

DEEP OPERATION THEORY

“artillery, tanks, aviation and infantry, cooperating amongst themselves, simultaneously inflict a defeat on the enemy’s combat order throughout its whole depth.”

TUKHACHEVSKII, as quoted by LOSIK

TUKHACHEVSKII AND TRIANDAFILLOV

At the same time as von Seeckt and his colleagues were beginning to brood over blitzkrieg, Tukhachevskii was standing back mentally from the traumas of the Red Army’s formation and the tumult of the Civil War, and starting to shape lessons for the future from his experiences. He was also able to draw on a tradition of manoeuvre in general and the turning movement in particular, continuing unbroken from the eighteenth-century writings of General Ukuniev (quoted by Jomini), an earlier advocate of cooperation between arms. This tradition was probably derived, as Duffy and Bellamy have postulated, from Genghis Khan’s way of war and, following this path back through time, from Sun Tzu. It is not without significance that at least four Russian translations of Sun Tzu have been made. Among the many levels of interpretation to which the Chinese master’s “ordinary force” (cheng) and “extraordinary force” (ch’i) lend themselves is the physical one which equates “ordinary force” (with which one engages the enemy) to the “holding force”, and “extraordinary force” (with which one wins the battle) to the “mobile force”. Again Sun Tzu’s analogy of a torrent of water (“Now the shape of an army resembles water”) perfectly expresses the dynamism of manoeuvre theory and, incidentally, the untranslatable German concept of

Schwerpunktbildung, of which “development of a centre of effort” is a totally inadequate rendering.

As the epigraph of this chapter suggests, the focal points of Tukhachevskii's thinking were the all-arms battle and the principle of simultaneity one, which is by no means easy to grasp. He interpreted simultaneity as bringing the largest possible number of troops into contact at the same time, and thus as requiring a concept, which offered the maximum contact area. In his twenties' writings he argued that this called for a mass army operating over a broad front. The contact was frontal (FIG. 4a) To succeed, you had to have a sufficient density of troops over the whole front not only to pin the enemy down but to achieve a favourable ratio of attrition rates, p/us enough reserves to achieve decisive superiority at the critical time and place. All this was the task of infantry, artillery and tanks acting in concert. Then, with the enemy pinned down everywhere and broken at the chosen point, you could launch your cavalry, with air and mechanised support, through the gap. Although this concept allowed for operational manoeuvre to achieve a decision, it owed a great deal to attrition theory.

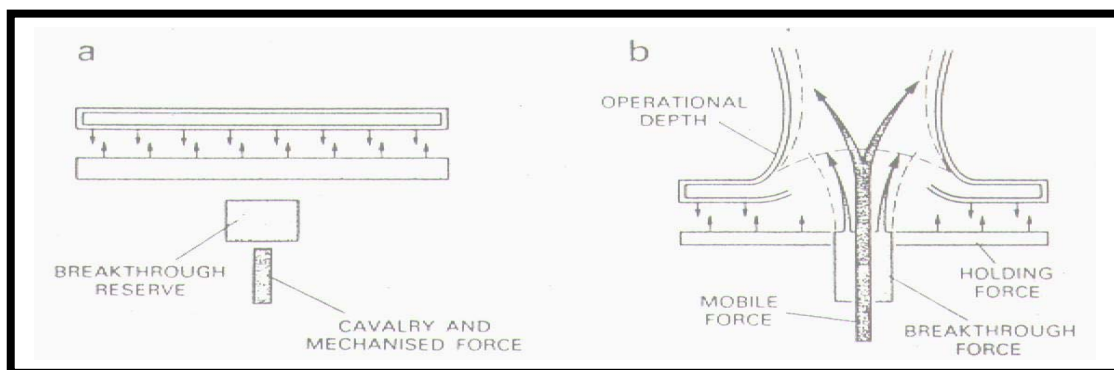


Fig 4. Tukhachevskii's "maximum contact area" a. broad front. B. Deep battles.

Against this background, the impact of Triandafillov's work *The Character of the Operations of Modern Armies* becomes clear, as do the respective contributions of these two brilliant Tsarist-trained officers to the evolution of the Soviet concept of land warfare.

Triandafillov focuses on the importance of the “shock army”, a powerful; versatile force composed of all arms including aviation (and, incidentally, having a substantial offensive chemical capability). He envisages the development of modern armies in two stages, the first of which is still infantry-centred and corresponds reasonably closely to Tukhachevskii’s broad front concept.

