Moscow was forced upon the German Army by the violence of the Soviet counter-blow at Smolensk.

During the second phase of the battle on the Smolensk front, from August 15 to October 1, it was the Russian initiative that was the decisive element. On only one sector of the front was there a successful German advance. In mid-August the right wing of the army group under von Bock occupied Gomel. (The German counter-attack in the region of Krichev-Roslavl, south of Smolensk, late in August, was of lesser importance.) But the blow against Gomel was linked to the impending German operations against Kiev. It was not directed at the Russian Central Front. It was to give von Bock's right flank a connection with the army group under von Rundstedt, and command of a position from which

Kiev could be enveloped from the North. On August 22, General Konev, who commanded the left wing of Timoshenko's army group, undertook a counter-offensive in the direction of Gomel, to the North and South of the city. Konev thereby covered Timoshenko's left flank; he was, however, unable to prevent the later shifting of German troops of Weichs' and Guderian's armies to the South, in the rear of Kiev. But Timoshenko's offensive operations in September were crowned with marked success. At Elnya early in September eight German divisions were smashed. Here a German wedge was encircled and hacked off. The decisive blow, as General Rakutin reports, was carried out in the night attack of September 4–5.[10] In twenty-six days of combat German losses here were to amount to 75,000 to 80,000 men. In mid-September strong Soviet attacks succeeded at Yartzevo, conducted by troops under General Rokosovsky, at Ryabtsevo, and in the region of Bryansk. The action by the Red Army at Bryansk struck weakened German tank forces—at that time the greater part of Guderian's tank divisions was operating farther to the South, in Kiev's rear. This stage of the fighting on the Central Front demonstrated two important facts—the superiority of Russian artillery, and the capacity of the Red Army to carry out strict and effective co-operation between all arms branches not only on the defensive, but also on the offensive.

In the battle of Smolensk the Russian Central Front was built up as the great breakwater against the German offensive, as the powerful bastion that held the entire Russian front line together, as the marshalling ground for the defence and for counter-offensives. The Russian Central Front was later also to prove itself in this capacity in the battle for Moscow and in the winter campaign. The importance of the battle of Smolensk consisted not only of the fact that it put the Russian anti-Blitz to the test and proved its effectiveness; in this battle there was also developed the Soviet strategy which seeks to attain exhaustion and destruction of the enemy by means of operations with limited goals. With the battle of Smolensk there began the series of battles in which the Red Army sought, to wear down and crush the German Army with all its power, whether in the defensive, as in the Moscow battle still to come, or in the offensive, as in the winter campaign. This strategy was bluntly formulated by General Sokolovsky, chief of Timoshenko's staff, in an interview with a New York *Times* correspondent:

> The Blitzkrieg, in its essentials, has been transformed into blitz destruction of German men and materials. This began at the battle for Smolensk. The Blitzkrieg has developed into a continuous grinding of the German war machine, with incalculable cost in matériel and men. The process closely resembles Verdun, but in terms of ten or one hundred times the destruction, because of the increased efficiency of new machines, such as tanks and airplanes.[11]

The battle of Smolensk was a victory for the Red Army—its first great victory and the first defeat of the German Army in the Second World War. It was not a total victory, but it was a success that foiled the enemy's purpose and imposed severe losses on him. The Red Army emerged from this battle enriched in combat experience and with its self-assurance increased. The Red Army was able to win the battle for Moscow because it had won the battle of Smolensk.

CHAPTER FOUR

THE UKRAINIAN CAMPAIGN:

Victory of Mobile Warfare

AFTER THE battle of the frontier, the Ukrainian campaign was the only large-scale campaign that was won by the German Army during the period between the summer of 1941 and the spring of 1942. It was a campaign of the victorious German mobile warfare.

The Ukrainian campaign lasted from early August to November 22, 1941, the date Rostov was taken—or almost four months in all. In point of time it was the longest and most protracted German offensive. Then, too, it afforded the German Army its deepest penetration into Soviet territory. The distance from Zhitomir, where the offensive started, to Rostov, where it ended, is 540 miles. This penetration exceeded by some 150 miles the German Army's farthest advance in the battle of the frontier. As a matter of fact, the distance from Przemysl, westernmost point on the old German-Soviet border in the South, to Rostov is 800 miles. It was in the South that German territorial gains were greatest and deepest.

The Ukrainian campaign revealed a rather important aspect of German strategy. The campaign was not dominated by purely military motives. Cold strategic calculation left no doubt in the mind of the German General Staff that the Central Front, the direction of Moscow, was the decisive military direction of the entire war. In keeping with this view, the army group under von Bock was the strongest German Army concentration on the Eastern Front, and the battle for Moscow constituted the most powerful German offensive, the greatest battle of the war. Yet, during the course of the war, growing importance with regard to Hitler's strategy attached to the Ukrainian campaign. It began to compete with the offensive in the Moscow direction. It led to splitting up the German war plan, which thus lost its uniformity of direction. For decades—indeed as early as the First World War—German strategy has been the victim of a "Ukrainian psychosis", and in this respect Hitler continued the strategic line of Ludendorff and Hoffmann, who occupied

the Ukraine in 1918. The Ukrainian campaign was now to complete the blow against the most important Soviet industrial centres. It was to result in economic gains to the Third Reich—agricultural territory, raw material sources, and, above all, oil—because it was to open the road to the Caucasus and the Near East, the whole basin of the Black Sea. For the Third Reich the direction of the Ukraine was the direction of imperialist expansion, corresponding to a strategy of vast spaces. In contrast to the Moscow direction, it was a strategy of geopolitics—not a strategy of military decision. Considerations of economy and foreign policy played a part in it. R. Kircher, the leading German journalist who serves as the mouthpiece of the Foreign Office, clearly outlined the aims of this strategy—at a moment at which the German Army had won its greatest successes in the Russian South:

> In the opinion of experts, this production base at the South-east of the Continent is capable of so great a potential development that it will materially raise the power of the continent with which it is included. Europe would then be rendered independent of the rest of the world. Since there would thenceforth be no more gasoline or oil problem either—with consequent dependence on Britain and America—this would augur an economic revolution of the greatest possible scope. Now that our troops stand on the shores of the Black Sea, on which the new European raw material regions border, we Germans are more interested than ever in seeing Britain's one-time hegemony in the Mediterranean permanently smashed. Henceforth we must see to it that only friends of the Axis powers dwell on the Black Sea, to which so many German-European interests are being shifted. The campaign in the East, as a matter of fact, has had distinctly noticeable reverberations all the way into the Pacific Ocean—at a moment when Japanese-Anglo-Saxon relations have reached a new point of high tension.[1]

Here all the dominant considerations of the Ukrainian campaign are set forth—control of the Black Sea, the Caucasus, the Middle East—a kind of German colonial policy of tremendous scope. And even in *this* context we have a hint of Japanese aggression—six weeks before Pearl Harbour! It is not for nothing that Herr Kircher is considered one of the best-informed German journalists. The fact that even then the Ukrainian campaign could be associated with the Japanese aggression yet to come shows that German strategy was already considering co-operation with Japan, by means of a German break-through to the Middle East. It was a vast, audacious, and very risky perspective.

While German strategy now permitted itself to be diverted from the original goal of a military decision on the Central Front, Soviet strategy in recent years had undergone a precisely opposite development. It shifted its centre of gravity from the Ukraine into the direction of Moscow. Until at least 1937, and probably even later, the centre of gravity

of Red Army disposition lay in the Western Ukraine. Here some 50 per cent. of the entire Red Army forces on the Soviet Union's western boundaries were stationed. From an operative viewpoint, the Ukraine direction was then regarded as the most important. There, too, the bulk of Soviet tank forces were massed. But in the course of the German–Soviet War it has become clear that the Red Army High Command no longer regards the Ukraine direction as the direction of decisive military importance. This change in the main direction is almost certainly associated with the general revision in the Soviet war plan which presumably took place in the years 1939-40, and which will be discussed later in this book. Following this shifting of the main direction, the Red Army's strategic reserves, too, were held for the Central Front. This change in the disposition of forces and the strategic purposes of the Red Army explains a great deal about the whole course of the German–Soviet War from July 1941 to the spring of 1942. Winning the Ukrainian campaign represented a great, though limited success for the German Army, whereas winning the battle for Moscow and the winter campaign represented a far greater military success for the Red Army.

On the other hand, the German victory in the Ukraine meant infinitely more than the initial German success in the battle of the frontier. It enabled the German Army to break through into the most important Soviet industrial regions. In a military sense, too, the Ukrainian campaign was a far greater achievement. In the battle of the frontier the German Army, so to speak, deployed in empty space, the surrender of which had been decided by the enemy in advance. But in the Ukrainian offensive the German Army ran down an old, strong base of operations which the Red Army had carefully built up over a decade.

The Ukrainian campaign of the Wehrmacht consisted of three great operations, executed in separate pushes, at intervals of two to three weeks. In August 1941 came the conquest of the Western Ukraine; in September the operations against Kiev and the Central Ukraine; and in October–November the operations in the Crimea, along the coast of the Sea of Azov and in the Eastern Ukraine.

The first phase, the occupation of the Western Ukraine, was carried out by the German Army in the classic style of mobile warfare. The methods were the turning of the enemy's flank and the break-through. The German offensive did not strike against Kiev, but south of the city, leaving Kiev on the left flank of the army group under von Rundstedt. At this stage of the Ukrainian campaign the German Army no longer had the great numerical superiority it had in the battle of the frontier against the most advanced units which the not yet mobilized Red Army had hurled against it. But it had the advantages of greater war experience, of special training for the offensive, and of greater capacity for manœuvring. It is virtually certain that von Rundsted's army group was assigned great air strength to carry out this operation.

The rallying-place for the start of the German offensive into the Western Ukraine lay between Zhitomir and Vinnitsa. The left wing of the attacking German troops brushed past Kiev and wheeled south-east. First the position between Belaya Tserkov and Uman was taken, and from there the German Army units drove south and east in two separate wedges. (At the same time Schobert's army drove south-east from the Bessarabian frontier towards the Black Sea coast.) In the South the objectives of the German offensive were the Soviet ports of Odessa and Nikolaev; in the East the three important industrial centres—the iron-ore deposits of Krivoi Rog, the hydroelectric power centre of Dnieprostroi and the large city of Dniepropetrovsk, centre of Soviet machine construction. The geographical objectives of the German drive were the coast of the Black Sea and the bend of the lower Dniepr. General von Kleist, the victor of Sedan, sought to repeat the German strategy of Dunkirk on the Russian Front—a break-through to the sea, with envelopment and encirclement of the enemy forces. As *Pravda* later wrote about him and his tactics:

> The German General von Kleist with his moto-mechanized columns stormed through the fields of France and Belgium, the Balkans and the Ukraine, laying waste to everything in their path. In the course of all these combats this well-known theoretician of tank warfare realized a uniform tactical plan. First the enemy's defence lines were smashed, then he was enveloped from the flank, pushed into the sea, a river, or some other natural obstacle, and finally encircled and destroyed. In the person of General von Kleist the Red Army encountered a strong and dangerous enemy. With his tanks he pushed on from Lvov to Nikolaev, from Kremenchug to Mariupol.[2]

But General von Kleist was not to reap victories on the Soviet Front of the same kind as in France and the Balkans. His break-through to the Black Sea coast at Nikolaev resulted in no Russian Dunkirk. It was an encirclement, but it was no battle of annihilation. Odessa became a large-scale Tobruk, an armed camp where the troops encircled in the South-western Ukraine took up defence positions. This was the first great siege in the German-Soviet War. The Russian defence of Odessa lasted for two months and had for its purpose the tying-down of enemy forces, weakening them by ceaseless combat, and then rescuing the large garrison, consisting of field troops who had retreated, by means of a well-prepared evacuation operation that preserved them for further combat. The break-through of von Kleist's moto-mechanized divisions to the East, to Krivoi Rog, was one of the best-executed and most successful German tank raids in the Russian war. In a single week these divisions covered a distance of 150 miles. But this was no encirclement. A broad, deep wedge was pushed into the Russian Front. In this offensive the

German troops utilized aviation on a large scale as a weapon of pursuit.

In this campaign the Red Army fought a tenacious, delaying, defensive battle. On the retreat towards the lower Dniepr it prevented German encirclement attempts. For the first time Soviet cavalry units were here used as mobile troops in rearguard fighting, to cover the withdrawal of the main forces. The extraordinary intensity of the Russian defence in the operations in the Western Ukraine was acknowledged even by the Germans. In the *Völkischer Beobachter* the war correspondent Karl Vollenhardt wrote:

> The Red Army fought against our embrace with unparalleled doggedness. Of course we have long since come to know the stolid tenacity with which the enemy fights. It has already become proverbial. The Bolshevik soldier is the most stubborn opponent our own men, tested in so many campaigns, have ever encountered. A high German officer has told me that in all his long war experience he has never witnessed such desperate and persistent break-through attempts as now in the great battle of the Ukraine.[3]

In its defensive battle in the Ukraine the Red Army High Command probably pursued two goals—to hold the Dniepr line, and to build up behind the Dniepr a new front capable of holding Kharkov and the Donets Basin. After the German break-through into the Western Ukraine, the Red Army still succeeded in holding the Dniepr line for a month and Kharkov for two and a half months.

Then, about mid-September, there came the German Army's Kiev operation, perhaps the greatest German encirclement operation, and probably the most brilliant action to be credited to German arms in the German-Soviet War. In this action great care was taken to provide strong numerical superiority on the part of the attacking German armies —especially of mobile troops. The Kiev operation was an example of close co-operation and common action by two German army groups on two fronts. The entire right wing of von Bock's army group as well as the troops of von Rundstedt's army group participated in it. Guderian's tank army and the army under von Weichs were actually ordered off from the Central Front to the Ukraine. Troops of von Bock's army group forced the Desna River and occupied Chernigov, 70 miles north-east of Kiev, breaking through, by way of Nezhin, to Romny, 120 miles east of Kiev. At the same time von Rundstedt's troops forced the Dniepr, taking Kremenchug, 170 miles south-east of Kiev, on September 9. Von Kleist's tank units effected a junction with Guderian's troops on September 14 at Lokhvitsa. Thus the Red Army's Kiev position was deeply flanked on both sides, the North as well as the South. On September 19 the frontal assault on Kiev began from the East and a flank attack from the North. This assault was carried out with a full assortment of German offensive

arms—dive bombers, heavy and light mobile artillery, tanks, assault pioneers, flame-throwers, and specially trained assault infantry.

Unquestionably the operations eastwards from Kiev were a great German success, but German dispatches fantastically exaggerated its importance. Actually this battle was not decisive for the whole course of the German–Soviet War—nor even for the course of the war in the South. The German Army *communiqué* described the success at Kiev as the greatest victory in military history, and the otherwise serious military writer, General von Westhofen, called it the greatest victory of all times. The German dispatches claimed 665,000 Russian prisoners. In the *Völkischer Beobachter* Captain Weiss wrote that "Budyenny is rallying a tremendous new army in the Kiev region", allegedly "for a new attack on the German armies". This version was launched in order to make the tremendously inflated number of prisoners seem plausible. Actually the entire Russian army of the South, from the outset of the German offensive and until the counter-blow at Rostov, was pursuing a strictly defensive strategy. After the bulk of Budyenny's army group had retired behind the Dniepr, the rôle of the Kiev position could at best have been but very modest—to tie down the left wing of von Rundstedt's armies. By far the greater part of Budyenny's armies now stood in the Eastern and Southern Ukraine. An article published in those days by the military expert of the *Frankfurter Zeitung* contains interesting details. In the first place it states that the German tank troops which had effected a junction behind Kiev, coming from the North and South, had at first created but a thin screen. In the second place, the Russians had sent neither relief troops nor matériel transports into the region of the Kiev pocket.[4] That meant that the Soviet High Command never dreamt of holding Kiev and the region of Kiev under any and all circumstances. The main task of Budyenny's armies in September was not the defence of Kiev but, as has been said before, the defence of the Eastern Ukraine, of the Donets Basin and of Kharkov. According to the Russian version there were all in all fifteen divisions in the whole Kiev sector of the Ukrainian front. This figure seems quite credible, since it cannot be assumed that more than one-fourth of Budyenny's army group could have been left in the Kiev Front sector. According to the Russian version, ten of these fifteen divisions were at once withdrawn when the danger of encirclement became clear, while three additional divisions broke out of the encirclement.

October brought the German Army the occupation of a whole series of important centres in the Russian South. On October 8 the German Army succeeded in breaking through to the coast of the Sea of Azov in the region of Berdyansk—the last German operation in the formal style of the Dunkirk strategy, but lacking the results of the real Dunkirk. On October 16, after two months under siege, the Red Army evacuated Odessa. On October 20 German troops occupied Stalino, the centre of the Donets Basin. On October 23 they took Taganrog, on the road to

Rostov. On October 24 came the fall of Kharkov, third largest industrial city and second most important transport centre of the Soviet Union. On October 27 Kramatorskaya was occupied—the other important centre of the Donets Basin. On October 30 the isthmus of Perekop, across which the Crimea was being defended, was stormed, and thus began the occupation of the Crimean peninsula. These were great successes, and above all they were the heaviest blows struck against Soviet industrial centres since the beginning of the war. But in a military sense the picture began to change. This third phase of the German campaign in the Russian South was no longer conducted by the method of mobile warfare, as had been the operations in the Western Ukraine and around Kiev. The German offensives were now for the most part frontal assaults at a slower pace. After achieving its greatest successes, the German war of movement was beginning to exhaust itself. That became even plainer in November. Russian resistance was already stiffening everywhere and German mobile warfare came to a halt everywhere. In the remaining portion of the Eastern Ukraine and in the Donets Basin the German offensive ceased. In November it was being continued only on the extreme right German flank, along the coast of the Sea of Azov and in the Crimea. But now the German Army needed a full month to cover the 40 miles from Taganrog to Rostov, and a week later it was beaten out of Rostov.

The Ukrainian campaign gave the German Army great and above all important territorial gains—but not the military decision. It inflicted upon the Red Army its greatest losses in man-power and matériel, but nevertheless it failed to break the fighting strength of the Red Army.

The Ukrainian campaign represented the severest test for Soviet strategy. This time it was one-sidedly defensive. Mobile warfare can be halted by adequate defence, as was the case in the battle of Smolensk and the battle for Moscow. If the means on a certain front are inadequate, another way is to allow the enemy's war of movement to develop in space, to offer only a delaying resistance, to scatter it, exhaust it, and fritter it away. This means playing space against mobile warfare, and that was the Soviet strategy in the Ukrainian campaign. The prerequisite for such a strategy was the assumption that German offensive power, while great, was not unlimited, and this assumption proved to be justified. The performance of the German Army in the Ukrainian campaign was tremendous. It forced the Dniepr, Europe's third largest river, in the face of Russian resistance. It took the fortified position of Perekop, perhaps the strongest natural defence position in Europe. But even in the South it proved unable to take all the objectives to which it aspired. It was unable to take Sevastopol, to hold Rostov, and to seize the all-important coal regions of the Eastern Donets Basin. Defensive Soviet strategy in the South pursued two purposes—to move into a definitive defence position in the South-east which could be held; and

by means of ceaseless, tenacious, holding resistance to weaken and exhaust the enemy to such an extent that he could not advance beyond a certain line. Despite great sacrifices, these purposes were served.

In observing the Ukrainian campaign, one may in general establish the following rules that seem to have guided the Red Army High Command:

1. The Southern Front was recognized as important, but was not regarded as the decisive front.
2. So long as the enemy had the advantage of greater striking power, his challenge to a great battle was not to be accepted under the conditions he prescribed.
3. Throughout the series of engagements the Red Army was above all to avoid encirclement by the enemy, and thus refuse to cling to the terrain.
4. After the retreat a firm front was to be re-established.

It may well be asked why the Red Army failed to organize a battle in depth in the South too, since it has been proved that the Red Army has mastered this method of halting mobile warfare by the enemy, and as a rule the German Army seems incapable of overcoming this defence. There was indeed no battle of Smolensk in the Ukraine. The Red Army lacked the necessary reserves for a battle in depth in the Ukraine, and a battle of this type requires a high degree of saturation deep into the front with combat forces and matériel. The necessary strategic reserves were being held for the crucial Central Front. Thus the rich Ukrainian territory became the heavy price with which the Red Army paid for the initial operative superiority of the German Army.

Despite its territorial gains, the German Army by its victory in the Ukraine was not even able to bring about a military decision in the South. The Germans—wholly without justification—had compared the battle of the frontier to the victorious battle of Flanders; now they put the Ukrainian campaign, too, on a level with the battle of Flanders. Captain Weiss, who is familiar with Hitler's war concept from personal contact, had this to say about the Ukrainian campaign in his series of articles about the course of the war in the East:

> Just as Weygand a year ago failed to crush the corridor to Amiens and relieve the encircled armies of Flanders, Timoshenko was unable to seal the gap in the Russian front that had been created between Gomel and the bottled up army of Budyenny. As in France, the genius of the Führer again succeeded, only on a vastly greater scale, in splitting up the scene of battle, in accordance with his needs, into individual segments, thus inexorably tearing the whole enemy front apart. The Führer characterized the significant results of the battles and en-

gagements so far by the pithy remark that the Bolshevik enemy is now already "crushed and unable ever to rise again" [speech of October 2, 1941]. With this remark the Führer allowed us to see that all the fighting on the Eastern Front since June 22 sprang from one all-embracing plan. Only today, in retrospect, can we recognize that the months of struggle on the tremendous theatre of war between the Baltic and the Black Sea actually constitute a single gigantic battle.[5]

These assertions are utterly false, and they allow us to probe a weak aspect of German strategy, even in the victorious Ukrainian operations. The battle of Flanders, which actually decided a war, had two results. An entire strong wing of the enemy front was hacked off and destroyed—the northern armies of the Allies; and this battle, though waged along the front of the northern wing, was immediately linked to the ensuing final decision on the Central Front in the West, along the Somme, so that von Bock's army group, which had fought the battle of Flanders in the North, also later occupied Paris. All this was lacking in the Ukrainian campaign. Not only was the enemy not crushed, but immediately upon the conclusion of the campaign he showed the capacity for a powerful counter-offensive, launched in the direction of Rostov even before the beginning of the Russian counter-offensive in the Moscow direction. And the Ukrainian campaign was in no way associated with the really decisive battle which was being waged at the time—October and November—before Moscow. On the contrary, the German forces in the Ukraine were being drawn more and more to the periphery, away from the decisive Central Front. The Ukrainian campaign showed the strong centrifugal force in the actions of the German Army, its over-extension and dispersion of forces. While von Bock's army group was being bled white before Moscow, the fighting in the Crimea and around Rostov more and more tied down von Rundstedt's army group hundreds of miles away from the scene of the real decision. More than that, at this very time the Germans were dreaming of an immediately impending campaign towards the Caucasus and the lower Volga. On November 6, 1941, the *Frankfurter Zeitung* wrote:

> The German Air Force has found the way to the coast of the Caucasus. By its bombardments of the ports situated there it has already shown in which direction the consequences of the conquest of the Crimean peninsula will extend. Only a narrow strait separates the German troops in the Crimea from the western foothills of the Caucasus.

And even in those days a spokesman for the German Army announced the fight for the oil of the Caucasus to the Press. There can be no question of any uniform planning of German strategy as a whole. The Ger-

man war plan was split up between the strategy of military decision and the geopolitical strategy of vast space, between the Southern and the Central fronts. One important German military writer and war historian warned against such discordant strategy. As early as September 7, 1941, General Kabisch wrote:

> There is only one thing that might imperil our success—if the victor were to break his annihilation operations, drunk with the smell of territorial conquest.[6]

The Ukrainian campaign was precisely this kind of intoxication with territorial conquest.

CHAPTER FIVE

THE STRUGGLE FOR LENINGRAD:

The Great Siege

THE GERMAN war plan in Russia includes the strategy of large-scale flank operations. After the failure of the German offensive on the Central Front at Smolensk, the centre of gravity of the German attack lay in operations on the flanks, in the South and the North. The offensive against Leningrad was carried out parallel with the Ukrainian operation. The climax of both operations fell in August and September 1941.

The northern German offensive pursued several aims:

Its primary objective was Leningrad. The old Russian capital was doubly important to the German Army—as the second largest industrial city in Russia, and the strongest strategic position of the Soviets in the entire North. Leningrad is both a naval and a land base, and thus the strongest barrier facing any large-scale German offensive in the North.

The other, even more broadly conceived aim of this German flank operation was control of the Russian North. This was an element in the German stategy of vast spaces, a counterpart to the similar strategy against the Russian South. There was to be a single German-Finnish front in the North, at first, say, in the region between Murmansk and the Valdai Hills, then to be pushed far to the East. The Finnish front against the Soviet Union held out several promises to German strategy. It outflanked the Soviet Union in the North, giving support to the extreme northern German flank in Norway. The Finnish front is threatening the vital Russian Murmansk Railway and might envelop and imperil Leningrad from the North. In the event a single German-Finnish front was created, the German Army would seek to cut off the Soviet Union

from all its northern ports—that is, from Leningrad, Murmansk, and Archangel. This was the grandiose concept of the Baltic–Arctic offensive.

The main strategic aim was a gigantic envelopment of the entire Russian front, a pincers movement from the North and South. The famous Archangel–Astrakhan line was no dream, but an actual goal of German strategy. The German offensive in the North, together with the German offensive in the South, was to effect a mighty envelopment of the Russian Central Front.

The German offensive in the North, finally, had still another special aspect—a naval aspect. Its immediate purpose was to attain absolute German naval control in the Baltic and the Gulf of Finland. To achieve this it was necessary to take Leningrad and Kronstadt, together with all the other Soviet naval bases, and to capture or totally destroy the Soviet Baltic Fleet. Everywhere—in the Baltic, in the Black Sea, and in Arctic waters—Russian naval forces had turned out to be extremely active and effective. As long as the Russian Baltic Fleet had external bases and thus freedom of action, it virtually barred the German sea route to the Baltic provinces. According to Russian statements, forty-five German troop and matériel transports were sunk by units of the Russian Baltic Fleet through July 1941, especially by submarines. But beyond that, the Red Navy even resorted to cutting off German sea communications with Scandinavia. It is noteworthy that Hitler Germany did not dare proceed with its naval forces against the Russian Baltic Fleet. Evidently such an operation was held to be too risky. The German plan was to remove the Russian naval threat in land warfare by conquering the entire Soviet Baltic coast, thus securing absolute control of the Baltic.

In its first assault the German Army attempted to overrun the Russian front in the North by means of a Blitz operation, an offensive on Luga and Novgorod. This attack was parried. On August 10 there began the second phase of the German offensive, conducted with relatively strong forces—five armoured divisions, thirteen infantry divisions, and three divisions of motorized infantry. The struggle was extremely bitter. The battle for the approaches to Leningrad lasted a full month. The aims of the Russian defence were to prepare for the defence of Leningrad, to set up a stable front east of Leningrad, and to exhaust the enemy as much as possible with a delaying action. The Russian Lieutenant-General Vakutin writes about the Russian combat methods in this battle:

> Our troops have been ordered to utilize the terrain skillfully, to manœuvre their fire effectively, to exhaust the enemy, to beat him on every defence line, to destroy his vital force and mechanized equipment.[1]

The German *communiqué* of October 21, 1941, which describes the course of operations on the Northern Front in August and September, speaks of the "constant heavy threat to the eastern flank" of the army

group under von Leeb, and of the "chief danger from counter-attacks south of Lake Ilmen". This shows the violence of the Russian counter-pressure even during the German advance.

In four weeks of fighting, German troops had cut off Luga. They first moved on Leningrad from the South and South-west. Then, some 35 miles from the city, they took a sudden turn to the East, locking off the region of Leningrad on September 8 at Schluesselburg. Thus began the siege of Leningrad.

As in almost all the great German operations in Russia, the first phase of the action succeeded, while the second failed. True, in the German offensive in the North the German Army succeeded in investing Leningrad, in occupying the Russian Baltic naval bases with the exception of Kronstadt, and in blockading the Russian Baltic Fleet in Kronstadt. But all the other and much broader aims of the German offensive failed of accomplishment.

It was the greatest siege battle in military history. Leningrad became the first position on the Russian front which the Germans failed to take. Even the powerful Russian front at Smolensk, which stood fast from July to September, was later overrun in the German offensive on Moscow (though the Red Army still later restored it approximately on the old line). But the Leningrad Front did not give way, even at a time when the German Army everywhere else was advancing and the entire Russian front was in a fluid state. At Smolensk and later at Moscow the German Army failed in field battle against the Russian defence zones in depth. At Leningrad the German Army also failed against Russian fortified zones in siege operations. The Germans have great experience in laying siege and have brought this art to a high state of perfection. Their old method is massed fire by artillery of the heaviest calibre. That was the way in which Antwerp was taken in the First World War. Their new method, already tested in the Second World War, consists of a combination of air attacks by dive bombers carrying bombs up to two tons in weight, with attacks by assault pioneers and specially trained assault infantry, and the use of anti-aircraft artillery against the fortifications. Until the siege of Leningrad not a single fortified enemy position in all Europe had stood up before these German assault methods. It was in this manner that the Belgian fortifications in the West were taken, the Maginot Line along the Rhine pierced, the Stalin Line swiftly overrun. Against Leningrad both methods of laying siege were applied, supplemented still further by frontal infantry attacks, in the manner of the German attack procedure against Verdun. In addition there were massive German air raids, directed not only against the Leningrad fortifications but also aimed at complete air mastery of the entire region. The intensity of these air raids during the first phase of the siege can well bear comparison with the most violent German air raids on Britain in the winter of 1940–41.

Leningrad stood firm because its defences possessed powerful weapons

and were well organized. German co-operation between arms branches in the attack and siege were opposed by Soviet co-operation between every imaginable defensive factor. There was first of all the naval fortress of Kronstadt. Next there was the Soviet Baltic Fleet, bottled up in Kronstadt. It was reorganized for the purpose of defending Leningrad. The greater part of the personnel, especially the naval reserve, was gathered into naval infantry units, with the ships themselves serving as floating batteries. Up to November 1 alone the Baltic Fleet had carried out 196 firing actions against the enemy. Its artillery tactics were adapted from naval warfare to co-operation with land troops and to action against objectives on land, with an appropriate system of observation and fire correction. Added to this was above all a system of land fortifications in which nothing had been overlooked. There were pill-boxes, tank ditches, wire entanglements, and large minefields. Nowhere along the front were land-mines as instruments of the defence so extensively utilized as in the Leningrad defence zone. In a single outer sector of the Leningrad zone alone the Germans claimed to have discovered 10,000 land-mines, after they had occupied it.

The story of the siege of Leningrad is of military importance because it turned into a test of the war techniques of the two belligerents. The effectiveness of these techniques could be observed and calculated because they were applied over a narrow, fixed sector of the front. The siege was above all a duel between two air forces and artilleries. The German Army failed to show superiority in either arm. Nowhere else could Göring's Luftwaffe have had such a chance as in the siege of Leningrad, where it could operate against a concentrated objective at extremely short distance. At the outset of the siege the German Air Force was extremely active. On several occasions several hundred German planes were in action during a single day. According to one Russian report of September 29, the Richthofen Corps of the German Air Force made twenty-two flights a day, with up to eighty planes in the air at one time. German aviation was put to all-around use in the siege. It not only attacked vital objectives, but intervened in the land fighting, supporting infantry attacks. Yet it failed to achieve air mastery over Leningrad. It was neutralized by the Russian anti-aircraft artillery and pursuit aviation. In the air-fighting over Leningrad the Soviet Air Force showed itself to be at least the technical and tactical equal of the German Air Force. The artillery duel had a similar result. In general, the German Army did not use a great deal of artillery of the heaviest calibres on the Russian front. But in the siege of Leningrad such artillery was considerably drawn on, relatively more so than on any other sector of the front. Against Leningrad the best and most modern types of German heavy and long-range artillery saw action, including railway artillery. Yet the total artillery fire-power of the Leningrad fortified zone was rather stronger than that of the besiegers.

The German assault actions proper against Leningrad did not last very long. The two greatest attempts were made at the outset, on September 9–11 and 22–23. As early as September 11 a German military dispatch made the painful discovery that Leningrad was "still shooting from all barrels". The attack of September 22–23, 1941, was conducted by two German infantry divisions. It was beaten back by Russian artillery fire. With the beginning of October the siege of Leningrad, which was to turn into a ceaseless struggle of many months, began to assume a peculiar character. It became a struggle between two fortified zones, two strongly built-up frontal sectors. For the German Army, too, had meanwhile built up a fortified belt of its own around Leningrad. The defenders of Leningrad proceeded to counter-attack continually, engaging strong enemy forces in combat. The besieger was often on the defensive. A permanent battle of Leningrad came into being. Under the conditions of this curious siege struggle, the aim of the Red Army was, as everywhere, to wear down the enemy forces by attrition. Of all the sectors of the Russian front, the Leningrad sector began to bear the greatest tactical resemblance to Verdun. As early as September 29, 1941, the Leningrad correspondent of *Pravda* wrote:

> We have already beaten back the enemy's attacks. Now we are bleeding him white.

The Leningrad front actually became a "mill of death", in which, as at Verdun, the forces of the attacker were systematically ground down. The Russian General Semashko calculated that total German losses before Leningrad had reached 216,000 by November 15. This figure seems too high for two months of unsuccessful siege. But there can be no doubt that German losses were very high in nine months of siege.

The siege of Leningrad tied down the German forces and prevented broad operations on the Northern Front. Von Leeb's troops succeeded in but one local offensive action east of Leningrad—the occupation of Tikhvin on November 10. The German Army did not succeed in making further break-through to the North-east from Lake Ladoga and effecting a junction with the Finns, which would have created a joint German-Finnish front. And a month later it lost Tikhvin too and was driven far to the West.

To achieve both things—maintain the siege of Leningrad *and* attack over the Northern Front—to do that the German Army was not able. On the Northern Front there never was a large-scale German offensive after the fashion of the Ukrainian operation. Though such an operation was planned, the forces of the German Army were nowhere nearly equal to a great enveloping operation in the North. On the contrary, by October 1941 it had already become unavoidable to withdraw part of the forces from the Northern Front. The German Army *communiqué* of

October 21, 1941, said of von Leeb's army group on the Northern Front:

> The essential sections of this army group and of the air fleet of Colonel-General Keller for some time have already been free and have participated in operations in other sectors.

Chief among the units withdrawn from the Northern Front were the tank army of Hoepner, part of the aviation, and some of the infantry divisions which were needed for the offensive on the Central Front, against Moscow. They were taken from the Northern Front not because they had already fulfilled their task there, but despite the fact that they had *not* yet done so. After the failure of the attack on Leningrad the German High Command dropped the idea of a large-scale offensive in the North. Just as the German Army was unable to attack simultaneously on the Central and Southern fronts over any length of time, it was also unable to be on the offensive at once in the North and on the Central Front. As General Semashko wrote:

> Any broad operation at Leningrad has now come into conflict with the German strategic plan as a whole.[2]

On the other hand, the successful defence of Leningrad improved the whole situation on the Russian front. For now the Russian front had a firm pillar and a protecting flank in the North. To a certain extent the Russian Central Front had been relieved from the North. The great German strategy of envelopment was shattered on the Russian resistance at Leningrad.

CHAPTER SIX

THE BATTLE FOR MOSCOW:

The Russian Marne

THE BATTLE for Moscow was, by the summer of 1942, the greatest battle of the Second World War. It determined the whole course of the German-Soviet War in the period between October 1941 and May 1942. For the first time the really decisive forces of the two armies and their reserves met in combat. The fight for Moscow lasted for two and a half months, and in it the German Army exhibited very great tenacity on the offensive. In the battle of Smolensk the German offensive gave up rather quickly, when the enemy's resistance became evident, and the direction of the main German attack was shifted from the Central Front to the flanks. In the Ukrainian campaign the German Army fought an enemy

who refused to accept large-scale battle, dodging and yielding terrain instead. But in the battle of Moscow the Red Army from the very outset showed high powers of resistance. In this battle both armies rendered their utmost in fighting strength, skill, and reserves, and thus the German offensive was intensified to the ultimate degree.

The German High Command conceived, planned, and executed the battle for Moscow as the battle of decision. Its goal was to force the military issue. This goal was unmistakably made clear in Hitler's proclamation to his troops on October 2, 1941, at the outset of the battle:

> Within a few weeks his [the enemy's] three most important industrial regions will be completely in our hands.

And:

> Today begins the last great, decisive battle of this year. It will hit the enemy destructively.

That meant that the goals of the German offensive were the occupation of Moscow, Leningrad, and the entire Donets Basin, and the final crushing of the Red Army—and all this before the onset of winter, as the proclamation said. Hitler's aim in this battle was no more nor less than to end the war on the European Continent.

German preparations for this battle were thorough and of long standing. Undoubtedly they had been begun immediately after the first German assault behind Smolensk had been beaten back.

> All preparations, so far as human beings can foresee, have been made. Step by step this has been prepared systematically to manœuvre the opponent into such a position that we can now strike a deadly blow.

Thus stated Hitler's proclamation. The German offensive was indeed excellently organized. At the beginning of the battle the German Army had on its side the advantages of complete concentration for the attack, a big lead in offensive arms, the choice of direction for the decisive blows, and the element of surprise. Four-fifths of the German tank forces on the Russian Front, two-thirds of the aviation, and more than half of the infantry participated in the first offensive against the Russian Central Front.

The German plan was grandiose. On a front of over 400 miles, in a circle from north of Kalinin to south of Orel, a battle of annihilation was to be waged against the bulk of the Red Army forces with all the means, and in the tempo, of mobile warfare. At two predetermined points, Bryansk and Vyazma, entire Russian armies were to be encircled and destroyed; subsequently the entire Russian Front between Kalinin and Orel was to be enveloped and crushed in short order, while in the centre a breakthrough was to open the way to Moscow. The entire Central Front was

to become a single battlefield. Never before had a battle of such scope, waged by armies running into the millions, been planned.

The battle for Moscow consisted of four stages. At first it was waged as a violent German offensive, after the fashion of mobile warfare. This was from October 1 to about October 20. There followed a phase in which there was a temporary balance of power, with the initiative remaining in German hands. On November 16 there began a new German offensive, now conducted after a new plan. The Moscow Front of the Red Army was to be more closely enveloped. After December 6 began the Russian counter-offensive.

The battle began with great initial German successes. The Russian Central Front, built up during the two months of the battle of Smolensk which had been successful for the Red Army, was within a single week rolled up all along the line. It seemed to have fallen into a continued retreat towards the East. From the southern wing of von Bock's army group, Guderian's tank army made the greatest break-through and tank raid of the German-Soviet War. As early as September 16, 1941, when Guderian was still taking part in the Kiev operation and stood in Romny in the Northern Ukraine, he received from von Bock's staff a voluminous order entitled "Directives for the New Operation". According to this document Guderian's tank army was to move into standing positions at Novgorod Severeski, north-east of Chernigov, whence it was to strike against the southern wing of Timoshenko's army group. Part of Guderian's tank forces broke through to Orel in a few days—a distance of 240 miles—thus flanking Moscow from the South, while another part of his army occupied Bryansk from the East, from the rear of the Russian Front. The offensive began with German tank break-throughs all along Timoshenko's front. Powerful action by the German Air Force supported the German troops. The tank break-throughs were followed by German infantry assaults. At Bryansk, Vyazma, and Yartzevo there were the beginning of encirclements of strong Russian troops—the armies of Generals Yeremenko, Boldin, and Rokosovsky. Between October 8 and 15 von Bock's armies stood on the road to Kaluga and Kalinin.

There can be no doubt today just what aims this German offensive pursued. On October 9 the German Press chief Otto Dietrich made a statement to representatives of the German and foreign Press, concerning the situation at the front. Otto Dietrich is Hitler's mouthpiece and most intimate confidant. His statement came on the heels of an interview with Hitler that lasted four and a half hours. Unquestionably he represented the situation at the front as Hitler pictured it:

> With the crushing of Timoshenko's army group the campaign in the East has been decided. The military decision is final and further developments will follow the wishes of the German High Command. These blows have finished the Soviet Union in a military sense. It no

longer has at its disposal units with any considerable freedom of action. The divisions which were hurled against the Germans, and which are now encircled, were in fact the last ones. The Führer, who conceived the plan for the crushing of Bolshevism, and who personally directed the campaign in all its phases, is not the man to allow the enemy time to recuperate.

This made it abundantly clear that Hitler's goal in this battle was the final smashing of the Red Army, the military liquidation of the Soviet Union—all before the onset of winter. True, his judgment of the situation did not correspond to the actual situation at the front. But at least the aims of the German High Command in the battle for Moscow were placed on record.

It was not merely a case of lies and propaganda. The responsibility was far too great, and Hitler does not lean to such propaganda tricks, which can too readily be refuted by military events. Unquestionably Hitler and perhaps his personal military staff were convinced that a decision of this nature—total victory—had either been attained or was immediately impending. Hitler's October 2 proclamation to his troops was made public only a week later, by Dietrich at the above-mentioned press conference. Thus the promises it held out were considered to have been fulfilled—or at least to be certain of fulfilment. On October 10, 1941, General von Westhofen wrote:

> The incredible and almost inconceivable has happened. The enemy has been beaten even before the onset of winter.[1]

On October 18 the German Army *communiqué* reported that the twin-battle of Bryansk and Vyazma had been victoriously concluded, and that Marshal Timoshenko's army group, consisting of eight armies, had been destroyed. No fewer than 648,196 prisoners were supposed to have been taken by the German Army in the process. As further events showed, this report was cut out of whole cloth. True, the Soviet group of armies of the centre consisted essentially of eight armies—and it was eight Soviet armies that proceeded to the counter-offensive early in December, defeating the army group under von Bock. Those Soviet armies were under the command of Generals Lelyushenko, Kuznetsov, Vlasov, Rokosovsky, Govorov, Boldin, Belov, and Golikov. Thus they could not have been destroyed. But the German High Command was unquestionably convinced that its superiority of forces was so great, and the German battle plan so irresistible, that victory was certain.

Between October 8 and 20 the German offensive placed a broad ring around Moscow. The German front was pushed from 120 to 150 miles east of the starting position of the offensive. The ring passed from south of Kalinin to north of Orel. The advanced front against Moscow passed 70 miles to the West of the capital. In addition to exerting pressure on the

two wings, the German Army also attempted a break-through at the centre, opposite Moscow, following the letter of the offensive plan. On October 15 the Red Army *communiqué* reported that the situation had deteriorated in the Mozhaisk sector. This was the first time such desperate language had appeared in any Russian *communiqué*. It was the high-water mark of danger.

In the two first weeks of the offensive the German Army carried out great mobile operations. By manœuvring it sought to push deep wedges into the now fluid Russian front, to separate units of the Red Army from each other by tank spearheads, and then to encircle them. But by October 20 the German advance had generally been halted. A fixed front line came into existence, and the German Army proceeded from manœuvring to fighting an offensive battle of matériel.

Soviet combat methods in the battle of Moscow bear a certain resemblance to the methods the Red Army had already shown at Smolensk. The method was that of a battle in depth, combined with co-operation between arms branches in the defensive and in counter-attacks. But German pressure in the battle for Moscow was incomparably stronger than in the battle for Smolensk, and thus Russian combat methods were more distinctly defensive in character and more highly differentiated.

Their primary task was to lead the imperilled units out of their encirclement. This was done by tenacious counter-attacks and by parries against the German enveloping tactics. When Yeremenko's army was enveloped from the North-east at Bryansk, it was relieved from the North, from the direction of Kaluga–Kozelsk, by Red Army units that kept open a corridor into the encircled area. The imperilled army on its part fended off the flank attacks of the enemy, who came from the East, and it managed to get free of the encirclement. By October 14 there was not one Russian army left in danger of encirclement, and a front before Moscow without a single gap had been re-established.

The other new element in the battle for Moscow was the Russian manœuvre with defence positions. With an extraordinary speed, probably never before attained in military history, new defence positions were erected at the spots that were exposed to the greatest danger. Special importance attaches to the creation of the defensive belt around Moscow, with its tank-ditches and obstacles of stone and steel, its pill-boxes and fortified trenches. Similar fortifications were erected in the region of Tula, which held a place of great importance in the Russian defence. It became the solid pillar of the Russian defence on the Central Front. All along the front there arose field fortifications, oriented according to the direction of the German attacks. The farther the German Army pushed eastwards, approaching Moscow, the stronger grew the Russian defence lines. This manœuvring with defence lines was an effective means for attaining stabilization of the Russian front.

As early as the first phase of the battle for Moscow began the con-

tinuous use of Russian reserves which had been held in readiness and were now sent into the field, beginning with October 8. As a matter of fact, the battle for Moscow turned into a battle between the strategic reserves of the two armies. It developed that the Russians had been well advised not to use up their strategic reserves in premature counter-offensives and not to scatter them in defensive actions on other fronts, so that they were available on the decisive front at the decisive hour. On October 23, 1941, *Pravda* wrote:

> Moscow remains the rallying centre for all our reserves. The battle of Moscow, far from being over, is only in its beginning.

Compared to the battle of Smolensk, the arms tactics of the Red Army had now changed in part. German preparations for the battle for Moscow had been far more thorough and the German concentration of arms was far greater. For the Red Army the battle of Moscow was a purely defensive battle from early October to early December. During this period Red Army co-operation between arms branches was aimed at the defence. At the very outset of the German offensive, Russian aviation, as the most mobile arm, had been hurled against the onrushing German tank units. Trained for a long time in fighting German tanks, it slowed up the tempo of the German tank break-throughs. From the second week of the battle, Soviet tanks began to emerge into action, especially in the tank battle north of Orel and in the region east of Vyazma. The rôle of Soviet artillery constantly grew in the course of the battle, as the Red Army moved into permanent positions.

But the most important achievement of Soviet tactics in the battle for Moscow was the successful fight against enemy tank superiority. Of all the great battles of the Soviet-German War, it was in the battle for Moscow that German tank superiority was greatest (the reasons for this will be discussed further on). Thus all actions by Russian arms were now primarily directed at fighting the German tanks. The battle for Moscow was the greatest anti-tank battle of the war. The most important and interesting element was the fight put up by Soviet infantry against the German tanks. It fought them with all the technical and tactical methods at its disposal—rapid erection of tank obstacles, fire concentration by the infantry accompanying artillery and anti-tank artillery, hand grenades, gasoline bottles, and portable mines—in large formations and in dispersed commands of specialized tank destroyers. In a certain sense the Soviet infantry in the battle for Moscow fought as specialized anti-tank troops. Infantry fighting against massed tanks was demonstrated for the first time on this scale. The Soviet defence in the battle for Moscow represents the classic example of the modern defence—the use of offensive arms in the defence, arms co-operation, the use of infantry masses, the battle in depth, and in addition manœuvring with defence position and the use of strategic reserves and combined tactics of anti-tank defence. These com-

bat methods succeeded in holding up the German assault by October 20 and achieving a relative stabilization of the Russian front lines for some weeks.

