

delayed transmission of the message until 19 April; but Stalin had had equally good Western intelligence of German intentions weeks before that. Early in March, Sumner Welles, the American Under-Secretary of State, had passed to the Russian ambassador in Washington the gist of an official inter-governmental communication which, in its original form, read: 'The government of the United States, while endeavouring to estimate the developing world situation, has come into possession of information which it regards as authentic, clearly indicating that it is the intention of Germany to attack the Soviet Union.' The imprecision of this weighty warning was dissipated throughout the spring by messages from the Comintern agent Alexander Foote and the mysterious but quickly authenticated 'Lucy' network, both based in Switzerland. 'Lucy', whose identity remained obscure – perhaps a member of the exiled Czech secret service, the most effective run by any government during the war; perhaps a cell of the Swiss intelligence agency; perhaps an outpost of Bletchley – signalled Moscow in mid-June with a list of German objectives, a Wehrmacht order of battle for Barbarossa and even the current date for D-Day, 22 June. At about the same time (13 June), the British Foreign Minister told the Soviet ambassador that evidence of an imminent German attack was mounting and offered to send a military mission to Moscow.

— Stalin's wishful thinking —

Stalin by then had a plethora of evidence that German (with Romanian and Finnish) forces stood ready in millions to attack Russia's western frontier. Yet in the face of it all he clung to his belief and hope that every unwelcome interpretation of the facts was the fruit of Western ill-will. Cripps appears to have been so baffled by Stalin's wishful thinking that he consistently represented it to London as proof of Russia's intention to yield to a German ultimatum. In that judgement he was, of course, half right. Since the failure of Russia's diplomatic offensive against Bulgaria, Yugoslavia and Turkey four months earlier, Stalin was in chastened mood. Badly frightened also by the Hess mission, which he insisted on seeing as an attempt by Hitler to make peace with Britain so that he could attack Russia, Stalin had reverted to his earlier policy, fixed in August 1939, of dealing with Germany by granting her concessions, and he was now concerned most of all to placate Hitler by a meticulous fulfilment of the economic terms of the Molotov-Ribbentrop Pact. Train-loads of oil, grain and metals, as by strict quota, continued to pour across the frontier throughout June; what was to prove the final delivery crossed in the early hours of 22 June itself.

In this climate of appeasement, the Red Army's commanders, denied access to reliable intelligence ('reliable' intelligence, in Stalin's topsy-turvy world, was automatically deemed 'unreliable', as Professor John Erickson has demonstrated), and fearful of offending their timorous warlord, were prevented from taking any precautionary measures. M. P. Kirponos, commander of the Kiev military district, who was to show

himself the most independent-minded of Stalin's generals in the weeks before Barbarossa (and who died in the great encirclement battle at Kiev in September which was the worst outcome of Stalin's blindness), deployed some of his units to the frontier in early June, was reported by the local NKVD to Beria, Stalin's secret policeman, for 'provocation' and required to countermand the order. In mid-June, when he tried to man his defensive positions again, he was flatly told, 'There will be no war.' This was not merely a statement for private consumption. On 14 June, eight days before the launching of Barbarossa, the Soviet national newspapers printed a government statement to the effect that 'rumours of the intention of Germany to break the [Molotov-Ribbentrop] Pact are completely without foundation, while the recent movements of German troops which have completed their operations in the Balkans to the eastern and northern parts of Germany are connected, it must be supposed, with other motives which have nothing to do with Soviet-German relations.' On 14 June in 'eastern and northern parts of Germany', which meant those parts of Poland and Czechoslovakia captured or annexed between 1938 and 1939, nearly 4 million German troops, organised in 180 divisions, with 3350 tanks and 7200 guns supported by 2000 aircraft, stood ready to march to war. They were to be accompanied by fourteen Romanian divisions and shortly to be joined by the Finnish, Hungarians and puppet Slovak armies, together with a volunteer Spanish (the 'Blue') and several Italian divisions. To those Russian commanders in the front line who sensed the massing of this mighty host and asked for orders, advice, even reassurance from above, the answer, as Kilch, the chief of artillery at Minsk (a primary Wehrmacht objective), later bitterly recalled, was 'always the same - "Don't panic. Take it easy. 'The boss' knows all about it.'"

In reality, Stalin was as surprised as any subordinate by the unleashing of Barbarossa, and persisted in refusing to face facts even as the German attack units moved to their start-lines. When Timoshenko, Defence Commissar, and Zhukov, chief of staff, arrived at the Kremlin on the evening of Saturday, 21 June, with news that the Germans had cut the telephone lines into Russia and that a German deserter had brought news that the offensive would begin at four o'clock next morning, Stalin replied that it was too early to issue a warning order. He mused, 'Perhaps the question can still be settled peacefully. . . . The troops of the border districts must not be incited by any provocation, in order to avoid complications.' Implacably Zhukov confronted him with a draft directive for preparatory measures and, after insisting on some minor amendments, Stalin signed.

However, the directive did not order mobilisation nor fully alert the border troops to the danger in which they stood. In any case, it reached them too late. Even as the Leningrad, Baltic, Western, Kiev and Odessa military districts began to man their defences, the German offensive was upon them. Mass air raids and a gigantic artillery bombardment fell upon airfields and fortified zones. Behind this wall of fire the German army in the east, the *Ostheer*, moved to the attack.

Its three masses - Army Groups North (Leeb), Centre (Bock) and South (Rundstedt) - were each aligned on one of the historic invasion routes which led into European Russia,

towards Leningrad, Moscow and Kiev respectively. The first followed the coast of the Baltic, through territory Germanised by Teutonic knights and Hanseatic traders for 500 years; from it came many of the families which had officered the Prussian and German armies throughout their history. Manstein and Guderian, who were to win Hitler his greatest eastern victories, descended from landowners of those parts; Stauffenberg, who

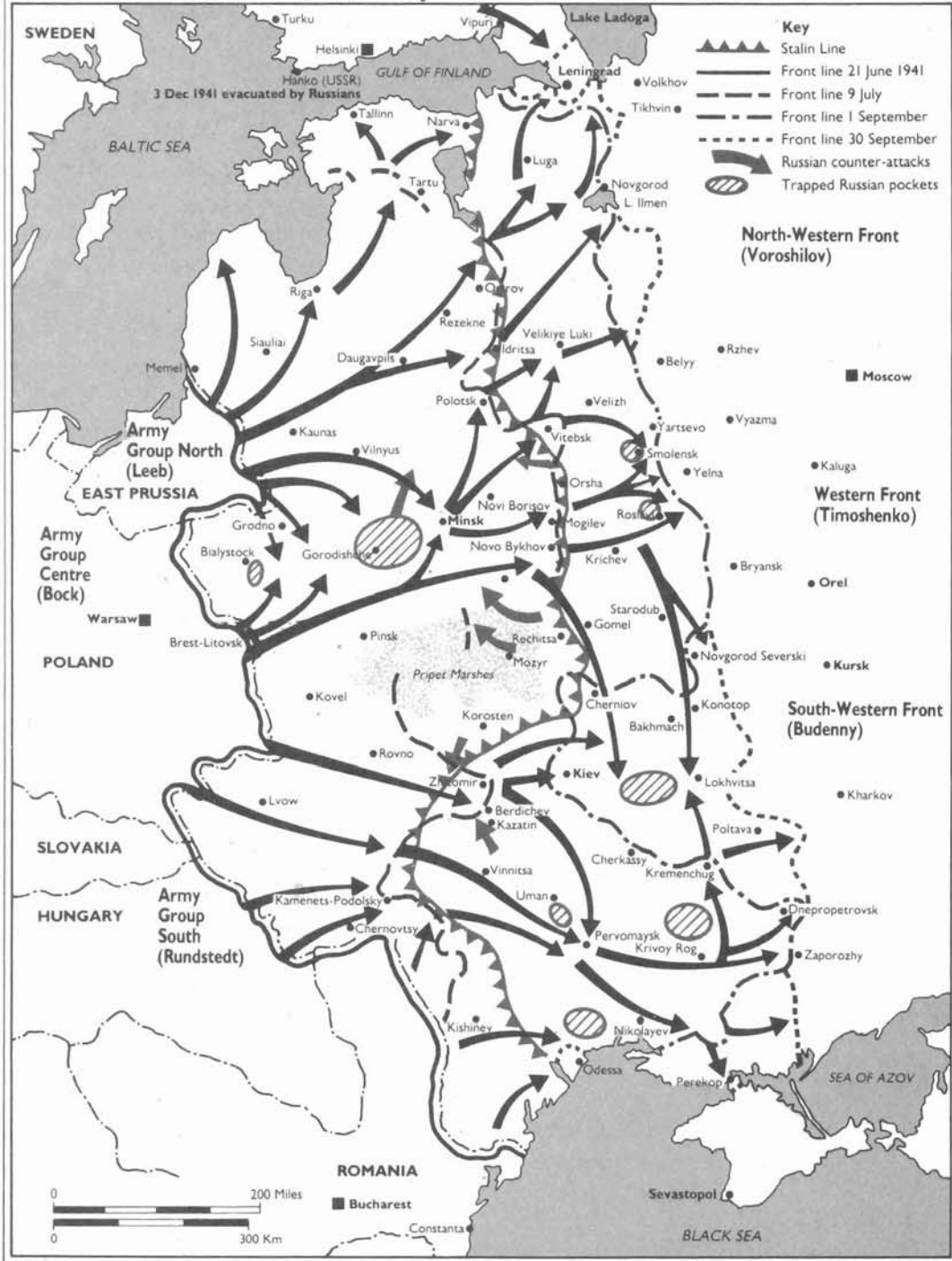
was to fail by the narrowest of margins to kill Hitler on 20 July 1944, was married to a woman born at Kovno on the river Neman. The second route was that followed by Napoleon in 1812, running through the ancient, formerly Polish cities of Minsk and Smolensk. The third, demarcated by the crest of the Carpathian mountains in the south and separated from the northern and central routes by the huge freshwater swamp of the Pripet, 'the Wehrmacht hole', as the Germany army would call it, since no military operations were possible within the 40,000 square miles it covered), led into the black-earth country of the Ukraine, Russia's wheatbowl and the gateway to the great industrial, mining and oil-bearing regions of the Donetz, the Volga and the Caucasus.