In Triandavillov’s second stage, the “shock army” remains responsible for the break-in but is completely reshaped to contain what we should now call the “mobile force” as well. “Manoeuvre tanks” (contrasted with “powerful tanks” and “tankettes”), in conjunction with special motorised forces, referred to as “mechanised cavalry”, operate in depth as “strategic cavalry”. In a further stage of development, these tank and mechanised forces become organic to corps, armies, and even divisions, and are complemented by motorised machine gun battalions and self-propelled artillery. Triandafillov also introduces, albeit tentatively, the other key concept peculiar to the Soviet approach, the interchangeability of combat troops and fire,

Figuratively speaking, this second stage concept, coupled with the notion of interchangeability, revolutionised Tukhachevskii’s approach to simultaneity. More literally, it turned his thoughts neatly through 90 degrees (Fig. 4b), from the “broad front” to the “deep battle”, while conserving the principle of maximum contact area. The first (incomplete) edition of Triandafillov’s book was published in 1930, and Tukhachevskii’s “deep battle” concept, the first stage of his “deep operation theory”, and took firm shape about 1932 whence my remark in the previous chapter that Tukhachevskii’s absence from the German—Soviet staff talks may have been due to his preoccupation with this fundamental rethink. The new approach launched the formation of the Red Army’s mechanised corps and culminated in “PU-36”, the 1936 Field Service Regulations that Tukhachevskii certainly masterminded and probably wrote.

In the following year Stalin, using as excuses the lessons of the

Spanish Civil War and Tukhachevskii's alleged involvement with the Abwehr (the German intelligence service), but almost certainly seeing a potential rival, had the great man and five of his six most able colleagues shot. The mechanised corps was disbanded or penny-packeted, tank formations were limited to brigade level with a high proportion of independent tank battalions; the infantry regained their dominance, and deep operation theory gave way to attrition theory. This purge and reversal of policy largely accounts for the course taken by the Russo-Finnish War, and was a major factor in Hitler's decision to launch Operation Barbarossa.

THE SECOND WORLD WAR ("THE GREAT PATRIOTIC WAR")

To the retreating Russians, often completely surrounded and more often still threatened with envelopment, the early German successes must have looked like deep operation theory in action. This factor, the evident need for drastic changes, and almost certainly pressure from officers who had been up-and-coming disciples of Tukhachevskii's resulted in the Supreme Headquarters (Stavka) Directive of 10 January 1942. This Directive, together with two implementing orders promulgated later that year, effectively reinstated deep operation theory and set in train the reorganisation it called for. The four tank armies formed by the time of Stalingrad had tank strength of 400 to 450 on paper. During 1943 this figure rose to about 500, a figure we shall see to be a key one in manoeuvre by armoured forces.

The two sides' operations in the Ukraine between Stalingrad and Kursk, say in the first 9 months of 1943, illustrate the whole essence of modern manoeuvre theory. In the first phase of the post-Stalingrad offensive, 5 Tank Army was used for the break-in, with independent tank corps and brigades—representing the old organisation and the first stage of the metamorphosis—in the follow-up force. This evolved fairly rapidly into a three-phase, or three-echelon, pattern. In a front (army group) offensive the independent tank brigades and battalions

were assigned to infantry formations for the break-in; tank and mechanised corps were employed to complete the penetration, screen off its flanks, and perhaps seize short-range operational objectives such as rail junctions or bridges. Tank armies, sometimes stiffened with an additional tank corps or so, formed the front's mobile group, then still known as the "shock group". This group was held back until it could be launched cleanly beyond "operational depth", the depth, that is, at which a manoeuvre would force the enemy to react at operational level.

At this point development of the concept came up against two conflicting calls on the limited armoured and mechanised resources available. On the one hand, as the mobile group demonstrated its potential, there was a tendency to enhance its power and scope by giving it more tanks, by expanding it in fact into a two- or even three-echelon force. This bigger and more complex force naturally required a larger mechanised infantry (motor rifle) component too. As a result, the second (breakthrough) echelon of the main force, made up of independent tank and mechanised corps, was weakened, its role being restricted to completing and securing the penetration.

On the other hand, even the three-echelon pattern (break-in, breakthrough, and breakout) often failed to ensure a clean launch for the mobile group. The initial response to this was simply to make the mobile group complete the penetration and fight its way clear. As a result it was slowed down, weakened, disorganised and logistically over stretched to the point where it became easy meat for a German counter-offensive, usually executed at Panzerkorps level. As a result, the Red Army effectively added a fourth phase to its offensive concept. The third echelon's task became not just to complete the penetration of the defence, but to' secure a deployment area, a kind of bridgehead, for the mobile group to shake itself out in.

These problems were fairly quickly and very effectively solved because they were basically amenable to an increase in mass, and the

Soviet war effort was by that time geared to achieving this. Shortcomings in command and control, and in artillery and air support, proved to be less tractable. When the new rules were promulgated in October 1942, only a sprinkling of officers in the tank arm, and any survivors of Tukhachevskii's mechanised force who happened to be around, had much feel or liking for them. The readiness of the gunners and the infantry to pick holes in the new concept was fostered by the rules as they stood being far from workable. The gross underestimation of the breakthrough problem discussed above was compounded by limitations in movement techniques, and by lack of the standing operating procedures (SOPs) needed for deployment from the move, for passing successive echelons though one another, and for carrying out rolling reliefs.