But this temporary stabilization of the front between October 22 and November 16 did not mean the onset of trench warfare or a stalemate. It was the result of an approximate balance of power, after the exhaustion of the first wave of the German offensive, with the pressure on both sides of the front approximately equal, though the initiative remained in the hands of the German Army. German *communiqués* emphasized that fighting had started "in the outer defence positions of the Soviet capital". During this period German pressure was greatest on the flanks, especially the southern flank. By October 29 the German troops in the southern sector of the Moscow Front had in three weeks covered the distance from Orel to Tula, and there began the violent struggle for Tula, which lasted more than a month. South-west of Tula, from the direction of the Kaluga sector, German pressure actually began to be felt at Serpukhov, 50 miles south of Moscow. But in the central and northern sectors the German advance made no headway. On October 27 Berlin uttered the first complaints about bad autumn weather preventing large-scale offensive operations. On that day the German spokesman declared that the German Army was waiting for better weather, and then "the whole German front will move forward, and we shall announce the news to the sound of trumpets". At the same time Moscow rightly expected a new German offensive. On November 4 *Pravda* wrote:

> The Germans are preparing a new attack and are bringing up new reserves. Consequently we are entering into a period of the most serious and most intense battles for Moscow.

This new German offensive began on November 16. In his speech of November Hitler declared that German operations would now be conducted "slowly but surely". The original German plan of attack had now been revised. From the great encirclement of the entire Russian Central Front, which had been planned for October, the German High Command now sought to proceed to a narrower encirclement of the Moscow region proper, over a diameter of some 140 miles. The German offensive was now to be a concentric attack, approaching Moscow more and more closely from the North and South, at the same time pushing the German flanks farther and farther to the East of the capital, encircling it deeply. Under this new plan Moscow was to be tied up in a constantly narrowing sack, the mouth of which was moving ceaselessly eastward.

> Despite snow and ice the defence ring about Moscow is being more and more tightly compressed by the irresistible attack of the German armies.[2]

Thus wrote Captain Weiss on November 21. This method of attacking

with strong forces in a narrow semicircle was to avoid the danger of dispersing the German offensive over vast spaces. It was to attain the greatest possible density of the attacking German troops, the greatest possible concentration of the attacking forces. This time there was not to be an all-out war of movement as in October, but a tenacious assault on the defence positions around Moscow, with manœuvring confined to the flanks, to the enveloping operations.

This new offensive was the German Army's final attempt to win the battle for Moscow. It too had been calculated to last but a short time. Thirty-three German infantry divisions participated, together with thirteen tank divisions and five divisions of motorized infantry. Never before had such strong tank forces been massed in so narrow a space. By November 24 the German Army had succeeded in taking Klin and Solnechnogorsk, north-east of Moscow, thus placing the German wing group, which but recently had stood near Kalinin 120 miles north-west of Moscow, a mere 35 miles from the capital in this direction. On the southern flank Tula was enveloped from the North-east by Guderian's tank army, which took Epifan, Skopin, Mikhailov, and Venev. The two jaws of the pincers squeezing Moscow were now separated by only 140 miles. The decisive German tank forces were gathered at the two flanks: the tank armies of Hoepner and Hoth on the northern flank—seven tank divisions in all—and Guderian's tank army of four tank divisions on the southern flank. The bulk of the German infantry divisions was in the centre, opposite Moscow, reinforced by the tank army of Reinhardt. On the northern stretch of front the German Army sought to cross the Volga-Moscow Canal and break through east of Dimitrov. On the southern flank its objectives were Ryazan, Kashira, and Kolomna, which would have deeply enveloped Moscow from the East. From November 25 to December 5, only 10 to 50 miles separated the German Army from these objectives.

The German offensive reached its climax between November 25 and December 5. The stretch between Klin and Venev became a single battlefield, where tank battles, defence of fortified positions, anti-tank struggles, and infantry battles raged side by side, with Russian counter-attacks following the German attacks. On November 29 German pressure north-east of Moscow was strongest. As late as December 1 *Pravda* reported that "the situation remains grave and tense". As late as December 2 strong German reserves were thrown into the battle—but this was for the last time. On the southern sector of the front the German Army at this time was already proceeding to the defensive. But south of the Moscow Front proper it succeeded in making one more breakthrough, occupying Yefremov, Livny, and Elets, far to the East of Orel, on December 5.

But here the turning-point came. The Russian defence had attained its purposes. On November 24 *Pravda* had written:

> Our tasks are to win time, to drag out the battle at Moscow, to exhaust and wear down the German divisions on the approaches to Moscow, and to destroy the greatest possible number of German tanks and planes. We must withstand the mad onrush of Hitler's hordes—we must stand fast!

By the time the German pressure had reached its greatest height, with German territorial gains before Moscow at their maximum and the artillery bombardment audible in the western suburbs of Moscow, the offensive power of von Bock's troops was already exhausted and near the breaking point. From the beginning of the battle for Moscow the Red Army High Command had been convinced, on the basis of cold-blooded calculation, that the moment must come during the battle when the strength of the Wehrmacht would give out. This moment actually came when the German offensive seemed to have reached its climax. By December 4 the Red Army had already won its defensive battle and the Russian defence had attained its purposes. Now came the hour for the Russian counter-offensive. The Red Army High Command had counted on that too and had made appropriate preparations. As early as November 27, when the German advance was still continuing, *Pravda* had written:

> One strong blow, and the enemy will not be able to hold up! He has already been gravely exhausted in the preceding fighting. He is tired. The moment has come when we can halt him, in order to smash him. The fighting at Moscow is of tremendous importance. Once we destroy the enemy before Moscow, we shall begin his destruction throughout the territory he has occupied.

On December 6 the Red Army's counter-offensive began. It had been thoroughly prepared. Even during the defensive period, the reserves for it had been held in readiness. The moment was skillfully chosen—just when German successes seemed outwardly at their climax, though the real offensive power of the German Army had already been exhausted, and just when cold weather began to make German tank operations more difficult. The Russian offensive started suddenly, over the entire Moscow front, and the surprise element was taken advantage of to the full. Strategically the Russian offensive was tailored to the German battle plan. The Russian counter-blow was launched most vigorously on the flanks, against the enveloping German wings, where the main German tank forces were concentrated. Colonel Boltin discussed these operations in *Izvestia*:

> The fate of the superbattle was decided not before Moscow, in the centre of the front, but on the flanks. To smash the jaws of the enemy pincers that sought to compress Moscow meant to win the battle as a

whole. We see that the Soviet offensive developed mainly in the form of flank operations.[3]

The Russian counter-offensive was carried out by seven armies and one cavalry corps. The crucial German tank forces in the northern sector of the front, between Klin and Istra, were beaten by the armies under Generals Kuznetsov and Rokosovsky, while Guderian's tank army suffered defeat at the hands of General Boldin's army and Belov's cavalry corps. The German front rolled westward. According to Russian reports, the German Army suffered the following loss by capture on the Moscow Front, not counting weapons destroyed: between November 10 and December 6, 1048 tanks and 370 guns; and between December 6 and 17, the first ten days of the Russian offensive, 705 tanks and 789 guns. With the recapture of Klin and Kalinin, the pursuit of the German troops on the Moscow Front, and the German retirement before Tula the battle for Moscow proper was concluded. Now began the winter campaign.

But the battle for Moscow proper was but the beginning of the defeat suffered by the strongest German Army group—that under von Bock. This was not only the strongest German army group. It was the army group that held the decisive front and that was familiar with the objectives of the battle of decision. It possessed the strongest concentration of tank forces so far given to any German front. From the viewpoint of war technics, perhaps the most important upshot of the battle for Moscow was that tank superiority failed to keep the German Army from defeat.

Looking at the actions of the German High Command in the battle for Moscow one is struck by the astonishing similarity to its failure in the battle of the Marne of September 1914. Just as in the case of the Marne battle, the Germans lost the decisive battle at the very gates of the enemy capital. Again as on the Marne, the German High Command demanded from its army tasks that could not be fulfilled, that far exceeded the German Army's strength. As on the Marne, the German offensive collapsed for lack of reserves five yards from the goal-line, as it were. As on the Marne, the German High Command proved incapable of parrying the enemy's counter-manœuvre.

The parallels between the younger Moltke and von Kluck in the battle of the Marne and Brauchitsch and von Bock in the battle for Moscow are amazing. Above all, in the battle for Moscow too the German High Command was taken by complete surprise by the enemy's counter-blow. The German High Command miscalculated the enemy's strength, his reserves, fighting strength, and combat methods in the most inexcusable manner. It had failed to perceive the Russians' preparations for a powerful counter-blow. For decades German officers, from the youngest cadet to the commander-in-chief, had studied the history of the battle of the Marne. There was no rule of strategy that was so binding for the Ger-

mans as the avoidance of another Marne. In the campaign in the West the most careful preventive measures had been taken to avoid such an eventuality. This was expressly emphasized in the German Army *communiqué* describing the course of the battle of Flanders:

> The German command had taken care that a protective ribbon of divisions quickly unrolled from the southern border of Luxemburg along the Maginot Line, up the Aisne and the Somme, thus insuring that there could be no repetition of the "Miracle of the Marne" of 1914.

To prevent a "Miracle of the Marne"—in the battle of Flanders that meant to foil any enemy counter-manœuvre. Yet the battle of the Marne was repeated—this time on the Eastern Front, before Moscow rather than before Paris.

The defeat was totally unexpected by the German masters of Blitzkrieg. The German version of a planned retreat, in which the German Army was supposed to be placed in the more feasible fashion of a war of position, is very wide of the mark. The German offensive was broken off with lightning-like rapidity, as was the transition to retreat; nor was there even an attempt at a counter-manœuvre. Until the very last hour the German High Command believed in the possibility of continuing the offensive and winning a decisive victory. The German Army *communiqué* of December 2 speaks of a deep penetration by German troops to additional points in the Moscow region. The offensive against Moscow was still being continued. The German *communiqué* of December 3 speaks of further territorial gains in the Moscow region, won by German infantry and tanks, supported by dive bombers—the classic picture of a great German offensive. On December 4 the German *communiqué* for the first time in weeks failed to mention the Moscow Front—an evil omen. But on December 3 the German press had declared that the Russian offensive at Rostov would not succeed as a diversion in easing the German pressure on Moscow. It was really believed, therefore, that the Russian offensive at Rostov was launched for the purpose of relieving Moscow. This proves that the Germans had no inkling where the main Russian counter-offensive was to start. On December 5 German attack operations east of Orel were reported, with the occupation of Malo-Arkhangelsk, Elets, Livny, Novosil, Mtsensk, and Chern, and German troops reaching the upper Don. The Germans appeared firmly determined to continue the offensive and even to expand their territory deep into the South-east. But on December 6 the German Army *communiqué* already reported:

> At several points on the Eastern Front the enemy was thrown back in local counter-attacks.

This was the first signal of the collapse of the greatest German military undertaking, and of the beginning of the powerful Russian counter-

offensive. On December 8 there appeared a now famous German *communiqué*:

> On wide areas of the Eastern Front there were only local operations, and methods of warfare in the East from now on will be conditioned by the arrival of the Russian winter.

This was an admission of the collapse of the German offensive and the retreat of the German Army on the entire Central Front. The change in attitude took place literally in forty-eight hours. The entire German war plan had been shattered within a few days, and the German High Command faced a totally new situation in extreme consternation.

But there is also a difference between the battle of the Marne and the battle for Moscow. In the battle for Moscow the German Army showed far greater offensive power than it had on the Marne. It made far greater efforts, and it also suffered much greater losses. It carried out a major battle that lasted ten times as long as the battle of the Marne. After six months of unbroken offensive, it retired from Moscow much more deeply shaken and with far greater losses than it had from Paris twenty-four years and three months earlier.

CHAPTER SEVEN

THE WINTER CAMPAIGN:

Failure of German Planning

THE WINTER campaign was the longest single phase of the German–Soviet War. For five full months, from early December until early May—when the winter campaign was already turning into a temporary spring stalemate—the German Army was on the defensive. This was a very unusual situation for the armed forces of the Third Reich. Throughout this period the strategic initiative was in the hands of the Red Army. From late February on, the front lines in the North and on the Central Front—with the exception of the German pocket at Rzhev–Vyazma—ran approximately where they had been in July and August 1941, roughly between Lake Ilmen and Bryansk. In the North and on the Central Front, the Soviet counter-offensive virtually cancelled the territorial gains of the German offensive of October–November 1941. The fact that in August 1942, after nine months of the most intensive war operations, the front was about at the same line as early in August 1941—that fact shows that during this period the German war of movement had come to grief. The winter campaign proved that the German–Soviet War developed along

entirely different lines from those that German strategy had sought to impose on it.

The causes that resulted in this reverse to the German Army in the winter campaign were these: in five and a half months of ceaseless and costly all-out offensive the German Army had become temporarily exhausted; the winter itself and the failure of German strategic planning wrought their effect; and the fighting strength of the Red Army was greatly increased.

In the winter campaign the Red Army moved to the offensive on all three fronts — the crucial Central Front and the Northern and Southern fronts.

Most important was the Russian offensive on the Central Front. It was a direct continuation of the battle for Moscow. The battle for Moscow may have shown remarkable similarities to the battle of the Marne, but the further course of the war on the Russian Central Front differs markedly from the fighting on the Western Front after the battle of the Marne in the autumn of 1914. The French Army, which won the battle of the Marne, was so exhausted that it broke off the offensive immediately. The battle of the Marne was followed by a stalemate lasting several months, and then by a transition to a war of position, which lasted for years. But the Red Army, after the victorious battle for Moscow, continued the offensive. The winter campaign on the German–Russian front was marked by an active Russian strategy.

The Russians waged one great battle on the Central Front from their occupation of Kalinin on December 16 to the capture of Mozhaisk on January 19. The struggle was bitter, protracted, and marked by the greatest fury. Like the battle for Kaluga, the battle for Kalinin lasted ten days. With the Russian occupation of Kalinin, Volokolamsk, Maloyaroslavets, and Mozhaisk, the Moscow Front proper was liquidated and the front lines were pushed forward. These battles were waged by the Red Army in varying tactical forms. Maloyaroslavets was taken by concentric envelopment from the North and South. Mozhaisk fell chiefly under a strong Russian artillery attack. Kaluga was taken by the Red Army in a bold surprise manœuvre.

> In the region of Tula a mobile shock force had been concentrated, consisting of infantry, cavalry, artillery, and tanks. The route of march had been deliberately chosen to run through a region extraordinarily poor in roads. There was not a single highway. On both flanks of the corridor through which the group moved in strict concealment there was violent fighting. In four days our units covered 70 miles of trackless winter country, reaching the banks of the Oka River.[1]

Thus General I. Boldin, who commanded this army, describes the operation. With the occupation of Kaluga the German–Russian Central Front was straightened out to a considerable degree. The German

wedges were liquidated, and instead Russian wedges now began to be pushed into the German lines. From mid-January on, this stage of the war on the Central Front no longer proceeded in major battles but in many individual Russian operations, which became characteristic of the winter campaign in general.

On the Southern Front the winter campaign included three large-scale offensive operations by the Red Army.

The most important was the reconquest of Rostov—that famous operation which proclaimed to the world that the turning-point had come on the Russian Front, and which preceded the Russian counter-offensive on the Moscow Front. For the first time in the Second World War a large city—a strategic position of the first order—was wrested from the German Army. For the first time a large German army group was forced to retreat on a vital front sector. The great German offensive plan in the direction of Rostov actually failed even before the great Russian counter-action. Under the original plan von Kleist's army, together with Schwedler's adjoining army to the North, was to carry out a great enveloping action of the Russian armies on the Southern Front, north-east of Rostov, at Kamensk. After this decisive victory it was to advance further along the Lower Donets, to the East and South-east, towards the Don bend and the Northern Caucasus.

The German operation against Rostov was primarily conceived of as falling within the framework of this larger offensive. But Schwedler's army was halted in its advance into the Eastern Donets Basin. The first attack on Rostov, undertaken by von Kleist in the first half of November, miscarried. He then prepared a new attack. But meanwhile the two Russian armies on the Southern Front moved to the attack themselves—against the division that covered von Kleist's north-eastern flank and the bulk of his tank forces. In this predicament von Kleist nevertheless decided in favour of another attack which was not supported by adjoining troops. This attack turned into a limited offensive along the coast of the Sea of Azov. It was a clash between two offensives—the German attack and the Russian counter-offensive. The Russian attack, directed westward, started further north; the German attack, directed eastward, further south. Colonel-General Cherevichenko, the Russian commander on the Southern Front and Marshal Timoshenko's first assistant, described the situation in these terms:

> The right claw of the Fascist lobster, armoured with tank divisions, was to cut off an important artery of our country in the direction of Rostov. But the Germans failed to understand the fundamental turn in combat operations on the Southern Front. They did not grasp that the initiative had passed into our hands. From sheer force of inertia, they regarded our blows as ordinary counter-attacks. But our Southern Front henceforth became an offensive front.[2]

When von Kleist took Rostov on November 22, his forces were flanked from the North-east by two Soviet armies under General Kharitonov and Lopatin. They wheeled toward Rostov and to the West, while a third army under General Remizov attacked von Kleist from the South, coming south of the mouth of the Don. Thus von Kleist's army was outflanked by a Red Army manœuvre and Rostov was reconquered. Subsequently the Red Army moved forward in the southern part of the Donets Basin.

The next important offensive operation by the Red Army in the South was the landing in the Eastern Crimea, at Kerch and Feodosya. The Germans had been convinced that the Strait of Kerch afforded absolute security against a Russian flank attack:

> The Crimea would never have been securely in our possession if the enemy had retained attack opportunities in the flank of the occupying power—that is, from the direction of the Isthmus of Kerch. But once he has been hurled back across the strait, there seemed to be effective protection against any surprise attack.[3]

The German High Command did not dream of a Russian landing in this spot. Yet such a landing was successfully carried out. Neither the German Air Force, nor the German coast defence artillery, nor the strong German forces in the Eastern Crimea—two Germany infantry divisions, one infantry brigade, a Rumanian brigade, and strong artillery forces—were able to forestall the Russian landing at Kerch and Feodosya. Russian land, air, and naval forces co-operated successfully. An important element was the active rôle played by the Russian Navy:

> The Black Sea Fleet had to transport our troops in secret to the coast, reduce enemy coastal artillery with its own guns, carry out the landing, and aid in the advance of our troops along the coast.[4]

Thus wrote Lieutenant-Commander E. Fedorov of this operation. The success of the Russian landing on the coast of the Eastern Crimea was important, and it was of interest with regard to the Western Front in Europe too. For this landing was not carried out in the enemy's rear at all, but directly at his front line, against an enemy base of operations from which action against the Northern Caucasus across the Straits of Kerch was being prepared.

The important operation on the Ukrainian Front was the breakthrough of Timoshenko's troops towards the Southern Railway—the southern sector of the vital Russian artery from Leningrad to the Crimea, in the Lozovaya-Likhachovo sector, south of Kharkov. This advance not only liberated an important part of the Donets Basin; it also gave the Red Army control of important strategic positions and communication lines. Contact between Kharkov and the part of the Donets Basin held by the German Army was broken, as well as contact between Khar-

kov and the German Southern Front. All German communications along the coast of the Sea of Azov, in the Donets Basin, in the Crimea, and in the Southern Ukraine were threatened by the Red Army, which now stood very close to the last two junctions on the east–west railways under German control, at Sinelnikovo and Zaporozhye.

In the North, by retaking Tikhvin, Volkhov, and Voibokalo, the Red Army prevented a German junction with the Finns and the deeper encirclement of Leningrad. And by the Valdai offensive in the second half of January the Red Army reaped one of its greatest territorial gains of the winter campaign. It thereby flanked the army group under von Leeb and substantially relieved the Leningrad Front. In addition the Russian occupation of the railway junction of Dno cut off the Leningrad–Kiev line, so important to the German Northern Front. The new Russian position in the North-west, south of Velizh–Velikie-Luki, flanked the German position at Smolensk deep from the North-west.

In the second phase of the winter campaign the German front ran along a zigzag line, deeply dented in many places and with its north–south communications disrupted. Deep Russian wedges had been pushed into it in four places—from Dno in the direction of Pskov, from Velizh in the direction of Vitebsk, from Dorogobuzh in the direction of Smolensk, and from Lozovaya in the direction of Krasnograd and Dniepropetrovsk. With the exception of the enveloped pocket at Rzhev–Vyazma, the German Army had lost its former jumping-off places against Moscow; with the exception of the inside siege zone, it had forfeited its positions east of Leningrad; and in the South, besides the two springboards to the Caucasus—Kerch and Rostov—it had lost the important region south of Kharkov. From these reconquered positions the Red Army now menaced the German Army's positions from the flanks in many directions. As at Kerch, it took additional fighting and sacrifices for the German Army to retake these positions which it once held and which it needed for any further larger offensive.

The scope and the effects of the winter campaign were those of a major battle. It struck the German Army even more severely with losses in man-power and arms than in the loss of strategic positions. Russian figures on the arms booty taken between December 6 and January 15 alone list 2766 captured German tanks and 4801 guns; and during this period German plane losses are put at 1100. The greatest German losses fall into the period between December 20 and January 15. The Russians have not made public total German arms losses for the entire winter campaign since then; but on the basis of Russian reports covering individual front sectors, the Russian booty in the winter campaign may be put at about 4000 tanks, 6000 guns, and 3000 planes. According to these partial reports too, German losses in man-power from December to April ran to something over two million men. Even the most cautious estimates must assume that German losses in manpower and matériel

were extremely high. For to the dead, wounded, and captured must be added the special victims of the winter campaign—the frozen, the sick, and the gravely exhausted; and to the matériel taken or wrecked in action by the Russians, plus the German Army's normal wear and tear, must be added the equipment ruined in the winter campaign. This equipment must represent an enormous amount, for the winter campaign struck the German Army completely unexpecting and unprepared. The entire vast German tank arm on the Eastern Front was paralyzed and the major part of it withdrawn. Total German losses in man-power between December and April almost certainly cannot have been lower than 1,500,000 to 2,000,000 men. Thus in five months of winter campaigning on the Russian Front, German losses in man-power far exceeded total losses of the old German Army in three and a half years of the First World War on the Eastern Front; and the German Army was hit far more severely by the winter campaign in the Soviet Union than in any of the great, costly battles on the Western Front in the First World War—the battles of Verdun, Flanders, the Marne, and the Somme.

Russian losses in the winter campaign, on the other hand, were at a minimum. The Red Army was incomparably better adapted to winter warfare than the German Army, and this time it was fighting a foe whose fighting strength and powers of resistance had been lowered. The German Army's claims of Russian prisoners taken in the winter campaign were very modest. For the three months of December, January, and February the German Army reported only about 100,000 Russian prisoners—compared to the 3,800,000 it had claimed for the first five months of the war. This shows that the German Army's offensive power had greatly fallen even in its own estimation. According to German calculations the proportion between Russian prisoners and dead and wounded were to be as 1 : 4 (1 : 1 for dead, and 1 : 3 for wounded). Thus even according to German calculations, the Red Army's total manpower losses in the winter campaign must have been very low. There can be no doubt that in the winter campaign the Red Army succeeded to a marked degree in restoring the balance in its favour.

The scope of German Army losses during this time becomes even clearer when one considers the critical situation into which the German Army blundered in the course of the winter campaign. There was an unprecedented crisis that affected the entire German war machine, partly paralyzing, partly disorganizing it. German offensive weapons failed altogether—not only tanks, but planes and artillery as well. German motorized transport, probably numbering all in all some 300,000 to 400,000 trucks, tractors, cars, and other vehicles, failed to function for the most part. It was a total crisis of German mobile warfare. The German Army's supply system with regard to winter clothing and special winter equipment was disastrously deficient. In his Reichstag speech of April 26, 1942, Hitler made the admission that the German Army's

motorized equipment, supply, and transport systems were not even being adapted to the needs of the winter campaign. Göring went even further in his speech: "There were moments when it seemed that no one could master the forces of nature, that no amount of heroism could find a way out of the situation." From a military viewpoint one of the most important factors was the German Army's virtually complete lack of special training in winter tactics.

It is noteworthy that two and a half years before the event the collapse of the German winter campaign in Russia was predicted by a German military expert with astonishing accuracy. Early in 1939 Captain Schoeneich wrote in the *Militär-Wochenblatt*:

> In the East soil and climate erect barriers before which we must stop. From late April until late September we can wage a war of movement in the East. But then, in the autumn, we shall have to call a halt. If motor transport is used beyond September [on the Russian Front], supply lines are likely to become paralyzed in short order.[5]

Captain Schoeneich made important revelations concerning the German Army's tactical unpreparedness for winter warfare in the East. Before the outbreak of the war there was but a single day of winter training outside the drill ground. And the German infantry had not the slightest notion of ski training, nor any supply of skis. Captain Schoeneich's conclusion was:

> In training and equipment our Army is prepared *exclusively* for combat in the Western theatre of war.

"We Need Troops for the East"—thus ran the title of his article. But when war was actually waged in the East, the Third Reich had only "Troops for the West".

The responsibility for this failure must be shouldered by the German High Command. It was convinced that the offensive in Russia could be continued in the winter, and that the issue in the campaign would probably be settled before the winter, leaving only the *coup de grâce* to be administered to the Red Army in the winter. This view was represented by Captain Werner Stephan, in opposition to those "of little faith". Just before the collapse of the German offensive, Captain Stephan wrote in the *Völkischer Beobachter*:

> In 1914 Hindenburg and Ludendorff began their great attack between the Warthe and the Vistula. By December 15 it had brought them to Lovich, on the outskirts of Warsaw. The dreaded Russian winter had long begun. Similarly, Hindenburg won his victory in February 1915, despite the bitter cold in the Masurian region. . . .
>
> In the summer and autumn of 1941 the Russian collapse was forced in a single, audacious blow. In October the German High Command,

unlike its predecessor in 1915, recognized that the decision had fallen and drew the proper consequences. [6]

The meaning of these remarks is clear: What Hindenburg and Ludendorff accomplished during the Russian winter of 1914–15, we too can do, especially since the foe is virtually beaten. The example of the Red Army did indeed show that a war machine can function smoothly and offensive operations be carried out even during the Russian winter. But on the German side all the prerequisites were lacking. In the fields of organization, supply, and tactical training of troops, the German General Staff fulfilled none of the conditions that would have been necessary to carry out a winter campaign. Its plan was short-sighted. It wholly miscalculated the actual military situation, the strategic needs in a Russian winter. In the long run its plan for the war with the Soviet Union was in its own way almost as careless as the planning of the French General Staff for the war with Germany. The Russian *communiqué* of December 13, reporting the first great Russian victory before Moscow, rightly concluded with these remarks:

> The miscarriage of the German plans can under no circumstances be attributed to the conditions of the winter campaign. It was not the winter that was at fault, but an organic defect of the German High Command in the field of war planning.

Materially and tactically the Red Army was thoroughly and carefully prepared for winter warfare. Its supply and transport systems and its combat methods were adapted to the conditions of the winter campaign. Red Army staff work and organization during the winter months functioned far better than with the German Army. The Red Army's success in the winter campaign, moreover, sprang from its far-sighted and effective use of Soviet reserves. Available German reserves had been ruthlessly thrown into the Ukrainian campaign and the battle for Moscow; but Red Army reserves had been carefully husbanded for the actual military decisions. Three times they were on the spot at the right time—in the battle of Smolensk, the battle for Moscow, and the winter campaign—and all three great operations were won by the Red Army. In the winter campaign Russian reserves were used relatively sparingly. But they were there—fresh reserves against a weakened enemy—and the *Kölnische Zeitung* wrote that the German retreat from Moscow was made under the pressure of the Russian army masses, Russian artillery, and Russian tanks.

The winter campaign was no centralized superbattle over a fixed frontal sector, such as the battle for Moscow in October and November—even though it was waged with great intensity by the Red Army. True, it included great battles, such as the battle of Rostov and above all the

great battle on the Central Front, west of Moscow, between December 15 and January 20. But it consisted in the main of a mosaic of individual engagements, ceaselessly conducted along the entire front. For the most part these were specialized operations of mobile winter warfare. German military science, despite its high level, had not the least notion of winter tactics, while the Red Army had long prepared for just such warfare. Half a year before the outbreak of the German-Soviet War, General Lubarsky wrote in the leading Russian military organ:

> The combat capacity of a given unit under conditions of winter will greatly depend on its specific winter equipment, its combat training in frost, deep snow, sudden weather changes, frozen ground, and so on.
>
> Ski troops, sometimes constituting entire units, can move even in the absence of trails. They are capable of swift and unexpected action. This enables them to infiltrate into the enemy's flanks and rear to encircle him and launch attacks on his staff and communication lines. At the head of the column goes infantry, trained to be expert skiers, and reinforced by artillery and pioneers with snow-ploughs.
>
> In the winter, troops on the defensive are likely to cling to inhabited points and woods, offering excellent opportunities for encircling and destroying them unit by unit. It will often be effective to organize surprise attacks at night or during storms. To obtain the full effect of surprise it will be useful to take advantage of darkness or of a blizzard blowing in the direction of the enemy—the terrain, of course, having been previously reconnoitred. The attack must carry great momentum, with tanks disposed in great depth in the most accessible directions. The assaulting tanks are followed by ski infantry. Some of the combat effectives may be carried aboard tanks.[7]

The German Army utterly failed to take these combat methods of the enemy into account. German troops were not adapted to this Russian type of mobile winter warfare, nor were they even trained to defend themselves against it. Yet it turned out to be the precise method of the Russian winter offensive of 1941–42. In the late autumn of 1941, when the German Army was recklessly trying to storm Moscow, the Red Army was already preparing for the transition to the winter offensive. On November 16 *Pravda* wrote:

> It is necessary to take as much advantage as possible of winter conditions to destroy the German invaders and their mechanized equipment. Ski troops offer excellent methods for assaults on enemy bases, staffs, and communication lines, for crushing blows against his flanks and reserves. Mobile units can occupy and hold important points in the enemy rear, cut off his retreat, and prevent him from bringing up reserves.

Such methods were actually applied. The tactics of the Red Army in winter warfare were predominantly those of penetration and local encirclement, with a large total of German losses arising from such localized operations. For the greater part such actions were carried out by cooperation between mobile troops—cavalry, ski troops, mobile infantry armed with submachine-guns—with artillery and tanks assigned as the need arose. Troop combinations were made up in keeping with each individual situation. The so-called sly tactics of the Russians continued in new forms—in the winter they consisted of night attacks and attacks during blizzards.

Yet all these individual Russian operations were related to the strategic plan proper. This had been inspired by the examples of Foch's and Brusilov's offensives in the First World War. Just as in Foch's offensive in 1918, the Russian winter offensive administered successive blows to the enemy in different directions all along the front, so that the German Army was unable to establish the direction of the decisive blow and was unable to concentrate its reserves on one sector for any length of time. Taken over from Brusilov was the tactical method of an offensive with limited aims all along the front. Even before the war General Levitsky, professor at the Russian General Staff Academy, had written:

> The goal of Brusilov's offensive was not merely an attack on the Germans and Austrians but the defeat of the enemy's vital strength. Brusilov's preparations for the break-through offer an instructive lesson in vision, organization, and planning. Reconnaissance, artillery, and engineering preparations were conducted with great thoroughness, and firm communications were established along the front and in depth. On every sector of the break-through Brusilov arranged for double superiority in forces and technical equipment. Brusilov's blow struck the enemy wholly unexpectedly. "Misfortune broke like thunder from a clear sky," Falkenhayn wrote in his memoirs.[8]

Throughout the winter campaign Russian strategy was not only better organized than the German, but showed greater initiative and differentiation in method.

Beginning in December 1941 there was a complete change in the strategy of both belligerents on the Russian Front. The German Army moved from the intensive all-out offensive to the passive defensive. The Red Army, on the other hand, proceeded from active defence to the offensive with limited aims.

This Soviet strategy of limited aims and means had a very definite meaning. The Red Army High Command did not envision the winter campaign as the decisive battle, the final passage at arms—as the German Army had pictured the invasion and then the battle for Moscow. The Russian offensive was to exhaust and wear down the German Army, as active Russian defence had done previously, only to a far greater degree,

with smaller losses on the Russian side and with the Russians taking the initiative. The Russian advance was to disrupt and disorganize the German front. Just as the Red Army, in the autumn of 1941, had prepared for winter warfare, the winter campaign itself was thought of as the most effective way of preparing for the coming super-battles in the spring and summer of 1942—Russian strategy was always taking the next phases of the war into account. The winter campaign was to place the Red Army in the most favourable, the German Army in the most unfavourable, position for the spring and summer campaign. As many German reserves as possible were to be drawn into winter warfare, in order to weaken the expected German spring offensive as much as possible. Russian losses were to be held down to a minimum. Another aspect of the Russian strategy of limited aims during the winter was to make it possible for the Russians to gather their strength for a decision in the spring and summer. That was why it was a strategy of limited means too. True, fresh reserves were drawn on, but they were drawn on sparingly—and offensive weapons were drawn on even more sparingly. Territorial gains were always calculated in relation to the necessary sacrifices—and they were rejected whenever the losses appeared too high. This explains, among other things, why the Red Army did not undertake any frontal assaults on large Russian cities that had been occupied by the Germans or on certain key positions on the German front that had been strongly fortified by the German Army. The balance of human forces and of weapons was to be as favourable as possible to the Red Army at the conclusion of the winter campaign.

The strategy of limited aims was practised in the years 1915–16 by General Falkenhayn, Chief of the German General Staff, in his Russian offensive of 1915 and above all in his offensive against Verdun. Soviet strategy in the winter campaign has two traits in common with Falkenhayn's strategy. It makes a realistic appraisal of enemy strength, and it is based on the concept that war develops by phases. It is different from Falkenhayn's strategy in its ultimate objectives and in its tactical methods. Falkenhayn had no faith in a total victory by Germany, and his limited offensives were merely intended to break the enemy's potential offensive power. A perpetual stalemate was to be achieved, as convincing proof that neither of the belligerent coalitions could achieve full victory. At bottom Falkenhayn with his strategy of limited aims was looking for a way out of the war. He wanted the war to end in a draw. But the Soviet strategy of limited aims in the winter campaign by no means implied a renunciation of ultimate victory and of the destruction of the enemy. On the contrary, it was to pave the way towards those objectives. It was put forward only for a definite and relatively short phase of the war. The enemy was to be exhausted, then to be resoundingly defeated in later phases of the war. Another difference concerns the character of operations under the two strategies with limited means.

As Field Marshal General von Leeb, Commander-in-Chief on the German Northern Front, had previously written of Falkenhayn's Verdun offensive:

> Renouncing the surprise element, the attacker sought to break down the defence by sheer force in months of fighting on the same ground.

Falkenhayn doggedly sunk his teeth into one spot at Verdun, was beaten back, and bled not only the enemy army white, but his own as well. The Russian strategy of limited aims in the winter campaign was of higher quality. The Russian offensive was conducted along the entire front in an elastic manœuvre, with Russian losses far lower than those of the Germans.

In the midst of the battle for Moscow the German High Command had to change its whole strategy, to revise its war plan completely. It went into the Russian campaign with the conviction that it would be able to wage an unceasing offensive, to overcome the war of position. It contemptuously discarded the defensive and trench warfare. Thus its sudden and enforced transition to passive defence represented a defeat for the principles of German strategy. When the German Army, however, was forced into the defensive, its first aim was to hold its positions, especially the positions directly before Moscow. The order to hold the positions at any cost was given by Hitler himself in the proclamation in which he deposed Brauchitsch and made himself commander-in-chief of the Army:

> Your task will be to hold and defend until the arrival of spring what you have gained with immeasurable heroism and heavy sacrifices.

The other tasks of the Germen defensive were emphasized in an official commentary:

> The front-line in trench warfare is generally shortened to economize strong forces. The German Army leadership, to save human lives and to facilitate the moving up of supplies, has systematically moved back the front to a certain line.

These aims—holding the front line before Moscow (which on the day of Hitler's proclamation stood at Kalinin and Volokolamsk and before Kaluga), shortening the German lines by giving up advance wedges, and reducing losses as much as possible—these aims were not achieved in the German defensive. On the contrary, the German front was rolled far back. Instead of being shortened, it was still further extended by Russian wedges and disrupted by the cutting off of important communication lines, while German losses were extremely high. On the other hand, the German Army did succeed in finding a tactically effective form of defence for certain fortified points and centres. From Novgorod to Taganrog it

managed to hold important centres by establishing concentric positions—so-called "hedgehog" or "porcupine" positions—planned to withstand even a siege. It showed great tenacity in the defensive, a capacity to defend itself by fire concentration. But this defence was purely passive, lacking manœuvres and counter-attacks, and even sacrificing the continuity of the front. The German concept of the second phase of winter strategy was to hold the front as a screen, to use the armies at the front as an *armée de couverture*, behind which the combat forces could be reorganized and resources assembled for a new offensive in the spring and summer. To the German High Command the decisive element now was not what happened at the front, but what happened behind the front.

But the winter campaign was not merely a momentary failure of the German offensive, a mere pause between two major German offensives. To a certain extent it shifted the balance of power between the German Army and the Red Army in favour of the latter. The after-effects of the winter campaign will continue to emerge in the further course of the German–Soviet War.

The war during the winter confirmed two important military facts:

Since the autumn of 1941 a conspicuous tactical inadequacy of the powerful German offensive arms has come to the fore. In the battle for Moscow these weapons did not suffice for a German victory. They were unable to prevent the defeat of the German Army at the conclusion of this super-battle. During the winter months the massed German tanks not only were of no help to the German Army—they constituted a direct liability, a millstone which had to be in part discarded by the wayside by the retreating armies.

The winter campaign further revealed the rising combat power of the Red Army. After having suffered vast territorial losses and great losses in man-power and arms, the Red Army was able to score decisive victories in the battle for Moscow—the greatest battle of the war so far—and in the winter campaign, and to continue the counter-offensive. It was this transition from the heaviest enemy blows while on the defensive to a full-fledged counter-offensive that General MacArthur in his now famous telegram called "the greatest military achievement in all history". This achievement shows the high combat morale of the Red Army, its great potential power, the existence of substantial reserves, and finally the far-sighted and effective plan under which it has been fighting.

Despite the great significance of the winter campaign for the course of the German–Soviet War the Red Army's gains in territory and strategic positions were only limited ones. The Red Army did not go on to capture entire lines of communications. Nor was it able to overrun the important German base of operations in the South from which the Nazis would launch their next offensive. In the winter campaign the offensive force of the German Army for the further development of the war diminished but was not broken.

CHAPTER EIGHT

THE SUMMER CAMPAIGN 1942:

Race to the Caucasus

AMID THE crisis in the German conduct of war, which came to a head during the winter campaign, the Third Reich began to prepare the coming major offensive for the summer of 1942, upon which all hopes were pinned. Hitler said in his speech of April 26, 1942, that the decision must fall on the Eastern Front—and he clung to this contention. All available forces were concentrated for this offensive. Hitler gave up the grand strategy in the Mediterranean and the Near East. Rommel's offensive of June 1942 was waged with only limited German forces. The overwhelming bulk of Germany's armed strength was kept in reserve for the Russian Front, and was replenished by forces from Western Europe and by the Hungarian, Rumanian, Italian, and Slovak allies. Between December 1941 and June 1942 the Third Reich made a supreme effort. Large arms reserves were piled up. Troop units were reorganized and regrouped. Bases of operations behind the front were expanded. The transport system was repaired and put on the alert for the special needs of the Eastern Front.

This grand offensive had a peculiar feature: it took place on only one front sector. The Soviet-German Front is so far-flung, and the fighting conditions and objectives on its two main sectors differ so greatly, that one might speak of a two-front war in Russia, meaning the Central Front (with the Northern Front included) and the Southern Front. In this sense German strategy has waged a two-front war on the Russian Front in 1941. At that time the big German offensives were conducted simultaneously on both fronts, both during the first six weeks of the invasion and in October-November 1941. At the end of July 1941 the German drive extended from the Bay of Finland to the Southern Ukraine; in October-November 1941 it reached from Kalinin to Rostov.

In contrast, the German summer campaign of 1942 has been only a one-front offensive. It was concentrated exclusively on the Southern Russian Front. While the two major German offensives of 1941 included a drive to the South, their emphasis was on the Central Front; the summer campaign in 1942, on the contrary, totally neglected the Central Front. In many ways it is a continuation of the Ukrainian campaign of 1941. First, in a territorial sense, it began where the Ukrainian campaign had stopped. But it is also a continuation of that campaign with respect to the choice of objectives and the methods of operation. In the Ukrainian campaign the German High Command was out for territorial gains and it was waged with the methods of a war of movement. The same is true of the 1942 summer campaign. It is directed much more at economic

and geopolitical goals than military ones. This time Hitler's oil strategy prevailed. It proposes to include the Ukraine, South-eastern Russia, and the Caucasus in a gigantic German economic region, as a kind of agrarian, raw material, and industrial colony of the Third Reich. The Black Sea is to become a German lake, Hitler's Mare Nostrum, and its basin is to become a German base, turned towards the Near East. All these various motives of German strategy, which were already part and parcel of the Ukrainian campaign, have in 1942 become clearly decisive for German strategy. In 1941 there existed a split between two trends of German strategy, the Southern Front and the Central Front variants. At that time the decision fell with the big battle for Moscow in favour of the Central Front trend. In the summer of 1942 it was made in favour of the Southern Front.

Yet there is a difference between the Ukrainian drive of 1941 and the Southern offensive in 1942. The Ukrainian campaign, from its very beginning in August 1941, was a war of movement. So was the 1942 summer campaign in South-eastern Russia, but the full development of mobile operations was prevented for a considerable time—for six weeks—by the Red Army. In 1942 the fight in South-eastern Russia began as a struggle between stabilized fronts, as a battle in depth. The Russian goal was to immobilize the enemy, to prevent a German war of movement. Timoshenko's army succeeded in this endeavour from the middle of May to the end of June 1942.

The Russian offensive at Kharkov, which was launched on May 12, got a jump on the German offensive. Its purpose was to tie down the German forces, to paralyze the German Army, and to prevent a German attack further south by pressure on Kharkov, the vital transportation centre in the Russian South. In its first attack the Red Army routed about six enemy divisions. The German counter-drive, which began on May 20 in the Izyun–Barvenkovo sector, was able to parry the Red Army's thrust, by pressure from the adjacent southern sector. But the German claim, that the counter-drive had turned into a battle of encirclement and annihilation in which three Russian armies had been smashed and 240,000 prisoners taken, was unjustified. (The Russian version, according to which Russian casualties ran to 75,000 and those of the Germans to 90,000, was nearer to the truth, though the number of Russian missing was startlingly high.) As a rule there were no German successes without transition to mobile warfare. But in the Kharkov direction the Russian Front remained stabilized for four weeks after this German counter-attack. Between May 12 and June 25 a battle in depth was waged in the Kharkov sector, with fixed fronts, heavy infantry masses, fighting within consolidated zones. This battle delayed the German war of movement in the South for six weeks, a fact which showed the increased tactical skill of the Red Army in the South too, compared to the summer of 1941.

The resistance of Sevastopol, 350 miles south of the Kharkov Front, was another factor which stemmed the unfolding of a German war of movement. The aim of the German assault on the Russian base in the Crimea was to overcome the enemy's position in the rear which would have been an obstacle for the Southern drive. The purpose of Sevastopol's resistance was to tie down as many German forces as possible, to inflict huge losses, and to gain time, to upset the schedule of the German offensive in the South. Sevastopol was defended under much more difficult conditions than Leningrad. Sevastopol had only a narrow strip of coast behind it, and had to rely on sea communications; it also had almost no air coverage. The German attempt to take it by a concentrated tank assault failed. It was taken, however, by the devastating concentration of artillery fire, combined with aerial bombardments, which systematically demolished one sector after the other, and tenacious infantry attacks. The resistance of the feeble garrison against a preponderance of probably five-fold dimensions on the part of the besiegers, and against the unprecedented concentration of the enemy's fire, once more showed the Red Army's fighting capacity. The twenty-five days which the storming of Sevastopol required were for the German Army a loss of time in the midst of a critical phase of the war, a loss which was not compensated for by the conquest of the Russian base.

It was not merely a matter of German strategy that the German High Command turned southwards in its great 1942 offensive. Operational considerations too were decisive. The German High Command calculated that it could gain its objectives only in a war of movement, and large-scale operations of that kind were considered possible only in the Russian South. It deduced from the experiences gained in the 1941 battles at the Russian Central Front, where the German war of movement had failed in the battles for Smolensk and Moscow, that it stood little chance there, if any. German military leadership was unwilling to wage a large-scale offensive on the Central Front, where the bulk of the Red Army was concentrated and which had been developed still further in depth since the winter of 1941. Hitler cautiously avoided taking revenge for the battle of Moscow. The decision of the German High Command to attack in the South, and in the South only, meant for the time being escaping the necessity of a battle against the main forces of the Red Army. It meant an outright evasion of the decision by purely military means.

June 25, 1942, the day on which Kupyansk was occupied, must be regarded as the beginning of the great German Southern offensive. Here the Nazi assault overran the Russian positions on the Donets, south-east of Kharkov. With the subsequent attack eastwards from Kursk, the German offensive strove to reach the Upper Don, and thus to obtain a firmly entrenched flank on the northern wing of the Russian Southern Front for further advances. The break-through to a war of movement

succeeded. On the way to Voronezh the German offensive was already waged on a front more than 150 miles wide. It was then further extended to the South, thus forming a classic image of the big German offensive of 1941—with a concentrated assault by the Luftwaffe which made up the first echelon of the attack upon the Red Army rear, with the break-through of the tank divisions, and the subsequent deployment of the motorized units.

The decisive move of the German Army in this operation was to envelop the Red Army positions in the industrial Donets Basin and around Rostov from the North-east.

The break-through to the Middle Don, to the Boguchar and Kalach, had a dual strategic effect: the German Army set its front in motion towards the East, against Stalingrad, and at the same time it opened up the way for a big offensive southwards. With the occupation of Millerovo and Lisichansk the Red Army Front in the Donets Basin was enveloped from the North-east. From then on it operated in the region of the Lower Donets River and the Lower Don under a constant threat of encirclement. Positions in the densely populated Eastern Donets Basin, around Rostov and the mouth of the Don, which ordinarily would have been very favourable for positional fighting and battle in depth, were now made untenable by the sweeping German manœuvre. On July 16 the Red Army evacuated Voroshilovgrad, centre of the eastern half of the Donets Basin. The German drive on Rostov was part of an encircling manœuvre. In November 1941 there had been only a frontal attack from the West, led by von Kleist's Army on the narrow sector at the Azov coast. The attack from the North, from Kamensk, had been planned at that date too, but it never materialized. This time Rostov was actually attacked from three directions, from the West, the North, and the East. It was in the centre of a contracting German loop. The break-through to the Lower Don east of Rostov was attained by the German Army on July 18. On July 23–24 the great city on the mouth of the Don was occupied.