The Pripet Marshes apart, no natural barrier stood between the Germans and their objectives on any of these routes. They are crossed, it is true, by several of Russia's enormous rivers, notably the Dvina and the Dnieper, but rivers, as the French had discovered in their much more defensible country the previous year, offer little obstacle to aggressively led armies, less still if the armies are mechanised and supported by airpower. In the vast spaces of the steppe, the Russian rivers were mere interruptions in country ideally suited for armoured advance. The sparsity of the road and rail network, and the spring and autumn floods which liquefy Russia's dirt roads, were better protection. However, the Germans had deliberately chosen high, dry summer for their onslaught, while the Russians, by crowding the bulk of their standing army into the narrow frontier zone behind the thin and incomplete belt of fortifications called the Stalin Line, liberated the Wehrmacht from dependence on a road network to make rapid ground into their rear. The shallowest of penetrations would suffice to put the Russian 'fronts' (as



Above: The evolution of the plan to conquer the Soviet Union. 1. The Marcks Plan, August 1940, placing the main drives in the north through Belorussia and in the south towards Kiev. 2. The Halder variant, December 1940, which added a third major thrust, to Leningrad. The Moscow drive was strengthened at the expense of the advance on Kiev. 3. Hitler's variant (Barbarossa) of December 1940; the emphasis moved north, with Leningrad becoming the main target. The southern operation was at first intended only to occupy the western Ukraine.

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their army groups were designated) between the Panzers' jaws; thereafter they could be devoured almost at leisure by the columns of marching infantry following in the tanks' wake.

Strongest in armour and committed to the largest encirclement mission was Army Group Centre, whose spearheads were Panzer Groups 3 and 2, commanded by Hoth and Guderian. Its orders were to encircle as much of the Russian army in White Russia as possible, hack or hug it to death, and then press forward to secure the 'land bridge' between the headwaters of the Dvina and Dnieper rivers by which the Minsk-Smolensk road passes to Moscow. Its attack was prepared by the aircraft of Second Air Fleet, which on the morning of 22 June destroyed 528 Russian aircraft on the ground and 210 in the air; by the end of the day, across the whole front of the attack, the Red Air Force had lost 1200 machines, a quarter of its front-line strength.

Hoth's and Guderian's Panzers were simultaneously pressing through the Stalin Line. Brest-Litovsk, the frontier fortress city in which the Germans had dictated peace twenty-three years earlier, was isolated on the first day; V. S. Popov, commanding the XXVIII Rifle Corps, described its fortress as 'literally covered all over with uninterrupted artillery and mortar fire'. For a week it was to be defended heroically by the survivors of its garrison; but their sacrifice was irrelevant. By the time it fell it had been by-passed and the German spearheads were ranging far to its east.

Bock, commanding Army Group Centre, was nevertheless misled by the tenacity of the Brest-Litovsk defenders to believe that they were covering the withdrawal of neighbouring Russian defenders towards the Dnieper-Dvina 'land bridge'. On 24 June he accordingly put it to OKH that his Panzer groups should abandon their mission to close their first set of pincers around Minsk, 200 miles from their start-line, and proceed immediately towards Smolensk. Halder, not yet accustomed to the headless-chicken behaviour of Soviet troops at this – for them – almost leaderless stage of the war, and fearing that Hoth's Panzer Group 3 might press too deep and get cut off, refused. Hoth therefore turned inwards on 24 June. As he did so, Guderian's Panzer Group 2 began to feel the pressure of Russian troops deflected southwards by Hoth against his flank, apparently seeking to escape into the Pripet Marshes where, by Halder's estimation, they might form a 'stay behind' army and menace the German follow-up forces as they advanced to consolidate the ground the Panzers had won. Accordingly he ordered Fourth and Ninth Armies to destroy these fugitives trapped between Hoth's and Guderian's extending pincers as fast as their infantry formations could be brought forward.

By 25 June, therefore, Army Group Centre was fighting no less than three encirclement battles: one, the smallest in scale, around Brest-Litovsk; one in the salient of

German assault pioneers and infantry wait for the signal to attack in the shelter of a railway embankment on the first day of Barbarossa. Three million German troops went into Barbarossa, behind 3300 tanks and supported by over 7000 guns.



Bialystok, the most senseless of the frontier meanders in which Stalin had marooned the Red Army; and one at Volkovysk. Twelve divisions were surrounded at Bialystok and Volkovysk; by 29 June, when Army Group Centre's infantry had released the Panzer groups for a further advance, a fourth encirclement battle – threatening the destruction of another fifteen divisions – was in progress around Minsk.

These battles, moreover, were being fought with a brutality and ruthlessness not yet displayed in the Second World War, perhaps not seen in Europe since the struggle between Christians and Muslims in the Ottoman wars of the sixteenth century. Not only did many encircled Russians, unlike all but the most intransigent Frenchmen, fight with the tenacity of despair; they were attacked by the Germans with a pitiless ferocity that no Norwegian, Belgian, Greek or even Yugoslav soldier had yet had to face. Hitler had set the tone of the campaign. In an address to his generals on 30 March 1941 he had warned:

The war against Russia will be such that it cannot be conducted in a knightly fashion; the struggle is one of ideologies and racial differences and will have to be conducted with unprecedented, unmerciful and unrelenting harshness. All officers will have to rid themselves of obsolete ideologies. I know that the necessity for such means of making war is beyond the comprehension of your generals but ... I insist that my orders be executed without contradiction. The commissars are the bearers of ideologies directly opposed to National Socialism. Therefore the commissars will be liquidated. German soldiers guilty of breaking international law ... will be excused. Russia has not participated in the Hague Convention and therefore has no rights under it.

The Soviet Union had indicated on 20 August 1940 its desire to accede to the Hague Convention – which since 1907 had regulated the treatment of prisoners and non-combatants in war – but the approach was tentative: after 22 June 1941, therefore, its soldiers were protected by none of the Hague or Geneva provisions which spared those of signatory powers from mistreatment. As a result, it was not only commissars who were subjected to 'special treatment'; as Professor Omar Bartov has shown, the anti-Bolshevik indoctrination of the Wehrmacht's members, many of whom in 1941 had grown up under Nazism, resulted in the arbitrary massacre of prisoners from the start of the campaign. The commander of XLVIII Panzer Corps, for example, was obliged to protest to his soldiers only three days after the campaign had begun that 'senseless shootings of both prisoners and civilians have taken place. A Russian soldier who has been taken prisoner while wearing a uniform, and after he put up a brave fight, has the right to decent treatment.' Five days later he was forced to circulate the corps again: 'Still more shootings of prisoners and deserters have been observed, conducted in an irresponsible, senseless and criminal manner. This is murder.' But his strictures were fruitless. So common did the mistreatment of Russian prisoners become at the very outset of Barbarossa that by early 1942 another Ger-

man formation, the 12th Infantry Division, was warning its soldiers that Red Army men were 'more afraid of falling prisoner than of a possible death on the battlefield. . . . Since November last year . . . only a few deserters have come over to us and during battles fierce resistance was put up and only a few prisoners taken.' This was not surprising; word of how the enemy treats prisoners circulates with lightning rapidity inside any army. It is news equalled in importance only by that of the survival rate for wounded in the army's own hospitals – but with this difference: poor prognosis for the wounded discourages soldiers from fighting hard, while bad treatment of captives has the opposite effect. During the course of the Second World War, the Wehrmacht took 5,700,000 Russians prisoner; of these 3,300,000 died in captivity, the majority in the first year of the campaign, victims above all of the lack of provision the Wehrmacht had made for feeding, housing and transporting such myriads. The result, succinctly summarised in a document circulated inside the *Grossdeutschland* Division in April 1943, was 'a stiffening of the enemy's resistance because every Red Army soldier fears German captivity'.

Systematic maltreatment was, however, a secret to which Germans alone were privy in June and July 1941. While their Russian opponents fought doggedly, they made little effort to beat a fighting retreat out of encirclement, in part because their commanders feared the consequences of ordering any withdrawal – their conditioned fear of Stalin would shortly be validated by the institution of summary executions for dereliction – in part because they lacked the means of escape. The German infantry divisions were themselves having great difficulty in catching up with the Panzer spearheads once they launched themselves into the blue; at this stage Barbarossa was following a pattern whereby armoured divisions lunged forward at fifty miles a day, pausing only to deal with resistance or take in supplies, while the plodding infantry laboured behind across the steppe at twenty miles a day or less. Between 22 June and 28 July, for example, the 12th Infantry Division marched 560 miles, an average of fifteen miles a day, all under broiling sun and the weight of 50 lb of equipment, ammunition and rations per man. This marathon greatly exceeded in distance the march on Paris made by von Kluck's infantry in August 1914; it seems probable that the exhausted *Landser* were sustained in their agonising trek, which bloodied feet and wore shoulders raw, only by the knowledge that the Panzers were winning the battle ahead of them. The encircled soldiers of the Red Army had no such spur. Commanded by generals paralysed by fear of Stalin's disfavour and the NKVD's execution squads, denied any prospect of living to fight another day, they commonly hunkered down in the pockets the Panzers drew around them and awaited the end which would follow when their last rounds were expended.