Just as embryonic were the kind of communications needed to control mobile operations. The communications complexes with which the Red Army ended the war, employing up to six major nets in an army headquarters, were the outcome of lessons learnt the hard way. This lack of the physical means of troop control compounded the two-pronged psychological problem that plagued the Red Army then as it does the Soviet Army today—the run-of-the-mill Russian officer's tendency to do nothing until not just told to but actively prodded; and his understandable fear of reporting an adverse situation lest he be held to blame for it. As the wastage rate among divisional and higher formation commanders shows, the only way of achieving any flexibility at all was forward command of the most extreme kind.

Death in battle at the head of one's troops was undoubtedly preferable to the price of failure—public execution, or the miseries of a penal battalion culminating in dismemberment on a minefield. But this rather snide comment does not serve to explain the contrast between the excellence of the top-flight Soviet officers and the mediocrity of the rest—something just as conspicuous and just as enigmatic today as it was then.

More serious still, and more recalcitrant than the problems of tactics, even than those of command and control, were the inability of the Soviet artillery of the day to support mobile operations, and the total absence of the kind of control and liaison arrangements needed for effective close air support. Lacking anything resembling an armoured personnel carrier, the Red Army was forced to mount its mechanised infantry in softskins of limited performance, or to have them ride on tanks. In either event, the German artillery was usually able to separate the Soviet infantry from their tanks at a very early stage in the battle. This vulnerability of the mobile force to artillery fire doubled the difficulty of advancing beyond artillery range. The mobile force lacked both the direct supports it needed to maintain momentum, and the counter-battery capability, which might at least have postponed the separation of tanks and infantry. I find it interesting that the Soviets were prepared to divert large numbers of tank hulls for assault guns (SU guns) but none, as far as I know, for “self-propelled” artillery mountings in the accepted sense of that term, or for armoured personnel carriers.

Be this as it may, from late 1943 onwards the artillery component of tank and mechanised corps was stiffened by the addition of a regiment’s worth of assault guns. These were used almost entirely in the direct fire role for which they were best suited, leaving the counter-battery problem unsolved. As far as I know, the only truly mobile indirect fire weapon system the Red Army fielded during the war was the truck-mounted multi-barrelled rocket launcher (the “Stalin organ”, now beloved of “phase three” revolutionary forces). Even had the technology and production resources been available, the conservatism of the Russian artillery arm, redoubled by the evident inadequacy of its procedures for mobile operations, might well have failed to achieve the proper support. It is significant that the Soviet Army, with an artillery arm as preeminent in history as that of the French, was by many years the last advanced army to acquire proper self-propelled artillery.

Both artillery and air support were-and still are-severely hampered by the absence of requests initiated at low levels and passed upwards. In most advanced armies, even major fire plans are built up in this way. But in Soviet eyes a request like this would be seen either as cowardice, or as an infringement of the higher commander's authority—two particularly well-trodden short cuts to the nearest penal battalion. In any event, despite the success of the joint aviation centre at Lipetsk, the Red Army never developed the kind of techniques for close air support which were pioneered by the Wehrmacht and effectively picked up and developed by the Western Allies. Despite the lavish scale of tactical air and the presence of an air army within each front (army group), close air support operations were mounted and coordinated at front level, with army-level flank liaison between the air army and the tank or all-arms army to be supported. The postwar Soviet Army did introduce a forward air control organisation capable of putting tentacles (as we should call them) forward to division. But only very recently has this shown any signs of functioning in the way familiar to Western soldiers and airmen; and the latest information suggests a reversal of that trend.

From the end of 1943 onwards, there were few changes in concept, organisation or tempo. As always in Soviet practice, the formations of the mobile force tended to grow in size, a 1945 tank army having tank strength of rather over 500. By the same token, the scope of operations—in particular their depth—progressively increased; but this was due mainly to deterioration in the quality and strength of the opposition. The tank army, reinforced as appropriate, became the normal mobile group of a front, and tank army operations between late 1943 and 1945 show a remarkable consistency of tempo. Their overall duration was about 30 days, split more or less evenly between mounting and execution. The best time to launch the mobile group was considered to be $D \pm 4$ or $D + 5$, at an “operational depth” N varying between 35 and 60 kilometres beyond the initial lines of contact. The tank army tended to gather momentum through the 10 days or so of its operation, achieving an average rate of advance of

some 50 kilometres per day. The break-in and break-through battle likewise accelerated from a typical 5 kilometres on the first 2 days to perhaps 25 kilometres per day on the fifth.

GROUND FORCES IN THE POSTWAR PERIOD

In the 40 years since the end of the Second World War basic deep operation theory has shown little change from the original pattern—a holding force, also responsible for the break-in battle, and a mobile force whose conduct is based on turning the largest possible enemy mass. The principle of “slow in, fast out”—deliberate action/tight rein in the break-in, and dash/loose rein in the break-out—is unchanged. But in practice the Soviets’ extremely advanced C³I systems have almost certainly deprived the mobile force commander of his previous freedom of action and resulted in a kind of “forward command from the rear”. In effect, an army commander can now directly control a company group without moving, from his headquarters; and it would be very un-Russian of him to resist doing just that thing.