This marked the beginning of the big Caucasian operations of the German Army, which was conceived so as to extend far beyond the region of the former Southern Front. From there on the German drive was clearly pointed southwards; the sector on the Lower Don which looked towards the Caucasus had now become the German offensive front. The second part of the big manœuvre began now. It had started on the Upper Don, and had then been continued between the Middle Don and the Donets River. The following operational calculation and preparation was at the bottom of this new phase of the German offensive: communications between the Caucasus and European Russia are concentrated in a radius of about 70 miles north and south of Rostov. Tikhoretskaya south of Rostov, Likhaya north of Rostov, and Rostov itself are regulative railroad junctions. With the occupation of these

adjacent transport centres, the rail connection between the Caucasus and European Russia, between the forces of the Red Army in the Northern Caucasus and the main forces on the Southern Front was severed. Thus the Caucasus was converted into a separate front and its defence into an autonomous operation. The decisive factor was now that, following the execution of this operation, the German Army could have every numerical and technical superiority over the severed Soviet forces in the Northern Caucasus. The strongest concentration of the German Army on the whole Russian Front was carried out in this direction, and it could thereby make use of the excellent and dense rail network of the Donets Basin. In this operation the German Army utilized the fact that the Caucasus is the only sector of the Russian Front that has no hinterland to the East, but extends to the South. This time a major Russian counter-concentration was precluded, which explains why the German offensive in the Northern Caucasus could take on the unusual shape of a long and narrow sack tending in the direction of Armavir–Krasnodar–Maikop. The German Army, meanwhile, unconcerned with the situation on its flanks, could pour every force into the South through the Rostov gap.

The German offensive that was launched at the end of June 1942 is characterized by the tenacity of its attack. It was conducted in an incessant war of movement. It was clearly the longest uninterrupted offensive since the beginning of the German–Russian War, without operational pauses which even in the Ukrainian campaign set in about three weeks after the active operations began and lasted from two to three weeks. The difference is evident. The Southern offensive of 1942 was carried on with far larger forces than the Ukrainian campaign. It was the only operation in the summer of 1942, while the Ukrainian campaign of 1941 was subordinated to the much vaster operations on the Central Front. The German Don–Caucasus drive was waged with fresh reserves which were continuously relieved, so that the uninterrupted operation was carefully prepared. Having minutely organized and concentrated its forces, the German High Command tried to bring the campaign to a rapid end and to attain its objectives as soon as possible. The superiority in the manœuvring on the part of the German Army over the Red Army in the summer campaign of 1942 was caused by a superiority in concentration and forces. In 1942 the Southern Front became for the German Army the main front, the front of the all-out offensive, while for the Red Army the Central Front remained the main front. Timoshenko's army group, especially its southern wing, took upon itself the entire burden of the German major offensive in the summer of 1942.

The German Army had not planned this summer campaign as the great battle of annihilation against the bulk of the Red Army. On the contrary, it sought to confront as few enemy forces as possible. That is why the Russian Southern Front, indeed, the extreme southern flank of

the front, which was cut off from the main forces, was chosen as the direction of the main blow. The goal of this German offensive was not the direct military decision, it was rather aimed at territorial and economic conquest. The German loot in prisoners and arms must have been nominal—even the German High Command made no great claims for this sector. The striking force of this offensive was much below that of the big ones of 1941—the battle of the frontier, the Kiev operations, and the battle for Moscow. The battle for the Don and the Northern Caucasus was characterized by a lesser intensity of the German striking strength against the vital force of the enemy. This time everything was tuned to swift movement and territorial occupation.

The summer campaign of 1942 was clearly a peripheral, excentric operation. It was aimed at the enemy's extreme outward flank, which was to be pushed still farther. The centre of gravity of the German drive was to be transferred more and more to the periphery. The Donets Basin and the Don Valley were for the German Army only transitional phases to the Northern Caucasus, and the Northern Caucasus itself is but a transitional phase on the desired path to the Southern Caucasus. The line of the German Front was constantly extended, and its southern flank, where the German Army was rallying its decisive offensive force, was removed farther and farther from the Central Front. The rail line from Rostov to Baku, the ultimate German goal, is more than 900 miles long. Even the Rostov–Grozny line is more than 500 miles long. This type of flank operation, waged not in a colonial war but against the decisive enemy, is without precedent in German strategy. The major German flank operations were always visualized with a mighty blow against the enemy's decisive forces and the heart of the country. That was the meaning of the Schlieffen Plan with its encircling operations by the right German flank, of the German deployment of 1914, of Ludendorff's attack on Amiens in March 1918, of the German break-through of Sedan–Abbeville–Dunkirk in May 1940, and also of the German operation at Kiev in 1940, which tried to expose the left flank of the Russian Central Front. The German Press described the second conquest of Rostov in July 1942 as the Sedan of the Russian Front—meaning the Sedan of 1940. The comparison is entirely arbitrary. The path via Sedan took the German Army to Paris in 1940, while the seizure of Rostov and the subsequent movements took the German Army far away from the centre of the Russian Front in the opposite direction.

Two serious crises now threaten both sides as a result of the summer campaign:

The Red Army lost its well-set-up base of operations in the South. The coal-mines in the Donets Basin, the largest in the Soviet Union, had to be yielded. The Caucasus has been cut off from European Russia, and its oil-wells threatened, in part lost. Grave new supply difficulties for the Soviet Union have emerged.

The Third Reich, on the other hand, is menaced by a military crisis. First there are the difficulties arising from the given conditions of the Caucasian theatre of war.

The Caucasus extends over an area roughly comparable to Germany before its expansion. It is impossible simply to send an Expeditionary Corps along the rail line of Rostov–Baku, because the German Army needs a firm grip on both flanking coasts, that of the Black Sea and that on the Caspian Sea. The drive to Baku, and even the occupation of the Northern Caucasus to the mountain range, would require and tie down vast forces. Each one of the Caucasian objectives must be considered in distances of hundreds of miles. As mentioned before, the Rostov–Baku line covers a distance of 900 miles. The Caucasian mountain range from the North-west to the South-east is more than 800 miles long. Not a single railroad goes through it. The only railroad running from North to South, connecting the Southern Caucasus and Baku with European Russia, winds along the coasts of the Caspian Sea. Militarily seen, this line hugs the coast to Baku through a corridor dominated by the mountains. The two highways through the mountains run at an altitude of from 5000 to 8000 feet, and are impassable for modern armies with their heavy trains. Both roads can be blocked without difficulty. The Caucasian mountains are military obstacles unparalleled in Europe. The average altitude of the ridge is from 9000 to 12,000 feet, with peaks far higher than Mont Blanc. They will be defended by a modern army with proper equipment— far different from the manner in which the Balkans were defended. With the exception of the limited flat terrain in the North-western Caucasus, the Caucasian war requires special tactics with which the German Army is unfamiliar, and in which the Red Army has a great many years of experience.

If the German plans include the conquest of the Southern Caucasus, the Wehrmacht will be faced by the greatest difficulties ever encountered by a modern army. If, however, the German offensive is confined to the Northern Caucasus, then this would mean renouncing the decisive goal of the Caucasus offensive: capturing the oil of Baku. The gains the Germans can make by overcoming the Northern Caucasus can hardly be adequate compensation in the strategic balance-sheet for the loss of time and the dispersal of forces.

Any balance-sheet of the German campaign in the Caucasus must be calculated in relation to four factors: space, time, losses, and ultimate goals of German strategy.

The Germans have acquired considerable gains in territory during the summer campaign. But the regions conquered have only limited strategic value. It is not the region in which the decisive battle against the bulk of the Red Army could be won. No ultimate military decision in the German–Russian War can possibly fall in the South.

The time the Germans lost in the summer campaign was not commen-

surate with the strategic gains. Even if the German 1942 offensive were aimed at the great military decision, it would be forced to keep within a limited time-table for major operations: not to launch any large-scale drives after the 1st of October and to terminate those under way not later than November 15. By August 15 the German Army had already spent by far the greater part of the time available for major operations in a war of movement, without attaining decisive strategic results.

The German losses in the 1942 summer campaign are smaller than the losses in the active war engagements of the first eight months of the German–Soviet War, because the German offensive was waged on shorter front sectors and with less violence. But the losses of the Red Army, too, were below those of 1941.

A major offensive with final victory as the goal would require the destruction of the Red Army, or at least its crushing to such an extent that it was no longer a potential offensive factor. This goal was not attained by the German Army in its summer campaign, and it was not even set.

The actual German offensive front in the South, in the Northern Caucasus, had in the middle of August a width of no more than 200 miles and was outside of European Russia. The German thrust in the Northern Caucasus encountered no more than one-third of Timoshenko's army group, and probably not more than one-tenth of the Red Army's effectives on the entire German–Russian Front. The Russian Front from the Middle Don to Murmansk remained unshaken by this German offensive. Impressive as territorial and economic gains in such an operation might be, from a military point of view they can be no more than local and partial successes. But the German Army, in the second half of 1942, was in a position in which partial successes were insufficient. For lack of time and because it is waging war against an enemy coalition, it can no longer afford a strategy of limited goals.

Such a strategy would have meaning for the German Army only if it could thereby gain not only security for a limited period of time during the tactical realization of an operation, but strategic long-range security on the entire Russian Front. The race for the Caucasus increases the risk for the German Army. Even the drive in the Northern Caucasus confronts it with vast difficulties. It must tie down large forces there, secure the flanks, overcome the enemy's delaying actions. It will then face the tremendous obstacles of a mountain war. In the event of a new crisis of German strategy on the scale of the one in the winter of 1941–42, the position of the German troops in the Caucasus must be especially menaced. But the strategic risk for the German Army, for the course of the entire Russian campaign, must be still greater. The interrelations between the German Front in the South and that in the Centre are now definitely interrupted. There can be no interplay between them, no combining of their forces. A large part of the German offensive forces is now fighting on Asiatic soil (the Manych River is the geographic frontier

between European Russia and Asia). In the late autumn of 1941 the German offensives in the South, in the Crimea, and on the coasts of the Sea of Azov already prevented the concentration of the German Army in the decisive battle for Moscow. The fight for the Caucasus is bound to make any further German initiative on the Central Front still more difficult.

With the Caucasian campaign Hitler has shifted from the grand continental strategy to oil strategy. He thereby neglects the military decision, giving Russian and Allied strategy a new chance. In 1941 the Russian High Command did not accept the challenge of a super-battle for the Ukraine; instead it retained for itself the choice of time and place for the crucial counter-blow. For the Red Army the time to use its reserves came when the German Army was worn down, and the place was the Moscow Front.

The all-out defence of the Southern Caucasus including Baku, along with the tying down of strong German reserves, is possible by using the mountain barrier as a powerful line of defence. Reinforcements can arrive through the Caspian Sea from European Russia via Astrakhan, and from Turkestan via Krasnovodsk. But the Caucasus, even less than the Ukraine, can be the scene of military decisions. So far the Soviet High Command has clearly seen and utilized the enemy's miscalculations. But the big counter-blow is now the job of the entire anti-Hitler coalition. The Anglo-American-Soviet coalition has today, more than ever before, the opportunity to confront Hitler's oil strategy with a grand continental strategy, a combined offensive from West and East, pointed to the European continent.

PART II

THE MAIN PROBLEMS OF THE GERMAN–SOVIET WAR

CHAPTER NINE

WHO IS STRONGER?

THIS IS the way the balance-sheet of the German Soviet War looked during the mid-summer of the German offensive in 1942: Of six major battles the Red Army had won three—the battle of Smolensk, the battle for Moscow, and the winter campaign; the German Army has won three—the battle of the frontier, the Ukrainian operation, and the battle for the Don and the Northern Caucasus. (The battle for Leningrad, which resulted in a stalemate, was only a local operation on a larger scale.) This undecided outcome was not accidental; it was to a considerable extent determined by the relation of forces of the belligerents themselves.

The novel factor in the German–Russian War is the total concentration of the German Army in the East. In the First World War no more than one-fourth of the German Army ever stood at the Russian Front. The largest number of German troops was stationed at the Russian Front in April 1915—639,000 men. At the same time 1,900,000 men were in action at the Western Front. In June 1916, the German troops on the Russian Front numbered 590,000, those on the Western Front 2,350,000. In the First World War, these few hundred thousand German troops bled the large Russian Army white, and so exhausted it that it soon collapsed completely. The rôle of the Austrian Hungarian Army in the Russian *débâcle* was nominal; it lagged far behind the Russian in combat power, and was beaten by it several times.

The victory in Russia in the First World War was the accomplishment of one-fourth of the German Army in the field. At that time the German Army was infinitely stronger than the Russian. If it had come to a duel between them, like the one of today, and if the German Army at that time had not been tied up on the Western Front, the Russian Army would unquestionably have collapsed within a few months. At that time the German Army was immeasurably superior to the Russian in combat power, tactical skill, organization, and equipment.

Hitler's army in turn is incomparably stronger than the Imperial Army was. It has a completely different striking power and strategic dynamic. In material respects the strength of the German Army is based

on the economic resources of the entire European continent, on the flawless organization of the German war economy, on the swiftest conversion of all available resources into arms. As Colonel Boltin wrote in *Izvestia*:

> Germany's lead at the beginning of the war consisted of the fact that, though its war potential was smaller, it was nevertheless able to mobilize its entire capacity in advance, and to draw maximum use from existing resources.[1]

The military characteristic of the German Army is its supreme capacity for the offensive, the thorough adaptation of all methods of offensive warfare, the ability to squeeze out of the troops everything they can give for the attack. In addition, the German Army of today has an altogether different type of leadership from the old Imperial Army. In the First World War the Imperial Army was largely led by stolid, elderly, moderately gifted military bureaucrats. The leadership and the officers' corps of Hitler's army, on the other hand, have impetus and imagination; they possess revolutionary ideas in their field, and they are masters of modern war technique and war tactics. The type of officer bred by Hitler's Wehrmacht is the most dangerous combination of engineer and mercenary, of strategist and gangster. The blows delivered by the German Army in 1941 against the Red Army were of tremendous violence.

The fact that in 1941 the Red Army was able to halt the Wehrmacht means that the Russian Army, too, at its present level, constitutes a wholly novel military factor. Even in World War I the German Army was first-class indeed, it has been regarded as the strongest army in Europe ever since the Franco-Prussian War. The Russian Army, however, was a second-class force in the First World War; in quality it ranged behind the German, the French, the British, and the United States Armies. That today the Red Army has been able to withstand alone the onslaught of the tremendously strengthened German Army, face to face and on equal terms, is evidence that the Soviet Union, which from a military standpoint started practically from scratch, has passed through a relatively greater and more accentuated military progress than even Germany, with her long-established industry and her old military tradition. It means that the Revolution and industrialization in the Soviet Union have brought in their wake greater military progress than the counter-revolution and the total war economy in Germany.

The factors that determine the relation of forces in this titanic struggle are man-power, arms effectives, war economies, quality of war technique, the relationship between industrial and military efficiency, and finally the dynamics of the war itself, as determined by the losses and mutual weakening of the two fighting armies.

At the eve of the war the Soviet Union had more than double the population of Greater Germany, about 190 million people against 80. By the late summer of 1941 the Soviet Union had lost regions with popu-

lations approximately between 65 and 70 million. With the exception of the newly acquired territories, where occupation was carried out at Blitz speed, the bulk—probably two-thirds—of the male population of draft age was evacuated from the lost areas in time. The conquest of the Soviet Ukraine, of the regions in Central and South-east Russia, was made long after general mobilization had taken place. That means that the ratio of losses in military reserves was much below the total loss in population due to the invasion. The annual Soviet contingent of recruits is much bigger, not only in an absolute, but also in a relative sense, because of the higher birth rate and the stronger representation of youthful male age classes. Although the total population of the Soviet Union was only a little more than twice that of greater Germany, the number of men in each year's draft-age class was four times the German. The average annual draft-age class from 1935 to 1941 ran to 1,600,000 men, as against 400,000 in Germany. The fact that her population is larger and more favourably balanced with regard to age gives the Soviet Union considerable superiority in military reserves. But just as the Third Reich is trying to make up its shortage in labour forces by the conscription of foreign workers, so it will undoubtedly try to strengthen its military reserves by compelling the satellites to send reinforcements. In 1941 the German Army could reckon on about thirty to thirty-five divisions composed of armies sent by the Third Reich's allies: Rumania, Finland, Hungary, Italy, and Slovakia. In the decisive 1942 campaign the Third Reich tried at least to double their number.

The Soviet Union will under all circumstances have greater man-power reserves than the Third Reich alone, without its allies. But it has smaller reserves in man-power and now a smaller population than the Third Reich with its allies on the European continent. The question now is to what extent Hitler Germany will succeed in deploying large contingents of its allies on the Russian Front. The bulk of the Italian Army can hardly be used on the Russian Front. During the summer campaign of 1942 the Hungarians were the allies that Germany sent to the Front in the largest number. The Finnish and Rumanian armies have by now suffered substantial losses. One must remember, on the other hand, that considerable Red Army forces are tied down in the Far East.

In the Soviet Union the training of reserves has been carried on systematically and with a long-range point of view, from the outset of the war. The auxiliary forces of the Red Army were prepared successively, deep in the rear. *Izvestia* wrote as follows:

> What does it mean to develop the reserves to the fullest? It means that the Soviet Union is mobilizing the rank and file of those liable to services successively. Only one part of the available forces are sent to the front. In the rear reserve units and new formations are set up, which will in due time find their place in combat against the enemy.[2]

It was not only ordinary reinforcements or the reserves of the High Command, but mass forces, which were to secure superiority for the Red Army. As *Izvestia* said:

> The troops sent as relief to the front are not merely fresh reinforcements but chiefly *new armies*, new strength that is to engage Hitler's troops, already exhausted and thinned out.[3]

These new armies were to receive thorough training based on the experiences of this war:

> The reserve units have to be given every opportunity for an extensive training period which brings them to the level of the rank and file. They adopt the fighting experience which the army has had on the battlefield. They study the peculiarities of this war. Mastery of new arms types and new war methods form the main content of the preparation of our reserves.[4]

Of great importance is the differentiated training of the five special groups of modern infantry: riflemen, sharp-shooters, machine gunners, mine-thrower crews, and anti-tank destroyer commandos.

The relative strength in weapons prior to the outbreak of the war, when the war began, and during the 1941 campaign, cannot yet be determined accurately. In 1939 the Red Army leadership made the claim that the Red Army took first place, even ahead of the German Army, with regard to tanks, bombing salvo of the air force, and fire power of the infantry. In November 1939 *Voyennaya Mysl*, the leading Soviet military publication, wrote as follows:

> The fire power of our army corps, the numerical strength, quality, and fire power of our tank arm and the bombing salvo of our air force are even today far ahead of all respective arms groups in *any* of the advanced European countries.[5]

Possibly this was a miscalculation. But it is unquestionably true that this was actually the goal of Soviet rearmament. At the beginning of the war the leading German military writers spoke of the extraordinary strength and even quantitative superiority of the Red Army's armaments. Colonel Soldan wrote:

> We are fighting against an enemy far superior in number as well as in matériel.[6]

General Westhofen describes the Red Army as

> . . . numerically the strongest army in the world, having at its disposal not only the strongest tank units but also a strong air force.[7]

The *Völkischer Beobachter* wrote at the beginning of the war that the enemy

. . . possesses tremendous combat forces with ample and good technical equipment, gigantic tank forces and a very strong air force.[8]

In the first months of the war Soviet quarters did not admit that the German Army had numerical superiority in offensive arms. In his first major speech of July 2, 1941, Stalin did speak of "the enemy armed to the teeth with tanks and aviation". But at that time he explained the German territorial gains not by the superiority of German offensive arms, but rather by the surprise of the German attack and the German advantage of prepared troop concentrations against the unmobilized Red Army. Soviet and Allied statements on German numerical superiority in tanks and planes began to appear in September 1941.

Actually the situation was probably as follows:

Soviet rearmament had taken on tremendous proportions in the years 1939–41, the two years preceding the war, and the Red Army's matériel, especially in tanks, aviation, and artillery, were extensively and successfully modernized. On the eve of the Second World War, in the middle of 1939, the Russian machine construction industry was even ahead of Germany's prior to the expansion of the Third Reich, and the Russian arms industry was by no means behind the German. But in the course of the war the German arms industry expanded because of two factors: through the incorporation of industries from the occupied countries and by the putting of Germany's entire industry on a war footing. That is why the aggregate German arms industry from 1939 to 1941 was bound to surpass that of Russia. It is likely that at the outset of the war Germany had numerical superiority in tanks and planes, though this superiority was not very great. Yet it was not this lead which gave the German Army its great initial successes, but rather its operative superiority: its concentration for the attack, the greater war experience, the specialized training for the offensive, and, during that first phase, better organization. In the first month of the war—probably up to the battle for Moscow—Soviet arms losses exceeded those of the Germans. The unfavourable ratio in offensive arms grew critical for the Red Army at the beginning of the battle for Moscow. On the other hand, the Red Army had been using offensive arms sparingly since the battle of the frontier, while the German Army had thrown them into the battle recklessly. Part of the Russian offensive arms had probably been kept in reserve from the autumn, especially the bulk of the heavy bombing aviation and the fast tank units for distant action. From the autumn of 1941 it had been the aim of the Red Army High Command to assemble as many tank reserves as possible for the decisive campaign of 1942. From then on the German losses in offensive arms far exceeded the Russian.

Yet in the long run the real relation of forces in offensive arms on the Russian Front is not determined by the arms in being, but by the degree to which the entire arms industries of the two countries are geared to war

production. Four economic factors are decisive for the arms production of the two belligerents: the actual arms industry, the machine construction industry, the steel industry, and the raw material supply. The development of the Soviet war industry is further governed by three special factors: the loss of various industrial centres; the relocation of industry—already put into effect; and the scope to which the planned total mobilization of the whole Soviet industry will be carried out.

The reduction in the Russian arms industry due to territorial losses was nominal. Most of this industry was already situated east of the Leningrad–Moscow–Donets Basin Line. In the occupied regions only a few scattered arms plants had been built, and these were immediately and almost 100 per cent evacuated. The machinery and equipment of the Russian arms industry were therefore practically salvaged *in toto*.

The losses of the Russian machine-construction industry were larger, but not vital in themselves. Twenty per cent of the industry was in the occupied South, and 14 per cent in threatened and besieged Leningrad. Most of the latter was evacuated, and whatever remained now worked for the war needs of the nearby front. Not evacuated were non-transportable parts like heavy cranes in the big locomotive plants, some turbines, etc. On the whole, it may be assumed that hardly more than 10 per cent of the Soviet machine construction industry had to be written off. The productive capacity of this industry is huge. In 1940 its output was thirty-two times that of 1913, fifteen times that of 1929, and 50 per cent higher than that of 1938—that is, since the last two years before the war.*

The gravest blow to the Soviet war industry was the occupation of the steel production centres in the Russian South, which had been manufacturing about 50 per cent of the country's entire output. Second place in the balance-sheet of Russia's industrial losses is Krivoi Rog, whose iron ore deposits yielded 50 per cent of the total production, and third comes the aluminum works on the lower Dniepr.

The latest territorial losses in South-eastern Russia have not directly affected the Russian armament industry, but they have hit the Russian war economy as a whole. The loss of the Donets coal places the railroads of European Russia, the chemical and machine-building industries west of the Urals, in a critical position. The loss of the oil-fields in the Northern Caucasus is not decisive in itself, but none the less grave, especially since several important refineries were also lost. The German occupation of the northern part of the big Caucasian pipe-line, in connection with the throttling of the rail communications between the Caucasus and European Russia, plus the possible threat to the approaches through the Caspian Sea and possibly along the Volga endanger Russia's most vital supply line.

* See *Russia's Economic Front for War and Peace*, by A. Yugov, page 16, Harper and Brothers, New York, 1942.

The colossal and unprecedented experiment of evacuating entire industries from the occupied and threatened regions has on the whole succeeded. It went hand in hand with a delay in the development of Soviet war production. A temporary disruption of a sector of production was the inevitable consequence. But the general evacuation not only saved the Soviet war industry for the moment, it also definitely withdrew it from the grip of the enemy for good. Far in the East, in new surroundings, a new secure ground-work for Russia's war industry was created. New gigantic combines have been set up, as, for example, the merger of the tractor works of Cheliabinsk with those evacuated from Kharkov. Towards the end of the winter of 1941–42 the reorganization that followed in the wake of the evacuation was terminated, and Russian war industry returned to normal, despite the heavy obstacles. Now it could work on a long-range schedule. The successes on the front provided the breathing spell that was necessary for this process of relocation. Because of the expansion and the full utilization of the productive capacity of the eastern steel industry, the Soviet war industry could now definitely count on an annual steel output of from 10 to 12 million tons. It was imperative that even in the most critical period of the industrial transition, the front be amply provided with all arms and ammunition- except tanks and planes, of which there was a shortage. "We are not skimping on ammunition," the Soviet Press wrote in the winter of 1941, and this was true.

The Russian plan for war production consists of complete industrial mobilization; it is aimed at gearing the productive capacity of the entire industrial plant to war production. On December 3, 1941, *Pravda* said:

> All industry, from top to bottom, down to the last tool, is from now on to be harnessed to its maximum for supplying the front.

In broad terms this means utilization of all reserves, of the whole productive capacity of industry for war production, and, more specifically, the farthest possible inclusion in arms production of consumer goods industries. In no country, not even in Germany, is the mobilization of all industry being so relentlessly carried out as in the Soviet Union. It is no exaggeration to say that during the war the Soviet Union will have only one industry—arms. Here the limited steel output will form the bottleneck. But there is a model example for developing the arms industry even though the steel output may be limited. Strange as it may sound today, this example was provided by France during the First World War. Because of the German occupation of the industrial regions the nation's steel output, never very great, fell catastrophically from 5 million tons in 1913 to 2 million tons in 1917 and 1918. (The production of pig iron fell even more sharply, from 5 million tons in 1913 to 1 million tons in 1917 and 1918.) But despite this curtailment of the most vital raw material, the French arms industry was highly developed in World War I. In the

first quarter of 1915 France turned out five (!) 75-mm. guns; in the last quarter of 1915, 700; in the last quarter of 1917, 1700; in the last quarter of 1918, 2000. In the second quarter of 1914 France produced 60 heavy guns; in the second quarter of 1916, 345; in the second quarter of 1918, 2005. In the third quarter of 1914 it turned out 150 airplane motors; in the fourth quarter of 1916, 5150; in the third quarter of 1918, 12,750.[9]

These highly impressive results were obtained through the ruthless concentration of all available resources on war production. In the First World War, France averaged one-fifth of the British steel production, but it manufactured about the same amount of arms as Great Britain. France averaged one-eighth of the German steel production in the First World War, yet it produced not one-eighth, but about one-half of the German arms production. One can rest assured that the Soviet Union, with its intensely planned economy and its extreme application of total warfare, will carry out the concentration of all available resources for war production far more ruthlessly than France did in the First World War. And with all its industrial losses the Soviet Union still has a steel industry that is six times larger than France's and a powerful, incomparably bigger machine-building industry. A Reuter's dispatch of February 1, 1942, estimated Soviet arms production in January 1942 at 40 per cent above that of June 1940 and regarded it as likely that in the spring of 1942 it would be 60 per cent above that of June 1940.

Within the framework of the whole war economy the output of the tank industry has special importance. Militarily the relationship of forces in the German-Soviet War is largely determined by the contest in tank production. One Soviet report in *Pravda* declared on November 25, 1941, that the tank industry was supplied with sufficient high-quality steel for the duration. Another statement in *Pravda*, on December 27, 1941, said that tank production would be carried out according to plan. The Russian plan provided that the German tank output would first be caught up with and then surpassed. We do not know to what extent Russian tank production declined at the beginning of the war. But there can be no question that the productive capacity of the Soviet tank industry permits of considerable expansion. The entire huge Russian tractor industry, the most powerful in the world, was even in peace-time planned in such a way that in war-time it could immediately become a production reserve for the tank industry; in other words, that it could be shifted to tank production. The Russian tractor industry turned out about 250,000 tractors annually in the last few years, and it is reasonable to estimate that it could produce an additional 15,000 to 20,000 tanks and armoured vehicles a year. According to a Russian statement in the spring of 1942, Russian tank production had exceeded the pre-war output. As Ustinov, commissar of the arms industry, stated in *Izvestia* on June 4, 1942, the production of cannon in May was several times higher than in the last pre-war months.

German armament production is undoubtedly far better off in various respects. The Third Reich has today much more iron ore, steel, and aluminium than the Soviet Union. But in relation of German arms production to Soviet arms production is by no means determined by these factors alone. If Germany, plus the occupied countries, has, theoretically, a steel production of 36 million tons, and the Soviet Union, after the loss of the southern steel productions, one of 12 million tons, it does not follow that the German arms output must be three times the Russian arms output. Germany cannot turn out more arms than its arms industry can manufacture. The German arms industry is not three times greater than the Russian. Germany's margin of superiority in arms production is far smaller than that. For example, the Third Reich does not have a tractor industry as reserve for the tank industry on the scale of the Russian with its mass and serial production.

On the whole, the German output in infantry weapons and guns is not at all larger than the Russian. To be sure, the draining of the occupied countries does give the Third Reich several advantages. But, with the exception of Czecho-Slovakia, the arms industry of the occupied countries is weak. In 1939 the French war-plane production averaged only 100 machines a month. Besides, the real economic capacity of the Third Reich cannot be computed by mere addition of the production of the former Germany proper plus that of the occupied countries before their occupation. Germany has by no means stepped up the industries in the occupied regions. On the contrary, their economy has to a large extent been utterly disrupted. Germany can exploit only a few industrial fields and plants (like the Czech arms industry, part of the French tank and aviation industries, the Polish arms plants now used as repair shops for German tanks) owing to the dislocation of the entire European economy, the raw material shortage, transport difficulties, and sabotage. In addition, transport difficulties in connection with the vastly extended German communication lines to the East are impeding the regular supplies for the front. German artillery on a number of occasions suffered from a shortage of ammunition during the winter campaign.

The other Achilles heel of the entire German war machine is the limited oil reserves. And it is irrelevant by what a war machine is threatened: whether by a steel or an oil shortage. The use of the captured oil-wells of the Northern Caucasus is precluded for the next phase of the war by their thorough destruction. All in all, therefore, the German arms industry can have only limited superiority over the Soviet arms industry.

By and large the organization of the Russian rear in the service of the war conduct has been satisfactory. The transfer of industries was a tremendous performance. American experts have stated that the technique and organization of Russian war industry are at a high level. Among the most important observations is that of Averell Harriman, who said:

I can testify that the Russian has become a skilled mechanic. I was amazed at the development of knowledge of the use of machinery that had come about in that period.[10]

Major-General Burns, American lease-lend executive, who took part in the tri-power conference in Moscow, said:

The Russians have a good military machine, a good labour set-up behind that, and a good organization, and those are the three most important things in war.[11]

And General Chaney declared, after touring the Moscow arms plants, that they were no worse, if not better, than similar plants in Europe. He gave high praise to the organization, the accomplishment of individual workers, and the extraordinary precision in the manufacture of instruments.[12] All this has been confirmed by the course of the war itself, and by the development of military operations. Without efficient organization of the rear the powerful German war machine could not have been stopped in its tracks and the Russian counter-offensive would have been impossible.

Russian transport has accomplished something quite unusual during this war. Formerly it had been assumed that the transport system would be the weakest link in the Russian economic system during the war. This has not been the case. The Russian railroads have passed the severest test, bearing almost incredible burdens under the most precarious conditions. Simultaneously they have served the front, have accomplished the transfer of industries to the East, and have also borne the normal transport loads despite the change in the entire direction of the traffic as a result of the relocation of industry. All this was partly carried out under a rain of bombs by the German air force.

That the Russian front did not have to skimp on ammunition is due, not only to the arms industry, but also to the railroads. It has been proved that the Russian railroads are well equipped. Before 1937 they had a somewhat larger rolling stock of locomotives and cars than Germany. And immediately before the war they transported four to five times more goods than in 1913.[13] The achievement of Russian transportation under war-time conditions was obviously of greatest military importance. The Russian supply apparatus functioned almost without a hitch.

The other revelation of the war was that the quality of the Soviet war technique does not, on the whole, lag behind the German: a fact, incidentally, which this writer has for years been stating in his earlier books. The superiority of German arms in a few particular types did not tip the military scales in favour of the Nazis. The German arms have no comprehensive qualitative superiority over the Russian arms that might give them a military decision. The great German successes in the initial

phase of the war were not the consequence of better technique, but, as stated before, of the operative superiority of the German Army at the outset, of its greater offensive ability based on experience and specialized training. In the long run we shall find that he who wins has the better technique. That does not mean that military technique is to be regarded as sheer engineering, but in relation to the tactical skill of the troops, of the purposefulness of the war plan, etc.

Soviet infantry arms are by no means inferior to the German. A war correspondent attached to the Finnish troops reported that "the Russian rifles are so good that any Finn is happy when he can capture one".[14] Garret Underhill, the American expert on armaments, regards the "uncanny effectiveness" of the Russian snipers as the decisive factor of the successful Russian resistance.[15] Soviet infantry arms have been criticized by General Yegorov of the Red Army. But this criticism referred to the calibre of the Russian rifle and of the light and heavy machine-guns that impede the mobility of the infantry because of their weight.[16] At the beginning of the war the German Army had more mine-throwers and submachine-guns. Later in the war the Russians turned out particularly large quantities of these weapons, and in this respect equal strength was probably attained.

The higher military effectiveness of Russian artillery is beyond question. Its superiority is less a technical one than one of mass and purposeful tactical use. But the quality of Russian artillery, too, is excellent. Of all artillery categories, the anti-aircraft artillery has achieved the greatest technical perfection. It shows what the arms technique of the country can accomplish. On this point the Soviet General Grendal said:

> Of all artillery categories the modern anti-aircraft artillery is probably the most perfect due to its ballistic qualities, its method of detecting aerial targets, its automatic set-up, and the technical excellence of the instruments used, which guarantees the high effectiveness of the firing.[17]

Soviet anti-aircraft artillery is stronger than the German; specifically the heavy Russian 105-mm. anti-aircraft gun is more efficient than the German 88-mm. gun. Of the individual types the German "storm cannon", a tank gun of greatest mobility, manœuvrability, and adaptability to all sorts of terrain, is better than the average Russian mechanized artillery.

The German tank arm had numerical superiority until the battle for Moscow and in the summer campaign of 1942. It also had greater operative effectiveness, a better capacity for offensive manœuvres, and, until its failure in the battle for Moscow, an excellent fighting order of great cohesion. It had hardly any superiority in technical quality. It is possible that especially the German medium tank is of better quality, but even that has not been proved. The construction of Russian tanks is well

thought out; especially the tanks of the infantry accompaniment have strong armour, the tanks of the units for distant action have great speed, and the tanks used for the break-throughs show a special combination of armour and fire power. The Russian tank technique puts particular emphasis on the so-called "technical vitality" (the ability to withstand material damage in fighting) of the tanks and upon the simplest possible construction for facilitating mass production. The Soviet tank arm has a far more varied assortment of categories than the German, particularly in heavy modern tanks. General von Westhofen had this to say about the Russian tanks:

> This enemy knew how to equip the great mass of his tank divisions with ultra-modern and heavy material which, for example, had not yet been put in evidence in the war against Finland, but had been constructed only afterward.[18]

And the German tank expert Captain Ritter von Schramm gave this comprehensive description of the heavy Russian tanks:

> Among them are all types and constructions, but the latest heavy categories predominate. What came rolling along after them, the waves of the actual tank divisions, was the most massive and heaviest tank material ever put into the field by any military power. The Soviet Army has frequently made no use whatever of its more obsolete and weaker armoured vehicles, which were equipped only with machine guns. Instead, a huge number of cannon tanks, of the lightest to the heaviest calibre, put in an appearance. The most frequent models are the tanks with a 45 and more often with a 76.2 mm. cannon. But one can also find an unusually large number of tanks with 150 mm. cannon. The Red Army has, besides, thrown heaviest models into the fray, those that have hitherto been kept a strict secret. These can no longer be called tanks—they are truly fortresses on wheels, super tanks with three heavily armoured turrets, strong enough to smash virtually any obstacle.[19]

Strangely enough, the German tank arm that was so successful at the outset of the war possessed no really heavy tanks—that is, tanks heavier than 40 tons. The superiority of the Red Army in heavy tanks was recognized by the military critic of the *Frankfurter Zeitung* when the war began:

> We know those giant Bolshevist tanks of more than fifty tons from pictures. Our troops have nothing equal to confront them with in mass and weight.[20]

It is likely that when the problem of the reorganization of Russian tank production is solved, the Red Army will have suitable tank types with

great fire-power and break-through capacity for large-scale offensive operations.

In aviation technique each of the belligerents has certain odds. Göring's air force probably has, on the whole, a larger number of modern types. In individual types Göring's aircraft is likely to have technical superiority in medium bombers and heavy fighters—the twin-seat fighter planes (interceptors or destroyers) used to escort bombers. It also has more dive bombers. The Soviet air force has sufficiently differentiated types; among others, it has night fighters and dive bombers. It has, above all, special categories for peculiar tactical use, such as intervention in land fighting. These are the Stormovik, which combines the qualities of the dive bomber, the storming plane, and the fighter plane, and a variation of the Stormovik, the anti-tank plane. Both types are of unique tactical effectiveness and of singular construction matched by no other air force in the world. The German air force had nothing to compare with these two types of planes until the spring of 1942. They are distinguished by their armour and armament, especially cannon. In these two respects Russian aviation has trod new paths. The Berlin correspondent of the United Press had this to say about the armour of the Stormovik type:

> German air fighters said they were able to pump enormous quantities of bullets into the new planes without bringing them down or setting them afire, so tough is the armour sheathing virtually every inch of their vital parts. "Gasoline tanks, radiator, the pilot's seat, in fact everything in this plane is armoured," wrote one reporter. "We therefore call them 'flying tank'."[21]

The Soviet anti-tank plane carries the most effective gun of any warplane and also aerial torpedoes. There has, on the other hand, also been considerable progress in the recent developments of the new Soviet fighters. These are the types I 17 (probably there are also I 18, I 20, and I 21) and MIG 3. Of the MIG 3, Major de Seversky says:

> This machine, with its 1300-horsepower engine and powerful armament, compared favourably even with the British Spitfire.[22]

Lord Beaverbrook also has a very high opinion of this plane, which he places above the German fighters:

> MIG is a fighter which corresponds in excellence of design and performance to our Hurricanes and Spitfires. Just as these machines are superior to the German fighters in the West, so have the Messerschmitts on the Eastern Front met their match in the MIG 3.[23]

The MIG 3, however, is not the last word in Soviet aviation. In the second half of 1941 it was enriched by fighters of still higher speed and stronger armament, as General of Aviation Shcherbakov announced.[24]

It is probably this type of plane, which, according to Wing Commander H. N. Ramsbottom Isherwood, is supposed to surpass in speed even the British Hurricane.[25] (Commander Ramsbottom Isherwood led two Royal Air Force Squadrons on the Russian Front.) In 1942, according to General Shcherbakov, the Russian air force should receive fighter planes of still further increased speed and armament. It seems to be certain that Russian aviation technique qualitatively is quite in a position to master the tasks which aerial warfare against the Third Reich demands.

During the war itself, especially since the winter campaign, both armies have received several new weapons. Among all the armed branches in the German Army the development of the artillery has been strongest in 1942. The Wehrmacht received notably some types of heavy cannon, among them the almost legendary 60 cm. (24 inch) howitzer. More important than this monster has been the reinforcement of German medium and heavy mechanized artillery. The anti-tank artillery has been strengthened by the new 50-mm. cannon.

The Red Army got its famous anti-tank rifle towards the end of 1941; furthermore, a long-range field cannon, and probably a new anti-tank gun.

The latest German planes are the fighters Heinkel 113, Messerschmitt 109 F and 115, the medium Dornier bomber 217, and armoured pursuit planes.

The latest Soviet aircraft are the pursuit planes YAK and LAG and the light bombers PE 2 and PE 3.

Armament and equipment of the German medium tanks have been increased in the war. The new Soviet tank production has probably been concentrated upon the powerful mobile type KV.

In calculating the balance of forces in the German-Soviet War, however, one should take the following into consideration: Technique and economic factors cannot be considered in an isolated manner. Technology and economic statistics by themselves give no accurate picture of the actual military strength of the combatants. Modern weapons are machines of a special brand, they are primarily *fighting* machines, which are not employed in accordance with the rules of economic productivity. Nor is the war a contest in international trade that can be encompassed by economic statistics. It is a contest of an altogether different nature. Factors of war economics and war technics do not function automatically, but through the medium of individual combatants and units, governed by rules of tactics and strategy. Today more than ever before, military decisions depend on economics and technology, but they are determined and fought out by military factors. Colonel Soldan, for example, has pointed up such an extraordinarily important military factor: he stated after the German defeat before Moscow that while in the First World War the individual German soldier far surpassed the individual Russian

soldier, the Russian soldier in this war is not below the German soldier in fighting quality.[26]

In the event of a relative equilibrium between arms technique and the industrial strength of the belligerents, the decision must depend upon military factors: the endurance and fighting morale of the troops, their tactical skill, and the purposefulness, strategic methods, and far-sightedness of the war plan as a whole. Superiority in all these military factors, or even in certain of them, might to some extent compensate for the industrial and possibly for the arms superiority of the enemy. The experiences of the German–Soviet War should be taken into account. In the beginning of the war and during its initial phase the Russian economy was still intact and the Russian war technique was not inferior to the German. But at that time the German Army had a military, an operative, superiority on its side. And therefore it won the battle of the frontier and the Ukrainian operations. In the battle for Moscow the Soviet war economy was already greatly crippled. At that time the German Army had pronounced superiority in offensive arms. The German war economy had not grown weaker during the summer and the German war technique had not deteriorated. But the tactical skill and the practical war experience of the Red Army had meanwhile grown, and it had benefited by the far-sighted Russian war plan, while at the same time the German army was gravely exhausted and placed in a strategically unfavourable position by the hazardous and poorly calculated German war plan. Military factors were now working to the advantage of the Red Army. It now had operative superiority, and thus it won the battle for Moscow and the winter campaign. In the summer 1942 campaign the Wehrmacht again had operational superiority, but this time it was limited to the Southern Front alone.

The balance of forces on the Russian Front has, however, meanwhile been greatly changed in the course of the first year of war, chiefly by the mutual using up of the armies. The increased intensity of this war is expressed in the steep rise in casualties of both combatants. The tempo of the casualties of the armies determines the tempo and the schedule of the war. The German Army collapsed in the First World War after having lost seven million men in dead, wounded, and prisoners in four years and three and a half months of war. The Russian Army broke down in the First World War after having lost between seven and eight million men in three years and four months of war. (There are no accurate statistics about the Russian casualties between 1914 and 1917.)

What is the tentative balance sheet of the German and Russian losses in this war?

Here it is necessary first to examine the statements of the two belligerents on their own and on the enemy's losses. The German statements are obviously untrue and absurd on their face. In his speech of November 9, 1941, Hitler himself quoted the German estimate. He said:

If I now want to sum up the success of this campaign to this day, then the number of Russian prisoners has now reached 3.6 million, and I resent any British dunce coming along and saying that this was not confirmed. If German military quarters count something, then it's so! Now, if I have 3.6 million prisoners on the one hand, and I apply the conditions of the First World War, then this is matched by at least the same number of dead. I presume that in Russia, as with us, there are three to four wounded to one dead.

According to Hitler's estimate the Red Army would thus have lost 18 million men in the first four and a half months of war: 3.6 million prisoners; plus the same number, that is, another 3.6 million, dead; plus at least three times that figure, that is 10.8 million, in wounded—or 18 million total casualties. That would run to more than 4 million Russian casualties a *month* between June 22 and the beginning of November 1941. The number of absolute Red Army losses—that is, of dead and severely wounded—was put by Hitler in his speech for this period alone at 8 to 10 millions. The total German losses, on the other hand, were placed by German official quarters at 400,000 men up to September 1, 1941, and at 700,000 men for the first four months of the war. Thus the German casualties are supposed to average less than 200,000 per month, and the ratio of the Russian to the German losses is set at 20 : 1. The history of war has never heard of more absurd casualty statistics. But, as Hitler said, when German military quarters count something, then it's so!

The latest German statement about German war casualties gives the number of dead in the first year of war at 271,612, and the number of missing at 65,730. The number of wounded has not been given at all. The monthly average of dead would thus be below 25,000. Assuming that there are three wounded to every dead, the total German losses including the missing men would be no higher than somewhat over 100,000 as the monthly average of the first year of war.

The Russian statements on casualties announced, for the first five months of the war, 6,000,000 casualties for the Wehrmacht and 2,219,000 for the Red Army (statement at the end of November 1941); and for the entire first year of the war, 10,000,000 casualties for the Wehrmacht and 4,500,000 for the Red Army (statement on June 23, 1942). The figures on the German losses are exaggerated, but the statements on the Russian casualties come more or less close to the truth, though the Russian casualties in the first phase of the war were probably even higher than stated. There has been no comprehensive Russian statement about German casualties during the winter months, only isolated statements from individual sectors of the fronts, and not for uniform periods of time. According to them the German casualties between December and March would run to about 500,000 men a month. These figures probably come close to the facts.

In an examination of the German and the Russian casualties in the first year of the war, two important factors emerge:

There exists first a certain equilibrium between the German and the Russian losses. In this respect there is a certain resemblance between the ratio of losses in the German-Soviet War and the ratio of the losses in World War I on the Western Front. In absolute numbers the losses reach a much greater monthly figure than in the First World War on the Western Front. But the ratio of losses as between belligerents must be about the same as it was in 1914–18. In the First World War the losses of the Allies were about 20 per cent higher than the German losses, but on the whole there was a tendency to balance the losses. The same is true for the Russian Front today. The sequence of battles is similar. At that time the German Army won the frontier battle against the Allies, as it did now against the Soviet Union. Then the French Army won the battle of the Marne, just as now the Red Army won the battle for Moscow. Just as at that time on the Western Front, there now exists on the Russian Front a certain equilibrium of fighting capacity of both armies. Thus today, as then on the Western Front, the losses must be about equal on either side. That does not mean arithmetic equality, nor that the losses are equal in all battle phases. There have been fluctuations in casualties, but on the whole the trend of the German-Soviet War up to now has shown a tendency to balance the losses. In the first phase of the war, up to the battle for Moscow, the Russian losses were higher. In the second half of the first war year, beginning with the late autumn, the German losses were higher. The Red Army had more losses in prisoners, because it passed through a deep retreat lasting four months. The German Army had heavy losses in frozen, disabled, and heavily exhausted men in the winter campaign. But altogether there has been a relative equilibrium of casualties.

Another fact is that the losses of both combatants in absolute figures are very high. The German-Russian War is a highly intensified war. The Russians' own statement of their losses in the first five months of the war of over 400,000 a month gives an approximate picture of the scope of the losses in modern warfare, waged by mass armies with weapons of extremely destructive power. In the periods of intensive fighting the losses of the combatants were probably still higher, between 400,000 and 600,000 a month.

The German military encyclopædia *Handbuch der neuzeitlichen Wehrwissenschaft* gives a scheme of the factors that determine the extent of losses in modern war.[27] They are stated to be:

1. The duration of the war and of the individual operations;
2. The type of the individual operations;
3. Type and scope of arms;
4. Terrain conditions, climate, weather;
5. Degree of training and war adjustment of the troops.