By 9 July those in the Minsk pocket had capitulated to Army Group Centre, but its two armoured groups, now reorganised as the Fourth Panzer Army under the dynamic (and strongly Nazi) General Günther von Kluge, were already pressing far beyond Minsk to complete a fourth encirclement at Smolensk. This pocket, in which the Dnieper–Dvina 'land bridge' lay, contained by 17 July some twenty-five Russian divisions, centred on





Left: A German 240-mm howitzer, dismounted from its travelling carriage, in action against Russian fortifications in the summer of 1941. **Above:** A German armoured column on the southern front, autumn 1941, with a Panzer Mark III on the right.

Vitebsk, Mogilev and Smolensk itself, the largest concentration of Russian numbers the Germans had yet corralled. Since Army Group Centre's infantry formations on the Minsk-Smolensk axis lay anything up to 200 miles behind its Panzer spearheads at this date, Bock, who was determined to 'clean up' his front in the shortest possible space of time, was now obliged to commit his valuable Panzer and motorised (soon to be renamed 'Panzergrenadier') divisions to close combat. A cordon of tanks, half-tracks and dismounted truck-borne infantry, diverted from the Panzer drive down the Moscow road, was therefore strung round Smolensk between 17 and 25 July and drawn ever tighter around the trapped Russians until, on 5 August, all resistance came to an end.

By then, however, Bock had grasped that his difficulty in closing the ring was due not simply to the resistance of the Russians within but also to a determined effort from without to reinforce and resupply the trapped divisions. The Dnieper-Dvina gap, while it had remained open, had been used as a 'land bridge' in reverse, to carry troops and ammunition westward as fast as it could be sent by the high command. On 10 July the high command had been reorganised, as Stalin, recovering from the initial paralysis imposed by Blitzkrieg, recognised how inappropriate to war was the existing machinery. He had recently

assumed the formal title of head of government; on 10 July he created the post of Supreme Commander, to which he had the Supreme Soviet appoint him on 7 August. The State Defence Committee (GKO), consisting of Stalin, Voroshilov, Beria, Molotov (Commissar for Foreign Affairs) and Malenkov (Stalin's deputy in the party), had been set up on 30 June; directly subordinate to it was the Stavka (Operations Staff), which when reorganised on 10 July included Stalin, Molotov and Voroshilov from the party and Timoshenko, Budenny, Shaposhnikov and Zhukov from the army. The General Staff, extended to oversee all branches of the armed forces, was subordinated to the Stavka on 8 August. By then Stalin occupied all the highest appointments in the Soviet state – Chairman of the GKO, Defence Commissar and Supreme Commander – and directly controlled all the rest. This self-elevation entailed risk. The odium of defeat now attached immediately to his person. However, so desperate was Russia's situation, after less than two months of war, that Stalin must have accepted he could not survive the consequences of further disaster. Victory alone could save him.

— The carrot and the stick —

There was almost no shift or expedient at which Stalin would not grasp in this supreme crisis of the Soviet state to assure its survival – as well as his own. In September he decreed the creation of new units of 'Guards', quintessential symbols of the *ancien régime*; in 1917 Guards officers had had the skin stripped from their hands in revolutionary hatred of the white gloves they had traditionally worn. Now Stalin decreed that regiments, divisions, even armies which resisted the Germans most stoutly should add 'Guards' to their titles. New distinctions were meanwhile created for heroes and victors, named after the generals who had fought Napoleon: the Orders of Kutuzov and Suvorov. Old distinctions of rank were soon to be revived, including the 'shoulder boards' which had been torn from officers' uniforms in 1917. Even the hierarchy of the Orthodox Church, persecuted and vilified for two decades, was suddenly restored to esteem as the servant of 'Mother Russia', a matriarch resurrected by the autocrat who had violated her children without pity in the era of collectivisation and the purges.

But with the carrot went the stick. The 'dual authority' of the commissars was restored on 16 July; on 27 July an order sentencing nine senior officers to death was read out to all officers and men. The condemned included the signals officer of the Western Front and the commanders of the Third and Fourth Armies and of the 30th and 60th Rifle Divisions. Others were shot in secret, or simply committed suicide rather than face the executioners of the NKVD; its 'Special Sections' (how terrible a meaning did 'special' acquire in the Second World War – 'special leader', 'special command', 'special treatment', all spelt death to the defenceless and disfavoured) were deployed in the rear of the fighting units to shoot deserters and menace with machine-guns those who even thought of quitting their posts.

Yet the difficulty of sustaining resistance grew greater with every day of combat. On 10 July three fronts had been set up – North-Western, nominally commanded by Voroshilov, Western, under Timoshenko, and South-Western, under Budenny – to correspond with the three German army groups attacking them. This was a rational means of bringing under command the reinforcements and supplies which the GKO was mobilising for the defence. In July 1941, however, new men and equipment were scarcely to be found; while existing units and weapons were being consumed like chaff in the furnace of battle. By 8 July, OKH reckoned it had destroyed 89 out of 164 Russian divisions identified; as a running check on that estimate, Army Group Centre was able to show that it had captured 300,000 prisoners, 2500 tanks and 1400 guns (the majority with their crews dead about them, so tenaciously did the Russian gunners fight). Stalin himself counted 180 divisions committed to battle, out of 240 mobilised; he hoped eventually, if Hitler would allow him the time, to raise 350. At present, however, replacements were being used up as soon as found: during the Smolensk encirclement battle (4–19 July), Army Group Centre's fourth, another 310,000 prisoners were taken, along with 3200 tanks and 3100 guns. Russian industry, suddenly thrown into high gear, was producing 1000 tanks a month (and 1800 aircraft) but losses exceeded these figures.

As Army Group Centre completed its destruction of the Soviet Sixteenth, Nineteenth and Twentieth Armies in the Smolensk pocket, Army Group North was accelerating its rate of advance along the Baltic coast towards Leningrad. Lakes, forests and rivers had impeded Leeb's spearheads at the outset. Although he had only three Panzer divisions at his disposal and he achieved no encirclement as spectacular as Bock's, by 30 June Army Group North had occupied Lithuania and secured bridgeheads across the lower reaches of the Dvina where the Stalin Line was supposed to run. Racing through it, Panzer Group 4 arrived at Ostrov, on Latvia's pre-1940 frontier with Russia, and ten days later stood on the Luga, only sixty miles from Leningrad and the last major water obstacle outside the city.

Army Group South had initially made slower progress than Centre and North. Commanded by Rundstedt, who had directed the great breakthrough across the Meuse thirteen months earlier, it consisted of two disparate blocs, a northern *masse de manoeuvre* of German infantry led by the five armoured divisions of Panzer Group 1, and, to the south, the allied contingent formed of Romanian and Hungarian divisions, equipped with inferior French weapons supplied during the years of the Little Entente. The satellite divisions' mission was to cross the rivers Dniester and Bug and capture Odessa and the Black Sea ports, while the German infantry and tanks marched deep into the steppe towards Kiev, capital of the Ukraine and founding city of Russian civilisation. Rundstedt's vanguards passed easily through the Soviet frontier defences, swamping the fortifications of Przemysl, which had sustained siege for 194 days in 1914–15. It then ran up against a major concentration of Soviet force belonging to the South-Western Front, under the direction of one of Stalin's best generals, Kirponos, whose political commissar was Nikita Khrushchev, the future First Secretary of the Soviet Communist Party, with the outstanding

General K. K. Rokossovsky as one of his tank commanders. The South-Western Front was particularly strong in armoured formations – it contained six mechanised corps – and had a high proportion of the T-34s in service. Kirponos determined to deal with Rundstedt's Blitzkrieg in absolutely correct fashion, by pinching the spearheads of Kleist's Panzer Group 1 between concentric attacks mounted by the Fifth and Sixth Armies; Fifth, operating out of the impenetrable marshes of the Pripet, had a firm base for its thrust; Sixth, whose positions were in the open steppe, did not. Although both armies pressed their attacks, their pincers never met and Kleist pushed between to capture Lvov (as Lemberg the Austrian capital of Galicia until 1918, then a Polish city until 1939) on 30 June. The commander of the garrison was General A. A. Vlasov, who managed to fight his way out on this occasion; a year later he would fall into German hands near Leningrad and defect, to set up the 'Vlasov Army' of anti-Stalinists. His loyalty to the regime may have been shaken during the evacuation of Lvov, when the local NKVD massacred its Ukrainian political prisoners rather than let them be liberated by the Germans.

Kirponos persisted in his efforts to mount 'pinching' operations against Kleist's Panzers on 29 June and 9 July; but the power of the Panzers and the flail of the Luftwaffe kept Rundstedt's spearhead moving forward, increasingly constricted within a narrow axis of advance, to be known as the 'Zhitomir Corridor', but reaching inexorably towards Kiev. On 11 July Kirponos held a command conference at Brovary, only ten miles east of the city. It was there decided that the Fifth and Sixth Armies – shadows of their former selves, despite constant reinforcement and re-equipment – should continue to hack at the approaching Germans. He was counting on the arrival of two new corps, LXIV and XXVII, to lend weight to their efforts, though, according to Professor John Erickson, what he had heard disturbed him: 'short of weapons, horse-drawn guns, disorganised staffs, no wireless sets; [in XXVII Corps] only one division had a commander.' As the military soviet of the South-Western Front dispersed from the conference, in gloom approaching despair, the headquarters came under heavy German air attack. Kirponos had already glimpsed the danger to which his failure to pinch off Kleist's penetration of his front exposed Kiev, and indeed his whole command: Panzer Group 1's advance now constituted one arm of a counter-pincers; should the Germans bring down tanks from the north, from Bock's Army Group Centre, a second pincer arm would be created and he, his men and the whole of the Ukraine would be enveloped within it.