The tank corps became a tank division, with some 340 tanks and 230 infantry-fighting vehicles (IFVs)—strength in main tactical tracks significantly higher than that of the wartime tank army. The corps level disappeared from the main force structure, the term’s “corps” and “brigade” being reserved for specialised formations; and the tank army grew to strength of about 2400 main tactical tracks. The all-arms army, of four mechanised divisions and one tank division, shows a very similar figure for main tactical tracks, but is about half as strong again in artillery and men. By and large both tank and mechanised formations have the same major equipments and thus the same physical mobility. But the planned overall tempo of the tank force is roughly twice that of the all-arms force-and four times that of the wartime tank army.

The heavy break-in fast breakout pattern remained virtually

unchanged until about 1960. Then the first phase of the “revolution in military affairs” ushered in the heyday of the battlefield nuclear weapon, and of the employment of tanks in mass. The vast tank formations rolled forward over a nuclear and chemical carpet, with little need to fight or manoeuvre, the all arms force being relegated to a secondary role of providing diversions and mopping up. For evident reasons, it was at this stage too that the concept of interchangeability of combat troops and fire came into its own. For the nuclear weapon did more than just neutralise its target; it achieved a large measure of destruction, and incapacitated the remnants for long enough for fast-moving tanks to close up to them.

In the Soviet Union, the end of this phase was marked by a non-nuclear scenario for the river crossing in Exercise Dnieper, the showpiece manoeuvres held to celebrate the fiftieth anniversary of the Revolution. The intervening years have seen a succession of three major changes, with a fourth, the employment of helicopters at operational level, very well on the way.

The swing away from reliance on battlefield nuclear weapons coincided with the introduction of the BMP 1 infantry fighting vehicle—a world first in its class. The Soviets had long maintained that the “heavy break-in battle” was not a fundamental part of their concept but an expedient forced on them by “limitations in training and equipment”. The evident potential of the BMP sparked a lively and enduring controversy, extending to proposals for the use of light armoured forces at operational level. What did emerge was the resurgence of the “slashing attack”, so strongly favoured by the Reichswehr’s cavalry officers (page 27), as an alternative to the heavy break-in. This slashing attack goes in through a gap or down an enemy boundary, and turns in diagonally, say along the rear boundary of a defending division or corps. This tactical turning movement, coupled with flank screening, opens a corridor for the mobile force proper. Alternatively the “slashing” force may itself push straight on to an operational objective, with an all-arms force as immediate follow-up to secure the

corridor, then the mobile force as a third echelon.

The Soviet Army more than most is riddled with internecine strife; as in the British and United States Armies, the motor rifle arm saw itself as the rightful heir to the infantry's traditional dominance. The success of tank-based mobile groups in the war had led to the enshrinement of the tank and domination by the tank arm; and the nuclear heyday reinforced this trend. The turn away from nuclear weapons and the coincident appearance of the BMP gave the motor rifle arm a chance to reassert itself. In the twenties, before he turned to mechanisation, Tukhachevskii's main theme had been the evolution of the all-arms battle; and the motor riflemen picked this theme up where he had left it. This switch of emphasis, still occupying the key position in every issue of *Voennyi vestnik*, will have taken nearer 20 than 15 years to promulgate—an indication, as mentioned earlier, of the scale of the Soviet armed forces and of the diversity of their manpower.

The third development is the emergence of the operational manoeuvre group (OMG). Historical perspective is not my strong suit, but I am puzzled at the sensationalist way in which most military Sovietologists presented the OMG—in fact a Polish term, not a Russian one—as an innovation (“A new challenge to NATO!”), and have maintained that its original form represented a development of the “raid” tactic (of which more below). To anyone with a feel for the linear imperative of troop movement, the OMG is essentially evolutionary in nature. Let me drive this point home with a simple statement of fact. Suppose that a 1980-ish Soviet tank army is moving westwards on a single route at normal Soviet speeds and densities, and that its tail is just clearing Berlin. With organic vehicles only, its head would be somewhere near Aachen; with the normal slice of front troops and specialist units thrown in, its head would be somewhere on the Jabbeke motorway, between Brussels and Ostend. And this is based on approximate road distances, not measured as the crow flies.

This vast body of troops is just about five times the strength of the 1945 tank army in main tactical tracks. Conceptually at least, it was a splendid complement to the battlefield nuclear weapon, because all it had to do was to roll forward over the nuclear carpet until it reached the area of its objective, spreading out and using its tracks to surmount or bypass damage to routes. In terms of genuine manoeuvre, it is virtually unmanageable. There is a good deal of German and Soviet evidence that the “magic figure” of 500 main tactical tracks represents about the largest mechanised force that can be manoeuvred as a single entity. Thus the bringing into play of an OMG based on a tank division—of just about this size—is simply a return to post nuclear realism.

However, this form of OMG had two drawbacks. The tank divisional commander, still short of infantry even after the balancing exercises of the seventies, was expected to peel off infantry-heavy battalion groups as raid forces. The Soviet General Staff evidently understood, as many Western commentators did not, that he was unlikely to see these troops again within the time-frame of the operation. More important still, he was going to have to keep looking over his shoulder—something very unwelcome to any armoured commander and totally out of place in the context of a Soviet mobile force. In the Second World War the Soviets had regarded separation (in depth) between the head of the mobile force and the line of the holding force as something to be actively striven for—as indeed it is. But with the tempos hoped for in the eighties, separation between the tactical tail of the mobile force and the holding force was likely to be such as to prevent the development of leverage.