These factors have been correctly summed up, and according to this blueprint it is possible to examine the extent of the losses in the German–Russian War.

First, the duration of operations. In the first World War the German offensives combined did not last more than six months for the whole four years and three months: from the beginning of the war to the battle of the Marne, followed by the German offensive at Verdun and Ludendorff's offensive in the spring and summer of 1918.

This time the offensive on the Russian Front lasted almost uninterruptedly for five months—from June 22 to December 5, 1941—during the first six months of the war alone.

"It is impossible to wage continuous offensive battles with millions of troops," General Field Marshal von Leeb, the present Commander-in-Chief of the Northern Front, wrote in 1937. But that is precisely what the German High Command has now done. In this war German manpower has been wasted to an incomparably greater extent than in the First World War. Because of the violence of the German attacks and the precarious retreat the Soviet losses too must be high. The length of the front is an additional factor in this connection. In the First World War the front in the West extended over about 400 miles. In Russia today it extends over 1500 miles. In the First World War major battles in the West were never waged on any front sector wider than 100 miles. But in Russia today battles were waged over a front of more than 300 miles.

The "type of the individual operations" means the character of operations. The German Army had to take fortifications, carry out siege operations, traverse vast streams, storm strongly fortified Russian defence lines. The deep Russian retreats too were costly operations, and thus the effort and the losses of both armies grew in proportion.

"Type and scope of arms" means the mass and effectiveness of arms. "The three-dimensional war, aided by chemical weapons, explosives, bacteria, heavily armoured vehicles, etc., makes new demands," the German encyclopædia says—demands chiefly in human lives. Today both armies use far more effective and destructive arms than the Germans and the Anglo-French used in the First World War. The automatic weapons of the infantry, rapid-firing artillery, tanks, and aerial weapons by far surpass in fire power the arms of World War I. The striking power of the Russian infantry and artillery has been particularly effective. Tanks and planes have great operative importance, but their immediate destructive force is limited. The heaviest losses are inflicted upon the enemy by modern artillery and infantry. A German war correspondent wrote at the beginning of the war: "The Russians shoot well, and they hit their targets."[28]

Terrain and climate were additional determining factors in the rise in the German casualties. The open Russian spaces have offered the Ger-

man troops no cover. In the winter campaign the Russian toll was small, the German extremely high.

On both sides the troops were well trained and hardened, except for the failure of the Germans to adjust themselves to the winter campaign. The German fury and skill in the offensive, the Russian tenacity in the defensive, their sly tactics plus the counter-offensive against their weakened German enemy, have kept the casualties on both sides very high.

The sum total of all these factors was that the losses on the Russian Front were three to four times as high as those on the Western Front in World War I. If, according to Russian estimates, the Russian casualties in the first twelve months of the war were about 400,000 a month, then the German losses must have been about the same. The average monthly toll on the Russian Front (with the exception of such comparatively calm months as March and April 1942) must have run to about 400,000 to 500,000 men on each side.* From June 1941 to May 1942 the losses of both the German and the Red armies probably totalled 4 to 5 millions. The high number of Russian casualties was the result of the German Army's offensive power, the high number of German losses was due to the intensity of the modern battle of material, the effectiveness of Russian arms, the ruthlessness of German strategy in the offensive, and the lack of foresight regarding the winter campaign. That the German losses must have been very high is evidenced by the course the war has taken. The German Army retreated from Moscow because it was exhausted, and it was exhausted because of its tremendous losses. The losses of the German Army at this time were so high that it could no longer continue its offensive. The Red Army losses were high too, but—owing to the tremendous available reserves—not so high that they could impede the Russian counter-offensive.

Two important conclusions must be drawn from these facts:

First, assuming that both sides suffered about the same number of casualties, then these casualties can be borne more easily by the Red Army because Russia has greater reserves in man-power, and thus the balance of forces will of necessity be shifted in favour of the Red Army. Since the

* This calculation on the whole is confirmed by two statements of Winston Churchill. In his speech of September 9, 1941, Mr. Churchill said: "Already in three months he [Hitler] has lost more German blood than was shed in any single year of the last war." German losses in the First World War averaged 150,000 monthly. According to Mr. Churchill they should be in the first months of the war in Russia four times as great, that is, approximately 600,000 monthly.

In his speech of May 10, 1942, Mr. Churchill stated with respect to the German losses in the winter campaign: "No one can say with certainty how many millions of Germans have already perished in Russia and its snow. Certainly more have perished than men killed in the whole four and a half years of the last war. That is probably an understatement." In the First World War 1,800,000 Germans were killed. Thus, in the winter campaign the German losses should be, according to Mr. Churchill, even higher than 450,000 monthly.

Red Army has larger reserves in man-power than the German Army, it can endure a longer war, if losses on both sides remain on a even level.

Secondly, the German Army's offensive power and power of resistance are limited not by a dearth of arms—arms will be plentiful—but by the increasing exhaustion and shortage of its effectives and reserves. The German-Soviet War has become a protracted war because German Blitzkrieg has failed. But it is not a protracted war with the long margins of the First World War. Its tremendous intensification and the extent of the losses are bound to shorten its duration considerably compared to the First World War.

CHAPTER TEN

TWO WAR PLANS

TO UNDERSTAND the course of the German-Soviet War and to judge its perspectives it is necessary to penetrate into the laboratories of the two general staffs. War is not merely a clashing of arms; in it military conceptions clash too. In this great continental war two different methods of military thought and planning have been in conflict—the German and the Soviet war plans. It would be useful here to distinguish between war doctrine, strategy, and war plan. *War doctrine* is the concept of the basic elements of present-day warfare. It determines the rôle and function of modern arms, the relationships between the defensive and the offensive. *Strategy* determines the method after which a particular war is to be conducted, the sequence of battles. A *war plan* is based on a war doctrine and employs a strategy in a given war, against a given enemy. A war plan arranges tactics, war technology, and grand strategy into a single system of calculations. Today it determines not merely the initial operations as did the Schlieffen Plan or the French Plan XVII of 1914. It decides upon the use of forces in relation to the enemy's forces, to the theatre of operations, to the calculated time-table for the entire course of the war.

The original German war plan against Russia is quite clear today. It stands revealed in the actions of the German Army, in official German utterances, and in German military literature.

The German war plan against Russia was conceived and applied as a Blitzkrieg. Its basic elements were surprise, unceasing offensive action, mobile warfare, encirclement, and the battle of annihilation. General von Hasse, who was one of the chiefs of the old Reichswehr, thus set forth the German offensive method in Russia:

> Surprise and speed are the pre-eminent characteristics of German tactics in all the campaigns of this war. The suddenness and impact of the first attack are to surprise and paralyze the enemy.[1]

Surprise and speed—these are also the chief methods of German

strategy in the opinion of General Guderian, outstanding technician of Blitzkrieg. Half a year before the outbreak of the Second World War Guderian, writing in the *Militärwissenschaftliche Rundschau*, characterized surprise as the main element of German strategy, thus foreshadowing the coming German war plan against the Soviet Union:

> Speed gives birth to surprise. Concentration of mass on the decisive goal generates power. The surprise use of concentrated power is the most reliable guarantee of victory.[2]

The surprise element was not merely a supplemental part of tactics in the German offensive in the East. It was to render organized resistance by the enemy impossible, prevent him from deploying his forces, and give the German Army a safe margin of superiority down to the day of victory. General von Hasse unmistakably stated that the suddenness and impact of the German offensive were to strike the enemy

> if possible even before he has finished getting into position. The fighting is then to proceed at such speed that the enemy has no time to come to his senses, to make new decisions, and carry them into action.[3]

This was the classic programme of German Blitzkrieg against the Soviet Union, as put into effect in July 1941. Under no circumstances was the enemy to be given time and opportunity to attain a balance of power after the initial German attack. In September 1941 the well-known German war historian General Kabisch put it like this:

> Our Commander-in-Chief is in a position to pursue victory to a point where any real possibility for the enemy to restore an equilibrium is lost.[4]

Such were the demands of German strategy. They logically gave rise to the German intentions of waging a ceaseless offensive, of letting one battle follow another without a let-up until the enemy collapsed. These imperatives of the German war plan were graphically described by Captain Weiss, editor-in-chief and military expert of the *Völkischer Beobachter*, and for years close to Hitler. In November 1941, concluding a series of articles describing the course of the entire campaign in Russia, he wrote:

> The crucial task the German Commander-in-Chief had to master in Russia consisted of directing uninterrupted operations according to his will on this, the mightiest battlefield in the world. He had to see to it that there was not even a moment's interference with the unbroken sequence of engagements and battles over a front at least 720 miles wide. Tannenberg in the year 1914 did not decide the war because it was not followed by a second battle of annihilation. The enemy's back has been broken only by the breathless pace with which the enemy was hunted down from pillar to post, from the defeat at Bialystok and Minsk to that of Smolensk, from the encirclement battles of Gomel and Kiev to those of Bryansk and Vyazma.[5]

The German High Command could tolerate no interruptions in the offensive, seeing in them the greatest menace to its entire war plan. It anticipated that the battle for Moscow would bring the final decision. Two weeks before the German offensive before Moscow collapsed and was broken off—the initiative passing to the enemy—Captain Weiss set forth this viewpoint quoted above.

It was mobile warfare that was planned and waged as the method of victory. In it alone the German High Command saw the strategic means that could assure victory. Captain Weiss lent special emphasis to this adherence by the German High Command to mobile warfare:

> These struggles placed great demands on the intellectual mobility of the German command. Operations had to be constantly resumed. Decisive battles had to be waged and their devastating results for the enemy could be attained only by the methods of mobile warfare.[6]

In its mobile warfare in Russia the German High Command proceeded from a technical and tactical super-modernism. On the basis of its past experiences it had absolute faith in the efficiency of modern offensive arms—tanks and aviation. It believed that the German motor would gain the same mastery of the Russian Front it had previously gained in Poland and France, that a German air and tank offensive would smash the Red Army. In the days of the super-battle in Flanders the influential German military writer Lieutenant-Colonel Hesse wrote:

> We have known since the Polish campaign that the issue in this war would be strongly influenced by Panzer forces. Panzer forces are in extensive control of the present war picture. They are proving themselves in a way that can hardly be imagined.[7]

The German High Command believed in the infallibility and omnipotence of a strategy which had lifted the offensive in mobile warfare to the heights of acrobatic virtuosity. The simple recipe was the battle of encirclement and annihilation: the "Great Cannae", as German military literature, after Schlieffen and harking back to Hannibal's victory, was wont to call the classic example of the battle of annihilation. In the Russian campaign the German High Command was to realize this strategic concept of Schlieffen and Ludendorff down to its last implications, using modern technical methods. Everywhere it saw this "Great Cannae"—in the battle of the frontier, the operations around Kiev, the battle for Moscow. Of the battle of Kiev Captain Weiss wrote:

> There has been a new battle of Cannae, its scope unexampled in the annals of war.[8]

The military expert of the *Frankfurter Zeitung* thus described the uniform method of German strategy in Russia:

The typical form in which the fighting in the East appears is not a war of position but rather the encirclement battle in mobile warfare.[9]

German strategy clung to break-through and encirclement—the "wedge" and the "*Kessel*"; it knew no other methods at all. As General Hasse put it:

> Two forms have been in evidence. At Lvov and in Lithuania powerful surprise attacks penetrated the enemy army, tearing it asunder. Fast troops pushed into the gaps, irresistibly sweeping all frontal resistance before them as they broke through.
>
> The other form of German attack pinned down the enemy by frontal attack while on both flanks fast units stormed forward, flanking the enemy and joining hands behind his back. An army thus encircled was then tackled by infantry divisions from the front and by armoured divisions on both flanks. This pressure was increased until the enemy had lost all freedom of action and had become paralyzed.[10]

The goal of the German offensive in 1941 was the final crushing of the enemy, the destruction of the Red Army. It was a strategy of annihilation, pure and simple, applied at the very outset of the war. The Germans sought to accomplish no less in the Russian campaign than they had done in their previous campaigns of the Second World War. As Colonel Soldan wrote in October 1941:

> Even in the First World War countless armies were beaten in countless battles. Yet none of the participating major powers was smashed. In every campaign of the present war, however, one country after the other has been so smashed by the German troops that it was left for dead, unable ever to rise. Such is the difference between then and now.[11]

The Russian Front was by no means regarded as one offering particular difficulties, but on the contrary as the ideal terrain for large-scale mobile warfare. In the vast Russian spaces German mobile warfare on a grand scale was to reach its greatest successes. Early in July 1941 the military expert of the *Frankfurter Zeitung* wrote:

> The romance of space is shattered by the clear language of the German Army. No matter over how many thousands of miles the fronts may extend, they appear organized, controlled, dominated by supreme generalship, supported by the means of modern technique. The technical prerequisite for the mastery of distance is furnished by the motor. In the open Russian spaces the German command is unlikely to find hostile arms. On the contrary, it will find that vast field on which alone its great operative plans can come to fruition.[12]

The German High Command in the East sharply rejected any strategy of limited aims. German military writers now attacked General von

Falkenhayn, Chief of the German General Staff in 1914–16, who rejected a deep offensive into Russia because he regarded it as dangerous and unrealizable. At the time Falkenhayn had said:

> It is impossible to defeat an enemy who is firmly resolved to escape regardless of the sacrifices in territory and men, and who has the vast spaces of Russia at his disposal for the purpose.

All that Falkenhayn aspired to in the East was, in his own words, "large-scale local successes that will see to it that the Russians will not be able to be a danger to us for some time to come". The German strategy of 1941, on the other hand, aimed at swift and total victory in Russia. It held this task to be imperative and capable of solution. In its solution the entire dynamics of German strategy were to be demonstrated. Comparing Hitler's strategy with that of General von Falkenhayn, Captain Stephan wrote in November 1941:

> Self-satisfaction and a system of makeshift remedies rather than the oncoming Russian winter prevented a decision in Russia in the autumn of 1915. Men of little faith then staked out the German goals, and they effectively prevented the full harvest from the German victory from being reaped. How different it is in 1941! What would have become of Germany, of Europe, if today too the dogma of the "limited effectiveness of any offensive operation in the East" had gained credence! Contemplating the motives that a quarter-century ago determined our strategy, we gain significant insight into the vast differences that separate the dynamics of Nazi Germany from those of its Imperial predecessor.[13]

Curiously enough, the German High Command during the entire Russian campaign thought in terms and methods of its war in the West. It sought to transplant its Western strategy to the East without any considerable changes. It read another battle of Flanders, first into the battle of the Russian frontier, then into the operations around Kiev. It took Odessa for another Dunkirk, Smolensk for Amiens, Moscow for Paris.

The German High Command believed that German strategy was irresistible. It is noteworthy that the German High Command has never claimed to have numerical arms superiority over the Red Army—not even when it actually had tank and plane superiority, as in the battle for Moscow. What it did claim was that its strategy was superior. It regarded the superiority of German strategy, of the German war plan, as a guarantee of victory. It proclaimed a revolution in strategy and with it a German monopoly on modern strategy in general—the secret of victory:

> Again a new trail is being blazed. The doctrine hitherto regarded

as fundamental has been cast to the winds. Strategy has become transformed into an art—an art mastered by the German Army alone.[14]

Thus wrote Colonel Soldan. In the end German strategy was held up as a kind of black magic which could almost conjure up victories. The German strategy in Russia in 1941 was exceedingly impatient. Under the German war plan each succeeding battle was marked as the decisive, the ultimate one. German strategy in Russia, moreover, was a strategy of prestige. It had to bring swift and decisive victories. It needed victory after victory, not merely for military reasons but also for psychological reasons. Victories were regarded as a kind of military propaganda by action, to maintain and constantly increase the morale of the Army and the people. The offensive strategy of the Third Reich in Russia was determined not merely by considerations of military effectiveness but by the psychological and political need for victories. Yet the German war plan lacked one vital element—a realization of the enemy's real war plan.

The Soviet war plan had the same premises and aims as the German. It was based on the concept of total war, waged even more comprehensively and relentlessly than by Germany, and on full utilization of modern war technics. Its aim too was the destruction of the enemy. But in planning and execution the Soviet concept of war was altogether different from the German.

The Red Army High Command above all proceeded from a serious and realistic estimate of the enemy's advantages and strong points. It took into account the better organization of the German Army, the greater precision of the German war machine, its broader war experience, its advantage in the strategic initiative as well as the gigantic striking power of German Blitzkrieg. It also took into account the numerical superiority which the fully mobilized German Army was able to muster against the not yet mobilized Red Army in the immediate theatre of war. The Soviet war plan started with a true estimate of the enemy's strength and war plan.

Its first feature was a cautious strategy, husbanding the Red Army and keeping it in being. That did not mean a passive strategy. Nor did it mean that the Red Army refused to fight. It did mean that the Red Army refused to cling to the terrain, preferring to maintain its strength to holding territory. Neither in the battle of the frontier nor in the Ukraine did the Red Army accept the gage of major battle. Its command preferred winning the battles on the Azov Sea and the Oka River to losing the battles on the Bug and the Dniepr. In the first phase of the war the Red Army refused to make a stand at those points where the enemy wanted to pitch battle and at a time when the German offensive still had its full momentum and the German Army was still fresh. During that first phase the tactical task of the Red Army was to avoid encirclement by retreating and counter-attacks—in other words, by dodging and delaying

the enemy advance. The retreat, however, was to have a limit. That limit lay approximately on a line running from Leningrad by way of Moscow to the Crimea. Only in the southern sector of this line did the Red Army retire east of this line under enemy pressure.

The second feature of the Soviet war plan was to force the Germans into a protracted war. In such a war Soviet power was to be fully unfolded, while the enemy was to be worn down. As long as fifteen years ago the present Chief of the Soviet General Staff, Marshal B. Shaposhnikov, wrote:

> We must be prepared for a protracted and intensive effort in the war to come. In all probability that war will bear the character of a war of attrition.[15]

In this protracted war the Red Army was to be placed in the most favourable, the German Army in the most unfavourable situation. Additional factors were to be brought into play, militating for the Red Army and against the German Army—above all, time and space, to offset the German strategy. Taking advantage of the time element meant to drag out the war, to halt the German Blitzkrieg, to exhaust the enemy. Taking advantage of the space element meant to scatter the Germany Army over a vast front, to extend its communication lines, impede its supplies, and block it by means of the scorched earth policy. This also includes guerilla warfare, which is to disorganize the enemy rear, divert his forces from the front, and inflict on him numerous local blows throughout the depth of his disposition of forces. The German High Command was convinced that the Red Army would reply to German Blitzkrieg with a Blitzkrieg of its own, that two gigantic war machines would clash head-on at the Russian frontier, with the Germans having the advantages of better training for the offensive, greater experience in Blitzkrieg techniqae, and better organization. But Colonel Niedermayer, who was the unofficial representative of the old Reichswehr in Moscow from 1924 to 1931, was one of the few German officers who knew that the Soviet Union had decided in favour of protracted warfare rather than Blitzkrieg against Germany:

> Influenced by its attitude toward Germany, the Soviet Union views any future conflict with Germany in the light of a protracted war. It feels that in such a war as its own forces will be more effective against an enemy whose situation and power demand swift decisions.[16]

That was actually the basis of the Soviet war plan—to attain superiority over an enemy whose decisive striking power would have been spent in the first giant assault, by unfolding its own forces and those of its allies. The Soviet *communiqué* of August 22, 1941, drawing the balance of the first two months of the war—which were unfavourable for the Soviet Union, concluded with these remarks:

While man-power reserves in Germany are diminishing and Germany's international position is deteriorating daily, the power of the Red Army is incessantly growing and the Soviet Union is gaining powerful allies and friends. The history of war shows that victory invariably comes to those states and armies which increase their power during the war, while states and armies whose powers diminish during the war are defeated.

This orientation towards a protracted war explains a great deal about Russian strategy in the first phase of the war. First of all it explains the disposition of Red Army forces at the German invasion—a disposition in depth, with but limited forces at the frontier. It may be assumed that in the German invasion the surprise element actually had but a subsidiary effect on the execution of the Soviet war plan. It is much more likely that the only gain the surprise gave the German Army was additional territory. Even had the German attack been expected at the precise moment it occurred, there would have been little difference in Russian strategy. This explains, among other things, why the German invasion did not provoke an immediate large-scale Russian counter-manœuvre. In the Russian view that great manœuvre was not to be unleashed at the very outset of the war, with the enemy at the height of his offensive power; it was to be held until later, when the enemy was exhausted. For the present the Russian delaying action and the vast Russian spaces were to absorb and wear down the German attack. In the Russian view the decision was to be sought not at the beginning but at the end of the war.

The third characteristic of the Soviet war plan is active fighting in all situations—in delaying actions during retreats; in the great defensive battles where terrain was held, as in the battles of Smolensk and Moscow; in the counter-offensive, such as the one that followed the conclusion of the battle for Moscow, and in the winter campaign. Under the Soviet plan the enemy must first be weakened, exhausted, bled white in ceaseless struggle, before a great counter-offensive is begun. All Soviet tactics were adapted to this task—the infantry battle, artillery concentration, the use of aviation against military land objectives, marching columns and tank forces, counter-attacks with tanks, and the battle in depth. In every engagement and in every situation it was the task of the Red Army to inflict upon the enemy the greatest possible losses, to weaken his strength as thoroughly as possible.

It was certainly not true that the Red Army was anxious to avoid battle. Orders of the Soviet High Command which fell into German hands left no doubt that the Soviets never intended to avoid a battle, but that they always endeavoured to offer stubborn resistance from strongly fortified positions in order to prevent any further advance of the German armies into the interior of the Soviet Union, since such an

advance would sooner or later lead to a fatal weakening of the country's powers of resistance.[17]

Thus wrote Colonel Soldan. The purpose of such resistance, however, was not merely to hold terrain but primarily to exhaust the enemy. In inflicting serious losses on the enemy, the Red Army High Command rightly saw a basic condition for halting the German offensive, successfully conducting its own defensive, and proceeding to the counter-offensive. The limit of the Russian retreat was not fixed in advance. It had to be set empirically, at such a place and time when the enemy's offensive power had become exhausted. When the final balance of the battles was drawn. German losses in man-power and material were to be as high as possible, showing a constantly rising curve. These tactics of exhaustion, attrition, and bleeding are actually of German origin—indeed, most of these terms spring from German military terminology—but they were abandoned by the German Army in favour of the "battle of encirclement and annihilation". It was the Red Army that now took them over. As Marshal Timoshenko said in the autumn of 1941: "We are harassing them and will go on harassing them until they are totally exhausted." [18] This is not merely tactics of a definite kind—it is a strategy with a broad perspective, directed at definitive and total victory. The Russian defence always had preparation for the counter-offensive as its aim. The Russian war plan here follows the commandment of Clausewitz: "Swift and powerful transition to the attack—the lightning sword of retribution—that is the most brilliant part of the defence."

The fourth characteristic of the Soviet war plan, finally, is its iron resolve to win full victory, to destroy the enemy. All the other forms of Soviet warfare—the strategy of caution which husbands the army, the protracted war which is to assure the full unfolding of Soviet power, playing off time and space against the enemy, the constant, intensive fighting using the tactics of attrition—they all point at and are subservient to the goal of total victory. To no less a degree than its German counterpart, Soviet strategy is a strategy of annihilation. The difference is that Soviet strategy pursues its aims along different paths, uses different methods—perhaps less swift and brilliant, but probably more certain and effective. Even in the defensive, however, there is a fundamental difference between Soviet strategy and the French strategy of 1939–40. The difference between the defensive strategy of Timoshenko and Zhukov and that of Gamelin and Weygand is not merely one of tactical method: it embraces the entire perspective of strategy. Even in the defensive the Russian war plan constantly envisioned victory with all its material and tactical demands.

This Soviet war plan was fraught with risks, difficulties, and danger. The retreat at the very outset of the war was a risky operation. The loss of the Ukraine and the Northern Caucasus without a major battle had

dangerous implications. But this strategy as a whole was conditioned by the enemy's gigantic striking power. Yet the Soviet war plan was doubly realistic. It was adapted to Soviet potentialities and to the realities of the Russian theatre of war; and it was carefully calculated to counter and foil the enemy's war plan. Soviet strategy confined itself to what was militarily effective, what would serve the exigencies of the fighting and, in the last reckoning, victory. The Soviets were not concerned with a strategy of prestige. There was nothing spectacular or sensational about Soviet strategy. The German High Command, personified by Hitler, proclaimed victory even before the battle, declared each battle to be the final and decisive one, and had the enemy utterly crushed after every major battle; but the Red Army High Command, even after its own victories, stressed the enemy's great strength and the necessity of putting forth still greater efforts. It regarded each battle as a link in a long chain of engagements. Under the Russian war plan, the war was not waged as one should like to wage it, but as it had to be waged, in keeping with enemy strength, own possibilities, and the conditions of the terrain.

Soviet strategy under this war plan is a combined strategy. Primarily it is a strategy of the modern war of material and movement. But it also takes into account the best lessons of the First World War—Joffre's tenacity in the defensive; the concentration upon the goal and the thoroughness of Foch in preparing a counter-offensive; Falkenhayn's operations with limited aims; Bursilov's method of smashing the enemy front by simultaneous blows in several directions. The Soviet war plan also learned from Kutuzov's strategy of deep retreat against Napoleon, with traps for the invader. It is interesting to note how the Russian strategy of 1812 influenced the Soviet war plan in the first phase of the war. This is what the Soviet war historian General Levitsky wrote about the course of the campaign of 1812 four years ago:

> Napoleon did not believe that the Russians would take up a defensive line or go into a retreat. He thought the chances better of destroying the Russian Army—which was not very numerous—in a battle on the frontier. Only the imperturbability of the Russian command, which avoided battle under unfavourable conditions, saved the Russian Army from being completely crushed by the invader. Barclay outwitted Napoleon. The Russian troops retired in exceptional order, awaiting a favourable situation for annihilating the enemy.[19]

On the second phase of the war he wrote:

> Napoleon's enveloping manœuvre at Ulm, which brought him so much glory, pales into insignificance before the manœuvre of Kutuzov, who in deepest secrecy moved his army from Moscow to Tarutino. This brilliant manœuvre by 80,000 Russians, in the face of an enemy

led by the glorious Napoleon, places Kutuzov among the greatest generals the world has known.

The history of war here furnishes us with a historical parallel. One reads these sentences as though they were part of a report on the German–Soviet War. The Red Army High Command undoubtedly knew many years ago just what danger would be involved in a great frontier battle against the German Army. And just as surely Hitler must have dearly wished, like Napoleon, that the Russian Army would accept a great battle at the frontier. The Red Army High Command studied Kutuzov's deep retreat with particular attention to his perspective of a counter-manœuvre involving the annihilation of the enemy. A similar manœuvre was executed early in December 1941 near that same Tarutino by General Zhukov.

Before the outbreak of the Second World War, the Soviet war plan was sharply offensive in character, in keeping with the modern Russian war doctrine. In the course of the war, however, between the Polish and the Balkan campaigns, under the impact of German strategy and the experiences of the war itself, the Russian war plan was revised in the direction of adaptation to Soviet resources and defence against the German Blitzkrieg offensive, which could not be parried merely by launching an immediate Russian counter-offensive. After the Russian victory at Moscow the gifted Russian military writer Colonel Boltin wrote:

> The Red Army had always prepared to counter every aggression with a powerful offensive blow. Actually events took such a turn that the Red Army retreated for more than five months. Does that mean that the Red Army betrayed its own doctrine? By no means. The Red Army, however, is free of any doctrinal limitations. History will count it one of the greatest merits of our military command that it chose the only correct method of action at the correct time. Soviet strategy during the early period of the war may be characterized as a strategy of active defence. The Red Army retired and sacrificed territory. But it defended itself actively and stubbornly. As a result the enemy suffered huge losses and was on the way towards swift exhaustion of his strength. Our own army, on the other hand, despite the forbidding difficulties facing it, was able not only to preserve the basic substance of its forces but even to assemble reserves. By pushing hundreds of miles eastward, the German Army extended its communication lines and encountered growing supply difficulties. In retreat Soviet forces managed to consolidate their communications, and despite all attempts by German aviation to destroy our railways, the tasks of front-line supply were brilliantly solved. By husbanding its vital force, moreover, the Red Army laid the crucial groundwork for further victorious defence. The battle for Moscow became the decisive battle—the battle royal—of the first half-year of the war. The decisive word now belongs

to the Red Army, which drove the Germans from the approaches to Moscow, forcing it to retreat and imposing on it the will and the initiative of the Red Army.[20]

True, there had been signs of such a revision of the Soviet war plan even before. In 1940, in the military Press and at military conferences in Moscow, there were interesting discussions among higher officers of the General Staff and professors of the General Staff Academy about the strategic problems at the outset of war. The discussion involved the war plans of the major Powers from their historical aspects, and in it three younger General Staff officers—Generals Krasilnikov, Sudakov, and Shilovsky—defended the old version of the Russian war plan of before 1914, which foresaw the surrender of the entire advanced western theatre of the war without a fight. These discussions must have been related with the revision of the Soviet war plan to its present form.

The Soviet plan for war against the Third Reich was not improvised but elaborated in long and systematic work. The German High Command failed to perceive it altogether. Yet one German journalist has given an interesting report about its origin during the war itself. He was, until the invasion, the Moscow correspondent of the *Frankfurter Zeitung*, and he turns out to have been an acute observer. He associated the origin of the new plan with the name of the present commander on the Central Front, General Zhukov. Zhukov, he wrote, had made a careful study of German operations and had reached the conclusion that German military effectiveness in a war with the Soviet Union would be severely circumscribed, and that it was possible to evolve and carry into effect a successful strategy against the Third Reich. Despite all the German successes in the West, Zhukov held that the German Army could be confronted with a strategy that would give the Red Army superiority in the long run. As a result he was named Chief of the General Staff early in 1941, half a year before the German invasion. There is much to lend credence to this version. The article in the *Frankfurter Zeitung* appeared on October 25, 1941, when Zhukov was still an unknown general—without the laurels of the victor of the battle for Moscow. At the most critical hour, between October 15 and 20, when the Germans had broken through at Mozhaisk, Zhukov was placed in command of the Central Front, succeeding Timoshenko. Only a general of great initiative and clear vision who was in possession of a far-sighted plan could win the defensive battle for Moscow—and then proceed to the counter-offensive. The present Soviet war plan is based on a combination of active defence and counter-offensive, and thus it is wholly plausible that Zhukov had an intimate and leading part in working it out. If that is so, then General Zhukov kept his promise.

The elements of the new war plan are plain today. It begins with the defensive, only to move to the counter-offensive. It is based on a strategy

of reserves and the full unfolding of forces. In the course of the war a balance of power is to be attained against an exhausted foe, from whose hands the initiative is then to be wrested. This war plan combines the tactics of modern defence with thorough preparation of the counter-offensive. It subordinates the strategy of attrition, to which it resorts at first, to the strategy of annihilation, to which it will turn later. A study of this plan leaves the inescapable conclusion that Soviet strategy was consistent and systematic from the very outset, from the battle of the frontier to the winter campaign. A transition from active defence to an offensive with limited aims was quite in keeping with the plan. German strategy, on the other hand—from the furious initial offensive to the climax of offensive action in the battle for Moscow, the collapse of that offensive, and the German Army change-over to passive defence in the winter campaign—this German strategy did *not* run according to the German plan. The original German war plan came to grief in the Russian campaign. Under the German plan a ceaseless offensive was to bring a series of battles in steady crescendo, with decisive victory won before the onset of winter. The climax of the offensive and the final military decision were expected of the battle for Moscow.

This German war plan of 1941 against Russia is not the continuation of classic German strategy. It is a continuation of but one trend in German strategy—the strategy of Ludendorff. This strategy of Ludendorff, however, is today supplemented not only by modern mechanized warfare but also by the famous Nazi "dynamics". It must not be forgotten that Hitler is the Commander-in-Chief of the German Army, and that the strategy of the Third Reich is actually, to paraphrase Clausewitz's famous saying, the continuation of Hitler's policies with different means. Historically the campaign of 1941 ties up with Ludendorff's plan against Russia in the late autumn of 1915. In that plan the objective was the envelopment of the Russian armies by a great pincers movement between Rovno in the South and the region north of Minsk, which was to be followed by a battle of annihilation. Falkenhayn sharply rejected this plan. In operative structure Hitler's war plan of 1941 bears a certain resemblance to Schlieffen's concept of deep flanking and swift decision. But with Schlieffen and his school this concept was adapted to an entirely different theatre of war—the Western Front. It is in the choice of the direction, the quest for a decision in the East, that the German war plan of 1941 breaks most sharply with the classic tradition of German strategy —the tradition of Schlieffen, Falkenhayn, Gröner, and Seeckt. Both Schlieffen and Falkenhayn warned against attempts to penetrate deeply into Russia. Falkenhayn, Gröner, and Seeckt demanded political and military relief for Germany in the East by the maintenance of peace with Russia. Seeckt, the most intelligent German strategist of the First World War and the creator of the post-war German Reichswehr, remains the most important military figure in Germany during the decade from 1920

to 1930. In 1933 he published a little book entitled *Germany Betwixt East and West*—a kind of strategic testament. Today his axioms appear as a bitter and annihilating posthumous critique of Hitler's war plan against Russia. Seeckt's criticism was directed against the German strategy and diplomacy of 1914–18, but his indictment applies to Hitler's foreign policy and strategy to an even greater degree. Above all, he turned on the fateful trait of German strategy—its tendency to overtax its strength and over-extend the theatres of war—the strategy of vast spaces:

> The [First] World War dramatically illustrated Germany's situation on all sides—its push into the plains of Russia, to the Euphrates and the Suez Canal, to the frontiers of Persia and Afghanistan. Are they not a symbol of German destiny—the graves of German soldiers in Asia and Africa—while at the same time the tricolor waves from the gates of Strasbourg? It was an extension beyond all limits of capacity, a loss at the basic substance of strength! [21]

Seeckt charged the war against Russia—the war on two fronts—with responsibility for the German defeat in the First World War:

> Germany bitterly expiated the errors of its Eastern policy. Shall we ever again be taken between two fronts? The *rapprochement* between Germany and Russia has been in military hands. Let us cry out to the German politicians: Keep our rear free! [22]

To keep the rear free—that meant: Do not wage war against Russia, give Germany military and political relief in the East. And Seeckt's disciple, Colonel Niedermayer, saw in the German-Russian Pact of August 1939 a specific continuation of Seeckt's policy of avoiding war with the Soviet Union:

> Today the country which from the whole aspect of its war potential counts on a war of long duration—Russia—has joined hands with a country whose forte has always been swift and surprise movement or "Blitzkrieg"—Germany. The era of Versailles and of intervention [against Russia] is closed.[23]

Colonel Niedermayer welcomed the German-Soviet Pact for military reasons, because he had no faith in the efficacy of German Blitzkrieg against the Russian protracted war.

But there is in existence still another criticism of the German war plan of 1941. It comes straight from the top of German generalship. Its author is not a dead general but a living field-marshal. This critic is Field-Marshal General von Leeb, in command of the German Northern Front ever since the outbreak of the German-Soviet War. Intellectually and as a military scientist, Field-Marshal General von Leeb is the first figure in the German Army. As a military thinker he may be compared with the greatest figures of the old German Army—Schlieffen, Falken-

hayn, Gröner, Seeckt. In 1937 he published a paper entitled "Defence" in the *Militärwissenschaftliche Rundschau*. It is probably the most important piece of research in the fields of tactics and strategy in modern warfare that has appeared in the past decade. In this essay von Leeb presented a carefully worked out plan for the war to come—a plan which in its whole concept is diametrically opposed to the German war plan of 1941 against Russia. Today von Leeb's findings appear as the most perfect and convincing criticism of Hitler's war plan in Russia. The present commander-in-chief on the Northern Front has not turned against the Russian campaign as such, as did Seeckt. In keen prevision he criticized the method of such a war, the kind of German strategy.

Von Leeb recommended that the war be begun, not with an offensive, but with active defence, in preparation for the offensive:

> Since in any war to come we cannot count on numerical superiority in war materials, the defence must help to support and prepare the attack, which alone can bring a decision. In the event of the enemy's absolute superiority, it must wear down his strength and power.[24]

This German war plan was to be adapted to the enemy's war plan, in order to maintain a successful defence against it:

> We know that defence is dependent on attack. It must adapt itself to the measures taken by the aggressor. It is in a state of operative and tactical dependence upon the party which attacks in a war, an operation, an engagement.[25]

According to von Leeb, the defence is to attain a shift in the balance of power in favour of the defender:

> More than ever before, the defence, because of its increased power, is in a position to serve its original purpose. This is to break the strength of the attacker, to parry his blows, to weaken him, and to bleed him white. The resultant reversal of strength will enable the defender himself to find the strength to move to the attack.[26]

Von Leeb emphasizes the importance of keeping reserves in readiness at all times:

> In the final analysis the success of the defence as well as of the break-through is a question of which side can maintain fresh reserves.[27]

It requires the use of offensive weapons in the defence:

> Not only the attack, but the defence too, can put aviation and fast units of all kinds to excellent use. They can certainly mitigate, perhaps even neutralize, the advantages accruing to the offensive from tanks and planes. Operative defence must oppose to an attack with such arms and material, weapons of the same kind. They are needed by the defence as well as by the attack.[28]

He recommends a strategy of attrition against a stronger enemy:

> When the enemy has great superiority, the first aim is to reduce the disproportion by a delaying combat strategy—a strategy of attrition that has for its purpose weakening the enemy to the point where one's own side is strong enough for the attack.[29]

There are two combat forms which von Leeb puts in the foreground of effective modern strategy in the defence. The first is the battle in depth:

> Tactical defence requires mobility in grouping, organization deep into the rear. It requires deep echelonization. This enables it to absorb enemy surprise actions, to slow up the enemy and entangle him in an advanced defence network, to rob him of his characteristic strength and all in all to win time for counter-measures.
>
> The new weapons and combat means, the fast units, the air arm, the broad use of artificial obstacles of all kinds—today they are in a position to render the defence more varied, to make it more mobile, to wrench it from the rigid linear forms of trench warfare, to organize it in depth.[30]

The other method is systematic co-operation among different arms branches:

> A basic condition for full utilization of all defence possibilities is the orchestration of all arms and means. In our war experience of 1914–18 we learned what was meant by intimate co-operation among all infantry arms and between the infantry and the artillery. But such co-operation is no longer sufficient in the face of a swift enemy equipped with strong armoured forces. It must now be augmented by a uniform plan of anti-tank defence; the use of all means of reconnaissance; the use of artificial obstacles of all kinds; the combined use of all offensive arms; the preparation and use of reserves, of armoured units, of aviation. It is not one arm or one method alone that brings the decision; co-operation among all of them is necessary.[31]

This war plan of von Leeb is in every way opposed to the German war plan of 1941. It was realistic, carefully thought out in technical and tactical respects. It was rejected by Hitler. These are the elements of von Leeb's war plan: a realistic appraisal of enemy strength, taking the enemy war plan into account; attainment of a shift in the balance of forces as a main task; active defence, leading up to the offensive when the enemy has been weakened; a strategy of attrition as the prerequisite for a strategy of annihilation; battle in depth; and co-operation among arms. One is struck by the fact that this is the very plan under which the Red Army fought in 1941 and under which it halted the German Blitzkrieg in its tracks! Von Leeb's war plan was indeed carried into action

and proved its effectiveness—but it was executed by the Red Army and not by the German Army. That does not mean that the Red Army took its war plan from von Leeb. Von Leeb and the Red Army High Command developed these ideas simultaneously and parallel to each other. These ideas—mobile defence, systematic tank defence with all arms, arms co-operation, battle in depth—were laid down in the Red Army Field Service Regulations as early as 1936. But in the Soviet Union these ideas were further developed, becoming the basis of the entire Soviet war plan, while in Germany they remained the literary work of a lone wolf, a voice crying in the wilderness. Late in 1939, when the Second World War was already under way, the Russian General Stromberg, in the leading military organ, *Voyennaya Mysl*, laid down tactics of defensive action which were quite in keeping with von Leeb's war plan. He wrote:

> Modern defence will be forced to fight against powerful offensive arms, including strong armoured forces. That means echelonization of the defence over a great depth; the availability in the defence not only of active firearms but also of strong striking arms such as tank units; ceaseless and precise co-operation between all defence means over the entire depth; crushing the attacking enemy unit by unit, using the entire mobility and power of one's own tanks and aviation.[32]

The Soviet version of the "Leeb Plan" had been developed in complete detail by the Red Army. Thus the greatest military theoretician of our time, Field Marshal General von Leeb, demanded that Germany adopt the very same war plan under which the Red Army later fought. And thus he justified the Russian war plan. Von Leeb proves that the Russian war plan is a modern plan, that it was systematically thought out and prepared, and that it was effective, as the course of the war has proved. Von Leeb also described the functions of the command of a modern army—functions that were never applied to the German Army but that today sound like praise for the Red Army High Command. He described all the difficulties of directing a modern army in the defensive:

> Forces must be pushed forward as well as grouped in depth; front reinforcements must not arrive too late; enemy intentions must always be recognized quickly—in his rôle as the attacker, as an independent agent, the enemy always has an advantage in time. Truly, it requires iron nerve, coldbloodedness, and prudence on the part of the military chief not to lose perspective when confronted by so swift an enemy, and not to be too late with one's own counter-measures.[33]

All these tasks were beyond the ken of the German command in the campaign of 1941. The Red Army leaders, on the other hand, pursued them consistently. It is von Leeb's personal tragedy that he had to wage war under Hitler's war plan, while his adversary, the Red Army, waged war under its own "Leeb Plan".

In every war there is an inevitable interaction between the war plans of the belligerents. Russian strategy was adapted to its German counterpart. It had observed, perceived, and firmly grasped the German war plan and German combat methods, and it had worked out parries to them. The aim of these parries was to halt German Blitzkrieg and to exhaust the German war machine, destroying it by successive blows. There were surprises for the Red Army High Command in this war too. The moment of the German invasion, the day of the great German offensive on the Central Front against Moscow, were such surprises. But the Red Army High Command did grasp the methods of German strategy and the main direction of the great German offensives. The German High Command, on the other hand, misread the Russian war plan. In the Russian campaign the German High Command failed not only in its technical and tactical calculations but in intellectual respects as well, since it failed to grasp the Russian war plan. At the very outset of the war the German leadership expected a powerful Russian counter-offensive—Russian Blitz against German Blitz. When this failed to materialize, the German High Command thought that the Red Army no longer had any war plan at all. As for the aims of the Russian defensive, they were not even grasped in the German camp. At the beginning of the war, when the great Russian offensive did not come off, Captain Weiss wrote: "Bolshevism on the defensive is a contradiction in terms".[34] The Russian defence was not seen as the execution of a systematic plan but the collapse of an offensive plan.

> The Bolshevik Army is an aggressive army, schooled in the attack by years of effort. The German blow has not only shaken the enemy's army to its foundations—it has shattered his military theory. The enemy has lost not only the weapons with which he sought to fight but also the ideas according to which he sought to use them. He had to acknowledge defeat in the field of strategy.[35]

Thus wrote the military expert of the *Frankfurter Zeitung* in the fourth week of the war. Neither the sequence of the Russian war plan was grasped—active defence, to be followed by a counter-offensive—nor the tactics of Russian defensive combat. This is what the military expert of the *Völkischer Beobachter* wrote about the Russians' use of offensive weapons in the defensive:

> The principle of the defensive cannot be pursued for any length of time by means of planes, tanks, and other swift mechanized weapons. Such methods are in conflict with the essential character of modern mechanized warfare. That warfare imperiously calls for the offensive.[36]

Von Leeb had different views on the subject.

As the war developed phase by phase, it was possible to see how the Germans were deceived about Russian combat methods. In October

1941 the Germans thought that Soviet strategy was now no longer capable even of the defensive, that there could no longer be such a thing as a Russian war plan:

> The war has already entered a phase in which the Russian command is no longer capable of acting correctly. That time is past. Everything it does today can only be fatal for it.[37]

Since the German military leadership thought that the enemy command had been paralyzed and was no longer capable of further action, it also had to suppose that the Red Army no longer represented a danger to be feared.

The Wehrmacht stubbornly refused to grasp the Soviet war plan, and thus it was constantly deceived about the true situation at the front. During the battle of the frontier the German High Command thought that the Russian Front could no longer be stabilized at all. During the battle of Smolensk General von Westhofen was convinced that the Red Army was no longer capable of the defensive or of launching counter-attacks:

> The Red Army neither has the free choice of building up a new defence on some more favourable line, nor has it even the possibility of rallying for a large-style counter-attack.[38]

In general German criticism of Russian strategy was full of contradictions. On the one hand it was regarded as a weakness that the Russians clung to the defensive and used offensive weapons in it. On the other hand the Germans failed to understand altogether why the Red Army sought to stabilize the front instead of retreating deep into the rear without a struggle. General von Westhofen was very much surprised:

> The Soviets are now doing everything to avert from their armies the fate they may as yet not even have perceived. For if they really grasped the crux of the situation, they would refuse to sacrifice additional reserves. Instead, they would endeavour to put as much distance as possible between themselves and danger, rallying their reserves somewhere farther east, even though only on a temporary defence line. Actually they are doing the precise opposite.[39]

The Germans did not even grasp that the Red Army High Command was husbanding its main forces for further fighting. They believed that these forces were being unconditionally sacrificed to hold the terrain. Just before the Russian reserves went into decisive action before Moscow, Captain Weiss wrote:

> Faced with the question whether to sacrifice armies or territory, the Bolshevik command again decided in favour of the latter. In the end, however, it was unable to forestall the loss of both.[40]

On the Western Front the German High Command had correctly seen and taken into account in advance the weaknesses and confusion in the

Allied leadership. But on the Russian Front it groped in the dark all the time. It did not know where the main lines of the actual Russian defence lay, where the enemy's main forces were situated, where and when the Soviet counter-blow would be dealt. The Red Army's counter-offensives at Rostov and before Moscow caught it completely by surprise. Its miscalculations and its auto-suggestion of victory had struck it blind.

The Red Army High Command had the advantage over the German High Command of having looked over the enemy's shoulder and seen the cards in his hand clearly. It knew the historic weaknesses of German strategy—the tendency to overtax its strength, to use its forces ruthlessly, to set them unrealizable goals. It knew that under Hitler these weaknesses had become further aggravated. As General Melikov wrote during the grave days of October 1941:

> Unquestionably Hitler Germany had and still has powerful forces with powerful mechanized equipment. But even such forces are unequal to realizing the impossible aims the Fascist leadership has set the German Army. In 1940 the German General Staff did succeed in winning individual campaigns, but from the viewpoint of the total strategy of the war these victories turned out to be fruitless, since Great Britain was not conquered. In June 1941 Hitler hurled his armies against the Soviet Union, but again the strategic tasks of the war as a whole were not decided.[41]

This estimate has proved to be correct. The Red Army High Command knew with mathematical certainty that the power of the German offensive *must* reach the exhaustion stage late in 1941, and it methodically rallied its own forces for the counter-offensive. In 1914 the French High Command won the battle of the Marne purely by improvisation. It did not even know at first that the battle had been won. But the Russian victory before Moscow was the result of calculation, of long-planned systematic action.