— The question of Moscow —

The same thought was simultaneously exercising Hitler. He and the army high command had differed in their view of how the Russian campaign should be fought from the moment of initial planning a year earlier. Their differences had been significantly reconciled in the Barbarossa directive of December 1940. But OKH, and particularly Halder, still believed that the Russians' fighting power could best be overcome by driving

headlong at Moscow, while Hitler was above all anxious to seize as much Russian territory as possible in one gulp, devouring the Russians defending it in giant encirclements on the way. His confidence as a commander, however, was rapidly increasing. He had left the conduct of the Polish campaign to his generals, and had largely been talked into the Scandinavian invasions by Admiral Raeder. Before and during the campaign in the west he had given his generals orders but had also suffered from severe attacks of indecision and second thoughts, notably outside Dunkirk. Since the inception of Barbarossa, however, he had found an increasing certitude. It was in the fullest sense his war, it had started triumphantly, and as its course developed he grew overbearing in its direction. 'The Führer's interference is becoming a regular nuisance,' wrote Halder on 14 July; a little later, he enlarged on this theme:

He's playing warlord again and bothering us with such absurd ideas that he's risking everything our wonderful operations so far have won. Unlike the French the Russians won't just run away when they've been tactically defeated; they have to be defeated in a terrain that's half forest and marsh. . . . Every other day now I have to go over to him [Hitler's headquarters and those of OKH, though close to each other at Rastenburg in East Prussia, were separate entities]. Hours of gibberish, and the outcome is there's only one man who understands how to wage wars . . . if I didn't have faith . . . I'd go under like Brauchitsch [the army C-in-C] who's at the end of his tether and hides behind an iron mask of manliness so as not to betray his complete helplessness.

Hitler's differences with Halder and OKH emerged into the open on 19 July when he issued a new Führer Directive, No. 33, outlining his conception of the next stage of operations. It laid down that Army Group Centre's two Panzer groups, 3 (Hoth) and 2 (Guderian), were to be diverted from the drive on Moscow to co-operate respectively with Leeb and Rundstedt in their advances on Leningrad and Kiev. A supplement, issued on 23 July, ramméd the point home. The drive on Moscow was postponed until mopping-up operations around Smolensk had been completed. In amplification of this order, Brauchitsch issued orders to Army Group Centre which Guderian was called to hear at a conference at Novi Borisov on 26 July. There he was directed to take his tanks off the Moscow road and lead them southwards to destroy the Soviet Fifth Army on the fringe of the Pripet Marshes.

Guderian was outraged. His divisions had been reduced by heavy fighting and long traverses of roadless country to 50 per cent of their tank strength. On the other hand, his leading elements, which had already advanced 440 miles in six weeks, stood only 220 miles from Moscow and, in the period of dry weather that could be guaranteed before the coming of the autumn rains, might certainly be led to reach the capital. As he had been promoted to the status of army commander at Novi Borisov, he was also now independent of Kluge (for whom he nursed a reciprocated antipathy) and so answerable

directly to Bock, whose views coincided with his own. With Bock's acquiescence, in which OKH tacitly joined, he therefore embarked on a delaying operation to frustrate Hitler's re-ordering of the Barbarossa strategy. It took the form of involving his Panzer group (re-named Panzer Army Guderian) in a battle for the town of Roslavl, seventy miles south-east of Smolensk, where the roads to Moscow, Kiev and Leningrad met. His purpose was to entangle his forces so deeply with the Russian defenders that the justification for their diversion to assist Rundstedt would be overtaken by events and so allow him to proceed towards Moscow as originally ordered.

Guderian's disguised insubordination almost worked. His argument for heightening the pressure at Roslavl was validated by the appearance of Russian reserves in that sector, sent to Timoshenko by Stalin from the training units and hastily embodied militias which were now his only source of fresh troops. Moreover, Hitler had had second thoughts. In Führer Directive No. 34, issued on 30 July, he postponed the diversion of Army Group Centre's Panzer groups to assist their tank-poor neighbours and arranged to visit Army Group Centre on 4 August to assess its situation for himself (a dangerous excursion, did he but know it, for its headquarters was the focus of the 'military resistance' which would strike against him in July 1944). Hoth, commanding Panzer Group 3, accepted the Führer's arguments for going to the assistance of Leeb on the Leningrad axis. Bock and Guderian resisted his arguments for joining Rundstedt. There followed what has been called a 'nineteen-day interregnum' during which Guderian edged southwards but attempted to retain the bulk of his striking force on the Moscow road.

The 'nineteen-day interregnum' (4-24 August), which may well have spared Stalin defeat in 1941, was characterised not only by slow German progress on all fronts but also by a succession of changes of mind. On 7 August, OKW and OKH conferred, and Jodl and Halder were able to persuade Hitler of the need to resume the advance on Moscow, which resulted in Führer Directive No. 34A. Three days later he took fright at renewed resistance on the Leningrad front and insisted that Hoth's tanks depart immediately to Leeb's assistance. The Führer, Jodl told Colonel Adolf Heusinger, the OKW operations officer, 'has an intuitive aversion from treading the same path as Napoleon; Moscow gives him a sinister feeling.' When the whole chain of command – Brauchitsch, Halder and Heusinger at OKW, Bock at Army Group Centre, Guderian as Bock's principal field commander – demonstrated that it was continuing to prevaricate, Hitler, who had recovered his sense of how the campaign was unfolding, lost patience. He repeated his orders that Army Groups North and South should proceed to their objectives and dictated a letter to Brauchitsch accusing him of a lack of 'the necessary grip'. Brauchitsch suffered a mild heart attack. Halder, who had urged him to resign when the letter arrived, did so himself 'to stave off an act of folly'. It was refused; Hitler, now as later, treated offers of resignation as acts of insubordination. Halder nevertheless felt that 'history will level at us the gravest accusation that can be made of a high command, namely that for fear of undue risk we did not exploit the attacking impetus of our troops.' Bock, in his diary, echoed his frustration: 'I don't want to

“capture Moscow”. I want to destroy the enemy’s army and the bulk of that army is in front of me.’ Both left it nevertheless to their subordinate Guderian to confront the Führer with the boldest statement of their anxiety. Overcome by Guderian’s exposition of what he believed to be the strategically correct path, when Halder visited Bock’s headquarters on 23 August Bock telephoned Schmundt, Hitler’s Wehrmacht adjutant, with a request for Guderian ‘to be granted audience’, while Halder agreed to take him back to OKW in his liaison aircraft.

Arriving in time to make the onward journey to the Rastenburg evening conference (Hitler had recently instituted a timetable for meeting his staff officers at noon and midnight), Guderian was greeted by Brauchitsch with the news: ‘I forbid you to mention the question of Moscow to the Führer. The operation to the south [the Kiev attack] has been ordered. The problem now is simply how it is to be carried out. Discussion is pointless.’ Guderian grudgingly obeyed, but in the course of the confrontation dropped so many hints about the ‘major objective’ on Army Group Centre’s front that Hitler eventually raised it himself. Given his chance, Guderian launched into an impassioned plea for sustaining the drive on Moscow. He was heard out; Hitler had a special regard for the Panzer pioneer, which had recently been reinforced by his acceptance of Guderian’s warnings of Russia’s unanticipated tank strength. However, when the general had spoken, the Führer went on to the offensive. His commanders, he said, ‘know nothing about the economic aspects of war’; he explained the necessity of seizing Russia’s southern economic zone from Kiev to Kharkov, and emphasised the importance of capturing the Crimea, from which the Soviet air force menaced Hungary’s Ploesti region, still the main source of Germany’s natural oil supply. Since the other officers present made it clear that they supported the leader, and Brauchitsch and Halder had pointedly not accompanied him, Guderian felt obliged to desist from opposition. The only concession he extracted was that his Panzer group should be committed to support Rundstedt in its entirety and allowed to return to the Moscow axis as soon as the battle for Kiev was won. Halder and Brauchitsch were loud in recriminations to his face when he returned to OKH from OKW, and Halder vilified him to Bock on the telephone during his homeward flight to Novi Borisov. But the die was now cast. After nearly three weeks of inertia, the *Ostheer* was to resume the attack with a full-blooded offensive into the black-earth region of the south. Whether it could then complete its thrust towards Moscow would depend on the seasons. The descent of the cold weather was only two and a half months distant and then Generals January and February would be fighting on Stalin’s side.

Stalin, however, was already planning a counter-offensive. On 16 August he had created the Bryansk Front, under A. I. Yeremenko, to close the gap which had appeared between the Central and South-Western Commands (temporary headquarters superior to fronts). To this new front he consigned as much of the new Soviet equipment as could be spared, several T-34 tank battalions and some batteries of Katyusha rockets (‘Stalin organs’ the Germans called them) which fired eight fin-stabilised projectiles with very large war-

heads. With these weapons and two new armies, the Thirteenth and Twenty-First, Yerenko attempted to counter-attack into the gap which yawned between Rundstedt's armoured spearhead, supplied by Kleist's Panzer Group 1, and Guderian's Panzer Army, approaching from the north. He was simply putting his head into a trap. Kleist had already pulled off a successful encirclement of 100,000 Russians at Uman on 8 August. The converging Panzer groups now stretched out their pincers to enclose the much larger Russian concentration around Kiev. Guderian, who offered an exposed flank eventually 150 miles long as he beat his way southward from the Moscow axis, was vulnerable to a Russian slicing stroke; but his 3rd and 17th Panzer Divisions, led by thrusting young generals, Walter Model, a future army group commander, and Ritter von Thoma, who was to make his name in the desert against the British, brooked no opposition. They drove forward and on 16 September joined hands with Kleist's tank force at Lokhvitsa, a hundred miles east of Kiev. It would take another ten days, during which the Second and Fourth Air Fleets saturated the pocket with bombs, to close all the gaps in its walls through which escaping handfuls of Russians managed to filter. However, on 26 September it had been securely enclosed and 665,000 Russian soldiers were prisoners within it – the largest single mass ever taken in an operation of war before or since. Five Russian armies and fifty divisions had been destroyed, uncounted thousands killed; they included Kirponos, mortally wounded in an ambush close to his final command post at Lokhvitsa on 20 September.