These two problems were solved by introducing into the OMG a second echelon in the shape of a mechanised division. This division can lead if the terrain calls for it to do so. But its normal role is to mount all raids, screening operations and other distractions, to support the tank division forward tactically and by control of movement, and to

maintain the lever arm between the mobile force and its hinge. Hiving off a headquarters to command this group would leave a standard front short of one operational level headquarters, so a purpose-designed corps level OMG headquarters has been introduced. Once again, one senses an emergent conflict between flexibility on the one hand, and size and complexity on the other. As we shall see, this conflict in turn suggests the need for new approaches to the implementation of manoeuvre theory.

The fourth firm trend, stemming, in part at least, from the post nuclear rethink, is the introduction of the airborne assault brigade, an operational helicopter' formation, into front and tank army troops. The principle underlying this will form one of the main themes of this book. But before turning to the whole business of desanty, I should like to mention yet another trend, now moving from the stage of reasonable prediction to that of stated intention, in the ground force proper. It is the product of the Soviet operational art and technological advance acting in concert. The mechanised division has the same physical mobility as the tank division; but it is a more massive organisation with a tank—infantry ratio of 7 to 10 (in fact almost 8 to 10) as against 10 to 6, and is usually handled more deliberately. With the growing emphasis, likewise soundly based on technology, on the all-arms battle as opposed to the tank's dominance, it would make very good sense to have just one type of division geared to the main battle tank. There are now firm indications of a plan to replace the existing tank and all-arms divisions by a single type of "shock division", and to pair this with an "airborne division". The latter would double in the airborne and light mobile force roles, and provide a mobility step between the heavy track and the rotor.

DESANTY

The Russian word desant (plural desanty) has the basic meaning of "descent"; but its military connotations are so wide-ranging and so important that I shall borrow it. As a noun or an attribute, the Russians

use it to describe the arrival in enemy-held or unsecured territory of any force, individual or warlike object, in any direction other than the shortest straight line drawn from his or its point of departure, and/or by any means other than his or its own steam. Thus the word was formerly used of infantry riding forward on tanks or crossing a river in assault boats. Nowadays it is used tactically, for instance, of a mechanised infantry company, which swims a river in its vehicles and moves along the far bank to bounce a bridge. Operationally and strategically, it extends on the one hand to major airborne and amphibious operations, on the other to the insertion of agents or Special Forces detachments. This concept of *desanty* is fundamental to contemporary deep operation theory, indeed to modern manoeuvre theory as a whole.

One of the notions which Tukhachevskii drew from either Fuller (who specifically proposes it) or from Triandafillov (who implies the need for it) and made very much his own is the idea not just of airborne forces, but of mechanised airborne forces. He evidently saw from the start the basic weakness of a force whose mobility plummets from that of the transport aircraft to that of the boot—three orders of magnitude nowadays—as its men jump or touch down. This lack of tactical mobility at once telegraphs paratroops' objective and makes them unable to organise themselves before a vehicle-based enemy can respond.

It took the Soviet Army almost 35 years to bring this concept to fruition with the introduction of the BMD multipurpose airportable armoured vehicle, and even then their direct firepower was limited to the ASU 85 airborne assault gun, an outstanding vehicle when first introduced in 1962, but no match for the main battle tank. The feasibility of the “light mobile protected gun”, in effect a light tank with full tank firepower, has been proven in the West; and the Soviets have the technology in the shape of the BMP vehicle family and a choice of several candidate guns. Given the BMD, now almost certainly in second generation form with most of its problems ironed out, this “light

tank” is the key to a single force which combines the concept of mechanised airborne troops with that of a light mobile force, and for that matter of an amphibious seaborne assault force. This vehicle has been long expected, and the firm indications of organisational change, touched on above suggest that it be well on the way. An “airborne/light” division of the kind depicted would at once provide a mechanised airborne airportable and economically seaportable force of high combat worth, and bridge the awkward mobility gap between rotor and heavy track on the one hand, and rotary and fixed wings on the other.

For although the United States Army rushed into the air cavalry business with cries of “vertical envelopment”, it was the Soviets, with manoeuvre theory in their bones, who grasped the true significance of the helicopter, built up a massive body of rotary-wing technology, and stuck with the concept through all its teething troubles. At tactical level, the employment of heliborne troops was thrashed out in the context of river crossing. Mainly for organisational and training reasons, the most usual scale of these tactical lifts was two battalions; but it varied from a reinforced battalion to a weak regiment. The next step was logistic—the use of heavy-lift helicopters to replenish the tanks of the mobile force.