The German war plan of 1941 could not be repeated in 1942. It was based on the idea of an unbroken offensive. The enforced pause of five months has completely cancelled it. Blitzkrieg, the strategy of annihilation, unrestricted mobile warfare in open space on the whole front—all the elements on which the German war plan against Russia in 1941 had staked its success were no longer realizable as a unified conception of warfare against the Red Army.

In the summer campaign of 1942 the German war plan was greatly revised. It pursued different goals and brought different methods to the fore. In the Don and Caucasus campaign the goal of the new German war plan was no longer the destruction of the enemy's main forces, but the attempt to paralyze his military might by seizing his economic centres and throttling his supply system. The military method too was different. In the summer of 1942 German strategy had given up the essen-

tial characteristic of the original German war plan of 1941: combined offensives against the entire enemy front, which were to transform the whole front into a unified battlefield where the enemy's armies were to be beaten in a battle of annihilation. The nucleus of the German war plan in the summer of 1942 was the localized offensive in the South. It is possible that in the further course of the war Hitler's strategy will still take recourse to the military *ultima ratio*, the attempt to force a military decision at all costs, according to the rules of the 1941 war plan. That the German High Command did not dare do this in the summer of 1942 shows that it encountered difficulties and preferred the strategy of the lesser risk this time. After twelve months of war, in the summer campaign of 1942, the German war plan shifted to a peculiar strategy of limited goals. The German High Command now acted under pressure. But in postponing the military decision, even though only temporarily, it took upon itself an additional risk. For the German Army was now threatened by lack of time. Despite the German strength, the change in the war plan indicated a crisis in German strategy.

CHAPTER ELEVEN

TACTICAL LESSONS

GRAND STRATEGY is based on the tactical efficiency of troops: mastery of weapons and skill in modern battle. Just as war as a whole is made up of individual battles, so a great battle is a mosaic of individual actions. Strategy determines the method of large-scale operations and their interrelation throughout the course of the war. But strategy cannot give more than tactics can execute. Modern mechanized warfare has provided new combat means of great effectiveness. Yet modern weapons can produce no more than the troops that wield them can get out of them. Tactics dominate technics. A single tank division may pierce the enemy front and have a decisive share in smashing ten infantry divisions—proof of the devastating effect of modern arms. But a single infantry regiment, reinforced by anti-tank artillery, can destroy a tank division in a surprise attack—proof that tactics still dominate technics. The failure of the German offensive of 1941 was the result not only of the failure to adopt a realistic war plan but also of inadequate tactical efficiency of German troops—in individual arms as well as for the army as a whole. Taken by itself that efficiency was of a very high order, but it was not good enough against an enemy with the endurance and fighting strength of the Red Army. The German-Soviet War is a struggle not only between two war plans, but between two tactical methods as well. In judging the

future perspectives of the war it becomes necessary, therefore, to draw the tactical lessons from its course so far, to examine the tactical methods of the two armies.

The Russian Front was far from what the German High Command thought it was. It did not offer unlimited open space for mobile warfare, nor did it afford terrain suitable for an uninterrupted offensive.

Actually the Russian Front is a "mixed" front, with all forms of modern war existing side by side. On certain sectors there were siege operations, while simultaneously other sectors were stabilized and still others witnessed mobile operations. Nor did the Russian Front have uninterrupted offensives. Pauses, long and short, were forever supervening. The short pauses were necessitated by preparations for new operations. The longer pauses were imposed by stabilization of the fronts, resulting from an equilibrium of forces. There were pauses arising from climatic conditions—in the autumn, the winter, and the spring. There was a long pause lasting from March to mid-May 1942, caused by the watchful waiting and the preparations on both sides. There were even pauses in mobile warfare and offensive operations, caused by the tremendous strain and the equal pressure on both sides of the front. And finally there were pauses arising simply from the temporary cessation of operations. But in general the tempo and character of operations on the Russian Front were quite different from what the German High Command had thought, planned, and prepared for.

The Russian Front was neither the fixed trench warfare front of the First World War, nor the fluid space of mobile warfare. It was a continuous front, but it was mobile and elastic. There were phases when it was stabilized over its entire length, because of the equilibrium of forces or the cessation of operations. But it never froze into a static war of position. On the other hand, the front in the German–Soviet War never fell apart, affording the attacker the opportunity for unrestricted mobile warfare, as had been the case in all the earlier campaigns undertaken by the German Army. It was a front that could be pushed this way and that, that could be bent and even pierced. It certainly was not the fixed front of a permanent defence line, such as the French High Command had imagined the Maginot Line to be. But it was never smashed and it was forever being repaired, by the Red Army as well as by the German Army. Streams of reserves were always flowing to the front lines, restoring them. These reserves and mobile troops and modern defensive methods kept the front continuous on both sides. To an even greater degree than with the German Army, this maintenance of an elastic, mobile front was the characteristic combat method of the Red Army, which went through a deep retreat, based itself on the rear, constantly led new reserves into battle, and remained predominantly on the defensive. But the German Army, in its retreat during the winter of 1941–42, likewise maintained a continuous front. Nevertheless, the fact that the

enemy maintained a mobile and cohesive front that was constantly being re-established, ran counter to the expectations and intentions of the German High Command.

The actual course of the German–Soviet War revealed the true face of modern large-scale continental warfare—not as it had been dogmatically envisioned, but as it really was. All the forms of modern land war here asserted themselves. In the large view it was a clash between two concepts—at first the German offensive pitted against the Russian defence; then the limited Russian offensive against the German defence. The duel between the German offensive and the Russian defence in the first phase of the war held the greater significance, since it was fought with far greater intensity, determining the whole further development of the war.

The evolution of the German–Soviet War has shown that, despite the revolution in tactics and mechanization, a certain continuity remains in modern warfare. Certain elements of strategy that had emerged during the second half and above all towards the end of the First World War, were reproduced in the German–Soviet War. They were repeated to the extent that even at the end of the First World War certain elements of modern war had evolved. Thus there is a certain continuity within the age of modern strategy. But in addition to that continuity, there emerged completely new combat forms, shown for the first time. Thus two groups of tactical elements were demonstrated in the war in Russia.

The chief combat form to be carried over from the First World War was the modern infantry battle. The infantry now fought with new weapons, according to new tactical rules, and in co-operation with other arms branches. But the infantry still formed the front—it formed the skeleton and the tissues of the front. It was the infantry that made the front continuous, that made possible its constant restoration. The infantry also was the last line of defence in both armies. Every major battle in the German–Soviet War ended as a major infantry battle. The experience of that war shows clearly that there can be no victory without the smashing of the enemy's infantry, that encirclement of the enemy can succeed only if his infantry is encircled by the attacking infantry. In the last analysis this is the crucial rôle of the infantry, proving that modern large-scale land war is a war of mass armies and reserves.

The other modern combat form taken over from the First World War, as the German–Soviet War proves, is the battle of matériel. This means the greatest possible concentration of arms and munitions—in other words, fire power. It includes the use of technical material in the defence—mines, artificial obstacles, fortifications of all kinds. From a technical viewpoint the battle of matériel in the First World War was far from conservative in character. On the contrary, it showed the way for the war of the future. If it proved unable at first to overcome the rigidity of the fronts, this was only because mobile warfare had not been

developed then. Yet in the end, in 1918, the German war of position was overcome by the Allies' battle of matériel, their concentration of artillery and tanks, aided by infantry manœuvres. In the German–Soviet War the large-scale battle of matériel reclaimed its rights. Curiously enough it was the German High Command which at first tried to avoid a battle of matériel against the Red Army. It attempted to solve the tasks of the offensive purely by manœuvring, without great concentration of fire. Since the battle of Smolensk, however, the Red Army has reintroduced the battle of matériel—in that phase of the war as a means for defence and for stabilizing the front. The Russian campaign proved that manœuvring alone—mobile warfare without concentration of arms and fire—cannot in the long run solve the problems of the offensive. Only manœuvring with fire power, manœuvring in the battle of matériel, holds out the promise of a successful attack.

It is significant that in the Second World War the large-scale infantry battle and the battle of matériel did not reach full effectiveness until the German–Soviet War. In the war in the West they were virtually absent—a fact due as much to French as to German strategy. French strategy not only failed to go beyond the experiences of the First World War; it actually lagged behind the war methods of the second half of the First World War. It had forgotten the real strength of French warfare in the First World War—the infantry battle and the battle of matériel. Its conservative concept of a rigid, continuous front misled it into keeping the fighting strength of the infantry in an under-developed state and to neglect the resources for a modern battle of matériel. The French High Command had neither the tactical means of mobile warfare nor a modern mobile defence, to parry the German attack. But over and above that it betrayed its own military traditions by failing to train an efficient infantry or assemble the resources for an effective battle of matériel. Foch, Mangin, Gouraud, and Herr would have solved the problems of French defence in 1940 much better than did Gamelin, Georges, and Weygand.

The German High Command, on the other hand, waged the war in the West purely in the style of a war of movement (with the exception of the battle of the Somme), without the use of large infantry masses and without matériel battles. Of course the weaknesses of the French defence aided it. The German Army had at its disposal very strong infantry forces and powerful resources for the battle of matériel. Yet it preferred to use neither to any great extent. It clung to mobile warfare in the West, with the German infantry merely following in the wake of the tanks, chiefly conducting mopping-up operations or completing encirclement operations in which the French armies had no choice but to surrender. These German tactics were not governed by chance. They were selected not because the German infantry was weak or the German Army incapable of launching a battle of matériel, but because the infantry

battle and the battle of matériel are not *fortes* of the German Army, as proved in the Russian campaign. At bottom the war in the West was not a modern war, since there was no clash between two modern armies. On the German side it was a hyper-modern war of moto-mechanized manœuvring, while on the side of the backward French Army it was no more than a weak, passive defence. From the military viewpoint, it was an exceptional case, in which the laws of modern war failed to take effect. It was quite different in the German–Soviet War. This was a genuine modern war, and for that very reason it restored to influence the infantry battle and the battle of matériel, both now armed with new tactical methods. In themselves, both the infantry battle and the matériel battle are methods of offensive as well as of defence. Both belligerents actually used them broadly for both purposes, with the Red Army, from June to December 1941, having the better of it in its system of defences.

There were, in addition, three elements of modern war that emerged for the first time in the German–Soviet War—elements unknown in the First World War.

The first is mobile warfare. It is a pure form of the offensive. German mobile warfare in Russia cannot be compared with the campaigns in Poland and France. It was waged against an infinitely stronger opponent, and this time it revealed an even greater striking power on the part of the German Army than in the previous campaigns. The battle of the frontier, the operations in the Ukraine, the phase of mobile warfare in the battle for Moscow, and the summer campaign on the Don and in the Northern Caucasus far surpassed German moto-mechanized warfare in Poland and France. But the Russian campaign also showed that mobile warfare is but one form of modern war and that its freedom of action is by no means unlimited. German mobile operations in the battle of the frontier and in the Ukraine were conducted against an enemy who had not yet fully deployed his forces. The mobile operations against Moscow lasted less than three weeks, in October; then they were halted. As for the second German offensive against Moscow, while the most powerful resources of moto-mechanized warfare were thrown into it, it was mobile warfare being checked, without a large-scale manœuvre.

On the other hand, it was shown very plainly on the crucial Central Front that after a certain lapse of time mobile warfare gives way to other combat forms, in a peculiar sequence of battles with different tactical forms. In the second half of July 1941, German mobile warfare on the Central Front was succeeded by a battle in depth. From August onwards a stabilized and more or less firm front evolved there. Early in October 1941 mobile warfare was resumed, but a few weeks later it was again supplanted by a battle in depth at the very gates of Moscow. In the great German offensive of late November and early December, German mobile warfare could no longer get into swing. But then came Russian mobile warfare, which after seven weeks of offensive action on the Central

Front again ended in a stabilization of the front. Thus in the German–Soviet War mobile warfare had the upper hand only to the extent that it temporarily succeeded in overcoming defensive resistance. Its feasibility on each occasion was determined, so to speak, by the difference between the means available to the offensive and those available to the defence. It broke out, after pauses, only for short periods, in sudden pushes.

Another form of modern war demonstrated in Russia was arms co-operation. It was put into effect in the offensive as well as in the defence, by both belligerents. The success of the German offensive until the battle for Moscow, as well as the success of the Russian defensive in the battle of Smolensk, later in the battle for Moscow, and finally in the winter counter-offensive—all these were the result of arms co-operation. Modern war technics has created an extreme differentiation of arms. Tactical skill in modern war is not merely a question of using every weapon to the full, but also of using all arms in combination. This introduces tremendous complexities into modern battle. It was arms co-operation on both sides which, in addition to other factors—led to a relative equilibrium of forces on the front in the late winter of 1941–42.

Finally there is the third new form of modern war revealed in the German–Soviet War—the battle in depth. It was worked out primarily by the Red Army, while the German Army neglected it, despite von Leeb's advice. The battle in depth is the form of defence peculiar to modern war. The aggressor seeks to avoid or to overcome it in order to reach the mobile warfare stage. Just as modern mobile warfare is distinguished from the crude form of break-through characteristic of the First World War, so the battle in depth is distinguished from the rigid linear defence of the First World War, as practised by the French at Verdun and by the Germans in the battle of the Somme. In a battle in depth the advanced lines are fluid. There are penetrations on both sides, reaching deep into the enemy lines, leading to local encirclements—what Russian military literature calls a "layer-cake" situation. All arms combined participate in such a battle. Artificial obstacles and defence positions begin to extend over a great depth. Usually both sides continue to draw on their reserves without interruption. The battle in depth absorbs great masses of infantry, since it is usually based on the saturation of the battle-front with huge numbers of combatants and weapons. Two results may come from a battle in depth. It may result in the establishment of fixed fronts, once the two adversaries have separated themselves from entanglement. Such was the case after the first phase of the battle at Smolensk. But the battle in depth may also shift over into mobile warfare. That was how the battle for Moscow ended—with an ensuing Russian offensive. The difference in the combat methods of the two armies is marked by the fact that while the German Army won such great initial successes in mobile warfare, it proved unable to win either of the

two great battles in depth—the battle of Smolensk and the battle for Moscow.

One should here distinguish between two phases in the development of the German war tactics in the Russian campaign. The first one lasted until the spring of 1942, and its most brilliant period was the time of the German offensive from the invasion until December 1941.

The crucial tactical topic of the German–Soviet War up to the summer of 1942 was the struggle between the German offensive and the Russian defence. In the winter of 1941–42 there were Russian counter-offensives and German defences, but both were limited operations. The battle for Moscow—so far the most important battle of the war—was won by the Red Army essentially in the defence. The ensuing Russian counter-offensive reaped the fruit of a successful defence—it was a continuation of the Russian defence. Thus the period from the outbreak of the war to the summer of 1942 was in tactical respects primarily a test of German offensive power pitted against Russian defensive power. This test will determine the outcome of the war.

The basis of German tactics during this period was orientation of all arms categories towards the offensive. Blitzkrieg is merely mobile warfare with a swift decision as its goal. German Blitzkrieg is no longer a mystery. It consists of a limited number of operations. It can be readily dissected. These are its operations:

1. Tank warfare—above all, the moto-mechanized break-through and tank raid.
2. Co-operation between tanks and motorized infantry and other fast troops.
3. The concentrated offensive use of the air arm.
4. Assault operations by the infantry and the pioneers.
5. Operations by mobile artillery.

All German tactics in the German-Soviet War can be tested on the basis of this breakdown.

It was German tank operations against the Red Army that were the most effective and successful. In all German operations the tank was the bearer of the offensive. The effectiveness of the German tanks was aided by motorized transport, by the presence of other fast troops (motorized infantry, motor-cycle troops, mechanized artillery), by special training for the offensive, and the feats of marching performed by the German infantry. The German principle of organization and operations was to concentrate the tank arm into large units of great striking power—tank armies consisting of three or four armoured divisions. The German tanks were successful in the battle of the frontier, when the enemy front was not yet stable, and in the Ukrainian operations. On one occasion they even overran a stabilized Russian front. That was the Russian Central Front between Valdai and Bryansk, early in the October

offensive. But in the battle for Moscow even the greatest German tank masses failed. There was a noticeable crisis in the German tank arm, beginning with November 1941. In the South the German tank forces were numerically inadequate with respect to the Russian spaces and the increased Russian resistance. But before Moscow, where the strongest German tank forces were concentrated, the reason for the failure of the German tank attacks was not numerical inadequacy, but a crisis induced by operative exhaustion and supply difficulties and, of course, by the power of the Russian resistance. The huge German tank mass (four tank armies!) came to grief against the Russian defences, even though the Russians themselves used but very limited tank forces. The battle for Moscow showed the risk with which an all-out offensive with concentrated tank masses is fraught. Within a few days they were paralyzed and were literally turned into iron scrap. For the crucial importance of tanks in the tactics of the German Army involved a peculiar feature that facilitated the Russian defence. The German tank columns clung to the roads. Lt.-Col. Paul W. Thompson, one of the best experts on German tactics in the United States Army, has this to say of earlier German campaigns, especially the Balkan campaign:

> One of the significant characteristics of all recent German campaigns has been the fact that they have been waged largely on the roads. . . . This was a war of columns, not of fronts.[1]

The experience was repeated in the Russian campaign. As *Krasnaya Sviesda* summed up its observations:

> The German Fascist troops, and especially their mobile troops, operate predominantly on the roads.[2]

This clinging to the roads of German tank and other mobile troops facilitated defence by Russian artillery and aviation.

German aviation was given very broad tasks on the Russian Front. It was to be one of the decisive instruments of Blitzkrieg. Among its tasks were: 1. Achievement of complete air mastery, by air combat, destruction of the enemy air force on the ground and the destruction of the enemy aircraft industry. 2. To prevent the concentration of Red Army forces and attack base lines, troop transports, and communication centres. 3. To co-ordinate closely with attacking land forces and to intervene in the land fighting, to destroy enemy fortifications and defence positions, and to attack tank columns, artillery, and infantry positions. 4. To destroy great industrial centres deep in the enemy rear.

This vast programme of total air war failed. In tactical effectiveness Göring's air force lagged far behind the German tank arm. The limited achievement of the German air force is a noteworthy phenomenon of the German–Soviet War. German air strength simply was not large enough for the tremendously extended Russian Front. Nor was it continuously

used on one or several major front sectors. As for concentrated, massed action by German aviation, that took place only in the battle of the frontier, the operations in the Ukraine, especially around Kiev, and the first phase of the battle for Moscow between October 1 and 15. Even there it failed to carry decisive importance. Göring's air force was carefully concentrated for major offensives, but otherwise it was spread quite thinly, and on sectors where the German Army was on the defensive, as in the direction of Smolensk in August and September 1941, only German reconnaissance aviation was in evidence. The German air force showed no tactical superiority over Russian pursuit aviation in air combat. In intervention in land fighting, German aircraft proved to be imperfectly adapted technically to this specialized task. The German air force lacked specialized types for this purpose, like the Russian Stormovik and anti-tank plane. The famous German Stuka dive bombers exhibited superior marksmanship in bombing, but their usefulness was limited to the one-time bombing of individual objectives. In the bombing of linear fortified positions the Stuka was effective, but it was unequal to the job of bombing large numbers of defence positions scattered in depth. As for the psychological effect of the Stuka, so outstanding a feature in the Western campaign, it failed against the Red Army. The German air force did not succeed in disorganizing Red Army bases and communications. The German air general Quaade wrote:

> The German air force focussed its attacks on the railways and most important roads leading into the theatre of war. Marching troops and motor columns moving on the roads were reached in this manner.[3]

But this was the recital of a programme rather than a record of accomplishment. And as for German air raids on Russian industrial centres, they were ineffective. There was no Coventry in Russia. The impotence of German air action became particularly apparent against Leningrad and Moscow, despite the favourable short range. Here the thorough and excellent system of Russian air defences had its day. Indeed, the German air force did not dare maintain continued air raids, on account of its high losses. Thus the effect of the German air force on the Russian Front was severely circumscribed.

The German Soviet War proved that the German infantry was trained mainly for the tasks of mobile warfare. It showed strength wherever the tanks opened the way for mobile operations. Its rôle was mainly, though not exclusively, that of accompanying and aiding the tank forces. As General Guderian wrote:

> Despite the noteworthy force of the modern anti-tank defence, a major surprise attack by superior armoured forces promises success, whenever infantry fighting in the wake of the tanks bends every effort to facilitate the break-through and support it, once it has been made.[4]

The German infantry has a very high fire-power, especially in mine-

throwers, automatic weapons, and its own mobile artillery. Its tactics exhibit two characteristic features. It is organized in a deep echelon, which facilitates the defence. The Russian General Rokosovsky, one of the successful generals of the battle for Moscow, described these German tactics in the following terms:

> The Germans put but a limited part of their forces into their most advanced lines. The remainder they hold in the immediate rear, in order to be able to shift it rapidly from one front sector to another. When our infantry drives a wedge into the first German line, our units are generally attacked in the flank and the rear by the German's second line.[5]

German infantry, when attacking, also tries to apply in small actions the tactics of wedges and encirclements. One of the weaknesses of the German infantry is its reluctance to engage in hand-to-hand fighting, and its slight endurance at close quarters. It is as characteristic of the German infantry as it is of German armoured forces, that while it has shown considerable success in penetrating linear defences, it has not mastered the battle in depth. The piercing of the Stalin Line and the capture of Perekop were peak performances unequalled by any other army in the world, but in the battle of Smolensk and even more in the great battle for Moscow the German infantry failed.

In 1941 German artillery played a smaller rôle than it did in the First World War, again because the German arms were one-sidedly oriented towards mobile warfare. The functions of the field artillery were in part transferred to the tanks and the air force, in part to the mine-throwers and the infantry-accompanying artillery. Yet the German artillery has a highly differentiated assortment of ordnance of superior technical quality. German anti-tank guns and howitzers are excellent. But the German Army lacked the concentrated fire of the field and heavy artillery. In the German Army the operative functions of the artillery are limited to such tasks as the preparation of the offensive, fire support of mobile operations. The advance group (*Vorausabteilung*) of a German division is saturated with light and mobile artillery—anti-tank and anti-aircraft guns and mechanized artillery (so-called storm cannon)—that are to facilitate the swift solution of independent offensive tasks. They engage in fire manœuvres and artillery raids that are executed with speed and surprise. But all in all the German artillery then had a relatively slight destructive effect. It was unable to give the German Army maximum fire support in every situation. Like all German arms, the German artillery proved unable to overcome the Russian defence system in depth. Curiously enough, German units often tried to mask the weakness of their artillery by a ruse. They would drive several guns through a major front sector and try to give the impression of a large number of firing guns. This neglect of the artillery was one of the German High

Command's most dangerous technical miscalculations, which led to a distinct tactical weakness in the German Army.

At the heart of all German tactics in the Russian campaign lay a cardinal error. Blitzkrieg tactics against a strong and tenacious enemy are simply nonsense. Between two powerful mass armies, armed with modern fighting equipment, there can be no such thing as Blitzkrieg. When two such armies clash, modern war is bound to assume different forms. The absurdity of Blitzkrieg is increased when it is attempted in the vast Russian spaces, against an opponent with the endurance and the reserves of the Red Army. This fundamental fallacy caused German tactics to develop in the completely wrong direction. They were simply unequal to Russian resistive powers, to the modern system of defence.

German tactics in the defence were tenacious and technically organized along rather effective lines. They were based on a combination of all forms of fire and on powerful, effectively constructed defence positions. The Germans did not wait until the winter campaign to improvise this system. It was in effect even during the second phase of the battle of Smolensk. It was then that the German "hedgehog" positions were carefully elaborated. According to the Russian Colonel Khitrov, this particular form was evolved as early as the fighting around Elnya, the first larger place that the Red Army succeeded in retaking early in September 1941:

> Though lacking an uninterrupted line of trenches in their most advanced sector, the Germans endeavour to place their fire-power so that the entire region before them is held under fire. Every strong point has a firing radius in several directions and is adapted to circular defence. Every village is transformed into a strong point, and trenches and firing points are planned for circular defence.[6]

But even the German defensive system had one defect - it was organized over a relatively shallow depth, unlike the Russian defences. Even in the presence of effective tactics, however, the defence cannot be regarded as a combat form that is characteristically German. In the winter of 1941–42, the German Army, though in retreat, managed to hold its defence lines and chief large centres. Yet this successful defence represented a strategic setback for the German Army. It knocked over the German time-table, nullified German mobile warfare, and foiled the German war plan, thus giving a changed direction to the further course of the war in the East.

There are other reasons besides the insistence on Blitzkrieg and the tactical inadequacy of individual German arms why German tactics in the Russian campaign fell short of the mark. For one thing, the Germans simply lacked power—reserves. German tactics in the war in the West emerged with glory and victory because there the German Army was able to maintain a consistent superiority in numbers and weapons, always operating with fresh reserves. Reserve divisions marched directly behind

the attacking troops, intervening in the battle as soon as there was the slightest slow-up in the tempo of operations. Thus the entire offensive in the West was able to unroll without interruption and in true Blitz tempo. In the Russian campaign, on the other hand, the lack of reserves in large-scale operations was felt as early as August 1941. Thus the whole German strategy was based on a horrendous miscalculation, and it was a foregone conclusion that German tactics had to fail.

They had to fail, moreover, because the operation at which they were pointed all the time and which was to be their crowning achievement was simply incapable of realization under the war conditions in Russia. All along, German tactics aimed at encirclement and battles of annihilation. But in order to succeed, an encirclement must first of all be complete—it must have the enemy really bottled up—and it must be tight enough to keep the enemy from breaking out. Encirclement requires both tanks and troops that are faster than the infantry, as well as the infantry itself, for tanks alone simply cannot block off a large area tightly. In other words, an effective encirclement that really holds the enemy in a firm grip rather than a loosely drawn noose requires strong numerical superiority. According to Russian calculations, such an encirclement actually requires four or even sixfold superiority.[7] Even if these figures are too high, the fact remains that in its encirclement tactics in Russia the German Army came up against virtually insurmountable obstacles. It encountered the vast Russian spaces where circles around enemy troops would have had to reach tremendous dimensions. It encountered the legions of Russian infantry, against which it could not hope to attain numerical superiority. In encirclements, the back part of the encircling ring particularly must be stronger than the forces it has flanked. But the German Army came up against the combat power of the Russian troops and their modern weapons. Under such circumstances the German strategy of encirclement was incapable of realization and German tactics lacked objectives.

In the same manner the German dream of the battle of annihilation faded away in the Russian campaign. A battle of annihilation does not simply mean the physical annihilation of the enemy. Quite to the contrary—large casualty lists usually mean that the enemy is offering strong resistance. In the German meaning of the term, a battle of annihilation does not mean the annihilation of troops, but that of the army—surrender by the enemy, demoralization of his military organization. The prototype of the battle of annihilation, so far as German strategy is concerned, was offered by the war in France, with its slight losses on both sides and its 2,000,000 prisoners of war. But a battle in which the attacker loses 100,000 men and the defender 150,000—yet goes on to fight—such a battle is not a battle of annihilation in the German sense, even though the losses on both sides are extremely high. In a real battle of annihilation, within the German meaning, the attacker would lose 10,000 men and the

defender perhaps 30,000—but some 250,000 enemy soldiers would have been forced to surrender. In this German sense, therefore, there were no battles of annihilation at all. In the face of the Red Army's high morale and great powers of resistance, reinforced by its numerical strength and modern weapons, such battles were out of the question.

> These fellows fight with the doggedness of madmen, until they can no longer move a limb. They never surrender.[8]

The quotation is from a dispatch by a German war correspondent, written early in the war. But if the enemy as a rule does not surrender, his military organization cannot be disintegrated, and thus there can be no battle of annihilation.

The German tactics of 1941 were in many points revised in the summer campaign of 1942. This time they were better calculated. The organization of the German tank arm was more elastic. The first phase of the campaign, the breakthrough to the Don, was essentially a fight of German tanks against the Soviet artillery positions, and in that phase the fighting ended with the overrunning of the Red Army's base of operations in the South. The action of the air force during the offensive lasted longer this time than in any other German drive of the Russian war. The well-prepared concentrations of aviation enabled it continuously to form the first echelon of attack. The co-operation between the German tanks, the air force, and the artillery functioned better than in previous German offensives. That was true particularly of the close collaboration between tanks and artillery, which hitherto had been relatively neglected by the German Army. Generally, in tactical respects the summer campaign was characterized by the much bigger rôle of the German artillery. In the siege of Sevastopol German artillery showed its increased destructive force. In the fight on the Don and in the Northern Caucasus it was numerically more strongly represented than in previous campaigns. This time it was adjusted to the tempo of the war of movement, owing to the large-scale use of mechanized artillery. It should, however, be considered that this all-around strengthening of the German Army's tactical performance rested on the concentration of its forces on one front and even on one front sector. Undoubtedly the German High Command has drawn several lessons from the experiences of previous operations. But in the South-east of Russia it was favoured by the fact that it did not direct its blow against the enemy's decisive forces.

German tactics, of course, came face to face with Soviet tactics. Like German tactics, Soviet tactics are modern in character, having complete mastery of the entire gamut of weapons in modern war. Soviet tactics were less definitely oriented towards the offensive. But to a greater extent than German tactics they were adapted to the defence against enemy tactics, as well as to the terrain and the climate. They were based on the

simultaneous use of offensive weapons for the defence as well as for the attack.

Red Army tactics made full use of the great endurance in which Russian troops excel. Even in peace-time, Red Army training was brought close to the harsh conditions of actual combat. As Timoshenko, the real educator of the Red Army in the last year before the war, said:

> The greater the peace-time hardship in training, the smaller the war-time handicap.

And Budyenny:

> Night, storm, snow, and frost—that is the best background for preparing and steeling men and officers.

In certain respects the arms branches of the Red Army were even more highly differentiated than those of the German Army. The Red Army had at its disposal large masses of modern cavalry, tactically adapted to the special conditions of the Russian countryside. The Soviet cavalry took on the functions of mobile cross-country forces, in the defence and also in the offensive, particularly in pursuit of the enemy. Soviet cavalry had the advantage that it could be readily and swiftly deployed for surprise action.

The Red Army furthermore had specialized winter troops, which the German Army lacked—powerful ski troops, propeller-driven sledges, infantry on motorized sledges, artillery on sledges. Superior adaptation to the terrain gave the Red Army a number of tactical advantages. Its units did not cling to the roads. They were past masters at fighting in the woods, and they knew how to take advantage of woodland for defence and camouflage. The way in which the Red Army had adapted itself to winter warfare was particularly important. For the Red Army winter meant no halt in operations. Its activities know no seasons. This gives it an absolute tactical advantage over the German Army in the months from November to March—an advantage by no means limited to the winter campaign of 1941–42, but certain to hold good in the future. Compared to the Red Army, which can keep on fighting the year round, the German Army is an army of summer soldiers, while German offensive tactics are distinctly seasonal in character.

Another *forte* of the Red Army is it so-called "sly tactics"—tactics that keep the enemy in ignorance concerning Soviet intentions and that take the fullest possible advantage of the surprise element. The enemy is to be constantly misled about Soviet positions and dispositions, the depth of the defence, and the tank defence zones.

> We were involved in engagements, the preparations for which by the enemy were a complete mystery to us,

wrote a German war correspondent early in the war.[1] Another German

reporter complained that "the Russian soldier's combat methods are utterly alien to the German soldier". And there are countless German plaints about the Red Army's "unfair fighting methods", about soldiers who played dead, only to open fire, about invisible snipers in the woods, about unimaginable ruses for which the German soldiers were quite unprepared.

Of special importance were Russian surprise attack tactics and combat operations at night. Despite its modernism, the German Army clung to the conservative view that even in war-time the night is made for rest. But the Red Army trained for night operations long before the war. As the leading Russian military organ wrote a year before the outbreak of the German–Soviet War:

> Night ceases to be a time for rest. More and more it is turning into the time during which crucial offensive operations are conducted. In the First World War night fighting may have been the exception, but now it is even more common than day-fighting.[10]

Night attacks give the attacker a double advantage. Preparations are removed from enemy observation; and there is great economy of forces, since enemy fire in the advanced zone, where contact is made, is virtually ineffective. In his speech of May 20, 1942, Göring specifically acknowledged the effectiveness of Russian attacks during the winter campaign:

> Now the Russians were able to break through in the night-time over frozen lakes, rivers, and morasses.

Red Army tactics, far from being improvised as the war went along, had been carefully worked out over a period of years. And they were as systematically applied as they had been developed. This development passed through three phases. Basic principles had been worked out before the outbreak of the Second World War. Even then all of the elements of the modern type of defence were fixed—mobile defence, battle in depth, tank defence, disruption of the attacker's combat order by cutting the tanks off from the infantry, delaying resistance, exhaustion of the enemy. Between the outbreak of the Second World War and the German invasion, the methods of German strategy were carefully observed and studied. The keynote of Russian tactics in this period was defence, halting German Blitzkrieg, and German mobile warfare generally, on the basis of the lessons of the campaigns in Poland, the West, and the Balkans. Russian tactics were accordingly modified and perfected. During this period Red Army tactics dealt with such questions as defence against armoured divisions, use of mobile reserves, perfecting the functioning of aviation intervening in land fighting. In the war itself, finally, Red Army tactics were adapted to all the concrete combat forms of the enemy by day-to-day observation and practical testing.

In general, Soviet tactics are heavier—less mobile than German tactics. But they are also more realistic. In the course of the war described they have been mainly, but not exclusively, defensive. They assign a greater rôle to the infantry than German tactics. Their infantry is not pushed into the background, as happened in the German Army in some cases. Nor is it reduced to escorting tanks. Modern offensive weapons have not reduced the importance of the infantry. As the Soviet military writer Galaktionov said at the outset of the German invasion:

> Moto-mechanized forces and aviation may infuse new strength into operative manœuvres, but they by no means cancel out the importance of infantry masses.[11]

According to this view the infantry is the foundation of the front, carrying the main burden in the offensive and even more so in the defence. The battles in depth, against which German mobile warfare was wrecked, were waged by the Red Army predominantly with infantry. The most important achievements of the Soviet infantry in the campaign of 1941–42 lay in the field of mobile defence, executed in many distinct forms, all the way to infantry combat against aviation (by fire concentration against low-flying planes) and co-operation with all other arms, especially the artillery. At the conclusion of the battle for Moscow, Red Army infantry also revealed its offensive power, defeating the German Army, which was equipped with far stronger offensive weapons, and forcing it to retreat.

As for Soviet aviation, it had been assigned definite and concrete tasks for years. The Soviet aviation doctrine was clear and logical. Its maximum effect was to be derived from intervention in land war. Its operations were by no means to be confined to the battlefield—it was to strike at the entire enemy front over its full depth. Soviet aviation was first and foremost the air arm of the Soviet combat forces, operating in the air on behalf of the warfare on the ground.

"The task of aviation is to drive forward the land front," wrote General Lapchinsky, leading theoretician of the Soviet air force.[12] Thus the Soviet air force, more consistently than any other air force in the world, developed so-called storming (assault) aviation, in addition to the pursuit and bombing types. This is the air branch which in organization and plane types is tactically adapted to operating against land objectives. The tactical method for this purpose is swift low flight—so-called "shaving flight"—giving these planes the advantages of surprise in bombing and strafing, greater accuracy in bombing, and protection against enemy pursuit craft. A speed of over 300 miles an hour protects the Russian Stormoviks from ground fire. This speed and the short ranges at which they operate (20 to 30 miles into the enemy front) also offer considerable protection against enemy pursuit craft. Stormoviks usually are able to attack their objectives before enemy pursuit planes can intercept them. Compared with the German dive bombers, the Russian Stormoviks have

the advantages of being able to maintain attack operations over longer periods of time, to attack several objects in succession by various methods, while enjoying greater security against enemy anti-aircraft fire and pursuit aviation. As a matter of fact, construction, flight characteristics, armour, and armanent of the Russian Stormoviks and anti-tank planes were specifically planned for the objectives sought. The Soviet air force was not given the gigantic job envisioned for the German air force in the German–Soviet War. But while more modest, Soviet air aims were carried out with greater precision and consistency. Thus the Soviet air force actually accomplished more in the defence than did Göring's air force in the offensive. In September 1939 the organ of the Soviet air force characterized the tasks of the air arm in the defence as follows: Air protection of the front and its bases; operations against the main enemy forces and defence against their main attacks; impeding enemy reserves on their way to the front; air support for counter-attacks.[13] Such tactics were actually followed in the war.

Up to the summer of 1942 Soviet heavy bombardment aviation was not much in evidence. This does not imply that it was neglected. In 1939, 20 per cent of all Soviet military planes were heavy bombers—a very high proportion. But this branch of the Soviet air force seems to have been held back. With the exception of the bombing of special objectives, such as the Rumanian oil-wells, bridges across the Danube, and a few German centres visited on something like orientation flights, Soviet heavy bombers were hardly seen. The reason was that Russian air bases were constantly being pushed back from German centres, increasing the ranges. An air force encounters great difficulties in attacking while its own army is in retreat. In continental warfare the strategy of the air force can never be very much different from that of the army—Britain is in an exceptional geographic and strategic situation. Russian bombers will get their chance for offensive action when the Russian Front rolls forwards within shorter range of German industrial and communication centres. The Russian air force had a very large bomb salvo—6000 tons in 1939. Thus it possesses a great potential for so-called autonomous air actions, which it has not undertaken so far.

The rôle of the Soviet tank arm has been smaller than might have been assumed. In the expansion of the Red Army special attention was devoted to the technical development of the tank arm and to tank tactics. Though both defensive and offensive tank tactics were evolved, greater emphasis was placed on the offensive. Nevertheless Red Army tanks, in the German–Soviet War so far, had far less ambitious operative functions than the German Panzers. Soviet tanks were, as a matter of fact, used predominantly in the defence. The reason is not to be sought in the Russian lack of an offensive tank doctrine. There was such a doctrine. Nor is the reason that Soviet tanks were organized into relatively smaller units than the German armoured divisions. Taken by itself, this fact

could hardly hinder offensive tank operations on the part of the Russians. For Soviet tank units were kept small only to increase their flexibility and facilitate their massing and combining with other arms branches for offensive purposes. The Red Army, moreover, has numerous tank units specifically intended for offensive operations—the so-called tank units for distant action. It was not the quantitative volume of the German armoured divisions that fitted them for the attack. In the battle for Moscow it turned out that such mammoth aggregations of armoured divisions and whole tank armies were quite cumbersome. The battle for Moscow proved that the German tactics involving the use of strong tank masses were fraught with great risk. In later phases German tanks appeared in far smaller concentrations. No, the causes for the limited effectiveness of the Russian tank arm in the campaign of 1941 must be sought elsewhere.

In the first phase of the war large Red Army units showed little capacity for large-scale offensive manœuvring. This may have sprung from a defect in specialized training. Certainly it was a result of lack of experience in actual warfare. It was quite evident that the German Army, which at the time had already been waging war for two years, had the operative advantage. Soviet tank units were in position to carry the burden of large-scale offensive manœuvres alone, with their army lagging behind. In the first phase of the war the Red Army was forced to remain on the defensive. It could not afford two different types of tactics—one for the bulk of the army and the other for the tank arm. The Russian tank arm was forced to conform to the entire strategic situation and the tasks of the Red Army. Thus it proceeded with defensive tactics. If it failed to carry them out in the form of large-scale counter-manœuvres, preferring individual operations, one of the reasons was that the Russian war plan reserved such counter-manœuvres for the time when the enemy would have been exhausted—as at the conclusion of the battle for Moscow. At any rate, from September 1941 the Soviet tank arm was used very sparingly at the front. Whether this was because tank reserves had been temporarily depleted by the preceding high losses, or because the Red Army High Command placed the accumulation of a strong tank reserve above all other considerations, is difficult to judge at this time. Possibly an important reason why tanks were used so sparingly in the autumn of 1941 is that their defensive use was no longer held to be effective from a military viewpoint. There is indisputable evidence that Russian bombing aviation was held back. Perhaps the same motives also operated to hold back Russian tanks, especially the tank units for distant action, until the entire strategic situation could take on a more suitable complexion. It is a safe assumption, however, that in the further course of the war, as tank reserves are accumulated, Red Army experience in manœuvring grows, and the enemy is progressively weakened, the Soviet tank arm will be used offensively in large-scale manœuvres. The

beginnings were shown in Timoshenko's Kharkov offensive in May 1942.

On the other hand, there can be no doubt concerning the tactical superiority of Soviet artillery in 1941. This was shown from the very first phase of the war, at the battle of Smolensk. This tactical superiority was the result of numerical superiority on the part of Soviet artillery. But the Red Army was given such numerical superiority because its High Command had a more realistic conception of modern war than the German High Command. Soviet artillery tactics are based on the universal use of the artillery, which is to render maximum fire support in every situation. It was not only to support operative arms like tanks and aviation but to aim at a destructive, reducing effect against the enemy, in the defence as well as the offensive. Soviet artillery played a prominent part in the battles in depth and the stabilization of the front. Its tactical principles were concentrated fire and manœuvring. In the words of General Kamera, one of the most successful Red Army artillery commanders:

> Building up massed fire by a large number of guns permits crushing surprise blows to be dealt against the fire points and vital strength of the enemy.[14]

Soviet artillery revealed great capacity for manœuvring "on wheels"—by swift changes of position—and "by trajectory"—changing the range and the direction of fire from the same position. In the defence it was one of the Red Army's most powerful arms, virtually nullifying the German Blitzkrieg and severely circumscribing German mobile warfare. In a transition to the offensive based upon coalition strategy, the Red Army can count on strong fire support.

Two elements of Soviet tactics will be of great importance for the further course of the war. The first is arms co-operation in the defence—a mobile and versatile defence. The Soviet defence system is the most complete and elaborate any Army has ever created. It includes the use of offensive arms, manœuvring, the battle in depth, the use of infantry masses, the construction of light defence positions, and the building up of a solid defence front. It is noteworthy that the views of Field-Marshal General von Leeb, the most important contemporary German military expert, coincide in detail not only with the basic elements and strategic ideas of the Russian war plan, but also with the tactical methods of the Red Army. Von Leeb specifically called for air intervention in land fighting and for plane armour. The Red Army had strongly armoured planes even when the war broke out—the German Army lacked them. Von Leeb recommended mobile defence tactics:

> The use of fast units, combat planes, localized attacks, the swift breaking off of engagements, concealment of measures taken, may

contribute as much toward tiring out the enemy as purely defensive means such as artificial obstacles and field fortifications.[15]

This is virtually a description of the Russian defence in action. The German defence in the winter campaign was far more static in character. It was defence using "artificial obstacles and field fortifications". Von Leeb warned against depleting tank forces in defensive fighting:

> The active character of operative defence carries the danger of letting the mobile units be worn down by allowing them to become involved in individual skirmishes, local attacks, or other side-shows. Such tactics spend forces prematurely and imperil the ultimate objective.[16]

Like the Red Army, von Leeb envisioned the ultimate objective as the transition to the decisive offensive. It is likely that this was the motive behind the sparing use of Red Army tanks from September 1941. They may be held for the offensive yet to come. Von Leeb warned against fixing and building up solid fronts too soon. Such fronts were to arise only in the further course of the campaign, when the enemy offensive no longer had its original momentum and the main direction of the enemy blow had become apparent:

> Later on, when the purposes of the enemy begin to become clear, when there are indications where his centre of gravity is situated, the fluid grouping of the defence may have to be modified into a more solid form. Reserve forces may be introduced into the hitherto loosely knit front, until it becomes strong enough to withstand premature rupture.[27]

This too is, by and large, descriptive of Red Army defence tactics. It did not even attempt to build up a firm front during the battle of the frontier. It did not do so until the battle of Smolensk and later the battle for Moscow, when the German offensive had spent its initial force. And against this solid Russian front even the strongest German offensives came to grief. Von Leeb demanded that defensive camouflage be used as much as possible:

> In attacks by enemy armoured forces and infantry the defence must take special pains to keep beyond the enemy's reach by avoiding being spotted. The enemy must not be given the opportunity to destroy in advance the weapons of the defence.[18]

It is a fact that camouflage has been developed into a fine art by the Red Army. Oddly enough, the German Field Marshal General von Leeb bears witness to Soviet combat methods in the matter of defensive tactics as well as of basic strategy.

Anti-tank defence is the second especially important part of the Russian defence system. Tanks are the German Army's strongest

weapons, the carriers of the German offensive and of German mobile warfare. Thus the duel between German tanks and Russian anti-tank defences is one of the most important elements of the entire Second World War. The Red Army fights enemy tanks not merely with one specialized arm like the anti-tank artillery, but with the totality of weapons at its command, combined in anti-tank action. The air force, the artillery, the infantry, tanks, and pioneers (by means of land mines and obstacles of all kinds)—they all fight the German tanks in their own tactical way. No other air force is technically and tactically as well adapted to this special form of combat. Special Soviet plane types engage the German tanks—anti-tank planes, Stormoviks, and pursuit craft armed with cannon. This fight of plane versus tank has one curious aspect. Tanks have the advantages of speed and surprise over infantry and artillery; but planes have the very same advantages over tanks. Planes take advantage of tank weaknesses—their limited vision and lack of anti-aircraft artillery. Even before the German–Soviet War had shown Russian planes in anti-tank action, the outstanding French air expert Rougeron had anticipated much along these lines:

> From a strategic viewpoint, the value of planes as anti-tank weapons lies in the fact that they can go into action 15 minutes after the first enemy tank has appeared. Within half an hour the remaining air strength of a given front sector can follow suit. It is impossible to overestimate airplanes in this respect, especially when their tremendous range is compared with the limited range of anti-tank artillery, infantry, and tank obstacles. A country having at its disposal a powerful storming aviation cannot possibly suffer the fate of Poland, where German armoured divisions operated hundreds of miles behind the front for days and weeks on end.[19]

There can be no doubt that this form of Soviet tank defence is highly effective. Soviet artillery, moreover, co-operates in tank defence. The field artillery lays down fire barrages against the attacking tanks at a considerable range, scattering their combat order and inflicting losses even before the tanks have come within range of the anti-tank artillery proper. This anti-tank artillery then fights the tanks virtually at point blank range. Russian experts state that twenty anti-tank guns, at a range of one kilometre, can destroy sixty enemy tanks (General Grendal[20]). Other calculations (General Kuznetsov[12]) put the effectiveness even higher, stating that ten anti-tank guns can put from ninety to one hundred and fifty tanks out of action in three to four minutes. As for Soviet infantry, it fights tanks by several means—with its own anti-tank artillery, with anti-tank rifles, hand grenades, mobile mines, gasoline flasks, and automatic weapons. It fights tanks in closed formation and with specialized two- or three-man tank destroyer commandos, equipped with gasoline flasks, hand grenades, and automatic weapons; and also

with small groups of armour-breakers handling anti-tank rifles. As a matter of fact, Soviet infantry has received so much training in fighting tanks that it can be looked upon as specialized anti-tank troops.