The aftermath of the Kiev encirclement yielded the worst of the spectacles which horrified even the hardest-hearted among the German conquerors, as the captives were marched back across the steppe to the wholly inadequate prisoner cages in the rear. 'We suddenly saw a broad, earth-brown crocodile slowly shuffling down the road towards us,' recorded an eyewitness. 'From it came a subdued hum, like that from a beehive. Prisoners of war, Russians, six deep. . . . We made haste out of the way of the foul cloud which surrounded them, then what we saw transfixed us where we stood and we forgot our nausea. Were these really human beings, these grey-brown figures, these shadows lurching towards us, stumbling and staggering, moving shapes at their last gasp, creatures which only some last flicker of will to live enabled to obey the order to march? All the misery of the world seemed to be concentrated there.' Nearly 3 million Russians had now been taken prisoner and of these half a million would die, of lack of shelter or food, in the first three months of the approaching winter.

— 'General Winter' —

The sense of the approaching winter had already started to touch the whole of the *Ostheer* in late September, with its threat first of liquefied roads and swollen rivers, then of blizzards and snowdrifts which its men and equipment were equally unprepared to meet. Guderian was hastening his Panzer army back to the central front, burning with anxiety to open the final drive on Moscow before the weather broke. To the south, the Romanians

were laying siege to Odessa, which was defended by a hastily constituted Special Maritime Army of 100,000 men and would not fall until 16 October, and the Eleventh Army, commanded by Erich von Manstein, was pushing on across the estuary of the Dnieper to reach the neck of the Crimea on 29 September. That thrust largely settled Hitler's fear that the Crimea might be turned into an unsinkable aircraft carrier for the bombardment of the Hungarian oilfields. Manstein's advance also brought the coastal industrial region of the Donetz and the Don under threat. Nevertheless, the unloosening of the Red Army's grip on Russia's southern provinces and the reassembly of Bock's striking force on the central front for a renewed drive on Moscow did not constitute a comprehensive solution to the development of the Barbarossa strategy. The unlocking of the northern front and the investment and eventual capture of Leningrad were also a necessary stage in the conquest.

Army Group North's concerted effort to take Leningrad had begun on 8 August with a determined assault on the line of the river Luga, the outermost line of the city's defences, which was to be co-ordinated with a Finnish-German offensive across the isthmus of Karelia – annexed by Stalin after the defeat of Finland in 1940 – and extending far northward towards the Arctic Circle. Leeb's offensive was complicated by three factors. The first was that Leningrad was protected from the rear by Lake Ladoga, an enormous body of water interposing between the city and any encirclement from the north. The second was that the Leningrad command had mobilised the city's population to construct concentric defence lines around the city, including 620 miles of earthworks, 400 miles of anti-tank ditch, 370 miles of barbed-wire entanglement and 5000 pillboxes – an extraordinary labouring effort to which 300,000 members of the Young Communist League and 200,000 civilian inhabitants, including women in equal numbers to men, were committed. The third factor was that Marshal Carl Gustav Mannerheim, the Finnish leader, was determined, even at this low point in Soviet fortunes, to give no hostages by capturing more territory than that to which he had title. While Leeb laboured forward along the Baltic coast, therefore, Mannerheim's Finnish units hung fire above Lake Ladoga after 5 September, when the tanks of Hoth's Panzer group, detached from Army Group Centre following the Hitler-Guderian conclave of 23 August, were returned to Army Group Centre. Hoepner's Panzer Group 4 was left by itself to breach Leningrad's fortifications and take the city.

A fourth impediment to Leeb's Leningrad *Blitzkrieg* emerged in mid-September. Zhukov, who had advised Stalin to abandon Kiev before it was encircled and for his pains had been dismissed as chief of staff, arrived at the North-Western Front on 13 September to energise the defences. He found the Germans on the outskirts of the old tsarist capital; Tsarskoe Selo (now called Pushkin), the Russian Versailles, had fallen on 10 September (its enchanting follies and pavilions, like those of the Peking Summer Palace designed by imported Western architects, were to perish in a conflagration caused by the invaders). Shortly afterwards Leeb's vanguards reached the Gulf of Finland at Strelna. Leningrad, isolated from the rest of Russia by the Finnish advance to the 1939 frontier and by Leeb's

occupation of the Baltic littoral, now connected with the interior only by the water route across Lake Ladoga. The lifeline was tenuous and erratic; Leningraders quickly felt the constriction and would shortly begin to experience the pangs of starvation which would kill a million of them before the lifting of the siege in the spring of 1944. In the immediate term, however, Zhukov's arrival had achieved a decisive effect. His first order was 'to smother the enemy with artillery and mortar fire and air support, permitting no penetration of the defences'. Under his resolute command, the energy of Hoepner's Panzer assaults was broken in the lines of trenches and concrete that the citizens of Leningrad had constructed. The situation has 'worsened considerably', Leeb reported to the Führer's headquarters on 24 September; Finnish pressure in Karelia had 'quite stopped'; the city, with its 3 million inhabitants, was intact. German bombardment was inflicting a toll of 4000 civilian casualties a day and starting 200 fires; but the great enceinte of canals and classical palaces remained impervious to the Panzer thrust. Only twenty tanks took part in the final assault. Hitler had already decided that the bulk of Hoepner's Panzer Group 4 must be diverted to the climacteric Operation Taifun (Typhoon), to take Moscow.

Führer Directive No. 35, which resolved the ambiguity of the Barbarossa strategy inherent in its direction since OKH and OKW had each presented their conception of the campaign's conduct a year earlier, was issued on 6 September. It laid down that, following the encirclement and destruction of the Red Army on the front of Army Group Centre, Bock was 'to begin the advance on Moscow with [his] right flank on the Oka and [his] left on the Upper Volga'. Panzer Groups 2 and 3 were to be reinforced by Hoepner's Panzer Group 4 brought from the Leningrad front to assure the largest possible breakthrough effort on the Moscow axis. The principal aim of the operation was the defeat and annihilation of the Russian forces blocking the road to Moscow 'in the limited time which remains available before the onset of the winter weather'.

The army which set off on the last stage of the road to Moscow in late September was greatly different from that which had crossed the frontier ten weeks earlier. Battle deaths, wounds and sickness had reduced its strength by half a million, casualties not to be compared to the ghastly loss suffered by the Red Army but clearly enough to depress morale at the front and cast a pall of misery and apprehension over family life in the Reich. The war diarist of the 98th Infantry Division, diverted northward from Kiev to the Moscow front, recorded the ordeal of its 400-mile march.

The modern general-service carts with their rubber tyres and ball-bearing mounted wheels had long since broken up under the stress of the appalling tracks, and been replaced by Russian farm carts. Good-quality German horses [600,000 had begun the campaign] foundered daily through exhaustion and poor food but the scrubby Russian ponies, although in reality too light for the heavy draught work they were doing, lived on eating birch twigs and the thatched roofs of cottages. Equipment, including many tons of the divisional reserve of ammunition, had to be abandoned

at the roadside for lack of transport to carry it. Gradually the most simple necessities of life disappeared, razor blades, soap, toothpaste, shoe-repairing materials, needles and thread. Even in September and before the advent of winter, there was incessant rain and a cold north-east wind, so that every night there was the scramble for shelter, squalid and bug-ridden though it usually was. When this could not be found the troops plumbed the very depths of wretchedness. The rain, cold and lack of rest increased sickness that, in normal circumstances, would have warranted admission to hospital; but the sick had to march with the column over distances of up to twenty-five miles a day, since there was no transport to carry them and they could not be left behind in the bandit-infested forest. The regulation boots, the *Kommissstiefel*, were falling to pieces [in the coming winter their iron-nailed soles would accelerate the onset of frostbite]. All ranks were filthy and bearded, with dirty, rotting and verminous underclothing; typhus was shortly to follow.

The realities of conquest can rarely have been much different. Alexander's hoplites entered Persepolis almost barefoot, Wellington's redcoats came to Paris in rags. Neither of those great victors' armies, however, stood at risk from the Arctic winter. Both, moreover, had already defeated the enemy's main force before they entered his capital. The *Ostheer* had a great battle ahead of it before it could be certain of finding shelter in Moscow. The opening stages promised well. In an encirclement rivalling that of Army Group South's at Kiev, Centre's Panzer groups, Hoth's and Hoepner's (detached from the Leningrad front), surrounded 650,000 Russians between Smolensk and Vyazma. Many gave up without a fight; they were the hastily embodied militiamen of the *Osoviakhim*, the pre-war citizen defence force on which Stalin drew for his reserves. Others fought more doggedly. Guderian, visiting the 4th Panzer Division, found 'descriptions . . . of the tactical handlings of the Russian tanks very worrying'. (It had recently encountered T-34s for the first time.)

Our defensive weapons available at that period were only successful against the T-34 when the conditions were unusually favourable. The short-barrelled 75-mm gun of the Panzer IV was only effective if the T-34 was attacked from the rear; even then a hit had to be scored on the grating above the engine to knock it out. It required very great skill to manoeuvre into a position from which such a shot was possible. The Russians attacked us frontally with infantry, while they sent in their tanks in mass formations against our flanks. They were learning.