The latest published information suggests that the integration of helicopters at tactical level has now spawned an “air-ground assault group” in place of the normal raid force. This appears to consist of an air element of a dozen or so assault helicopters, and a ground element, which includes a few armed helicopters for fire support and a small tactical lift (perhaps one battalion on minimum scales). My own impression is that this is yet another kite flown in the satellite specialised press to titillate Western commentators into sending a frisson through the NATO top brass. There seems no reason to suppose that tactical integration of helicopters has progressed as far as it has in the United States Army. Meanwhile, Soviet rotary-wing technology is falling back, especially in the fields of avionics and

optronics.

Once the assault helicopter, in the shape of the Model D and later versions of Mi-24 (Hind), had been proven in service, and the tactical concept of its employment had been evaluated at regimental level, the Soviet Army was ready to move on to the operational use of helicopters. The introduction of the (rotary-wing) airborne assault brigade in 1979 or 1980 was a triple step forward. It provides a permanent formation, considered by the Soviets to be the equivalent in combat worth of a tank division, with physical mobility an order of magnitude higher than the mechanised mobile force, thus adding a new layer to the deep battle. Its dismountable element consists of specialised helitroops, the entire brigade being found by the Airborne Forces, now a separate service and still five places above the army in the pecking order for manpower selection. Third and most important, it provides operational commanders with a powerful force free of the linearity which governs the controlled movement of troops in ground vehicles and— less obviously but almost as strictly—in fixed-wing aircraft.

This ability to concentrate and disperse independently of prepared surfaces is what the rotary-wing revolution is really about, and we shall be exploring its significance in Part 2. At present, though, there is one great drawback. In ad hoc heliborne actions, where a medium helicopter transport battalion flies in, lifts the men of a designated mechanised regiment, deposits them, and flies away, these men's operational and tactical mobility is reduced to that of the boot once they dismount. In the airborne assault brigade, with organic helicopters, the dismountable element retains operational mobility. But there remains an awkward gap in tactical mobility once men are on out on their feet. Briefly for the moment, there are two ways of overcoming this. One, represented by the von Senger "main battle air vehicle" concept M air-mechanisation, is to treat attack and assault helicopters like tanks and infantry fighting vehicles. The other is to mechanise operational rotary-wing formations by equipping them with light

armoured vehicles carried under heavy-lift helicopters for operational moves. It will be fascinating to see which way the Soviets go. They have the scale and the technology to do both, backing the airborne division with heavy-lift helicopters, and providing the rotary-wing airborne assault formations with machines suitable for intimate and sustained participation in the tactical battle.

No less interesting is the impact of the helicopter on strategic mobility. The strongest indication that the Soviets have appreciated this lies in their initial build of four or five nuclear-powered submarine catamarans, the size of the largest United States aircraft carriers. This information has been confirmed from several sources, but a news item published in July 1984 cast some doubt on it. If it is correct, the first of these catamarans will be long down the slip, perhaps even commissioned, and the second well into construction by the time this book is published. One of the more likely roles for these vast submarines could well be that of helicopter carrier. The potency of the threat posed by one or more airborne assault brigades brought to the enemy's rear or to a distant theatre in this way needs little emphasis.

To drive home the significance of desanty, I can perhaps use the "fifth column" analogy, which was coined in the Spanish Civil War and has become a household word. For the four types of organised force we have been discussing—heavy mechanised forces, light mechanised forces, helicopter forces and airborne forces—represent "the four columns marching on Madrid". The Soviet "fifth column" stands for the whole span of activities from information gathering by patrols of divisional deep reconnaissance companies to sabotage and state-sponsored terrorism at strategic level. Although the Soviets draw a formal distinction between strategy and the "operational art", the concept of the turning movement, the indirect approach, permeates their thinking from battalion to Politburo level. As that scholarly and lucid translator from the Chinese, General Samuel B. Griffith, points out, a remark made by Shaposhnikov when Chief of Staff of the Red Army echoes to the point of paraphrase Sun Tzu's teachings on this

aspect of war:

‘(The prerequisite to victory) is to make perfect preparations in the enemy’s camp so that the result is decided beforehand. Thus the victorious army attacks a demoralised and defeated enemy.’

Primary responsibility for military Special Forces (which exist alongside those of the KGB) is vested in the Airborne Forces (VDV). The main distinction between the “professionals” of Spetsnaz, long-service soldiers ranking from sergeant upwards, and others with special force training is that the “professionals” are trained for insertion by free-fall parachute. The Airborne Forces have been expanding their special force element for some time. There are indications that their aim is to train all their personnel “to special force standards”, but it is not entirely clear what this might mean— possibly the same standard as short-service members of Spetsnaz proper, and the men of divisional long-range reconnaissance companies. This could mean that close on 130 000 men—or 20000 detachments of five—would be trained in the more elementary types of semi-clandestine and clandestine operation. The mind boggles.

Today’s worldwide spectrum of activities by irregular forces suggests that the strategic scope for special forces with capabilities ranging from clandestine hit squads through coup de main to powerful raids is limited only by the sponsor’s imagination. Strategic and operational missions alike represent additional layers in deep operation theory; above all they are a means of implementing the principle of simultaneity. If successful, they would paralyse the opposition at all levels from cabinet to the higher operational commands as soon as the leading troops were committed, or more probably before this. The paralysing of government might suffice to destroy the political will to resist.