This tank defence by the Red Army as a whole has far-reaching tactical consequences. It has proved that it is possible to compensate for a disproportion in arms. German tank superiority has limited effectiveness. It is no longer adequate to win the war. In other words, enemy tank strength can be neutralized to a certain extent. Indeed, owing to such anti-tank defence the army with the weaker tank arm may actually excel in fighting strength. Even in tank strength proper, the army with the weaker tank arm can attain a balance of power. Superior anti-tank defence constantly weakens enemy tank strength, and from this it is only a step to the attainment of tank superiority. That is undoubtedly the goal of the Soviet anti-tank defence system.

The overcoming of the Russian defence on the Don and in the Northern Caucasus, and particularly the new successful development of mobile warfare in the Russian South-east, were, though large, essentially limited operations. They did not affect the main Russian defence. Thus the summer campaign of 1942 did not provide the test for the final superiority of the German offensive. The contest between the German tanks and the Russian anti-tank defence will continue.

As has been said before, the German–Soviet War in 1941 was a competition between German mobile warfare and the Soviet defence against it. Late in 1941, in the battle for Moscow, the Soviet defence first demonstrated its superiority. But the question remains whether mobile warfare, waged with stronger forces and suitable tactical methods, can in the end overcome a modern defence system such as that of the Red Army. The Russian anti-Blitz has overcome the German Blitz; can the Wehrmacht overcome the Russian anti-Blitz? This is impossible with the methods of "normal" Blitzkrieg, but can the Wehrmacht develop an "anti-anti-Blitz"? Hypothetically that is possible—in two ways. In the first place the attacker would have to increase his offensive arms—tanks and planes—on so gigantic scale that they would force even a total defence system to its knees. This would mean not only that the German tank and air arms would have to be far stronger than their Soviet counterparts, but that they would have to be strong enough to smash the entire Soviet defence system, essentially carried on the shoulders of the Soviet infantry and artillery. Such a strengthening of German offensive arms is beyond realization. The other method would be for the attacker to increase his strength in those arms that represent the backbone of the enemy defence system—infantry and artillery. In the case of the German Army that is most unlikely. It cannot conjure up greater man-power reserves than are possessed by the Red Army, nor can it make up for the lead in artillery which the Red Army has maintained for years. As a matter of fact, the German Army is in no position to find the resources

for smashing the modern Russian system of total defence on the entire front. Tactically, the variety and skill of the Russian defence render ultimate German victory impossible. That is the crucial function of the Russian defence in the Second World War.

But effective Russian defence has still another function. The further course of the German–Soviet War will not be exhaustively defined by the formula: Russian defence versus German mobile warfare. The Russian defence is constantly wearing down the German Army, inflicting mounting losses on it. The Russian defence, in the war as a whole, is restricting the potentialities of German mobile warfare. The extent of German mobile warfare operations in the summer of 1942 is less than that of the summer of 1941. On the other hand, the effectiveness of the Russian defence is facilitating the Red Army's transition to offensive tactics and strategy. Red Army defensive tactics are in essence *reversible*. Most defensive operations by the Red Army are not basically different from offensive operations. Indeed, they are used without change in the offensive. The Soviet defence was conducted with offensive arms, in high-powered fighting, with the use of manœuvres and of mass armies, and of modern weapons in large quantities. Under such circumstances Red Army tactical methods are bound to shift from the defensive to the offensive, as soon as the enemy has been weakened. To the extent that reserves will stiffen the offensive weapons of the Red Army, and to the extent that it will be relieved by a strategy of coalition, this reversal of the two combat methods will come more and more to the fore.

PART III

THE WAR IN THE ATLANTIC AND PACIFIC

CHAPTER TWELVE

THE BRITISH FRONTS

COMPARED WITH the spring of 1941, the strategic situation for Great Britain was completely changed through the entry of the Soviet Union and the United States into the war.

Great Britain was no longer alone. The war had ceased to be a duel between it and the Italo-German alliance. The war that Britain was now waging was no longer the isolated and defensive war at sea and in the air that it had been, but a component part of a global war, fought out between two world-wide coalitions.

The situation for Great Britain was vastly relieved. The spectre of invasion was as good as banned. The strategic encirclement which Germany had built up against Great Britain through its capture of the Atlantic coastline of Europe from Norway down to Spain was no longer effective. It was now more a line of defence for Germany than a base from which it might attack. It functioned as a springboard only on behalf of Germany's submarine warfare. Nor was Great Britain any longer threatened by massive German air bombardments.

On the other hand, Great Britain found itself exposed to a variety of other perils. Its losses of merchant tonnage through the action of German submarines continued, and the German war of strangulation went on. Shipping losses in the first half of 1942 reached an ominous height. The losses suffered by the British Navy after the spring of 1941 were high, and the fleet was overstrained. Libya was in German hands, and the Near East under pressure. Furthermore, the British strongholds in the Pacific, with the exception of Australia and New Zealand, were lost.

These drawbacks, however, were more than matched by the advantages that emerged for Great Britain was the result of its new strategic situation.

From the summer of 1941, Great Britain was able to accumulate new strength undisturbed. Its industry was relieved of danger from the air.

The country was able to build up new reserves of weapons, and to develop its fighting forces further. Its position was improved by the material and strategic assistance sent from the United States. It acquired superiority in the air, and assumed the offensive there.

Above all, a change had been put into effect in the British conduct of the war, and in the strategic position of Great Britain. The war was no longer being fought as a passive defence, as had been the case from June 1940 to June 1941, but with victory as a goal. Close inter-relations were established between the British and the Russian Fronts, opening up new vistas for British strategy. Finally, the British Isles had become the advanced post in the North Atlantic area of the mighty Anglo-American alliance.

With the United States having taken over the lead in the war in the Pacific, Britain was fighting on three fronts: along the front that runs from Gibraltar to the Indian Ocean, on the front in the Atlantic, and on the front that faces the Hitler-dominated European Continent.

The Mediterranean, North Africa, and the Near East form a strategic unit. Together, they make up the British Front that extends from the Atlantic to the Indian Ocean. The Mediterranean is for Great Britain the rear of its front on the Atlantic; it is, besides, the sea route that leads to the Indian Ocean and to the oil-fields of Iraq, Iran, and the Caucasus, after the American the richest in the world. The importance of this Empire region, above all for the resources and the communications of the British Empire, has grown even greater through the loss of its strongholds in the Pacific and the threat to India.

The significance of the Mediterranean area today is also more for Germany than it was in the first two years of World War II. The Mediterranean is now of value to Hitler's Germany not only as a bridge to Africa and Asia, that is to say for what might be called a "normal" expansion. The region has now also become for the Third Reich the line it has so much desired for breaking through to the Indian Ocean and a connection with Japan. It is therefore probable that Italy will be employed even more actively than heretofore in the furtherance of German strategic plans. Italy is Hitler's sailor in the Mediterranean. It has two functions to perform: to cut the British line of communication from west to east through the Mediterranean, from Gibraltar to Suez; and to furnish Germany with a bridge from north to south across the Mediterranean for the German offensive and expansion to Nothern Africa and the Near East. German strategy in the Mediterranean makes full use of the Italian fleet and bases. Where these are not enough, it seeks to overleap the sea-barrier with its air forces. Thus Crete was captured, attempts were made by the German Air Force to drive the British Fleet out of the Eastern Mediterranean, and it may be that new German air-borne drives will be launched there in the future. In the spring of 1941, after the conquest of the Balkans and of Crete, a German all-out offensive towards the South,

carried through chiefly by the Luftwaffe, seemed to be impending. It never materialized, its place being taken by the great German offensive in the East. The Third Reich is not able to carry through two great all-out offensives at once, against Russia and against the Near East. German strategy in the Mediterranean area is still capable of considerable intensification, but it can never attain the degree that it might have had, had Germany not attacked Russia. The front in Eastern Europe imposes fairly narrow limits on German offensive strategy in the Mediterranean and Northern Africa.

The war at sea and in the air in the Mediterranean area in 1941 and 1942 was carried out with forces that were comparatively limited, with the result that a certain degree of equilibrium was established for the time being. The British Navy enjoyed a tactical superiority, while the Italian was ahead in point of numbers, especially in cruisers and light naval forces. The war was conducted principally along communication lines, by submarines and air forces, both sides suffering losses. The British plans were, as usual, to proceed from the mastery of the sea to the control of the coastlines. The German procedure, on the other hand, was to go on from the occupation of the shores to seize control of the sea. But the British Navy did not have control of the sea, while the Axis Powers, for their part, had too narrow a basis of operations in Northern Africa, namely a single narrow bridge-head only. Furthermore, both sides made use of their air forces—which might have been able to gain the decision—to a limited extent only. The war in the Mediterranean thus ran on indecisively until the middle of 1942, the German air forces being fully occupied in Russia and on the Western Front. The British strengthened their aviation, but it remained insufficient for really large-scale action. American deliveries in the Mediterranean area arrived too late and not in sufficient quantity to ensure a quick decision against the Axis Powers. In 1941 and in the beginning of 1942, when the German forces were not yet firmly established in Libya, the opportunity no doubt existed to win the battle for the Mediterranean without extensive land fighting, and mainly with naval and air forces. The Italian Navy represents the weakest part of the Axis fighting forces. It might have been possible to knock it out if a sufficient air-supported concentration of British naval forces set free in the Atlantic by the American Navy, or an Anglo-American task force, had been employed against it.

Germany was not in a position to prevent the British occupation of Iraq, Iran, and Syria, for the reason that just at that time it was occupied in preparing and starting its own offensive against the Soviet Union. British strategy was thus successful, with relatively slight effort and minor forces, in bringing under its control a large and important region. A great territorial block could be created, extending from the Indian Ocean, Turkestan, and the Caucasus all the way to Northern Africa. Germany, however, was successful in retaining its bridge-head in Libya. In Libya,

too, down to the Rommel offensive of June 1942, the opposing forces remained in 1941-42 in a state of relative equilibrium. The mutual pressure of the two armies was evident in the swinging of the pendulum back and forth between Sidi-Barani and Benghazi. Down to May 1942, two British and two German offensives took place, but they remained of local importance only. The British and Empire forces were several times weakened by the successive withdrawal of troops to Greece, to Australia, and probably to India too.

The German Libyan offensives of January and February, and of May and June in 1942, have brought up the question of the reason for the German successes. Competent British military experts had already been profoundly disturbed by Rommel's winter offensive, at the beginning of 1942. General Sir Robert Gordon-Finlayson characterized Rommel's tactics as careful; he said Rommel's operations were well organized and added that the resumption of the drive, with its threat to Egypt, was entirely possible.

> Rommel, though in contact with our forward troops, has never exposed his main body; he is strengthening the ground he finds it easiest to hold, as well as to emerge rapidly from; he has shortened his lines of communication and his strength accumulates. He now awaits a decision by Hitler as to the spring plan. If this plan envisages the strengthening of the German position in the Mediterranean, and succeeds, Rommel's army becomes a real danger to Egypt.[1]

Air Marshal Sir Edward Ellington saw the danger to lie in better leadership on the side of the Germans, since he was inclined to discount German numerical superiority, and believed British predominance in the air to be a fact.

> But in January and February 1942, General Rommel, without attempting to deprive the British of air superiority and with little air support, has inflicted a severe reverse on the British forces and driven them out of most of Cyrenaica. . . . The blame cannot be laid on inadequate air support. It is hardly possible that the Germans and Italians in Africa were superior in number in January 1942 to the Allies. If the explanation is that General Rommel concentrated superior forces at the decisive point, and not only superior to his opponent's army, but also sufficiently superior to counter his enemy's air superiority, it argues a superiority of generalship which, to say the least of it, is disturbing.[2]

The impending danger, therefore, had been foreseen.

The storm broke in June 1942, in the great battle in Eastern Cyrenaica. The consequences of the battle, which led to the defeat of the British Eighth Army, the capture of Tobruk, and the invasion of Western Egypt, are of considerable importance. Certain parallels can be found with the

German victories in Russia in the spring of 1941. In Russia at that time, the Wehrmacht possessed superiority in numbers and offensive capacity, but it was not superior in war technics. In Libya in 1942, the Wehrmacht was superior in its offensive capacity and war technics, but not in numbers. As such, British and American armament industries are not inferior to the German. The battle in Libya in June has shown, however, that the German types of weapons in their technical qualifications were better adapted to particular tactical requirements. German medium-sized tanks, German artillery and anti-tank cannon, and in aviation the Stuka planes were better qualified for the tasks of offensive warfare on land than the corresponding weapons of Anglo-American production. Whereas in the campaign of 1941 the Red Army was able to a large extent to offset the original operative superiority of the Wehrmacht, the Germans in the second year of the war in Libya still enjoyed operative superiority over the British forces. The German Army fought the battle in Libya in June 1942 not as though it were a colonial campaign, and not as an action on the traditional lines of desert warfare, but as a real large-scale battle carried on according to all the rules and with all the technical means of modern war, in particular by massive attacks in mobile warfare, by the employment of the air force in land warfare, by co-ordination of all arms, and by great tank manœuvres.

A new German drive in the North African theatre of the war is not excluded. In that event, some kind of German action in the Western Mediterranean can be counted on almost as a certainty, such as the occupation of the French possessions in Northern Africa and perhaps the taking over of the French Navy, the entry of Spain among the Axis Powers, or at least the utilization of Spanish bases, an attack on Gibraltar, and the seizure of the islands in the Atlantic. In any case, intensification of the war in the Mediterranean and the Near East is bound to affect profoundly strategy in the Atlantic Ocean.

The military dilemma posed by the situation in the Mediterranean and the Near East is this: limited strategy or grand strategy. A limited strategy would mean for both the belligerents the maintenance of the military *status quo*, the retention of the bridge-heads in Northern Africa, and the prevention of attempts at expansion on the part of the opponent. Grand strategy would mean for Germany a great offensive from the Mediterranean basin towards the Near East, perhaps in several directions at once. For the Anglo-American Powers it would mean a drive from the Near and Middle East to North Africa and across the Mediterranean into Southern Europe. This grand strategy in the Mediterranean area would involve great difficulties, and would call for great exertions.

The Atlantic Ocean is for Great Britain at once its lifeline and military base of operations. The Atlantic Front thus has for it a double meaning, for on it is fought the battle for the safeguarding of supplies for Britain, and on it also are deployed the forces of the British Navy and aviation,

and those of the United States. The Atlantic is the front of the concentration of the Anglo-American forces in their coalition war.

The first, but by no means the only, aspect of Britain's Atlantic Front is its defence against the German U-boat menace. Allied shipping losses from the beginning of the war down to the middle of 1942 reached the very high and menacing total of no less than twelve million tons. Germany probably has more submarines in active service today than in the First World War and more than a year ago; and the efficiency of modern submarines, their range, cruising radius, and torpedo power, is greater. On the other hand, the figures of ship sinkings from month to month show wide variations, as much as by three to one—as for instance from 597,000 tons in April 1941 to 210,000 tons in July of the same year—depending on the weather, the effectiveness of the defence, Germany's submarine reserves and losses. The result of the battle of the Atlantic will depend primarily on the Allied defence and the amounts of new shipping constructed, neither of which is a strictly British, but a joint Anglo-American responsibility. The efficiency of modern defence against submarines has also increased. It includes the employment of great numbers of special vessels, of destroyers, submarine chasers, corvettes, and still smaller coast-defence boats, of aviation, improved technical apparatus for locating and sinking submarines, and so forth. All these factors and more too were doubtless included in the agenda of the British and American experts who met in London in the beginning of June 1942. According to the programme that was set up, British, American, and Canadian shipbuilding in 1942 was to be more than ten million tons, and in 1943 between fifteen and twenty millions. In the month of May 1942 alone, 623,000 tons were completed in American yards. The situation will become critical if the sinkings are increased, and if the Allied building programme falls short of the expected totals. It must also be considered that the activity of the German air force and of German raiders on the lines of communication on the Atlantic can become greater. With the high tactical quality of German cruisers, pocket battleships, and battleships, German raiders can become a great additional danger. If, however, the total sinkings can be brought down to about the level of the autumn of 1941, and if the Allied shipbuilding programme on the whole can be adhered to, the defensive battle in the Atlantic will be won, and a reserve of tonnage be built up, over and above the current requirements.

The battle of the Atlantic has another aspect, however, a purely military one. The issue here is as to the potentialities and the functions of British sea power. The British Navy has many difficulties to contend with. It is stretched out too thin. It must make long voyages on convoy service, around the African Continent, to the Eastern Mediterranean, to the United States, to India, to Murmansk. It is overburdened. It must keep watch on the German Navy in the North Sea, fight the Italians in

the Eastern Mediterranean, guard the Western Mediterranean and the South Atlantic, conduct the blockade service, and chase enemy submarines. Since its size is much less than it was in the First World War, its losses and damage weigh far more heavily. The loss in a single day of the *Prince of Wales* and the *Repulse* was a greater blow than all its losses in the Battle of Jutland. If three British battleships are hit and have to undergo repairs, it means that more than a fifth of England's battle fleet has been put out of action. By the spring of 1942 the British Navy had lost 5 battleships, 4 aircraft carriers, 15 cruisers, 68 destroyers, and 37 submarines, with a high percentage of damaged ships. The wide extent of convoy duty diverts it in important measure from its normal military tasks. Great Britain is suffering from a shortage of ships of war for combat, as well of tonnage for military purposes.

Great Britain, traditionally a naval power *par excellence*, also suffers from the change in the functions and in the technical means of sea power of our time. Sea power today cannot lay claim to being a decisive weapon, one that alone brings victory. Adherence to this ancient doctrine of war has been shown in the Second World War to be of baleful effect.

We are fighting alone, and we believe we can successfully fight alone,[3]

Captain Russell Grenfell, a well-known British naval writer, and a representative of the old-time school of sea power, wrote in 1941. The inferences of the doctrine that he preaches are that Britain needs no allies because it can be sufficiently protected by sea power alone, and, that to secure its safety it does not need to break the continental might of Hitler's Germany, for the Third Reich, as a land Power only, can achieve nothing against a naval power like Great Britain. Incidentally, it is not by chance that the doctrine of "pure" sea-power, perhaps at times supplemented by air-power, has been the war doctrine of British and also of American isolationism. In a modern war among Great Powers, the fleets can gain the decision only in co-operation with the air and land forces, as a part of the total fighting forces. The part played by the German Navy in the campaign in Norway, and still more that of the Japanese Navy in the great campaign in the Pacific in 1941–42, was important, but in neither case were the navies ranged in the attacking forces as the decisive weapon, the decision being gained by the air forces and the armies. The autonomy of naval strategy today is merely technical, and no longer possesses the splendid independence of former days. Its concrete duties are determined by considerations of total strategy, the strategy of the fighting forces taken as a whole. The importance of a "fleet in being" has declined, but a "fleet in action", acting in concert with the air force and the land force, is an essential element of present-day strategy, which is by nature both dynamic and complex, and which includes all the fighting

forces and makes use of them as a unit. The British Navy therefore cannot fulfil its functions by the methods of the naval strategy in 1914–18.

At the same time, a change has also taken place in the technical structure of sea power. It has become three-dimensional, acting on the surface, in the air, and below the surface. Though control of the sea has not lost in significance, the technical efficiency of surface fighting forces decidedly has. Modern sea-power also includes, in an organic whole, aviation, submarine forces, and submarine defence. Whereas submarine forces and submarine defence were already admitted to membership in the course of the First World War, the addition of the air force as a full-fledged element of sea power is a specific phenomenon of the present war. What seemed to be a fundamental crisis of British and American sea-power, in principle has turned out to be a lack of proper co-operation between the navy, the air force, and the army, and in particular the insufficient development of aviation as an element of sea-power, despite the actions at Taranto, the sinking of the *Bismarck*, and the feats of American flying forces in the Pacific. What John Philips Cranwell has to say on the matter is only in part correct:

> The submarine and the bomber have not altered, and will not alter, the doctrine of sea power. Control of commerce and that commerce itself, the basic elements in the doctrine, are just as important now as they ever were. What the new weapons have altered is the method of controlling the sea lanes; they affect the establishment and the exercise of sea power, not its doctrine.[1]

Sea-power, in fact, means more than just sea commerce and the protection of sea commerce. It means the military domination of the sea, which today includes the sub-surface and the air above the sea. The traditional conception of sea-power as sovereign and independent naval strategy has collapsed, and the part of the navy in the final war decision has diminished. The modern, technically transformed type of sea-power, however, acting within the frame of the united fighting forces, has been newly developed, and presents, indeed, new possibilities.

That is an important conclusion to be drawn for British strategy, which was greatly hampered, and actually even side-tracked, in the first years of World War II by the conservative, traditional doctrines of sea-power. Above all, it is the development of aviation which opens up new possibilities for British naval strategy. Advances in the production of military aircraft in Great Britain and the United States are such that they will vastly exceed production in Germany and Italy, and this can give the fighting in the Atlantic and the Mediterranean an entirely new aspect. British sea-power, which primarily is Atlantic sea-power, can be the first to profit by this, in the fight against the German and Italian navies, in the enhancement of Britain's own security, and in the control

of coastal waters and coastal territory. Britain can enjoy a marked advantage as against the Third Reich, because a strong navy plus a strong air force are more powerful than a weak navy plus a strong air force. As Paul Schubert described the situation at Dunkirk,

> Britain won at Dunkirk because the algebraic sum of Britain's floating power, down on the surface of the water, plus Britain's strength in the air above the water, outbalanced the sum total of the German floating and flying strength.[5]

Since Dunkirk, moreover, British aviation has been relatively more strongly developed than has the German. The mighty dynamics of aviation thus can accrue to the advantage of British sea power on the Atlantic Front.

The true strategic meaning of the battle of the Atlantic does not lie in a merely passive British defence at sea. That was the case for Britain during the time when she stood alone and isolated against the Third Reich. In a coalition war against Germany, the purpose of the Atlantic Front is a different one. It has become an offensive front of the Allies, a base of operations at sea for the Anglo-American coalition. The Atlantic Ocean has become the marshalling place for the invasion of Europe, and British sea-power thus has been given a forthright offensive purpose.

While in the middle of 1942 Great Britain was still on the defensive in the Mediterranean basin and in Atlantic waters, an important change took place along this front. On the front opposed to Continental Europe, she became a potentially offensive factor, and in the air she actually went on to attack. Great Britain alone was considerably weaker in the air than Germany, and incomparably weaker on the land. Great Britain now, in a coalition war, is based on stronger fighting forces in the air and on the land than Germany can put on its Western Front. The air and land forces of Great Britain today must not be compared with the sum total of the corresponding forces of the Germans, but only with those which the Germans have available in Western and Northern Europe, or which they can send into those regions.

Relieved as it is by the Russian Front, Great Britain has been able since the middle of 1941 to expand its armament production undisturbed. British aircraft production in the middle of 1942 was double what it was in the last quarter of 1940.[6] In 1942 it was certainly much more than half of Germany's production, perhaps even as much as two-thirds. British production of tanks in the first quarter of 1942 was twice that of August 1941 and three times that of February 1941.[7] In the middle of 1942 Great Britain was manufacturing cannon at the rate of 40,000 per year, which is enough for the full artillery equipment of 200 infantry divisions.[8] It was at the same time producing military vehicles of every kind at the rate of 257,000 a year, enough to equip 100 fully motorized divisions.[9] It must, of course, be remembered that perhaps

from a third to one-half of the total British production of tanks, and perhaps a third of aircraft production, have been exported, among other countries to Russia. At the same time Great Britain was receiving armaments from the United States, although in 1941 in smaller quantities than it was itself sending abroad. An immense increase in the flow of American armaments to Britain must, however, be looked for. The division of labour and increased co-ordination with armament production in the United States give Britain further advantages. This is particularly true of aircraft production, in which field Britain will presumably henceforth concentrate its attention on the manufacture of pursuit planes, and America on that of bombers.

The British Army will probably not have been made stronger in point of numbers than it was in 1941—that is to say, something more than a million and a half men. But it has undoubtedly improved in respect of its arms and in its organization. New armoured divisions and air-borne units have been equipped and trained, as have also, according to an announcement before the House of Commons by the then Minister for War Captain Margesson, several regiments of field and anti-tank artillery. The British Army has to meet two requirements. Primarily, it is predestined to be an army of invasion. This means that it must be fully familiar with the special technique of an army of invasion, which must operate as a large-scale landing force. It must be trained in landing technique, the seizure and retention of footholds, and so forth. And further, it must tactically and operatively be so expert as to be able to meet the war-seasoned German Army on an equal footing. For this, it will require a smoothly functioning organization on the field of battle, thorough mastery of modern weapons and of arms co-operation. It may be expected that the lesson will be learned very quickly from the tragic experience of the campaign in Libya. Shipping and the special difficulties of landing operations unquestionably face the British Army with grave problems. On the other hand, it is doubtless a fact that the land fighting forces concentrated in the British Isles are greater than the forces which the Wehrmacht has available in Western and Northern Europe. After all, it is not a matter of "national" British forces alone, but also of the Americans and Canadians stationed in the British Isles. The constant influx of American forces will greatly increase the numerical superiority which the British Army already enjoys as against the German forces in Western and Northern Europe.

The war in the air opens up special possibilities for British strategy in the war against Germany. Since 1942, the Royal Air Force in the British Isles has been stronger than Göring's Luftwaffe in Western Europe. In no other field does Great Britain profit so much from the coalition war as in the war in the air. The R.A.F. possesses strategic freedom of action as against Hitler Germany, while the main forces of the Luftwaffe are tied down on the Russian Front.

Without question, Britain's air force is the most modern part of her fighting forces. In pursuit planes, night fighters, and heavy bombers, the R.A.F. in 1942 stands at the top of the air forces of the nations in the war. In these classes, British aviation is qualitatively superior to the German. The Soviet air expert Spitalny, creator of the armament of the Russian Air Force, considers the Spitfire III the most manœuvrable, and the Hawker Typhoon the fastest, pursuit planes in existence, and the Beaufighter and the Whirlwind to be the most powerfully armed night fighters.[10] Modern British bombers have the greatest bomb load, joined with high speed and heavy armament. These technical features accord with past and present British air strategy, which primarily is directed at actual air fighting and bombing operations. The qualities sought most are range, speed, manœuvrability, armament, and bomb load.

The British air offensive against Germany had several aims in view. It sought to divide the forces of the Luftwaffe, to draw away a portion of the German pursuit plane units, and to pin them down in the West. Air Marshal Sir Edward Ellington has expressed the matter thus:

> One of the principles which emerged from the air warfare of 1914 was that if one power could force the other to defend itself in the air had thereby secured the command of the air. It is with this object, in part, that the attacks on targets in enemy territory have been made, so as to force the Germans to retain aircraft for protective purposes and thereby weaken their forces available for use on the Russian front.[11]

In this respect, the R.A.F. has in fact been acting according to the rules of genuine coalition air warfare, in co-ordination with the Russian air forces, each furthering the relief of the other. Another objective of the British offensive in the air is its immediate destruction effect, the greatest possible paralysis of German centres of communication and war industry and of military bases. Its third aim is preparation for invasion. In this, the question is not alone one of a material and psychological "softening up" of German power, but rather, as pointed out by Air Minister Sir Archibald Sinclair in his address in Birmingham on May 8, 1942, of attaining air supremacy over the Germans by uninterrupted massive bombardments.

While down to the spring of 1942 British bombardments in Germany in their extent and effect were less than German air attacks on Great Britain had been, the British air offensive of May to August surpassed the earlier German performance. The attacks on Cologne and Essen were the greatest mass air attacks in military history, and it may be that they have introduced a new era in aerial warfare. Their execution was admirably organized. The tactics of the British air attacks were effective and well suited to their purpose; the mighty waves of bombers attacked so massively and quickly that the German air defence was overwhelmed, while at the same time flights of British planes struck at German airports

in order to forestall a counter-attack on the returning bombers. The rôles were now reversed, and the aims and principles of the former German air strategy—namely, destruction on a massive scale and preparation for invasion—were now employed by the British in their air war against Germany.

The question now is whether the R.A.F. has the reserves necessary to continue an uninterrupted air offensive of such dimensions. Even if the attacks on Cologne and Essen were only experimental operations, they are significant. The general situation, however, calls for the intensification of the air war against Germany, and that immediately. Early in 1942, Air Marshal Lord Trenchard, former chief of the R.A.F., warned against assuming that the R.A.F. had very large forces available for bombardment purposes, and termed such a belief illusory. Air Marshal Sir Edward Ellington, again, said in the spring of 1942:

> It has been the policy of the Government to build up the Fighter Command, the Coastal Command, and the Middle East Command as the first charge on the resources of the Empire and only to use the residue of the capacity for the Bomber Command.[12]

It may have been the case that great efforts were made, particularly in the first half of 1942, to increase the offensive bomber strength of the R.A.F. It is certain that American bombing planes in quantity have been sent to Britain. The air war against Germany is not a specifically British task, but the joint concern of the Anglo-American coalition.

Despite its efficiency British aviation does show very definite limitations, in its types constructed, in its tactics, and in its aerial strategy. British aviation in the main confines itself to air combat and to independent operations in the air—that is to say, to long-distance bombing. British air policy is threatened by a doctrine of "pure" air war similar in its rigidity to the British naval policy of "pure" sea-power. The R.A.F. possesses too few airplane types qualified to take part in land warfare, such as dive bombers (which the Russians took over from the Germans), or Stormoviks and anti-tank planes (which the Germans now are copying from the Russians). In consequence of this intrinsic defect, the British Army is going to lack the support of such specialized types of planes as are at the command of the Wehrmacht and of the Red Army. Voices are being raised in England itself against this one-sidedness of British aviation technics and tactics. The former Minister for Aircraft Production Moore-Brabazon has pointed out that the war cannot be won by air bombardment alone. A British military periodical, again, has gone so far in its distrust of a one-sided air war as to term the bomber "a mere fearmonger".[13]

The fact is, however, that heavy bombers are as necessary a feature of British air technics as long-distance air war is a necessity of British strategy. Great Britain is predestined to be the springboard of the whole

anti-Hitler coalition in its coming great air offensive. What Great Britain needs are differentiated air technics that are adjusted to the entirety of its strategic tasks. The first of Britain's strategic tasks is the invasion of the European Continent. It therefore must have an "invasion" air force —that is to say, airplane types that are especially designed to destroy enemy coast defences and maintain air supremacy in coastal territory, such as dive bombers and light bombers. Great Britain, moreover, must have special aircraft for carrying on operations after a landing has been effected and to carry the invasion further; that is to say, in addition to pursuit planes and dive bombers, it must have Stormoviks and anti-tank planes. Just as the air war against Germany is not a specifically British, but a joint Anglo-American affair, so is a maximum of air support for all the troops now stationed on the British Isles and destined for action in Europe also a common Anglo-American task. The crisis that raged in British military policy from Dunkirk to Tobruk essentially revolved about the backwardness of the British Army as compared with the Wehrmacht, and this in part at least could be referred back to the lack of tactically adequate air support of the British Army, and to defective co-operation between it and the R.A.F. A comprehensive total revision of the British air policy thus could assist in the modernization and enhancement of the striking power of the British Army.

All the great military problems that face Great Britain today debouch in a single greater problem, that of coalition war. The war in the Mediterranean and the Near East, the battle of the Atlantic, the air war against Germany, are all actions in the coalition war. The problems can be solved through co-operation with the Russian Front, and through the closest collaboration with the United States, through the unification of the Anglo-American strategy. An intensified coalition war would also enhance the military weight of Great Britain in the coming decision.

CHAPTER THIRTEEN

THE CAMPAIGN IN THE PACIFIC

THE ANTI-JAPANESE powers, in 1941 and 1942, did not lose the war in the Pacific, yet they did lose a campaign of large stakes. Two preponderant facts emerged from this defeat:

A Greater Japan has sprung up, the greatest oceanic-continental colonial empire in the world. Together with the Japanese Islands, Manchukuo, the occupied regions of China, Indo-China, Thailand, Malaya, the Philippines, Burma, and the Dutch East Indies, this great Japanese empire can boast a population of nearly 400 millions. It now possesses by far the major part of Asia's economic resources.

From now on Eastern Asia and the Pacific area have a new, completely altered military geography. There has been a new distribution of forces, of strategic positions and bases. Japan has military control over the huge region that stretches from the Aleutian Islands to Australia and from Oceania to Bengal Bay. Manila, Singapore, Surabaya—fortresses and symbols of American, British, and Dutch power in the South-eastern Pacific—are today Japanese bases. The United States and Great Britain have been thrown back, in the Pacific and in Asia, on Hawaii, Australia, and India.

The crisis of Allied strategy in the Pacific had several reasons. Primarily it was the consequence of the inadequate military policy of coalition. Originally this defence coalition in the Pacific had been planned exclusively as a coalition of the Western Powers. It was not an ABCD (including China), but an ABDF coalition: American, British, Dutch, French. After the defeat of France it shrank to an ABD coalition, of America, Britain, and the Dutch. The two major continental Asiatic Powers, China and the Soviet Union, were not included. That meant that the defence coalition of the Western Powers had no access to the core of the Asiatic continent, and was essentially confined to the South-western Pacific. From a military standpoint the naval aspects of this coalition predominated. Japan was hopelessly encircled by the ring of hostile Powers, by the United States, the Soviet Union, China, Great Britain, the Netherlands—and, if a water-tight anti-Japanese coalition had materialized, Japan would have stood no chance. But, like the Third Reich, it profited from the dissension and lack of co-ordinated action in the camp of its enemies. The Munich policy in Europe was the cause that in Asia too the great anti-Japanese coalition failed to come into being. Japan succeeded in localizing the war against China. The American-British-Dutch coalition that was later on attacked by Japan, was but a torso. As Germany did in Europe, Japan in Asia too defeated one of its enemies after another, in succession.

The other reason for the Anglo-American defeat in the Pacific was the lack of effective defences. The self-imposed prohibition of fortifications and expansion of military bases in the Western Pacific was unfortunately taken seriously by Great Britain and the United States. Even Singapore, which did not fall within this prohibition, was no strong fortress. Narrow-minded naval thinking led to a fatal weakening of the Anglo-American land and air forces in the defence system of the South-western Pacific. The vital positions in the Pacific were defended by far less than 100,000 British and American white troops even when the Japanese attack was imminent. Most likely the Allies had only a few hundred modern planes from the Philippines to Australia and from the Dutch East Indies to Burma. The higher figures with which there was much manipulating stood only on paper, since they included obsolete matériel, as in 1939 and 1940 in France.

Finally the lack of an actual war plan had fatal consequences for the anti-Japanese coalition. An offensive as well as a tenacious defensive conduct of war against Japan was entirely possible. Geography favoured Japan's enemies more than Japan. A potential frontal war theatre for offensive operations against Japan existed. From the Aleutians, the Philippines, Hongkong, Guam, a concentric attack on Japan would have been possible. The blocking of any Japanese expansion towards the South-western Pacific, control of the southern part of the China Sea, a threat to Formosa and Hokkaido, large-scale aerial warfare against the Japanese Isles—all that would have been possible if the Allies had really prepared and utilized this advanced war theatre. Another variation of effective defence would have been conceivable, with Singapore as the central base. Even if the Philippines, Guam, and Hongkong had been yielded, control of the actual South-western Pacific with Malaya and the Dutch East Indies, and the approaches to the Indian Ocean could still have been maintained if the defence had been concentrated upon Singapore. But there was no plan, either for an offensive or for a systematic defensive conduct of war. The Allies looked upon the war in the South-western Pacific primarily as a blockade and a naval war, but it was never executed in that form. In reality it was waged as an unsystematic defence of isolated, scattered objectives. Any war plan has the concentration and disposition of forces, counter-manœuvres, the selection of central points for defence as its central elements. In this sense the Allies had no war plan in the Pacific.

Above all, they had no war plan aimed at and adapted to thwarting the Japanese war plan. Japan's methods of conducting war were completely misunderstood by the military leadership of the Allies.

In the Pacific Japan is now waging the first big war, the first genuine world war in its history. It is doing so with brilliance and shrewdness, and is actually introducing several new methods. Japanese strategy has been completely in harmony with its political goals: mastery of the Asiatic continent and of the Pacific. That is why it combined a continental and an oceanic strategy which was not merely naval strategy but which also included land objectives in the Pacific.

This Japanese conduct of war had three essential features:

1. Japanese forces were employed as a unit. Japan hurled against its enemies a combination of land, air, and naval forces acting in closest co-operation. This strategy was partially favoured by the proportional development of the Japanese armed forces, chiefly the Army and the Navy. More than any other major Power Japan is a sea and land power combined. But this "complex" strategy was prepared not only in a material sense; it was also calculated and executed with minute precision and thoroughness. Strategically the co-operation of the fighting forces was carried out within the war plan as a whole, and operationally in every

single action. It was minutely calculated in advance in what proportion and capacity the land forces, the air force, and the Navy should be used in each operation. None of the arms branches acted alone and independently. The Japanese military leadership is land-, sea-, and air-minded at the same time—and this universality is its strongest asset. Everywhere it acted on a three-dimensional scale. The functions of the individual Japanese fighting forces were always adapted to the exigencies of the situation and were frequently used in unexpected ways, deviating from the conservative pattern. The Japanese Navy was partially used as floating artillery against land targets, chiefly for the protection of troop transports and the covering of landing operations. Japanese Army units often acted as marines, occupying bases for the fleet. Thus, while the Navy carried out army operations, the land forces extended the domain of the Navy. The air force acted as the air arm of the Army and the Navy, to some extent as an instrument for controlling the seas.

2. The specific characteristic of Japanese strategy was the oceanic Blitzkrieg. It consisted neither of purely continental nor of purely naval operations. The decisive method of this Japanese strategy was that of long-distance landings, which had a certain resemblance to Hitler's Norwegian operations, but they were executed in gigantic oceanic spaces. In actual land fighting the German Army by far surpasses the Japanese Army. But the Japanese forces have shown unmatched ingenuity in combined naval warfare. They manœuvred not merely in naval battles but in oceanic expanses; they conducted a naval war of movement, carried out by the Navy, the Army, and the air force. No other strategy has been able to bridge space to such a degree. The combination of the Japanese forces in the oceanic areas acted with more lightning speed than even Hitler's moto-mechanized units.

3. Decisive blows were struck by the Army and the air force. Here lay the surprise for the Allies who had visualized the war in the Pacific as a naval duel. But the Japanese leadership did not conduct even oceanic war according to the rules of pure naval strategy. The Japanese Navy had to fulfil a function in the service of the Army and the air force. It consisted, as mentioned before, of escorting troop transports and covering landing operations. The Japanese Navy avoided major naval engagements. Japan conquered on the sea the greatest colonial empire in the world—although no Japanese battleship fired a single shell at an American battleship. The Japanese Navy paid no attention to abstract sea control. With the exception of the attack on Midway Island it did not try to contest United States naval control in the Central Pacific. Japan, the island empire that is a major maritime Power, did not cling to the doctrine of pure sea-power, and the Japanese Navy with its glorious tradition modestly harnessed itself to the Army and the air force. The conquest of the entire South-western Pacific was carried out by Japanese land and air forces.

> The United States and Britain saw the world through marine glasses that did not reach to the shores. Tokyo, its big Navy notwithstanding, contemplates the Pacific area through field glasses.[1]

writes Alexander Kiralfy, the naval writer who most clearly grasped the essence of the Japanese conduct of war. The occupations, land offensives, and landing in the oceanic war were the decisive operations of Japanese strategy. Japan fought with the co-ordinated entirety of its forces, but within this framework the harvest of its second-class Army by far exceeded that of its first-class Navy.

Japan's war plan was that of the great offensive which was to embrace the entire West Pacific area and Eastern Asia. The objectives had been chosen in advance and consisted of all the British, American, and Dutch possessions. Japan prepared several variations in the Pacific conflict. There was the war against the United States and that against Great Britain. But these variations were put together into one all-encompassing plan for war against the Western coalition combined with the old war against China.

> We must be fully prepared for a war with the United States once we should be fully engaged in a war with Britain,[2]

wrote Shiro Mashida, editorial writer of the Tokyo *Asahi* as early as March 1940. And even at that time the Dutch East Indies were included in this unified war plan:

> The Dutch East Indies issue is a matter of life and death to Japan, economically *and strategically*,[3]

the former Japanese Ambassador in Rome, Toshio Shiratori, wrote in June 1940. Thus the Japanese offensive was marked by a colossal multiplicity of objectives. Several operations were carried out simultaneously, separated from one another by huge distances. Landings in the Philippines coincided with operations in Malaya; the offensive in Burma was waged while the Dutch East Indies were being occupied; the march on Singapore took place during the many landings in Oceania. Side by side with these parallel actions in various directions, successive operations in one chosen direction were carried on, so that each conquered position was used as a way station and jumping-off base for the next. That is how the great Japanese offensive from north to south proceeded, via the Philippines to Borneo, Celebes, Oceania, and the approaches to Australia. The goal, to knock all the military bases of the Western Powers out of the Pacific and the entire Far East, was proclaimed before the war:

> Japan's fundamental policy in the Far East is to stabilize this part of the world by excluding the Western Powers' advance bases. Japan has good reason to demand the expulsion of all the military bases and facilities which endanger the new order already under way,[4]

Masanori Ito, director of the *Japan Times and Mail*, wrote in July 1940.

After December 7, 1941, this programme was systematically carried out by armed force.

The Japanese war plan was based on two factors: on thorough technical, material, organizational preparations, and on the calculation of the weaknesses and indecision of the enemies to come. The bulk of the merchant marine was held in readiness for military operations, landings and transport of military supplies. The troops were systematically trained for landing operations. The whole machinery set up for long-distance landings, which later functioned with such precision, was expanded and minutely prepared. In addition, the Japanese figured out what their enemies could not do, and what they would probably fail to do because of negligence, passivity, and strategic miscalculations. The Japanese High Command knew years ago that no large-scale British forces could be dispatched to the Pacific and that the United States Navy would be able to hold neither the Philippines nor the routes to the Dutch East Indies:

> It is absolutely impossible for Britain and France to dispatch part of their forces to the Pacific area; nor has the United States military forces sufficient to wage war with Japan in the Far East. With all its enormous resources, it is impossible for the United States to safeguard single-handed the Philippines and its supply routes to the Netherland East Indies,[5]

wrote Akinaru Jisawa, editorial writer of the *Chugai Shogyo* in June 1940. Beyond that, the Japanese High Command was firmly convinced that the Allies would have no counter-plan to offer which would clearly recognize and resist the Japanese methods of war. As Alexander Kiralfy put it:

> Japan has been able to disregard many accepted military rules because of its reliance upon our not doing the right thing at the right time.[6]

The Japanese war plan has several traits in common with German strategy: Blitzkrieg methods, excellent organization, and far-sighted planning. Above all, full exploitation of the surprise element. As Kinoaki Matsuo said in his book on the coming Japanese–American War:

> From the age of the civil wars Japan's tactics have been to forestall the enemy. In both her wars—the Sino-Japanese War and the Russo-Japanese War—she used these tactics. When one considers it, if a country with an inferior fighting strength attempts to fight another country, she has no alternative but to avail herself of her enemy's unpreparedness to strike and annihilate him. . . . Japan is inherently blessed with a chance to choose freely her own time to open war.[7]

But there is a twofold difference between German and Japanese strategy. Germany either crushed its enemies—as in Poland, France, etc.—or pounded tremendous blows against their vital centres, as against

England and the Soviet Union. Japan, however, wages a peripheral war; it is not merely unable to strike—it cannot even threaten the vital centres of its decisive enemies in the Pacific campaign. That is why the lost campaigns in the Pacific are not in the long run decisive for the United States, nor even for England, however large the losses.

The second difference concerns the actual scope of forces. Japan, compared to Germany, has incomparably inferior war technics and economic resources. Germany is strong in an absolute sense, Japan is only relatively strong. Germany's claim to military world hegemony is a genuine menace. Japan's military hegemony is largely chimerical. Japan's forces on the ground and in the air are relatively weak. Japan waged the entire Pacific campaign with no more than 400,000 men and 3000 planes. Japan is unable to conduct a genuine, modern war on land, similar to the fighting between the Wehrmacht and the Red Army. Nowhere in the Pacific campaign, although it has been successful, was the Japanese land fighting a real modern war—that is, a war of powerful modern war technics. Nowhere did the Japanese forces either on land or in the air appear in concentrations as strong as those of the German Army in the years since 1940. The whole Pacific theatre of war was by no means saturated with Japanese forces. They were strong only in comparison to a weak and unprepared enemy, yet nevertheless strong enough to have superiority and attain their goals at a given time and in a given direction.

The Japanese war plan was not set in motion accidentally with the blow at Pearl Harbour. That was not a mere demonstration, but a well-calculated attack on the centre of United States power in the Pacific, and it was a blow by which the American naval and air forces were to have been annihilated or at least paralyzed. The attack made the Japanese operations against the Philippines and Malaya secure. This was even more important for the Japanese High Command than inflicting material damage upon the enemy. Thus the penetration of Japan into the depths of the South-western Pacific began in the direction of Singapore. The blow at Singapore was the central action of the entire Japanese campaign in the Pacific. It is not paradoxical to say that Japan regarded Singapore as a higher prize than even England did. For years Japanese strategy had stared fixedly at Singapore as the strategic core of the entire South Pacific. In the classic book on the coming war in the Pacific, *Japan Must Fight Britain*, which appeared as early as 1936, Lieutenant-Commander Tota Ishimaru wrote as follows:

> With the outbreak of the war Japan would, we may suppose, descend on Hongkong and Singapore like a thunderbolt and capture them. . . . Without a fleet there [at Singapore] at the right time and in a condition to operate, the Japanese Fleet would have a free hand, and Australia, New Zealand, India, and the other possessions, together with the command of the sea in the Indian Ocean, would fall into the hands of the enemy.[8]

The major Japanese offensive proceeded in two directions. First it went southwards. The phases included landings on the Philippines, the securing of the Eastern Chinese Sea, the conquest of Malaya. The offensive then continued in a western and an eastern direction, to the oceanic islands which flank Australia from the North-west, and to Burma. Indonesia, from Ceram to Sumatra, was here the island chain which gave Japan a cross axis in an east-west direction in the South-western Pacific. Following the expansion phase there began the phase of continental consolidation. In June and July of 1942 Japan resumed the offensive in China which was to complete the continental conquests on the route from Shanghai to Singapore.

It is hard to say what actions the Allies would have taken in the Pacific if the paralyzing blow against Pearl Harbour had not come. It may be that the original plan, as Alexander Kiralfy assumes, was to take the American battleship squadron to Singapore, airplane carriers and heavy cruisers to Manila, and to start an active submarine campaign.[9] It can hardly be supposed that the Allied war plan in the Pacific had anything in view beyond a blockade and naval warfare. Today there can be no doubt but that the weakness of the Allied land and air forces in the Pacific made it impossible in advance to stave off the Japanese war plan effectively. The main idea of Allied strategy was doubtless to immobilize the Japanese forces by defensive and naval operations. But such a Maginot policy in the Pacific was bound to fail, even without the crippling blow at Pearl Harbour. For Japan had mobile strategic reserves for the war of movement in the Pacific, consisting of land, air, and naval forces, which were bound to overrun a weak and static defence. The basic traits of Japanese strategy in the Pacific were concentration of forces and speed, while those of Allied strategy consisted of a dispersal of forces and waiting. While Japanese forces waged a war of movement, the Allied forces were tied down in the Philippines, Malaya, the Dutch East Indies, and Australia. They were garrisons of besieged fortresses, and thus inferior to the Japanese from the outset.