Even more ominously, he reported in his war diary on 6 October the first snowfall of the approaching winter. It melted quickly, leaving the roads, as before, liquid mud. It was difficult to know, at that stage, which was preferable – a prolonged autumn, with all the difficulties of movement that that rainy season brought, or an early winter, which made for firm, frozen going on the roads but threatened blizzards before the final objective was

reached.

Stalin could repose no solid hopes in the turn of the seasons. Winter might save Moscow; it might not. There was the gravest doubt whether the remains of the Red Army in European Russia could do so. It had now been reduced to a strength of 800,000 men, divided into ninety divisions, with 770 tanks and 364 aircraft; nine of the divisions were of cavalry, only one – and thirteen independent brigades – of tanks. A large army was stationed in the Russian Far East, but it could not be moved while there was still the danger of war with the Japanese, whom the Russians had fought in Mongolia only two years previously. Hitler, by contrast, had now increased the strength of Army Group Centre itself to eighty divisions, including fourteen Panzer and eight motorised, supported by 1400 aircraft; the other two army groups, though depleted by tank transfers to the Moscow front, retained the bulk of their infantry and were sustaining their pressure against Leningrad and into the southern steppe.

In this supreme crisis Stalin turned again to Zhukov. Though their disagreement in the summer had led to Zhukov's removal as chief of staff, Stalin recognised his superlative talents which had recently if only temporarily saved Leningrad. Now, on 10 October, he was called south to energise the defence of Moscow. Rumours of panic were already touching the city; Red Air Force pilots who on 5 October reported German columns fifteen miles away driving towards it were threatened with arrest by the NKVD as 'panic-mongers'; on 15 October, however, fear took hold in earnest. The 'Moscow panic' began with a warning by Molotov to the British and American embassies to prepare for an evacuation to Kuibyshev, a city 500 miles eastward on the Volga. According to Professor John Erickson, 'The real crisis, however, spilled on to the streets and into plants and offices; a spontaneous popular flight added itself to the hurried and limited evacuation, accompanied by a breakdown in public and Party disciplines. There was a rush to the railway stations; officials used their cars to get east; offices and factories were disabled by desertions.' The panic was not merely unofficial. 'Railway troops were told to mine their tracks and junctions . . . sixteen bridges deep within the city were mined and crews at other mined objectives issued orders to blow their charges "at the first sight of the enemy".'

Zhukov, however, kept his nerve. As at Leningrad, he mobilised citizens, 250,000 Muscovites (75 per cent women), to dig anti-tank ditches outside the city. He brought proven commanders, including Rokossovsky and Vatutin, to the threatened front and he concentrated every reserve that Stalin could send him on the Moscow approaches. Stalin, too, found a public resolution he had not always shown in the closed meetings of the Politburo and the Stavka earlier in the campaign. At the traditional Red Square parade held to commemorate the October Revolution on 7 November, even though Bock's Panzers were only forty miles from the Kremlin, he denounced those who thought 'the Germans could not be beaten', declared that the Soviet state had been in greater danger in 1918 and invoked the name of every Russian hero – pre-, post- and even anti-Revolutionary – to stiffen the sinew of his audience. Inspired by those 'great figures', and fighting under 'great



Women citizens of Moscow digging an anti-tank ditch in the path of Army Group Centre's advance in October 1941.

Lenin's victorious banner', with or without the opening of the 'Second Front' promised by the British, he forecast the Red Army's eventual triumph.

The first frosts of winter were now hardening the ground for the enemy, and the Panzer groups were making faster progress towards Moscow than they had done in October. Their tank strength, however, was reduced to 65 per cent, and Guderian, Hoth and Hoepner were all concerned about their ability to push their spearheads to the final objective. Accordingly, on 13 November Halder arrived from OKW at Army Group Centre's headquarters at Orsha to canvass opinion from the army group chiefs of staff – Sodenstern of South, Griffenberg of North, Brennecke of Centre – as to the further conduct of the campaign. Should the *Ostheer*, he asked, make a final dash or instead dig in for the winter to await fairer weather for a culminating victory next year? Sodenstern and Griffenberg, respectively overstretched and blocked on their fronts, answered that they wished to halt. Brennecke replied that 'the danger we might not succeed must be taken into account, but it would be even worse to be left lying in the snow and the cold on open ground only thirty miles from the tempting objective' – Moscow. Since Hitler had already

told Halder (who was himself already looking beyond Moscow) that this was the answer he wanted, the issue was decided on the spot.

— ‘The flight to the front’ —

The final stage of Operation Typhoon began on 16 November. It was organised as a double envelopment of the Moscow defences, Panzer Groups 3 and 4 moving towards Kalinin north of the city, Panzer Group 2 towards Tula in the south. It was to become known in the *Ostheer* as the *Flucht nach vorn*, ‘the flight to the front’, a desperate attempt, like Napoleon’s in 1812, to get to Moscow for shelter from the snows. But between the *Ostheer* and the city stood Zhukov’s last line of defence, the Mozhaisk position, which included the man-made Sea of Moscow to the north of the city and the river Oka to the south.

Despite the arrival of some reinforcements, the Mozhaisk position at first did not hold. Guderian, blocked at Tula, merely swung his Panzer group around the town and chose a new axis for his advance on Moscow. To the north, the German Ninth Army broke through to the Sea of Moscow and the Volga Canal on 27 November, linking up with Panzer Group 3; the 7th Panzer Division, Rommel’s old command, actually got across the canal on 28 November.

The German effort was now at crisis-point. At Krasnaya Polyana, Panzer Group 3 stood only eighteen miles from Moscow. The Fourth Army, with its outposts at Burtsevo, was only twenty-five miles from the city. Guderian’s Panzer Group 2 was sixty miles away to the south. There is a legend that in the following days an advance German unit saw the golden domes of the Kremlin illuminated by a burst of evening sunshine and that a patrol even penetrated an outlying suburb. If it did, that was the last flicker of energy from an army expiring on its feet. The Russian winter in all its cruelty, unknown and unimaginable to a Westerner, was now beginning to bite; the season was approaching when temperatures would fall below -20 degrees Celsius, inflicting on the *Ostheer* 100,000 frostbite casualties, of whom 2000 would suffer amputations. After 25 November, Guderian’s Panzer Group 2 made no further advance, having failed to take Kashira on the main southern rail line; on 27 November he ordered a halt. After 29 November there was no movement by the northern pincer either, both Ninth Army and Panzer Group 3 having lost the ability to drive forward. Bock, writing to Halder at OKH on 1 December, explained Army Group Centre’s predicament:

After further bloody struggles the offensive will bring a restricted gain of ground and it will destroy part of the enemy’s forces but it is most unlikely to bring about strategic success. The idea that the enemy facing the army group was on the point of collapse was, as the fighting of the last fortnight shows, a pipe-dream. To remain outside the gates of Moscow, where the road and rail systems connect with almost the whole of eastern Russia, means heavy defensive fighting. ... Further offensive

action therefore seems to be senseless and aimless, especially as the time is coming very near when the physical strength of the troops will be completely exhausted.

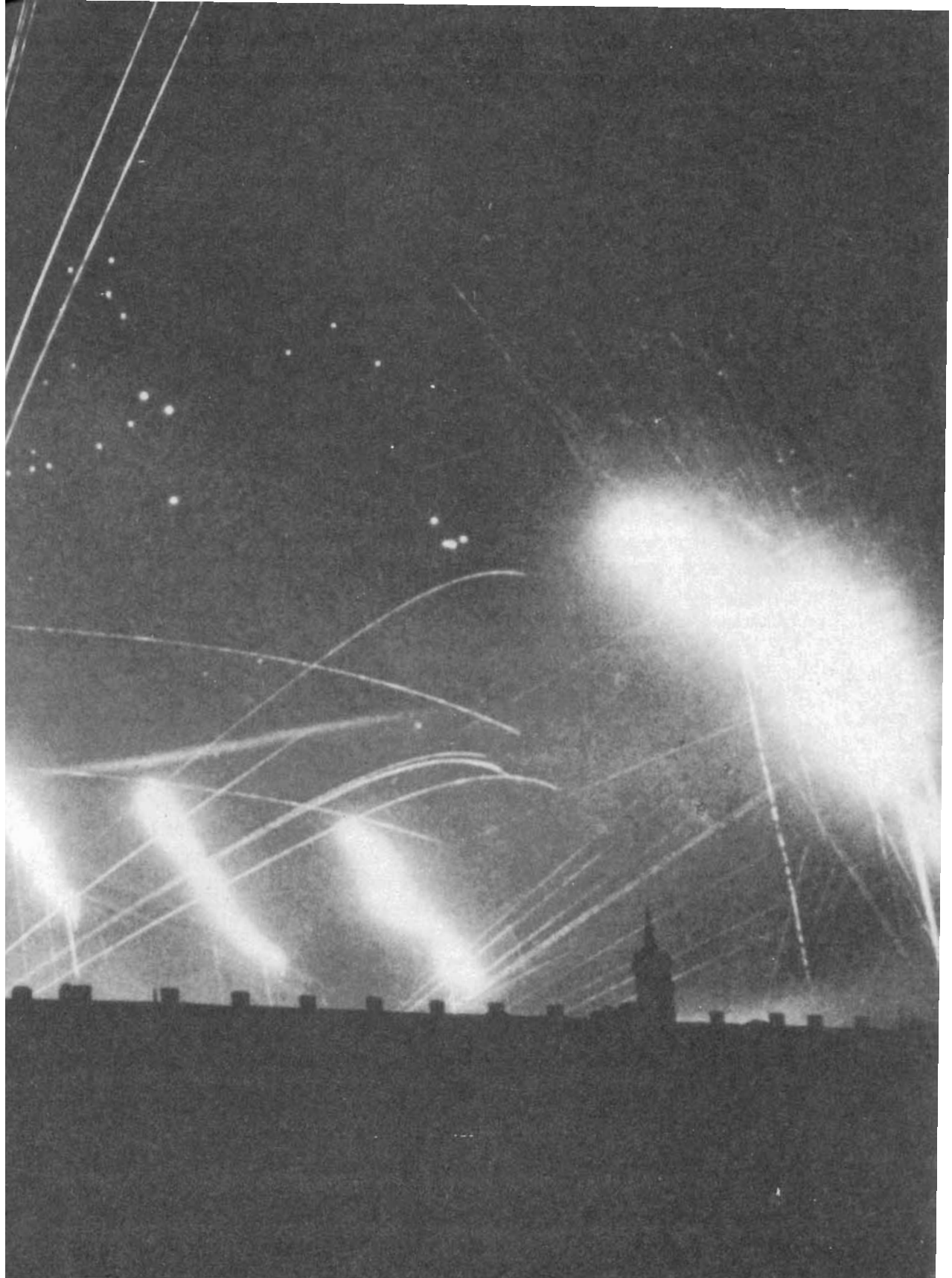
By the first week of December the ordinary German soldiers of the fighting divisions were almost incapable of movement. Jodl had refused to allow the collection or supply of winter clothing, lest its appearance cast doubt on his assurances that Russia would collapse before the coming of the snows. The men in the firing line stuffed torn newspaper inside their uniforms to repel the cold. Such expedients worked scarcely at all. The Russians, by contrast, were accustomed to and equipped against the temperature; every Russian, military or civilian, possessed a pair of felt boots which experience proved best protected feet against frostbite (America was to supply 13 million pairs during the course of the war) and the Red Army accordingly continued to manoeuvre while the *Ostheer* froze fast.