This picture is formidable enough, but superimposed on it is the politically orientated KGB network of agents and special forces, who will have been working at one remove again from the military special forces to undermine the unity of alliances and of states within them. And over and above the KGB's "organic" personnel are indigenous agents estimated, for instance, at about 20 000 in the Federal Republic alone. By way of summary I can only reiterate what I wrote in *Red Armour*—"While massive enough, the frontal threat on which [the West] focuses its attention is only the tip of the iceberg—a good analogy since, it is said, a third to a quarter of an iceberg shows, and this is roughly the proportion of the Soviets total offensive power that their organised land force represents.

CRITIQUE

I have not attempted to analyse deep operation theory in detail at this stage. The Soviet model is the only one in existence at the moment, and at theoretical level it is better developed and documented than any other version of manoeuvre theory in history. I shall therefore take it as the basis of Part 2, in which I shall examine the physical level of manoeuvre theory. How far it matches the theses I shall develop in the later parts of this book, I leave it to the reader to judge. For whether or not I am right in suggesting that the Wehrmacht's practical potential outmatched its theoretical back-up, the Soviets themselves leave one in no doubt of their reservations about their ability to implement deep operation theory to the full. There are two main reasons for these questionings. One is transient. The other is the Soviet armed forces' Achilles heel, which might even prove as enduring and ultimately fatal as that legendary failure of immersion.

First, if Chapter 1 is right, we are now at one of the peaks of theoretical speculation which presage radical change. The main instruments of the late twentieth-century change are evidently electronics and the rotary wing. In particular the dominance of indirect fire achieved by surveillance and fire control on the one hand, and by

terminal guidance on the other is bringing the Soviet principle of interchangeability home to roost. Whether they are in armoured vehicles, on their feet, or dug in, troops deployed at high density will certainly be pulverised into incapacity and probably “destroyed” in a markedly more literal sense than Clausewitz intended. Against troops in the field, the levels of effect once associated with battlefield nuclear weapons can now be achieved by non-nuclear means. All this fits into Soviet operational teaching, but literally turns their tactical concepts—and everybody else’s—inside out. As I have tried to suggest in Fig. 5, the “anvil of troops” ringed by fire has to become an “anvil of fire”, better perhaps a “cauldron of fire”, ringed by enough troops to seal the edges, observe indirect fire, and thicken it up with direct fire when targets present themselves.

Yet, for the Soviets more than most, the abandonment of high troop densities is a leap in the dark. They can field the technology; but their ability to train commanders or troops in this new way of war is another thing again. As a result, they are piling new layers of capability, like the operational employment of helicopters, on old. The resulting “club sandwich” is getting difficult enough to dish up; the chances of its reaching the table and getting eaten without collapsing sideways are increasingly remote. At the same time, technology is making the filling of each layer more and more complicated, too sophisticated perhaps for some of those who will have to prepare it. At some point the Soviets are going to have to cast aside much of their massed forces and “baroque” equipment, and shift the focal point of deep operation theory from the old layers to the new. Russian history suggests that they will do this later rather than sooner.

The second and more lasting weakness stems from the Russian character and is compounded by the paranoia that seems to permeate the Marxist-Leninist system from top to bottom. The amount of noise the Soviet Army makes in public about flexibility, initiative and tempo shows how well aware its higher echelons are of weaknesses in these respects. Let me quote just one example—the “hasty battalion ~ Now a

days this term would make even the addicts of attrition think in terms of a period of 2—3 hours between receipt of orders and accomplishment of the mission. So my attitude has been as rigorous as that of the religious and scientific establishments towards parapsychology. When Red Armour went to press, I had written simply that the tempo of the “hasty” attack was an enigma. Since then I have added to my collection three more unequivocal accounts from Voennyi vestnik, and had all the evidence independently checked. The tempo of the hasty battalion attack is not 2—3 hours from receipt of orders to accomplishment of mission, but 18 to 22 hours from receipt of orders to launch (H hour).