Strategically the starting point was favourable to the Allies, who had an outlying war theatre relatively near to the enemy, and positions extending from Australia to the Japanese Isles—flanking the South China Sea if these positions had ever really been fortified. But with the loss of each one of these positions the strategic possibilities of the Allies were more circumscribed and their forces further weakened. Every one of the bases between Formosa, on the one hand, and Australia and the Dutch East Indies, on the other, has a dual function and can be utilized in two directions: they can be descended from north to south, or ascended from south to north. They could serve as bridges making an attack upon Japan possible, or an attack from Japan on the last strongholds of the Western Powers, on the Dutch East Indies and Australia. On the south-eastern tip of the Asiatic continent Malaya has the same position towards

Sumatra in the south, Thailand and Indo-China in the north. The value of the bases is determined by their military strength and by the use to which they are put, not merely by their geographical situation. They can be jumping-off points and advanced positions; they might act as bases to block off positions and straits; or they might merely be transportation centres, and, as such, easy prey for the attacker. Within the network of Japanese strategy every newly acquired strategic position was a starting point for further movements, a continuation of the offensive to the next base. As Matsuo described it so graphically:

> Let us think of India after the [Allied] loss of Singapore, and of Australia after the loss of New Guinea.[10]

That was no pious wish, but a strategic programme. Whenever the Japanese conquered a military base, they always eyed the next one—and tried to get a foothold there. The mobile Japanese forces operated with extraordinary skill in the labyrinthine archipelagoes of Indonesia and Oceania with their countless islands and straits. Unquestionably the Japanese aggressors have transformed the occupied positions into a connected system of defence. Matsuo announces this intention in advance, as follows:

> Japan will, in a very leisurely manner, occupy the Philippines and Guam and then undoubtedly build invincible fortresses on the occupied islands.[11]

In the land fighting Japan had nearly twice as many troops in action as the Allies. Compared to the motley Allied forces (Americans, Filipinos, Australians, British, Indians, Dutch, Malayans) the Japanese Army had the advantage of unified training, organization, and command. The proportion of the Allies' white troops to the colonial and coloured troops was 1 : 3 on the Philippines, 1 : 1 in Malaya, possibly 1 : 10 in the Dutch East Indies. Everywhere the Allied forces were insufficiently armed, in Malaya perhaps a little better than elsewhere. Everywhere they lacked aerial support. In the Philippine campaign the American and Filipino troops had practically no support from the air and only weak artillery forces. In Burma the situation was still worse. In Malaya and Burma the Japanese Army waged a colonial war of movement with superior tactical skill; in Malaya, particularly, the Japanese used infiltration methods and raids. The specialized training of the Japanese troops for jungle fighting was tactically decisive in Malaya.

The fight for Java was really decided in the air and at sea, when the land defences broke down after only a few days. Nowhere did the Japanese Army conduct a modern war, with mechanized arms and strong concentration of fire. The entire Malayan campaign was carried through by the Japanese troops with about 150 tanks. Only in the last phase of the brief fighting for Singapore did the Japanese open concentrated artillery fire and carry out massive bombardments from the air.

But on the whole the Japanese Army fought tenaciously everywhere, using purposeful tactical methods, well adapted to the terrain.

For Japan the war against the Western Powers was a supplemental war, a war running parallel with the old one against China. So far these two campaigns have not yet been turned into one unified drive by Japan's enemies, with a unified, connected front against Japan. Japan, on the other hand, is forced to wage both wars simultaneously. The Japanese forces tied down in China are greater than the Japanese troops taking part in the land fighting against the Western Powers. Experience shows that the Japanese war in China was not nearly as brilliant and successful as the Japanese land fighting in the Pacific campaign of 1941 and 1942. There was no Japanese Blitzkrieg in China: China forced Japan to wage a protracted war of attrition. The elements of space, the Chinese mass armies, the tenacity of Chinese combat, the spirit of the people's war, the excellent adjustment of the Chinese soldier to the terrain, have given the Sino-Japanese War a complexion that greatly differ from Japan's land campaign against the Western Powers. While the tactical qualifications of the Japanese Army were at a very high level in the Pacific campaign, they were at best mediocre in the Chinese campaign, especially if one considers the tremendous Japanese superiority in arms. Japan avoided waging simultaneous large-scale offensive operations against the Western Powers and against China in 1941 and 1942. It was noteworthy that Japan had waged no major offensive operations in China since the beginning of 1939; perhaps it took into account the coming war against the Western Powers, which was being prepared. But in June and July of 1942 Japan resumed active operations against China, thereby showing that it was still pursuing the grand continental strategy side by side with the oceanic war and the war on Asia's eastern periphery. The recent Japanese conquests and occupations of Indo-China, Thailand, and Burma had a dual strategic purpose: Japan faced the Indian Ocean and the Pacific in one direction, and the Asiatic continent in the other. These conquests were to give Japan an outlet to the South-western Pacific and Bengal Bay, and at the same time to encircle China from the South, and, more specifically, to cut off the Burma Road. It is part and parcel of Japanese strategy to exploit one position in all directions.

The recent Japanese offensive drives in China had as their goal the rounding off of the new Japanese possessions on the Asiatic continent and to connect them by traffic routes. The Japanese-occupied area in China is by no means a compact land mass, but a deep wedge running along the Yangtse Valley from Shanghai to Ichang in an east–west direction. It is comparatively narrow in the north–south direction and, apart from the coastline, broadest in the region between Hankow and Nanchang. From its major continental base in China, Japan has no direct access to its new possessions and protectorates in South-eastern Asia. It is confined to sea communication with Indo-China, Thailand, Burma, and Malaya,

and the campaigns in Malaya and Burma had to be carried on by troops and supplies landed from the sea. The most recent Japanese offensive in the provinces of Chekiang and Kiangsi was to have placed the railway from Hangchow to Nanchang entirely in Japanese hands. That would be a part of the grandiose Japanese project to seize the entire Peiping–Canton and the Shanghai–Canton lines, and to set up a Japanese trans-Asiatic railroad from Shanghai to Singapore.

The fighting for Changsha, waged for many months, is chiefly concerned with the vital junctions of the Hankow–Canton railroad. Other motives for the Japanese offensive in the provinces of Chekiang–Kiangsi and Fukien were the following: to encircle and cut off South-western China, to occupy the last ports in Chinese possession—Wenchow and Foochow—and to secure Japan, especially Formosa, from the danger of air raids launched from those regions of the Chinese mainland. There will be no lull in the war on the Asiatic continent, even after the Western Powers have been driven out of the South-western Pacific.

In the Pacific campaign Japan was master of the skies, and thus scored the decisive victory in the air. It profited from the weakness of Allied aviation. American aerial rearmament came one year too late, and this delay had to be paid for with terrifying losses.

Japan won victory in the skies despite the numerical weakness of its air force, the small productive capacity of its aircraft industry, and the generally mediocre quality of its air force. It had no super-modern aviation. Japan's planes are relatively lightly armed, and it has only a limited number of heavy bombers. Japan won the war in the air on the battlefield, without autonomous actions by the air force—that is, without long-distance bombardments of the enemy's vital centres. But Japanese aviation was correctly distributed. It was always at hand at the right time and in the right place. It was mobile. It was an inherent part of the Japanese fighting forces, of the three-dimensional mobile Japanese shock army consisting of land, air, and naval forces. Thus it was one of the decisive means for victory, of the tremendous success of Japanese grand strategy in the Pacific campaign.

Japanese aviation launched the campaign by scoring the biggest record in the destruction of enemy battleships within the first three days—at Pearl Harbour, and by sinking the *Prince of Wales* and the *Repulse*. In these engagements Japan showed the effectiveness of its aviation in naval warfare regarding both types of aircraft, air-carrier-borne aviation, and shore-based aviation. In both instances the Japanese attacks from the air were characterized by extraordinary tenacity and superior marksmanship. Yet, despite these successes, the accomplishments of Japanese aviation in naval warfare were not decisive. Had the Allies had sufficient land and air forces in the Pacific, the losses inflicted upon the Allied Navies by Japanese planes would still have been considerable, but none the less secondary.

The decisive factor was the performance of the Japanese air force in the land fighting, because to it belongs a major share of the success chalked up by the Japanese troops. In the Philippines, in Malaya, in the capture of Singapore, in Java and Burma, during the countless landings in Indonesia and Oceania, it was the use of the Japanese air force in land fighting that clinched the outcome. Not mastery of the skies *per se*, but mastery of the skies in land fighting was one of the decisive elements of Japanese success. This kind of aerial superiority, in which aviation was the air arm of the Japanese Army on the battlefield, helped overcome the Allied forces, aided the Japanese High Command in carrying out the occupations and conquests—in other words, to win. In their individual drives the Japanese forces operated with only a few hundred planes: with approximately 200 to 300 in the Philippines, with 500 to 600 in Malaya, with 400 to 500 in Burma, with 300 to 400 on Java. But Japanese tactics, with great tenacity and skill, managed to push air-bases and airfields to the front during all their operations, and that was a vital factor of the Japanese war of movement. During all operations, especially landing operations, the Japanese Army secured air bases first.

Japanese tactics in the air resembled German tactics in two important respects. Co-operation between the army and the air force functioned like clockwork; it was teamwork patterned after the German model. And the Japanese air force tried frequently and with success to strike and destroy the enemy's air forces on the ground. It scored such hits in the beginning of the war in the Philippines and Malaya; the most important success along these lines was on Java. With comparatively weak forces Japanese aviation was able, in the Pacific campaign, to achieve results of far-reaching consequences. The Japanese air force grew less effective when the fighting for Burma was over—that is, when the actual land war against the Allies had ended. It is hardly able to wage long-distance operations, and the reinforcement of American aviation, especially around the Australian approaches, has shown that the balance of power in the air is gradually changing. But then, the coming great air battles in the Pacific and in Asia will in any event be waged under changed strategic conditions.

The course of the sea war in the Pacific has been especially important. That war showed the crisis of traditional sea-power, and with it the doctrine of pure sea-power has definitely collapsed. The Allied defeat in the Pacific came without naval defeat and the Japanese victories were attained without naval victory. Japan won the campaign in the Pacific despite her greater losses at sea—except in the battleship class.

The concept of the coming war in the Pacific was shaped in the Anglo-American camp almost exclusively by its naval doctrine. The future war against Japan was visualized primarily as a sea war, and this concept was the factor that decisively determined the Anglo-American war plan against Japan. It was a fatal miscalculation.

British and American visions of the future war in the Pacific were determined by three concepts:

1. That the war against Japan would be decided in a major naval battle;

2. That this naval super-battle would be won by the British, or by the combined Anglo-American naval forces;

3. That the strategic positions for the big naval war against Japan would remain unchanged for the United States and Britain.

The foundation of this conception was laid by the great British naval expert Hector Bywater after the First World War. In his fictionalized version, the course of the future Japanese-American War would be as follows: In the eighteenth month of the war the United States Navy would by a ruse lure the Japanese Navy into battle off the Island of Yap. This battle would be won by the United States with a loss of five battleships on the Japanese and two on our side. That was to have put an end to the war, which was to be won by the United States. Bywater's book, *The Great Pacific War*, appeared in 1925, but his idea prevailed in Anglo-American military literature right up to 1941.

It was also the opinion of the representatives of the Navies in both countries. The former head of British naval intelligence, Vice-Admiral C. V. Usborne, in a collective work, *Evolution of Sea Power*, published in 1939, visualized the coming military decision for the Allied fleets as follows:

> Then a fleet greatly superior to that of Japan could be concentrated in the South, and so far as anything can be foreseen, where chance plays so great a part, it could move northward, compelling the Japanese either to retire or to face annihilation of their fleet.[12]

Generally speaking, this was also the opinion of the former head of the United States naval intelligence, Lieutenant-Commander William D. Puleston. In his book *The Armed Forces of the Pacific*, which appeared in 1941, he wrote:

> During these encounters the American Fleet, being the stronger, should seek battle on all occasions and in all waters except along the coast of Japan and its overseas bases. It would prefer a major engagement in the early part of the campaign and a chance to end the war at a blow. . . . The American Commander-in-Chief must convince the Japanese Commander that he has met his master.[13]

The British Lieutenant-Commander Kenneth Edwards, in his book *Uneasy Oceans*, published in 1939, was convinced that the British and the American fleets would be able to beat Japan decisively at sea:

> There is no doubt that the Japanese personnel would fight their ships with almost incredible gallantry, leading in several cases to suicidal rashness. The greater weight of metal in the British salvoes would,

however, have its inevitable effect; and the "Battle of Macclesfield Bank"—the large shoal near which the action would be fought—would result in a British victory and the collapse of the naval power of Japan.[14]

And:

In either case the action would be fought with all the advantages on the side of the superior American forces, and the destruction of the Japanese Fleet would be inevitable.[15]

According to Denlinger and Lieutenant-Commander Gary (*War in the Pacific*), the naval super-battle would be waged in the second year of war, en route from Attu to Petropavlovsk—and won by the American Fleet.[16] In the view of the British Lieutenant-Commander A. Bell (*Sea Power and the Next War*), the greatest damage Japan could inflict upon Britain in the event of war would be the destruction of the British Settlement in Shanghai, and, in the most extreme case, the capture of Hongkong.[17]

These optimistic naval concepts about the coming war against Japan always started from the assumption that the American Fleet would have far-reaching freedom of movement, and would remain in possession of its bases. Kenneth Edwards believed that the American Fleet could occupy several Bonin Islands, and extend a blockade along the lines Bonin Islands–Riukiu Islands–Shanghai. Lieutenant-Commander Puleston assumed that the American Fleet would be based on Manila, and would blockade Japan from there, and that the entire route along the islands of Midway, Wake, and Guam would remain in American possession. Denlinger and Gary expected the American Navy to be concentrated off Attu Island in the Aleutians.

In reality the naval war in the Pacific took a completely different turn. The naval super-battle has been completely absent. The battle of the Pacific was not decided by squadrons of battleships, "moving slowly, majestically, and irresistibly", as Walter Lippmann described this pre-Pearl Harbour illusion.

The freedom of movement of the United States Navy was circumscribed and its range greatly narrowed down. Operations of the bulk of the United States Pacific Fleet did not reach beyond the Marshall Islands, which were bombed on January 31. That means that the United States Navy's radius of action did not come closer than 2000 miles to the war theatre in the South-western Pacific. The waters of the Western and South-western Pacific were thus a kind of Japanese reservation, not in the sense that no Allied ships appeared there, but in the sense that the main forces of the United States Navy could not make a safe showing. This unexpected restriction of the United States naval action was chiefly the result of the loss of our bases. As Admiral Hart, former Commander of the Asiatic Fleet, said on March 11, 1942:

Naval forces can be effective over any considerable period only if they can operate from bases which are reasonably secure. What did eventually upset our own plans was the loss of such bases.

This loss was proof of the fact that the Japanese strategy of fighting land forces and oceanic war of movement was more effective than the naval strategy of the Allies. And that is what altered the character of sea war in the Pacific.

The naval engagements in the Pacific varied in their tactical forms. Since they were launched by the crippling of a part of the Anglo-American battleship forces, attention was diverted from the real causes of the defeat in the Western Pacific. The dramatic happenings at Pearl Harbour and along the Malayan coastline overshadowed the much more important developments that followed. The outcome of the Pacific campaign would hardly have been different had the Anglo-American battleships not been sunk. Four battleships more would not have essentially changed the course of events, since Japanese superiority in the air and the lightning conquest of the Allied bases paralyzed the Allied battleships to a large degree. In January and February 1942 the naval fighting proceeded on the advanced front in the South-western Pacific, primarily between the Japanese naval forces which acted as escorts for the troop transports and the Allied forces trying to prevent the Japanese from landing. The sea battles in the Macassar and Lambok Straits ended with an Allied victory; the battle in the Java Sea, in which the Dutch Fleet and the small United States Asiatic Fleet were defeated, with a Japanese success. But while the Allied successes in the first two encounters could not prevent the Japanese landings, the battle in the Java Sea sealed the fate of the Dutch East Indies.

The actual strategic measuring rod for the naval fighting in the Pacific, however, was not the ship losses, but the attainment or non-attainment of the tangible goals of the big Japanese offensive: the occupation of whole regions and bases. The fighting around the Japanese landings proceeded on both sides without the use of battleships. The attack launched in the middle of March 1942 against the Japanese bases in New Guinea, which resulted in considerable Japanese ship losses, marked the beginning of the reversed military situation: this time Allied aviation was striking out against the Japanese naval forces, a course that was continued in May and June 1942 in the battles of the Coral Sea and of Midway.

The battles of the Coral Sea and of Midway have great significance in many respects. They showed the new technique of naval combat, fought out in the air, without direct contact between the contending naval forces. They showed the new structure of modern sea-power, the integration of surface craft and aviation in naval battle in a more marked form than in the preceding naval battles in the Mediterranean and in the Atlantic. In the battles of the Coral Sea and of Midway the American naval and air forces evidenced great operational alertness and tactical

skill. They probably mark the beginning of the new era for American aviation in the Pacific. The Japanese attacks were repulsed—and the attack on Midway Island was probably planned as the biggest Japanese naval offensive of this war—and the Japanese Navy suffered heavy losses, especially in airplane carriers. The offensive strength of the Japanese Navy was here considerably reduced.

But the Japanese naval defeats in these two battles did not influence the outcome of the campaign in the Pacific. They did not threaten Japanese possessions. For Japan they were merely material losses, the "costs of production" of its conquests. The next decision in the Pacific cannot be attained in isolated naval engagements, even if they are supported by aviation. It can be reached only by a fight for the lost bases, by their reconquest, in a struggle against the vital centres of the enemy—that is, in a combined sea, air, and land war.

The question has been raised: What will the Allied counter-action in the Pacific be like? This counter-action will not merely be a continuation of a lost campaign. It is going to be a new war, waged with different methods, to some extent in different regions, and possibly with the help of new allies.

The continuation of the war against Japan requires the fulfilment of various tasks. First the existing bases must be built up—Australia, India, Alaska, the Aleutian Islands, and China must have rapid assistance. There will have to be an accumulation of military might and of resources, of shipping, trained forces, and modern arms, for a major counter-offensive against Japan. The anti-Japanese coalition must, further, kindle a sea war against Japan along the lines of the German war against the Allies in the Atlantic, including submarine warfare, raiding, short and rapid blows against the over-extended Japanese communication lines. The coming increase of American air-power too offers possibilities of a special kind. The United States will have the opportunity to utilize the air force on a large scale for naval warfare, that is, to carry out autonomous aerial operations—aerial bombardment over long distances. Nowhere else has aviation the specific significance that it has in the Pacific area, owing to the vast expanses and the new rôle of aviation in naval warfare. One might actually speak of a "Pacific aviation", with special strategic functions and technique. Yet the significance of aviation in the Pacific area and the possibilities of autonomous actions on its part are not under any circumstances to be identified with an isolated aerial strategy for the Pacific region. On the contrary, if it is true that land-based aviation has an advantage over carrier-based aviation, then aviation is dependent on land bases. In order to protect and reconquer land bases, however, land power is necessary.

In the beginning of the Pacific campaign the Allies had sufficient bases but insufficient aviation. In the near future the United States will have a strong enough air force in the Pacific, but not enough bases. Even the

needs of aerial warfare require that the lost bases be retaken, or that the policy of coalition yield new ones. In both cases one would have to reckon with the use of a land force against Japan. What the anti-Japanese coalition should take over from the Japanese High Command is, above all, the strategy of the fighting forces, that is, the unified use of land, air, and naval forces.

This strategy, turned against Japan, will form the new phase of the war in the Pacific. The dynamic of this war in the Pacific leads to an extension of the fronts and to the participation of new belligerents. The first phase of the war in the Pacific can be compared to the first phase of the war in Europe, the fall of Singapore with the fall of Sedan on May 16, 1940, the Japanese victories with the German conquests of Poland and France. But the fall of Sedan and the collapse of France by no means indicate the ultimate outcome of the war on the European continent. The campaign in the West was followed by the Russian campaign, the German war against the Polish-Anglo-French coalition by the war against the Soviet-Anglo-American coalition. Although the struggle for the South-western Pacific might be ended for the time being, it will be succeeded by the much farther-reaching, gigantic battle for the entire Pacific and for the Asiatic continent.

The great counter-offensive against Japan must exploit Japan's military weaknesses and prepare for all possibilities of a war of coalition against her. Japan's military shortcomings are over-extension of sea communications, dispersal of her armies in vast spaces, the numerical inferiority of her aviation, inadequate striking power of her land and air forces against opponents armed with modern equipment. Japan's strategic situation is precarious in two respects: it is vulnerable in the North, where Soviet and American bases are near the Japanese Archipelago; and it is exposed to great danger from the Asiatic continent. Japan's military weaknesses will be most clearly revealed should it have to bear the brunt of a war from the North and from the Asiatic continent. Japan must succumb once it is confronted with the grand coalition of its enemies.

The war of coalition against Japan has various aspects. There is the aspect of American-Chinese co-operation; the aspect of American-Soviet co-operation; the aspect of Soviet-Chinese co-operation; and finally, the all-encompassing aspect of American-Soviet-Chinese co-operation.

American-Chinese co-operation is not concerned with "aid" for China, but with the organization of a genuine war of coalition in the interests of the two countries. If China had received Anglo-American support in time, China could have been transformed into a military force able to tie Japan down completely and to make her incapable of attacking in any other direction. Anglo-American aid for China in time would have prevented the Japanese conquest of the South-western Pacific. China can offer the anti-Japanese coalition a mass army on the Asiatic continent.

For more than three years, from the beginning of 1939 to the spring of 1942, the Chinese Army maintained a stabilized front against the materially much stronger enemy. The Chinese Army showed not only great tenacity, but also tactical skill and amazing adaptability to all weapons of modern warfare. Well equipped and trained, the Chinese soldier would be superior to the Japanese soldier. China furthermore offers the anti-Japanese coalition a theatre of war on the Asiatic continent, and it can tie down large Japanese land forces. It is interesting that the leading Japanese military writer, Tota Ishimaru, who called for an attack on Great Britain years ago, regarded the military conquest of China by Japan as an impossibility:

> Let me ask you if you think Japan can absolutely subdue China by force. The reply must be absolutely in the negative. What is the military situation in Manchukuo? Japan has hardly succeeded in maintaining peace in Manchukuo even with this large force (more than 100,000 men). If, therefore, Japan intends to establish a second or a third Manchukuo in China, she will require at least 200,000 men to maintain order there. Now Japan has only 17 divisions in her standing Army, and even if this entire force were dispatched to China it would still be found insufficient for this purpose.[18]

Since this was written Japan has mobilized totally and is conducting total war against an enemy coalition. It is characteristic, however, that a spokesman of Japanese aggressive strategy like Ishimaru warned of the war in China, chiefly because he regarded the concentration of all forces for war in the South-western Pacific as necessary. That shows the potential danger of the Chinese Front for Japan. The war in the Pacific and in Asia is a war of coalition, and within its framework new supply roads have to be opened for China. China needs the organization of air-borne transportation, planes, and equipment and the establishment of American air forces on Chinese soil.

The broadest perspective for an anti-Japanese coalition, however, is offered by the possibility of American Soviet co-operation in the Northern Pacific. There can be no doubt that the Northern Pacific is the most suitable route for a major action against Japan after the loss of the South-western Pacific the only one. The Soviet Far Eastern Army, the Russian Air Force in the Far East, whose range includes Japanese large cities and industrial centres, the strong Russian submarine fleet which can blockade Japan from the North, and the Soviet sea bases in the Northern Pacific all these are decisive for the balance of forces in Asia and the Pacific. It is here that the military centre of gravity lies. Japan realizes that the Northern Pacific is its most vulnerable route. In July 1940 Tadashi Saito, a Japanese military writer, had this to say:

> The most necessary aid the American Navy would like to have in the case of war with Japan would be that from the Soviet Union rather

than from Great Britain, for the blockade of the Japanese Islands about which the American Navy authorities have probably been cudgelling their brains might not be complete, should they fail to effect collaboration with the Soviet Fleet in the Far East. The shortest and safest among several routes of anti-Japanese aggression by the United States is without doubt that via the Aleutian Islands, but even this route does not constitute a menace unless Petropavlovsk, a Soviet naval base on the southern tip of Kamchatka, should be placed at the disposal of the American Navy. Furthermore, Japan would immediately be brought to bay, should her communications with the continent be cut off by the Vladivostok fleet (incidentally, this task is beyond the ability of the American Navy) simultaneously with the interruption by the American Fleet of her trade with South America and the South Seas.[19]

But more is at stake than a blockade and naval collaboration. Japanese aggression against Siberia should not find the Soviet Union and the United States unprepared for a war coalition—for total co-operation in the air, the sea, and on land, including all possibilities resulting therefrom.

Soviet-Chinese co-operation would be important because it would bring about a gigantic continental front against Japan. This front would encompass the insecure Japanese positions from the Amur River to the Yangtse Valley. Modern Russian arms in conjunction with the Chinese mass army would have great effectiveness. The Japanese fear of a Russian-Chinese alliance is of long standing. The Japanese military analyst, Otsughi Narita, wrote in May 1940:

> In the Nomonhan campaign, the Kremlin sent up-to-date aircraft and mechanized units from European Russia and rushed Japanese positions. The Soviet Union and China both have the biggest armies in the world, and no matter how Japan should mobilize all its manpower it can never compete in this respect with either country. No more can it compete with the two together.[20]

The greatest strategic possibilities, however, would be reserved for American-Soviet-Chinese co-operation in Asia and in the Pacific. For years Japan has had nightmares about being taken in the triangular American-Russian-Chinese vice.

> If Japan desires to be assured of victory over America or over Russia she will first of all have to consider how to manage China, who will be either alongside or at her rear,[21]

Ishimaru wrote, and this was the chief reason he warned against the war with China.

The war against the United States and China is dangerous for Japan. The war against the Soviet Union and China would also be dangerous for Japan. But the war against the United States, China, and the Soviet Union would be the most dangerous war of coalition Japan could be subjected to.

PART IV

STRATEGY OF THE WAR OF COALITION

CHAPTER FOURTEEN

WAR BETWEEN TWO COALITIONS

THE SECOND world war is a global war waged by two coalitions. Deployment of the contestants has ended, the positions have been taken up. No other belligerents of significance can still join the war. What is possible is the further territorial expansion of the war, the establishment of new fronts, even of new wars, but among the nations already in the war in different groupings, as Japan and the Soviet Union. But there are no further important forces in reserve which could still intervene in this Second World War.

By its scope, the Second World War by far overshadows its predecessor, the First World War. That war was essentially confined to Europe, appearing almost provincial compared to the standards and extent of World War II. In the last war, the fronts outside of Europe, in Asia and Africa, were altogether secondary. In the present war, too, Europe is the decisive theatre of war, but in Europe it is waged against the background of a war on all continents and oceans and for all continents and oceans, and the United States and Japan have much more significant rôles in it. The military forces involved have their effects at great distances; there are close interrelations between fronts which are separated by thousands of miles; strategic positions on different continents are closely linked. Detroit and Chelyabinsk, Essen and Osaka, have co-ordinated their production. Stalingrad and Rabaul, Cherbourg and Dutch Harbour, Wilhelmshaven and Alexandria, are strategic positions of a unified war. This war of coalition may not yet be waged according to a plan, especially not by the United Nations. But it shows that major forces appear in gigantic agglomerations—divided in two camps all around the globe.

The two contending coalitions have vast strategic differences. The two Axis centres of power, Japan and Germany (with her Italian appendage and her minor European satellites), are isolated from each other. There are no communication routes between them, neither on land, nor at sea, nor in the air, except for isolated submarine contact and occasional planes via Sumatra-Djibuti-Libya. They can fight a

co-ordinated war, but they cannot combine their forces. Nowhere can their armies, their navies, and their air forces carry on a common fight shoulder to shoulder. In the winter of 1941–42, during the period of his grave setbacks, Hitler profited from the Japanese successes, and Japan leans strategically upon the continental might of Germany. Both the two leading Axis Powers have the advantage of the inner line, they can strike from the Aleutians down to New Guinea, and from Narvik to the Nile Valley, but even the extreme radii of their military operations do not come in contact with one another.

The situation of the United Nations is quite different. With the exception of China they are not isolated from one another. The United States and Britain have the Atlantic Ocean as a bridge and common base of operations. The concentration of Anglo-American naval and air forces is possible, and their combined land forces on the British Isles too are becoming increasingly important. They have contact and co-operate with each other in the Near East and in Australia. The Anglo-American bloc has sea communications with the Soviet Union that can be disrupted, but hardly throttled altogether, and there are air communications. The Soviet Union and Great Britain are also connected in the Near East by the land mass reaching from Turkestan and India to Egypt. This route is as yet used only to a limited extent for military purposes, but its military significance may yet grow.

This difference in the strategic situations works still further in favour of the United Nations. The objectives of Axis strategy in this war are diverse and separate from one another. It is obvious that Germany cannot put in an appearance in the Far East, nor can Japan in Europe; their strategic efforts cannot even be aimed at the same fronts. Only in the event of a Japanese invasion of the Soviet Union can Japan influence the course of the war in Europe, and even then only from Asia. And that was the actual, the initial goal of the German Japanese alliance: to take the Soviet Union, as a European-Asiatic Power, into a pincers. As long as that does not come to pass, Germany and Japan can co-operate strategically but to a limited extent. But even if that happens, it is possible to prevent the effects of the Japanese attack on the war situation in Europe by Allied counter-measures—namely, by weakening Japan through a counter-offensive of the American-Soviet-Chinese-British coalition in the Far East and by weakening Germany on a second European front.

The major powers of the United Nations, on the other hand, are in a position to concentrate their forces on the same fronts, according to the requirements. The main war effort of the United States and Britain, in closest co-ordination with the Soviet Union, can be concentrated on the European theatre of war. Under certain circumstances—primarily relief through a second front in Europe—the Soviet Union might become the decisive military factor on the Eastern Asiatic Front.

The military forces of both coalitions, if each is viewed as a unit, have a different structure. Japan has only a fraction of Germany's land and air force. The Third Reich is not merely the leading military Power of the Axis, it also embodies the overwhelming part of the offensive striking power of the fascist imperialist alliance. The military strength of the Third Reich rests on the unique combination of a tremendously strong war economy plus a war machine of gigantic offensive force. Japan has nothing the like of it. The German–Japanese coalition is not an alliance among equals. The two major Axis Powers supplement each other only to a slight degree. Only the Japanese Navy is a factor that augments the land force of the Third Reich to some extent, but without the possibility of direct co-operation. The fighting forces of the Axis can form no organic unit.

The forces of the Anglo-American-Soviet coalition can supplement one another to a much greater degree. None of the major democratic Powers has a war machine that can match the German in completeness and striking power. None of them is able to smash the mighty German war machine alone; that is why they need one another. But combined, and if they deploy their forces to the fullest extent, and completely co-ordinate their strength, they can be superior to their enemy; they can form the most powerful military alliance that ever came into being.

The United States and Great Britain need the continental power of the Soviet Union. The Soviet Union and Great Britain need the war resources of the United States. The United States and the Soviet Union need Great Britain's strategic position, which is a connecting link between them and which alone can give the United States a base for direct participation in the European war. The continental power of the Soviet Union and the sea and air-power of the United States and Great Britain supplement each other. But the Red Army and the British and American ground forces on the British Isles supplement each other, too, as do Soviet aviation and the Anglo-American air forces in Europe. The European-based Soviet–Anglo–American forces can, not merely be stronger than the German forces, but also more unified than the scattered German–Japanese forces.

In comparing the material potential of the two coalitions one should consider that Germany and Italy have grown exceedingly strong through expansion in the course of the war, through material and strategic gains. The Axis Powers control from 700 to 800 million people in Europe and Asia. They have expanded and strengthened their economic base—Germany by seizing the European raw material regions and machine-building plants, Japan by capturing the oil and rubber wealth of the South-western Pacific. They have reinforced their strategic positions—Germany by conquering the European continent, Japan by pocketing South-eastern Asia and making gains in the Western Pacific. But the rational expansion of the newly won Germany resources has been

rendered difficult by ruthless exploitation, throttling of overseas supplies, and the transportation crisis. Japan's difficulties in consolidating its new economic power are caused by its inferior industrial capacity, the over-extension of its naval communication lines to the newly won raw material areas, and its limited merchant marine. In addition, Germany is severely hampered by disorganization and sabotage in occupied Europe, and Japan in occupied China.

The element of economic superiority is on the side of the anti-Axis coalition. The Anglo-American-Soviet coalition has about three times the industrial strength of the Axis. It has about three times the German capacity in engine production—so decisive for war. The centre of the United Nations' industrial power is the United States. The Soviet Union has suffered severe raw material losses, but has a powerful machine-building industry and a strong arms industry. Soviet industry is to a much greater extent on a war footing than that of America and Britain. The democratic coalition has a dual problem of military supply to solve: it has to convert its industrial superiority into war output, and must deliver the arms produced to the war theatres. In the beginning of 1942 the actual arms production of the two coalitions was about the same. By the end of the summer of 1942 Anglo-American-Soviet war production was decidedly greater than Axis war production, owing to the upswing of American war industries. If the American armament programme is carried through, one may count on a twofold superiority in arms production on the part of the anti-Axis coalition for 1943. But by the end of the summer of 1942 the Third Reich still had arms superiority on the decisive European war theatre, on the Eastern Front.

The grand strategy of the Second World War is the strategy of coalition. This war has regional coalitions. The Anglo-American-Chinese coalition in the Pacific and in Asia is such a regional coalition. Anglo-American co-operation in the battle of the Atlantic is the same. The German and Italian conduct of war in the Mediterranean and Egypt is a regional war of coalition. But these regional coalitions are subsumed under the great global coalitions; they are subordinated components of the great war between the coalitions of the Big Three of the United Nations and the Big Two of the Axis.

The grand strategy of the United Nations must repulse and overcome the Axis grand strategy, which is first of all determined by the fact that Germany represents the preponderant part—perhaps as much as 80 per cent—of the actual Axis military power. Axis grand strategy is essentially German strategy, and Germany strategy is continental European strategy. German strategy for 1942 and 1943 is evident: its aim is to blast the Soviet Union out of the war, to paralyze the Red Army at least as a potential offensive force. The Third Reich is carrying out this plan, definitely fixed by the big German push in the summer of 1942, with consistency, extreme concentration of forces, and with all the risks it

entails. On the whole, these factors convey the major elements of the Axis war plan. Japan is waiting for the German success on the Russian Front, just as Italy waited for the German victory over France in the spring of 1941. If Germany can blast the Soviets out of European Russia, then Japan may hope to eradicate Russia as a military factor in Eastern Asia. Decisions in this Second World War are being determined by decisions in Europe. France's defeat on the continent has led to the collapse of Allied hegemony in the Mediterranean. The blockade of England by Germany and Italy helped pave the way for the Japanese victories in the Pacific. Whether a junction between Germany and Japan can be reached, whether German-Japanese forces will perform as a coherently functioning unit, whether, by weakening the Soviet Union, Japan will assume the dominant rôle on the Asiatic continent—all that depends on the course of the war on the Russian Front. The emphasis of Axis strategy lies on the European continent.

Axis grand strategy is utilizing three factors. The first one is the tremendous continental power of Germany. The second one is the relative inaccessibility of the German and Japanese areas that might possibly become the targets of attack from the sea: the occupied European continent and the new Japanese possessions in the South-western Pacific can be attacked only after considerable obstacles have been overcome. The third factor is the active Axis strategy of coalition.

This strategy was not improvised by the Axis, but carefully planned and prepared for years. It had two aspects for Germany, the first of which was co-ordination with Japan. Japan did not wage a German, but a Japanese, war in the Pacific. But the Third Reich tried to get the most out of it. Japan was expected to tie down as strong an Anglo-American force in the Pacific as possible, thus diverting it from the Atlantic and Europe. Japanese aggression was to weaken the Anglo-American naval forces as much as possible, and it was to hamper the delivery of American war supplies to England and the Soviet Union. In addition, Japan had the task of throttling sea communication between the Allies—the Pacific route between the United States and the Soviet Union and the major route from the American West Coast via Australian waters to the Indian Ocean and the South Atlantic. Above all, Japan was to upset and prevent the Anglo-American-Soviet strategy of coalition by dispersing the Allied forces. In the first place, the United States was to be strategically disoriented, hampered in its actions, and divided by the alternative of a Pacific or an Atlantic strategy. All the material difficulties for Allied strategy which Japanese aggression brought in its wake, every sign of vacillation, dissension, and delay which Japanese pressure exerted on Allied strategy, were of greatest value to the Third Reich.

The other side of the picture showed the actual continental European policy of Hitler Germany. This policy of coalition was imposed upon Germany's allies dictatorially, with greatest ruthlessness, but also with

the greatest military effect. To Italy fell the task of forming the bridge from Germany to Africa, to throttle the British communications in the Mediterranean, and to patrol the European coastline against the danger of an Allied invasion. However weak Italy may be in a military sense, it has fulfilled these orders. The smaller countries—Hungary, Rumania, Slovakia, Bulgaria, Finland—were to provide the Third Reich with the largest possible reserve in man-power for land fighting. Bulgaria was given policing functions in the Balkans. Hungarian, Rumanian, and Slovakian troops were to supply large-scale reinforcements for the German Front in South Russia. Finland's share in this set-up was of particular importance. The entire Finnish Army was to be used for the war against the Soviet Union, forming a front of its own that was to outflank the Russian Front in the North, and more specifically, to cut the vital Russian Murmansk Railroad. Germany has squeezed out of its allies everything that could be drained for the total war of coalition.

The disposition of the forces, the strength and methods of the enemy, determine the tasks of the Anglo-American-Soviet coalition. Its forces must attain superiority over Germany in the decisive European theatre of war, and it must overcome the barriers that separate it from the German- and Japanese-controlled regions. This war of coalition is a race between the concentration of Allied forces and the offensive power of the Third Reich.

There is a fundamental difference between the disposition of forces of the Soviet-Anglo-American coalition and the anti-German coalition of 1914-18. The Anglo-French-Russian coalition of 1914-17 was a European west-east coalition, a coalition that had land fronts against Germany in Eastern and Western Europe. It was in a position to wage a classic two-front war against Germany, under which the then German war plan collapsed, a fact which prepared for Germany's defeat in 1918. At that time the problem of a war of coalition against Germany consisted of co-ordinating the land fronts. The Anglo-French-American coalition of 1917-18 was a West-European-Atlantic coalition. It failed to have the advantage of a two-front war against Germany, but it was based on concentration of Allied forces in Western Europe, on the land front against Germany in the West. In 1918 England and America, Atlantic sea-powers, won in the land fighting on the European continent. The task of the war of coalition in 1918 consisted, for the anti-German coalition, not in co-ordinating fronts, but in the unified use of forces on one front—the French, British, and American armies stood side by side on French soil. At that time the tasks of a war of coalition were comparatively easily solved, because there existed a unified land front.

The Soviet-Anglo-American coalition of World War II has a different composition. It is an Eastern-European-Atlantic coalition. It has no two fronts of land fighting against Germany. It has no land front in the West. It has only one land front in Eastern Europe, in Russia. The

Soviet Union, Great Britain, and the United States can have no unified front like the one in 1918. They can fight Germany only by a co-ordination of fronts. But in order to create this co-ordination of fronts, Great Britain and the United States must first create a land front. The effective war of the Anglo-Saxon Powers against Germany, the true war of coalition, will begin only with the creation of their land front in Europe.

The anti-Axis Powers can win only by closest collaboration, by a most intensive war of coalition. But until the late summer of 1942 there were three separate military efforts and three national strategies on the part of the major anti-Axis Powers. The Soviet Union led the defence against the bulk of the German forces; the United States waged the war in the Pacific and the Atlantic, simultaneously carrying on the battle of production; Great Britain conducted the war in the Atlantic and the Middle East.

In this period it was not the military reverses, not the Russian retreat, not the lost campaign in the Pacific, not the British defeats in the Middle East, that were most threatening, but the delay in coalition planning. A war of coalition against Germany means, a two-front war in Europe. A two-front war against Germany can now accomplish more than in World War I, because two leading countries of the United Nations, the Soviet Union and the United States, are now incomparably stronger than they were in World War I. The Soviet Union is an immeasurably stronger military power than the Russia of 1914–17; the United States has an infinitely stronger war industry than in 1918. But the strategy of the two-front war now meets technical obstacles. The Channel—in 1940 and 1941 a safety belt for England—has become a safety belt for the Third Reich in 1941 and 1942. Today the decisive task of the war of coalition against the Axis is the overcoming of the Channel.

CHAPTER FIFTEEN

AMERICA'S TASK

ON DECEMBER 7, 1941, America entered upon total war. This did not yet mean the total militarization of the nation, but it did mean that the United States was ready to wage war with its entire resources. In the first phase of the war, in the very first few months, America's most important military decisions involved the planning of a gigantic rearmament programme and the proclamation of a new strategy, the strategy of a global and total war of coalition to be conducted along offensive lines.

America's rôle and the tasks it has to solve in the Second World War are totally different from those of the First World War. In 1917–18 America was primarily a strategic reserve for the anti-German coalition,

whose fresh and untapped man-power replaced the gap Russia's withdrawal had caused. This time, however, the United States has the strongest war industrial potential in the world, and its major duty in this Second World War is to give the United Nations arms supremacy over the enemy.

The American war programme takes this necessity into account. President Roosevelt's arms programme provides for the production of 60,000 planes, 45,000 tanks, and 20,000 anti-aircraft guns in 1942; 125,000 planes, 75,000 tanks, and 35,000 anti-aircraft guns in 1943. With the development of armament production in line with this programme, America will have caught up with German arms output by the late autumn of 1942; by the spring of 1943 it will have surpassed the German output by far; and by the summer of 1943 it is expected to turn out at least twice as much war material as Germany.

No definite opinion can yet be formed about the pace at which this programme will be realized. President Roosevelt announced on June 26, 1942, that American war production in June 1942 ran to nearly 4000 planes, more than 1500 tanks, nearly 2000 artillery and anti-tank guns, and well over 100,000 machine and submachine guns. Thus airplane production was approximately up to the 1942 programme. Tank production was at first far behind schedule, but it had been expected that the decisive increase in this field would come in the second half of 1942, when it was to quadruple the output of the first half. The production of automatic infantry weapons was very large. There can be no doubt that America's capacity for expanding war production is enormous.

In the long run, however, the military effectiveness of American war production will be measured by the quantities that reach the Allied fighting lines. By the end of July deliveries of American war materials to the various United Nations ran to somewhat less than 12 per cent of the total war output, as the Office of War Information announced on July 29, 1942, but tanks and planes had been delivered at a much higher rate.

This percentage is rather small. Transport difficulties might have played their part, and also the needs of the growing United States Army. The decision as to what percentage of American arms production is sent overseas is a strategic one. Measured by the quantities ultimately envisaged, American war production in the middle of 1942 was still in the initial stage, as was delivery of supplies to the Allies. But towards the end of 1942 both factors—production and delivery—can influence the course of the war.

The United States is making two indispensable contributions to the United Nations' Front: its armed forces, and the masses of arms turned out not alone for America, but for the entire anti-Axis coalition as well. The building up of America's armed forces is aimed at a great war by land, air, and sea. They are being developed proportionally. The

United States will have the strongest Air Force, the strongest Navy, and a strong Army. There has been a noticeable shift from the peacetime concept that the Army and the Air Force were essentially only the land and air arm of the Navy. Now the emphasis is placed chiefly on a speedy development of land and air forces. In 1942 the United States Army will total 3,600,000 men, with the further aim of reaching to 7,000,000. American infantry divisions are built up as triangular divisions throughout, with increased mobility. In the course of 1942 the United States Army is to receive fifty-two tank-destroyer battalions adapted to modern mobile warfare. Army training takes the most recent experiences of the Second World War into consideration. The quality of American war technics is not to lag behind the German—indeed, the aim is to surpass what the Germans can do. The latest type of the American medium tank, the 75-mm. tank gun, the 90-mm. and especially the newest 4·7-inch anti-aircraft gun, are said to be among the best weapons available.

The American naval rearmament programme has on the whole remained unchanged since 1940–41, except that the emphasis in the classes of heavy ships may be shifted from battleships to aircraft carriers. The American programme for a two-ocean navy in 1940 and 1941 already called for a maximum effort, with seventeen battleships, twelve aircraft carriers, forty-eight cruisers, 156 destroyers, and eighty-one submarines. Once it is carried out and adapted to the latest requirements of modern naval warfare, the United States will unquestionably have the most powerful fleet in the world.

The American Air Force, the Navy and Army air forces together, shows the greatest differentiation of airplane types. The Douglas DB-7 (Havoc) is, with the British Beaufighter and the Whirlwind, the best night fighter in existence. The Soviet expert for aviation armament Spitalny regards the Airacobra as the most effectively armed fighter plane in the world, with a fire salvo 5·2 times greater than that of the Hurricane, which is armed with twelve machine-guns.[1] The Soviet Air Colonel Denisov has, on the basis of experiences on the Russian Front, characterized the firing power of this type as enormous. Spitalny thinks that the latest Bell and Lockheed fighter planes are the fastest, and regards the Boeing Flying Fortresses and the Martin B-26 (with certain modifications and improvements) as the basic types of modern bombers. The Martin B-26 especially distinguished itself in the battle of Midway Island. There was some technical criticism about the low ceiling of the standard types of American fighter planes, but the new Lockheed P-38, especially, has the fastest rate of climb in the world. The latest P-47 fighter plane is said to have maximum speed and ceiling. It is safe to assume that American aviation technics can surpass the German achievements in this field during the course of the war. According to General Arnold the Army Air Force is to have 23,000 combat planes and 10,000 training

planes in line with the aviation appropriation bill of January 1942.[2] And Secretary of War Stimson stated that the trained aviation personnel will total 2 million men in 1943.[3]

The expansion of the American combat forces has not yet been concluded by any means. According to General MacNair, commander in chief of the ground forces of the U.S. Army, not more than 600,000 men were trained in the Army in 1941.[4] Only in mid-1942 did the American air force begin to become a quantitatively strong weapon. At that time American arms production was in full swing, but had not yet formed an arms reservoir for its own forces and for the Allies.

The new programme of American strategy was proclaimed by President Roosevelt in his message to Congress of January 6, 1942. He started out from the premise that the United States is now waging a genuine global World War:

> American forces must be used at any place in all the world where it seems advisable to engage the forces of the enemy. . . . American armed forces will be on all the oceans.

It is a fact that shortly after the United States entered the war, it had military bases on all five continents. It therefore had to maintain the most extended communication lines and to connect the remotest fronts with one another. No other nation on earth has a more favourable geographic position for conducting a real world strategy. America can intervene militarily on all five continents, and the Pacific as well as the Atlantic are for it communication lines that lead in all directions and permit the disposition of the United States Air Force and Army everywhere.