In the meantime Army Group South had occupied the Crimea (except for Sevastopol) during November. Late in that month, Timoshenko's front met Rundstedt's Panzers head on at Rostov-on-Don (the 'gateway to the Caucasus' and so to Russia's oil), recaptured the city on 28 November after it had been in German hands for only a week, and then forced them back to the line of the river Mius, fifty miles behind Rostov, where they dug in for the winter. Army Group North was meanwhile halted outside Leningrad and after 6 December driven back from Tikhvin, its furthest point of advance along the southern shore of Lake Ladoga. There it established a winter line which subjected the city to slow starvation – a million were to die in the three-year siege, the majority in the first winter – but did not quite cut it off from supply across the lake, by ice-road in winter, later by boat.

The Red Army's great manoeuvre, however, began outside Moscow on 5 December. Reinforcements had been found from new waves of conscripts and from the output of her mobilised factories; a few tanks had even arrived by Arctic convoy from Britain, heralds of a source of supply which would become a flood – of trucks, food and fuel – as Western aid developed. Yet the most important source of reinforcement to Zhukov was already in existence: the Siberian force, from which Stalin – who had made only small withdrawals from it previously – had brought ten divisions, 1000 tanks and 1000 aircraft in October and November. That he felt free to do so was chiefly the result of reassurances transmitted by one of the most remarkable espionage agents in history, Richard Sorge, a German but also a Comintern operative who, as a confidant of the German ambassador in Tokyo, was privy to top-secret German-Japanese confidences and so able to assure Moscow (perhaps as early as 3 October) that Japan was committed to war against the United States and therefore would not use its Manchurian army to attack the Soviet Union in Siberia.

Overleaf: Russian anti-aircraft guns light up the sky above the Kremlin on the night of 22 June 1941, the first day of Barbarossa. The German advance was halted, in the city's outer suburbs, in the following December.

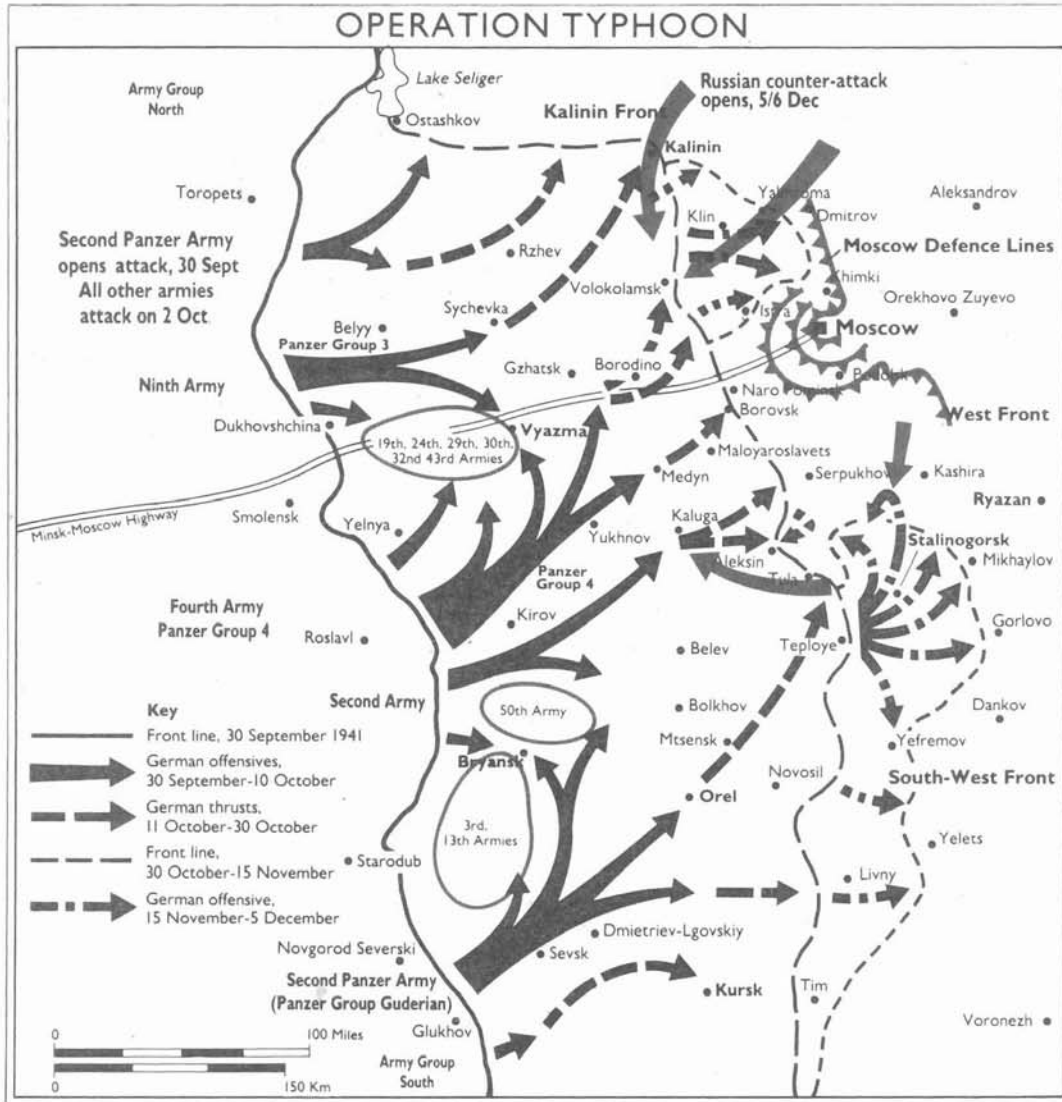




Had Japan decided otherwise – and its historic quarrel rather than its focus of strategic ambition lay against Russia, not America – the Battle of Moscow of December 1941 must have been fought as a Russian defensive, instead of as an offensive, and would almost certainly have resulted in German victory. As it was, Stalin's reinforcements had raised Zhukov's Western Front to a strength equal in numbers, if not equipment, to Army Group Centre's, and in consequence the outcome was the first Russian victory of the war. On the morning of 5 December, the Stavka plan mirrored those by which Hitler's marshals had inflicted such bloody wounds on the Red Army in the summer. Zhukov was to drive headlong at the Germans opposite Moscow, while Konev's Kalinin Front and Timoshenko's South-Western Front drove up from the south. Kluge and Hoepner, commanding the Fourth Army and the Fourth Panzer Army (as Panzer Group 4 had been renamed), decided that they could force their troops no further forward and had gone over to the defensive. Accordingly they were inert when the Russians struck. In the north, the deepest advance was made by Lelyushenko's Thirtieth Army, which advanced as far as the Moscow–Leningrad highway, threatening Panzer Group 3's link with the Fourth Army. By 9 December it had reached Klin and with the neighbouring First Shock Army seemed poised to bring off an encirclement. The Sixteenth and Twentieth Armies, commanded by Rokossovsky and Vlasov, operating closer to Moscow, matched their progress and on 13 December retook Istra, close to the Moscow–Smolensk highway up which Army Group Centre's axis of advance from the frontier had lain.

To the city's south, the Thirtieth and Fortieth Armies attacked Guderian's Panzer Group 2 and by 9 December menaced its main line of supply, the Orel–Tula railway. Guderian's Tula position formed a salient; on its opposite face the Soviet Fiftieth and Tenth Armies succeeded in separating Guderian from Kluge's Fourth Army and driving both away from the Moscow approaches – a displacement widened after 16 December when the Soviet Thirty-Third and Forty-Third Armies joined in.