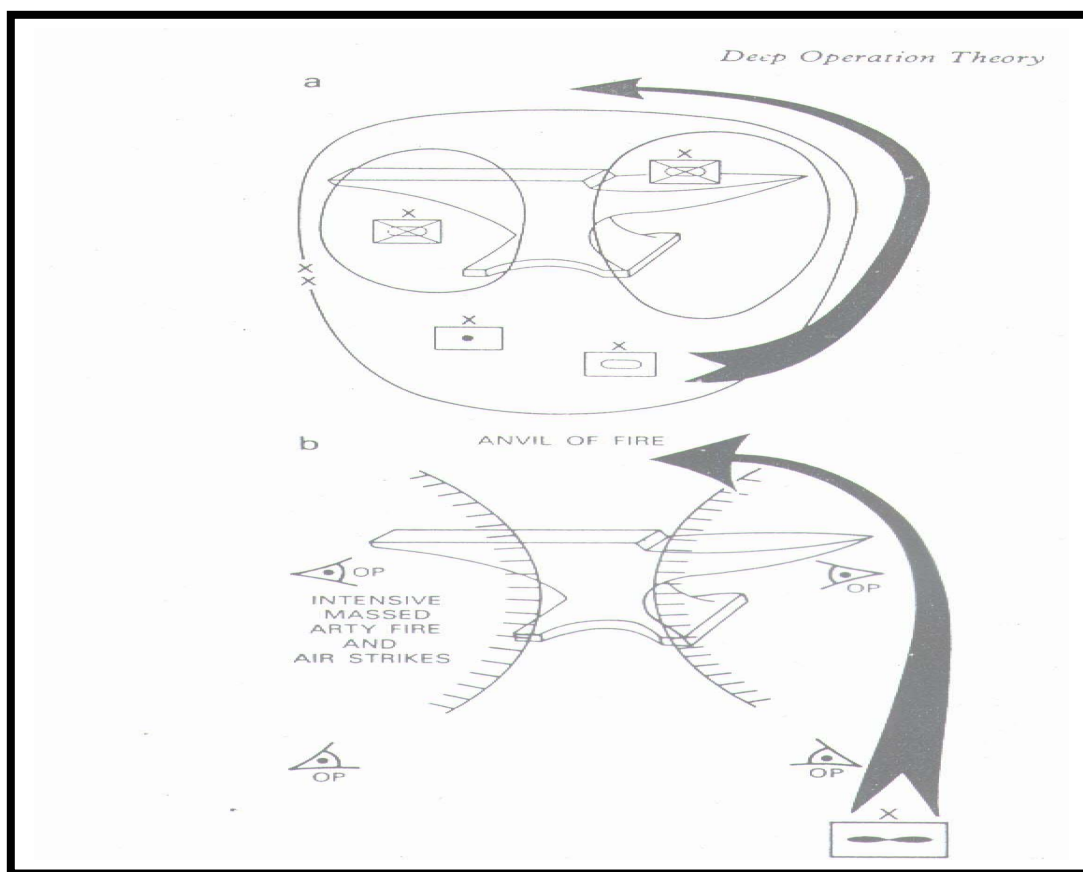


Fig 5. a. The anvil “of troops” – a conventional hammer and anvil defence by a mechanised division with a tank heavy brigade. B. The anvil of fire, a killing area shaped by defending troops but not occupied by them.

Again, one sees the Voennyi vestnik series on the all-arms battle, which has been running since January 1981 and virtually amounts to a complete tactical manual, trying to drive home the same lessons on co-operation between arms that Tukhachevskii was trying to instil in the twenties—or, *mutatis mutandis*, that General Ukuniev was banging on about 200 years ago. When I was young and strove for a sophisticated image, I used to spend hours looking for hidden charms in the jokes in the New Yorker, only to discover that the intended joke was the one I had first thought of. Dangerous as it is to underrate a potential enemy, the Soviet Army's achieved performance sometimes seems so indifferent as to defy credence.

The run-of-the-mill Soviet officer—and that means most officers serving with troops up to and including battalion commanders—apparently has only one response to a situation. This is to play it by the book as far as he can, and then to sit back and await new orders. Indeed, since promotion beyond battalion commander (roughly the equivalent of company commander in most Western armies bar the German) is unlikely even in war for those who do not qualify at a special-to-arm academy, and since an active mistake might point the way to the nearest penal battalion, he has little reason to do otherwise. By the same token, such men tend not to report adverse situations promptly and fully, lest they be blamed for them. Thus, even with modern communications and means of surveillance, any system which relies on requesting or awaiting new orders will seldom offer the speed and aptness of response to the actual situation which manoeuvre theory calls for. Quite apart from its effect on morale, “forward command from the rear cannot work.

Apart (presumably) from the new breed of warrant officer, the “officer's right-hand man” introduced as a link between officers and senior NCOs (*sic*), the professional and personal quality of NCOs in field force units appears to be at best mediocre. In the Soviet Army as in those of the Federal Republic and the United States, the quality of senior NCO is an acknowledged weakness; and my impression is that

the Soviet training organisation in its various forms sucks up the best, bleeding field force units more heavily than they can stand.

What is more, relations through the ranks are so appalling as to be hard for a Western professional soldier to envisage. At a symposium I attended in Canada, Peter Vigor, then head of the Sandhurst Soviet Research and Study Centre, was asked how a Soviet NGO might tell one of his men to do some simple thing. His sample order contained, I think, seven words, five of them variants on the soldierly expletive which the Russians, in a true spirit of democracy, use freely through the ranks. This is a record I have only once heard equalled. Working on a muddy side-slope, one of my Centurion crews had just got a thrown track back on and tightened, when the track-adjusting mechanism came away. Falling back into the mud with the 3-foot spanner and its contents on top of him, the driver uttered the immortal phrase-“The *****’s *****ed, ***** it!” Perhaps Peter Vigor too was indulging in a touch of poetic licence. But if there is one assertion in this book that my whole experience, research and reason tell me is beyond dispute, it is that manoeuvre theory can only be exploited to the full by the practice of directive control (Auftragstaktik) in the full German meaning of that word.