The new United States strategy proclaimed the war of coalition, in close co-ordination with its allies. As President Roosevelt said:

> We shall not fight isolated wars—each nation going its own way. . . . We of the United Nations will so dispose our forces that we can strike at the common enemy wherever the greatest damage can be done.

In practice, co-operation with Great Britain, the Soviet Union, and China predominates. With Great Britain the most far-reaching military collaboration is possible on every front—in the Pacific, in the Atlantic, in the Mediterranean, in North Africa, and in Europe. For American collaboration with the Soviet Union the Northern Pacific is the potential joint base. In Europe, Soviet-American co-operation should lead to a co-ordination of the fronts, of the Soviet Front in Eastern Europe and an Anglo-American Front in Western Europe. The outlook for united American-Soviet action in the Northern Pacific will depend chiefly on the effective military co-operation with the Soviet Union throughout the European theatres of war.

And, finally, the United States is waging this war with an offensive

plan and offensive aims. President Roosevelt defined the general outline of the new American strategy thus:

> We cannot wage this war in a defensive spirit. As our power and our resources are fully mobilized, we shall carry the attack against the enemy. We shall hit him and hit him again wherever and whenever we can reach him. . . . We shall strike at the common enemy, with a view to his complete encirclement and eventual total defeat.

Offensive weapons take first place in the stupendous American rearmament programme. The use of the British Isles as a base has great strategic perspectives for the United States, especially in the event of a big-scale offensive against Europe. The war of coalition and offensive warfare are both closely related for United States strategy. America can make offensive war only in close co-ordination with the Allies. The strategy of encircling the enemy, which President Roosevelt mentioned, can be materialized only by means of second fronts: in Europe through an encirclement of Germany by the Russian Front in the East and an Anglo-American Front in the West; in Asia through an encirclement of Japan by an American offensive from the Pacific, a Russian-American offensive from the Northern Pacific, and Soviet Chinese co-operation on the Asiatic continent.

The given conditions of global war and the needs of offensive strategy might create for the United States a contradiction: global warfare might lead to a dispersal of forces while the offensive conduct of war demands that forces be concentrated and a definite choice of direction made. This contradiction must be eliminated by far-sighted strategy. A consistently planned offensive conduct of war prescribes the primacy of the Atlantic-European theatre of war. The scope of the American rearmament programme makes sense only on this basis. Offensive arms on the scale planned by the United States are not necessary for a war against Japan; they could not even be utilized against her (120,000 tanks). Of course they are aimed at Germany. A major American offensive effort against Japan must now reckon with almost insurmountable difficulties. The outlying war theatre against Japan is lost; the United States has no more bases for an attack on Japan. In an isolated offensive war against Japan the naval forces at least have to be equal. America must attain naval superiority there, which requires time. Tremendous spaces have to be bridged. Large-scale troop transports to the Pacific are bound to meet with tremendous difficulties. Japan is now protected against the United States by countless newly won barriers. For other reasons, an effective war of coalition against Japan is at present a virtual impossibility. The Netherlands has been blasted out of the war for good; Great Britain has been thrown back on Australia and India; China has been cut off. The chances of collaboration with the Soviet Union in the Northern Pacific, however, are dependent on American-

Soviet co-operation on the European war theatre—that alone shows that the resumption of the great offensive in the Pacific can be made possible only by starting a grand Allied offensive. The primacy of the European-Atlantic theatre of war does not mean a renunciation of the preparations for the offensive in the Pacific; it does not mean stopping assistance to China—on the contrary, assistance to China must be even increased if the Pacific Front is to be held—but the primacy of the Atlantic-European Front means a choice of the main direction in which the conditions for the great offensive are more favourable—the only field of operations where the war can be decided.

In the Atlantic the Allies have naval superiority and the surface forces of the enemy have almost no chance of putting in an appearance at all. The Allies have aerial supremacy over England and Western Europe, a supremacy that is rapidly growing. Unlimited Anglo-American forces can be concentrated on the British Isles, from which the great offensive against the centres of the enemy can be waged. Finally, by Anglo-American action on the Atlantic-European theatre of war in co-ordination with the Russian Front, decisive forces of the Anglo-American-Soviet coalition—which is to say, almost the entire offensive force of the United Nations—can be set in motion against the decisive enemy. All the available forces of the anti-Axis coalition can be hurled against Germany, but only a fraction of the American forces could be thrown against Japan.

One must also grasp the strategic sequence of offensive operations against Germany and against Japan in their timing. The decision against Germany can fall earlier than that against Japan, because the total concentration of Allied forces against it can be carried out, while in the case of Japan, that is an impossibility, geographically and militarily. The German Army, although much stronger, is far more worn out and has suffered much greater losses than the Japanese Army. The German Army has already passed through one grave crisis in the winter of 1941-42, and a new, even more severe crisis is yet to come, while the Japanese forces have remained relatively intact. Germany is well able to wage war without Japan, while Japan without Germany is doomed. Japan cannot win the war for Germany, while Germany's victory in Europe means almost automatic victory for Japan in Asia. All these factors make the choice of the Atlantic-European theatre of war imperative as the place to strike the decisive blow.

It is precisely because America's war effort is still in flux and incomplete that it is necessary to have a clear conception of her specific potentialities and tasks in the war of coalition. Side by side with the tasks that have to be fulfilled in the course of the war as a whole, there are others of extreme strategic urgency. Apart from the job of war in the Pacific, America is faced by the following strategic tasks:

1. To give the Allies arms superiority over the Axis. This matter can be solved. If the German Army is halted on the Russian Front in the

second half of 1942, the position of the Third Reich in a protracted war must grow hopeless, since by the spring of 1943 the Allies will have attained material superiority, which then will continue to grow.

2. More specifically, to give the Allies superiority in the air. This problem too can be solved. German airplane reserves are limited, and Japanese are minimal. The air arm is a universal arms branch that, in addition to carrying out its own functions, can supplement and augment all other arms branches and operations. America is clearly decisive in the air. That a coalition including the United States and the Soviet Union must have enormous superiority in the air was recognized by German military experts years ago. Colonel, later General, von Buelow, the German air attaché in Rome and organizer of the German-Italian Air Alliance, wrote as early as 1935:

> Today there are only two countries in the world which are completely economically independent and in a position to produce airplanes and air engines on a mass scale indefinitely, namely Russia and America.[5]

But today the Soviet Union cannot have an airplane reserve for the anti-Axis coalition, because it has suffered great industrial losses, because the bulk of Göring's air force is concentrated against it, and because for that reason it must limit its air forces to actions in land warfare. Therefore America is the only country in the world capable of producing and holding in readiness large-scale bomber reserves for autonomous operations—that is, for long distance bombings of the enemy's industrial and transport centres. Neither Germany can do that, nor Russia, both of whom are building up their air forces primarily for intervention in land operations. Germany, which in 1940 and 1941 waged big-scale aerial warfare against England, is now refraining from independent actions of this kind, since it cannot at the same time conduct long-distance operations in the air and have the Luftwaffe intervene in ground operations. The Soviet Union, which up to 1940 built up an imposing fleet of bombers, has now limited the development of her heavy bombardment aviation, because she prefers to pursue the more urgent development of the Army Air Force. England has only limited possibilities for building up heavy bombardment aviation, because the productive capacity of the British aircraft industry is limited and England needs large fighter plane effectives.

Thus American participation in the war gives the anti-Axis coalition a monopoly on autonomous air operations. The preponderant part of heavy bombers will come from the United States, and systematic bombardment of German vital centres might become of tremendous strategic significance. But autonomous aerial operations by Allied aviation are not to be waged as isolated actions; by themselves such actions cannot solve the great strategic tasks of a war of coalition against

Germany. The great aerial superiority over Germany, which is to be consolidated in the hands of American and British flyers, demands a proportional distribution of all aviation categories and aerial warfare in all forms. For the war of coalition against Germany, massive bombings of German centres *and* superiority in actual aerial combat *and* powerful intervention by the air force in land warfare are imperative. For this purpose strong forces of heavy long-range bombers *and* a powerful reserve of pursuit planes of all types, as well as a strong Army Air Force including medium and light bombers, dive-bombers, Stormoviks, and anti-tank planes are necessary. To supply the major share of these supplemental forces is the material and technical task of the United States. And that is not its sole task, because victory in the air is but one of the problems confronting the Allies, and because aerial operations are under no circumstances to be isolated operations.

3. To give the Allies the needed naval superiority in the Atlantic and the Mediterranean. Domination in the Atlantic alone is insufficient for the war of coalition against Germany. The Atlantic and the Mediterranean must be considered as a strategic unit. Sooner or later the Allies will need naval superiority in the Mediterranean also. Sooner or later they will be forced to transform the Mediterranean and North Africa into an offensive front. This is not going to be a task confined to the Allied navies; it will have to be solved by a combination of air, land, and naval forces. But the Allied fleets will have to take over part of this job. Allied sea mastery of the Atlantic and Mediterranean must be more than the mere domination of naval expanses; it must be adequate for the invasion of the European coasts, for the fight for the coasts and individual bases that will ensue, as well as for the protection of troop transports and landing operations. To attain these goals the American Fleet will have to co-operate to some extent with the British Fleet.

4. The formation, in conjunction with the British forces on the British Isles and possibly in North Africa, of a mobile military force capable of invading Europe from the West or the South.

Various estimates of American troop requirements for operations in Europe must be made. The scope of the Anglo-American effort on the ground will be determined by the scale of the Russian military factor.

Should Hitler win in Russia or the Red Army be decimated to such an extent that it must be ruled out altogether as an active force for counter-attacks, then the United States and Great Britain would be confronted with the herculean task of having to set up a mass army at least equal in number to the German Army. In the summer of 1941, an Army and Navy Board, starting out from the hypothesis that Hitler's enemies in Europe would be unable to defeat the Third Reich, reviewed the necessary strength of the American armed forces in such an event, and estimated that 10,045,000 men would be needed, including an Army of 6,745,000 men and an A.E.F of 5,000,000 men (The New York *Times*,

December 5, 1941). These figures may be regarded as the maximum estimate in case the United States Army has to bear the brunt of the land fighting.

If, however, the Red Army, while not knocked out, would nevertheless be so worn out that it could tie down only the lesser part of the German Army, then the Anglo-Saxon Powers would still have to constitute a strong mass army. Even though it could be of smaller scope than the figures given above, it would still have to be superior to the bulk of the German Army in numbers and offensive force.

In the event that the Red Army fights on with the unabated force it has shown in 1941 and 1942, then the United States and Great Britain would have to face an urgent but *circumscribed* problem in the European war on the ground. The strength of the Red Army and the balance of forces on the Russian Front are the basis for estimating the needs in effectives for the war in Europe and North Africa. The German Army has only limited reserves. Added to its huge losses in the first year of the war with Russia have to be the heavy casualties during the summer and autumn offensive of 1942. The winter campaign of 1942-43 will sap its core still further, since the German Army will again have to put up with most unfavourable fighting conditions during a winter campaign in Russia. An inevitable item in the dispersion of German forces is the fact that they must maintain occupation troops in Europe. In 1918 Germany had 400,000 to 500,000 occupation troops in the Ukraine (a country with a little over 30 million inhabitants) at that time without military opponents, and these troops could not be withdrawn and sent to the Western Front even in the zero hour when need for reserves was desperate.

The combined anti-Hitler coalition—the Soviet Union, Great Britain, and the United States—needs numerical superiority over the Axis in Europe and the surrounding areas—the Near East and North Africa. The Anglo-American forces must be calculated in such a way that they have numerical superiority over the available German reserves in Western and Southern Europe. It must also be taken into account that in case of severe pressure from the West the German Army might decide to hurl additional forces from the Eastern Front against the B.E.F. and the A.E.F. These forces could be none too strong, however, since any weakening of the German armies in the East would immediately facilitate a Soviet counter-offensive, thus exposing the German Front to the gravest danger. Nonetheless, the Anglo-Saxon forces earmarked for operations in Europe need additional reserves for safety's sake, in order to stand up to a stronger German concentration. Sixty to eighty Anglo-American divisions with 3000 to 5000 planes and tanks can give the Allies superiority over the German Army in Western and Southern Europe. Approximately twenty more divisions should be added as reserves against German reinforcements from the Eastern Front. A

total of 100 divisions, reserves included, can be regarded as the maximum requirements, provided the strength of the Red Army remains intact.

The A.E.F. and the B.E.F. combined will have to make a relatively much smaller contribution in proportion to the Red Army than they had to make in 1917–18 to the French Army, since the Red Army is numerically much stronger than the French Army was twenty-five years ago. At that time they equalled 60 per cent of the French Army effectives. Today the two forces combined will need on the European Continent no more than at most 25 per cent of the Red Army strength. England can now make this contribution much more easily than in 1917–18. In the beginning of 1918 the British Army had already suffered almost 2·5 million casualties. England's total losses by the middle of 1942 amounted to less than 300,000 men. The effectives and reserves of the United States Army have not even been tapped.

The shares in the joint action in Europe will probably be approximately 1 : 1 for the A.E.F. and the B.E.F. each. In the beginning the British share will have to be considerably greater than the American, but later on the balance can be gradually achieved.

The thirty to fifty American divisions in Europe and North Africa will probably run from about 800,000 to 1,500,000 men, including auxiliary troops and reserve formations. The larger figure can be regarded as the maximum. The United States is called upon to make an all-out war effort, in the sense that it must harness its entire industry to the war machine and develop all its armed forces. But thanks to Russian strength and British participation, its military intervention in Europe can remain confined to comparatively limited operations, as far as the number of troops required is concerned.

The A.E.F. abroad will have to deploy modern arms and equipment on a large scale and in the most effective manner. It can have a fundamentally different, much more far-reaching effect than the 1918 A.E.F., even though at that time too the outcome of the war was decided by fresh American reserves. It is the task of the Anglo-American operations in Europe to match the German lead in offensive arms on the Eastern Front—and to convert it into arms superiority for the Allies. This accomplishment is even more vital than to secure numerical superiority for the whole anti-German coalition on the European theatre of war.

Anglo-American arms deliveries to Russia have the purpose of confronting the German Army on the Eastern Front with as strong a mass of arms as possible. But the A.E.F. and the B.E.F. on European soil can and must achieve arms *supremacy* over the German Army in the West. In building up the A.E.F., the Unites States Army actually is in a position to replace men by machines to a far-reaching degree. Economizing man-power by strategic passivity *à la* Gamelin is fatal. But economy in the use of man-power by large-scale use of modern war technique is not only humane, it is also purposeful and effective from a military point

of view. The number of A.E.F. effectives in Europe on the whole can be reduced, if the troops are equipped with sufficient quantities of modern offensive arms. An A.E.F. numbering 600,000 men, accompanied by ten armoured divisions and 5000 planes, will be able to deliver more effective blows than one million men plus four armoured divisions and 2000 planes.

Undoubtedly the United States Army on a war footing is being so constituted that it is much stronger in numbers than the immediate needs for operations against the Axis demand. The United States must reckon with the eventuality that large numbers of trained reserves will be necessary to end the war in Europe or in the Far East, as the case might be. But there will be no need for a United States mass army in Europe, provided the Allied coalition war is started and aggressively waged in time.

America has made a rapid transition from lend-lease and "arsenal of democracy" strategy to a strategy of active warfare. The strategy of total and global coalition war which President Roosevelt proclaimed in his message to Congress of January 6, 1942, is the most broadly conceived, far-sighted, and vigorous war plan as yet promulgated by the democracies. America's World War cannot be patterned on the infantry-minded strategy of 1918. It cannot be based on the doctrine of pure sea-power as it prevailed in the 'twenties and 'thirties. What might gravely enfeeble American strategy now is the intoxication with technics at the expense of intrinsic military criteria: one-sided industrial-statistical estimates and the substitution of technology for strategy. No technic can replace inadequate tactical skill, the lack of a war plan, and the failure to realize a strategy of coalition. One should expect no miracles from any one arms branch. Germany did not conquer the European continent with a stratoliner; Japan has achieved tremendous success with mediocre war technics, but its industrial weakness was counter-balanced by good organization, purposeful co-ordination of arms, and daring, farsighted offensive planning. This is no argument for feeble war technics, but it is an argument for good strategy. The Second World War will not be won by stratoliners, long-range bombers, nor by mammoth tanks and super-dimensional heavy long-range cannon. America's war rôle demands an unwavering strategic orientation, minute exploration of the specific strength and the war plan of the enemy. The United States cannot settle the imminent outcome of the war in 1942 and 1943 with an air armada of 1945 and 1946. No flight into the skies, into a pure aerial war, is conceivable against the continental might of Germany with its powerful machinery for land fighting; victory can be attained only by a strategy of the combined armed forces of all the United Nations. The highest commandment of United States strategy is the combination of its own purposeful, all-out effort with the most intensive war of coalition. America is in the fortunate position of being able to include the entire fighting forces of the Soviet Union, Great Britain, and China in its own war plan.

American strategy is faced with the task of meeting the tempo and the deadlines of this war. Hitler has staked all on one card: on his 1942–43 offensive. He does not want to wait until the United States has fully developed its industrial capacity. His whole plan can be thwarted, disrupted, and turned into defeat only by military action within a coalition war.

CHAPTER SIXTEEN

THE GREAT OFFENSIVE AGAINST THE AXIS

THE SECOND World War is dominated by the law of great offensives. All German operations have been waged as decisive actions designed to deal the enemy a crushing blow. The German Army has scored major territorial and strategic gains in all its drives, from the Polish campaign to the Caucasian. But four large-scale Axis offensives form the peak of World War II: the campaign in the West, the first German offensive in Russia in 1941, the Japanese campaign in the Pacific, and the second German offensive in Russia in 1942. The campaign in the West and the war in the South-western Pacific ended with complete Axis victories. The first German drive in Russia brought Germany considerable territorial gains; its original war plan, however, was frustrated. In the second German drive in Russia everything is at stake.

In the late summer of 1942 the United Nations were faced by the compulsion to launch an offensive. The law of the great offensive had caught up with them too. The possibilities open to them of waging defensive warfare were now completely exhausted. In 1940 and 1941 the British defensive was expedient because it was the only course possible, and because the R.A.F. was repulsing in British skies the preliminaries for a German invasion. Russia's defensive strategy in 1941 was purposeful because it stopped the German Blitzkrieg and forced a protracted war on the Third Reich. But since the summer of 1942 the continued defensive attitude of the Soviet–Anglo–American coalition showed a lack of perspective, and threatened to prove fatal. The course of the war is forcing upon the United Nations a strategy qualitatively equal to, and capable of overcoming, that of the enemy. The power of the fascist-imperialist coalition can be broken only by a major counter-offensive. A situation has been created in which only a great co-ordinated offensive against Germany can overcome the present crisis in the Allied conduct of the war.

In the late summer of 1942 the warfare of the United Nations was in the throes of a grave crisis. It had as its main features remaining on the defensive in the East and remaining in wait in the West. The German attacks forced the Red Army to retreat and wage defensive war. The

Red Army was threatened by a shrinkage of its offensive potential, and the Russian supply and communication system too was in danger. Yet in the West the extent of Anglo-American warfare against Germany was still minimal. These are the criteria for the effectiveness of Anglo-American operations against Germany: How large is the actual front of fighting contact and how intensive is the combat? How many German forces are tied down by Anglo-American military forces? How much of the German war machine is being consumed and destroyed by the Anglo-American military forces? In the late summer of 1942 only three German divisions were tied down in Libya by British troops, while American forces had not yet joined in battle with the Germans.

The proper task of the Allies in the summer of 1942 was not merely to help the Red Army, but to make the transition to a true war of coalition, which implies active Anglo-American warfare against Germany, *and* the relieving of the Red Army by an Anglo-American offensive, *and* the relieving of the Anglo-American forces on the European continent by a Russian counter-offensive, *and* the strategy of the common Anglo-American–Russian offensive.

The Anglo-American–Soviet Alliance is in a position in which a joint attack is the best defence, not because text-books of strategy say so, but because isolated national wars against the Third Reich are bound to fail. Russian resistance, British strategy, and America's shift to active warfare against Germany, are so interlinked, that only a joint offensive strategy can solve the crisis for each of the Allies. The crisis must be overcome by a common action. The United Nations must wage an offensive on the scale of the big Axis offensives, and that is the central function of their coalition warfare.

Three circumstances facilitate this transition to an offensive strategy:

1. America's entry into the war gave the anti-Axis policy new, supplemental power; it also altered Great Britain's strategy position. The British Isles were a beleaguered fortress in the period between the collapse of France and Russia's entrance into the war. After Russia had come in, Britain was relieved, but it still held a peripheral position in the European war, with limited offensive strength of its own. With America's entry Great Britain became the rallying point of Anglo-American troop concentrations, and a jumping-off ground to the European continent.

2. The experiences of 1941 showed the limitations of Germany's military capacity. The German conduct of the war fell, at the end of 1941, into a grave crisis when the Wehrmacht had to fight, in effect, only the Soviet Union. The winter campaign of 1941–42 demonstrated the potential offensive striking power of the Red Army.

3. Since the middle of 1942 the United Nations have been able to count on their own growing material superiority. In the summer of 1942 Germany had lost its advantage in matériel over the Allies. But it

did have the strategic advantage of being able to concentrate all its forces against Russia and to wage a one-front war.

The big-scale offensive and coalition strategy are for the United Nations one and the same thing. They, even more than the Axis Powers, are dependent on such a course, because they have no centre of power comparable to Germany's.

A war of coalition implies a maximum of co-ordinated efforts, a common war plan, and strategic planning against the enemy. The following are the principles of coalition strategy:

First, the division of functions among the Allies. They must develop their fighting forces in accordance with their resources and their position. The Soviet Union is predestined to be the big land force of the coalition; the Anglo-American bloc must expand its air and naval forces to maximum capacity. But above that, the British Army must be a mobile reserve, for land war in Western and Southern Europe, while the United States supplies the additional contingents needed for this purpose and secures material supremacy for the United Nations.

Second, co-ordination of effort. This means the simultaneous actions of the military forces of the coalition on a unified plan.

Third, strategic compensation. This means that a certain equilibrium should exist in the efforts, performances, and sacrifices of the Allies. The strategic objectives to be pursued and the extent of forces their attainment involves, should be in proper proportion as between the members of the coalition. The front against Germany in Eastern Europe must be counter-balanced by another one in Western Europe. If it becomes necessary that the Soviet Union open a front against Japan in the Pacific, then this would require an additional Allied effort in Western Europe and the Mediterranean, in the interests of the coalition as a whole.

The Anglo-American-Soviet Alliance can be defeated only in the event that it fails in realizing a strategy of coalition. Hitler's entire strategy is built upon escaping a coalition war by his enemies. It aims to defeat his enemies in succession, one at a time. The coalition strategy of the United Nations will fail if the time-tables of the main participants diverge. The Soviet time-table is calculated on the basis of the German time-table, and involves the total concentration of Soviet forces for beating off and disrupting the German war schedule, which calls for an all-out drive at all costs in the second half of 1942, and no later than the spring of 1943. Allied strategy has now to adjust the Anglo-American and the Soviet time-tables.

The character of the United Nations' offensive grand strategy is predetermined by their strategic positions. In relation to the Axis Powers they occupy the exterior line. Thus their strategy must be an exterior-line strategy requiring concentric attacks—heavy blows struck at the enemy from various directions at the same time, and aimed at the centrally situated enemy Powers. The blows would be struck at Germany from

the East and the West, and against Japan by the encircling American, Soviet, Chinese, and British forces. The British Isles have a special—now decisive—position for the invasion of Europe. A front in Western Europe, set up from the British Isles, does not need extensive forces. But the base on the British Isles can be transformed into a strategic lever whose use might alter the entire strategic situation in Europe and set in motion all the anti-Hitler forces on all fronts.

It is erroneous to assume that the sole function of a second front in Europe would be to relieve the Red Army. The Second Front is not a prop for the Soviets. It would primarily be the starting of Great Britain's and America's own war against Germany, and furthermore an instrument of the major anti-Hitler offensive. That the Red Army would be relieved by a second front would be but one of its consequences. Another would be that the Red Army's offensive powers would be unleashed for the benefit of the entire anti-Axis alliance.

It is a fact that the coalition strategy of the United Nations was in the summer of 1942 in crisis. The mechanism of joint action did not yet function, Hitler's big July offensive was not immediately followed by Anglo-American counter-action. There were attempts to explain the reasons for the gap between the time-table of the German-Russian War and that of Anglo-American strategy by technical difficulties, the lack of tonnage, and various other bottlenecks. This is to reverse the actual order of things. It was not the technical difficulties which hampered the full development of Allied coalition strategy, but the delay in coalition planning which prevented the overcoming in time of the technical bottlenecks. The imperatives of coalition strategy were grasped only with delay. A different distribution of available shipping reserves, an increased tempo of preparations, would have been possible, had the war plans of the coalition been fixed in advance, and if the machinery for waging this coalition war had been set up in time. The German and Japanese High Commands, in calculating and preparing for their operations, first fixed the aims and vital targets. Subsequently the corresponding technical means were brought together with ruthless energy: shipping for the Japanese landings in the Pacific, the air force for the German operations in Norway and Crete, tanks for the invasion of Russia. Axis technics were determined by Axis and grand strategy —not vice versa. Germany and Japan did not permit their strategy to be paralyzed by initial technical bottlenecks.

The delay in the Allied camp has several causes. England, the Soviet Union, and the United States did not come into the war at the same time; they had not formerly been united in a military alliance. The diplomatic crisis that bulked large in the years from 1939 to 1941 prevented them from laying the groundwork for real military collaboration; Chamberlain's policy, the German-Russian Pact, and America's neutrality were the major obstacles. In the beginning their coalition strategy was but

an improvisation. Nevertheless, there should have been no question, since the outbreak of the German–Russian War, that the invasion of the European continent was the decisive function of the Anglo-American bloc. But more than one year has been lost, a year in which Hitler has continued to have strategic freedom of movement. This irreparable loss of time was in part due to the fact that in the Anglo-American camp the interrelations between the various fronts of the coalition war were not immediately recognized.

The interrelations between the Russian Front and a land front in Western Europe are of decisive importance. Once the front in Western Europe has been established, the balance of forces on the entire European theatre of operations will be changed, because of the active intervention of Anglo-American strength. The German Army will be unable, in such an event, to wage offensives on the Russian Front, and a crisis of German warfare in the East, much graver than the one in the winter of 1941, would be inevitable. We know that at that time the German Army was near defeat. In his radio address of April 20, 1942, Lieutenant-General von Dittmar, a German Army spokesman, said on the occasion of Hitler's birthday:

> At the beginning of winter the German Army in the East found itself in an incredibly grave position. It was faced with extraordinarily serious decisions. It was almost decided to move far away from the enemy and to put the zone of the scorched earth which he had created between him and our own positions.

This statement, translated into plain language, means that the German High Command was virtually determined to yield the occupied Russian territory, and to withdraw the Army almost to the old German–Russian frontiers, for the area of the scorched earth begins there. Colonel Scherf, a public relations spokesman of the German General Staff, wrote in the *Völkischer Beobachter* of May 11, 1942, of the mood of the German High Command in the winter of 1941–42 as follows:

> Should one not, it was asked, start a large-scale retreat, in order to shorten the communication lines? Memories of 1812 began to paralyze officers and men.

An Anglo-American invasion of the continent in the winter of 1941–42 would have brought the German Army to the brink of catastrophe. Hitler's entire strategy in this phase of the war, as in previous ones, is based on the concentration of forces on one front, at present the Russian Front. The German striking power in the East rests on its relative superiority in offensive weapons over the Red Army—and once this margin of superiority is upset by a front in the West, German strategy in the East loses its ground. This means not merely that the German offensive would be halted, it also means a freeing of the Red Army's entire offensive strength, the first signs of which were already visible in

the 1941–42 winter campaign. A Red Army on the offensive would in turn relieve the Anglo-American Front in Western Europe. The interrelations between the Russian Front in the East and the Anglo-American Front in the West would consist of mutual support and relief. The strategic function of the Second Front is thus to upset the German war plan. In 1941 the Red Army stopped the German Blitzkrieg. But the German war of movement as the decisive and virtually sole German offensive method must be stopped once and for all not merely through the tactical methods employed by the Red Army, but also with the methods of a strategy of coalition—by encirclement of the Third Reich and by Allied supremacy on the whole European theatre of war.

The effectiveness of the Second Front will be increased by the fact that it is a blow in an additional direction. The mere dispatching of Anglo-American troops to Russia cannot possibly have the same result. That would only give the Red Army numerical reinforcements, but not the simultaneous advantage of a second front against the enemy. The function of the Second Front is to split up the enemy's forces, to disrupt and stir up the German rear in the West and the South, to disorganize the German inner line between East and West. Should the Second Front reach even into those regions without German occupation troops, like unoccupied France and the Iberian Peninsula, then it would have an additional consequence, namely, that the Germans would have to extend their communication lines and throw in more occupation troops. The Second Front would also bring into play against the Third Reich the powerful weapon of political warfare, by raking up the fires of the European Revolution, by increasing resistance and sabotage in the occupied countries.

Similar interrelations might emerge between the fronts in the Mediterranean and North Africa, and the European Eastern and Western Fronts. Libya too could have become the nucleus of a second front. But this would have demanded two prerequisites: first, that the Libyan Front be able to divert considerable German forces from the East, and, second, that it be rolled up far to the West, to North Africa, so as to represent a threat to German-occupied Southern Europe. If North Africa and the Mediterranean had been converted into a base of Allied operations for intervention in Southern Europe, the blow could have been delivered even more easily from there than from the British Isles. For in that event the Allies would have had the choice of direction from Spain to the Balkans; and the coasts of Southern Europe, in contrast to the Atlantic coasts of Western Europe, are not fortified.

The Axis succeeded in making the Libyan Front an isolated British front without strategic interplay with the Russian fighting lines. It succeeded in this by securing the Mediterranean communications and by repulsing the British armies from Libya to Egypt with comparatively small forces. An evil fate hovered over the operations of the

democracies, preventing them time and again from fighting the battle for the Mediterranean to a finish. The Anglo-French coalition of 1939–40 failed to utilize its tremendous superiority over Italy in time. The Mediterranean would have been an ideal battle ground for Anglo-American action also, aimed at Europe. If, with other reinforcements, the *Prince of Wales*, the *Repulse*, the *Oklahoma*, and the *Arizona* had been used for offensive action in the Mediterranean, instead of waiting for their sinking in defensive actions in the Pacific, the course of the war in the Mediterranean would have been different.

Yet there are still broader interrelations among the fronts of World War II. There are close ties between the Second Front in Europe and the situation in the Pacific. The United States, Great Britain, and China clearly need Russian assistance in Eastern Asia and the Pacific area. They need the help of the Far Eastern Red Army, of the Russian Air Force, Russian air and naval bases, and the Russian submarine fleet in the Northern Pacific. But the Soviet Union is tied down on the European Front by Germany; it is compelled to regard its Far Eastern Army and Air Force as a reserve for the European Front and to save it for that purpose, and thus it strives to avoid war with Japan. Russian-Japanese neutrality rests on the undecided war situation in Europe. But it is not a definitive state of affairs. A Japan, so successful in the Pacific, cannot reconcile itself to the powerful Russian positions on its borders, nor can the Soviet Union in the long run tolerate the tremendous expansion and growth of Japan. The Russian-Japanese enmity is the oldest, gravest, and sharpest in Asia. Japan cannot forever wage war against Russia's allies, and Russia against Japan's allies, without disturbing the Japanese-Russian truce. There has already been one precedent in this Second World War, when one Axis Power went to war against another country, and second Axis Power did not at first intervene. That happened in the Italo-Greek War, in which Germany stood by in the beginning. But German neutrality lasted only from November 1940 to April 1941—then Germany attacked. But who would assume that the Russian-Japanese conflict is less serious than that between Germany and Greece? Once Japan attacks the Soviet Union, the United States and Great Britain will be chiefly interested to relieve the Soviet Union in its terrific two-front war against Germany and Japan by a second front in Western Europe. In addition they are greatly concerned, as Pacific Powers, to prevent the withdrawal of the forces of the Far Eastern Red Army to the German Front. It is a vital necessity for them that the Far Eastern Red Army should be able to carry on offensive operations against Japan. It is the only modern army that can fight against Japan on the Asiatic continent. But even if Japan does not attack the Soviet Union, the United States and Great Britain are greatly interested in giving Russia diplomatic and military freedom of movement in the Far East, for that is the prerequisite for her joining the anti-Japanese coalition. She should be placed

in such a situation as not to be compelled to consider the Far Eastern Red Army as a reserve for the German Front. For this purpose too the Soviet Union would have to be relieved in Europe by a second front. Considerations of Pacific strategy therefore prescribe an active strategy of coalition in Europe for the United States and Great Britain. Whatever they throw into the fray in Europe will return to them with a hundred per cent interest in the Pacific. The way to the Japanese Islands leads across the Channel.

A Second European Front can release and set in motion all anti-Axis forces in the global war. A considerable portion of them, and many Axis forces as well, were out of action in the late summer of 1942, apart from the strategic reserves which all armies hold back. The following armies were frozen at that time: on the side of the United Nations, the British Army on the Isles, the United States Army, and the Soviet Far Eastern Army; in the Axis camp, the Japanese Army in Manchukuo, the bulk of the Italian Army, and the limited number of German troops on the European west coasts. Thus the anti-Axis forces were used on a much smaller scale than those of the Axis. Their military effectiveness was smaller, but their reserves are greater. The Axis armies were on the whole much more strained and their military effectiveness was greater, but their reserves are correspondingly much smaller. An active coalition strategy will give the anti-Axis coalition the chance to make use of the bulk of its frozen forces, throwing its large reserves into the field and deploying its entire strength in a co-ordinated way. A Second Allied Front in Europe might be the prelude to second fronts everywhere. It might pave the way towards a Second Russian Front against Japan. It might tie down the German forces in Europe to such an extent that reinforcement of the German Front in North Africa becomes an impossibility, and the British Front there, with the help of American reinforcements, could be turned into an offensive one. Thus, a great second front offensive might create new interrelations among the Allied fronts in global warfare, between the fronts in Eastern Europe, Western Europe, North Africa, and the Pacific.

An active policy of coalition, starting with a second front in Europe, which holds the key for the whole strategic world situation, might bring about a more purposeful distribution of Allied forces over the great spaces. Allied strategy is faced with dead zones, insurmountable expanses. The Red Army cannot be used in Western Europe. The United States Army cannot be sent to the Western Pacific and the Asiatic continent in large numbers, because of the huge distances and transportation difficulties. Geographical conditions dictate the disposition of the Red Army on the Asiatic continent and massive use of the United States Army in Western Europe and in Northern and Western Africa. The distance from New York to Casablanca and from Boston to Northern Ireland is less than half that from San Diego to Singapore. But such

possible and necessary adjustments can be made only through unified Allied planning. Co-ordinated actions will compensate the United Nations with more than a mere arithmetical addition of their forces; the more effective strategic performance will mean for them a multiplication of their forces.

A realization of the Second Front has two aspects, a technical and a strategic one. The first involves material and tactical expedients, such as possibilities of landing operations, etc. The second comprises the relation of forces between the belligerents. In the spring of 1941 a British Expeditionary Force could be dispatched to Greece; it was technically possible to open up a British Front in the Balkans. Landings could be carried out, since the Allies had a foothold in Greece and Yugoslavia. But strategically this operation was futile. For the entire weight of the German Army could then be used against the British-Greek-Yugoslav Front; it was not tied down by any land front and could operate freely and effectively against the B.E.F. and its feeble allies. The landing in Greece might have had moral and psychological motives, but strategically it was a desperate undertaking from the outset.

The two aspects of the Second Front in the West are in reversed relation. Its creation has to reckon with technical obstacles. It must solve the shipping problem; landing difficulties must be overcome. But strategically it is realizable. The Second Front in the West is possible because a strong front in the East, in Russia, is already directed against Germany; because the overwhelming bulk of the German forces are tied down there; and because the Anglo-American-Canadian forces stationed on the British Isles are superior in number to the available German forces in Western and Eastern Europe.

In the spring of 1941 the strategic situation in Europe could not be changed, but now the difficulties hampering a second front can be overcome.

Coastal fortifications alone are inadequate for staving off landing operations. No West Wall can protect the German-dominated coasts from Biarritz to Narvik, or the Mediterranean coasts from Malaga to the Piraeus. Hitler's stress on the invincibility of the German-held coasts could be called a German version of the Maginot Line complex—unless one assumes that it is calculated to serve as a psychological deterrent. The Nazis know the technics of modern warfare too well to stake everything on coastal fortifications. The real problem for coastal defence is that of mobile reserves. In this respect the dynamic of the relationship of forces is favourable for the Anglo-American forces; because of the tying down of the German armies on the Russian Front, because of the growing German casualties there, because of the draining of German reserves by the needs of the Eastern campaign, and also because of the decreasing density of the German occupation in the West. The Anglo-American-Canadian troops on the British Isles will in any event

be stronger than the German forces in Western and Northern Europe.

Another factor favours landing operations in Western Europe. The possibility that the landings might be threatened by German naval forces is almost entirely ruled out. It was chiefly the weakness of their own Navy and the superiority of the British Fleet which made an attempt at invasion of England so dangerous for the Third Reich. The reverse relationship of forces at sea facilitates an Anglo-American landing.

Experience has shown that landing operations can be carried out. Japan achieved amazing successes in countless landings. They have proved the significance of good organization and of the co-operation of sea, land, and air forces in invasions from the sea. Japanese landings, true enough, were made in the face of a feeble enemy. But there exists one model example of landings against a strong army, indeed, against the German Army. It is the Russian landing of December 30–31, 1941, in the Crimea, when Kerch and Feodosya were occupied. The Kerch Peninsula, which was taken by Red Army and Marine units, was not the German Army's hinterland, like the Western regions, but the German frontal line. And, even more, it was a sector of the offensive German Front, from which the German Army planned to jump across Kerch Straits to the Taman Peninsula. The Russian landing was carried out in a narrow sector, where all prerequisites for coastal patrol and defence were given, and against a front sector in which the German occupation was dense. The landings were successful owing to the surprise element, the tenacity of the attack and in the fighting at close quarters, and the active support and coverage by Russian air and naval forces. The second German seizure of Feodosya, on January 18, 1942, was not a prevention of a landing, but a counter-offensive in land war. The Russian troops stayed in Kerch until the middle of May.

A realistic coalition strategy demands the correct evaluation of the Soviet military factor. The misconception regarding the Red Army's striking power was in the summer of 1941 fatal to the development of Anglo-American strategy. In part that misconception is responsible for the delay in the proper planning for the coalition. The assumption that the Red Army might resist for only three to six months, and that it would then either collapse or withdraw to the Ural Mountains, was bound to result in a warped attitude towards the tasks and possibilities of coalition warfare. Why collaborate with an army that could wage only a brief delaying action? On such a basis, a long-term coalition strategy with Russia would have been unrealizable; the Russian war would merely have meant a short breathing spell for Great Britain and the United States; and nothing was to be expected from the offensive power of the Red Army that could enter into the calculations of coalition strategy. At no time did the Allies under-estimate their prospects for a coalition strategy so fatally.

The strategy of the great offensive can, and must, be built up, on the one hand, on what the Red Army has accomplished, and, on the other hand, on what the United States and Great Britain have accumulated in military resources. Though not yet in the framework of planned coalition warfare, by its mere resistance the Red Army has already made a tremendous contribution to the cause of the coalition. It prevented any German attempt to invade England. It made complete occupation of Northern Africa and of the Near East impossible. Great Britain and the United States gained valuable time for military preparations. Most important, the Red Army used up and destroyed a considerable portion of the German war machine. It is impossible to state precisely how great a part of the German war machine was destroyed in Russia, whether 30 or 40 per cent. These losses, apart from the casualties in men and war materials, include numerically intangible strategic and psychological factors. But it is undoubted that the peak of the German Army's offensive power has been passed, and that the German Army will never again have the concentrated impact it had in the summer of 1941. The tremendous consumption, the partial demolition, of the German war machine in Russia is the greatest and substantially the only large military asset hitherto won by the anti-Axis coalition. The function of the Red Army for the strategy of the great offensive is not only to win time for the Allies. Its decisive function in the frame of the coalition strategy is to wage the great land offensive. The meaning of Russian resistance was not merely self-preservation, it was to prepare by active defence a Russian counter-attack and an all-out coalition offensive.

The strategy of the great offensive requires unified action of the Allied fighting forces, the strategic co-operation of weapons. Tactical co-operation of arms—the co-operation of tanks, air force, infantry, and artillery on the battlefield, or co-operation of surface craft, submarines, and air force in naval operations—is not enough. The Allies' task is the planned co-operation of the entire land, air, and naval forces. Japan showed consistency and brilliance in the execution of such a strategy of fighting forces. But the task of the Allies is still broader: to attain strategic co-operation by all the arms branches of various nations on different, widely separated war theatres. The war technics of the Allies must be in harmony with the requirements of coalition warfare.

The task of the war of coalition against the Third Reich consists of combining operations on sea, in the air, and on land in such a way that victory may be attained in the war on land. The primacy of continental warfare has been recognized in the Anglo-American camp. In his speech before the Canadian Parliament, Winston Churchill held out three phases of United Nations warfare against Germany: first, the accumulation of forces; second, the reconquest of the German-occupied regions; third, carrying the war to German soil and the final defeat of the enemy.

Two of these three phases are to be waged on the European continent. In early July 1941 General Claude Auchinleck stated:

> If this war is to be won properly, it has to be won in Europe. And in Germany. The Germans must be beaten on their own soil, exactly as Napoleon was beaten.

The task of the Anglo-American bloc is to utilize its sea and air superiority against the decisive enemy, in accordance with this supreme imperative of the Second World War.

Allied sea strategy is subject to two prerequisites. They concern Great Britain and the United States individually and together. The first one is the concentration of Anglo-American sea power in the Atlantic, where the situation is far more favourable for the democratic powers than it was for Japan before the war in the Pacific was unloosed. Axis naval strength cannot be concentrated in the Atlantic, while Japan had to reckon with the United States Navy in the Pacific. The Atlantic is the natural rallying ground for the great Allied offensive.

And the second prerequisite is this: The British and American naval forces must be used in co-ordination for this offensive. The British Navy alone no longer suffices for the purpose of the great offensive, which must be waged by the two Anglo-Saxon powers combined.

Anglo-American sea strategy must be directed at the European continent. It must exert control of the sea for a victory on land. Anglo-French sea domination was in 1939–40 unable to prevent the German victory in Europe. Anglo-American control of the Atlantic was futile in 1941–42 because it was not followed by an offensive on the ground. Japanese naval superiority in the Western Pacific, on the contrary—although it was by no means overwhelming—brought success because it was an organic component of the offensive carried out by the Japanese fighting forces as a whole. The Allies need an invasion fleet in the Atlantic. A blockade is only passive sea supremacy. Active domination of the sea includes keeping the sea lanes open to supply the fighting machine on land, clearing the seaways for an invasion, and sea fighting for the coasts. The invasion can be supported by a mobile war on the seas and by large-scale manœuvring along the coastline. Sea power makes possible the carrying out of simultaneous landings over great distances. If we take the British Isles as a starting point and apply to them the distances and radii of the Japanese landings and amphibious invasions from the sea, then this would correspond to Anglo-American landings in Petsamo, Narvik, Cadiz, Lisbon, Valencia, Palermo, Brindisi, Smyrna Algiers, Tunis, the Azores, Casablanca, Dakar, Angola, Jibouti. The conservative doctrine of sea-power has all along neglected the real potentialities of sea-power in combined sea-land-and-aerial fighting.

As in naval warfare the task of the democracies is to make full use of

aerial warfare for the great offensive directed towards the European continent. The Allies can wage a more total and comprehensive aerial war, in all its forms, than the Axis. An isolated air strategy is an impossibility. Individual aerial operations have fundamentally different targets. The objectives of autonomous operations in the air, of aerial bombardments over great distances, are the industrial and transportation centres of the enemy. The objective of aviation in actual aerial warfare at sea is the enemy's Navy, on the ground it is the enemy's Army. Thus total air warfare includes active air operations against the land and sea forces of the enemy. These operations can be fulfilled only by the co-operation of the air force with its own Army and Navy. A total strategy of the skies is possible only if it is part of the strategy of all fighting forces.

The great offensive against the Axis requires not merely the development of one specific function of the air force, but the development of all its functions in co-operation with the other fighting forces. An isolated strategy of the air, based on autonomous aerial operations, would be a passive and ineffective strategy. Bombings of the enemy's economic and transport centres from great distances can become tangibly effective only when they are waged continually and in great concentrations. Militarily they take effect only when they are waged simultaneously with the offensive operations of other fighting forces. A liberated Paris *and* demolished German aircraft factories, chemical works, motor works, and Berlin in ruins—that would be an example of co-ordination of autonomous air war with offensive land war. The autonomous operations of an air force as such do not strike the fighting forces of the enemy and do not directly help its own fighting forces. The bombings of Cologne, Essen, Bremen, Düsseldorf in the summer of 1942 have not improved the situation of the British Army in Egypt and that of the Red Army one iota. Experiences of the Second World War prove that the greatest strategic results were shown by the intervention of aviation in land fighting. The Third Reich waged autonomous aerial actions only to a limited extent—Japan hardly at all. But with the aid of excellent land aviation Germany conquered the European continent and Japan the South-western Pacific. On the United Nations side, the most effective was the Red Army land aviation—this in defence operations. The successes scored by British aviation in the battle over Britain were of great importance, but it only struck at the German Air Force, while the accomplishments of the Soviet Air Force, especially in the great battle for Moscow, essentially helped to disrupt the entire German war machine.

For the great offensive against the Axis, those categories of aviation have priority which can help most effectively to reconquer the European continent, those which can hit the German Army most severely, those which can cover the Anglo-American forces most effectively from the air and can best help them push their front forward. These are the fighters, light and medium bombers, dive bombers, Stormoviks, and anti-tank

planes. For the great Allied offensive, aerial supremacy is necessary not only for aviation but for the advancing armies.

Collaboration between the Western and Eastern Front might give the Allied air strategy new aspects, made possible by the specific mobility of aviation. Large forces of Anglo-American bombers can be hurled on the Russian Front to strike against German communications. In the event of a Russian offensive they can deliver effective blows at Eastern Germany. Such a two-front offensive from the skies might give the Allied war in the air the greatest measure of intensity.

Germany's safety depends on the cordon of water that separates the German-controlled regions from the British Isles. Formerly this cordon defended England; now it is defending Germany. Once the Anglo-American bloc has bridged the Channel—broadly speaking, the ring of water around Hitler Europe—German security is gone. Hitler has no parry against a two-front war.

Two final conclusions are to be drawn for United Nations strategy:

The first is that Germany should not be beaten merely by stronger arms, but also by a bolder strategy, planning, and daring initiative.

The other is that all technical and military requirements for the United Nations coalition war, especially for the two-front war, should have strategic priority. They should be item A-1-A on the Allied schedule.

NOTES

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