By Christmas Day 1941 the Russian armies had retaken almost all the territory won by the Germans in the culminating stages of their drive on Moscow. Not only had the *Ostheer* lost ground; its leaders had also lost their Führer's confidence. He had dismissed generals in droves. On 30 November Rundstedt insisted on resigning in protest at his treatment by OKH; Hitler, on a visit to his headquarters, recognised the justice of his protest but accepted his resignation nevertheless. (Reichenau, who replaced him, died almost immediately of a heart attack.) On 17 December he replaced Bock with Kluge at Army Group Centre and on 20 December dismissed Guderian for preparing to withdraw his Panzer group from its exposed position. He also dismissed Hoepner from the Fourth Panzer Army (between October and December 1941 Panzer groups were redesignated Panzer armies) for unauthorised retreat, and the commanders of the Ninth and Seventeenth Armies. Thirty-five corps and divisional commanders were dismissed at the same time. Most dramatically of all, on 19 December, Hitler relieved Brauchitsch as commander-in-chief of the army. Like Bock, Brauchitsch was ailing; but that was not the reason for his re-



Operation Typhoon, the final German drive on Moscow. It ground to a halt in appalling winter weather and on 6 December 1941 the Red Army counter-attacked.

moval. Hitler had come to believe that only his own unalterable will could save the Ostheer from destruction. He therefore announced that Brauchitsch would not have a successor but that the Führer would himself directly act as the army's leader.

In that role he lectured and terrorised his generals to stand. Over Mannerheim, his Finnish ally, whose soldiers had marched in parallel with Leeb's to the gates of Leningrad (and also made an advance into Arctic Russia further north) he could not prevail; the mar-

shal, once a tsarist officer, was prudently determined to hold no more territory than his country had possessed before the Winter War. Against his own commanders, however, he used the lash of implied incompetence and imputed cowardice. Führer Directive No. 39, issued on 8 December, had announced that the *Ostheer* would go over to the defensive, as several of its formations had already done; where it would defend was the Führer's prerogative. 'Do you plan to drop back thirty miles? Do you think it isn't all that cold there, then?' he recalled asking those he saw as fainthearts. 'Get yourself back to Germany as rapidly as you can – but leave the army in my charge. And the army is staying at the front.'

The spectre of 'Napoleonic retreat' afflicted Hitler in those days of mid-December and early January – the spectre of losing not only the line won but hundreds of thousands of men on the road to the rear and, most disabling of all, the army's heavy equipment. 'Save at least the army, whatever happens to its guns,' he recalled the falterers pleading to him. Convinced that withdrawal would lose both – 'How do you think you're going to fight further back if you haven't got any heavy weapons?' – he bullied and remonstrated down the telephone from Rastenburg (he did not shift his headquarters to Russian territory until the following year), until, by force of personality and threat of professional extinction, he infused the commanders at the front with a determination to hold against the Red Army and the Russian winter as inflexible as his own. By mid-January 1942, the worst was over: Army Group South's front was holding; Army Group Centre's was penetrated by a large salient north of Moscow but stabilised; Army Group North was entrenched on the fringe of Leningrad, which its artillery was slowly battering to pieces. The Red Army's winter reinforcements sustained a sporadic offensive but, advancing too often in human waves, were diminishing in numbers and force. Hitler had already begun to think of the spring and of the battle he would fight to destroy Stalin's Russia for good.

IO WAR PRODUCTION

The German armoured pincers which encircled and crushed the Soviet armies in western Russia in June, July and August 1941 were instruments of military victory such as the world had never seen; but they were not instruments of total victory. Although they destroyed one of the Soviet Union's principal means of making war, its mobilised front-line defences, they did not succeed in destroying its industrial resources in the European provinces. Even while the Panzers were on the march, an evacuation soviet, directed by the economic expert A. I. Mikoyan, was rapidly uprooting factories from their path, loading machinery, stocks and workforces on to the overstretched railways, and shipping them eastward to new locations beyond the Panzers' reach. The strategic relocation of industry had begun long before the war, with the effort to make the output of the new industrial and raw-material zones beyond the Urals and elsewhere equal that of the traditional centres around Moscow, Leningrad and Kiev and in the Donetz basin. Between 1930 and 1940 new metallurgical plants were opened at Magnitogorsk, Kuznetsk and Novo-Tagil, industrial complexes at Chelyabinsk and Novosibirsk, aluminium works at Volkhov and Dnepropetrovsk, coalfields at Kuznetsk and Karaganda and a 'second Baku' oilfield in the Urals-Volga region, together with no less than thirty trans-Ural chemical plants. The pace of equalisation was slow; but by 1940, when the Donetz basin produced 94.3 million tons of coal, the Urals and Karaganda fields were producing 18.3 million.

However, Barbarossa stimulated nothing less than 'a second industrial revolution in the Soviet Union', in John Erickson's words. In August to October 1941, 80 per cent of Russian war industry was on the move eastward. The German advance had overrun 300 Soviet war-production factories, and would eventually bring the whole immovable extractive resources of western Russia, particularly the rich coal and metal mines of the Donetz basin, into German hands; but it was not rapid enough to prevent the evacuation

eastward of the greater part of Soviet engineering industry from Leningrad, Kiev and the regions west of Moscow. In the first three months of the war the Soviet railway system, while transporting two and a half million troops westward, brought back eastward the plant of 1523 factories for relocation in the Urals (455 factories), Western Siberia (210), the Volga region (200) and Kazakhstan and central Asia (more than 250). The effort was both extraordinary and perilous. On 29 September 1941 the Novo-Kramatorsk heavy-machine-tool works received orders to strip down its workshops; within five days all its machinery, including the only 10,000-ton presses in the Soviet Union, were loaded on to wagons under German bombing, while the 2500 technicians had to march on the last day to the nearest working railhead twenty miles away.

Ninety factories were evacuated from Leningrad, including the heavy tank works, the last shipments being made by barge across Lake Ladoga after the city was cut off by land from the rest of Russia. When similar German advances interrupted evacuations from the Donetz basin, all workable plant, including the gigantic Dnieper dam, was dynamited. In the teeth of this appalling industrial turbulence, Soviet economic managers succeeded in bringing the relocated plants back into production after an almost miraculously brief delay: according to Erickson, on 8 December 'the Kharkov Tank Works turned out its first twenty-five T-34 tanks [at Chelyabinsk in the Urals], just short of ten weeks after the last engineers left Kharkov, trudging along the railway tracks.'

These beginnings of Russia's 'second industrial revolution' were the worst of news for the Wehrmacht, even though it remained unaware of them for months to come. The worm in the apple of Hitler's spectacular campaigns of 1939-41 was that they had been fought from an economic base too fragile to sustain a long war, but with effects on the will of his enemies which ensured that the war would inevitably lengthen into a do-or-die struggle unless he could quickly crown it with a swift and decisive victory. Hitler's Germany, behind the panoply of the Nuremberg rallies and the massed ranks of the Wehrmacht, was a hollow vessel. As a producer of capital goods in 1939 she stood equal to Britain, with about 14 per cent of world output, compared to 5 per cent for France and 42 per cent for the United States, even in her still depressed condition. When British invisible earnings were added into her gross national product, however, Germany's output declined to third place below the British and American (excluding the Soviet Union); and when allowance was made for access to essential raw materials, including non-ferrous metals but particularly oil, the size of the German economy appeared smaller still.

German economic strategy, quite as much as its military one, was therefore geared to the concept of *Blitzkrieg*. The need was for a quick victory to spare German industry the pressure of producing weapons and munitions in quantity; once the war protracted, and Hitler decided upon the necessity of attacking Russia, German economic strategy changed. On the material front the drive was to lay hands on the extractive resources of the enemy, including those of the Balkans but particularly the coal, metal and (above all) oil-bearing regions of south Russia (together with the vast agricultural wealth of the Ukraine). On the

industrial front the emphasis shifted in two different directions. Until 1942 Hitler had been adamant that the military effort should not depress civilian living standards or curtail the output of consumer goods; between January and May 1942, at the insistence of his Armaments Minister, Fritz Todt, and then (after Todt's accidental death) Dr Albert Speer, he accepted that military output as a proportion of gross national product would have to rise. However, while Todt and Speer introduced centralised measures of economic control which did indeed begin to raise output at a spectacular rate (for example, armaments, as a proportion of industrial production, increased from 16 per cent in 1941 to 22 per cent in 1942, 31 per cent in 1943 and 40 per cent in 1944), they did not commit Germany to attempt to match the production of their enemies' economies in quantitative terms. German war-economic philosophy rested on the concept that the country's weapons output should and could outdo the enemy's primarily in quality.

— The 'quality war' —

This concept proved difficult to implement in aircraft production, where both types and individual models of propellor-driven aircraft fell progressively behind their British and American equivalents after 1942. The German aircraft industry never produced a satisfactory strategic bomber; as early as 1934 the Luftwaffe had decided not to make an effort to develop this type of aircraft. Its single-seat fighters had reached the limit of their development in 1943. Its heavy fighters were all failures. By contrast, its first jet-propelled fighter, the Me 262, was a spectacular success, and if Hitler had encouraged its early production in quantity it would have confronted the Allied strategic bombing campaign with a severe challenge. German tanks, designed for serial development from a basic model, were also of the first quality, as were German small arms. For example, the MP-40 sub-machine-gun, known to Allied soldiers as the Schmeisser, was both the best of its kind in use in any army and one of the simplest to produce. German design engineers had simplified its components so that almost all could be produced by repetitive stamping, only the bolt assembly and barrel having to be machined.

German 'secret weapons' were also a testimony to the success of the 'quality' philosophy. Though Germany's electronics industry failed to match the achievements of the British, which consistently produced better radar equipment of every sort and supplied the scientific and technological basis for American industry's advances in that field, and though its nuclear weapons programme was an abject failure, its success with pilotless weapons and advanced submarines was impressive. The perfection of the schnorkel air-breathing system for submarines, though it came too late in the war to revitalise the U-boat campaign, introduced a method of operation which all post-war navies adopted and used until the coming of the nuclear-powered boat; while the development of the hydrogen-peroxide propulsion system, allowing a submarine in theory to cruise submerged indefinitely, in a sense anticipated the principle of the nuclear-